Vol. I

TRANSCRIPT OF RECORD

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Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 8, 1945.

VOL. I.

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United States Circuit Court of Appeals

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vs.

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Pleas and proceedings in the United States Circuit Court of Appeals for the Eighth Circuit, at the May Term, 1944, of said Court, before the Honorable John B. Sanborn, the Honorable Joseph W. Woodrough and the Honorable Walter G. Riddick, Circuit Judges.

Attest:

E. E. KOCH,
Clerk of the United States Circuit Court of Appeals for the Eighth Circuit.

(Seal)

Be it Remembered that heretofore, to-wit: on the 6th day of February, A. D. 1943, a transcript of record on Petition to Review and Set Aside Order of Federal Power Commission was filed in the office of the Clerk of the United States Circuit Court of Appeals for the Eighth Circuit, in a certain matter wherein Panhandle Eastern Pipe Line Company, a Corporation, et al., were Petitioners, and the Federal Power Commission, et al., were Respondents, which said transcript as prepared and printed, pursuant to designations, under the rules of the United States Circuit Court of Appeals for the Eighth Circuit, under the supervision of its Clerk, is in the words and figures following, to-wit:

[fol. a] Petition of Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company, and Michigan Gas Transmission Corporation to Review and Set Aside An Order of the Federal Power Commission.

(Filed in U. S. Circuit Court of Appeals on November 18, 1942.)

In the United States Circuit Court of Appeals for the Eighth Circuit.

Panhandle Eastern Pipe Line Company, a Corporation, Illinois Natural Gas Company, a Corporation, and Michigan Gas Transmission Corporation, a Corporation, Petitioners,

No. 12466. vs.

Federal Power Commission, City of Detroit, Michigan, County of Wayne, Michigan, Michigan Consolidated Gas Company, a Corporation, and Michigan Public Service Commission, Respondents.

To the United States Circuit Court of Appeals for the Eighth Circuit and the Honorable Judges Thereof:

Panhandle Eastern Pipe Line Company, a Delaware corporation (herein sometimes referred to as Panhandle Eastern), Illinois Natural Gas Company, an Illinois cor-
[fol. b] poration (herein sometimes referred to as Illinois Natural), and Michigan Gas Transmission Corporation, a Delaware corporation (herein sometimes referred to as Michigan Gas), herein collectively referred to as Petitioners, being aggrieved by an Order of the Federal Power Commission (herein sometimes referred to as the Commission) dated September 23, 1942, as amended October 12, 1942, respectfully petition this Honorable Court to review and set aside said Order.

In support of their petition they respectfully represent:

A.

The Nature of the Proceedings As to Which Review Is Sought.

(a) The Order of the Commission which Petitioners now seek to have reviewed and set aside was entered after a hearing in two consolidated proceedings brought against petitioners. These proceedings were entitled and docketed before the Commission as follows: "City of Detroit, Michigan, and County of Wayne, Michigan, vs. Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, Docket No. G-200," and "In The Matter of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation, and Illinois Natural Gas Company, Docket No. G-207."

The proceedings were instituted and the Order was made purportedly under the authority of and in accordance with the terms of an act of Congress known as The Natural Gas Act (Act of June 21, 1938, Ch. 556, 22 Stat. 824, Title 15, U. S. C. A. 717).

(b) Case No. G-200 was instituted February 28, 1941, by the filing of a complaint by the City of Detroit, Michigan, and the County of Wayne, Michigan, against Petitioners, Panhandle Eastern and Michigan Gas. In said complaint it was alleged that the rates and charges paid [fol. c] by Panhandle Eastern to Michigan Gas (which latter Company, for a carrying charge paid by Panhandle Eastern, transports gas from Panhandle Eastern's pipeline to its distributor customer, Michigan Consolidated Gas Company, and other customers) were excessive, and that the rates and charges demanded and collected by Panhandle Eastern from said Michigan Consolidated Gas Company were unjust, unreasonable and unduly discriminatory. The prayer of the complaint was that the Commission, after investigation, fix and determine the just and reasonable rates to be thereafter observed and enforced in respect to such transportation and sale of natural gas for resale in said city of Detroit and in said County of Wayne.

Answers were filed by Michigan Gas on March 28, 1941, and by Panhandle Eastern on April 3, 1941, in which it

was denied that the rates complained of were excessive, unjust, unreasonable or discriminatory. Permission to intervene in said proceeding was granted to Michigan Public Service Commission (a State regulatory body having jurisdiction of the rates of Michigan Consolidated and other Michigan utilities) on June 10, 1941, and to Michigan Consolidated on July 12, 1941.

(c) Docket No. G-207 was a proceeding instituted by the Commission on its own motion against Panhandle Eastern and Michigan Gas by way of an investigation for the purpose of enabling the Commission

(1)

To determine with respect to each of said companies (a) whether it is a natural gas company within the meaning of the Natural Gas Act, and (b) whether in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, any rates, charges or classifications demanded, observed, charged or collected, or any contracts affecting such rates, charges, or classifications, are unjust, unreasonable, unduly discriminatory or preferential; and

[fol. d] (2)

If the Commission, after hearing, should find that Panhandle Eastern or Michigan Gas is a natural gas company within the meaning of the Natural Gas Act, and that any of their rates, charges, classifications, rules, regulations, practices or contracts, subject to the jurisdiction of the Commission, are unjust, unreasonable, unduly discriminatory or preferential, to determine and fix by appropriate order or orders, just and reasonable rates, charges, classifications, rules, regulations, practices or contracts to be thereafter observed and in force.

On March 26, 1942, during the hearings hereinafter referred to, Illinois Natural was, by agreement, made party to the proceedings in Docket G-207.

(d) On July 15, 1941, hearings were commenced under Docket No. G-200 before Hon. Samuel H. Crosby, Trial Examiner for the Commission. During those hearings, on September 2, 1941, Dockets Nos. G-200 and G-207 were

consolidated, and thereafter the hearings continued in the consolidated causes from time to time, until April 23, 1942. These hearings occupied eighty-four hearing days, during which oral testimony (comprising 10,774 pages), two hundred sixty-seven exhibits, and other documentary evidence were introduced.

(e) On April 23, 1942, motions were filed by Commission Counsel, and by Counsel for the City of Detroit, the County of Wayne, and Intervener, Michigan Consolidated, seeking an immediate or interim order of the Commission directing a reduction of Petitioners' rates pending further hearings and investigation. Upon such motions being filed, the examiner adjourned the hearings and directed the filing by all parties of briefs, addressed to such motions. Briefs of all parties were filed on or prior to June 1, 1942.

(f) On September 28th, 1942, the Commission served on your petitioners its final interim rate order in said con- [fol. e) solidated dockets, but keeping the record in said causes open for such further proceedings as the Commission may deem necessary or advisable. Said order bears the date September 23, 1942, and was issued pursuant to its Opinion No. 80. A copy of such Opinion No. 80 and the order issued pursuant thereto is hereto attached, marked Exhibit A, and by reference made a part hereof.

In said Order the Commission, without a specific finding as to the reasonableness of any specific rate, but solely because it found that Petitioners' net earnings during 1941 exceeded a 6½% return on the rate base found by it to be reasonable, purported to find Petitioners' rates and charges in connection with their transportation and sale of natural gas in interstate commerce for ultimate public consumption to be unjust, unreasonable and excessive, and directed that Petitioners' rates and charges for or in connection with their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption be so reduced as to reflect, when applied to their 1941 transportation and sales, a reduction of $5,094,384 per annum below their 1941 consolidated gross operating revenues of $17,789,573.

Said Order further required that on or before October 15, 1942, Petitioners file new schedules of rates and charges

for or in connection with their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption which shall reflect such reduction of $5,094,384 below 1941 consolidated gross operating revenues; and that such new schedules of rates and charges shall be effective as to all bills regularly rendered on or after November 1, 1942.

On October 12, 1942, the Commission issued its order extending the time for filing new schedules of rates and charges required by said Order of September 23, 1942, to be filed by October 15, 1942, to November 10, 1942; but provided therein that such extension of time should not operate as a change of the date on which the new schedule of rates and charges should be effective, namely, Novem- [fol. f] ber 1, 1942, and that nothing in said order should be construed as staying the time within which Petitioners shall file a petition for rehearing or a petition for review as provided in Section 19 of the Natural Gas Act. A copy of said Order is attached hereto, marked Exhibit B, and by reference made a part hereof.

(g) Within thirty days from the date of said Opinion No. 80 and the order of the Commission issued pursuant thereto, to-wit, on October 23, 1942, Petitioners did file with the Commission, in strict accord with the rules of the Commission and Section 19 of the Natural Gas Act, their joint Petition for Rehearing and Reconsideration by the Commission of its said order of September 23, 1942, issued pursuant to said Opinion No. 80. In that petition complaint is made of certain rulings by the Commission's Examiner in the course of the hearing of evidence, and to certain rulings, holdings and findings in the memorandum opinion upon which said order is based, and in the order itself; and complaint is also made of the failure of the Commission in said order to make certain rulings, holdings and findings. The rulings, holdings and findings concerning which complaint is made are set out in Specifications of Error incorporated in said petition.

(h) On October 30, 1942, the Commission denied your Petitioners' Petition for Rehearing and Reconsideration. Petitioners have, therefore, exhausted all their administrative and procedural remedies before the Commission.

B.

The Facts and Statute Upon Which Venue Is Based.

(a) The statute upon which venue and jurisdiction in this case is based is Section 19(b) of the Natural Gas Act; Act of June 21, 1938, Ch. 556, 52 Stat. 833; Title 15, U. S. C. A., Section 717 r (b), the pertinent part of which reads:

[fol. g] "Any party to a proceeding under this chapter aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business. * * *"

(b) Panhandle Eastern is a corporation organized and existing under the laws of the State of Delaware, Illinois Natural is a corporation organized and existing under the laws of the State of Illinois, and Michigan Gas is a corporation organized and existing under the laws of the State of Delaware. Each of petitioners is a natural-gas company within the contemplation of said Natural Gas Act. Illinois Natural and Michigan Gas are both wholly owned subsidiaries of Panhandle Eastern. Each of Petitioners has its principal place of business in Kansas City, Jackson County, Missouri, within the jurisdiction of the Eighth Circuit Court of Appeals. Petitioners together constitute a pipeline production transmission and marketing system owning large gas reserves in the states of Texas, Oklahoma, and Kansas, and a pipeline with appropriate lateral lines connecting those reserves with markets in Texas, Kansas, Missouri, Illinois, Indiana, Ohio, and Michigan. A substantial portion of the transmission facilities lie within the territory over which this Court has jurisdiction.

C.

The Points on Which the Petitioners Intend to Rely.

In this Review proceeding, Petitioners intend to rely upon each and all of the Points hereinafter set forth, all of which were urged by Petitioners as specifications of error in their Petition for Rehearing filed with the Commission.

To avoid unnecessary repetition, Petitioners assert that each of the errors hereinafter specifically assigned under [fol. h] the following Points operates to confiscate and take Petitioners' property without just compensation, and to deprive Petitioners of such property without due process of law; contrary to the Fifth Amendment to the Constitution of the United States; that none of the Findings and Conclusions challenged is based upon substantial evidence as required by the Natural Gas Act, and each is contrary to the evidence; and that because of the errors complained of in said respective Points, Petitioners have not been given such a fair hearing as is contemplated by the Natural Gas Act and the provisions of the Fifth Amendment to the Constitution of the United States; and, by virtue of such errors, the Commission's order, as applied to the facts before it and viewed in its entirety, produces an arbitrary result.

First Point.

The Examiner for the Commission erred in refusing to admit in evidence Exhibits 39, 39-A, 62, 83 and 84, showing the reproduction cost of Petitioners' physical properties and the present value of such properties as evidenced by the reproduction cost new of such properties less observed depreciation thereof; such evidence being admissible for consideration in determining both the fair value of such properties and the return to which Petitioners are justly and [reasonable] entitled.

Second Point.

The Examiner for the Commission erred in refusing to admit in evidence Exhibit 71 and Pages 17, 20, 21, 22 and 32, of Exhibit 75, showing the value of the properties of Panhandle Eastern at the approximate date of the enactment of the Natural Gas Act; such value, when considered in connection with subsequent additions and allowances for depreciation being appropriate for consideration by the Commission in determining both the fair value of Petitioners' properties and the return to which Petitioners are justly and reasonably entitled.

[fol. i] Third Point.

The Examiner for the Commission erred in refusing to admit in evidence Exhibits 37 and 37-A, and the testimony

explanatory thereof, showing the present value of the gas leasehold estates owned by Panhandle Eastern, based on the prices at which said gas leaseholds could now be sold, whether the production therefrom be sold by the purchaser in a regulated or in an unregulated market; such evidence being appropriate for consideration by the Commission in determining both the fair value of Petitioners' properties and the return to which Petitioners are justly and reasonably entitled.

Fourth Point.

The Commission erred in refusing to include in the rate base the value of the property represented by "Construction Work in Progress" on December 31, 1941, February 28, 1942, or March 31, 1942, the evidence clearly showing that the property reflected in such accounts represented actual cost to Petitioners as of those respective dates.

Fifth Point.

The Commission erred in refusing to include in the rate base Petitioners' property represented by the increase in "Gas Plant Classified" from December 31, 1941, to March 31, 1942, since such increase represented actual cost to Petitioners.

Sixth Point.

The Commission erred in refusing to include in the rate base the property represented by additional capital expenditures which, at the time hearings were suspended, were covered by current budgets, were in course of construction, and expected to be completed by the end of 1942, since the evidence clearly showed that the expenditures would be made, and that funds were on hand to make the required payments.

[fol. j] Seventh Point.

The Commission erred in failing to consider, in determining either the rate base or the appropriate return, the cost of carrying unused capacity until its use was required, since it was not shown that during the period 1932 to 1937 the earnings of Petitioner Panhandle Eastern constituted a reasonable return on its invested capital or that such cost was thereafter recouped from excessive earnings.

Eighth Point.

The Commission erred in finding that the failure of Petitioner Panhandle Eastern fully to utilize its capacity during the development period 1932 to 1937 was because of the restraint of its holding company because

(1). There is no evidence of probative value sufficient to justify the finding.

(2) The amount of revenues, if any, lost to the company, as a result of such restraint, if any there was, is not made to appear.

(3) There is no evidence to support the finding that customers along the line were clamoring for service.

Ninth Point.

The Commission erred in refusing to include in the rate base the unamortized portion ($251,505) of the item of $654,989 included in "old gas sales and purchase contracts" which concededly reflects cost to Panhandle Eastern.

Tenth Point.

The Commission erred in refusing to accept as the rate base Petitioners' "Prudent Investment" represented by its invested capital, adjusted by a reduction therefrom of the unamortized portion of the item representing the contracts acquired by Panhandle Eastern from Missouri [fol. k] Kansas Pipe Line Company, originally for $2,398,402, the only item reflected in the invested capital as to which any question has been raised relating to cost to Panhandle Eastern.

Eleventh Point.

The Commission erred in failing to adopt at least Petitioners' Invested Capital (less the unamortized portion of the old gas sales and purchase contracts) as of March 31, 1942, in the sum of $76,563,961, as the appropriate rate basis and the cost of service thereof, $5,173,686 as the return to which Petitioners are entitled—a "rate of return" of 6.75% on the invested capital.

Twelfth Point.

The Commission erred in failing to adopt at least Petitioners' Pro Forma Invested Capital (less the unamor-

tized portion of the old gas sales and purchase contracts) as of December 31, 1941, in the sum of $75,738,202, as the rate base, and the cost of service thereof, $5,074,292, as the return to which Petitioners are entitled—a rate of return of 6.69% on such invested capital.

Thirteenth Point.

The Commission erred in finding that 6½% is a fair return upon the rate base allowed because there is no evidence of probative value to support that finding.

Fourteenth Point.

The Commission erred in finding that $4,363,925 constitutes a reasonable return to Petitioners because there is no evidence of probative value showing that such amount is a fair and reasonable return on either Petitioners' invested capital, or the fair value of their property.

[fol. 1] Fifteenth Point.

The Commission erred in finding that $4,363,925 constitutes a reasonable return to Petitioners since there is no evidence of probative value showing that such sum reflects the "cost of service" as that term is used in applying the prudent investment doctrine of regulation, no evidence of probative value that such sum will be adequate to attract capital to the enterprise, or be adequate to enable Petitioners to maintain and support their credit, and enable them to raise the money necessary for the discharge of their public duties; and such finding is against the uncontradicted evidence showing that such sum will not be adequate for those purposes.

Sixteenth Point.

The Commission erred in using Petitioners' 1941 experience as a test period without

(a) Adjusting same so as to deduct from receipts the amounts received ($980,000) from increased sales to purchasers engaged in war work, such sales not being normal.

(b) Increasing operating expenses in the sum of $73,500 resulting from payroll increases not incident to increases in revenues, required in 1942 and subsequent years, and not fully reflected in 1941 operating expenses.

(c) Increasing operating expenses by the sum of $221,500, not fully reflected in 1941 operating expenses, required for emergency property protection as a result of the war (which emergency expense should be considered if the abnormal receipts are considered).

(d) Increasing operating expenses by the sum of $30,000 representing increased cost of Employees' Welfare and Pension Expense resulting from the employees of Michigan Gas becoming employees of the Panhandle Eastern System, and thereby being entitled to participate in such benefits.

[fol. m] (e) Increasing operating expenses by the sum of $70,000 representing a reasonable annual charge for amortizing in five years the expense of the proceedings.

(f) Increasing operating expenses by the sum of $.... so as to take care of increased Federal Income Excess Profits Taxes required by the 1942 Act.

Seventeenth Point.

The Commission erred in the assumption that future increases in net revenues will equal the increases in expenses since there is no evidence of probative value to sustain such assumption.

Eighteenth Point.

The Commission erred in taking into consideration the possibility that Petitioners' lines may for a time be operated at a 90% capacity factor without also taking into consideration the additional capital expenditures which will be required to permit such operation more than a few months, and the increased unit production cost resulting therefrom.

Nineteenth Point.

The Commission erred in holding that increased tax burdens must be borne by a regulated utility, and are not to be allowed for in the fixing of Petitioners' rates.

Twentieth Point.

The Commission erred in failing reasonably to allocate Petitioners' earnings between regulated and unregulated sales, and in taking Petitioners' direct sales into consid-

eration in determining the amounts of Petitioners' profits, and then directing that the excess return so determined be reduced through a reduction of the prices and charges for gas sold for resale; thereby assuming jurisdiction over Petitioners' direct sales.

[fol. n] Twenty First Point.

The Commission erred in requiring a reduction of Petitioners' rates and charges so as to reflect, when applied to their 1941 transportation and sales, a reduction of not less than $5,094,384 below their 1941 consolidated gross operating revenue; thus taking from Petitioners a large portion of their required cost of service.

D.

The record in this case, as already shown, contains 10,774 pages and two hundred sixty-seven Exhibits, some of which are rather lengthy. Counsel for Petitioners are now preparing a narrative statement of the record, and it may be possible for the parties to stipulate as to the corrections thereof, and as to what portions of the transcript or the narrative should be printed. Whether such stipulation is reached or not, it will not be reasonably feasible for Petitioners after the filing of the transcript in this Court, within the time required by the rules of this Court, to prepare and serve upon all other parties and file with the Court a designation of the portions of the transcript to be contained in the printed record, and a reasonable time should be allowed for such designation and service and filing thereof.

Wherefore, Petitioners pray:

1. That a copy of this Petition forthwith be served upon some member of Respondent, Federal Power Commission, in pursuance of Section 19 (b) of the Natural Gas Act (Act of June 21, 1938, Ch. 556, 52 Stat. 833; Section 717 r. (b), Title 15, U. S. C. A.), and that all parties respondent herein be served with a copy of said Petition, as provided by the Rules of this Court.

2. That Respondent, Federal Power Commission, be required, in conformity with said Act, to certify and file with the Court a transcript of the record upon which the Order now sought to be reviewed was entered, including

[fol. o] the testimony, evidence, exhibits, pleadings, opinions, findings, conclusions and orders of said Respondent in the two dockets above referred to.

3. That pursuant to the rules of this Court Petitioners be notified by the Clerk when said transcript has been received and that an order be entered herein allowing Petitioners a reasonable time from the date of such notice within which to prepare the portion of the transcript to be contained in the printed record, unless, in the meantime, the parties have stipulated as to what portions of the transcript shall be printed.

4. That this Court review the Order of the Respondent, Federal Power Commission, of September 23, 1942, and the findings and opinion of the Commission upon which the same is based and which are incorporated therein, as supplemented by the order of said Commission dated October 12, 1942, and the order of the Commission denying Petitioners' Petition for Rehearing filed with the Commission, and upon such review reverse, vacate, set aside, and hold said Order for naught.

5. That this Court exercise its jurisdiction over the parties and subject matter of this Petition and grant to Petitioners such other and further relief in the premises as the rights and equities of the cause may require.

PANHANDLE EASTERN PIPE LINE COMPANY,

ILLINOIS NATURAL GAS COMPANY,

MICHIGAN GAS TRANSMISSION CORPORATION,

By J. D. Creveling, President,
1221 Baltimore Avenue,
Kansas City, Missouri.

GLENN W. CLARK,
1221 Baltimore Avenue,
Kansas City, Missouri.

D. H. CULTON,
Oliver Eakle Building,
Amarillo, Texas,
Attorneys for Petitioners.

[fol. p] State of Missouri,
County of Jackson.

J. D. Creveling, being duly sworn, on oath deposes and says:

That he is the President of Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company, and Michigan Gas Transmission Corporation, the Petitioners in the above Petition named; that he has read the above and foregoing Petition and knows the contents thereof, and that the matters and things therein stated are true, as he verily believes.

J. D. CREVELING.

Subscribed and Sworn to before me this 17th day of November, 1942.

(Seal) MARY C. MAGERS,
Notary Public,
Jackson County, Missouri.

My commission expires August 31, 1943.

[fol. q] Exhibit A.

United States of America.
Federal Power Commission
Opinion No. 80
City of Detroit, Michigan,
and
County of Wayne, Michigan,
Docket No. G-200. vs.
Panhandle Eastern Pipe Line Company,
and
Michigan Gas Transmission Corporation,
In the Matter of
Panhandle Eastern Pipe Line Company,
Michigan Gas Transmission Corporation,
and
Illinois Natural Gas Company
Docket No. G-207.

Appearances.

For the City of Detroit, Michigan:
Paul E. Krause, Esq., James H. Lee, Esq.

For the County of Wayne, Michigan:
William E. Dowling, Esq., Harold Goodman, Esq.

For the Respondents:
Glenn W. Clark, Esq., D. H. Culton, Esq., Robert E. May, Esq., Carl I. Wheat, Esq.

[fol. r] For Respondent Michigan Gas Transmission Corporation:
Milton C. Baldridge, Esq., Charles S. Porritt, Esq.

For the Michigan Public Service Commission:
James W. Williams, Esq.

For the Michigan Consolidated Gas Company:
Park Chamberlain, Esq., Henry A. Montgomery, Esq., A. V. McRee, Esq.

For the Federal Power Commission:
Harry S. Littman, Esq.

Opinion

Scott, Commissioner:

The issues now before us in these proceedings are raised by motions for an immediate order reducing natural gas rates pending further investigation.

On February 28, 1941, the City of Detroit and the County of Wayne, Michigan, filed a petition with this Commission alleging that the rates and charges of Panhandle Eastern Pipe Line Company[1] and Michigan Gas Transmission Corporation[2] for natural gas sold to Michigan Consolidated Gas Company[3] for resale in that city and county are unjust, unreasonable and unduly discriminatory. On May 22, 1941, the Commission, on its own motion, instituted an investigation of all the interstate wholesale natural gas rates and charges of Panhandle Eastern and Michigan Gas. The two proceedings were consolidated for purposes of hearing. The Michigan Public Service Commission and

[1]Hereinafter referred to as "Panhandle Eastern."

[2]Hereinafter referred to as "Michigan Gas."

[3]Hereinafter referred to as "Michigan Consolidated."

Michigan Consolidated were permitted to intervene. On March 26, 1942, the Commission enlarged the investigation [fol. s] to include the Illinois Natural Gas Company.[4]

Hearings were begun on July 15, 1941, and continued thereafter from time to time through 84 days until April 23, 1942, when our Trial Examiner adjourned the hearings pending disposition by the Commission of the pending motions for an immediate order reducing rates filed by the Complainants, Michigan Consolidated and counsel for this Commission. The record comprises 10,774 pages of transcript of the proceedings and 267 exhibits, consisting largely of the respondents'[5] presentation on direct, cross-examination thereon, and rebuttal evidence.

The complainants offered one witness in support of their petition. The respondents offered 24 witnesses who presented a complete rate case including, among other matters, evidence of operations, revenues, expenses, book cost and original cost of their properties, "going concern value," working capital, gas reserves, depreciation, rate of return, future capital expenditures and allocation of costs. Counsel for the Commission called 5 witnesses whose testimony related principally to depreciation, a write-up, historical earnings on average net investment, working capital, rate of return, and allocation of costs. The interveners presented no witnesses. The witnesses were tendered to all parties for cross-examination and full opportunity was given to present rebuttal evidence. Exhaustive briefs have been filed by the parties fully arguing the issues raised by the motions.

The complainants contend that the respondents' rates should immediately be reduced by $6,800,479 per annum; Commission counsel seeks a reduction of [a] least $5,580,887; and Michigan Consolidated urges a reduction of $5,489,874. The respondents deny that their rates and charges are unjust and contend that the motions should be denied.

[fol. t] Jurisdiction.

No question has been raised concerning the Commission's jurisdiction over the respondents' rates and charges

[4]Hereinafter referred to as "Illinois Natural."

[5]Panhandle Eastern, Michigan Gas and Illinois Natural are hereinafter sometimes referred to collectively as the "respondents."

for the transportation and sale in interstate commerce of natural gas for resale, and the respondents admit that they are "natural-gas companies" within the purview of the Natural Gas Act.

Authority for Interim Order.

It has been clearly established by the Supreme Court of the United States in the Natural Gas Pipeline Company of America case[6] that this Commission may, upon a proper record, enter an interim order in rate proceedings under the Natural Gas Act.

In the instant proceedings respondents have been given full opportunity to present all the evidence they desired, to adduce, and to cross-examine the witnesses offered by the complainants and Commission's counsel. Indeed, respondents' counsel stated at the conclusion of all the testimony now contained in the record that they had no further evidence to offer, and that they had not been denied the opportunity to present additional testimony. In their brief, respondents' counsel state that full and complete evidence has been presented dealing with those elements which this Commission has heretofore deemed appropriate for consideration in proceedings such as these. The record is voluminous and comprehensive, touching those matters usually deemed relevant in the rate-making process. It cannot be gainsaid that the respondents have had a full and complete hearing. Thus, it appears that the record is ripe for a determination of the substantive aspects of the problem posed by the motions.

[fol. u] Ownership, Control and Description of Respondents' System.

The respondent, Panhandle Eastern, a Delaware Corporation, has outstanding 807,367 shares of common stock owned beneficially as follows: 404,326 shares (50.1%) by Columbia Oil & Gasoline Corporation, a subsidiary of Columbia Gas & Electric Corporation; 339,475 shares (42%) by Missouri-Kansas Pipe Line Company; and 63,566 shares

[6]Federal Power Commission, et al., vs. Natural Gas Pipeline Company of America, et al., 315 U. S. .....; 62 S. Ct. 736.

by the public. All the outstanding securities of respondent, Michigan Gas, a Delaware corporation, and respondent, Illinois Natural, an Illinois corporation, are owned by Panhandle Eastern. The respondents are operated as a single system for the production, gathering, transportation and sale in interstate commerce of natural gas, principally for resale, and it is not controverted that the separate corporate entities may be disregarded.

Panhandle Eastern produces, purchases and gathers natural gas in the Amarillo field of the Texas Panhandle and in the Hugoton field in southwestern Kansas. This gas is transported to markets along Panhandle Eastern's main transmission line which extends for a distance of about 860 miles from a point in Moore County, in the Texas Panhandle, through the States of Oklahoma, Kansas, Missouri and Illinois, to a point near Dana, Indiana, adjacent to the Illinois-Indiana boundary. At this point, gas is delivered into the main transmission line of Michigan Gas, which extends from Dana, Indiana, to a point near Zionsville, Indiana, where the line branches to Detroit, Michigan, and to Muncie, Indiana. Through these facilities of Michigan Gas, the gas is marketed in Indiana, Ohio, and Michigan. Illinois Natural owns numerous lateral lines extending from Panhandle Eastern's main line in Illinois, and serves numerous customers in that State. Panhandle Eastern also owns a small section of pipe line, recently acquired from The Ohio Fuel Gas Company, connected to the lines of Michigan Gas and used to serve certain com- [fol. v] munities in Indiana and Ohio. Together, these lines constitute the longest natural-gas pipe line in the world, serving more than 200 cities, towns and communities with more than 700,000 retail customers in Texas, Kansas, Missouri, Illinois, Indiana, Michigan and Ohio.

The Rate Base.

Evidence of Reproduction Cost Excluded. The record before us raises the question of the necessity, under the Natural Gas Act, for considering evidence of the reproduction cost of respondents' property. Upon objection of Commission counsel, such evidence was excluded by the Trial Examiner.

Section 6(a) of the Natural Gas Act provides:

"Sec. 6(a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property."

It is obvious from an examination of the record that there is no need to estimate the cost of the respondents' properties. The cost records are complete and maintained in accordance with recognized accounting practice. The respondents assert that their books accurately reflect the original cost of the properties. The plant has been built within recent years, construction having begun in 1930.[7] [fol. w] There is, therefore, no difficulty whatever in ascertaining promptly and accurately from respondents' books the actual legitimate cost of or the investment in their property.

We held in the Chicago District Electric Generating case[8] that under Section 208(a) of the Federal Power Act (the provisions of which are identical with Section 6(a), supra) that reproduction cost evidence is inherently fallacious and should be disregarded under that statute.

It is not deemed necessary to discuss at great length the defects and vagaries of reproduction cost evidence. The manifold reasons why such evidence is fallacious, and is

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[7]The books show the gas plant classified of Panhandle Eastern and Illinois Natural, combined, at the end of each of the years 1930-1941 as:

1930	$ 7,571,851	1936	$46,387,074
1931	41,815,781	1937	58,071,907
1932	42,568,283	1938	58,751,335
1933	42,435,049	1939	59,226,065
1934	42,594,692	1940	64,380,428
1935	42,441,201	1941	65,225,927

and of Michigan Gas as:

1931	$ 2,340,353	1937	$ 9,226,241
1932	2,354,167	1938	9,260,047
1933	2,353,183	1939	9,812,436
1934	2,357,450	1940	12,295,897
1935	2,397,880	1941	12,804,341
1936	7,770,429		

[8]Re Chicago District Electric Generating Corp., 39 PUR (N. S.) 263.

obstructive of the regulatory process, have been fully expounded by members of the Supreme Court[9] and by this Commission.[10]

[fol. x] Moreover, in the light of the many expressions emanating from the highest court in the land, and the opinions of competent experts in the regulatory field, it seems evident that Congress recognized the fallacy of the reproduction cost doctrine and sought by the enactment of Section 6(a) to shelve that illusory concept as a requisite in rate making. Our view, that this was uppermost in the mind of Congress, is substantially concurred in by the Special Committee of the Public Utility Law Section of the American Bar Association in its report at the annual meeting of such association in September, 1940.[11] No less significant in this respect is the statement of the Supreme Court in the Natural Gas Pipeline Company of America case that:

"The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom this legislative power has been

[9]See concurring opinion of Justice Black, Douglas and Murphy in Federal Power Commission, et al. vs. Natural Gas Pipeline Company of America, et al., 315 U. S. ....; 62 St. Ct. 736. Mr. Justice Black dissenting in McCart vs. Indianapolis Water Co., 302 U. S. 419, 435. Concurring opinion of Mr. Justice Frankfurter and Mr. Justice Black in Driscoll vs. Edison Co., 307 U. S. 104, 122. Dissenting opinion of Mr. Justice Brandeis in State of Missouri ex rel Southwestern Bell Telephone Co. vs. Public Service Commission of Missouri, et al., 262 U. S. 276, 292. Mr. Justice Brandeis concurring in St. Joseph Stockyards Co. vs. U. S., 298 U. S. 38, 88-92.

[10]Re Chicago District Electric Generating Corp. case, supra; Re Canadian River Gas Co., et al., FPC Op. 73; Re Hope Natural Gas Co., FPC Op. 76; see brief for the United States Amicus Curiae, in which this Commission joined, case of Driscoll vs. Edison, 307 U. S. 104.

[11]This Committee in discussing Section 208 of the Federal Power Act and Section 6 of the Natural Gas Act concluded:

"It will be noted that the primary duty of the Commission under these two provisions is to ascertain the cost of the property and the depreciation thereon, and that 'other facts which bear on the determination of such cost or depreciation, and the fair value of such property' are to be determined only 'when found necessary for rate making purposes.' There is here the possible inference that the Congress, when it drafted this provision, was hopeful that the courts would decide that nothing other than the 'actual legitimate cost' of the property would be found necessary for rate making purposes.' However that may be it is patent that an accounting or cost rate base was dominant in the Congressional mind, and that these very recent statutes in that respect are the very antithesis of some of the older state statutes which prescribe the reproduction cost new less depreciation formula."

delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances."

[fol. y] When such pronouncement is coupled with the assertion, in the separate concurring opinion, of Justices Black, Douglas and Murphy that:

"As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or of giving any weight to that element of 'fair value.' The Commission may now adopt, if it chooses, prudent investment as a rate base—the base long advocated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in the Southwestern Bell Telephone case there could be no constitutional objection if the Commission adhered to that formula and rejected all others"

any thought that reproduction cost evidence is any longer required in the rate-making process is substantially destroyed.

Having been authorized by the Congress to determine in the first instance the actual legitimate cost of utility properties and the depreciation therein, we conclude that the rate base is the actual legitimate cost of the property used and useful in furnishing the service, less the existing depreciation in such property, plus the working capital necessary to render such service. It is certain from the record that no necessity exists requiring the consideration of other facts in determining a rate base in these proceedings. It is, therefore, clear that the exclusion of reproduction cost evidence by the Trial Examiner was proper.

The Actual Legitimate Cost. The record clearly shows that the consolidated book cost of the plant in service at December 31, 1941, is $79,986,407.[12] Respondents take the

[12]This gives effect to the acquisition by Panhandle Eastern on February 6, 1942, of Michigan Gas, Indiana Gas Distribution Corporation, and a section of pipe line purchased from The Ohio Fuel Gas Company. It also gives effect to the following deductions:

(a) $139,500 of inter-company profit eliminated by the respondents on their consolidated statements, but not recorded on the books, and (b) $55,016 of "contributions in aid of construction."

Indiana Gas Distribution Corporation, hereinafter referred to as "Indiana Gas," a wholly-owned subsidiary of Panhandle Eastern, owns

position that their book cost and the actual legitimate cost [fol. z] are identical. The movants, for purposes of their motions, have accepted this sum as the actual cost of the properties, except for an item of $1,172,115, the unamortized amount of "gas sales and purchase contracts," alleged to be a write-up.

The evidence shows that the partnership firm of Shippey, Maddin and Parish Gas Company originally secured these contracts at no cost, and thereafter transferred the same to its subsidiary, Missouri-Kansas Pipe Line Company, which company recorded them on its books at a purported value of $1,105,000. On October 23, 1930, Panhandle Eastern acquired these contracts from Missouri-Kansas Pipe Line Company, then its parent, and recorded the same on its books at $2,398,402. By December 31, 1941, this amount had been reduced through annual amortization charges to $1,172,115. Since the record discloses that this unamortized balance of "gas sales and purchase contracts" represents a write-up (no property used and useful), it must be excluded in arriving at the actual legitimate cost of plant.

Panhandle Eastern is currently amortizing this write-up through charges to operating expenses at the rate of $293,029 per year. Inasmuch as this write-up, if allowed, [fol. aa] would impose an unwarranted burden on the consumers, it is accordingly excluded from operating expenses.

The elimination from book cost of the said write-up of $1,172,115 leaves $78,814,292, which is accepted, for purposes of disposing of the problems presented by the motions before us, as the actual legitimate cost of the respond-

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and operates certain facilities in Indiana through which it serves approximately 1,800 customers with natural gas purchased from either Michigan Gas or Panhandle Eastern. Although the distribution facilities of this company are not subject to the jurisdiction of this Commission, it is undisputed that its properties, receipts and expenses are inconsequential in comparison with the whole of the respondents' system, and the parties have treated the same as an integral part of the respondents' interstate operations. We shall therefore include the operations of Indiana Gas as a part of the respondents' interstate business for purposes of disposing of the motions before us.

ents' property used and useful in furnishing gas service at December 31, 1941, as shown by the following tabulation:

Panhandle Eastern	$ 62,665,568
Illinois Natural	2,871,194
Michigan Gas	12,643,847
Indiana Gas	194,357
Pipe Line Purchased from Ohio Fuel Gas Co.	439,326
Total	$ 78,814,292

Depreciation.[13] The respondents charge amounts for depreciation to operating expense and credit the same to depreciation reserves at the rate of approximately 3% per year on a straight-line basis. As shown by the respondents' books, the depreciation expense in 1941 was $2,512,498, and the total accumulated depreciation reserves at December 31, 1941, was $12,596,987. The Commission's staff recommends that for purposes of determining the rates to be fixed by interim order these amounts be accepted as the annual depreciation allowance and accrued depreciation respectively. The respondents agree that the books reserves should be accepted for purposes of these proceedings as the appropriate measure of the accrued depreciation. They do not deny that the annual depreciation expense as recorded on the books has been adequate and reasonable. The depreciation reserves, as of December 31, 1941, were as follows:

[fol. bb]	Panhandle Eastern	$ 10,405,047
	Illinois Natural	502,976
	Michigan Gas	1,661,966[14]
	Indiana Gas	26,998
	Total	$ 12,596,987

Where reasonable and proper depreciation accounting practices have been observed, the resulting reserve represents the best measure of the depreciation existing in the property and should be deducted from the gross cost in the rate base determination.[15] The record discloses that

[13]The term "depreciation" as herein used includes depletion and amortization.

[14]Reflects a deduction on $36,000 of inter-company profit eliminated by the respondents on their consolidated statements, but not recorded on the books.

[15]Re Hope Natural Gas Co., FPC Op. 76; Re Chicago District Electric Generating Corp., 39 PUR (N. S.) 263, 275; Re Interstate Power Co., 32 PUR (N. S.) 1, 10.

the respondents have followed a consistent accounting method in recording the annual and accrued depreciation. The amounts have been determined by the management after consultation with an independent engineer and geologist as to the propriety and reasonableness of the annual provisions and the reserves. The testimony of the Commission's staff is to the effect that the amounts which the respondents have set up on their books are adequate and reasonable, having in view the economic life of the property as governed by such elements of depreciation as the exhaustion of the natural gas supply, wear, decay, inadequacy and obsolescence. There is no dispute that these amounts have been sufficient to provide for the restoration of the capital investment over the life of the gas supply.[16]

[fol. cc] The respondents, complainants, and Michigan Consolidated presented separate estimates of depreciation expense consisting of a combination amortization and annual replacement allowance. Under these estimates, the amortization allowance is accumulated at various sinking fund interest rates, but the replacement allowance is not calculated on a sinking fund basis. There is sharp disagreement both as to the sinking fund formula to be used in computing the amortization and as to the amount to be allowed for replacements. These differences lead to widely varying results.

No sufficient reasons have been advanced why these estimates are to be preferred to the amounts recorded on the respondents' books. For the purpose of disposing of the motions before us, we shall accept the respondents' recorded depreciation expense of $2,512,498 as the reasonable annual allowance for depreciation, and the total accumulated depreciation reserves of $12,596,987 as the actual existing depreciation in the plant as of December 31, 1941.

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[16]The respondents presented evidence indicating that Panhandle Eastern controls recoverable gas reserves of not less than 700 billion cubic feet in the Texas Panhandle field, and not less than 1,700 billion cubic feet in the Hugoton field, combined gas reserves adequate to supply the respondents' estimated market requirements for a period of more than 25 years. In fact, Panhandle Eastern's president testified that sufficient additional gas reserves could be secured on a favorable and economical basis to meet future requirements for the next 30 to 35 years.

Working Capital. The respondents claim the following amounts for working capital:

Cash for operating expenses	$ 517,175
Cash for emergencies	100,000
Minimum bank balances	316,303
Prepayments	134,538
Materials and supplies	735,724
Line pack	65,407
Total	$1,869,147

The Commission's staff recommends a total working capital allowance of $920,000. This sum includes for the respondents $322,701 of cash for operation and maintenance expenses, $489,893 for materials and supplies, $101,097 for prepayments, and $6,309 to provide working capital for Indiana Gas.

[fol. dd] We find the staff's estimated cash allowance for operation and maintenance expense of $322,701 to be proper and reasonable. This sum is equal to 45 days of the actual total 1941 operation and maintenance expense of the respondents, excluding cost of gas purchased. The respondents' higher claim for this item is primarily due to the improper inclusion of Panhandle Eastern's cost of gas purchased. It is clear from the evidence that the respondents pay for such gas at about the same time in each month as revenues from gas sales are collected. Hence, no allowance should be included in working capital for the cost of such gas.

We accept the staff's recommendation of $489,893 for materials and supplies. This amount represents the actual inventory on hand at December 31, 1941, the largest in the respondents' operating history. The respondents' higher claim is occasioned by the inclusion for Panhandle Eastern, in addition to the inventory as of June 30, 1941, of materials and supplies then on order and estimated to be ordered during the ensuing six months, without any deduction for materials and supplies issued and used during that period. The exorbitance of the respondents' estimate is demonstrated by the fact that it exceeds by at least $260,000 the materials and supplies actually on hand at December 31, 1941.

The staff's allowance of $101,097 for prepayments, representing the actual amount of such items as of December 31, 1941, is considered ample.

The evidence of record convinces us that $920,000 is a fair and reasonable amount for working capital and the same is allowed.

We make no separate allowance for the items of line pack, cash for emergencies, and minimum bank balances. To do so would result in duplication. The evidence discloses that Panhandle Eastern has capitalized in its plant accounts amounts for line pack in excess of the sum separately claimed for that item as working capital. The amounts accrued by the respondents for Federal, State [fol. ee] and local taxes are more than sufficient to cover the cash required for emergencies and minimum bank balances. Panhandle Eastern alone had approximately $3,000,000 in tax accruals at all times during the year 1941. Michigan Gas had accrued $268,385 for Federal income taxes and $114,000 for Indiana property taxes at December 31, 1941. We have consistently recognized that such tax accruals are available as cash working capital.[17]

Going Concern Value. We reject the respondents' claim for going concern value of $7,822,533. $5,500,000 of this amount is for so-called "carrying costs on that portion of plant idle, pending development of business," the same species of going concern value disallowed in the Natural Gas Pipeline Company of America case, supra. The said sum of $5,500,000 consists of a portion of the operating expenses, bond interest and ad valorem taxes incurred from the beginning of Panhandle Eastern's commercial operations on April 1, 1932, to October 1, 1937, all of which has been recouped through past rates and charges. It appears from the evidence that the failure of Panhandle Eastern to attain sales capacity during this so-called "development" period was not due to initial difficulties in securing patronage, but was because of the refusal by its holding company, Columbia Gas & Electric Corporation, to permit Panhandle Eastern to sell gas in competition with

[17] Re Chicago District Electric Generating Corp., 39 PUR (N. S.) 263, 276; Re Canadian River Gas Co., et al., FPC Op. 73; Re Hope Natural Gas Co., FPC Op. 76.

other subsidiaries and in territory considered as lying within the sphere of influence of other holding company interests. Actually, customers along the line were "clamoring" for service, and no justification for the refusal to sell gas has been offered by the respondents.[18]

[fol. ff] $736,619 is for "payments to utility customers" and "contributions to customers," consisting principally of reimbursements to distributing companies for expense incurred in the change-over from artificial to natural gas, and in promoting sales. Of this sum, $383,722 has been recovered through past operating expenses, and the balance of $352,897 is included in the allowed book cost of plant.

The remaining item of $1,585,914, "value of gas purchase contracts," is a synthetic figure appearing nowhere on the books, representing the purported present value of future savings anticipated in the purchase of gas under certain advantageous contracts. The "value" is based upon the difference between the present field price and the lower contract prices of such gas. It would be a travesty on regulation to permit fictitious amounts of this character to inflate the rate base.

Conclusions as to Rate Base. Our conclusions with respect to the proper rate base as of December 31, 1941, may be summarized as follows:

Actual Cost of Gas Plant in Service at December 31, 1941	$ 78,814,292
Less: Accrued Depreciation	12,596,987
Actual Cost Less Depreciation	$ 66,217,305
Working Capital	920,000
Rate Base	$ 67,137,305

The rate base as of February 28, 1942, determined in the same manner, is $66,697,358.[19] These amounts reflect the

[18] See Columbus Gas & Fuel Co. vs. Public Utilities Commission of Ohio, et al., 292 U. S. 398, 412.

[19]

Actual Cost of Gas Plant in Service at February 28, 1942	$ 78,875,242
Less: Depreciation Reserves	13,097,884
Actual Cost Less Depreciation	$ 65,777,358
Working Capital	920,000
Rate Base at February 28, 1942	$ 66,697,358

actual legitimate cost of the respondents' property as an [fol. gg] assembled whole and an established plant in successful operation.

The respondents contend that $4,944,820 of construction work in progress, and budget estimates totaling $6,372,100 to complete said construction, should be added to the rate base as of February 28, 1942. We conclude that it would be highly improper to include these amounts in the rate base. The facilities under construction are for the purpose of meeting the demands of new or increased business and consist mainly of plant additions to extend service to 80 communities in Michigan including Pontiac, Flint, Jackson, Battle Creek and Kalamazoo, involving service to territory not heretofore served by the respondents. If this construction were included in the rate base, rudimentary principles of fairness would require that full consideration also be given to the [addittional] revenues to be obtained from the added territory. However, the respondents deny that it is possible to estimate such increases in revenues.

The exclusion of this incomplete construction from the rate base does not deprive the respondents of just compensation on their actual investment therein. The respondents follow the practice of capitalizing interests on such amounts during construction. To allow in addition a return during the construction period would result in duplicate charges against the customers. Insofar as the respondents' claim includes future capital expenditures, the same must, of course, be disallowed. As the Supreme Court held in the Natural Gas Pipeline Company of America case, supra:

"* * * the refusal to include in the rate base capital expenditures not yet made can not involve confiscation."

Rate of Return.

A large part of the record is devoted to the subject of rate of return. The evidence on this subject is compre- [fol. hh] hensive and complete, dealing fully with those elements which Courts and Commissions have considered pertinent, such as the financial history of the respondents, the current cost of money, earnings on securities, commodity price indices, etc.

The respondents have advanced a novel theory which assumes that they are entitled to a return on their total capitalization as represented by the principal amounts of their outstanding securities including surplus. The fallacy inherent in this approach, however, is that it ignores the basic principle that the respondents are entitled to a fair and reasonable return upon the actual legitimate cost of their property devoted to the public service, less existing depreciation, plus a reasonable allowance for working capital, and no more.

The evidence discloses that the respondents' business is exceptionally free from serious business hazards. The gas supply is assured for at least 30 to 35 more years. We have made ample provision in the annual depreciation allowance for the restoration of the capital investment in the property over the claimed life of the gas supply. The respondents' markets are rapidly expanding and embrace the large metropolitan area of Detroit, which alone takes 40% of the entire output under a long-term contract. Panhandle Eastern's president testified that the demand for service is so great that within the next year the respondents will be called upon to sell every cubic foot of gas that can possibly be delivered through the lines, and that the capacity factor will increase from 70% to 90%.

It is likewise apparent from respondents' own evidence that Panhandle Eastern has been able to raise considerable capital at low cost. Only recently it successfully completed a financing program at remarkably low rates which resulted in a substantial reduction in its annual cost of capital. In February 1941, Panhandle Eastern sold $18,250,000 of first mortgage and first lien bonds and $5,000,000 of serial notes at an average annual interest cost of 2.74%. In February 1942, it sold an additional $10,000,000 [fol. ii] of first mortgage bonds at an interest cost of 3.13% and $15,000,000 of preferred stock at a cost of 5.86%. After the financing, Panhandle Eastern's annual cost of long-term debt was 2.88% and preferred stock was 5.87%, a combined annual cost of only 3.85% for these securities.

Panhandle Eastern has earned an average of 10.64% on its net investment over the past five years, and Michigan Gas an average of 8.5% during approximately the same period.

We conclude, upon careful consideration of the record in the light of the principles enunciated by the Supreme Court,[20] that 6½% is a fair and liberal annual rate of return upon the rate base allowed herein.

Rate Reduction.

The consolidated gross operating revenue of the respondents in 1941 was $17,789,573.

For the purpose of disposing of the motions for an interim order, we accept the respondents' 1941 consoli- [fol. jj] dated operating expenses as shown on their books (before Federal income and excess profits taxes), with the exception of $293,029 for the amortization of the write-up in "gas sales and purchase contracts" and $6,000 of rate case expense. The operating expenses thus allowed total $7,237,496. Adding Federal income taxes of $1,093,768 computed at the 1941 tax rate on the taxable net income reflecting a fair return of $4,363,925 (6½% of the rate base of $67,137,305 as of December 31, 1941), brings the total allowable operating revenue deductions for 1941 to $8,331,264.

The respondents' 1941 consolidated gross operating revenue, less proper operating revenue deductions, exceeds a fair return by $5,094,384. This amount is available for an immediate rate reduction, as shown by the following tabulation:

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[20] See Bluefield Waterworks & Improvement Co. vs. Public Service Commission of West Virginia, 262 U. S. 679, 692, wherein it is stated: "What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally".

Gross Operating Revenue	$17,789,573
Operating Revenue Deductions	8,331,264
Income Available for Return	$ 9,458,309
Reasonable Return—6½% of Rate Base	4,363,925
Total Available for Rate Reduction	$ 5,094,384

It is clear that a reduction of $5,094,384 in the respondents' 1941 rates would reduce gross operating revenue to $12,695,189, which amount would yield a fair return upon the rate base as of December 31, 1941, after payment of all necessary and proper operating expenses and charges for that year.

The Test Period. The question arises as to whether the year 1941 is a proper period by which to test the respondents' rates. The record contains the respondents' revenues and expenses from the beginning of operations in 1932 through March 31, 1942. Consideration of these figures convinces us that the latest calendar year, 1941, is the most reliable guide for the future, in view of the changing [fol. kk] economic conditions and the respondents' rapidly expanding business.

The respondents contend that consideration should be given to a $389,000 increase in operating expenses not fully included in their 1941 consolidated income statement, as follows:

	Increased Expenses on Annual Basis	Increases Already Included in 1941 Expenses	Increases Not Included in 1941 Expenses
Payroll Increases	$ 138,000	$ 64,500	$ 73,500
Emergency Property Protection	228,000	6,500	221,500
Amortization of Rate Case Expense[21]	70,000	6,000	64,000
Increased Cost of Employees' Welfare and Pension Expense	30,000		30,000
Total	$ 466,000	$ 77,000	$ 389,000

It is also claimed that allowance must be made for future increases in Federal income and excess profits taxes. Significantly, the respondents do not ask us to consider future increases in revenues.

[21] The total rate case expense claimed is $350,000. The respondents contend that this sum should be amortized over the next five years at the rate of $70,000 per year.

A forecast to be proper must, of course, include a prediction of revenues as well as expenses. The record clearly shows the trends of both. The respondents' operating expenses, before Federal income taxes, increased 9.8% in the first three months of 1942 over the first three months of 1941. The claimed increases in expenses, including amortization of rate case expense, are fully reflected in the 1942 operating expenses. The gross operating revenue increased 13.8% over the same period, while the respondents' net investment in plant declined approximately $700,000. Although the Congress has not yet passed the Revenue Act for 1942, it is certain that Federal income taxes will be increased. The House of Representatives has recently ap- [fol. 11] proved a bill providing for a combined normal and surtax rate of 45%, as compared with the 1941 rate of 31%.

With these data at hand, we can make a reasonable forecast of future operations. Applying these trends to the 1941 revenues and expenses, as adjusted in this opinion, and giving effect to the latest proposed Federal income tax rate of 45%, it appears that increases in revenues will more than offset all increases in expenses and taxes. This is shown by the following tabulation:

	1941	Rate of Increase	Increase	Projected for Full Year 1942
Operating Revenue	$12,695,189	13.845%	$1,757,649	$14,452,838
Operating Expenses, Exclusive of Federal Income Taxes	7,237,496	9.82 %	710,722	7,948,218
Net Earnings Before Income Taxes	$ 5,457,693	19.183%	$1,046,927	$ 6,504,620
Federal Income Tax (31% for 1941 and 45% for 1942)	1,093,768	88.234%	965,077	2,058,845
Net Operating Income	$ 4,363,925	1.875%	$ 81,850	$ 4,445,775

Indeed, it is apparent from the foregoing that the net operating income for the projected year 1942 exceeds by $81,850 the 6½% return of $4,363,925 on the rate base of $67,137,305.

The record compels the conclusion that this forecast is liberal to the respondents. The main transmission line

was operated at a 70% capacity factor in 1941. Panhandle Eastern's president testified that because of anticipated increased sales he fully expects the line to be operated at a 90% capacity factor in the near future. He further testified that the acquisition of Michigan Gas by Panhandle Eastern, effective February 6, 1942, would result in economies of operation which, of course, are not reflected in 1941 expenses.

We find upon the substantial evidence in the record that the reduction of $5,094,384 in the respondents' rates indi- [fol. mm] cated by the 1941 operations, will leave more than sufficient revenues to yield a fair return upon the rate base as of December 31, 1941.

Direct Industrial Sales. Upon the record before us, we consider it unnecessary to make an allocation of the respondents' business as between sales for resale and direct sales. The direct sales are made to 19 industrial customers on an interruptible basis and at prices fixed in competition with other fuels.

According to respondents' own evidence, no capacity has ever been constructed or provided in their gas plant for these direct industrial customers. It is equally clear that deliveries are made to them only when there is available excess off-peak capacity not required by the other wholesale customers. As evidence of this fact, in 1941 the volume of gas sold to the direct industrial customers amounted to 13.2% of the total system sales, whereas on the system peak day of the 1941-1942 winter the direct industrial sales constituted only 2.69% of the total deliveries, due to interruptions and curtailments brought about by the necessity for meeting the wholesale customer requirements.

Testimony of respondents' witnesses discloses that only $128,848 of the entire investment in plant (less than one-sixth of one per cent) is used exclusively in the service of the direct industrials. Moreover, the respondents themselves treat their entire business as a unit and make no segregation of costs or profits on their books as between the two classes of sales. Indeed, Panhandle Eastern's

president testified quite clearly on cross-examination that any attempt to allocate would be "theoretical," "unrealistic" and "not practical" because of the unified character of the business.

Deliveries to the direct industrials are made only when the plant is not fully used in serving the requirements of the wholesale business, and are curtailed or interrupted [fol. nn] when the capacity is required by the wholesale customers. It is apparent that the incidental direct industrial business is in reality a by-product of the wholesale business, comparable to the respondents' gasoline extraction business. All parties are agreed that the expenses and revenues in connection with the sale of gasoline extracted from the natural gas should be treated as an integral part of the respondents' entire operations. Thus, it is manifest from the evidence that the direct industrial sales are purely incidental to the main or principal enterprise, viz.: the wholesale business of the respondents.

It is obvious from the record that respondents have made no clear and convincing showing that the direct industrial sales are so distinct and separate from the general wholesale business that the two cannot here be considered together. We conclude, therefore, that, under such circumstances, it is not unreasonable to treat the entire business as a unit requiring no allocation as between the two classes of sales.

Tax Increases Due to the War Effort.

While we have arrived at certain definite conclusions in disposing of the motions for an interim order reducing rates herein, the tax problem posed by legislation pending in the Congress makes it imperative that we make further comment on this subject.

We take judicial notice of the fact that our country is waging a war for survival. It is common knowledge that there will be increased tax burdens resulting from the requirements inherent in a global conflict. Business as usual is out—in fact, a great many so-called "small enterprises" have ceased to exist. Normal business during this period of grave emergency is at an end. Obviously, no

one can expect to maintain a status or condition of business unaffected by the holocaust now sweeping the world. Increased tax burdens must be borne by the utility which [fol. 60] enjoys a monopolistic position in the economic field, as well as by others who have no such advantage.

Proposals now pending in Congress to raise additional taxes are required to defray in part greatly increased expenditures resulting from the war effort. In this regard, the report of the House Committee on Ways and Means,[22] considering the proposed Revenue Bill of 1942, after first pointing out that "the cost of the war effort is placing upon the Nation a financial burden unequaled in our history," states:

"It is thus apparent that our revenue needs are extreme and your committee have endeavored to secure every dollar of additional revenue which, in its opinion, the national economy can bear. In its effort toward this objective, however, care has been exercised in every instance not to place an unbearable burden upon any taxpayer."

Moreover, the President in his message to Congress July 30, 1941, requesting enactment of legislation for control of prices, stated:

"Inflationary price rises and increases in the cost of living are today threatening to undermine our defense effort."

Thus it appears that the doctrine of unjust enrichment as well as equity and good conscience compel the conclusion that a utility should not be permitted to thwart the purpose and spirit of the war price control legislation and the revenue laws by passing such abnormal tax requirements along to its consumers as an operating expense to be collected in increased rates. Indeed, we feel increased rates on such a basis would be unjustifiable. To allow them would in effect impose upon the consumers a sales tax.

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[22]Report No. 2333, 77th Congress, 2d Session, July 14, 1942.

[fol. pp] So that there may be no confusion concerning the tax situation in connection with the companies subject to our jurisdiction, where necessary to stabilize utility rates at reasonable levels during the war emergency period, we propose to allow as proper operating expenses only such taxes as may be termed ordinary or normal. For the purpose of distinguishing between ordinary or normal and war emergency or abnormal taxes, we conclude that the basis prescribed in the 1940 Revenue Act establishes the highest possible level of Federal taxes which may be allowed as an element of operating expense for such purpose. The 1941 Revenue Act and the pending 1942 proposal certainly reflect abnormal tax requirements for war purposes.

The conclusions we here express find validity in utterances of other regulatory bodies who were confronted with the problem of abnormal tax requirements in dealing with the utility industry as a result of the first World War.[23] Furthermore, the Public Service Commission of Wisconsin, on May 5, 1942, disapproved the application of the Wisconsin Telephone Company for authority to revise the base rate area and the rates at its Madison Exchange, a proposal estimated to increase the cost of telephone service to the subscribers in that area $290,000 annually. In its opinion denying such request the Wisconsin Commission made this significant comment:

"We do not look with favor upon proposals to increase utility rates in these times * * * rates should not be increased solely because the management may consider that its return is less than it is entitled to ask in normal times."

Moreover, it is evident that Congress intended when it enacted the Emergency Price Control Act of 1942, that [fol. qq] during the prosecution of the present war, this Commission, in carrying out its regulatory responsibilities, should make every reasonable effort to assist in making effective the national policy of price stabilization. In

[23] See Re Western States Gas & Electric Co., PUR 1919B, 485, 493; Re United Fuel Gas Co., PUR 1920C, 583, 606.

this regard we will be alert to the necessity for checking unwarranted increases in utility rates which, if permitted, will contribute to the disruptive inflationary process now threatening to destroy our economy.

Conclusion.

We conclude from the record that the present rates and charges of the respondents are unjust, unreasonable, unlawful and violative of the provisions of the Natural Gas Act. Therefore, until further order of this Commission, we determine for purposes of disposing of the motions before us that the just and reasonable rates, charges, classifications, rules, regulations, practices, or contracts to be hereafter observed by the respondents and fixed by order of this Commission shall reflect an immediate reduction of at least $5,094,384 below those in effect during the year 1941.

An appropriate order will be entered in accordance with this opinion.

LELAND OLDS,
Leland Olds, Chairman,
CLAUDE L. DRAPER,
Claude L. Draper,
Commissioner,
BASIL MANLY,
Basil Manly, Commissioner,
JOHN W. SCOTT,
John W. Scott, Commissioner,
CLYDE L. SEAVEY,
Clyde L. Seavey, Commissioner.

Dated at Washington, D. C., this 23rd day of September, 1942.

LEON M. FUQUAY,
Leon M. Fuquay, Secretary.

[fol. rr] Order Reducing Rates.

United States of America.

Federal Power Commission.

Commissioners: Leland Olds, Chairman, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

September 23, 1942.

City of Detroit, Michigan,
and
County of Wayne, Michigan,
Docket No. G-200. vs.
Panhandle Eastern Pipe Line Company,
and
Michigan Gas Transmission Corporation.

In the Matter of

Panhandle Eastern Pipe Line Company,
Michigan Gas Transmission Corporation,
and
Illinois Natural Gas Company.
Docket No. G-207.

Upon consideration of the entire record herein, including the motions for an immediate order reducing rates, and having on this date issued its Opinion No. 80, which is made a part hereof by reference,

The Commission for the purpose of disposing only of the motions before it for an immediate order reducing rates, finds that:

(1) Panhandle Eastern Pipe Line Company (hereinafter referred to as "Panhandle Eastern") is a corporation organized and existing under the laws of Delaware, is engaged in producing, purchasing and gathering natural gas in the Amarillo field of the Texas Panhandle and in [fol. ss] the Hugoton field in Oklahoma and Kansas; is engaged in the transportation of natural gas in interstate commerce by means of facilities which include (a) a partially looped natural gas main transmission pipe line extending from a point in Moore County,

Texas, known as "Windmill Junction," for a distance of approximately 860 miles through the States of Oklahoma, Kansas, Missouri and Illinois and into the State of Indiana to a point near Dana, near the Illinois-Indiana boundary, and (b) a natural gas main transmission line approximately 33 miles in length extending generally eastward from a point near Muncie, Indiana, to a point approximately 2½ miles east of the Indiana-Ohio boundary; is also engaged in the sale in interstate commerce of natural gas so transported to various purchasers for resale for ultimate public consumption for domestic, commercial, industrial, and other uses; and is a "natural-gas company" within the purview of the Natural Gas Act;

(2) Michigan Gas Transmission Corporation (hereinafter referred to as "Michigan Gas") is a corporation organized and existing under the laws of Delaware; is engaged in the transportation of natural gas in interstate commerce by means of facilities which include (a) two natural gas main transmission pipe lines extending from a point of interconnection with Panhandle Eastern's main transmission line near Dana, Indiana, for a distance of approximately 70 miles, to a point near Zionsville, Indiana; (b) a main transmission line approximately 52 miles in length extending from said point near Zionsville, Indiana, to a point near Muncie, Indiana, where said line is interconnected with Panhandle Eastern's main transmission line; and (c) a main transmission line approximately 230 miles in length extending from said point near Zionsville, Indiana, to Detroit, Michigan; is also engaged in the sale in interstate commerce of natural gas so transported to various purchasers for resale for ultimate public consumption for domestic, commercial, industrial, and [fol. tt] other uses; and is a "natural-gas company" within the purview of the Natural Gas Act;

(3) Illinois Natural Gas Company (hereinafter referred to as "Illinois Natural") is a corporation organized and existing under the law of Illinois, is engaged in the transportation of natural gas in interstate commerce by means of facilities which include the lateral lines extending from Panhandle Eastern's natural-gas main transmission pipe line in Illinois; is also engaged in the sale in interstate commerce of natural gas so transported to various

purchasers for resale for ultimate public consumption for domestic, commercial, industrial, and other uses; and is a "natural-gas company" within the purview of the Natural Gas Act;

(4) The rates and charges demanded, observed, charged and collected by the respondents for the transportation and the sales of natural gas in interstate commerce, set forth in findings Nos. (1) to (3), inclusive, together with the rules, regulations, practices, and contracts, affecting such rates and charges, are subject to the jurisdiction of this Commission;

(5) Panhandle Eastern, Michigan Gas, Illinois Natural (hereinafter referred to collectively as "the respondents"), and Indiana Gas Distribution Corporation (hereinafter referred to as "Indiana Gas") are under common control and ownership, and are operated as a single, interconnected and integrated system for the production, purchase, gathering, transportation, sale and delivery of natural gas;

(6) The actual legitimate cost before depreciation, within the meaning of Section 6(a) of the Natural Gas Act, of the respondents' gas plant used and useful as of December 31, 1941, is not more than $78,814,292, as follows:

Panhandle Eastern	$62,665,568
Illinois Natural	2,871,194
Michigan Gas	12,643,847
Indiana Gas	194,357
Pipe Line purchased from The Ohio Fuel Gas Company	439,326
Total	$78,814,292

The said actual legitimate cost of $78,814,292 gives effect to the acquisition on February 6, 1942, by Panhandle Eastern of Michigan Gas and Indiana Gas and the purchase by Panhandle Eastern from the Ohio Fuel Gas Company of a pipe line approximately 33 miles in length extending eastward from a point near Muncie, Indiana, to a point approximately 2½ miles east of the Indiana-Ohio boundary;

(7) The respondents' accumulated depreciation reserve as of December 31, 1941, totaling $12,596,987, as follows:

Panhandle Eastern	$10,405,047
Illinois Natural	502,976
Michigan Gas	1,661,966
Indiana Gas	26,998
Total	$12,596,987

are accepted, for the purpose of these proceedings, as the accrued depreciation existing in the respondents' gas plant as of December 31, 1941, and should be deducted from the actual legitimate cost of $78,814,292 in arriving at the rate base;

(8) The sum of $920,000 is the proper and reasonable allowance for working capital for the respondents;

(9) The sum of $67,137,305 is the proper rate base for the purpose of these proceedings, as shown by the following tabulation:

[fol. vv] Actual Legitimate Cost of Gas Plant in Service at Dec. 31, 1941	$78,814,292
Less: Accrued Depreciation	12,596,987
Actual Legitimate Cost Less Depreciation	$66,217,305
Working Capital	920,000
Rate Base	$67,137,305

and the said rate base of $67,137,305 reflects the actual legitimate cost of the respondents' property as an assembled whole and an established plant in successful operation;

(10) An annual rate of return of not more than 6½% on the rate base of $67,137,305, or $4,363,925, is a fair and reasonable return to the respondents;

(11) The respondents' consolidated gross operating revenues in 1941 totaled $17,789,573;

(12) The respondents' total consolidated 1941 operating expenses, as shown on their books (before Federal income and excess profits taxes), are accepted as the proper annual operating expenses for the purpose of these proceedings, with the exception of $293,024 for amortizing a write-up in "gas sales and purchase contracts" and $6,000

of rate case expense; the amount so accepted is $7,237,496; and adding thereto Federal income taxes of $1,093,768 makes the total annual consolidated operating revenue deductions $8,331,264 for the purpose of these proceedings;

(13) The respondents' 1941 consolidated gross operating revenues, less deductions for proper operating expenses, exceed a fair return on the rate base of $5,094,384, as shown by the following tabulation:

Gross Operating Revenues	$17,789,573
Operating Revenue Deductions	8,331,264
Income Available for Return	$ 9,458,309
Fair Return—6½% of Rate Base	4,363,925
Total Available for Rate Reduction	$ 5,094,384

[fol. ww] (14) The rates and charges made, demanded, or received by the respondents for or in connection with their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption are unjust, unreasonable and excessive;

(15) The rates and charges of the respondents, after reflecting the reduction hereinafter ordered, will be just and reasonable;

Therefore, the Commission orders that:

(A) The rates and charges made, demanded, or received by the respondents for or in connection with their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption shall be so reduced as to reflect, when applied to respondents' 1941 transportation and sales, a reduction of not less than $5,094,384 per annum below their 1941 consolidated gross operating revenues of $17,789,573;

(B) The respondents shall file on or before October 15, 1942, new schedules of rates and charges for or in connection with their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption, which shall reflect the reduction in consolidated gross operating revenues ordered in paragraph (A) above, which new schedules of rates and charges shall be effective as to all bills regularly rendered on or after November 1, 1942;

(C) The Commission reserves the right to reject all or any part of such new schedules and in lieu thereof to prescribe any other schedules by further order;

(D) On and after the effective date of the new schedules of rates and charges filed and made effective in accordance with paragraph (B) above, the respondents shall cease and desist from making, demanding, or receiving any rates and charges which do no reflect the reduction ordered in paragraph (A) above;

[fol. xx] (E) The record herein shall remain open for such further proceedings as the Commission may deem necessary or desirable;

(F) This order shall not be construed as an acquiescence by this Commission in any estimates or determinations of original cost, or any valuation of property, claimed or asserted by the respondents.

By the Commission.

LEON M. FUQUAY,
Secretary.

[fol. yy] Exhibit B.

Order Extending Time Within Which to File New Schedules of Rates and Charges.

United States of America.

Federal Power Commission

Commissioners: Leland Olds, Chairman, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

October 12, 1942.

City of Detroit, Michigan,

and

County of Wayne, Michigan,

Docket No. G-200. vs.

Panhandle Eastern Pipe Line Company,

and

Michigan Gas Transmission Corporation.

In the Matter of

Panhandle Eastern Pipe Line Company,

Michigan Gas Transmission Corporation,

and

Illinois Natural Gas Company.

Docket No. G-207.

Upon motion filed with the Commission October 9, 1942, by Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company, praying that additional time be granted Respondent-Defendants for the preparation and filing of new schedules of rates and charges as provided for in Section (B) of the Commission's order of September 23, 1942:

It appearing to the Commission that:

Good cause has been shown for the granting of the extension of time hereinafter ordered:

[fol. zz] The Commission orders that:

The time within which the Respondent-Defendants shall file the new schedules of rates and charges required by the Commission's order of September 23, 1942, be and the same is hereby extended to November 10, 1942, provided, however, that:

(i) The extension of time herein granted shall not operate as a change of the date on which the new schedules of rates and charges shall be effective, namely, November 1, 1942;

(ii) Nothing in this order shall be construed as staying the time within which Respondent-Defendants shall file a petition for rehearing or a petition for review as provided in Section 19 of the Natural Gas Act.

By the Commission.

FPC Seal

J. H. GUTRIDE,
Acting Secretary.

(Endorsed): No. 12,466. Filed in U. S. Circuit Court of Appeals on November 18, 1942.

[fol. 1] (Transcript of Testimony before Federal Power Commission.)

Official Stenographer's Report

before the

Federal Power Commission

Subject:

City of Detroit, Michigan, and County of Wayne, Michigan.

Docket No. G-200. vs.

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

Washington.

July 15, 1941.

[fol. 3] Proceedings.

Trial Examiner: The hearing will be in order, gentlemen, in the matter of the complaint of the City of Detroit, Michigan, and the County of Wayne, Michigan, against the Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation. This is Federal Power Commission Docket No. G-200.

. . . . . .

[fol. 7] Please let us have your appearances, gentlemen, in the order in which the various parties have been stated, such as the City of Detroit, first, and the County of Wayne, next.

[fol. 8] Mr. Lee: James H. Lee, on behalf of the Petitioner, City of Detroit,—Assistant Corporation Counsel.

Mr. Goodman: Harold Goodman, for the County of Wayne.

Mr. Williams: James W. Williams, Assistant Attorney General, State of Michigan, appearing for the Michigan Public Service Commission.

Mr. Chamberlain: Park Chamberlain, and Henry A. Montgomery, for the Michigan Consolidated Gas Company, as interveners.

Mr. Wheat: Glenn W. Clark, D. H. Culton, Carl I. Wheat, and Robert E. May, for the Defendant, Panhandle Eastern Pipe Line Company.

Mr. Baldridge: Milton C. Baldridge, for the Respondent, Michigan Gas Transmission Corporation.

Mr. Slaff: For the Federal Power Commission, George Slaff and W. Russell Gorman.

Trial Examiner: That completes our record of appearances, I take it, gentlemen.

* * * * * * * * *

[fol. 19] MANFRED K. TOEPPEN,

a witness produced on behalf of the Petitioners, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Goodman:

Q. Mr. Toeppen, where do you reside?

* * * * * * * *

[fol. 20] A. My legal residence is Lansing, Michigan, and I have been living in Alexandria, Virginia.

Q. What is your occupation?

A. I am an engineer.

Q. What is your present connection?

A. At present, I am on leave from my position with the Communications Property Section of the Federal Communications Commission.

Q. And you are here, or you have prepared your work here, under private employment, have you not?

A. I have prepared my work here and am testifying as a private consultant for the City of Detroit.

Q. Now, Mr. Toeppen, you are a graduate of what institution?

A. Washington University, in 1908.

Q. With what degree?

A. Bachelor of Science in Electrical Engineering.

Q. And upon what date did you graduate?

A. 1908.

Q. How many years engineering experience have you had?

A. I have been continuously employed in engineering since that time.

Q. And in that period, what branches or subjects of engineering were you primarily engaged in?

[fol. 21] A. Various forms of public utility services, street railway, electric power, telephone, gas, natural gas, either as an employee of operating companies or as an employee of regulatory bodies, or in private practice.

Q. Now, when you left college, what was your first connection?

A. I went to work for the United Railways Company of St. Louis.

Q. What capacity?

A. I was first assistant engineer in the power department, and then was chief inspector of the line, or overhead department.

Q. Now, did you remain in this connection until you went into the telephone line work? A. I did.

Q. And when was that?

A. That was first as student, and then as exchange engineer with the Southwestern Bell Telephone Company of St. Louis, in 1912.

Q. And what did your work consist of, for the most part?

A. The laying out, planning, and cost estimating of telephone distributing plants, poles, wires, cables, and conduit.

Q. And from that job, what was your next connection?

A. Still with the telephone companies, in the office of [fol. 22] chief engineer of the central group of the Bell Telephone Companies of Chicago, from July, 1914, until February, 1915, mostly on valuation and cost work.

Q. And did you continue further in the telephone line work? A. Yes.

Q. In what capacities?

A. In February, 1915, I transferred to the organization of the Receivers of the Central Union Telephone Company, which were operating the Bell Company properties in Indiana, Illinois, and Ohio, under a receivership.

Q. And—

A. (Interposing) And was in the office of chief of engineers.

Q. What work were you in charge of?

A. As assistant to the general commercial engineer in charge of valuation, rates, and fundamental plant studies.

Q. Now, did you establish a connection with the Michigan State Telephone Company?

A. In 1918 I went with the Michigan State Telephone Company at Detroit, first as special telephone line engineer and then as valuation engineer.

Q. Well, at around that time,—you left it subsequently, —you left the Michigan State Telephone Company and what was your next connection?

[fol. 23] A. With the General Oil Company as chief engineer in charge of lease surveys and engineering phases of drilling.

Q. Did you subsequently secure a connection with the Michigan Public Utilities Commission? A. I did.

Q. When?

A. April, 1920, I became valuation engineer for the Michigan Public Utilities Commission at Lansing, remaining as valuation engineer for two years, when I became chief engineer in charge of all of the work for the Commission.

Q. Now, as chief engineer what did your work consist of, in general?

A. Directing the engineering work relating to all utilities under their jurisdiction such as manufactured gas and electric light and power and telephones and interurban railways.

Q. Now, have you, from time to time, worked in any private capacity as an engineer?

A. In July, 1924, I took leave of absence from the Michigan Commission to become its consultant in charge of the second investigation of the Michigan Telephone Company properties, and after completing that work, I resigned in order to enter, or rather to continue, private practice as a consultant for the City of New York in the telephone proceedings both before the Commission and the Federal [fol. 24] courts and for the Michigan Commission and the Attorney General of Michigan in the proceedings between the Michigan Bell Telephone Company and the State of

Michigan in the Federal court at Detroit, and consultant for the Michigan Commission in connection with the application of the United Home Telephone Company of Muskegon, and consultant for the Detroit-Canada Tunnel Company in its security application, and for the Tri-County Telephone Company in its application for securities and rates; also, in Michigan, and for the Michigan Commission, again, in the case of the Michigan Federated Utilities, Inc., versus the Commission, relating to gas rates in Mount Clements; and for the cities of Dearborn and River Rouge in the case of the City of Detroit versus Detroit Edison Company regarding rates in the Detroit area before the Michigan Commission; and, in 1931, again for the Michigan Commission, in another investigation of the Michigan Bell Telephone Company, and then again, in 1934, I became chief consulting engineer of the Michigan Commission.

Q. Now, in the period from 1925 to 1934, all that period, were you a practicing general consulting engineer?

A. I was.

Q. And you were a specialist, more or less, in rate matters? A. I was.

Q. Rather more than less? A. Yes.

[fol. 25] Q. And during your experience, did you have occasion to study the principles involved in the valuation of public utility properties? A. I did.

Q. And did you have occasion to study the principles involved in the establishment of rates for public utility services? A. I did.

Q. And did these include substantially all manner of public utilities? A. Yes.

Q. Gas and electric rates and power, included, as well as telephones? A. That is right.

Q. Now, have you had occasion also to study the principles of depreciation applicable to rate-fixing? A. I have.

Q. You had occasion also to study the elements of going value applicable in the fixing of rates, did you?

A. I did.

Q. And, in short, it was your business to handle and to apply every phase of appropriate principle to your knowledge, to the general subject of regulation of rates?

A. That is correct.

[fol. 26] Q. Well, what connection did you have after you were chief consulting engineer for the Michigan Public Utilities Commission?

A. I would like to review some of my work in that connection before going ahead.

Q. Very well, proceed.

A. During the engagement which lasted from March, 1934, to May, 1935, I was in charge of all engineering work of the Commission again, and for part of the time in charge of a substantial part of accounting; incidentally, in the 1924 investigation of the Michigan Bell Telephone Company, I had also been in charge of the accounting work as well as the engineering work, and in the 1934 engagement, there was another really continued rate proceeding against the Michigan Bell Telephone Company, and there were a number of—one principally, I believe, and some minor,—but, one principal natural gas transmission line case before the Michigan Commission, and that was concerning the Muskegon supply by the American-Michigan Pipe Line Company, and a number of smaller light and power rate cases, and the writing of the Michigan Commission's rules for production, transmission, and sale of natural gas by a committee of which I was chairman.

Q. Did you have occasion, Mr. Toeppen, to become familiar with the principles involved in the valuation and the rates affecting the gas transmission companies,— [fol. 27] natural gas? A. I did.

Q. What was your connection subsequent to that of chief consulting engineer for the Michigan Commission?

A. On May 1, 1935, I went to the Federal Communications Commission as principal telephone engineer, subsequently becoming chief of the Valuation and Depreciation Section of the special investigation dealing with the investigation of various aspects of depreciation practices of telephone companies.

Q. Have you had some private practice during that period?

A. Not during that first period; that engagement lasted during the continuance of the special investigation and terminated January 1, 1937, I believe, when I became a member of the regular staff of the Commission as chief of the Communications Property Section where I have continued with the work we had been doing in the Valua-

tion and Depreciation Section and, too, certain additional duties of which I have been in continuous charge since. During this last engagement, I have taken leave on two prior occasions to engage in private practice.

Q. And were they engagements in behalf of public representatives?

A. They were: the first time, for the Michigan Public [fol. 28] Utilities Commission, to prepare a study of the gas division of the Consumers Power Company at Kalamazoo, Michigan; and on the second occasion, to serve the Prosecuting Attorney of Wayne County in the Michigan Consolidated Gas Company case before the Commission.

Q. Mr. Toeppen, have you made an investigation of the operating results during the past several years of the Panhandle Eastern Pipe Line Company and the Michigan Gas Transmission Company? A. I have.

Q. And will you state the sources and general nature of that investigation?

A. The sources were the reports of these companies filed with the Federal Power Commission for the years 1939 and 1940; the registration statement filed by the Panhandle Eastern Pipe Line Company with the Securities and Exchange Commission, and the information contained in Moody's Reports on Public Utilities, together with the general knowledge of the territory traversed by the pipe lines, at least east of Kansas City, and a rather detailed knowledge of the territory east of Kansas City—and a knowledge of the gas consumption conditions in Detroit, and the general knowledge of the economic conditions of [fol. 29] the entire Middle West through many years of living and working in that territory.

Q. Have you prepared a statement of the operating results of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation in exhibit form?

A. I have.

Mr. Goodman: I desire to have the exhibit marked, please.

Trial Examiner: The reporter will mark this exhibit as Exhibit No. 1 for identification.

(The Document Referred To Was Marked For Identification as Exhibit No. 1.)

Mr. Goodman: Exhibit No. 1 consists of six pages marked 1-A to -F. I will hand the original to the Commission.

. . . . . .

[fol. 30] By Mr. Goodman:

Q. What does Exhibit 1 embody?

A. Exhibit 1 is a summary of the recorded costs of the properties of the Panhandle Eastern Pipe Line Company and the Michigan Gas Transmission Company and of the operating results during the years 1938, 1939 and 1940.

Q. And does Exhibit 1 represent your opinion of those subjects based upon the data that you have mentioned?

A. I wouldn't say any opinion there, it is a summary of facts.

Q. It represents the facts which come to your attention from the data mentioned?

A. They do.

Q. Now, I offer Exhibit 1 consisting of six sheets in evidence.

Mr. Wheat: Mr. Examiner, I wonder if we can reserve ruling until we have had an opportunity to examine the exhibit? This is the first time we have seen it. It comes to us entirely cold.

Trial Examiner: The ruling on admission will be deferred for the time being.

Mr. Baldridge: I would like to have ruling reserved on behalf of the Michigan Gas Transmission Corporation.

Trial Examiner: Very well.

[fol. 31] By Mr. Goodman:

Q. Will you proceed to explain the exhibit and the matter included therein?

A. The first sheet of this exhibit is a summary of the details set forth in the following five sheets which have been drawn from the annual reports of the two companies.

The first several lines, the first two lines show the recorded cost less recorded reserves of the Michigan Gas Transmission and Panhandle Eastern Pipe Line companies as at the end of the three years, 1938, '39 and '40.

The second line is a work line in which I laid the foundation for arriving at an average and the third line is the average cost less reserves during 1939 and 1940.

For 1938 I have used the cost at the end of the year as I could not get from the annual reports the cost less reserves at the beginning of 1938.

The next line is an allowance for working capital based on an analysis of the approximate amount of pay rolls of the two companies.

The line marked "Total" is the cost, less reserves, plus working capital of the properties of the two companies, of the Panhandle Eastern and Michigan Gas Transmission companies, used in producing and transmitting gas from the Texas and Kansas fields to the various customers en route in Detroit and other eastern points at the end of the pipe line.

[fol. 32] Mr. Wheat: Mr. Examiner, counsel has no objection to my asking a question for information, if I may, to clarify one matter here, if that will be agreeable to you, sir.

Trial Examiner: Is that satisfactory, Mr. Goodman?

Mr. Goodman: It is satisfactory. I think that counsel should be permitted to ask such questions in matters of this sort in order that they may understand the testimony as it proceeds.

Mr. Wheat: Thank you, sir.

Just one question, Mr. Toeppen. Are we to understand that what you have done on these figures on Exhibit 1 is to take figures obtained from file data, as you have stated, with respect to these two separate corporations and simply add them together and get your results?

The Witness: I have added together, as I will explain, with respect to pages 2, 3 and 4 of this exhibit the reported cost of gas plant from the reports of these two companies to get the cost of the entire property used in producing and transmitting gas from the Texas and Kansas fields to the various customers along the line and at the end of the line.

Mr. Wheat: Then any figures on page 1 of Exhibit 1, are we to understand, apply to the two companies together in the manner you have suggested, not to each individual company?

The Witness: They apply to the two companies jointly, being the entire property used and useful in supplying [fol. 33] gas to the customers of the Panhandle Eastern Company and of the Michigan Gas Transmission Company.

Mr. Wheat: I see. Well, I assume, Mr. Goodman, that an explanation of how the figures were arrived at will be shown later, but I just wanted to find out how you had done that. Thank you.

By Mr. Goodman:

Q. Proceed.

A. The line, "Utility Operating Revenue," is the combined utility operating revenue as reported for the Panhandle Eastern Pipe Line Company and for the Michigan Gas Transmission Company for the years indicated.

The line, "Percent Utility Operating Income of Average Cost Less Reserves of Utility Plant, Plus Working Capital," is simply the ratio of the last preceding line to the line marked "Total" and that shows that these companies combined earned a return, after provision for depreciation, depletion and amortization, of 7.96 percent of the cost less reserves in 1938, subject to possible adjustment between the end of the year, the average figure, and in 1939 10.59 percent was the average and 10.30 percent was the average in 1940.

The bottom of the sheet is simply an analysis of the amounts set aside for depreciation, depletion and amortization during each of these years as measured against the first cost as reported in the books of the properties [fol. 34] of the companies, the first cost being shown in the first three lines of the sub-group developed similarly to an average during the year as was done with the first three items on the page.

The next line is the total of the provisions for depletion, depreciation and amortization and the last line is the ratio which shows these provisions to have been at the

rate of 3.53 percent of the first cost of plant in 1938, 3.67 in 1939 and 3.32 in 1940.

Now, on the second page is shown separately the information with respect to each of the two companies which were combined, Column A being the information with respect to the Panhandle Eastern, Column B with respect to Michigan Gas Transmission Company and the last column being the total of the two.

I think the title of the lines and the operations performed are, in general, self-explanatory. I have added back the reserves for amortization of gas sales and purchase contracts so as to get a complete first cost instead of a mixed first and depreciated cost of plant and I have deducted construction work in progress because construction work in progress is not properly a part of a rate base because its earnings and its provision for protection of the investors are reflected in the interest-during-construction allowance included in construction work in progress.

Then, I have summarized in line 6 the various reserves [fol. 35] provided by the company according to the total set forth in the annual reports, again including the amortization of gas sales and purchase contracts which I added back up in line 2.

Then I deduct the total of these reserves from the cost new of plant in service to determine the cost, less reserves, which is set forth in line 7.

In lines 8 to 12 I combine the reported utility operating income with the provisions for depreciation, depletion and amortization in order to arrive at the total amount available for depreciation, depletion, amortization and return.

This first sheet is for the conditions as of December 31, 1938 and the same operation is repeated for the condition at the end of 1939 in the next sheet and for the condition at the end of 1940 in the following sheet marked "1d" in the lower left-hand corner.

The sheet after that, 1e, is a comparison of current assets, current and accrued assets and current and accrued liabilities to determine the probable working capital on this particular basis of estimating.

The first two numerical columns set up the amounts shown in the annual reports for the two companies as of the end of 1939 and '40 and derive the excess of assets over liabilities which turned out to be a deficiency in 1938 and of substantial magnitude in 1939 and '40. However, as [fol. 36] shown at the bottom of the page, there was a substantial increase in cash in 1939 and 1940 over the cash in 1938 which, in view of the increase in investment in fixed capital, I assume to be related to the construction operations carried on in the latter years and not relating to operation and I have, therefore, adjusted the balances in 1939 and 1940 by the excess of the cash in those years over the cash in 1938 on the assumption that that additional cash was acquired for construction and not for operating purposes.

After this adjustment, liabilities exceed assets in 1938 and in 1940 and assets slightly exceed liabilities in 1939. On the basis of this condition, there would be no need for any working capital allowance in the rate base.

I have further on sheet 1f, lower left-hand corner, roughly approximated the pay rolls by taking the amounts shown for the year 1940 for those accounts which are predominantly labor accounts, although I have adjusted the operation accounts by deducting the gas used in transmission included in it, and I have reduced administrative and general expenses by one-half on the assumption that it contains legal services and insurance and items of that kind which are not of the pay-roll character and have derived the total, approximate total, in the amount of $1,269,000 during the year or approximately one hundred five thousand-odd, one hundred six thousand a month, and I have allowed, as shown on the first page, $100,000 of [fol. 37] working capital, being the approximate average monthly pay roll.

Q. Is it your opinion that that allowance is adequate for the amount to be included in the calculation? A. It is.

Mr. Goodman: That covers Exhibit L. I renew the offer of Exhibit 1 in evidence.

Mr. Wheat: We should like the privilege of having ruling reserved until the conclusion.

Mr. Baldridge: I would like to reserve my objection to Exhibit 1 until further cross-examination.

* * * * * * * *

Trial Examiner: You have further testimony?

Mr. Goodman: Oh, yes, quite a bit.

I desire to have this paper marked Exhibit 2 for identification.

(Document referred to was marked Exhibit 2 for identification.)

Mr. Goodman: I am supplying three copies.

By Mr. Goodman:

Q. Will you identify the paper marked Exhibit 2?

* * * * * * * *

[fol. 38] Trial Examiner: Before we take that recess, however, I should like to express a request. It is evident that there are various companies with various affiliations which are now or will ultimately be involved in this proceeding and my attention was called yesterday to the advance sheets of the Supreme Court reports, the case of Missouri-Kansas Pipe Line Company, Panhandle Eastern Pipe Line Company vs. United States of America, reported in Volume 85, No. 9, page 586, which gives a considerable part of the affiliations existing between the several companies mentioned in that decision.

The Missouri-Kansas Pipe Line Company and its relation to Panhandle Eastern are set forth there, but I am also informed that there have been recent changes in the matter of affiliations.

I would like to have you give us very early in the record, right after the luncheon recess if possible, an exact state-
[fol. 39] ment of the present existing affiliations between the several companies, all of them, and if there are further changes prospective in affiliations, I would like to have some exact statement concerning the status of such negotiations.

I think that is important for us to have in the record immediately in the early part of the proceedings.

* * * * * * * *

[fol. 42] Mr. Clark: Your Honor, responding to your request made just before the noon adjournment, we, on behalf of Panhandle Eastern Pipe Line Company, have attempted to assemble the correct facts and figures for you with respect to the Panhandle Eastern Pipe Line Company's status concerning affiliations, and I will give you those, very briefly:

As to the capital structure of Panhandle Eastern Pipe Line Company, there are outstanding 807,367 shares of common capital stock; also, 100,000 shares of Class A 6 percent participating preferred stock; also, 10,000 shares of Class B preferred stock which is non-callable and has the right, as a class, to elect two directors.

Of this stock, which is all of the outstanding stock of the company, 404,326 shares of common stock is owned by Gano Dunn and held beneficially for Columbia Oil & Gasoline Corporation as trustee under a so-called consent decree; 339,475 shares of the common stock is owned by Missouri-Kansas Pipe Line Company; the balance of the common stock, being 63,566 shares, is owned by approximately 1,500 other stockholders.

All of the Class A preferred stock and the Class B preferred stock is owned or held by Gano Dunn as trustee and held beneficially for Columbia Oil & Gasoline Corpora-
[fol. 43] tion.

Recently, there was a hearing before the Securities and Exchange Commission, and, on May 28, 1941, that Commission entered findings and its opinion, in which it held Columbia Oil and Gasoline Corporation to be a subsidiary of Columbia Gas & Electric Corporation, and held this defendant, the Panhandle Eastern Pipe Line Company; to be a subsidiary of both Columbia Oil & Gasoline Corporation and of Columbia Gas & Electric Corporation. It also held that Panhandle Eastern Pipe Line Company was not a subsidiary of Missouri-Kansas Pipe Line Company.

Leaving now that finding and opinion of the Commission, which I am going to hand Your Honor at the close of this statement,—Michigan Gas Transmission Corporation, which is codefendant with Panhandle Eastern Pipe Line Company, is a direct subsidiary of Columbia Gas & Elec-

tric Corporation. Since the finding of the Securities and Exchange Commission, a contract has been entered into between the Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation, and Missouri-Kansas Pipe Line Company, subject to the approval of the Securities and Exchange Commission and of the Delaware court, which, if and when carried out, will change the existing status of those companies and their relationship to Panhandle Eastern Pipe Line Company which is not a party to that contract and does not have a copy of it, but there [fol. 44] has been handed to me, here, a summary of the contract insofar as it is pertinent to Panhandle Eastern Pipe Line Company. Under that contract, if and when carried out, Michigan Gas Transmission Corporation is to be sold by Columbia Gas & Electric Corporation to Panhandle Eastern Pipe Line Company at cost. Panhandle Eastern is to have the right to acquire from Columbia Gas & Electric Corporation other connecting pipe lines in Indiana for approximately $355,000. These would constitute all of Columbia Gas & Electric Company's lines in Indiana.

The two classes of outstanding preferred stock of Panhandle Eastern Pipe Line Company would be refinanced in a public issue contemplated. Columbia Oil & Gasoline Corporation would distribute its stock in Panhandle Eastern Pipe Line Company,—that is, the stock in Panhandle owned by the Columbia Oil & Gasoline Corporation, and held by Gano Dunn as trustee; and, Missouri-Kansas Pipe Line Company would distribute its common stock—its Panhandle Eastern Pipe Line Company common stock—at the same time.

A new and independent Panhandle Eastern Pipe Line Company board of directors would be elected and a new executive head would be installed.

This contract, as I have stated, will be subject to approval by the Securities and Exchange Commission and the Delaware Federal court.

I am sorry I do not have a copy of that contract, but [fol. 45] as I say, we are not a party to it and I do hand you the findings and opinion of the Securities and Exchange Commission in that recent hearing.

* * * * * * * *

[fol. 46] Mr. Chamberlain: Michigan Consolidated Gas Company is a wholly owned subsidiary of American Light & Traction Company. American Light & Traction Company, in turn, is a subsidiary of United Light & Railways Company, the latter company owning about 53 percent, I believe, of the voting shares. There is also, at the moment, a relationship there with United American Company, a company now about to be dissolved, but United American, again, is a wholly owned subsidiary of United American Railways, so the two are about to be merged into one. United Light & Railways is a wholly owned [fol. 47] subsidiary of United Light & Power Company, a public utility holding company registered under the Act of 1935.

* * * * * * * *

[fol. 48] MANFRED K. TOEPPEN

resumed the witness stand on behalf of the Petitioners and, having been previously duly sworn, was examined and testified further as follows:

Direct Examination (resumed)

By Mr. Goodman:

Q. Mr. Toeppen, during the recess you made some corrections in Exhibit No. 1, as heretofore offered, did you not?

A. Yes; in checking the figures in the proposed Exhibit No. 2, I found that they came out of Exhibit No. 1 and that there had to be corrections on the first sheet of Exhibit No. 1.

Q. And you have a substitute now for Exhibit No. 1?

A. I do.

Q. Now, is everything included in your testimony applicable to the Exhibit No. 1 as corrected, which you offer now?

A. Everything I stated is applicable, with the exception that certain figures in the first and second columns, in the last five lines, will read as shown on the revised exhibit, rather than as read on the original exhibit.

[fol. 49] Q. Well, the testimony given—

A. (Interposing) Applies to the revised exhibit.

Q. Is applicable to Exhibit No. 1 as now revised?
A. It is.

Mr. Goodman: Your Honor, I ask leave to withdraw Exhibit No. 1, as presented, and to present the substitute for it, including the corrections. Now, the request for withdrawal and substitution applies only to page 1 of Exhibit 1,—the rest of the exhibit stands as it is.

Trial Examiner: You may make the necessary changes and assist the reporter so that the original exhibit will stand.

Mr. Goodman: Very well; if the original is to stand, this will be put in as a correction.

Trial Examiner: That is correct.

Mr. Goodman: I suggest, but I leave it to Your Honor's judgment,—it might perhaps be better to withdraw the exhibit as presented today, completely, because it will just stand in the way. I think it best to take up Exhibit 1 as presented,—page 1 of Exhibit 1, and put the substitute instead.

Trial Examiner: Very well.

(Whereupon, page 1 of Exhibit No. 1 for identification, as originally offered, was removed, and a corrected page 1 to Exhibit 1 was placed in the record.)

Mr. Goodman: May I have this exhibit marked for identification as Exhibit No. 2?

* * * * * * * *

[fol. 50] By Mr. Goodman:

Q. Will you proceed to identify Exhibit No. 2?

A. Exhibit No. 2 is a compilation from the annual reports of the companies, supplemented by certain calculations intended to show the relation of the amount available for depreciation, depletion, amortization, and return, as a percentage of the cost new of the properties during the years 1938, '39, and '40, and in the lower part, to show the requirements for depreciation, depletion, amortization, and return on the assumption of a 30-year life and annual returns of 5, 6, 7, and 8 percent on the value, together with excess of present amount available for depreciation,

depletion, amortization, and return over these requirements.

Mr. Goodman: I offer Exhibit No. 2 in evidence.

Mr. Wheat: We would like to have the same ruling on that, Your Honor; it apparently is merely a mathematical calculation of the figures in Exhibit No. 1.

Trial Examiner: Very well, we will reserve ruling on the admission of the exhibit until the cross-examination is completed.

Mr. Baldridge: May the record also show that we make the same request, your Honor?

[fol. 51] Trial Examiner: Very well.

By Mr. Goodman:

Q. Will you proceed, Mr. Toeppen, to explain the conclusions shown by Exhibit No. 2?

A. The fifth line shows that in 1938, the ratio of the amount available for depreciation, depletion, amortization, and return was 10.3 per cent of the first cost of the property at the end of the year, plus $100,000 working capital allowance, and a similar figure for 1939, in terms of the average cost of plant, was 12.82 percent, and in 1940, 12.15 percent.

Then, in the group of items marked, or titled, "Annual Requirement for Depreciation, Depletion, Amortization and Return on Utility Plant," there is calculated the amount required for these items on the assumption of a 30-year life and the full rates of return of 5, 6, 7, and 8 percent.

In the next group of items marked "Return Requirement on Working Capital," same annual requirements, the annual requirement at the same rate of return for the working capital is determined; and in the group of lines titled "Total requirement," the requirement for depreciation and so forth on the plant and the return requirement on the working capital are added together to show the total requirement for depreciation, depletion, amortization, and return on both the plant and the working capital in the amounts shown in those lines, ranging from $4,754,000, [fol. 52] for the year 1940, for a 5 percent return basis,—

to $6,485,000, in 1940, for an 8 per cent return basis. These requirements are less than the amount presently available, shown in line 4, above, and the excess is shown in the last group of lines. For a 5 percent return, the excess amounts to $4,118,000, in 1940, and for an 8 percent return,—to $2,387,000 in 1940.

At the bottom of the page, there is a note explaining the basis for using a 30-year life for the depreciation, depletion, and amortization calculations.

The company's estimate as reported in the registration statement filed in 1940 showed a gas supply adequate for 25 years, and the field had been in use 8 years, which would give,—or rather, properly in use for 8 years,—which would give a total life of 33 years. To allow for shorter life of additions which have been made since 1932, and which may be made in the immediate future, and for the fact that they have been amortizing certain gas purchases and sales contracts on a 10-year basis,—I have used 30 years, rather than 33 years in this calculation.

Q. Is it your conclusion, Mr. Toeppen, and your testimony here, that if the Commission should find that an 8 percent return upon the property used and useful in the transmission of natural gas by Panhandle Eastern and Michigan Gas Transmission Corporation, that if the Commission should find an 8 percent return a reasonable rate [fol. 53] of return,—then the present income of these companies is excessive by $2,387,000?

* * * * * * * * *

[fol. 54] The Witness: That is my conclusion, subject to the modification that there would be some income tax adjustments if such excess were found to exist.

[fol. 55] I have made no attempt to determine the income tax adjustment which would follow a reduction of rates in this amount.

Trial Examiner: And with this further fact,—is it not true, Mr. Toeppen, that all of the information which you have assembled in Exhibits Nos. 1 and 2 for identification, is exclusively from the official reports to which you have referred, fundamental data, and you do not claim any

access to the books of the companies, and your survey and opinion are based entirely on these official records?

The Witness: Yes, and no, Mr. Examiner; because I have, as I will present in subsequent exhibits, certain other considerations which go beyond examination of the records in that they give me information about the properties such as I would have procured by directing my own employees to view and examine the property, and I have used this information in lieu of examination by my own employees.

Trial Examiner: Proceed.

By Mr. Goodman:

Q. Now, is it your conclusion and opinion that if the Commission should find a 7 percent rate of return to be a reasonable one for the property used and useful by Panhandle Eastern Pipe Line and Michigan Gas Transmission Company in its production and transmission of natural gas, that the excess over a reasonable return is shown by the figure of $2,986,000?

* * * * * * *

[fol. 56] Q. And is it your conclusion that if 6 percent be determined to be a reasonable rate of return for the properties used and useful by Panhandle Eastern Pipe Line and Michigan Gas Transmission Company, the excess over a reasonable return is the amount of $3,570,000?

A. That is correct, again subject to the income tax adjustment.

Q. And is it your opinion and conclusion that if a 5 percent return per annum should be found to be a reasonable rate of return for the property used and useful by Panhandle Eastern and Michigan Gas Transmission Company, the excess over such reasonable return is the amount of $4,118,000?

A. That is correct, also subject to income tax adjustment.

[fol. 57] Q. And these opinions and conclusions concerning the excess returns are based upon the operating results for the year 1940?

A. That is correct.

Q. Now, you have qualified that conclusion by the question of income tax adjustment? A. Yes.

Q. Will you explain in what direction that income tax adjustment operates?

A. That income tax adjustment would increase the excess of present earnings over the required earnings.

Q. In other words—

A. (Interposing) If the revenues were reduced by an amount somewhat greater than the amount here stated, the amount of income taxes paid would be reduced in some amount depending on the present taxable income and the taxable income under the reduced revenues; and that would be the adjustment which would have to be made in addition to this reduction referred to heretofore.

Q. Now, directing your attention, Mr. Toeppen, to the figures which follow line 5, under the general caption, "Annual requirement for depreciation, depletion, amortization of and return on utility plant,"—"Annual rate of return, 5 percent,"—"Requirement 6.51 percent"—do you follow me? A. I do.

[fol. 58] Q. Now, will you explain how it is that a requirement for return, depreciation, depletion and amortization equal to 6.51 percent of the cost of the property will yield an adequate depreciation, depletion, and also a return of 5 percent?

A. It is the nature of interest, and of compound interest, that when you recover an investment through a number of years, that a small increment, being the rate of interest above the return requirement, will, throughout a series of years, recover the investment and provide a return on the unrecovered remaining part of the investment. For a 30-year life, this annual requirment amounts to 6.51 percent, of which, during the first year of life, 5 percent would go for return, and 1.51 percent for recovery of investment; during the succeeding years, the amount required for return would decrease as the investment is recovered, and in the last year, only 1/105th of the 6.51 percent would be interest, and the remainder of the 6.51 percent would be return on the unrecovered portion, with a constantly changing ratio during the intervening years.

Q. Now, looking at the figure of 8 percent, you indicate a requirement for depreciation, depletion, amortization,

and return equal to 8.88 percent of the first cost of the property.

A. That is correct.

Q. And is the same principle which you mentioned? [fol. 59] A. It is.

Q. Now, Mr. Toeppen, you have covered it, but I just want to make sure that it is emphasized or covered,—now, suppose that we put into this picture of a recovery of return, recovery,—that is, the yield of return and recovery of adequate amortization, depreciation, depletion,—at any point in its life history. Now, will such an income yield of 8.88 percent upon the first cost at any point in the life history yield 8 percent on the value of the property, all other conditions remaining the same, assuming that there is no change in value other than the depreciation which is being constantly recovered or the depletion which is being recovered?

A. That is correct. Possibly I can give a specific example of those relations.

Mr. Wheat: May the record show the name of the volume from which the witness is now reading?

Mr. Goodman: It will.

Trial Examiner: The record should show such reference.

The Witness: I am consulting a table, or publication, entitled "Engineering valuation" by Marson and Agg, published in 1936, and am on page 646.

Mr. Culton: Who is the publisher?

The Witness: McGraw-Hill.

(Continuing)—on page 606, in the bottom table, with the subheading "21-30 years probable life", in the last [fol. 60] column, "30 years",—let us go to it, and, by the way, this is an 8 percent table, as stated on the top of page 606,—let's go to the fifth year where the property is shown to have a value of 94.82 percent of the cost new at the beginning of the year, and of 93.52 percent at the end of the year, or a depreciation of 1.30 percent. Then, in that year, 1.30 percent of the 8.88 percent will be needed for depreciation, leaving 7.58 percent as an 8 percent return on the 94.82 percent value at the beginning of the year;

By Mr. Goodman:

Q. In other words, you assert the conclusion that 8.88 percent, under the conditions stated as to the expected life, will yield throughout, conditions other than the assumptions remaining unchanged, a return of 8 percent on the value as constantly depreciating throughout the years?

A. That is correct.

Q. Now,—

Trial Examiner: (Interposing) Is your testimony involving depreciation based on a company policy of these companies?

The Witness: The company policy, I think, is not clearly set forth in any manner that I have been able to ascertain. They have shown various appropriations in the registration statements, but there is no definite commitment as to the continuation of that policy.

Trial Examiner: What are your assumptions as a basis [fol. 61] for the depreciation testimony?

The Witness: My assumptions are that, based upon their statement as to the probable life in the field of 25 years from 1940, and an age of 8 years to 1946; there will be a total life of 33 years to the enterprise, and to allow for additions since 1932 and for the fact that they are depreciating or amortizing certain contracts on a 10-year basis, I have assumed a 30-year average life of the property in question.

Trial Examiner: What depreciation method did you follow?

The Witness: I have used the recovery of the investment on a compound interest basis during the life of the enterprise and return on the unrecovered investment. It is equivalent, and as a matter of fact, it is the basis of the often-used, so-called sinking fund method which is not, in truth, a sinking fund method, by which equal results may be obtained under the treatment I here use, and which is similar to that which prevails, for example, in connection with the paying off of a mortgage on your house in equal monthly installments during the life of the mortgage, where the monthly payment is divided into unequal

amounts and constantly changing amounts between return on unrecovered balance of the mortgage and the recovery of the mortgage.

Trial Examiner: Your method, then, is essentially the same as used by the California regulatory commission?

[fol. 62] The Witness: The answer is the same, although I do not go through the fiction of a sinking fund allocation; the answer is exactly the same as if you would use a sinking fund approach and use as your annual depreciation, the sinking fund allowance plus the accrued interest on the sinking fund.

Trial Examiner: Excuse the interruption, Mr. Goodman,—proceed.

By Mr. Goodman:

Q. Now, Mr. Toeppen, by using a percentage requirement like for 5 percent,—6.51 percent of the first cost,—I take it that it is not intended to vary the income yield, that is to say, the amount for return and depreciation, throughout the period?

A. As long as circumstances and conditions justify the 5 percent rate of return, the 6.51 percent will not change; if circumstances and conditions justify a change in the rate of return, then naturally the annual requirement will change.

Q. In other words, making the theoretical calculations, it is assumed for purposes of completion, or conformity to theory, that the 6.51 percent is an equal annual return throughout the life?

A. No, not a return, but a recovery which is divided between recovery of investment, and return on unrecovered investment.

Q. Right. Now, will you tell me why an assumption of [fol. 63] equal annual return is essential?

A. Because the cubic foot of gas which you will sell in the last year of operation of this property and the one you sell in the middle year and the one you sell in the first year are of equal value to the customer.

Q. In other words, for the purpose of setting up the calculation as you see it now, there is no difference in value for the annual delivery of service as between the first year and the last, is that right?

A. Or at any intermediate year.

Q. Therefore, they should sell for the same amount, is that right?

A. That is correct.

Q. Assuming the continuance of the same conditions?

A. Right.

Q. Now, you are familiar with the theory of depreciation known as the straight-line theory, which, in the proper application of the theory, depreciates the value of the property from the initial amount in equal annual amounts? A. I am.

Q. Now, if you were to take an item of property having an initial value or cost of $100 and a life of 10 years, and for the sake of convenience, it has no salvage, what would the requirement for depreciation and return be, for the first year?

[fol. 64] A. On a straight-line basis?

Q. On a straight-line basis.

A. On the assumption that you could reconcile the straight-line basis, which is fundamentally the case of a compound interest or sinking fund treatment, at zero percent return, with a result of return which is inconsistent in itself, I suppose you would make that reconciliation, —then, the requirement for a 10-year life will be 10 percent to depreciation and—what rate of interest?

Q. Six percent.

A. And a 6 percent rate of interest would be 6 percent for the return, making it 16 per cent for return and depreciation during the first year.

Q. Well, now, let us suppose, then—

A. (Interposing) For the sake of simplicity, put it on a $100 basis, and that would be 10 per cent or $10 for depreciation, and 6 per cent or $6 for interest, making a total for return and depreciation of $16.

Q. Now, let us suppose that we had confidence in that theory and we then, at the end of the first year, had a remaining value of $90 and proceeded to use the $90 as a rate basis. What then would the requirement be on that assumption for the depreciation and return during the second year?

A. You would need 10 per cent, or $10, of the first cost as depreciation, and 6 percent of the remaining value

[fol. 65] of $90, or $5.40 for a return, making a total of $15.40, as compared with $16 for the first year.

Q. Now, what is wrong with the picture?

A. Well, the older the property got, the cheaper you would buy your gas.

Q. Right, or if you were delivering goods in freight cars,—then what?

A. The older the railroads got, the cheaper you would get your transportation.

Q. Is that right, in your opinion?

A. I have always thought that the same service was worth the same money, no matter how old the taxicabs are, or the railroads, or anything that the riders use.

Q. Do you visualize a customer as paying less for the use of an old freight car than he would for a new one?

A. No, I do not think you could induce anyone to pay one rate for riding in a brand new taxicab and pay another rate for an old taxicab which might be sold to the junk dealer tomorrow.

Q. Would gas have a different value if it were delivered through old pipes, or new pipes?

A. No, it would do the same amount of cooking or house-heating, no matter how it got there.

Q. Is there anything more that you care to say about Exhibit No. 2?

[fol. 66] A. I think that covers Exhibit No. 2 very thoroughly.

Mr. Goodman: Please mark this paper which I present as Exhibit No. 3 for identification.

(The document referred to was marked as Exhibit No. 3 for identification.)

By Mr. Goodman:

Q. Mr. Toeppen, will you identify the paper marked as Exhibit No. 3?

A. Exhibit No. 3 is an extract from a registration statement filed by Panhandle Eastern Pipe Line Company on February 12, 1937, with the Securities and Exchange Commission, and included in their File No. 2-2867-1-1.

Q. And what comment do you make concerning the use that you made of Exhibit No. 3?

A. This exhibit, which contains a statement at the end of the second paragraph marked with double black lines

in the two margins, contains this statement: "And after giving consideration to all known factors affecting the future supply and probable demand, the Issuer will be able to obtain supplies of natural gas sufficient for its market requirements for a period of not less than 25 years."

I used this in lieu of an independent investigation of the gas reserves under the control of this company, it being their statement included in their registration statement, and I made it a part of my report and the basis of my [fol. 67] conclusion as to the life of the reserves. Incidentally, I possibly could have included with it a copy of another sheet of the registration statement which was a letter from Ralph E. Davis, Inc., engineers, of Pittsburgh, stating that they concurred in the statement made in the registration statement with respect to such reserves.

* * * * * * * *

A. (Interposing) May I add something to that, and in view of the fact that the property of the Michigan Gas Transmission Company is an integral part of the means of delivering gas to Detroit, or to customers east of Dana, Illinois,—I have used the probable life of the gas supply [fol. 68] which controls the useful life of a pipe line as measuring the probable life of both the Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Company properties.

Q. Now, Mr. Toeppen, you examined the registration statement of Panhandle Eastern Pipe Line Company filed with the Securities and Exchange Commission on February 12, 1937, in File No. 2-2867-1-1, in re gas reserves?

A. That is right.

Q. And Exhibit No. 3 was secured in what manner?

A. By photostating the page marked "3" in that registration statement.

Q. And do you know that it is a true copy of the filed registration statement?

A. It is.

Q. And did you make use of the information, herein contained to develop your information concerning the probable service life of the property here in question?

A. I did; I used this information the same as if I had, at that time, had occasion to go out and engage a person

or engage the person who made up these statements, to make such a study for me, and assumed that the statements would be identical with the report made to the company.

Mr. Goodman: I offer Exhibit No. 3 in evidence.

* * * * * * * *

[fol. 69] Trial Examiner: The ruling as to the admission of this proffered exhibit will be reserved until opportunity for cross-examination has been given.

Mr. Goodman: Will you please mark this paper as Exhibit No. 4 for identification, and I have here three copies, each consisting of three sheets.

(The document referred to was marked for identification as Exhibit No. 4.)

By Mr. Goodman:

Q. Will you please identify the paper marked as Exhibit No. 4?

A. Exhibit No. 4 is a photostatic copy of pages 17 and 18 of a registration statement filed by the Panhandle Eastern Pipe Line Company with the Securities and Exchange Commission on November 13, 1940, and filed by them in File No. 2-4579-1-1.

[fol. 70] Q. What use, Mr. Toeppen, or fundamental data did you prepare from the information contained in Exhibit No. 4?

A. This exhibit is a copy of a letter from Ralph E. Davis, Inc., Engineers, Pittsburgh, to the Board of Directors of Panhandle Eastern Pipe Line Company under date of November 12, 1940, relating to the ownership of gas properties or leases or contracts in the Panhandle field of Texas, the Amarillo field of Texas, and the Hugoton field, of Kansas. My particular interest was in the items marked "A" to "G," which are Mr. Davis', or the Davis company's, conclusions as to the reserves controlled by Panhandle Eastern in these various portions of the two fields.

Mr. Wheat: Mr. Goodman, I take it that the witness, himself, added those letters, "A" to "G"?

Mr. Goodman: That is right.

The Witness: I have summarized the reserves in thousands of cubic feet, set out in the various paragraphs at the marked points,—on the third sheet of the exhibit. They total, for both fields, 2,491,977,000 thousand cubic feet, as of the date of the report, in 1940. I have then provided that by the annual capacity of the pipe line, at 100 percent load factor, using the capacity stated in the 1940 report of 250,000 thousand cubic feet per day for that purpose, dividing that 91,250,000 thousand cubic feet into the reserves, indicates a life of 27.4 years from 1940, on, [fol. 71] for the reserves under the control of the Panhandle Eastern at the time of the report.

I have used this report in the same manner as I would use a report, had I employed Davis and Company to make such a survey for me at that time.

Q. And would you have confidence, Mr. Toeppen, in the report of Ralph E. Davis, Inc., Engineers?

A. I think I would consider the employment of Ralph E. Davis, Inc., by Panhandle Eastern as a very high recommendation.

Mr. Wheat: May I ask a question, at this time?

I think, that in arriving at your calculations on the attached third page of this exhibit, No. 4 for identification, you assumed a static condition in connection with sales of gas by this company?

The Witness: I assumed, as I stated, Mr. Wheat, sales amounting to the capacity, present capacity, of the pipe line at 100 percent load factor.

Mr. Wheat: Well, did you make any assumptions with respect to the static, or otherwise, nature of the withdrawals of gas from the Amarillo and Hugoton gas fields by companies other than the defendant Panhandle Eastern Pipe Line Company?

The Witness: I assumed that Panhandle Eastern would adequately protect their proportionate right in these fields by arranging the proper withdrawals from the wells so that [fol. 72] they would have no losses by having their reserves drained by others.

Mr. Wheat: And those two statements—

The Witness: (Interposing) And I must assume that Mr. Davis' conclusions were based on the same assumption.

Mr. Wheat: Now, regardless of the Davis conclusions, to be sure how you arrived at this,—I take it, then, that you did not make any calculations based on any change in the amounts of gas withdrawn from the Amarillo field or the Hugoton field during these future years by persons other than this defendant, is that correct?

The Witness: I based my conclusions on the final paragraph of Mr. Davis' statement, where it says, "The reserves are, we believe, sufficient to meet the combined anticipated requirements for pipe line, carbon black, and other uses for a period of more than 25 years.

"The combined gas supply controlled by your company in the Amarillo and Hugoton fields is, in our judgment, adequate to supply its present markets and any reasonably anticipated increase in the gas requirements of said markets for a period of more than 25 years."

To be on a very safe side, I used a 100 percent load factor, amounting to 91,000,000, rather than—I think it is 54,000,000-odd, which the company transmitted last year.

Mr. Wheat: Well, I wonder if you would mind answer-
[fol. 73] ing the question which I asked.

The Witness: I believe I answered the question.

* * * * * * * *

[fol. 74] By Mr. Goodman:

Q. Mr. Toeppen, you considered Mr. Davis' report and statement as indicating the controlled gas areas of the Panhandle Eastern Pipe Line Company, is that right?

A. I did.

Q. Now, you then, for the purpose of your own calcu-
[fol. 75] lations, looked to the maximum possible take with the existing facilities?

A. I did.

Q. You then concluded that on the basis of Mr. Davis' statement of the control of reserves and the maximum possible take with the existing facilities, the probable life of the supply would be 27.4 years?

A. That is correct.

Q. Now, in making these calculations—and this is Mr. Wheat's question,—did you consider that some other person apart from Panhandle Eastern would increase their take in and about those fields?

A. I considered that if that condition existed, that it had been properly taken into account by Mr. Davis in his conclusion.

Q. In other words, you accepted Mr. Davis' figure of what Panhandle Eastern had under control and you did not pay any attention to the possibility that that might happen in other parts of the field, or anything else,—is that right?

A. I did pay attention to the possibility that other companies possibly might be draining gas out from under Panhandle Eastern's controlled territory: but I had to assume that, in making a statement as to the available reserves of this company, Panhandle Eastern, that Mr. Davis had made similar considerations and that his figures [fol. 76] had been properly executed for that risk, and that this was a net available to this company, according to the Davis report.

Q. All right, now, I wonder if that—

Mr. Wheat: I am sure that answers my question.

Mr. Goodman: I offer Exhibit No. 4 in evidence.

Trial Examiner: The same ruling with reference to its admission.

* * * * * * * *

Mr. Goodman: Will you please mark this paper which I present as Exhibit No. 5 for identification?

(The Document Referred To Was Marked For Identification as Exhibit No. 5.)

Mr. Goodman: I am presenting three copies of Exhibit No. 5 for identification to the Commission, and Exhibit No. 5 consists of two sheets.

By Mr. Goodman:

Q. Will you please identify Exhibit No. 5?

A. Exhibit No. 5 is a photographic copy of pages 19 and 20 of a registration statement filed by Panhandle East-

ern with the Securities and Exchange Commission on [fol. 77] November 13, 1940, and by them placed in File No. 2-4579-1-1.

Q. Will you state what use you made of Exhibit No. 5 and the information therein contained?

A. Exhibit No. 5 is a report by P. McDonald Biddison, consulting engineer, Dallas, under date of November 2, 1940, to the Board of Directors of Panhandle Eastern Pipe Line Company, dealing with various aspects of the Panhandle properties, and I paid particular attention to the second page on which I have marked the first paragraph with lines in each margin.

Q. Will you state what they amount to, Mr. Toeppen?

A. Beginning on the fourth line, there is a statement concerning the property,—"The compressor stations on the main system are carefully designed, their equipment is first class in all respects, they present a neat and attractive appearance and are maintained in excellent condition. All these features tend to produce reliability and economy of operation. The main transmission system has been constructed with a margin of safety as to pressure so that it may safely be operated at 500 pounds compressor station discharge pressure. Stream crossing locations"—

Mr. Baldridge: (Interposing) He is reading now from the report and I will have to make a statement which I have made as to the two preceding exhibits.

Now, can it be understood that if he reads it into the [fol. 78] record that it be in the record subject to being stricken out at the time the other exhibits are passed upon?

Trial Examiner: Very well, we will have that understanding.

May I ask what is the source of what you are reading? Is that part of the same exhibit?

The Witness: It is the second page of the same exhibit.

Trial Examiner: You may proceed, with that understanding.

The Witness: It is the paragraph marked with parallel lines. (Continuing):

"—Stream crossing locations have been carefully selected and multiple lines across streams so located and installed as to leave very slight probability of interruption at such locations. The transmission lines have been well located and well laid to secure stability and are carefully maintained. The main line loops completed in 1937 provide additional protection against service interruption and this protection will be enhanced by the loop extensions recently completed and by those now under construction. The Gasoline Plant at Liberal is of modern design, and the dehydration plant in connection with it is an effective preventive of interruptions of service from freezing of lines. Measuring and Regulating Stations are of up to date equipment, are carefully maintained and the stations are neat and clean. Little evidence of deterioration in the main line property can be found. Pipe exposed in making connections for 1937 and 1940 additions did not [fol. 79] indicate interior corrosion. Flow tests of the main lines in 1937 and 1938 showed some fouling or corrosion of the old lines westward from Olpe Station to Liberal Station."

Mr. Wheat: May I ask whether the witness did not make a error and say "fouling or corrosion" instead of "fouling, not corrosion"?

The Witness: It should read, "showed some fouling, not corrosion of the old lines westward from Olpe Station to Liberal Station. This condition has been effectively remedied as evidenced by subsequent flow tests and by capacity obtained under routine operations. Routine reports show little deterioration of protective coating and pitting of pipe except in a few very restricted areas. Such areas are being protected cathodically as they develop."

* * * * * * * *

[fol. 82] By Mr. Goodman:

Q. Mr. Toeppen, did you personally check the original of Exhibit 5 in the files of the Securities and Exchange Commission?

A. I read Exhibit 5 in the files of the Securities and Exchange Commission before I ordered a photostat made.

Q. And is Exhibit 5 a true copy of what it purports to be? A. It is.

Q. And the information that you pointed out, concerning the condition of the property as reported by P. McDonald Biddison, consulting engineer, and as filed with the Securities and Exchange Commission by Panhandle Eastern Pipe Line Company, did you depend upon that report?

A. I did, as if I had instructed Mr. Biddison to make a similar examination for me of the same features there reported on.

Mr. Goodman: I offer Exhibit 5 in evidence.

Trial Examiner: The ruling on admission will be deferred until the completion of cross-examination.

[fol. 83] By Mr. Goodman:

Q. Now the figures which you have used and the conclusions which you have drawn are predicated upon reported cost figures, are they not? A. They are.

* * * * * * * *

[fol. 85] By Mr. Goodman:

Q. Mr. Toeppen, have you made any allowance in the figures specifically for going value as a separate item?

[fol. 86] A. No.

Q. Will you state why you did not?

A. The figures for cost of gas plant and for costs of other plants as summarized in the annual reports of the Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Company purport to be in accordance with the system of accounts for natural gas companies described by the Federal Power Commission and that system of accounts requires and, therefore, I must assume that the reports report the actual disbursements for material, labor, services and all other elements entering into the construction of the properties of these two companies.

These costs, in the first place, are costs of these materials, labors, services, easements, and so on, on the open market and are costs for merchantable goods, that is, goods capable of being sold and resold as goods of their own particular character, that is a ton of pipe is bought as a ton of pipe and can be used for any purpose whatsoever or sold again as a ton of pipe. Labor of various grades, ditch diggers, welders, truck drivers and all the other forms of labor are bought as unapplied labor which

can be applied to the company to any purpose whatsoever or possibly at the time sublet to others, for use in other performances of other duties, services of engineers, superintendents and others who are similarly free to be used [fol. 87] anywhere prior to the construction of this property and they are used in assembling this merchantable material into an operating gas transmission property and gas-producing property and they are assembled in view of their prospective future earning ability, either estimated in view of the cost of the thing and its prospective revenues or in view of the prospective revenues and a justifiable total cost.

When the property represented by the recorded cost has been assembled from the constituent merchantable materials and unapplied labor into the operating gas transmission and gas-producing property it no longer has values as separate items of merchantable material or merchantable labor and services, it has a value only as an operating gas property. It cannot be recovered or valued as at the current price of its component materials, labor and services as merchantable commodities.

If it were not operated as a gas transmission and gas-producing property, it would have only a merchantable cost equal to the recoverable junk value of the material; the labor used in assembling and the labor used in supervising and engineering the property would be irretrievably lost and its value as a non-operating property would be only junk, far less than the cost as reported in the records of the company.

The difference between the amounts reported as ex- [fol. 88] pended for merchantable material and merchantable labor and merchantable services and the junk value of the property now recoverable is the going value of the enterprise.

Mr. Goodman: I present for identification and hand to the Commission three copies of a paper which I request be marked Exhibit 6 for identification.

(Document referred to was marked Exhibit 6 for identification.)

By Mr. Goodman:

Q. Will you please identify the paper marked Exhibit 6?

A. This is a calculation designed to show the estimated operating expenses and taxes during 1940 on the assumption that the system were operated at a hundred percent load factor and at capacity.

Q. Now, you wanted to make a little correction on one of the figures there, did you?

A. I do. In the last column in the first line, it should read 84 instead of 81 and the line entitled—

Trial Examiner: (Interposing) Eighty-four thousand instead of eighty-one thousand?

The Witness: Yes. In the line entitled "Total Natural Gas Production" it should read 226,000 instead of 223,000. In the line "Total," it should read 926,000 instead of 929,000—

. . . . . .

[fol. 90] By Mr. Goodman:

Q. Now, reserving the right to substitute a corrected Exhibit 6, will you proceed to state the general result shown by the exhibit?

A. In this exhibit I undertake to estimate along very broad lines the probable cost of conducting operations in 1940 if the system had delivered 91,250,000 cubic feet' instead of 54,116,525 that it did handle. I should say "transmitted" rather than "delivered," because this is an import.

I did that by increasing those items expensed which were more or less directly related to the quantity of gas transmitted by the ratio of the 54,000,000,000 cubic foot to the 91,000,000,000 cubic foot which is a ratio of 1.686.

For the item, "Net Credit for Residuals Produced," I used only one-half of that ratio because I did not have the details of the operation of the recovery plant and there would be some constant expenses in that item. That is the only one where I modified the ratio. On that basis the operations in 1940 would have amounted to 6,476,000 instead of 5,719,301 that they did amount to for the two companies together.

Q. Mr. Toeppen, state whether you developed in this exhibit, Exhibit 6, that if this company were to operate at its capacity with the existing facilities, of course, and constantly, it would result in annual operating costs of [fol. 91] $6,476,000?

A. Approximately that amount.

Q. Yes. And do you show the quantity of gas that would be delivered annually at that cost?

A. Not the quantity delivered, but the quantity which would be fed into the system.

Q. Yes.

A. Some of that would be used in transmission and the small amount would be unaccounted for.

Q. And what is that figure?

A. 91,250,000 cubic feet.

Q. And what is the significance of the two figures which I mention, namely, the expense of $6,476,000 and the quantity of gas which you mentioned?

A. Those figures, by themselves, as yet have no significance. They must be combined with the requirements of the capital investment for return and depreciation.

Q. Yes, but what does it lead up to, anyway?

A. It leads up to the cost of supplying gas under 100 percent load factor condition.

Q. Now, will you state whether or not that would be an ideal object to attain?

A. That is what any company operating a property of this kind would like to attain, if they possibly could.

Q. In other words, it utilizes their full capacity?

[fol. 92] A. It does, just like the hotel keeper would like to have all the rooms in his hotel rented every night.

Mr. Goodman: With the privilege of substituting for correction of figures, I offer Exhibit 6 in evidence.

Trial Examiner: The ruling on admission will be reserved until the completion of cross-examination.

Mr. Goodman: I present three copies of a paper which I request be marked Exhibit 7 for identification.

(Document referred to was marked Exhibit No. 7 for identification.)

By Mr. Goodman:

Q. Will you please identify the paper marked Exhibit 7?

A. Exhibit 7 is a compilation continuing the compilation of Exhibit 6 to reduce the operating cost, plus depreciation and return requirements, to a cost per thousand cubic foot of gas. In it I start with the figure from Exhibit 6 of $6,476,003, which is, again, a correction from the figure shown and I add to it the requirements determined in Exhibit 2 for depreciation and return in the amounts there shown in the third group of lines ranging from 11,230,000 corrected, to 11,778,000, corrected, 12,362,000 and 12,961,000 as the amounts acquired for operating expenses, depreciation and return on the bases shown at 100 percent load factor and capacity use of pipeline.

. . . . . .

[fol. 93] Mr. Culton: There are not enough exhibits to go around. Does that assume 100 percent load factor?

The Witness: It does.

Mr. Culton: During the entire life of the plant?

The Witness: Yes.

Dividing these amounts by the 91,250,000 cubic feet, we arrive at a necessary price of 12.3 cents for a 5 percent return, 12.9 cents for—

Mr. Baldridge: (Interposing) If Your Honor please, may I reserve my objection to be ruled on at the same time?

Trial Examiner: You may.

Mr. Wheat: We should like to have the same ruling.

Trial Examiner: Yes, you will have ample opportunity to cross-examine on these exhibits before they are received in evidence.

The Witness: (Continuing) —12.9 cents for a 6 percent return, 13.6 cents for a 7 percent return and 14.2 cents for an 8 percent return on the basis of gas delivered to the transmission system; on a basis of the gas delivered to customers the figure would be slightly higher to allow

for gas used in transmission and for gas used as gas un-
[fol. 94] accounted for.

Mr. Culton: May I inquire, you say transmission to customers. Do you mean customers of the distributing company or customers of the pipeline company or customers of the Michigan Gas Transmission line?

The Witness: I mean customers of the Consolidated Pipe Line System.

Mr. Culton: Two?

The Witness: Right.

Mr. Culton: You refer, then, to the customers as being the city distributors?

The Witness: Yes, sir.

Mr. Culton: And not the ultimate consumer?

The Witness: Not the ultimate consumer.

Mr. Culton: O. K.

The Witness: This would be the city gate rate.

By Mr. Goodman:

Q. I take it that if the Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Company, together, were to make a price of 14.2 cents per thousand cubic feet of gas and if, as a result of that price, they were to achieve 100 percent load factor they would, in your judgment, be earning 8 percent upon the book cost of their property?

A. They would be earning 8 percent upon the remain-
[fol. 95] ing cost of their property.

Q. Yes.

A. Subject to the adjustment of that 14.2 cents for the difference between gas put into the system and gas delivered to customers.

Q. Well, of what magnitude would that adjustment be in general?

A. Very small. It should not exceed probably 5 percent.

Mr. Goodman: I offer Exhibit 7 in evidence.

Trial Examiner: The ruling on admission will be deferred. It is understood, again, that the substituted Exhibit 7 will be brought in.

The Witness: Yes.

Mr. Goodman: Yes.

I present a paper and hand up three copies and I request that it be marked Exhibit 8 for identification.

(Document Referred To Was Marked Exhibit No. 8 For Identification.)

By Mr. Goodman:

Q. Will you please identify Exhibit 8?

A. Exhibit 8 is an estimate of the probable revenue and income if the system were operated at capacity, 100 percent load factor and the Michigan Consolidated Gas Company rate were applied to all the sales without adjustment [fol. 96] for the difference between the gas put in and gas delivered.

The Michigan Consolidated schedule rate gives a cost of .0275 dollars or two and three-quarters cents per therm at 100 percent load factor. This is equal to 26 cents per thousand cubic foot as calculated.

Applying this to the 91,251,000 cubic feet will give a revenue of $23,725,000. Deducting the $6,476,000, which is a correction against the $6,473,000 written here determined in the previous exhibit, will leave $17,249,000 for depreciation, depletion, amortization and return without correcting for income tax changes which is at the rate of 23.6 percent on the average cost new of the property in 1940.

. . . . . .

[fol. 97] By Mr. Goodman:

Q. You mean, Mr. Toeppen, that if the gas company were to sell all of its gas substantially at the same fundamental contract price as they sell to Michigan Consolidated Gas Company, namely demand charge of 38 cents per therm per month, measured as they measure it under that contract, and a commodity charge of one cent and a half per therm the return will be approximately 23.6 percent per year if they have 100 percent capacity operations and 100 percent load factor?

A. That is correct, subject to the adjustment for the difference in gas measurements put in and taken out and subject to the income tax correction.

Q. Yes.

Mr. Culton: May I ask another question in connection with that table? What did you consider to be the 100 percent load factor, daily, for the 365 days in the year from the beginning of the plant?

[fol. 98] The Witness: I will calculate this on the basis of the present plant and the present operation.

Mr. Culton: All right, but what did you consider to be the present 100 percent load factor which was the basis for your tabulation?

The Witness: Two hundred fifty thousand thousand cubic feet a day.

Mr. Culton: Two hundred fifty million cubic feet a day, in other words?

The Witness: Yes.

Mr. Culton: And what day was that ever produced?

The Witness: I used your stated capacity in your annual report.

Mr. Culton: That is what you consider as the load factor, is it?

The Witness: I consider that as the capacity of the line.

Mr. Culton: All right.

The Witness: And a hundred percent load factor means operate at rated capacity of a device continuously.

Mr. Goodman: I offer Exhibit 8 in evidence.

Trial Examiner: The ruling on admission will be reserved.

By Mr. Goodman:

Q. In your general experiences, as outlined, dealing [fol. 99] with your work and studies of proper rates for various public utilities, have you had occasion to give consideration to the fair rate of return? A. I have.

Q. Will you state the factors which you deemed proper to be considered in developing a fair rate of return?

A. The factors involved in the determination of a fair rate of return are first of all the risks to which the business is subject and the way in which the costs incident to the incurrence of those risks are dealt with and then after each risk has been taken care of, either specifically or generally, the return on a risk, less investment at that time. The risks of a business may be taken care of in two ways, they may be either commuted into a current cost or they may be allowed to fall into the return which is not specifically distributed as a cost. For example, you have the choice as to whether you will run the risk of the burning down of your home or of the property you are leasing and renting to others and take all of the rent as a return or you may buy fire insurance and decrease your return and avoid the risk of losing your investment.

Q. In other words, the process of insurance means the purchasing of certainty at a cost?

A. It does. This is practiced in many, many phases of utility business or other business generally and in the [fol. 100] gas production and transmission business as well as in other business.

Q. Well, would you care at this time to mention some of the risks incurred in the conduct of a business which are secured or converted or commuted into certainties at a cost or relative certainties?

A. Yes, for example, in Exhibit 5, I think it was, in Mr. Biddison's report, there are statements as to the manner in which this pipeline and the stations were constructed to avoid the risks of interruption to service. Here the risks of interruption and the risk of continuance of return have been commuted into a capital cost rather than being allowed as a part of the return.

The company, after it has once constructed its pipeline, does not leave it subject to the mercy of the elements but inspects it and maintains it and repairs it continually, thereby converting the risk of its failure due to wear and tear into a cost of operation.

The company pays social security insurance, which is one means of stabilizing its labor relations and preventing interference with its operation through failure of labor

supply and it also, I can assume I believe, pays a rate of wages which will attract a competent and reliable personnel rather than paying minimum wages and running the risk of interruption to service from the low wage rate that [fol. 101] they would pay under those conditions.

It, insofar as is applicable, carries appropriate fire insurance either outside or through a self-insurance provision and I have no occasion to check, but it is reasonable to assume that they carry the usual public liability and employee liability insurance to minimize or commute the costs incident to those risks of employee or public injury or to defalcation of employees handling funds.

Q. Now speaking generally, Mr. Toeppen, is it a frequent incidence that risks are taken care of or commuted by costs and the claim is made that they still exist as risks, when it comes to consider the rate of return?

A. That is frequently done, because the relation between inclusion of cost of meeting risks or accruing for meeting of risks, say in the form of insurance, is in their minds not associated with the level of the rate of return applicable to the risks remaining after those provisions are made.

Q. What is the effect so far as the resultant quantum of risks is concerned of a public utility following the general and usual prescribed forms of accounting in regard to its expenses and maintaining adequate reserves in accordance with the usual prescriptions?

A. If those reserves and provisions, and they are not in the form of reserves because many are either by capitaliza- [fol. 102] tion as I pointed out at an adequate improved rate of construction—

Mr. Culton: (Interposing) Are you talking about this company now?

The Witness: I am talking about this company, yes. I had reference to Exhibit 5 in which Mr. Biddison reported on the high grade of construction and special care taken in river crossings and other practices to prevent interruption to service.

Mr. Baldridge: I take it your comment does not apply to Michigan Gas Transmission Corporation?

The Witness: The comment is not based upon this specific case, but a parallel based upon my general acquaintance with the practices of corporations generally is that all such proper and justifiable provisions are made and I believe have been made in the case of Michigan Gas Transmission Company.

. . . . . .

[fol. 103] Mr. Goodman: I present a paper consisting of three sheets and I request that it be marked Exhibit 9 for identification. I am handing three copies to the Commission.

(Document referred to was marked Exhibit No. 9 for identification.)

By Mr. Goodman:

Q. Will you please identify the paper marked Exhibit 9?

A. Exhibit 9 is a statement setting forth the nature of the factors affecting the nature and magnitude of the report of net incomes.

. . . . . .

[fol. 104] Q. Does Exhibit 9 state the major factors which you have considered in coming to your conclusion as to the proper rate of return? A. It does.

Mr. Goodman: I present a paper which I request be marked for identification as Exhibit 10 and I am handing three copies to the Commission.

(Document referred to was marked Exhibit No. 10 for identification.)

By Mr. Goodman:

Q. Will you please identify the paper marked Exhibit 10?

A. Exhibit 10 is a tabulation to show the effect of variation in accounting practices on reported incomes of an enterprise.

. . . . . .

[fol. 105] Q. The figures on Exhibit 10 and the example is offered merely for illustrative purposes, is it not?

A. It is.

Q. Is it necessary to make any explanation?

A. I think the exhibit speaks for itself, that the manner in which you account for certain costs determines the magnitude and character of the rate of return which is to be allowed in considering the enterprise.

Q. Is there any further comment that you care to make as to the bearing of the example in Exhibit 10 on the general subject of rate of return?

A. Yes, there is this: That if one company accounts for its incomes in a manner similar to Plan A, it will be justified in asking for a higher rate of return than if it accounts for them under Plan B where it has commuted all its risks or many of its risks to an expense rather than [fol. 106] to be met out of the return allowed in the rate-making procedure.

Mr. Goodman: For the purposes mentioned, I offer Exhibit 10.

Mr. Wheat: Holding the ruling open on that, Mr. Examiner, may I ask one question for clarification?

Trial Examiner: Surely.

Mr. Wheat: Do I understand that it was your previous testimony that Panhandle Eastern Pipe Line Company reports and that you assume that it reports to this Commission on the basis of the general accounting practices which have been set up by this Commission for natural gas companies?

The Witness: I do.

Mr. Wheat: Well, under Plan A or Plan B is it prepared?

The Witness: There is a latitude of choice left under that system of accounts and the company reports, as far as I can discover from the annual reports, partially on Plan B and partially on Plan A. Certain provisions for risks which are in many companies treated as an operating expense before the determination of gross income are by this company treated as a deduction from gross income.

Mr. Wheat: On Exhibit 10, the only difference is in the item of insurance, is it not?

The Witness: Or other provisions against risk.

[fol. 107] Mr. Wheat: On Exhibit 10 the only difference is in the item of insurance, is it not?

The Witness: "Insurance and so forth," I may point out which covers all other forms of risk which have been commuted or may be commuted.

Mr. Wheat: That is the only "and so forth" on the whole exhibit, isn't it?

The Witness: Correct. That is the entire point I want to make, Mr. Wheat, that if you commute risks into costs to insurance or insurance-like processes in which I include inclusion of incurred actual expense either of actual disbursements to meet matured risks or accruals to meet future risks then you have a different treatment in the way of a rate of return than if you don't make such provisions in operating expenses.

Mr. Wheat: Well, whatever point you want to make, what does Panhandle Eastern Pipe Line Company do with respect to "and so forth" on Exhibit 10?

The Witness: I have stated that as far as I can discover from the annual reports it splits its treatment. For example, the provision for uncollectible bills is apparently made out of income and not as an operating expense.

Mr. Wheat: You do not know that, do you?

The Witness: I have consulted the registration statement and I say the figures therein show that it is ap-[fol. 108] parently treated as a deduction from income.

Mr. Wheat: Do you know whether or not that is true?

The Witness: Only insofar as the registration statement speaks for itself.

Mr. Wheat: What other items are covered under your theoretical "and so forth" under Exhibit 10 in reference to Panhandle Eastern Pipe Line Company?

The Witness: I cannot tell you because we have not had a detail operating expense statement of the company. I am only offering this to indicate that consideration must be given the treatment by the company, whatever it may be must be reflected in determining the rate of return allowable.

Mr. Wheat: Now, Mr. Toeppen, in the item of insurance, what does the Panhandle Eastern Pipe Line Company do that is not proper under the system of accounts of the Federal Power Commission?

The Witness: I did not say they did anything which was not proper. I said a latitude of choice was offered them as how certain costs are treated under that system.

Mr. Wheat: Well, what does it do, then, that makes it pertinent to your purported Exhibit 10?

The Witness: I made no statement as to what Panhandle Eastern does, I simply say that the question of what is done which is not fully determinable from the annual reports has a bearing on the magnitude of the rate of [fol. 109] return to be allowed.

* * * * * * * *

By Mr. Goodman:

Q. Have you been able to make any analysis, Mr. Toeppen, of the size of the provision for identifiable risks in operating costs in relation to the size of the investment of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Company?

A. I have not, sir.

Q. And why have you been unable to do so?

A. The operating expense statement included in the [fol. 110] annual report as filed with this Commission is not in sufficient detail to permit identification of specific provisions for risks and association with the particular investment concerned in that risk.

Q. Will you illustrate how different maintenance practices of companies engaged in the same business following the same accounting practice may affect the value of any comparison of their respective net earnings as shown by their books?

* * * * * * * *

[fol. 111] By Mr. Goodman:

Q. Will you illustrate how different maintenance practices of companies engaged in the same business and following the same accounting rules may affect the value of any comparison of their respective net earnings as shown by their books?

A. One company may make all necessary repairs very promptly and, you might say, even in advance of serious deterioration of its property and thereby prevent the need of large replacements at a later date. Another company may choose to let maintenance accumulate and make its repair through a replacement of a major unit rather than by constant repairs prior to the stage at which a replacement must be made. The one would show a high maintenance cost and the other would show a low maintenance cost, but the first one would have a low depreciation requirement and the second one would have a high depreciation requirement.

Q. And what would you say about variances in the depreciation policies as affecting the real returns and the [fol. 112] proper rate?

A. If a company uses either a so-called retirement policy of treating depreciation or the straight line method of providing for depreciation, its reported operating results will be distorted from those which would prevail on the basis of using a proper depreciation provision in my testimony today.

If it used a straight-line method, its earnings during early days, that is when the property was of an age less than half of its life, it would be understated because excessive provisions for depreciation had been made in those years and during the latter half of its life, its earnings would be overstated because not sufficient provision was being made on a retirement basis, also a distortion would occur, being overstated in earlier years, the depreciation being understated and the profits overstated in the earlier years.

Q. Now, have you taken into consideration the effect upon risks in general due to inadequate maintenance policies or whatever they may be or depreciation policies which is created by the use of the particular service life which you have applied?

A. I don't quite understand your question.

Q. Well, in other words, do you expect that there is some risk here of the property wearing out?

[fol. 113] A. As far as the major part of the property is concerned, I should judge from Mr. Biddison's report that

the property will not wear out prior to the exhaustion of the gas supply.

Q. So that when you use the service life which you have applied here, what does that allowance do toward eliminating various risks?

A. It, you might say, brackets all the risks which would tend to mature at a point beyond the life adopted. In other words, if there is a risk which would destroy this property in 40 years, that risk is practically excluded by the controlling risk that the field would fail in 30 years. The estimations are paralled, not cumulative, and the shortest controls.

Q. So that, when you were using for property of this character a service life of 30 years, is there reasonable certainty that that 30-year income that we have figured upon is in sight?

A. If it were not, then the investments made in the pipeline would have been ill advised.

Q. Well, what do you think as to whether or not a 30-year income is in sight?

A. According to the reports which I have introduced in evidence which are, I take it, by the fact that they were made on behalf of the Panhandle Eastern Pipe Line Com- [fol. 114] pany, made by competent engineers, there is a supply of over 30 years from the inception of the program in sight.

Q. Now, in what manner does the use of the 30-year life affect the question of probable obsolescence of gas as a fuel?

A. I don't quite—

Q. (Interposing) Well now, suppose that somebody were to present an argument that other types of fuel utilization may be discovered in the future through scientific research, to what extent is that question or speculation answered by the statement that "Well, we are only figuring on 30 years"?

A. If that condition can't be expected to materialize before the 30 years are up, it is of no consequence.

Q. Now, conditions of progress in the arts and so forth, just how are they, are the risks of depreciation due to them eliminated by using a short life like the 30 years?

A. Using a short life avoids the risks of improvement which may appear after 30 years and leaves you faced only

with those that would occur during the immediate 30 years.

Q. In general, what would you say concerning the existence of any risk of obsolescence or lack of customer demand in the commodities supplied by the companies under regard here?

[fol. 115] A. I don't foresee any within the estimated additional 25 years of life.

Q. Now, Mr. Toeppen, can you say anything about the probable survival of utility to this property beyond the 30-year period which you used?

A. There are two factors that come in there. The first one [illegible] to whether or not this gas supply will last longer than 30 years. Mr. Davis makes no statement as to reserves beyond the 25 years from 1940 which underlies the 30-year estimate from inception of the company.

It is not customary in those reserve calculations to make the most extreme assumptions as to the available gas. There may be some more in addition to what Mr. Davis gave as an estimate to be in the present reserves. There may be additional large areas in the western part of the Mississippi Valley which have not yet been discovered. The discovery of gas in the western part of the Mississippi Valley has been going on for very, very many years. We don't know what else we may find.

If gas should give out in the area there is in that same eastern slope of the Rockies a substantial deposit of oil shales through Colorado, Wyoming and possibly farther south and if there is no more gas, there would probably be sufficient economic urge to exploit the oil shales for production of both gas and oil which can be transmitted [fol. 116] through this same pipeline.

There is another alternative, that either in the West or in the Middle West after the gas supply fails there will be manufactured gas production at mine mouth which can be economically distributed through this pipeline system in view of its then salvage value.

Q. Now, are you able, in view of all considerations which you have mentioned as being applicable, to form an opinion concerning the degree of risk or the comparison

of risk applicable to Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Company in respect to their ability to yield adequate depreciation and reasonable earnings within the stated period?

A. As compared with what?

Q. With anything you wish to form some comparison, say, possibly with the risk of rate return.

A. Certainly there are some unprovided for risks which do not exist in the country as a whole in business. In other words, the entire country's business has a great diversity as to risk distributions and any one particular industry in the country will have a greater inherent risk than all the enterprises in the country together and, therefore and further, all the enterprises of the country together and their chance of survival and their relation to conditions in the country as a whole is, possibly, reflected [fol. 117] in the yield on U. S. Treasury bonds and notes. The risk of Panhandle Eastern and Michigan Gas Transmission is certainly one which is greater than a risk of the country as a whole and, therefore, the rate of return would be greater than this quasi risk less rate of U. S. Treasury bonds and notes of equal maturity.

Q. Well now, how would it compare with other businesses and would you express a comparison in terms of figures for the rate of return?

A. Well, for example, it is probably more risky than the venture of the American Telephone & Telegraph Company. It operates in a limited territory as compared to the nation-wide operation of American Telephone & Telegraph Company. It is probably even more risky than a large electric light and power company such as Consolidated Edison of New York or Commonwealth Edison of Chicago. It is not as risky as a straight oil producing company or a straight gas producing company.

Q. Have you given any consideration to the ability of a concern like Panhandle Eastern to secure financing and the costs of money to it?

A. I have not.

Mr. Goodman: I present a paper which I will ask to have marked for identification as Exhibit 11. I am handing three copies to the Commission.

[fol. 118] (Document Referred To Was Marked Exhibit No. 11 For Identification.)

By Mr. Goodman:

Q. Will you please identify the exhibit marked 11?

A. Exhibit 11 is a chart showing the relation between yields of various United States Treasury securities and the life from the date of the quotation on which the yield is based to call date as during October 1939 and as based on a publication of the U. S. Treasury Department setting forth the average prices and average yields of all the outstanding issues during the month of October 1939.

Q. Did you prepare the exhibit?

A. It was prepared under my direction.

Q. And will you characterize its substantial purport?

A. This chart shows that yields vary more or less directly with the length of time to maturity or call date and that immediate maturities, that is maturities less than about a year and a half, at that time were sold at such a premium as to yield no return and that beginning at a year and a half the return increased gradually to about slightly over 2.5 percent for maturities over 17 years.

Mr. Goodman: I offer Exhibit 11 in evidence.

Trial Examiner: The ruling will be reserved.

Mr. Goodman: I present a paper and ask that it be marked Exhibit 12 for identification. I am handing three [fol. 119] copies to the Commission.

(Document Referred To Was Marked Exhibit No. 12 For Identification.)

By Mr. Goodman:

Q. Will you please identify Exhibit 12?

A. Exhibit 12 consists of five sheets relating to the yields of U. S. Government Securities in the interval from the quotation date of July 6, 1941 to maturity. It is based on information contained in the financial page of the "New York Times" for July 6 and is as of July 5. The yield rates are taken directly from the "New York Times" tabulation, a photostat of which is page 3 and the length of time to maturity was calculated by myself.

The information as to the time of call was calculated by myself and the information as to call dates was secured from the U. S. Treasury Department.

The second page contains the same information for the U. S. Treasury notes taken from the same source and the first chart is the graph of presentation of the information on the first and second sheets and was prepared personally by me and shows that immediate yields of about nine months or less again are negative and increase gradually [fol. 120] with increasing remaining life of the investment with slightly over 2 percent at 17 years.

The last chart is a similar chart drawn from similar sources prepared in the same way and by myself as of February 7, 1940 from information which I used in another case and brought in here simply to show the general continuance of conditions during that recent period.

By Mr. Goodman:

Q. Now, Mr. Toeppen, isn't it a fact that Exhibit 12 shows, in general, risk less rates of return which apparently varied dependent upon the length of maturity?

A. They do. They are not quite riskless, Mr. Goodman, they are subject to what might be called the integrated risks of the country as a whole.

Q. Now, how do the present yields from U. S. bonds compare with yields from the same securities in other years?

A. Very, very much lower.

Q. Could you refer to any date as a basis of comparison? A. You have a chart on that.

Mr. Goodman: I wish to offer Exhibit 12 in evidence.

Trial Examiner: The ruling will be deferred.

Mr. Goodman: I present a paper which I request be marked Exhibit 13 for identification.

(Document Referred To Was Marked Exhibit No. 13 For Identification.)

[fol. 121] By Mr. Goodman:

Q. Will you identify Exhibit 13?

A. Exhibit 13 is a chart showing the history of yields of U. S. Government securities from 1920 to date for maturities, for additional lives, remaining lives of five, ten, fifteen and twenty years from the date, during the month from which this yearly yield was calculated. It is calculated for only two months in each of the years.

The calculation was carried out under my direction and supervision and shows that these yields in March of 1921 were all in excess of 5 percent for all lives of investment and have declined, not uniformly, but consistently from then to the present date.

The lines of the chart stop with February 7, 1940 and I have inserted beyond that four dots showing the yields for five, ten, fifteen and twenty-year lives as of the July 5 quotation under Exhibit 12 which yields seem to be almost the lowest that have occurred since 1921.

Mr. Goodman: I present a paper which I request be marked for identification Exhibit 14.

(Document Referred To Was Marked Exhibit No. 14 For Identification.)

[fol. 122] By Mr. Goodman:

Q. Will you please identify the paper marked Exhibit 14?

A. Exhibit 14 is a computation in which I take yield rates from Exhibit 12 and the chart for July 5, 1941 as read from the curve on that chart for one year, two years and so on for maturities to 30 years and average them at an equal weight which shows that if you have a serially maturing investment, maturing in equal, annual installments, each installment yielding the return at the time of acquisition, shown on the July 5 chart of Exhibit 12, that you will obtain an average yield of 1.66 percent over your 30 years investment.

. . . . . .

[fol. 123] By Mr. Goodman:

Q. Do you have any opinion, Mr. Toeppen, concerning what would be a fair rate of return for a utility such as Panhandle Eastern Pipe Line Company and Michigan Gas Transmission?

. . . . . .

A. Yes.

Q. What is it?

A. It is a figure somewhere in excess of this 1.66 percent of Exhibit 14 and covering a range rather than a specific amount.

In view of the incomplete information concerning the treatment of certain specific risks, by these companies, [fol. 124] I would say it would run probably somewhere between 4.5 or 6 or 6.5 percent.

Q. You mean that it is your opinion and judgment that a return as high as 6.5 would be clearly adequate and a return as low as 4.5 might be adequate?

A. That is correct.

Mr. Goodman: That is all and that is our case.

There is one other question I would like to ask.

By Mr. Goodman:

Q. Mr. Toeppen, you have not made any attempt to make an apportionment of any available reduction to Michigan Consolidated Gas Company? A I have not.

Q. Why have you not done so?

A. For two reasons, first of all, if such an apportionment were to be made more information than was presently available would be necessary.

Secondly, I believe that with the type of enterprise that we have here, that is an integrated utility serving a large number of customers, rather say an integrated plant serving a large number of customers, each one which is essential to the success of the entire venture, the cost to the system as a whole is the cost to every customer and there is no apportionment necessary.

Q. Well now, assuming that this Commission would [fol. 125] adopt as a fair rate of return 6 percent, how would you suggest that the reduction entailed thereby should be distributed?

A. I would suggest that the gate rate for every distributing customer be set at an amount per thousand cubic foot arrived at by dividing the amount in Exhibit 2 in the line entitled "Total Requirement at 6 Percent Per Annum

Return of $5,362,000," by the proper number of cubic feet, preferably the cubic foot at 100 percent load factor.

Mr. Lee: Cubic foot sold you mean?

The Witness: Cubic foot sold, yes.

Mr. Goodman: That is all, Mr. Toeppen.

[fol. 146] Mr. Baldridge: It is suggested that that part of Mr. Clark's statement with respect to affiliations and similar matters, that begins at line 2 on page 44 of the record and reads as follows: "Under that contract, if and when carried out, Michigan Gas Transmission Corporation is to be sold by Columbia Gas & Electric Corporation to Panhandle Eastern Pipe Line Company at cost. Panhandle Eastern is to have the right to acquire from Columbia Gas & Electric Corporation other connecting pipe lines in Indiana for approximately $355,000. These would constitute all of Columbia Gas & Electric Company's lines in Indiana." be revised to read as follows: "Under that contract, if and when carried out, Michigan Gas Transmission Corporation and a small distributing company, which is likewise a subsidiary of Columbia Gas & Electric Corporation, are to be sold by Columbia Gas & Electric Corporation to Panhandle Eastern Pipe Line Company at cost and at the same time Panhandle Eastern Pipe Line Company will purchase other connecting pipe lines in Indiana belonging to another subsidiary of Columbia Gas & Electric Corporation for approximately $355,000. These would constitute all, or substantially all, of the gas pipe lines in Indiana owned by subsidiaries of Columbia [fol. 147] Gas & Electric Corporation."

Trial Examiner: Thank you for this statement and I am going to ask that Release No. 2778 of the Securities and Exchange Commission, being the opinion and order of May 27, 1941 in matters relating to the Panhandle Eastern, et al, as amended by Release No. 2834, the Securities and Exchange order of June 21, 1941, come into the record as Exhibit 15.

I have asked that copies be obtained of this. I think that we should have this data in the record.

Mr. Gorman: If the Examiner please, I have obtained extra copies of the release of May 28 which I have in my office and will be glad to make available if anyone so desires.

Trial Examiner: The order of the Commission of June 21 is equally important because there are corrections made in the original order, so at your convenience, Mr. Gorman, if you will furnish those we will treat them as Exhibit 15.

(Exhibit No. 15 was received in evidence.)

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[fol. 270] (Exhibits Nos. 1 to 14, inclusive, were received in evidence.)

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[fol. 337] C. H. M. BURNHAM was produced as a witness by and on behalf of Panhandle Eastern Pipe Line Company, and being first duly sworn, testified as follows:

Direct Examination.

By Mr. Wheat:

Q. Where do you reside?

A. Kansas City, Missouri.

Q. Are you employed by Panhandle Eastern Pipe Line Company?

A. Yes, I am Chief Engineer of Panhandle Eastern Pipe Line Company.

I graduated from Ohio State University with a degree of Bachelor of Mechanical Engineering in 1916. In 1929 I was granted a professional degree of Mechanical Engineer by the same university.

* * * * * * * *

[fol. 338] In 1916 I went to work for the Ohio Fuel Supply Company, Columbus, Ohio. This company later became a subsidiary of Columbia Gas and Electric Corporation. It was engaged at that time, and, as I understand it, is now engaged, in the transportation and wholesaling of natural gas from Ohio and West Virginia fields. My early work with that company was as a draftsman, during which period I designed compressor stations and gaso-

line plants, gas measuring stations, and similar structures used in the natural gas industry.

In 1920 I became Construction Engineer for the same corporation. My time was largely engaged in supervising the designing and construction, as I said before, of compressor stations, natural gasoline plants, gas measuring stations, and pipe lines.

In 1925 I joined the organization of Henry L. Doherty & Company, New York City, with headquarters in Colo- [fol. 339] rado as Chief Engineer of the Colorado-Wyoming Gas Company, a Cities Service subsidiary. As Chief Engineer of Colorado-Wyoming Gas Company, I supervised the design and construction of its system, which extends from Denver, Colorado to Cheyenne, Wyoming. This is a natural gas pipe line system with all the usual appurtenances of such a line.

In addition to my duties as Chief Engineer of Colorado-Wyoming Gas Company, I collaborated on numerous occasions with the organizations of the other natural gas subsidiaries of The Cities Service Company in the Midcontinent and in the Appalachian fields. This collaboration was concerned largely with the construction of long distance natural gas pipe lines, compressor stations, and special problems involved in measuring and transporting natural gas.

In 1930 I was commissioned to make a study of the feasibility of building a natural gas pipe line from the Transylvania fields of Roumania to Vienna, Austria and Budapest, Hungary. In connection with this study, I spent approximately three months in Roumania, Hungary and Jugoslavia.

In 1936 I made a similar survey relative to a natural gas supply for Mexico City, Mexico. In the summer of 1936 [fol. 340] I went to California as Chief Engineer of the Coast Exploration Company, a subsidiary of Federal Water Service Corporation, organized principally to engage in the exploration for natural gas in California.

In 1937 I joined the organization of Panhandle Eastern Pipe Line Company, and have been employed continuously by that company since that date.

Q. Now, Mr. Burnham, will you describe your duties as Chief Engineer of Panhandle Eastern Pipe Line Company?

A. I have general supervision of the engineering activities engaged in by this company, including the construction of all new gas transmission facilities.

Q. Does this include the designing of facilities as well as their construction?

A. It does. My duties also include that of being familiar with all of the property owned and operated by this company, including its gathering line system, its gasoline, dehydration, and compressor stations, its pipe lines, its gas measuring equipment, and all other items of plant and equipment.

In 1938 I was assigned the job of testing the lines and equipment of this system in order to determine its safety at five hundred pounds working pressure. That particular job took me from one end of the system to the other, during which time I was able to observe not only the plant construction, but much of the pipe used in the construction of the system.

[fol. 341] In 1939 a program of increasing the flow efficiency of some of our lines was carried out under my direction. In this connection I designed (and later patented) a gas pipe line "go devil" for cleaning internally large diameter pipe lines. I might add here that the fouling in our lines was determined by test to be present only on the west end of the system and consisted of dirt, principally sand, included in the line at the time of construction.

. . . . . .

This device consists of a ten-inch diameter by approximately four-foot segmented steel body having attached to it by means of leaf springs four rows of metal-backed steel brushes. Three roller bearing wheels are mounted on springs at each end to carry the weight of the device. These wheels are set tangentially to impart to the "go-devil" a spiral motion necessary to distribute the wear on the steel brushes and to obtain complete scrubbing of the [fol. 342] interior surface of the pipe.

In operation, the "go-devil" is placed in the line, and (by admitting gas behind it), is propelled through gate-to-gate sections of the line at a speed varying from twelve to fifteen miles an hour. As it progresses through the line the steel brushes loosen the dirt which, carried by the gas passing through and around the "go-devil," is blown ahead and out of the line. By means of this device we were able to restore a great many miles of our line to a clean condition and thus more nearly assure ourselves of full and unobstructed flow of gas through these sections.

Q. Have you anything to add, Mr. Burnham, to your description of your experience and duties as Chief Engineer of Panhandle Eastern Pipe Line Company?

A. Nothing other than the fact that we are extremely busy at the moment engaged in a construction program which involves the expenditure of some nine million dollars. We hope that this program will be largely completed by January 1, 1942.

Q. Is this work you have mentioned largely a continuation of the general program of this company to completely loop its pipe line system?

A. It constitutes that, and also the extending of our lines to new markets.

. . . . . .

[fol. 345] By Mr. Wheat:

Q. Now, Mr. Burnham, let me ask you to what you refer when you use the expression "Panhandle Eastern Pipe Line System"?

A. I not only refer to the pipe lines, compressor stations and other property owned by Panhandle Eastern Pipe Line Company, but also to the properties of a wholly-owned subsidiary, Illinois Natural Gas Company, which owns lateral lines in the State of Illinois.

According to the company's records, the construction [fol. 346] of the company's original line was commenced in the yea. 1930. The major part of the construction was completed in 1931, although service was not rendered on any considerable scale until the next year, 1932.

Q. Will you please state the length of the original line?

A. The total length of the original line was 859.4 miles. It includes the section of 22-inch pipe in Texas and Oklahoma, to a point in Kansas near the Liberal station.

The system today consists of 2,788 miles of varying sizes of pipe, including loop lines, lateral lines and gathering lines. Through this system the company serves, directly or indirectly, some 200 cities and communities having an aggregate population of upwards of three million persons.

Q. Please name some of the principal cities and communities so served?

A. Detroit, Monroe and Ann Arbor, Michigan; Fort Wayne, Muncie and Kokomo, Indiana; Champaign, Urbana, Peoria, Springfield, Jacksonville and Quincy, Illinois; Hannibal and Jefferson City, Missouri.

[fol. 347] The company's system includes 12 main line compressor stations and three small local area stations to which I shall refer later. It also includes a large gasoline plant, for the extraction of gasoline from the natural gas as it comes from the wells. The system also includes two dehydration plants which are used for the purpose of removing moisture from the natural gas, in order to render it possible to transport the gas through the pipe line without danger of freeze up. In addition, the system has 629 measuring and regulating stations, together with numerous warehouses, camps, and various types of auxiliary structures.

Q. Now, Mr. Barnham, I would like to have you state the principal sources of supply of natural gas of this company?

A. Panhandle Eastern Pipe Line Company secures its supply of natural gas from two principal sources, the so-called Panhandle Field of Texas and the so-called Hugoton Field of Southwestern Kansas. In the former field gas is obtained from 110 wells and in the latter from 137 wells.

Approximately fifty per cent of the gas secured from both the Panhandle and Hugoton gas fields is purchased by the company and the balance is produced from the [fol. 348] company's wholly-owned or partnership wells.

At the present time approximately 70 per cent of the company's annual requirements are taken from the Texas

Panhandle Field and the remaining 30 per cent comes from the Hugoton Field.

In the Texas Panhandle Field the gas is gathered from the various wells through varying sizes of pipe lines ranging from 4 to 22 inches in diameter and having a total length of about 125 miles. The gas thus gathered is brought into the Sneed Compressor Station where it is compressed and dehydrated by means of a glycol dehydration plant located on the same site. The gas is then carried northward through the Hansford, Texas, Compressor Station to the compressor station at Liberal, Kansas, a dis- [fol. 349] tance of some 105 miles, where it is mixed with the gas which has been gathered from the Hugoton gas field. The gathering system in the latter field consists of approximately 250 miles of various sizes of pipe lines ranging from 2 to 18 inches in diameter. At the Liberal Station, the natural gasoline is removed from the gas by an oil absorption plant, after which the mixture of Kansas and Texas gas is dehydrated in a second glycol plant and is thus made ready for transportation to the markets lying to the northeast. I might add that the natural gas, as it leaves this Liberal dehydration plant, is dry and sweet, and that it possesses a heating value of approximately 1000 BTU per cubic foot, and is in marketable condition.

. . . . . .

[fol. 350] Q. Mr. Burnham, I wish you would explain, briefly what is shown on Exhibit 15, for identification.

A. This map shows the entire transmission, and lateral pipe line system of Panhandle Eastern Pipe Line Company and includes in different colors, as shown on the "legend" in the lower right-hand corner of the map, not only the main line construction, but also the loop construction made during the year 1937, which is shown in [fol. 351] red; the loop construction done during 1939 and 1940, which is shown in green; the new construction now in progress, which is shown in dotted purple lines; and also roughly the pipe line system of the Michigan Gas Transmission Corporation, which is shown by a heavy dashed blue line, commencing at the Illinois-Indiana boundary and running easterly and northeasterly from that point to the city of Detroit, Michigan.

I might add that the section of the Michigan Gas Transmission System between Muncie and the Ohio line is not properly shown there on that map. As I understand it, that section of the line does not belong to the Michigan Gas Transmission Corporation.

* * * * * * *

Q. And have you also shown on this map, Exhibit 15, for identification, the various compressor stations of the Panhandle Eastern Pipe Line Company?

A. I have. The compressor stations originally constructed on the Panhandle System are shown by dark [fol. 352] blue squares; those constructed in 1936 are shown by yellow squares; the one constructed in 1937 by a red square; and the one constructed in 1940 by a green square.

Q. This map apparently shows, Mr. Burnham, that the gas obtained by the company in the Panhandle Field of Texas comes to the Sneed Compressor Station through two distinct gathering line systems; is that correct?

A. Yes, that is correct. It is to be noted that gas which this company obtains in the Panhandle Field is produced in two general areas, one being in the northeast Potter, northwest Carson, southwest Hutchinson, and eastern Moore Counties. This gas, after being gathered through smaller pipe lines is moved through an 18-inch pipe line to a point some two and one-half miles southwest of the Sneed Compressor Station, where a junction is made with a 20-inch pipe line bringing gas from the other general area in the Panhandle Field from which the company obtains gas, that is, the south central Moore County area lying generally west and southwest of this junction. A 22-inch line leads from this junction to the Sneed Compressor Station.

Q. Mr. Burnham, have you in this connection prepared, or had prepared under your direction, a map showing generally the gathering pipe line systems of the Panhandle Eastern Pipe Line Company in the Panhandle and also in [fol. 353] the Hugoton Gas Fields? A. I have.

Q. Is the map which I now show you, Mr. Burnham, a copy of the map to which you have just referred?

A. It is.

Q. Was this map prepared by you or under your direction? A. Under my direction.

Q. And do you believe that it correctly shows what it purports to show? A. I do.

* * * * * * *

Trial Examiner: It will be marked Exhibit 16 for identification.

* * * * * * *

Q. Now, Mr. Burnham, does the map which has been marked Exhibit 16 for identification show, in somewhat greater detail than Exhibit 15 for identification the gathering lines in the Panhandle Field to which you have just been testifying? A. It does.

Q. Would it be correct to state that all of the wells, which are shown as connected to the Panhandle Eastern gathering system in Texas by lighter solid lines on Exhibit [fol. 354] 16 for identification, belong to Panhandle Eastern Pipe Line Company?

A. That is true, except for two wells which belong to the Navajo Production Company, from which Panhandle Eastern purchases gas at the wells in Texas.

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As is fully shown on the Exhibit, the Panhandle Eastern Pipe Line Company's gathering lines in the Hugoton Field are much more extensive than are its gathering lines in the Panhandle Field. They also draw gas from a much larger area. This gathering system in the Hugoton Field, as is shown on the map, consists generally of two main arms extending westerly and northwesterly from the compressor station located at Liberal, Kansas. The branch which extends due west from Liberal some 37 miles consists of a 16-inch pipe. At a point about four miles west of the town of Hugoton, Kansas, one branch, consisting of 12-inch and thereafter 8-inch pipe, extends in a southwesterly direction, while another branch, consisting of 8-inch pipe, extends in a northwesterly direction.

The other main arm of the Kansas Hugoton Field gathering system consists of an 18-inch pipe line gradually reducing to 8 inches and extending some 50 miles in a north- [fol. 355] westerly direction from the Liberal station. At a point on this line, about 26 miles from Liberal, a 16-inch

branch extends in a westerly direction, and thence a 10-inch line or branch in a southwesterly direction connecting with the 8-inch line from the arm first described.

* * * * * * * * *

Q. Does the Panhandle Eastern Company also purchase some gas in the Hugoton Field?

A. Yes, in addition to taking gas from its own wells in that field, Panhandle Eastern purchases approximately 60 per cent of its total requirements in that area from other producers. I should add that on the map of the gathering system, connecting lines joining the gathering pipe lines to wells which are shown by solid lines represent pipe lines owned by Panhandle Eastern, while dotted lines from wells to the gathering lines represent gathering pipe line systems owned by other producers who sell gas to Panhandle Eastern.

* * * * * * * * *

[fol. 356] Commencing at Windmill Junction, in Moore County, Texas, where the two main lines of the company's Texas Panhandle gathering system join, near the Sneed Compressor Station, a 22-inch O. D. by 11/32-inch wall, Lapweld, single random length pipe line extends 2.69 miles to Sneed Compressor Station. This line is a composite, welded and coupled line with a Dayton coupling every third joint.

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From the Sneed Station to Hansford Station, a distance of 51.5 miles, the same type of material and construction I have just mentioned was used.

* * * * * * * * *

At Sneed Compressor Station we are just coming out of what is known as the Canadian River breaks, a badly eroded country typical of the area covered by the south branch of our Texas gathering system. Aside from a few small canyons the country from Sneed to Hansford is fairly level. There are some wheat fields here, but grazing of cattle predominates.

* * * * * * * * *

[fol. 357] From Hansford Compressor Station to the Beaver or properly called the North Canadian River in Oklahoma, there are .67 miles of 22-inch O. D. by 11/32-inch wall, Lapweld, single random length pipe and 13.56 miles of 22-inch O. D. by 5/16-inch wall, single, random length pipe. This pipe is also joined with a Dayton coupling every third joint. At the Beaver River, the line branches through the use of headers and gate valves into five 10-3/4 inch O. D. by .307-inch and .365-inch wall thickness, double random length, seamless pipe lines, solid welded, and weighted with river clamps. These multiple lines extend across the river bed for a distance of 1.01 miles. The total quantity of pipe in this river crossing is 26,680 feet.

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From the north header on the Beaver River crossing, the line extends 37.98 miles to the south header of the Cimarron River crossing in Kansas. This section of line consists of 22-inch O. D. by 5/16-inch wall, single random length, Lapweld pipe with a Dayton coupling every third joint. The Cimarron River crossing consists of five 10-3/4 inch O. D. by .365-inch wall, seamless, double random length pipe, solid welded lines across the bed of the river for a distance of .71 miles and weighted with numerous river clamps. The total quantity of pipe in this river crossing is 18,804 feet.

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[fol. 358] From Hansford to the Beaver River, the line runs through grazing country similar to that between Sneed and Hansford. At the Beaver River, we come to the great wheat growing area of the Oklahoma Panhandle. Almost solid wheat fields extend to a point near Liberal Station where we come into the breaks of the Cimarron River. This is near the center of the dust bowl of the Southwest.

Q. Does the loop line system of this company's pipe line commence at the Liberal Station?

A. Yes, and in describing the main transmission line from this point easterly, I should like to describe separately both the original line and the loop line between each compressor station. I should like to add that when mention is made of the fact that every second or every third

joint is made with a coupling, it is also meant, without ex-
[fol. 359] ception, that the intervening joint or joints are welded.

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The original line from Liberal Station to Greensburg Station, a distance of 86.72 miles, consists of 24-inch by 5/16 inch wall, electric weld pipe in 40-foot lengths. All coupled type of construction was used, meaning a coupling every 40 feet.

* * * * * * * *

Total length of the loop between Liberal and Greensburg is 63.31 miles.

* * * * * * * *

[fol. 360] The line from Liberal Station progresses through rough eroded country for a short distance then emerges onto the plain between Cimarron and Arkansas Rivers. Between Liberal and Greensburg Stations the crops are principally wheat and kafir corn. Due to the proximity of the dust bowl, dust storms are common in this area.

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From Greensburg Station to Haven Station, the original line consists of 59.7 miles 24-inch O. D. by 5/16-inch wall, double random length, electric weld pipe with Dayton coupling on each joint and 26.24 miles 24-inch O. D. by 5/16-inch wall, 30-foot average random length, seamless pipe with a coupling on each joint.

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[fol. 361] Total length of this loop is 65.67 miles.

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Beginning at Greensburg the line is built through some 20 miles of shifting sand hills. It is here that considerable difficulty is experienced keeping the line covered. After emerging from the sand hills the line procesds through a swampy area for a number of miles. Here the line is held down by means of numerous anchors.

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[fol. 362] As I have said, the distance from Haven Station to the West header of the Arkansas River crossing is 4.08 miles. The original line for this distance is of 24-inch O. D. by 5/16-inch wall, seamless pipe with a coupling every joint. At the Arkansas River the original line branches out through the use of headers and valves into six 10-3/4 inch O. D. by .307-inch seamless, solid welded lines constituting the submerged crossing for this river. The distance from header to header across this river is 1.2 miles and the total quantity of pipe used in building this crossing was 38,130 feet.

From the east bank of the Arkansas River, the original line is constructed for a distance of 17.1 miles of 24 inch O. D. seamless pipe with a coupling every 30 feet. From this point to Olpe Compressor Station, a distance of 70.28 [fol. 363] miles, the original line is constructed of 24-inch O. D. by 5/16-inch wall, electric weld pipe with a coupling every joint.

. . . . . .

[fol. 364] Near Haven Station the line is in the flood plain of the Arkansas River. Upon emerging it runs through 30 to 40 miles of good farming country to a point near Burns, Kansas, where we encounter the Flint Hills of central Kansas. Here for a distance of some 30 miles the line is laid in solid rock. As for farming, the Flint Hills are unsuitable for anything but grazing lands. Near Olpe Station the line runs out of the Flint Hills and the balance of this section of line is built through fairly good farming country.

. . . . . .

From Olpe Compressor Station to the west header of the Neosho River, the original line extends for a distance of 9.99 miles and is constructed of 24-inch O. D. by 5/16-inch wall, double random length, electric weld pipe with a coupling every 40 feet. At this header, the original line branches into two 18-inch O. D. by 5/16-inch wall, solid [fol. 365] welded lines and on the bank of the stream the two 18-inch lines branch into six 10-3/4-inch O. D. by .365-inch seamless lines laid under the bed of the stream to a point beyond the opposite bank, where double 18-inch

welded construction is again used to the east header. The total quantity of 18-inch pipe used in this crossing is 33,955 feet, and the total quantity of 10-inch pipe is 6,797 feet, and the total distance from header to header is 3.43 miles.

From the east header of the Neosho River to the west header of the Osage River, the original line extends for a distance of 52.81 miles and is constructed of 24-inch O. D. by 5/16-inch wall, double random length electric weld pipe with a coupling every 40 feet. At the west header of the Osage River crossing, the 24-inch line branches into two 18-inch O. D. by 11/32-inch wall, solid welded, seamless lines which at the west bank of the stream branch into six 10-3/4-inch O. D. by .365-inch, seamless lines which are buried under the bed of the river and which extend to a point on the east side of the river where similar double 18-inch construction is again used. The total distance from header to header at this river is 1.37 miles and the total quantities of pipe are 9,463 feet of 18-inch O. D. by 11/32-inch wall, solid welded, seamless pipe, and 14,919 feet of 10-3/4-inch O. D. by .365-inch solid welded seamless pipe.

[fol. 366] From the east header of the Osage River to Louisburg Compressor Station, the original line extends for a distance of 18.28 miles and is constructed of the following materials:

.19 miles 24-inch O. D. by 5/16-inch wall, double random length electric weld pipe with a coupling every 40 feet;

17.99 miles 24-inch O. D. by 5/16-inch wall, hammer weld pipe with a coupling every 30 feet, and

.1 mile of 22-inch O. D. by 5/16-inch wall, single random length, Lapweld pipe with Dayton coupling every third joint.

. . . . . .

The loop-line-out of Olpe Compressor Station extends from the station to the west header of the loop line Neosho River crossing for a distance of 10.05 miles and is constructed with the following materials:

.16 miles 24-inch O. D. by 5/16-inch wall, double random length, electric weld pipe with coupling every second joint.

9.9 miles 24-inch O. D. by 9/32-inch wall, double random length, electric weld pipe with coupling every second joint.

At the west header of the Neosho River crossing, the line divides into two 18-inch O. D. by 3/8-inch and 9/32-inch wall, double random length, solid welded seamless lines which extend across the river for a distance of 3.42 miles to the east header where the two 18-inch lines converge into a 24-inch line.

[fol. 367] From this point, the loop line extends for a distance of 45.61 miles parallel to the original line and consists of the following:

.22 miles 24-inch O. D. by 5/16-inch wall, double random length, electric weld pipe with Dresser coupling every second joint.

37.14 miles 24-inch O. D. by 9/32-inch wall, double random length, electric weld pipe with Dresser coupling every second joint.

8.25 miles 24-inch O. D. by 0/32-inch wall, double random length, seamless pipe with Dayton coupling every second joint.

The total length of the Olpe loop is 59.08 miles.

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From Olpe to Louisburg the line runs through rolling country dotted with many farms. The principal crops are wheat and corn. The Osage and Neosho Rivers, as I just stated, are in this section and fairly rough going is encountered at several other spots.

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From Louisburg Compressor Station to Houstonia Compressor Station, a distance of 73.45 miles, the original line is constructed of 22-inch O. D. by 5/16-inch wall, single [fol. 368] random length, Lapweld pipe with Dayton coupling every third joint.

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The total length of the Louisburg Loop is 63.31 miles.

. . . . . .

From Louisburg to Houstonia Compressor Station we have rolling wooded lands well drained and highly suited for general farming. Mixed crops are raised. There are also some orchards.

. . . . . .

[fol. 369] From Houstonia Compressor Station to the west header of the Lamine River Crossing, the original line extends for a distance of 18.51 miles and is constructed of 22-inch O. D. by 5/16-inch wall, single random length, Lapweld pipe with Dayton coupling every third joint. At the Lamine River the original line branches into two 16-inch O. D. by .284-inch wall thickness, solid welded lines which, in turn, branch into six 10-3/4-inch O. D. by .365-inch solid welded lines which are submerged under the river. On the east bank the six 10-inch lines converge into two 16-inch lines which, in turn, converge into a single 22-inch line. The total distance from header to header at the Lamine River is 1.16 miles and the total quantities of pipe used are as follows:

6,951 feet of 16-inch O. D. by .284-inch, single random length, Lapweld pipe, and

15,977 feet of 10-3/4-inch O. D. by .365-inch wall thickness, double random length seamless pipe.

. . . . . .

[fol. 370] From the east header of the Lamine River Crossing to the west header of the Missouri River Crossing, the original line extends for a distance of 15.24 miles and is constructed of 22-inch O. D. by 5/16-inch wall, single random length, Lapweld pipe with a Dayton coupling every third joint. The Missouri River Crossing of the original line is constituted of six 10-inch submerged lines requiring a total of 27,543 feet of 10-3/4-inch O. D. by .365-inch wall, double random length, seamless pipe. This crossing is solid welded, weighted with numerous river clamps and extends for a distance of .87 miles from header to header.

From the east header of the Missouri River Crossing to Centralia Compressor Station, the length of the original line is 35.45 miles and it is constructed of 22-inch O. D. by 5/16-inch wall, single random length, Lapweld pipe with a Dayton coupling every third joint.

. . . . . .

[fol. 371] Q. What about the loop line between the east header of the Lamine River Crossing to the Missouri River?

. . . . . .

[fol. 372] A. The total length of this loop is 55.59 miles.

. . . . . .

Between Houstonia and Centralia Stations the line proceeds through typical Missouri farm lands. It is principally rolling country with many farms and orchards. The Missouri River with its broad flood plain is in this section.

. . . . . .

From Centralia Station to the Mississippi River, the original line extends for a distance of 63.41 miles and is constructed of 22-inch O. D. by 5/16-inch wall, single random length, Lapweld pipe with a Dayton coupling every third joint. The Mississippi River crossing is constituted of two components; first, the 22-inch line on the Champ Clark Bridge; second, a double 12-inch submerged crossing. On the Champ Clark Bridge, the quantity of pipe used is .53 miles of 22-inch O. D. by 3/8-inch wall, single random length, Lapweld pipe solid welded and reinforced for the entire distance across the bridge. At the east end of the bridge the 22-inch line divides into two 18-inch O. D. by 5/16-inch wall, single random length, Lapweld lines solid welded for a distance of 7.17 miles where they converge into a single 22-inch line. This 22-inch line terminates at Pleasant Hill Compressor Station [fol. 373] and is but .04 miles long and is constructed of 22-inch O. D. by 5/16-inch wall, double random length, Electric Weld pipe with coupling every second joint.

. . . . . .

The submerged crossing of the Mississippi River has a total length of .92 miles and is constructed of 9,713 feet of 12-3/4-inch O. D. by .375-inch wall, double random length, seamless pipe solid welded and weighted with river clamps. Its east header is tied into the original line with 720 feet of 22-inch O. D. by 5/16-inch wall, double random length, Electric Weld pipe with Dresser coupling every second joint, and 2,330 feet of 20-inch O. D. by 5/16-inch wall, double random length, Electric Weld pipe with Dresser coupling every second joint.

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The loop line out of Centralia Compressor Station is constructed of the following pipe:

.09 miles 22-inch O. D. by 5/16-inch wall, double ran-
[fol. 374] dom length, seamless pipe with Dresser coupling every second joint.

40.77 miles 22-inch O. D. by 9/32-inch wall, double random length, seamless pipe with Dresser coupling every second joint.

6.16 miles 24-inch O. D. by 9/32-inch wall, double random length, seamless pipe with Dayton coupling every second joint.

Total length of this loop is 47.02 miles.

* * * * * * * * * *

From Centralia to the Mississippi River the line is on high rolling ground interspersed with farms. Fire clays are found in abundance here. Mixed farming is the practice in this area. The approach to the Mississippi River on the west side is down over steep bluffs and along the water's edge to the points of crossing. As I stated before, we have a submerged crossing here as well as a line on the Champ Clark bridge. From the east bank to Pleasant Hill Station the line runs through a low flat flood plain.

* * * * * * * * * *

[fol. 375] From Pleasant Hill Compressor Station to the Illinois River, the original line extends for a distance of 19 miles and is constructed of 22-inch O. D. by 5/16-inch wall, double random length, Electric Weld pipe with cou-

pling every other joint. On the west bank of the Illinois River the original line divides into five 10-inch lines constituting the submerged crossing, which consists of:

12,916 feet 10-¾-inch O. D. by .365-inch, double random length, seamless pipe solid welded and weighted with numerous river clamps.

On the east bank of the river, the 10-inch river lines converge into two 18-inch lines. These lines are built of 18-inch O. D. by 5/16-inch wall, solid welded pipe and converge into a single 22-inch line at a distance of 2.66 miles from the river. The total length of the Illinois River crossing is 3.15 miles. From the end of the double 18-inch on the east side of the Illinois River to Glenarm Compressor Station the original line extends for a distance of 48.52 miles and is constructed of 10.17 miles of 22-inch O. D. by 5/16-inch wall, double random length, Electric Weld pipe with coupling every other joint, 38.35 miles of 22-inch by 5/16-inch wall, single random length, Lapweld pipe with coupling every fourth joint.

. . . . . .

[fol. 376] The Pleasant Hill loop is divided into two sections. The first section lies between Pleasant Hill Compressor Station and the Illinois River and is constituted of .39 miles of 22-inch O. D. by 5/16-inch wall, double random length, seamless pipe with a Dresser coupling every second joint, 18.75 miles 22-inch O. D. by 9/32-inch wall, double random length, seamless pipe with a Dresser coupling every second joint. The second section of the Pleasant Hill loop extends from the east side of the Illinois River, parallels the original line for a distance of 23.87 miles, and consists of the following pipe:

10.82 miles 22-inch O. D. by 9/32-inch wall, double random length, seamless pipe with Dresser coupling every second joint.

[fol. 377] 13.05 miles 24-inch O. D. by 9/32-inch wall, double random length, seamless pipe with a coupling every second joint.

The total length of the Pleasant Hill loop, including both sections, is 43.01 miles.

. . . . . .

Beginning at Pleasant Hill Station the line proceeds through some very hilly country cut up with deep ravines which nature of country extends to the Illinois River. The country from the Illinois River eastward to Glenarm Station is more level and is generally good farming land. Some drain tiles are encountered in this area.

. . . . . .

Through this area, the farms are flat, the soil is not of such a nature as to give good drainage, and the farmers have put in numerous drain tiles. We cut those lines during the construction, and, needless to say,—well, I might say they are quite a nuisance. They have to be repaired, and even a year or two later the farmers require us to come back, and make complaint in case the drainage is not complete for their farm land.

. . . . . .

[fol. 378] From Glenarm Compressor Station the original line extends for a distance of 8.37 miles to the west header of the Sangamon River, more properly the south fork of the Sangamon River crossing, and for this distance is constructed of 22-inch O. D. by 5/16-inch wall, double random length, Electric Weld pipe with a coupling every 80 feet. The Sangamon River crossing consists of a submerged crossing employing five 10-inch lines. The quantity of pipe used was 5,315 feet of 10-¾-inch O. D. by .365-inch wall, double random length, seamless pipe, solid welded and installed with numerous river clamps and the total distance from header to header in this crossing is .2 miles.

Beginning with the header on the east side of the Sangamon River, the original line continues as a 22-inch line and runs for a distance of 46.64 miles to a point where the size is reduced to 20 inches. This 46.64 miles of line is constructed of 22-inch O. D. by 5/16-inch wall, double random length, Electric Weld pipe with coupling every other joint. From the 22-inch by 20-inch swedge to Tuscola Compressor Station is a distance of 14.31 miles and the line is constructed of 20-inch O. D. by 5/16-inch wall, single random length, Lapweld pipe with a coupling every fourth joint. The loop line out of Glenarm Compressor Station consists

[fol. 379] of 17.15 miles of 22-inch O. D. by 5/16-inch wall, double random length, seamless pipe with Dresser coupling every second joint, and 16.37 miles 24-inch O. D. by 9/32-inch wall, double random length, seamless pipe with Dayton coupling every second joint. The total length of the loop out of Glenarm Station is 33.52 miles.

. . . . . .

Beginning at Glenarm Station and extending to a point just east of Decatur are more rolling farm lands. However, between this point and Tuscola Station and extending on to the Illinois-Indiana State line is a great section of the black rich corn land for which Illinois is famed. The land is heavily tiled and the crops are principally corn and soy beans.

. . . . . .

[fol. 384] Q. Will you please describe the type of the original and loop lines in that section?

A. The original line from Tuscola compressor station to its terminus near the Illinois-Indiana State line, a distance of 44.03 miles, is constructed of 20-inch O. D. by 5/16-inch wall, single random length, Lapweld pipe with coupling every fourth joint. The loop line out of Tuscola compressor station, which extends for a distance of 23.79 miles parallel to the original line, is constructed of 20-inch O. D. by 9/32-inch wall, double random length, seamless pipe with Dayton coupling every second joint.

Q. Mr. Burnham, have you now described the entire main natural gas pipe line of Panhandle Eastern Pipe Line Company, including both the original and the loop line?

A. I believe I have.

Q. What portions of these main pipe lines are protected against corrosion by protective coating on the pipe?

A. All, except the 10-inch pipe in the Cimarron River, the 10-inch and 18-inch pipes in the Arkansas River, the 18-inch pipe in the Neosho River, and the 10-inch pipe in the Osage, Lamine and Illinois submerged river crossings.

. . . . . .

[fol. 385] Q. And was this coating applied when the lines were installed? A. It was.

Q. In addition to such coating, have any other means been taken to protect any portions of this main pipe line system against corrosion?

A. Yes, at some thirteen points on the system we have installed cathodic units of various types in order further to protect the pipe by electrical means.

. . . . . .

Q. What in general is the depth at which the main pipe lines are placed in the ground?

A. A minimum of thirty inches of cover has been employed in all instances in the construction of the pipe lines [fol. 386] which I have been describing. At numerous points, particularly at rivers or creek banks, the pipe line is laid much deeper under the surface of the soil and these river and creek banks are protected with riprap of stone or other materials. In order further to protect the back fill, the company has made numerous installations of breakers and spillways throughout the length of the line.

. . . . . .

It has been found, particularly where the line traverses swamps or unstable ground, that anchors are necessary, and numerous anchors have been installed at these points to prevent the pipe floating. These anchors are concrete or of steel expansion type, depending on soil conditions.

Q. Does the main pipe line system which you have described include gate valves with by-pass or blow-off connections?

A. Yes, at intervals of every eight or ten miles along [fol. 387] the pipe line, there are installed 24 inch, 22 inch or 20 inch main line gate valves with by-pass and blow-off connections. These block gate valves are used for sectionalizing the line.

Q. Will you state what you mean by the term and whether it is a procedure normal to the operation and maintenance of natural gas pipe lines?

A. Yes, it is such a procedure and it consists of closing the block gates at either end of the section to be isolated. The blow-offs are then opened to the atmosphere, and, as soon as the pressure has been relieved, the section can be safely uncovered and worked on. When a looped sec-

tion of line is to be isolated the same procedure is followed but by opening or closing the proper valves around each gate setting, the section to be isolated is by-passed and service through the second line continues uninterrupted.

Q. Before leaving your description of the company's main natural gas pipe line, Mr. Burnham, I wish you would state briefly what, if any, are the advantages of what you have termed loop lines?

A. Where the line is paralleled with a loop line, each of these sectionalizing gate valves is provided with cross-over connections thus, as I just stated, making it possible to operate the line continuously with one or more sections isolated. Aside from the added capacity provided by the loop line, this ability to isolate any section of the line, in [fol. 388] case of a break or other trouble, is of great advantage to the ultimate gas consumer. Repairs to lines and large scale maintenance programs may be carried out on a loop or double line without discommoding the public in the slightest degree, an advantage not possessed by most gas pipe lines in this country.

* * * * * * *

Between Liberal compressor station and the terminus of the line at the Illinois-Indiana boundary approximately 70 percent of the main line system is now looped, and it is expected that by the end of the year 1942 Panhandle Eastern Pipe Line Company will possess the only completely looped long distance natural gas pipe line system in the country.

Q. What would you say, Mr. Burnham, with respect to the effect of such looping upon the ability of the company to assure continuity of service to its customers?

A. I should say that such continuity of service is much more nearly assured by such a line than could be possible with a single line. In other words, I am of the opinion that the double or looped pipe line will assure the protection and continuance of service in a very positive manner.

Trial Examiner: May I ask: When you cut out one of the parallel lines, is the pressure stepped up in the other?

The Witness: Yes, if the season of the year permits you [fol. 389] to step up the pressure.

Of course, we have, as you know, a maximum operating pressure of 500 pounds. If we cannot step up the pressure, the service might be curtailed to some non-essential industry during that period.

Trial Examiner: But you ordinarily do step up the pressure so that the actual delivery is not curtailed?

The Witness: Yes, we ordinarily step up the pressure.

Trial Examiner: So that it is not materially affected?

The Witness: Yes.

* * * * * * * * *

[fol. 390] Q. Now, returning for the moment, Mr. Burnham, to Exhibit 15 for identification, that is the map of the main pipe line system of the company, does that map show the extent of looping which has been completed or is in progress on the company's main line?

A. It does. And when the work now in progress has been completed, 88.2 percent of the main line system will be looped, and there will be only four short sections east of Liberal, Kansas, which are not completely looped.

Q. That is east of Liberal, Kansas?

A. That is right.

Q. Now, I wonder if you will explain the type of construction shown by the dotted lines in the State of Michigan and northern Illinois on the map, Exhibit 15 for identification?

A. The pipe lines shown by purple dots in those States are being constructed for the purpose of furnishing gas to additional communities. They, as well as the loop lines [fol. 391] now in progress, will be completed as fast as pipe can be obtained and laid.

Q. Now, Mr. Burnham, will you please describe generally the flow and route of natural gas in the company's pipe line system?

A. As shown by Exhibit 15 for identification, gas produced in the Panhandle field moves first to the Sneed compressor station in Moore County, Texas; thence to Hansford compressor station in Hansford County, Texas; and thence to the compressor station at Liberal, in Seward County, Kansas. Liberal is also the point at which the gas gathered by the network of gathering lines in the Hugoton

Field is delivered to the main line. While the trunk line from Sneed to Liberal is of main line type and construction, and a small volume of gas is delivered from it for use in the small community of Gruver, in Hansford County, Texas, yet the entire group of lines west of Liberal including this line from Texas is in a sense a large gathering system. In fact, Panhandle Eastern is now receiving a part of its purchased gas at a point on its line near Baker, Oklahoma. (It is not intended to present on Exhibit 15 an accurate outline of the southern portion of the Hugoton field. The outline shown is only a general one.)

From Liberal the gas produced and purchased in Texas, Oklahoma and Kansas moves in an easterly direction [fol. 392] through compressor stations at Greensburg, Haven, Olpe, Louisburg, Houstonia, Centralia, Pleasant Hill, Glenarm, and Tuscola to Dana measuring station near the Illinois-Indiana line. At Dana measuring station the gas is delivered to the Michigan Gas Transmission Corporation.

At many points along the main line, lateral lines belonging to the Panhandle Eastern Pipe Line system deliver gas to communities hereinafter referred to as being supplied by Panhandle Eastern Pipe Line Company, or for delivery to those industries to which the Panhandle Eastern Pipe Line system renders direct service. The lateral lines in Kansas and Missouri belong to Panhandle Eastern Pipe Line Company and those lateral lines which are in Illinois belong to Illinois Natural Gas Company.

Q. What is the final destination of the natural gas which has not been withdrawn through laterals in Kansas, Missouri and Illinois, and which has not been lost or used [fol. 393] in transit through the company's main line system?

A. That gas is delivered to Michigan Gas Transmission Corporation at the Dana measuring station near the Illinois-Indiana line.

Some of that gas so delivered to the Michigan Gas Transmission Corporation is sold by that corporation to customers of its own, which furnish gas at retail in certain communities in Indiana. Certain of the rest of the

gas is transported by the Michigan Gas Transmission Corporation for Panhandle Eastern Pipe Line Company, for a consideration, to customers of Panhandle Eastern Pipe Line Company in Indiana, Ohio, and Michigan, including Michigan Consolidated Gas Company at Detroit. These customers in turn distribute the gas at retail in various cities and communities in those States.

* * * * * * * *

[fol. 394] Q. Mr. Burnham, have you prepared a schedule showing the various compressor stations of the Panhandle Eastern Pipe Line Company's system, together with the year of their construction and the horsepower now installed at each station? A. I have.

Q. Is the document which I now show you, which is headed "Schedule 1," the document to which you have referred? A. It is.

Q. Was that prepared by you or under your direction?

A. Under my direction.

Q. And do you believe it correctly states what it purports to state?

Mr. Wheat: Mr. Examiner, I should like to ask that the one-page document marked "Schedule 1", be introduced for identification as Exhibit 17.

(Schedule 1 referred to was marked as Exhibit No. 17 for identification.)

[fol. 395] By Mr. Wheat:

Q. Now, I note on this exhibit, 17 for identification, Mr. Burnham, that only three of these twelve main line compressor stations appear to have been constructed when the line was first placed in operation; is that not correct?

A. It is. The three compressor stations which were originally installed are those at Liberal, Kansas; Louisburg, Kansas; and Glenarm, Illinois.

* * * * * * * *

Q. Mr. Burnham, how was it possible to operate this main line system with only three compressor stations?

A. This was possible because of the comparatively small amount of natural gas then being moved through the system, and prior to 1936 the gas produced in Texas moved on well head pressure more than 100 miles to the station

at Liberal, Kansas. It was there compressed and moved more than 350 miles to the Louisburg station where it was again compressed and moved some 285 miles to the compressor station at Glenarm.

[fol. 396] Q. Was it later found necessary to install additional compressor stations?

A. I do not think it is correct to state that it was later found necessary to do this. The company recognized at all times that as soon as the pipe line was fully loaded and as soon as its reasonably-to-be-expected markets should develop, additional compressor stations would be required in order to move through the pipe line the greatly increased volumes of gas which would then be required by those markets. As proof of this, it is of interest to note that compressor station sites for all but two stations were acquired at the time the line was originally built, and dividing gates required for compressor stations as well as side gates were installed at that time.

Q. Were such additional stations actually installed?

A. Yes, as shown by the schedule, in 1936 a new compressor station was installed southwest of Liberal, Kansas, three stations were installed between Liberal and Louisburg, three between Louisburg and Glenarm, and in 1937 one east of Glenarm. In 1940 a second compressor station was installed southwest of Liberal.

Q. In addition to constructing these new compressor stations, has any increase been made in the compressor horsepower of the original stations?

A. Yes, the horsepower at Liberal, which was origi-
[fol. 397] nally 4,000 in 1930, was increased to 5,000 in 1931, to 7,000 in 1936 and to 10,000 in 1937. The original 5,000 horsepower at Louisburg was increased in 1937 to 7,000 and the original 4,000 horsepower of Glenarm station was increased in 1937 to 5,000 and in 1940 to 6,000. I think I should add that the horsepower at Glenarm station is now being further increased by the addition of another, 1,000 horsepower unit to bring it to a total of 7,000 horsepower.

Q. Have any of the other stations which were installed since 1930 been given added horsepower?

A. Yes, the Greensburg station, which was originally installed with 3900 horsepower in 1936 was increased to

7800 horsepower in 1937. The same thing was done at the Haven and Olpe stations; Centralia, with 3,900 in 1936, was increased to 6,500 in 1937; Pleasant Hill, with 2,600 in 1936 was increased to 6,500 in 1937. An additional 1,300 horsepower unit is being installed at Pleasant Hill this year which will increase its power to 7,800. Tuscola, constructed with 3,900 horsepower in 1937, was increased to 5,100 in 1939, and a new 600-horsepower unit is now being installed which will increase its rating to 5,700 horsepower.

Q. The total compressor horsepower on the system has, therefore, been materially increased, has it not, commencing in 1936?

A. Yes, commencing in that year, the horsepower of [fol. 398] the main line compressor facilities has been increased from fourteen thousand to eighty thousand one hundred, and with the completion of installations now in progress, this figure will be increased to a total of eighty three thousand horsepower.

. . . . . .

From Sneed station to Hansford the distance by pipe line is 51.50 miles;

From Hansford to Liberal, the distance is 53.99 miles —

. . . . . .

From Liberal to Greensburg, the distance by pipe line on the original line is 86.72 miles.

Q. And on the loop line?

A. 63.34 miles.

. . . . . .

From Greensburg to Haven, the original line is 85.94 miles, and 65.67 miles is the length of the loop line;

[fol. 399] From Haven to Olpe, the original line is 92.66 miles, and of this distance 66.62 miles is looped;

From Olpe to Louisburg, the original line distance is 85.89 miles, and of this distance 59.08 miles is looped;

From Louisburg to Houstonia, the distance on the original line is 73.45 miles, and of this distance 63.31 miles is looped;

On the original line between Houstonia and Centralia, the distance is 71.23 miles; and of this distance 55.59 miles is looped;

From Centralia to Pleasant Hill station the distance by pipe line is 71.15 miles, and of this distance 47.02 miles is looped;

From Pleasant Hill to Glenarm, the distance is 70.67 miles, and of this distance 43.01 miles is looped;

From Glenarm to Tuscola the distance by pipe line is 69.52 miles, and of this distance 33.52 miles is looped;

From Tuscola to the terminus of the line,—in other words, to the Illinois-Indiana line, the distance is 44.03 miles, and of this distance 23.79 miles is looped.

Q. What is the approximate percentage of looped line between the Liberal station and the terminus of the line—the Indiana-Illinois boundary?

A. I think I stated before 70 percent, approximately.

* * * * * * * *

[fol. 400] In addition to the main trunk line just described, with its attendant field gathering lines, the Panhandle Eastern Pipe Line Company system owns and operates 597.4 miles of lateral lines of various sizes and lengths; in Texas, 2.8; in Kansas, 65.5; in Missouri, 266.8, and in Illinois 262.3.

* * * * * * * *

[fol. 401] As already stated, the gas, on its journey from the fields to eastern markets, passes under numerous streams and rivers. The principal rivers where multiple line submerged crossings are used, are as follows: Beaver River in Oklahoma, Cimarron River, Arkansas, Neosho and Osage Rivers in Kansas, Lamine and Missouri Rivers in Missouri, the Mississippi River where both a submerged crossing and a crossing on the Champ Clark Bridge are utilized, and the Illinois and Sangamon Rivers in Illinois.

Aside from certain constructional advantages, multiple lines are used under rivers for the purpose of making service more certain; if a single line were built across a river

and it should be washed out, it would take days, even weeks in some cases, to resume service on the system. To avoid this possibility, it has been the practice of this company to divide the line at river crossings into two or smaller lines, thus insuring itself to a greater extent against a complete interruption of gas supply, since essential deliveries can be maintained if only one line of the multiple constituting the river crossing is left in service.

* * * * * * * *

[fol. 402] In addition to the company's main line property and the production and gathering systems and lateral pipe lines, the company owns and operates another unit or minor system termed its local area system, which lies to the south of Kansas City in both Missouri and Kansas.

The greater part of this local area system was built in 1928 and 1929 to gather gas produced from shallow wells in Miami, Franklin and Lynn Counties, Kansas, and Jackson County, Missouri, and distribute it to the towns and communities in the immediate vicinity. The size of the lines constituting this local area system varies from two to ten inches in diameter and the total length of these lines is:

Kansas—257 miles, Missouri—110 miles.

Practically all of the gas in this local area is purchased from independent producers and is sold for resale in the town and villages in the immediate vicinity; however, during cold weather the gas supply derived from these shallow wells is wholly inadequate for the requirements of these small towns and it has been found necessary to supplement the locally produced supplies with gas from the main line system. Some sales, principally in the summer months only, are made to the Cities Service Gas Company at Kansas City. There are approximately five hundred [fol. 403] and twenty-three wells, in 22 of which the company has an interest, attached to our lines in this area.

* * * * * * * *

The locally produced gas supply in this area is fast dwindling and it is anticipated that it will soon be neces-

sary to abandon the greater portion of his local area system.

Q. Mr. Burnham, have you prepared a schedule listing the principal communities served by Panhandle Eastern Pipe Line Company's system in the States of Texas, Kansas, Missouri, and Illinois?

A. I have, and I should add that the schedule in question also lists the principal communities in Indiana, Ohio, and Michigan served by the system through utilization of facilities owned and operated by Michigan Gas Transmission Corporation.

Q. Is the document marked Schedule 2, which I show you, the study which you mentioned? A. It is.

Q. Was this made by you, or under your direction?

[fol. 404] A. Under my direction.

Q. And do you believe it correctly shows what it purports to show? A. I do.

. . . . . .

(Identification Markings on Schedule 2 of "Exhibit 18" Deleted and the Same Was Remarked "Exhibit 17, Schedule 2" For Identification.)

. . . . . .

[fol. 405] Q. Now, in addition to the communities mentioned on Schedule 2, are there any other communities which the company has contracted to serve?

A. Yes, the company has contracted to serve and is attempting to make service available as soon as facilities can be constructed to the following communities:

In Illinois: Abington, Galesburg and Knoxville.

In Indiana: Greenfield and Richmond.

In Michigan: Adrain, Albion, Battle Creek, Flint, Jackson, Kalamazoo, Owosso, Marshall, Pontiac and more than eighty small communities in the same general area.

. . . . . .

The company has contracts covering direct industrial sales with sixteen industrial consumers.

[fol. 406] Q. Have you prepared a schedule showing the names of these industrial consumers and the purposes for which the gas is used by them, respectively, as well as the dates on which they were first rendered service?

A. I have.

Q. Is the document marked "Schedule 3", which I now show you, the schedule in question?

A. It is.

. . . . . .

(Schedule 3 Referred To Was Marked As Exhibit 17, Schedule 3, For Identification.)

Q. Now, Schedule 3 is self explanatory, is it not, Mr. Burnham? A. It is.

. . . . . .

The company owns 91 producing gas wells, 34 of which are in Kansas, and 57 in Texas. It also owns a 50 percent interest in 46 producing wells in Kansas.

[fol. 407] Q. Have you prepared a schedule giving a list of the wells you have just enumerated, separated as to State and ownership?

A. I have, and I have also shown the depths of the respective wells and the principal items of pipe and equipment used in each well.

Q. Is the schedule which I now show you, marked "schedule 4", the document which you have referred to?

A. It is.

. . . . . .

Q. Have you also prepared a schedule showing the equipment used in the various compressor stations?

A. Yes, and I wish to emphasize that the size, type and capacity of the equipment in the various compressor stations vary, depending on the requirements of the individual station and the availability of various types of equipment when it was installed.

. . . . . .

[fol. 408] Q. Now, have you also prepared, Mr. Burnham, a schedule showing the main principal items of equipment and the structures contained in the company's dehydration and gasoline plants?

A. Yes, the company has a dehydration plant at Sneed, Texas, and a dehydration and gasoline plant at Liberal, Kansas. I have listed the principal structures and major items of equipment at each of these plants.

Q. Is the schedule marked "Schedule 6", which I now show you, the schedule which you referred to?

A. It is.

. . . . . .

[fol. 409] Q. Now, Mr. Burnham, is it a fact that at some points the company has constructed residence and housing facilities for its employees?

A. Yes, some of the compressor stations were located at points where adequate housing facilities were not otherwise available. In addition, since there were no housing facilities in the production areas where the company secures its gas supplies, it has been necessary for the company to construct certain camps for the use of its employees.

. . . . . .

These camps are located at the Sneed, Liberal, Hansford, Louisburg, and Glenarm compressor stations, and also, for production forces, at Hugoton, Kansas, and at Fritch and Zoffness, Texas.

Q. Have you prepared a schedule showing the location of these various camps and also the principal structures and equipment there installed? A. I have.

Q. Is the document which I now show you, marked "Schedule 7" the document to which you have referred?

[fol. 410] A. It is.

. . . . . .

Q. Does the Panhandle Eastern Pipe Line Company possess many measuring or regulating stations and auxiliary equipment?

A. Yes, the company has more than 600 measuring and regulating stations to operate and maintain, and it is necessary in that connection for the company to have large quantities of equipment and tools especially suited to this particular, and highly technical work.

Q. Have you prepared a schedule showing in general the property and equipment owned by the company and

used by the Gas Measuring Department for maintenance and repair purposes? A. I have.

Q. And is the schedule marked "Schedule 8", which I now show you, the document in question? A. It is.

. . . . . .

[fol. 411] Q. Now, Mr. Burnham, what have you to say about the warehouses and general equipment of the company?

A. The Pipe Line Department must, at all times, have on hand at convenient points along its pipe line system, adequate quantities of material and supplies in order to maintain uninterrupted service to gas customers on the system. For this purpose it has twelve warehouses, together with automotive and other special equipment essential to both routine operations and emergency service. Two warehouses are also maintained for the Production Department.

Q. And have you prepared a schedule showing the various warehouses and their location and the major equipment located at each warehouse? A. I have.

Q. And is the schedule marked "Schedule 9", which I now show you, the one to which you refer? A. It is.

. . . . . .

[fol. 412] Q. Does Panhandle Eastern Pipe Line Company own any automotive equipment?

A. It owns 107 trucks and automobiles. In addition to the automotive equipment of the Pipe Line Department, consisting of thirty-three trucks and sixteen passenger cars, and the four trucks operated by the Production Department, there were fifty four other automobiles in service on the system as of June 30, 1941.

Q. Have you prepared a schedule showing the automotive equipment you have just mentioned?

A. I have, including the various departments in which these units are used.

Q. Is the document which I now show you, which is marked "Schedule 10", the one to which you refer?

A. It is.

. . . . . .

Q. Now, have you also prepared a schedule showing, on a single page, the various sizes of pipe included in the lines

of the Panhandle Eastern system and the miles of pipe by sizes?

[fol. 413] A. I have. This schedule is as of June 30, 1941, and includes all pipe laid and in use in the company's main line, gathering lines and laterals, but does not include pipe or material in stock. In this schedule the pipe is classified according to use and to size.

Q. Is the one page document marked "Schedule 11", which I now show you, the study you just mentioned?

A. It is.

[fol. 415] Q. Now, Mr. Burnham, you have afforded us with a general picture of the extent of the physical properties constituting this natural gas transmission system. I wish you would tell the Commission what is the capacity of the main line of this system?

A. The delivery or sales capacity is approximately 250,000,000 cubic feet per day.

Mr. Goodman: Will you please repeat that?

The Witness: The delivery or sales capacity is approxi-
[fol. 416] mately 250,000,000 cubic feet per day.

Q. At what pressure is the pipe line presently being operated?

A. At a maximum pressure of 500 pounds gauge per square inch.

Mr. Goodman: 500 pounds, what?

The Witness: Per square inch gauge pressure.

Q. How much gas did the system handle last year?

A. 58,535,000,000, in round numbers.

Q. Of this total, Mr. Burnham, how much gas was used for fuel and other purposes, including gas lost in transit?

A. 4,140,000,000 cubic feet, in round numbers.

Q. And is it a proper statement to say that the difference between the last two figures which you have mentioned represents gas sold?

A. Yes, it represents main line sales amounting to 54,395,000,000 cubic feet.

. . . . . .

[fol. 417] Trial Examiner: The documents which have been described and respectively identified as Exhibits 15, 16, 17 and its 11 schedules, and 18 are received in evidence, without objection.

. . . . . .

[fol. 419] Mr. Culton: Mr. Examiner, the next two witnesses whose testimony will be presented are both geological witnesses; that is, they will testify, one of them with respect to the geological conditions in the Panhandle field and the other with respect to the geological conditions in the Hugoton field. Both will give some statistical information.

On the assumption that it might be of more convenience to the Examiner and also to the other counsel, we have prepared the testimony of these two witnesses in written form, so that it can be distributed. There are schedules attached to it, and I had in mind, if it suits the convenience of the [fol. 420] Examiner and counsel, to offer that testimony as the sworn written testimony of these witnesses and just interrogate them generally with respect to certain matters with regard to some of the maps that are presented in connection with their testimony; and I, myself, at this time, that is, at the time of presenting each witness, can tell the Examiner and counsel the nature of the testimony of these witnesses. If that is suitable, it will expedite the hearing.

Trial Examiner: It is a very excellent plan, Mr. Culton, and it is one that always results in advancing the progress of the hearing.

Mr. Culton: That is what I had in mind; so, if that is satisfactory we shall handle these two witnesses in that way.

Trial Examiner: Very well.

. . . . . .

[fol. 421] RUFUS M. SMITH was called as a witness on behalf of the Panhandle Eastern Pipe Line Company, being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Culton:

Q. Your name is Rufus M. Smith? A. It is.

Q. You are an employee of Panhandle Eastern Pipe Line Company. A. I am.

Q. I hand you herewith document entitled "Written Testimony of Witness Rufus M. Smith" to which is attached Exhibit 30, consisting of a number of schedules. Does the written testimony referred to constitute your written testimony under oath in this case? A. It does.

Q. The schedules attached thereto, were they prepared under your direction? A. They were.

Q. Are the matters reflected in those schedules correct statements of the fact? A. Yes, sir.

* * * * * * * * *

[fol. 422] Trial Examiner: Very well. The reporter will mark the document, including 12 schedules which is the written testimony of Witness Rufus M. Smith, as Exhibit 30 for identification.

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By Mr. Culton:

Q. I now present to you, Mr. Smith, a series of exhibits [fol. 423] marked 19 to 29, both inclusive, and one marked 30. I ask if these exhibits were prepared by you and under your direction.

A. Yes, they were, but one is missing. Exhibit 20 is hanging up. They all belong in the same series.

Trial Examiner: And the two maps which are hanging on the wall, may I ask, Mr. Smith, whether they belong to your series?

The Witness: They do.

* * * * * * * * *

Trial Examiner: These respective schedules and maps may be marked as indicated by Mr. Culton.

Mr. Culton: Nineteen to 29, inclusive, and 31.

Trial Examiner: Very well.

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[fol. 433] Mr. Culton: We do not and we offer the exhibits and his written testimony in evidence.

* * * * * * * *

Trial Examiner: The offer of Exhibit 30 in evidence will be withheld until completion of cross-examination when a ruling will be made on admission.

* * * * * * *

GLENN G. BARTLE was called as a witness on behalf of the Panhandle Eastern Pipe Line Company, and being first duly sworn, was examined and testified as follows:

(Exhibits Nos. 32 to 36, Inclusive, Were Marked For Identification.)

[fol. 434] Direct Examination.

By Mr. Culton:

Q. Your name is Glenn G. Bartle?

A. That is right.

Q. What is your present position?

A. I am Professor of Geology and Dean of Liberal Arts in the University of Kansas City.

Q. You have prepared a written statement of your experience and qualifications and the written testimony which you are prepared to offer in this case?

A. I have.

Q. You have also prepared certain schedules?

A. I have.

Q. Those schedules are attached to the written testimony? A. Exhibit 36.

Q. Exhibit 36 constitutes the written testimony and the schedules referred to? A. Yes, sir.

Q. You have also caused to be prepared under your direction certain maps and graphs numbered 32 to 35, inclusive? A. Yes, sir.

Q. Do those maps and graphs correctly reflect the facts they purport to reflect?

[fol. 435] A. They do.

Trial Examiner: These several maps and graphs which have been referred to have been marked for identification, respectively, as Exhibits 32 to 35, both inclusive, and 36 which constitutes the written testimony of the witness referred to.

Thirty-six has certain schedules attached which also are included in that identification.

* * * * * * * *

[fol. 443] R. J. Wallace, a witness appearing for and on behalf of the Panhandle Eastern Pipe Line Company, after first having been duly sworn, was examined and testified as follows:

* * * * * * * *

[fol. 444] Q. Your name is R. J. Wallace? A. It is.

Q. I hand you Exhibit 37 consisting of two volumes styled Parts 1 and 2. Has that been prepared by you?

A. It has.

Q. Have you, in connection therewith, in the introductory portion, presented in writing your testimony in this case? A. I have.

Q. Do the subdivisions attached thereto, as shown in volumes 1 and 2, present the facts which you offer in connection with your testimony and described in your written testimony? A. Yes, sir.

Q. The tabulations found under the summary contained in Part 1, do they represent accurate totals of the various items shown thereon? A. They do.

* * * * * * * *

[fol. 450] Trial Examiner: May I ask, Mr. Wallace, if you are able to state the number of pages in the two sections of the proposed Exhibit 37?

The Witness: 957 pages, I am sure.

Trial Examiner: In the two sections?

The Witness: In the two sections, yes.

* * * * * * * *

[fol. 451] Q. Mr. Wallace, how many leases did you treat in this study of the Panhandle Eastern?

A. I will have to check that. It was two hundred and eighty some, but I have my work sheets and I can check that very rapidly and give that to you also.

Trial Examiner: Exhibit 37, Parts 1 and 2, so far marked only for identification, has now been offered in evidence, and from the size of this exhibit it is readily evident that counsel will all desire time to examine it before any cross-examination can be had, and we will defer, therefore, cross-examination until such time as counsel indicate they desire it, subject to further arrangement of course.

* * * * * * * *

[fol. 452] Louis Fenn Sperry, a witness appearing for and on behalf of the Panhandle Eastern Pipe Line Company, having first been duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Wheat:

[fol. 453] Q. Where do you reside?

A. 12 Donnellan Road, Scarsdale, New York.

Q. Are you connected with Panhandle Eastern Pipe Line Company?

A. I am. Since February 1937, have been treasurer of that company, and of its subsidiary companies.

* * * * * * * *

I graduated from Williams College in 1919, with the degree of Bachelor of Arts. From 1919 to 1923 and again from 1929 to 1935, I was employed by the Guaranty Trust Company of New York, located at 140 Broadway, and later was one of the officers of its affiliated company, The Guaranty Company of New York, located at 31 Nassau Street. From 1924 to 1929 I was vice president of the National Bank of Auburn, at Auburn, New York. From 1935 to 1937 I was vice president of The National Bank of New Jersey at New Brunswick, New Jersey. And, as I have already stated, from 1937 to date I have been treasurer of Panhandle Eastern Pipe Line Company.

Q. In general, what has been the nature of your experience?

A. It has included both general and specialized duties covering practically all phases of commercial banking and [fol. 454] investment banking, together with the analysis of securities, the setting up of underwriting for corporations, and the marketing of corporate securities both through such underwritings and by retail sale. I have also, over the years, had considerable to do with the examination and study of corporate finances and corporate financial problems in general.

Since 1937 my experience has included general supervision of the financial operations of Panhandle Eastern Pipe Line Company, including the establishment and maintenance of both the private and public credit of that corporation.

Q. In connection with your work as treasurer of the Panhandle Eastern Pipe Line Company, have you become acquainted with the needs of that corporation for cash and materials and supplies for the current use of the company in its operations?

A. I have. I believe I am fully acquainted with the necessity of the corporation by way of proper and adequate provision for those items, and in this connection I have made definite recommendations to the management and to the Board of Directors in various meetings touching upon the financial policies of the corporation in this direction.

Q. Has your experience with the corporation given you [fol. 455] a knowledge of its affairs sufficient to enable you to determine the amount of cash and materials and supplies which it should have at hand at all times in order to properly conduct its affairs and to maintain a reasonable credit standard? A. It has.

Q. Have you recently made a detailed study of the operating conditions which confront the Panhandle Eastern Pipe Line Company for the purpose of determining in detail the amounts which that corporation will currently require for working capital? A. I have.

Q. What do you understand the term "working capital" to include?

A. I understand that term to include the materials and supplies necessary and requisite for the carrying on of current operations and current repairs, and also cash balances sufficient in amount to enable the corporation to pay promptly its current operating expenses as they accrue, to provide for such prepayments as are necessary, to afford provision for reasonably to be expected contingencies, and to make possible the continuous efficient operation of the corporation. This necessarily includes the meeting of such emergencies as they occur and the proper maintenance of current credit.

Q. In making the study you have just mentioned, would you consider this corporation being static in its operation? [fol. 456] A. No, because that is not the fact: This corporation is still growing and it expects further to enlarge its market outlets.

Q. Are the items included in your study, or are any of them, included or reflected in the plant accounts of the corporation?

A. No, none of the items included in my study are reflected in the plant account.

Q. Now, I wish you would tell us of what do these various items which make up your study consist.

A. They consist of (1) normal cash funds for operating expenses, (2) a provision for emergency cash, (3) a provision for necessary minimum bank balances, (4) a provision for necessary current advance prepayments, (5) materials and supplies, and (6) line pack.

Q. Now, Mr. Sperry, I wish you would take up and discuss each of these various items. Suppose you start with what you have termed "normal cash funds for ordinary operating expenses." I would like to have you state in your own words what you have done in order to determine the reasonable and proper amounts of such funds which you believe should be carried currently on hand.

A. As treasurer of this corporation it is my definite opinion, based upon my actual experience in handling the funds of the corporation, that it would be unwise, uneco- [fol. 457] nomical and improper for the company, management to attempt to operate this enterprise without at all times having available in cash the necessary money to pay its ordinary and usual operating expenses for a period of at least 45 days. I believe it would be preferable for the

company to have on hand at all times an amount sufficient to cover such expenses for a period of 60 days, and in my opinion the period of 45 days which I have just mentioned should be considered the only safe minimum for reasonable and economical operation. I have made a careful study of the operations of the company during the 18 months period ending June 30, 1941, for the purpose of determining its cash disbursements for purely operating expenses. Included in this study were payments for wages, gas purchased, overheads, ordinary maintenance, general operating expenses, normal regular construction expense of the nature of maintenance, on which no interest during construction is charged; also production, franchise, sales, workmen's compensation and unemployment taxes. Excluded from this consideration were amounts paid for materials and supplies, prepayments, and ad valorem, income and capital stock taxes, as well as payments for interest, [fol. 458] sinking fund, and other capital expense items. The total paid for such purely operating expenses during said eighteen month period was $5,609,600, or approximately $311,666 monthly. Such an expense for a 45-day period would be approximately $467,000. Having in mind the rising cost of wages and many other items included in this study, it is my judgment that the company should at all times have on hand for this purpose at least the sum of $470,000.

Q. Mr. Sperry, in addition to the provision of cash for ordinary operating expenses, is it necessary in your opinion for this corporation to maintain currently certain cash balances to cover reasonably to be expected emergency situations?

A. Yes, I believe that this company must make such provision. It must recognize that it is likely to be faced with operating or construction emergencies such as line breaks and serious accidents which may not be fully covered by insurance. It is also necessary to consider the circumstance that there is seasonal fluctuation of cash needs among typical 45-day periods and that the flow of cash must be adjusted by the maintenance of additional cash on hand to cover the unusual periods.

Q. For the purpose of coping with such emergencies as you have mentioned and also in order to adjust the flow of cash, is it your opinion that the company should main-

tain a cash balance over and above that which you have mentioned for the normal 45-day period?

[fol. 459] A. That is my opinion.

Q. How much do you believe the company must keep on hand to cover these items?

A. I believe that it should have available for these items a minimum sum of $100,000.

Q. Is it necessary for your corporation to maintain certain bank balances based at least partially on the activity of its account?

A. It is. Any company which issues a large number of checks must at all times maintain substantial bank balances, and the amounts required by the banks in this connection are based on the activity of the account in question. In my judgment, the appropriate sum which should be maintained for this purpose is not less than $200,000.

Q. In the course of its business, is it necessary for this corporation from time to time to pay certain items of operating expenses in advance of their normal accrual date? A. It is.

* * * * * * * *

I have reference to such so-called prepaid items as insurance premiums and advance rentals on undrilled acreage.

* * * * * * * *

These items necessarily paid for in advance are carried on the company's books as prepayments. They are extinguished by monthly charge-offs during the periods to which [fol. 460] they are applicable.

Q. Have you made a study to determine the amount of such prepayments?

A. I have. During the 6 months ending June 30, 1941, the prepayments averaged $128,087 each month-end. On June 30, 1941, they totaled $135,113, of which $55,361 represented lease rentals, $79,001 represented prepaid insurance, and $750 represented the prepaid rental upon a bridge river crossing.

Q. What is your judgment, Mr. Sperry, in respect to the fair and reasonable amount which you believe the company should keep on hand to represent and cover such prepayments?

A. In my judgment a minimum reasonable sum representing such prepayments would be $130,000.

Q. Now, Mr. Sperry, have you made any investigation in respect to the materials and supplies which this company must currently keep on hand?

A. I have made a careful investigation of that subject. This investigation has covered the materials and supplies not included in the plant account. Not only in respect to those now on hand, but also in respect to the amounts which will be required during the reasonable immediate future.

Q. I wish you would please state the amounts of such materials and supplies which are now carried on hand by the different departments of the company. Please state these amounts in dollars according to the cost of the ma-
[fol. 461] terials and supplies carried by each department.

A. The Transmission Department, including the Gas Measurement Division, has on hand currently $158,293.44 of materials and supplies. The Production Department has on hand $37,741.74. The Compressor Department, including Gasoline Plant and Auxiliary Equipment, has on hand $58,487.98. The Communications Department and the Cathodic Protection Department has on hand $2,862.98; and the Transportation Department, including Automotive Equipment, has on hand $3,700.47.

. . . . . .

The total is $261,086.61.

Q. Would you mind stating as of what date, Mr. Sperry?

A. That is approximately the middle of the year date.

Q. June 30th?

A. In some cases, the departments have submitted their inventories as of slightly different dates, but it is approximately the end of June or early in July.

Q. Now, Mr. Sperry, I understand you to state that the figures that you have just given is the aggregate amount of the cost of the materials and supplies now carried on hand. Is this amount reasonably representative of the materials and supplies which have currently been kept on hand by this company in its various departments over the
[fol. 462] past few years. A. It is.

Q. What is your opinion, based upon your experience with the company, in regard to the amounts of materials and supplies which should be kept on hand as of the present time and the immediate future?

A. I think the stock must be largely increased.

Q. Why?

A. Because the present situation in which we find ourselves is quite different from the conditions that have existed in the last few years.

Q. Do you base this opinion entirely upon judgment, or has the company acted to increase its current stock of materials and supplies along the lines you have indicated?

A. The company has acted directly along this line. In fact, a considerable amount of additional equipment is now on order, and many other items must be ordered in the immediate future and obtained before the coming winter season opens.

Q. Would it be your view, based upon your experience with the Company and your testimony just given, that the stocks of materials and supplies now carried or carried over the past few years, reflect an adequate standard for the immediate future?

A. I do not believe that they reflect such a standard.

Q. I wish you would state your reasons for this opinion.

[fol. 463] A. There are several such reasons which I should like to outline in some detail.

* * * * * * * *

Among the more important reasons which have lead me to form the opinion which I have just expressed are the following:

(1) Until recently, the company has been able to operate with excess facilities available so that when repairs were needed the remaining facilities were adequate, temporarily at least, to handle the required load while repairs were being made.

(2) It now conclusively appears that all available facilities are to be required to handle the peak loads which will be required by customers during the coming fall and winter months of the current year.

(3) The company is now operating its system at higher pressure than those employed in former years. It is obvious that due to this circumstance more frequent repairs will have to be made than have been required in the past because of the greater strain on the equipment.

(4) Since the line will be operating at capacity during peak periods, repairs will have to be made immediately, since it would be disastrous to wait for the necessary replacements to be obtained from the factories under current [fol. 464] manufacturing conditions.

(5) The parts included in this system which are ordinarily of short life are more nearly approaching the end of their usefulness. We anticipate, therefore, an increasing need for additional repairs.

(6) There is a great diversity of equipment used in our property and many types and sizes are necessary to be kept in stock. As examples the company is using approximately 10 different types of compressors, 15 different types of generators; 17 different types of meters, 72 different types of valves, 56 different types or sizes of pipe, and 18 different types of couplings. All of this diversified equipment is serviced out of fourteen warehouses, spread over approximately 800 miles of line. For efficient operation, it is necessary, in order that service interruptions be kept at a minimum, that full supply of extra parts be well distributed along the line so that when needed they may be obtained at the earliest possible moment. In connection with this, it is well to point out that the greater portion of our properties is located in areas far removed from the factories where most of the parts are manufactured.

(7). Until recently, it was not difficult to obtain parts and supplies shortly after the placing of an order therefor. Now, the situation in that respect has greatly changed. Practically all companies from which necessary supplies [fol. 465] must be obtained are required to give preference to orders placed as a result of the existing national emergency, and the ability of the manufacturer to furnish needed parts promptly is contingent on whether or not orders having a higher classed priority are being filled. This condition, in my opinion, will continue for an indefi-

nite time in the future. As a result of this situation, the company cannot hope to obtain as prompt deliveries as it has enjoyed in the past, and, therefore, is forced to carry much larger stocks of all types of materials and supplies, so as to be prepared for such emergencies as they arise.

(8) Finally, there is a serious and growing danger of damage to the physical properties resulting from acts of sabotage, of cranks, of the common enemy, the fifth columnist, the spy, and the like. This company's properties are particularly vulnerable to this type of damage. While not mathematically measurable, it is my opinion and the opinion of the management of the company, that this is a real danger, particularly in view of the fact that the line serves one of the great industrial defense areas. Accordingly, we believe that the company must be prepared immediately to repair any damage that may result from such acts.

Q. Can this company afford, Mr. Sperry, to allow any condition to arise which will interrupt its service?

A. No, the service rendered by this company must be [fol. 466] continuous and it cannot afford to have its service interrupted either by act of God or by the hand of man. It is clearly in public interest that no such interruption be allowed to occur.

. . . . . .

I believe it is clear, both for the company's own protection and in the public interest, that it be in a position to make such repairs promptly as required, whether the necessity therefor arises from natural wear and tear, action of the elements, activities of public enemies, or other causes.

Q. In this connection have you made an effort to determine the amounts of additional materials and supplies which should be carried on hand by this company?

A. I have.

. . . . . .

I have requested from each major operating department head of the company's organization a schedule of materials and supplies now on hand, stated at its cost, and

also the schedule of additional materials and supplies which, in the light of present circumstances, are now on order or should be immediately acquired. After receipt of [fol. 467] these reports from each department head, they were carefully checked by me and also by the responsible managing officers of the company.

* * * * * * * * *

In this connection I should explain that I have divided the amount of materials and supplies not now on hand into three classes: (1) those which are actually on order; (2) those which it is felt certain must and will be ordered within the next 90 days, and (3) those which the management deems necessary but which will not be required until sometime shortly after this 90-day period. The totals of these additional necessary materials and supplies are as follows:

Transmission Department, including Gas Measurement, $138,976.80; Production Department, $29,037.76; Compressor Department, including Gasoline Plant and Auxiliary Equipment, $188,700.35; Communications Department and Cathodic Protection Department, $15,662.06, and Transmission Department, Automotive Equipment, $2,015.68.

* * * * * * * * *

Total, $374,392.65.

Q. Now, Mr. Sperry, in order that the record may be entirely clear in connection with these various items, I wish you would state by departments, first the amounts of materials and supplies which are now on hand and on order; second, the amounts now on hand, now on order and which will be ordered within the next 90 days; and [fol. 468] third, the amounts now on hand, now on order, those which will be ordered within the next 90 days and those which will be placed on order shortly thereafter. I think you might read, by departments, the first item first.

A. The first figures I shall read are the materials and supplies now on hand or on order, combined.

For the Transmission and Gas Measurement, $189,730.97;

For the Production Department, $49,464.59;

Compressor Department and Gasoline Plant, $120,331.63;

Communications and Cathodic Protection Departments, $2,862.98;

Transportation Department, $3,700.47. The second item, by departments, represents the materials and supplies on hand, on order, and to be on order within 90 days:

Transmission and Gas Measurement, $249,074.91;

Production Department, $65,288.50;

Compressor Department and Gasoline Plant, $1[illegible] 13.53;

Communications and Cathodic Protection Departments, $9,877.80;

Transportation Department, $3,700.47.

Q. Now, finally, I wish you would state, by departments, the amounts now on hand and now on order, those [fol. 469] to be ordered within the next 90 days, and those which will be placed on order shortly thereafter.

A. Transmission and Gas Measurement, $297,270.24;

Production Department, $66,779.50;

Compressor Department and Gasoline Plant, $247,188.33;

Communications and Cathodic Protection Departments, $18,525.04;

Transportation Department, $5,716.15.

* * * * * * * *

The total amount of materials and supplies now on hand and now on order stated at cost is $366,090.64. The total of materials and supplies now on hand, now on order, and which will be ordered within the next 90 days, is $497,154.31. The total of such supplies including those for which orders will be placed within the near future but not within the 90-day period is over-all $635,429.26.

* * * * * * * *

In my opinion the general conditions facing the country at this time and also facing this particular enterprise, render it imperative that this corporation order and obtain additional materials and supplies as and when it appears

that they should be stocked, to the final total amount which I have mentioned. In other words, it is my opinion that [fol. 470] the company should have either on hand or represented by cash available to make purchases as required within the near future, materials and supplies totaling, at cost, not less than $635,000.

Q. Is it a fact Mr. Sperry, that before this company can sell any gas it must have its line filled with gas?

A. That is of course true: In other words, the company, before selling any gas, must first pack its line, and this line pack is always tied up as an investment not included in the ordinary plant accounts.

* * * * * * * * *

It amounts to approximately 851,578,000 cubic feet on a 16.4 pound pressure base and is calculated at an approximate value of 4 cents at the wellhead, this gas has an inventory value of $34,063.44, not considering the costs incurred by the company to pump the gas through this long line to the point where it is located, or the additional value which the gas must therefore possess in place along the pipe line. For working capital purposes, I have rounded off the figure to $34,000.

* * * * * * * * *

It is my judgment that the items which I have mentioned [fol. 471] constitute the minimum reasonable amounts of working capital currently needed in the conduct of the business of this corporation and on which it would receive no return unless they are included in the rate base.

* * * * * * * * *

These amounts consist of the following items:

Normal cash funds for operating expenses, $470,000; cash for emergencies, $100,000; minimum bank balances, $200,000; prepayments, $130,000; materials and supplies, $635,000, and line pack $34,000.

* * * * * * * * *

The total of these items is $1,569,000 and it is my judgment that this company by way of what is ordinarily referred to as working capital should at all times have on

hand, either in materials and supplies, or in cash, not less than that amount.

Q. In expressing your opinion, Mr. Sperry, in respect to the amounts of working capital which you believe to be currently required in the conduct of this company's business, have you included any item referable to the company's new construction program?

A. I have not. Any additional working capital which may or will be required as a result of that program will be an increase over the amount to which I have testified.

[fol. 472] Q. Let me ask you, Mr. Sperry, whether it has been the actual practice of this company in the past to carry in cash amounts aggregating at least as much as the total to which you have testified?

A. It has. While the company has not at all times kept on hand the materials and supplies in the aggregate amount which we now deem necessary because of present and prospective conditions surrounding the operation of this property, the company has during recent years kept on hand substantial cash balances sufficient at all times to enable it to purchase such additional materials and supplies as might have been needed and which could then be promptly secured under the conditions heretofore existing. This is in addition to cash balances adequate for all the other purposes which I have enumerated. Over the last four year period, the aggregate actual working capital, represented by cash, prepayments, and materials and supplies which the company has actually maintained as a part of its current business operations, has been as of the dates listed as follows:

June 30, 1937, $3,070,960.52; December 31, 1937, $1,889,574.34; June 30, 1938, $1,672,443.61; December 31, 1938, $1,646,111.52; June 30, 1939, $2,233,423.49; December 31, 1939, $5,731,934.85; June 30, 1940, $6,190,999.35; December 31, 1940, $4,030,616.16; June 30, 1941, $7,446,667.39.

* * * * * * * * *

[fol. 475] Oscar William Morton, was called as a witness on behalf of the Panhandle Eastern Pipe Line Company, and being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Wheat:

. . . . . .

Q. Where do you reside?

A. 21 West 69th Terrace, Kansas City, Missouri.

Q. Are you at the present time connected with Panhandle Eastern Pipe Line Company? A. I am.

Q. In what capacity? A. Rate engineer.

Q. How long have you served in that capacity?

A. Ten years.

Q. Now, Mr. Morton, I would like to have you state briefly the general nature of your education and experience.

A. Shortly after graduating from high school I attended a radio school and became a radio operator. Later, during the first World War, I was a radio instructor in [fol. 476] the Student Army Training Corps at Tulane University, New Orleans, Louisiana. Following the armistice I remained at Tulane University as a special engineering student until June 1921.

In February 1922 I was employed by the El Paso Electric Company under the Stone & Webster organization and commenced my work with that company as a draftsman in the engineering department. I later became maintenance engineer for the company and remained in that capacity until 1925 when I was transferred by Stone & Webster to Baton Rouge, Louisiana, where I was employed by the Baton Rouge Gas & Electric Company. I remained with the Baton Rouge company until March 1926 when I was transferred to City Gas Company, Norfolk, Virginia as assistant to the vice president of that company. I remained in that position until 1929 when I was transferred to the Virginia Electric & Power Company as head of its rate and insurance department.

After two years with Virginia Electric & Power Company I was employed by Panhandle Eastern Pipe Line Company and entered that employment August the first, 1931 as rate engineer, the position which I have occupied continuously since that time.

. . . . . .

[fol. 477] During these past ten years I have been what might most nearly be described as a special problems man.

I have prepared numerous economic studies of all types and descriptions involving the operations of the company and it has been my duty annually, since I came with the company, to prepare the company's annual revenue estimates, also to estimate in advance the maximum day for each winter as the basis for pipeline construction programs.

During 1935, '36, '37 and '38 I made pipeline capacity studies for the company and collaborated with the members of its engineering staff in the preparation of annual pipeline construction programs. It has also been my duty each year during the past ten years to prepare the company's budget—

Q. (Interposing) Mr. Morton, just in that connection, do you mean by that that it is an annual budget?

A. I do not refer merely to an annual budget but what might be called a constant budget.

Q. A continuing budget?

A. That is it, a continuing budget. That is, I do not only prepare the annual budget, but I give the budget problem continuous attention and am constantly revising it during each year.

. . . . . .

[fol. 478] As rate man for the company I prepare and supervise the preparation of all studies affecting the company's rates.

Q. Have you prepared a study showing costs incurred by this company in providing necessary capacity in its main pipeline prior to the time that that line became loaded?

A. I have prepared such a study.

Q. Did you reduce it to writing?

A. I have, in that I have summarized the results of the study in an tabulation which I have entitled "Basic Statistics Used in Calculating Interest, Ad Valorem Taxes and Operating Expense Attributable to Unused Capacity" and also "Five Different Methods of Calculating Interest, Ad Valorem Taxes and Operating Expense Attributable to Unused Capacity."

Q. Mr. Morton, is the two-page document which I now show you the study to which you have just referred?

A. It is.

. . . . . .

[fol. 479] (Document Referred to was Marked Exhibit No. 38 For Identification.)

By Mr. Wheat:

Q. Was Exhibit 38 for identification prepared by you, Mr. Morton? A. It was.

Q. Does it, in your opinion, correctly state the facts which it purports to state. A. It does.

* * * * * * * *

The data contained on this exhibit shows my calculation of the costs actually incurred by Panhandle Eastern Pipe Line Company in providing unused but necessary capacity in its main line system prior to the time that the pipe line became loaded. Page 2 of the exhibit summarizes the data under five different methods of calculation.

Q. I note, Mr. Morton, that you stated that you have included operating expenses attributable to unused capacity. Will you please state what operating expenses you have so included?

A. Certain operating expenses such as the cost of gas purchased and also royalty expense vary directly with the amount of gas sold. Other expenses such as administrative and general expense do not vary materially with the [fol. 480] amount of gas sold. A portion of the latter is attributable to unused capacity and it is to these expenses only that I refer where I have used the caption "Operating Expenses" in this exhibit.

Q. I wish you would explain, briefly, Mr. Morton, what you did in connection with the preparation of the exhibit which has been marked Exhibit No. 38 for identification.

A. In general I developed and followed a procedure which allowed me to calculate the interest, ad valorem taxes and operating expenses attributable to unused capacity on five different methods. What I attempted to do was to compare various conditions obtaining during the first year when the pipeline could be and was operated under conditions closely approaching that for which it was designed with conditions during previous years when a considerable portion of interest, taxes and operating expense actually incurred was paid out on account of unused capacity in the line.

Q. What period did you select as being the first year when the pipeline was loaded?

A. The period from October 1, 1936 to September 30, 1937. This was a period during which I believe the conditions under which the line was operated could fairly be said very nearly to approach those for which the line was designed. Prior to that time there was a varying amount [fol. 481] of unused capacity.

* * * * * * * * *

Q. Mr. Morton, I wish you would explain briefly the source of the nature of the data which you have included on the first page of Exhibit 38 for identification?

A. The source of the information contained on the first sheet of the exhibit is the books and records of the com- [fol. 482] pany. The data contained on sheet 1 is merely a compilation of statistics, investment, gross revenues, thousands of cubic feet sold, maximum daily sales, line capacities, interest charges, ad valorem taxes and certain operating expenses by periods from April 1, 1932 to September 30, 1937. The periods selected are shown at the head of columns identified by letters.

The first period, Column A, is a nine-months period, April 1, 1932 to December 31, 1932. The next three periods, Columns B, C, D, are calendar periods. The fifth period, Column E, is another nine-months period and the sixth period, Column F, is a 12-months period.

Q. Why did you use two nine-months periods as shown at the heads of Columns A and E?

A. Many of our figures are more readily available on our books on calendar year bases. For this reason I tried to stick to calendar years where I could and I did so in the case of the second, third and fourth periods.

This necessitated the use of two nine-months periods. I might add that throughout the exhibit I have made proper adjustments for nine-months periods in all cases where comparisons are made with annual periods.

Q. Now, will you turn to page 2 of Exhibit 38 for identification and explain the nature of the calculations which you have headed "Direct Investment—Volume Method"? [fol. 483] A. In this first method I calculated the investment per thousand cubic feet of gas sold during the period October 1, 1936 to September 30, 1937, which period I have previously referred to as the loaded period.

I next determined the investment per thousand cubic feet sold during the previous periods using data shown on Sheet 1. Then, by comparing the investment per thousand cubic feet sold during the loaded period, Column F, with the respective investments per thousand cubic feet sold during each of the previous periods, Columns A, B, C, D and E, I arrived at the percentage of unused investment during each such period.

These percentages I then applied to interest, ad valorem taxes and my selected operating expenses incurred during these particular periods on account of unused but necessary capacity the resulting figure represents, in my opinion, one reasonable measure of the costs to this company attributable to unused but necessary capacity during the periods preceding the loaded period.

Q. Now, Mr. Morton, will you explain what you did in connection with the second method shown on page 2, Exhibit 38, that you headed "Direct Investment—Revenue Method"?

A. In this particular study I first determined the investment per dollar of revenue received during the early years as compared with the investment per dollar of rev- [fol. 484] enue received during the loaded year and from these data I obtained a percentage of unused capacity for each of the preceding years.

These percentages I then applied to certain costs incurred during those previous years in the same manner as the percentages were applied under the first method. The resulting figures represent, in my opinion, another reasonable measure of the costs attributable to unused but necessary pipeline capacity provided during the periods prior to that which I have termed the loaded period.

Q. Now, will you direct your attention to the method shown on page 2, Exhibit 38, which you have headed "Direct Investment-Maximum Day Method" and explain what you did under that method?

A. In developing the figures under this third method I followed the same plan as was followed under the first and second methods which I have described, except that in connection with this third method I compared the investment per thousand cubic feet sold on the maximum day

during the early periods with the investment per thousand cubic feet sold on the maximum day of the loaded period.

In my opinion, the result shown under this third method is also a reasonable measure of the costs attributable to unused but necessary capacity provided in this pipeline prior to the date it became loaded.

[fol. 485] Q. Now, Mr. Morton, will you turn to your fourth method which you have headed "Adjusted Base Year—Volume Method" and explain what you have done in connection with that method?

A. Under this method I compare the actual volume of gas sold during the early periods with the volume sold during the loaded year.

Q. Did you make a direct comparison between the volume of gas sold in the loaded year with that sold during previous years?

A. No. I adjusted the quantity sold during the loaded year to a basis comparable with former years before making any comparisons.

Q. I wish you would explain why you did that.

A. Just prior to the loaded years we added enough compressor stations to our system to enable us to carry a full load in our line. It would not be fair to compare directly the volume of gas sold during previous years when the capacity of the line was 80,000,000 per day.

Q. Eighty million what?

A. Cubic feet, 80,000,000 cubic feet per day with the volume of gas sold during the loaded year when the capacity had been increased to 125,000,000 cubic feet per day.

Q. Well, Mr. Morton, how did you go about adjusting [fol. 486] the volume during the loaded year to a proper basis for comparison?

A. I reduced the volume sold by 45/125 which is the difference between the capacity during the two periods or, to put it another way, I multiplied the volume during the loaded year by 80/125 in order to arrive at an adjusted volume for comparison with other years.

Q. What did you do next?

A. I then compared the volumes during the previous years with the adjusted volume during the loaded year.

From that point the procedure was the same as described in Methods 1, 2 and 3.

Q. Now, is it your opinion that this method also represents a reasonable method of determining the costs of this company attributable to unused but necessary capacity provided during the period prior to that which you have termed the "loaded period"?

A. Yes.

Q. I note that you have also included a fifth method which you have termed "Adjusted Base Year, Revenue Method." I wish you would explain what you did in connection with that method.

A. Under this method I followed essentially the same procedure as that which I outlined in connection with Method No. 4, my adjusted base year volume method. In other words, I have compared each preceding period to the loaded period on the basis of revenues instead of volumes, [fol. 487] but I have adjusted the revenues during the loaded year upon the ratio of the capacities during the loaded and unloaded periods just as I did in the fourth method. It is my opinion that this fifth method also constitutes a reasonable approach to the problem of determining the cost attributable to unused but necessary capacity in the pipeline prior to the loaded year.

Q. Have you included in this study of yours any of the facilities of the company located near Kansas City and sometimes referred to as the "local area system?"

A. No, I have not included any such facilities. They were not connected with the main line system of the company during the years covered by my study of costs attributable to unused capacity and since my study concerns main line capacity only and the cost of maintaining excess capacity in that main line during certain periods, I have eliminated the investment, sales and charges connected with what we term "local area operations."

Q. Does the Panhandle Eastern Pipe Line Company also own certain natural gas production facilities in western Kansas which are not connected with its main pipe line system?

A. Yes, the company owns certain production facilities in Western Kansas which are used to supply gas to the Argus pipeline system but which are not connected with

[fol. 488] its main line system from the Texas Panhandle field to eastern markets. I have, therefore, in this study eliminated all investment, sales and charges connected with that operation.

Q. Is it a fact, Mr. Morton, that during certain of the earlier years of the company's pipeline operations gas in varying amount was transported for the Northern Natural Gas Company?

A. Yes, that is correct. During the early years we transported some gas for Northern Natural Gas Company through a short section of the main line in western Kansas. This was a temporary arrangement and it was discontinued as soon as our full load came on in 1936.

I have, therefore, eliminated from this study all revenues received from this source and also all figures covering gas transported for Northern Natural as well as the investment in that portion of the Panhandle Eastern Pipe Line Company's facilities used in such service.

Q. What is the effect, in general, of these eliminations?

A. The effect of these eliminations is that none of the above facilities appear as unused capacity in this study.

* * * * * * * * * *

[fol. 491] P. McDonald Biddison was called as a witness on behalf of the Panhandle Eastern Pipe Line Company, and being first duly sworn, was examined and testified as follows:—

Direct Examination.

By Mr. Wheat:

* * * * * * * * * *

[fol. 492] Q. Where do you reside?

A. Dallas, Texas.

Q. Have you been employed by the Panhandle Eastern Pipe Line Company as consulting engineer?

A. I have, several times.

Q. On more than one occasion? A. Yes, sir.

Q. And have you been employed to make certain studies in connection with the pending case? A. I have.

Q. I wish, Mr. Biddison, that you would state rather fully your background, education and experience with particular reference to the natural gas business and your knowledge

of the properties and operation of the Panhandle Eastern Pipe Line Company.

A. I am a graduate of Kansas State College with a degree of Bachelor of Science in Electrical Engineering, Class of 1904.

After graduation I spent about one year on miscellaneous work as draftsman, electrician and stationary engineer in cement plants at Iola, Kansas.

Following this I began work in the natural gas industry at Columbus, Ohio, May 20, 1905 on work for the Kansas Natural Gas Company, which company at that time was constructing a transmission system to serve markets in [fol. 493] Kansas and at Kansas City, Missouri. I worked under the direction of the then chief engineer for the Logan Natural Gas & Fuel Company who was at the same time consulting engineer for Kansas Natural Gas Company.

In 1906 I became chief engineer for the Logan Natural Gas & Fuel Company at Columbus, Ohio and in 1907 I went to Joplin, Missouri as sales engineer with the Hope Engineering & Supply Company who were engaged in the design and construction of gas producing, transmitting and marketing equipment.

In the fall of 1907 I became assistant to the chief engineer of the Kansas Natural Gas Company and was stationed at Independence, Kansas. My duties were the supervision of construction of gas transmission and compression and measuring and regulating installations.

In the fall of 1908 I became construction engineer for the Columbia Gas & Electric Company upon the installation of their system from West Virginia to Cincinnati, Ohio. I had charge of construction of the western end of their pipeline system from a point near Alexandria, Kentucky through the suburbs of Cincinnati and across the river into Cincinnati.

In the following year, 1909, I designed and constructed their compressor station at Kenova, West Virginia.

During 1910 I was construction engineer for the Ohio [fol. 494] Fuel Supply Company in Ohio and overhauled some of their compressing equipment and installed additional such equipment at Homer, Ohio.

During 1913 I was mechanical engineer with the Texas Company at their Port Arthur, Texas refinery. I was engaged in the design and installation of a water supply system for the refinery, additional boiler plant capacity and electrical generating installations. I also installed an exhaust system throughout the refinery and assisted in the design of foundations and reinforced concrete structures for a wax plant and an oil filtering installation.

In 1912 I returned to Ohio as construction engineer for the Ohio Fuel Supply Company and its affiliated companies. I remained with that organization until the spring of 1919.

During this period I acted as consultant to various departments of this organization on technical matters and I designed and installed the gas compressing stations; reinforced concrete shop buildings, regulating and metering equipment and beginning in 1916 I carried on experimental work in connection with representatives of the United States Bureau of Mines upon the extraction of natural gasoline from the natural gas.

I later designed and built gasoline plants for the Ohio Fuel Supply Company and for the Onio Fuel Oil Company [fol. 495] in West Virginia and for the Lone Star Gas Company in Texas.

During the period from 1917, about, until the spring of 1919 I supervised the operation of the gasoline production department of the Ohio Fuel Oil Company in West Virginia.

During the period 1914 to 1919 I also acted in the capacity of consulting engineer to the Lone Star Gas Company whose offices were then located at Fort Worth, Texas and which company at that time had a transmission system from Petrolia fields near Wichita Falls, to Fort Worth and Dallas and other Texas points as well as connections for gas supply from Oklahoma fields.

During this period I predicted for this company the amount of extensions necessary to be made to their transmission facilities in order to meet their increasing markets, the amount of additions to be required through their com-

pressing facilities and the amount of additional drilling required to be done in the respective producing areas in order to maintain a supply of gas for those markets.

In addition, during the period of the World War I acted as consulting engineer on war gases to the United States Bureau of Mines and in that capacity supervised the construction of helium-producing plants at Fort Worth, Texas and at Petrolia, Texas. I also conducted a search during that period in every known gas-producing section of [fol. 496] United States for helium-bearing natural gas.

In the spring of 1919 I went to Mexico as construction engineer for the A. G. W. I. Companies. These companies were subsidiaries of the Atlantic Gulf and West Indies Steamship Company. I spent one year in this connection upon the design and construction of oil pipelines, oil pumping stations and off-shore bulk oil loading stations.

At the conclusion of my year with this organization I spent nearly one additional year in Mexico upon similar work for the Tide Mexico Company, a subsidiary of the Tide Water Oil Company.

Upon the conclusion of that work I was idle for a few months and then became associated as a consulting engineer with the then owners of the Dallas and County Gas Companies at Dallas, Texas and of gas leases in the Panola County area of eastern Texas and the Monroe field of Louisiana.

While with these properties I acted as consultant to the Dallas Gas Company and the County Gas Company and I acted as manager of the producing, transmission and distributing properties and gasoline and carbon manufacturing properties in the East Texas field and in the Monroe field. While there I built a carbon black plant, a gasoline plant, certain gathering lines and marketing lines and distribution systems in and near the Monroe field.

I also built a portion of a pipeline from the Monroe [fol. 497] field to Baton Rouge, which line was later sold to the Interstate Natural Gas Company. Also during this period I made investigations of the markets which could be served by pipelines from the Monroe field and reported as to their feasibility.

I reported on projects to pipe natural gas to the Birmingham and Atlanta markets, to Memphis, to New Orleans, to Houston, to Dallas and to other minor markets. Some of these markets were subsequently served from the Monroe field, some of them upon reports which I made and some upon other reports.

In 1927 those properties were sold, the East Texas and the Monroe field properties being acquired by interests affiliated with Electric Bond and Share group. The distribution properties at Dallas went to another organization.

I remained with the properties affiliated with Electric Bond and Share until the fall of 1928 and during that period I participated in negotiations for the piping of natural gas to Memphis. I supervised the construction of the pipeline from Baton Rouge into New Orleans and supervised generally the operations in the field.

In the fall of 1928 I severed my connection with those properties and began business as a consulting engineer at Monroe, Louisiana. The major work which I performed during the year 1928 was to report upon a project of piping [fol. 498] natural gas to Salt Lake City. This line was built upon the basis of my report.

I also made an evaluation of the properties of the then Fort Worth Gas Company, a distribution system at Fort Worth and testified as to those valuations before the Federal Court at Fort Worth.

About the first of January, 1929 I became consulting engineer to the Southern Natural Gas Company who projected a pipeline system from the Monroe fields to Birmingham and Atlanta and other points and I acted as consultant to Southern Natural Gas Corporation during that construction period of 1929, 1930 and the first half of 1931.

In the fall of 1931 I moved my office to Dallas, Texas and have been located there ever since. My work since that date has been largely in connection with valuation of properties in connection with rate cases.

I have recently, however been engaged by Phillips Petroleum Company in connection with a projected natural gas pipeline company from the Panhandle fields of Texas

and the Hugoton fields of Kansas, Oklahoma and Texas into the southeastern Wisconsin areas and have made estimates and reports to them thereon and appeared before the Federal Power Commission and the Public Service Commission of Wisconsin in respect to those matters.

Q. In general, then, during the past decade you have, in [fol. 499] the practice of your profession in Dallas, made numerous studies as I understand on the valuation of natural gas properties.

A. I have for a number of the larger gas companies operating in the Southwest.

Q. Such as which companies?

A. Lone Star Gas Company and its affiliates and subsidiaries, the Arkansas Natural Gas Company and its affiliates and subsidiaries, the Cities Service Gas Company and the United Gas System and for several smaller gas companies operating in that general area.

. . . . . .

(Interposing) I might also mention that I have done some evaluation work and report work for the Natural Gas Pipe Line Company of America.

. . . . . .

The first work which I now recall doing for Panhandle Eastern Pipe Line Company was in March 1937 at which time I made an investigation of the capacity of that system and of what that capacity would be upon the completion of some proposed additions to their transmission and compressing system property.

[fol. 500] Later on in 1937, I partially completed a valuation of those properties and in 1938 I made a complete valuation of the properties of Panhandle Eastern Pipe Line Company and its subsidiary companies.

I also made in 1937 and in 1938 a study of the operating pressures on Panhandle Eastern Pipe Line system to determine the degree of safety in operating that pipeline system at a maximum pressure at compressor stations of 500 pounds and reported to the Panhandle Eastern Pipe Line Company my findings thereon.

I also made in 1937 and 1938 an investigation of the amounts which Panhandle Eastern Pipe Line Company

was accruing annually in its reserve account for the purposes of depreciation and depletion and amortization and reported thereon and have made subsequent check studies on that matter.

I have also upon several occasions since 1937 made certificates requisite in connection with financing. Some of these certificates appear in registration statements filed with the Securities and Exchange Commission.

I think that covers, generally, the work which I have done up to the preparation of a valuation of the plant property and business as of June 30, 1941 which work has just been completed.

Q. And is the document which I now show you a re- [fol. 501] port covering the work which you just mentioned? A. It is.

Trial Examiner: This large document containing 968 pages and entitled "Panhandle Eastern Pipe Line Company and Subsidiary Companies, Reproduction Cost New of Plant Property and Business as of June 30, 1941, P. McDonald Biddison, Consulting Engineer, Dallas, Texas," will be marked for identification as Exhibit 39.

Q. Was the document which has been identified as Exhibit 39 prepared by you and under your direction, Mr. Biddison? A. It was.

Q. And in your opinion does it correctly show what it purports to show? A. It does.

. . . . . .

[fol. 510] Q. Mr. Biddison, at the conclusion of the hearing yesterday afternoon, I think you had just identified the document which has been offered for identification in this record as Exhibit No. 39. Does that document contain a letter of transmittal from you and, if so, where is that to be found and what does that letter contain?

A. The letter is page 1 of the exhibit. It identifies the work as being my work.

Q. And do you state a conclusion in that letter?

A. Yes, the conclusion is that the cost of reproduction new of the consolidated plant property and business of Panhandle Eastern Pipe Line Company and subsidiary companies of June 30, 1941, is $85,262,766.09.

I wish to explain in reference to the subsidiary companies that they are represented by a single company, Illinois Natural Gas Company, owning certain properties in the State of Illinois.

Q. And the data, Mr. Biddison, in respect to that company, as well as the data in respect to Panhandle Eastern Pipe Line Company, as such, is included, is it, in the [fol. 511] material which is contained in Exhibit 39?

A. Yes, as if they were one corporation.

Q. Now, Mr. Biddison, will you turn to page 967 of Exhibit 39 for identification and also page 968 and will you tell us whether these two pages contain an index by the consultation of which the data which you have included in this large exhibit on individual items and units of this property can be found?

A. Yes, it does, and the main subdivisions of the index correspond to the main subdivisions of the summary and of the body of the report.

Q. Now, having drawn the attention of counsel and parties here to the index, I wish you would return now to page 2 of Exhibit 39 for identification.

A. Page 2 contains a summary of the estimate by main property divisions, production system, transmission system, gasoline system, general system and certain other additional values beyond those of the four main general groups of property showing, in toto, in Column C, in line 36 the reproduction cost new of the plant property and business in the amount of $85,262,766.09.

Q. That is the figure which you included in your letter of transmittal on page 1, is it?

A. That is correct and the various subtotals shown on page 2 are developed by property groups in subsequent [fol. 512] pages of the report.

Q. Now, Mr. Biddison, I wish you would turn to page 3 which is headed "Panhandle Eastern Pipe Line Company and Subsidiary Companies' Production System Property Summary," and in general outline tell us what you have done and what is included in this exhibit with respect to production system property.

A. On page 3 are shown five groups of property included as production system property. For each of those groups there follows in subsequent pages the detail. Pro-

duction system land shown on page 3 in the amount of $971.02 is detailed on page 4. It consists of two tracts which are described on that page, the first one in the amount of $299, the second in the amount of $672.02, producing a total of $971.02, which is carried forward to page 3.

The next group of property, beginning on page 5 is leaseholds, which is shown on page 3 amounting to $8,695,524. These leases are set out on page 5 by classifications and as to locations.

This data, in toto, is taken from the report, an estimate by Mr. R. J. Wallace, which has been previously testified to by him and placed in evidence in this case as an exhibit.

Q. Now, will you turn to the next item which is "Production System Gas Wells and Equipment"?

[fol. 513] A. This is shown on page 3 in the amount of $2,053,884.39 and is detailed beginning on page 7.

Q. Well, the total is shown on page 6, is it not, or in the recapitulation?

A. There is a recapitulation of gas wells on page 6, that is correct.

* * * * * * * * *

Beginning on page 7, is shown the details of gas wells. For each gas well I have shown the amount of pipe and casing in the well. This data has been taken from the plant and equipment records of Panhandle Eastern Pipe Line Company and compared with the records on file in the production department of Panhandle Eastern Pipe Line Company.

With respect to the first well, Sanford No. 1-4, showing, in the beginning at line 2 on page 7, there are 82 feet of 24-inch surface pipe, 2,245 feet of 10 3/4-inch casing, 122 feet of 6 5/8 casing. This pipe and casing has been priced out at the prices f. o. b. mill for pipe and casing current as of June 30, 1941.

I have made an analysis of gas wells drilled in the Panhandle field under contract for Panhandle Eastern Pipe Line Company in 1940 and 1941 and I have found from an analysis of those jobs that the valves and fittings priced

at the fittings prices as of June 30, 1941 amounted to [fol. 514] $416.84 per well on the average. I have therefore applied to each well in the Panhandle field of Texas that price for the valves and fittings on a well.

This same analysis showed that for the work done by the contractor in drilling a well, the cost was $2.83 for each foot of depth of the well, I have, therefore, applied in the case of this Sanford No. 1-4 well a price of $2.83 to the total depth of 3,100 feet to arrive at the costs for the drilling contract on this well.

In addition to those costs there are some costs incurred by the owning company, some miscellaneous hauling, some rigging expense, some water supply expense and some fuel expense.

The same analysis previously referred to shows that where a well is not acidized that expense amounted to $3,979.32.

Q. That is on the average per well?

A. As used at line 26 on page 7 and where the well was acidized, that cost amounted to $5,468.62 as shown at line 8 on page 7, the Sanford well having been acidized and the Masterson well not having been acidized.

Q. Now those figures that you have just mentioned are averages per well drilled. Is that true?

A. That is correct, taken from the analysis of wells drilled in 1940 and 1941 under contract.

* * * * * * * *

[fol. 515] Q. Well, Mr. Biddison, what I have in mind is that from pages 7 to 19, inclusive, you have included the individual analysis of the wells of the company in the Panhandle field of Texas, have you not?

A. That is correct and on page 19 I have taken a subtotal at line 26 of $944,628.76. To this subtotal I have added an item to cover stores expense, the expense of accounting for materials in the field, the receipt of materials and their disbursements and accounting.

This stores expense amounts to 1 percent on pipe and casing and to 4 per cent on miscellaneous valves, fittings and other materials. Then I have added the amount of

freight on the casing, there being 52,840.3 hundredweight of pipe and casing at a 92 cents freight rate, making the freight for these Texas wells amount to $48,613.08 and making the total wells in the Panhandle field, as shown at line 29 on page 19, $996,481.52.

Q. That is also shown, is it not, Mr. Biddison, on page 6, your recapitulation?

[fol. 516] A. Yes, sir, that figure is carried forward to page 6.

Q. All right, now will you turn to page 20 and state what you did with respect to the gas wells in the Hugoton field of Kansas?

A. Beginning on page 20 and continuing through to page 36, I have evaluated the gas wells in the Hugoton field of Kansas in precisely the same manner that I have related for the wells in the Panhandle field of Texas, and on page 36 I have arrived at the total, line 5, of $1,041,824.06 which has been carried forward to the—

* * * * * * * * *

I wish to explain with regard to these wells in the Hugoton field in Kansas that some of these wells are partnership wells in which Panhandle Eastern Pipe Line Company owns a one-half interest. That is true, for example, of all the wells on page 20 and the one-half interest is shown and set up and carried into the totals.

Q. That is true with respect to every well as to which this company owns a one-half interest in that field, is it not?

A. That is correct.

* * * * * * * * *

[fol. 517] Q. Well, will you turn, then, to page 37 which discusses the gas wells? There is a recapitulation apparently of the gas wells of the local area and will you state what you did in that connection?

A. There is an area close to Kansas City, south of Kansas City of shallow gas production in which for some 12 or 13 years Panhandle Eastern Pipe Line Company or predecessor owners have been producing and marketing natural gas. Panhandle Eastern Pipe Line Company has

remaining 22 wells in this area, 11 in Kansas and 11 in Missouri. On pages 38 and 39 I have listed those wells.

The amounts which I have set out as their reproduction cost new are their original cost. They are not the figures now on the books as the cost of Panhandle Eastern, but are the cost to a predecessor company as shown by books of that predecessor company.

Q. In other words, with respect to the wells of the so-called local system you have used the original cost and have shown that total on page 37, also bringing it back in recapitulation to page 6, is that true?

A. That is correct. These wells will show a very small value when these amounts are reduced to present [fol. 518] value I don't think it makes much difference what you start with on property of that class.

. . . . . .

Q. Now, Mr. Biddison, the total shown on page 6, your recapitulation for gas wells, is the total, is it not; shown on line 3 of page 3, the summary of your reproduction system property estimates?

A. It is.

Q. Now, will you turn to page 40, whereon you summarize your estimates with respect to other production system structures and state what that shows and what you did?

A. Production system structures are shown in summary form on page 40 and in detail in subsequent pages up to and including page 44. They consist of cottages and warehouses and appurtenant structures at three locations. Two of these locations are in the Panhandle field of Texas for the use of the production forces and one it as Hugoton, Kansas, in the Hugoton field.

The first item on page 41 is the warehouse structure at the Fritch Camp. This item has been estimated in detail from its component parts, and as a completed item I have estimated it, as shown on line 12, at $3,231.27. Incidentally, that is slightly under 13 cents per cubic foot of content. [fol. 519] The next item are the cottages located at this point. These cottages have been priced at $3,830 each, based upon a recently completed contract for similar cot-

tages at the Sneed compressor station a few miles distant and in the Panhandle field of Texas.

The garage in similar fashion has been estimated from the cost, under a contract, for recently completed garage at Sneed Camp.

The tool house has been estimated on the basis of the cost per cubic foot of structures of this type. The balance of the various items have been partially taken at the costs for similar work incurred under recently completed contracts at Sneed station and for some minor miscellaneous items they have been taken at the figures shown by the books.

Q. And the total is shown on page 42, is it not?

A. That is correct, at $20,940.23 for the structures at the Fritch warehouse site.

Q. Now will you proceed to the next item which is the Zofness Camp in Texas and state what you did?

A. The items at the Zofness Camp have been handled in the same fashion as I have related for the items at the Fritch warehouse site, as have also the items for the Hugoton Camp beginning on line 13, page 43.

[fol. 520] Q. And you have shown a summary on page 40, have you not, line 7 of the total of other production system structures and have carried that forward in your general summary of other production system structures on page 3 in the amount of $42,188.75?

A. That is correct.

Q. Now, will you proceed to the item of drilling and clean-out equipment?

A. This is the equipment for cleaning out and reconditioning gas wells. The amounts shown are the amounts carried upon the books of the company for that equipment. A considerable amount of such equipment has been retired within the last two or three years and this is the selected equipment out of a considerably larger original amount.

Q. This is the equipment that is still in use, is it?

A. That is correct.

Q. Now, the total for that figure shown on page 48 and brought forward on line 3 on page 45 is the same total, is it not, as is carried on line 5 of page 3, your summary production system property?

A. That is correct and the sum total from page 3 of $10,813,244.62 has been carried forward to the corresponding item on line 7 of page 2.

. . . . . .

[fol. 521] Q. Well, Mr. Biddison, now will you turn to page 49 on which appears a summary of your reproduction cost new estimates in respect of transmission system property in the amount of fifty-five odd million dollars and tell us whether that is the same amount that you have carried at line 17 of page 2?

A. It is.

Q. Now, will you proceed to discuss what you did in your estimates with respect to each of the items of transmission system property?

A. Transmission system property constitutes the largest single group of property in this valuation. The first item shown on page 49 at line 1 is transmission system land in the amount of $55,909.84. That total is carried [fol. 522] forward to line 8 on page 50 which is a summary of transmission system land.

The details of transmission system land begin on page 51 and continue to include page 54. All items of transmission system land are taken from the plant and equipment records of Panhandle Eastern Pipe Line Company and the Illinois Natural Gas Company.

I call attention to the fact that on page 51, line 9 and lines 10 and 11, I have listed two parcels of land which are not in use and have deducted them from the gross amount of land to arrive at the net figure of $55,909.84 for land.

Q. Well, is that net figure the cost shown on the books of the company for the parcels of land in question?

A. It is. I have used the cost as shown on the books because I believe that for land and for rights-of-way that the costs actually incurred are the best obtainable measure of what would be incurred under reproduction.

Q. Now, Mr. Biddison, will you turn to page 55 and state what you have done with respect to rights-of-way, the discussion which I believe continues to and including page 71?

A. On page 55 I have shown a summary for rights-of-way. I call attention to the fact that under transmission system rights-of-way I have included rights-of-way for [fol. 523] well lines as well as for the main lines, whereas under the prescribed classification of accounts some of these rights-of-way would be under the division of production property and some would be under the division of the communication system. I have them all in this one classification beginning on page 55 at a total shown on line 13 of page 56 of $1,278,521.36. These figures are all taken from the records and are the cost to Panhandle Eastern Pipe Line Company for those items. The total amount has been carried forward to line 2 on page 49.

Q. Also line 10 on page 2, has it not? A. Yes, sir.

* * * * * * * * *

The next item of transmission system property was transmission measuring and regulating station structures. These are the buildings which house the regulating and measuring equipment. These structures are summarized on page 72 for a total, as shown by line 35, of $104,475.27. They are detailed in subsequent pages up to and including page 139.

It may be noted on page 73 that the first item has to do with structures for production measuring stations in Texas, buildings constructed after a standard drawing No. 4,182, that specification being on line 2 of this page.

[fol. 524] In this field there are 55 such buildings, six-foot by eight-foot by seven-foot as shown on lines 7 and 8 and one similar one, eight-foot by ten-foot by seven-foot.

The standard building six by eight by seven has been estimated in detail at current prices for the materials therein and for the labor for such construction and that price has been applied to the 55 buildings. A corresponding price per cubic foot has then been applied to the other building at lines 9 and 10.

Following on page 74 is a listing of the buildings included in the 56 buildings shown on page 73.

Q. Now, does somewhat the same procedure follow with respect to the buildings added on page 76?

A. That is correct, those buildings are for the housing of equipment to measure gas produced in the Hugoton field in Kansas. On page 76 is shown the value at line 8 for 65 such buildings and the buildings are subsequently listed on pages 77 and 78.

Q. Have you done the same thing with respect to other buildings of this type, beginning on page 79 and following through to the end of this discussion on page 139?

A. That is correct.

. . . . . .

[fol. 525] A. I might explain further that beginning on page 83 the process is repeated for those structures housing measuring equipment which measures gas purchased in the Texas field, and on page 85 are shown the values for the building, housing equipment, measuring gas purchased in Oklahoma, and on page 87 is shown the value for the structures housing the equipment, measuring purchased gas in Kansas, and on page 90 we have a similar statement for the purchased gas stations in the local area of Kansas, and on page 97 similarly the buildings for the purchased gas stations in the local area in Missouri.

Q. And similarly for all the other items down to and including those covered on page 139, Mr. Biddison, you followed the same procedure, did you?

A. That is correct.

Q. And you have shown your total on page 72, which has been brought forward, has it not, to page 49 and then to the final summary on page 2?

A. That is correct.

. . . . . .

Q. Now, will you turn to the next item which is headed "Other Transmission System Structures," beginning on page 140 and state what you have done with respect to those structures?

[fol. 526] On page 140 is the summary of other transmission system structures amounting to $382,920.59 as shown at line 29. That amount has been carried forward to page 49.

Q. And page 2, also, Mr. Biddison?

A. And to page 2.

The items covered are the residences at compressor stations and various warehouses along the system for the use of the transmission department, these warehouses carrying supplies for current operations as well as equipment and supplies for emergency work. The detail begins at page 141 and continues to include page 154.

Q. These include only the structures here, do they not, and not the equipment contained in them?

A. That is correct. The item is named "Other Transmission System Structures" and it is the structures that are included, not the supplies or the equipment.

These structures as to cottages have been priced on the basis of the cost of similar structures recently completed at compressor stations.

As to garages, they have also been priced on the basis of the contract price for garages completed in 1940 and '41 of similar types.

The other miscellaneous items in these camps at the [fol. 527] various compressor stations have been taken from cost recorded in the plant equipment record of the Panhandle Eastern Pipe Line Company.

* * * * * * * * *

[fol. 528] I was going to explain that with reference to some of these warehouse buildings, like those shown on page 147 and page 148, that they have been priced on the basis of 12.82 cents per cubic foot, based upon the detailed estimate for a similar structure at the Fritch warehouse site.

I think with those explanations I have given enough to show the method used in the determination of values for other transmission system structures.

Q. Now, Mr. Biddison, turning to page 155, which is headed "Summary—Transmission Measuring and Regulating Station Equipment," and which shows a total of $491,685.32, as also carried back to line 5 of page 49 and to line 13 of page 2, will you please state what you have done with respect to this particular class of property?

A. On page 156 I have shown the measuring stations which measure gas produced by Panhandle Eastern in Texas.

There are 11 measuring stations whose valves and fittings correspond to Standard Drawing No. 4143, and 46 whose valves and fittings correspond to Standard Drawing No. 4144.

I have determined that the valves and fittings called for by Drawing 4143, priced at prices as of June 30, 1941, at [fol. 529] the discounts from catalog prices at which Panhandle Eastern is currently buying this class of equipment, amounts to $233.13 per installation; that the valves and fittings called for by Drawing 4144 correspondingly cost $339.19.

Q. Per installation? A. Per installation.

That of these 57 stations, 37 of them have the type of clock shown by line 8 on page 156, and 13 have the type of clock in the meter as shown by line 9—

Q. (Interposing) I think you misspoke yourself, Mr. Biddison. There are 34 that have the type of clock shown on line 8 instead of 37?

A. 34 is the correct figure.

(Continuing) And similarly as to other items as shown on that page.

Pricing these stations out on this basis, I derive, at line 22, a total amount of $36,864.26. Those stations are listed, then, on page 157 and page 158, those pages showing whether the stations conform as to valves and fittings to Drawing 4143 or to Drawing 4144.

Q. And the total you have carried back on to your summary page 155, have you not, line 2?

A. That is correct.

I might add that I have shown, on page 156, an item of [fol. 530] stores expense, at line 21, which is 4 per cent of the materials included in the tabulation on page 156.

That figure is the figure which I have determined to be the usual cost for accounting for stores in the field, from a study of that expense as incurred by the Lone Star Gas Company system and the system of the Arkansas-Louisiana Gas Company.

Q. Now, the next item is "Hugoton field, transmission measuring and regulating station equipment," is it not?

A. Yes.

Q. Starting at page 159?

A. Yes, sir; and that is handled in the same fashion as I have described for the production stations in the Texas field.

Beginning at page 162, I have handled the production stations in the local field, on the Kansas side, in the same fashion; and at page 164 the production stations for the local area, on the Missouri side, in the same fashion.

Now, other classifications of measuring stations throughout have been handled in identically the same manner.

Including all the various points and at the various localities.

* * * * * * * * *

[fol. 531] Q. Now, will you turn, then, to page 351, Mr. Biddison, at which point you have included a summary of transmission mains?

Let me ask you in that connection whether the total of $43,025,965.41, shown at the bottom of that page, is the same total shown and carried forward by you to line 6 of page 49, your summary of said transmission system property and to line 14 of page 2, your summary of your entire reproduction cost estimate? A. It is.

Q. Now, will you proceed to discuss what you did with respect to transmission mains?

A. The first group shown on the summary, page 351, is well lines. Well lines have been shown in a recapitulated form on page 352, and beginning on page 353 the well [fol. 532] lines to wells owned by Panhandle Eastern Pipe Line Company, in Texas, are listed by their number as they appear of record.

In column A is shown the line number, the line size, and the weight of pipe in the line;

In column B is shown the number of feet in that line;

In column C is designated the unit to which the quantity in column B applies;

In column D is shown the unit cost per cubic foot of pipe, f. o. b. mill—

. . . . . .

Per lineal foot. F. o. b. mill.

(Continuing) In column E the quantity in column B has been extended at the price in column D to produce the amounts in column E.

. . . . . .

[fol. 533] Now, where did you obtain the prices which you used under column D?

A. Those prices are the carload list prices with the discounts properly applying as of June [31] 1941. (Pause)

. . . . . .

This list is National Tube List No. 14, of July 1, 1938.

. . . . . .

Continuing on to page 354, on line 32 I have taken off a subtotal of the materials required to construct these lines, in the amount of $65,837.80, as shown at line 32. To that I have added an allowance for stores expense, which is 1 percent on pipe and 4 per cent on the other materials shown on line 33, which produces line 34, the subtotal of materials and stores. I have then continued with an estimate of the cost to install these materials.

Q. How did you arrive at that estimate?

A. These estimates of the cost to install are based upon [fol. 534] contract prices recently paid by Panhandle Eastern Pipe Line Company in that area for similar work.

. . . . . .

I have estimated, as shown by line 37, that the 4½ inch lines would be laid under contract price at 13 cents per foot, and that the 6⅝ lines would be laid at 18 cents per foot.

I have subsequently shown an estimate of cost of installation of the valves and of the cost of painting the lines, and have arrived at a subtotal, as shown on line 5 of page 355, for installation of those lines of $15,529.41.

I have then computed the freight on this pipe into that area at the freight rates in effect as of the valuation date. As shown on line 8, page 355, the freight on the 4½ inch pipe would be $3,712.51, and on the 6⅝ pipe, shown on line 9, $6,245.40.

I have thereby produced a total for the production well lines in Texas, as shown by line 11, page 355, of $61,750.29.

Upon re-examination of this total, I find that there should have been an allowance in the case of each of these lines for making the connection to the line to which it joins. This has not been included.

. . . . . .

[fol. 535] The next item is similar in character, beginning on page 357, and covers production well lines in Kansas, Western Kansas, that is, in the Hugoton field.

Those lines were handled in exactly the same fashion as I have related for the production well lines in Texas.

Then, if you refer to page 351 you will find that the next page group is the gathering lines. This system of lines takes gas from the smaller well lines into a system of larger lines verging toward a central point.

. . . . . .

With respect to gathering lines, as illustrated on page 363, I have set forth in respect to each line the pipe, valves, fittings and other materials in that line.

This data is taken from the plant and equipment records and the engineering department records and the engineer-[fol. 536] ing department maps of Panhandle Eastern Pipe Line Company. All those sources have been used in the compilation of the inventory of this equipment.

I have also had access to the field notes of the engineering department for cross checking on some items where it was required.

. . . . . .

Now, beginning on page 389, for those same Texas gathering lines, I have shown the estimate of the cost of installation, taking each line as an individual unit in the same fashion as I have previously set forth the materials in that line.

The estimated installation costs are based upon recent contract work of a similar nature performed for Panhandle Eastern Pipe Line Company by contractors. The [fol. 537] estimate of the installation cost continues to include page 405, where at line 9 the installation cost on Texas gathering lines is shown to be $235,828.43.

Then, continuing on page 406, I have shown the freight on pipe in these Texas gathering lines, by sizes and quantities, the total being shown on line 19 at $180,308.36.

Following, on page 407, still in the Texas gathering line group, we have a river crossing of the Canadian River, which is estimated in detail, as shown by line 20 on page 408, at $61,010.35; and on this same page, 408, at line 21 is shown the total cost for Texas gathering lines of $1,249,988.32, which is the item carried forward to line 1 of page 362.

* * * * * * * *

Beginning on page 409, we have Kansas gathering lines. These have been handled in precisely the same fashion as the Texas gathering lines, and in that fashion I have arrived, on page 455, at line 22, at the total of $2,011,397.67, which is carried forward to line 2, page 362.

* * * * * * * * *

Beginning on page 456 is another group of still larger gas mains, bringing gas from the gathering lines through these trunk gathering lines into the initial compressor stations. One of these trunk gathering lines extends from Liberal station down to Sneed station, a 22-inch line. On [fol. 538] page 456 there is shown a recapitulation with the values shown by States, in the amount of $2,630,583.49.

Beginning on page 457 is detailed the trunk gathering lines in Texas, this being a 22-inch line starting at Sneed station and running eventually to Liberal station, across the panhandle of Oklahoma and into the State of Kansas.

On page 457 has been listed the materials; and at line 36 is shown the subtotal to include stores expense on pipe and fittings of $844,159.59 for the portion of that line in Texas.

On page 458, lines 1 to 15, is shown the detail of the installation cost of that same Texas portion of that 22-inch line, with the subtotal at line 16 for installation, of $278,110.25.

There follows a calculation of the freight on pipe and couplings; and at line 26 I have arrived at the total reproduction cost of the Texas portion of that 22-inch line, in the amount of $1,348,066.85.

The installation costs, as shown on page 458, are arrived at from an analysis of the contract prices at which work has recently been performed for Panhandle Eastern Pipe Line Company. The pipe is based upon a schedule of pipe prices for such sizes which I believe to be the prices obtaining as of June 30, 1941. Pipe prices have recently been advancing. Panhandle Eastern Pipe Line Company [fol. 539] has been negotiating for the purchase of pipe for additional loop lines and for extensions to its system in southern Michigan and northern Indiana, and from consideration of the information derived in making those purchases I have fixed a schedule of pipe prices for pipe over 16 inches in diameter for main line use, which is as follows:

16-inch—lapweld, $65; electric weld, $67; seamless, $68.

18-inch—lapweld, $64.50; electric weld, $66.50; seamless, $67.50.

20-inch—lapweld, $62; electric weld, $64; seamless, $65.

22-inch—lapweld, $62; electric weld, $64; seamless, $65—

(Continuing) 24-inch—lapweld, $62; electric weld, $64; seamless, $65.

26-inch—lapweld, $62; electric weld, $64; seamless, $65.

28-inch—lapweld, $62; electric weld, $64; seamless, $65.

All these prices are prices per ton, based upon Lorain freights without further discount for cash.

The prices which I have used on smaller pipe, as I have [fol. 540] previously pointed out, are based upon carload list with the applicable discounts, which do include 2 percent discount for cash.

Q. Do you believe that the prices that you have just adopted are fair and reasonable prices under your assumptions?

A. I do; I believe they are the minimum prices at which pipe could have been purchased June 30, 1941.

Q. When you speak of Lorain, what do you refer to?

A. I mean that those prices will be so adjusted that whether the pipe be shipped out of Lorain or Milwaukee, that the net delivered prices will be these prices per ton plus freight from Lorain.

Q. That is a common practice in the industry, is it?

A. It was a common practice. It has been deviated from to some extent in the last five or six years; but that is evidently the basis on which pipe will now be purchased for Panhandle Eastern.

The actual tonnage rates may prove to be somewhat higher than I have given when the order is finally placed.

. . . . . .

[fol. 541] I have recited my schedule of pipe prices used throughout in this tabulation.

. . . . . .

Well, at page 458 I have arrived at the total of the Texas portion of this 22-inch line.

Now, that same line continues across Oklahoma, and the Oklahoma portion of it is shown in subsequent pages, the total for Oklahoma being on page 460. Beginning on page 461, I have detailed a river crossing on that line, the total for that river crossing being on page 462.

I have then continued with the Kansas portion of that line, the Kansas portion being shown for its total on page 464; and an additional river crossing shown in total on page 466.

. . . . . .

[fol. 542] Now, on page 467, in column A, I have given a description of the main units into which the main lines of Panhandle Eastern Pipe Line Company may be divided.

At line 2 is the designation "Kansas Line 100." This is the Kansas portion of the original main line.

The Kansas portion of the loop line is designated in line 7 as "Kansas Line 200", and that has been estimated by sections, the Liberal loop for example being the section between Liberal station and Greensburg station, the Greensburg loop following in order, being that loop between the Greensburg station and Haven station. In general, the loop is designated by the compressor station which precedes it.

On page 468 the recapitulation of the main lines is completed, showing a total, at line 14, of $29,395,674.68; and [fol. 543] in subsequent pages the items shown in the recapitulation are detailed.

Beginning on page 469, I have detailed the Kansas main line No. 100, the original line. The materials are listed down to line 8 on page 470, after which is added the stores expense, amounting to 1 percent on the pipe and 4 percent on the other materials, to produce the subtotals of materials and stores at line 10.

Following this is the estimate of the costs of installation, these costs being based upon an analysis of contract prices for work recently done or bids on work now authorized to be done.

Q. In that same general area? A. Yes, sir.

Q. Now, on page 471, have you added an item for freight?

A. I have, because the items for pipe as shown on page 469 are for pipe f.o.b. mill; therefore, on page 471 is a calculation of the freight on this pipe, and at line 36 I arrive at the total installed cost of the Kansas portion of the original line, in the amount of $7,821,020.61.

Q. Would it be fair to say, Mr. Biddison, that with respect to each of the other items that you have mentioned in connection with the main transmission line, that you have followed a similar process?

A. That is correct.

[fol. 544] I have estimated the river crossings, for example, the Arkansas river crossing, beginning on page 472, —I have estimated that upon the basis of contract prices for construction. These jobs were done in 1937, or earlier, and in general on these river crossings I have used the contract costs incurred in that 1936 and 1937 construction on river crossings, without any substantial modification.

I realize that the costs have materially increased for the labor in performance of that class of work, but time has not permitted to make the adjustment on account of the detail work that would be required to do that.

Q. And those items have been included in the cost?

A. Such items as I have for increased cost must come in my allowance for miscellaneous construction expenditures and omissions.

I think the explanation which I have made will cover the balance of the whole grouping of transmission mains.

[fol. 545] On page 774, I have shown, in summary, the costs of compressor station property. I have shown there the cost for each of the compressor stations owned and operated by Panhandle Eastern Pipe Line Company. In subsequent pages each of those stations is detailed.

In estimating the cost of these compressor stations, I have used the analysis of the contractor's charges to the Panhandle Eastern for a distribution of the contractor's direct costs. Certain of the equipment in these stations, practically all the work having been done by contract, was purchased by Panhandle Eastern Pipe Line Company and furnished to the contractor under the terms of the construction contract. This includes such items as the main engines, the auxiliary engines and their connected generators, water pumps, water tank, air compressor, structural steel for the main building, and some other items.

I have then re-priced these major items of main engines, compressor stations, main buildings, water tanks, on the basis of the present-day costs for that class of material, as shown by recent purchases by Panhandle Eastern Pipe Line Company for construction work now in progress, and for the balance of the work on these compressor sta-

tions have used the distributed costs as reflected on the Panhandle Eastern records and as furnished by the contractors, and to the work performed by the contractor have added 20 percent to cover the contractor's overheads and [fol. 546] profits, this 20 percent being arrived at by an analysis of the residue of undistributed charges in this allocation made by the contractors upon completion of the installations.

* * * * * * * * *

Q. All right.

And the compressor station total is carried forward to line 15 of page 2, is it not?

A. It is, in the amount of $9,792,271.60.

Q. Now, Mr. Biddison, turning to your next item, which is that of "Other Transmission System Equipment", as shown in total on line 16 of page 2, let me ask you whether that is discussed, commencing at page 837 and ending at page 926 of your Exhibit No. 39 for identification?

A. It is.

* * * * * * * *

On page 837, the items of Liberal boarding house equipment; domestic water well, Louisburg; air and gas line to laboratory, Louisburg; domestic water pump, Liberal; lake barge, Louisburg; pressure alarm gauges; Sneed boarding house equipment; Hansford boarding house equipment; [fol. 547] gas scrubbers—

* * * * * * * * *

(Continuing)—have been taken from the books. These are miscellaneous items, not of great value, and I have taken the book statement for them.

The items of cathodic protection installation are mostly of very recent construction, and they have also been taken at the amounts shown by the books.

On cattle guards, I have a field inventory taken, and that item has been estimated in detail from that field inventory.

The same is true on fence gates on leases.

At line 13 is shown emergency pipe racks and equipment, in the amount of $67,066.35.

These emergency pipe racks are located along the main lines at points where they will be accessible so material may be had for emergency repair work.

I call particular attention to them because a great deal of the value in this item consists of material, but this is not material which is included in the item of materials and supplies on hand used as an item in working capital, as testified to by Mr. Sperry.

The location of these pipe racks and the equipment on them is detailed on pages 842 to 926, inclusive, and as summarized on page 841.

. . . . . .

[fol. 548] Q. Now, will you turn to the next item, which is "Gasoline Production System Property", a summary of which is shown at page 927, and state what you did in that connection?

A. Liberal gasoline plant was constructed partly in 1936 and partly in 1937. It is true that labor cost has advanced since that date, and it is also true that the costs of a great deal of the equipment in that plant are higher today than they were when the plant was built; but the figures which I have shown for Liberal gasoline plant, beginning at page 927 and continuing to 933, are an allocation to the accounts which I have used of costs determined from the books of Panhandle Eastern Pipe Line Company.

. . . . . .

Under "General System Property", as shown on page 934, there is included general office equipment, general transportation equipment, general laboratory equipment, general communication equipment, and general tools and implements. With the exception of general communication equipment, which has been estimated in detail from an inventory completed about June 1, 1940, the items of general [fol. 549] property have been taken at the stated values shown on the books of Panhandle Eastern Pipe Line Company.

Q. And the total is $727,565.12, is it?

A. That is correct.

Q. As carried forward on page 2?
A. That is correct.

. . . . . .

Q. And was not the inventory with respect to that communication equipment completed in June of 1941 instead of 1940?
A. 1941 is the correct figure. If I said 1940, it was an error.

. . . . . .

Q. Then, turning back to page 2 for a moment, you have your total of direct construction costs, shown on line 28 of that page, covering all the items you have been describing, is that true?
A. Yes, sir, at line 28 I show total direct construction costs of $67,422,726.85.
Q. And the detail with respect to all of those items is [fol. 550] included on the pages of the exhibit from 3 to 955 inclusive, is it not? A. That is correct.
Q. Now, will you turn to page 956, which is headed "Intangible Fixed Capital", and state what that covers?
A. It covers the item of preliminary and organization expense, that cost which would be incurred in organizing the company to do business, getting its charters and permits and in reaching a decision as to whether to proceed with the project.

It involves the expenditure of money for geological investigations and engineering investigations and reports, as well as the salaries and expenses of the promoters of the enterprise during the preliminary stage and before financing is completed and construction work started.

Q. And you used three quarters of one per cent for that item, did you?
A. Yes, sir. That is my estimate of what it would cost to duplicate the services that have been performed in that respect.
Q. Now, will you turn to page 957, headed "Undistributed Construction Expenditures", and state what is covered by that item?
A. Under this group I have included administrative expense during the construction period, law expense during [fol. 551] the construction period, engineering and super-

vision of construction, taxes during construction, interest during construction, and miscellaneous construction expenditures and omissions. The total of these, as shown on page 957, is $7,781,764.69.

. . . . . .

I might add to that explanation that with respect to interest during construction, I have assumed a two-year construction period, substantially that the original line would be built in one construction period and the loops in the second construction period.

Q. Do you believe that to be a reasonable assumption, based on your experience?

A. I do. It would be a big construction period for each of the two periods.

Q. Now, will you turn to page 962, where you commence a statement of construction work in progress, and state what that covers?

A. I have listed what is recorded on the books as con- [fol. 552] struction work in progress, beginning on page 962, which is a total, as shown on line 2, page 963, of $383,556.82; but of that work in progress, as shown by the books, certain items were completed and in use and were therefore included by me in the property accounts which I have evaluated. Those items are listed on page 963, line 3 to line 26, inclusive, for a total, as shown by line 27, of $233,887.20, so that there is work in progress not included by me in the direct plant accounts to the extent of that shown on line 28 of $149,669.62.

Q. That is of June 30 of this year?

A. That is correct.

Q. Now, will you turn to page 964, which you have headed "Working Capital," and explain what you did there?

A. The amounts shown on this page are amounts as estimated by Mr. L. F. Sperry, treasurer of Panhandle Eastern Pipe Line Company, and as testified to by him in this proceeding.

Q. You have taken the figures which Mr. Sperry developed and testified to, have you not?

A. Yes, sir.

. . . . . .

[fol. 554] Q. Now, will you turn to page 966 which you [fol. 555] have headed: "Cost of Business Development", and tell us what is included on that page?

A. Upon the completion of a natural gas line, business does not just walk down the street and attach itself. It takes effort to attach business. It takes time to attach business and costs money to attach business.

Q. Is there usually some lag of that sort?

A. It is almost inevitable. I know of one or two exceptions, where business was immediately attached to substantially the capacity of the system, but those are very rare.

In general, it takes five years or more to develop the business for which a line is constructed.

On this particular system, in order to develop business, and in line with what is being proposed on more recent construction, payments were made to some of the distribution utilities to aid them in their sales campaigns for industrial gas, for house heating gas, and contributions were made to bear part of the cost of their changing over their systems from manufactured gas to natural gas.

I have listed, on page 966, a statement, beginning at line 2 and ending in a total at line 30, of such payments made to utility companies. The purpose of the payment is generally shown.

Q. You mean payments actually made by Panhandle [fol. 556] Eastern Pipe Line Company?

A. Yes, sir.

Q. Where did you get those figures?

A. Those figures were furnished to me by an officer of Panhandle Eastern Pipe Line Company, at my request.

Q. And they total how much?

A. They total $553,992.48.

Q. And is the statement which is shown on page 966 with respect to those particular payments self explanatory? A. Yes, sir.

* * * * * * * *

Now, we come to lines 31 and 32 of page 966. Will you explain the figure you have shown, Mr. Biddison, where you got it, and the reasons why you have included it?

[fol. 557-8] A. Roughly, the capacity of Panhandle Eastern's system was about 80,000,000 cubic feet per day up until early 1937, at which time it became about 125,000,000 cubic feet per day.

Panhandle Eastern would not have been justified in building a smaller line with the expectation of increasing from the 80,000,000 capacity to the 125,000,000 capacity by looping; it simply would not have been economical to have done so. You can make a rough comparison of it on the basis that a single 24-inch line, such as they did build, would cost about $30,000 per mile, and an 18-inch, having, roughly, half the capacity of the 24-inch, would cost about $20,000 a mile; so that the two 18-inch lines would have cost about $40,000 a mile compared to $30,000 per mile for the 24-inch line. The carrying costs on the unused capacity for the larger system would be less than the additional capital and its carrying costs for laying two of the smaller lines. It is almost inherent in the natural gas business that there shall be this lag in the development of the business and for a period of five or more years that you shall have some unused capacity in your system.

Q. And with costs attributable thereto?

A. Yes. If half your system is unused capacity, then half of the fixed charges thereon are attributable to unused capacity. I have used here as carrying costs on that [fol. 559] portion of the plant idle pending development of business, an amount of $5,500,000, predicated upon a determination of the costs of carrying such idle plants made by Mr. Morton in testimony in this hearing, in which he measured that cost by 5 different methods.

Q. You have taken no one of his methods, have you, but have considered them as a whole?

A. That is correct. I have not taken any particular one, nor have I taken the average of all, but having considered them all I have taken $5,500,000 as a measure of that cost of carrying the unused portion of the plant while the business was being developed to such an amount as was contemplated to load the original line.

Q. Now, Mr. Biddison, have you anything further you wish to state about this last item you have been mentioning?

A. Well, I should like to point out definitely that these costs, which are payments made and took money, are not allowed for in any item of my direct construction costs; nor are they allowed for in my item of intangible fixed capital; nor are they allowed for in my item of undistributed construction expenditures; nor are they allowed for in construction work in progress; nor are they allowed for in working capital; nor are they allowed for in the value of gas purchase contracts. They are not allowed for in any way, shape or form, in whole or in part; in any other place in my valuation except where shown as the cost of busi- [fol. 560] ness development.

Q. And they represent real costs and actual money expended on the history of this plant rather than mere past losses?

A. That is correct, and they represent value because they are costs which would be incurred in the reproduction of this property, and they are costs which would be escaped by a purchaser who purchased the property with this business which has been attached by the expenditure of that money.

. . . . . .

Q. Now, Mr. Biddison, will you turn back to page 2 and state whether this last item of cost, to business development has been included in your summary contained on that page?

A. It has been, at line 35, in the amount of $6,053,992.48.

Q. Now, Mr. Biddison, you have shown a total on page 2 of $85,262,766.09. Let me ask you whether this figure, in your opinion, is a fair and reasonable estimate, based upon your experience in this business, of the cost which would be entailed to reproduce the Panhandle Eastern Pipe Line Company's system as of June 30, 1941?

A. It does, with one exception, to which I called attention to, the modification which I propose to make in the value of gas purchase contracts.

. . . . . .

[fol. 562] Trial Examiner: The study of reproduction costs by Mr. Biddison, identified as Exhibit 39, is now of-

fered in evidence; and the ruling as to its admission will be reserved until the completion of cross-examination.

* * * * * * * * *

[fol. 581] Trial Examiner: The hearing will be in order.

* * * * * * * * *

Are there any additional or other appearances today?

* * * * * * * * *

Mr. Gorman: I should like to add for the Commission's counsel the appearance of Mr. Harry S. Littman.

* * * * * * * * *

[fol. 585] P. McDONALD BIDDISON having been previously sworn, resumed the stand and testified further as follows:

Further Direct Examination.

By Mr. Wheat:

Q. Mr. Biddison, since the date of the last hearing, have you prepared certain correction sheets relating to data which you have shown in Exhibit No. 39 for identification?

A. Yes, I have.

Q. Let me ask you whether the group of sheets headed at the outset on the first page "Correction Sheets for Exhibit No. 39" is the group of corrections to which I have just referred?

A. Yes, sir, it is.

Q. And was this group of corrections prepared by you or under your direction. A. Yes, sir.

Mr. Wheat: Mr. Examiner, we have copies here and I think it would be advantageous if this group of corrected sheets rather than being inserted in Exhibit 39 as cor-[fol. 586] rections might be marked Exhibit 39-A for identification, if that meets with your approval.

Trial Examiner: That may be done.

* * * * * * * * *

By Mr. Wheat:

* * * * * * * * *

Q. Now, I wish you would state where you think we should start in your explanation of these corrections?

A. When I testified at a previous session of this hearing with respect to Exhibit No. 39, I stated that I would recompute the value of gas purchase contracts shown on [fol. 587] page 965 of Exhibit 39, using in that computation a higher rate of interest at which to discount the differences between gas cost and gas values. I have done that on page 965 of corrected Exhibit 39-A.

. . . . . .

The differences are in column "F" of the tabulation on the lower half of the page whereby the total value, as shown on page 965 of Exhibit 39, is reduced from $1,779,942 which was arrived at by using a 4 percent interest rate, to a new figure shown on page 965 of Exhibit 39-A of $1,585,914. This latter figure is arrived at by using a discount rate of 7 percent.

. . . . . .

The figure of $1,585,914, which I have just explained, is carried forward to page 2 of Exhibit 39-A at line 34.

. . . . . .

[fol. 588] Q. Now, will you proceed with respect to your compressor station data?

A. Upon examination of Exhibit No. 39 I found that in connection with Tuscola compressor station on page 831 that there had been added into the total from the working papers an item of $23,440 which should have been crossed out on the working papers. Therefore, I have prepared in Exhibit 39-A a corrected page, No. 831, which correction for that error produces a total for Tuscola station of $682,218.43, whereas on page 831 of Exhibit 39, the total was [fol. 589] shown as $710,346.43.

Having made that correction for Tuscola station, the corrected figure from page 831 of the Exhibit 39-A is carried forward into the summary of compressor stations on page 774.

. . . . . .

Q. And that changes the sum total of line 19, does it not?

A. Yes, sir, that changes the total for sheet 774, which in Exhibit 39 was $9,792,271.60 to the figure of $9,764,143.60. That change is reflected in Exhibit 39-A on page 2 at line 15.

Q. That change also makes a change, does it not, on page 2 of the total of transmission system property and of the grand total shown at the bottom of that page, line 36?

A. Yes, it affects those items, but the total changes on page 2 of Exhibit No. 39 are not brought about by the compressor station item carried forward from page 774.

Q. In other words, on page 2 there are corrections other than that in line 15?

A. That is correct.

Q. You have already testified to one in line 34, have you not?

[fol. 590] A. Yes, sir.

* * * * * * * * *

Q. Will you now proceed with the other corrections which you have in mind?

A. On pages 682 and 683 of Exhibit No. 39, there is included some pipe lines from the local-area, that being a gas field near Kansas City, which were set up by a shortcut method and then the method abandoned. The sheets were typed and the totals carried into the valuation.

Pages 682 and 683 should be deleted as the pipelines shown thereon are set up in detail in subsequent pages.

Now, the amount of money affected by this is that shown on page 683 of Exhibit 39 at line 11, $1,065,095.26. To correct for that error there must be correction made on page 669 of Exhibit 39 and I have included in Exhibit 39-A a corrected page 669 in which in this recapitulation the item of $1,065,095.26 is taken out. The new total for local area lines, as shown on corrected page 669 of 39-A is $1,877,681.35 as compared to an original figure on page 669 of Exhibit 39, line 17, of $2,942,776.61.

The new total on corrected page 669 of Exhibit 39-A [fol. 591] is carried forward to corrected page 351 of Ex-

hibit 39-A at line 31. The correction on page 351 then affects the total for mains which in Exhibit No. 39, page 351, line 32, was $43,025,965.41. The corrected total as shown by page 351 of Exhibit 39-A is $41,960,879.15. That total from line 32 is carried forward to page 49 of Exhibit 39-A at line 6.

This correction on page 49 of 39-A, therefore, changes the total for transmission system property at line 90, page 9 of 39-A.

In Exhibit 39 that total was, as shown on line 9, page 49, $55,260,406.88. The new total is $54,167,183.62.

Q. And that is carried over, also, on to page 2, is it not?

A. Yes, sir, that is carried forward to page 2 of Exhibit 39-A at line 17.

Q. That affects the total shown on line 17 of page 2, does it not?

A. It does. It produces at line 17 of page 2 the figure of $54,167,183.62 as compared to the figure on line 17, page 2 of Exhibit 39 of $55,260,406.88.

* * * * * * * *

[fol. 592] On page 38 of Exhibit 39, line 12, there is an error. The figure shown is $91. The figure should have been $991 and I have made that correction at line 12, page 38 of Exhibit 39-A. That correction does not change the totals at line 14 of page 38, Exhibit No. 39.

* * * * * * * *

On page 956 of Exhibit No. 39 I computed preliminary and organization expense at three-quarters of 1 percent upon $67,422,726.85 of direct construction costs.

I arrived at a figure of $505,670.45.

Q. Now, you have changed that figure, have you, by applying the three-quarters of 1 percent to your new direct construction costs?

A. That is correct.

[fol. 593] Q. And is that the figure which appears on corrected sheet 956, to-wit, $497,471.27, the corrected figure which has resulted from that computation?

A. It is. The base upon which three-quarters of 1 percent is computed comes from line 28, page 2 of Exhibit No.

39-A and is $66,329,503.59 and the amount estimated for preliminary and organization expense shown on line 3, page 956 of Exhibit 39-A is carried forward to line 29, intangible fixed capital, page 2 of Exhibit 39-A.

* * * * * * * *

On page 958 of Exhibit 39-A I have recomputed the items of administrative expense, law expense, engineering and supervision and taxes during construction. The rates at which these are computed are the same as those used in the computation in Exhibit No. 39.

However, the base figures to which the ratios are applied in Exhibit No. 39-A are those resulting from the corrections which I have made in the estimates of direct construction cost and they appear in column "D" on page 958 of Exhibit 39-A and may be compared with the similar items in Exhibit No. 39 or from the summary sheets of the individual classifications of property.

[fol. 594] The amounts computed for these elements of the undistributed construction expenditure, namely, administrative expense, law expense, engineering and supervision and taxes during construction are carried forward from page 958 to page 957 of that same exhibit at lines 1, 2, 3, and 4.

In a similar manner I have made correction on pages 959 and 960 for the item of interest during construction, using in this computation for amounts in column "C" the corrected amounts of direct construction cost which I have today explained, and I arrive on page 960 at line 11 at the figure of $1,836,547.54 which has been, in turn, carried forward to page 957, line 5.

Similarly with the item of miscellaneous construction expenditures and omissions. I have recalculated that item on page 961 of Exhibit 39-A and have arrived on line 13 at the corrected figure of $1,118,287.73, which has been carried forward to line 6, page 957 of Exhibit 39-A.

On this last-named page the corrected amount for undistributed construction expenditures in total as shown on line 7 is $7,647,897.58. This figure compares with a previous figure of $7,781,764.69.

The corrected figure has been carried forward and used on page 2 of Exhibit No. 39-A at line 30.

Page 2 is a summary of the estimate and with the corrections which I have outlined I arrive at a total reproduc-[fol. 595] tion cost new of plant property and business at line 36 of $83,833,448.54 which compares with the previous total as shown on page 2, line 36 of Exhibit 39 of $85,262,-766.09.

Q. Have you carried that forward, also, to your original letter of transmittal?

A. Yes, sir, which is page 1 in Exhibit 39-A.

Q. In other words, the total appearing in the last paragraph of your letter on page 1 is the corrected total which you have read from your summary sheet, page 2, headed "Reproduction Cost New" is that correct?

A. That is correct.

* * * * * * * * *

Trial Examiner: Exhibit 39-A is now offered in evidence. The ruling will be deferred until after cross-examination.

By Mr. Wheat:

Q. Now, Mr. Biddison, is there anything further you would like to say in explanation of any of the items contained in Exhibit 39-A?

[fol. 596] A. I would like to explain a price feature in connection with compressor stations. In estimating the reproduction cost on compressor stations in Exhibit No. 39, I used the purchase price of the last main units which had been purchased by Panhandle Eastern Pipe Line Company.

At the time of compilation of Exhibit 39 Panhandle Eastern Pipe Line Company was negotiating for the purchase of additional compressor units and have since that date placed a firm order with the Cooper-Bessemer Corporation.

On March 19, 1941 Panhandle Eastern Pipe Line Company purchased from Worthington Pump & Machinery Corporation one 1300-horsepower unit at a price of $54,384.80.

* * * * * * * * *

The Witness: The unit to which I refer is of the type shown on page 775, for example, of Exhibit 39, lines 2 to

8, inclusive, and also of the type, for example, shown on page 799, lines 2 to 8, inclusive.

On September 25 the Cooper-Bessemer Corporation quoted for engines of this style $63,410 each. This is an increase in price on those engines of about $6.75 per horse-
[fol. 597] power, 1300 horsepower units.

. . . . . .

On this system there are 42 such units of 1300 horsepower each, amounting to 54,600 horsepower. There is also on the system 23 units of 1000 horsepower each, amounting to 23,000 horsepower. These 1000 horsepower units are generally of the same type, but simply a little smaller in size, so there would be affected by such a price increase about 77,600 horsepower at $6.75 per horsepower or $523,800.

Q. Do you understand that this price quoted by the Cooper-Bessemer Company is a firm price for such units?

A. It is a firm price at which two units will be bought.

Q. By this company?

A. Yes, sir, and it is the price at which other units have been sold since June 1 of this year.

Q. By the Cooper-Bessemer Company? A. Yes, sir.

. . . . . .

[fol. 598] Q. Have you anything further to say now with respect to these major compressor units?

A. Yes. In this system there are two 600 horsepower vertical compressor units and six 650 horsepower vertical units. That is 5,100 horsepower. Six of these units were bought in 1940 at $26,897 each. There has been purchased on a proposal dated October 2, 1941 two additional 650 horsepower units at a price of $32,956 each.

Q. Those were purchased by this company, were they?

A. Yes, sir. This is an increase of about $9.34 per horsepower which applied to a 5,100 horsepower would amount to $48,634.

. . . . . .

In September 1941 the Cooper-Bessemer Corporation quoted $13,932 f. o. b. factory for 200 horsepower vertical [fol. 599] gas engine, directly connected to a 125 K. W. gen-

erator. That may be compared to a purchase price in January of '37 of $10,610 for such units.

. . . . . .

Now, I have not had an opportunity to run through the effect of this last purchase order upon the auxiliary engines, but inspection indicates that there would be some substantial additions by giving effect in all the compressor stations to this last price for the auxiliary units.

Q. Well, how much per horsepower is this price now over 1937?

A. Well, it is $16.61 a horsepower increase, but I have not had an opportunity to run the matter through for complete comparison with the prices used in the valuation on the auxiliary units.

Q. Well, is that because you have not had time owing to the pressure of other work in connection with this case?

A. That is right.

. . . . . .

Q. Now, Mr. Biddison, have you anything further that you would like to say with respect to these particular mat-
[fol. 600] ters which you have just been discussing?

A. Only that while I have called attention to these increases in present day costs of main compressor units, I have not given them any effect in the corrections which I have made in Exhibit 39-A.

I want to call attention, further, to the fact that they, themselves, point to what is pretty well known, that we are in an era of advancing prices and prices on all equipment seem to be headed toward increments such as I have pointed out with regard to these compressor units or more.

In connection with the contract with the Cooper-Bessemer Corporation for the two 1300 horsepower units there is a provision in that contract by which the price may be increased over the quoted price, any such increases being based upon specified indices of labor rates and material rates.

There is specific provision in the contract for increasing the price. Nobody knows what the price might be when the engines are actually delivered.

Q. Well there is no provision for decreasing the price, is there? A No, there is none.

Q. The provision only goes toward increases, is that correct?

[fol. 601] A. That is correct.

* * * * * * * *

[fol. 622] O. W. MORTON, having been previously sworn, resumed the stand and testified further as follows:

* * * * * * * *

[fol. 623] Q. In carrying on your duties as an employee of the Panhandle Eastern Pipe Line Company, have you had occasion from time to time to estimate the market requirements in m.c.f. of that company?

A. I have.

Q. Over what period of time have you made those estimates?

[fol. 624] A. Ten years.

Q. Is that done as a matter of curiosity or is there a particular necessity for it?

A. That is one of my annual assignments.

Q. Why is it necessary for those estimates to be made?

A. The company requires those estimates in order that they can have some idea of the gross revenue they will receive during the ensuing year.

Q. They need to know both the revenue they will receive and the amount of gas they will probably sell?

A. Exactly.

Q. In order to have their proper facilities available and make all necessary arrangements?

A. Yes, sir.

Q. In making these estimates you estimate the total consumption, I assume, that is, the total market in m.c.f. Do you also make any estimates as to the maximum day requirements?

A. We also estimate maximum day requirements.

Q. Why is it necessary to estimate the maximum day requirements?

A. Those estimates are necessary in order that the company may plan its construction program.

Q. Have you recently made an estimate of the require-
[fol. 625] ments of the company over the period of 1941 to 1946? A. I have.

Q. Are the results of that study incorporated in Exhibit 40 which has been marked for identification?

A. They are.

Q. I notice that in the exhibit you apparently divide your estimates into two general divisions, west of Dana and east of Dana. Will you point out on Exhibit 15, which is on the wall, the point where that division is made?

A. Dana is located very near, almost exactly upon the Indiana-Illinois state line at the point I indicate here.

Q. Does Panhandle Eastern, itself, transport any gas beyond Dana in an easterly direction?

A. It does not.

Q. What does it do with the gas at Dana?

A. It sells the gas at Dana to the Michigan Gas Transmission Corporation for resale by that corporation or it delivers to Michigan Gas Transmission Corporation gas for delivery by that corporation on account of Panhandle Eastern.

Q. All points west of Dana are those from which Panhandle Eastern delivers its own gas?

A. That is correct.

Q. Without the use of some intermediate transporting company?

[fol. 626] A. That is correct.

Q. Is that the reason why you use Dana as the dividing point?

A. It is a natural division point in all of our statistics and all of our work.

Q. Yes. I notice that you have divided the areas East of Dana into several divisions. You have a Michigan division and an Indiana and Ohio division and a Kentucky Natural Gas Company. The Michigan gas is further subdivided into "Detroit," "Other Industrial" and "Domestic, Commercial and Other."

By the "Detroit" gas you refer, I assume, only to the gas which is delivered at Detroit?

A. That is correct.

Q. By the use of the transportation facilities of the transmission company? A. Correct.

Q. What do you refer to as "Other Industrial" shown on lines 5 and 6 of Exhibit 40?

A. Why, that is industrial sales that we expect to make. You will see that there is none being made in 1941.

Q. That was what I was going to ask next. There is none for '41. You expect to pick that up in '42. Is that correct? A. That is correct.

[fol. 627] Q. And where do you expect those sales to be made?

A. As it states here, in Michigan.

Q. Then line 8—

Mr. Lee: Is the Detroit area, possibly, in what we refer to as the Consumers' Power Area?

By Mr. Culton:

Q. Can you name some of the cities or towns that you have on that?

A. The first that comes to my mind is Pontiac and Flint. There are numerous others.

Q. Does Panhandle Eastern have any industrial sales of its own in Detroit direct?

A. Panhandle makes no direct sales.

. . . . . .

Mr. Lee: Well all of this, lines 5 and 6 and 8 and 9, are sales that you contemplate making under the Consumers Power Company contract, isn't it?

The Witness: Not exclusively. We have just used a general term there "other" meaning sales other than those to Detroit in the State of Michigan.

By Mr. Culton:

Q. You do have on line 8 some sales being made during 1941. What area did you have in mind for those sales?

[fol. 628] A. Well, that comes under the general heading of "Michigan Other" and is the domestic and commercial sales which are now being made in the State of Michigan other than to Detroit. Specifically I refer to Monroe.

Q. There are some parts in Michigan which the company is already furnishing gas to or in addition to Detroit?

A. That is correct.

Q. The Indiana and Ohio load seems to be divided into two divisions, the "Industrial" and "Other," the "Industrial" being 10,000,000 m. c. f.

A. Correct.

Q. What areas are those?

A. That is, as it states, Indiana and Ohio principally, almost entirely located in the Muncie area.

Q. Then, you have "Other" listed there under line 13. What area do you refer to there?

A. That is domestic and commercial sales and unaccounted for and company used gas in the states of Indiana and Ohio.

Q. In other words, the company uses some gas in its operations?

A. The gas which Michigan Gas Transmission Corporation uses is to Panhandle Eastern a sale.

Q. I see, so that it is the company use gas of the Transmission Company that you refer to there?

A. That is right.

[fol. 629] Q. The gas is sold to the Transmission Company and by it is used in transporting the gas which is actually sold? A. Yes.

Q. Line 15, you have an allowance for Kentucky Natural Gas Company. What area is that?

A. Kentucky Natural Gas Company has a gas pipeline coming up from the South, intersecting the Michigan Gas Transmission Corporation's line east of Dana and that is the sale to which the title "Kentucky Natural Gas" refers.

Q. I notice that in your estimates for 1942 and 1943 you are assuming a probability of slightly less gas being disposed of through that method than during 1941 or subsequent years. What is the reason for that circumstance?

Trial Examiner: You mean the reference, Mr. Culton, on line 15?

Mr. Culton: Yes, sir, 1942 has 1,720,000; 1943, 1,690,000.

. . . . . .

A. Well, that is based upon our past performance with this sale, also due to the fact that recently a new contract [fol. 630] has been entered into with Kentucky Natural and the requirements of that contract are for less gas during '42 and '41 and with respect to '43 and '42, the esti-

mator felt that '43 would be less than '42, because during the year '42 Kentucky Natural would be making up a shortage in their takes which now exists. By the year '43, during which the shortages would have been made up, the sale for '43 would be that which is called for by the new contract.'

Q. In the area west of Dana, you have two general divisions, the "Industrial" and the "Domestic and Commercial." Are there few or many towns and communities served in that area?

A. There are many, I would say.

Q. In making this investigation, did you take into consideration the past history in those various areas?

A. The past history is our chief guide in preparing all these estimates.

Q. I notice that as to each of these different types and areas of consumption you show maximum day's obligations. That, I take it, is intended to present your view of the maximum requirements any one day in the year in any of those different areas.

A. The maximum day shown under each classification is the contribution of the respective classes to the system total maximum day rather than the individual maximum [fol. 631] day of each class.

Q. Is it true that the maximum day for any particular area would necessarily be the maximum day for the entire line? What I mean to say, stating it differently, would the maximum day for the entire line always be the maximum day for an individual area?

A. We have the proposition of diversity there. The thing you have in mind, no doubt, is whether or not the total maximum day to be taken care of on our line is equal to the sum of all individual maxima of all the different points of delivery.

And the answer is no.

Q. How do you arrive at the maximum day for the line then?

A. We use past performance and experience, we consult the individual maximum days of the different points of delivery, we study previous years' maximum days and then we arrive at what, in our best judgment, is the contribution of each individual delivery to the maximum day

and then we add all of those and that gives us the maximum day for which we will have to construct capacity.

* * * * * * *

[fol. 632] Q. I ask you to examine Exhibit 41. Was that graph prepared by you or under your direction? A. It was.

Q. Will you explain it to the Examiner and for the purposes of the record?

A. On Exhibit 41 I have plotted cost of gas plant against total annual sales of the Panhandle Eastern Pipe Line Company and subsidiary companies' system. The scale applying to gas plant reads in millions of dollars and the scale applying to annual sale reads in billions of cubic feet.

Q. What did you use as the gas plant, for the number of millions of dollars?

A. We used what is called for in our classification of accounts, "Gas Plant Classified" at the End of Each Calendar Year.

Q. All right, proceed.

Mr. Gorman: That is taken from the books, of course.

[fol. 633] The Witness: It is.

The bottom curve or graph is "Annual Sales" and is self-explanatory, I believe.

By Mr. Culton:

Q. The graph, in short, shows an increasing amount of sales annually and, during the same period of time, increases in the gas plant account. A. It does.

Q. I note two lines, one marked 1940 and one marked 1941. Those two periods are marked "Est." What do you mean by that?

A. It means that I have estimated those values.

Q. And that purports to show the year 1941 which is not yet completed? A. It does.

Q. Were any portions of the figures used for that period actual figures?

A. We had six months actual to guide us in making the estimate.

* * * * * * *

Mr. Gorman: Do I understand from your statement that only the last six months or the last year of which you

[fol. 634] have been speaking was estimated and the first six months of 1941 are actual figures?

The Witness: I believe you mean, does the point half way over from 40 to 41 represent the actuals?

Mr. Gorman: That is right.

The Witness: It does not.

* * * * * * * *

The Witness: (Interposing) The whole year is estimated and I had, in preparing the estimate, the advantage of six months actual.

* * * * * * * *

The Witness: I might say that I feel quite certain, although I haven't tried to spot it on here since I drew it, that that midpoint is just about the six months actual.

Mr. Gorman: So the answer is really that despite the fact that you had the first six months' figures available you still estimated for that period.

The Witness: That is true.

Mr. Goodman: May I ask a question here? Is there any significance in the slope of the curve? In other words, does that indicate that the sales increased in the ten [fol. 635] periods marked out there at that rate or is it to be read as from point to point?

The Witness: You read this from point to point, that is to say, if you will look at it there, 1933 the figure is 11 plus. In 1934, the annual sales were 13 plus.

Mr. Goodman: I see. So that really to be really accurate the line is not significant, it is just the points on the line that are significant.

The Witness: Yes.

By Mr. Culton:

Q. That isn't divided into 12 units to show 12 months, it is merely the paper it is prepared on? A. Correct.

Q. Returning back to Exhibit 40, do the estimates shown on that exhibit evidence your best judgment as to the requirements of Panhandle Eastern during the years

shown on that exhibit for those different areas and for the line as a whole and the maximum day requirement during those same periods? A. It does.

* * * * * * * * *

Trial Examiner: The proposed exhibits, identified as 40 and 41, have now been offered and the ruling on admission will be deferred.

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[fol. 639] Mr. Gorman: Did I understand your testimony to be that the construction program for the following year of Panhandle Eastern is based upon your estimate of volumetric demand for that period?

The Witness: The construction programs of past years have been based upon my estimate of maximum day and sales similar to this estimate I have prepared here. As to the future, and that was your question, I can't answer it.

* * * * * * * * *

[fol. 647] Mr. Lee: Is this maximum day that you have set forth in your exhibit what you anticipate to be the maximum day under the Detroit contract, or the maximum [fol. 648] day for the entire system west of Dana?

The Witness: I don't understand your question.

Mr. Lee: In Exhibit No. 40, you have 1941, M. C. F., 24,000,000, line C.

Then, you have maximum day, 102,604. Now, how do you arrive at that maximum day? Is that a maximum day for the entire system, the average west of Dana, or is it the maximum day for the Detroit area which will affect the contract for the Detroit area?

The Witness: I previously testified, Mr. Lee, that the individual max days shown here are the contribution of the individual loads to the system max day upon the system's max day.

Mr. Lee: How do you apportion to the Detroit area alone?

The Witness: It happens that the 102,604 is an actual figure. That was the contribution of Detroit to the total of 240,394 on the system's maximum day.

Mr. Lee: Has that figure any reference to the maximum day referred to in the Detroit contract which fixes the demand charge?

The Witness: It has none.

* * * * * * * *

Mr. Lee: Your estimates for the next five years so far as the Detroit area is concerned show a continuing increase [fol. 649] in the volume of gas you expect to sell there; isn't that right?

The Witness: Yes, sir.

Mr. Lee: Did you have any correspondence with the Michigan Consolidated Gas Company and the distribution company, that you used in making up that estimate?

The Witness: I do not.

Mr. Lee: Did anybody for the Panhandle have it and give it to you?

The Witness: They did not.

Mr. Lee: Have you ever had any factor in making up your estimates for Detroit area, did you ever have any factor in your mind for the diminution in the use of gas for automobile companies there; by automobile companies there by reason of any defense program that might reduce the amount of gas sold—had that ever occurred to you?

The Witness: That never occurred to me.

Mr. Lee: And, of course, you used nothing like that in this estimate?

The Witness: I didn't use that. I wouldn't say anything like that, but I didn't use that in this estimate.

* * * * * * * *

[fol. 652] Mr. Chamberlain: Mr. Morton, in order that the record may be perfectly clear, will you let us know whether the maximum day that you have indicated on Exhibit 40 is the day of the highest send-out for any day of the year, or does it refer to the highest send-out during the four winter months?

* * * * * * * *

Mr. Chamberlain: I am referring to the term "Maximum Day."

* * * * * * * * *

Mr. Chamberlain: In other words, what is your defini-[fol. 653] tion of "maximum day" as respects this exhibit?

The Witness: "Maximum day" as shown on line 27 is the total maximum day which I estimate will be experienced on The Panhandle Eastern Pipeline System on the day of the highest demand for the 12 months' period.

Mr. Chamberlain: Yes, and is your estimate not made with respect of the higher demand of the four winter months?

The Witness: It happens that our highest demand does occur during the four months' period, and this estimate contemplates that the highest maximum demand will occur during the winter time.

Mr. Chamberlain: Do you remember the date of the maximum demand in the current year?

The Witness: It was February 19.

Mr. Chamberlain: And your computation with respect to the Detroit maximum day was with reference to the maximum day upon the system rather than the maximum day at Detroit?

The Witness: Yes, the 102,604 shown here is Detroit's contribution to the Panhandle Eastern maximum day; not Detroit's maximum day.

* * * * * * * * *

C. H. Hinton called as a witness for the Panhandle [fol. 654] Eastern Pipeline Company, having been first duly sworn, was examined and testified as follows:

* * * * * * * * *

Q. You live in Kansas City? A. That is right.

Q. Have you caused to be prepared written testimony in this case? A. Yes, sir.

Q. Also, some schedules presented in connection with it? A. That is right.

Q. And three separate maps? A. Two development maps and one area map.

Mr. Culton: Mr. Examiner, at this time, may the record show that we are requesting that a document entitled "Written Testimony of Witness C. H. Hinton" be marked for identification as Exhibit No. 42.

That a document entitled "Schedules Presented in Connection with the testimony of C. H. Hinton" be marked Exhibit 43 for identification.

That a map entitled "Development Map Basic Load" [fol. 655] be marked Exhibit 44 for identification.

That a map entitled "Development Map Anticipated Increased Loads" be marked Exhibit 45 for identification.

That a map entitled "Group Area Map" be marked Exhibit No. 46 for identification.

Trial Examiner: These exhibits may be so marked for identification.

• • • • • • • •

Q. Are the facts set out in your written testimony true and correct to your best judgment? A. In my best judgment, yes, sir.

Q. Are the exhibits and maps presented in connection with your testimony correctly prepared in your judgment? A. Yes, sir.

• • • • • • • • •

[fol. 671] Trial Examiner: Do you wish us to understand, Mr. Hinton, the substance of your written testimony is under oath, and in effect is such as you would give in response to certain questions and answers?

The Witness: Yes, sir.

Trial Examiner: So far as statements of facts are made, you believe the statements are true, and insofar as opinion is concerned, they represent your best judgment?

The Witness: Certainly.

By Mr. Culton:

Q. Mr. Hinton, without going into the general testimony given in the earlier portion of your written statement but addressing myself to the testimony commencing on page 21 of Exhibit 42, I desire to ask you with respect to a number of those items to give the reason for them and point out on the map just exactly where the work is to be done.

I notice that you make no distinction between the basic [fol. 672] load and the anticipated load for the year 1941 and the anticipated loads for that year is on page 26.

That is just because the year is just about over and you have a pretty good idea as to what will be done; is that correct?

A. That is correct. The change in the load would not change the expenditure.

Q. Yes. So that counsel may understand you have prepared two maps which show the amount of work which would be done, first under the basic load, and second under the anticipated load.

. . . . . .

[fol. 673] Trial Examiner: In order that we may have no confusion, let us try and refer to the basic load map as the map marked for identification as Exhibit 44, and the other as Exhibit 45.

. . . . . .

Q. Did you use the same color scheme in the preparation of those two maps?

A. Yes, sir.

Q. Would you please explain to the Examiner, and for the purpose of the record, just exactly what your color scheme used means and if you need to go to one of the maps to point out, you may do so.

. . . . . .

A. (Going to the map) On the schedule there, it shows that there is to be some work done through 1941. Now, all that can be shown on a map by symbols is shown in a grey color.

That takes in the installation of two well compressors.

. . . . . .

(Interposing) The grey shows the work to be done in 1941.

[fol. 674] The brown, 1942.

The green, 1943.

The orange color, 1944.

The purple, 1945.

The blue, 1946.

Trial Examiner: Is that true of both maps, Exhibit 44 and 45 as well?

The Witness: Yes.

Mr. Littman: May I inquire are those the legends marked on the maps themselves?

The Witness: Yes, sir, down in the right-hand corner.

Mr. Culton: The lower right-hand corner.

Explain what the red is on those maps, and the yellow.

A. The leases shown in the dark red are leases that were drilled previous to June, 1941, and the yellow acreage is acreage which is under gas purchase contract.

The lighter pink acreage is acreage which is under lease to the Panhandle Eastern and which will be drilled at a later date, that is, after the five-year period which this map covers.

Q. You do not contemplate drilling those particular leases during the five-year period at this time?

A. No, sir.

Q. Under either the basic load or the anticipated load?

[fol. 675] A. Only those that are shown by the color that is in the lower right hand corner of each map.

* * * * * * * * *

[fol. 676] Q. The first item on 1941 is construction installing a specially designed liquid separator between Sneed and Hansford Station in Texas, costing $26,300. Has any work been done on that?

A. It is under construction and I believe that it is pretty well dug out now. I think they have had just a

little delay on getting the separator tanks, and I don't know just exactly what stage that is in right now, but I know that it is under way.

Q. In the process, will you point out about where that will be on the map?

A. I don't show on the map that because I didn't have any symbol, but it would be right in this area right in here (pointing).

[fol. 677] Q. What is the purpose of that separator?

A. That is to try to get away from the icing conditions in that line that has prevailed over the past several winter's operations.

Q. Explain what you mean by the icing conditions.

A. Well, when the gas leaves the compressor station at Sneed, shown on the map there, it is heated and as it goes on down the line, that gas cools and hydrates are formed in that line and have caused us considerable trouble, and the flow efficiency has gone down so low in the past year's operation that we are putting this one in addition to further work on the dehydration station, the plant there, to try to get better flow efficiency in the line.

It is really a super drip, you might call it. In other words, it is designed to try to take the moisture from the pipe line.

Q. In other words, it is what might be termed an advancement in the art of operating pipe lines?

A. That is right.

Q. You are attempting to get away from certain conditions that now work against economic operation.

A. Yes, sir.

Q. The next item which you have is two individual well [fol. 678] compressors in the Burnett field, Burnett well No. 108, and Bivins well No. 91.

Q. What is the necessity for those two field compressor stations, or well compressor stations?

A. That is due to the formation pressure. In those wells, the Burnett well pressure is down to a point where it is impossible for it to produce any gas into our pipe

lines against our required operating pressure, and the Bivins well is not quite as bad.

There have been a few days this year that we could get our pressures down low enough to take a slight amount of gas from that well, but we cannot depend upon it for any peak load delivery, and that is the reason we are installing that compressor there.

. . . . . .

[fol. 684] Q. Mr. Hinton, when we adjourned yesterday, we were discussing two individual well compressors for two wells on the Burnett and Bivins leases in the Panhandle field. You stated that it was necessaary to install these well compressors at these wells in order to boost the pressure up to where they would enter the pipe line at the present working pressure, I believe.

A. That is right.

Q. What stage is that construction in at this time on those two wells?

A. The compressors are in the warehouse at Fitch, Texas, and we are waiting on some of the smaller parts to start the actual installation of the two units.

Q. All of the equipment is either now on hand, or on order?

A. Yes. And, it is all there except just a few minor parts.

Q. Are any of the gas purchase contract holders in [fol. 685] that field from which Panhandle Eastern is purchasing gas at this time using compression to enable their production to enter the pipeline?

A. Yes, the Huber Petroleum Company has 19 wells which they produce through one main station.

There is one of those 19 wells, the Chapman well, which will produce during the lower periods of working pressure on the line, and it doesn't go through the compressor all the time, but the other 18 are on all the time.

They have another group of three wells which are on a compressor all the time; in addition to the Huber Company, the King Oil Company has—they have two wells

which are produced by means of compressors to get the gas into our lines.

Q. What is your judgment as to the necessity of further use of field compressor stations or well compressor stations in the latter years of that field?

A. Why, I think there will be many field compressors in the next few years.

Q. The next item which you have for 1941 on both the anticipated load and the normal load or the present load about which you have testified, is to construct a warehouse at Zofness Camp.

Just what is Zofness Camp? Can you point it out on exhibit No. 45?

* * * * * * * * *

[fol. 686] (Going to the map) That is in section 55 and that camp is located right up here (indicating), as I remember. It is northeast of the northeast of the northwest.

Q. Section 55; what block is that?

A. 6-T, T&NO.

Q. When was the Zofness Camp constructed?

A. 1930, the first building was done there, and in 1931 we wanted to fence it and I surveyed that camp at that time. It was in August of 1931 that we definitely tied the camp location in.

Q. Why is there a necessity for a warehouse at Zofness Camp at this time?

A. Well, in the years before this, why, we did our warehousing out of Fitch, Texas, but about three or four years ago—maybe a little longer than that—the railroad bridge which we used to cross from the Fitch Warehouse—

Q. (Interposing) That is across what? The Examiner may not know.

A. The Canadian River washed out, and that made it necessary to make a trip of about 44 miles to get from the Fitch Warehouse out to the Zofness Camp, so this year we built a small warehouse there so we could carry the necessary stock of supplies over there without making that [fol. 687] long haul from the Fitch Warehouse.

* * * * * * * * *

[fol. 688] Q. The expenditures, $500.00, I believe that is the amount for that warehouse this year. Has this already been completed?

. . . . . .

[fol. 689] A. That was completed on, some six weeks ago, I believe.

Q. You have included in your figures here, all of the capital construction completed after the first of July, 1941?

A. I think it has been so noted on here.

Q. Yes. I just wanted to make that clear, that even though it has already been completed but, if it is completed since June 30, 1941, you are showing that here?

A. Yes.

Q. The next item you have on both types of load is to drill a well near Guymon, Oklahoma, in the Hugaton field. Have you already selected the point at which that first well will be drilled?

A. Yes, sir.

. . . . . .

That well will be located approximately in the center of the west half of section 25, township 3, range 15. It is noted on the map as Central Life. The names of all the landowners are noted on these exhibits 44 and 45 where we expect to drill wells during the next 5 and 1/2 years.

Q. In other words, by finding that point on the map and referring to Mr. Wallace's exhibit giving the names of the landowners, you can check the lease.

A. That is right. We have to do that to figure our [fol. 690] rentals, also.

Q. Yes.

Mr. Hinton, is there any particular necessity for starting construction in the Guymon, Oklahoma area:

A. Yes.

. . . . . .

It is not so much the matter of having to have the gas this winter that leads us to start the drilling of this well. It is due to the fact that that lease expires next year before June, I believe, next year, and we feel that we

should get this under way because that particular lease has been top leased by another company, and the only way we can hold that lease as a part of our reserve is to drill it before the expiration date.

Q. The Examiner, I am sure knows, but someone reading the record might not know what you meant by "top leasing".

A. I mean that another company has taken a lease on this particular land that becomes effective at the time of our expiration.

Q. And your lease provides that it is to be in force for a certain period of time and so long thereafter as production is had.

A. That is right.

Q. And if you get production prior to that time, your lease will continue and their lease will not become ef- [fol. 691] fective. I did a bit of leading there but I believe you can understand why.

Mr. Littman: I was going to ask the witness to state what company has top leases.

The Witness: Hagy, Harrington & Marsh.

Mr. Littman: What date is it expected that the well will be drilled near Guymon, Oklahoma?

The Witness: We expect to commence the drilling of that well probably in the next three or four weeks.

Mr. Littman: But how long will it take you to complete that well?

The Witness: It should be done four to six weeks after the date we start commencing to drill.

By Mr. Culton:

Q. The next item you have is to purchase an automobile for the use of the field forces in the Hugoton field. What is the necessity for that expenditure?

A. Well, we are going to have a heavier load out of the Hugoton field this winter than we ever had before, and last winter we were just operating about down to the last peg during our heavy pull, and we are going to have to put on this additional automobile to take care of the manipulation of the load because the Texas line will be operating

at full capacity and the manipulation of the load, or the taking care of the rise in fluctuations of the daily deliveries will be taken care of out of the Hugoton field.

. . . . . .

[fol. 692] Q. The next item is to construct the Cimmaron River jetties to protect present river crossings from high water. Will you show the Examiner just where that Cimmaron River crossing is, referring to exhibit 45?

A. It is directly south of the Liberal, Kansas com-[fol. 693] pressor station site. It is located in section 24, township 33, range 32.

Q. Has that construction been under consideration for some time by the company?

A. Since the last two or three high waters, yes.

Q. In other words, the last two or three high waters, on the Cimmaron River has caused you to become a little bit concerned about the crossing staying in without further protection?

A. There is considerable evidence of washing there now.

Q. Yes. These jetties, just what are they? How are they made?

A. Well, they will probably be a pipe or piles driven as deep as they can get them into the ground there. They will probably pour concrete around the base.

. . . . . .

And then they will probably string wire along there and make it just as stable as is possible to divert washing at the points desired.

. . . . . .

[fol. 694] I believe that the necessary right-of-way has been purchased there to enable the company to go ahead with the construction on the banks, but I haven't been down there for the past five or six weeks.

. . . . . .

Mr. Littman: May I inquire whose estimate is this $6,500.00, the estimate to construct the river jetties?

The Witness: That comes from the engineering department. They prepare all estimates of that type.

Mr. Littman: Then I take it it is not your own estimate?

The Witness: No, sir.

* * * * * * * *

Q. Now, in 1942 we find some substantial differences between the required expenditures on the basic load and the required expenditures on the anticipated load; the aggregate expenditures under basic load being $2,756,000, while the aggregate expenditures on the anticipated load are approximately $4,500,000. For that reason, we will discuss the differences between those requirements as we go along.

* * * * * * * *

[fol. 695] Trial Examiner: Would it not be well to indicate just the source of the figures which are included in your proposed exhibit 42 at this time?

Mr. Culton: Yes. What is the source of the figures which you used in your computations for all these expenditures?

The Witness: Well, I believe that—I tried at least to cover in this testimony an explanation that the prices used were either those of Mr. Biddison, or those which we had estimates on, or quotations on that were applicable to work that we were going to do in the near future.

By Mr. Culton:

Q. Now, with respect to the wells, we are going to get into the expense of drilling wells. What figures did you use on that?

A. We figured the unit price as worked out by Mr. Biddison which was an average of several—many contracts, and we used for the pipe, the present price, present quoted price and for liner, or tubing, we used the same, and for the cost of installing liners, and installing tubing, we worked that out—we had no prices on tubing so we [fol. 696] broke that down as best we could in our own department, and got our figure for the tubing. On liners, it was based on past experience. On acid treatment, also on past experience.

* * * * * * * *

[fol. 697] Q. During 1942 under both estimates, you have drilled five wells in the Panhandle field, including acidation and liner. You would be in a position to advise the engineers for the Commission, or any other party just exactly the location of those wells that you are talking about there?

A. I think they are all rather clearly shown on the map there. It is all of the leases shown in brown color on either exhibit 44 or 45.

* * * * * * * *

Q. All of those wells are in Moore County, is that correct?

[fol. 698] A. Yes.

Q. Now, in your report, you say including acidation and liner. What do you mean by "acidation"?

A. By acidation we mean the acid treatment of wells which consists of a treatment of hydrochloric acid; usually, the total treatment will run 10,000 gallons. That is what we are using now and this treatment is usually put in in the form of a light shot as we call each injection, about 500 gallons of acid, to 500 gallons of water, and this is pumped down with a compressor back into the formation just a little bit so that it has a chance to clean the side wall of the well bore.

Then the well is opened, and it is allowed to blow out, and this wash treatment is usually repeated until we get a fairly clear return.

Q. What do you mean by "clear return"?

A. I mean that the liquid coming from the well is not carrying any great quantities of larger pieces of lime and it is not cloudy with lime dust.

Q. What does the acid do to the formation?

A. Well, I believe the best term that comes to me, it disintegrates it. It just eats away the lime and creates larger pore space and connects the pore space to a greater extent allowing a much larger flow of gas to the particular area on which the acid works lying near the well bore.

[fol. 699] Q. Does it create any more gas down in the reservoir?

A. No, sir. But it does increase the deliverability of a well and, in many cases, a great deal.

Q. In other words, it increases the ability of the well to deliver volumes of gas over a certain period of time?

A. Yes, sir. And greater volumes at the same working pressure.

Trial Examiner: Just as a matter of general information, may I ask at this point, from what percentage, roughly, of the wells on which you rely is oil also produced?

The Witness: They still produce oil from some of those Huber wells on the Continental lease and we have one that is trying awfully hard to make an oil well out of itself.

By Mr. Culton:

Q. Except for those three, none of the wells produce oil at all? A. That is right.

[fol. 702] Q. Now, you have explained the acidation. What are the liners?

A. The liners are pipes which will fit inside the produc-[fol. 703] tion string which are perforated usually with slots about 1 inch by 12 to 16 inches, that are placed through the actual pay.

Q. By "pay" you mean the producing portion of the formation?

A. The producing formation, and these slots enable the gas to come into the well bore; but at the same time, keep the wells from caving, that is, where there is a shale break, or loose material, oftentimes the wells have a tendency to continuously cave, and fill up the well bore with these rocks, shale pieces, and it is necessary to blow those wells very often, and these liners are installed to keep the well bore free from cavings that is the primary purpose of them.

Q. So those reading the record might not understand what you mean by "blowing the well"—

A. By blowing a well, I mean that the well is opened to the full size of the production string to atmosphere and allowed to blow.

Q. In others words, the gas goes off into the air?

A. Yes, sir.

Nothing is holding back but atmosphere.

Q. That is right, and as it goes out it carries these cavings out with it?

A. That is true. As long as the pressures are up as [fol. 704] high as they are now, it is rather easy to keep a well bore clean, but as these pressures—

Q. That is, by this blowing process?

A. By this blowing, but as the pressures go down, why, it is not going to be possible for those wells to carry out the same amount of cavings and therefore, these liners, we feel will be of great advantage and we are installing them somewhat earlier than might be termed necessary, because we are looking to the curtailment of any gas waste that is incurred in blowing wells to just clean them.

Q. In other words, when you blow a well, you just lose the amount of gas that goes into the atmosphere in connection with the blowing; is that correct?

A. To a certain extent, you do, Mr. Culton.

Q. That is, there is no utilization of it except for cleaning purposes?

A. Not at that particular time but by blowing a well, you clean out the permeability back from the well bore, and I think that enables a better migration of gas, but it really wouldn't be felt for several years.

Q. I see. Now, are you at this time, acidizing and putting in liners in connection with all of your new wells, as you drill them? A. Yes, sir.

Q. And you provide in subsequent portions of your [fol. 705] statement here expenditures for installing liners and tubes and acidizing old wells as the years go by?

A. That is right.

Q. What is the ordinary cost of acidizing the wells in the Panhandle? Is it exactly the same in all wells?

. . . . . .

A. About $1,550.00.

Q. What is the ordinary cost of installing a liner?

. . . . . .

A. That varies with each well.

Q. Due to the depth of the well?

A. Due to the length of open hole.

. . . . . .

That is, from the bottom of the producing string down to the total depth of the well.

* * * * * * * * *

Q. Could you give us roughly what the approximate amount will be for them?

[fol. 706] A. I would say from $400 to $700; that would be about as approximate as I would want to go.

* * * * * * * * *

Q. In item "b" for the year 1942, in both classifications, you provide for installing liners in two old wells in the Panhandle field. Have you found already that those liners are needed.

A. Yes, sir. If we didn't feel that they would be of advantage, we wouldn't have them on our next year's budget.

* * * * * * * * *

[fol. 707] Q. What do you mean by "tubing"?

A. I mean by tubing that we install a smaller string of pipe clear down to the bottom of the well to carry off water which is coming into the well bore without trying to raise a full column of water through the producing string.

Q. By the well bore, you mean that part of the producing formation around the bottom of the well, bottom of the hole—

A. The well bore, I mean that is the hole itself to the producing formation.

Q. And the water is coming in down at the bottom of the hole, or somewhere down there?

* * * * * * * * *

A. On this particular well, I don't think it is bottom-hole water. It is caused from a condition down around that well. When this well was first started, the contractor lost the hole, that is, he either got a crooked hole or he stuck the tool—it was before I was down there, and I don't know, and he moved over and the same thing happened again, and this well he finally completed—we bought it from another company—and the water seems to be com-

[fol. 708] ing in from one of those old holes which were improperly plugged.

Q. Do you remember the name of that well?
A. Yes, Sneed No. 23.

* * * * * * * *

Q. After you drill wells, how do you get that gas into your gathering lines? Through well lines or just what do you do?

A. Yes. If, of course, at the completion of the well, we put on what we term a "Christmas tree" and this goes to a well line through the well meter and then on to the gathering line itself.

Q. What do you mean by a "Christmas tree"?

A. Well, that is an oil term that originated probably in some high pressure field where the head of the well looks like it was decorated for Christmas, and it is just a term that has carried on down through the years.

Q. It has the various connections?

A. That is right.

Q. By which you control the amount of production from the well; is that correct?

A. That is correct.

Q. And it also has certain connections by which you can open that well to the atmosphere?

A. That is right.

* * * * * * * *

[fol. 710] Q. Now, you say after your gas comes from the Christmas tree, it goes to the well lines? A. Yes, sir.

Q. Where do the well lines carry it?

A. To the gathering lines.

Q. Now, en route between the well and the gathering lines, is that gas measured?

A. Yes, sir. That passes through an orifice meter.

* * * * * * * *

[fol. 711] Q. In other words, you determine the pressure on the upstream side and the pressure on the downstream side, and the differential? A. That is right.

Q. And then you apply certain well recognized tables in determining how much gas that showed to have passed through the pipe? A. I think that explains it.

Q. This measuring is all done in connection with the meter?

* * * * * * * *

Q. And what else do you have in connection with that meter? Do you have a station of some kind enclosing that [fol. 712] meter? A. Just a regular meter house, yes.

Q. Under item "e," of each of these tables, you show laying well lines for five new wells, amounting to $15,395. Do your papers show just exactly what the distances were on each of those well lines so they can be added together?

A. Yes.

Q. And the appropriate prices applied and you reached this $15,395?

. . . . . .

Q. These five new wells that you are expecting to serve, by those well lines, are the five wells that are referred to in subdivision "a"? A. Yes, sir.

. . . . . .

Q. Item "f", that is to construct five measuring stations. Those are the stations where you house the meters. Does that include the cost of the meter? A. Yes, sir.

Q. And everything else used in connection with that? [fol. 713] A. That is the complete meter and the house for it.

Q. Now, item "g", on the basic load, and item "h", on the anticipated load are to increase the capacity of the gathering lines from Zofness to Sneed by looping the existing line between those points and to construct additional gathering lines.

Will you point out on exhibit 45 the portion of the gathering line which you expect to loop during 1942?

A. This portion of the line is shown in brown (indicating) and we expect to loop down to the junction here (indicating) with 26 inch pipe.

. . . . . .

[fol. 714] Q. And do you recall what that distance is that you have in mind looping?

A. Let's see—I believe that is slightly over 7 miles, down to the junction on section 55, block G-T, T&NO, Moore County, and then from that point on west to the

point where our Nield well takes off. That is in section 25, block 44, H&TC. We are going to put in a loop there of [fol. 715] various sizes, that is—we have now a stretch of 12 inch pipe in there which we are going to loop with 20, and when we go back to our 16 inch again, we are going to finish that with 16. That is shown in detail, however, in my estimate.

Q. Is that additional capacity you think, going to be needed on the basis of the present load in 1942?

A. Yes, sir. I would feel better if we had it for this winter.

Q. You will really need it and you need it now?

A. Yes, sir.

Q. Why will the need become greater in another year if there is no difference in the volume?

A. Well, the pressure on the wells will probably be an average of 11 pounds lower for the next winter's operation than it was for last winter's operation.

Q. What difference does that make in the deliverability in the gathering lines?

A. It is according to the characteristics of the well. On the average, it will mean that there will be a little greater reduction in percent of deliverability than the 11-pound drop as a percent of the average closed-in pressure of the previous year.

Q. So, it becomes a question of consideration of pressure that you carry in your gathering lines as well as the pressures in the wells; is that right? A. That is right.

[fol. 716] The point I was trying to make is that the deliverability falls off at a slightly greater rate than the pressure does.

Q. Do you anticipate having to carry some lower working pressure in your line, gathering line, to take care of that situation? A. We will be forced to.

. . . . . .

Q. Then, if you are forced to carry a lower working pressure in your line to take care of the gas coming into that line, from wells where the pressures are becoming lower and lower, how can you take care of that gas?

A. By only one way, and that is either—I would say additional horsepower, or additional gathering-line capacity.

Q. And this is the character of additional gathering-line capacity that you think will be needed in this particular situation?

A. It could be taken care of in either manner, and we studied both methods of trying to increase our load into Zofness. The design of our pipe-line system is such that it is almost necessary to loop the greatest part of it, even if we went to what we might term a centralized horsepower, and therefore, we decided that probably the looping would be better because we would spend about the same amount [fol. 717] of money, and we would cut down the operating cost at another compressor station which would be located out near the Zofness Camp.

Q. In other words, for that particular operation, after making a study, you reached the conclusion that looping would be the most economical method of handling it?

A. Yes, sir.

Q. Now, in the study based on the anticipated load, you have an item for constructing a trunk gathering line, looping the present line from Hansford Station South, 21.1 miles, costing some $672,000. That item does not appear in a consideration of the basic load requirements.

A. That is right.

Q. Why is it that it would be required in 1942 under the anticipated load and yet not required in 1942 under the basic load?

A. Because we plan to take from the Texas field next year a peak day of around 205 million feet. At the present time it is 165 which means that we are going to increase that load from Texas on peak days by about 40 million cubic feet.

. . . . . .

And that is the reason we have to have additional [fol. 718] pipe-line capacity.

Q. In other words, your judgment is that the present pipe line would not be adequate to enable you to transport that volume of gas from the Panhandle field without some addition?

A. Unless we could go to higher pressures which we are unable to do with this present type of construction we have on that line.

Q. You think that the most economic way to handle it would be by the additional looping to which you have referred?

A. I am quite sure of that.

Q. Now, will you point out to the Examiner on Exhibit 45, the place where you think it would be looped during that 1942, on the assumption that the load will be as anticipated?

A. The looping would start at Hansford Station which is located in Section 13.

Q. Hansford County, Texas?

A. I was going to give that; section 13, block 1, Washington County Railroad Survey, Hansford County, Texas, and that would extend southwest to about the town of Morse, Texas, which is located in section 30, block 5-T, T.&N.O. Railroad Survey, Hansford County, Texas.

Q. What type of line do you expect to construct there, that is, the size of it?

A. That will be a 22 inch line, but it is going to be designed to carry higher pressures than our present line. [fol. 719] That is a 500-pound line we have, and we estimated that we would put in a 700-pound test line so that—you will notice that the looping is carried from the station to the south, instead of from the discharge side of the station north.

Q. Yes, explain that and why.

A. That is in order to take care of these future leases which we have down in Hansford County.

Q. So that a person reading the record, without having seen your indicator, can understand, those are the leases colored pink and shown in Hansford and Sherman Counties, Texas?

A. That is right.

Q. Do you anticipate any drilling of those leases during the 5-year period?

A. We have not put that in our budget, but there is a possibility that we will drill one well down here (indicating), to try to get further information on the formation in that area.

Q. But you do not have it in your budget about which you have been talking? A. That is correct.

Q. What is the comparison between the size of that looping and the size of the existing line running along that same course?

A. They are the same sized lines.

[fol. 720] Q. Item "h" on the basic load, and item "k" on the anticipated load call for the construction of additional dwellings for employees, three at Zofness, three at Hansford and six at Sneed; the one at Hansford being really a ten-room hotel; the aggregate cost of these units being $81,000. What is the necessity for that construction?

A. Well, it is a long way from the camps mentioned into any town, and if the company would not build housing facilities for these employees, it is necessary that they drive back and forth to town. Now, this particular building program has been increased over what we would originally have estimated for this year due to the fact that we have put all of our employees on a straight 40-hour week, that is, we had been working those employees 48 hours and paying 8 hours overtime and then the management just adopted the straight 40 hour week.

That meant we had to hire several more men around the compressor stations and in the pipe-line department, and in the production department, so for that reason, we have had to increase this number of houses to be built.

Q. In other words, it takes care of the new men you are now adding to the pay roll?

A. And it also takes care so that, instead of driving from the towns like they have done in the past, which I understand they have been getting mileage for driving—but they are not going to continue to do that.

[fol. 721] Q. It is considerably more economical to furnish the facilities for them out at the camp?

. . . . . .

[fol. 722] Q. Item I on the anticipated load, being on page 27, is an expenditure of $362,800 for additional horsepower at Sneed station to increase the cooling tower capacity and one additional auxiliary engine and one scrubber. Will you explain the necessity for those items?

A. Well, we have to have the additional horsepower due to declining field pressures which forces a lower work-

ing pressure in the pipeline. The increased cooling tower capacity is badly needed in order to cool the gas down to a temperature low enough to help in the process of dehy- [fol. 723] dration and the auxiliary engine is necessary because we are going to run an additional pump and at the same time these auxiliary engines generate the power for the camp and it is necessary that we install this additional auxiliary engine for these two reasons. The scrubber is required because we are going to increase the capacity or the volume, rather, of the amount of gas going through to the extent that the other scrubber will be required.

Q. Just what do you do with that horsepower capacity at the station? What function does the engine serve?

A. The engine turns the compressor.

Q. And what does the compressor do then?

A. It takes the gas on the suction side of the compressor at a lower pressure and forces it to a higher pressure when it emerges from the discharge side.

Q. In other words, you take the gas into that station at a certain pressure and before you start transporting it north and east you increase the pressure?

A. That is right.

. . . . . .

[fol. 724] Q. The Item 1 for 1300 horsepower at Hansford, why is that going to be needed?

A. In order to handle this additional amount of gas that will pass through the Hansford station.

Q. In other words, you are allowing for more gas that year than the present?

. . . . . .

[fol. 727] Trial Examiner: (Interposing) Mr. Culton, to come back to the direct question, how is this future proposed expenditure and the additions and betterments contemplated in the next five years, how is that related to [fol. 728] the determination of the present rate base and the fairness of present existing rates?

. . . . . .

Mr. Culton: I will be glad to discuss it, Mr. Examiner.

It is related to the rate base for this reason: If this company at this time made these expenditures, unquestionably they would go into the rate base at this time. Several authorities, which we will be glad to obtain and furnish to the Examiner if he desires, have held that such expenditures as may reasonably be expected in the reasonably near future may be taken into consideration.

* * * * * * * *

We assert that in determining the reasonableness of [fol. 729] this price, of this existing rate, the Commission must take into consideration the expenditures which will be made in these future years and must allow a reasonable amortization of those expenditures in determining whether or not the existing rate is too high.

Now, that is with respect to the rate base, itself, and that unquestionably applies, if we are right in our legal position, both to the basic load and to the anticipated load.

Another circumstance which makes this evidence very pertinent is that as these years go by the evidence will show the over-all unit cost of producing gas is increased. It is increased because of the necessary carrying charges on the additional capital expenditures which will be required and increased by the necessary amortization of those capital expenditures and the depreciation of the items and increased by the additional operating expenses which would be necessitated by reason of the increased expenditures.

We offer the evidence, carrying out the holdings of our courts, that the only way we can determine the future is by a consideration of the past and that in looking to the future we must take into consideration known changed conditions that we must necessarily expect and also changed conditions which we may reasonably expect. Therefore, if it is assumed that the future gross operating income of this company—just taking the gross income from the receipts of gas, assume that the same volumes [fol. 730] of gas are sold on the same schedule prices which now obtain. We have our top figure. Then, to determine whether our existing rates will be too high over

these next five years, we must see what is going to be the picture as to the expenses of producing and delivering that gas, so as to have the proper idea.

This testimony is offered for the purpose of showing what this cost is going to be over this period of years so that it may be related to the probable income if we assume that the same volumes of gas are going to be sold at the same prices as those that are now existing and for the purpose of determining, irrespective of whether the rates in the past have been excessive, whether those same rates would in the future be excessive. The evidence is also offered for the weight thereof on the rate of return in that this company is not static in its operations. It is a growing company, it has needed more money in the past and is going to need much, much more money in the future, if it properly serves the public. If it furnishes gas as needed, it must have very substantial capital expenditures.

We shall offer to show, later, something with respect to what we consider the future of this company to be, the areas which it probably will serve. For the purpose of showing that the company must be in position promptly to obtain money to finance its operations and obtain that [fol. 731] money at a reasonable over-all cost, it being one of the well recognized, we think, principles that a growing company requires a greater indicated rate of return since it is going to require more money if it continues its growth.

If this were a company which had already reached the saturation stage and said, "We are satisfied with what we have done in the past; we are not wanting to do anything in the future," a slightly different position might be presented. Then, they could say; "It is an old, seasoned company, it requires no new money for its operations." But that isn't the case with this company.

We have offered in evidence here a graph showing the growth of this company in sales of m. c. f. over the period of the last five or six years. That has been a phenomenal growth. We have shown that during that same period of years there has been a tremendous increase in its plant account showing in the past; as it has obtained additional markets and as its additional markets have increased its

requirements, it has been forced to make additional capital expenditures. In connection with the drilling of wells we have already shown that we have been drilling an average of quite a good many, our gas purchase wells and our own wells together constituting about 172 wells that we have handled in the last five or six years, showing that we have had to tie on more wells in the past.

We are expecting a growth in the future which means [fol. 732] that we have to tie on more wells in the future. We have already shown that we have nearly doubled the size of our line in the last few years by looping, by the addition of more compressor stations and more power. We have added that power just as fast as the requirements of the business have justified and we expect to do that in the future.

We expect the business of this company to grow, that it will need more money, that it will serve more people and with the hope that it may serve them even more efficiently if possible.

Now, we realize that to do that we must keep, not up with the procession, we must keep ahead of the procession, because the natural gas pipeline company business is different from any other character of business. They can't tell us at one of the market towns today that they are going to need some more gas tomorrow and expect us to deliver it tomorrow, if we are just keeping up with the procession. We must have some pretty good ideas based on the past as to what we may expect in the future and then build for that future.

That is why we take the requirements which we anticipate. Then, when we get those requirements we realize that something must be done to that pipeline if we deliver those additional requirements, something must be done in the field, and we must get the wells drilled, we must [fol. 733] get the gathering lines laid, we must get the additions by way of pipeline and compressors to the pipeline all constructed before the need of their market takes place and to do that we must make these capital expenditures. In order to get the capital expenditures, we must necessarily go to the public and finance them and, in order to finance them, we must have such a rate of return as will attract capital to that type of investment.

* * * * * * *

[fol. 738] Q. Now, passing to the probable expenditures in the Hugoton field in 1942 on the two bases of loads, I note that under the basic load you provide for drilling 14 new wells in the Hugoton field and under the anticipated load 19 wells.

A. That should be 13 instead of 14, I think, because we drilled one of the 14 in 19—well, this fall.

Q. That is explained on page 22 that that 14 includes one well drilled in 1941. Is that the Guymon well that you have already testified about?

A. That is correct, yes, sir.

Q. Where do you expect those wells to be drilled?

A. They will all be drilled in what might be termed the south central part of Texas County, Oklahoma.

Q. Will you point that out on Exhibit 45, the general [fol. 739] location?

A. It is all leases which are colored brown that will have wells drilled on them during the year 1942.

Q. Now, in order to get the production from those wells into the pipeline in 1942, what do you have to do?

A. Well, we really have to start the construction of a gathering system for Texas County, Oklahoma portion of the Hugoton field. It is necessary that we build a 22-inch line commencing in Section 31, Township 4, Range 19, Texas County, Oklahoma and extending to the southeast corner of Section 34, Township 4, Range 16, Texas County, Oklahoma and it shows better on this. For the 14 wells—

Q. (Interposing) On Exhibit 44 it shows better, you say?

A. On 44, yes, sir, for the 14 wells the line shown in brown are the ones which will be necessary to carry the gas from the leases which will be drilled during 1942.

Q. Now, in constructing that gathering line, are you constructing it so as to take care of only the wells that will be drilled in that year?

A. No, sir, we have gone ahead in our study and laid out a gathering line which we believe will take care of all of the future wells to be drilled in the general vicinity to which each of the major arms of the gathering system extends.

Q. That line about which you have been talking, is that [fol. 740] the one from Section 31, Township 4 to near Optima, costing $324,000?

A. That is the trunk gathering line portion.

Q. All right, then you have an item to construct gathering line in Oklahoma connecting with the Optima line costing $856,000. Where does that line run?

A. That is the line that extends southwest from Optima down to the extreme end of the southernmost end which is just out of Goodwell, Oklahoma.

Q. Are you required in that year to do any additional work between Liberal and Hansford? A. Yes, sir.

Q. What work is that?

A. That is the looping of the present 22-inch line with a 26-inch line.

Q. I see you have listed as Item P the construction of the Cimarron River crossing for the loop line costing $220,000.

A. That is correct.

Q. How does that crossing compare with the one which is now there for the existing line?

A. It is going to be a larger crossing because we are a little short on capacity there right now and it is going to be four 16-inch lines and that price was obtained from the engineering department by getting bids from contractors and then adding the price of pipe on to the labor part of the [fol. 741] bid. I believe that I am right on that.

Q. All right. Now, you have items here for connecting well lines for 20 new wells. That is the 19 that will be drilled in 1942 and one well drilled in 1941, is that?

A. That is Item T?

Q. Item T, yes. A. Yes, that is right.

Q. That is the same type of well lines that you referred to in '41?

A. They are all 4-inch lines.

Q. And the same situation is true as to the measuring stations? A. Yes.

Q. And the same thing as to the employee housing, warehousing, new car garage, six-car garage, all of that being additional expenditures in your judgment required because of the loads which will be existing at that time?

A. Yes, sir, that is right.

Q. There is one item, Item U, ten well dehydrators, that I don't believe you referred to.

A. Well, the gas which is produced in Hugoton field is quite different from the Panhandle gas in the respect that

at the same pressure and same temperature we have far more freeze trouble in the Hugoton field and we have been working on that problem for the past several years.

[fol. 742] Now these ten well dehydrators that are mentioned here have not been located. The management has decided that we will try out these well dehydrators at points where we feel that they will be of the most benefit. They are not shown as located on the working papers anywhere.

Q. It is, to some extent, an experiment to see how it works out?

A. Yes, sir. We have several now that are.

Q. That are so far working?

A. Well, some of them work pretty good and some don't and that is the reason that we are spending this money, to try to take care of that problem in a better manner.

. . . . . .

Q. Item z-1 is to construct telephone line to serve Optima gathering line. Is that anything different from your present method of operation on the gathering line?

A. No, that is just an extension of our present telephone system which will be parallel to the pipeline which we have referred to as the Optima trunk gathering line.

Q. That is the area serving Texas County, Oklahoma?

[fol. 743] A. That is right, yes, sir.

Q. You have, also, as Item z-2, installing a radio station serving an area within a 50-mile radius of Hugoton. Do you have any telephone line which would serve that area?

A. No, sir, we made a survey of that last winter and tried to use some of the local farm lines out there, but they are in very bad shape and we found that from Hugoton we only had one point from which a chart changer could call, that is, from Ulysses, and for the reason we go all directions from Hugoton there, this two-way radio has been considered to be the best method of reaching the chart changers from the Hugoton Camp.

Q. Do you think there will be any saving to you in using that two-way station for that small area rather than build a regular telephone line to it?

A. Oh, there will be a great saving.

Mr. Littman: May I inquire what does that have to do with the anticipated load?

The Witness: It is on both the present and anticipated load. It is something that we need down there quite badly because, as we get a load change and our load changers have left the main camp, why then there is no way to go out and get them because you can't, unless you start somebody else right after them to catch them. That is if we want a load increase and they were already gone we have no way of [fol. 744] changing the volume of gas that is going into the line until they get back. If we had this radio, you see, they could be reached at any time and they could turn on or turn off the gas as needed.

* * * * * * *

By Mr. Culton:

Q. In other words, as I understand you would really like to have it now.

A. We would like to have had it about three years ago.

Q. All right. I notice a credit several different years through 1943, 1942, 1944 and 1945 for contributions by joint owner on account of acidation, liners or tubing, such as that.

A. That is true. We own a 50 percent interest in 34 wells which are connected to the main line and in 12 wells which are connected to the Argus Natural Gas Company. When any work is done on those wells we take care of the accounting and our partner is charged back with the amount of money that was spent.

* * * * * * * *

[fol. 745] Q. Now, in 1943 you have information respecting drilling of wells, installing liners, acidizing, constructing additional lines to serve new wells, constructing wells, lines, measuring stations, well dehydrators, and so forth. Are your explanations with respect to those items in 1943 the same explanation as to similar items in 1942 and prior years?

A. Yes, sir, the same method was used in each year.

Q. Was the same thing true as to 1944? A. Yes, sir.

Q. 1945? A. Yes, sir.

Q. And 1946 so far as similar items are concerned?

A. That is true.

Q. Mr. Hinton, in your judgment will the company be required during these various years, even if the load be not increased over and above the present load, to increase

its capital investment in the fields and lines in the amount shown under your basic load?

Mr. Littman: I object.

[fol. 746] Mr. Culton: During each of those years?

Mr. Littman: I object to that. I don't think this witness is sufficiently qualified to answer that question, if Your Honor please. He says he is not a geologist. He says these are not his own estimates. The whole thing is predicated on the assumption as to increased load handed to him by another witness. I think the record as it now stands eloquently demonstrates that this witness is in no position to answer that question with any authority.

* * * * * * * *

Trial Examiner: I think the objection is strictly good, gentlemen. Mr. Hinton has presented an exhibit here which is fully itemized, including various estimates made by others and based upon other proposed exhibits, namely, 40 and 41. I think Mr. Culton, the exhibit speaks for itself and the question should not be allowed.

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[fol. 751] Trial Examiner: These exhibits which are now tendered in evidence will be subjected to cross-examination and ruling deferred as to their admission.

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[fol. 753] C. H. M. Burnham, having been previously sworn, resumed his testimony.

Direct Examination: (Continued)

By Mr. Culton:

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Mr. Culton: Mr. Examiner, a tabulation has been passed around entitled "Future Capital Requirements Gas Transmission Facilities, Liberal Station and Eastward", Witness Burnham.

We would like to have that marked exhibit 47 for identification.

Trial Examiner: It will be so marked.

* * * * * * * *

Q. Mr. Burnham, have you prepared a tabulation with respect to the future capital requirements of Panhandle Eastern from the Liberal Station eastward?

A. I have.

[fol. 754] Q. In making that computation, did you take into consideration any assumed market requirements of m. c. f. of gas?

A. I did.

Q. What assumed requirements did you take into consideration in that computation?

A. Mr. Morton's estimate.

Q. Is that the estimate which has been offered in evidence as exhibit 40? A. It is.

Q. Showing the estimated main line sales from 1941 to 1946, inclusive? A. That is correct.

Q. What part of the system did you consider in your study?

A. I considered the main transmission system from Liberal Compressor Station east to the terminus of the line.

Q. And what did you consider as the terminus of the line? A. Dana, Indiana.

Q. In determining the sufficiency of the existing transportation facilities, such as pipe lines, compressor stations, and so forth, to handle increasing loads, from what part of the line do you start to make your computations?

A. It is proper for the designing engineer to begin at the point farthest removed from the source of supply, and [fol. 755] design backwards, as you might say, toward the source of supply, station by station and loop by loop, until he reaches the source.

Q. Now, in addition to making the computations with respect to the main line itself, that is, from Dana westward, did you make any computations with respect to requirements for markets which the company expects to serve within the next five and one-half years which are not at this time being served?

A. I did.

Q. Will you go to exhibit 15, and starting at Dana, explain to the Examiner, just exactly how you made your study in order to determine where necessary capital expenditures will be required for certain loads.

By the way, is that method you referred to anything unusual or do you do it ordinarily?

A. It is the very usual thing to do.

Q. By whom? A. By the engineers.

Q. As far as this company is concerned, have you had any previous experience in the past?

A. Yes, indeed.

(Going to the map) At Dana we have an assumed quantity of gas to be delivered, or estimated quantity is probably better, and we also have a delivery pressure to maintain there.

[fol. 756] We take this quantity of gas and by applying the proper formulae, we work backwards or westward on our main line system to the next point of delivery.

Q. Where would that be?

A. That would be this line (indicating) that leads from our main line system up to Danville, Illinois.

Q. Is that a lateral line?

A. That is a lateral line.

Here we pick up the delivery of gas which Danville will require on the peak day.

Q. That is in addition to the gas required at Dana?

A. It is.

Q. All right.

A. From Danville then, we proceed westward carrying this increased quantity of gas to the next point of delivery.

Which is the lateral line leading to Urbana and Champaign. Here we pick up the quantity of gas to be dropped off at that point. We bring then the sum of the deliveries to be made at Dana, Danville, Champaign and Urbana into the first compressor station which is, in this instance, Tuscola compressor station.

Now, if the pressure indicated by our formulas is in excess of 500 pounds in this station, that indicates that we [fol. 757] do not have enough pipe capacity between Tuscola Station and Dana, so then the calculator must go back, properly install another loop in his computation and work back to Tuscola until he ends at Tuscola with an operating pressure for which the equipment is designed to meet.

The Tuscola compressor station will operate at a certain ratio of compression, that is, a certain ratio between the discharge pressure and the suction pressure, so again we start a new problem, as you might say, of designing between Tuscola Station and the next station to the west.

We pick up at Tuscola station the fuel required for the Tuscola station on the peak day and add it to the total quantity that we have carried back to Tuscola station.

In a manner similar to the manner just described as coming back from Dana to Tuscola, we proceed on westward to Glenarm Station, picking up the various markets as they come off the main line system.

Q. Mr. Burnham, the method is clear enough, isn't it, Mr. Examiner, without carrying the same principle all the way back to the beginning. Without taking the time to explain that all the way back to Liberal compressor station, is that same method followed as you go back westward, picking up the additional loads as you go westward?

A. It is.

Q. And then when you get to the station at Liberal, you [fol. 758] know exactly how much gas your line will be able to furnish at given pressures to serve all of the markets in the aggregate.

A. We do.

Q. Now, do you sometimes in addition to looping add additional power for the purpose of more easily transporting the desired volumes of gas?

A. There is a certain economic balance between power and pipe which will result in the greatest economy in a transportation of this gas, and we strive to work within close limits to that economic balance.

Q. You have noted here on exhibit 47 an expenditure for Southern Michigan, North Line, in 1941, and will you point out to the Examiner where that is located as shown by exhibit 15?

A. The Southern Michigan North Line begins a short distance inside the Michigan State Line.

Q. Making a connection with what line?

A. Michigan Gas Transmission Line to Detroit.

Q. All right.

A. And extends northward to a proposed junction west of Ann Arbor, Michigan. The north line thence extends in a northeasterly direction to a proposed junction southwest of Pontiac, Michigan. The line thence proceeds northward to a point near Flint and thence northwest to a point near Saginaw, Michigan.

. . . . . .

[fol. 767] Q. Mr. Burnham, in line No. 5 of Exhibit 47, you show certain lateral lines. What do you mean by "lateral lines"?

A. Lateral lines are lines leading off of already existing feeders, and the items shown there involve lateral lines which I shall indicate on the map to Galesburg, Illinois, to Abington and Knoxville, also in the State of Illinois, to Greenfield, Indiana which is not shown on this map but it is a town directly east of Indianapolis, to Adrian, Michigan, where a lateral line takes off of our north line at a point about midway between the junction with the Michigan Transmission System and the junction just west of Ann Arbor.

Q. In other words, those are lines for the purpose of tying the cities into the general distribution line that you have there, that is, connecting to the companies' own transmission line?

A. Yes, and to fulfill contract terms already entered into.

Q. I see. What progress has been made with respect to doing the work necessary in 1941, under your additions to the main line?

A. We have already secured the right-of-way for main [fol. 768] line additions in Illinois and Missouri, and some in Kansas.

Q. Are those particular areas in which you do the additional main line construction in 1941 indicated in any particular way on exhibit 15?

A. They are shown in purple dotted lines.

We have already received a considerable amount of material for these lines with the exception of pipe. That material is in warehouses, strategically located so that construction can proceed immediately upon the receipt of pipe.

We have let the contracts for the construction of the line, main line additions, in Illinois. We have bids on main line additions in Missouri and Kansas. I think that is the extent of our progress in respect to main lines construction.

Q. Now, were the prices which you used in showing the cost of additions to main lines—how were they determined?

A. They were determined from these contract prices, either entered into, or the low bidder on this work here in Missouri and Kansas. The pipe prices were secured in cooperation with the purchasing department. Other prices we already know because we have some of that material on hand. They have bought and paid for some of that other material.

. . . . . .

[fol. 769] Q. What is the situation as to the additions to compressor stations?

A. The items shown in line 3, additions to compressor stations, in the amount of $344,100, covers the addition of a compressor unit in each of our Illinois compressor stations, Tuscola, Glenarm and Pleasant Hill. The work at Tuscola and Glenarm is approximately 80 percent completed. The units are already installed but not in operating condition.

[fol. 770] The work at Pleasant Hill is, I would estimate, 60 percent completed.

The compressor unit has not yet been received but is promised for delivery on November 1.

Q. What is the stage of construction as to the Southern Michigan north line?

A. The progress made on the north line in Michigan consists of approximately 80 percent of our rights-of-way having been secured, practically all engineering work having been done, and involves, or rather progress has been made to the extent of numerous items of material having been received and placed in warehouses.

We have received in addition to these small items material involved in construction of a line such as this, about 13 miles of 12 inch pipe.

Q. How did you arrive at the cost of the estimated expenditure for the Southern Michigan north line?

A. The contract for the work in Southern Michigan has already been let. We used, therefore the contract prices for the labor and for the pipe and materials; as I have said before, we used prices secured through the cooperation of the purchasing department.

Q. Is that program also contingent on being able to get some additional pipe to complete the work?

A. It is.

[fol. 771] Q. The lateral lines, what is the situation with respect to lateral lines shown on line 5?

A. The Galesburg lateral line involves the lifting of a lateral line in Kansas known as the Mildred lateral line, and the purchase of sufficient additional 8 inch pipe to complete the 40-some mile of line involved.

We have an application before the Commission, as I understand it, for permission to lift the Mildred lateral and make that pipe available.

Mr. Littman: You mean before the Federal Power Commission?

The Witness: Yes. The contract has been negotiated for laying this line. The rights of way have been taken. The engineering work has been done. Some materials are already on hand.

By Mr. Culton:

Q. How did you arrive at the cost of that line?

A. We used the contract price for the cost of laying, and I have used, in the case of the Galesburg line, the cash required to lift the Mildred line and re-lay it in its new location in Illinois.

Now, the other lateral lines in Illinois are in this situation:

The rights of way to Abington and Knoxville have been secured; some materials are on hand but no pipe is on hand for those two towns.

[fol. 772] So much for the lateral lines in Illinois.

In Indiana, we are presently engaged in laying the line to Greenfield. Pipe is on hand and the work is progressing very rapidly.

Another item under lateral lines, in line 5, is the line to Adrian, Michigan. Rights of way have been taken on that

line, the pipe has been requisitioned. I do not know whether the order has been placed for pipe or not. I believe that covers the discussion.

Q. That covers the discussion of your lateral lines. I notice in 1942, in 1944, in 1945 and in 1946, you have different items for additions to main lines.

Is your method of determining when those additions to main lines will be required similar to that which you used in connection with 1941 except taking into consideration added demands as the years passed by under Mr. Morton's estimate?

A. That is correct.

Q. When do you get the main line completely looped under that program which you have there?

A. In the year 1942.

Q. Then, what are the items shown on lines 20, 24, 25 and 30 as additions to main lines?

A. I believe that is item 21, that is the first one.

Q. You are right.

[fol. 773] A. Those are the estimated investments which this company will be required to make in a third line, or loops constituting a third line.

Q. If the anticipated requirements materialize?

A. That is correct.

Q. Is that looping the same type of looping you are now doing on other work? A. Yes, it is.

Q. And you determine the points at which that looping will be required for each of those years by the same method used in determining the other loop?

A. That is correct.

Q. I notice that in 1942, 1943, 1944, 1945 and 1946, during each of those years, you have additions to compressor stations. Has the necessity for those stations been similar to those which will require additions in 1941?

A. Yes.

Q. Resulting from future increases and load requirements? A. That is correct.

Q. Now, in 1942, under line 11, you have the South Michigan West Line.

Explain to the Examiner just what that is.

A. The South Michigan West Line originates at this junction point west of Ann Arbor, and extends for a [fol. 774] distance of approximately 82 miles to a point near Kalamazoo, Michigan. It is to be built of 16 inch pipe as far as Battle Creek and 12 inch pipe from Battle Creek to Kalamazoo.

Q. Has any of the rights-of-way been obtained for that as yet? A. No.

Q. It is merely in prospect at this time?

A. We are preparing maps, getting ready to take rights-of-way.

Q. Yes. When do you expect to start the rights-of-way men to work on that line?

A. Within the next week or two.

Q. In 1942, 1943 and 1945 you have additions to gasoline and dehydration equipment.

What is the necessity of those items?

A. Our gasoline dehydration plant is already up to load, in fact, this coming winter we anticipate we will have to by-pass some gas around this plant.

Q. Then, the necessity for these increases is the same as the loop lines—as the additional markets come on you require additional facilities to dehydrate the additional gas; is that, in substance, it?

A. That is right.

Q. Item No. 12—line 12, for 1942, is telephone line east—

. . . . . .

[fol. 775] Mr. Culton: Mr. Burnham, what is the subsidiary company referred to on your caption sheet, the caption of exhibit No. 47?

The Witness: The Illinois Natural Gas Company, a wholly owned subsidiary which owns all the lateral lines in Illinois and will own the lateral lines to be built from our Peoria line to Galesburg.

. . . . . .

Q. What is true as to the Michigan situation? Do you have any subsidiary there?

A. Well, the Panhandle Eastern Pipe Line Company is conducting this work in Michigan and it has—

Q. (Interposing) There is no existing subsidiary of Panhandle Eastern Pipe Line Company except the Illi-
[fol. 776] nois Company; is that correct?

A. That is correct.

* * * * * * * * *

Mr. Williams: The point of origin of the Michigan lateral lines, is that within the material limit of the State of Michigan?

The Witness: As I just testified, it originates at a point just inside the State of Michigan.

By Mr. Culton:

Q. And intersects no state line at all?

A. None whatever.

* * * * * * * * *

[fol. 777] Mr. Gorman: Do I understand correctly that the Illinois Natural Gas Company is merely a corporate convenience but for all intents and purposes it is considered as a part of The Panhandle Eastern System?

The Witness: I would prefer not to answer that.

Mr. Culton: I will say that is a legal question, but the company so considers, and it has taken that position, I think, in a little contest with the Illinois Commission.

Counsel is probably familiar with that.

By Mr. Culton:

Q. I believe I started to ask you to discuss line 12, the telephone line east, in 1942.

A. With the completion of a completely looped system from Liberal to Dana, and considering the greatly increased loads which would be carried by that completely looped system, it would be necessary that the company extend its telephone—present telephone system across the state of Missouri and Illinois and connect with each and every compressor station along the line in those two states.

At the same time we propose to put in drops or connections at or near each of the main-line gate-valves where cross-over connections are available, between the two lines.

We also contemplate having telephone lines into our warehouses so that we will be in complete communication

at all times with the employees and points of operation, [fol. 778] important points of operation, on our line, east of Kansas City.

Q. In other words, the company now has a line covering all of its property west of Kansas City?

A. Yes, sir. It has and which line serves our field system.

Q. In all three States? A. In all three states.

Q. Will you explain why it is necessary to have a telephone line for the proper operation of the company's business?

A. As I stated before, this increased load will require much closer attention to the operating conditions at these compressor stations. When the compressor stations are connected with each other with two lines, rather than a partially looped single line, the response to pressure increases will be much quicker, or to state it conversely, should be much quicker and will require much closer attention from the central office in Kansas City.

Q. What method are you now using to handle such matters east of Kansas City?

A. We depend upon the commercial lines for communication now, that is, telegraph and telephone and we have found it highly unsatisfactory under some conditions.

Q. I see you have reference to lateral line, 1942, line No. 13.

What are those? Additional lateral lines for South [fol. 779] Michigan West Line?

* * * * * * * *

A. That is the lateral line to Bloomington, Illinois, a fairly good-sized city south and east of Peoria. As I stated in my testimony in September, we are about to secure a contract to cover the requirements of Bloomington, Illinois.

Q. The company has in mind serving that area at any rate? A. It does.

Q. I notice on line 14, we have a warehouse at Paola.

Mr. Littman: Pardon me. Will you please show us the lateral you just described, the Bloomington lateral? From what point does it run, to what point?

* * * * * * * *

The Witness: Bloomington lies about 29 miles east of our Peoria lateral and somewhat southeast of Peoria itself. We propose to build a line from the Peoria lateral also due east to Bloomington.

* * * * * * * * *

Mr. Littman: It would run from a point on the lateral in Tazewell County over to McLean County and what is [fol. 780] the approximate length of that line?

The Witness: I just stated approximately 29 miles.

* * * * * * * * *

By Mr. Culton:

Q. All right, the Paola warehouse.

A. We find, I might say that Paola is located in Miami County, Kansas, a short distance from the Louisburg compressing station. We find that the company has slightly outgrown the Paola Warehouse and we contemplate substantial additions to that warehouse.

Q. I believe you discussed all the separate items. Now, will you tell us the aggregate of the estimated capital requirements for the year 1941, the remainder of the year, in order to satisfy the estimated requirements?

A. The aggregate shown here for 1941 is $8,993,700.

Q. And for 1942? A. $6,791,300.

Q. And for 1943? A. $3,768,800.

Q. And for 1944? A. $6,684,100.

Q. And for 1945? A. $7,087,100.

[fol. 781] Q. And for 1946? A. $3,617,600.

Q. Making a total of how much? A. $36,942,600.

* * * * * * * * *

[fol. 782] Q. What prices did you use in subsequent years after 1941?

A. I used the same unit prices as existing today.

* * * * * * * * *

Trial Examiner: Did you make all these estimates or were they made under your direct supervision?

The Witness: Under my direct supervision.

Trial Examiner: Does the growth loads and anticipation and so forth—you were relying on exhibits 40 and 41?

The Witness: I was.

By Mr. Culton:

Q. Mr. Burnham, do you know how the prices, unit prices for extensions of gathering lines and similar facilities which were used by Mr. Hinton were obtained by him? Were they obtained from your department?

A. They were prepared in my department under my direction and were obtained from my department.

. . . . . .

[fol. 796] Mr. Culton: Mr. Gorman, the record may not be fully complete.

. . . . . .

Mr. Littman: As I indicated a moment ago, Mr. Burnham, I wanted to ask you a few questions with respect to [fol. 797] Exhibit 47 before proceeding with cross-examination of the exhibits that you prepared for presentation at the previous hearing.

Calling your attention to line 5 on Exhibit 47 entitled "Lateral Lines" in the amount of $463,800, does that refer entirely to the lateral to be transferred to the State of Illinois and to be installed between Peoria and Galesburg, approximately, or does that include another lateral?

The Witness: That includes five lateral lines and I shall give you the names and the amounts.

Mr. Littman: Will you please do that?

The Witness: Adrian lateral, $47,914, Adrian, Michigan.

Mr. Littman: Which one is that?

The Witness: Adrian, Michigan.

Galesburg, Illinois lateral, $291,500; Abingdon, Illinois lateral, $38,500; Knoxville, Illinois lateral, $2,600; Greenfield, Indiana lateral, $83,300. In adding those five together I rounded off the figures to the even hundred.

Mr. Littman: Now a part of the Galesburg lateral will consist or be composed of pipe that will be removed from the present Mildred lateral in Kansas?

The Witness: That is correct.

Mr. Littman: How much of the $291,500 is represented by the present Mildred lateral in Kansas?

The Witness: The $291,500 is an item which is composed of the cash required to do that job and includes no [fol. 798] pipe whatever, that is insofar as Mildred is concerned. It does include pipe to the amount necessary to make up the difference between the length of the pipe to be recovered from the Mildred lateral and the total distance to Galesburg.

Mr. Littman: I see. In other words, there will be charged on the books of the Illinois Natural Gas Company only the cost of removing and hauling and relocating the Mildred lateral line.

. . . . . .

The Witness: I believe I can answer that this $291,500 item isn't intended to be the amount charged on the books at all. It is the cash, as I said before, required to bring about this change.

Now, what the company's books reflect after the change has been made I cannot give you an exact figure.

Mr. Littman: Well, does that amount include the cost of the pipe?

The Witness: There is no cash involved insofar as the pipe in Mildred lateral is concerned. The cash involved is in lifting Mildred lateral, moving it to Illinois, relaying it and buying enough new pipe to make up the difference and laying it.

[fol. 799] Mr. Littman: And does not reflect the cost of the pipe, itself, that is insofar as the Mildred lateral is concerned?

The Witness: It does not, it does not reflect that.

. . . . . .

[fol. 800] Mr. Williams: Do you know whether or not these items as given by you include interest during construction?

The Witness: They do.

Mr. Williams: Can you state what interest rate was used in computing interest during construction?

The Witness: No, but my working papers will show the amounts charged into these estimates for interest during construction.

Mr. Williams: Will your working papers show the period of time over which interest is charged?

The Witness: Yes, it will show the period of time during which construction will be pursued and I assume that interest will be charged during that period.

. . . . . .

[fol. 801] Cross-Examination.

By Mr. Littman:

Q. Mr. Burgham, you testified on direct examination that the Panhandle Eastern Pipe Line Company serves through its system, directly or indirectly, some 200 cities and communities having an aggregate population of upwards of 3,000,000 persons, did you not?

A. I believe I did.

Q. Does Panhandle Eastern Pipe Line Company and its wholly owned subsidiary, Illinois Natural Gas Company, engage in any local distribution of natural gas?

A. It does not.

Q. Do they own any facilities for the local distribution of natural gas?

A. They do not.

Q. What proportion of Panhandle Eastern Pipe Line Company's gas is delivered to Detroit, approximately?

A. In the order of 40 percent, I should say.

Q. Do I correctly understand your direct testimony to be that Panhandle Eastern Pipe Line Company produces and purchases natural gas in Texas, Oklahoma and Kan-

[fol. 802] sas and transports that gas by means of its own pipeline system through those states and through the states of Missouri and Illinois as far east as the Illinois-Indiana state line?

A. That is correct.

Q. And is it also a fact that such natural gas is transported for Panhandle Eastern Pipe Line Company by

Michigan Gas Transmission Company from the Illinois-Indiana state line in a generally easterly and northerly direction through the states of Indiana, Ohio, Michigan as far as the City of Detroit, Michigan by means of Michigan Gas Transmission Corporation's pipeline?

A. That is correct.

Q. At what point does the gas of Panhandle Eastern Pipe Line Company first enter the pipeline of Michigan Gas Transmission Corporation?

A. At our measuring station located at Dana, Indiana.

Q. Is Dana measuring station located in Indiana?

A. It is, just a few hundred feet across the state line in Indiana.

Q. Does Panhandle Eastern Pipe Line Company own any property in Indiana, Ohio, or Michigan?

A. It owns property in Indiana, to the extent of that two or three hundred feet that I just mentioned and it is now acquiring more property in Indiana as a result of the construction of this lateral line to Greenfield, Indiana. To [fol. 803] my knowledge it owns no property in Ohio and it goes without saying that it is acquiring property in Michigan to the extent of its new construction work in that state.

. . . . . .

Q. Now, the Greenfield lateral has not yet been completed, has it?

A. No.

Q. How far has the construction progressed?

A. The pipe is on the ground, the contractor is on the ground, the rights-of-way have been secured and I should believe that by now active construction is being engaged in.

Q. Who is going to own that line when it is completed?

A. Panhandle Eastern Pipe Line Company.

Q. Well that will be, then, the only lateral running off Panhandle Eastern's main line, I mean off Michigan Gas Transmission Corporation's main line that will be owned by Panhandle Eastern Company when it is completed. Is that correct?

A. In Indiana?

[fol. 804] Q. In Indiana, yes.

. . . . . .

Q. Well now, Panhandle Eastern Pipe Line Company sells gas in Indiana, Ohio, and Michigan, does it not?

A. We have customers in Michigan, the Michigan Consolidated Gas Company and we sell gas to the City of Monroe. In Ohio we have several customers. In Indiana I do not know whether they are our customers or the Michigan Gas Transmission Company's customers that they serve there at the present moment.

. . . . . .

Q. Might not your schedule 2 of Exhibit 17 refresh your recollection on that score, Mr. Burnham?

. . . . . .

[fol. 806] The Witness: We have one customer now, as I look over the schedule, in Indiana.

By Mr. Littman:

Q. What is the name of that customer?

A. Kentucky Natural Gas Corporation, another pipeline company.

Q. And you have customers in Ohio, do you not?

A. Yes.

Q. I don't recall whether you have mentioned those or not. A. Well, they are shown on page 3, Schedule 2.

Q. Page 3 of Schedule 2.

. . . . . .

Mr. Littman: Will you name the customers in Ohio?

The Witness: Central States Natural Gas Company, Ohio Gas Light & Coke Company, The Toledo Edison Company.

Q. Does the Panhandle Eastern Pipe Line Company sell gas to the Michigan Gas Transmission Corporation? [fol. 807] A. Yes, we do.

Q. In other words, I take it that Michigan Gas Transmission Corporation is not only a vendee of gas of Panhandle Eastern Pipe Line Company, but also transports gas for and on behalf of Panhandle Eastern Pipe Line Company. A. It does.

Q. Can you state generally under what arrangement, and I say just generally, Panhandle Eastern Pipe Line Company delivers gas in Indiana, Ohio and Michigan with-

out, itself, owning any facilities in those states other than the facilities which you mentioned a few moments ago?

A. Panhandle Eastern Pipe Line Company pays Michigan Gas Transmission Corporation a consideration for the transportation of that gas.

Q. And, in turn, Michigan Gas Transmission Corporation delivers Panhandle Eastern Pipe Line Company's gas to Panhandle Eastern Pipe Line Company's customers in those states? A. That is correct.

Q. To wit, Ohio, Indiana and Michigan?

A. That is correct.

. . . . . .

[fol. 809] Q. Does this exhibit, No. 17, Schedule 2, show all of the customers in Column A of Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company and Michigan Gas Transmission Corporation?

A. It does, as of June 30, 1941.

Q. Are the sales by Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company to the customers shown in Column A of Schedule 2 of your Exhibit 17, sales of natural gas for resale for ultimate public consumption for domestic, commercial and industrial use in the communities shown in Column C of that schedule?

A. They are.

Q. Will you please turn to Schedule 3 of your Exhibit 17? Does that schedule show all of the industrial customers receiving natural gas from Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company?

A. It does.

Q. Are these industrial sales what might be called sales for resale or not? A. They are not.

Q. Are there any sales not for resale made by Panhandle Eastern Pipe Line Company other than those shown in Schedule 3 of Exhibit 17?

A. Not to my knowledge.

. . . . . .

[fol. 812] Q. Well now, Panhandle Eastern Pipe Line Company sells gas to certain customers which gas does not at any time flow through the Panhandle Eastern Pipe Line Company's main transmission line, does it not?

A. That is correct, in one instance that I know of.

. . . . . .

Q. And what is that instance?

A. The Argus Natural Gas Company, Inc.

Q. Will you elaborate on the Argus Natural Gas Company, the sales of it, and tell us approximately where the properties are located and generally the nature of the transaction?

A. The properties are located in southwest Kansas near the Hugoton field and its principal market is Dodge City, if my recollection is correct.

Trial Examiner: Your exhibit shows Garden City, does it not?

The Witness: Yes, that is true.

* * * * * * * * *

[fol. 813] A. Well, then I am mistaken. Garden City is the principal community which is served instead of Dodge City and we have a contract to supply a certain portion of those markets at the wells, delivered into their pipelines.

* * * * * * * * *

Q. Mr. Burnham, would you state whether or not Argus takes the gas from Panhandle Eastern Pipe Line Company at the wellhead of the wells of Panhandle Eastern?

A. I believe I have already stated that to be the case.

Q. Will you please, again, refer to Exhibit 15 and state at what point the main transmission line of Panhandle [fol. 814] Eastern Pipe Line Company begins?

A. We consider the main transmission system to begin at Liberal, although under some interpretations and definitions you might consider the beginning at Sneed station, however, I prefer the definition to the effect that the main transmission system begins at Liberal station.

* * * * * * * * *

Mr. Culton: You mean you consider that beginning at Liberal because from an operating standpoint that is your understanding, but from a classification of accounts stand-[fol. 815] point it starts at Sneed?

The Witness: That is correct, sir.

* * * * * * * * *

Mr. Littman: Well, let's determine the fact; that is the operating fact. That line running from Sneed compressor station north and east to Liberal compressor station is a 22-inch line?

The Witness: That is correct.

Q. And isn't it a fact that all of the Texas gas, both produced and purchased, which enters the main transmis-[fol. 816] sion line or which enters the transmission line of Panhandle Eastern Pipe Line Company comes into that line at Windmill Junction south of Sneed compressor station, does it not?

A. Substantially that is correct.

. . . . . .

[fol. 817] Q. Are you now prepared to answer the question, Mr. Burnham?

A. Yes, I am. The production is received from the [fol. 818] King Oil Company into our 22-inch line, a short distance northeast of Windmill Junction and that is all the gas that constitutes, along with the gas that comes in at the junction point, all the gas that is transmitted through that 22-inch line.

Q. And the point that you refer to with respect to the two wells is south, is it not, of Sneed compressor station?

A. Yes.

Q. Can you state how far south of Sneed compressor station?

A. I would say about three-quarters of a mile.

Q. And what is the distance between Windmill Junction and the Sneed compressor station, along the transmission line? A. Two and two-thirds miles.

. . . . . .

Q. Now, isn't it a fact therefore, to make it clear, that no Texas gas enters the main transmission line north of Sneed compressor station?

A. That is the situation today.

. . . . . .

[fol. 819] Q. Now, tracing the main transmission line north from Sneed compressor station to Liberal compres-

sor station, at what point or points does Oklahoma or Kansas gas enter that line?

A. There is no Oklahoma gas nor Kansas gas in the line at that time.

Q. I think there is one. A. In Oklahoma?

Q. Texas County, Oklahoma, is there not a main line delivery from the Cimarron Utilities Company?

A. I am sorry, but I believe that is correct.

Q. You don't know of any others, do you? A. No.

Q. Neither do we. Does any gas enter the main transmission line of Panhandle Eastern Pipe Line Company between Liberal compressor station in Kansas and Dana measuring station near the Illinois-Indiana state line? That is quite a distance.

A. My knowledge is more complete in this respect. There is no gas entering the main line system between Liberal compressor station and Dana, Indiana.

Q. Now, going back to Liberal station for a moment, that is back to Liberal compressor station for a moment, will you describe the gas that enters at or near the Liberal compressor station, that is, tell us the source of that gas, please?

[fol. 820] A. The gas entering the main line system at Liberal compressor station is gathered from the Hugoton field in Kansas which Hugoton field extends down into Oklahoma and Texas, but at the moment no production is delivered into our system from Texas, it being derived entirely, insofar as the Hugoton field is concerned, from Kansas and Oklahoma, a very small quantity of gas being produced from Oklahoma.

Q. And that Oklahoma gas is wholly purchased, isn't it? A. That is correct.

Q. And the Kansas gas is both produced and purchased? A. Yes.

Q. Does any of the so-called local area gas in eastern Kansas and western Missouri near Kansas City at any time enter the main transmission lines of Panhandle Eastern Pipe Line Company? A. No, it does not.

. . . . . .

Mr. Littman: If Your Honor please, I wonder whether counsel for Panhandle Eastern Pipe Line Company and I take it you are also counsel for Illinois Natural Pipe

Line Company, would be willing to stipulate on this record that Panhandle Eastern Pipe Line Company and Illinois [fol. 821] Natural Gas Company engage in the transportation of natural gas in interstate commerce and in the sale in interstate commerce of such gas for resale and are natural gas companies within the meaning of the Natural Gas Act.

I wonder whether counsel would be willing at this time to stipulate into the record what I have just read.

Mr. Culton: I don't know that we can do that in all of its ramifications. We probably have a legal conclusion. I think there is no question but what the operations of the two companies, together, reflect an interstate transaction and we have not raised any question on the matter.

I will say this, counsel, that we are taking a position somewhat similar to what counsel has indicated in a case which is now pending in the Supreme Court of the United States where the Supreme Court of Illinois held to the contrary with respect to the Illinois Natural Gas Company, therefore, we would hesitate to formally stipulate something which might turn around and hit us if the Supreme Court holds that both we and the Power Commission are wrong in the present contention.

I will say this, that we are not at this time making any contest of the propriety of the Commission's making this investigation, based on a procedural question, nor are we making any contention other than that we recognize that the Illinois Natural is nothing in the world but an operat- [fol. 822] ing department or arm of the Panhandle Eastern Pipe Line Company.

Trial Examiner: That statement is made in spite of the separate corporate entity of the Illinois?

Mr. Culton: We are disregarding the separate corporate entity of those two companies in this investigation, Mr. Examiner. Our exhibits are prepared as if they are all one, the exhibits which we shall hereafter offer in evidence are all prepared on the assumption that the two are one.

We are taking that position in the case which counsel—counsel knows the case I am talking about—where we

are contending the Illinois Commission has no jurisdiction whatever over the Illinois Company.

Mr. Littman: That is, you are contending that the Federal Power Commission has jurisdiction?

Mr. Culton: We are contending that the Federal Power Commission has that jurisdiction and we think we are right, we think the Federal Power Commission is right. I have no objection to stipulating what the facts are but the conclusions, of course, are a different question.

Trial Examiner: Whether or not it heretofore appears in our record, is it a fact that the Illinois company is the wholly owned subsidiary of Panhandle?

Mr. Culton: At this time. In the past it has had other subsidiaries. In the past it has had distribution subsidiaries, Mr. Examiner, but that was dissolved sometime [fol. 823] back. There is no affiliation of any character between the present owners of that company and the Panhandle Eastern Pipe Line Company. The Illinois Corporation is its only subsidiary.

* * * * * * *

By Mr. Littman:

Q. Mr. Burnham, Panhandle Eastern Pipe Line Company has one gasoline extraction plant, has it not?

A. That is correct.

Q. Where is that plant located?

A. On the site of the Liberal compressor station.

Q. Why was the Liberal gasoline extraction plant constructed at Liberal?

A. Because the gas is gathered to this central point and it is more economic to build one large gasoline dehydration plant at one central plant than have several such plants scattered throughout the two fields.

Q. When was it constructed? A. In 1936.

Q. And 1937?

[fol. 824] A. And additions have since been made.

Q. Why was it necessary to extract the gasoline from Panhandle Eastern's gas by means of Liberal gasoline extraction plant?

A. Had the gasoline not been extracted, it would have condensed in our transmission system and would have

given us no end of trouble in trying to get the full flow efficiency of our system when needed.

Q. The gasoline extraction also makes the gas more merchantable, doesn't it? A. It does.

Q. And facilitates the transportation thereof, does it not? A. It does.

Q. In some respects, I presume, the extraction of gasoline from the line is analogous or similar to the dehydration process, is it not? A. In some respects.

Q. That is, in that it facilitates the transportation and aids in making the gas more merchantable?

A. That is correct.

. . . . . .

[fol. 826] Q. Do you know what part of the present system was in service on January 1, 1933?

A. The single, original single line and three compressor stations, to the best of my knowledge.

. . . . . .

[fol. 828] Q. What is the present maximum daily capacity of Panhandle Eastern, of the Panhandle Eastern Pipe Line Company system?

A. Approximately 250,000,000 cubic feet per day. That is sales capacity.

. . . . . .

Q. Will you state what you mean by "sales capacity"?

A. We design for a maximum day and we design for a maximum day sales so we always express the capacity of the system as sales capacity, gas that might be sold on a peak day.

Q. You mean deliverable capacity? A. Correct.

. . . . . .

[fol. 831] Q. What ultimate daily capacity of the system is now contemplated?

A. What do you mean by "ultimate", how many years?

. . . . . .

Mr. Littman: Let's take 1946, the last year of your proposed capital additions exhibits.

The Witness: For the winter of '46-47 we anticipate that our sales capacity must have been built to handle or

deliver the quantity shown on Mr. Morton's estimate for that winter.

Q. How much is that?

A. With a slight correction or reduction due to the fact that we design for a quantity resulting from deducting [fol. 832] from Mr. Morton's estimate the readily interruptable gas on that particular day, my figure shows we should have a capacity of 457,250,000 to carry the system peak on that day.

Q. On what day?

A. On the peak day of the winter of '46-47, which will, no doubt, occur in 1947 in January or February.

Q. Just to make certain of the understanding, shall we; Mr. Burnham, is your figure of 457,250 m. c. f. comparable to Mr. Morton—is that 457,250 m. c. f.? A. Yes.

Q. Is that figure comparable with Mr. Morton's figure shown in Exhibit 40, Line 11, at the bottom of that line or column rather, as 441,900 m. c. f.? I wanted to call that to your attention so as to make certain—

A. (Interposing) No, that is not.

Q. That is not comparable?

A. No, sir.

Q. Why isn't it, what is the difference?

A. All right, the figure which I gave you is the amount to be handled the winter following Mr. Morton's estimate there of 441,900,000. During that winter, as shown on Mr. Morton's estimate under 1946 we propose to design for a delivery of 429,900,000.

Q. That is compared with Mr. Morton's figure of what? [fol. 833] A. 441,900,000. The difference represents the readily interruptable gas which we shall shut off on that day.

. . . . . .

[fol. 834] Q. Were all of the compressor station sites obtained with the original right-of-way?

A. I think I testified to the fact that all were secured except two.

Q. And which were the two?

A. Hansford and Tuscola.

. . . . . .

[fol. 836] Q. Are you familiar with the construction problems encountered in connection with the building of the loop lines? A. Yes, I am.

Q. Does Panhandle Eastern Pipe Line Company have records showing the quantity of machine trenching and hand trenching employed in the construction of the original and loop lines?

A. I doubt if we have, of the original lines, but insofar as the loop line is concerned, in the last few years we have gathered that information and I shall be glad to furnish it to you.

* * * * * * * * *

[fol. 837] Q. I just have a few more questions here. What is the distance that gas is transported in the main transmission line from Sneed compressor station to Dana measuring station? A. 859.4 miles.

Q. From Sneed compressor station to the City of Detroit? A. Approximately 1200 miles.

* * * * * * * * *

[fol. 840] Q. Are you familiar with the company's practice with respect to letting contracts for construction and well drilling?

A. I am more familiar with the company's practice with respect to letting contracts for the construction of transmission facilities.

Q. Now, will you describe generally the routine or the practice in that regard?

A. Well, complete specifications are drawn up in the engineering department, maps are prepared and invitations to bid are sent out to not less than five, if five reputable contractors are available at the moment—

[fol. 841] Q. (Interposing) Ordinarily is it five or more or less?

A. Sometimes more but not ordinarily less, five or more. The contractors are usually given two weeks to four weeks to look over the rights-of-way, the problems involved in completing the construction and on a certain stipulated date they submit bids to the assistant secretary of the company, not to its engineering department.

The bids are opened by the assistant secretary and the contract is let.

Q. To the lowest bidder or not to the lowest bidder usually?

A. If the lowest bidder is a reputable contractor and if the lowest bidder is not engaged in other work at the moment.

* * * * * * * *

Q. If I may ask one more question with respect to your Exhibit 47, Mr. Burnham, referring you to line 4, Southern Michigan North Line, $3,893,300. Is that line going to be constructed in 1941?

[fol. 842] A. I am glad you asked me that question. In my estimation it is now physically impossible to get that line completed in 1941 and the same applies to the item on line two. This is because of the delay in receiving pipe, so I should say, generally, that items shown on lines 2, 4 and 5 will run over into 1942.

Q. Is the gas delivered to the Interstate Gas Company for resale in Harrisonville, Missouri taken from the main pipe line system?

A. Our local area system, I am very certain.

* * * * * * * *

Q. Well now, I think the record ought to be clear, Mr. Burnham, with respect to other such similar delivery.

Could you point out on your Schedule 2 other instances where gas is delivered to customers not from the main pipeline system of Panhandle Eastern?

A. Well, generally speaking, the customer receiving service from the local area system that is not getting gas out of the main line system was attached previous to the construction or completion of the main line system and if you will refer to the dates in the Column F you will get a very good idea of what customers received service from the local area system.

Q. Well do those customers never get any gas from the [fol. 843] main line?

A. Yes, indeed they do, and I testified in the hearing in September that on cold days it was necessary that we turn the main line gas into this local area system to reinforce the supplies of local gas and the day is fast approaching when local gas will probably be depleted to such an

extent that the great majority, I mean the greater part of this gas will be main line gas.

. . . . . .

[fol. 844] By Mr. Lee:

. . . . . .

[fol. 845] Q. What is the mileage of the Michigan Gas Transmission Company from Dana to Melvindale, the Detroit gate? A. Approximately 350 miles.

. . . . . .

[fol. 856] Leith V. Watkins, called as a witness on behalf of the Panhandle Eastern Pipe Line Company, being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Wheat:

Q. State your name and business address, Mr. Watkins.

A. My name is Leith V. Watkins. My address is 90 Broad Street, New York City.

Q. Do you hold any position at this time with the Panhandle Eastern Pipe Line Company?

A. Yes, sir, I am secretary-controller of Panhandle Eastern Pipe Line Company and its subsidiary company, Illinois Natural Gas Company.

. . . . . .

After completing high school, I entered Emory and Henry College at Emory, Virginia and remained there through my sophomore year. That was about 1910.

During the year 1911 I was a student at the Spencerian [fol. 857] Commercial School at Louisville, Kentucky where I took a course in accounting and finance. Almost constantly during my entire business career I have been a student of matters relating to specific and general accounting, operating and tax problems.

. . . . . .

I am a member of the Controllers Institute of America, of the American Gas Association and several of its committees.

. . . . . .

During the period from 1910 to 1926 I was a member of a staff of public accountants, a member of the staff of Clearing House Bank Examiners, staff auditor for corporations, officer of corporations and an instructor in advanced accounting in Y. M. C. A. night schools.

During the period from 1926 to 1931 I was a member of the staff in charge of the installation of operating and construction budgets of the General Auditor of Columbia Engineering and Management Corporation, assistant treasurer of Union Gas & Electric Company at Cincinnati, Ohio, and its associated companies.

During the period from 1931 to 1937, I have been assistant secretary, assistant treasurer and secretary and treasurer of Panhandle Eastern Pipe Line Company and its [fol. 858] subsidiary companies.

Also during a portion of that period from 1934 to 1937 I was secretary-treasurer of Columbia Oil & Gas Corporation and its subsidiary companies.

Q. From 1937 to date however, you have been secretary-controller of Panhandle Eastern Pipe Line Company and its subsidiaries during a portion of the time and its single subsidiary at this time. Is that true?

A. That is correct.

* * * * * * * *

As secretary of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company I have complete responsibility to the board of directors and to the president of those companies for the duties generally associated with the secretaryship of a modern-day corporation.

* * * * * * * *

As controller, instead of comptroller, of those companies, I am the chief accounting officer and, as such, I am responsible to the board of directors and to the president for all accounting matters, practices or policies and the wide variety of duties generally associated with and specifically assigned to the controller of a modern-day corporation.

[fol. 859] Q. Mr. Watkins, have you prepared for introduction in this proceeding an exhibit consisting of three pages headed "The Balance Sheets Per Books"?

A. Yes, I have prepared such an exhibit or have had it prepared under my supervision.

Q. And is the document which I now show you the document to which you refer? A. That is correct.

Q. And that was prepared under your supervision, was it? A. Yes, indeed!

Q. And do you believe it correctly shows what it purports to show? A. I do.

* * * * * * * * *

(Document Referred To Was Marked Exhibit No. 48 For Identification.)

Q. In preparing this document, containing certain balance sheets of the company, and also in preparing the income statement which will follow, have you generally [fol. 860] followed the forms prescribed by the Federal Power Commission in its uniform system of accounts for natural gas companies and also its forms for annual reports of such companies?

A. Yes, those forms have been generally followed, but I do not wish to have the fact that I have so followed those forms in making up these exhibits to be understood as a concurrence on my part or on the part of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company in the soundness, from an accounting standpoint, of certain of these forms or parts thereof.

* * * * * * * * *

Exhibit 48 for identification shows the assets and liabilities of Panhandle Eastern Pipe Line Company and subsidiary companies at December 31 each year, beginning with the year 1930, through the year 1940 and at June 30, 1941.

Q. Now, is it true that the assets covered by these balance sheets for each of these years are stated on page 1 of the exhibit and the liabilities for each of these respective years are stated on page 2 of the exhibit?

A. That is correct.

Q. So that by considering the asset column on page 1 for any particular year and comparing it with the liability column for that particular year on page 2, your complete

balance sheet for that particular year can be ascertained?
[fol. 861] A. That is correct.

. . . . . .

These assets, of course, are stated in this exhibit on the consolidated basis and have, therefore, been taken from the books and records of either Panhandle Eastern Pipe Line Company and whatever subsidiaries it owned at the dates for which the figures were respectively shown.

Q. Now, it is a fact, is it not, Mr. Watkins, that Panhandle Eastern Pipe Line Company did at one time own another corporation as a wholly owned subsidiary, which corporation is not now so owned?

A. As a matter of fact, it owned several other such corporations which corporations are not now subsidiaries.

Q. Yes, and is it a fact that the only subsidiary corporation now owned, wholly or in part, by Panhandle Eastern Pipe Line Company is Illinois Natural Gas Company?

A. That is true as of this date.

Q. As of this date. In this exhibit you have consolidated data from the books and records of both Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company, have you not?

A. That is true, not only with respect to this exhibit, [fol. 862] but any other exhibits that this witness will offer.

Q. Yes. Now, without going into detail in respect to the items which are contained on Exhibit 48 for identification, I think that there are some items which might necessitate some slight discussion for a thorough understanding of their nature. For example, Mr. Watkins, will you state what the item headed "Other Investments" on line 3 of page 1 of Exhibit 48 for identification represents?

A. May I ask if that question is directed to the amount shown in Column F on line 3 of Exhibit No. 48?

Q. Yes.

A. Which is $214,298.25 as of June 30, 1941?

Q. That is right.

Mr. Littman: You mean Column M or Column F?

The Witness: "M."

The Witness: This amount represented on June 30, 1941, an amount due Panhandle Eastern Pipe Line Company by

Southwest Kansas Oil & Gas Company and Saturn Oil & Gas Company on open account amounting to $48,819.24—I beg your pardon, that represents four notes of equal amount dated January 6, 1936 of which one note is due each year during the years 1943 to 1946 and an open account due from the same companies amounting to $165,479.01.

[fol. 863] Q. Making the total shown by you in Column M, line 3 of page 1?

A. That is correct.

. . . . . .

Q. Is there any further explanation that you think should be made of that particular item of "Other Investments"?

A. I don't believe so, except that there might be some interest in the fact that as at the end of the year 1934 the amount shown as "Other Investments" in Column F on line 3 of Exhibit 48 was $180,240.68, whereas at the end of the year 1935 the amount had been reduced to $1.00. This change came about because of the reduction of investment of Panhandle Eastern Pipe Line Company's investment in capital stocks of two corporations dissolved during that year. The balance in this account rose at the [fol. 864] end of the year 1936 to the amount stated in Column H on line 3 or $150,146.84 by the addition of the notes and accounts receivable, previously referred to by this witness as explanation of the balance of $214,298.25 shown in Column M at June 30, 1941 on line 3 of Exhibit 48.

Q. Now, Mr. Watkins, what have you to say with respect to the item of "Special Deposits" in line 6 which I think might well be given some explanation?

A. Without refreshing my mind as to the balance at the end of each year, this account generally contains amounts placed on special deposits for some specific purpose, as an example the principal portion of the amount shown on line 6 in Column M of Exhibit No. 48, represents the balance of funds deposited with the company's corporate trustee, with Panhandle Eastern Pipe Line Company's corporate trustee for the redemption of its 4 percent bonds redeemed during the year 1941. The amount shown at the end of each of the prior periods represents similar transactions or transactions of a similar nature.

Q. The account varies from a high of something slightly under $9,000,000 now to a low of $660, does it not?

A. That is correct.

Q. Now looking down the page to line 10, "Accounts Receivable," have you any explanation which you desire to make in respect to that item?

. . . . . .

[fol. 865] A. The balance shown as "Accounts Receivable" over the years covered by this statement simply represents in some degree of relationship the growth of the company's business.

. . . . . .

Q. Now most of the other items on page 1 of Exhibit 48 are generally self-explanatory, are they not, Mr. Watkins? If you have any other items that you feel should be briefly explained, I wish you would do so.

A. Well, to the witness they seem self-explanatory.

Q. Yes, they so seem to be. Now, will you turn to page 2 of Exhibit 48 which is the page on which the liabilities for these respective years are shown? I draw your attention to line 6 entitled "Bonds" under the general heading "Long Term Debt" and also to line 7 under the same general heading, which is entitled "Miscellaneous Long Term Debt."

I would appreciate it if you would outline briefly what is disclosed on those two lines of page 2 in respect to the ups and downs of these two items.

A. The up and down of the two items referred to, shown on lines 6 and 7 of page 2 of Exhibit 48, is simply the re-[fol. 866] sult of the change in the portion of the company's financial structure represented by long-term debt during the years.

Q. For example, Mr. Watkins, I notice that the amount shown under the heading "Bonds" at the close of 1940 is $22,500,000 and that at June 30, 1941 that amount is shown as $18,250,000. Does that difference represent a portion of the refinancing operations carried on by the company early in this current year?

A. It does.

Q. And is the same true with respect to the increase shown between 1940 and June 30, 1941 in the other item, to-wit, "Miscellaneous Long-Term Debt"?

A. As to the principal portion of that change, yes.

Q. Now, I notice that that has risen from around $30,000 to slightly over $5,000,000. Is the $5,000,000 represented by certain notes at this time?

A. That is correct.

Q. Yes. Now, without going into detail on various other items down through line 16, I should like to ask you with respect to line 16, which is headed "Taxes Accrued," what is represented by the item shown in Column M for June 30, 1941 in line 16? In that connection, please feel free to consult the note shown on page 3 of this exhibit in connection with your explanation.

[fol. 867] A. The amount of $3,176,774.41 shown on line 16, Column M, page 2 of Exhibit 48, represents the total taxes accrued by Panhandle Eastern Pipe Line Company and subsidiary companies as of June 30, 1941.

Q. That includes both Federal and State taxes, does it?

A. It includes both Federal and State taxes and the Federal income taxes and excess profit taxes have been computed without regard to special deductions which result from the refinancing consummated during the early part of this year and without making provision for possible increases in rates or otherwise resulting from the Revenue Act of 1941.

* * * * * * * *

Q. Will you please give the detail of that item?

A. The detail of that item is as follows: Ad valorem taxes for the State of Texas for the year 1941, $17,400; for the State of Oklahoma during the year 1941, $6,000; for the State of Kansas during the year 1941, $132,000; for the State of Missouri during the year 1940-41, $97,478.66; for the State of Missouri during the years 1941-42, $8,400; for the State of Illinois during the year 1941, $42,600.

For gross production taxes in the State of Texas, $2,707.24. For the conservation assessment made by the [fol. 868] State of Kansas, $180.19. For the Federal capital stock taxes for the year 1940-41, $68,520. For capital stock taxes for the State of Illinois during the year 1941, $2,400. For Federal excise for old age benefits, $2,588.87.

For Federal excise for unemployment insurance, $1,597.54. Unemployment compensation for the State of Texas, $122.74; Kansas, $2,363.94; Missouri, $3,035.56; Illinois, $1,126.08; New York, $122.24.

For State income taxes for the year 1939, $15,418.21; for State income taxes during the year 1940, $31,625.49; for State income during the year 1941—$24,000; for Federal income taxes during the year 1938, $24,242.22. For Federal income taxes during the year 1939, $14,883.13. For Federal income taxes during the year 1940, $747,962.25. For Federal income taxes during the year 1941, $934,000. For Federal excess profits taxes during the year 1940, $480,000. For Federal excess profits taxes during the year 1941; $516,000.

Q. Now, the total of those figures is the total shown in Column M, line 16, page 2, is it?

A. That is correct.

Q. That represents, does it, the accruals made on the books of these two companies, consolidated during the first six months of 1941, or just how would that better be [fol. 869] stated?

A. Well, not necessarily during the first six months of 1941—

Q. (Interposing) It is the balance shown on the books as of June 30, 1941, is it not?

A. That is correct, because some of these taxes cover a period other than the year 1941.

Q. How does that come about, Mr. Watkins?

A. Without being facetious, by reason of the Acts of the State Legislatures, principally.

* * * * * * * * *

Mr. Wheat: Mr. Examiner, I offer Exhibit 48 for identification in evidence.

* * * * * * * * *

[fol. 871] Q. Now, Mr. Watkins, have you also prepared a document entitled "Income Statement Per Books, Period from April 1, 1932 to December 31, 1941"?

A. I have.

Q. And is the document consisting of two sheets which I now show you the study which you have just mentioned?

A. It is.

* * * * * * * * *

(The Document Referred to was Marked Exhibit No. 49 for Identification.)

Q. Was the data shown on this exhibit prepared by you or under your direction?

A. Under my direction.

Q. And do you believe that the contents of the data shown on Exhibit 49 for identification correctly show what they purport to show?

[fol. 872] A. I do.

Q. Now turning to Exhibit 49 for identification, turning now to Schedule 1, which is page 1 of Exhibit 49 for identification, I should like to ask you how you obtained the figures shown in Column M, which is 1941, January 1 to December 31.

A. The figures shown in Column M for the year 1941 represent the actual results of operation for the first six months of the year 1941, plus an estimate of the probable results of operation for the last six months of that year.

Q. May I ask whether that is true of any of the other figures shown in the other columns of this exhibit, in other words, are any of the other figures in Columns B to L, inclusive, estimated or are they actual?

A. They are actual.

Q. And only then in the instance of 1941, as shown on Note 1 on Schedule 1, are there estimated figures included?

A. That is correct.

Q. Now, will you look at line 3 under the heading "Income" and tell me what is included under the item "Gas"?

A. All the revenue received by Panhandle Eastern Pipe Line Company and its subsidiary company, Illinois Natural Gas Company, or any other subsidiary companies in-
[fol. 873] cluded in prior years is included in the item of "Gas" shown on line 3 in the various columns of Exhibit 49.

* * * * * * * *

Q. What do you mean by the item of "Pipe Line Rentals" in line 5?

A. Formerly Panhandle Eastern Pipe Line Company [fol. 874] transported gas for a period of a few years for another company, the transportation of the gas, as I re-

call, was for a distance of about 100 miles. The contract expired or the arrangement ceased during the year 1936 and there has been no such income since that year.

Q. Will you direct your attention to lines 19 and 20 of page 1 of Schedule 1, Exhibit 49, which are respectively headed "Federal Income" and "Federal Excess Profits" under the center heading of "Taxes" and particularly the items shown in Column M and tell us what those contain?

A. The amounts shown in Column M as accrual for Federal income and Federal excess profit taxes for the year 1941 have been computed without regard to special deductions resulting from the refinancing consummated during February but have been adjusted for increase in rates and other changes as a result of the Revenue Act of 1941.

Q. Now, with respect to those special deductions you just mentioned, have you made any computation of those amounts?

A. Yes. Such computations, however, have not been entirely checked with the new Revenue Act because of the newness of it and, subject to that, amount to approximately $900,000.

Q. May I ask, Mr. Watkins, how you, as controller of this company, plan to treat that item and give your reasons?

[fol. 875] A. As controller of the company, it is my expectation to recommend that the company continue to accrue Federal taxes for the year 1941 without referring to the deduction resulting from the refinancing consummated this year but before the end of the year and before the company's books are closed to transfer from the accrued tax account to the unamortized debt discount and expense account the actual amount determined on the basis of the 1941 Revenue Act that does represent the so-called saving as a result of the refinancing and thereby distribute the so-called saving over the life of the securities which gave rise to it.

Q. You believe that that is a proper accounting method for the treatment of this item?

A. I most certainly do.

Q. And it is true, is it not, that this item is a special item resulting in this particular year and not expected in other years and solely coming about by reason of the re-

financing operations which were consummated early in the year, 1941?

A. That is correct, however, there was a similar item in a prior year.

Q. There have been other items of that nature or at least one other item during the history of this company arising also from a refinancing operation?

[fol. 876] A. That is correct.

Q. But unless there were some such refinancing operation, no such particular type of special deduction would result from the normal operations of this company. Is that correct?

A. That is correct.

May the witness make one explanation before we leave this?

Q. Yes, please.

A. The revenues from gas operation shown on line 3 in the various columns of this exhibit do not include the total amount paid by certain of the companies to which Panhandle Eastern sells gas. As a result of certain contracts it has with Michigan Gas Transmission Corporation providing for the acceptance by that corporation and the redelivery by it to certain of Panhandle Eastern's customers, this organization has recorded as income only that part of the amount paid by those customers which it actually received.

Q. Well, do I understand from that, Mr. Watkins, that Michigan Gas Transmission Company receives payment from these corporations which you have mentioned and transmits to Panhandle Eastern Pipe Line Company an amount somewhat less than that, the difference taking care of the contractual obligation with respect to payment for transmission of the gas?

[fol. 877] A. That is correct.

. . . . . .

[fol. 879] Q. What is the item "Interest Charged to Construction" in line 33 which I note is in each instance a red figure?

A. These amounts represent the interest which Panhandle Eastern Pipe Line Company or its subsidiary companies have charged to construction projects and capitalized during the years for which such amounts are shown.

Q. Why, Mr. Watkins, do you start your first column of figures, to wit, Column B, on April 1, 1932, rather than January 1, 1932?

A. The construction of our facilities occurred during the years 1930 and 1931 and continued to about March 31, 1932. The facilities as they then existed were placed in practical operation at that date. Prior to April 1, 1932, all costs were capitalized. However, during a portion of this period the facilities were operated to some minor degree, the result of such operations, either a loss or a gain, was likewise capitalized, so that in effect the entire cost, from whatever source, of the facilities constructed by these companies prior to March 31, 1932, was capitalized.

Q. That fact leads to the result, does it not, that your average figures shown in Column L are for eight and three-quarters years rather than for six or nine years?

A. Yes, that is correct.

Q. And your cumulative total shown in Column K [fol. 880] covers the eight and three-quarters year period, does it not? A. That is correct.

. . . . . .

Q. Will you turn to Schedule 2, which is page 2, Exhibit 49? I note that this page is headed "Net Income Adjusted for Depreciation (Including Amortization) computed at 3 percent for a period from April 1, 1932, to December 31, 1941." May I preliminarily ask you whether it is not true that in line 3 where, under the heading "Item" is shown depreciation per Schedule 1, line 9 that figure "9" should be replaced by "10"?

A. Yes, that is correct.

. . . . . .

[fol. 881] Now, Mr. Watkins, will you state what you have shown on this page, and then will you state how you happen to use a 3 per cent figure in connection with your items contained on line 6 of Schedule 2?

A. This exhibit has been prepared with the view of restating the net income shown on line 35 of Schedule 1 of Exhibit 49 to give effect throughout the years of a provision for depreciation including amortization computed at 3 per cent rather than the basis used by the company per books during those years.

Q. Mr. Watkins, would it be fair to say that the 3 percent item is an approximation of the recent charges made by the company?

A. Not only fair but absolutely correct to so state.

Q. I take it you are not suggesting that this company or any of its subsidiaries were required to set up 3 percent in the earlier years for any reason, are you? A. Oh, no.

Q. You are showing what would have occurred had the [fol. 882] company so handled its records?

A. Simply that.

Q. And what happens to the net income after such an adjustment is made?

A. As to the cumulative total?

Q. Yes.

A. The average?

Q. As to the cumulative total.

A. The cumulative total shown on both Schedule 1 and Schedule 2 representing net income for the period from April 1, 1932, to December 31, 1940, would by this adjustment become $10,070,700.16 rather than $13,552,607.22 as shown on line 35 in Column K on Schedule 1.

Q. Now, will you state what difference such an adjustment would make on the average 1932 to 1940, eight and three-quarters years figures?

A. It would make a difference of approximately $400,000 per year.

Q. On the average? A. On the average.

Q. Thank you. Is there any further explanation that you desire to give with respect to Exhibit 49?

A. There is none.

Mr. Littman: May I ask a question at this point?

Mr. Wheat: Surely.

[fol. 883] Mr. Littman: Mr. Watkins, will you please explain what you include within the meaning of the term "amortization" as used on Schedule 2 of Exhibit 49, that is, in the heading of this schedule?

The Witness: Any provision for the return to a corporation engaged in the exploitation of a wasting asset for its assets consumed in operations must necessarily include factors representing actual deterioration, functional depreciation and the amortization of the corpora-

tion's investment in its facilities over the life of the product which it is exploiting, for which reason it has been the general practice of our corporation to give consideration to and make provision for the possibility that it may become necessary to cease operation before our facilities are actually entirely worn out.

Mr. Littman: Now, what facilities do you mean?

The Witness: All of our facilities.

Mr. Littman: Including the main transmission line?

The Witness: Surely.

Mr. Littman: Thank you.

Trial Examiner: Was it stated in the record what accounting method applied to the reserve for depreciation?

. . . . . .

[fol. 884] The Witness: This matter might better be covered by reference to a registration statement entitled "Registration Statement No. 2-2867 on Securities and Exchange Commission's Form A-1, Effective March 29, 1937, Filed by Panhandle Eastern Pipe Line Company" where on page No. 75 in certain notes accompanying and made a part of the income and surplus statements, included in that statement the following appears:

"The Issuer, under the retirement method of accounting, has provided for current retirements and renewals, and in addition, is providing a reserve for future retirements and renewals. This method does not contemplate a full provision for accrued depreciation as determined by the age and estimated service life of the properties. Annual provisions on the foregoing basis have been computed on the average balance in property account (exclusive of undistributed legal expenditures, interest and taxes during construction, and so forth) at the annual rate of one-half of one per cent for the year 1931, one percent for the year 1932, and one and one-half percent per annum for 1933, 1934 and 1935. In 1936 the provision was computed at the rate of one and one-half percent per annum on the average balance in property account, including undistributed legal expenditures, interest and taxes during

construction, and so forth, on all property exclusive of production system property acquired in liquidation of Texas-Interstate Pipe Line Company on October 31, 1936.

[fol. 885] "Provision for retirements, renewals, depreciation and amortization on this production system property has been computed since acquisition at the rates used by the predecessor subsidiary company, namely, depletion of producing leaseholds at the rate of three mills per m. c. f. of gas produced and amortization of the cost of non-producing leaseholds, drilling costs, well equipment and other production system property at 6 per cent per annum.

"In addition, the Issuer made a provision of $30,108.65 for retirements for the period from September 1, 1930, to December 31, 1930."

By Mr. Wheat:

Q. That is the end of the quotation, is it, Mr. Watkins?

A. That is correct.

Q. Is there any further statement that you desire to read in that connection?

A. In Registration No. 2-4118 of Securities and Exchange Commission Form A-2, effective July 29, 1939, on page S-7 thereof, there is shown a further note with respect to the income account attached to and made a part of the consolidated income account in such statement which reads, in part, as follows:

"The registrant and its subsidiaries have provided for retirements, renewals, depletion and amortization (other than amortization of gas sales and purchase contracts) in [fol. 886] accordance with resolutions of the board of directors. Specific rates based upon the age and estimated life of the properties were not used in determining the amounts.

"The provision made for the year 1936 is not represented to be a reasonable provision for depreciation as determined by the age and estimated service life of the property. The registrant's Certificate of Incorporation, as amended, provides substantially that no dividends on the common stock or any participating dividends on preferred and common stocks may be paid except out of net surplus earned subsequent to December 31, 1935, remain-

ing after there shall have been deducted therefrom as provisions for renewals, retirements, depletion and amortization (other than amortization of gas sales and purchase contracts) an aggregate accrual equal to one-third of one percent per month (on monthly balances) of the consolidated tangible property account of the registrant and its subsidiaries; the provisions for renewals, retirements, depletion and amortization as computed in accordance with the registrant's certificate of incorporation would have amounted to $1,715,241.58, $1,909,966.65, $2,337,597.71 and $979,449.83 for the years 1936, '37 and '38 and the five months ended May 31, 1939, respectively. The amounts claimed by the registrant and its subsidiaries for depreciation for Federal income tax purposes are larger than the provision for retirements and renewals as set forth in [fol. 887] the income account."

That ends the quotation with respect to the matter contained in Registration No. 2-4118.

In Registration 2-4579 on Form A-2 of the Securities and Exchange Commission, effective January 29, 1941, there is a further statement with respect to this matter on page S-7 of which the following is a part:

"The management has been informed by P. McDonald Biddison, an independent consulting engineer of Dallas, Texas, that in his opinion the annual amounts provided for depreciation, depletion and amortization were reasonable for this purpose.

"The provisions for the years 1938, 1939 and 1940 were equal to 2.98 percent, 3.20 percent and 3.16 percent of consolidated property, plant and equipment accounts at the beginning of the respective years."

In a listing application dated February 28, 1941, filed with the New York Stock Exchange with respect to Panhandle Eastern Pipe Line Company's first mortgage and first lien 3 per cent bonds, Series B, due November 1, 1960, under the heading "Depreciation Policy" the following appears:

"The formulae consistently used by the company and its subsidiary companies beginning with the year 1937 to develop an amount to be recommended to the board of di-

rectors as a proper provision for depreciation, depletion [fol. 888] and amortization gives consideration to the "wasting asset" theory and provides depletion on operated leaseholds on the basis of units of gas withdrawn, amortization of investment in unoperated land rights by the use of a composite life of ten years for such land rights, amortization of gas sales and purchase contracts at a specific monthly rate as provided in the company's certificate of incorporation and in amounts to conform to the contract period in certain instances and an amount for the other transmission system properties determined by its board of directors which recognizes amortization in addition to a composite rate based on the age and estimated life of the properties. The propriety of the aggregate annual provision, as well as the reasonableness of the total reserves provided to date has been substantiated by an opinion from an independent consulting engineer. Unless required to do otherwise by some regulatory authority of competent jurisdiction, the company expects to continue this policy."

* * * * * * * * *

[fol. 889] Trial Examiner: Is the straight line method apparently followed by the excerpts you have read?

* * * * * * * *

The Witness: It is followed.

Trial Examiner: It is followed at the present time?

The Witness: That is correct.

Trial Examiner: And when did that begin?

The Witness: We have never used anything else.

Trial Examiner: That is from the beginning?

The Witness: That is right.

Trial Examiner: And your answer to the question originally stated is that you employ the straight-line method of accounting for depreciation?

The Witness: As to the method, that is correct, but as to the amount, that varies over the several years.

Mr. Wheat: But as to the amount, that varies over the several years?

The Witness: Yes, indeed.

* * * * * * * * *

[fol. 890] Q. Mr. Watkins, have you also prepared a document of two pages headed "earned surplus—per books period from commencement of operations to June 30, 1941"? A. I have.

Q. Is the document I now show you the one which I have just mentioned? A. It is.

* * * * * * * * *

(Document No. 50 marked for identification.)

Q. Mr. Watkins, was exhibit 50 for identification prepared by you, or under your direction?

[fol. 891] A. Prepared under my direction.

Q. And does it correctly show what it purports to show, in your opinion? A. It does.

* * * * * * * * *

This exhibit shows an analysis of the earned surplus account per the books of Panhandle Eastern Pipe Line Company and subsidiary companies at December 31, 1930, at each December 31, thereafter up to and including the year 1941, and at June 30, 1941.

* * * * * * * * *

Both the credits during the year, the balance at the beginning of the year, and the total credits thus created are shown on page 1 of exhibit 50.

Q. And are the debits and the earned surplus figures as of the end of the year shown on page 2 of that exhibit?

A. They are.

* * * * * * * * *

Q. Now, will you turn to page 2 of the exhibit.

[fol. 892] What is meant by the items shown on lines 10 and 11 entitled, "Reduction of Interest Capitalized by Amount of Interest earned during 1930" preceding the item on column (C) under the year 1931?

A. That item, which is $18,334.42, as well as the item following the explanation shown on lines 14, 15 and 16, amounting to $53,551.88, shown in column (D), both repre-

sent amounts capitalized by the companies at the end of the construction period and prior to the placing of the facilities—these companies' facilities—in practical operation at March 31, 1932.

* * * * * * * *

Mr. Watkins; have you also prepared a single page computation showing—entitled "Capital Surplus Per Books, Period from September 1, 1930 to June 30, 1941"?

Such an exhibit has been prepared under my direct supervision.

Q. And is the document I now show you the exhibit you have just mentioned? A. It is.

* * * * * * * *

[fol. 893] (Document referred to was marked Exhibit 51 for identification.)

Q. Does Exhibit 51 for identification correctly show what it purports to show, in your opinion, Mr. Watkins?

A. It does.

Q. Let me ask you in respect to the item covered under lines 11, 12 and 13, which same amount appears opposite lines 22 and 23.

What does that item represent and what brought about the reduction shown in the balance at the end of the year for 1931 in column (C) under the balance shown in column (B) which is the period September 1, 1930 to December 31, 1930?

If there is some action on the part of the Board of Directors of the Company you would like to read in connection with that, please feel free to do so.

A. If the witness may suggest, it might be more appropriate to explain that item in connection with the next exhibit.

Q. I would be very happy to have you do so. The next exhibit is the exhibit entitled, "Gas Plant"?

A. That is correct.

Q. We will proceed in that manner, then, and ask for that explanation at that time.

[fol. 894] I would like to ask you, however, on exhibit 51, to explain the items in column (H) and state what happened with respect to capital surplus between the close of the year 1935, shown in column (G), and the close of the year 1936, shown in column (H)?

A. As will be shown by ines 3, 4 and 5 in column (B), Panhandle Eastern Pipe Line Company came into possession of surplus aggregating $19,335,867.47, as of August 31, 1930, without cost to it.

In the year 1936, the items to which your question was directed, representing a residue of $19,000,000 odd the witness referred to, were disposed of by action of the Board of Directors, through the creating of special reserves in that year applicable to the earned surplus deficit of the company at December 31, 1935, amounting to $1,247,365.50, and a special reserve to cover the loss on investments in subsidiary companies, in two subsidiary companies as of December 31, 1935, amounting to $2,232,009.04.

There was also assigned to the common stock account $15,017,300 so that the entire number of shares of common stock outstanding at that time would be deemed to have been issued at $25.00 a share.

These appropriations, together with a charge to capital surplus of $39,902.48 representing an account due from Missouri-Kansas Pipe Line Company written off during [fol. 895] the year 1933, disposed of $18,000,000—

Q. (Interposing) You mean 1936, do you not?

A. Correct, disposed of 18,536,577.02 of the remaining capital surplus of $19,335,867.47 created on August 31, 1941, as previously explained.

Q. You mean 1931? A. I am sorry, 1936.

Q. Now, Mr. Watkins, that left, at the close of 1936 as capital surplus on the books of the company, the item of $46,364.54, did it not? A. That is correct.

Q. I note that item does not appear, nor any other appears as capital surplus per books as from January 1 to June 30, 1941. Will you state what happened to the $46,000 odd item which I just mentioned?

A. During the year 1939, the item amounting to $46,364.54 was transferred to the reserve for depreciation

in conformity with the authorization by the company's board of directors.

* * * * * * * *

Q. Now, have you, Mr. Watkins, a statement consisting of two pages headed, "Gas Plant"?

A. Such a statement has been prepared under my direction.

* * * * * * * *

[fol. 896] (Document marked exhibit 52 for identification.)

Q. And does exhibit 52 for identification, in your opinion, correctly state what it purports to show?

A. It does.

Q. Will you now explain exhibit No. 52, the items which I mentioned to you in my interrogation under exhibit 51 which you stated you thought had better be explained under this item?

A. By reference to page 2 of exhibit 52, particularly in columns (b) and (c) on line 40, it will be noted that the balance in the account under the classification, "Gas Sales and Purchase Contracts" in those years is considerably greater than that under the same caption on line 40 in column (d).

Q. For 1932?

A. For the year 1932. The reason for this change came about in this manner:

At a special meeting of the Board of Directors of Panhandle Eastern Pipe Line Company held on September [fol. 897] 3rd, 1930, the following preambles and resolutions were adopted and I quote:

"Whereas, Messrs. Brokaw, Dixon, Garner and McKee, geologists and petroleum engineers, have given to this Company a letter setting forth their opinion that this company's present and available sales contracts are of a present fair market value in excess of eleven million ($11,000,000) dollars, which letter is in substance as follows:

"'Based on our examination of the leaseholds for natural gas acreage, survey of the natural gas transmission line now under construction from the Panhandle area of Texas, Oklahoma, and Kansas to Indiana, survey of the

markets of the present non-competitive territory to be served by this line, analysis of the contracts signed and under negotiation for gas and of contracts available, we are of the opinion that such present and available sales contracts are of a present fair market value in excess of $11,000,000.'

"Now, Therefore, be it

"Resolved that the officers of the company be, and are hereby authorized, empowered, and directed to set up the company's present and available sales contracts upon its books at a value of Eleven Million ($11,000,000) Dollars."

As a result of that action by the Board of Directors, an entry was made on the books of Panhandle Eastern Pipe Line Company represented by Journal voucher No. [fol. 898] J-11 during the month of September, 1930, a result of which was a charge to a sub-classification, "Gas Sales and Purchase Contracts", in the property plant and equipment account of $10,357,713.70, and a corresponding credit to the account, "Surplus Arising from Valuation of Gas Contracts".

This $10,357,713.70 taken together with an amount previously appearing on the company's books of $642,286.30, represented the $11,000,000 authorized by the Board of Directors in preambles and resolutions quoted from the meeting of the board held on September 3, 1930.

At a meeting of the Board of Directors of Panhandle Eastern Pipe Line Company held on March 29, 1932, the following preambles and resolutions were adopted.

"Whereas the Board of Directors of Panhandle Eastern Pipe Line Company, at its meeting held September 3, 1930, pursuant to an appraisal by Brokaw, Dixon, Garner and McKee, adopted a resolution determining the value of the gas sales and purchase contracts owned by this Company to be $11,000,000 and ordered the value of said contracts to be so entered on the books of account of the company;

"Whereas, pursuant to said resolution, an entry was made on the books of account of the Company charging 'Gas Sales and Purchase Contracts' and crediting 'Surplus Valuation of Gas Contracts' with the sum of $10,357,713.70; and

[fol. 899] "Whereas, in the opinion of this Board, it is desirable to reverse said entry in order that the books of account of this Company shall be as fully as possible in accord with sound and conservative accounting practice;

"Now, Therefore, be it Resolved that the Treasurer of the Panhandle Eastern Pipe Line Company be and hereby is directed to enter on the books of account of the Company a credit of $10,357,713.70 to the account entitled 'Gas Sales and Purchase Contracts' and a debit in the same amount to the account entitled 'Surplus-Valuation of Gas Contracts'; and

"Resolved that the Treasurer of said Company be and hereby is directed to investigate and report to this Board his recommendations with respect to the balance remaining in said account 'Gas Sales and Purchase Contracts' after the entry of the credit hereinabove ordered."

As a result of this action by the board of directors, journal entry No. C-517 made in the month of March, 1932, charged account No. 191, "Capital Surplus Arising From Valuation of Gas Contracts", and credited Account No. 3, "Gas Sales and Purchase Contracts", with the amount of $10,357,713.70, so that the explanations of the amount just quoted appearing on both lines, 12, and on 23 of exhibit No. 51, as well as the reduction in the classification on page 2 of exhibit No. 52 on line 40 in the year 1932, column (d) came about.

* * * * * * * * *

[fol. 900] By Mr. Wheat:

Q. All right.

What is meant by the terms "drilled" and "not drilled" in lines 10 and 12?

A. The amounts shown in columns (B) to (M) exclusive on exhibit 52, in lines 10 and 12, represent the cost per the company's books of its gas leaseholds, segregated as to those leaseholds upon which there are wells drilled, or by virtue of conservation orders or practices followed by the companies, have been combined into production units as well as the cost per the company's records of such leaseholds upon which there are no wells

drilled and as to which none have been included in conservation or drilling units.

* * * * * * * *

[fol. 902] Q. Now, will you turn to page 2 of exhibit 52, and tell us whether it is a fact that the undistributed construction expenditures shown under lines 24 to 35 of that page, were distributed during the year, 1937 to the respective accounts to which they might apply?

A. They were.

* * * * * * * *

[fol. 903] Q. Yes.

Will you direct your attention to lines 43 and 44 of page 2, headed, "Other gas sales and purchase contracts": Of the items which are represented under that heading, have they any relation to the items of "Gas Sales and Purchase Contracts" covered under line 40?

A. The amounts shown on lines 42, in columns (D) to (M) inclusive, on this page, represent at the end of each respective year, the accumulated balance in an account created for amortization of the amount shown on line 40 of this same exhibit.

The amounts shown on line 44 in columns (H) to (M), inclusive of this exhibit, have no relation whatever to the amounts stated either on lines 40 or 42.

* * * * * * * *

[fol. 904] Mr. Watkins, referring to page 1 of exhibit 52, where are the field lines, or gathering lines included on that page? I do not see them listed there and I wondered where you included them.

The Witness: Prior to the advent of the Uniform System of Accounts adopted by this Commission, neither Panhandle Eastern Pipe Line Company, nor any of its subsidiaries considered that they had investments in field lines.

Our lines are of such size that for operating and internal use, they seem to be transporting gas directly from the well mouth to the customer.

Our work of reclassification of accounts to conform to the uniform system of accounts has not yet been com-

pleted, so that it remains for us to make a separation of some sort.

Mr. Littman: I take it from your answer that the field lines and the gathering lines will probably be included under the heading of "mains" shown in line 37 on page 1 of exhibit 52?

The Witness: That is correct.

Mr. Littman: And the rights-of-way would probably be included in line 31, "land"—I mean 32, "land rights".

[fol. 905] The Witness: In the separation, that is also required.

Mr. Littman: Rather than in the production plant accounts?

The Witness: That is correct.

Mr. Littman: Referring to page 2, Mr. Watkins, I note that with respect to undistributed construction expenditures, to-wit:

"Engineering and Superintendence during Construction",

"Law Expenditures During Construction",

"Interest During Construction",

"Taxes During Construction", and

"Miscellaneous Construction Expenses — Expenditures" shown in lines 26 to 35, inclusive, on page 2 of exhibit 52, I note that there are no figures shown for the years 1937, 1938, 1939, 1940 or 1941.

Will you please explain how that comes about?

The Witness: In the years 1937, 1938, 1939, and 1940 to the extent there were any such costs, they were distributed directly to the respective work on which such cost was incurred.

Mr. Littman: In other words, you don't mean to infer there was none incurred, but they were not separately shown on the books as in previous years; is that right?

The Witness: That is correct.

Mr. Littman: In other words, whatever was incurred in that respect, that is, through 1937 and thereafter, was distributed among the various accounts?

[fol. 906] The Witness: In those years.

Mr. Littman: And the balances in 1936 were so distributed?

The Witness: There was a general distribution made in the year 1937 of the balances of these amounts accumulated up to that time.

Subsequent to that distribution, any such cost incurred was distributed customarily in the year in which it was incurred if it was not distributed directly to the job as the work was performed.

* * * * * * * * *

Q. Now, Mr. Watkins, have you also prepared a statement consisting of two pages, entitled, "Statement of Dividends, Paid on Class 'A' and Class 'B' Preferred Stocks from Beginning to September 1, 1941"?

A. Such a statement has been prepared under my supervision.

* * * * * * * * *

[fol. 907] (Document Referred To Marked Exhibit No. 53 For Identification.)

Q. Mr. Watkins, does Exhibit No. 53 for identification correctly purport to show what is your opinion?

A. In my opinion, it does.

Q. And what is the source of the data, the books of the company?

A. That is correct.

Q. Without asking many questions about this exhibit, let me just ask you whether this participation shown in connection with the dividends under column (D) involves both the common and preferred stocks?

A. As to this particular exhibit, it involves only the participation on the class A preferred stock. There will be a further exhibit showing the amount of such participation on the common stock, but it does include participation in both classes.

Q. How are these participations based?

A. When in any year dividends at the stipulated rate have been paid on the company's preferred stocks and dividends aggregating $1.50 per share have been paid on the common stock, this company's common stock and class [fol. 908] "A" preferred stock participate in further dividends in that year on the basis of 25 percent of such dividends to the Class "A" preferred stock.

Trial Examiner: From your exhibit 48, it appears you had no preferred stock prior to 1936.

By Mr. Wheat:

Q. May I ask the witness the history of the preferred stock of this company?

A. As shown by page 2 of exhibit 42, on line 3, in column 8, the preferred stock to which reference has just been made, came into existence in the year 1936.

Trial Examiner: You said exhibit 42. I believe you meant exhibit 48, did you not?

The Witness: That is correct. The witness believes there was a slight amount of preferred stock in the very early history of the company, but has no specific information at this time with respect to the details of that stock.

By Mr. Wheat:

Q. Then, the answer to the Examiner's question is that the preferred stock which is mentioned on your exhibit No. 53, and which is now outstanding, is stock which came into existence during the year 1936?

A. That is correct.

[fol. 909] Trial Examiner: So that your phrase used on the proposed exhibit 53, "from beginning to September 1941" should be modified to state, "from 1936 and thereafter"?

Mr. Wheat: Yes, I think that understanding may be had.

* * * * * * * *

Q. Have you also prepared a single page statement entitled, "Statement of dividends paid on Common Stock from Beginning to September 1, 1941"?

A. Such a statement has been prepared under my supervision.

. . . . . .

[fol. 910] Q. And does it, in your opinion, correctly show what it purports to show?

A. It does.

. . . . . .

(Document Referred To Was Marked Exhibit No. 54 For Identification.)

Q. Mr. Watkins, the explanation you have already made with respect to participating dividends as between common and Class "A" Preferred Stockholders explains the items under participating on exhibit 54, does it not?

A. In column (C).

Q. Let me ask you what is meant by note—(1) in line 17 to line 21 on exhibit No. 54.

A. If the witness' memory is correct, during the early part of this year, the company had a registration statement pending with the Securities and Exchange Commission in connection with which some question arose as to whether or not by reason of the ownership of Central Distributing Company, a wholly-owned subsidiary, which company distributed natural gas in the States of Missouri and Kansas, complications with respect to whether or not the [fol. 911] company was a gas utility under purview of the Natural Gas Act might arise.

In order to clear the slate of any such complications or possibility, the capital stock of the subsidiary was increased so that it represented an equal number of shares of stock as there were outstanding of Panhandle Eastern Pipe Line Company's common stock and the Board of Directors declared a dividend payable in shares of this subsidiary on the basis of one share of the subsidiary stock for each share of Panhandle Eastern Common Stock so held.

As a result of this declaration, the concurrent charge to "Earned Surplus" of $399,094.14 was made.

This amount represented the net asset-value of subsidiaries according to its own books.

. . . . . .

Q. Mr. Watkins, you said something about the Natural Gas Act in your previous answer—you meant the Holding Company Act, did you not?

A. Certainly.

Q. Thank you.

Now, Mr. Watkins, have you also prepared a statement consisting of a single lengthy page entitled "Statement [fol. 912] Showing Comparison of Sales and Revenue, Principal Industrial Customers, Years 1939, 1940 and 1941"?

A. Such a statement has been prepared under my supervision,

Q. Does the document I now show you, is that the statement to which you just referred?

A. It is.

Q. Does it, in your opinion correctly show what it purports to show?

A. It does.

. . . . . .

(Document Referred To Was Marked Exhibit No. 55 For Identification.)

Q. Mr. Watkins, in connection with exhibit 55 for identification, how did you select or have selected the various customers listed in column (A)?

A. The customers included in column (A) are the customers whose annual purchases from Panhandle Eastern Pipe Line Company, or its wholly owned subsidiary, Illinois Natural Gas Company, or from the organization to whom Panhandle Eastern Pipe Line sold gas for resale to such organization—

[fol. 913] Q. You mean to such customers?

A. To such customers, in excess of $20,000 per annum.

You will note that in column (C) most of the customers are indirect customers which accounts for their having been included in this schedule.

Q. I note that you have here data for 1941, the totals shown for 1941 are the totals of the columns covering 6 months' actual and 6 months' estimated, are they not?

A. That is correct.

Q. I note that in the last column, a rather large increase in both revenue and MCF sales is shown for the year 1941 over the year 1939.

Would you say that any large proportion of that increase is probably due to defense operations?

A. It would be the witness' judgment that the entire amount, or possibly more would be directly due to defense operations.

Q. How do you reach that conclusion?

. . . . . .

A. As the witness previously stated, the customers included in this exhibit are those whose annual purchases are in excess of $20,000 per customer.

[fol. 914] Unquestionably, out of the great number of other customers both direct and indirect, much of their purchases were a direct result of the defense activity.

Furthermore, it will be noted that in columns (O) and (Q) there are several amounts which represent decreases rather than increases.

That would have a tendency to increase the $892,000 figure shown in column (Q) on line 40.

. . . . . .

Q. I believe it is self-explanatory.

Now, Mr. Watkins, have you also prepared a statement, a one-page document headed, "Statement of Gas Produced From April 1, 1932 to June 30, 1941"?

A. Such a statement has been prepared under my supervision.

Q. And is the document I now show you the one to which you have just referred?

A. It is.

Q. Does it correctly show what it purports to show in your opinion?

A. It is my opinion that it does.

. . . . . .

[fol. 915] (Document Marked Exhibit No. 56 For Identification.)

Q. Now, Mr. Watkins, referring to Exhibit 56 for identification, the data which you have included on this exhibit is from the companies' records, is it not?

A. It is.

Q. And why did you use only three-quarters of a year in 1932?

For the same reasons as you have explained on another exhibit?

A. That is correct.

Q. The items covered under column (D) include the so-called "Local Area", is that correct?

A. Yes, sir.

Q. Is there anything else you feel should be explained with reference to exhibit 56?

A. Column (B) is headed Amarillo field. Really that refers to the Panhandle field.

Q. Yes.

I think wherever that might appear in this exhibit, and in the next exhibit which I will show you, it may be understood that refers to the Panhandle field of Texas?

A. That is correct.

* * * * * * * * *

[fol. 916] Q. Have you also prepared a document, 1-page document, entitled "Statement of Gas Purchased, Period from April 1, 1932 to June 30, 1941"?

A. I have.

Q. Is the document I now show you the one you just referred to?

A. It is.

Q. And does it correctly show what it purports to show?

A. It does, in my opinion.

* * * * * * * * *

(Document Marked Exhibit No. 57 For Identification.)

* * * * * * * * *

[fol. 917] Q. The data shown on exhibit No. 57 was obtained from the companies' records, was it not?

A. It was obtained from the companies' records under my supervision.

. . . . . .

Q. Have you also prepared, Mr. Watkins, a document of several pages, entitled, "Statement of Gas Revenue Period from April 1, 1932 to June 30, 1941"?

A. Such a statement has been prepared under my supervision.

Q. And is the document which I show you the document to which you have just referred?

A. It is.

Q. Does it, in your opinion, correctly show what it purports to show?

A. It does.

. . . . . .

(Document Marked Exhibit No. 58 For Identification.)

[fol. 918] Q. Mr. Watkins, does schedule 2 of Exhibit 58, which appears on the second and third pages of the exhibit, constitute a detail of sales to gas utilities during the years 1939 and 1940?

A. It does.

Q. Let me ask you in that connection with respect to the item contained on page 2 of schedule 2 in column (H), line 7, is the figure shown, the net figure received by Panhandle Eastern Pipe Line Company?

A. It is.

Q. Now, Mr. Watkins, are the last two pages of this exhibit which are headed, "Schedule 3", pages 1 and 2, a detail of sales to industrial consumers?

A. For the years 1939 and 1940.

Q. And are—

A. Such a statement for the direct industrial consumers of Panhandle Eastern or Illinois Natural.

It does not include any indirect industrial sales.

Q. In other words, the industrial sales shown on schedule 3 of exhibit 58 are all the direct industrial sales made by this company and are all direct industrial sales; is that correct?

A. That is true; not only with respect to industrial [fol. 919] sales, but residential and commercial sales shown on the same page of that exhibit.

* * * * * * * *

Q. I was speaking of schedule 3 of exhibit 58 when I mentioned particularly this question as to whether or not schedule 3 shows the sales to all of the companies' direct industrial consumers; and whether all of the sales are direct sales?

A. They are.

* * * * * * * *

Q. In exhibit 58, you have included all the industrial customers, have you not, without regard to their annual bill—direct industrial customers without regard to their annual bill?

A. That is correct.

Q. Now, turning to schedule 1, which is page 1 of exhibit 58, is it a fact that all of the sales, both residential, commercial and industrial, and sales to gas utilities included [fol. 920] on that page are direct sales by Panhandle Eastern or its wholly owned subsidiary?

A. With the explanation heretofore made by this witness with respect to sales to certain customers to whom gas is transported by Michigan Gas Transmission Corporation, that is correct.

Q. Yes.

Now, the residential and commercial direct sales are down to very small amounts in the current year, are they not? A. They are.

Q. Your direct industrial sales, however, have risen materially? A. They have.

Q. And the same is true, is it not, with respect to sales to gas utilities?

A. That is right.

* * * * * * * *

Mr. Littman: May I ask a question here?

Mr. Watkins, you do not show in exhibits 55 or 58 the pressure base that you used for the quantities of gas there-

in shown, whereas, you do show a pressure base in exhibits 56 and 57 at 16.4 pounds absolute pressure.

[fol. 921] Can you state what the pressure base was that you used in exhibits 55 and 58?

The Witness: The pressure base at which the sales were made. It varies, of course.

* * * * * * * *

By Mr. Wheat:

Q. You do sell some gas on a therm basis; is that correct? A. That is correct.

Q. Now, Mr. Watkins, have you also prepared a one-page document entitled "Statement of Gas Revenue by States Period from April 1, 1932 to December 31, 1941"?

A. Such a statement has been prepared under my direct supervision.

Q. The document I now show you is the document to which you have just referred?

[fol. 922] A. It is.

Q. Does this document, in your estimation, correctly purport what it purports to show? A. It does.

* * * * * * * *

(Document Referred to Was Marked Exhibit No. 59 for Identification.)

Q. Mr. Watkins, I think Exhibit 59 for identification is self-explanatory, but I should like to ask you whether you have with you data from which you could state the annual amount of industrial sales during 1933, 1936 and 1940 in Missouri, Illinois and Indiana, respectively?

If so, I would appreciate it if you would read those data into the record.

* * * * * * * *

A. No, I don't have such information available.

Q. What data have you with you with respect to details of sales shown or revenues shown on exhibit 59?

A. The three states involved were?

Q. Missouri, Illinois and Indiana.

[fol. 923] A. I can furnish the industrial sales for the states of Missouri and Illinois for the years 1939 and 1940 only.

Q. Will you state those amounts, please.

A. Direct industrial sales made by Panhandle Eastern Pipe Line Company in the State of Missouri during the year 1939, amounted to $550,326.93.

In the year 1940, $619,442.49.

Q. Will you give us now, Illinois?

A. The industrial sales made in the State of Illinois in those two years were respectively $25,411.30, and $22,844.20.

* * * * * * * * *

Q. Thank you.

Now, Mr. Watkins, have you prepared any statement in a tabulated form, or otherwise, showing the original cost of properties of Panhandle Eastern Pipe Line Company?

A. No, I haven't been able to do that at this time.

Q. Would you like to explain the situation with respect to that item?

A. On November 3, 1939 the Federal Power Commission issued its order No. 49, prescribing a system of accounts for the Natural Gas Companies under the Natural Gas Act. Sometime prior to that date, however, Panhandle Eastern and its subsidiary companies had been giv-[fol. 924] ing consideration to a study that might become necessary in order to develop a statement of the gas plant of its companies based on original cost under the Commission's definition for such plant, which we generally understood at that time to be the cost of gas plant to the persons first devoting the property in question to public service.

Q. Mr. Watkins, did the order No. 49, which you have just mentioned, contain a provision in respect to this matter?

A. It did. In Instruction No. 2 of such order, provision was made for preparation of a statement of original cost.

Q. And what has Panhandle Eastern Pipe Line Corporation done in that connection?

A. Immediately upon receipt of the formal order of the Uniform Classification of Accounts prescribed by the Federal Power Commission, our consideration of the problem and our work on it took definite form through the creation of a separate section of the company's general accounting department, manned by employees, specially

equipped to undertake and satisfactorily finish the transition of the companies' records from the accounting practices previously employed to those required under the Commission's Classification of Accounts.

Q. What further steps have been taken in that connection?

A. Well, the work thus undertaken was scheduled to provide in a satisfactory manner for the filing of the data [fol. 925] required by an order of the Commission dated April 9, 1941, which was order No. 73, and which provided in detail for the filing of so-called original cost data.

The effort was made for the completion of this study and a filing of the results of this study during the month of November of this year; this being shortly before the time fixed for such filing in the order.

* * * * * * * * *

Q. Will you please state for the record what the present status of this work is?

A. The advent of a tremendous volume of effort thrust upon the general accounting department as a result of the inception of these proceedings has thrown this company's time schedule, in connection with its original cost studies very much awry.

Since the early part of July of the current year, 1941, the time of the entire accounting staff, including those who had been engaged in the reclassification work, has been necessarily devoted almost exclusively to the preparation of material for use in connection with Federal Power Commission Docket G-200 and G-207.

[fol. 926] Q. Are we to understand that it is not possible for you to present at this time, such a re-classification, showing the original cost of the company's properties in the manner set forth in the Commission's order?

A. That is correct.

However, I should like to make a further statement in respect to that matter.

Q. Please proceed.

A. It is my opinion, based upon my experience with this company, and also my knowledge of the way in which its books have been developed, that when it becomes pos-

sible to make the filing required by the Commission, order No. 73, there will be very little, if any, difference between the investment of the company in properties as shown by its books, prior to the adoption of the Commission's Uniform System of Accounts, and the amounts to be reported as original cost.

* * * * * * * * *

I hold such opinion because practically all of the facilities used by Panhandle Eastern and its subsidiary companies were constructed by those companies and were first devoted by them to public service.

Furthermore, in respect to the small amount of property which was not so constructed and devoted to public service by this company, such property was acquired without [fol. 927] cost to those companies, and according to the best information we have thus far been able to obtain, was first devoted to public service by the organization from which these companies received the properties at no cost.

Q. Thank you.

Now, Mr. Watkins, one further document.

Have you prepared a document of a number of pages, I think 8 pages, headed, "Sales Agreements with Other Gas Companies as at June 30, 1941"?

A. Such a statement has been prepared under my supervision.

Q. And is the document which I now show you the one which you have just referred to? A. It is.

Q. Does it, in your opinion, correctly show what it purports to show? A. It is my opinion that it does.

* * * * * * * * *

Trial Examiner: It will be so marked.

(The Document Referred To Was Marked Exhibit No. 60 For Identification.)

Q. Mr. Watkins, briefly what does exhibit 60 show?

[fol. 928] A. Exhibit 60 contains a tabulation of the sales agreements of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company with other Gas Companies as at June 20, 1941.

I mean, June 30, 1941. The information included in this exhibit gives the name of the customer, the territory served, some segregation of the nature of the service, the date of the agreement, or Federal Power Commission rate schedule under which service is rendered, and the expiration or term of either the agreement or rate schedule involved.

Q. And is it a fact that this exhibit shows both the firm and non-firm service in respect, first, to the sales agreements with other gas companies, and also with respect to the sales agreements with industrial customers?

A. That is correct.

Q. Are all of the sales agreements with industrial customers of an interruptable character?

A. They are, and with respect to that, certain of the agreements covering non-firm service have interruptable features.

Q. Yes.

Now, let me ask you, the pages 6, 7 and 8 of this exhibit deal with contracts of Illinois Natural Gas Company, do they not?

A. They do.

Q. The previous pages deal with contracts of Panhandle [fol. 929] Eastern Pipe Line Company, do they not?

A. In both instances, contracts or rate schedules; that is correct.

* * * * * * * *

[fol. 931] Q. Mr. Watkins, one or two more questions. Are there any sinking fund requirements prescribed in any of the documents or indentures under which Panhandle Eastern Pipe Line Company's bonds or notes have been issued?

A. There are sinking fund requirements in the indenture dated November 1, 1940 between Panhandle Eastern Pipe Line Company and Chemical Bank & Trust Company and in the mortgage and deed of trust dated November 1, 1940 between Panhandle Eastern Pipe Line Company and City Bank Farmers Trust Company and James M. Kemper, trustees.

As to the sinking fund provisions of the note indenture there is provision for the retirement of the $5,000,000 prin-

cipal amount of serial notes in equal annual installments of $1,250,000 on each November 1, 1942 to 1945 and the provisions in this respect are included in Section 1 of Article I of page 11 thereof.

The mortgage and deed of trust referred to contains sinking fund provisions with regard to an issue of Series [fol. 932] A bonds and Series B bonds. The Series A bonds, by the terms of the mortgage indenture are to be retired in equal annual installments of $1,250,000 on each November 1, 1946 to 1950, inclusive, and their precise terms are shown in Section 1 of Article IV on pages 209 and 210 of that indenture.

The mortgage indenture also contains provisions for the retirement of the Series B bonds in accordance with the sinking fund provisions stated in Section 9 of Article IV on page 239 of the mortgage and deed of trust on the basis of $1,200,000 each November 1, 1951 through 1960, inclusive.

Q. That is $1,200,000 each year?

A. That is correct.

Q. Is that, in general, a statement of the various sinking fund requirements that are prescribed in the documents mentioned? A. It is.

* * * * * * * *

[fol. 933] DAVID FRIDAY, called as a witness on behalf of Panhandle Eastern Pipe Line Company, being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Wheat:

* * * * * * * *

Q. And where do you reside?

A. I reside at 4525 Garfield Street, Washington, D. C.

* * * * * * * *

I was graduated from the University of Michigan in 1908 [fol. 934] and appointed an instructor there in economics and began the teaching of economics and finance there in the autumn of that year. I was there as an instructor

until 1912 when I was made associate professor of economics and accounting and then taught economics and accounting, also public financing from 1912 to 1916. I was made a full professor in 1913.

In 1916 I left the University of Michigan and went to New York University, School of Accounts and Finance, where I had charge of the graduate courses in value and valuation, the subject of price and also courses in public finance.

I became head of the Department of Economics at New York University in the autumn of '17 and left there in the spring of '18, temporarily, on leave of absence at first, to come to the United States Treasury in April of 1918.

There my task was the planning of a system of war taxes, those taxes were largely enacted into law by Congress at the beginning of 1919.

I remained at the United States Treasury until September 1918. At that time I went to the Post Office Department under Post Master General Burleson, who was at that time in charge of the Government control and operation of the telegaph and telephone systems of the country.

My task there was one of doing the statistical investigations and the economic examination incident to award-[fol. 935] ing those companies just compensation for the use of their property as the law provided. I was there until September 1919.

When I returned to the University of Michigan I taught courses in money, credit and business cycle. I was there until 1921.

In 1921 I became president of the Michigan Agricultural College, now known as the Michigan State College, and I was there until 1923.

From 1923 to 1924 I was in Washington as Director of Research of the National Transportation Institute. Also, while I was at Washington, I lectured in public finance and the subject of value and prices at the Brookings Graduate School for Economics.

In 1925 I went to Europe and studied situations there. After that I was not engaged in strict academic work.

I also taught economics, incidentally, at Columbia University in the summer of 1920 and lectured at various places. I lectured at Harvard on the subject of value and depreciation.

Q. Dr. Friday, during your years of professional experience which you have detailed to us, had you even then commenced some work of a consulting character in connection with economic problems?

A. Yes, sir. In 1909 I worked with Professor Henry [fol. 936] Carter Adams who was at that time statistician of the Interstate Commerce Commission, as well as head of the Department of Economics at the University of Michigan, on the valuation of the franchises of the Detroit United Railway. That was a task that we did for the City of Detroit.

In 1911 I was in charge of statistics for the Michigan Commission of Inquiry into Taxation, a special Commission appointed by the Legislature. I had charge of that in the summer and autumn of 1911.

In 1912 I was employed by the Attorney General of the State of Michigan to work on a 2-cent passenger rate case, involving the rates on the Duluth, South Shore and Atlantic Railroad, a railroad in the upper peninsula of Michigan.

In 1913 I was retained by the minority stockholders of the Lake Shore & Michigan Southern Railroad, that is now the New York Central Railroad west of Buffalo into Chicago, to determine the fair value of the minority stock of the Lake Shore & Michigan Southern, the New York Central & Hudson River Railroad Company being owner of the majority of the stock.

In 1914 I was employed by the Railroad Commission of Michigan to rewrite the property accounts of the Pere Marquette Railroad then in reorganization, also to value the lands of the station grounds and the right-of-way of the Pere Marquette Railroad.

In 1915 I wrote a corporate history for the Michigan [fol. 937] Railroad Commission,—I believe it was called the

Public Utility Commission by that time, I am not quite clear,—of the Consumers Power Company and to determine the going value of that company for the Commission.

Q. Have you done any work in California?

A. In 1915, after I had finished this work with the Utilities Commission, I went to the City of Los Angeles to determine the value of the franchises of the Southern California Edison Company which were at that time being condemned by the City of Los Angeles in the acquisition of a municipality owned electrical property.

In 1916 I was engaged in an income bond case involving the income of the income bonds of Texas Pacific Railroad; that was a court case.

I was also retained by the bond holders of the Texas and Oklahoma and the Sherman, Shreveport, and Southern Railroads, those were two branches of the Missouri, Kansas and Texas, which was then in receivership, and negotiated the sale of the Sherman, Shreveport and Southern Railroad to the New Orleans interest that finally acquired that.

In 1917, while I was in New York at New York University, I was engaged in various matters involving valuation and reorganization and litigation.

In 1927 after I had been in Europe and was largely engaged there for several years, I was engaged by the [fol. 938] minority stockholders of the Ford Motor Company who had sold their Ford Motor stock to Mr. Ford in 1919. There the task was to determine the value of the stock of the Ford Motor Company as of March 1, 1913. That resulted in testifying before the United States Board of Tax Appeals in the determination of that value.

From then on I was in various matters involving valuation, particularly of securities. Some of those cases that I have been in recent years were a valuation of the common stock of the Curtis Publishing Company of Philadelphia. The occasion for that was the determination of the fair value of that stock for purposes of determining the estate tax of Mr. Edward Bok who had been editor of the Ladies Home Journal and who had died.

I testified before the Board of Tax Appeals in 1936 in that matter.

I testified for the United States Government, either '37 or '38, I believe it was '37, in the determination of the value of the stock of the Hoover Vacuum Cleaner Company stock which had no market value and never was marketed. In that case I testified before the Board of Tax Appeals for the United States Government.

In 1938 I was retained by the Laird Estate to determine the value of the common stock of the Christiana Securities Company, popularly known as the DuPont family holding [fol. 939] company. That was before the Board of Tax Appeals and that case was heard early in 1938.

. . . . . .

Q. Have you been connected with the National Bureau [fol. 940] of Economic Research?

A. Yes, I have been connected with the National Bureau of Economic Research from very shortly after its origin. I may say that that is a non-profit organization located in New York City. It was organized about 1918 or '19 and it was devoted to pure research. I have been a Director in it almost from its inception and in the years '38 and '39 I was president of the Bureau and I am now Chairman of the Board of the Bureau.

. . . . . .

Q. Did you engage in any activity from an economic viewpoint during the period of the N. R. A.?

A. Yes, during the period of the N. R. A. I acted as economist for the National Retail Dry Goods Association as economist in connection with the preparation of the economic information and statistics incident to the obtaining of the retail code for dry goods and boots and shoes and [fol. 941] hardware and several other retail lines.

I was also the economist for the Retail Tobacco Dealers' Association. That was one which involved an analysis particularly of unfair competition and one, by the way, which had a marketing agreement during the code days.

Q. Yes. Have you published any books in connection with your studies and your work?

A. I prepared a book of readings in economics, but I wrote and published a book of "Problems in Accounting" while I was at the University of Michigan and I published in 1920 a book entitled "Profits, Wages and Prices," published by Harcourt, Brace & Company.

I have published a good many magazine articles in the various economic journals, that is, the Journal of Political Economy at the University of Chicago, the American Economic Review, which is the official publication of the American Economic Association; Quarterly Journal of Economics, which is the Harvard publication, on such various subjects, particularly taxation, valuation and such. I have also written a good many articles in the more popular magazines, Atlantic Monthly, Review of Reviews, World's Work, Saturday Evening Post and the New Republic. I was contributing editor of the New Republic for four years.

Q. Dr. Friday, have you prepared a statement of statistical material and descriptive material entitled "Cur-
[fol. 942] rent and Future Trends in Commodity Prices and Wages," with particular reference to the pending procedure. Have you prepared such a study?

A. I have.

Q. Is the document which I now show you the study to which you refer? A. Yes, it is.

Q. Was this prepared by you or under your direction except insofar as there are public documents and public statistics included in it? A. It was.

Q. Yes. And does it, in your opinion, correctly show what it purports to show?

A. It does, yes, sir.

. . . . . .

(Document Referred To Was Marked Exhibit No. 61 For Identification.)

. . . . . .

[fol. 943] Q. Now, Dr. Friday, referring to Exhibit 61 for identification, I wish you would turn to the first page and briefly outline what you did and what your conclusions have been with respect to the price situation.

A. Well, I studied the price situation as it existed. This study was begun, specifically this particular study—

I have always been interested in the subject of prices during the last war and during this one and the intermediate period, but I studied the whole movement of prices as it has been going on in this country since the war broke out, and particularly since the earlier part of this year, with a view to forming an opinion as to what was likely to be the course of prices in the United States throughout the duration of this war. I knew what happened in the last war. I became professionally interested and worked at that.

One of the first things I did was to discover what had been going on in prices and I may say that from my general information I knew what prices usually did during a war and in preparing this memorandum, on the second [fol. 944] page, page 2. I have inserted here a graph which portrays what prices have done during wars in the last century and a half, almost, the last 140 years.

Q. Dr. Friday, what, in general, has been the experience of the United States with respect to prices and price levels during periods of prolonged war?

A. In periods of prolonged war, by that I mean periods from say two, two and a half, three years, four years, prices have had a phenomenal rise in this country and in all Europe, too, and on this page 2 that price rise is portrayed.

The first peak that we have there was the War of 1812 in this country which was simply the American counterpart or the American section of the Napoleonic Wars.

The next one is a war there, a heavy black streak, which is the Mexican War in 1846. That was not of sufficient duration to have any marked effect on the price level in the United States.

But after 1860 came our conflict between the States, which is called the Civil War. That again sent the prices high, although there was no war in any other country. It sent the prices up here although it was our own private war.

Finally, just before 1920, comes the great uprush of prices in the World War, the first World War.

Now, those manifest very much the same characteristics. Wherever you have a war you expect prices to rise. [fol. 945] That is the natural thing for them to do.

Q. May I ask you, Dr. Friday, what is the source of the graph attached to page 2 of Exhibit 61 for identification?

A. The graph that is here shown was prepared by the Bureau of Labor Statistics in an article entitled "134 Years of Wholesale Prices." It was published in the Monthly Labor Review in July, 1935.

Q. And is the precise piece of paper which you have attached, this graph on page 2 of your exhibit, has that been cut out of that Bureau of Labor Statistics publication?

A. Yes, well it was a separate reprint. They had such a demand for them that they reprinted them, except that from '35 on,—this was only brought down to somewhere around '35,—from there on it is traced in ink by myself. The course of prices as shown by the Bureau of Labor Statistics in an exhibit attached to this report entitled Exhibit A which shows the history of commodity prices as prepared by the Bureau of Labor Statistics from 1890 to 1941, inclusive. Those figures from the Bureau of Labor Statistics I have sketched in that piece from 1935 on.

Q. Yes, and Exhibit A is the two pages of what was marked, coming after page 25 of your exhibit?

A. That is correct, sir. Exhibit A shows the Labor Bureau statistics for wholesale prices by months from [fol. 946] 1890 to date and A-2 there shows the prices by weeks for the period immediately preceding September, 1920. I put those in because there was no figure available for September, 1941.

Q. Those two sheets marked "A" and "A-2" are actual releases of the Bureau of Labor Statistics?

A. They are, sir.

Q. Inserted in the copies of this Exhibit 61?

A. That is correct.

Q. Has this price rise experience been true in the United States even though the United States may not have actually declared war or participated actively in hostilities?

A. Yes, it has. That is true this time and was true in the World War up to the time we entered the World War.

Q. I wish you would outline for the Commission some of the data on which you base that view.

A. I took the Bureau of Labor Statistics' figures for wholesale prices by groups and analyzed them to see what had happened to them since the outbreak of this war. The result of that analysis is embodied in the table on page 4.

* * * * * * * *

Q. What does that table show?

A. That table shows the movement of wholesale prices by groups and is prepared from Bureau of Labor Statistics Index which is released monthly for almost 900 com- [fol. 947] modities and is released also weekly, weekly and monthly.

Now, that is shown as Release 6270 on the part of the Bureau of Labor Statistics.

On page 4 I have simply copied from those figures, released by the Bureau of Labor Statistics, the movement of prices for the groups into which the Bureau of Labor Statistics subdivides the commodities.

These are index numbers and they are based upon the prices of 1926 as 100. We take those as 100.

In August, 1939, which was the month before the war broke out, all commodities that are included in this index number stood at 75. That means that they stood at 75 percent of the 1926 prices and when you go down the group list you find that they aren't all at 75 but at various prices, farm products at 61 percent of the 1926 level and foods at 67, and so on down, hides 92 and so on through the list.

By August '40—

Q. (Interposing) By 1940?

A. Yes, which is the second column, these prices had risen but not very much, they had only risen 2.4 points. That is the rise shown in that particular column.

By December, 1940, they had risen a little more, but they were only 5 points above August, 1939, level and they had risen as shown here.

By March, 1941, they were not up so very much yet, [fol. 948] they were 81.5 percent of the 1926 prices; that is, they had risen 6.6 points. That would be 8.8 percent.

Since that time, from then on until September 20, they have risen more rapidly and on September 20, which is the last week I had when I prepared this table, they had gotten to 91.5 percent of 1940.

Now that 91.5 percent of 1940, that index, is 22 percent higher than of August, 1939. Prices have risen that much; you have a 22 percent rise.

Q. That is a general figure for all commodities and there are variations in those prices from a low of slightly under 6 for metals and metal products to a high of 49.5 percent for certain farm products, is that not so?

A. That is correct, yes.

Q. But the average is the 22 percent which you have mentioned. Is that correct?

A. That is correct, that is the average.

Mr. Littman: May I inquire whether the 5.9 for metals and metal products would include such metal products as pipe for transmission lines of natural gas companies?

The Witness: Yes, they do. That is, they are in the metal and metal products groups, two kinds of pipe. The ones that are used by natural gas companies I don't know. I am inclined to think not, but the steel that is in the pipe which is used in the natural gas companies, certainly.

[fol. 949] The reason I am saying this, the two kinds that are in there, they have a black steel pipe which sells by the 100 feet, you people probably know what kind that is, and that is a rather expensive pipe. It costs something like, if I remember in the last war, $4 or $5 per 100 feet.

Then they have another pipe that sells for less, 6-inch diameter. The one that is included here, the pipe that is included in the natural gas companies. There are those two kinds of pipes that are included here and I suppose they must follow the general price of pipe which you use

in the natural gas company. I suppose you use the A. O. Smith Company pipe.

Mr. Wheat: Some of that.

Mr. Littman: And Youngstown Sheet & Tube.

The Witness: But the answer, generally speaking, is yes.

By Mr. Wheat:

Q. And Dr. Friday, is it not a fact, that with respect to metal and metal products, there was an effort on the part of governmental agencies to attempt to arrest a too great or too rapid price rise?

A. That is correct, yes.

Q. That has not been the case with respect to some other types of commodities, has it? A. That is true.

. . . . . .

[fol. 950] The efforts on the part of the Government to restrain the rise in prices here and to control it in some measure has been directed in considerable degree to metals, copper, steel and zinc and so on.

. . . . . .

Q. Will you turn now to page 5 of Exhibit 61 and proceed with your general discussion?

A. Now, these figures which the Bureau of Labor Statistics compiles and which are shown on page 4 are not the only set of statistics which is compiled by the Labor Bureau. It also compiles a group of 28 commodities, basic commodities. Those are compiled every day. You can call up the Bureau of Labor Statistics this afternoon at 5:00 or 5:30 and they will give you the index for this afternoon.

Those are the basic commodities. They are much more sensitive than this big group that we have shown here on page 4 and these are actual prices paid. The group on page 4 has largely quoted prices.

Q. May I ask you, Dr. Friday, have you brought up from the daily indices that you have discussed, have you [fol. 951] brought your figures up to approximately a week ago today? A. Yes, to the end of the month.

Q. September 30, 1941? A. That is correct.

Q. Will you proceed with your discussion?

A. These 28 basic commodities have also risen, and they have risen a good bit more upon the whole than this larger group, which, as I said before, is shown on page 4 and this covers practically 900 commodities.

These 28 basic commodities had risen between August 29 and September 30 by 55.7 percent.

Q. You mean between August, 1939, and September of 1941? A. They rose 55.7 percent.

If I may go over them by dates, during the first year, that is from August, '39, to August, 1940, they rose only 5.6 percent.

Let me say one thing more about it. I have not put in here the index for those 28 commodities in September, 1939, and in October and November, that index would have stood at the highest point in those months at 127.

What we had directly after the war broke out was a rapid rise in commodity prices so that these 28 commodi- [fol. 952] ties ran up to 127, but by the middle of August of 1940, the year afterwards, they were back down to 105.6 percent. That means they had only risen 5.6 percent, that was all.

The first rise in commodities largely fizzled out during the nine months from about November, 1939, to August, 1940, and it stayed low then for a considerable length of time. Even on December 31, 1940, it was only up 18 percent and in March, 194.., the end of this last March, was only 137 for these 28 commodities.

Now, however, it stands at 155.7.

Q. And as far as foodstuffs are concerned, it is up as high as 170, is it not?

A. As far as foodstuffs are concerned, it is up to 170.8. In that connection it is interesting to note how the rise did go. The import commodities were among the first to make a decided move upward, that is on the 31 of March, 1941, there was already considerable shipping shortage and considerable difficulty with shipping, import commodities had risen 44 per cent while the food had risen only

33 and the domestic commodities only 29. They have since been as high, I think, as 155.7 and have been fluctuating around there for some time.

Q. That is a much larger increase, is it not, in general, of the 28 basic commodities than the movement on the general index number which is shown on Exhibit A at the [fol. 953] end of the book?

A. That is correct. That was only 22 percent and this is 55.

It explains, however, and helps to make us realize why a war will practically always produce a rise in prices. All imported commodities, if you are in a war in which there is an attempt to interfere with commerce and the sinking of ships and there gets to be any shortage of shipping, we will have a rise in the imported commodities and we will have it pretty quick.

There is nothing you can do about restraining that rise. There is simply a shortage of shipping and an enormous increase in shipping rates and the price goes up. That is one of the other evidences that we have had all along as to how prices were going.

I want to summarize right there, if I may, and make this point clear, that it is the natural thing for prices to rise in time of war.

Q. Why is that, Dr. Friday?

A. Well, it is due to the fact that every war, especially every modern war, results at once, after it breaks out, almost at once in a large increase in demand for commodities, because modern wars are fought with materials. That was especially true of the first World War, it was of this and it was even of our own Civil War which in many [fol. 954] respects was the first modern war. It was the first modern war fought after the railroads came. That, at once, then adds to whatever demand there was before the war came an additional demand for products, an additional desire and want for them. Not only is it that the people want more products, but it is a desire that comes from a quarter where there is a purchasing power to make that desire effective.

In any nation such as the United States there is power that is very large, it runs into billions of billions of dol-

lars, almost unimaginable, to pay for goods and at once you have not only this demand for things that we have had before, but you have demands from an organization that can make its demand effective, because Government has the power of taxation and the Government has, besides that, the power to borrow both from private individuals and from banks.

If the banks haven't got the money they can create credit and loan that to the Government so that you have at once a great increase in demand and a great increase in purchasing power because of the fact that the Government proceeds to buy commodities in large quantities and it is obviously the institution which has the greatest amount of purchasing power.

There are other reasons, one of them is the fact that the Government here doesn't buy with a view to reselling. [fol. 955] It doesn't buy it with a profit motive in mind. It buys with a view to gaining an end that is of enormous consequence and enormously important to the people. It becomes an absolute end in itself, so to speak.

You have to maintain the dignity and honor of your Government. To do it, you not only spend money, you spend life and all the old values pass away. You send your son forth to be killed, if necessary, without hesitation, so that you have an entirely new phase of demand in the situation and an entirely new aspect of demand coupled with practically unlimited purchasing power.

Certainly for the time being any such increase in demand would raise prices and it does raise prices. That is the natural thing for prices to do. If they can be restrained at all, nobody has yet succeeded in restraining them to anything like the level which exists at the time that war broke out, unless it be Germany, and it has done it by the methods that a dictatorship uses.

First it fixes a price at which goods can be sold and then having fixed that it fixes all the labor cost back. If you can do that and have a good enough police force that can detect any infringement of your law and that promptly prosecutes the offender, you can pretty well control prices.

Q. Is that possible in a country like the United [fol. 956] States, in your opinion?

A. We have no such police force as that and public opinion, anyhow, in my judgment, wouldn't stand for it. There would be no desire to do it here.

Q. I wonder if you would like to go back for a moment now and contrast what happened in the World War, starting in 1914? I believe on page 7 of your Exhibit 61 are to be found certain data on that subject.

A. Yes, naturally when we had the World War there was a great increase in prices and naturally when these prices began to rise,—may I say parenthetically that in the first year of the war we felt this wasn't going to hurt us? Prices didn't rise much.

Q. That is in 1914?

A. 1914 and this time, too, prices didn't rise much until after the fall of 1940. That same thing happened in the World War.

I have set down here on page 17 in the briefest possible compass just what did happen to prices in the World War. These prices are all shown on this Exhibit A and A-2, also.

Q. And are to be found in the little tabulation at the bottom of page 7? A. That is correct.

Now, in July 1914, that was the month in which the war broke out, I think July 28, it was just at the end of that [fol. 957] month, the price level stood at 67.3. That was on the basis of '26 as one hundred.

In the course of a year it had risen very little, less than 3 points in 15 months. Then it began to rise after that and by the 25th month, I chose that because we are now in the 25th month of this war, I mean Europe is, the World is, they had risen to 86.1 and so on down.

Q. You mean 85.1, do you not? A. 85.1.

I took this 67.3 as 100 and constructed the next column, it says "On the Basis of July, 1940" and divided the 67.3 into 70.2, that is 103. The next is 126, so that by August '16, which was the 25th month of the World War, prices had risen 26.4 percent.

Q. By August 1916?

A. Yes. We are now in the 25th month of the war and we saw on page 4 that prices had risen 22 per cent this time. I may say that that difference in the rise of prices is largely explained by the fact that in 1914 there were certain conditions that existed that didn't exist this time.

We had the merest fraction of the chemical industry in 1914 that we have today. We didn't have any chemical industry in the sense which we have now.

I think dyes is a subject familiar to all of us who are old enough to remember 1914. Our dyes came from Ger- [fol. 958] many, and so that commodity ran up at an enormously rapid rate. It got up from something like 70 when the war broke out to 170 by the early months of 1916.

Also, in the field of metals and metal products, copper particularly, when it became evident that the war wasn't going to be over in six months or in a year, as the Germans had thought would be the case, and the Europeans came here in 1915 and began to place orders in large volume, then there came to be a great demand for copper.

Michigan was still a great copper producing state and up there we were perfectly familiar with what went on. Fifteen cents was considered a normal price for copper. But Europe came in and bought copper in great quantities in '15, the latter part of '15, and they found there were no supplies of copper or very small ones and that commodity was bid up and bid up until in the spring of '17 it was 36 cents. That is where copper stood. It had gotten down as low as eleven and a half cents in '14. There was a depression in Michigan and Detroit in September 1914, but later copper ran up.

Now, in this war there was no such great demand for copper from Europe as that, besides which there was control of price of copper as one of the first industries with respect to which they made such a control arrangement. There were only six producers that produced the great mass of copper and copper was pegged early this time.

[fol. 959] But aside from the chemicals and this special movement in metals, the speculative movement, largely, that then got to be a speculative movement in those days,

so that I think it explains why the price went up a little less this time than then. We didn't have those conditions in the present war.

Q. What happened after that month of the war?

A. By March 1917, when we entered the war,—we entered on April 6,—the prices had risen 60 percent, but they went right on rising after the 25th month. By August 1917 they had risen 84 per cent. Then, they didn't rise so much more from August, from that high level of 84 percent rise Government began then to control prices, reduce them somewhat from that high level. Copper was reduced from 36 cents to 26 cents and pegged there and the price rose less.

By the time of the Armistice prices had doubled. They stood at 202. They were twice as high as in August 1914.

Q. Did they go down?

A. They acted like they were going down for a month or two; they went down several points.

Q. Then what happened?

A. Then they rose and by May 1920 they stood at a level which was practically two and a half times as high as it had been in July 1914. It was almost the universal opinion of business men and many economists, too, that [fol. 960] prices, of course, would fall greatly after the war. People wrote articles about it. One of the New York banks I remember put out two pamphlets, one called "When Prices Fall" and "When Prices Drop" signed by the president of that bank and that was a pretty general notion.

By April 1919 they started up again and instead of having the great business slump that we expected at the end of the war, business improved and we ran into a post war boom which lasted throughout the rest of 1919 and on into May from [—] and June 1920 and by that time prices were almost two and a half times as high as they were at the outbreak of the war.

* * * * * * * *

[fol. 961] A. So far prices have moved just about as they did in the World War the first. There is no material difference. And I, myself, don't see any reason to expect

them to move materially different. I expect to see a further rise in prices from this level and I expect to see it extend not only to the end of the war, but I expect to see it rise further after the war, not merely because it did then, but because the reasons which were then operative are operative now and will continue to be operative.

Q. Yes. I take it that on pages 11 to, I think, 14 of your Exhibit 61 you have discussed the reasons for price rises during war and you have outlined briefly those reasons.

Have you anything further you wish to state on that subject you possibly have not discussed?

A. I have this to say, there is this difference between this situation and the last situation, seemingly, this seeming difference, that we are now discussing the possibility and the desirability, not only the desirability but the possibility of restraining commodity prices from further rises in this country.

. . . . . .

[fol. 963] Q. Dr. Friday, I wish you would continue with your discussion of the economic forces which are at play in connection with a rising price situation such as the one we are now facing.

A. When you come to the situation that we now have before us where we have already a very greatly increased demand on the part of Government and when that increased demand on the part of the Government has been accompanied by a great increase in demand on the part of the public which, because of the revival in business and the great increase in productivity, finds itself in possession of greatly augmented purchasing power, then we are in a situation where the forward movement of prices, the forward movement of prices of practically all kinds is inevitable.

Now, we all know that these prices are up 22 percent and we all know, furthermore, that the purchasing power of the people has been greatly augmented.

I have been studying this matter of what has just happened to wages. Taking the survey of current business [fol. 964] and the figures that are there given of wages other than wages paid in agricultural, we find that month

by month in this year the wages paid are $1,000,000,000 a month above last year.

Now, in such a situation there is a great mass of people who have purchasing power in the form of money that they didn't have before and you are certain to have a greatly augmented demand for commodities and that is what we are having. That is why in recent months your price level has been advancing rapidly.

Now, there is another reason why the price level has been advancing rapidly in recent months, a reason which we didn't have back in the World War and that is the fact that our Government has definitely adhered to its policy, which it followed before the war, to increase the farmers' income. That is to increase the prices of agricultural products.

As you see on page 4, a very large part of this increase of 22 percent that we have had thus far came in agricultural products have increased 49.5 percent and the President in his statement which he made and which appears somewhere in these pages, said definitely, as justification for signing that bill in May when the amount of loans which the Government was willing to make against agricultural products was increased to 85 percent,—the President said that that was, it had been and was now the policy of the United States Government and he was signing the bill on that account.

[fol. 965] Q. Now on page 15 I see that you state that there is no likelihood, in your opinion, that costs of production will fall during the present war nor for some years thereafter. I wish you would briefly tell us your reasons for that conclusion.

A. Yes. The first reason, on the matter of the rise in prices, why it is bound to continue, is that it is in entire conformity with the governmental policies that we have,—and I know of no objections to it, certainly no party objects to it,—that is to increase the farmers' prices. You can't increase the farmers' wages because the farmer does

his own work and doesn't work for wages. If he is to get more money he has to get it in prices.

Now, second, some governments have at times had some success in restraining prices, but they have only done it, any governments that have been at all successful, by restraining wages.

As a matter of fact, the only manner in which you could possibly restrain prices and hold them at a level say such as we have now, 91, on the basis of '26 as one hundred, would be to increase production of the commodities that people want and to do it at a cost so low that people would [fol. 966] offer them for sale at the old prices.

Now, if we could do that, if an increased flood of all sorts of commodities were coming on the market, it is imaginable that the prices might remain stationary here, but to do that you would have to have a cost of production which is stationary and which is low.

Now, the most obvious thing about your cost of production is that the principal cost of production, namely, labor cost, is not low and is not stationary. It has been rising right along.

Q. Do wages tend to rise during war?

A. Yes, wages always tend to rise. They did during the last war and they do during this one and it is the policy of our Government to increase the wages of labor and to increase the share of production that goes to labor.

Now, for manufactured products, by far the largest part of the cost of production consists of labor. You are inclined to say, "Well, what about material costs?"

In the automobile business they buy parts. Well the parts again are products and they are largely made by labor, so that when you resolve the general price of manufactured products, you find that after all the greater part of it is labor.

We know how much of it is labor. The Commerce Department reports annually and periodically, especially an- [fol. 967] nually on the size of the national income. That is it reports the sum total of the value of all of the pro-

duction that is turned out and upon the disposition that is made of it.

Now last year, 1940, the manufacturing operations of the United States resulted in an addition of $19,000,000,000 to the national income. That is, that was the sum total of the net product of all manufacturing industries and it also shows,—this is in the survey of Current Business for June 1941, there is a special article on the national income during 1940,—that of that $19,000,000,000, $15,000,000,000 of it went for labor, went for wages and salaries. So as long as you have a policy in which labor cost is not restrained and in which wages are not restrained, obviously the cost of production isn't restrained. There is no prospect in the world that I can see that it will be restrained.

. . . . . .

[fol. 968] Q. Dr. Friday, have you included in your discussion in Exhibit 61 for Identification data with respect to the increase in wages?

A. Yes, sir.

Q. And have you shown that these wage-increases are in operation in this country at this time?

A. Yes. I have also shown what happened to them formerly, during wars, as shown by the last war.

Q. Yes. What did happen to them after the last war?

A. I have here two graphs that show, I think, more briefly and concisely than anything else, just what did happen to wages during the last war.

Naturally, our recent data isn't as abundant or as good as our price data, but there is, especially during the last war, from 1914 to 1920—there is a record of the average weekly wages in manufacturing industries in New York State, which runs back to 1914 by months.

Q. That is Exhibit B?

A. Exhibit B.

Q. At the end of Exhibit 61.

A. Now, Exhibit B is a graph, which is prepared from the figures published monthly in the New York State Department of Labor, and this graph shows—and the figures [fol. 969] at the left side of the graph—these are not index numbers, these are actual dollars per week.

Going back to 1914, you will find there wages were half way between $10 and $15, or $12.50.

In the middle of 1914, they rose gradually—not very much—through 1915, more through 1916, and in 1917, and finally in 1918 they had a very rapid advance. That is shown by the graph here.

Then there was a lull in the wages paid per week in the early part of 1919, after the Armistice had been signed, and then another rapid advance to the middle of 1920 and after.

Now, at the beginning of that period, wages stood at $12.50 and at the end of it, they stood at some $29.

They fell during the depression of 1921—the great post-war boom of 1920 came to an end during the summer of 1920 and they fell. It was generally believed at that time, and if you will examine the discussions, you will find they give evidence of the fact that people generally believed that these wages which had gone from $12.50 to $29 would have to go back somewhere not far from $12.50.

The general effect, however, that actually happened, is shown on this graph. They went back a little under $25, and in New York factories,—and I may say at the time I made considerable study of what had gone on in Detroit, especially, and that is the place they had gone highest, and [fol. 970] there again they didn't fall anywhere near as much as we expected them to.

Q. Then they reached another peak during the last year of the 20's?

A. Yes, with the return of good business in 1923, and rose and continued to rise throughout the 20's until they reached a peak in 1929, which was a little above the peak in 1920, and that was a little above $30.00.

They fell with the Depression—1929 to 1932, revived in 1933 with the Code, and then continued rising, first to a peak in 1936, and finally passed through the old high level of $30.00 which they had reached in 1929.

Q. What has happened during the current year?

A. During the current year they have gone from $30.00 to somewhat over $34.00 as this graph shows (indicating). They are still on their way up. These are wages per week.

I have also made a study shown in Exhibit C on the top graph of wages per hour in the manufacturing industry. This study was made from the data that is collected monthly by the National Industrial Conference Board. It is for twenty-five manufacturing industries. There are no figures available by months from the middle of 1914 to 1920, but there are figures available for the single month of July, 1914.

At that time—and here again the figures along the left-hand side are not index numbers, but wages per hour.

The wages in July, 1914, stood at $.25 per hour, on the average.

[fol. 971] Detroit was somewhat higher, or the Detroit area was somewhat higher because Mr. Henry Ford had put in his $5.00 a day wage plan during January, 1914, and so Detroit is a little above this, especially in the automobile industry, but the wages rose from 25 cents to over 60 cents, as shown here (indicating).

They got up there in the latter part of 1920. They fell in 1921, and dropped down to a low in 1922, which low again was far above the 25 cents that had been the average wage in 1914.

Q. The same is true with the low that occurred in 1933, is it not?

A. And then in 1933, again, even in that serious depression, it only got down to 45 cents.

Now, after 1933, we had an almost perpendicular rise with the revival of business in the Spring and Summer of 1933, and they rose here (indicating) until they got, in 1934, to a level which was very much like that which prevailed in the 20's.

In 1935, just at the end of the first six months, first six months of 1935, they passed through the old high. These are wages per hour, and they passed through the high of 1929, and with the revival of business in 1936 and 1937, they made the further advance which is shown here,

and then with the CIO and the sit-down strikes, they took [fol. 972] that perpendicular upward rise there in 1937 to 72 cents.

That is portrayed here, and then, with the depression of '38, they did not go down again but remained at about 72 cents. Now with the war, especially since the latter part of last year, they have taken another perpendicular advance and stand now at 82,8 cents. That is the figure for August. That is what is happening to wages.

Q. Is it a fact that at this time there is also a higher concentration of organization in labor that has had some effect on wages, that has had some effect on wages?

A. That is one of the great differences this time, as against the World War. We have at this time a high degree of organized labor. Industry is much more widely organized; many more workers,—that is number one; and, number two, they have very able leadership. It is their business to get higher wages. They know what they want and they know how to get it, and there is no sign of any cessation of that general movement of wages yet, and that is true of all industries. You can't raise wages in one part of an industry without getting into all of them, just as the price level spreads itself finally into every nook and corner of industry, so does this rise in wages. I don't see any chance of reducing costs. It seems to be perfectly clear we are going to have further increases in costs as we go along.

Q. In that connection, Dr. Friday, have you considered [fol. 973] the relation of taxes to prices?

A. Yes, I have considered that question.

Q. Have you discussed that subject in your Exhibit No. 61? A. Yes, sir.

Q. Commencing on page 20 of that exhibit?

A. I have discussed it very briefly, and what there is here I thought might be of illumination to illuminate the mind of the Court somewhat. I discovered the figures.

It is the table which appears on page 21.

Q. Will you briefly explain what is shown on that table?

A. On page 21 is a table showing total taxes, collected in the United States for Federal, State and Local purposes. That includes everything. It includes everything from

excess profits taxes to the tax on millionaires, collected by the Federal Government, right straight down to City, County, School District, and Road taxes, and that total tax of 1914, when the World War broke out, was $2,383,000,000, and in the year 1917,—these are fiscal years by the way—the year ending July 30, $3,158,000,000. That is what taxes were when we entered the war.

They rose as shown here (indicating) and they finally got to a peak in 1920 of $9,204,000,000. That is the total tax bill upon corporations and individuals and all tax-[fol. 974] payers in the United States.

It got to a peak of $9,204,000,000.

Q. 13.54 per cent of the then national income?

A. That is correct. They fell, as shown here, until in 1923, they were only $7,200,000,000 and they rose again and in 1940, the tax bill in the country was $14,300,000,000 and since then it has risen, and in the fiscal year which has just [begin], it is my opinion that taxes will be $22,500,000,000. In fact, they won't be a billion away from that one side or the other.

Q. And what per cent will that be of the National income?

A. I estimate the National income will be $90,000,000,000 for this fiscal year, and that is 25 per cent.

It simply shows the change, the radically different situation that we have with respect to taxes.

Q. Now, what have you to say as to the general price level by June 30, 1942?

A. Well, prices will rise, and the best estimate I can make, the best opinion I have, is that prices will be up to a level of 110 by next year—by June, 1942.

Q. A level of 110 on what basis?

A. On the basis of 1926, as a basis. They will be up to 91.5 to 100 by the end of the year, and 110 by next summer.

Q. And you feel your opinion is bolstered—do you think [fol. 975] it is bolstered by any statement of policy of the United States Government?

A. Yes. I, myself, am surprised at the great amount of talk we have had about inflation. People tell us that prices have gone up 22 per cent here since August, 1939,

and they talk as though that was a most serious matter, and use the name "inflation" to designate that.

Well, it wasn't what we thought of as inflation in this country at all—I am sure when we think back and remember what the President's attitude on taxes were at 1933—he said in 1934 we would have to get the price level up to 100. He said if we couldn't do it one way, we would do it the other, and he wanted debtors to be in a position to pay back their debts in dollars of the same purchasing value that they had had before, and that was the feeling that we would have to get up to practically that before we could get a revival, so there hasn't been any tremendous increase yet. 110 would not be a surprisingly large figure.

I think, by the way, I think the efforts that are now being made to restrain the rise of prices in the OPACS, as Mr. Henderson calls it, is one of the reasons it is not going to be higher than 110 by a year from now, and let me say further that the question of how high prices are going to go after that, they will be up pretty continuously during the duration of the war, and it all depends on just how long [fol. 976] the war is going to last.

Q. What have you to say, Dr. Friday, of the price problem after the war?

A. The price problem after the war, as I see it, will be just as it was after the last war. We are going to have another advance in prices over and above that which we have already had. I have already said we didn't expect that advance during the period after the last war, but I am sure we will have it this time, and we will have it largely because we are having this question of restrictions. We had it last time, we had the same questions on restrictions, and house building, and if you look at the cement figures last time, the cement production was down, automobile production, and we have the same restrictions now, but probably more so because raw materials are serious problems. The more you restrict the purchase of these things which the people want to minister to their wants and maintain their standards of living, the more intense is going to be the want for that.

Now, merely an intense want for things doesn't necessarily lead to the belief that things will go up.

I came to the conclusion after careful study of that—prices rose during 1919 and the first half of 1920. I came to the conclusion that obviously, of course, production had been restricted, but that the purchasing power to give business that impetus which started prices up again and led to the boom we had in the United States and the greater [fol. 977] period of industrial activity in 1919 and 1920,—that the purchasing power came from the bonds, Liberty Bonds that were bought during the duration of the war.

Those of us who are old enough to remember what happened then know what happened. The people who bought bonds in small quantities—I mean the man who bought $25, $50, $200, $500 or even $1,000 didn't keep his bonds. What could he do with a $200 bond, or a $500 bond? His wife wanted some furniture. They wanted an automobile, or an improvement on the house—any one of those numerous things that people want when they have gone without them for years, and they went out and sold the bonds. Just to refresh our memory, I say that the price of Liberty Bonds at that time, 1920, was down to 85. The same Liberty Bonds are selling now for $110.

I followed that thing with a great deal of interest. Everywhere in the cities—they were small places, holes-in-the-wall, as we call them where people sold bonds, and they bought these things which they wanted.

If we are fortunate enough to finance this war largely by a sale of bonds, to a great mass of people, so that the great mass of people that want things will have the bonds,—and I hope and believe that restrictions on their sale will not be put upon them—we will have the same thing happening again. We are having restrictions upon the [fol. 978] goods that people want in their homes, and if we sell these people now bonds for a part of their income, we are going to get another uprush of prices now as we did then.

Q. And will those uprushes of prices go to all phases of the cost of operating business?

A. Yes, all phases, and to the whole phase of prices. I looked that thing up a year or so ago. I was interested in that to see whether it wasn't limited to some one phase of it, and it isn't.

Q. And no business is exempt?

A. No business is exempt, except perhaps some declining business. But no business is exempt.

Q. Now, what is your conclusion with respect to the stabilization of process after the war period?

A. The stabilization of prices after the war period will be somewhere below the high peak that we reach after the uprush of prices which will follow immediately upon the war.

Q. What do you think that high peak will be, based upon your studies?

A. Well, if the war should last—it depends on how long it lasts, but suppose it lasts until the end of 1943—suppose it lasts two years more, I can't imagine that the price will be less than twice the price level that prevailed at the [fol. 979] outbreak of the war.

Now, the price level at the outbreak of the war, that is, the price level in August, 1939, was 75, and I believe that on the basis of 1926 as 100, it will be at least 150. That would be my opinion. I say that is putting it moderately; and that is making full allowance for this restriction we are putting on prices, to insure an orderly advance, rather than a runaway market.

Q. And have you formed any opinion with respect to the probable stabilization of prices after the post-war period, or after the preliminary post-war period?

A. Stabilization will be somewhere below the peak. They will also be decidedly higher than the prices which prevailed at the beginning of the war. Now, if I may give my observation on the experience after the last war. We had here a price, as we saw on page 11, of whatever that was there; that was 248 per cent of the price at the outbreak of the war. We thought those prices were going down somewhere back toward the 1914 level. They didn't. The prices in 1914 were 67.3 as shown in Exhibit A here, and from 67.3 in July, 1914, they ran up to 167 in May, 1920. That is 248 per cent. They didn't fall back to 67.3. They fell back to 91 in a single month or two, early in 1922. By 1926 they were at 100. It was 50 per cent above the old price level, and there they stayed. The prices in 1923 had been a little above that, but in 1926 they were 100, and [fol. 980] we took that then as the normal year.

I believe something just like that is going to happen in the next period.

You can't put prices down to the old pre-war level, because the cost of living has gone up, and it doesn't go down with the prices—the prices pull the cost of living up as they are rising, just as they did in the last war, and that is Exhibit C that is attached.

Q. Do you visualize any escape on the part of any citizen, or corporation engaged in business in this country, from the result of the price rise to which you have testified?

A. I can't see any escape from it, no.

* * * * * * * *

[fol. 981] Trial Examiner: Before you start with your next witness, Mr. Wheat, I think, perhaps, I will ask you whether you would like to have Mr. Sperry prepare a tabulation as a result of his testimony on working capital. I personally would much prefer to have him prepare the tabulation resulting from that testimony.

Mr. Wheat: Yes. We will be happy to have Mr. Sperry do so, and we will present it at some stage of the hearing. I think I understand, Mr. Examiner, that you would like to have Mr. Sperry develop a table of the items here covered?

Trial Examiner: That is right, the working capital was [fol. 982] approximately $1,500,000, and there were a great many details considered in arriving at that. We have the testimony in the book beginning at page 452, but a table made by others might not exactly meet Mr. Sperry's conception of the testimony.

* * * * * * * *

P. McDonald Biddison, previously sworn, resumed his testimony:

Direct Examination.

By Mr. Wheat:

Q. Mr. Biddison, have you prepared a document entitled "Panhandle Eastern Pipe Line Company and subsidiary companies, deduction from cost of reproduction new for depreciation and present value of plant, property and business as of June 30, 1941?"

A. I have.

Q. Is the document which I now show you the document in question? A. It is.

Q. Was it prepared by you, or under your direction?

A. It was.

Q. Do you believe that it correctly states what it pur-
[fol. 983] ports to state? A. I do.

* * * * * * * * *

(Document referred to was marked as Exhibit Number 62 for identification.)

Q. Now, Mr. Biddison, will you turn to page 1 of the document which has been marked Exhibit No. 62 for Identification, and state the figures which appear on that page.

A. The figures are, first, $4,121,749.80.

* * * * * * * * *

Which represent the amount of depreciation which I estimate to have occurred in the plant of Panhandle Eastern Pipe Line Company and its subsidiary company, Illinois Natural Gas Company, as of June 30, 1941.

The second figure is $79,711,698.74, which is my estimate of present value of the plant, property and business of Panhandle Eastern Pipe Line Company and its subsidiary company, Illinois Natural Gas Company, as of June 30, 1941.

This last figure is arrived at upon page 2 of this exhibit by deducting the first figure from my estimate of reproduction cost new of those properties, as of June 30, 1941, in the amount of $83,833,448.54.

This last figure, and its component parts, as shown on page 2 of Exhibit 62, are from Exhibit No. 39 and its
[fol. 984] corrections, 39-A.

Q. So that all the figures in column "(B)" on page 2 of Exhibit 62 are derived from and their details may be ascertained in Exhibits 39 and 39-A; is that true?

A. That is correct.

Q. Now, then, the items contained on columns (C) and (D) of page 2 of Exhibit 62 are items, are they, which are developed in the detail shown on the following pages of Exhibit 62?

A. Both the items shown in columns (C) and (D) on page 2 are developed in subsequent detail in this Exhibit 62.

Q. Yes. But the items in Column (D) are essentially subtractions from items in column (B), are they not?

A. That is correct, and the items in column (D) are the result of that subtraction.

* * * * * * * *

Q. State what are the items in column (C)?

A. The items in column (C) totalling $4,121,749.80 are the amounts by which I estimate the various classes of property have depreciated in value as of June 30, 1941.

Trial Examiner: When you say "the various classes of property," do you mean the physical property now in use, the plant, line actually in use, and those only?

[fol. 985] The Witness: I mean only the presently existing plant; not plants which have been retired or otherwise disposed of by sale, or any other means. The presently existing plant on the basic date.

Trial Examiner: In other words, you are arriving at a figure which you say represents the present existing depreciation in the property of Panhandle Eastern and its subsidiaries now used and useful in the public service?

The Witness: That is correct.

By Mr. Wheat:

Q. And your testimony now has nothing to do with any property [—] be acquired in the future?

A. No, sir; nor with any disposed of in the past.

Q. Yes. Now, Mr. Biddison, for example, will you take some item or some line on page 2 and state what you find to be the fact as to the depreciation existing in that particular item?

A. Starting first with Line 2, "Land." This particular land being production system property, its reproduction cost new is $971.02. It is my opinion that there has been no depreciation on this land. I therefore made no deduction for it, and I have arrived at its present value in column (D) in the same amount, as its reproduction cost new figure.

The next item, line 3, page 2, "Leaseholds" is shown in [fol. 986] column (B) at the reproduction cost new and present value as determined by Mr. R. J. Wallace; he having determined present values. I have made no deductions for depreciation of "Leaseholds" and have carried them across into column (D) at the same figure as they appear in column (B).

* * * * * * * * * *

My column (D) represents the estimate of value as of the basic date of the report, and Mr. Wallace's determination of values was as of that date. I therefore had no deduction to make from his report to ascertain values.

* * * * * * * * * *

The deduction for depreciation on gas wells is recapitulated on page 4 of this exhibit and the details which are recapitulated upon page 4 are set forth in subsequent pages 5 to 8 inclusive.

I saw upon an inspection of property of Panhandle Eastern Pipe Line Company, beginning on August 17, 1941, a considerable number of the wells owned by Panhandle Eastern Pipe Line Company in the Texas Panhandle Field and in the Hugoton Field. Their appearance was uniform—that of being well-maintained. However, records available in the Kansas City office indicated that [fol. 987] on some wells, depreciation had occurred. It was not visible by inspection of surface equipment, and also disclosed that there were some wells in the Texas Panhandle Field located close to areas of oil production of which the rock pressure had declined to figures below that at which their drilling would not be justified if they had not already been drilled.

In determining the amount of money to be deducted from the reproduction cost new of any of the gas wells in these two fields, I have been giving consideration to the question of whether it was affected by the factor of obsolescence, due to depletion of the reserves underlying it, or to the factor of underground depreciation or deterioration disclosed by well history.

If no such factor existed, and no data existed to indicate material depreciation of the above-ground equipment, I depreciated the well one per cent for each year of age.

Q. On what ground?

A. On the ground that wells do depreciate with age and that with the small amount of depreciation that can now be detected by examination of those wells, depreciating them on the basis of one per cent per year of age was a liberal allowance for the amount of depreciation which had occurred on those wells.

I have depreciated other wells on the basis of some of the other factors which I have mentioned, and I call at-
[fol. 988] tention to some of them.

Line 15, the well Burnett No. 1-84-1013A, I have depreciated that well, which was drilled in 1930, 15 per cent, because of the decline in its rock pressure.

Similarly with the well shown at Line 21, I have depreciated that well 15 per cent.

At Line 5, Sneed 1-23-1903A, this well apparently has water-leakage into the casing as a result of a poor cementing job. It needs re-cementing and needs a new master gate. I have depreciated that well 25 per cent.

That explains the method which I have used with respect to wells, and the working papers will show the details with respect to any individual well.

Q. And have you listed all of the wells, in Exhibit 62, showing the amount of depreciation which you have found, after examination, to exist, in your opinion, in those particular wells?

A. Yes. I think I should make a further explanation with regard to wells in the local area.

Q. Please do. A. Shown on page 8.

Q. Of Exhibit 62? A. Yes.

These wells in the local area are shallow wells and generally have quite low rock-pressure. The last available
[fol. 989] tests of rock-pressure and open-flow on these wells was as of September, 1936.

At that time, the rock-pressures on the wells tested ran from 12 pounds to 75 pounds, and the open-flow varied

from 10,000 cubic feet per day to 100,000 cubic feet per day. I have estimated that these wells have residual values from their costs of from 7 per cent low to a maximum of 25 per cent, and I have made a deduction for depreciation on those wells in accordance with those figures.

The details for those individual wells are shown in my working papers, but for wells in the Kansas side of the local area, I have deducted for depreciation $8,583.91 from a reproduction cost new of $10,518.32 to arrive at a present value of $1,934.41.

Q. What about the Missouri local area?

A. On the Missouri side on the local area, I have deducted $4,084.67, from a reproduction cost new of $5,060.49 to obtain a present value of $975.82. This is on eleven wells in Missouri and eleven wells in Kansas for the respective pairs of figures.

Q. In other words, you have developed a rather small residual value in respect to those particular local areas—particular local area wells?

A. Yes, I nearly wiped them out.

Q. All right. Now, Mr. Biddison, is there anything [fol. 990] further that you wish to state in explanation of the items contained on pages 5, 6 and 7 in connection with production system gas wells, excluding those of the local area?

A. Well, only that both as to those wells and as to the local area wells, the figures derived on pages 5 to 8, inclusive, are carried forward on to page 4 where I arrive at a total deduction for depreciation which has occurred in wells of $180,364.61 to obtain a present value of $1,873,519.78, which in turn is carried forward to line 4 on page 3 of this same exhibit.

Q. And also to line 6 on page 2, is it not, the general summary? A. Yes, sir.

Q. Now, have you explained in detail all of the methods which you used in arriving at the amount of depreciation which you estimate has occurred in the individual wells shown in the list on pages 5, 6, 7 and 8?

A. I have.

Q. All right. Mr. Biddison, will you turn to the item of "Other Production System Structures," which you show on line 5 on page 2 and state what depreciation you

found to have occurred as to those structures, and also state what those structures are and your methods of arriving at this depreciation?

A. The structures are those at the Camps in the Texas Panhandle Field and the Hugoton Field. They are [fol. 991] detailed on pages 10 and 11 of this same exhibit, No. 62. Upon my inspection, I made notations of the conditions of various structures at these locations, and I have applied the results of those observations to the reproduction cost new as estimated by me in Exhibit 39, to determine the amount of money to be deducted for depreciation on the various items of property.

Those deductions are shown in detail in column (C) on pages 10 and 11 and totals for each group are carried forward from pages 10 and 11 in the recapitulation on page 9, where I show a deduction for depreciation of Other Production System Structures of $5,615.44 in column (C) to be deducted from $42,188.75, to obtain the present value in column (D) of $36,573.31.

Mr. Goodman: I have an objection. I move to strike all the testimony Mr. Biddison has given on the subject of accrued depreciation heretofore given, for the reason that he has not undertaken to state any basis whatsoever for the conclusions which he reaches, and they stand on the record merely as gratuitous conclusions. While it is conceded that the opinion of an expert may be placed in testimony, yet, on a subject such as valuation, or depreciation, it is necessary even for the logical probativeness of such testimony, that it be supported by basic facts so that we may be informed as to what facts the conclusions are drawn from. So far, the witness has testified only that he observed certain things. He has not [fol. 992] told us what he observed, and he depreciated it.

I submit that that is not adequate to that conclusion, and I therefore move that the testimony on the subject be stricken.

Trial Examiner: The witness is entirely qualified as an expert, and the motion will be denied at this time. The

witness will be subject to the usual cross-examination, which will enable you to determine whether or not the conclusions which are expressed in his proposed exhibit are well founded.

. . . . . .

[fol. 995] PAUL BROWN COFFMAN, called as a witness for the Panhandle Eastern Pipe Line Company, being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Wheat:

Q. Mr. Coffman, will you please state your full name, and your address?

A. Paul Brown Coffman, 222 Sylvania Place, Westfield, New Jersey.

. . . . . .

I am a graduate of Ohio State University in 1923 with a degree of Bachelor of Science, a graduate of the Graduate School of Business Administration, Harvard University in 1926 with a Master of Business Administration Degree.

[fol. 996] My present position is vice president and director of Standard & Poor's Corporation, 345 Hudson Street, New York City, which is a recent consolidation of Standard Statistics Company and Poor Publishing Company, publisher of Poor's Manuals.

. . . . . .

I am in charge of research and valuation.

Q. And what, in general, are the activities of that corporation?

A. Well, Standard & Poor's Corporation is a company which gathers, collates and disseminates information pertaining to business, industries, commodities and investments, and offers services on a printed basis and on a professional and personalized basis.

. . . . . .

Upon graduating in 1926 from the Graduate School of Business Administration of Harvard University, I went to

the College of William & Mary in Williamsburg, Virginia, where I was professor of economics and accounting for approximately a year and a half.

In 1927, I returned to the Graduate School of Business Administration at Harvard University to join the faculty, and I remained there approximately 10 years, teaching [fol. 997] business policy, corporate management and accounting.

During the time I was at the university teaching, I served as consulting economist for a number of various business organizations and financial advisory firms, including both Standard Statistics and Poor's Publishing Company.

I first was associated as consultant with Standard Statistics Company in 1928 and in 1931 became associated as a consultant with Poor's Publishing Company and took over the position of executive vice president and general manager which position I held for approximately two years.

I have collaborated on several books in accounting, and I have written a number of articles. Since I have been with Standard Statistics Company and later, Standard & Poor's Corporation, I have asked—I have been asked to make a number of special investigations, some of which related to situations which required presenting my analysis and findings before various courts and commissions including the Federal Power Commission.

Q. Now, Mr. Coffman, have you, at the request of Panhandle Eastern Pipe Line Company made a study of the investors' appraisal of the risks of capital in the natural gas industry as compared with other divisions of the utility industry?

A. I have prepared such a study.

Q. Is the document which I now show you—does that document contain the results of that study?

A. That contains a summary of the analysis.

[fol. 998] Q. And have you, in that connection, prepared also a volume entitled, as I have stated above, but marked volume 2, of statistics supporting data in volume 1, appendices A, B and C?

A. I have prepared that.

Q. Is this document I now show you the document to which you referred? A. That is right.

Q. Were these documents prepared by you, or under your direction?

A. They were prepared under my direction.

Q. And do they, in your opinion, correctly show what they purport to show? A. They do.

* * * * * * * *

(Documents referred to were marked for identifications as Exhibits 63 and 64.)

Q. In this connection, Mr. Coffman, have you also prepared a study dealing with, in general, the economic return requirement of Panhandle Eastern Pipe Line Company? [fol. 999] A. Yes, I have made such study.

* * * * * * * *

Q. Now, in connection with making that study and as a collateral part of that undertaking, did you make the study, the results of which are shown in exhibits 63 and 64 for identification? A. Yes, sir.

Q. Now, will you state first the purpose of that study, and then proceed to outline what you did in that connection?

A. Well, several years ago we undertook to produce a rather elaborate analysis of the investors' appraisal of the risks of capital in a broad industrial grouping.

After we had spent some time on that, it proved that the time necessary to complete the study as well as the cost, made it prohibitive.

At about that time we were retained by the Hope Natural Gas Company to produce such study, but confining it to the public utility division.

We found that that was of such scope we could produce the study within a reasonable time, and on that particular assignment, covered the investors' appraisals of risks re- [fol. 1000] lating to water companies, electric utility operating companies, manufactured and mixed gas companies and natural gas companies.

The results of that study later on were presented before this Commission in connection with the Hope Natural Gas Company.

The Panhandle Eastern Pipe Line Company in August of this year retained Standard & Poor's Corporation through me to make a similar study bringing the various data down to-date and showing the results, the analysis and results being contained in this exhibit, Volume 1.

Q. When you speak of exhibit, volume 1, you are referring to exhibit 63 for identification? A. Yes, sir.

Q. And did you, in that connection, add to your study an examination of the investors' appraisals of risks in relation to natural gas pipe line companies?

A. Yes, we had to expand the study to include the pipe line companies.

Q. May I ask, parenthetically, Mr. Coffman, why you did not include the telephone industry in this study?

A. Well, the telephone industry, we found, was so predominantly covered by the American Telephone and Telegraph Company, and so many of the various individual companies' securities were held by the American Telephone and Telegraph Company, that we could not get sufficient data on market prices and on earnings to produce [fol. 1001] a study that we felt would be indicative of that particular branch of the utility industry.

* * * * * * * *

Q. Now, may I ask whether exhibit 63 for identification presents the findings which have resulted from the investigatio to which you have just referred?

A. Yes, that exhibit contains a full statement of the approach and procedure followed in the study.

Q. And may I ask whether it also contains your conclusions?

A. It contains the conclusions and certain exhibits at the end called "Statements A, B," and etc., which relate to the supporting statistics that were used directly in the computations made in this particular exhibit.

* * * * * * * *

Exhibit 64 contains all of the figures and the working papers that were used throughout this entire study, the

two of them together are everything that we used in this study.

Once we selected the various divisions which I have already enumerated, from the water companies through to the various natural gas pipe line companies, from one place or another, depending upon where we could get the [fol. 1002] most complete list which I shall define later on, we took all the companies that applied to the division.

From that overall list, we made certain eliminations of companies for reasons that are given and which I shall specify later.

Thereby we came down to a group which was used in the study which we believed to be most representative of conditions in that particular division of the utility field.

Once we had those companies established, in order to ascertain investors' appraisal of the risks of capital, we took the earnings of each company that were available for all capital, that is, the earnings that were available to be used for paying interest, preferred dividends, or distributed to common stock and surplus.

We took the various amounts of capitalization that were outstanding, that is, bonds, preferred stocks, common stocks, and got the market quotations on those securities.

We took the average of the high and the low for each of the years studied and there are four years from 1937 through 1940 inclusive.

And the interim period from January of 1941 through August of 1941.

We multiplied the bonds, preferred stock or common [fol. 1003] stock outstanding in terms of issue, that is, number of shares, or thousands of dollars of bonds, by the average of the high and low market price, thereby securing a market appraisal for each of those divisions of capitalization.

Q. And for each of the periods you have mentioned?

A. For each of the years mentioned, and we then added those various amounts for each company together, getting

what we called a total indicated market appraisal of capital.

Then the total amounts for each company were added together for the list of companies that resulted from our eliminations and that gave us the total indicated market appraisal for all those companies. We added the earnings available for capital for each of the companies for each of the years in question, and that gave us the total earnings for that particular group.

We then divided those total earnings by the total market appraisal of capitalization, and that gave us a percentage figure which we said was, or represented the investors' appraisal of risks of capital in the particular division we are discussing.

Now, in this report—

* * * * * * * * *

Exhibit 63, I give an example as to the procedure so that the method will be clearly understood and then this exhibit is broken down as to sections, starting with water companies and going through the natural gas pipe line companies.

[fol. 1004] Q. Now, Mr. Coffman, I wish you would proceed in your own way to explain the data contained in this exhibit so that it may be clearly understood, briefly, explaining each step which you took in this examination.

A. Generally, I have outlined the procedure particularizing it to one company so that it will be specific.

Q. What company do you take for that particularization?

A. I took the Boston Edison Company for the year 1940. It had a simple capital structure and would prove the point without taking up too much space or time.

First, for the years 1937, 1938, 1939 and 1940, the indicated total market value of all the securities of a single company was determined by taking the sum of the amounts produced by multiplying the number of each class of security, that is, bonds, preferred and common stocks as the case might be, outstanding at the end of each year, by the average of its high and low market quotations in that year.

For the interim period of 1941, January-August, both inclusive, the same procedure was followed except that the latest record of securities outstanding and the average of high and low market quotations for the period were used.

. . . . . .

The Witness: Shown on page 6 of exhibit 63, I give [fol. 1005] an example which is captioned, "Indicated Market Value of the Securities Outstanding of the Boston Edison Company for 1940."

Taking the capital outstanding as of December 31, 1940 which is clearly captioned there was capital stock $25 par value in the amount of 2,468,656 shares outstanding.

The 1940 market prices, high and low and the average, were 36 and 3¼, 30 and ¾ths and the average was $33.75 per share.

Multiplying the 2,468,656 shares by $33.75 average price for the year 1940, gave an indicated market value of $83,317,140.

In addition, the Boston Edison Company had first mortgage bonds, 2¾, maturing in 1970 outstanding in the amount of $53,000,000 as of December 31, 1940.

The price of the bonds—$103.53 per bond, which is used for that calculation, was the offering price used since issue was sold on December 10, 1940.

That is clearly shown in the note.

Multiplying the $53,000,000 bonds—dollars worth of bonds, by the $103.53 price, gave a market value of $54,870,900. Adding the two dollar amounts together, gave a total indicated market value for December 31, 1940 of $138,188,040.

Then, as shown in section (B) of the example captioned, "Indicated Market Value of the Securities Outstanding of the Boston Edison Company for the Interim Period of 1941, January-August, Both Inclusive", I follow the same [fol. 1006] procedure showing that there was outstanding the capital stock $25 par, in the amount of 2,468,656 shares.

The interim period, high, low and average price was 34 and 3/4ths, 26 and 7/8ths and 30.69 respectively.

Multiplying the 2,468,656 shares by the average price of $30.69 gave a total indicated market value of $75,763,053.

Following the same procedure with the first mortgage bonds, 2 3/4ths due in 1970, there were $53,000,000 par amount of such bonds, outstanding, December 31, 1940.

In the period January 1 to August 31, 1941, both inclusive, the bonds reached a high of 104 and 3/8ths, a low of 101 and the average was 102.69.

Multiplying the $53,000,000 by 102.69 gave a total of $54,425,700.

Adding this figure to the $75,763,053 gave me a total indicated market value of $130,188,753.

Q. Mr. Coffman, is it a fair statement to say that that example which you have just outlined discloses the method which you have used in each instance, and in respect to each selected period and each selected company in connection with the preparation of this study?

A. This represents exactly the method that is used in each of the cases you have mentioned and applied throughout this report so far as determining indicated market value is concerned.

[fol. 1007] Q. And I take it that you used the high and the low and the average for the year because you deemed that to be a reasonable method of obtaining investors' appraisal of the risks of capital of that period; is that correct?

A. That is correct; yes, sir.

Q. Now, will you state what your next step was?

A. As shown on page 6 of exhibit 63, item 2, next there was determined for the individual company, the total earnings available for distribution to the securities, after taxes, depreciation and all other miscellaneous charges, as reported in the particular company's reports to stockholders.

For the years 1937, 1938, 1939 and 1940, earnings as shown in the published annual reports for the years in question were used.

For the interim period of 1941, January-August, both inclusive, the latest reported earnings covering a 12-months period were used, the dates of which are clearly indicated in the statements at the end of this exhibit, exhibit 63.

Q. Now, you have shown on page 7 of exhibit 63, have you not, by an example taken from the Boston Edison Company, just what you do in that step?

A. That is correct.

Q. Now, what was the next step which you took?

A. In the next step, as shown in item 3, page 7, exhibit [fol. 1008] 63, the earnings so determined under (2) A and B were then divided by the indicated market value of all securities as determined under (1) A and B respectively, and a rate for the period in question was thus obtained.

Q. I wish you would outline by an example just what you did in that step.

A. Following the same example, the Boston Edison Company, for the calendar year 1940, dividing the consolidated earnings available for capital, in the amount of $7,730,837, by the indicated market value of all capital of $138,188,040, gives a percentage of 5.59 percent which, in my opinion, fairly indicates the investors' appraisal of the risks of capital employed in that enterprise for the year 1940.

Q. Did you do the same thing for the interim period, January to August, inclusive, 1941?

A. Exactly.

Q. What was the percentage that you found in that instance?

A. The percentage is shown in (3) B on page 7 of exhibit 63, 5.92 percent.

Q. What was the next step in your study?

A. As shown in section (4) page 7, exhibit 63, having determined in the manner described above, the investors' appraisal of the risks of capital employed in each com- [fol. 1009] pany selected, the indicated market value of the companies in each group, determined under (1) A and B above, was added to obtain the indicated market value of the capital securities of the entire group.

Similarly, the earnings available for distribution to the securities of each of the companies, as determined under

(2) A and B above, were added to obtain the total earnings available for distribution to securities of the entire group.

The latter figure was then divided by the former in order to obtain the investors' overall appraisal of the risks of all capital of the group.

This was done for each of the years 1937, 1938, 1939 and 1940, and for the interim period of 1941, January-August, both inclusive.

Now, in connection with this, the results of such computations for the years 1937, 1938, 1939 and 1940 appear on statements A to E at the end of exhibit 63. Statements A-1 to E-1 present such data for the interim period of January-August, 1941, both inclusive, and the complete working papers, upon which these statements are based are presented in Appendix C of the accompanying book of tables, volume 2 called Exhibit No. 64.

Q. Yes.

Now, in general, does what you have now testified cover in outline form the study which you have thus made?

A. It does.

[fol. 1010] Well, on page 9 of exhibit 63, I present an analysis of the data on water companies, which shows that I first took all of the companies engaging solely in the water business from our Standard Corporation Records and those appear on pages 1 and 2 of appendix A in exhibit 64.

There was a list of 72 companies. From those companies, certain eliminations were made for purposes of this study.

Q. Will you state why you made these various eliminations?

A. Well, there were three main reasons as shown on page 9 of exhibit 63.

(1) Companies whose common stocks were held by one of the larger holding companies, such as American Water Works & Electric Company, the Federal Water Service

Corporation and the Community Water Service Company and whose stocks had no obtainable market evaluation.

Q. You eliminated them, then, because you could not obtain for them the data you needed in connection with developing the study?

A. That is correct.

Q. Did you make other eliminations for other reasons? [fol. 1011] A. (2) We eliminated companies whose stocks were closely held by relatively few individuals and had no available market evaluation.

Q. In other words, you eliminated those companies for the same reason, towit:

That you were unable to obtain the data which you would need to make the necessary study in this investigation?

A. That is correct.

Q. Now, have you made other eliminations?

A. There was one further elimination.

(3) We eliminated the companies whose 1940 gross operating revenues were less than $500,000. This latter class was not deemed of sufficient importance to be included in the study.

Q. Why was that?

A. Well, the companies whose gross revenues were so much smaller or lower than $500,000, we did not feel were representative of the water industry as a whole.

Q. Now, when you got through with these eliminations from the 72 companies which you originally examined, what companies were left?

A. After the eliminations were made from the overall group of 72, there were 7 water companies remaining which were Bridgeport Hydraulic Company, Elizabethtown Water Company, Consolidated, Hackensack Water Company; Middlesex Water Company; New Haven Water [fol. 1012] Company; Plainfield-Union Water Company and Stamford Water Company.

Q. Now, do you consider those companies to be representative of the class in which they fall?

A. Yes, I thought they were entirely representative of the class in which they fell, and further, they are the only water companies, as a matter of fact, that you can find information upon of the size mentioned.

Q. What did you do with respect to those particular water companies?

A. I followed the same procedure as already outlined in regard to the Boston Edison Company.

Q. And have you shown in exhibit 63, the result of your investigation in respect to these water companies?

A. That is correct.

On page 10 of exhibit 63, without going through all the details, details recited in connection with the Boston Edison Company, I give the results of such procedure as it relates to these water companies.

In a table on page 10, exhibit 63, I show that the total indicated market value of capital for 1937 was $79,750,400.

For 1938, $78,545,433.

For 1939, $79,635,529.

For 1940, $83,244,017.

[fol. 1013] And for the interim period, January-August 1941, $81,816,519.

I show the total earnings available for capital for those same years, 1937, $4,410,321.

For 1938, $4,114,060.

Q. Without reading those complete figures, what are the percentages of investors appraisal of risks of capital which you found in connection with these companies during these various periods?

A. The percentages representing the investors' appraisal of the risks of capital were 5.53 for 1937;

for 1938, 5.24 percent;

for 1939, 5.64 percent;

for 1940, 5.13 percent.

For the interim period, January-August, 1941, 5.24 percent.

And the average for the full four years was 5.38 percent, which is given in the text, not in the table.

Now, in connection with that summary table shown on page 10 of exhibit 63, statements A and A-1 at the back of exhibit give the detailed information which I have already recited in connection with the Boston Edison Company and show how the resulting figures shown in the table on page 10 were actually ascertained without going through the details in the text to show it.

Q. Now, in that connection are all the data which you [fol. 1014] used for this particular branch of your study shown in the volume which has been marked exhibit 64 for identification?

A. The exhibit marked 64 contains therein a section called, "Appendix A" and in Appendix A on the first page there is shown a list of water companies from which selections were made to determine investors' appraisal of risks of capital. And there we will find the list of 72 companies which has been mentioned, and will find columnar captions which show the basis on which one or another of the companies were eliminated down to the 7 which we finally used.

Q. All right.

Now, where else in exhibit 64 are the data contained in respect to water companies?

A. Taking Appendix C.

Q. Which is headed "Working Papers Showing the Computation of Investors' Appraisal of Capital", is it?

A. That is correct. Water companies in that section of appendix C of exhibit No. 64 show it.

Q. Beginning on page 1 of that exhibit?

A. Beginning on page 1 and going through—beginning with the Bridgeport Hydraulic Company, showing the detailed information which actually is the information supporting the statement A and A-1 in volume 1, or exhibit 63.

Q. And the first 21 pages of the appendix you have just mentioned contain those data; is that correct?

[fol. 1015] A. That is correct.

Q. All right.

Now, having performed this investigation with respect to water companies, will you now turn to your analysis of the data of electric utility operating companies, and state what you did in that connection?

A. As shown on page 11 of exhibit 63, I have an analysis of the data on electric utility operating companies.

From an alphabetical list of telephone, electric and gas utility common stocks, considered in the course of the study of certain factors influencing investors' appraisals of risk characteristics, carried as schedule 9 of Federal Communication Commission publication issued June 15, 1938, and entitled, "The Problem of the 'Rate of Return' in Public Utility regulation" were selected all electric operating utility companies whose common stocks were outstanding in the hands of the public to the extent of at least 5 percent.

The complete list included 40 telephone, electric and gas companies in the schedule just referred to. From that, we made certain eliminations.

Q. Will you state why you made those eliminations?

A. Well, the eliminations were made from—(1), companies whose revenues were derived primarily from telephone service.

[fol. 1016] Q. You have stated, have you not, why you felt that telephone companies should be eliminated?

A. That is correct.

(2) Companies whose revenues were derived primarily from gas service.

Q. Is that because you have another section of this report dealing primarily with gas companies?

A. That is right.

The gas companies will come from this grouping, as a matter of fact but are classified as gas rather than electric and gas.

Q. And you have made no further eliminations?

A. (3) Companies whose common stock was outstanding in the hands of the public to an extent less than 5 percent.

(4) We eliminated those companies which were primarily holding companies.

Q. Why did you do that?

A. Because we were trying to get the investors' appraisal of risks of capital in operating companies as distinguished from holding companies.

Q. Now, out of the complete list of 40 companies, how many were left after you had made these eliminations?

A. There were 15 electric utility operating companies, remaining.

Q. Are those listed, and will you state what they are? [fol. 1017] A. Those are listed on page 11, exhibit 63.

Q. And 12, are they?

A. 11 and 12. They cover Bangor Hydro-Electric Company.

Boston Edison Company;

Central Hudson Gas and Electric Company;

Cleveland Electric Illuminating Company;

Commonwealth Edison Company;

Connecticut Power Company;

Consolidated Edison Company of New York;

Consolidated Gas, Electric Light & Power Company of Baltimore;

Detroit Edison Company;

Duke Power Company;

Hartford Electric Light Company;

Pacific Gas & Electric Company;

Pennsylvania Water & Power Company;

Southern California Edison Company, Ltd.;

Tampa Electric Company.

Q. Those were the companies which you then studied; is that right?

A. That is correct.

Q. And did you perform the same general investigations with respect to those companies that you explained with respect to the water companies?

A. I followed that same identical procedure, yes.

[fol. 1018] Q. Will you state what were the results of those studies in respect to the investors' appraisal of risks of capital in connection with those companies?

A. As shown on page 12 of exhibit 63, the summary table of basic material and the investors' appraisal of risks

of capital which was the resulting percentage showed 5.47 percent for 1937.

5.52 percent for 1938;

5.42 percent for 1939;

5.46 percent for 1940;

5.61 percent for the interim period, January-August, 1941, both inclusive.

Q. What was the average over the four full years that you studied?

A. The average for the four full years was 5.47 percent.

Q. Now, have you included in your two exhibits that have been marked for identification the supporting data with respect to each of these companies for each of the years studied as well as the total figures for the group?

A. That is correct.

That is contained in statements B and B-1 at the end of this report.

Q. Exhibit 63?

A. Exhibit 63.

And I show the information for each company and the [fol. 1019] indicated market value of capital for each year, the earnings available for distribution to capital for each company for each year and the investors' appraisal of risks of capital which is the percentage for each company for each year, and on statement B-1, I show the same material for each company for each year on the interim period, January to August, 1941, both inclusive.

Q. Yes.

A. And in volume 2, which is exhibit marked 64, I show in appendix A, page 3, the list of electric utility operating companies and others from which selections were made to determine the investors' appraisal of risks of capital which shows the full list of 40 referred to and in columns in our headings, show the method of elimination for whatever reason it might be, which left the resulting figure of 15, which has been considered in exhibit 63, pages 11 to 12.

Q. Mr. Coffman, is it your opinion that the elimination you have made in this section of your study, as well as th eliminations which you have stated were made with respec to water companies, and the eliminations which you are going to explain with respect to the other types of utilit operating companies, are reasonable and necessary elimi inations in connection with arriving at your conclusions

A. I believe that they are.

Q. And, in connection now with these electric com panies, did you include in your final study all of the com [fol. 1020] panies which you believed reasonably repre sentative of the electric industry and as to which you coul obtain the data which was necessary to your study?

A. So far as I know, this is an all-inclusive list on th basis that I have outlined and is fully representative.

Q. And you did not, in any sense hand pick any of th companies you used with respect to any of the companie in these sections?

A. That is correct.

Q. And all of the eliminations were made on the base stated in exhibit 63?

A. That is correct.

Q. Now, have you anything further that you would lik to say with respect to the studies made on electric utilit operating companies?

A. Well, except to emphasize that in this particula study, the source of information used came from th schedule 9 of the Federal Communications Commissio publication. We believed that to be inclusive, and we ha that checked against our own sources and found it to b such and we used that list on the theory that it had alread been tested and had been found to be about as complet as any that could be prepared.

And then went on with the various eliminations as de scribed, to get the final group of companies.

. . . . . .

[fol. 1021] As shown on page 13 of exhibit 63, in makin the data on manufactured and mixed gas companies, her a list was prepared of all operating companies distributi manufactured and or mixed gas from the Standard Co poration Records which appear on pages 4 and 5, appendi A in the exhibit marked 64.

From this list of companies, we made eliminations on the following basis:

(1) Companies whose stocks were controlled completely or practically so, by a holding company and for which there was no market evaluation.

(2) Companies whose gross revenue was predominantly obtained from services other than the distribution of manufactured and/or mixed gas.

(3) Companies with gross revenues in 1940 of less than $1,000,000 because these were too small to have any important bearing on the final results.

Q. Those were all of the eliminations that you made, were they?

A. That is the basis of all eliminations that were made.

Q. Now, after making those eliminations, how many companies did you have left, and what were they?

[fol. 1022] A. There were 10 companies remaining in the grouping.

* * * * * * * * * *

These were the Bridgeport Gas Light Company;

Brooklyn Union Gas Company;

Elizabethtown Consolidated Gas Company;

Hartford Gas Company;

Laclede Gas Light Company;

Peoples Gas Light & Coke Company;

Providence Gas Company;

Seattle Gas Company;

Springfield Gas Light Company;

Washington Gas Light Company.

Q. Now, in determining your figures for the investors' appraisal of risks of capital for these companies, could you follow precisely the same course that you followed with respect to the electric and water companies that you have described?

A. I did, yes.

Q. Now, will you please state what the results were in connection with these gas companies?

A. Well, as shown on page 14 of exhibit 63, we give the total indicated market value of capital for each of the years and the interim period, the total earnings available for capital for each of the years and the interim period, and dividing the total earnings available for capital for each of the years, by the total indicated market value of capital for each of the years, I get the investors' ap-[fol. 1023] praisal of risks of capital which was 6.12 percent in 1937;

6.72 percent in 1938;

6.72 percent in 1939;

6.89 percent in 1940, and

7.04 percent for the interim period.

. . . . . .

A. The average as shown in the text was 6.61 percent.

Q. Is full supporting data for all the figures which you have used contained in exhibits 63 and 64 respectively.

A. Yes it is, and in exhibit 63, on statement (C), I show for each company for each year the indicated market value of capital, the earnings available for distribution to capital, and the investors' appraisal of risks of capital, and in statement C-1 at the end of exhibit 63, I show for each company, the indicated market value of capital, the earnings available for distribution of capital, and the investors' appraisal of risks in capital in percentage form.

Q. For the interim period?

A. Yes, for the interim period.

Q. When you speak of the interim period in your testimony, you mean the period, January to August, 1941, inclusive?

A. That is correct.

Now, in further support of those data in exhibit 63, [fol. 1024] there is shown in Appendix A, pages 4 and 5 of volume 2, exhibit 64, the list of all the operating companies distributing manufactured and mixed gas services as prepared from Standard Corporation Records wherein the entire list covered 85 companies—and it was from

those, that complete list that the eliminations were made, resulting in the final 10 shown.

Q. And, in the data you have just mentioned in exhibit 64, have you shown the reasons for the elimination of each company which was eliminated, and also the list of the companies which were used to determine investors' appraisal of risks of capital?

A. Yes, I have shown that, and in the subsequent tables in exhibit 64, all the detailed information is given on each company.

Q. All right.

Now, Mr. Coffman, did you make a similar study with respect to natural gas companies, and if so, will you outline what it was?

A. I made a similar study of natural gas companies and this is shown on page 15 of exhibit 63.

The list of natural gas companies from which selections were made to determine the investors' appraisal of risks [fol. 1025] of capital for this industry was the same as that prepared by Mr. Charles W. Knapp, Jr., of the Federal Power Commission in an exhibit entitled, "Rate of Return", which was submitted in the Hope Natural Gas Company hearings.

Q. That is a hearing which has been running along for the last two or three years, is that your answer?

A. That is correct.

This list was used since it appeared to be fully representative of the industry.

Mr. Knapp testified that:

"In preparing this list, an attempt was made to include all natural gas companies which had the following characteristics:

"(1) Companies engaged in the production and transmission of natural gas and sales thereof at wholesale and to main-line industrial customers;

"(2) Companies engaged in the transmission of natural gas and sales thereof at wholesale and to main-line industrial customers.

"(3) Companies such as those described in (1) and (2) above which also conduct retail distribution operations.

"(4) Companies so engaged which have annual operating revenues of $2,000,000 or more."

Q. Do you believe that a list of companies determined as so stated by Mr. Knapp would be fully representative of the Natural Gas Industry in general?

[fol. 1026] A. We believe that was an inclusive list.

Trial Examiner: Mr. Coffman, may I ask whether, as you construe Mr. Knapp's basis of selection, his (4) of, qualification or condition, is a limitation upon the other preceding conditions?

The Witness: That is, the companies engaged which have annual operating revenues of $2,000,000 or more.

Well, generally speaking, I would say that wasn't a very great limitation because for the companies that are listed, many of them are of such size that I don't believe that that elimination would—that particular process of elimination would restrict the study to any material extent, so far as results are concerned.

Trial Examiner: You do, however, understand that limitation is to be superimposed upon the other limitations?

The Witness: Yes, I do.

Mr. Wheat: You believe that was a proper limitation as made by Mr. Knapp?

The Witness: I believe it was a proper limitation as I have mentioned, for example, in a prior listing, where we have the manufactured and mixed gas companies, I eliminated companies of $1,000,000 or less, and in the case of water companies, I eliminated companies which had gross revenues of $500,000 or less. I think it is sound to do this on exactly the same basis.

By Mr. Wheat:

[fol. 1027] Q. How many companies were left after Mr. Knapp had made these various eliminations?

A. In this particular case, I show left 13 companies which are listed on page 17 of exhibit 63 and that is taken from a total list of 43 natural gas companies in all.

Q. In other words, Mr. Knapp included 43 natural gas companies, did he?

A. There were in his list, 43 companies.

Q. And would it be fair to state, as stated on page 16 of exhibit 63, the grand total of securities of these 43 companies which you have stated in your opinion are fully representative of the natural gas industry, is $1,181,773,511?

A. I think that is representative, yes.

Q. Yes.

That is the total, is it, of those outstanding securities?

A. That is the total of the outstanding securities of the entire 43 companies which are listed.

Mr. Littman: As of what date, may I inquire?

The Witness: This particular date, I think is, as of December 31, 1940.

. . . . . .

[fol. 1028] Mr. Littman: Isn't it apparently various dates?

I call your attention to Appendix B, page 1, of your exhibit 64, and ask you whether that will refresh your recollection as to what dates were used?

. . . . . .

Mr. Littman: I see dates ranging from, well, one in July, 1940, one in March, 1941, another December 31, 1940.

The Witness: That is correct.

Mr. Littman: And also, December 31, 1939, and so forth.

The Witness: That is correct. The data given in Appendix B on pages 1 to 5, inclusive, on exhibit 64, show for each company the particular date and they vary. There

are some of them at the year's end for 1940 and 1939,—one or two for interim dates.

By Mr. Wheat:

Q. You mean pages 1 to 10, do you not, inclusive of exhibit 64? Appendix B, Exhibit 64?

* * * * * * * * *

The Witness: Pages 1 to 10, that is correct, and as explained in the note at the bottom of each of the exhibits that is taken from the exhibit prepared by Mr. Charles W. Knapp of the Federal Power Commission, in the Hope Natural Gas Company hearing.

[fol. 1029] Mr. Littman: Are those the dates Mr. Knapp used?

The Witness: I believe they are; the ones that were taken from that exhibit.

By Mr. Wheat:

Q. Now, Mr. Coffman, considering these 43 companies, was it necessary for you, in connection with your present study, to make other eliminations, and if so, why did you do so?

A. Well, we did make some further eliminations on the original list, from the 43 companies we eliminated all companies whose common stocks were not outstanding in the hands of the public and for which an investment appraisal of this portion of capital was not obtainable.

After giving effect to these eliminations which are shown in Appendix A, page 6 in exhibit 64, there were 13 companies which remained.

Q. Will you state what they were?

A. These are listed on page 17, exhibit 63.

Consolidated Gas Utilities Corporation;

El Paso Natural Gas Company;

Houston Natural Gas Corporation;

Interstate Natural Gas Company;

Lone Star Gas Corporation;

Memphis Natural Gas Company;

Montana-Dakota Utilities Company;

[fol. 1030] Mountain Fuel Supply Company;

National Fuel Gas Company;

Oklahoma Natural Gas Company;

Pacific Lighting Corporation;

Panhandle Eastern Pipe Line Company;

Southern Natural Gas Company.

Trial Examiner: Referring to Appendix A on page 6 of your proposed exhibit 64.

The Witness: Yes.

Trial Examiner: Is that the list of companies that you have eliminated from Mr. Knapp's studies for reasons indicated?

The Witness: The Appendix A, page 6, shows it.

* * * * * * * * *

The Witness: In exhibit 64, it shows the list that was selected by Mr. Charles W. Knapp in the study that has been already referred to.

Trial Examiner: And in the middle, companies which you have eliminated in your conclusions?

The Witness: Exactly.

That explains the method or the reason for the elimination that I made from the group of 43, which I finally gave as a resulting list of 13 companies shown on page 17 of exhibit 63.

Trial Examiner: Now, you were about to state your reasons for those eliminations; is that right?

The Witness: I stated the reason for the elimination made.

[fol. 1031] By Mr. Wheat:

Q Will you elaborate on that, please?

A. As being the companies whose common stocks were not outstanding in the hands of the public, and for which an investment appraisal of this capital was not obtainable.

In other words, of the various companies that Mr. Knapp included in his list of 43, if we could not find a reliable market quotation on a portion of the common capital stock, then we eliminated that company from the grouping because we could not, you see, get an overall investors' appraisal of the market value and therefore, I did not have the basic figure to make a calculation on.

Trial Examiner: There were no other bases for elimination used by you?

The Witness: No, except just that one—as mentioned, in other words, Mr. Knapp had already listed certain bases of elimination, so I started with what he had, and added only one namely—if I couldn't get an indicated market value for common stock, I had to eliminate that company. I couldn't make my calculations.

By Mr. Wheat:

Q. And having made that particular elimination, you had the 13 listed companies left, did you?

A. That is correct.

Q. Those which you have mentioned?

[fol. 4032] A. Yes.

Q. Will you proceed and state what you did with respect to development of your study as to these gas companies; natural gas companies?

A. Well, I followed the same procedure as outlined at the beginning of each of the preceding divisions, and as shown on page 17, exhibit 62, found by using that method, that for basic facts that there were total outstanding securities of $492,892,522.

That was the total outstanding capital.

Q. That was 41 percent of the aggregate book value of all the 43 natural gas companies?

A. Approximately that, yes.

. . . . . .

The Witness: It is 41 percent according to the figures, one shown on page 16 and the others on page 17 of exhibit 63, the $492,892,522 is 41.7 percent of the aggregate book value of all 43 natural gas companies.

By Mr. Wheat:

Q. Do you believe, therefore, that you had obtained a representative sample of the natural gas industry?

[fol. 1033] A. I felt that I had, yes.

Q. What did you do with respect to these 13 companies?

A. Well, I made some analysis in this particular case to show the distribution of various types of securities, 49.2 percent in common stocks, 14.9 percent in preferred stock, and 35.9 percent in debts, composed of bonds, debentures, notes and advances.

Further, all of the outstanding securities of these 13 companies were not held by the public. Owing to the practice in recent years of selling many senior issues privately, $82,732,500, or 46.8 percent of the total debt outstanding was held by institutions. In such cases it was necessary to estimate the investors' appraisal of this particular portion of the capital.

However, the possible margin of error in making such estimate was very small in view of available data on original offering prices and the subsequent trend of quotations for publicly held securities.

Q. Do you believe that any possible margin of error created by that estimate would be large enough to affect your general conclusions?

A. No. The margin of error would be so small it would have little or no effect upon the final results.

[fol. 1034] Likewise, $11,000,000 or 15.0 percent, of the total preferred stock outstanding was held by affiliated companies. This amount was represented by the two issues of preferred stock of the Panhandle Eastern Pipe Line Company which were outstanding in the name of Gano Dunn, trustee for Columbia Oil and Gasoline Corporation.

Here again estimates had to be made of the investors' appraisal of these particular securities, but the margin of error in making such estimates of stocks calling for a fixed dividend payment, obviously could not be great.

Q. How about common stocks?

A. In the case of common stock, there was $36,316,243 or 15.0 percent of the total book value of common stock of the 13 companies, also held by affiliates.

In no case, however, did affiliated companies own 100 percent of the outstanding common stock of any particular company and therefore, the investors' appraisal of the common stocks as indicated by the record of price quotations on the publicly held portions of the issues were used to determine the aggregate value of all the stock outstanding.

Q. Do you believe that to be a reasonable method in connection with your study?

A. I did. I think it is the only method that can be used in the—in a situation like that.

[fol. 1035] The procedure followed in determining the investors' appraisal of the risks of capital in the natural gas division of the utility industry was that previously described in section 1 above.

Q. And what were your conclusions with respect to the investors' appraisal of the risks of capital in this natural gas industry?

A. As shown on page 19, of exhibit 63, the investors' appraisal of risks of capital was represented by 7.81 percent in 1937.

7.98 percent in 1938;

7.60 percent in 1939;

8.03 percent in 1940; and

8.07 percent in the interim period, January-August, inclusive, 1941.

Q. What was the average for the four full years included in your study?

A. The average for the four full years is shown in the text on page 17.

Q. 19, you mean?

A. Page 19 of exhibit 63 which is 7.78 percent.

Q. Now, are the supporting data in connection with your study of these companies contained in these two exhibits, 63 and 64?

A. Yes, they are.

* * * * * * *

[fol. 1036] All the data that we have to work with is in either volume, exhibit 63 or 64 or the two of them.

Q. Now, Mr. Coffman, in connection with your study of these natural gas companies, did you ever have available data with respect to certain natural gas pipe line companies?

A. Yes.

Q. If so, what were they?

A. Included in this list of 13 natural gas companies which I have been discussing, there were certain pipe line companies, El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Panhandle Eastern Pipe Line Company and Southern Natural Gas Company.

Q. Well now, Mr. Coffman, it is evident, is it not that since these companies—these five natural gas pipe line companies which you have just listed as being included in the 13 natural gas companies you heretofore listed, eliminations from any all-inclusive list of natural gas pipe line companies had already been made by Mr. Knapp and by you on the basis which you have been describing?

A. That is correct.

Q. Yes.

Now, would it be true, would it be correct to state that these five natural gas pipe line companies, which you have [fol. 1037] mentioned were, in your opinion comparable because their revenues were derived principally from the transportation of gas through long natural gas pipe lines?

A. That would be correct.

Q. In any instance, in connection with these five natural gas pipe line companies, was the ultimate distribution system operated by the pipe line company itself?

A. No, I believe not.

Q. Now, what were the results of using your data and confining it to these five natural gas pipe line companies?

A. As shown on page 20 of exhibit 63, the investors' appraisal of the risks of capital was 9.63 percent in 1937, 9.52 percent in 1938, 8.84 in 1939, 9.55 percent in 1940 and 9.49 percent in the interim period, January-August, both inclusive, 1941.

Q. What was the average for the four full years contained in your study?

A. The average for the four full years is shown in the text on page 20 of exhibit 63 and it was 9.38 percent. There is a footnote shown on that same page which explains the data for Panhandle Eastern Pipe Line Company which shows that it could not be computed for the years 1937 and 1938, since no part of the common stock was outstanding in the hands of the public at that time.

Q. You mean that for those years, you did not, you were [fol. 1038] unable to include such data for Panhandle Eastern?

A. That is correct, yes.

Q. However, you did include such data for Panhandle Eastern in the other years of your study, is that correct?

A. Yes.

Q. All right.

Now, will you state whether, in this connection, you also have made an investigation of the investors' appraisal of the risks of the Panhandle Eastern Pipe Line Company, as such?

A. Yes, sir. On page 21 in exhibit 63, I show the determination of the investors' appraisal of risks of capital of Panhandle Eastern Pipe Line Company.

Q. I notice that, for the years 1937 and 1938, you show no figures and I ask you whether that is because of the same reasons as you have just mentioned in respect to the five natural gas pipe line companies?

A. That is for the same reason, yes.

Q. What did you find to be the total indicated market value of capital, the total earnings available for capital, and the investors' appraisal of risks of capital for Panhandle Eastern Pipe Line Company, for the years 1939 and 1940, and for the interim period, January-August, inclusive, 1941?

A. As shown on page 21, exhibit 63, the investors' appraisal of risks of capital was 8.40 percent.

Q. I would like to have you give us the figures for the [fol. 1039] total indicated market value, and the total earnings available for capital.

A. All right.

As shown on page 21, exhibit 63, total indicated market value of capital was $66,681,674.

The total earnings available for capital in 1939 was $5,601,585, and the investors' appraisal of risks of capital was 8.40 percent.

Q. What are the figures for 1940?

A. Total indicated market value of capital for 1940 was $58,156,283.

The total earnings available for capital in 1940 was $5,761,686; and

The investors' appraisal of risks of capital for 1940 was 9.91 percent.

Q. And for the interim period, January to August, inclusive, 1941, what were the figures?

A. Total indicated market value of capital as shown on page 21, exhibit 63, for the interim period, January-August, both inclusive, 1941 was $64,219,240.

The total earnings available for capital in the interim period, January-August, both inclusive, 1941, was $5,843,430; and the investors' appraisal of risks of capital for the interim period, January-August, both inclusive, 1941 was 9.10 percent.

[fol. 1040] Q. What was the average for the full two years included in this study?

A. The average for the full two years shown in the text on page 21 of exhibit 63 was 9.15 percent.

Q. Now, Mr. Coffman, in connection with this general study, have you included in exhibit 63 a summary of the analyses which you have just outlined?

A. Yes, on page 63 of exhibit—on page 23 of exhibit 63, I show a summary of this study, and opposite that page is a chart numbered page 22 in exhibit 63, which shows the detailed information for each group for the four year aver-

age, 1937-1940, both inclusive, and for the interim period, January-August, both inclusive, 1941.

Now, the figures in tabular form on page 23, which supports the chart opposite page 22, show that the 4-year average, 1937-1940, both inclusive, was 5.38 percent for water companies; 5.47 percent for electric utility operating companies; 6.61 percent for manufactured and mixed gas companies; 7.78 percent for all natural gas companies; 9.38 for natural gas pipe line companies, and 9.15 percent for Panhandle Eastern Pipe Line Company.

The figures for the interim period, January-August, both inclusive, 1941, were 5.24 percent for water companies; 5.61 percent for electric utility operating companies; 7.04 percent for manufactured and mixed gas companies; 8.07 percent for all natural gas companies; 9.49 percent for [fol. 1041] natural gas pipe line companies, and 9.10 percent for Panhandle Eastern Pipe Line Company.

Q. Now, are those figures which you have just been reading the figures which form the bases for the development of the chart which appears on page 22 of exhibit 63?

A. The chart is just a graphic presentation of data shown in the table on page 23, exhibit 63.

. . . . . .

As a result of my analysis, I thought that the one important thing that this analysis indicated was that the investors believed that there is a difference in risk in the different divisions of the utility field which I have covered; namely, water companies, electric utility operating companies, manufactured and mixed gas companies, natural gas companies, and natural gas pipe line companies.

Q. What is the range of that difference?

A. Well, the range in the investors' minds is from 5.38 percent for water companies to 9.38 percent for natural gas pipe line companies as based upon four full year averages and it ranges from 5.24 percent to 9.49 percent based upon the interim period, January-August, both inclusive, 1941.

Q. Well, is it fair to state that, as a result of your study, it is shown that investors appraise the risk of capi- [fol. 1042] tal invested in natural gas companies at ap-

proximately one percent higher in respect to manufactured and mixed gas companies, and from two to two and one-half percent higher than in respect to electric operating utility companies?

A. That is the conclusion that I draw from these data.

Q. And is it also evident from these data that investors in general, consider the risks of capital invested in natural gas pipe line companies to be greater than the risks encountered in other divisions of the natural gas business?

A. They very definitely do, from these figures.

Q. Now, Mr. Coffman, is there anything further you would like to state at this time, with respect to this study?

A. Well, in connection with the data which is shown on page 22, in the graph of exhibit 63 and in addition to showing there is a difference in the risk, and the requirement that the investor has, he has also required over this four year period, that the average yield that he should secure, that is, the earnings, the relationship to independent market price, should be in the range of 9½ percent approximately.

In addition, there is one further point in connection with the study that I attempted throughout the study, to make this purely a statistical analysis. I have no opinions of my own in here. I have taken all the facts that were available on all the individual companies listed, and upon the classifications used, and so far as I am concerned, the [fol. 1043] figures speak for themselves.

They are just the results of an arithmetical computation, once the original totals are accumulated.

. . . . . .

[fol. 1044] Q. Mr. Coffman, have you also prepared a study entitled "Study Relative to Rate of Return on Panhandle Eastern Pipe Line Company"? A. I have.

Q. Is the document which is in the hands of the reporter the study to which you have just referred?

A. Yes, sir, it is.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 65 For Identification.)

* * * * * * * * *

By Mr. Wheat:

Q. Now, Mr. Coffman, will you please state briefly what the general purport and purpose of Exhibit 65 for identification is, then will you outline what you did in [fol. 1045] connection with that study?

A. Exhibit No. 65 contains an analysis which I made in relation to the Panhandle Eastern Pipe Line Company with the purpose of determining the economic return requirement that I thought was necessary for the management to receive to permit them to render efficient service or discharge its public duties and generally maintain its credit position.

In some restatement I will amplify that later, but that is the digested result.

* * * * * * * *

On the next few pages immediately following the page containing my statement of experience and qualifications, I present a synopsis of the history and development of the company. I believe most of such information has already been in as evidence in this particular case.

The actual source of this material, from my own standpoint was the S. E. C. registration statement and statements taken therefrom which appear in our publication [fol. 1046] called "Standard Corporation Records."

It shows as a part of that a map which presents the territory from which the company secures the gas and the mileage it covers and the ultimate consuming areas it serves.

I thought it was necessary for me to have familiarity with those facts before continuing my study, but I don't need to go into that here because it has already been presented.

* * * * * * * * *

Q. Now, will you proceed to state what your approach was to the determination of what you have just a moment

ago denoted as the economic return requirement of this company?

A. Well, over the past several years, while I have been making studies in connection with the investor's appraisal of the risk of capital, I have been trying to explore other data which I thought might be helpful and contribute something to a study of return.

Several months ago my company was, through me, retained to make an analysis for the Pennsylvania Power & Light Company which was to be presented before the Pennsylvania Public Utility Commission.

[fol. 1047] In that analysis I attempted to ascertain what the return, that is, the total compensation, should be to allow the management of that company to operate efficiently, discharge its public duties effectively and maintain its credit position.

In this particular study I have attempted to do the same thing. It occurred to me in the studies that I have made and reviewing the various Commission decisions and court decisions on the subject that in past cases the general approach had been one wherein various qualified people would make thorough studies, some relating to information that could be used for determination of the proper rate base and others were devoting their attention to what could be used as suitable material to form an opinion as to a fair rate of return.

So far as I understand those two things, multiplying a fair rate base by a fair rate of return gives a sum of money which is believed to be a reasonable amount that the company should receive for the service it discharges.

Mr. Littman: May I inquire, is this witness a lawyer?

Mr. Wheat: No, this witness isn't a lawyer, Mr. Littman. I have asked him to explain the basis of his approach to the study he has made. The answer is, no, he is not a lawyer.

The Witness: The dollar amount that was received, it [fol. 1048] seemed to me, was a matter which might be determined if one struck at that particular problem directly, so in this particular study I have taken the point of view that through a thorough analysis of all the data that

is pertinent and important to the subject I could arrive at a figure which, to me, would be an irreducible minimum of compensation required by the management of this company to continue to discharge its public duties and maintain its credit position.

In connection with the Pennsylvania Power Company, the Pennsylvania Power & Light Company, which study I had already made and presented before that Commission, I felt that I was following fairly precisely the various factors underlying a determination of a rate as outlined in the Solar Electric case.

Q. What is that case to which you refer?

A. The Solar Electric case is a case in which an opinion was handed down by the Pennsylvania Supreme Court and in the decision there there was—

Q. (Interposing). Give the reference.

A. 137 Pa. Sup. Court Rep. 325.

Q. All right. Now what was the particular statement of the Court which you felt you were following?

A. Well, I felt there that they outline certain underlying factors which I considered in my study from a [fol. 1049] statistical point of view to arrive at a conclusion. That statement was; "The Courts have held that the return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to pay all the expenses of operation, provide for depreciation; payment of interest and reasonable dividends and for a reasonable amount to be applied to a surplus account, thus insuring the maintenance of credit and enable it to raise money necessary for a proper discharge of its public duties."

Then, of course, there are references to the Bluefield Water Improvement Company.

Q. You are referring to Bluefield Water Works Improvement Company vs. Public Service Commission reported at 262, United States Supreme Court's Reports 679 at 692?

A. That is correct and United Railway & Electric Company vs. West.

In following my study of the Pennsylvania Power case, which is similar to the one here, I tried, statistically to present information on these various factors that are outlined and, so far as I understand the opinions, the same general factors were outlined in the Bluefield case and those are the ones that are the basis of my analysis.

So far as the actual presentation is concerned, it might appear to be a little different or new, but so far as I under- [fol. 1050] stand what I have done, I have followed this as precisely as one could under a statistical procedure, the various factors outlined as being important to this kind of a study in the courts, as I state.

* * * * * * * *

Turning to Chart 2, captioned "Growth of Natural Gas Industry in the United States of America, 1906-1940, Both Inclusive," I show a graph which presents natural gas production as represented by the solid blue line and the domestic and commercial customers as represented by the solid gray line.

* * * * * * * *

[fol. 1051] The Witness: On this graph, of the exhibit, it must be observed that there are two scales, the scale on the left-hand side is in terms of billion m. c. f. production, which goes from 0 to 3.5 billions and relates, of course, to the solid blue line.

The scale on the right-hand side is in terms of millions of customers and runs from zero line to 14,000,000 customers.

The figures for the domestic and commercial customers for 1940 were not available, which explains the fact that one year is missing.

I analyzed these data because I thought it was essential in familiarizing myself with the background of the natural gas industry. I interpret these data to indicate that for a period for 1906 to 1920 there was a growth in the number of domestic and commercial customers and some growth in the production of natural gas.

In 1921 the blue line takes a dip, which to me indicated that the business depression following the last World War had some effect upon natural gas production.

Beginning in 1922 there was a considerable sharper rise in production which lasted until 1929.

In the next three years there was a decline which again indicated that this industry was subject to the fluctuations in the business cycle and beginning in 1933 there was an [fol. 1052] other sharp rise until 1937, followed by a year's dip for the recession that occurred in 1937 and '38 and then in the latter part of 1938 on through '40 another sharp rise, so that to me it indicates that the natural gas industry is still a growing industry, that its greatest and sharpest growth began subsequent to the post-war depression of 1920-22, that that industry is subject to business fluctuations and, therefore, carries risks connected therewith which must be faced by managements of various companies in the industry.

The line representing the number of domestic and commercial customers generally is extended upward, the period from 1922 to 1931 showing the sharpest growth and then some leveling off since that latter year, although still showing an increased number.

Now, in connection with this exhibit there is in the back of the Exhibit 65 a complete set of my statistical data for each exhibit that I shall describe here, the first one being marked as the first table therein "Table for Chart No. 2" and that table is captioned "Growth of Natural Gas in the United States of America for the years 1906 to 1940, Inclusive."

It shows a column for 1906 through 1940. It shows, column 1, the domestic and commercial customers in number, the 1940 figure being marked "not available" and the footnote shows support for what is taken from Moody [fol. 1053] Public Utility Manual 1941, page A 42. Column 2 shows the natural gas production in terms of thousand m. c. f. for the years 1906-1940 and the footnote 2 indicates that those data were taken from the United States Bureau of Mines, Minerals Year Books 1937, page 1062, 1941, page 1030 and each succeeding graph that I talk about is supported by a similar table of statistics properly documented with many sources of information as shown, except two or three charts which are fully complete in themselves and there was no need to duplicate the figures.

Q. In other words, you have included in this Exhibit 65 what practically amounts to your working papers for the development of the charts in question?

A. That is correct, every figure that I used is contained in this book.

Q. By the way, it has just been brought to my attention that you stated that the Solar Electric case was reported in the reports of the Pennsylvania Supreme Court. I think the record should show it was the Pennsylvania Superior Court.

A. I am sorry, I didn't know that I said that.

Q. Now, have you completed your explanation of Chart No. 2? A. Yes, I have.

Q. Now, will you turn to Chart No. 3 and state what is shown on that chart?

[fol. 1054] A. Chart No. 3, in Exhibit 65, captioned "Consumption of Natural Gas in U. S. A., 1919-1940, Both Inclusive," shows on the left-hand side one set of data captioned "Consumption According to Usage," and on the right-hand side data relative to "Consumption of Natural Gas Versus Industrial Production in Relatives; 1935-1939, Equalling 100."

The two different boxes in this one chart carry different scales. The left-hand one carries a scale in terms of billion c. f. from zero to 3.5 and the scale in the right-hand box is in terms of percent, since the figures are all relative, and the scale runs from zero to 160 and 160 or any other percent on that scale is percent of the average for 1935, 1939 equalling 100.

In the left-hand section, showing consumption according to use, the consumption for the years 1919 through 1940 are given in the various classifications, domestic and commercial, miscellaneous industrial, field use and carbon black and various colors represent those classifications; but they are clearly marked and I need not explain each.

Generally I interpret these data to show that there has been a substantial growth in consumption from 1921 through 1940 as shown by the top blackline marked "Total Consumption" but that consumption has been influenced by the business cycle or fluctuations in general business as noted in the dip in 1921, the dip for the years 1930, '31 and [fol. 1055] '32 and the dip shown from 1937 to '38.

The total consumption, of course, has shown a marked growth from 1919 when it was 750,000,000 m. c. f., approximately, to a total in 1940 of 2,670,000,000 m. c. f.

In the right-hand exhibit the solid green line represents consumption of natural gas, excluding field use and carbon black and the solid gray line represents the total consumption of natural gas and the brown line represents the Federal Reserve Board of Industrial Production index for the years 1919 through 1940. We have an estimate of the Federal Reserve index for the year 1941 as shown by the dashed brown line to an estimated figure of 155 of the 1935-39 average equalling 100.

* * * * * * * * *

That average comes from the Federal Reserve Board, the other figures relating to consumption of natural gas and total consumption figures which are given from the sources already mentioned. We made the calculation to reduce them to an index so that they would be comparable with the Federal Reserve and be on the same basis with the Federal Reserve.

These graphs indicate that from 1919 to 1930 the trend of consumption of natural gas, excluding field use and carbon black, and the total consumption of natural gas, followed very closely together and, further, so far as trend was concerned, they followed the index of industrial pro-
[fol. 1056] duction as made up by the Federal Reserve Board.

Since 1930 all three lines, as can be seen, are about on the same level and follow the same general pattern, indicating that the consumption of natural gas is subject to the business fluctuations as they occur.

It shows, also, that in 1940 consumption of natural gas was the highest of any time in the history of the industry, that the industrial production index was the highest in its history and that the estimates indicate conditions considerably beyond anything we have seen in the past.

Q. As far as industrial production?
A. As far as industrial production is concerned.

Now, that exhibit, also, as I have explained, carries a table at the end which is marked "Table for Chart No. 3" captioned "Consumption of Natural Gas in the United States of America for the Years 1919-1940" and the table's figures wherein information was available are given for the years 1919 through 1940, both inclusive, and are specifically marked to indicate that the column 1, which is in relatives, 1935-39 equalling 100 is a computation made by Standard and Poor's Corporation, based on figures that were already supplied from governmental sources.

The column No. 2, grand total, is shown to be United States Bureau of Mines figures from Minerals Year Book, already mentioned, and column 3, which is the Federal Re-
[fol. 1057] serve index, is taken from our Standard Trade and Securities where we reprint that index for public consumption.

Q. Now, is there anything further that you wish to state with respect to Chart No. 3?

A. I don't believe there is anything further than to make the point that I have already made, that the total consumption of natural gas has shown tremendous growth in these years, that it is subject to business fluctuations and, therefore, carries more risk than some other activity which might not be subject to such fluctuations.

The left-hand exhibit shows that the greatest growth since 1929 has occurred in miscellaneous industrial and field use. Other divisions have shown growth, but not in the same proportion.

Q. Now, Mr. Coffman, will you turn to Chart No. 4 in Exhibit 65 and explain what is shown on that chart?

A. Chart No. 4 of Exhibit 65, captioned "Revenue from Natural Gas Consumed in U. S. A., 1919-1940, Inclusive," is divided into sections, the left-hand box captioned "Total Revenue According to Usage at Points of Consumption" shows the total revenue and also revenue according to usage as between domestic and commercial, miscellaneous industrial, field use and carbon black.

That particular chart or section of the over-all chart, No. 4, carries a scale in terms of millions of dollars [fol. 1058] from zero to eight hundred million.

The right-hand division of Chart 4 carries a scale in terms of cents per m. c. f. from zero to 40 and shows the average value per m. c. f. as represented by the solid green line.

This shows that the average value per m. c. f. fluctuated from 21.6 cents per m. c. f. in 1919 to 29.1 cents per m. c. f. in 1922 and then came back to around 21.4 to the 22-cent level wherein it fluctuated until 1931 when it reached about 25 cents.

. . . . . .

Mr. Littman: May I interrupt? Does your term "average value per m. c. f." mean average sales price per m. c. f.?

The Witness: That is the term customarily used by the Bureau of Mines in which it represents the total revenues shown in this chart divided by the "Consumption According to Usage" presented in Chart No. 3 of Exhibit 65, which gives you the average value per m. c. f. of consumption.

By Mr. Wheat:

Q. I take it then the two terms, as far as this chart is concerned, are synonymous. That is, the figures here, the amounts reflected are the sales prices?

A. Yes, that is correct. Of course, the one thing which we know is that this is an average value which covers [fol. 1059] domestic, commercial and miscellaneous industrial, field use and carbon black, some of which have very low prices because they are used directly in the field and others higher prices because they are used by the ultimate consumer and buyer, but it is the over-all average of those things at retail.

The Witness: Except for the two fluctuations indicated by the green line in the right-hand division of Chart No. 4 as occurring in 1922 and again in 1932 the average value, although showing some fluctuations, has kept on a reasonably stable basis, that is somewhere between 21.5 cents per m. c. f. to, say, around 22.5 cents per m. c. f.

Q. Would that indicate to you that the supply and demand were somewhat well balanced over these particular years?

A. It would seem to me that that was the case and the only difference that occurred in the two years here where there were more extreme fluctuations was for the most part accounted for by a temporary shift in the demand due to business fluctuations.

Q. General business fluctuations having their effect upon the demand for natural gas?

A. That is right, in cutting down the demand for gas, either for industrial use or for commercial and residential [fol. 1060] use.

The left-hand division shows, as represented by the top black line, the total revenue and that, of course, shows an increase for the period 1921 through 1940, but also shows that it was affected by business conditions in the same years as was the m. c. f. consumption.

Q. Now, these are, in general, what might be termed retail figures, are they? In other words, they are not figures of pipe line transmission company?

A. No, sir, they are the revenue according to uses based on points of consumption, that is right.

Q. They show, do they not, that the revenue from the rather large use shown in Chart No. 3 for carbon black is a relatively very small revenue? A. That is correct.

Q. And that the same is largely true of the field use?

A. The field use, the largest amount of revenue comes from domestic and commercial and the next largest from miscellaneous industrial.

Q. Now the data on which you have based the material shown on Chart No. 4 is shown on the Table for Chart No. 4, is it not?

A. The table for Chart No. 4 at the end, yes, sir.

* * * * * * * * *

[fol. 1061] Chart No. 5 of Exhibit 65, captioned "Average Revenue Per M. C. F., 1929-1940, Both Inclusive," the exhibit is again broken down into two sections, the left-hand section shows the average industry revenue from natural gas consumed in the United States of America at points of consumption and that particular exhibit is in terms of cents per m. c. f., the scale ranging from zero to 80, and the right-hand division showing the average revenue, Panhandle Eastern versus the industry, the scale

there being in cents per m. c. f. but running from zero to 50.

This merely is a breakdown of information shown in the preceding exhibits to indicate that the average industry revenue of natural gas consumed in the United States of America at points of consumption is lowest for carbon [fol. 1062] black which ranges from 1.9 cents per m. c. f. in 1929 along at a rather level line for some years, but finally declines to 0.9 cents per m. c. f. in 1939. The 1940 figures are not yet available.

The field use shows a little larger revenue but has indicated a decline in the years 1929 through 1939, the figure for 1940 not being available, from 9.7 cents per m. c. f. in 1929 to 4.2 cents per m. c. f. in 1939.

Miscellaneous industrial, which is the next line, shows a clearly marked, general downward trend from 19.7 cents per m. c. f. in 1929 to 16.6 cents per m. c. f. in 1939, the 1940 figure not being available.

Then in the next bracket, which is for commercial, the figures are larger amounts, starting with those first available for commercial of 47.8 cents per m. c. f. in 1930, increasing to 50.4 cents per m. c. f. in 1932 and then fluctuating something under that throughout the years and being 49.2 cents per m. c. f. in 1940.

The domestic, which is the higher rate, shows 67.8 cents per m. c. f. in 1930, an increase to 74.8 cents in 1932 and then a somewhat minor decline through the years to 1940 at which time the level was 73 cents per m. c. f.

The main purpose of this was merely to show that in the various different classifications of usage the rates vary according to type of use and point of consumption and this [fol. 1063] was to familiarize me with those data.

On the right-hand division there is a comparison made of the figures for the total industry, excluding field use and carbon black, at points of consumption as shown by the green line, indicating that there the average revenue varied from 35.7 cents per m. c. f. in 1929 to a higher figure of 40.7 cents in 1932 and then a general decline through the remaining years until it reached a level of 34.7 cents per m. c. f. in 1939. The 1940 figures were not available.

The solid red line shows the Panhandle Eastern Pipe Line Company average wholesale rate for the years in which it was available, beginning with 21.1 cents per m. c. f. for 1934 and increasing gradually to 23.4 cents per m. c. f. in 1940.

Now, it must be borne in mind, of course, that this particular section of Chart No. 5 in Graph 65 for all practical purposes—

Q. You mean in Exhibit 65?

A. In Exhibit 65 is for all practical purposes comparing a wholesale rate, that is the Panhandle Eastern figure with a retail rate which is the figure representing the total industry.

Q. Well, in a sense those are not comparable figures, are they?

A. They are not comparable figures, but since the various gas which is transported and sold by Panhandle [fol. 1064] Eastern at wholesale ultimately gets to the hands of the consumer, I have merely put the two on the same chart to see what the trend was.

Q. Well, Panhandle Eastern Pipe Line Company's average wholesale rate has slightly risen, has it not, during these current years, '34 to 1940?

A. That is correct, yes, sir.

* * * * * * * * *

Well, I think it is chiefly explained by the fact of a shift in the usage on the part of the gas transported by the company, that is as you change the relative proportions of the amount of gas that is used for domestic and commercial or for miscellaneous industrial or field use, and so on, you naturally have an influence on the rate because—

Q. (Interposing) You have shown that the domestic and commercial carries much higher rates, have you not, in the left-hand box on Chart No. 5?

A. That is correct, and I presume that is why the proportion or average here has gone up a little, as that particular division has increased.

* * * * * * * * *

There is a table at the end of Exhibit 65 for Chart No. 5, stating all of the data that was used to prepare the exhibit

and shows that such information was taken by Standard [fol. 1065] and Poor's Corporation from Moody's Public Utility Manual.

. . . . . .

Chart No. 6, Exhibit 65, captioned "Panhandle Sales by States Versus Industry Consumption of Natural Gas, 1930-1940, Inclusive"—

Q. (Interposing) You mean 1934?

A. 1934-1940, inclusive.

This exhibit carries two scales, the left-hand scale which ranges from zero to 90 is in terms of million m. c. f. for Panhandle and the scale on the right which ranges from zero to 1.8 is in terms of billion m. c. f. for the industry.

This exhibit in the band portions which are marked "Total Panhandlle Sales" shows the sales broken down in the states that consumed the gas.

The green portion represents the amount that was taken by Michigan; the orange portion by the State of Illinois; the blue portion by Indiana and Ohio; the yellow for Missouri and the red for Texas, Oklahoma and Kansas.

That portion of the exhibit shows by the top line that [fol. 1066] the sales have increased at a rapid rate from 1934 when it was equivalent to 13,500,000 m. c. f. for Panhandle to 56,400,000 m. c. f. in 1940.

The exhibit also indicates that the service to Detroit increased the company's sales beginning on completion of its service to that city, that is, the completion of the facilities to get gas to Detroit, beginning in 1937, but from 1937 through 1940 the chart indicates that the growth in sales for Michigan have not been as great as has the sales in Indiana and Ohio.

In other words, if one were to make a comparison from the 1937 level in each of the classifications, he would find that there has been a lesser growth in Michigan since the addition of Detroit than has been the growth in the service to the states of Indiana and Ohio.

The exhibit further shows, as represented by the solid brown line marked "Industrial Consumption Exclusive of

Field Use and Carbon Black," that the consumption in the industry rose from 981,000,000 m. c. f. in 1934 to 1,598,000,000 m. c. f. in 1940.

However, the growth shown for the industry was exceeded by the growth shown by Panhandle Eastern because if one compares the line marked "Total Panhandle Sales" with the line marked "Industry Consumption," you can observe that there is a narrowing of the gap as you pro-
[fol. 1067] ceed from 1934 to 1940, which indicates to me that Panhandle Eastern Pipe Line Company has shown a more rapid growth than has the industry as a whole.

Q. You have included, have you not, a table showing the detailed figures from which you prepared Chart No. 6?

A. Yes, sir, that is marked "Table for Chart No. 6" presented at the end, included in the table of statistics at the end of Exhibit No. 65 and shows the various sources from which the information was taken.

* * * * * * * * *

Q. All right, now is there anything further you wish to state about Chart No. 6?

A. I don't believe there is, except that an observation can be made that is of some interest in regard to Panhandle sales; that whereas, as shown in a preceding exhibit, there were fluctuations caused in the industry generally by fluctuations occurring in general business,—and that is shown in the line marked "Industrial Consump-
[fol. 1068] tion" for the period '37 and '38,—Panhandle Eastern at no time in its total sales showed any decline, although there was a slight leveling off which indicated to me that perhaps the management had been very alert in operating its business and holding it or at least it fared better, we will say, than other units in the industry.

Q. Yes.

Now, will you turn to your Chart No. 7 and state what is shown by that chart?

A. Chart No. 7 in Exhibit 65, captioned "Trends of Gross Revenue, 1934-1940, Both Inclusive, Panhandle Versus Other Pipe Line Companies and Industry," is shown here in terms of relatives, 1934 equals 100. The purpose of doing that was because the figures for the industry

and for other pipe line companies were so much larger than those for Panhandle Eastern that the only way to show comparability as to trend was to reduce all the series to relatives and start from a common point, which in this case was 1934 equalling 100.

In this case the Panhandle Eastern Pipe Line figures are represented by the red line and show this tremendous growth in gross revenue from 1934 through 1940, representing an increase of 344 percent over the 1934 level.

That compares with figures for total other pipe line companies which increased 91.3 percent of the 1934 level and the figures for total industry which increased 38.7 [fol. 1069] percent for 1939 over the 1934 level. The 1940 figures were not available for the industry.

This exhibit also shows the point I have just made, that the revenues for Panhandle Eastern, although slowed in one or two places by fluctuations in general business, never showed a decline, whereas the industry as a whole and total other pipe line companies did show declines where there were marked recessions in general business.

Q. Have you in your table for Chart No. 7 shown the actual data for other natural gas pipe line companies?

A. The table for Chart No. 7 appearing at the end of Exhibit 65 shows the trend of gross revenue for Panhandle Eastern Pipe Line Company, for the other pipe line companies and for the natural gas industry as a whole and those other companies included Cities Service Gas Company.

Q. About how much did that rise?

. . . . . .

A. I can give it to you in percentage, it was 44.32 percent higher in 1940 than in 1934.

Q. And as contrasted with 344 percent for Panhandle Eastern? A. That is correct.

[fol. 1070] Q. Now, what about El Paso Natural Gas Company?

A. El Paso Natural Gas Company showed an increase from 100 percent, that is the 1934 figure, to 314.34.

Two hundred fourteen percent higher than the '34 figure.

Interstate Natural Gas Company, Inc., showed an increase of 71.29 percent in 1940 above the 1934 figure.

Memphis Natural Gas showed an increase of 87.15 percent greater in 1940 than in 1934.

Mississippi River Fuel Corporation showed 85.03 percent higher in 1940 than in 1934.

Northern Natural Gas Company showed 100.84 percent higher in 1940 than in 1934.

Southern Natural Gas Company showed 200.88 percent higher in 1940 than in 1934.

The total other pipe lines showed a 91.30 percent higher than in 1934 and the total for the industry shows 38.68 percent higher in 1939, the 1940 figure not being available, than the figure in 1934.

Q. Now, what, in general, do these data show, in your opinion?

A. Well, they show pretty conclusively to me that the industry has shown some additional growth in 1934 through 1939; that other pipe line companies which have [fol. 1071] been mentioned show a growth somewhat larger than the total industry in the period 1934 through 1940, but that the Panhandle Eastern Pipe Line Company shows a tremendous growth in that same period when compared to either the total industry or the other pipe line companies, so that there, again, I think that, and I use these statistics and this chart to indicate to me that the management of the company must have been alert during this period in seeking new markets and selling its gas.

Q. Is there any indication in these data or this chart that this growth on the part of Panhandle Eastern Pipe Line Company has come to an end?

A. I see no evidence of that at all at the moment, no.

Q. On the contrary, the trend would appear to be distinctly upward on a rapidly rising line, would it not?

A. From these data it seems to me that that is a logical conclusion.

* * * * * * * * *

[fol. 1072] In Chart No. 8, Exhibit 65, captioned "Operating Ratio of Panhandle Compared with Other Pipe Line Companies, 1934-1940," this exhibit is again divided into two sections, the left-hand section showing figures before taxes, the right-hand figure showing after taxes and both divisions being on a scale in percent of gross revenue, the scale running from zero to 80.

In the left-hand section before taxes, I show that the operating ratio for other pipe line companies was 58.9 percent in 1934 and gradually declined to a level of 51.3 percent in 1940.

The figures for Panhandle Eastern Pipe Line Company represented by the solid red line showed a decline from 58.2 percent in 1934 to 38.5 percent in 1940.

Q. This is before taxes, is it not?
A. This is before taxes.
Q. Yes.
A. Now, that exhibit indicates to me that here, again, the management of Panhandle Eastern is an efficient management because its operating ratio has not only shown a very favorable turn in the period mentioned, but is substantially below the average for the industry.

[fol. 1073] In other words, in 1940 it is a comparison of a ratio of 38.5 percent to gross for the Panhandle Eastern Pipe Line Company as against 51.3 percent for other pipe line companies, which indicates to me, fairly clearly, that there is an efficient management operating the company when contrasted with other pipe line companies as a whole.

Now, the right-hand division, however, shows a matter of further significance because that graph considers the same factors except that they are computed after taxes and here we see that for other pipe line companies the ratio was 65 percent of gross revenue in 1934, showed a slight decrease up until 1937 when after that time it began to increase and in 1940 was 66.7 percent.

Now, that represents, when contrasted with the trend on the left-hand side, the full effect of taxation upon gas pipe line companies, and I emphasize that because taxation, after all, is without the control of the managements and

they are subject to it and must pay it, regardless of their efficiency or inefficiency.

Now, in the case of Panhandle Eastern Pipe Line Company, as shown by the solid red line on the right-hand side, the ratio fell from 67.1 percent of gross revenue in 1934 to approximately 50 per cent in 1937 and, thereafter, showed an increase reaching 57.8 percent of gross revenue in 1940, so that one can see, if you would convert this in-[fol. 1074] formation to a different basis, that in most of the cases apparently the gross revenues of the individual companies and Panhandle Eastern Pipe Line Company have been able to absorb tax increases but the net operating revenue has not.

In other words, the additional increases of taxation at this point are definitely continuing to eat into net operating revenue in spite of the fact that most of these companies are showing considerable growth.

Q. Is it known at the present time that taxes for 1940 and '41 would be higher than for 1940?

A. Yes, I think that so far as 1941 is concerned, the Revenue Act is already out and actually I believe it is in preparation now, being considered, the factors that would be influencing taxation for 1942.

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[fol. 1075] Mr. Littman; Mr. Coffman, do the operating expenses which are reflected on your Chart No. 8 and in Tables 1 and 2 for Chart No. 8 include annual allowances for depreciation?

The Witness: Yes, they include that item.

* * * * * * * * *

By Mr. Wheat:

Q. Now, will you turn to Chart No. 9 and state what is shown on that chart?

A. On Chart No. 9 of Exhibit 65, captioned "Trend of Revenue and Expenses of Panhandle Eastern Pipe Line Company, 1934-1940, Inclusive," this chart is divided into four boxes, Box 1 showing gross revenue in the upper left-hand corner, Box 2 showing operating expenses before taxes in the upper right-hand corner, Box 3 showing

taxes; which is in the lower left-hand corner, and Box 4 showing net operating income after taxes in the lower right-hand corner.

These various boxes show two things; first, the left-hand scale in each case is in terms of millions of dollars, but in the case of the operating expenses, in the case of taxes, in the case of net operating income after taxes, there is a second scale which is in terms of percent of gross revenue, so that one, again, has to interpret properly the scales to be sure they are relating the proper scale to the [fol. 1076] proper item.

The gross revenue as shown in Division 1 in the upper left-hand corner, indicates that there was an increase from $3,000,000 in 1934 to thirteen and a half million dollars, approximately, in 1940.

It can be seen that the point I have already made is actually true, namely, that although the company's growth in revenue was on one or two occasions slowed by business recessions, at no time did they show an actual decline in the period 1934 through 1940.

The operating expenses before taxes represented by the red bars in the upper right-hand box show that they increased from approximately $1,800,000 in 1934 to $5,200,000, approximately, in 1940. There has been there an increase in each year, notwithstanding some slowing down of gross revenue in 1938 because of the business recession.

The solid red line in that same box represents the percentage of the operating expenses to gross revenue, repeating the figure already given of a decline in that figure or operating ratio from 58.2 percent in 1934 to 38.5 percent in 1940 and there the percentage scale is given on the right-hand side.

The lower left-hand box, representing taxes, shows an increase in taxes each year from $270,000, approximately, in 1934 to $2,610,000 in 1940 and, percentagewise, to gross [fol. 1077] revenue, that represents an increase from 8.9 percent in 1934 to 19.3 percent in 1940.

Now, this, of course, merely supports the statement that I gave earlier in interpreting the figures before and

after taxes and the operating ratios, that the increases in taxes are such that in spite of substantial increases in gross, the increases in net operating revenue are going up in less proportion, because taxes are taking a higher percentage.

In the lower right-hand box is shown the net operating income after taxes, showing here $1,000,000, approximately, for 1934, showing that the net operating income did decline by contrast with an increase in gross in 1938 because of the tax situation and it increased to $5,700,000 in 1940; in percent of gross it rose from 32.9 percent in 1934, that is the net operating income rose from 1934 to a higher level in 1937 and then began to decline, reaching 42.2 percent in 1940.

Q. What does that show, in your estimation?

A. Well, it shows fairly conclusively that as the gross revenue and the net operating revenue before taxation of the Panhandle Eastern Pipe Line Company continues to grow, a part of the revenue, and a larger part, is to be consumed by taxation according to the trend as shown in the lower left-hand box and, therefore, that has to be con-
[fol. 1078] sidered, it seems to me, pretty seriously in a case of this sort because the Government will be taking out a certain proportion in taxation which definitely now will be coming out of net income.

* * * * * * *

Chart No. 10 in Exhibit 65, captioned "Percent Earned on Invested Capital of Panhandle Based Upon Capital Structure." This chart is divided into two parts. The left-hand section shows invested capital, broken down as to net debt, preferred stock, common stock and surplus and that particular division is in terms of millions of dollars in a scale that ranges from zero to 80.

The right-hand division shows operating income, the bars representing net operating income and the solid red line representing the percent earned on invested capital, the scale running in terms of millions of dollars from zero to 10.

These figures are taken from the annual reports, the computation of percentage being our calculation of re-

[fol. 1079] lating net operating income to invested capital, both of which figures appear in the annual report to stockholders.

In the left-hand section it is shown that invested capital as represented by total capitalization rose from $44,900,000, approximately, although irregularly, to $59,400,000 in 1940 and the last bar in that section shows the average figure of invested capital for the period 1934-1940, both inclusive, at an amount of $52,100,000.

Now, I might say in connection with that exhibit, as is shown clearly in the table supporting, which is marked "Table for Chart No. 10" at the end of Exhibit 65, we have computed the invested capital herein on the basis of using the net debt. In other words, that is the gross debt minus the various discount commissions and financing charges that were involved and the purpose for that was that in arriving at invested capital we believed that it was the only sound accounting procedure to use, which was to compare the figure with the actual amount of cash the company received and was invested in the business as against the gross figure, part of which was used to pay someone else for the services they rendered in making that item.

Trial Examiner: May I ask whether the computation included any invested capital of the subsidiary companies?

The Witness: This is the consolidated statement as shown in the annual report.

* * * * * * * *

[fol. 1080] By Mr. Wheat:

Q. Well, Mr. Coffman, it includes any subsidiaries owned by the company during any of the particular years shown.

A. That is correct. If I had reviewed the history of the company, I would have stated there how the company was formed and what happened from one period to the next.

Q. You have that included in the first pages of this exhibit, have you not?

A. That is included in the full statement captioned "Synopsis of the History and Development of the Company" in the exhibit and the figures are the figures then

taken from the annual reports for each of the years shown or the registration statement which would give a figure. In other words, the first annual report actually, I believe, was prepared by the company in 1935, but in the '36 annual report figures were given for 1936. The '34 figure was one which was taken from the registration statement. All the other figures are directly from annual reports.

In the right-hand division of Chart No. 10 I show that the net operating income, which is represented by the red [fol. 1081] bars, increased from approximately $1,000,000 in 1934 to $5,700,000 in 1940 and show in the last bar in the division that the average for 1934-1940, inclusive, was $3,700,000, approximately.

The comparison of the operating income, as shown by the red bars in the right-hand division, with the trend of the bars in the left hand, year by year, give the calculation which is captioned "Percent Earned on Invested Capital" and is represented by the solid red line which shows that the percent earned on invested capital, by this total capitalization method of computing invested capital, ran from 2.24 percent in 1934 to 9.62 percent in 1940 and that the average for the years 1934-40, both inclusive, was 7.11 percent.

Q. Now, you have shown all the data on which you based your Chart No. 10 on the table for Chart No. 10, have you not? A. That is correct.

. . . . . .

Mr. Littman: I just wanted to ask you as of what date are these years shown on table for Chart No. 10?

The Witness: December 31, 19—whatever it was, of each year.

. . . . . .

[fol. 1083] By Mr. Wheat:

Q. Mr. Coffman, will you turn to Chart No. 11, of Exhibit 65, and state what is shown upon that chart, and I think you could, by outlining in general and rather briefly, what is shown on these various charts and pos-

sibly proceed without quite as much detail as we have been having, although I do wish your would explain carefully each chart.

A. Chart Number 11 in Exhibit 65, captioned "Per cent earned on invested capital of Panhandle, based upon net property, intangibles and working capital," purports to show exactly the same information as shown in Chart No. 10 of Exhibit 65, except that in Chart No. 11, invested capital is defined as net working capital and intangibles, including the gas sales and purchase contracts, and the net property after reserves.

. . . . . .

The only difference is that in chart number 11, invested capital is based upon the property accounts, whereas in chart number 10, it was based upon the total capitali- [fol. 1084] zation of the corporation. So far as the figures are concerned, the average invested capital for the period 1934-1940, both inclusive, is $52,070,680. There was no change in that. There were a few minor changes in individual years, but it didn't change the average.

Q. Well, the percentage earned on invested capital is the same?

A. The average return on invested capital is 7.11 per cent for 1934—the 1934-1940 period, which is identical with the figures shown on Chart 10. I merely put it in both ways so there would be no question about selecting total capitalization, or property account.

Q. Now, and the detail of the figures from which chart number 11 is shown on the table for chart number 11, is it not?

A. That is correct.

. . . . . .

Q. Mr. Coffman, will you turn to the table for chart [fol. 1085] number 11, and state where you obtained your figures for intangibles, and what those intangibles include?

A. Well, for each of the years, 1934 through 1940 inclusive, there is shown in the table for chart number 11 the detailed items which were included in the total figure shown in chart number 11 for the calculation of the total invested capital.

Now, among the items are property, plant and equipment, less retirements, renewal, depreciation and amortization reserve, thus showing the net property, plant and equipment account; the intangibles, including gas sales and purchase contracts, for 1940, were listed at $2,051,434, and then there was in addition current assets, less the current liabilities, leaving the net working capital, which is shown in the table.

Now, I do not have as a part of the exhibit, the list of the various gas sales and purchase contracts, but such material was taken directly from the company's annual report, and is the amount which is therefore carried.

Q. And which is reported by the company for that item?

A. That is correct, for each of the years shown.

Q. You have simply taken the data shown on that report, and used it in the manner shown in the table for chart number 11, is that right?

A. And I might amplify that to say that throughout [fol. 1086] that entire study, that all the figures that I am talking about in that study either come from a recognized source, such as the Bureau of Mines, or Commercial and Financial Chronicle, or any quotations from recognizable sources, and all figures came directly from the annual reports.

I have had no figures given me directly by the management.

Q. Yes. You have made this study fully and completely as an independent study?

A. From the investors' point of view, using the sources available to the investors, in making such a study.

Q. And finding these figures in the annual report of the Company, you have used them, as shown on chart number 11, and on the table for chart number 11?

A. That is correct.

Mr. Littman: And you have not adjusted those figures in any way?

The Witness: I have not adjusted them in any way except where I have already commented, in one chart, for instance in calculating invested capital, we said we used

the net, which means we took the gross, minus the cost involved, to get net debt, because I think that is proper accounting—the proper accounting method of getting the invested capital.

And in another case, I have shown, and we will come to it shortly, a figure as reported, and then as I adjusted it, but all such adjustments are clearly marked, and the only [fol. 1087] one I recall mentioned up to date is the one about net debt.

Mr. Littman: Is the same thing true with all your exhibits; to wit, Exhibits 63, 64 and 65?

The Witness: The statement is correct that throughout all the exhibits, marked 63, 64 and 65, the information used therein has been taken from reliable sources, and has been clearly documented throughout, and we have not adjusted any figure, unless it is absolutely specified in the exhibit.

Mr. Littman: And that is true, is it, of the earnings figures which you have shown in these three exhibits?

The Witness: That is true, until such time as I indicate a change.

In other words, if there is no footnote or caption to the effect that there has been a correction, or alteration, they are as reported from the source to which it was attached.

By Mr. Wheat:

Q. Now, I think, unless you have something further to say with respect to chart number 11, we may start with chart number 12.

. . . . . .

A. Chart Number 12, in Exhibit 65, captioned "Return to common stockholders of Panhandle Eastern Pipe Line —1934-1940", is divided into three boxes. The one in [fol. 1088] the upper left hand corner shows investment represented by common stock and surplus, and is given in terms of millions of dollars, with a scale from zero to 40.

The upper right hand box captioned "Dividend return to common stock holders," is in terms of millions of dol-

lars, with a scale range from zero to 3, and the lower box captioned "Per cent return to common stock holders," is in terms of per cent with a scale from zero to 10.

As shown in the upper left hand box, investment represented by common stock and surplus, increased from $17,130,094 in 1934 to $28,107,142 in 1940.

The average of such investment for 1934-1940 inclusive, was $21,818,994.

The particular division shows a general increase throughout the various years.

In the upper right hand box captioned "Dividend return to common stock holders," it is shown that there were no dividends to common stock holders in the years 1934, 1935 and 1936.

In 1937, a dividend totalling $364,326 was paid.

In the next three years, dividends were paid, but depending upon how one interpreted the declaration, we get an adjustment in the figures.

For instance, in 1940, in January, approximately the 15th as I recall it, a dividend was declared and I interpreted such declaration then to be based mostly on, or [fol. 1089] practically entirely on the 1939 earnings, and not what had happened in the year 1940.

So if I adjusted the dividend declaration of $1.50 and put it back in 1939, as against 1940, the 1939 dividend would have been the red bar plus the dashed part on top, making a total of $2,340,000 altogether, as against $1,130,000 which is shown at the top of the red bar, which was the actual amount paid in the year 1939.

Naturally, if that adjustment is made for the 1939 figure, then the 1940 figure would be adjusted by a like amount, so that the dividend which actually totalled $2,420,000 was adjusted for the $1.50 declaration in January, and the total then paid would have been $1,210,000.

However, I don't attach any importance to that figure, one way or the other, except to note it is rather odd to have a declaration in January of a given year, unless it

really applied to the earnings in the preceding year. It wasn't due to current earnings.

Q. In any event, it has no particular significance, except that it created a problem as to which year to put it in?

A. As to which year it should be allocated to. As far as any figures are concerned, looking at the average for 1934 to 1940, it will show there a $790,000 payment per annum average for the period which, of course, washes out this adjustment anyway.

[fol. 1090] Then, merely converting the two sets of figures presented above to a per cent as shown in the box presented below, captioned "Per cent return to common stock holders," I show that the average return to the common stock holders in terms of per cent in the year—in the period 1934 to 1940, was 3.64 per cent.

Now it shows clearly in this exhibit that that portion of the capital supplied to the company which came through sale of common stock, that the purchasers of such stock received no return whatsoever in 1934, 1935, and 1936 and that for the entire period 1934 through 1940, they have to date received in dividends a sufficient sum to show them a yield return of 3.64 per cent.

Q. On the average?

A. On the average, which would indicate to me that a person investing [their] money in this particular type of risk might be willing in their purchase to tolerate a period of waiting for dividends, but certainly expects for the investment of that capital on the average to have a better yield than 3.64 per cent because that is not much better than what a first-class bond is selling for at the present time, and certainly the risk of such stock is much greater.

Q. As is shown particularly on your other study of investors' appraisal of risk?

A. Shown therein, and also later on in this study.

. . . . . .

[fol. 1091] Chart 13, Exhibit Number 65, captioned, "New Tax Bill will Reduce Income Sharply, Computations based on Operations—12 months ended June 30, 1941."

In this particular exhibit, or chart, I took the most recent 12 months, as can be seen, to bring it down as close to the date of this analysis as I could make it.

The gross revenue for the 12 months ended June 30th, 1941, was $14,336,448. The net operating income before taxes were $8,823,092.

At this point, I make an adjustment on the figures, which is clearly indicated in Chart Number 13 of this Exhibit 65.

The next two bars, captioned "Taxes," I show the taxes based upon the Second Revenue Act of 1940 in the amount of $3,008,117. If the taxes are recomputed on the basis of the Revenue Act of 1941, and that is certainly the basis upon which the taxes will be paid, the total tax would be computed at $4,[illegible]017.

The net operating income, therefore, has to be adjusted in line with the tax computations. The vertically hatched [fol. 1092] bar on the left-hand side, showing "Net operating income," shows $5,814,975.

Q. After taxes?

A. After taxes, based upon the Second Revenue Act of 1940.

But the other bar showing $4,811,075 is the net operating income figure after applying the Revenue Act of 1941, which again is the figure which will be used.

Q. That is the figure that would have to be used?

A. That is correct, yes.

Now, that is all based upon information again taken directly from the annual report, to get the current picture before us.

Q. Now, Mr. Coffman, when you say that is the figure that has to be used, the tax liability under the Revenue Act of 1941 has already become applicable, has it not?

A. That is correct.

. . . . . .

It is obvious from the figures that I have discussed that the difference in taxes in one year, between the time the Sec-

ond Revenue Act of 1940 came out, and the Revenue Act of 1941, that it makes a difference of approximately $1,000,000 right now increase in taxes on this Company, which [fol. 1093] is a further support of the observation that I made this morning, that although the gross revenue of this company continued to go up, its taxes go up and eat into the net operating income, and there is to be a continued reduction in that, and it seems to me that is important in a study of this kind, because I don't believe that rate reductions could be continued at the same time tax rate increases were being continued, without there being a line some place that would have to be drawn, where you couldn't go any further with those two trends.

Chart No. 14, Exhibit 65, captioned, "Per cent earned on invested capital of Panhandle Eastern Pipe Line Company as of June 30, 1941," shows on the basis of the property and intangibles, that the invested capital as of June 30, 1941 totals $61,216,031, as shown in the Company's report.

Now, that particular total figure was made up of net property, $54,690,591, net working capital $4,661,875, and intangibles, $1,863,565.

The net operating figure shown in the next two bars are the same as those presented in Chart No. 13 of Exhibit 65, showing $5,814,975 at the 1940 rates, and $4,811,975 at the 1941 rate.

Q. What does the change of the application of the latter figure make in the per cent earned on the invested [fol. 1094] capital?

A. Well, it makes a decline of about 1½ per cent.

Q. What are the figures with respect to per cent earned on invested capital?

A. The per cent earned on the invested capital on the basis of 1940 tax rate would be 9.50 per cent, and that percentage is reduced when you apply the 1941 rate to 7.86 per cent.

Q. Again, I ask, is it necessaary to apply the 1941 rate?

A. It is necessary to apply that rate.

Now, these charts, both numbers 13 and 14, in Exhibit 65, are again supported by tables at the end of Exhibit No.

65, marked "Tables for Chart No. 14" and table for Chart No. 13.

* * * * * * * * *

Chart No. 15, Exhibit No. 65, captioned "Per cent earned on invested capital of Panhandle Eastern Pipe Line Company, as of June 30, 1941," but here the invested capital is determined by the total capitalization of the company as against the net property and working capital.

Invested capital on this basis, as of June 30, 1941, totalled $61,423,853, which was represented by net debt of $21,165,558, total preferred stock $11,000,000 and total common stock and surplus of $29,258,295.

[fol. 1095] Again, computing the net operating income at the 1940 rates, we have $5,814,975, and giving effect to the 1941 tax rates, the net operating income is $4,811,075.

Q. What are the per cents earned on invested capital?

A: The per cents earned on invested capital, based upon the 1940 tax rate, is 9.47 per cent, and giving effect to the 1941 rates, is 7.83 per cent.

Mr. Littman: May I inquire, the new tax rate that you speak of, does not apply to the last six months of 1940, does it, Mr. Coffman?

* * * * * * * * *

The Witness: What I have done is this, the figures that I have are net operating income for the last and closest twelve months, which is the twelve months from June 30, 1940 to June 30, 1941, and the way the earnings of the company are now going, it would appear that that was at least a conservative figure, or that the earnings for the full year of 1941 wouldn't be less, so the tax figure I have is conservative. If the earnings are higher, I will apply the 1941 rates and the rates will be higher, therefore the deductions for taxes will be greater.

Mr. Littman: You wanted to show what the effect would be if the present rate was applied to the last half of 1940, [fol. 1096] as well as to the first half of 1941?

The Witness: No, I wouldn't say it that way. What I am really trying to show is, if you had a set of earning fig-

ures of a certain amount for a twelve-months' period, which we actually have, and you apply to that period the 1940 rates, you get a figure. If that is a basis of comparison, you apply the 1941 rates. That shows the effect of the increased taxation immediately. I could have used a hypothetical situation, but this shows that on the same basis, the same base earnings figures, just by applying the 1940 and 1941 rates you increase your taxation $1,000,000 so that it seems to me that it is one hundred per cent comparable and accurate.

By Mr. Wheat:

Q. And conservative rather than otherwise?

A. It is necessarily conservative.

* * * * * * * * *

Trial Examiner: I wonder whether your tax figures, prospective taxes, is in any way affected by the present high rate of earnings, and would be modified if those earnings were, through this proceeding, or for any other reason, reduced?

[fol. 1097] The Witness: Well, it seems to me there are necessarily two components to the problem.

You have in the first instance the base which is the taxable earnings base, from which to make a computation. Now, if that base should change, and if the two rates remain the same, it will necessarily be a change in the resulting figure, so if you reduce the earnings, and apply the same rates, the tax, the aggregate would be less.

On the other hand, if the earnings were greater, the taxes remaining the same—the tax rate remaining the same, the tax would be greater.

In the particular comparison here, since I am using the 1940 and 1941 rates, those two, for purposes of this study, they remain static, so that the only change for the moment you could get would be in the earnings changed, but in that connection, I think that it is important to note, as I have shown, I thought fairly clearly in one of the preceding charts, in Exhibit 65, the figures indicate as shown, for instance, on chart number 9, that the tax rates are getting to a point where although you have an increase in gross, the

tax very definitely eats into net, so I come to the conclusion from that combination of circumstances, that you can't continue to have increasing tax rates and lowering of income without arriving at a point where the Company could no longer maintain its efficiency or its credit. It seems to me impossible.

* * * * * * * *

[fol. 1099] Mr. Littman: Do you mind if I ask one more question here, to clarify the situation in my mind?

Do these taxes to which you refer in these tax charts include all excess profits taxes levied by the Federal Government for National Defense?

The Witness: The figure for 1940 is the only one which includes a Federal Excess Profits Tax for an obvious reason.

The other years include the Federal Income Taxes, the State or Local and Miscellaneous Federal Taxes.

Now, in regard to the table for chart Number 9, which I have already explained, reference to that will give some answer to the question asked in regard to the breakdown of taxes.

In that table, I have a tax item broken down as to State, Local and miscellaneous Federal, and it shows from 1934 to 1940 an increase from $270,204 to $612,872.

That is just using round figures here for the moment, and it is a little better than two times, 200 per cent.

* * * * * * * *

[fol. 1100] The Witness: Federal income taxes were not reported until earnings were sufficient to make it eligible for payment of $230,000 in 1936, and $1,436,598 in 1940, and in addition to which there was paid the Federal excess profits tax of $561,000.

Trial Examiner: That necessarily is because the earnings of the Company were about 9 per cent during that same period, is that not true?

The Witness: That is true, because it qualified under the Act, under a certain bracket.

Trial Examiner: In other words, as your profits rise, so do taxes?

The Witness: That is correct, but so that my original statement won't be misunderstood, it was my impression that if taxes actually are already having a pertinent bearing on the reduction of income, then it seems to me that there is a delicate point some place along the line as to how far rate adjustments can be made. In other words, I don't see how this, or any other Company, for a prolonged period, can face increasing tax rates and decreasing sale rates for its commodities, without there being some point arrived at where it is detrimental to the management in discharging its public duty. It seems to me that can be worked out mathematically.

Trial Examiner: Even though the taxes are passed on as operating expenses?

[fol. 1101] The Witness: Well, I say that from the credit position of the company, the taxes come out first, and unless an investor may—assuming we are going to have private financing of companies from time to time, whenever new capital is needed—that investors will feel that the credit position of the company is changing adversely if the combination of these two factors make it such that you cannot see an adequate return and safety of principal for the money you otherwise might be willing to invest.

Trial Examiner: The factor you now define is equally applicable to all regulated utilities, is it not?

The Witness: Yes, I think so.

Trial Examiner: In this economic period?

The Witness: I think so.

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By Mr. Wheat:

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Q. Let's turn to chart 16.

A. Chart 16, in Exhibit 65, captioned, "Historical costs of debt capital of Panhandle Eastern Pipe Line Company,

[fol. 1102] "1930-1941." This shows in per cent by years the cost of debt capital indicating that in the early years beginning in 1930, it was equivalent to 7.20 per cent, that in 1937, it was reduced to something approximating 4.6 per cent, where it remained for the years 1937, 1938, 1939 and 1940, and because of refinancing, about February of 1941, the cost was then reduced to 2.74 per cent.

Now, the right-hand bar marked "Weighted average," which shows 5.17 per cent for the entire period covered, is weighted on this basis:

That there are a certain number of years covered from 1930 to 1941, I believe eleven or twelve altogether, so that 1941 gets a weight of 12, 1940 a weight of 11, 1939 a weight of 10, and so forth, back to the earliest year, getting a weight of 1, so I have followed that practice here of trying to give the greatest weight to the current conditions, and it shows for 1941, 2.74 per cent, but on the weighted average basis, 5.17 per cent, and it does indicate to me that the company here has been following a policy of attempting to reduce its cost of capital at strategic points.

* * * * * * * *

Chart No. 17 in Exhibit No. 65, captioned, "Effect of 1941 refinancing of Panhandle Eastern Pipe Line Com-[fol. 1103] pany," shows first in the printed matter in the upper left hand part, the present funded debt. That is clearly shown. I don't believe I need read it unless you desire it.

* * * * * * * *

The schedule of debt retirement in the upper right hand box is in terms of millions of dollars, with a scale from zero to $2,000,000.

It shows the maturity yield based on the net price to the Company, and shows how that is effected in the period in question, from 1941 through to maturity date of the bonds, November 1, 1960.

The lower left-hand box captioned, "Schedule of Outstanding Debt" shows how the sinking fund and retirement procedure would work in terms of millions of dollars on a scale of zero to $30,000,000 from the present time,

to the maturity date of the bonds, showing they will be fully amortized at that time.

Q. What is the average annual interest cost?

A. The average annual interest cost of debt to-day is 2.74 per cent.

As shown on Chart No. 17:

Q. Chart No. 17,—that is right. The general effect [fol. 1104] of 1941 financing was to lower the interest rate on the long term debt?

A. That is correct, and brought it in line very definitely with current conditions, as I see them.

. . . . . .

Chart No. 18, Exhibit No. 65, captioned "Historical costs of preferred stock capital of Panhandle Eastern Pipe Line Company, 1937-1941," shows the cost of such capital as 6 per cent in 1937, 7.66 per cent in 1938, as reported by the Company in its annual reports, 6 per cent in 1939, as adjusted for that $1.50 which I have already discussed, as the dividend declared in January of 1940, would have made it 9.67 per cent, 1940 as actually reported, 9.67 per cent, making the adjustment back would have been 6 per cent, and the estimated 1941 figure of 8.45 per cent, and the weighted average on the same basis of weighting as mentioned in the costs of debt capital, 8.2 per cent.

Now, here again, these charts mentioned in Exhibit 65 are supported by the tables at the end of the exhibit.

. . . . . .

[fol. 1105] Chart No. 19, Exhibit 65, captioned "Earnings-Price Ratios of Natural Gas Pipe Line common stocks—1937-1940,"—this exhibit is divided into four groups of bars; one group covering each of the four years mentioned, for each of the companies included which are shown on the bottom, namely, El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Southern Natural Gas Company, Panhandle Eastern Pipe Line Company and an average.

To get these figures as shown in the table for Chart No. 19, at the end of Exhibit 65, I took the earnings per share for each of the companies mentioned for each of the years

mentioned. I then found the average high and low prices for each of the companies' common stocks for each of the years mentioned, and then took the relationship of the earnings per share to the average of the high and low price, to determine an earnings price ratio for each of the companies for each of the years, and from those figures, calculated an average earnings price ratio, so that to make [fol. 1106] the example clear, El Paso Natural Gas Company, shown in the table, reported earnings per share of 3.73 in 1940.

The average of its high and low price in 1940 was 33.94.

The price, therefore, was 10.99 times the earnings for that year, and so on.

I followed the procedure in each of the years for each of the companies, thereby determining the following ratios, as shown in the chart itself.

Q. No. 19? A. No. 19.

In 1937, El Paso Natural Gas Company was 13.79 times.

Interstate Natural Gas Company was 9.90 times.

Memphis Natural Gas Company was 16.85 times, and, in the case of Southern Natural and Panhandle Eastern Pipe Line Companies, base figures were not available for prices in the years mentioned, and therefore, I could not make a calculation.

. . . . . .

Q. I would like to have you again explain what you did, to get the earnings-price ratio, and again I would like to have you develop for the record the difference, the essential difference for such a study as you have made, between an earnings-price ratio and a price earnings ratio, [fol. 1107] so that we may be clear in connection with the testimony you are now giving with respect to these individual companies.

. . . . . .

The Witness: Starting again with the figures in the table for Chart No. 19, the earnings for El Paso Natural Gas Company for 1940, were $3.73 per share. The average high and low prices for 1940 was $33.94 a share.

If the figure of $3.73 of earnings per share is divided by the price, the average price, of $33.94, instead of multiplying, we get 10.99 percent and that same correction would apply to anything else that I might have said, unless you want to have me restate the whole business.

Q. I don't care to have you do that. I just wanted to have the record perfectly clear, and on that matter, and I wish you would now, for the record, state the difference between an earnings-price ratio, which you have used and the price-earnings ratio, and why you have used the earnings-price ratio.

A. Well, in this particular case, I was taking the earnings per share and the average of the high and low price [fol. 1108] for the year in question, to determine what would have been, let us say, an earnings yield on the particular price of the stock, to get the total amount that was earned and which would be available, or a portion of it, for distribution.

Now, the other basis around would be to talk in terms of number of times earned a particular requirement was, but that would then relate to a dividend payment as against the total earnings that were available.

Q. Yes. Therefore, you have used the earnings price ratio in all instances, have you not?

A. Except where specified otherwise, and that is marked clearly.

Q. Yes. Thank you.

Now, will you go back to Chart No. 19, and explain that again?

A. In Chart No. 19, the figures for 1937 show that the earnings price ratio for El Paso Natural Gas Company were 13.79 for 1937, 14.08 for 1938, 10.6 for 1939 and 10.99 for 1940.

The figures for Interstate Natural Gas Company for 1937, 9.90, 1938, 10.02, 1939, 8.88, 1940, 8.67, and for the Memphis Natural Gas Company for 1937, 16.85; 1938, 16.24; 1939, 15.74 and 1940, 15.75.

In the case of the Southern Natural Gas Company and the Panhandle Eastern Pipe Line Company, data for 1937 [fol. 1109] and 1938 were not complete, so that the cal-

culations could not be made, but in 1939, Southern Natural Gas Company had 21.59 and for 1940, 20.13.

Q. All of these things you are reading are earnings in relation to price?

A. That is correct.

Q. And they are not times earnings? A. No.

The Panhandle Eastern Pipe Line Company for 1939 was 9.61, and for 1940, 13.55.

Then, taking all the figures for these companies, and striking an average, the average for 1937 was 13.51, the figures for 1938 were 13.45, the figures for 1939 were 13.28 and the average for 1940 was 13.82.

Now, I interpret these data to indicate that the figures shown in Chart 19 of Exhibit 65 indicate clearly what investors believe must be the fair figure for natural gas pipe line common stocks, or, to state it differently, they were actually the figures that were made during the four year period, 1937 to 1940.

Q. By the general experience of these securities in the Stock Market?

A. That is correct. That is correct.

Q. They show what investors actually have done, do they not?

[fol. 1110] A. That is correct.

Q. And those figures are not based upon any opinion of yours, but upon published data based on actual sales?

A. Arithmetical calculations from figures available.

* * * * * * * * * *

Chart No. 20 in Exhibit No. 65, captioned "Current Earnings-Price Ratios of Natural Gas Pipe Line Common Stocks," shows for Interstate Natural Gas Company, Memphis Natural Gas Company, El Paso Natural Gas Company, Southern Natural Gas Company and Panhandle Eastern Pipe Line Company, first, the earnings per share in the upper left-hand box, and that scale is in dollars per share from zero to $5.00; second the average market price, January 1, to August 31, 1941, shown in the upper right-hand box, which is in a scale of dollars per share from zero to $50; third, the earnings-price ratio, in the lower left hand box which is in terms of earnings-price ratio from zero to 25%, and fourth, the per cent of earnings avail-

able for common stock in terms of per cent, ranging from zero to 100.

The earnings per share for the 12 months ended Decem-
[fol. 1111] ber 31, 1940, of Interstate Natural Gas Company, was $2.07.

The earnings of the Memphis Natural Gas Company for the year ended December 31, 1940, was 69 cents.

The earnings for the twelve months ended June 30, 1941, of El Paso Natural Gas Company, were $3.61.

For the Southern Natural Gas Company, for the twelve months ended June 30, 1941, $2.04.

And for Panhandle Eastern Pipe Line Company for the twelve months ended June 30, 1941, $4.21.

Those are shown in the box in the upper left hand corner. The average market prices for the interim period January 1 to August 31, 1941, as shown in the upper right hand box, in terms of dollars per share, was $22.00 for Interstate Natural Gas Company; $4.57 for Memphis Natural Gas Company; $31.06 for El Paso Natural Gas Company, $11.81 for Southern Natural Gas Company and $36.50 for Panhandle Eastern Pipe Line Company.

The earnings price ratio, which are shown in the lower left hand box were 9.41% for Interstate Natural Gas Company; 15.10% for the Memphis Natural Gas Company, 11.62% for El Paso Natural Gas Company; 17.27% for Southern Natural Gas Company and 11.53% for the Panhandle Eastern Pipe Line Company.

Q. Now, Mr. Coffman, what do these earnings-price ratios signify in your estimation?

A. In my opinion, they signify that investors, the same [fol. 1112] as I have described it in Chart No. 19, were requiring in the interim period, January 1 to August 31, 1941, the relationship of earnings to price that is shown in the various bars 9.41, the lowest, in Interstate Natural Gas Company to the highest of 17.27 for Southern Natural Gas Company, and I presume the variations are largely explained by the difference in risk from one company to another.

That is what the investors were attempting to appraise.

Q. That is what investors would attempt to appraise in any refinancing?

A. That is correct.

Q. Now, what is the lower right-hand box?

A. The lower right-hand box shows the percent of earnings available for common stock, and indicates the difference that may be caused by different capital structures.

For example, in the Interstate Natural Gas Company, 100 per cent of the earnings are available for common stock, which would mean that the capitalization of that company is all common stock. There are no bonds or preferred stocks.

In the case of the Memphis Natural Gas Company, there is either some preferred stock or bonds ahead of the common, so that all the earnings are not available for the common.

The El Paso Natural Gas Company, there is available for [fol. 1413] common stock, 80.85%, and still less for Southern Natural Gas Company, until we come to Panhandle Eastern Pipe Line Company, which has already been described as having bonds outstanding, preferred stock and common stock, so that of the total amount of earnings available for distribution to capital, only 58.41 percent in the case of Panhandle Eastern Pipe Line Company, is available for common shares.

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I could add in regard to Chart No. 20 that one might note an omission of the Northern Natural Gas Company, but the reason that was omitted is because I set this up as a separate example because it is the most recent case of natural gas pipe line financing that I know about.

Q. And this bringing of Northern Natural Gas into focus in a separate chart, gives an impression, does it not, of what investors are now at the moment actually demanding?

A. It seems to me that it very definitely does, because the stock in this case is distributed, or, has been distributed early this year; it is only a few months back, and it is an actual test of what conditions are encountered by a corporation to secure private financing.

In Chart No. 21 of Exhibit No. 65, captioned "Cost [fol. 1114] of financing Northern Natural Gas Company, common stock—offered to public on September 10, 1941," it is broken into two divisions, or three boxes, as a matter of fact.

The one on the left-hand side shows prices, commissions and expenses per share.

The upper right-hand box shows earnings per share for twelve months ended June 30, 1941.

And the lower right-hand box shows earnings-price ratio.

In the left-hand box I show the price to the public, which is $31.40 as ex a 60 cent dividend.

The underwriting commissions were $2.35.

The expenses to the seller were $0.32.

Making the deductions of those items from the price to the public gives a net price received by the seller, ex the dividend, of $28.73 and would be the figure that would be logically included as the invested capital. The other will be the cost of financing.

The earnings per share, twelve months ended June 30, 1941, as shown in the upper right-hand side, shows the figures on two bases; first, $3.68 per share of earnings, on a regular reported basis, but if those earnings were adjusted to reflect the increase in taxes under the Revenue Act of 1941, then, those earnings would be $3.26 per share.

The earnings-price ratio below is shown on two bases, adjusted—shown as reported, and then shown for adjust- [fol. 1115] ment of 1941 tax rates, based on the price to the public before tax adjustments, 11.72 per cent, and after the tax adjustment, 10.38 per cent; and based on the net price to the seller before the tax adjustment, 12.81 per cent and after the tax adjustment, 11.35 per cent, so that here again it would seem to me that, as I interpret these data, that from an actual piece of financing in the market by a public utility, natural gas company, as recent as September of this year, it indicates that investors to be encouraged to make an investment in that type of security were requiring somewhere in the neighborhood of 12 per cent on

common stock to find it sufficiently attractive to encourage them, to make the dollar investment.

Q. Northern Natural Gas Company is quite comparable to Panhandle Eastern in respect to its operation, and is so generally recognized?

A. I think it is very comparable, yes.

Q. Does it, in your estimate, make a competent yardstick?

A. It seems to me the only yardstick, if you want to get to actual practices. If one wants to make the other comparisons that I have made of what the figures show for other companies, although they haven't been refinanced at the time, but their securities are being traded—but that is the next best, but I would rather work from tests such as this, than the other, than to take the other ratios alone.

[fol. 1116] Q. I take it that you believe that this is an actual yardstick which has been furnished you by very recent financing? A. Yes, I do.

* * * * * * *

Well, this chart No. 22 in Exhibit No. 65, captioned "Estimated current cost of financing common stock of Panhandle Eastern Pipe Line Company," summarizes to a large extent the preceding charts, and shows that the average of pipe line companies, based upon 1941 market prices, was 12.99 per cent, or in round figures, 13.00 per cent.

The Panhandle Eastern Pipe Line Company common stock showed 11.53 per cent.

The Northern Natural Gas Company, which I have just discussed, based upon actual public financing, and upon price to the seller, was 11.35 per cent, and for the purpose of calculations which I make hereafter, as I continue this study, I have taken the round figure of 12.00 per cent as representing what investors require, as a basis upon which they are willing to make new monetary commitments in this type of industry.

Q. And in respect to Panhandle Eastern Pipe Line Company?

[fol. 1117] A. That is correct, with particular reference to Panhandle Eastern.

Q. Now, that is an earnings return and not a yield return, is it not?

A. That is correct. You are exactly right. That is an earnings return.

It is not a yield.

Q. Not a yield at all? A. No, sir.

* * * * * * * *

Trial Examiner: You have nowhere in your exhibits made a comparison between cost of money by common stock financing to the other utilities, either water or electric?

The Witness: With particular reference to outside issues like natural gas?

Trial Examiner: For the purpose of comparison with [fol. 1118] present estimated costs of financing the common stock in the pipe line or natural gas company field.

The Witness: Well, in Volume 1 and 2, that is Exhibits 63 and 64, which we had this morning, the comparisons are shown there for individual companies, and the different utility classifications, but there would be no example therein of recent financing actually, such as was afforded by the Northern Natural Gas Company.

All I have there is then the actual test of the ratios judged by market prices at the time of bond, preferred and common stocks actually traded, but I had no examples of an actual piece of financing such as Northern Natural.

Trial Examiner: Have you shown earnings-price ratios in those tables to which you referred?

The Witness: The tables?

Mr. Wheat: You are referring now to what document?

The Witness: I am now referring to Exhibit No. 64.

In that particular exhibit, Appendix C I show the various divisions of the capital structure, but I take an all-round figure for the total. Now, you can't get the individual ratio specifically worked out because I was there considering the over all capital, but the data are there from

which calculations could be made, but I have not made them.

By Mr. Wheat:

Q. Well, in other words, may I ask a question here? [fol. 1119] In other words, Mr. Coffman, a consideration of data contained in Exhibit 64 will enable anyone to develop earnings-price ratios for each of the companies involved, will it not, for each of the periods involved?

A. That is right. I didn't go to that additional trouble in this study because looking for the over-all appraisals, I took the bonds, preferred and common stocks, and I, as I described this morning, lumped them together to get one figure.

Mr. Wheat: Yes.

It may be, Mr. Examiner, that we may some time during this proceeding, present these actual figures worked out on the basis of data shown in Exhibit 64. I don't know how long it will take, or whether it will be of pertinence, but we will be happy to consider that and see whether or not it is necessary.

Trial Examiner: The method of presentation of the data in these exhibits as selected in the first place, three fields for comparison, it does not require proof that we are in a strained period from an economic standpoint.

The Trial Examiner has no idea of just how these conclusions presented by Mr. Coffman should be considered with relation to the whole field of financing. It is, of course, a well-known fact that stock financing at this period is difficult in any field, even the best.

It is a bond market, is it not?

[fol. 1120] The Witness: The bond market has been the strongest of any of the markets; that is right.

Trial Examiner: Also, it would seem that a comparison with the recent experience of the companies attempting to finance by common stock in other utility fields, at least, should be presented; and my inquiry was, simply [ask] whether you presented it, and whether I might look in your exhibit for it.

The Witness: You can't. The basic material, most of it, is available, but the figure you look for is not specifically there.

. . . . . .

I just wanted to make the observation that in Chart [fol. 1121] No. 19 is discussed this particular thing, although it is related to natural gas companies. Of course, covering four years would, to me, avoid the pitfall that one might encounter if any one year were difficult, but a four-year period, although it may not be long enough, nevertheless, would indicate that the conditions existing are somewhat of a longer term, consequently, than a momentary difficulty, that is, when we speak of the common stock, for instance, the stock market being weak and the bond market strong, it has now gone on for a period of years, during which period of time such a condition has existed, and that might be different if it was just a year or a few months.

Trial Examiner: Wouldn't it also be helpful to know the earlier experiences in the field of financing for natural gas pipe line companies through the sale of common stock? In other words, your industry is new. What relative change has there been in the cost of financing, taking into account economic conditions from the very beginning to date?

The Witness: We could easily make such a calculation, but because of trying to keep the study to a more current condition, I haven't done it, and I didn't intend to do that. We can do it. We have all the facts and figures in our files available for making such a study.

Trial Examiner: To me it was quite surprising you had obtained the present bond interest rate of less than 3 per [fol. 1122] cent in a field which I think some years ago many people considered to have been a speculative risk, and I wondered if there was a comparable, or similar change in the cost of money through common stock financing.

The Witness: Well, those figures could be very easily developed, but I can't give you the figures here because I haven't them in my study.

. . . . . .

Trial Examiner: You will consider, Mr. Wheat, it is a notable fact a natural gas pipe line company has borrowed money at less than 3 per cent.

Mr. Wheat: I think it is an astonishing reflection of the efficiency of the management of the Company.

Mr. Culton: I might; in this connection, suggest that it would be difficult to get many companies of that character, because very few have been financed by common stock issues sold to the public.

Trial Examiner: I assume that is true.

Mr. Culton: That is the difficulty.

Trial Examiner: For the most part, it has been an owner-investment.

The Witness: That is right.

. . . . . .

[fol. 1123] By Mr. Wheat:

. . . . . .

Q. Would you now turn to Chart 23, and state what is shown on that chart?

A. Chart No. 23 in Exhibit No. 65, captioned "Continuing growth of Panhandle System, indicates future needs for new capital," and this chart is divided into four sections.

The upper left-hand section shows the pipe-line miles, gathering, main and lateral lines, as of December 31, of each of the years 1936 to 1940, both inclusive.

This scale runs from zero to 4, in terms of thousands of miles.

It shows that in 1937, there was 1,651 miles.

[fol. 1124] The Witness: (Continuing) In 1940 this had increased to 2,374 miles.

In the upper right-hand section, captioned "Installed Horsepower of Compressor Stations as of December 31", for each of the years 1936 through 1940, all inclusive, the scale is in terms of thousand horsepower and ranges from zero to 100, indicating that the installed horsepower of

compressor stations increased from 43,300 horsepower to 80,100 horsepower between 1936 and 1940.

In the lower left-hand division is shown gross property as of December 31 for each of the years 1936 through 1940 in terms of millions of dollars on a scale from zero to 80, showing that the gross property was equivalent to $46,600,000 as of the end of 1936 and increased through the years to $64,900,000 at the end of 1940.

In the lower right-hand box is shown the annual increase in gross property for the years 1936 through 1940 in terms of millions of dollars, with a scale ranging from zero to 16, showing that in 1936 there were $4,300,000 annual increase in gross property; in 1937, $11,400,000; lesser amounts in 1938 and '39 and $5,400,000 in 1940.

* * * * * * * *

Or an average of four and a half million dollars for the '36-'40, both inclusive, period, so that interpreting that [fol. 1125] figure in line with materials shown in earlier exhibits it shows a striking growth in this company and conditions at the present time indicating that that growth may be continued for some time to come. It seemed to me reasonable to say that an average expectancy per annum of four and a half million dollars for additional increases in gross property was not unreasonable, so long as that growth continued.

Q. Well, in order to increase gross property a company such as this must have new capital, must it not?

A. Some place along the line it would certainly have to have new capital.

* * * * * * * *

Chart No. 24 of Exhibit 65, captioned "Panhandle Eastern Pipe Line Company Invested Capital as of June 30, 1941," shows the various detailed items in the capital structure, including the various items of the long-term debt, the preferred stocks and the common stock and surplus.

It shows there the principal amounts or shares of each, the book value of each and the percentage to total cap- [fol. 1126] italization, the net debt is equivalent to 34.46

percent of the total invested capital on a total capitalization basis, the preferred stock represents 17.91 percent and the common stock and surplus represents 47.63 percent, which percentages are equal to 100, or in terms of dollars amounts to $61,423,853.

Those figures that I have read are taken from the first three columns presented in this particular chart.

In the second three columns of figures, I show what the market appraisal of this capitalization is. Using market prices for each of the securities outstanding, where such market prices were available, or using, as clearly marked in the footnote, "Prices Estimated. Sold privately in January, 1941, at 100 to several banking institutions and one insurance company," and so on, I have explained which price I have used throughout the individual figures.

I show that the market appraises the debt part of the capital structure at $23,500,344 or the equivalent of 36.59 percent. It appraises the preferred stock at $11,250,000 or 17.52 percent and the common stock and surplus at $29,468,896 or 45.89 percent. The 100 percent total is equivalent in dollars, market appraisal, to $64,219,240.

Now that to me indicates a very close approximation between the market appraisal, on the one hand, or $64,219,-
[fol. 1427] 240, and the book value of $61,423,853.

From studies that I have made of numerous other companies, it is seldom that one finds the appraisal made by the market of the total capitalization of a company approximating the book value and in this particular case it would indicate to me that the investors believe that the book value here must be an accurate figure.

. . . . . .

No. 25 in Exhibit 65, captioned "Preferred Stock Unusual in Natural Gas Pipe Line Companies, Based on Book Figures as of December 31, 1940," is shown in terms of percent of invested capital with a scale from zero to 22 and covers Cities Service Gas Company, El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Mississippi River Fuel

Corporation, Northern Natural Gas Company, Southern Natural Gas Company and Panhandle Eastern Pipe Line Company.

Q. In only two did you find preferred stock outstanding, is that not true?

A. Yes. In all the companies that I have just men- [fol. 1128] tioned there were only two that had preferred stock outstanding and the one is negligible, in the case of El Paso Natural Gas Company, and the only other is Panhandle Eastern which has 18.52 percent.

Q. Well now, let me ask you, Mr. Coffman, in your estimation what is the significance to be attached to this particular chart?

A. Well, as I interpret the data contained in this chart, it indicates that preferred stock has not been considered a sound part of a capital structure in this particular industry, that preferred stock is generally not looked upon with too much favor, therefore, these companies have not any preferred stock outstanding except the two mentioned.

I further conclude, in view of these facts, that it might be wise if at some point along the line with the management of Panhandle Eastern, following its policy to make adjustments of its capital structure to the times, that it eliminate the preferred stock or otherwise refinance it.

* * * * * * * * *

Mr. Williams: Is your information such as to permit you to state whether or not these companies such as Cities Service Gas Company, Interstate Natural Gas, and so forth, are wholly owned subsidiaries?

[fol. 1129] The Witness: Are what?

Mr. Williams: Wholly owned subsidiaries. Is their stock held by some holding company?

The Witness: In many of these companies?

Mr. Williams: Yes.

The Witness: Not in all cases.

Mr. Williams: Will you state which ones are not?

* * * * * * * * *

The Witness: I would prefer to check that before I answer.

. . . . . .

Trial Examiner: Your Exhibit 64 contains an appendix [fol. 1130] shewing a number of ownerships.

The Witness: That is right.

Trial Examiner: Including gas companies beginning at Statement F, 20 pages or less, which I believe answers the question which Mr. Williams has asked.

The Witness: That is right, but I can't answer it directly without referring to records.

By Mr. Wheat:

Q. We will look up Cities Service Gas Company.

A. Cities Service is one that is held by a holding company.

Q. How about Interstate Natural?

A. Interstate Natural Gas Company, as shown in Appendix B, page 3, Exhibit 64, had outstanding as of December 31, 1940 $6,529,530 of common stock of which $1,893,564 was held by the public and $4,635,966 was held by affiliates. The stock therefore was not a wholly-owned subsidiary of a holding company.

Q. Well, what about the other pipe line companies shown on the Chart No. 25?

A. Of the other pipe line companies, namely El Paso Natural Gas Company, Memphis Natural Gas Company, Mississippi River Fuel Corporation, Northern Natural Gas Company, Southern Natural Gas Company and Panhandle Eastern Pipe Line Company, in only one case was all of the common stock held by a holding company. That case was the Mississippi River Fuel Corporation. Complete data referring to the ownership and the securities of these companies are shown in Appendix B of Exhibit 64. I might say, however, in order to clarify this part of the testimony that, as the chart shows, none of the natural gas pipe line companies with the exception of El Paso Natural Gas Company and Panhandle Eastern Pipe Line Company had any preferred stock in their capitalizations whether held by the public or by affiliates.

. . . . . .

Chart No. 26 of Exhibit 65 captioned "Earnings Necessary to Maintain Credit Position of Panhandle Eastern Pipe Line Company" shows on the bar the invested capital based upon the capitalization as of June 30, 1941 which totals $63,525,839, which total is made up of bonds in the [fol. 1131] amount of $23,267,544; preferred stock, $11,000,000; and common stock, $29,258,295.

I then have presented in this exhibit the earnings required to maintain the quality.

Q. You mean the quality of this particular credit position?

A. To maintain the various classes of the capital structure. In other words, in the preceding exhibits I have already shown that the bond class of the total capitalization carried a rate of 2.74 percent, so that with bonds outstanding in the amount of $23,267,544 with a rate or cost of 2.74 percent would require a certain amount of earnings to maintain that rate.

The preferred stock of $11,000,000, which I have shown had a historical cost weighted such as to give the current conditions greatest weight at 8.45 percent.

That would require certain additional earnings and the common stock figure at 12 percent, which has already been discussed, gives a total of earnings that would be necessary to maintain these various groups of the capitalization of $5,077,648.

Now, those various figures, I can refer to the specific exhibits. The 2.74 percent was shown in Chart No. 16 of Exhibit 65, and the 8.45 percent was shown in Chart No. 18 [fol. 1132] of Exhibit 65, and the 12 percent was shown in Chart No. 22 of Exhibit 65 and the result of this analysis indicates that if the investors require these various percents of earnings to attract capital in the division that may be considered, that is where it be a bond, a preferred stock or common stock, then this total capitalization of $63,525,839 in the proportions here stated would mean that the management of the company would have to have earnings of $5,077,648 to maintain the quality of those particular securities.

. . . . . .

In Chart No. 27 of Exhibit 65, captioned "Earnings Necessary to Maintain Credit Position of Panhandle Eastern Pipe Line Company," the total invested capital is shown at $63,775,839.

Now, the reason for that is that, as explained in the chart, I have assumed here the refinancing of the preferred stock by means of 50 percent bonds sold on a basis of three and a quarter percent and 50 percent of common stock sold on a basis of 12 percent, therefore, we would have a resulting capital structure in which there would be only bonds and common stock.

On that basis the 2.74 percent would increase slightly because of 50 percent bonds at a three and a quarter rate [fol. 1133] so that the bonds would then call for a 2.84 percent earnings base and the common stock continued at 12 percent would indicate that the management would have to have $5,006,338 to maintain the present quality of these securities.

Q. When you say "proposed" on Chart No. 27, you mean, do you not, that this is an assumption on your part in order to obtain these data?

A. Yes, it really should be, probably "projected." It is my analysis. From the preceding Chart No. 25 I concluded that perhaps the preferred stock was not a logical part of a company in this particular industry and I have made an assumption here to see what could be done by way of putting it all in bonds and common stock.

Q. It is your conclusion that the management would have to have slightly over $5,000,000 in order to maintain the quality of such securities as you have assumed on Chart No. 27?

A. That is exactly correct, yes, sir.

Q. Now will you turn to Chart 28 and state what is shown on that chart?

A. Chart No. 28 in Exhibit 65 is captioned "Over-all Cost of Capital to Panhandle Eastern Based on Ideal Capital Structure, Capital Structure Composed of 40 Percent Bonds and 60 percent common stock."

Here I have assumed a debt equivalent to 40 percent of [fol. 1134] the total capitalization on a 3 percent basis. There being no preferred stock and the common stock rep-

resenting 60 percent of the total capitalization on a 12 percent basis would then give for the total capitalization 8.40 percent rate that the investors would require to maintain the present quality of the capital distributed, 40 percent to bonds, 60 percent to common.

Q. That is 8.40 percent of what?

A. That is the earnings which would be required to cover the particular securities satisfactorily enough to maintain the credit position in the minds of the investors.

Q. Yes. Now what are the figures that bring about the 8.4 percent.

A. Well, it is merely 40 percent at 3 percent basis and 60 percent at 12, which is 74 plus the 12 making 84.

Q. Yes, and you have previously testified how you reached those other percentages, have you not?

A. That is correct, they are already supported by our charts.

Q. And there is no supporting table for this chart, of course, because it is self explanatory?

A. That is correct, yes, sir.

. . . . . .

Chart No. 29 of Exhibit 65 is captioned "Dollars Needed [fol. 1135] Annually by Panhandle for Operations and Maintenance." It is the beginning of the part of this study wherein I am trying to consider the various component parts of the costs of operations plus the money income that would be needed to give a gross revenue figure that the management would have to have to maintain the efficiency of its present service, allow for return of the capital which is presently invested in the firm, maintain the credit position of the corporation so new financing could be done and otherwise enable it to discharge its duties to the public.

Q. Yes.

A. On the basis of the annual report, the actual 12 months ended June 30, 1941, operations and maintenance charges totaled $3,196,797. Of that amount, operations accounted for $2,902,353 and maintenance accounted for $294,444.

The right hand column is entitled "Projected." I have merely added to the actual for the 12 months ended June

30, 1941 what I believe to be a reasonable allowance for higher operating costs in a reasonable future period.

Q. Is it not a fact, Mr. Coffman, that you have attempted to be highly conservative in using only a 10 percent increase in this item?

A. Well, I believe that that is true for a reasonable period because as we know, various costs, material, wages [fol. 1136] and other items are going up and we are informed by various Government officials that the trend is likely to continue in that direction for some time.

I believe it very definitely is true, yes, and I allowed 10 percent as being a conservative figure to alter the actual for 12 months which will not be the same amount even though the volume would continue the same for another year on the score that these costs will be increasing.

Q. And, Mr. Coffman, should it prove to be the event that costs go up more than 10 percent then your right-hand or projected column would be greater than is there shown on Chart 29, is that not true?

A. That is true.

Q. That would be true of all other charts which follow this and deal with similar subjects?

A. That is correct, yes, sir.

Trial Examiner: Have you stated here what you include in operations?

The Witness: Well, in operations, that includes the wage cost, the material cost, all the miscellaneous charges that go in to make up operations, repairs, and so forth.

Trial Examiner: But not including depreciation and taxes?

The Witness: No, those are included later; those are [fol. 1137] shown separately.

This projected figure then totals, with the allowance of an increase of 10 percent for rising costs, $3,516,000, which allows operations $3,192,000 and maintenance $324,000.

* * * * * * * *

Chart No. 30 in Exhibit 65, captioned "Dollars Needed Annually by Panhandle for Taxes", shows in the left-

hand bar the actual figures for the 12 months ended June 30, 1941 which total $3,008,117, of which $2,359,100 was for Federal income and excess profits taxes and $649,017 was for state, local and miscellaneous Federal taxes.

For reasons that have already been given in the study by differences in the second Act of 1940 and the 1941 Revenue Act, I have here made allowances for a further 10 percent increase in Federal taxes and on that basis get a total for the company of $4,399,000, which is distributed $700,000 to state, local and miscellaneous Federal, $3,363,000 for Federal income and excess profits, and taking the additional amount of $336,000 as being the amount of further increase over the higher rates in Revenue Act of 1941, making a total of $4,399,000.

Q. Now, if is a fact, is it not, Mr. Coffman, that the [fol. 1138] state, local and miscellaneous Federal taxes are increasing in a much smaller ratio than are the Federal income and excess profits taxes?

A. Yes, sir, they have been up to date.

* * * * * * * * *

Q. Now is there anything further you wish to state about Chart No. 30?

A. Well, the only point again is the one I have mentioned in the study heretofore, namely, that the increased taxation does have a definite effect upon the net income available for distribution to the capital and at the same time, naturally, if there are changes in rates to the company that would influence the gross revenue.

And if the taxes are working on one end and the rate reductions are working on the other there is some point arriving where investors would not be interested any longer in this firm because it has so changed these ratios I have discussed that they would not feel warranted in putting up additional capital to finance any new requirements.

[fol. 1139] Q. Which new requirements you believe to be necessary as indicated by the history of the company?

A. Based upon the past experience for a number of years and the continued growth which can be seen with reason at this time, it would average at least four and half

million dollars a year, so that some place along the line some new capital will be required.

Q. Now, will you turn to Chart 31 and state what is shown on that chart?

A. Chart No. 31 in Exhibit 65, captioned "Dollars Needed Annually by Panhandle to Return Capital to Investors When Gas Reserves are Exhausted," deals with the item that has just been asked, namely, the provision for depreciation, depletion and amortization. The actual 12 months' figure ended June 30, 1941 totaled $2,316,560.

I have increased that to $2,551,034, which was made on the basis of an annual provision necessary to retire $63,775,839 of invested capital, which is a figure already shown in the preceding exhibit, over a 25-year period which is the estimated life of the gas reserves I have used.

Q. You took this from the statement of Mr. Ralph E. Davis, quoted in a registration statement of the company, have you not?

A. That is correct, yes.

Q. You have made no examination of that?

[fol. 1140] A. No.

Q. You accepted that figure and used 25 years on that basis?

A. Throughout this study I took figures from recognized sources or the annual report and I have made no study of my own.

Q. On that basis you arrived at the figure of $2,551,034?

A. That is right.

Q. Should it appear from a greater study that a greater amount would be needed for such provision, then that right-hand column would be raised accordingly. Is that not true?

A. That is true.

Chart No. 32 of Exhibit 65, captioned "Dollars Needed Annually by Panhandle for Current Capital Requirements, Bonds," actual figures for 12 months ended June 30, 1941 totaled $1,030,003. Of that total, interest on funded debt less other interest deductions, net, amounted to $723,468 and $306,535 was for amortization of debt discount and expense.

The right hand column marked "Projected" shows a reduction to $807,516 because of certain changes which produced savings through the refinancing in January of [fol. 1141] 1941, so that on the new basis the interest on the debt outstanding after January 1941, refinancing at that period would be $540,625. Interest on the $5,625,000 of new debt at 3.25 percent; if the preferred stock is eliminated as suggested in Exhibit 65, Chart 27, would amount to $182,812 and $84,079 would be attributed as amount necessary to amortize $2,101,986 of debt discount and expense over 25 years, the estimated life of the gas reserves as taken from the source already mentioned.

* * * * * * * * * * *

Chart No. 33, in Exhibit 65, captioned "Dollars Needed Annually By Panhandle For Current Capital Requirement—Preferred Stock" presents similar information for preferred stock as was presented in Chart No. 32 for bonds.

The actual amount for the 12 months ended June 30, 1941 totaled $1,388,480. Of that amount there was $660,000 required at the regular fixed dividend rate. The preferred stock Class A happens to be participating and the maximum participation of this Class A accounted for $728,480.

[fol. 1142] Because of the assumption I made that the preferred stock would be retired by raising new capital in the amount of 50 percent by bonds on a 3.25 percent yield basis and 50 percent sale of additional common stock on a 12 percent earnings basis, there would be no future requirement for preferred stock.

* * * * * * * * * * *

Chart No. 34, Exhibit 65, captioned "Dollars Needed Annually by Panhandle For Current Capital Requirements—Common Stock" shows the actual figure for the 12 months ended June 30, 1940 at $3,396,492. This figure would become $4,185,995 with the change in capital structure already noted. Of that total, $3,510,995 would represent 12 percent earnings-price ratio on $29,258,295 of common stock and surplus as of June 30, 1941 and $675,000 would represent a 12 percent earnings-price ratio on the

$5,625,000 of additional common stock to be sold to provide 50 percent of the capital necessary to retire the preferred.

Chart No. 35 in Exhibit 65, captioned "Dollars Needed Annually by Panhandle for Total Current Capital Requirements—Total Invested Capital," shows the actual figure for the 12 months ended June 30, 1941, total $5,814,975; [fol. 1143] of which bonds account for $1,030,003; preferred stock, $1,388,480; and common stock, $3,396,492.

Those figures have already been presented in the preceding charts.

The projected figure, therefore, assuming the present preferred is retired, would be a total of $4,993,511 of which bonds would take $807,516 and common stock would take $4,185,995.

Chart No. 36 in Exhibit 65, captioned "Dollars Needed Annually by Panhandle to Provide Service to Customers, a Fair Return to Investors and Restore Invested Capital When Gas Reserves Are Exhausted," summarizes all this information and is based upon a refinancing of the preferred stock.

On the basis of these figures it indicates that the management would have to have for the purposes mentioned $15,459,545 of which $3,516,000 would be necessary for operations and maintenance, $4,399,000 would be required [fol. 1144] for taxes, $2,551,034 would be necessary to return the capital when the gas reserves are exhausted and $4,993,511 would be necessary to mainfain the capital requirements so that new capital could be secured when required.

Mr. Littman: May I inquire what gas reserves you are speaking of that are going to be exhausted? Will you tell us a little bit about that so that I will know what you mean?

The Witness: Well, the company is securing gas from gas wells and those gas wells are down in Amarillo and

Hugoton Sections, that are estimated at various lengths of life according to estimates made by various engineers and they have placed various life values upon those reserves and as reported in the S.E.C. statement it seemed that the average life of those reserves was in a 25-year period, so I took the 25 years as being a sound figure based upon such engineering estimates.

Mr. Wheat: Let me ask a question which may clear this up. May I, Mr. Littman?

Mr. Littman: Yes.

By Mr. Wheat:

Q. If it should appear that the prospective exhaustion of those gas reserves or any major part thereof would be within 25 years, then the amount which you have shown for the return on capital when gas reserves are exhausted [fol. 1145] would be increased, would it not?

A. That is correct.

Q. And vice versa, should it appear as a result of these hearings that the life of the reserves now owned by the company would probably be longer than 25 years, then that figure would be reduced, isn't that true?

A. That is correct.

Q. And that figure is based upon the assumption of 25 years made by you?

A. That is correct.

* * * * * * * * *

Trial Examiner: The total of $15,459,545 is to be compared with an estimated earnings from total operating revenue. Now $15,409,387 is for the current year; is it not, Mr. Wheat, shown in Exhibit 49?

Mr. Wheat: Well, I think that the figures have a comparative value, let us put it that way, which I think will appear in the general discussion which must result in this case.

Trial Examiner: Exhibit 49, Schedules 1 and 2, I think.

Mr. Wheat: Yes, I think there are figures there which ought to be compared rather closely with these figures of the witness. However, I would like to ask the witness to turn to Chart No. 37, which shows the present situation

[fol. 1146] based on the present capital structure and state what is needed in his estimates and on the basis of these studies; based on the present capital structure.

The Witness: Chart No. 37, Exhibit 65, captioned "Dollars Needed Annually by Panhandle to Provide Service to Customers, a Fair Return to Investors and Restore Invested Capital When Gas Reserves Are Exhausted, Based on the Present Capital Structure," would then show total dollars needed of $15,520,855, of which operations and maintenance would require $3,516,000; taxes, $4,399,800, return of capital when gas reserves are exhausted of $2,541,034, and to maintain the present capital requirements, $5,064,821.

By Mr. Wheat:

Q. As has been shown on previous charts?

A. Yes, sir.

Q. Yes.

I think, Mr. Examiner, that possibly that figure would be more comparable than the one that you mentioned, but I assume that is a matter of argument which will come later and have clarification on the record by counsel, yes.

Trial Examiner: Yes, this, of course, you are unable to compare because it contemplates no new financing and takes the company as is.

. . . . . .

[fol. 1147] Mr. Littman: I take it from your responses to Mr. Wheat's questions you are not vouching for any precise period as to when these gas reserves are going to be exhausted, are you?

The Witness: Well, all I am saying is that I have seen in the S. E. C. registration statements comments in regard to gas reserves and their length of life which was in terms of 25 years. I am not an engineer so I didn't make an engineering study, myself, neither did I have any engineering report given to me. I got the figure from a recognizable source.

Mr. Littman: From the registration statement filed by Panhandle Eastern Pipe Line Company.

The Witness: With the S. E. C., yes.

Mr. Littman: In other words, you assumed the period that you found in that statement as the basis for this chart?

The Witness: That is right, it was 25 years.

Mr. Littman: In other words, if it had been 100 years you would have shown the result on the basis of 100 years.

The Witness: If the S. E. C. statement had shown it, I would, yes.

By Mr. Wheat:

Q. Mr. Coffman, are the totals on the columns at the [fol. 1148] left-hand sides of Charts Nos. 36 and 37, which are, respectively, $15,459,545 and $15,520,855, in your opinion and based upon your studies, the irreducible minimum dollars which would be required by this company on the two bases, one of refinancing preferred stock and the other of the present capital structure as shown on those charts?

A. Yes, sir, they are.

. . . . . .

Mr. Littman: Based on the information that you received from various sources that you mentioned, that is, your answer to Mr. Wheat's question, I take it, is predicated on that information—

Mr. Wheat: (Interposing) I will stipulate to that, of course.

. . . . . .

[fol. 1150] P. McDonald Biddison, having been previously sworn, resumed the stand and testified further as follows:

. . . . . .

By Mr. Wheat:

Q. Mr. Biddison, will you please turn to page 9 of Exhibit 62 for identification and continue your statement with respect to the other production system structures?

A. The items shown at line 8 on page 9 of Exhibit No. 62 have been carried forward in the general summary of production system property on page 3 at line 6.

Q. Well, also on line 5 of page 2, have they not?

A. Yes, I have finished the description of the group of property classified as production system property and beginning on page 12 and continuing to page 44 I have set out my estimates of the amounts to be deducted for depreciation on transmission system property, page 12 being a summary of transmission system property.

Beginning on page 13 I have shown the amounts to be deducted for depreciation on transmission measuring and [fol. 1151] regulating station structures, these being the structures that house the measuring and regulating equipment.

Q. Well, for example, let's look at those production stations which I see you have listed under Texas, Kansas, Kansas local area and Missouri local area. What are those?

A. Those are the structures that house the measuring equipment to measure gas produced from wells owned by Panhandle Eastern Pipe Line Company.

Q. How did you arrive at the figures you have shown in Column C on page 13 for these items?

A. In my inspection of the properties of Panhandle Eastern Pipe Line Company, I inspected stations both in the Texas Panhandle field and in the Hugoton field and made notes of the condition of the structures which I saw.

I have noted the amounts which I think should be deducted from cost of reproduction new for the amounts of loss in value that has occurred in those stations and have deducted in Column C the amount by which I think those stations have depreciated to arrive at the present value figures in Column D.

Now, the same procedure was adopted in connection with the other groups of measuring station structures, namely, purchase stations which embrace the structures housing equipment, measuring gas purchased; for the wholesale sales stations beginning at line 12, page 13; for the industrial sales stations, beginning at line 20; for the field [fol. 1152] sales stations, beginning at line 23; for the main line check stations, beginning at line 25; and for the main line regulating stations beginning at line 29.

I have thereby arrived at a total deduction for depreciation for structures in this group of $11,137.11 which, deducted from the total reproduction cost new for the group in Column B of $104,475.27, produces a present value total in Column D of $93,338.16.

These figures have, in turn, been transferred from page 13 to line 4 on page 12.

. . . . . .

Q. Now, will you turn then to page 14, which is headed "Other Transmission System Structures" and state what [fol. 1153] is included in that particular item?

A. In that item is included the residences and garages and site improvements at the compressor stations, the warehouses at Belton and Booneville, Missouri; at Centralia and Houstonia compressor stations and the residences at the Dana measuring station near the Indiana-Illinois state line.

For each of the structures listed in Exhibit No. 39 I have determined from my observations the amount by which these structures have depreciated or lost value and for each of those structures I have made a deduction in my working papers of those amounts and on page 14 have summarized those deductions.

. . . . . .

The details of the individual structures are shown on pages 15 to 18, inclusive. Referring to page 15 it may be noted that for the structures at Hansford Camp, lines 2 to 16, inclusive, there is no deduction made for depreciation on structures.

Those structures were erected late in 1940. No ascertainable depreciation would likely be found upon a careful investigation of structures of so young an age.

I wish to call attention to the fact that my visit to Hansford station was at night and I was not able to make an investigation of the individual structures and have de- [fol. 1154] termined the zero amount for deduction for depreciation on the basis of the fact that they are new.

In the next item, Sneed Camp compressor station, embracing the items from line 17 to line 32, we will take for

example a warehouse at line 18. My observations indicated that this warehouse had lost about 5 percent in value and I have, therefore, deducted from the estimate of reproduction cost new 5 percent or $216 to arrive at the present value figure of $4,104 shown in Column D. Similarly with the other items for the structures at Sneed Camp and warehouse.

Now, I have followed a similar procedure for the balance of the items down to and including page 18 to arrive at a total deduction for depreciation on other transmission system structures of $38,572.16 to produce the present value figure in Column D of $344,348.43.

Q. Which is carried forward then to recapitulation on page 14, is it not? A. That is correct.

Q. And then to recapitulation on page 2? A. That is correct.

. . . . . .

[fol. 1166] P. McDonald Biddison, having been previously sworn, resumed the stand and testified further as follows:

. . . . . .

[fol. 1168] By Mr. Wheat:

Q. Will you take up your discussion of the data con-
[fol. 1169] tained in Exhibit 62 and your studies connected therewith at the point that you left off at our adjournment of yesterday?

. . . . . .

A. The next item is transmission measuring and regulating station equipment shown on page 19.

. . . . . .

That consists of the equipment used to measure and to regulate the pressure of the gas purchased and of the gas sold or otherwise delivered.

In Column C, I have shown for various classes of measuring and regulating stations the estimate of the amount to

be deducted for their loss in value and in Column D I have shown the result of subtracting Column C from Column B.

I have obtained on page 19 a total deduction for depreciation of $39,350.84 and a present value of $452,334.48, which I have carried forward to the summary of transmission system property, page 12, at line 8.

Q. And also your general summary on page 2, line 13, is that not true? A. That is correct.

Q. Now, Mr. Biddison, will you turn to page 19 of Exhibit 62 and, taking an example of this transmission measuring and regulation station equipment, state how you arrived at the deduction which you have stated should be made for de- [fol. 1170] preciation?

A. As an example, we will take well measuring stations, Texas, line 2 on page 19. I made specific notes, during my inspection, on the equipment at 12 such stations. The equipment is uniformly in excellent condition, of first class appearance and the allowance for deduction for depreciation is simply that one indicated by judgment to allow for defects and for deterioration, which, under all probabilities, will exist to some degree.

I, therefore, deducted approximately 5 percent from the cost of reproduction new for this equipment to obtain the present value in Column D.

Q. Well how did you fix on 5 percent as an approximation?

A. Just as I have explained, as a judgment figure that I thought would be ample to cover the matter. There is no depreciation on it that can be seen more than the deterioration in the paint.

Q. What do these stations consist of, Mr. Biddison? What are they?

A. They consist of pipe, pipe fittings, either cast or welded fittings, valves, regulators, pressure gauges and gas meters. These latter may be either of the displacement type or of the orifice type.

The orifice type is almost universally used on stations [fol. 1171] for the purchase of gas in the field and it is

used on sales stations where the ratio of the peak rate of flow to the average rate of flow is not too great.

Q. Now, in all instances in connection with the study outlined on Exhibit 2, Mr. Biddison, is it a fair statement to say that the items which you have headed "Deduct for Depreciation" or "Deductions for Depreciation" represent your judgment of the amount of depreciation that has accrued to the date of your study in the particular items of property that you mentioned? A. That is correct.

* * * * * * * *

Q. That represents your judgment as to the depreciation which now exists in the property?

A. That is correct.

Now, in a great many of these cases, the amounts shown are the result of a computation from judgment figures, so that the final figure is not always just a judgment figure; it is the result of the application of factors arrived at by applying my judgment to what I saw.

* * * * * * * *

[fol. 1172] Q. Well then, will you turn to the item of transmission mains which I believe is the next main item. Is that true?

A. That is correct, beginning on page 20.

Q. And that continues, does it not, for several pages of your Exhibit 62?

A. Yes, specifically to include page 29.

Q. Twenty to twenty-nine, inclusive? A. Yes, sir.

Q. All right, will you state what you did in arriving at the sums which you believe should be deducted for depreciation with respect to transmission mains and state the main figures which you have arrived at?

A. The first group of transmission mains, well lines, is detailed on page 21.

Q. What are those well lines, by the way?

A. These are the lines which connect the gas wells from which Panhandle Eastern takes gas in the gas fields into a subsequent group of lines called gathering lines. The well lines are the initial lines through which gas flows from the well into Panhandle Eastern's pipeline system.

Q. What did you find with respect to those lines?
[fol. 1173] A. With respect to well lines, I have found upon numerous examinations that the condition of well lines in any given field was generally about the same as that of the larger lines in that same field, therefore, a determination of the condition of larger lines in any gas field is a good criterion to apply to the condition of the smaller diameter and shorter length well lines.

In determining the amounts of money to be deducted for depreciation from such lines I have, therefore, given effect to the information derived on the gathering lines.

Q. Would you prefer to discuss this after you have discussed the gathering lines?

A. No, I think I can complete it right here as we go through and, as may be noted, on page 21, the amounts deducted for depreciation from well lines is substantially 10 per cent of their reproduction cost new.

I have arrived on page 21 at a total deduction for well lines of $14,419.06 producing in Column D a present value figure of $129,690.52.

Q. Which is carried forward, is it not, to page 20, line 4? A. That is correct.

Q. And that represents your statement, does it, of the deduction for depreciation which should be made with respect to these well lines?
[fol. 1174] A. That is correct.

. . . . . .

The gathering lines are those lines connected to the outlet side of well lines which in a particular field collect and gather the gas for delivery to a central point. These lines are shown upon page 22.

Q. Exhibit 62?

A. Yes, sir. The statement of reproduction cost new on page 22 is not identical with the statement of reproduction cost new of those items in Exhibit No. 39.

Q. Why not?

A. Because in determining the amounts of money to be deducted for depreciation which has occurred in this property, it was necessary to make a separation between the re-

production cost of pipe and equipment and the reproduction cost of the protective coating that was on that pipe.

This was true, because in so many instances upon inspection, the only deterioration that could be found was that which had occurred in the paint only, that is, in a great many of the observations; although the value of the paint had almost entirely disappeared, there would still be [fol. 1175] no attack upon the pipe, itself, no evidence whatever of corrosion or of loss in value on the pipe.

Q. And did you personally examine these items and determine that fact? A. I did.

I have before me the notes of my observations upon the paint and its protective coating and upon structures made during the inspection, to which I have previously made some references.

Q. Now, will you proceed to your discussion of what you did with respect to the gathering lines?

A. For example, the field lines in Texas,—I made eight observations upon field lines in this group and found of those eight observations that at three points there were no indications of corrosion, whatever. At two there had been definite indications of attack upon the metal.

Q. What do you mean?

A. Well, that corrosion had marked the metal so you could see it and realize it was there, although it was so small that the depth could not be measured with the ordinary instruments used for such measurements.

Q. When you speak of corrosion, what type of attack upon the metal do you refer to?

A. Just ordinary rust.

Q. Ordinary rust by action of the air and the elements [fol. 1176] upon the metal, is that true? A. Yes, sir.

At three locations, there was definite pitting of the metal. I examined the records of Panhandle Eastern Pipe Line Company of inspections upon pipe and protective coating; in the year 1940 there were 19 such inspections upon Texas field lines.

Combining those with the observations which I, myself, took, there were 12 observations at which there were no surface indications of rust whatever. There were four at

which there was definite surface attack. There were six with very shallow attack upon the metal and five with definite pitting on the pipe. Assigning to those instances where there were no indications whatever of corrosion a relative condition of 98 percent,—this being 98 percent instead of 100 simply because in all probability the pipe isn't perfect,—and 97 percent to those locations where there had been a definite surface attack, assigning 95 percent condition to those locations where there had been shallow metal attacks, and assigning 90 percent to those locations where the depth of pitting was measurable by the usual instruments produces a weighted condition for pipe at these locations of 95.77 percent.

I have, therefore, depreciated those lines by 5 percent.

Q. In all instances?

[fol. 1177] A. Yes, sir.

Now, with reference to the paint on those lines I have tabulated my observations, my conclusions, from my observations as to the condition of paint on these lines and have arrived at an over-all percent condition for paint upon these field lines of 34 percent.

There is some enamel upon some of these field lines, not a great deal, and I have used as a result of these conditions a deduction from Ace paint, that being a cold application, of 50 percent,—70 per cent.

Q. You mean 70 instead of 50?

A. Yes, 70 percent of the reproduction cost in order to obtain the present value, and for the enamel I have made a deduction of 50 percent from reproduction cost in order to obtain its present value.

Now the method by which I have obtained the deduction for depreciation on the gathering lines in Texas, is the manner which I have followed for the other gathering lines and I have thereby arrived at a total deduction for depreciation on gathering lines of $195,613.33, producing a present value as shown on line 12, page 22 of $3,065,772.66.

Q. Which you have carried forward, have you not, to line 80 on page 20? A. That is correct.

Now, on page 23 is shown what I have designated as a [fol. 1178] trunk gathering line.

Q. What is that?

A. That is a 22-inch line which originates at a point about two or three miles south of Sneed station in the Texas Panhandle field.

Q. Is that the place that some people refer to here as Windmill Junction?

A. It is; and runs to Liberal station which is in the State of Kansas and near the town of Liberal, east of the Hugoton gas field.

This line is carried in the company's records, in some places, as a main line designated "Line A-100," the "A" meaning that part of it is in Texas and it is the original line. The Oklahoma portion of it, I think, is designated as "B-100" but it is at least designated as a No. 100 line.

I have chosen to set it aside out of the main line system and designate it as a trunk gathering line.

Q. Why did you do that?

A. Simply to have it separated from the other property.

Q. All right, now will you state what you did in inspecting that line and what conclusions you have arrived at in connection with your Exhibit 62?

A. I have handled my observations on this line in precisely the same manner as that which I have described [fol. 1179] for the gathering lines.

Q. Well, Mr. Biddison, did you examine this line? If so, how did you go about it?

A. I designated locations at which holes were to be dug with a clearance of not less than 18 inches all around the pipe and upon inspection I went into this test hole and examined the pipe wholly around the circumference.

I had four feet of the protective coating, of whatever nature it might have been, removed so I could see four feet of bare pipe and two feet of the protective coating. I made notations as to the conditions of the coating and I made notations as to the condition and appearance of the pipe.

Q. In each instance?

A. Yes, and if there were pits I recorded pit depths measurements, dividing pipe off into four 1-foot sections where it was bare and recording for my own information the deepest pit on each one of those consecutive four 1-foot sections.

Q. How did you select these points for this pit digging or hole digging?

A. It was a purely random selection with the exception that where the company's records indicated that there was material deterioration in the protective coating or that pitting had occurred upon the pipe, I made sure that I had an inspection hole in that area.

[fol. 1180] Q. How did you find out where those points were?

A. By an examination of the records of the tests which the company regularly conducts for such determinations.

Q. How many of these holes did you say you had dug?

A. My last number is No. 116. I think there are one or two locations, however, where there is a sub-number in that connection, so there may be one or two additional locations above the serial numbering of my last page.

Q. It runs up to about 120 places, is that true?

A. That is correct.

Q. And did that give you a reasonable opportunity to inspect your line in question?

A. It did, but I used in addition to my own observations the records of the Panhandle Eastern Pipe Line Company's inspections of 1940.

Q. What were they?

A. They were inspections of precisely the same nature except that in the case of their inspections the length of pipe to be exposed was not specified in advance but was fixed largely by matters of expediency at the time inspection was made.

Some of these inspections were made in connection with repair work being done or with construction work being done and some were made solely and purely for the pur-

[fol. 1181] pose of determining the effects of the time and the elements upon pipe protection and upon pipe, itself.

Q. Now, will you continue with your discussion of the deduction for depreciation which you have determined should be made in respect to trunk gathering lines?

A. I have handled this trunk gathering line in precisely the same manner as I have previously explained for gathering lines and have used in addition to my own observations on this line, six in number, 61 observations from the reports by Panhandle Eastern Pipe Line Company.

I have in that fashion determined a total deduction for depreciation for trunk gathering lines of $136,026.48 producing, by deduction from Column B, the present value shown in Column D of $2,494,557.01.

Q. As you have carried forward to line 14 of page 20?

A. That is correct.

. . . . . .

Q. Now, turn, if you will, to the item headed "Main Lines" beginning on page 24 of Exhibit 62 and state what your methods and conclusions were with respect to the depreciation existing in those lines.

A. I think "Main Lines" might well be explained by taking Kansas Line 100 as an example. The amounts of [fol. 1182] money shown in Exhibit 39 for Kansas Line 100 have, in Column B, page 24, lines 1 to 13 of this Exhibit No. 62, been restated so that a determination might be shown of the loss in value of the protective coating as distinguished from the pipe, itself.

Therefore, at line 2 is shown for Kansas Line 100 the reproduction cost new in Column B of "Pipe and Equipment" and in line 3 the protective coating upon that pipe. In order that I might weigh out the observations which I had made in connection with the information available from the company's records of pipe inspection, I made up an alignment chart upon which I recorded the location of each of my own inspections and of each of the recorded tests in 1940 by Panhandle Eastern Pipe Line Company.

. . . . . .

I recorded on these alignment sheets by the symbol "A" the fact that there were no indications of corrosion at that location.

I recorded by means of the symbol "B" the fact that there was definite surface rust, I recorded by means of the symbol "C" the fact that there had been shallow metal attacked, and I recorded by means of a vertical line the fact that there was pitting and the [fol. 1183] height of that vertical line records the depth of the pits.

The information as to each of these observations is located upon the alignment sheet at the appropriate distance from the point of beginning.

I have then allocated over the length of the line these various conditions and laid them out. I have assumed in this allocation that if condition "A" existed at any one point and condition "B" existed at the next point of inspection that condition "A" would exist half way to that next point and condition "B" exist half way.

Q. Do you believe that to be a reasonable method for the approach to this particular problem?

A. I do. It is the only one which I could conceive to give proper effect to the information that was available.

Q. Now will you proceed to explain that?

A. By assigning to the condition "A", which I have mentioned, a value of 99, to the condition "B" a value of 98, to the condition "C" a value of 97, and to the average of those conditions where pitting existed a value of 95, I find that for the section Liberal station to Greensburg station that the figure 97.65 represents the mean condition or that the pipe has depreciated 2.35 percent in that section.

In the same manner I find that for the complete line C-100 in Kansas, this being the original line, that the [fol. 1184] loss in value so determined is 2.01 percent.

I have, therefore, deducted for pipe and equipment 2.5 percent to produce the amount of $185,752.78 shown at line 2, Column C.

Q. What does that represent, that figure?

A. That represents my estimate based upon these observations of the amount of value which has been lost in the pipe and equipment in this original Line 100 in the State of Kansas.

I produced, thereby, a present value in Column D, line 2, of $7,244,358.54.

On paint for this line, I have assigned conditions for each observation which I made, these conditions representing in each case my judgment of the residual values remaining in that paint and by weighing out these observations on paint I arrive at the conclusion that on this line in Kansas 47 percent of the value of the paint is gone.

Q. How did you get 47 percent?

A. By weighing out these observations, weighing out their values, I arrive at the result that 53 percent remains and by the difference 47 percent is gone. I, therefore, deducted that percentage from the reproduction cost new of paint at line 3 on page 24 and produce thereby a figure of $183,727.37 in Column C which being deducted from Column B gives a present value for the protective coating [fol. 1185] in line 3 of $207,181.92.

I might call attention to the fact that the deduction for depreciation on paint in this instance is very closely equal to the deduction for depreciation on pipe and equipment.

There has been a substantial loss in value on the paint. There has been little loss in value upon pipe. The paint having lost value and being no longer an effective protection against corrosion and pitting, pipe will in the future lose value at a much more rapid rate.

Now, the total deduction on Kansas Line 100 as shown on this page 24, lines 2 and 3, is about $378,500, something on the order of 5 percent of the reproduction cost new of pipe equipment and paint, although it is only about 2.5 percent on pipe, itself, and 47 percent on the protective coating.

Now, what did you do with respect to the river crossings on the Kansas line?

A. On the Arkansas River crossing, inspection was made of the river lines on the flats and those observations are the basis of the assignment of condition to the Arkansas River crossing as a whole.

I have deducted from the reproduction cost new on three river crossings, the Arkansas, the Neosho and the Osage

on Kansas Line 100, 5 percent as a result of observations [fol. 1186] made upon pipe at the Arkansas River crossing.

Q. In other words, you inspected pipe at the Arkansas River crossing and looked at the other situations as to the Neosho River crossing and the Osage River crossing, and assigned the same amount for depreciation on those, the same relative amount?

A. That is correct.

Q. On what ground did you do this, Mr. Biddison?

A. On the probability that they were in about the same condition.

Q. You saw no reason to doubt that fact, did you?

A. That is right. The property is maintained in a highly uniform state of good condition and repair, the whole property is.

Q. Now why do you not show paint from the Arkansas River crossing?

A. Well, my recollection is that there was none on there.

Q. Yes. There was paint on the other crossings?

A. That is correct.

Q. All right, what is your total, then, of depreciation that you have deducted from the Kansas Line 100?

A. The total which I have deducted is $394,513.82, as shown in Column C, line 13, producing the present value in Column D, line 13 of $7,818,798.33.

. . . . . .

[fol. 1187] Q. Well, what other main transmission lines are there in Kansas and what did you do with respect to them?

A. There is laid close to this Line 100 what is sometimes referred to as a loop line and officially designated as Line 200.

Q. What is a loop line?

A. As I have used the term it means a line laid parallel to another line; maybe for an equal distance and maybe for only a portion of the distance and interconnected. This particular loop line referred to is the Liberal loop; it begins at Liberal station and runs eastward. It does not run clear through to Greensburg compressor

station, which is the first compressor station eastward from Liberal on Panhandle Pipe Line Company's system.

Q. But it connects with the Line 100 at some point westerly of the Greensburg station, is that correct?

A. They are interconnected at Liberal station and at the eastern terminus of the loop Line 200 and are interconnected about every eight miles in between.

Q. And are there several loops in Kansas along and parallel to Kansas Line 100?

A. That is correct. Each loop line is commonly re- [fol. 1188] ferred to by the name of the compressor station at its western terminus.

Q. Yes. Now you have shown those all on page 24, have you not, of Exhibit 62? A. Yes, sir.

Q. You have shown also certain river crossings of the loop lines, have you not? A. Yes, sir.

Q. Will you state whether the methods you have used in arriving at deductions for depreciation on Kansas Line 200 are similar to those used for Kansas Line 100 and, if not, will you state the differences?

A. As a result of inspections which I made, I reached the conclusion that on these loop lines the amount of depreciation which had occurred was so minute that it would be very difficult to detect by observation. I had anticipated that that would be the case before selecting the points at which to make observations.

In making the selections of these points to which observations were to be made, I made locations only upon pipe that had been laid in the looping program of 1937.

Q. Why did you take that?

A. Because that is the oldest pipe in the loop lines, in the 200 number lines.

Q. In other words, all pipe in these 200 number lines [fol. 1189] has been laid in 1937 or since that date?

A. That is correct. In 1937 or in '39, '40 and '41.

Q. Then, did you feel that what you did in that connection was a conservative method of arriving at your result? A. Yes, sir.

Q. Will you proceed?

A. I have assigned, on that basis, to the lines constructed in 1937 in the Liberal section, Greensburg section and Haven section, 99 percent as a figure representing

their conditions as respect to new or a loss in value on pipe of 1 percent. This applies to the pipe laid in 1937; for the balance of the pipe I have assigned a condition of 100 percent or no loss in value.

Q. Well, it is almost new, isn't it?

A. Yes, some of it was laid this year.

In the section between Olpe and Lewisburg, I have made a deduction of 2 percent from pipe laid in the 1937 construction program and that is true, also, of the pipe in the Houstonia section, that is, I have deducted 2 percent for depreciation of the pipe laid in 1937.

On all other of the loop lines, I made the deduction for pipe laid in '37 as 1 percent and other pipe has been depreciated none whatever.

In connection with river crossings on these loop lines, [fol. 1190] I have made a deduction of 3 percent on all river crossings as being an average figure of loss in value on those river crossings. These river crossings were laid in 1937.

In this manner I have arrived at the total deduction for depreciation on transmission mains shown in line 37, Column C, of $457,897.07, which is deducted from reproduction cost new which produces the present value figure in Column D, line 37, of $13,388,635.14. This latter figure has been carried forward.

Q. To line 16 on page 20, is that not true?

A. Yes, sir, that is correct.

Q. And that covers then the main transmission lines in the State of Kansas, does it? A. That is correct.

Q. Now, is there anything further that you wish to state with respect to your study of the existing depreciation in such lines?

A. No. The method I have used in connection with the Kansas lines on page 24 is the method used in connection with the other main lines, pages 25 and 26, inclusive.

Q. All right, will you state what the total deduction for depreciation is at which you arrived with respect to the Missouri main line, both Nos. 100 and 200, as shown, I believe, on line 32 on page 25?

A. The amount of deduction as shown in Column C is [fol. 1191] $344,234.86, producing a present value figure in Column D, line 32, of $8,435,603.79.

Q. As carried forward to line 17 on page 20?

A. That is correct.

Q. In your recapitulation of transmission main property?

A. That is correct. And on this same page 25 the deduction for depreciation on Mississippi River crossings, shown on line 40, is $49,228.54 and the resultant present value figure, $396,599.70, are forwarded to page 20 at line 18. From page 26 the Illinois line shown at line 24 with a deduction for depreciation of $205,898.84 and a present value of $6,116,914.95 is carried forward to page 20 at line 19, and the main lines in Indiana shown at line 28 on page 26 with a deduction in Column C of $31.19 and a present value of $630.60 is carried forward to page 20 at line 20.

Q. Now, Mr. Biddison, what is the total deduction for depreciation and your figure of present value for the main lines of the company, the main transmission lines of the company over all?

A. For main lines the total deduction for depreciation, as shown on line 19, of page 26, and as forwarded to line 21 of page 20, is $1,057,290.50 and the present value resulting is $28,338,384.18.

. . . . . .

[fol. 1192] The next item is that of lateral lines, beginning on page 27 and continuing through on page 28. The deductions for depreciation shown in Column C are arrived at for these lateral lines in the same manner as I have previously explained for main lines and the subtotals for the various states shown on those two pages have been carried forward on to page 20 at lines 23, 24, 25 and 26 and the totals for lateral lines from line 10 on page 28 have been carried forward to page 20 at line 27.

[fol. 1193] Q. Will you state what those totals show?

A. The deduction in Column C is $307,488.62, producing a present value of $4,343,955.44.

Q. Now, Mr. Biddison, is there anything in connection with what you have done in respect to these lateral lines

which differs and, therefore, should be explained from what you did in connection with the main lines?

A. No, the method is the same and I have used in connection with the lateral lines the information in the records of Panhandle Eastern Pipe Line Company of their regular pipe inspections.

I did not, however, on the lateral lines weigh out the observations on an alignment chart nor did I have observations upon all lateral lines, but have assigned to lateral lines in the various states the condition figure determined from the lines which were examined.

Q. You believe that to be a reasonable method for arriving at the conclusion to which you have arrived?

A. I do.

. . . . . .

[fol. 1194] A. With respect to the local area lines I wish to point out that with regard to this system there is a group of lines which I have referred to as permanent lines shown in line 2, page 29, which, insofar as one can predict the future, seem to be lines which will be maintained in operation by Panhandle Eastern Pipe Line Company regardless of the future life of gas production in the local area.

. . . . . .

They are transmission lines which feed communities in this area and from this area. They are what would be called in an ordinary classification for a natural gas utility, based upon this local area, their main lines in the transmission system.

. . . . . .

To those lines I have made a deduction of 25 percent of their reproduction cost new.

Q. How did you arrive at that figure?

A. That figure is purely a judgment figure based upon general knowledge of conditions in that area. I did not make specific examinations of those lines.

Q. What is the figure you arrived at?

A. The deduction as shown at line 2, Column C.

[fol. 1195] Q. Page 29?

A. Page 29, yes, which is $153,009.27, resulting in the present value of $459,027.81.

Another classification of lines in this area is the gathering lines. These lines are of a less permanent nature and as a matter of judgment I have deducted from their value, because the producing area has been heavily depleted of its gas reserves, 60 percent.

The amount of deduction is $700,536.75, resulting in a present value of $467,024.49.

Q. As shown on line 6, page 29?

A. That is correct.

Q. Are there other types of lines in this local area system?

A. The third class of lines are the well lines. These well lines are connected to individual wells whose future life is short.

I have made a deduction for depreciation upon these lines based, not upon their physical condition, but upon prospective obsolescence, upon depletion of the reserves and I have deducted 80 percent of their value from reproduction cost new. The amount of the deduction shown on line 14, page 29, is $78,466.43, resulting in a present value of $19,616.60.

Q. Will you please now state the total with respect [fol. 1196] to the local area lines?

A. The total deduction and total present value, as shown on page 29, line 15, for local area lines and carried forward—

Q. (Interposing) To line 32 on page 20?

A. Yes, to line 32 on page 20, is for deduction $932,012.45 and for resultant present value $945,668.90.

Q. Will you now please state the total figures which you have arrived at with respect to transmission mains?

A. The total deduction, as shown in Column C, line 33—

Q. (Interposing) Page 20?

A. Page 20, is $2,642,841.44, with a resultant present value of $39,318,028.71, which figures have been carried forward.

Q. To line 14 on page 2? Is that correct?

A. That is correct.

. . . . . .

On page 30 is shown a summary of the reproduction [fol. 1197] cost new, deduction for depreciation and present value for compressor stations.

. . . . . .

The total deduction for depreciation for compressor stations as shown at line 18, Column C, page 30, is $628,607.30, with a resultant present value of $9,135,536.30.

Q. As carried forward to line 15, page 2. Is that correct?

A. That is correct.

Q. Now, will you please discuss this item of compressor stations, using such examples as you deem pertinent to explain what you did and how you arrived at this conclusion.

A. The determination of the deduction for the individual stations is shown on subsequent pages 31 to 42, inclusive.

Q. Of Exhibit 62?

A. Yes, sir.

Upon my inspection trip over this property I made notations of the condition of various items of this property. The largest single items in compressor stations, as to value, are the main compressor units.

Taking Sneed Station as an example, on page 31 at line [fol. 1198] 2, are shown the main compressor units at a reproduction cost new of $270,346.72, with a deduction for depreciation of $19,600.14 and a resultant present value of $250,746.58. This is a deduction on these units of 7.25 percent.

Q. How did you arrive at that figure?

A. I have estimated that these units could operate a total of 325,000 engine hours, each. As of the close of June 1941, one of these units had operated 29,500 hours. One of them had operated 29,700 hours. One of them had operated 30,400 hours. One had operated 4,300 hours.

If we estimate the depreciation to be in proportion to the engine hours operated—

Q. (Interposing) You believe that to be a reasonable method?

A. With some qualifications.

Q. Yes, will you state those after you have concluded?

A. If we estimate that depreciation has occurred in proportion to the engine hours operated, then these four units, by virtue of the engine hours which they have operated have lost 7.22 percent of their value.

I have deducted 7.25 percent. I would like to explain that an inspection of these engines shows little in the way of depreciation to have actually occurred upon them. The engine which has operated 4,300 hours, so far as one can tell by its appearance, is in the same condition as the [fol. 1199] one which has operated 30,400 hours.

I reached the conclusion from an examination of records of wear upon pistons, upon cylinders and upon rods that unless some other damage ascertainable by inspection existed that it was reasonable to depreciate these engines on the basis of the engine hours which they had operated, predicated upon 325,000 total engine hours. For engines of some other make or size, I would predicate their life upon a different number of total engine hours.

Q. How did you arrive at the total engine hours for the gas-driven engine compressors at this Sneed compressor station?

A. That is a matter of judgment. Three hundred twenty-five thousand hours is about 40 years of continuous operation. I know of units that have been maintained in operation for comparable periods, not continuous operation, but I think it is possible that if use be had for this class of equipment that it can be kept in operation for some such periods.

We are going to have to have several generations of experience with equipment of this sort before anybody can say what the average life of one of those units is.

Q. At any rate, they have a long life, do they not, as compared with many types of machinery?

A. They do.

[fol. 1200] Q. And the figures you have given represent your best judgment after inspecting them with care, is that correct?

A. That is correct.

I would like to point out while I am on that subject that these engines are 24 x 36 units, 1300 horsepower. At Liberal station the units are 21½ x 36, 1000 horsepower each. I have assigned to them a total possible life of 350,000 engine hours.

Q. Why?

A. Because my experience with that particular type of engine is that it is a smoother running machine, some of which are now operating after some 30 years of use and are in good condition today.

Q. Still operating? A. Yes, sir.

To the main units at Olpe, Centralia and Pleasant Hill stations, and at this Olpe Station, which are 24 x 36 units, 1300 horsepower each, I have assigned total lives of 300,000 engine hours each and to the main units at Hansford, which are vertical high speed, 600-horsepower units, I have assigned a life of 200,000 engine hours each. I have also assigned that life to the 600 horsepower units in Tuscola station.

Q. Do you believe these assignments of life are reasonable, based upon your experience?

[fol. 1201] A. Yes, sir.

Q. And what have been the general results of the study you have thus made?

A. The general results of the studies I have made in that fashion on these main compressor units is that for the Hansford units installed last year I have made a deduction of 1.25 percent, for the Liberal units I have made a deduction of 7.5 percent, for the Greensburg units I have made a deduction of 4.5 percent, for the Haven units of 5.5 percent, for the Olpe units 5 percent, for the Lewisburg units 6.5 percent, for Houstonia units 5 percent, for the Centralia units 5.75 percent, for the Pleasant Hill units 4.25 percent, for the Glenarm units 5 percent, for the 1300-horsepower units at Tuscola 5 percent, for the small vertical units at Tuscola 2.25 percent. These percentages are

rounded figures, in general slightly over the calculated figures.

* * * * * * * *

Q. Is it a fact that these large compressor units are the primary items in value of these compressor stations?

[fol. 1202] A. Yes.

Q. And in the items of equipment contained at the compressor stations?

A. Yes, that is true.

Q. Now, will you turn back to page 31 for a moment, headed "Sneed Compressor Station" and state whether all of the other items contained on that page are items of equipment or buildings or machinery used in connection with the operation of these main compressor units?

A. That is correct.

Q. And will you state the figures you arrived at with respect to the total property at the Sneed compressor station?

A. By applying to the other individual items, that is other than gas engine-driven compressors, percentages of value to be deducted for depreciation sustained, I have arrived at a total deduction for Sneed compressor station as shown at line 45, Column C, of $45,839.17, which produces the present value figure in Column D of $605,118.71.

Q. Carried forward to line 1 on page 30, is that true?

A. That is correct.

Q. Let me ask you whether the methods which you have just stated with respect to the Sneed compressor station and the buildings and apparatus there contained are the [fol. 1203] same methods which you followed with respect to the other compressor stations of this company?

A. They are.

Q. As listed on the following pages of this exhibit, to wit, 32 to 42, inclusive?

A. Yes, sir.

Q. Now, will you state what the total deduction for depreciation is which you have arrived at and shown on page 30 for all the compressor stations of this company?

A. The total deduction which I have arrived at for compressor stations shown on line 18, page 30, is $628,607.30 with a corresponding present value of $9,135,536.30.

Q. Now, that includes, does it, the following stations, to wit, Sneed compressor station, Hansford compressor station, Liberal compressor station, Greensburg compressor station, Haven compressor station, Olpe compressor station, Lewisburg compressor station, Houstonia compressor station, Centralia compressor station, Pleasant Hill compressor station, Glenarm compressor station, Tuscola compressor station, Sneed dehydration equipment, local area compressor stations consisting of Wea compressor station, Rantoul compressor station and Dodson compressor station?

A. That is correct, and with reference to the last three, they being the compressor stations in the local area, I have depreciated them down to what I estimate to be their sal-

[fol. 1204] vage value.

Q. So that you have very little left of present value for them?

A. That is correct, I have 10 percent remaining for Wea, 10 percent remaining for Rantoul and 20 percent remaining for Dodson.

Q. And why did you depreciate these to such a large degree?

A. Because of early obsolescence caused by depletion of gas supply in the local area.

Q. Yes, and are the total items with respect to compressor stations, which you have just read, carried forward to line 15 on page 2 of Exhibit 62?

A. They are.

Q. There is one other item under your heading of "Transmission Property" and that is the "Other Transmission System Equipment"; state what that is and where it is shown on Exhibit 62 and the amounts you have arrived at for deduction for depreciation.

A. The item is shown on page 43.

Q. What do they consist of, in general?

A. Some boarding house equipment, some miscellaneous stuff, the cattle guards in the gas fields, fence gates in the gas fields, the pipe racks along the transmission lines for holding pipe to be used in emergency repair work.

[fol. 1205] Q. And do you also include the equipment on those pipe racks?

A. And the equipment on those racks.

Q. All right, now, Mr. Biddison, what is the figure you find for depreciation in this miscellaneous group of items and how did you arrive at it?

A. The figure found to be deducted for depreciation on this equipment, and that is shown on line 16, is $11,936.13, producing a present value of $116,721.36.

Q. As carried forward to line 16 on page 2?

A. That is correct.

* * * * * * * *

Mr. Williams: On line 17, page 43, there appears the item "Equipment on Pipe Racks.":

Mr. Wheat: Yes.

Mr. Williams: My assumption is that that is not material and supplies, but I would like to be certain of that.

* * * * * * * *

The Witness: That is not in the material and supply account and the amount of that equipment was determined by a field inventory which I had taken in connection with [fol. 1206] the preparation of my estimate of cost of reproduction cost new, Exhibit No. 39.

Mr. Williams: Will you state, generally, why you consider that a proper inclusion in the rate base instead of including it in operating expense? That is the equipment on the pipe rack.

The Witness: Well, it could not under any conception of accounting be an operating charge. Now, it could have been carried in their stores account, but it wasn't and isn't. It is material which they own, have on hand, it is there for the purpose of emergency use and if is not carried in stores account because in emergencies the operators want to be able to take that material and use it any place any time that it is needed, without going through the formality of requisitions and transfers in order to get it out of stores.

By Mr. Wheat:

Q. Isn't it just exactly the same with respect to the pipe line and just as much a part of the pipe line as a spare tire is that is carried on an automobile?

A. Certainly it is.

Q. And isn't it, in essence, that type of property?

A. The pipe, as a matter of fact, on their books, this equipment on their books has been charged to investment. I have it in investment, but I do not have the investment as [fol. 1207] part of the pipeline. I separated it out.

. . . . . .

Q. All right, now, Mr. Biddison, will you turn to page 44 and tell us what is shown there?

A. Panhandle Eastern Pipe Line Company, in order to offset the effects of corrosion upon steel pipe, has in the last few years at locations where corrosion was making itself evident, installed electric generators to neutralize the current flowing from pipe to ground and thereby prevent corrosion and pitting.

This equipment is referred to as cathodic protection equipment. Some of it is windmill driven, some of it is driven by gas engines.

Q. How much depreciation did you find in that item on that account?

A. I found as a result of observation and as a result of information derived from company records that there should be deducted for loss in value on this equipment $6,486.65, which results in a present value of $33,289.79, as shown, respectively, in Columns C and D at line 18, page 44. Those amounts have been carried forward to line 11 on page 43 and incorporated with other transmission system equipment.

. . . . . .

[fol. 1208] Q. And which has been carried forward to line 16 on page 2?

A. Yes.

Q. All right, now, Mr. Biddison, what have you to say with respect to the Liberal gasoline plant? What did you do in arriving at the deduction for depreciation and what were your methods?

A. I think, Mr. Wheat, before I pass on to that I should explain with reference to page 12.

Q. All right.

A. That with respect to transmission system land and transmission system rights-of-way, lines 1 and 2, I have

made no deductions for depreciation on those two items. Depreciation has not occurred in land nor right-of-way.

Now, with reference to Liberal gasoline plant, that is shown on page 45 of Exhibit 62, to the individual items of reproduction cost new, as shown in Column B on this page, I have applied percentages representing the proportions of value which I estimate to have been lost in these items due to wear and tear and to all causes of depreciation to produce the individual amounts to be deducted for depreciation shown in Column C and through those deductions have obtained the individual items of present value shown in Column D.

[fol. 1209] Q. These are based, are they, on your judgment based on an inspection of this property?

A. Yes, they are.

Q. What are the items, what is the amount?

A. The total to be deducted for depreciation, as shown at line 40, is $37,690, resulting in a present value of $583,820.23.

Q. As carried forward on line 19, page 2, is that correct? A. That is correct.

Q. Now, will you state the figures with respect to the total transmission system on line 17 on page 2? I don't think that has been stated here.

A. I have previously explained the derivation of the individual items on page 12, this being a summary of transmission property at line 13, Column D. I arrive at a total deduction for depreciation of transmission system property of $3,372,444.98, with a resultant present value in Column D of $50,794,738.64, these figures being the ones carried forward to line 17 of page 2.

Q. Thank you.

Now, will you turn, Mr. Biddison, to page 46 of your Exhibit 62 where, under the heading of "General System Property" you have included certain items. Will you state what those items are, where the details are shown in [fol. 1210] the exhibit and what your methods were and what your general deduction for depreciation was?

A. The first item on page 46 is that of "General Office Equipment." From this I have deducted 15 per cent of its reproduction cost as a measure of the depreciation that

has occurred in that property; the amount of the deduction is $11,712.35 and the resultant present value is $66,370.01. There are no details subsequent in this report.

Q. What is the next item?

A. The next item is "General Transportation Equipment" on which I have shown in line 2 a deduction of $21,702.18 and a resultant present value of $88,269.72. In connection with this item detail will be found as to individual units on pages 47 to 49, inclusive.

Q. Tell us how you arrived at these figures.

A. As to automobiles and trucks, I have estimated that automobiles would have an ultimate life of 100,000 miles.

Q. Is that based on your experience and the experience of this company?

A. It is. This does not mean that Panhandle Eastern Pipe Line Company proposes to drive automobiles 100,000 miles before disposing of them. It means, in fact, that they will drive these cars about 50,000 miles each and dispose of them at 50 percent of their cost, so the assumption [fol. 1211] of 100,000 miles total life is in line with the Panhandle Eastern Pipe Line Company's policy as to trading in of cars and as to their experience as to their life.

Q. They have had that experience, have they?

A. Yes, sir, and it is an experience which I have encountered in my analyis of other situations.

As to trucks I have used the figure of 75,000 miles and I have depreciated automobiles and trucks on the basis of these ultimate lives in proportion to the mileage which they have traveled as of the close of June 1941.

Q. Well, let's take as an example the Ford, Tudor sedan, I suppose it is, listed on line 2, page 47 of Exhibit 62, car No. 653.

A. The mileage recorded on that car was 34,797 miles, which is 34.8 percent in round numbers of 100,000 miles and its reproduction cost new was $826.91 and 34.8 percent of that is $287.76 and that is the amount of the deduction for that car to obtain its present value of $539.15.

Q. How did you get the reproduction cost new item of $826.91 that you list here on page 47?

A. That is the amount of money that Panhandle Eastern paid for the car when new.

Q. That is not an attempt to find out how you could build that car new today, is it?

A. No, that is just the price of it, that is all.

. . . . . .

[fol. 1212] That method was used as to automobiles and trucks. The amount of depreciation set up against trailers and winches is my judgment of the amount by which those items have been depreciated after having seen a considerable amount but not all of that equipment.

Q. Well now let's take trailers, line 23, page 49, where you show $2,463.40 as deductible for depreciation and where you show present value $7,390.13. That is the item you have just referred to as trailers, is it? A. Yes, sir.

Q. And that is a judgment figure? A. That is correct.

Q. Now take winches, line 24, page 49, where you show to deduct for depreciation $1,187.37 and where you show present value $3,562.11, there, again, you have used a judgment figure as so stated, have you?

A. That is correct and the deduction is 25 percent of their cost.

Q. All right, now will you state the totals with respect to general transportation equipment?

A. The total deduction shown on line 25, page 49, is [fol. 1213] $21,702.18 with a resultant present value of $88,269.72.

Q. As carried forward to line 2, page 46. Is that correct? A. That is correct.

. . . . . .

Q. Will you turn now to the subject of general laboratory equipment as shown on page 46, line 3, and state what your results were and how you arrived at them?

A. As a matter of judgment, having seen some of this equipment I made a deduction of 20 percent of its reproduction cost for depreciation thereon in the amount of $1,310.14 with a resultant present value of $5,240.57 as shown at line 3 on page 46.

Q. Do you believe that to be a reasonable amount for that deduction? A. I do.

Q. Now, will you turn to the subject of general communication equipment and state what the figures are, where they are shown and what your methods were?

A. This general communications equipment consists of a telephone line and its necessary appurtenances, the line running from Kansas City to the Hugoton field and into the [fol. 1214] Panhandle field.

I made observations on this telephone line at various points during the course of my inspection. As a result of those observations from the main line in Texas I deduct 10 percent for depreciation, for the tools in Texas I deduct 25 percent, for the main line in Oklahoma I deduct 10 percent, for the main line in Kansas I deduct 10 percent and for the tools in Kansas I deduct 25 percent.

Q. Based on your experience and your observation of this particular equipment you believe that to be a reasonable deduction? A. I do.

Q. What are the figures you found?

A. I find for general communication equipment a total deduction of $49,690.12 with a resultant present value of $443,018.17.

Q. As carried forward to line 4, page 46?

A. As shown on that line of that page.

Q. Yes. And this is a figure which has been based upon your experience and your inspection of this property, is it? A. That is correct.

Q. All right, now for the last item under "General System Property" appears to be general tools and implements as shown on line 5, page 46. Please explain that item.

[fol. 1215] A. For this equipment I have made a deduction of 25 per cent of its value.

Q. What is that?

A. This consists of tools, tractors, excavating machinery and, in general, the tools and equipment used in the maintenance and operation of the pipe line system.

Q. Why did you arrive at 25 percent for a deduction?

A. Well, I have seen a great deal of this equipment on this system and I am familiar with the condition in which tools for such operating organizations are usually found to be.

Q. Well, are these found to be in that condition?

A. That is my estimate of the condition that they are in.

Q. All right, what are the figures?

A. The amount which I have found to be deductible is $10,062.97 with a resultant present value of $30,188.89.

Q. Now, Mr. Biddison, will you state what your conclusions are with respect to total general system property as shown on line 6, page 46?

A. That there should be deducted from reproduction cost new $94,477.76 which produces a present value of $633,087.36.

Q. As carried forward to line 27, page 2?

A. That is correct.

[fol. 1216] Q. Now, will you state, Mr. Biddison, what the deduction for depreciation is that you have found on total direct construction cost?

A. The sum of all of the deductions for depreciation which I have determined and generally explained is, as shown, on line 28 for direct construction cost.

Q. Page 2?

A. Page 2, $3,695,761.90 resulting in a present value for the direct construction costs of $62,633,741.69.

Q. Mr. Biddison, you did not deduct anything on the item of intangible fixed capital, did you?

A. I did not, nor on the item of construction work in progress nor on working capital nor on the value of gas purchase contracts nor on the cost of business development. I did, however, make a deduction for depreciation upon undistributed construction expenditures shown on line 31 on page 2 of this exhibit.

Q. In what amount?

A. In the amount of $425,987.90, with a resultant present value of that item of $7,221,909.68.

Q. How did you arrive at that deduction?

A. That deduction bears the same relation to the reproduction cost of that item as does the total deduction bear to the total of direct construction cost.

[fol. 1217] Q. In other words, you used a similar proportion, did you? A. Yes, sir.

Q. And why?

A. Because as items lost value I think the undistributed general costs incurred on them lost value correspondingly and to the same degree.

Q. Well, having made that deduction, what is your figure with respect to the deduction for depreciation for

the total plant property and business of Panhandle Eastern Pipe Line Company?

A. $4,121,749.89 as shown on line 37, Column C.

Q. And from what figure do you deduct that amount in order to arrive at your statement of present value?

A. From a reproduction cost new, as shown in Column B of $83,833,448.54.

Q. Which is the figure shown, is it, in Exhibit 39 as amended by Exhibit 39-A? A. That is correct.

Q. And what is your final figure at which you arrived in Exhibit 62?

A. $79,711,698.74 as shown in Column D, line 37, page 2 and as mentioned in the letter of transmittal upon page 1.

* * * * * * * *

[fol. 1218] Q. Have you also developed a book containing numerous photographs of the actual inspections which you made during this study?

A. I have and it is available. I have been carrying it back and forth here. I just got tired carrying it and didn't bring it today.

* * * * * * *

Trial Examiner: Exhibit 62, which is, shall we say, supplemental to proposed Exhibit 39, is now offered in evidence, and the ruling on its admission will be deferred until after cross-examination.

* * * * * * *

Mr. Littman: Mr. Biddison, do I understand that this Exhibit No. 62 contains in Column B your estimate of the [fol. 1219] reproduction cost new of the plant property and business of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company as of June 30, 1941?

The Witness: Yes, those figures being obtained either directly from Exhibit 39 or 39-A or from the working papers from which they were compiled. The arrangement of the items in Column B of Exhibit 62 is not in all cases identical with the arrangement in Exhibit No. 39 or 39-A.

Mr. Littman: Do I also correctly understand that your Column C contains throughout this exhibit your estimate of observed [to] depreciation?

The Witness: It does.

Mr. Littman: Am I also correct in understanding that figures in this exhibit shown in Column D show your estimate of reproduction costs new less your observed depreciation?

The Witness: That is correct, and that is obtained by deducting Column C from Column B.

Mr. Littman: In other words, it is reproduction cost new less depreciation that you mean by the term "present value," is it not?

The Witness: Well, no, it isn't.

Mr. Littman: What is it?

The Witness: What I mean by the term "present value" is present value. Now, I have arrived at present value by exactly the process which you mentioned, by [fol. 1220] deducting from reproduction cost new the observed depreciation, and I have labeled the answer "present value." It is, also, in this case, reproduction cost new less the observed depreciation.

Mr. Littman: In other words, the one is synonymous with the other?

The Witness: In this case it is.

Mr. Littman: That is in your opinion?

The Witness: In my opinion, of course, yes, sir.

Mr. Littman: Thank you.

Mr. Wheat: May I ask this question? Mr. Biddison, when you use the term "observed depreciation" you include all of the types of depreciation whether calculated or actually observed or otherwise arrived at by processes of judgement which you have discussed in your direct testimony in respect to Exhibit 62?

Mr. Littman: Just a minute, I object to Mr. Wheat testifying here for this witness. I believe the witness has already explained what he meant by what he included in Column C. I object to this question, if Your honor please.

Mr. Littman: Certainly it is leading if nothing else. [fol. 1221]. Mr. Wheat: That is correct. It is objectionable from that ground.

Mr. Biddison, when you, in response to a question by counsel for the Commission, stated that Column C contained figures which are observed depreciation, did you refer to figures arrived at in all the methods which you have explained in your direct testimony in connection with Exhibit 62?

The Witness: Certainly, because I have included all those methods in that column as I have just been explaining here this afternoon. I might better have used the word "determined depreciation" rather than "observed" but I have not restricted myself as to the word "observed" to only that which I saw in compiling Column C and I have so testified otherwise this afternoon.

[fol. 1222] Mr. Gorman: If the Examiner please, Commission's counsel would like at this time to state our [fol. 1223] objection to the receipt in evidence of the exhibits in this proceeding which have heretofore been offered by the Respondent, Panhandle Eastern Pipe Line Company, concerning the reproduction cost less depreciation of the property of this Respondent.

We object specifically to Exhibit No. 37, both parts 1 and 2, entitled "Panhandle Eastern Pipe Line Company, Market Value of Leases"; Exhibit No. 38, entitled "Basic Statistics Used in Calculating Interest, Ad Valorem Taxes and Operating Expense [Attributable] to Unused Capacity" and also "Five Different Methods of Calculating Interest, Ad Valorem Taxes and Operating Expense Attributable to Unused Capacity"; Exhibit No. 39 entitled "Panhandle Eastern Pipe Line Company and Subsidiary Companies, Reproduction Cost New of Plant Property and Business as of June 30, 1941, P. McDonald Biddison, Consulting Engineer Dallas, Texas;" and the modification of that exhibit designated as Exhibit No. 39-A; and Exhibit 62 entitled "Panhandle Eastern Pipe Line Company and Subsidiary Companies, Deduction from Cost of Reproduction New for Depreciation and Present Value of Plant, Property and Business as of June 30, 1941."

We also move to strike all testimony concerning reproduction cost given in connection with these exhibits, on the ground that all of such evidence is incompetent, irrelevant, and immaterial in this proceeding in that such evi-
[fol. 1224] dence of reproduction cost has no bearing on and is unnecessary to the determination of the proper base for rate-making purposes in this case.

I should like to say at this point, while we object to Exhibit No. 62 our objection goes to the basis that this exhibit is set up on values, on amounts of reproduction cost new and what was purported to be an estimated depreciation of the property as of June 30, 1941, which was also set up on a dollar value. In making objection to this exhibit we want it to be understood that we do not object to any attempt, a proper attempt at least, of this Respondent, to show what is estimated to be the accrued depreciation in Respondent's property as of any particular given date.

This proceeding, as we all know, was instituted pursuant to the provisions of the Natural Gas Act, and when I say "this proceeding" I include, of course, the matter at Docket No. G-200 as well as the matter at Docket No. 207. Since this is true, your special attention is invited to Section 6(a) of the Natural Gas Act, which reads as follows:

"The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property."

[fol. 1225] Now, as the Examiner and the parties to this proceeding have doubtless observed, this language is identical with the language contained in Section 208(a) of the Federal Power Act, excepting, of course, that the words "natural-gas company" have been substituted for the words "public utility" as contained in the Power Act.

Since this is true, any construction of Section 208(a) of the Federal Power Act would be equally applicable

and of as great weight when applied to Section 6(a) of the Natural Gas Act, and contrariwise.

The Commission has not, as yet, been confronted with a case involving or requiring a ruling as to the effect and intent of Section 6(a) of the Gas Act. It has, however, placed its interpretation of the import of Section 208(a) of the Power Act, as evidenced by its Opinion No. 63, at Docket No. IT-5500, in the matter of Chicago District Electric Generating Corporation, which was issued as of July 16, 1941.

The Examiner is, of course, familiar with that decision, and I am sure counsel for all parties to this proceeding are likewise acquainted with it. However, I should like to point out certain salient features of that case and the statements of the Commission concerning them, because of the close analogy between the facts related to the Chicago District case and the facts of the proceeding in which we are here engaged.

[fol. 1226] At the outset of its opinion, the Commission undertook to point out that the cost records of the Chicago District Corporation "are complete and well maintained." That there was "no difficulty whatever in ascertaining promptly and accurately from the books of the Respondent the cost of, or the prudent investment in its property." That is cited from page 7 of the opinion.

The Commission then, upon consideration of Section 208(a) of the Power Act, found that Congress thereby "clearly evinced a definite departure from the fair value doctrine of Smyth vs. Ames" (169 U. S. 488-1898) (page 8). That "Congress recognized the fair value doctrine as an impediment to rate making. It saw plainly the lack of practical workability in the requirement that we," that is the Commission, "be compelled in all rate cases to enter into the elaborate investigations and determinations implicit in any reproduction cost finding when, in most cases, there would be no necessity for any such determination."

The Commission then went on to say "we were directed to determine facts other than actual legitimate cost bearing on the fair value of a utility company's property in those situations when we found it necessary in order to do justice in the rate-making process. It was recognized

that there might still be some instances of companies subject to our jurisdiction whose historical records were not [fol. 1227] in such shape that the prudent investment in the property might be accurately determined."

The Commission reached the climax in this phase of its opinion when it said: "It would appear, therefore, that this section (and here, again, we would like to emphasize the identity between Section 208(a) of the Power Act and, Section 6(a) of the Gas Act) contemplates the ascertainment of facts other than the actual legitimate cost which bear upon the fair value of the company's property in rate-making procedures when the exigencies of the particular situation require such a determination. In the normal case we were, directed, however, only to determine the actual legitimate cost and the depreciation (that is, the prudent investment) of the utility's property."

The position taken by the Commission in the Chicago District case may well be summarized in the following sentence taken from its opinion:

"Reproduction cost evidence is inherently fallacious and should be confined to those rare cases where evidence of original cost or prudent investment cannot reasonably be assembled."

Therefore, from a reading of this decision of the Commission, with particular reference to those passages which we have quoted, it appears clear and certain that the Commission does not propose to entertain any consideration of [fol. 1228] evidence of reproduction cost in those "normal" cases where the company's "cost records are complete and well maintained" and where there "is no difficulty in ascertaining promptly and accurately from the books of the Respondent the cost of, or the prudent investment in its property," but to the contrary has clearly manifested an intention to consider reproduction cost evidence only in "those rare cases where evidence of original cost or prudent investment cannot reasonably be assembled."

We submit to the Examiner that this instant proceeding falls within the Commission's classification of a "normal" case where reproduction cost is not pertinent. Here the cost records are "complete" and the cost of Respondent's

property can be "promptly and accurately" ascertained from the books of Respondent.

The truth of this statement is evidenced by the fact that the Panhandle Eastern Pipe Line Company was obviously in a position to ascertain from its books and records not only the amount invested in its property, but to set forth in itemized detail the actual growth of this investment as shown on Exhibit 52 which has been offered by this Respondent.

It is probably true that this Exhibit 52 reflects the "book cost" and does not necessarily purport to be the "actual legitimate cost." This distinction, however, can be of little service to the Respondent in this proceeding because [fol. 1229] the "book cost" and the "actual legitimate cost" are said to be practically one and the same as witness the statement of Mr. Watkins, secretary and controller and chief accounting officer of the Panhandle Eastern Company, who said at page 926 of the transcript as follows:

"It is my opinion, based upon my experience with this company, and also my knowledge of the way in which its books have been developed, that when it becomes possible to make the filing required by the Commission, order No. 73"—and he was referring to the statement of original cost—"there will be very little, if any, difference between the investment of the company in properties as shown by its books, prior to the adoption of the Commission's Uniform System of Accounts, and the amounts to be reported as original cost."

While we feel bound to construe Section 6(a) of the Natural Gas Act precisely as the Commission has construed the language of Section 208(a) of the Federal Power Act, and while we feel that the Trial Examiner is also bound by such construction, we should like to point out here that this construction is not necessarily original with the Commission, itself.

At the annual meeting of the American Bar Association held on September 9-10, 1940, the "Report of the Special Committee to Report on Recent Development In the Field of Public Utility Valuation and Accounting" speaking

[fol. 1230] with reference to these sections of the Power Act and the Gas Act, which we have been discussing, said at page 14 of such report:

"It will be noted that the primary duty of the Commission (speaking of the Power Commission) under these two provisions is to ascertain the cost of the property and the depreciation therein and that 'other facts which bear on the determination of such cost or depreciation, and the fair value of such property' are to be determined only 'when found necessary for rate making purposes.' There is here the possible inference that the Congress, when it drafted this provision, was hopeful that the courts would decide that nothing other than the 'actual legitimate cost' of the property would be 'found necessary for rate making purposes.' However, that may be, it is patent that an accounting or cost rate base was dominant in the Congressional mind: and that these very recent statutes in that respect are the vary antithesis of some of the older state statutes which prescribe the reproduction cost new less depreciation formula."

As further proof of our contention that reproduction cost is not necessary to a determination of the proper base for rate making purposes in this proceeding, we desire to invite the Examiner's attention to other facts which are cognate to this question, but are distinguished from the reasons stated by the Commission in its opinion [fol. 1231] as to why a consideration of reproduction cost is unnecessary in the "normal" case.

In the McCardle case, that is, McCardle vs. Indianapolis Water Company (1926), cited at 272 U. S. 400, 411, the United States Supreme Court said:

"Undoubtedly, the reasonable cost of a system of waterworks, well planned and efficient for the public service, is good evidence of its value at the time of construction. And such actual cost will continue fairly well to measure the amount to be attributed to the physical elements of the property so long as there is no change in the level of applicable prices."

This statement was cited again in the case of Los Angeles Gas & Electric Corporation versus the Railroad

Commission of California, 289 U. S. 287 (1933) and the same theory was there upheld by the Court.

In the case here before the Examiner, the Respondent has not been heard to contend that there has been a "change in the level of applicable prices" to the extent that the "actual cost" does not "continue fairly well to measure the amount to be attributed to the physical elements of property." On the contrary, the evidence offered in this proceeding by the Panhandle Eastern Pipe Line Company would refute any such contention if it were so advanced.

Exhibit 52 shows that the "Total Gas Plant Classified" as of June 30, 1941, is shown on the books as being $64,-[fol. 1232] 622,148.66. Of this amount, plant property requiring an investment of $7,571,851 was in place on December 31, 1930. This is equivalent to 11.7 percent of the total investment. In addition, at the end of the year 1930, the work in progress represented a required investment of $23,462,004, which is equivalent to 36.3 percent of the total investment. Since this work representing a total of 48 percent of the total investment of Panhandle Eastern Pipe Line Company was actually in progress during the year 1930, it was unquestionably contracted for at 1930 or higher price levels.

Exhibit 52 shows that during the year 1931 further additions to the system property were made which are said to have a book value of $10,781,926. This is equivalent to 16.7 percent of the stated book value of all property at June 30, 1941.

Additional construction of a stated book value of $3,-945,873 was completed in 1936, which was 6.2 percent of the whole. At the end of this year there was work in progress entailing an investment of $503,061, or 0.8 percent of the whole, which was contracted for at 1936, or higher price levels.

In 1937 property having a book value of $11,684,833 was added to the system. This investment was 18.1 percent of the entire stated book value.

Finally in 1940 property having a stated book value of [fol. 1233] $5,154,363 was added, which is equal to 7.97

percent of the whole. Also there was under construction at the end 1940 work, contracted for at 1940 or higher price levels, entailing an investment of $688,812 or 1.7 percent of the whole investment.

Having thus considered to some extent the growth of the property and the years when the greatest amounts of money are shown by Respondent's records and the testimony of its witnesses to have been invested, let us now consider the question of whether there has been any material changes in the price levels.

For this purpose, and for this purpose only, we will adopt the United States Department of Labor—Bureau of Labor Statistics—Index Numbers of Wholesale Prices of All Commodities—as shown on Exhibit A to Exhibit 61 for identification which has been offered in this proceeding by Dr. Friday. In considering the yearly comparison which we here offer, we ask the Examiner to keep in mind that the percentages of dollar investment, to which we refer, are, in fact, the percentages of the total investment in plant property, which are shown on Exhibit 52 to have a grand total of $64,622,149 as of June 30, 1941.

In 1930, as we previously stated, there was contracted for property having a total value on the books of $31,033,855 which represented 48 percent of the total value [fol. 1234] of the property used and useful according to Exhibit No. 52 on June 30, 1941. The average price index for the year 1930, when 48 percent of this property was installed, was 86.4 percent, whereas the average price index for the first six months of 1941 was 83.0 percent.

In 1931, a $10,781,926 investment was made which is 16.7 percent of the total. The average price index for this year was 73.0, the average price index as stated for the first six months of 1940 was 83.0.

In 1936 an investment was made of $4,448,934 or 7 percent at an average yearly index figure of 80.8.

In 1937, $11,684,833 was invested which was 18.1 percent of the whole and the average price index for that year was 86.3.

In 1940, $5,843,175 was invested which was 9.7 percent of the whole and the average price index for that year was 78.6.

From these comparisons, or this tabulation, it will readily be seen that approximately 66.1 percent was constructed in 1930 and 1937, that is, 66.1 percent of the total investment of Panhandle Eastern, as shown on its books, was made during years when the yearly index was at least 3.3 above the average of 83.0 for the first six months of 1941.

Approximately 7.0 percent of the total was invested during a year when the index was 2.2 below the 1941 figure [fol. 1235] of 83.0. Approximately 9.7 percent of the total was invested during a year when the index was only 4.4 below the 1941 figure of 83.0 and finally only 16.7 percent was invested in a year when the index was 10.0 below the 1941 index figure of 83.0. The aggregate investments made in the years referred to represent about 99.5 percent of the total; the remaining ½ of 1 percent having been made during the other six years of Respondent's corporate history.

The weighted average of these figures and the yearly indexes which I have mentioned shows that 99.5 percent of the total invested property, as of June 30, 1941, of this Respondent, was made at a weighted index average for these years of 82.96 which is precisely four-hundredths of 1 point below the average index for the first six months of 1941.

Yet, despite the fact that when considered as a whole, the foregoing comparisons of yearly index numbers of commodity prices, upon which Respondent relies, conclusively show that there has been no material change in price levels over the indices for the years when the property was constructed, the Panhandle Eastern Pipe Line Company is here contending that the reproduction cost new of its property would entail an investment of more than 17 million dollars over and above the actual stated book cost value.

We wish to again emphasize that by the use of the index submitted by Dr. Friday we do not here concede that we

[fol. 1236] consider such indices to be useful for any proper purpose in this proceeding. Concerning the use of indices and trends in utility valuation proceedings, it has been said by an eminent authority on this subject, namely, Mr. Wheat, counsel for Panhandle Eastern, referring to the Harvard Law Review, Volume 51, at page 856, that

"If variations between the original cost of utility property, that is, an amount approximating so-called 'prudent investment' and 'the present cost of construction' (mentioned in Smyth vs. Ames, 169 U. S. 466—1898) are to be considered in rate base development, the sensible use of pertinent price and cost indices and trends seems indicated. Such action is believed wholly consistent with the remarks of the United States Supreme Court in West vs. Chesapeake and P. Tel. Co., 295 U. S. 662 (1935), if the trends are carefully selected and bear directly upon the specific type of property under consideration."

Obviously price and cost indices and trends presented in Exhibit 61 by Dr. Friday have not been "carefully selected and do not bear directly upon the specific types of property under consideration", but, if Mr. Wheat deems them to be proper for his purpose in this case, they are certainly entirely proper for our purpose.

We conclude, therefore, in view of the foregoing facts, with the following statements taken from the opinion of [fol. 1237] the Commission in the Chicago District case, and while it is a quotation we adopt it as our position in this case.

"We (and when I here say 'we' I mean the Commission) have been authorized by Congress to determine the actual legitimate cost of utility properties and the depreciation therein, that is, the prudent investment. We have been directed to determine other facts bearing on the fair value of such property, such as reproduction cost, when found necessary for rate-making purposes. There is nothing which makes a determination of reproduction cost necessary for rate making purposes in this proceeding. On the contrary, such a determination would be not only valueless but, in fact, obstructive of the orderly regulatory process. We conclude, therefore, that the rate base in

this case is the actual legitimate cost of the property used and useful in furnishing the service subject to our jurisdiction, less the existing depreciation in such property, plus the working capital necessary to render such service."

. . . . . .

[fol. 1238] Mr. Littman? I believe the reasons already stated by Mr. Gorman are sufficient to warrant the exclusion of the evidence offered in this proceeding of reproduction costs new less depreciation of the consolidated plant, property and business of Panhandle Eastern Pipe Line Company and that of its wholly owned subsidiary, Illinois Natural Gas Company.

There is, however, another further cogent and, I believe, compelling reason why this evidence must be excluded, and that is because this evidence is wholly without any probative weight for rate making purposes and is wholly unreliable for rate making purposes.

As Mr. Gorman has pointed out—and I would like to summarize one portion of his argument, if I may—the reproduction cost estimate, which company witness Biddison presented, amounts to $83,833,448 new and $79,711,698 depreciated. This claimed value new is $17,143,799 in excess of the book cost of the gas plant. Company witness Watkins, the controller of Panhandle Eastern Pipe Line Company, testified that book cost in this case would very closely approximate original cost, and so it may, therefore, be concluded from the company's own testimony that the reproduction cost new estimate, submitted here by Mr. Biddison, exceeds original cost by at least $17,143,000.

[fol. 1239] Now this wide disparity between the value claimed by the company through Mr. Biddison's theoretical and hypothetical estimate and the value or costs appearing on the company's own books and claimed by them as their actual cost is particularly shocking when viewed in the light of the fact that this property was for the most part constructed during an era of high price levels.

The company's estimate, we submit, proves too much and we submit it is distinctly at war with realities.

This so-called reproduction estimate upon closer examination includes the enormous sum of $8,695,524 for so-called market value of gas leaseholds. This estimate is contained in Exhibit 37, Parts I and II, which was presented by company witness Wallace. This estimate of so-called market value of leaseholds of $8,695,000-odd exceeds the claimed book cost of leaseholds, exceeds, if you please, the cost as recorded on the books of this company by the amazing and astounding amount of $7,000,000. In short, the company is here claiming, by its theoretical estimate, approximately five times more for these leases than it actually paid for them.

Now, Mr. Wallace's conclusions are based upon what he pleases to call his judgment. His method, as disclosed by his testimony, we submit, is subject to all the infirmities and vices of the methods employed by the witnesses who [fol. 1240] testified on market value of leaseholds in Dayton Power & Light Company case, which is reported at 292 U. S. 290.

Justice Cardozo in that case condemned in no uncertain terms this character of evidence of market value. He said that such "evidence is lacking in that high coercive power", "is lacking in that high coercive power", and that Court and Commission are "free in their discretion to reject as unsatisfactory the conflicting opinions of a group of friendly experts."

While it is true in this case we have one friendly expert, we submit that the evidence that he submitted is so similar to that submitted by the witnesses in the Dayton case that it, too, must be excluded. Similar evidence was rejected by the United States Supreme Court in United Fuel Gas Company versus West Virginia Public Service Commission, reported at 278 U. S. page 322, the decision in that case being written by Justice Stone.

If I may, for a moment, refer to the exhibit, itself, I would like to read, Your Honor, a bit of the testimony, some of the reasons why Mr. Wallace found a value $7,000,000 in excess of book cost; this is typical. I quote from page 8 of Exhibit 37, Part I.

"From the beginning of active development of the oil pools in the Texas Panhandle field in the year 1926 there

was an excessive waste of gas. In the early years, of [fol. 1241] course, there was not an appreciable market for gas for light and fuel, consequently, the gas at that time was of little or no value. Likewise, the market value of leases was very low. It was what was termed a 'wildcat area' and the producing extent or boundaries of the field had not been determined."

In other words, it is clear that what Mr. Wallace has done here is to reflect in his market value something that the consumer, himself, has created. He also says at page 8: "Beginning about 1927 when some of the major gas transmission lines were being planned, the market value of leases in the gas area increased very rapidly."

In other words, what Mr. Wallace has included in his valuation is an increment, a so-called value, brought about by the very presence or existence of this company's main transmission line running into that field, something which the gas consumer, himself, created.

On page 10 he said, "Legislative and Railroad Commission policy has undoubtedly resulted in the creation of higher values for the reason that a purchaser will now feel more confident of recovering a greater proportion of the gas underlying the land than would have been possible under former conditions."

In other words, Mr. Wallace would ask the rate payer to pay a return upon a value which he claims was brought about by reason of conservation measures taken by the [fol. 1242] Legislative and Railroad Commissions of Texas and other states.

Now the reproduction estimate here submitted also includes the huge sum of $6,053,992 for so-called "cost of business development." At least five and a half million dollars of this amount represents past operating expenses, past taxes, and past interest for which the commission has been reimbursed long since through past rates paid by the consumers. This is simply an undisguised attempt, we submit, to capitalize operating expenses and bond interest.

Now, the United States Supreme Court has again and again rejected similar attempts to compel the rate payers to pay a return on operating expenses long since paid for

through the medium of past rates. As Justice Cardozo pointed out in the Columbus case, 292 U. S. 398, "So far as such expenses had been actually incurred by any affiliated company, they had already been concluded as part of the cost of operations," and that "We cannot find that the Commission and Court went beyond the bounds of legitimate discretion in putting aside these estimates as too uncertain to be followed."

The company's estimate, also, includes the further sum of $1,585,914 for so-called "Value of Gas Purchase Contracts." Now, I submit that this is a monstrous claim. The company here alleges that it has certain advantageous gas purchase contracts under which it buys gas at about [fol. 1243] three and a half cents per m. c. f. It contends that simply because the present market value of that gas which, of course, the consumer, himself, has created, a market which the consumer, himself, I submit has created is four and one-half cents, that he is entitled to capitalize the purported enhancement of value on that account.

Isn't the rate payer entitled to the savings in operating expenses? Can we imagine this company offering to reduce its rates and its rate base if those contracts obligated it to pay more than the going field price of gas purchased?

Indeed not! In those circumstances, of course, the company would contend that the contract price furnishes the correct measure of its cost. Surely the rate-paying public is not to be penalized by the fact that the company has advantageous gas purchase contracts.

Moreover, the fallacy of the contention is apparent because it is the regulated price to the consumer which determines the field price of the gas purchased, and those rates, themselves, are here the subject of inquiry by this Commission.

The market value of gas in the field will in the ultimate be determined by rates fixed by regulatory bodies, including the Federal Power Commission.

If the company's contention in this regard were allowed we would find ourselves in a vicious circle. Moreover, it [fol. 1244] should be remembered that the customer, himself, has created the very market upon which the company

relies as the basis of market value of gas. Indeed, Mr. Biddison, himself, described his estimate of value of gas purchase contracts as "present value of future profits."

This reproduction estimate also includes the amount of almost one-half a million dollars for so-called "Intangible Fixed Capital." This amount covers the alleged cost, as estimated by Mr. Biddison of "Preliminary and Organization Expense." It was computed by Mr. Biddison by applying .75 percent to his total direct construction costs.

Now, it is significant to note that Panhandle Eastern Pipe Line Company claims to have actually expended, according to its own books, $179,339 as compared with Mr. Biddison's estimate of almost a half million dollars on account of intangible plant.

[fol. 1245] Mr. Littman: My argument goes to the weight to the extent that I am endeavoring to show that this evidence is entitled to no weight; that it is wholly incompetent and wholly without any probative weight.

Witness the fact, if Your Honor please, that Mr. Biddison's so-called estimate of a half million dollars for intangible plant is almost three times the claimed actual cost of organizing this company. His claim in this regard appears even more ludicrous when it is considered that Mr. Biddison's estimate of the cost of organizing this company became a different amount after he corrected [fol. 1246] for his error of one and a half million dollars in the estimate of the value of the physical plant.

By using a percentage to the various estimates of physical plant before and after his correction of his million and a half dollar error he secured a lower amount or different amount as a cost of organizing the company.

In other words, the higher Mr. Biddison's estimate of the cost of pipe, then the higher was his estimate for the cost of organizing the company. Certainly such evidence is entitled to no credence or belief.

The items which I have mentioned, and I shall not go into all of them, of course, more than account for the disparity between the company's claimed book cost and

their claimed reproduction cost, but to all this is added the inherent infirmities and vagaries of Mr. Biddison's estimate of reproducing other features of the plant.

Mr. Biddison based his costs, for example, upon prices as of June 30, 1941 which we all know is a most abnormal and unprecedented period. The record shows that it would be impossible to obtain the required quantity of pipe on this date due to the unprecedented war requirements and priorities. But that didn't disturb Mr. Biddison one bit. He assumed that it would all be bought at the top price, notwithstanding the fact that the evidence in this case conclusively shows that the company hasn't [fol. 1247] been able to buy enough pipe to extend their lines for a short distance up in Michigan,—purely a hypothetical estimate based upon anything but the facts,—nor does Mr. Biddison for a moment hesitate to suggest by his estimate that the consumer should pay a return on an alleged increment created by this Nation's defense efforts,—a claimed enhancement of value which the company has neither created nor earned.

It is respectfully submitted under the decisions cited to Your Honor by Mr. Gorman and myself, and under the evidence of the record in this case, that these exhibits should be excluded from the evidence and that all testimony given in connection with reproduction cost new less depreciation should be excluded and we respectfully and earnestly urge the exclusion of such evidence, if Your Honor please.

[fol. 1250] Proceedings.

Trial Examiner: The hearing will be in order.

Upon receipt of the report of yesterday's proceedings which the Trial Examiner carefully reviewed, the session for today seems to be quite appropriate in order to further discuss this objection. I think, in fact, it is very fortunate that the objections were raised at this early stage in the proceedings in order that if any saving of time results, we will be able to plan accordingly.

With respect to the objection stated last evening by counsel for the Commission, we have, of course, the recent

statement of the Commission, itself, in its opinion in the Chicago District Electric Generating proceeding, to the effect that in a so-called "normal" case, as distinguished from what might be called a rare, or unusual case, reproduction cost estimates are neither relevant, material, nor of any probative value.

As the Trial Examiner understands the objection of Commission's counsel, it is in substance this:

That the instant proceeding by reason of the very close parallelism of the facts in this case to those which existed in the Chicago District Electric Generating proceeding fits closely into the category described by the Commission as a "normal" case, and consequently that in this proceeding, reproduction cost evidence is irrelevant, immaterial, of no probative value, and therefore should be excluded in its [fol. 1251] entirety.

That is a correct statement, is it not, Mr. Gorman?

Mr. Gorman: Yes, it is, Mr. Examiner.

Trial Examiner: The Trial Examiner desires to state that he has the very definite impression at this point that there is a close parallel between at least the major aspects of this proceeding and the major aspects of the Chicago District Electric Generating matter.

Consequently, at this moment, the Trial Examiner feels inclined to go along with Commission's counsel in putting this instant proceeding in the category of the so-called "normal" proceeding.

The Trial Examiner does not readily find, from an examination of the evidence, without specific reference to the details, that counsel for the company has come forward with any facts indicating the necessity for a consideration of reproduction cost evidence in this proceeding.

In view of this, I would be pleased, at this point, to hear a statement from company counsel, as to the reasons why they believe that this proceeding necessitates the reception of reproduction cost evidence.

In other words, to obtain a statement in the record as to what peculiar facts are present in this matter which

would take it out of the category of what the Commission in the Chicago case and its opinion, described as a "normal" proceeding.

. . . . . .

[fol. 1259] Mr. Littman: Am I correct in stating that this so called "cost of business development" which figure was derived by Mr. Biddison from Mr. Morton's Exhibit 38, isn't that item a part and parcel of Mr. Biddison's claimed reproduction cost new less depreciation?

Mr. Wheat: Yes, it is.

Mr. Littman: All right.

. . . . . .

[fol. 1277] Mr. Littman: If Your Honor please, I waited patiently throughout the reading by Mr. Wheat of his prepared argument, and nowhere did I hear him answer [fol. 1278] the inquiry propounded of him by Your Honor; namely, is this, or is this not a "normal rate proceeding" such as the proceeding which was before the Commission in the Chicago District Electric Generating case? If this is a normal proceeding, then, of course, if we are to follow the precedent established by this Commission in the Chicago District Electric Generating case, no testimony with respect to reproduction cost new less depreciation is admissible.

If counsel for Panhandle Eastern Pipe Line Company will come forward here and show us that this is not a normal case upon this record, and that it is one of those rate cases referred to by the Commission in the Chicago District Electric Generating case, then, of course, it will be up to Your Honor to consider whether or not evidence of this nature is admissible.

But I think it is highly significant that counsel for the Company has utterly failed to advance one argument thus far along the lines suggested by your Honor in connection with whether or not this is a "normal rate proceeding."

Now, the Commission has fully considered, and said in its opinion in the Chicago District Electric Generating

case, it had fully considered all of the general arguments advanced by counsel for the Company in connection with Smyth versus Ames, and in connection with the legislative history of the section of the Natural Gas Act upon which the Commission relied. All of that is, so far as this Commission is concerned, water over the dam.

The question, of course, will ultimately have to be de- [fol. 1279] cided by the Courts, but I don't believe that it is necessary at this time, inasmuch as the Commission has already fully discussed these legal propositions in its decision in the Chicago District Electric Generating case, to go into them any further here.

I would like to call your Honor's attention, your careful attention, to the wording of our objection. Commission's counsel's objection is, of course, first, to the five-named exhibits; namely, Exhibits Nos. 37, 38, 39, 39-A, and 62, and also Commission's counsel moved "to strike all the testimony concerning reproduction cost given in connection with these exhibits."

Now, careful consideration of the language in that objection would not exclude from the testimony in this case any testimony that might bear upon depreciation accrued —accrued depreciation, which might be applicable to book costs, or to original costs.

It goes to the depreciation which has here been applied to the reproduction cost new.

Now, Exhibit No. 62, set forth three columns in dollars, not in percentages, giving us the reproduction cost new, giving up the accrued depreciation in dollars, and the reproduction cost new less depreciation, referred to by Mr. Biddison as present value, also in dollars.

Of course, we don't know whether Mr. Biddison, nor has he stated on this record, would apply his rates, or percentage of accrued depreciation to original cost or book [fol. 1280] cost, and so our objection, if your Honor please, goes to his resulted dollars, and certainly if Mr. Biddison wishes to come forward in the hearings which will ensue in this case, and testify with respect to the depreciation which, in his opinion, is properly applicable to original cost, or to book cost, we will then, at that time, determine

whether or not in our opinion objection should be made to it.

At this time, however, our objection goes purely to the depreciation in dollars found by Mr. Biddison to be applicable to his reproduction cost new estimates, and I hope that I have made that clear.

Just one further point that I feel might require a little discussion and that is with respect to the alleged cost of business development which is now rather belatedly referred to as "going concern value." I would like to call your Honor's attention to the fact that Mr. Wheat has stated, and I think certainly correctly so, that this estimate of cost of business development is a part and parcel of reproduction cost new less depreciation. It is all interwoven with Mr. Biddison's estimate of the physical plant, and it is all a part of reproduction cost, and, therefore, if we are to follow the Commission's decision in the Chicago District Electric Generating case, we must, of course, exclude it, we believe, in this case.

Now, Mr. Wheat has cited the Circuit Court of Appeals' decision in the Natural Gas Pipe Line Company case with [fol. 1281] respect to going concern value. He has not, however, shown any similarity of facts as between that case and this. Moreover, the United States Supreme Court, itself, has spoken several times on this subject of going concern value, particularly in the Columbus and Dayton cases, wherein the United States Supreme Court stated that under the facts in those cases, no separate allowance for going concern value should be made.

We believe it to be the law that no separate allowance for going concern value need be made in this case. We respectfully submit that our objection to the five exhibits already named, and "to strike all testimony concerning reproduction cost given in connection with these exhibits" should be sustained.

* * * * * * * * *

[fol. 1284] Trial Examiner: With reference to the objection, in so far as it relates to your proposed Exhibit No. 38, there will be no harm whatever in deferring a ruling un-
[fol. 1285] til some later time, when the objection may be

renewed. I think we are in entire agreement, that the subject of depreciation is one thing, you are entitled to introduce evidence concerning, and it is the understanding of the Trial Examiner that this objection is not aimed in any way at the usual evidence concerning depreciation, but only because in so far as any evidence concerning depreciation has been offered by the Respondent, the defendant, at this time, it is in a sense intertwined with the reproduction cost evidence.

Reverting now to the objection in so far as it relates to proposed Exhibits 37, Parts 1 and 2; 39, and 39-A, and the proposed Exhibit 62, and to the opinion of the Commission in the Chicago District Electric Generating Company case, quoted by Commission's counsel yesterday at Page 1227, attention is again directed to the phrase from that opinion, which has been emphasized and restated by Commission's counsel, and to some extent discussed by Mr. Wheat; namely, "In the normal case, we were directed, however, only to determine the actual legitimate cost and the depreciation (that is, the prudent investment) of the utility's property."

In the opinion of the Trial Examiner, there has been no distinction made in the record and counsel for the Defendant has not pointed out any peculiar facts present in this proceeding that would take it out of the category of what the Commission in that opinion described as a "normal proceeding."

[fol. 1286] Since I feel that I am bound by this opinion, and since I feel that there has been no distinction made to take the present proceeding out of the category of "normal cases", I feel prepared to rule on this objection at this time.

However, before making any ruling, I will say that if counsel so desires, counsel may so desire, the Trial Examiner will present to the Commission the question of the inclusion or exclusion of the reproduction cost evidence for such action as the Commission may deem appropriate.

* * * * * * * * *

[fol. 1288] Trial Examiner: Will you state what you have in mind for further proof? It was the understand-

ing of the Trial Examiner that with the exception of some minor matter, the testimony had been completed.

Mr. Wheat: I think the understanding of the Trial Examiner was wholly erroneous if that was his understanding.

The testimony is not yet completed in any sense, and it is in no sense minor in character. The testimony to which I have particular reference, will be the testimony of the management of Panhandle Eastern Pipe Line Company, dealing with the history, development, methods of management, and the operation of the company, and it is to that testimony that I have reference in making the suggestion which I have made, and I think it would save everybody's time and energy.

Trial Examiner: Well, that testimony—will that testimony, in any way, change the basic testimony of Mr. Watkins with reference to the financial history of the company?

Mr. Wheat: Why, of course, it will be in no contradiction to the books of the company. That is not what I refer to.

Trial Examiner: Have you in mind some aspect of your further testimony which might affect the historical cost recorded?

Mr. Wheat: No, I have not, sir.

[fol. 1289] Mr. Littman: In the light of that answer, I submit, if your Honor please, that no evidence that Mr. Wheat can offer could, in any manner, impinge upon what has already been established in this record; namely, that the record shows that this is a normal rate proceeding.

Mr. Watkins having testified that the books and records of this company were in such good shape, and that he already knows that the book costs and original costs will very closely approximate each other, I submit to your Honor that the very purpose of making the objection at this time is so that the record may not be unduly encumbered with lengthy cross-examination on these exhibits, and so that time may not be wasted by prolonging the proceedings by reason of the very presence in the record of these exhibits.

Trial Examiner: As indicated a moment ago, the Trial Examiner is prepared to make a ruling at this time unless there is a preference on the part of counsel for the defendant that the matter be submitted to the Commission.

Mr. Wheat: I should think your Honor should wish to submit this particular matter to the Commission. I, of course, wouldn't suggest that you do so, because that is a matter for your own determination, but I do feel that this is a vital matter, and it is an important matter, and it has been my experience before this Commission that this matter and matters of this sort, rulings are frequently with-[fol. 1290] held until after the Examiner has had an opportunity to discuss the problem with the Commissioners. That is my only thought in this matter, and I am sure that the Examiner must, of course, use his own judgment in respect to this item.

Trial Examiner: Does counsel have any remarks to make?

Mr. Gorman: I have none.

Mr. Wheat: I would like to suggest and request that the Examiner obtain a ruling on this matter from the Commission. I believe that would be a fair method of procedure, and therefore, in reply to the Examiner's suggestion, I make that request.

Trial Examiner: Very well, we will act in accordance with that indicated procedure.

Is there anything else before recess until the 27th?

Mr. Lee: On behalf of the petitioner City of Detroit, I should like to do this, if it is permissible—adopt the motion of counsel for the Commission as being concurred in by the petitioner in this case. Whether or not that is necessary, or whether or not that is of any strategic support to the motion, I am not clear, but if it is, on behalf of the petitioner, and the City of Detroit, and the County of Wayne, as represented by Mr. Goodman, with whom I have conferred, but who unfortunately cannot be here this morning, we should like to join in adopting the motion of the Commission's counsel and to exclude the exhibits referred to, and to strike the testimony presented and predicated thereon.

[fol. 1291] Mr. Wheat: Now, as I understand it, that was not the motion of Commission's counsel just stated:

Mr. Littman: I take it, Mr. Lee, you mean you wish, do you not, to join in the motion made by Commission's counsel?

Mr. Lee: That is correct.

* * * * * * * *

[fol. 1305] C. H. Hinton a witness, having been previously sworn, resumed the stand, was examined and testified further as follows:

By Mr. Culton:

* * * * * * * *

[fol. 1306] Q. Mr. Hinton, in your testimony, you have estimates as to costs of various construction which you expect to have in the future, and some question was raised as to your ability to properly estimate those costs.

I will ask you how long you have been connected with engineering matters? A. Since 1924.

Q. What experience have you had in estimating costs for well construction, gas-well construction in the Hugoton and Panhandle fields?

A. I have been in constant touch with all drilling for the past four years and prior to that time, I made a study of the cost of the probable development required to supply the Detroit market before that line was built.

Q. In that work, have you become familiar with the costs actually incurred by the company in its drilling operations?

A. Yes, sir, at the completion of each well, we naturally get the total cost of that well.

Q. And under whose supervision is that done?

A. That is under my supervision.

Q. Have you, during that period of time, had any experience in estimating the costs of gathering lines and well lines?

A. Yes, since 1929, I have had considerable experience [fol. 1307] on pipe-line estimating work.

I have been on the construction of approximately two thousand miles of pipe line and it was necessary that the engineer make out the monthly estimate for the contractor and, naturally, the engineer must be well informed upon the prices in order to make out the estimate.

Q. Did you do that character of work as engineer?

A. Yes, sir.

Trial Examiner: Just a moment, Mr. Culton. Mr. Hinton's exhibits, I believe, were 42, 43, 44, 45 and 46. Were there any others?

Mr. Culton: That is right, Mr. Examiner.

The questions are related particularly to Exhibits 42 and 43.

Trial Examiner: That is the written testimony and the Schedules?

Mr. Culton: That is right.

Trial Examiner: The other exhibits which were identified by Mr. Hinton were all maps, I believe.

. . . . . .

By Mr. Culton:

Q. Mr. Hinton, are you familiar with the prices which have been paid by the company over the past few years for different types of construction?

[fol. 1308] A. Yes, sir, I am.

Q. How did you obtain that familiarity?

A. From the records of the company.

Q. I believe you testified that in your exhibit you used the drilling-cost unit which was used by Mr. Biddison? A. Yes.

Q. How does that cost compare with the prices which have been paid by the company over a period of several months or years?

A. That price is based upon what has been paid by the company for several years, with the exception of the liner installation in the Hugoton field.

We have not used liners in our Hugoton wells and that cost was estimated by me because I know about how many days it is going to take to make the liner installation. I know the price of the material required.

Q. You know that from your own experience?

A. Yes, sir.

Q. You also made some estimates as to the cost of measuring stations. What do you personally know as to the cost of measuring stations?

A. I have been on enough measuring stations that I know the cost used was just about what I would use, but I further checked that by going back to the company records.

Q. And you find that they are in accord, the prices you [fol. 1309] used?

A. Slightly lower than this price, but due to the increase of the going price of valves, that was raised.

Q. What basis did you use for the unit cost for well lines? A. In that—

Q. (Interposing) In your exhibit.

A. I used the figures that were worked up by Mr. Biddison in that.

Q. Have you, since that time, checked those figures with respect to the company records? A. Yes, I have.

Q. And how do you find the figures compare with the company's experience?

A. Well, I find that there is some fluctuation in the prices. Now, the labor price on the 4½ inch there on the longer lines which have been laid during the past three years, the labor price is slightly lower than the price we used, that is, Mr. Biddison's price, but on the short lines, that is, lines less than one mile in length, why, the majority of them have run considerably in excess of the figure which Mr. Biddison used.

Q. Can you give us an idea, on a percentage basis, as to how those increases or decreases are?

A. Totalling up the number of wells that have been [fol. 1310] built the past three years, taking those direct from the company records, I find that the deviation is less than five percent.

Mr. Littman: Did you mean wells or well lines?

The Witness: Well lines.

By Mr. Culton:

Q. What can you say as to the expense of constructing the gathering lines as distinguished from the well lines? What basis did you use on those lines?

A. In this exhibit, I used all of the figures which were worked up by Mr. Biddison.

Q. Since you testified, have you checked the company records as to past costs on those lines?

A. I have.

Q. How do those costs compare with the figures used by Mr. Biddison?

A. They show slightly under Mr. Biddison's figures, but the price of pipe has changed. I used the pipe price that actually was on the books for my comparison and the increase in the cost of material will make it up. The labor figure is approximately the same.

Q. In other words, the present increased price of material will offset any difference there is between the price on the books and the price used by Mr. Biddison?

A. I do not believe the present price would. I think it [fol. 1311] would probably raise it some, but the price that I used as of June 30 would about equal it.

Q. You testified with respect to the construction of dwellings for employees. What basis did you use for determining that cost when you were preparing your exhibit?

A. Well, I am fairly familiar with building costs, and I used some of the information that was on the company's books and I used my judgment on the other portion of it.

Since that time, I have gone back and checked the cost of the houses built in the producing area of our company, and have found that the cost was, I believe, slightly under $5,800, covering everything that is charged to the house, but we had some exceptionally low bids on the houses for that year.

I have made up a detailed estimate of the cost of those buildings and find that it runs $165 more than the $6,000 which I had in there.

I might add that I used for that purpose a contract price which was submitted for the house itself. The other costs were in about the same proportion as shows on our books for the same type of construction.

Q. You allowed for the construction of a hotel, I believe. How did you arrive at the price for that hotel?

A. That was a little bit difficult, because we want to build that hotel in such a manner that, in the future, we might want to make two dwellings from it, so we are build-
[fol. 1312] ing two five-room dwellings and building a connecting room which will be used for a kitchen and for a passageway, and I estimated that portion of it myself.

Q. And obtained the information from the five-room dwellings from the records on other houses?

A. I checked it from the records, yes.

Q. There was some testimony with respect to the construction of jetties in the Cimarron River. How did you arrive at an estimate of the price for those jetties?

A. That was a contract price, that is, in the form of a contract now and it is $6,478 without any company cost charged to that job. I used $6,500.

Q. There is also an estimate by you as to the expense of a river crossing across the Cimarron River from the loop line. How did you arrive at that cost?

A. I obtained a bid from a contractor, and then just added the price of the material and labor based on past river jobs.

Q. There was a telephone line serving Optima. How did you arrive at the cost of that?

A. By taking the cost of the material required, and I used about 25 percent of the material price for labor, by just counting up to myself what the man-hour requirements would be.

Q. Using your judgment as to the labor time required?

A. Yes, sir, I have been on several hundred miles of telephone construction.

[fol. 1313] Q. There was some testimony by you with respect to power at different points in Texas and Kansas and, probably, also Oklahoma. How did you arrive at the cost of the compression required?

A. The costs on the compressor stations are based on book costs for the miscellaneous work and the power or equipment itself is based on the last quoted price.

Q. By book costs, you mean costs of former construction of similar type?

A. That is right, previous costs.

Q. I believe you state that all of the installing of liners and tubing and acidizing is under your general supervision,

and you keep in constant touch with the cost of those operations? A. That is right.

Q. Have you had anything to do with the preparation of budgets for the company?

A. Yes, sir. That is what I have been working on for the past two weeks.

Q. How long have you been assisting in the preparation of annual budgets?

A. For the past several years.

Q. In doing that work, is it necessary for you to become familiar with the costs of construction of different [fol. 1314] types in the field end of the system?

A. It naturally would be, or we could not make a budget.

Q. That includes the drilling of wells and the construction of lines, and things of that character?

A. That is right, because we weigh different methods of improving our field system and, naturally, we must be familiar with costs in order to decide whether we should build one line and drill a certain number of wells in one portion, or maybe cut down the expenditure by moving that over to another part of the system which fits the line design in a better manner.

* * * * * * * * *

[fol. 1316] Mr. Quitong: Mr. Examiner, I told counsel for the Commission the last time—it was not on the record—Mr. Wallace had discovered that, through error on his part, he had overlooked the circumstance that a number of leases in the Hugoton field were only owned to the extent [fol. 1317] of a half interest by Panhandle Eastern.

He has prepared, and we have printed it, a list of corrected sheets for each of those leases, and a corrected total, which reduces his valuation, I think, approximately $250,000.

Now, we do not have Mr. Wallace here, but I think, with the explanation, probably he would not be required to be here. I will explain that the sheets which had been prepared for him showed Panhandle Eastern Pipe Line Company, et al, and it did not register with him that Panhandle Eastern did not own the entire leasehold interest.

The change is to show, at the bottom of each page, the market value of an undivided one-half interest, and to furnish corrected summary sheets.

Trial Examiner: That will effect a correction of proposed Exhibit 37?

Mr. Culton: Yes, and we ask that that be marked Exhibit 37-A, if we may. We have copies to distribute.

Trial Examiner: That is the correction sheets which you now propose to offer?

Mr. Culton: Yes, sir.

Trial Examiner: As Exhibit 37-A?

Mr. Culton: Yes.

Trial Examiner: They may be so marked.

[fol. 1318] Mr. Littman: May I also inquire whether or not the corrections contained in Exhibit 37-A will not also affect the figures in Biddison's Exhibit 39?

Mr. Culton: They will, to the same extent.

Mr. Littman: In other words, this correction contained in Exhibit 37-A can be very quickly applied to Exhibit 39-A?

Mr. Culton: Yes.

[fol. 1319] Trial Examiner: I assume, Mr. Culton, from a hasty examination of your Exhibit 37-A, there is no matter contained in it which would, in any way, be necessary to ascertain the actual original cost of the properties of your company?

Mr. Culton: There is not. They do not purport to reflect original cost, Mr. Examiner.

Trial Examiner: They are entirely related to the reappraisal of present value?

Mr. Culton: That is right.

The Examiner: Of leases?

Mr. Culton: That is right.

Mr. Littman: I would like the record to show an objection to Exhibit 37-A for the reason that it is a part of, and relates, to the reproduction cost estimate.

Mr. Culton: We may stipulate that the same objections to Exhibit 37 may apply to Exhibit 37-A.

Mr. Littman: Yes.

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[fol. 1408] P. McDonald Biddison, a witness, having been previously sworn, resumed the stand, was examined and testified as follows:

By Mr. Wheat:

* * * * * * *

[fol. 1410] Q. While we are on this type of matter, have you consulted Mr. Wallace as to the corrections made by Mr. Wallace to his Exhibit 37 which were introduced yesterday morning as Exhibit 37-A? A. Yes, I have.

Q. Will you state what changes, if any, such changes by Mr. Wallace would make in any of your former testimony?

A. The change in values of leases by Mr. Wallace, as I have determined it by a subtraction process, is $355,801.38.

Q. Which figures are you using now to arrive at that subtrahend?

A. I am using the figure of $8,695,524 as the value of [fol. 1411] leaseholds originally derived by Mr. Wallace and as used by me in Exhibits 39 and 39-A.

I am reading the figure from Exhibit 39-A, Line 3, Column B. The new figure which has been submitted in correction sheets—

Q. (Interposing) Exhibit 37-A, are you referring to?

A. I think it has been marked Exhibit 37-A for identification, is $8,339,722.62.

Now, in connection with that correction, if I were to run that through in detail by the same process of correction which I used in Exhibit No. 39, I would feel that it would

be proper at that same time to put through some other corrections.

Q. What are they?

A. One of those other corrections is the matter of prices on main compressor units and auxiliary engines with regard to which I have previously testified.

I testified in regard to the increase in the price on Cooper-Bessemer 1300 horsepower units, and I testified to the increase in price also on Ingersoll-Rand vertical units. The price increases on those main compressor units amounts to about $48,634.08, engines of that general style, and applying the rate of increase to the twenty-three 1000 horsepower units and forty-two 1300 horsepower units in the system, that amounts to $523,800, so those price increases account for $572,434.

In connection with the price of pipe, there is another matter that should be given some consideration in this [fol. 1412] connection. Panhandle Eastern Pipe Line Company has just recently, within the last week, actually placed an order for about 46,000 tons, as I recall it, of seamless pipe, 18-inch to 24-inch.

Q. May I ask, Mr. Biddison, aren't you in error, isn't it 12-inch to 24-inch?

A. Yes, it does cover sizes down to 12-inch.

Mr. Littman: Just a moment, please.

I would like to enter an objection to this testimony, first, for the reasons already stated. The Commission's staff objects to any and all testimony with respect to reproduction costs and I take it that your Honor will allow an objection to all of this testimony without the necessity of interrupting from time to time.

Mr. Wheat: We will stipulate that your objection goes to any items of that sort.

Mr. Littman: I have also a further objection to this testimony, and that is this: If this witness is testifying that his original estimate of reproduction costs as of June 30, 1941, is in error and that he is now aware, for the first time, of errors that appear in that estimate, then we have one situation but, if this witness is now going to

testify to increases, alleged increases in prices that have taken place since June 30, 1941, of course those would not affect his estimate as of June 30, 1941.

I am not clear, and perhaps Mr. Wheat could clear me up [fol. 1413] on it, as to whether this witness is now testifying that his original exhibit of reproduction cost, I believe it is Exhibit 39 and Exhibit 39-A, is now being corrected for certain errors, whether certain changes are now being made because of this witness' mistakes in his estimate as of June 30, 1941, or whether he is now testifying to increases in prices that have taken place since that time?

I would like to have made clear the purpose of this testimony.

Mr. Culton: I think if you will just wait, you will withdraw that particular objection.

The only thing the witness is going to do is to show an unusually advantageous contract which this company has entered into recently. Bearing in mind this is a general investigation by the Commission, I think the information will probably be of interest to the Commission.

Mr. Wheat: And I am sure it will be of interest to counsel if he will hold off a moment.

Mr. Littman: I take it we have a general objection to all testimony on reproduction costs, have we not?

Trial Examiner: That was covered by the statement of Mr. Wheat that counsel agrees that all testimony with reference to proposed Exhibits 39 and 39-A shall come in, if at all, subject to the objection now pending.

Mr. Littman: Well, I want to reserve my right to have [fol. 1414] this testimony stricken.

Trial Examiner: You made your record. Proceed.

By Mr. Wheat:

Q. Go ahead, Mr. Biddison. You were discussing the pipe matter.

A. There is, in the system of Panhandle Eastern Pipe Line Company, a considerable amount of seamless pipe. In the valuation, Exhibit No. 39, there are $7,318,856.27 worth of seamless pipe, 18-inch and larger.

That figure may be subject to slight revision. It was taken off last night, and the additions are by longhand and there might be some slight error, but that is substantially the amount of values for pipe that is in the valuation; that is, the 18-inch and larger seamless pipe.

The price at which that pipe is priced in the valuation is $65 per ton, except for the 18-inch, which is priced at $67.50 per ton, those prices being net f. o. b. mill. The recent purchase was—

Q. (Interposing) When?

A. Within the last week, by Panhandle Eastern, was at $64 per ton average for their immediate pipe requirements, 12-inch to 24-inch, inclusive.

Q. You have not a separate price for each size, have you?

A. No, I do not have and Panhandle Eastern does not have. The price given is an over-all price for the specified tonnage.

[fol. 1413] Q. Proceed.

A. That purchase indicates that the price used by me on seamless pipe is a little bit high, substantially $1.00 per ton. $1.00 per ton out of $64 per ton is 1.56 percent and 1.56 percent on $7,319,000, practically, is approximately $114,000.

Q. Of course, this happened after June 30, 1941, didn't it?

A. That is true, that the purchase was actually closed at that time, but the negotiations had been in progress since prior to June 1.

. . . . . .

Yes, sir, and it was only at this late date that the actual price could have been determined by the placing of an order.

Now, considering the situation with regard to pipe, and the situation with regard to compressor engines, and the correction by Mr. Wallace, I stand on the sum total of my figures.

Q. Why?

A. Because there is a tendency to substantially offset, item for item, the increases against the decreases and, in any event, determinations of this sort are not made with exactitude.

As a matter of fact, there are no operations in engineering or science, except the counting of units, which are done [fol. 1416] with exactitude. They are done with varying degrees of precision and the amount of error, one way or the other, resulting from making these three adjustments, would not change the sum total of the estimate sufficiently to justify revision or argument about the difference.

* * * * * * *

[fol. 1422] Q. Now, Mr. Biddison, have you, since the last hearing in this proceeding, prepared a statement entitled, "Panhandle Eastern Pipe Line Company and Subsidiary Companies—Amount of Depreciation on Book Cost of Property as of June 30, 1941"? A. I have.

Q. Is the document which I now show you the document to which you have just referred? A. It is.

[fol. 1423] Q. Was this prepared by you, or under your direction? A. It was.

Q. And does it correctly show what it purports to show, in your opinion? A. It does.

* * * * * * * * *

(The Document Referred To Was Marked Exhibit No. 69 For Identification.)

* * * * * * * *

[fol. 1424] Mr. Littman: Mr. Biddison, coming back again [fol. 1425] to your claimed reproduction cost, there has been some confusion on this record, due to numerous changes and corrections and, for purposes of clarification, I would like to have you, at this time, read into the record the total reproduction cost new, and total reproduction cost new, less depreciation, as of June 30, 1941, which you are claiming is your estimate.

The Witness: The figures called for will be found on Page 1 of Exhibit No. 39-A as to cost of reproduction new, which is, $83,833,448.54. The deduction from that figure for depreciation which has occurred in the property—

Mr. Wheat: (Interposing) That is shown on Exhibit 62, is it not?

The Witness: That is shown in Exhibit No. 62, and will be found on Page 1, in the amount of $4,121,749.80, with a resulting present value shown on that same page of $79,711,698.74.

Mr. Littman: Now, Mr. Biddison, are the figures which you just read the same figures that you testified to several days ago, before the error of Mr. Wallace's estimate of market value of leaseholds was corrected?

The Witness: They are; as I have just explained today that those were the figures which I would stand upon after making adjustment for that matter and the other matters to which I testified.

Mr. Littman: In other words, the estimate today is the same as it was before Mr. Wallace's corrections in the [fol. 1426] amount of $355,752 was made, isn't it?

The Witness: The sum total of the answer is the same as I explained on testimony today.

* * * * * * * *

[fol. 1439 to 1449 inc.] By Mr. Wheat:

* * * * * * * *

Q. All right. Now, Mr. Biddison, will you turn to Exhibit 69 for identification, which I believe you have just identified as having been prepared by you and as [fol. 1450] showing the amount of depreciation referable to the book cost of the property as of June 30, 1941; is that correct? A. That is correct.

* * * * * * * *

Q. Will you please explain what is contained on that exhibit?

A. In column (A) are shown the account numbers for the property classifications as they appeared upon the monthly financial reports of Panhandle Eastern Pipeline Company.

In column (B) the accounts are named.

And in column (C) is shown the amounts as reported for the corresponding classifications of property.

Q. As of June 30, 1941? A. Yes, sir.

Q. Proceed.

A. In column (D) is shown my estimate of the amounts to be deducted from column (C) for depreciation which has occurred in the property.

This amount of depreciation which is set out in column (B) for each classification of property is based upon the same knowledge of property and the same observations of property as were used in the compilation of the similar [fol. 1451] deductions for depreciation in Exhibit No. 62.

In my Exhibit 39 and 39-A dealing with reproduction cost, the groupings of property were not in all cases the same as carried on the books and on the monthly operating financial reports.

In order to make application of the information as to the condition of property to the amounts shown in column (C) on Exhibit 69 I have used Exhibit 62 to weigh out the deductions there shown to determine the percentages produced by such weighing to apply to column (C) on Exhibit 69, and in that manner have arrived at the amounts in column (D).

The amounts in column (E) are arrived at by deducting the amounts shown in column (D) from the amount shown in column (C), and column (E) represents the book figures on property which I understand to be cost less the depreciation stated in column (D).

Q. In that connection, is there any further explanation which you think would be proper at this time with respect to the items or any of them on Exhibit 69, in order that they may be readily understandable?

A. I think the only thing that would be necessary to explain at all might be some of the weighing out of the data in Exhibit No. 62 to arrive at its application in this case, but that's a purely arithmetical process.

[fol. 1452] The data itself has all been used in the preparation of Exhibit No. 62 and I have testified to that and explained in that connection.

Q. All right. Will you state the amount of accrued depreciation as of June 30, 1941, which you have found from

your examination to exist in the property of Panhandle Eastern Pipeline Company and its subsidiary companies in relation to the cost of the property in question?

A. As shown on page 2 of Exhibit 69, line 31, column (D), the amount is $3,903,102.46.

Q. Thank you. Mr. Biddison, have you also prepared a tabulation starting with the valuation of September 30, 1938, which you stated yesterday you had made with respect to the property of Panhandle Eastern Pipeline Company and which I believe is one of the items which was requested by Mr. Chamberlain, and have you brought that item up to date by the addition of net additions and betterments since that time?

A. I have.

Q. Does the single sheet which I now show you contain a summary of the data which you have used in that connection (handing paper)?

A. It does.

. . . . . .

[fol. 1453] The Document Referred To Was Marked Exhibit 70 For Identification.)

. . . . . .

By Mr. Littman:

Q. Mr. Biddison, calling your attention to Exhibit 69, is the depreciation shown in Column (D) the depreciation arrived at by the methods which you described in connection with Exhibit 62?

A. It is.

Q. That is, generally the observed method, is it not?

A. Generally the observed method, but some of the items were not the result of specific observation. It is the observed method as I explained in my testimony with respect to Exhibit No. 62.

. . . . . .

Q. Mr. Biddison, I want to call your attention to line 8, "Leaseholds." I note that you have no deduction [fol. 1454] for depreciation of the leaseholds. Will you explain why you deducted nothing for depreciation on leaseholds?

A. The explanation with respect to that item in Exhibit 69 is that while some depletion has occurred upon leaseholds I have not considered, in view of the fact that there was no determination of the value, that it was requisite to make a deduction from this book figure of cost for the determination in column (E) of a figure which might be interpreted as value.

Q. Well, the figure for leaseholds shown in column (C) is the book cost of the leaseholds when they were originally acquired?

A. That is true.

Q. And the figure that you show in column (E) entitled "Book Cost Less Depreciation" is precisely the same figure, is it not?

A. Precisely the same figure. I made no deduction in column (D).

The Witness: Column (D) does represent depreciation and I made no deduction in that column for depletion.

. . . . . .

[fol. 1455] By Mr. Wheat:

Q. Mr. Biddison, is it a fact, as stated on line 1 of Biddison Exhibit 70 for identification, that your valuation of total fixed property of this Panhandle Eastern Pipe line Company and its subsidiaries as of September 30, 1938, amounted to $64,544,104.58?

A. It is.

. . . . . .

Q. Mr Biddison, is the document which I now show you a copy of the 1938 study to which you have just referred (handing book)?

A. It is.

Mr. Wheat: May it be marked Biddison Exhibit 71 for identification.

Trial Examiner: It will be so marked.

. . . . . .

[fol. 1456] Q. Mr. Biddison, is the document which has been marked Biddison Exhibit 71 for identification a copy of the document in which appears the figure which I have just read to you?

A. It is.

Mr. Littman: Pardon me.

May I inquire here: Is the document identified as Bidison Exhibit 71 for identification an estimate of the reproduction cost—is this reproduction cost?

Mr. Culton: Yes, as of September 30, 1938.

Mr. Littman: I would like the record to show that counsel for the Commission objects to the entire line of inquiry with respect to this exhibit for reasons already stated in the record.

Mr. Wheat: We will stipulate, Mr. Examiner, that the objection of Commission's counsel, heretofore stated, may go to any questions in connection with this exhibit or these two exhibits which deal with problems of reproduction cost.

You understand, Mr. Littman, that other items not covered by the general blanket of reproduction cost are contained on Exhibit 70 for identification, and I shall question the witness on those and, I take it, that in that instance [fol. 1457] you would prefer to make any additional objections, should you have them, separately for any such items.

Mr. Littman: Yes. Well, my objection goes only to the reproduction cost evidence.

Mr. Wheat: That's what I thought, and, to save time, we will be glad, as I have stated, Mr. Examiner, if it is agreeable, to stipulate to that effect.

Mr. Littman: Is it agreeable to the Examiner for us to stipulate to that effect?

Trial Examiner: Certainly it is perfectly clear from this record that any matter which has come into the record since the objection to the evidence as to reproduction cost was made, accompanied by motions to strike all testimony relating to reproduction cost, heretofore received, shall equally apply to any subsequent additions by way of testimony or exhibits based upon or relating to the reproduction cost new of the property under consideration.

Mr. Littman: Not only reproduction cost—

Trial Examiner: (Continuing) I think the acquiescence of counsel for the defendant has been clear and complete as to each one of these items when objection was raised.

Mr. Littman: Our objection goes, if you Honor please, goes not only to the reproduction cost new but also depreciated.

Mr. Wheat: And of course it is understood, Mr. Litt-
[fol. 1458] man, that if you at any time have any other objection or further objection to any of this testimony, why, we would assume that you will make that as a separate objection.

Mr. Littman: Yes.

Mr. Wheat: Our stipulation of course goes to the objection which you made to the data contained in certain exhibits at the last main hearing of this proceeding.

Mr. Littman: And to future exhibits and future testimony with respect to reproduction cost evidence.

Mr. Wheat: That is correct, yes, just so we understand each other.

Mr. Littman: Yes.

Mr. Wheat: Fine.

By Mr. Wheat:

Q. Mr. Biddison, how did you arrive at and what is the nature of the figure of $64,544,104.58, shown in line 1 of Exhibit 70 for identification, and also shown as the final result of your 1938 valuation on Exhibit 71 for identification?

A. On page 3 of Exhibit 71 for identification, near the bottom of the page, the third line of figures from the bottom, is shown the item of "Total Fixed Property— $64,544,104.58" in the column headed "Reproduction Cost New."

That is the figure appearing on Exhibit 70 for identification at line 1.

[fol. 1459] Embraced in that total in the classification of "Production System Property" on page 2 are "Produc-

tion System Leaseholds" in the amount of $4,592,116.04, and "Gas Wells and Equipment" in the amount of $1,882,830.

As indicated on page 7, and as explained in the letter of transmittal at the front of the report—

Q. Exhibit 71?

A. Yes (Continuing)—the leases and the wells therein were evaluated by Mr. Ralph E. Davis.

Q. Did you accept Mr. Davis' figure?

A. I have used Mr. Davis' figure. I have accepted it and used it.

Mr. Wheat: I may say, Mr. Examiner, we will file that in by Mr. Davis himself, because I think it will be necessary here.

A. (Continuing) His report was dated February 1, 1937.

That report evaluated the leases in Kansas and Oklahoma portions of the Hugoton Field at $2,019,000, and the leases in the Panhandle Field of Texas or Amarillo Field, as indicated on page 8, at $3,061,000.

I have estimated the reproduction cost of wells, which for the Hugoton Field are shown on page 7, it amounted at that time to $541,595, and I evaluated the wells in the Amarillo Field as of that date, as shown on page 8, at [fol. 1460] $556,890.

Since the values placed by Mr. Davis upon the property included the values of wells and leases, I deducted the well values from the total values and assigned the balance to the leases.

I have then in both cases added to the figures so obtained additional leases obtained between the date of the Davis report and the date of the evaluation and have deducted the leases surrendered in the interim, and I have thereby arrived at a division between lease cost, lease value, and well value.

Q. You are now speaking entirely of Exhibit 71 for identification, are you not? A. Yes.

Q. Proceed.

A. The balance of the property has been determined by estimating reproduction cost or by taking book cost in substantially the same manner as I explained for the valuation made in 1941 in Exhibit No. 39.

Certain items which were recently constructed or which were of little importance were taken at their book figures.

The items of transmission mains were estimated upon construction costs determined from an analysis of the contract prices for recent construction.

Q. During 1938? A. During 1936 and 1937 largely. [fol. 1461] Q. I see.

A. The estimate for compression stations was predicated upon an analysis of the contractors' construction reports to Panhandle Eastern Pipeline Company.

The Liberal Gasoline plant was determined in the same manner, and its cost is shown on page 2, I believe, the book cost on that date.

Q. It was practically new then; was it not?

A. It had been constructed in 1936 with an addition in 1937 so if was practically new property.

The items of "General Office Equipment" and "General Garage Equipment" and "General Laboratory Equipment" and "General Tools and Implements" groups under "General System Property" on page 3 are taken from the books.

"General Communication Equipment" was estimated by inventorying a typical mile of various types of construction on the system, pricing out that equipment and applying thereto a labor ratio determined from a study of telephone line construction.

The items of "Intangible Fixed Capital" and of "Undistributed Construction Expenditures" were determined substantially in the same manner as for Exhibit No. 39. The details do not appear in the report.

The item of "Construction Work in Progress," shown [fol. 1462] on page 3, and of "Materials and Supplies", on that same page, are the amounts shown by the books as of the valuation date, September 30, 1938.

Q. Let me ask you, Mr. Biddison: On pages 2 and 3 of Exhibit 71 for identification, you have, do you not, two columns of figures after the various classes of property, one headed "Reproduction Cost New" and the other headed "Present Value"?

A. Yes, sir.

Q. And what do those two columns represent?

A. The column headed "Reproduction Cost New" represents the estimated cost of reproducing the property in new condition as of September 30, 1938.

The column headed "Present Value" represents the residual amount after deducting from reproduction cost new the amounts by which I estimate the various classes of property had lost value at that time.

Q. Through the accruing of depreciation?

A. Through the occurrence of depreciation in property.

Q. Yes. Mr. Biddison, was this report, Biddison Exhibit 71 for identification, prepared by you at the request of Panhandle Eastern Pipeline Company?

A. It was.

Q. And do you believe that it reflects the reproduction cost new of the property as it existed on September [fol. 1463] 30, 1938? A. I do.

Q. Now, will you turn to Biddison Exhibit 70 for identification and state where you obtained the figure of $6,380,886.03, listed in line 4 as "Net Additions to June 30, 1941."?

A. I obtained that figure from the controller, Mr. Leith Watkins.

. . . . . .

Q. Will you now explain what else you have done in connection with Biddison Exhibit 70 for identification and what it shows.

A. In Line 1, the item of "Fixed Property", on Exhibit 70, includes an item of "Construction Work in Progress" of $63,215.38, which I have deducted from the "Total Fixed Property."

I have then added the amount of net additions from September 30, 1938, to June 30, 1941, as furnished to me by Mr. Watkins.

This results in a fotal fixed property on the basis of the 1938 values and "Net Capital Additions as of June 30, 1941," as shown in line 5, Biddison Exhibit 70 for identification, of $70,861,775.23.

[fol. 1464] Q. To that you have added certain items, have you not? What are they?

A. To make this comparable to Exhibit No. 39 I have added working capital in the amount of $1,569,000, shown at line 6, and taken from the same source as the same amount shown in Exhibit 39 and Exhibit 39-A, and I have added the value of gas-purchase contracts derived in the same fashion and from the same source as similar items appearing in Exhibits 39 and 39-A, and I have added "Cost of Business Development" in the amount of $6,053,992.48, derived from the same sources and in the same manner as the identical figure appearing in Exhibits 39 and 39-A, and have arrived at reproduction cost new of the plant property and business existing June 30, 1941, based upon the 1938 values and subsequent capital additions and the addition of the other items just explained, of $80,070,681.71.

. . . . . .

Mr. Littman: I would like to state at this time, if your Honor please, that Commission's counsel has a further objection to Exhibits 70 and 71 for identification for the reasons that they are wholly immaterial to the issues presented in this proceeding.

[fol. 1465] Mr. Culton: Mr. Examiner, so that the record of the defendant may be clear: We are offering that on several grounds:

First, it shows the experience which this witness heretofore had with the properties of this company.

Second, the values called for by one of the interveners in the case.

Third, it is one of the matters referred to in the order relating to the subpoena duces tecum.

The next reason is that it is corroborative of the witness' testimony with respect to the present reproduction cost of the properties.

And, finally, because it is a valuation made at approximately the date the National Gas Act went into effect, in the summer of 1938, and for the purpose of showing the value of the defendant's property as of that date.

. . . . . .

[fol. 1470] LEITH D. WATKINS, a witness, having been previously sworn resumed the stand, was examined, and testified further as follows:

Direct Examination—Resumed.

By Mr. Wheat:

. . . . . .

Q. Mr. Watkins, since the conclusion of the hearing last held in this proceeding, have you prepared a one-page statement headed "Panhandle Eastern Pipeline Company and Subsidiary Companies—Net additions to Gas Plant Per Books from October 1, 1938, to June 1, 1941."

. . . . . .

Is the single sheet which I now show you the statement in question (handing)?

A. It is.

. . . . . .

Trial Examiner: It will be marked for identification as Watkins Exhibit 72.

. . . . . .

[fol. 1471] By Mr. Wheat:

Q. Mr. Watkins, I think you have stated that this document which has been marked Exhibit 72 for identification was prepared under your direction?

A. That is correct.

Q. From the books of the company?

A. That is correct.

Q. And does it in your opinion correctly show what it purports to show?

A. It does.

Q. Now, I note the figure $6,380,886.03 as being the same figure which was testified to by Mr. Biddison this

morning as the net additions to gas plant. Did you furnish that figure to Mr. Biddison at his request?

A. I did, as representing the net additions to gas plant per books from period October 1, 1938, to June 30, 1941.

Q. And would you please describe what is shown on Exhibit 72 for identification.

A. Exhibit No. 72 for identification contains a statement by classifications of property, showing the increase or decrease in the investment per the books of Panhandle Eastern Pipeline Company or its subsidiary companies in those segregated classifications during the period from October 1, 1938, to June 30, 1941.

[fol. 1472] Q. What do the black figures show in column (B)?

A. The black figures in column (B) represents increases, while the red figures shown in the same column represent decreases, in investment during the period.

Q. And the total shown at the bottom of the page, and which I have heretofore read into the record is the net of the black figures over the red figures; is that correct?

A. That is correct.

* * * * * * * *

Q. Mr. Watkins, have you also compiled a document consisting of a number of pages headed "Comparison of Costs of Certain Equipment, Materials and Labor—Panhandle Eastern Pipeline Company and Illinois Natural Gas Company"?

A. Such a document has been prepared under my direction.

Q. Is the document which I now show you the document to which you have just referred (handing)?

A. It is.

[fol. 1473] Q. You say it was prepared under your general supervision?

A. That is correct.

Q. And does it in your opinion correctly show what it purports to show?

A. It does.

* * * * * * * *

Trial Examiner: It will be marked for identification as Exhibit 73.

* * * * * * * *

Exhibit No. 73 for identification contains a comparison of costs of certain equipment and materials and labor used either in construction or operation by Panhandle Eastern Pipeline Company and its subsidiary companies for the period shown in the various charts or tables contained in the document from which the charts were prepared for several classes of such materials or equipment.

. . . . . .

[fol. 1474] A. Chart No. 1 of Exhibit No. 73 is a comparison of the cost of labor man-hours in cents per man-hour for the months of July, 1938, and September, 1941.

. . . . . .

Q. What were the figures?

A. For July, 1938, the cents per man-hour of labor cost was 58 cents and for September, 1941, 82 cents.

Q. Do those figures in your opinion show that it now costs the company more per man-hour of labor than it did in recent periods?

. . . . . .

By Mr. Littman:

Q. Before you leave chart No. 1, Mr. Watkins, I would like to inquire what labor is included in chart No. 1?

A. There is a table for charts No. 1 and No. 2 immediately following chart No. 9, which shows in some substantial detail the labor included in not only chart No. 1 but chart No. 2 as well.

By Mr. Wheat:

Q. In general what is that?

[fol. 1475] A. In general the labor is that of foreman, chart changers and well tenders and laborers in the production system, and foremen, line walkers, welders and laborers in the pipeline section of the transmission department; compression engineers, auxiliary engineers, and oilers in the compression section of the transmission department; meter engineers, meter men in the measurement division of the transmission department; telephone system, linemen; stillmen, boiler men and oilers in the gasoline and dehydration operation.

Q. Under the "telephone system" only the linemen are shown, is that correct? A. That is correct.

Q. Under the "gasoline and dehydration plant" are the stillmen, boiler men and oilers that you mentioned?

A. That is correct.

Q. Will you turn now to chart No. 2 and state what is shown on chart No. 2?

A. The first block to the left in the upper section of chart No. 2 gives a comparison of man-hour labor cost in the production system for the month of July, 1938, with September, 1941.

Q. And those figures are taken, are they, and the heights of the bars represent, do they, items from the table for charts No. 1 and No. 2 under the heading "Pro-
[fol. 1476] duction System"?

A. They do.

Q. In addition to that have you shown the charts of labor costs and labor man-hour costs for transmission pipe lines, transmission compressors, transmission measurement, the telephone system, and the gasoline and dehydration plant?

A. I have on this same chart No. 2.

Q. And all of those items are covered, are they, on the table for charts Nos. 1 and 2? A. They are.

Q. And the totals at the bottom of that table are the totals, are they, which were used in the preparation of chart No. 1?

A. They are.

Mr. Littman: May I inquire, Mr. Watkins?

By Mr. Littman:

Q. Tell me whether or not the amount shown in your total for charts Nos. 1 and 2 are operating expenses, or do they include costs of construction?

A. Principally they are operating expenses. The reason there is no comparison given for construction is because of the varying nature of construction projects during the period.

It is the witness' belief, however, that the same general trend of costs would be in evidence had such charts been prepare .

[fol. 1477] Q. Are you prepared at this time to say whether or not the figures in table for charts Nos. 1 and 2 are all operating expenses or not?

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TRANSCRIPT OF RECORD

(Pages 513 to 1024)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. II.

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United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

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PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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XXX III

A. They are all operating expenses.

Q. For the months shown? A. That is correct.

* * * * * * * * *

By Mr. Wheat:

Q. And do show a general trend upward in each individual item? A. That is correct.

Q. As covered by the tables or by the charts on the pages headed "Chart No. 1" and "Chart No. 2"?

A. That is correct.

Before leaving this, however, I would like to amplify my statement made in response to Mr. Littman's question.

It might have been possible that either in the month of July, 1938, or the month of September, 1941, that some of the employees for which both the man-hours and amounts are shown in the table for chart No. 1 performed some incidental construction work, in which event such cost would have been charged to construction.

In preparing these charts no effort was made to segregate such incidental construction costs from costs properly chargeable to operation.

[fol. 1478] The amounts shown here represent the total received by the payroll classification selected.

Mr. Littman: And you are not prepared, of course, at this time to say how many of these dollars found their way into operating expenses, and how many of them found their way into plant account.

The Witness: I am not.

By Mr. Wheat:

Q. I take it from your testimony, Mr. Watkins, that the vast proportion of the dollars represented on the table for charts Nos. 1 and 2 represent operating expenses?

A. Yes. The very nature of the work performed by the employees selected would indicate that.

* * * * * * * * *

Q. Can you say whether you included here all personal services?

* * * * * * * *

[fol. 1479] A. No, I did not.

Q. What limitations were imposed?

A. The employees selected for this comparison represented the payroll classifications for which there had been at intervals over the period of the last four or five years specific general class raises or changes in payroll rates.

The remainder of our employees' bases of pay did not undergo such general classification.

. . . . . .

[fol. 1480] By Mr. Wheat:

Q. Now, will you turn to chart No. 3, Mr. Watkins, and state what is shown on that chart, and also what is shown on the table for chart No. 3 at the back of Exhibit No. 73 for identification.

A. Chart No. 3 is a comparison of the cost of seamless steel pipe for 24-inch pipe represented by the first block in the chart, which shows the cost per ton, in dollars, for purchases made during the year 1940 and for the year 1941.

The respective amounts are $44.59 per ton and $64 per ton for the 24-inch pipe.

Q. The same figures appear for the 20-inch pipe, do they not? A. They do.

Q. There is a slight difference, isn't there, with respect to the 18-inch pipe?

. . . . . .

A. In the case of the 18-inch pipe the cost for purchases, cost per ton of purchases for the year 1939 was $45.08, while the cost per ton for purchases made during the year 1941 remained at $64.

These prices are mill prices.

Q. And where were they obtained?

[fol. 1481] A. They are shown by the table for chart No. 3.

The source of the information for the year 1940 was from the company's gas plant record.

For the year 1941 from the company's Purchasing Department and representing the purchases consummated on October 22nd, 1941.

Q. Just last week? A. That is correct.

Q. I note you use the figure $64 per ton for all three of these sizes. Is it a fact that in making the order last week that you mentioned the company received no separate quotation on individual sizes?

A. That is a fact.

Q. Was the $64, then, a price averaged over these various sizes?

A. That is correct with respect to these particular sizes and other sizes of pipe purchased at the same time.

Q. What sizes did this price cover?

A. It covered sizes ranging from 24 inches down to 12.

Q. That is the price, is it, which this company is now preparing to pay under this pending order for the pipe in question?

A. It is.

. . . . . .

[fol. 1482] By Mr. Littman:

Q. Mr. Watkins, when does the company expect to receive the deliveries of this pipe which you have shown on table 4, chart No. 3, for the year 1941?

A. It is the witness' information that deliveries for this pipe are to begin about the middle of November, this year.

Mr. Wheat: 1941?

The Witness: Yes, and to continue at regular intervals thereafter until the entire purchases have been delivered.

By Mr. Littman:

Q. Does this price include all of the discounts?

A. This is a net price at the mill.

Mr. Littman: Thank you.

Q. That price would not include the cash discount, would it?

A. It was furnished to the witness as the net price at the mill and the question of cash discount was not discussed except in a very general way, as a result of which the witness assumed there would be no cash discount.

Q. But you are not certain about that right at this time, are you? A. I am not.

[fol. 1483] By Mr. Wheat:

Q. Now, will you turn to chart No. 4 and to the table for chart No. 4, and state what is shown on those two pages of Exhibit 73.

A. Chart No. 4 gives a comparison of the cost of pipe couplings and valves for the sizes and periods shown in the two blocks in chart No. 4 and the information from which the charts were prepared is contained in the table for chart No. 4.

The first section of chart No. 4 compares the cost of 24-inch O. D. couplings purchased in 1939 and those purchased during the year 1941.

The respective costs were $8.75 per coupling in 1939 and $10.04 per coupling in 1941.

Both of these prices refer to the 24-inch O. D. couplings, the 24-inch O. D. sizes.

Q. What about the valves 24 by 20?

A. The 24 by 20 valves purchased during the year 1939 cost $600 each while those purchased during the year 1941 cost $690.

Q. As shown on the table for chart No. 4?

A. That is correct.

The information there was taken, in the lower section, from the company's gas plant records, while the data with respect to the 24-inch couplings came both from its [fol. 1484] plant records and from recent purchase records.

. . . . . .

Chart No. 5 is a comparison of the cost of river clamps, stated in cost per ton.

The cost of river clamps purchased in 1940 was $48.55, while those purchased in 1941 cost $55.

. . . . . .

Mr. Littman: May I inquire: Is the $55 price per ton of these river clamps the price actually paid by the company, or is that for material yet on order?

The Witness: As shown by table for chart No. 5, the cost for the clamps purchased in 1940 and in 1941, both

came from the company's gas plant records and therefore it [represent] actual cost paid for clamps actually purchased.

Mr. Littman: And do they reflect all the discounts that were actually obtained by the company?

The Witness: They do.

Mr. Lee: Does the cost per ton vary with the quantity [fol. 1485] taken? I notice there is quite a difference: 400 tons in 1941 and 140 tons in 1940.

The Witness: The witness is not prepared to answer that question.

By Mr. Wheat:

Q. As a matter of fact, Mr. Watkins, in 1941 more river clamps were ordered, to-wit, 400, than were ordered in 1940, to-wit, 140; is that not true?

A. Yes, sir, that is correct.

Q. So that if any shaving of price were customary in connection with larger orders of river clamps you would have expected a lower price for the 1941 orders than for the 1940 orders, would you not?

A. That is correct. And it is the witness' view that whatever weighing is required to make the prices comparable in the two periods is in evidence in the data shown in the table for chart No. 5.

* * * * * * * * *

Chart No. 6 and the table for chart No. 6 contain a comparison of cost of master control valves for gas wells as to 7-inch and 8⅝-inch valves, and are stated in hundreds of dollars per unit.

The data from which chart No. 6 has been prepared is [fol. 1486] shown on the table for chart No. 6.

The comparison of the 7-inch valves purchased during the year 1938 and during 1941 show costs respectively of $145 and $152 per unit, while the comparison for the 8⅝-inch valves purchased during the year 1938 and the year 1941 show comparative costs, respectively, at $230 and $250 per unit.

Q. These are actual purchases made by the company, as shown by its records? A. That is correct.

* * * * * * * * *

Chart No. 7 and the table for chart No. 7 show a comparison of costs of pipeline construction of various sizes, loop lines constructed in several sections of the company's system.

The cost is stated in dollars per foot, and the information from which chart No. 7 was prepared is shown on the table for that chart.

* * * * * * * *

[fol. 1487] This is a comparison of the cost of construction including, as shown, I believe, on the chart, the cost of ditching, stringing, welding, painting and laying of the pipe, and back-filling of the trench in which the pipe is laid on comparable projects, and does not include the cost of materials.

So that we have a comparison of the loop lines constructed in the counties of Ralls and Pike Counties, Missouri and Pike County, Illinois, as shown by the first two bars in chart No. 7, for the years 1940 and 1941 of 85 cents per foot for the year 1940 and $1.29 per foot for 1941, and for the loop lines constructed in Christian, Macon, Moultrie and Douglas Counties, Illinois, for the same periods, $1.13 per foot for the year 1940 and $1.28 per foot for the year 1941.

And for the 24-inch loop lines constructed during the same years in Scott and Morgan Counties, Illinois, a cost per foot of pipe line construction in 1940 of $1.13, which rose to $1.40 in 1941.

And for the 20-inch loop lines in Douglas and Edgar Counties, Illinois, $1.09 and $1.27 per foot for the years 1940 and 1941, respectively.

The data from which chart No. 7 was prepared is taken from actual construction contracts completed during the year 1941 and from actual construction contracts entered [fol. 1488] into during the year 1941 but not yet completed.

Q. But they are actual costs being suffered by this company, are they not? A. They are, indeed.

Q. Now will you turn to chart No. 8 and to the table for chart No. 8, which deals with compressor station en-

gines, and state first what is shown on the charts and the tabulation, and then state whether you have shown anything here for the 1300 horsepower compressor engines?

A. Chart No. 8 and the table for chart No. 8 form the basis of a comparison of the cost of a 1,000 horsepower Cooper-Bessemer compressor station engine in the year 1940, purchased in the year 1940, and in 1941, and are stated in thousands of dollars per unit.

The engine purchased during 1940 cost $43,200; the one purchased during the year 1941 cost $46,500.

Q. You refer to the years 1940 and 1941, Mr. Watkins?

A. That is correct. The 600 horsepower Clark Brothers engine: One was purchased during the year 1939, which cost $22,800, while the one purchased during the year 1941 cost $24,600.

Q. All as shown on table for chart No. 8, taken from the company's gas plant records. A. That is correct.

Now, with respect to the 1,000 horsepower unit shown in [fol. 1489] the first block of this chart, the company has just recently entered an order for an additional unit for which the cost will be $52,200.

The costs with respect to these compressor station engines are the costs at the factory.

Chart No. 8 does not give a comparison of 1300 horsepower units.

Q. Have you the data with you on which such a comparison could be given? A. Yes.

Q. Will you please state it.

A. Yes. On October 7, 1941, Panhandle Eastern Pipe Line Company ordered two 1300 horsepower Cooper-Bessemer compressor station engines, the cost of which will be $64,000 at the factory.

The last recent purchase of a unit of this size occurred in the year 1940, and the cost at the factory of that unit was $52,200.

Q. So had you added a chart for the 1300 horsepower unit it would have shown the same comparative trend upward in price that is shown for the compressor station engines you have included in Exhibit 73 for identification; is that true?

A. That is true.

* * * * * * * * *

[fol. 1490] Mr. Wheat, the witness believes he made an error in stating the cost of a thousand horsepower unit recently purchased.

Q. Please correct it if you did, sir.

A. The witness believes he stated that the unit cost $52,200. The actual cost was $57,000.

Mr. Littman: That is at the factory, isn't it?

The Witness: Yes.

* * * * * * *

Chart No. 9 consists of a comparison of the cost of automobiles.

The comparison covers Ford V-8 "85" coupes and Ford V-8 "85" one-half ton pickups, and Oldsmobile "6" Tudors.

Q. Those are types of automobiles which are in actual use in the plant of this company?

A. That is correct, and we selected these particular types because out of the entire purchases for the fleet as a [fol. 1491] whole these three types were those that seemed to be more representative of equalized freight costs.

The Ford V-8 "85" coupes, purchased during the year 1938, cost $711 per unit, while those purchased during the year 1941 cost $892.

* * * * * * *

Q. What did you find with respect to the Ford V-8 "85" one-half ton pickups?

A. There we found the units purchased during the year 1938 had cost $682 while those purchased in 1941 cost $731.

* * * * * * *

The Oldsmobile "6" Tudors purchased during the year 1938 cost $1014 while those which were purchased during 1941 cost $1173.

Q. Now, Mr. Watkins, considering the data which you have shown in Exhibit No. 73 for identification, would you say that the charts and the tabulations in that exhibit show that there has been a trend upward or downward in

the prices suffered by Panhandle Eastern Pipe Line Com-
[fol. 1492] pany for the items covered?

A. I would state that the data most definitely shows there has been an upward trend.

Mr. Wheat: I think that concludes the direct testimony of this witness.

Mr. Littman: There has been a decided upward trend in the revenues, too, hasn't there, Mr. Watkins, or don't you propose to put in an exhibit on that?

Mr. Culton: You mean from MCF?

Mr. Littman: Well, both ways: MCF and in total.

The Witness: There has already been introduced through this witness Exhibit No. 49, which shows the total operating revenue of the company for the period from April 1, 1932, to December 31, 1941.

Mr. Littman: That is in Exhibit 49, isn't it?

The Witness: That is correct. The witness referred to that exhibit number.

* * * * * * * *

[fol. 1493] Louis Fenn Sperry, recalled as a witness on behalf of the respondent and duly sworn, testified further as follows:

By Mr. Wheat:

* * * * * * * *

Q. Have you since the last hearing prepared at my request, which was made pursuant to a request of the presiding Examiner, certain tabulations of data from your testimony on the subject of materials and supplies?

A. I have.

Q. And have those tables been prepared in a document of four pages, containing four separate tables showing the various figures which were used by you?

A. Yes. They include, however, figures on overall working capital as well as materials and supplies.

Q. Yes. In other words they are tabulations of data already contained in your testimony but put into usable form? A. That is right.

[fol. 1494] Q. May I ask you whether the document which I now show you is the tabulation to which you have just referred (handing)? A. That is it.

* * * * * * * *

Trial Examiner: It will be marked for identification as Exhibit 74.

* * * * * * * *

Q. Mr. Sperry, all of the figures contained on Exhibit 74 for identification are figures already contained in your testimony, are they not?

A. With one exception.

Q. Will you please state what that is?

A. The total on table 1 varies from the figures in the transcript of the testimony by a total of $50.

Q. Yes? A. In the amount of $374,000.

This discrepancy apparently arises out of a typographical error in the transcript.

The figures on this table are the correct ones.

* * * * * * * *

[fol. 1496] RALPH E. DAVIS, a witness called on behalf of the respondent, and, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Culton:

Q. Your name is Ralph E. Davis? A. Yes, sir.

Q. And you are the President of Ralph E. Davis, Incorporated? A. Yes, sir.

Q. What is the business of that company, Mr. Davis?

A. Consulting engineers and geologists and particularly in the field of natural gas and petroleum work.

Q. How long have you been engaged in that class of work?

A. I have been engaged in engineering and geological work for 35 years.

For something over 20 years practically all of my professional work has had to do with natural gas and petroleum.

Q. Were you employed about February of 1937 to prepare a valuation of the gas reserves of Panhandle Eastern Pipe Line Company located in the Panhandle and Hugoton Fields?

A. Yes. Some time prior, I believe, to February 1st I was employed.

Q. As of February 1 did you make a report of your [fol. 1497] valuation? A. Yes, sir.

Q. In that report did you give both your judgment of the then value of the reserves and the methods used by you in arriving at that conclusion? A. Yes, sir.

Q. I hand you a document entitled "The Panhandle Eastern Pipe Line Company—Natural Gas Supply—Value of Gas Reserves and Wells—February 1, 1937," is that a copy of the document which you delivered at that time (handing)? A. Yes, sir.

* * * * * * *

Trial Examiner: This document will be marked for identification as Exhibit 75.

* * * * * * *

By Mr. Culton:

Q. Mr. Davis, does the valuation contained in Exhibit 75 for identification represent your best judgment of February 1, 1937, of the then value of the gas reserves in the Hugoton and Panhandle Fields belonging to Panhandle Eastern Pipe Line Company and fully referred to in that exhibit? A. Yes, sir.

Q. And the bases set up in that exhibit for determining [fol. 1498] value are the bases which you used in arriving at your value?

A. That is correct. You referred to reserves a moment ago and now to value.

Q. Yes.

A. My answer is that the bases—

Q. You used the bases set out in here both in determining the amount of reserves you considered and the value of those reserves?

A. In both the determination of reserves, Mr. Culton, and the judgment regarding value, I feel that I have applied my general knowledge and experience as well as the particular detailed arithmetical calculations which are shown.

Mr. Culton: Yes. That's all.

By Mr. Littman:

Q. This estimate is what is commonly known as an estimate of the cost of reproducing the wells and leases of Panhandle Eastern Pipe Line Company, is it not?

A. No, I think not, sir.

Q. Well, what was the basis of your value of the leases, market value?

A. In a broad sense, I think so, yes. Yes, in a broad sense.

Q. And how did you generally place a value upon the wells?

A. I think if you have reviewed that report carefully [fol. 1499] you will find that I did not specifically place a value on the wells then owned.

Q. What I am trying to get at—I think perhaps Mr. Culton will understand.

Mr. Culton: You might just briefly give him—he has not had an opportunity yet to read this—you might just briefly give him the method used for determining value, the methods which were used.

The Witness: In the first place the Panhandle Eastern Pipe Line Company owned on the first of February, 1937, very substantial amounts of gas reserves, primarily leasehold lands in the Amarillo Field and in the Hugoton Field, and in each case the greater portion of the acreage thus controlled was in the area then regarded as a proven area.

I had been familiar with the Amarillo Field since the days of its first development and I had made many studies regarding gas reserves in that field, and the same would apply to Hugoton, and I brought those studies of reserves down to a very recent date as compared to February 1, 1937, and then I studied the character of the leasehold property of the Panhandle Eastern Pipe Line Company in each field to determine if their acreage was to be considered, let's say, average acreage, or would it be considered better than average, or less than average, and I came to a conclusion as to the proven reserves which I believed were [fol. 1500] recoverable and controlled by Panhandle Eastern in each field, in the Amarillo and the Hugoton Fields.

At the time of the study Panhandle Eastern were delivering to market slightly more than 20 billion cubic feet of gas annually.

The rate of delivery has been growing rather rapidly and there was very definite knowledge that in the very near future their deliveries to the markets would very substantially increase, and at that time we anticipated an early—that is, within a year or two or three—delivery of an annual amount of about 30 billion feet, and believed that that would gradually thereafter increase to some 40 billion cubic feet per year.

I had knowledge of the relative position of the company's controlled reserves through leasehold as compared to the reserves controlled through gas purchase contracts, and formed a judgment as to what quantity of gas I believed that the company would take from the Amarillo Field and from the Hugoton Field over a future period of 25 years.

I limited my estimate to 25 years for reasons which I considered good.

I had knowledge gained from a study of the company's operating experience as to the cost to them of producing gas. I knew that the cost of producing gas was greater per M cubic feet in years of low production and that the cost [fol. 1501] was substantially less in years of high production.

I looked forward to an increased delivery, and I estimated the future producing cost at an average overall of eight-tenths of a cent per thousand cubic feet, which figure did not include royalty, nor the cost of carrying undeveloped acreage nor did it include the cost of drilling new wells, nor did it include any cost of depreciation of old wells, nor depletion of gas lands.

It was eight-tenths of a cent per MCF for the so-called out-of-pocket operating cost.

I had fair knowledge gained through the years of what gas was worth in the Amarillo Field to those who were purchasing gas, and also in the Hugoton Field.

I knew the rate at which the company and others were making royalty settlements in each field.

I reached the conclusion that gas in the Amarillo Field would, during the 25-year period that I was anticipating, be worth at the well-head not less than four cents per MCF and in the Hugoton Field not less than four and one-half cents per MCF.

Now, there I had the basic elements for a so-called engineering appraisal in the estimate of the amount of gas which would be produced, the gross value of that gas at the well-head, the cost of bringing it to the well-head, and the time period during which the income would be derived. [fol. 1502] The frequently used method of applying a discount for deferment was applied by me, but instead of doing it on a certain percentage basis, such as eight per cent annual compound discount rate, such as that, I chose the shorter method of applying a 60 per cent discount to the expected net revenue.

In other words, the value on the basic data arrived at by me was 40 per cent of the expected net income and after due allowance for not only operating expense but the royalty payments to be made, payments on unoperated acreage, and the annual rentals, and the expected investment that would be required in additional wells.

Now, that sort of an appraisal—I call it an engineering appraisal—was presented in this report as reflecting fairly what my judgment led me to believe was the fair value of the acreage in each of these two fields which would contribute to the 25-year program.

The company held a substantial amount of acreage in addition to that which I have described, acreage that was so distant from its gathering system in each field, that I doubted it ever would be called upon for the purpose of delivering gas within the 25-years, and if the amount annually amounted to only about 40 billion feet, and so I gave that other acreage an acreage value—if was undeveloped—it was isolated so far as this company's requirements were [fol. 1503] concerned—and I merely applied a value of so many dollars per acre to that.

Mr. Littman: Was that based on what a willing buyer would pay a willing seller, generally?

The Witness: Yes, sir.

Mr. Littman: I did not mean to interrupt you, sir. You may proceed, if you wish.

* * * * * * * *

By Mr. Littman:

Q. It is clear to me from your explanation, and I wish you would correct me if I am wrong, that your estimate of the value of the leases and wells of the Panhandle Eastern Pipe Line Company in the amount of $5,080,000 as of February 1, 1937, was not based upon original cost?

A. No, it was not, sir.

Q. It was not predicated upon any purported book cost?

A. Not at all, no.

Q. But was arrived at by the application of your judgment to the data that you described and in the manner in which you have just described?

A. That, and I think I should say that for a number of years past I was familiar with the requirements of the various pipe line companies for gas, from gas acreage.

I knew that this acreage had very substantial value, and [fol. 1504] I think judgment entered into it, although the figure $5,080,000 is, as you see, an arithmetic answer.

Q. That is multiplying the recoverable reverves in MCF by the amount per MCF, which you arrived at in the manner you have described?

A. That and other certain factors came to me and gave me the answer $5,080,000; and I adopted that as a fair representation of the value because it accorded with my judgment.

Q. In other words, generally speaking, it might be said this method reflects the value of the recoverable gas reserves in the ground as of February 1, 1937; is that generally correct?

A. That was my judgment in 1937, yes, sir.

Mr. Littman: I have no further questions at this time but I would like to have the record show that in the opinion of Commission counsel this exhibit falls in the same category as other exhibits which deal with reproduction costs, and our objection goes to the values or reproduction costs stated in the exhibit, and not to the witness' estimate of reserves.

I will ask you:

By Mr. Littman:

Q. You have in this exhibit 75 for identification an estimate of recoverable gas reserves, have you, Mr. Davis?

A. Yes, sir.

Mr. Littman: I would like to have it understood that [fol. 1505] this Exhibit 75 for identification is subject to our general objection to reproduction costs, but those parts of the exhibit which do not deal with reproduction costs are outside the orbit of the objection.

. . . . . .

[fol. 1506] Q. Mr. Davis, referring to your "Summary and Conclusions" on page 18, in which you estimate the combined reserves of the Amarillo and Hugoton Fields at approximately 30 trillion cubic feet, do you mean by that recoverable reserves?

A. I do, sir.

Q. Now, as to the 30 trillion cubic feet which you have in mind, your figure of eight-tenths of a percent is the out-of-pocket cost of production per thousand cubic feet, which is applicable, I take it?

Mr. Littman: Eight-tenths of a cent and not percent.

The Witness: That is right, eight-tenths of a cent per MCF.

By Mr. Goodman:

Q. Yes.

A. That does not include, you understand, the drilling of wells in the figure for depreciation and depletion. It is the actual cost of operation during the year.

Q. Assuming that adequate wells will be built for the [fol. 1506] extraction?

A. That is right, and exclusive of royalties.

Q. Yes. Merely operating costs and the necessary structures and equipment is provided?

A. That is right.

Q. All right.

A. That figure, by the way, is supported by a table showing historical costs over a period of a few years.

Q. You mean the figure of eight-tenths of a percent?

A. Eight-tenths of a cent.

Q. Eight-tenths of a cent, I mean.

A. I think it is supported by certain data shown in the report on page 32.

Q. 32. Yes, I see.

A. Do you care for me to give you any explanation?

Q. No, I don't think so.

A. On the chart No. 1, I would like to point one thing out, Mr. Goodman, that down about the middle of the page, on the left-hand column, you see a caption "Total Cash Expense" about the middle of the page.

Q. I see that?

A. Do you see that, sir?

Q. Yes.

A. If you follow that to the right, the cash expense per thousand cubic feet of gas produced in 1932 was four [fol. 1507] and six-tenths cents, the next year it was three and three-tenths cents, the next year two and one-half cents, and the next year two and one-tenth cents, and in 1936 was 1.64 of a cent.

Now, the trend downward is due to the increase in the annual delivery.

That figure of the figures that I have just read to you include royalties, and the royalties amount to a sufficiently important amount here so that I think you can come to the figure that I use, eight-tenths of a cent, as a reasonable expectancy for the future, when you have in mind that they were delivering 20 billion a year when I made the estimate, and I was anticipating 30 to 40.

Q. Now, you limit your estimate to a period of 25 years, and will that 25 years, with the production you have in mind, dispose of the 30 trillion cubic feet that you have in mind?

A. No, indeed.

Q. It will not?

A. No, indeed, but there are many factors, Mr. Goodman, that are of uncertain import that might bring about a discontinuance of this business after a period of 20 or 25 or 30 years.

I wouldn't know how to estimate it any more closely, but I have thought that 25 years was a fair and sound period of time, being aware of studies made by people able, in [fol. 1508] my judgment, to carry through such undertakings as I am going to refer to:

I have been engaged in recent years to study the possibility of taking gas from these very fields in pipelines of 28 to 30 inch diameter, high pressure lines, lines that would be expected to deliver gas for industrial uses in the Chicago-Milwaukee district to compete with Illinois Coal, and most any type of service.

In other words, I am talking of gas that would sell there for maybe only 15 cents, possibly less.

If such things come to pass, 25 years might be too long a period. It might be.

I have thought it a reasonable estimate.

If something like that does not come to pass, 25 years may be too short a period.

Q. But you allowed a certain margin of safety here, didn't you?

A. I am describing to you right now why I allowed as much margin as I did allow, was because I had knowledge of what people were thinking about.

Q. Now I am referring again to the difference between the 30 trillion cubic feet of recoverable gas and that which you considered would be taken in 25 years.

A. 30 trillion cubic feet—in 1936 or 1937 they were taking approximately a little more than 600 billion feet per [fol. 1509] year, between 600 and 650, two-thirds of a trillion, so on the matter of just plain arithmetic, if they never took it out any faster, and continued, and were able to take it out that fast, you might have an indicated future of 45 years.

I wouldn't know that the takes would be limited to two-thirds of a trillion a year. That's the reason I couldn't, in my studies and in my advice to investors, and that by the way has been the principal responsibility that I have had in matters of this kind, I couldn't advise them that they could be assured of more than 25 years.

Q. Well, what output did you actually figure upon in terms of billions of cubic feet per year?

A. Are you thinking now of the Amarillo and Hugoton Fields?

. . . . . .

I just stated to you that the withdrawal, which had been about 700, or a little more than 700 billion in one year—

Q. Well, it says 600 billion here.

A. There was a year in which there was about 700. I have the table.

Q. Gas is being produced in those two fields at a rate of approximately 600 billion cubic feet per year?

[fol. 1510] A. In 1935 the total withdrawal was 748 billion but by 1937 it was down to about 600—well, for 12 months ending July 31, 1936, the figure was 617 billion. In other words, it had dropped substantially for reasons we don't need to go into, maybe.

[fol. 1511] Mr. Goodman: Now, what output did you have in mind for the ensuing 25 years for the field as a whole?

The Witness: I had in mind they might produce anywhere from 600 billion to a trillion per year, something like that. I could not be too sure what industry might require. I recognize it might go to more than a trillion.

Mr. Goodman: So, did you have in mind a figure of the quantity of gas still recoverable which probably would be left in the field after 25 years?

The Witness: Well, I do not know how much they would take out in 25 years. I could only form a general idea of it. I saw they were taking something over 600 billion. I thought they might build that up to 800 billion or a trillion or more. I believed it would last 25 years. If I could have known how much they would have taken out in 25 years, I could give some notion of what the remainder would be, assuming that my estimate of 30 trillion cubic feet is a good estimate.

Mr. Goodman: I take it that you take 25 years to be a safe figure within which a quantity of 30 trillion feet recoverable reserves would be adequate?

The Witness: I do not exactly understand your wording there.

Mr. Goodman: I take it that you took the period of 25 years as a period of time in which recoverable reserves of 30 trillion cubic feet would be adequate?

Mr. Culton: Adequate for whom?

[fol. 1512] The Witness: I will say that I thought that 30 trillion feet in the fields, that is my estimate of what is there. I thought that would be adequate for 25 years, yes sir.

Mr. Goodman: Without any precise calculation as to what would be drawn from the fields other than a broad general estimate?

The Witness: That is right.

Mr. Littman: Mr. Davis, when you speak of the life of the reserves, are you referring to the reserves of Panhandle Eastern Pipe Line Company in the acreage owned by that company on February 1, 1937?

The Witness: To the extent that I placed a value on reserves, yes. I showed in this report that Panhandle Eastern controlled acreage reserves were vastly greater than the amount I estimated that they would require in 25 years, but I did not pretend to foresee to what extent increased demand in the field might make inroads into the reserve of the field as a whole, and, consequently, in the reserves of Panhandle.

Mr. Littman: Well, let me read a paragraph on Page 18 of your Exhibit 75, and ask you a question with respect to that.

"After giving consideration to all of the known factors affecting the future supply and probable demand, it is our judgment that Panhandle Eastern Pipe Line Company will be able to obtain, at reasonable costs, supplies of natural gas sufficient for its market requirements for a period of [fol. 1513] not less than 25 years."

Were you refetring, there, to the reserves owned by Panhandle Eastern?

The Witness: Yes.

Mr. Littman: You were not, of course, referring to the reserves not in the possession of Panhandle Eastern, were you?

The Witness: I was referring to the reserves controlled through, first, leasehold ownership, and, second, gas purchase contracts.

Mr. Littman: That is right.

The Witness: None other.

Mr. Littman: That is what I understood it to be. You stated that you are a geologist, did you not, Mr. Davis?

The Witness: I do not know whether I said so or not.

Mr. Littman: I understood that you were.

The Witness: I have played the game.

Mr. Littman: Are you what is known as a petroleum engineer?

The Witness: I do not know. I have played the game.

Mr. Littman: What degree do you have, maybe we can get at it in that way?

The Witness: I have a degree of Bachelor of Science in General Engineering.

Mr. Littman: You would call yourself, certainly, a practical geologist, wouldn't you?

The Witness: I think I get along all right.

[fol. 1514] Mr. Littman: Well, I think you have, too.

The Witness: I do not mean to be funny.

Mr. Littman: Neither do I.

The Witness: I studied geology in school. In fact, I majored in geology. I studied basic sciences, like chemistry, mathematics and physics and, eventually, I got into the petroleum and natural gas engineering work and there is nothing in it that a fellow cannot follow if he has got general knowledge of arithmetic and a little chemistry and a little physics. You do not have to have a degree, so far as I know.

Mr. Littman: You have been working at it for a long time, as you say?

The Witness: That is right.

Mr. Littman: Mr. Davis, you are quite familiar, are you not, with the Hugoton field?

The Witness: I have been familiar with it for a long time, at least.

Mr. Littman: Is it correct to say, or is it not correct to say, that the Hugoton field is today yet undefined?

The Witness: We must know what we mean when we make that statement. The meaning that would occur to my mind is that the limits of the field are not as yet defined.

Mr. Littman: That is what I mean, by dry holes, is that correct, Mr. Davis?

The Witness: Generally, that is correct, yes, sir.

[fol. 1515] Mr. Littman: Is it not only true, generally, but also pretty specifically, that is to say, how many dry holes have been drilled in the Hugoton field?

The Witness: Well, there have been a few.

Mr. Littman: A few?

The Witness: But let me point out to you that the limit of the field, particularly a field of the Hugoton type may be indicated by the size of wells. You know the Hugoton field is located on a very broad, gently dipping monocline and it is not, so far as we know, limited on the west by any structural feature.

We believe it to be limited on the west by a thinning out of the porous formation, just more shale and less sand, the gradual disappearance of the porous bed within which the gas occurs in commercial quantities in the central part of the field, so, as you go to the west and drill wells, instead of getting a 10-million foot well or eight or six or five, you get a one-million foot well.

To me, that indicates an approach to the edge of the field.

Mr. Littman: How about the south? Is it defined in the south?

The Witness: No, I think it is pretty wide open to the south.

Mr. Littman: Have you finished your answer?

The Witness: Yes.

Mr. Littman: In fact, so wide open that today no one [fol. 1516] knows where the Panhandle field ends and the Hugoton field begins, is that generally correct?

The Witness: I might bring to your attention this proposition that in the Hugoton field the production is obtained from the Permian Dolomite. That is one of the three formations that produces at Amarillo. In the Amarillo field, the production is from the Gray Lime of the Upper Pennsylvanian, it is from the Granite Wash lying deeper and it is also from the Permian Dolomite. At the Hugoton field the production is practically entirely and, so far as I know, it is entirely, from the Permian Dolomite.

Now, at the northwestern end of the Amarillo field, the gas is a sour gas, whereas, in the southerly end of the Hugoton field, as we now know the Hugoton field, the gas is a sweet gas and it is not just a certainty that these two things can come together and be a single field.

Here we have a peculiar field, a great body of sour gas in the northwest corner of Amarillo, and that is where the Hugoton field should be expected to connect, if it connects at all, and yet there is one field, one field producing in one formation, and the other producing in three. It is not at all certain.

Mr. Littman: And it is as yet undefined?

The Witness: It is undefined in that area.

Mr. Littman: And what about the east of the Hugoton field?

The Witness: The Hugoton field on the east, the wells [fol. 1517] that have been drilled out in the east are small wells. They are so small that I doubt, really, that they

are commercial wells. Personally, I would not recommend the selection of acreage east of the line which, on my map of, at any rate, on my 1941 map, indicates the easterly edge of the field.

I think beyond that, gas may be found, in commercial amounts, may or may not, but generally the wells in that eastern border are small wells, indicating to me probably edging out of the field, although it is not defined by dry holes.

Mr. Littman: It is your testimony, I take it, that the Hugoton field is generally yet undefined by dry holes?

The Witness: I say the Hugoton field is not as yet definitely defined. It is not as yet definitely defined by dry holes but I think it is approximately defined to the west, northwest, and to the east by these small wells, which I personally do not consider sufficiently large, under present conditions, to be commercial.

To my mind, the field is pretty well defined by the type of edge wells we are getting, although they are not dry holes, except in certain instances they are dry.

Mr. Littman: How about the north? I am speaking of the north of the Hugoton field?

The Witness: Up there, north of what we have been calling the Hugoton field, sometimes, not too long ago some one brought in an oil well. I have not paid much attention to that. I rather think it indicates the north [fol. 1518] limit of the Hugoton field.

Mr. Littman: One oil well?

The Witness: That is all I recall.

Mr. Littman: You do not know anything about that well?

The Witness: I was told that it was a fair well.

Mr. Littman: But you have not examined the well log or the situation up there?

The Witness: That is right.

Mr. Littman: Or made any investigation with respect to that one oil well in the north, have you?

The Witness: No, I have not.

Trial Examiner: We will take a five-minute recess.

(Whereupon, at this point, a short recess was taken, after which the hearing was resumed.)

Mr. Littman: Mr. Davis, in looking through your Exhibit 75 rather hurriedly, I cannot find the abandonment pressure that you used in determining your estimate of reserves in the Texas Panhandle and Hugoton field. Could you tell us what abandonment pressure you used in arriving at this?

The Witness: That report that you have as of February 1, 1937, followed very shortly a report that was made as of November 1, 1936, and I think I gave some explanation and some data in the 1936 report that was not again repeated, and I believe that in that 1936 report, at least, I stated that it was quite impossible to anticipate at what average pressure the field would finally be abandoned as a [fol. 1519] major producer of gas, that I thought that possibly 30 pounds per square inch at the well head would be a reasonable figure to use.

Now, that was my view back in 1937 and I believe I did use that figure, and then I made some adjustment from what would have been a theoretical answer based upon Boyle's Law to take account of the then recognized fact that a substantial amount of the acreage in the Amarillo field was what we term "marginal acreage", acreage that is not as good as the best commercial acreage.

I made adjustment for abandonment at 30 pounds, for marginal acreage, being less than average in quality and for deviation from Boyle's Law and, after making those adjustments, reached the conclusion as stated in the report regarding the over-all gas reserves.

Mr. Littman: Are those adjustments shown in your Exhibit 75?

The Witness: Not in detail.

Mr. Littman: Could you state approximately what was the percent of the reserves ascertained by the application of the rock pressure decline method with the use of a 30-

pound rock pressure abandonment pressure? Did you discount for the other factors that you mentioned?

The Witness: You will note, or I will say to you, that as of July, 1936, the average pressure in the Amarillo field [fol. 1520] was determined to be approximately 355 pounds. That is the nearest date to February 1, 1937, that we had at the date of my study.

The pressures of wells in the Amarillo field are taken by the Railroad Commission of Texas once a year, usually in July and August, and those pressures are plotted on a map. Lines of equal pressure are drawn thereon, and the pressure of the field is determined, weighting the areas of certain pressure according to their size.

In other words, if I have 100 thousand acres with an average pressure of 300 pounds and I have 200 thousand acres with an average pressure of 400 pounds, then the 400-pound figure gets twice the weight that the 300-pound figure gets, because it applies to twice as large an area.

The average pressure, as determined in July, 1936, was 355 pounds. The original pressure in the field had been 430 pounds, so you will note a decline in pressure of 75 pounds down to July, 1936.

Considering the total amount of gas that had been withdrawn from the field, including the best estimate that we have of gas wasted, the figures that are adopted by practically everyone who deals with this problem in the Amarillo field indicated, in 1937, that the production of gas per pound drop in pressure of gas in the field had been at an average rate of about 68½ billion feet for each pound drop.

Now, if I applied that figure to the remaining pounds, I [fol. 1521] would have an estimate, 68½ multiplied by 355, but instead of doing that, I applied 68½ multiplied by the difference between 355 less 30, or 325, and you will see that 30 pounds is a little less than 10 percent of 355 pounds, so there was a nine-percent, we will say, reduction in the estimate to take account of the assumed abandonment pressure.

Now, to allow for the deviation from Boyle's Law I recall that the allowance for that was approximately 5 per-

cent and, in the same direction, a reduction. The allowance for marginal acreage was also about 5 percent and in the same direction, so I had a total reduction of about 19 percent to account for the three things I have mentioned.

Mr. Littman: Was that also true of Hugoton field, as well as the Texas Panhandle field?

The Witness: No, sir.

Mr. Littman: Can you give us the method used in that field?

The Witness: The Hugoton field was developed so much more recently than the Panhandle field, so little gas had been withdrawn from Hugoton by February, 1937, it seems to me that not more than 100 billion feet had been taken from field, and that was such a modest amount, as compared to the totals we are dealing with, you could not use it as a basis for making a reserve estimate.

Mr. Littman: You could not use [what] as a basis, you mean Boyle's Law, the application of Boyle's law?

[fol. 1522] The Witness: You could not use what we call the pressure decline and related production method. The decline in pressure in the Hugoton field had affected only a limited part of the area, 5 percent of the Hugoton field, 5 percent I would say offhand, and, certainly, not more than 10 percent, most of the field had shown no decline in pressure, a limited part, something like 5 or 10 percent, showed a very modest decline in pressure and with only 100 billion feet of gas withdrawn and with only something like 10 or 15 or, on the outside, 20 pounds of decline and in a very small part of the area, it was too small a base—it would be like trying to determine the distance from here to that building (indicating), using as a base line here something like a quarter of an inch.

If we had three feet to use as a base line and surveying instruments, we could get the distance over there within an inch or so. With a quarter-inch, we would be pretty good if we got within a rod, or two or three rods.

Mr. Littman: So you did not use any abandonment pressures in the Hugoton field for that reason?

The Witness: I would not say I used no abandonment pressure in that field, but what I did in the Hugoton field was this:

We had certain studies that had been made of materials taken from the wells, samples of the producing formation had been sent to laboratories for the determination of porosity. We knew something about the thickness of the producing zone. We knew that it was the Permian dolo- [fol. 1523-4] mite which is also productive down at Amarillo.

We had some line on what that formation should produce from one acre, based upon the thickness of the porous zone and the approximate porosity of it, the pressure.

In other words, a volumetric calculation was made.

Mr. Littman: Isn't that called the porosity method?

The Witness: That is frequently called the porosity method and the very first studies that I made of that, my figures were too high. I thought the gas per acre would be more than I now believe, and the reason for that error was this, that the sample sent to the laboratory, the laboratory man just tested the best part of the sample and I did not know that.

I thought he tested at random, but as I say, he selected the parts he wanted to test, and I got my figure too high, but I happened to do that back in a year when it did not make any difference because the acreage I was dealing with was the only acreage that was producing at the time, and it has already produced more gas than I gave it per acre because it has had the surrounding field from which to draw, but coming right down to what you want, I think that the Hugoton field is now practically proven throughout an area of more than two million acres.

I think that it will produce over all an average of not less than 7½ million cubic feet per acre. That indicates a future ultimate production of at least 15 trillion feet.

[fol. 1525] Mr. Littman: If you were making an estimate of the gas reserves in the Hugoton field today, would you use the rock pressure decline method in preference to the porosity method?

The Witness: We do not have enough data yet. It is still, in my judgment, a very dangerous thing to use because the gas production has come first from a limited part of the field.

It is very difficult to determine how much replenishment there has been into that area from the outside during the ten years of gas withdrawal.

I would do this: I would prepare a pressure contour map of the field. I would make a study, using the pressure decline method, and then I would also make a study based on the volumetric method, and I would take into account, particularly, the indicated better than average gas conditions in the south end of the field as compared to the central part where gas had been produced.

I would study these several different things and bring them together. That is what I really do. I call it 7½ million per acre today, and that is not any pure volumetric method nor pressure decline method.

It is partly a judgment method. It is partly based on what I know the Permian will do in Amarillo, where it has been productive a long time.

Mr. Littman: Is that 7½ million per acre the recoverable reserves, that is, after discounting for abandonment pres- [fol. 1526] sures and the other discount items that you mentioned a few moments ago?

Mr. Culton: I would suggest, when you said 7½ million, that is M. c. f.

Mr. Littman: Yes, 7½ million cubic feet.

The Witness: Yes, that is right. That is what I mean, recoverable.

Mr. Littman: Your answer to my question as to the discount factor was yes?

The Witness: Yes.

Mr. Littman: In making estimates of reserves in the Panhandle field, which method would your prefer, the rock pressure decline method or the porosity method?

The Witness: There are objections to each method. There are difficulties in the application of each of the two methods. The difficulty in applying the porosity method is that no man in the world knows much of anything about what the porosity is.

Mr. Littman: You cannot tell what it is, in the Panhandle field, can you?

The Witness: Nobody has ever taken a core of even a single well so far as I know, and had the porosity determined throughout the pay zone from top to bottom, but even if he had done that and had done it for 25 wells, he still would have only 25 samples in a field 125 miles long, so he would not have anything, anyway.

He would have another one of these little things one-[fol. 1527] quarter inch long to measure the Washington Monument with. We know pretty well how thick the producing zone is in the Amarillo field from data from more than a thousand wells. I think the figure is 71½ feet average thickness, but nobody knows whether the porosity is 20, 30 or 35 percent.

The boys who use 20, think 20 is a good figure to use. I think 30 would be a better figure, myself. The reason I think 30 would be better is because it must be 30 if the answer we have by the other method is right.

Mr. Littman: By "the other method", you mean the rock pressure decline method?

The Witness: That is right.

Now, the rock pressure decline method has this uncertainty about it, that the pressure in this great field of almost 4½ million acres has not gone down uniformly throughout the whole field. The pressure has gone down more in the area of greater than average production and less in the marginal area, so when I find the average pressure in 1940 to be 320 pounds, and if I made my study without any correction for the marginal acreage.

I would be getting too high an answer. I am satisfied that I would be too high if I did that and, therefore, I must make some correction.

Well, the best that we know about the field is that there is about 450 thousand acres, in round figures, of marginal acreage out of 1,467,000, which leaves a little more than a [fol. 1528] million acres of what we call the best commercial acreage.

That acreage has produced most of the gas that has come from the field.

I have made many attempts to solve that problem. Without going into detail with you, I believe that the correction factor that I apply takes care of the fact that the marginal acreage will be less productive.

Mr. Littman: And that is the correction factor which you mentioned a few moments ago, namely, of 30 pounds abandonment pressure—

The Witness: (Interposing) Not the 30 pounds, that has nothing to do with it.

Mr. Littman: Plus the two 5 percent factors?

The Witness: Just one of those 5-percent factors.

Mr. Littman: Which one is that?

The Witness: Not the one that has anything to do with the deviation from Boyle's Law, but the one that has to do with marginal acreage.

Let me point out this: If I had [being] doing this problem back in 1930, when the decline in pressure had been very, very little, one percent correction for marginal acreage would have been sufficient.

But, by the time you get down to January or February of 1937, I tell you 5 percent at that date was a sufficient correction. Now, in 1941, it would require a higher correction.

[fol. 1529] Finally, at the late 1955, 1960, when you get down there, we are going to be making still greater corrections. You can see that the first year there would not be any correction and, in the last year, it would be a maximum.

Mr. Littman: What would you say would be the proper correction factor to apply as of, say, June, 1941?

The Witness: June, 1941, for the west field, I think around 7 or 8 percent, 7 percent probably, for the west

field; and for the east field, pretty close to 20 percent; for the combined field about 10 percent.

Mr. Littman: Which field does Panhandle Eastern have its acreage in?

The Witness: In the west field.

Mr. Littman: And what figure would you give as the estimated original recoverable reserves per acre for the Texas Panhandle field, that is, the west field, which would be comparable to the 7½ million cubic feet per acre that you gave a few moments ago for the Hugoton field?

The Witness: Well, it would be 18 or 19 million feet per acre.

Mr. Littman: That figure represents the recoverable reserves?

The Witness: Yes. I always mean that unless I specify otherwise.

Mr. Littman: I believe there is one question that you [fol. 1530] have not answered for me, and that is what abandonment pressure would you use today in the Hugoton field?

The Witness: Today?

Mr. Littman: Yes, in estimating reserves—well, let's say as of June 30, 1941.

The Witness: Well, I think I would not go below 50 pounds. I do not know that I would go that low.

You see, in Amarillo, the formation is so much more permeable. You get so much more gas from a well.

Mr. Littman: I believe I asked you about the Hugoton field, sir.

The Witness: Yes. I am saying, though, that at Amarillo you get so much more gas from the wells when the pressure is 340 pounds than you get at Hugoton. I believe, when you get down to, say, 50 pounds in each case, I think we will be getting several times as much gas per well in Amarillo than in Hugoton; so, if the pressure is properly estimated at somewhere between 30 and 50 pounds

at Amarillo, and that is my present judgment, then the abandonment pressure at Hugoton will be somewhere between 50 and 100 pounds.

Mr. Littman: Can you estimate it any closer than that?

The Witness: If I could, Joe Crevelling would probably be willing to pay me $50 more for the job.

Mr. Littman: There have not been any wells abandoned in the Hugoton field on which to predicate an actual figure?

[fol. 1531] The Witness: Even if there had been, that would not mean anything. These wells that are abandoned early in the history of a field, they are usually abandoned for a specific cause.

Mr. Littman: I take it, it is pretty much of a guess what the proper abandonment pressure should be?

The Witness: It is going to depend, in a large manner, on the economics of the thing, 20, 30 or 25 years from now, the economics, what is gas worth. That is going to be a big factor.

Mr. Littman: I take it the specific answer to my question is yes, it is pretty much of a guess?

The Witness: That is right.

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[fol. 1535] Mr. Goodman: Can you tell us the applica-
[fol. 1536] tion of your testimony concerning reserves and your exhibit relating to conditions of 1937 to the present time?

The Witness: Well, there has been a great deal of water gone over the dam since 1937. There is a very, very different business picture in front of Panhandle Eastern today as compared to 1937.

Their present deliveries of gas are of the order of 60 billion feet per year. Back in 1937, I was talking about 30 to 40 and, in forming a judgment of the value of their gas lands, gas reserves in 1937, I was relating that to the amount of gas that they could market from their acreage

over the 25 years I had in mind, and a study of my report will show that I used up, in that 25 years, only a very modest part of their total reserve.

I come to 1941, I see a company delivering 60, with the prospect that they will build that up to 80. I do not know what they will build it to, but I know from this recent study of mine that they have in the two fields reserves that justify this greatly increased delivery and, based upon the conditions of 1941, the reserves of gas lands are worth at least twice what they were in 1937.

Mr. Goodman: How about quantity of reserves in 1941?

The Witness: They have plenty of reserves in 1941.

Mr. Goodman: Could you give me a more definite figure?

The Witness: I will see what I have right here. Here [fol. 1537] is a study as of September 30, 1940, and the total proven acreage under leasehold control in the two fields combined was 235,594 acres, and the gas reserves controlled through gas purchase contracts in the two fields covered 56,868 acres.

* * * * * * * *

[fol. 1588] J. D. Creveling, a witness called on behalf of Panhandle Eastern Pipe Line Company, being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Culton:

Q. Your name is J. D. Creveling, and you are President of the Panhandle Eastern Pipe Line Company.

A. That is correct.

Q. How many years' experience have you had in the gas business?

[fol. 1589] A. I did my first work in connection with the natural gas industry in 1904 and have worked, at least a part of every year, from that year to date in such industry.

Q. Detail the types of experience you have had.

A. Well, in 1904, strange as it may seem, I started to work for a natural gas company as a carpenter. In those days, we used much wood in the construction of structures,

especially compressor stations, and the first work I did was on a compressor station which was one of the first large gas-engine driven compressor stations built in the United States, near my home town of Mount Vernon, Ohio.

Thereafter, I worked for gas companies continuously in the summer time in positions of responsibility, at all times having charge of construction or operations and, in the early days, I was going to school in the winter.

In 1913, I went to Oklahoma in charge of the construction of what is now known as the Tallant Compressor station in Osage County. I came back to the Ohio territory after that work was concluded and have, since about 1915, worked continuously for natural gas companies, principally in the States of Ohio, West Virginia, Pennsylvania and some in Kentucky until 1918, at which time I returned to Oklahoma in charge of all construction work for the Cities Service Company in the mid-continent having to do with natural gas and natural gasoline activities.

I remained in Oklahoma—

. . . . . .

[fol. 1590] The middle of 1919, July 1, I think is the exact date, I was moved to the New York office of Cities Service Company as head of natural gas activities of that company for all of its properties operating in at least fifteen different States and in the Province of Ontario.

I remained with that company in that capacity until the middle of 1936 and during that time, I did some consulting work, principally for the La Habra Gasoline Company of Los Angeles, California, the Monongahela-West Penn. Power Company at Fairmont, West Virginia, and the J. G. White Engineering Company of New York City, at which time, that is, the middle of 1936, I resigned to accept the Presidency of the Panhandle Eastern Pipe Line Company, which position I have held to date.

Q. Have you, for some years, been connected with any trade association?

A. Yes. In 1923—you know, these dates go back a long ways—I was President of the Natural Gas Association of America, at which time I introduced a famous geologist, Mr. Ralph E. Davis, to the industry.

I have been a member of various important committees having to do with industry matters for many years and, [fol. 1591] for many years, I represented the industry on the Advisory Council of the Bureau of Mines at $1.00 per year and I have not received any compensation yet. I have been, for many years, and am now, natural gas representative on the Board of Directors of the American Petroleum Institute.

Q. I believe you stated you came with the Panhandle Eastern Pipe Line Company as President in 1936. Do you recall what time of the year it was, about?

A. It was in June, 1936.

Q. At the time you came with the company, did you have a general knowledge of the company and its markets?

A. It was part of my duties, in the position occupied immediately previously, to be well acquainted with activities of the industry throughout the entire country. I did, therefore, have what I consider was a fair general knowledge of the Panhandle Eastern Pipe Line Company and its then existing and potential markets.

Q. After you became President, did you take steps to further familiarize yourself with the company?

A. I did, naturally, the first one of which was a careful investigation and appraisal of the personnel. This, under any circumstances, would be an important first step. It was an especially important first step in this particular case because of the fact that I was taking the place of a man who had built up this personnel and who, because of [fol. 1592] certain legal conditions, could no longer be a principal officer of the company and he was still a member of the organization.

It was only natural, therefore, that I assure myself, not only of the quality of the personnel, but also that the personnel was one whose loyalty was first with the company, rather than with an individual. I made such a check and found what I considered the nucleus of a very fine organization, and found the spirit universally all that could be expected.

. . . . . .

[fol. 1593] Q. Mr. Creveling, I assume that one matter to which you probably gave some attention was gas reserves.

Before discussing those, I would like for yor to give me a definition of what you consider to be an integrated gas company.

[fol. 1594] A. Of course, an integrated gas company, which we are not, would be one having an adequate reserve, transmission facilities of sufficient capacity, and markets all in balance. We do not have any retail markets.

Q. In other words, you own no distribution facilities?

A. That is right.

Q. What is the type of company represented by Panhandle Eastern Pipe Line Company?

A. Production and transmission, its business being largely wholesale.

Q. Irrespective of the meaning which might be given the same word under other circumstances, I would like to have you give us your definition of operative acreage, from the standpoint of the owner of a pipe line company?

A. Our conception of operative acreage is that acreage essential to the successful conduct of its business over a period of years commensurate with its ability or with its financial requirements and the requirements of the markets which it serves.

Q. What is the necessity for a company of this kind to have acreage of this character?

A. This acreage, of course, might be compared, if you please, to a coal pile. We cannot expect to sell our commodity to prospective customers on a day to day basis. We must be able to approach them on a basis that will warrant them changing from whatever fuel they are then using and incurring the cost incident for a long enough [fol. 1595] time to, in their judgment, enable them to economically justify the change.

A company such as this also, and by "such as this", I mean one that has been and still is rapidly growing, must attract new capital. The size of our reserves must be adequate, from that standpoint, to satisfy any prospective capital, especially that which is taken into the company in the form of debt, must be of an adequacy beyond the maturity of that debt.

Q. Did you, when you first went with the company, check into its reserves for the purpose of determining the adequacy?

A. Amongst other things that I am not, I am not a geologist. I appreciated the fact, however, that the question of reserves was an important item. I was of the general opinion that the reserves up to that time, in view of the markets that had been attached, were adequate.

I was not certain of the amount of those reserves, however, or their adequacy looking into a reasonably expected future. To that end, I employed Mr. Ralph E. Davis to make an estimate of the reserves and a valuation thereof, both in the Hugoton field and the Amarillo areas, and the results of that investigation are a part of the records of this company. That was done late in 1936 and early in 1937.

. . . . . .

Q. Since that time, has the company made any additions [fol. 1596] to, or changes in, its reserves and, if so, why and what changes?

A. We have. In the Amarillo field, we have acquired very little additional acreage under lease. We have, however, acquired considerable acreage under purchase contracts for the life of commercial production on those leases.

We acquired that reserve largely under purchase contract for various reasons, one of the important one being that the location of these reserves was such, in reference to our own reserves, that it better blocked those reserves and made for a more economic production of these reserves over their life.

In the Hugoton field, a slightly different condition existed. There were parts of that field that were not, at that time, proven. As a matter of fact, they were considered pretty much wildcat in nature.

Mr. Littman: You are speaking of the year 1936, Mr. Creveling?

The Witness: That is correct, and immediately thereafter.

We were able to encourage, through purchase contracts, at prices delivered into our main gas transmission system in the field, potential reserves, and by that I mean reserves if development disclosed the fact that they existed under

the particular acreage, of gas under purchase contracts that we considered very favorable and which, in addition to that, would prove our own acreage in the general vicinity covered under these purchase contracts.

[fol. 1597] By Mr. Culton:

Q. In other words, the drilling on those gas contract acres would help to prove the existence of gas under your own leases in the area?

A. That is exactly the case, and I refer principally now to the north end of the Hugoton field, principally Grant County, in which county under three contracts, we had the call on any gas reserves discovered under a minimum of 30 sections of land and a maximum of 90.

Q. Did you adopt any policy with respect to the closeness of wells, the spaces between wells or the acreage surrounding wells?

A. Very definitely, yes.

Q. What was that policy?

A. We were very definitely of the opinion that economic development and production of gas in fields such as the Amarillo and Hugoton areas could not be carried out with more than one well per section of land.

We therefore, adopted that as a company policy, that we would not enter into a purchase contract where one well did not hold at least 640 acres. Neither would we drill a well where we had not been able to unitize a block into one of at least 640 acres.

Q. Why didn't you drill all of these tracts immediately upon acquiring them?

[fol. 1598] A. Because of the economics involved, which economics, of course, in its last analysis, goes finally to the public. To carry a section of land under lease would probably cost at an average, $320 per year.

Q. As delay rental?

A. As delay rental, which, of course, would be an expense item. To drill one well on that section and connect it to our main transmission lines would cost an average of possibly $25,000. It is our belief that it is more uneconomic to pay a delay rental of—

Q. (Interposing) More economic or uneconomic?

A. (Continuing)—$320 a year, rather than have $25,000 additional investment substantially in advance of

when the production or the reserve rather, developed through that investment would be necessary to adequately serve our markets.

Q. You used the words, "more uneconomic." You meant, "more economic", did you not?

A. That is correct.

Q. You just misspoke the words.

Why not wait until you need that gas before acquiring the lease?

A. That would be a very fine situation, if it could be done, but competitive situations have been, and are now, such that, in that field, you could not acquire on as favorable a basis, currently, leases for development as you could [fol. 1599] at the time these leases were acquired.

Q. In other words, other companies are buying leases and producing from the same reservoir?

A. That is correct, and other lines are being talked about and projected out of the area, none of which, I hope, are built.

Q. Is there any way by which you can prevent their construction?

A. By no way that I know of, unless we come to the Federal Power Commission and represent they are about to compete with our markets and have them agree with us.

Q. Mr. Creveling, has the company adopted any, I suppose we should call it "new order" in the business of producing wells?

A. We have possibly developed something that could easily be so classified. By that, I refer to the acidization of wells.

About the time I came with the company, while acidization had been in practice in connection with oil fields in certain areas, it had not been developed in connection with gas fields.

In these two fields, the porous space in a producing horizon is partially filled with lime which, of course, cuts down the number of openings through which gas may come into the well bore, restricting the rate of flow from the wells.

As I said, acidization was in a very embryonic state, so [fol. 1600] far as natural gas wells were concerned. A

few wells had been acidized with approximately 1,000 gallons with some improvement but probably not enough to justify it unless there was something more that could be done.

We have developed this process further—I say "we", we developed it in cooperation with two companies who had had considerable experience in acidization of oil wells—to the point where we have now acidized some 54 of our wells and have increased the original open flow from slightly over 200 million to over 750 million.

Now, I want to be understood on that. We have not increased the reserve under that acreage by that process, but we have developed a more economic method of removing that reserve from its underground home.

Q. Why is it more economic?

A. Because of the fact that the original cost of a well in those areas might reasonably be taken at $20,000. It costs from $1,200 to $1,500, possibly an average of $1,400, to completely acidize a well with possibly a thousand gallons of diluted hydrochloric acid.

Q. A thousand or ten thousand gallons?

A. Ten thousand gallons. Did I say a thousand?

Q. Yes.

A. Ten thousand gallons of hydrochloric acid.

Q. The old method was a thousand?

[fol. 1601] A. The old method was about a thousand.

You can readily see, if it is profitable to spend $20,000 on the original well cost, obtaining a certain open flow thereby, it most certainly is within the limits of good economy to spend another $1,400 to increase that open flow by more than 200 percent.

This also goes beyond the original open flow of the wells in that it materially reduces the cost of taking care of those wells. There is practically no cleaning out work to be done on a well that is acidized as soon as it is drilled and it is our policy now to acidize the wells as we drill them.

Q. Since you have been with the company, has it adopted any policy with respect to consolidations and exchanges of leases?

A. We have. As I indicated to you, we do not drill a well on a tract that does not, in consolidation with other tracts, total at least 640 acres. Many of the leases in those areas, of course, are not 640 acres in size. We have, therefore, through trades with other companies, consolidations of various sorts and, through the acquisition of other tracts, consolidated before starting the drilling of a well, and do not start it until the consolidation is completed.

Q. Mr. Creveling, in your judgment, is your present reserve adequate for the markets which the company now anticipates?

[fol. 1602] A. If that question had been asked me a year ago, I would have been inclined to say yes. In view of the demands, however, being presently put upon us, the growth of those demands being much more rapid than we had previously estimated them, it is my judgment that we could well add to our acreage in favorable locations from time to time and our land and lease department, in cooperation with our geological department, is carrying out such a program on a modest scale at this time.

Q. Passing now to consideration of the transmission facilities of the company, what was the extent of the line which existed when you came with the company in 1936?

A. It had two main gathering lines, into the Liberal Compressor Station.

Q. One from the Panhandle field and one from the Hugoton field?

A. One from the Panhandle field and one from the Hugoton area and, from that point, had a transmission line of 24, 22 and 20 inch pipe diameter, running in a generally northeasterly direction, as has already been described in detail in this case, to a point on the Indiana-Illinois State line near Dana. It had installed, at that time, three compressor stations having a total installed horsepower of 14,000.

Q. What was the sales capacity of the line at that time?

A. The sales capacity of the line at that time was approximately 80 million cubic feet per day.

[fol. 1603] Q. Did you know anything definite as to the condition of the line?

A. I had some general thoughts about the line that caused me to feel that certain checks should be made to determine the exact quality of our transmission facilities

before our load built up to a point where they would be worked substantially to their capacity.

Q. What steps did you take to ascertain the condition of the line?

A. In acquainting myself with the affairs of the corporation, from time to time I went over the construction contracts and specifications for the original line. I found also that there had been used in the construction of this line, many different makes of pipe, all the way from lap weld to electric weld and seamless.

I knew that this pipe was acquired at a time when the demands on the pipe mills of the country were at a peak and that the line had been procured from various mills in any amounts that those mills could furnish above their other sales.

I was not certain as to the quality of this line and, in order to satisfy myself, I employed Mr. P. McDonald Biddison, whom I had known for many years, and with whom I had been associated for a part of that time and who had a reputation as one of the best natural gas engineers in the country, to make a valuation and appraisal of this [fol. 1604] entire system for me. This was done late in 1937 and completed in 1938.

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Q. He was not a regular employee of the company, was he?

A. No, he was an outside consulting engineer.

Q. Did Mr. Biddison make a report to you, a copy of which has been offered in evidence? A. He did.

Q. Did you ascertain, when you came with the company, that there was a restriction in some portion of the line?

A. When I came with the company, one of the first things the operating men told me was the fact that the apparent capacity of the west end of the system was below that which it should be by the application of the then usually accepted flow formula.

This had not been previously an important item because of the fact that there was adequate capacity for the then existing markets in spite of these restrictions.

However, I put two engineers on the job of finding out what this was, because we were in the process of connecting other large markets, and we were approaching the point when we would need the maximum reasonable capacity of the line, with the result that the type of restriction was discovered and removed, thereby increasing the flow efficiency of those sections of the line from the low seventies to the low nineties (in percentage).

[fol. 1605] Mr. Littman: When did that occur, Mr. Creveling?

The Witness: That occurred in 1938.

By Mr. Culton:

Q. What was found to be the restriction?

A. There was a very thin scum formed on the inside walls of the line that I could describe, in lay language, as resembling, in general appearance, the roughness of sandpaper. The binder holding this sand in position apparently had come from a mineral seal oil from our gasoline plant and, possibly, some lubricating oil that had come through the compressors.

Q. How was that substance removed?

A. It was removed by running through the line, a section at a time, and by that I mean between gate valves—we have a gate valve on our main line about every eight miles—a device developed by our engineers on which a patent has been obtained.

Q. Was that the "go-devil" that has been referred to?

A. Yes, commonly called the "go-devil."

. . . . . .

Q. (Interposing) In a practical manner, what happened?

A. This go-devil is designed so that, by the pressure of the gas back of it, it is moved through the line in a rotary motion. It has on it wire brushes which, if you please, loosen up the material on the inside walls of the line, and it is so designed that the coneentric ring between [fol. 1606] the back part of the go-devil and the inside wall of the pipe can be varied to such an extent that enough gas will pass ahead of the go-devil to carry with it the loosened particles.

Q. During the period about which you have been talking, was there any pressure test made of the line?

A. There was. As I indicated, upon reading the contracts covering the original construction of the line and the specifications for material, I found that although the generally accepted maximum working pressure of the line was 450 pounds, these contracts and specifications indicated the fact that we probably had a line that could be safely worked at 500 pounds maximum working pressure.

To establish the reasonableness or unreasonableness of that position, during the year 1938, when our demands were not building up so rapidly, we tested our entire line, section by section.

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To a pressure of 550 pounds, which pressure we figured would be sufficiently high to permit of a working pressure of 500 pounds maximum, provided those tests were, in our judgment, satisfactory.

Q. What was the result of the test?

A. Out of over 150,000 joints of pipe, we had 7 leaky joints, of which only three were complete failures, and out of some 85,000 couplers used on this line, we had only 3 failures, a performance that I, in my judgment, think [fol. 1607] would not be excelled by a line built today giving full consideration to any advances in the art of manufacture or construction from the date this line was laid to the present time.

Q. I assume that these bad joints and bad couplers were replaced?

A. They were removed, replaced with other material of the same size, and the line was again tested to 550 pounds.

Q. Has it been operated at a 500-pound pressure at numerous times since then? A. It has.

Q. During this same period, did you make any discovery with reference to anything else relating to the flow capacity of the line?

A. Yes, in cleaning out the line and making the tests of flow capacity before and after, we found a performance that we had felt certain existed, that is, that the flow capacity of large pipe lines under normal conditions was somewhat in excess of that indicated by the use of the

then generally used flow formula known as the Weymouth Formula.

We found, by actual experience and tests, that lines of this size, especially this line, perform more nearly in accordance with the flow formula in which Nikaradse's friction factor was used.

[fol. 1608] Q. From the standpoint of efficiency, what was the result of your discovery that the line would stand 500 pounds operating pressure and that this new formula was applicable?

A. Of course, we did not buy any additional capacity by developing the fact that the formula we had previously used in figuring capacity was too low or gave us too low a capacity.

However, it did give us some assurance of our ability to deliver an additional amount of gas than that we had previously considered possible.

With the raising of the pressure from 450 to 500 pounds, the tests and repairs resulting from which cost us approximately $50,000, we did buy a material increase in capacity. The total of those two items was approximately 30 million cubic feet, of which some 9 or 10 million was due to the formula and at least 20 million to the raising of the maximum pressure from 450 to 500 pounds.

In other words, we furnished, for the use of our customers, 20 million of additional capacity for $50,000 when, up to that day, capacity per million had cost possibly $250,000 or, saying it another way, for $50,000 we established a capacity that to have laid additional pipe lines working at 450 pounds, would have cost us between 4 and 5 million dollars.

[fol. 1609] Q. Has there been much of a turn-over in the employees of the company?

A. There has been practically no turn-over. As a matter of fact, possibly it has been even too small.

Q. In other words, practically all of the employees have been with the company a number of years?

A. That is correct.

Q. What construction was in progress when you came with the company in 1936?

A. The Detroit City Gas Company contract had been negotiated and executed prior to the time I came with the company. Construction work—

Q. (Interposing) Right there, did that contract require greater capacity than the 80 million cubic feet daily which the line at that time had?

A. The Detroit contract is a requirement contract by one of the terms of which our maximum obligation, as the [fol. 1610] original contract existed, was 90 million cubic feet per day.

As I was about to say, this Detroit contract was about to become operative and construction work, looking toward the delivery of gas to the Detroit area, was in progress. So far as the Panhandle Eastern Pipe Line Company is concerned, it was adding to its transmission facilities 8 additional compressor stations which stations had an installed horsepower of 29,300.

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Q. All right. Was there any pipe line construction going on at that time?

A. At that time, as I recall it, Panhandle Eastern Pipe Line Company was not making any addition to its main pipe line system.

Q. What increase in the capacity of the line was effected by the construction of these compressor stations to which you have referred?

A. I would like to call your attention to the fact that in quoting capacities now, I am quoting prior to 1938, when work was done to increase the pressure and also when we, in estimating our capacities, gave proper credit to the flow formula.

Q. In other words, you are talking about the construction in 1936 and 1937?

A. That is correct. This work in 1936 increased the sales capacity of our system from 80 million to approx- [fol. 1611] imately 125 million cubic feet per day.

Q. This increase resulted solely from the addition of compressor stations? A. That is correct.

Q. What work, if any, was done in 1938? Was any construction of pipe line done in 1937? A. Yes.

The first delivery of natural gas under the Detroit contract was made July 7, 1936. The change-over from manufactured to natural gas was completed in December of the same year. The effective date, therefore, of the contract by one of its terms was January 1, 1937.

We had, in 1936, built capacity that we felt would be sufficient to carry all of our market requirements, including that of the Detroit area, for the winter of 1936.

We had not, however, built sufficient capacity to place us in a position to fulfill our maximum obligations under the Detroit contract, if we should be called upon to do so.

Therefore, in 1937, we did additional construction work along two lines. We further increased the installed horsepower in our various compressor stations by 29,400, and also started the looping of our main line; by looping I mean started the paralleling of the original line with another line, during that year laying approximately 270 miles [fol. 1612] of main line loops.

Q. What resulting capacity did you have after that work was completed?

A. This gave us an estimated resulting capacity of approximately 170 million cubic feet. Now, it was immediately after this, or in 1938, during which year we made these tests, because we could see, near the end of 1937, that we were going into a general industrial recession, if you please, and that increases in market requirements would not be as rapid as they had been, that we did the work, which work resulted in increasing our estimated capacity of our pipe line by 30 million or raising it from 170 to 200 million.

Q. As a result of that discovery, did you need to do any additional construction work in 1938?

A. We not only were not required to do any additional construction work in 1938 but, at the beginning of 1939, it did not appear that any would be necessary.

I would like to call your attention to the fact, however, that only about a third of this additional capacity could be classified under what you called "discovery." The other

was the result of actually improving the condition of the facilities as they then existed.

Q. What changes were found necessary, what increases were found necessary in 1939?

A. As we progressed into 1939, the Detroit City Gas [fol. 1613] Company indicated a probable maximum day the coming winter of 100 million, where the maximum under our contract as it then existed, was 90 million.

We immediately instituted a construction program to take care of this, as well as other apparent increases in demands due to the general improvement of business in the year 1939, which improvements probably were the forerunners of what we call our defense program.

Before that construction work was completed, it was apparent that the Detroit City Gas Company would probably require more capacity than the 100 million, indicating and requesting us to be able to serve that varying requirement up to 125 million.

We, therefore, if you please, superimposed another construction program on the one then in progress, which would place us in a position to deliver to the Detroit area 125 million cubic feet per day.

Q. And how much pipe line construction was carried on during that year as a result of those two programs?

A. As I recall it, there was approximately 250 more miles of main line looping done; and certain additions to compressor stations.

Q. Do you recall what those additions were?

A. We put in two small units, one at Tuscola and one unit at Greensburg, 1200 horsepower is my remembrance.

* * * * * * * *

[fol. 1614] Q. Mr. Creveling, before recess, I believe we were discussing the construction program by the company carried on in the year 1939.

A. 1939, and the early part of 1940, it ran over.

Q. Upon the conclusion of that program, what was the sales capacity of the line?

A. The sales capacity was increased from 200 to 250 million cubic feet per day.

Q. In our references to capacity at various times, you have been referring to sales capacity at all times?

A. I only talk about that capacity which we can convert into dollars, which is sales capacity.

Q. Yes. You have referred to the circumstance that the Detroit market was increasing from time to time. Have you had similar increases in other markets than Detroit?

A. I believe I indicated that in the statement to the effect that in 1939, not only were we requested for an increase in capacity dedicated to Detroit markets, but also our markets in general were increasing and at possibly as rapid a rate.

Q. Has the company carried on any construction since this work which was completed in the early part of 1940 up [fol. 1615] to recently, or is the sales capacity now the same as it was at that time?

A. 250 million cubic feet sales capacity as of the completion of the work of 1940 is the present sales capacity of our system.

Q. If the load during the winter of 1941 and 1942 is to be that which you are now estimating, will you be able to carry the peaks without additional construction?

A. We hope and expect to be able to carry all peaks created by our firm customers, but shall not be able to carry the total requirements of all customers attached to our lines at the present time.

Q. Do you recall what your cushion was on the peak day last year?

A. Our peak day's sales during the past winter were approximately 242 million cubic feet with a sales capacity of 250 million cubic feet.

Q. Has there been anything which prevented you from being ready to carry the peaks this winter? A. Yes.

Q. What is that?

A. We had under contemplation and had designed and put into operation, a construction budget, or a construction project which would have enabled us to, in our opinion, meet the coming winter's peaks substantially in their entirety, had we been able to obtain material soon enough

[fol. 1616] so that the construction work could have been completed before the time of those peak requirements.

However, although we applied for priority rating in May in order to obtain this material, primarily steel for pipe lines and in an amount of about 57,000 tons, we only, within the past ten days, have obtained a priority rating that, in our judgment, and the judgment of the steel mills, will give us this pipe.

We expect to obtain deliveries starting in November, possibly the middle or, shortly thereafter, and running at the rate of from 18 to possibly as high as 30 or 35 miles a week thereafter, until all of the material has been made and delivered, and we expect to carry out the construction program as rapidly as material is received and weather conditions will permit.

Q. Mr. Creveling, is it your judgment that any excessive load being put on the line now or in the future or, rather, any of the increases in the demand are the result of the defense situation?

A. That was very definitely demonstrated in our discussion of that very problem with distributors to whom we sell gas wholesale and through them, with industries served by them with our gas.

Q. Where are those industries located?

A. They are located in Missouri, Illinois, Indiana and [fol. 1617] Michigan.

Q. Do you think that there is any substantial portion of the increase which results from that? A. Yes.

Q. You have stated that you have a planned program which you hope to have completed sometime during the winter. Will that construction program take care of the necessities of the company's markets as you anticipate them to be during the winter of 1942 and 1943, taking into effect additional demands arising under the defense program?

A. It is our studied judgment that the construction program now in progress will fall short of taking care of the requirements of the winter of 1942 and 1943 and we are already discussing, in preliminary form, the amount of additional construction work that will be necessary in 1942 in order to meet those requirements.

Q. The additional demands put upon the line by reason of the defense program, will those demands be permanent demands or temporary?

. . . . . .

[fol. 1618] The Witness: Undoubtedly and indisputably, any temporary demands built up by industry which, by its very nature, is temporary, will not be lasting.

Q. Do you expect to attempt to build to take care of those requirements even though they be temporary?

A. We expect to build to take care of all of our implied obligations to the public to the extent that they appear to be within the realm of economic feasibility.

Q. What additional markets does the company now have in mind supplying over and above which it already now supplies?

A. Our present construction program will provide the immediate facilities of sufficient capacity to serve Flint, Pontiac, Kalamazoo, Battle Creek, Jackson, and some 80 other smaller communities in what is called the southern peninsula of Michigan and will be of such design that additions can be made as the market requirements increase and as the local supply of gas in the State of Michigan decreases to eventually supply substantially all of the market requirements of the southern peninsula of Michigan.

Trial Examiner: Just a moment at that point. Do the plans for new construction which you have just described exceed the estimate of outlay for 1943 as shown in Exhibit 47?

. . . . . .

[fol. 1619] The Witness: They do not.

Mr. Culton: The plans which you have referred to are those which Mr. Burnham has explained in his exhibit?

Trial Examiner: Involving a prospective outlay of approximately $6,000,000?

The Witness: That is substantially correct, yes, sir.

By Mr. Culton:

Q. That is for the transmission lines without including the field lines?

A. That is substantially correct for our main transmission system.

* * * * * * * *

Q. Do you plan to have your increases in main line sales capacity so as to take care of the additional demands from the new areas to be served in Michigan?

A. It is our plan to increase our main line sales capacity at a rate which will enable us to meet the increasing market requirements of all of our present and potential customers.

Q. There was a question asked by the Examiner and the record may not be clear on it. He inquired particularly with respect to the 1942 expenditures. There will [fol. 1620] be some 1941 expenditures carried over into 1942 now?

A. That is right.

Q. Because of your delay in getting your priority orders?

A. That is correct. My answer was intended to indicate that this indicated 1942 expenditure would be superimposed upon that now in progress.

Q. Yes, even though this now in progress, as originally planned; will not be completed until 1942?

A. That is right.

Q. Have you examined, and are you familiar with, the estimates made by Mr. Morton of the demands which this company will be called upon to meet for the years 1941 to 1946? I believe it was Exhibit 40.

A. I have examined and, as a matter of fact, gone over those very critically with Mr. Morton when they were in the process of preparation.

Q. Do you adopt them as your own? A. I do.

Q. Why?

A. Because of the fact that Mr. Morton has been doing this type of work as a part of his regular duties for the corporation ever since I have been with the company. I have made it a practice to discuss with Mr. Morton all of his major estimates that appear in our annual budgets from year to year, and to check performance against prediction and have found that performance to be such that [fol. 1621] I have the utmost confidence in Mr. Morton's ability to make such estimates.

I have also, in my past connections, had eighteen years of experience along just such lines of work, and believe I am qualified to pass reasonably accurate judgment on such items.

Q. Are you familiar with Mr. Hinton's estimate of the estimated capital expenditures in the field, both on the basic load and on the anticipated load? I believe that is Exhibit 43, Schedules 1 and 2.

A. I am familiar in some detail with Mr. Hinton's estimate on the field end, having discussed those in considerable detail with him at the time of their preparation.

Q. Are you also familiar with his estimates of future operating and maintenance expense, both on the basic load and on the anticipated load and I believe that is in Schedules 3 and 4 of Exhibits 43.

A. I am also familiar with those.

Q. Are you familiar with Mr. Burnham's exhibit as to the future capital expenditures on the main line? I believe that is Exhibit 47.

A. I am familiar with that, also.

Q. Do you approve the estimates of Mr. Hinton and Mr. Burnham in these exhibits?

A. I most certainly do.

Q. There has been introduced here an exhibit by Mr. [fol. 1622] Watkins showing certain increasing costs of Panhandle Eastern Pipe Line Company. Are you familiar with that exhibit?

A. I am.

Q. In your judgment, does it reflect the increasing costs which this company is now having to pay for similar labor and material over the prices heretofore existing?

A. It most certainly reflects the proper trend in such costs.

Trial Examiner: Are you referring to proposed Exhibit No. 73?

Mr. Culton: Yes, sir.

By Mr. Culton:

Q. What do you mean by "the proper trend"?

A. By proper trend, I mean it reflects an upward trend. I am not at all certain that the rate of that upward trend, as indicated by this chart, is as rapid as it will be in the immediate future.

Q. When you came with Panhandle Eastern Pipe Line Company in 1936, what was the character of its financial structure?

A. Briefly, it had outstanding in private hands approximately 18 million par value 6 percent first mortgage and first lien bonds; 100,000 shares of $100 par value 6 percent cumulative and participating preferred stock class A callable at 100 to 110, changing from one to the other at a certain date; and 10,000 shares $100 par value 6 percent class B preferred stock, non-callable, and carrying [fol. 1623] the right as a class to elect two directors to the corporation; and some 728,000 shares of common stock having an estimated value of $25 per share.

Q. Had any dividends been paid on the stock at that time? A. No dividends had been paid up to that date.

Q. Did you have occasion shortly after you came with the company to make any change in that capital structure?

A. It was quite apparent to me, as I got my feet on the ground and looked around for something that I might contribute that had not already been done, that in view of the change in money rates, there was a possibility of refunding the outstanding 6 percent bonds.

With that thought in mind, we started to work with the result that, early in 1937, those bonds were called with a part of the proceeds of a new issue of 4 percent first-mortgage and first lien 15-year bonds.

The amount of that issue was, as I recall it, [was] $24,000,000. The difference in the net proceeds between the total issue and what was required to call the outstanding issue of 6-percent bonds, in an amount, as I recall it, of some four or five million dollars, was applied to the construction work of 1937.

Q. Since you have been with the company, has there been any change in the amount of common stock outstanding?

[fol. 1624] A. Yes. In 1939, 80,000 shares of common stock was offered through rights to the stock holders of Missouri-Kansas Pipe Line Company, and substantially the entire amount was taken.

Q. At what price? A. At $25 per share.

Q. Since that time, has there been any other change in the capital structure? A. Yes.

Q. What was it?

A. Money markets plus the fact that we, at this time, had behind us some earnings record, some indication as to the stability of our business and had established certain credits in the general financial markets by our performance, enabled us to believe that the then outstanding 4 percent first mortgage and first lien bonds could be refunded on a basis more favorable than the existing one.

Q. Were you able to do that?

A. We consummated such a refunding deal early this year, as of November, 1940.

Q. What was the basis of that?

A. This deal consisted of $5,000,000 unsecured serial notes maturing at the rate of $1,250,000 per year from the second to the sixth year; $6,250,000 par value of mortgage notes maturing serially at the rate of $1,250,000 a year from the sixth through the tenth year and twelve million par value of 3 percent first mortgage and first lien [fol. 1625] 20-year bonds on which the sinking fund, beginning in the 11th year, in an amount of $1,200,000 per year, was sufficient to retire the entire issue at its maturity twenty years after the issue date.

Q. What was the necessity for the payment annually of certain sums and the provision of a sinking fund maturing the entire obligation in twenty years?

A. This corporation is engaged in the production, transmission and sale of a wasting asset. The management itself considers it good business to pay its debts before the commodity on which it must earn moneys with which to meet those debts has been exhausted.

Also, it is a requirement of that part of the public to whom we go for capital of this type to require that type of security.

Q. In other words, it is necessary to maintain the credit of the company? A. Yes, sir.

Q. The obligations must be paid before the gas is gone? A. I believe I so stated.

It might be interesting, in passing, to say that the average over-all cost of money during this last refunding proposition resulted in an average rate slightly below 2¾ percent.

Q. Mr. Creveling, is all of the money which the company has invested in additional facilities since 1936 rep-
[fol. 1626] resented in the increase in the outstanding bonds and stocks?

A. It is not. When I came with the company, we had outstanding approximately $18,000,000 par value of first mortgage and first lien bonds. We now have outstanding comparable debt of approximately $23,000,000. We have outstanding, let us say, substantially 160,000 shares of common stock at $25 per share or substantially $4,000,000 as the proceeds from that.

In that time, we have increased our plant account by substantially $22,000,000, as I recall it.

Q. These amounts you have given for debt and common stock are in excess of that formerly existing?

A. That is correct. In other words, I am trying to answer your question as I understood it.

Q. Yes, and what has been the increase in construction? A. I would say in excess of $22,000,000.

Q. Where has the rest of the money come from?

A. It has come out of the till.

Q. Is it going to be necessary for Panhandle Eastern Pipe Line Company, in the future, to go to the public for additional financing?

A. I anticipate that undoubtedly it will be.

Q. For what purpose?

A. For the purpose of further developing our properties to the economic limits largely determined by the requirements of our present and prospective markets.

[fol. 1627] Q. Are there any risks of a natural gas pipe line company and, particularly, of Panhandle Eastern Pipe Line Company, not shared by other types of businesses?

A. Of course, all types of business involve certain risks. There are certain risks peculiar to companies such as the Panhandle Eastern Pipe Line Company of varying degrees for different companies.

Those risks might be roughly classified under those incident to exploration or mining hazards which, I think, are generally understood, the production risks after the raw material has been discovered, if you please, such

risks as are involved in taking care of wells in different fields; no two wells require the same treatment and, as a matter of fact, quite frequently different wells in the same field require different treatment in order to produce the ultimate economic limit from those wells. We have salting conditions. That is now appearing in certain areas in the Amarillo field. We have water hazards and freeze-ups. The change in the quality of the gas which might become of some importance, especially in the Amarillo field, due to the fact that in the same general horizon in different parts of the field there are both sweet and sour gas or commercial and uncommercial gas.

By sweet gas, I mean gas that does not contain sulphur content in any appreciable amount and, conversely, by sour gas, I mean gas that does contain sulphur content [fol. 1628] in some appreciable amount. There might be some other risks named in the production—

Q. (Interposing) Is there any competitive risk?

A. Yes, from the standpoint of drainage, that is probably the largest single risk in the field from which we obtain our supply of natural gas.

Q. How does that risk come about?

A. It was partly in order to minimize this risk that we have adopted and pursued our policy either through purchase contracts or through acquisition and reallocation of acreage to so block our acreage that that drainage, if any, will be reduced to a minimum.

Q. How does that drainage come about?

A. It comes about by someone drilling a well offsetting a lease that you have, and taking from that well gas at such a rate that the underground movement of the gas will be from your lease to his lease.

Q. What risk does the company face from the standpoint of its transmission facilities?

A. In the field end of this company's transmission system, and by that I mean with its gathering lines, there is some considerable risk because of the character of the terrain. Certain parts of it are badly eroded, it cuts and washes very easily during heavy rains, and there are many of them, so that we are constantly faced with the proposition of having field lines uncovered and some of [fol. 1629] them go out, have to be replaced, and it

might be sufficient in size to materially lower the current amount of gas available for our markets, if it were not for the fact that we have three main field lines, two of which come out of the Hugoton area and one out of the Amarillo area and the risk of this type of field line failure is not nearly so great in the Hugoton field as it is in the Amarillo field, plus the fact that we have in storage, from fields to our markets, several hundred millions of cubic feet of gas sufficient in quantity to enable us to make any reasonable repairs or replacements without any hazard to continuity of service.

Now, on the main lines in general—

Q. (Interposing) Right there, that is merely a hazard of the company having to spend an unusual amount for repairs, rather than a real hazard from loss of service?

A. I would say the hazard of loss of service is very, very small.

Q. Where is the line pack with respect to the field?

A. The line pack is all between the field and the market.

Q. Therefore, a washout could not affect the line pack?

A. That is correct in the field lines. Now, on our main transmission facilities, while there is some risk there, the character of the country through which our main transmission lines run is such that we have very little chance of a line going out due to high waters or for any other [fol. 1630] reason that normally we might expect to occur.

We have taken care of our main line river crossings by having multiple crossings. The Mississippi River, for instance, has both an overhead crossing and a crossing under the bed of the stream. We also have, at the present time, 70 percent of our main line looped and, with the construction work now in progress, that will be increased to 85 percent and if we carry out our presently anticipated additional program for 1942, our entire main line will be completely looped, being, so far as I know, the first completely looped long natural gas transmission system in the country.

Q. When that is done, what have you to say as to the practical probability of any interruption of service, whether there is a hazard in that respect?

A. It is entirely a matter of degree of hazard. It would be foolish for me to say that there is no possibility of an interruption of service.

However, it is my very definite judgment that the practical hazard of such an interruption of service is reduced to a point where it is negligible.

Q. Can you give an illustration of that?

A. Yes, I think I can give an illustration of that by stating what happened within the past month and about which our customers knew nothing unless they read an account of the happening in some of the papers.

[fol. 1631] Some workmen were digging a hole to bury a dead man as an anchor for an electric pole line at a point about a mile and a half west of Mexico, Missouri. In digging this hole, the workmen struck a dark-colored hard material which did not respond easily, and most workmen digging holes for pole lines expect the terrain to respond easily to the ordinary working tools, so they placed a charge of dynamite on this dark material and set it off, with the result that one of our pipe line systems was blown up; destroying about 300 feet of a newly constructed main highway nearby; completely interrupting Western Union service, about an 80-wire system, putting out of commission the main lines of two railroads, and seriously burning three men but, in passing, I am glad to say all of those men are recovering.

This happened at four-thirty in the afternoon. At twelve o'clock that night, in spite of this very severe fire, the line was ready to go back in service and, due to the fact that we had a two-line system, I do not believe that any of our markets were aware of the happening unless they read news items copied from the Mexico, Missouri, paper.

Q. In other words, you had a double line at that point and the other line was able to give service until the repair was made? A. That is correct.

Q. And where is that point located with respect to the line as a whole? Is it near the center or on one side, or how

[fol. 1632] does the distance from the point to the east end and the west end of the line compare?

. . . . . .

A. It took place just west of Mexico, Missouri, and it is in the area really where our market requirements start to be substantial and I should say substantially halfway on our main line system.

Q. Do you consider that use of the loop line system as being a substantial protection to the public against interruptions of service?

A. Most definitely, yes.

. . . . . .

[fol. 1633] Q. You have been discussing the transmission facility risks. I believe you stated there are some commercial risks?

A. Yes, there are some commercial risks that, to me, are much more likely of realization than these previous risks which we probably should classify as physical risks.

On the commercial risks, I have in mind, briefly, these and I am not endeavoring to mention all of them and possibly not in the order of their importance but in the order they come to me.

One is the risk of confiscatory taxes. By confiscatory taxes, I do not mean those taxes that are levied in the guise of excess profit taxes or normal taxes of that kind at all. Those are taxes that industry must bear and we do not cry about those taxes except to the extent that those taxes may be discriminatory, but I refer to taxes of this type: To the best of my knowledge and belief, there has not been a session of the Illinois State Legislature since I have been associated with this company at which there has not been introduced one or more bills, the purport of which is to tax every thousand cubic feet of natural gas sold within that State.

Those bills have proposed taxes ranging from five to as high as ten cents per thousand cubic feet and, of course, such a tax, if finally it were administered, would be com-
[fol. 1634] pletely confiscatory so far as our business in the State of Illinois is concerned.

Mr. Lee: Mr. Examiner, if you will pardon me—those in effect are not taxes are they?

Mr. Culton: He is talking about risks.

The Witness: This is a risk, Mr. Lee, that we face continually.

Mr. Lee: Such as strike bills that are introduced some time?

The Witness: I do not know whether they would be called that or not and I do not wish to indicate definitely who may be behind these taxes, but an implication might be gained from my next risk.

* * * * * * *

The Witness: (Interposing) There are in existence today no such confiscatory taxes, but there has not been a session of the legislature in Illinois in which an effort to pass such a bill has not been made.

By Mr. Culton:

Q. Your next commercial risk?

A. The next commercial risk would probably be that of competing fuels. Competing fuels is a real risk, probably from two main standpoints; one, that competing fuels are not subject to the same regulation that natural gas is sub- [fol. 1635] ject to. It is true that under the Natural Gas Act, as it now exists, direct sales to the industry are excluded.

However, a large part of our business is, in its last analysis, competitive and ceases to be competitive only to the extent that, for certain uses, it gets into the luxury class and our wholesale customers or distributors sell much gas to industries within the distribution centers.

It is not possible to vary the prices to such industries sufficiently rapidly to meet changing competitive prices.

For this particular company, competing fuels offer an additional risk because of the existence of such large quantities of competing fuels in the same general territory as that traversed and served by Panhandle Eastern Pipe Line Company.

By that, I refer to the coal situation in Missouri and Illinois and to the fuel-oil situation in the Chicago area and close enough to the Detroit area that we have found fuel-oil being sold in that area during the past two years for as low as two cents per gallon.

Another risk that we must give consideration to is that of other supplies of natural gas, economically closer to our principal markets than our present supply is, which sources of supply did not exist at the inception of this project.

* * * * * * *

They were not known to exist at that time, and which have developed or may develop at any time. As an example [fol. 1636] of the seriousness of this, there are held under commercial oil and gas leases at the present time in the State of Michigan approximately two million acres, in the State of Indiana approximately 1,300,000 acres, and in the State of Illinois, approximately 3,700,000 acres, or, in total, something like seven million acres that are presently, at the present time, being explored in the search of oil and gas.

Mr. Littman: Are those near your pipe lines, Mr. Creveling?

The Witness: They are near our pipe lines. As a matter of fact, the most recent activity in the acquisition of oil and gas leases in the State of Indiana is in the northwest part of the State.

Within the past probably two weeks in this exploratory work, there has been drilled in the State of Illinois at a point some 50 or 60 miles east of St. Louis and 70 to 75 miles from our pipe line, a gas well having an open flow of 17 million cubic feet, so that this is a real risk.

By Mr. Culton:

Q. How is that a risk, Mr. Creveling?

A. It is a risk because of what seems to me the very apparent fact that whenever natural gas is discovered in commercial quantities that can be offered to the public economically on a more favorable basis than we are delivering the same commodity to the same public, the public will be given the benefit of it in some way, either we will

[fol. 1637] lose all or a part of our market or we will be compelled to reduce our prices to a point that is competitive with this new supply.

. . . . . .

The Witness: Another risk that has recently arisen and one that no one had experienced previously is that risk indicated by Docket G-210.

By Mr. Culton:

Q. That is of this Commission?

A. Before this Commission, hearings on which were had last week. If the contentions made in this case—

Q. (Interposing) You mean in G-210?

A. —In G-210 are finally sustained, the immediate effect on the gross earnings of this company and by "immediate effect" I mean immediately upon putting into operation what is proposed, would be a reduction of the company's gross income in excess of $1,000,000.

. . . . . .

[fol. 1638] Q. Mr. Creveling, are you familiar with the study which was presented in connection with the testimony of Mr. Coffman in which he expressed, from the sources he had examined, his judgment as to the number of dollars this company would be required to receive if it properly served the public?

A. I am familiar with that. I went over that study in considerable detail with Mr. Coffman and with a great deal of interest.

. . . . . .

[fol. 1639] Q. What specific items can you refer to which, in your judgment, were not sufficiently covered by the testimony of Mr. Coffman?

A. Without appearing to criticize Mr. Coffman's findings, which I do not, in which he stated, so far as the item about which you are questioning me is concerned, that the figure given by him was an irreducible minimum, there are these items that Mr. Coffman was not in a position to know about and which would materially increase the number of dollars arrived at by Mr. Coffman as essential to the satisfactory economic conduct of this company's business.

Because of our increasing demands, we are going to be required, in the immediate future, to make larger expenditures in the field end of our business than had previously been our practice. During the next short time, that item will be at least $4,000,000—.

. . . . . .

[fol. 1640] By Mr. Culton:

Q. What additions do you think should be made to the [fol. 1641] estimates of Mr. Coffman in order to reflect matters for which the company needs additional money, over and above those referred to by Mr. Coffman?

. . . . . .

The Witness: One, an expenditure in the immediate future for additional development and field lines and other items connected therewith of approximately $4,000,000; the fact that while the over-all rate of amortization may be on a 25-year basis, a material part of our field investment, namely that in the Amarillo end, should, in my judgment, be amortized over a period of not to exceed 15 years, thereby requiring a larger sum for amortization the next few years.

. . . . . .

The Witness: Also, actual experience during the past year indicates that an estimated addition of an item of 10 percent on material and pay rolls is not sufficient. It is my judgment, from experience for 1941, and as borne out by our records, there should be at least $150,000 more per year added for this item. Those are the ones I think of, at this time.

By Mr. Culton:

[fol. 1642] Q. That is because of increased costs?

A. Certainly.

Q. Are there any other matters that he failed to take into consideration?

A. I do not recall any other in arriving at this figure, but there is one other matter that I think should be given consideration in a fair consideration of the problem before us, and that is this:

Because of the peculiar period through which we are now passing, we are experiencing an abnormally large increase in our gross business. That increase, in our judgment, is caused largely by the demand for fuel caused by the defense program and is one that we are being called on, to the best of our ability, to meet promptly when it arises. It is one that will not continue indefinitely and, therefore, should be given proper weight in arriving at a fair return for this company.

* * * * * * *

[fol. 1664] GEORGE S. YOUNG a witness called on behalf of Michigan Gas Transmission Corporation, being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Porritt:

* * * * * * *

[fol. 1665] Q. Where do you reside?

A. Detroit, Michigan.

* * * * * * *

I am Vice-President and also a Director of the Michigan Gas Transmission Corporation.

Q. Mr. Young, please state your education and experience.

A. I graduated from the United States Naval Academy in 1920. From then until 1925 I engaged in the performance of various duties, mostly of a technical nature, aboard various type of naval vessels.

In 1925, I entered Columbia University for postgraduate work in engineering, which work was completed in 1927, at which time I received a degree of Master of Science.

From 1927 to 1930, when I left the Navy, I performed engineering duties on a battleship.

In 1930, I entered the employment of the Columbia Engineering and Management Corporation, a subsidiary of the Columbia Gas & Electric Corporation. I continued in its employ until 1933.

In that year the Columbia Engineering Corporation, [fol. 1666] which was also a subsidiary of the Columbia Gas & Electric Corporation, was organized and replaced the Columbia Engineering & Management Corporation.

I continued in the employment of the Columbia Engineering Corporation until 1934. While in the employment of these corporations, I engaged chiefly in making engineering studies of natural gas projects and in the design, construction and operation of natural gas transmission facilities.

The Columbia Engineering Corporation was liquidated in 1934 and I was transferred to the United Fuel Gas Company at Charleston, West Virginia.

This company is also a subsidiary of the Columbia Gas & Electric Corporation, and while in its employ I was also engaged in making engineering studies of natural gas projects and in the design, construction and operation of natural gas transmission facilities.

I left the employment of the United Fuel Gas Company in 1936, when I was temporarily employed by the Panhandle Eastern Pipe Line Company at Kansas City, Missouri, to assist in the design and construction of compression stations which were built in that year between the Texas Panhandle Gas Field and the Illinois-Indiana State Line.

These stations were built to increase the capacity of Panhandle's transmission system to deliver gas to the Detroit market which had been acquired by the Panhandle Eastern Pipe Line Company.

[fol. 1667] Upon completion of my temporary employment by the Panhandle Eastern Pipe Line Company I was employed as General Manager of the Michigan Gas Transmission Corporation, a subsidiary of Columbia Gas & Electric Corporation. I established offices in Detroit on June 1, 1936, and except for a brief tour of duty in the Navy in 1941, I have been employed by Michigan Gas Transmission Corporation since that date.

I had some responsibility in connection with the construction of approximately 231 miles of 22-inch O. D. pipe

line and river crossings between Zionsville, Indiana, and Melvindale, Michigan. I have been responsible for the construction of all other additions to the Corporation's property, and for its operation. I have also personally conducted sales negotiations.

In 1938 and 1939, I was Chairman of the Transmission Committee of the Natural Gas Section of the American Gas Association.

Q. Mr. Young, have you been requested to prepare, or to have prepared, a general description of the physical properties of the Michigan Gas Transmission Corporation's transmission system?

A. Yes, a general description of the physical properties and also the source of supply and a brief description of the markets served with gas delivered from the system, all as of June 30, 1941.

[fol. 1668] Q. Has this description been reduced to writing? A. It has.

Q. Did you also prepare or have prepared schedules amplifying, in some detail, the general description of the Corporation's property?

A. Yes.

Q. Are these documents, a copy of which I have in my hand, the material to which you have just referred?

A. Yes, they are.

Q. Were these documents prepared under your direction and supervision? A. They were.

* * * * * * * * *

(The Document Referred To Was Marked Exhibit No. 77 For Identification.)

* * * * * * * * *

[fol. 1671] Mr. Lee: Mr. Witness, does your exhibit contain any statement with reference to the number of breakages of the pipe lines and the failure to supply at any time since the date of construction?

The Witness: Yes, on Page 15 of the exhibit, it refers to two pipe-line breaks, one of which occurred January 8, 1937, and one of which occurred on January 14, 1937.

Mr. Lee: Thank you for that information, and just one more question.

Does that comprehend all of the breakages or failures of the pipe line since its creation?

The Witness: Yes, since June 1, 1936, the time when I [fol. 1672] joined the company, it does.

By Mr. Porritt:

Q. Mr. Young, have you prepared or had prepared under your direction a map showing the pipe line system of the Michigan Gas Transmission Corporation?

A. Yes.

Mr. Montgomery: May I ask one question, Mr. Examiner?

. . . . . .

Mr. Montgomery: It is in relation to the question just asked by Mr. Lee.

Your answer to Mr. Lee's question refers only to the section of the pipe line owned by Michigan Gas Transmission Corporation, does it?

The Witness: That is correct, sir.

Mr. Montgomery: Do you know whether or not there have been breaks in other sections of the pipe line since you have been with the company?

The Witness: There have been no other breaks in the pipe line belonging to the Michigan Gas Transmission Corporation.

. . . . . .

[fol. 1673] Mr. Montgomery: I will ask you this and withdraw that question for a moment.

In your position with the Michigan Gas Transmission Corporation, if there were any other breaks in the line between the source of supply and Dana, Indiana, you would know about it, wouldn't you, necessarily?

The Witness: Yes. On one occasion I was advised there was such a break, and on only one.

Mr. Montgomery: And about what date was that?

The Witness: That happened to occur at the same time that the break occurred on January 8, 1937.

Mr. Lee: Has a break of any kind resulted in a failure of supply of gas to the Detroit market by your company, at any time?

The Witness: It resulted in a curtailment, but not a discontinuance.

* * * * * * * * *

By Mr. Porritt:

Q. Mr. Young, I show you a copy of a map of the Corporation's main line transmission system which is en- [fol. 1674] titled "Transmission Lines of Michigan Gas Transmission Corporation", and ask you if this is the map to which you have just referred?

A. It is.

* * * * * * * * *

Q. Mr. Young, was this map prepared under your direction and supervision?

A. It was.

Q. Is it your opinion that it correctly shows what it purports to show? A. It does.

* * * * * * * * *

(The Document Referred To Was Marked Exhibit No. 78 For Identification.)

* * * * * * * * *

Q. Mr. Young, have you prepared, or had prepared, a statement comparing the capacity provided by Michigan [fol. 1675] Gas Transmission Corporation for the delivery of firm gas with the maximum daily deliveries of firm gas from the system? A. I have.

Q. Is this document which I now show you entitled, "Comparison of Daily Provided Capacity to Deliver Firm Gas with Maximum Daily Delivery of Firm Gas from System of Michigan Gas Transmission Corporation", the statement to which you have just referred? A. It is.

* * * * * * * * *

(The Document Referred To Was Marked Exhibit No. 79 For Identification.)

By Mr. Porritt:

Q. Will you briefly outline the information set forth in this statement?

A. Under Column "A" are listed the distributing companies to whom Michigan Gas Transmission Corporation sells firm gas or to whom it delivers firm gas for the account of Panhandle Eastern Pipe Line Company.

Under Column "B" are shown the location of the points of delivery to the respective distributing companies.

Under Columns "C" to "L", inclusive, are shown the capacities provided for each customer beginning with the [fol. 1676] winter period of 1940-1941 as compared with the actual maximum delivery of firm gas to each distributing company. The dates on which the maximum deliveries occurred in each winter period are shown on Line 37 of the tabulation.

Deliveries to certain of the distributing companies are not metered daily and the maximum deliveries in each of these cases was estimated from the total deliveries for the week or month during which the date of maximum deliveries occurred.

. . . . . .

Q. Mr. Young, what have you to say concerning materials and supplies on hand as of June 30, 1941?

A. I consider that the quantities of materials and supplies on hand as of June 30, 1941, are the minima required for the operation and maintenance of the transmission facilities.

. . . . . .

[fol. 1677] Mr. Littman: Just one minute, Mr. Young.

Referring to Column "J" of Exhibit 79, is all of the gas shown in that column firm gas?

The Witness: Yes, sir.

Mr. Littman: Will you elaborate for us with respect to the figure of 9,035 in Line 42 with the footnote "B" and explain what that footnote means?

The Witness: The measurement to the Central Indiana Gas Company at the Muncie measurement includes the delivery of interruptible gas.

Normally, we do not get a report of the daily deliveries to interruptible customers which we can subtract from the total deliveries to determine the firm deliveries.

In this case, there was one delivery to one customer which we could not obtain and, as stated in the footnote, we estimated the daily delivery to that particular customer on January 18, 1941, the date on which the maximum delivery occurred.

Mr. Littman: Did you deduct the amount for that industrial?

The Witness: Yes.

Mr. Littman: So that none of the columns, "C" to "L", inclusive, contain any interruptible gas?

The Witness: That is correct, except I might mention in connection with this note "B" again, that, if our estimate of the amount delivered to that one customer on that [fol. 1678] one day was in error, then interruptible gas to the extent of our error might have been included.

* * * * * * * * *

Henry C. Lehn, a witness, called on behalf of Michigan Gas Transmission Corporation, being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Porritt:

Q. Mr. Lehn, will you please state your name, address, and present connection?

A. Henry C. Lehn, Buffalo, New York, Worthington Pump and Machinery Corporation.

Q. What is your present position with that company?

A. Consulting Engineer.

Q. State briefly your business experience, with particular reference to your experience with gas compressors.

A. Following several shop and drafting room engagements, in 1906 I entered the employ of the Snow Steam Pump Works, which is now the Buffalo Works of the [fol. 1679] Worthington Pump and Machinery Corporation, as draftsman.

From 1906 to 1911 I was engaged in detail gas engine drafting and later gas engine design. In 1911 I entered the Sales Engineering office of the plant where my work consisted of gas compressor and pipe line calculations and related general sales work, and also field work at gas compressor stations.

In 1918 I was made assistant chief engineer, and in 1923 Chief Engineer in charge of gas and Diesel engine design and field tests. I became Consulting Engineer in 1933, my present position, and devote special attention to pipe line compressors.

Since 1925 I have been in close contact with gas-pipe line and compressor activities, retaining direct supervision of pipe line and compressor design at the Buffalo plant.

Since 1925, the Worthington Pump and Machinery Corporation has installed the main compressor equipment in more than thirty compressor stations on the major pipe lines.

Some of these installations are on the following lines:

Interstate Natural Gas Company; Memphis Natural Gas Company; Mississippi River Fuel Corporation; Colorado Interstate; Natural Gas Pipe Line Company; Northern Natural Gas Company; Panhandle Eastern; Michigan Gas; Southern Natural Gas Company; and others.

In line of my duties on behalf of Worthington Pump in connection with these installations, I took part in general engineering discussions with the pipe line organizers and [fol. 1680] particularly for estimates of their power requirements from which I calculated the size of engines and compressors, and made recommendations to them.

I have inspected many of these stations during erection and after they were in service, noting their construction, operation and manner of maintenance. I am also familiar with this type of equipment and with its history almost from the beginning, and have had an opportunity to observe its behavior over long periods of service.

Q. Have you inspected the three compressor stations of Michigan Gas Transmission Corporation located near Montezuma, Zionsville and Edgerton, all in Indiana?

A. I have.

Q. I show you a document entitled "Report of Inspection by H. C. Lehn" of equipment in the compressor stations of the Michigan Gas Transmission Corporation, and ask you if this was prepared by you in the light of that inspection. A. It was.

* * * * * * *

(The document referred to was marked Exhibit No. 80 for identification.)

Q. Can you summarize briefly, Mr. Lehn, the nature of [fol. 1681] the inspection you made of these compressor stations?

A. While the nature of my inspection is set forth in more detail in my report which has been marked Exhibit 80 and identified, the general nature was this:

My company, Worthington Pump and Machinery Corporation, was asked to furnish an engineer for the inspection of these compressor stations to determine how much they had depreciated since their installation.

Because of my familiarity with this type of equipment, I was selected by my company to undertake this work. I did visit the stations and examined first, the external parts of the engines to determine whether there was any evidence of deterioration visible there, and then I carefully observed the operation of the engines. Then I examined the station records covering hours of operation, measurements of wear and maintenance work.

Q. Did you determine the amount of wear on cylinder liner and piston rod parts?

A. Yes, by observation of the station records.

Q. Was your examination sufficiently complete and detailed to enable you to form definite opinions of the present condition of these units? A. It was.

Q. What was your conclusion as to the percentage condition which you were able to determine as to each of these units?

A. On the main Edgerton Station—99 percent; Zionsville [fol. 1682] Station—97 per cent, and Montezuma Station—96 percent. On the remainder of the auxiliary equipment, which is of a different type, Edgerton Station—99

percent; Zionsville Station—96 percent, and Montezuma Station—95 percent.

. . . . . .

HOWARD S. RIDDLE, a witness, called on behalf of Michigan Gas Transmission Corporation, being first duly sworn, [fol. 1683] was examined and testified as follows:

. . . . . .

By Mr. Porritt:

. . . . . .

Q. Where do you reside? A. Columbus, Ohio.

. . . . . .

I am employed by the Columbia Engineering Corporation, a subsidiary of Columbia Gas & Electric Corporation.

. . . . . .

My present position is Electrolysis and Corrosion Engineer for the Columbia Engineering Corporation.

. . . . . .

My technical education was received at Ohio State University and the University of Florida where I graduated in 1924 with the degree of Bachelor of Mechanical Engineering.

From 1924 to 1925 I was employed by the Jeffrey Manufacturing Company of Columbus, Ohio, as Assistant Chemist in the Metallurgical Department under the direction of Dr. C. C. Clevenger. This work consisted of metallurgical analysis of cast iron, steel, metal alloys, as well as calorimeter determinations on oils.

In 1925 I left the Jeffrey Manufacturing Company, or- [fol. 1684] ganizing my own engineering and surveying company in the City of Clearwater, Florida, conducting general engineering and property surveys. This business was conducted for approximately one year which terminated in selling out to Mr. R. B. Moore of Indianapolis, Indiana.

In 1926, I was re-employed by the Jeffrey Manufacturing Company of Columbus, Ohio, in the Engineering Department, Crusher and Pulverizer Division, on design and layout work.

In the fall of 1927, I was employed by the Columbia Engineering and Management Corporation as Assistant Electrolysis and Corrosion Engineer. I continued in its employ until 1933. In that year Columbia Engineering Corporation, which was also a subsidiary of the Columbia Gas & Electric Corporation, was organized and replaced the Columbia Engineering and Management Corporation. I continued in the employment of the Columbia Engineering Corporation until 1934.

In 1934, Columbia Engineering Corporation was liquidated and I was transferred to the Ohio Fuel Gas Company at Columbus, Ohio, which company is also a subsidiary of Columbia Gas & Electric Corporation. In February, 1938, Columbia Engineering Corporation was reorganized and I was again transferred to this organization, where I am employed at the present time.

My work has consisted chiefly in conducting electrolysis surveys on both main pipe lines and distribution plants of the Columbia system, in talling subsequent mitigation [fol. 1685] measures for their future protection against electrolysis, conducting soil surveys prior to construction along the right-of-way of proposed underground pipe lines and also along the right-of-way of operating systems for the purpose of determining the necessity of installing or applying protection against corrosion. Supervision as to the proper application of coating materials where protection was to be applied, and the design of various coating and piping wrapping devices.

In this connection, corrosion research was conducted on a various assortment of coating materials in an effort to select a salient few most suited for economical pipe line application.

* * * * * * *

Q. You mention the conducting of soil surveys on various properties of the Columbia system. Was this ever done on the property of Michigan Gas Transmission Corporation? A. Yes.

Q. Please specify where these surveys were conducted.

A. A soil survey was conducted on 20" Line A from the [fol. 1686] Illinois-Indiana State line east to Zionsville and on 18" Line B from Zionsville, Indiana, east to King Measuring Station near Muncie, Indiana. A soil survey was also conducted on the 22" Line C from Zionsville, Indiana, to Detroit, Michigan.

Q. What method was used in making these soil surveys or, in general, what was the procedure?

A. The Columbia Soil Rod was used, an instrument devised and patented by the Columbia system for determining the relative corrosivity of soil in place and at pipe depth.

* * * * * * * *

[fol. 1687] Q. Did you find these soils where the surveys were conducted to be of a corrosive nature?

A. Yes, practically all soils are corrosive and, in this case, most of the soils are, in my judgment, sufficiently corrosive to justify the use of protective coating.

Q. Mr. Riddle, have you been requested to make a physical examination of the underground transmission pipe lines of the Michigan Gas Transmission Corporation?

A. I have.

Q. Have you prepared a written report on your examination of such pipe lines? A. I have.

Q. Is this your report, and does it contain the results of your physical examination and study conducted either by you, under your supervision, or in your presence and with your knowledge? A. It does.

Q. Does this report, in your opinion, correctly show what it purports to show? A. It does.

* * * * * * *

[fol. 1688] (The document referred to was marked Exhibit No. 81 for identification.)

Q. At how many locations during this survey was the pipe exposed for examination?

A. Thirty-seven excavations were made spaced approximately every ten miles, covering in all approximately 362 miles of transmission pipe line.

Q. Did you select the location for these pipe excavations or exposures?

A. I did not. It is my understanding that these locations were selected by a representative of the Central Service Corporation.

Q. In making the pipe observations, the results of which are herewith set forth, you personally observed the exposed pipe at each location and in each case rendered a judgment figure as to the percent condition? A. I did.

Q. Please explain the method used in arriving at the percent condition in the pipe line at each location where the pipe was exposed for examination.

A. Prior to the inspection at each location, the pipe was meticulously cleaned, removing all dirt, rust and scale so that a clean metallic surface was presented for observation. At each inspection location, approximately a five-[fol. 1689]-foot section was so treated. The soil was removed below the bottom of the pipe for a distance of from eight inches to one foot, thus making possible a complete inspection of the bottom surfaces as well.

The pipe was carefully scrutinized over its total surface and any irregularities other than mechanical or mill blemishes, which were ascertained to be due to corrosion, were measured for depth with an Ames Dial Gauge registering in mils. The deepest of these was recorded at each location on the field inspection sheet.

The outside diameter of the pipe was calipered in a horizontal and vertical plane and notations made as to depth of cover and the soil type at each location.

. . . . . .

[fol. 1691] Q. Were any of these inspections made on the new 24" loop lines which were laid in 1939 and 1940?

A. No inspections were made on these 24" loop lines, as they had been laid so recently and coated in their entirety so that they were considered as being in a 100 percent condition.

. . . . . .

[fol. 1696] Mr. Littman: Yes.

Will you please turn to Page 7, Mr. Riddle, and state whether or not the figures in the column, headed "Maximum Pit" are expressed in hundreds of an inch?

The Witness: You mean, how the maximum pit is expressed in one-hundredths of an inch?

Mr. Littman: What does ".04" mean, for instance?

The Witness: That is four-hundredths of an inch. That is the depth of the pit we measured.

Mr. Littman: Now, Mr. Riddle, I wish you would turn to Page 17, and tell us whether you were present at these two inspections shown on Page 17?

The Witness: Yes, sir, I was.

Mr. Littman: Now, in order that we may understand the method you used, will you please take the inspection No. 9 on Page 17 of your Exhibit 81, and explain the various numbers and terms on that inspection report and then tell us precisely how you arrive at the pipe condition of 85 plus percent.

[fol. 1697] Just give us the detailed method that you used.

The Witness: Well, starting on, of course, we have the location of the particular inspection No. 9, by township, county and property ownership.

Mr. Littman: What does the next figure mean?

The Witness: That means, 100 feet west of the center line of the road and at a plus marking of 137 plus 86. That is a surveyor's plus mark for length of the pipe line.

Pipe Lines are measured in that manner from stile to stile. Immediately below that, you will notice there is "L. P." and "M. P.", meaning low pressure and medium pressure; field or service referring to service lines and transmission lines and you will note that I have ringed transmission.

Immediately under that is "depth of cover—36", indicating 36 inches of over-burden on the pipe line.

Mr. Littman: At that point?

The Witness: At that particular point.

"Kind of soil", you will notice that I have indicated clay and loam. There are also other types of soil shown

here, but I have indicated clay and loam at that particular location.

"Material determination", nothing was done with that in this particular case.

Mr. Littman: What does that mean, what would be done?

The Witness: In case we were trying to determine in [fol. 1698] the field whether it was wrought iron or steel, we have a method of making a field determination by microscope.

The pipe is etched in the field and we examine it in the field so we can determine whether the pipe is steel or wrought iron.

Of course, we knew what it was in this case and we did not have to do that.

Mr. Littman: You did not have to do that at this time?

The Witness: Not at any time in this case, no, sir.

Mr. Goodman: Let me ask one question at this point, if I may.

What condition would you characterize as zero percent and what condition would you characterize as ten percent?

The Witness: That would be very hard for me to do unless I were able to see the pipe.

Mr. Goodman: Can you state your standards upon which you based your calculations of percent condition?

The Witness: My standards are simply, you might say, a judgment figure based on a large number of inspections that I have made from time to time, and comparing, perhaps in my mind's eye, a piece of new pipe right alongside of it with due consideration to wall thickness of the pipe.

It is merely a judgment figure. That is all I can say.

Mr. Goodman: What are the factors which enter into the judgment?

[fol. 1699] The Witness: Well, perhaps the type of soil, the environment, the depth of pitting on the pipe, how general that pitting is, whether it is continuous around the pipe, whether it is confined to the bottom surface only, the top or top shoulders, or the sides.

They would be factors that entered into it.

Mr. Goodman: I would like to ask you this question:

Did you compare the serviceability of a particular piece of pipe with the serviceability of pipe in 100 percent condition? Is that the basis of your judgment?

The Witness: I did, in what you might say my mind's eye.

Mr. Goodman: Well, then, a piece of pipe that you would rate at ten percent would have a serviceability, say, of one-ninth of that which you would rate at 90 percent, would that be correct?

The Witness: No, I would not say it was.

Mr. Goodman: I see. Therefore, you are not able to furnish me with any standard of comparison objectively for a 10 percent condition or a 90 percent condition, is that right?

The Witness: I can compare for you a 90 percent condition pipe line with a 100 percent condition pipe line if I have them immediately before me.

I have to see the pipe because there are so many things that enter into particular condition, you cannot say, of your own accord, that a certain piece of pipe, even from a picture, is 90 percent, 100 percent, or 50 percent.

[fol. 1700] Mr. Goodman: Have you ever seen a pipe which you would rate at 50 percent?

The Witness: I have.

Mr. Goodman: Is it in this plant?

The Witness: No.

Mr. Goodman: What would be the characteristics of the 50 percent pipe?

The Witness: Fifty percent pipe would be pipe that is fairly-well corroded, probably in its entirety. Maybe at a particular location, there would be several leak clamps on the line, but the line was still in service transmitting gas, and there was no leakage whatever.

Mr. Goodman: What would that 50 percent condition mean with respect to serviceability?

The Witness: I do not believe that that would enter into the serviceability, as far as transporting gas is concerned.

Mr. Goodman: Well, would one have a right to assume from it, for example, that 50 percent of its service life had departed?

. . . . . .

[fol. 1702] The Witness: Absolutely not. That line could undoubtedly go on carrying gas for a number of years. You might say that 50 percent of its value had departed.

Mr. Goodman: I will stop here.

Trial Examiner: Are there any other questions?

Mr. Littman: Yes.

Mr. Riddle, you were explaining Inspection Report No. 9 on page 17—

The Witness: That is right.

Mr. Littman: When Mr. Goodman asked you some questions. Now, will you proceed with your explanation of Inspection Report No. 9?

The Witness: I believe I left off at material determination, just after that.

Mr. Goodman: Yes.

The Witness: The next statement is "Pipe coated paint yes or no." You will note there that I have indicated that the pipe was not coated or painted.

Mr. Littman: Well now, what does the term "Yes" mean there?

The Witness: That in case it had been coated I would [fol. 1703] mark "pipe coated" and mark "Yes" or if it had been painted I would have marked it "Painted" and "Yes."

The next statement is "Kind of joint." Where no joint either weld or coupling appeared in the excavation, nothing was indicated in that space.

Trial Examiner: That is, Mr. Riddle, you are using a printed form and where the alternative is shown you have encircled the condition which you wish to designate as applicable to the particular inspection?

The Witness: That is right, sir.

The next is "Inventory Data." That is from inventory sheets, the nominal size of the pipe, 18-inch with the nominal wall thickness.

Immediately under that is the material, whether it was steel, wrought iron, cast iron. You will note that I have indicated steel.

Mr. Littman: Just a minute, what do you mean by this nominal size and "nominal wall thickness"?

The Witness: The nominal size would be the calipered size of the pipe as stated on the inventory sheet. The size of the pipe.

Mr. Littman: Pipe new?

The Witness: Pipe new, yes.

Mr. Littman: That is the ordinary or usual wall thickness at which this pipe is purchased new?

[fol. 1704] The Witness. That is right.

Mr. Littman: There is some tolerance from that, I take it, is there not?

The Witness: There is.

Mr. Littman: It is not all exactly .281, is it?

The Witness: No.

Mr. Littman: Will you proceed with your explanation?

The Witness: Immediately under that is material, steel, which I have indicated. We knew, of course, the pipe was steel and the type, whether screw, plain-end or weld or bell and spigot. Of course, in the case of cast iron it would have been marked "Bell and spigot" if it were.

Then the job numbers, the job on which I worked is indicated by C-1350.

Mr. Littman: I don't recall whether you told us what kind of joint was on this pipe.

The Witness: No, as I said before if the joint did not show in the excavation, the point of excavation, that was left blank, as it wasn't observed. If the weld happened to be at that location, where by happenstance the excavation was made, I would mark it "weld."

Mr. Littman: Do you happen to know what kind of joint was actually on this pipe?

The Witness: Yes, it was both weld and dresser coupling.

[fol. 1705] Mr. Littman: But you didn't make a notation unless—

The Witness: Unless I actually hit one of those locations.

Mr. Littman: I see. All right. Will you proceed with your explanation?

The Witness: Now, at the top of the page, the line B, that designates which one of the three lines it was on the system. Then the nominal size, 18-inch, wall thickness. Now, the next—

Mr. Littman: Pardon me, before you go to the next one will you tell us why you repeat the same data as to nominal size and wall thickness?

The Witness: Well, one was from inventory sheets and the other is just a repetition. If we would not fill out on this one side for our own use we would repeat it up there at the top of the page. In this case we filled out everything we had except for material determination.

Mr. Littman: The nominal size and wall thickness figures which appear for the second time do not represent actual measurements, do they?

The Witness: No, not right there. Immediately below that it does, as far as the outside diameter is concerned.

Mr. Littman: Yes, I see. I thought there might be some distinction by reason of the fact that you have the term "Inventory Data" below.

[fol. 1706] The Witness: Those are selected from the inventory sheets, it is designated on the inventory sheets, themselves.

Mr. Littman: In both instances?

The Witness: No, well, I presume that that nominal size 18-inch is from inventory sheet and inventory data, also.

Mr. Littman: I see, that is just a pure repetition?

The Witness: That is pure repetition.

Mr. Littman: And those sizes come directly from the inventory data.

The Witness: Now shall I proceed?

Mr. Littman: Yes, if you please.

The Witness: Immediately below that is the calipered outside diameter, you will notice H. and V. which designates the horizontal and vertical plane at which this pipe was calipered.

Mr. Littman: This represents the actual measurement in the field?

The Witness: Yes.

Mr. Littman: After the pipe has been cleaned?

The Witness: After the pipe has been cleaned.

Mr. Littman: You may proceed.

The Witness: Immediately below that is the description of the pitting which was noted at this particular location. We have rather numerous descriptions there, but those

[fol. 1707] certain pitting descriptions were indicated which served to represent the condition of the pipe at the particular location where it was observed. In this case the pitting was very small and though sharp scattered over the entire surface of the pipe, but they were very few.

. . . . . .

Mr. Littman: All right, will you proceed with your explanation? I believe you got as far as maximum pit depth and average estimated depth. Will you explain those for us?

The Witness: Yes, the maximum pit depth, as I said in my previous testimony, was measured with an Ames dial gauge after the pipe was cleaned. The Ames dial [fol. 1708] gauge was set immediately over the pit and the reading was taken on on the dial which read in mills and in this case the maximum pit depth was .06.

Mr. Littman: How many pits did you measure at this particular point before you hit the deepest pit?

The Witness: Well, when we went into the excavation we would start at the top surface. We would scrutinize the top surface very carefully and measure pits as we went along, every pit we could see that looked like it might be deeper than the previous one until we struck with a series of measurements the deepest pit and that was recorded.

Now, from observation the average estimated depth was .01 at this particular location. None of these pits were recorded except the deepest pit.

There is no computation put down on paper, but that .01 is purely an estimate after we had obtained the maximum pit depth.

Mr. Littman: Well, that is the average depth of how many pits at this point?

The Witness: That is a judgment figure on the estimated depth of the pits.

Mr. Littman: Well, I think I understand that .05 inches is the maximum.

The Witness: .05, I beg your pardon, I was looking at the maximum figure. They are both on the same page.

[fol. 1709] Mr. Littman: Referring to Inspection Sheet No. 9, I understand that .05 represents the deepest pit that was found.

The Witness: That is right.

Mr. Littman: Over the four feet of exposed section of pipe.

The Witness: That is right.

Mr. Littman: Now then, you have averaged estimated depth .01 inches. Isn't that the average of all the pits that was measured?

The Witness: That is an estimated average of all the pits that were measured.

Mr. Littman: What do you mean by estimated average, Mr. Riddle?

The Witness: Merely a judgment, as you go along you record in your mind the depth of the pits as you go. Now this was not put down on paper, but you can easily estimate in the field the average depth of those pits.

Mr. Littman: You could very easily calculate the exact average, couldn't you?

The Witness: Well, there are so many small irregularities on the pipe, perhaps due to corrosion, that are immeasurable. They are visual but you can't put an Ames dial gauge on them and get any depth that is readable.

Mr. Littman: Then, the fact, as I understand it, is [fol. 1710] that you didn't record the measurements of all the pits?

The Witness: No.

Mr. Littman: And then you added them up and divided by the number of pits to secure the average estimated depth, did you?

The Witness: No, I did not.

Mr. Littman: That is just a judgment figure, is it?

The Witness: That is the estimated judgment figure.

Mr. Littman: And it might be higher or lower than the average figured mathematically, might it not?

The Witness: I believe it would be very close to the average in this particular case.

Mr. Littman: Well, you don't know if you didn't average it up mathematically, do you?

The Witness: It wouldn't be off very far.

Mr. Littman: All right, now the next item I think is "Field Estimate of Pipe Conditions, 85 Plus." Will you tell us how you arrived at that?

The Witness: That, also, is a judgment figure.

Mr. Littman: Well, judgment arrived at from the data which appears on Inspection Sheet No. 9?

The Witness: Which appears on Inspection Sheet No. 9, that is correct.

Mr. Littman: Was any other data considered?

The Witness: No other data except visual inspection.

[fol. 1711] Mr. Littman: Which is recorded on this inspection sheet?

The Witness: Which is recorded on this inspection sheet.

Mr. Littman: Well now, we have all the data, then, before us up to this point.

Now, tell us how you got to 85. I am trying to bridge the gap there. Give us the mental process that you went through to get the 85.

The Witness: When you are in an excavation and you have a piece of pipe immediately before you—

Mr. Littman: (Interposing) Let's take this excavation, if you will pardon me.

The Witness: Yes, sir, this excavation. You have a piece of pipe before you and you have gone over it, measured pit depth, examined the bottom very carefully and meticulously. Then you compare, after seeing a great

number, perhaps, of other excavations with pipe, maybe worse or better, you compare that with new pipe, taking into consideration wall thickness, the depth of penetration in this particular case and you render then a judgment figure. That is, my judgment figure, the percent condition of that pipe. It is just slightly better than 85 percent.

Mr. Littman: Did you calculate what the percent condition would be when calculated mathematically by relating the maximum pit depth to the original wall thickness?

[fol. 1712] The Witness: No.

Mr. Littman: You didn't make any such calculation?

The Witness: No such calculation.

Mr. Littman: And you didn't make any such calculation with respect to the so-called average estimated depth?

The Witness: No, as I say, this is entirely my judgment figure.

Mr. Littman: In other words, you didn't go through any mathematical calculation before you arrived at 85?

The Witness: No, I did not.

Mr. Littman: And you have told us all that you can tell us, have you, about how you got your 85?

The Witness: It is just simply by a judgment figure, that is all I can say.

. . . . . .

[fol. 1718] Francis S. Haberly was called as a witness on behalf of Michigan Gas Transmission Corporation and being first duly sworn, was examined and testified as follows:

. . . . . .

By Mr. Porritt:

. . . . . .

My name is Francis S. Haberly and I live in Chicago, Illinois, and I am a consulting engineer with offices at 122 South Michigan Avenue, also in Chicago.

. . . . . .

I was educated in grade and high schools at Fort Wayne, Indiana, completing the latter in 1914. This schooling was supplemented by intensive engineering study on my own part, together with extension courses in engineering [fol. 1719] and business administration.

I was futher benefited by practical experience as an apprentice in the student course of the General Electric Company at Fort Wayne, Indiana.

In 1916, following my student training, I entered the engineering department of the Fort Wayne & Northern Indiana Traction Company.

After a summer spent as a laborer on construction and maintenance work, I became a draftsman and general assistant to the engineer of ways and structures and to the superintendent of overhead construction.

Later I became an assistant engineer and my duties consisted of design, surveys and engineering for construction and maintenance of track, structures and overhead. In 1917, under the personal direction of the president of the company, the late Robert M. Feustel, I made an appraisal of a large part of the company's street and interurban railway property.

Following two years in the Army as an officer of artillery, I joined the consulting engineering staff of Mr. Feustel and was employed by him until he disbanded his organization in 1924, my duties being principally in connection with valuation and appraisal work. Such work included the following: The Indiana Service Corporation at Fort Wayne, Indiana, in 1919. This was a repricing and bringing down to date of the appraisal which I had [fol. 1720] made in 1917 prior to my entry into the Army. This work was done largely by the use of indexes.

The Nashville Railway & Light Company in Nashville, Tennessee, in 1920. This was an inventory and unit cost appraisal of railway and light and power property. The original cost was also determined partly upon the basis of book analysis and partly by the use of indexes.

The Great Northern Paper Company in Millinocket, Maine, in 1920. This was an inventory and unit price appraisal for tax purposes.

The Philadelphia Rapid Transit Company, Philadelphia, Pennsylvania, in 1921 and '22. This was an inventory and unit price reproduction cost appraisal with original cost being determined by detailed indexes. Mr. Feustel in this case represented the City of Philadelphia.

The Frankford Elevated Company, Philadelphia, Pennsylvania, in 1922. This work consisted of setting up property records of a city-owned elevated.

The Tennessee Electric Power Company, Chattanooga, Tennessee, in 1923 and 1924. This was an inventory and unit price appraisal of street railway, light and power and hydro-electric property. Reproduction costs at various other price levels were obtained by indexes.

In April, 1924, I took a temporary assignment as special assistant to the general manager of the Tennessee Elec- [fol. 1721] tric Power Company in matters connected with rate analysis, valuation and preparation of technical exhibits for court cases involving rates and valuation.

In December, 1924, I was employed by Mr. William F. Sloan of Chicago on valuations of the New England Telephone and Telegraph Company with property in five of the six New England States. Also the Cincinnati & Suburban Bell Telephone Company and the Ohio Bell Telephone Company.

In May, 1926, following my work with Mr. Sloan, I was employed by the late Albert S. Richey and remained with him, first, as an employee and later as an associate until his death in June of 1936. Mr. Richey was Professor of Electrical Engineering at Worcester Polytechnic Institute at Worcester, Massachusetts, as well as being a nationally known engineering consultant.

During my association with Mr. Richey I was actively connected with or in responsible charge of the following appraisals:

United Traction Company, Albany, New York, in 1926. This work consisted of checking an appraisal made by the company and determining costs at various price levels by indexes. Mr. Richey in this case represented the City of Albany.

The Nashville Railway & Light Company, Nashville, Tennessee, in 1926 and '27. This was an inventory and unit price appraisal of the street railway and light and [fol. 1722] power property on which I had worked in 1920 under Mr. Feustel. In this case Mr. Richey represented the State Commission.

The Tennessee Electric Power Company in 1927 and '28. This was an inventory and unit price appraisal of property on part of which I worked in 1923 under Mr. Feustel. The property included one street railway system, considerable hydro-electric property, electric generating, transmission and distribution systems covering more than one-half of the state as well as several water companies. It is this property which was sold to the Tennessee Valley Authority and is now operated by that Authority. Indexes were used on minor parts of this work. Mr. Richey, again, in this case represented the State Commission.

Southern Public Utilities in North and South Carolina in 1929. This was an inventory and unit price appraisal of street railway, light and power and gas property. For this work I took leave of absence from Mr. Richey and was employed by Jackson & Moreland of Boston, Massachusetts.

In 1930 I returned to Mr. Richey's employ and made an inventory and unit price appraisal of that part of the Third Avenue Railway System located in Westchester County, New York.

In 1931 this appraisal was repriced and brought down to date by means of indexes. Other jobs of lesser importance during the period 1931 to '35, included the following: [fol. 1723] Toledo, Bowling Green & Southern Traction Company, Conestoga Traction Company, Conestoga, Pennsylvania, Omaha & Council Bluffs Street Railway Company, Chicago, North Shore & Milwaukee Railroad Company, the Ottawa Electric Railway Company, the Sioux City Gas & Electric Company. My work in this latter case consisted of the development of indexes for the gas property.

In 1933 an appraisal of the Louisville Gas & Electric Company in Louisville, Kentucky, was made by the use

of indexes. This work covered electric light and power, natural gas fields and gas transmission lines, artificial gas plants and the attendant distribution system.

Public Service Company of Northern Illinois in 1933. This was a valuation of light, power and gas property made by the use of indexes.

An appraisal made by the application of unit prices to the same property as of the same date by independent engineers produced results differing by 5 percent.

The Commonwealth Edison Company, the Chicago District Electric Generating Corporation and the Super Power Company of Illinois in Chicago in 1934 to '36. This was an appraisal of the electric light and power property in the City of Chicago in which reproduction cost was obtained by the application of detailed indexes to the original cost.

An appraisal made by the application of unit prices to [fol. 1724] the Commonwealth Edison portion of the property as of the same date by other engineers produced results differing by 1.7 percent.

Chicago Rapid Transit Company, Chicago, Illinois, in 1936. This was an appraisal made by us of indexes for tax purposes.

The People's Gas, Light & Coke Company in 1935 to '38. This was an appraisal of the gas property in Chicago in which reproduction cost was obtained by the application of detailed indexes to the original cost. Here, again, an appraisal made by the application of unit prices to the same property as of the same date by independent engineers produced results differing by 1.6 percent.

In June, 1936, Mr. Richey died suddenly and I have since carried on the business under my own name. I continued such work of Mr. Richey's as was then in progress which consisted of presenting the testimony in the People's Gas, Light & Coke Company case and in making a revaluation as of a later date.

The valuation work done by me since that time has included a tax valuation of a part of the Third Avenue Railway System in New York in 1938, an inventory includ-

ing the setting up of property records for the Montreal Light, Heat & Power Consolidated in Montreal, Quebec, in 1939 and '40 and in the same two years an inventory and unit price appraisal of the properties of the Pittsburgh Railways Company for purposes of reorganization.

[fol. 1725] At the present time I am engaged in making appraisals of the property of the Chicago Rapid Transit Company, the Chicago Surface Lines and the Chicago Motor Coach Company, all in Chicago. These last three named valuations are being prepared by the application of indexes to previous appraisals or to original cost.

There are currently prepared in my office construction cost indexes of electric light and power, artificial gas and electric railway properties which reflect the variation in construction costs of typical properties, exclusive of land, on a nationwide basis.

I am a member of the American Institute of Electrical Engineers as well as a member of the American Transit Association.

Q. Mr. Halverly, were you asked to make a determination of the existing accrued depreciation on the various structures on the property as well as on the equipment in the measuring and regulating structures and also on the general equipment?

A. I was.

Q. Did you make such a determination? A. I did.

Q. I show you an exhibit marked "Michigan Gas Transmission Corporation, Accrued Depreciation on Com-[fol. 1726] pressor Station Structures, Measuring and Regulating Station Structures and Equipment, Other Transmission System Structures and General Equipment as of June 30, 1941" and ask you if this was prepared by you or under your direction?

A. It was.

. . . . . .

(Document referred to was marked Exhibit No. 82 for identification.)

Q. Did you inspect the property on which you determined the existing accrued depreciation?

A. I did. The property was inspected by myself and my principal assistant on August 13 and 14 and I made a further inspection on September 26, all in this year. On both occasions I was accompanied by Mr. C. D. Alstadt, superintendent of transmission of the Michigan Gas Transmission Corporation.

I inspected the buildings and structures at the three compressor stations in considerable detail. Structures at these locations comprise all of the compressor station structures as well as all of the miscellaneous transmission system structures on the property.

In addition, I inspected the measuring and regulating [fol. 1727] structures at Detroit as well as many of the smaller measuring and regulating structures, including their equipment, which are scattered over the property.

In the course of this inspection of the structures and as a result of considerable time spent in the company offices, both in Detroit, Michigan, and in Fort Wayne, Indiana, an opportunity was offered to see practically all of the general equipment such as the furniture and other miscellaneous equipment.

Q. As a result of the inspection which you have just described, will you please state the condition in which you found the structures and the other items of property upon which you were asked to determine accrued depreciation.

A. The condition of the structures and of the measuring and regulating station equipment was extremely good. Practically all of the structures had been built since 1936 and, therefore, are comparatively new and modern in type of construction. There were practically no signs of age, wear, weathering or deterioration and the entire property was extremely clean and orderly, in excellent repair, very well maintained, well painted and gave every evidence of exceptionally fine housekeeping.

I have inspected many properties in the course of my valuation work, including properties of street railway companies, electric light and power companies and arti- [fol. 1728] ficial and natural gas companies and have never seen an entire property in an equally high state of

maintenance. In fact, little could be found indicating depreciation due to physical deterioration alone.

In arriving at condition percent for the structures and for the equipment in the measuring and regulating station structures, consideration was given to the effect of wear and tear, action of the elements, the degree of serviceability, the state of maintenance, obsolescence as well as the age and probable future life use.

Q. In arriving at your condition percent for these parts of the property, did you use a straight-line method of depreciation?

A. No, I did not. I have just explained the various things which were given consideration and I would like to state the condition in which I found this property offers strong evidence that well maintained property does not depreciate on a straight-line, but depreciates less rapidly during its early life than it does in later years.

I did give consideration to age and life in arriving at my final conclusions as to the condition percent of the property, but I did not use the so-called straight-line method. I was not determining the amount which might be set up annually in order to amortize the property over a specific number of years, but I was determining in my [fol. 1729] best judgment the actual existing conditions of the property at the present time.

Q. In the discussion you have just given as to your determination of accrued depreciation, you have limited yourself to the structures and to the measuring and regulating station equipment. Were you not also asked to determine the percent condition of the general equipment?

A. I was.

The property included under the heading of "General Equipment" consists of the office furniture and fixtures, the transportation equipment such as automobiles, trucks and tractors, the stores equipment which is composed largely of pipe racks and the tools and work equipment which is made up of concrete mixers, portable pumps, surveying instruments and all other small tools. Property of this kind has relatively a short life as compared to the structures and equipment. It was found to be in very

good physical condition, well maintained and repaired and for the most part of quite recent purchase.

In determining the percent condition of this character of property, the same considerations were given to the effect of wear and tear, action of the elements, degree of serviceability, state of maintenance as well as age and probable future life.

This property was depreciated at a faster rate because [fol. 1730] of its comparatively shorter life and consideration was given to the salvage or trade-in value which probably would be realized upon replacement or retirement.

Q. Would you indicate in a general way the conditions which you found?

A. The conditions are expressed numerically in Exhibit 82. For the compressor station structures, the largest of which are the main compressor buildings and the auxiliary buildings, I found a condition percent of 94.8 for the property constructed in 1936, 96 for the property constructed in 1937 and 97.7 to 98.1 for the property constructed in 1940.

For the other transmission system structures consisting largely of residences and garages, I found conditions ranging from 89 for the 1936 construction to 98 for the 1940 construction.

In account 354.1, Compressor Station Equipment, I included certain items which were considered to be structures and upon which I placed the condition percents. These comprise the cooling towers and their foundations and the elevated water tanks and their foundations. Condition percent for the cooling towers ranged from 91 percent for those constructed in 1936 to 97 percent for those constructed in 1940. For the water tanks, including their foundations, the conditions ranged from 96 percent for the 1936 construction to 99 percent for the 1940 construction.

[fol. 1731] For the smaller structures included in Account 354.2, Measuring and Regulating Station Structures,

as well as to the equipment therein, conditions ranged from 77 percent for property built in 1931 to 99 percent for property built in 1940.

Q. Mr. Haberly, the last statement that you made, you said for the smaller structures included in Account 354.2. Isn't that 352.2?

A. I probably mis-spoke it; 352.2.

With regard to the general equipment, condition percents as determined by me are as follows:

For the office furniture and equipment, 78 percent; for the transportation equipment, 71 percent; for the stores equipment, 90 percent; and for the tools and work equipment, 79 percent.

. . . . . .

Mr. Goodman: I have some difficulty in understanding just what you mean by the use of the word "condition." [fol. 1732] Do you mean something different from or something in addition to its state of physical integrity?

The Witness: Conditions which I have applied here indicate something somewhat below its state of physical integrity because I have given consideration to age and probable future life and serviceability.

Mr. Goodman: So that you have used these factors in accumulated fashion with the result that you have made a deduction for deterioration and then you have added to that deduction something for other factors. Is that right?

The Witness: Not necessarily added something for the other factors, but in arriving at my final conclusion I have taken them into consideration.

Mr. Goodman: Well now, you say that you have considered the probable future life in use. In what way would the probable future life affect the present condition?

The Witness: It would affect it if I am giving consideration to age, in that I have to take into consideration the probable life in order to give effect to age.

Mr. Goodman: Now, did you in every instance give effect to age?

The Witness: In practically every instance, as I recall, the condition which I placed upon the structures is lower in my opinion than its physical condition.

Mr. Goodman: Well, will you state how you gave effect to age?

[fol. 1733] The Witness: By lowering the condition percent that I had formed in my judgment as representing its strictly physical condition.

Mr. Goodman: I had in mind you would give me the processes of giving effect to the matter of age.

The Witness: There are no processes, it is simply a matter of judgment. No mathematical calculations are performed in weighting the various elements I considered.

Mr. Goodman: Did you consider the number of years in service which the article under examination had?

The Witness: I did.

Mr. Goodman: And let us assume, for example, that it was five years. Now, did you consider its probable future life?

The Witness: I had that in mind, yes, sir.

Mr. Goodman: What figure did you use for its probable future life, if any?

The Witness: I would have to know what particular piece of property we are discussing.

Mr. Goodman: Well, you used different figures for different pieces of property, then?

The Witness: Naturally, I would.

Mr. Goodman: And did you not consider that its probable future life might be limited by the exhaustion of the wells?

[fol. 1734] The Witness: I did not use that as the probable future life.

Mr. Goodman: I take it that you took into consideration, then, its probable future life as dependent upon factors of deterioration and obsolescence?

The Witness: Right.

. . . . . .

Mr. Goodman: Well, what reason could you advance for marking down the property on the ground or score of obsolescence?

The Witness: There was no obsolescence.

Mr. Goodman: In other words, you considered obsolescence and rejected it as an effective cause of depreciation. Is that right?

The Witness: No, if I had found obsolescence in the property I would have given it consideration. I found none whatever.

Mr. Goodman: So that we can strike obsolescence out of this picture, completely?

The Witness: As being reflected in the condition percent. It is, however, one of the elements which I gave consideration to.

Mr. Goodman: Now, you then obtained a percent depreciation indicative of a state of physical integrity by con- [fol. 1735] sidering the physical evidences of deterioration and the age of the property in service as compared with its probable physical life. Isn't that right?

The Witness: Yes, in a measure, however, the condition which I place on practically every structure is, in my judgment, lower than the condition I would have placed there on purely considering physical integrity.

Mr. Goodman: Why did you place it lower?

The Witness: Because age, I believe, is an element which should be taken into consideration in determining depreciation because there are occasionally points of deterioration which cannot be seen and because in all of my determinations of condition percent my effort has been to reflect the effect of age independent of the physical condition as seen.

Mr. Goodman: Well now, the first part of your answer agrees with what I thought you did as represented in my question to which you said "Yes, in a measure." That is

to say that you used age as a guide to your judgment in revealing to you the presence of invisible deterioration or its life probability.

The Witness: It is used for that purpose and also for the others which I mentioned.

Mr. Goodman: Well now, can you state the extent to which you depreciated any item of property here by reason of its age in comparison with its physical service life and, [fol. 1736] also, the extent to which you considered that age as indicative of invisible deterioration on the one hand, and as indicating some additional reason for further depreciation? Can you give an example of that?

The Witness: No, I don't believe I can do that. Age and the other elements which I considered were all taken into consideration, but I do not think I can give you an example breaking it down into the various elements and weights which were assigned thereto.

Mr. Lee: Well then, what you did all through, what you really did was to exercise your judgment upon your observation of the property?

The Witness: Exactly.

. . . . . .

Mr. Lee: And there is no way to apply any test to your statements, is there? For example, if you said that the [fol. 1737] present condition was 96 percent and some other witness said it was 94 percent, it is just a question of judgment on your part and a question of judgment on his part, if he arrived at it the same way you did.

The Witness: I think that is correct. I do not think that depreciation can be determined with precise mathematical accuracy.

Mr. Lee: No, but when you say that you comprehend certain factors, obsolescence and things of that kind, you don't break them down into percentages, you don't add them up, you don't use them, really, at all, it is simply just your independent judgment.

The Witness: They are the guides to my judgment and the things which I am looking for as I formulate my opinion as to the condition of the property.

Mr. Lee: Yes, but when you say they are the guides to your judgment you are not able to tell us on cross-examination how much credence you gave to each of the guides, are you?

The Witness: It would depend upon the individual case.

Mr. Lee: Did you have any work sheets?

The Witness: Yes, I did have.

Mr. Lee: And did your work sheets break it down?

The Witness: They did not.

Mr. Lee: And you want us to understand now that we [fol. 1738] should accept your version of the physical condition of this extensive property without any breakdown as to how you arrived at it?

The Witness: Well, I have explained the elements which I gave consideration to and the conclusion I arrived at.

Mr. Lee: No, but you give us no means whereby we can test your consideration, there is no breakdown.

The Witness: I do not think I am able to.

Mr. Lee: Well, there isn't any breakdown, we can agree on that, can't we?

The Witness: That is correct.

Mr. Lee: Now, did you limit your depreciation to obvious depreciation which could be rectified by repair, for example, or repainting?

The Witness: Oh, no.

Mr. Lee: You didn't consider that?

The Witness: I considered it, but I went beyond that.

Mr. Lee: Well then, you want us to understand that outside of any depreciation that was obvious to the eye, that you fixed a certain amount for that and then you added in additional to cover any depreciation due to obsolescence, to age, to use or to depreciation that was unable to be determined by observation?

The Witness: In effect, that is what was done.

Mr. Lee: And what was that percentage?

[fol. 1739] The Witness: For what particular item?

Mr. Lee: For any item. Give us any example.

The Witness: All I can do is pick one of the items to which I applied condition. What item would you like me to pick?

Mr. Lee: Well, I am particularly interested in the service of the Detroit area. Let's take some measuring equipment in the service to the Detroit area. Let's take the regulating station on page 4. Now, you have got on page 4, Detroit regulating station, 1937-40, condition of structure, 97.7 percent; equipment, 96 percent. Is that right?

The Witness: That is right.

Mr. Lee: Now, tell us. There is 2.3 percent off from the hundred, isn't there? That is the average that was taken off the structures at that location?

The Witness: That is right.

Mr. Lee: Now that comprehends quite a considerable structure, doesn't it?

The Witness: There are a number of structures.

Mr. Lee: And this percentage comprehends them, doesn't it?

The Witness: It does.

Mr. Lee: So you want us to take your word for it that upon those structures, the present condition as against 100 percent is off 2.3 percent. You don't give us any break-[fol. 1740] down as to how you arrived at the 2.3 percent.

The Witness: I explained the things which I gave consideration to and the 97.7 is that result.

Mr. Lee: No, but what you gave consideration to is all in the back of your mind. You don't tell us what percentages or how you arrived at it. This is just your "ipse dixit", you arrived at it and that is so?

The Witness: It is a result of my considered judgment.

Mr. Lee: I know, but I have a right to explore how you arrived at it.

The Witness: And I have explained it.

Mr. Lee: No, but you still don't tell us how you can break it down, do you?

The Witness: I don't think you can break it down because there are no mathematical conclusions involved.

. . . . . .

[fol. 1741] Mr. Goodman: I do have another question. I want to know if salvage is a factor in your present condition, or if that is excluded?

The Witness: I took salvage into consideration in arriving at my percent condition, yes.

Mr. Goodman: That does not answer my question. What I want to know is, whether you excluded it as a factor in your percentage, or if it is somehow included in the percentage?

The Witness: The effect of it is included in the percentage.

Mr. Goodman: By what manner or method? In other words, what is the percent condition of an article ripe for salvage?

The Witness: May I hear that question?

Mr. Goodman: What is the percent condition of an article ripe for salvage?

The Witness: Its percent condition is the salvage value.

[fol. 1742] Mr. Goodman: So that to the extent your percentage speaks of value, it contains the residual salvage value, is that right?

The Witness: Yes, it does.

Mr. Goodman: Now, I have some difficulty, and maybe you can help me in reconciling a concept of value with a concept of percent condition.

The Witness: My percent condition does express the value percentage-wise, in my opinion.

. . . . . .

Mr. Littman: Mr. Haberly, when you find a compressor station structure or a measuring and regulating station structure or any equipment that is referred to in Exhibit 82 in 90 percent condition, does that mean that 10 percent of the life of the property has expired and that 90 percent of its life remains?

The Witness: No, sir.

Mr. Littman: Does it mean that 10 percent of its value has depreciated and 90 percent of its value remains?

The Witness: That is the result I am trying to express in my percent condition.

. . . . . .

[fol. 1743] By Mr. Porritt:

Q. Mr. Haberly, have you been asked by the company to prepare an estimate of the cost of reproduction new of the plant and property of the Michigan Gas Transmission Corporation as of June 30, 1941, exclusive of working capital, materials and supplies, cost of developing business or going value?

A. I was.

Q. Did you prepare such an estimate?

A. I did.

Q. I hand you herewith an exhibit entitled "Michigan Gas Transmission Corporation, Reproduction Cost New of Plant and Property as of June 30, 1941, exclusive of Working Capital, Materials and Supplies, Cost of Developing Business or Going Value," and ask you if this was prepared by you, or under your supervision?

A. It was.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 83 [fol. 1744] For Identification.)

Q. Will you explain, generally, the method by which this exhibit was prepared?

Mr. Littman: Just a minute, I want at this time to object to any testimony with respect to this exhibit for the reason that it states, on its face, that it is an estimate of reproduction cost new of plant and property.

The reasons for my objection have been stated from time to time on this record, if your Honor please. I want the record at this time to show an objection to this testimony, as well as to this exhibit.

Mr. Lee: Your Honor, on behalf of the Petitioner, City of Detroit, in these proceedings, I should like to make the same objection as made by counsel for the Commission, Mr. Littman.

Trial Examiner: I will ask you, Mr. Porritt, to confine the questions you will be permitted to ask to the content of the exhibit by way of general description and a statement of what the witness has done in the preparation of this proposed exhibit, irrespective of what the title page may show as to its substance, but do not, please, ask questions which involve testimony from the exhibit itself.

. . . . . .

[fol. 1746] Q. Mr. Haberly, will you explain, generally, the method by which this exhibit was prepared?

A. The method used in determining the reproduction cost new of the plant and property of the Michigan Gas Transmission Corporation as of June 30, 1941, has been by the application of specific indexes of equipment, materials, labor, and other costs to the original costs of the company's property as obtained from an analysis of the company's records.

The cost of reproduction new, as shown in this exhibit, is the amount in dollars necessary to be expended in order to reproduce the existing plant under the original conditions of construction and predicated upon the same contingencies as were actually encountered in its construction.

Trending by means of index numbers, developed especially with reference to the particular property, involves little or no estimate of labor performance other than a reflection in the index numbers of improvements in methods of construction. Trending does not involve percentage

allowances for warehousing, loss and breakage, supervision, use of tools and equipment, or contingencies.

[fol. 1747] These items are a part of the original cost which constitutes the inventory of dollars to which the indexes are applied.

Q. Will your please state the original cost to which you applied indexes in the manner just described and, likewise, the resulting reproduction cost as of June 30, 1941?

A. Those figures are shown on page 11 of Exhibit 82.

* * * * * * *

[fol. 1752] By Mr. Porritt:

Q. Mr. Haberly, I see by examination of Page 11, that you have included amounts for organization, which is Account Number 301, in the sum of $10,333; also an amount for Miscellaneous Intangible Plant, Account Number 303, in the amount of $73,667; for Land, which is Account No. 351.1, in the amount of $26,146; and for Land Rights, which is Account Number 351.2, in the amount of $241,467.

These amounts, as shown on Page 11, are identical with the original costs of the same items except that they have been rounded off to even dollars. Were these figures sub-[fol. 1753] ject to the application of indexes?

A. No. The items of Organization, Miscellaneous Intangible Plant, Land, and Land Rights are as furnished to me by the company and are included in this exhibit at their original cost and no trending was applied to them.

Q. You stated that the indexes which you developed with especial reference to this property were applied to an analysis of the company's records. Will you describe what this analysis consisted of?

A. Yes. In order to properly apply the indexes to the various elements of the property, it was necessary to analyze company records, including property records, construction ledgers, vouchers, bills, contractors' final estimates, and payrolls.

The character of the analysis was designed to obtain original costs in such form as to permit the application of the indexes to the individual items of property installed in the various years.

In other words, in order to trend a main compressor, it was necessary to obtain its original cost, and the date of its installation. The analysis which was made also covered the determination of unit costs of pipe per ton, labor per hour or per foot of pipe, and such other unit costs as were necessary for our trending purposes.

Q. Will you explain briefly the sources from which you obtained the data necessary for the development of the indexes?

[fol. 1754] A. The data for the development of the indexes were obtained from manufacturers of the equipment and machinery used on this property, from current price quotations as shown in trade publications, from catalogs and price lists and from contractors, and were checked, wherever possible, with the trend of actual costs as incurred during the construction of the property.

The index data covering building materials and labor were weighted in proper proportion to reflect the trend of construction costs in place. By that I mean that the basic indexes of cement, sand, stone, lumber, reinforcing steel and labor were so combined as to result in a trend of reinforced concrete in place.

With regard to the indexes of equipment, those for the principal items of equipment, namely, the main compressor units and auxiliary engines, were computed from the actual prices which have been paid for such equipment by the Michigan Gas Transmission Corporation.

The trends of other items of equipment were based on information from manufacturers, secured especially for this work or from data which we carry currently in our files.

The indexes for steel pipe were developed after analyzing vouchers showing the prices which have actually been paid by this company and from a consideration of information relative to the price at which pipe could have been [fol. 1755] purchased as of June 30, 1941.

Indexes for the installation of mains and laterals were based upon the relation of actual costs of construction to recent construction costs, as well as a consideration of current bids for the installation of comparable sizes of pipe in

comparable territory. Some of the mains were laid in 1930 and 1931.

Present-day methods of installation of mains and present-day construction equipment represent considerable improvement over those used in 1930 and 1931 and, in developing the indexes for application to installation costs of those years, recognition was given to this fact.

In other words, the reproduction cost of mains, as included in this exhibit, covering the construction done during 1930 and 1931 represents a present installation cost using modern methods and modern construction equipment.

Q. Now will you outline very briefly the contents of Exhibit 83, which is your reproduction cost new of plant and property of the Michigan Gas Transmission Corporation as of June 30, 1941, exclusive of working capital, materials and supplies, cost of developing business or going value?

Trial Examiner: Please omit from your answer, Mr. Haberly, any statement of your conclusions.

The Witness: Yes.

The exhibit consists of 64 numbered pages and several [fol. 1756] unnumbered pages and contains, first, a letter of transmittal; next, a table of contents; and then, starting with Page 1 and continuing through Page 7, sets forth my education and experience in much the same manner as I have given it verbally in my testimony.

Page 8 through Page 10, inclusive, states the purpose of the exhibit and the methods used in its preparation.

Page 11, which I have previously referred to in my testimony, shows a summary by accounts of the reproduction cost at June 30, 1941, with the corresponding original costs shown opposite each account.

Page 12 is a reconciliation of the original cost and the reproduction cost, both as of June 30, 1941, reflecting changes due to reclassification as well as setting forth the amounts of transfers, adjustments and other items which were not analyzed by me in my development of the necessary original cost figures for trending purposes.

It can be seen at the foot of column 2 that the items not analyzed total $46,779 as compared to $12,356,105 which was analyzed. The amount not analyzed represents somewhat less than one-half of one percent of the total original cost.

Then, starting on Page 13, there is shown a summary of the reproduction cost of Account 352.1, Compressor Station Structures and Improvements, which is followed on Pages 14 to 25, inclusive, with the details by locations by years:

[fol. 1757] On Page 26 is shown the reproduction cost of Account 352.2, Measuring and Regulating Station Structures and Improvements.

On Page 27 is shown a summary of the reproduction cost of Account 352.3, Other Transmission System Structures and Improvements, which is followed on Pages 28 to 30, inclusive, with the details by locations by years.

On Page 31 is shown the summary of reproduction cost of Account 353, Mains, and on Pages 32 to 37, inclusive, the details by years are shown.

On Page 38 is shown the summary of reproduction cost of Account 354.1, Compressor Station Equipment, which is followed by details by location by years running through to Page 58.

Page 59 shows the reproduction cost of Account 354.2, Measuring and Regulating Station Equipment, and Pages 60 to 64, inclusive, show the reproduction cost of general equipment such as office furniture and fixtures, transportation equipment, stores equipment, and tools and work equipment, some parts of which were not subjected to trending because of the smallness of the amount involved and also because of the multitude of items included in the various groups.

Trial Examiner: You have made reference at several points in both Exhibits 82 and 83 for identification, to certain account numbers. To what system of accounts are you referring?

The Witness: As I understand it, those account numbers are the Federal Power Classification.

[fol. 1758] Q. Mr. Haberly, have you prepared an exhibit applying to the reproduction cost new as set forth in Exhibit No. 83 condition percents as determined by you in Exhibit 82, by Mr. Lehn in Exhibit 80 and by Mr. Riddle in Exhibit 81? A. I have.

Q. I show you an exhibit marked "Michigan Gas Transmission Corporation—Reproduction Cost New Less Depreciation as of June 30, 1941 (Exclusive of working capital; materials and supplies, cost of developing business, or going value)", and ask you if this was prepared by you or under your direction? A. It was.

* * * * * * *

(The document referred to was marked Exhibit No. 84 for identification.)

[fol. 1759] Mr. Littman: Mr. Examiner, in order to keep the record straight, we at this time note an objection to the exhibit in so far as it relates to reproduction cost new and reproduction cost new less depreciation and object to any and all testimony with respect to reproduction cost and with respect to this exhibit.

Mr. Lee: In behalf of the Petitioner, your Honor, I desire to make the same objection as stated by the Commission counsel, Mr. Littman.

* * * * * * * *

[fol. 1760] Mr. Baldridge: Might I ask, Mr. Examiner, whether these objections made to this proposed Exhibit 84 go to the matter of condition percent; in other words, the percentage of depreciation?

Mr. Littman: You already have those condition percent in your Exhibit No. 82, in part, and I think, in Exhibit 81.

Mr. Baldridge: Yes, that is true, Mr. Littman.

Mr. Littman: So that your column in Exhibit 84 labeled "Percent Condition" is purely a duplication of what is already included in three previous exhibits, is it not?

Mr. Baldridge: This may be a situation in which it might help to clarify the record, if I may state the position I think you are taking, that you are not objecting to the

testimony on condition percents but only to any figures which tend to show the reproduction value new.

Am I correct in stating your position correctly for you?

Mr. Littmann: I will state at this time we are not making any objection to the testimony respecting condition percent or percent condition, but our objection goes to reproduction cost new and goes to reproduction cost new less depreciation.

[fol. 1761] Mr. Baldridge: Yes. Is that your position, too, Mr. Lee?

Mr. Lee: Yes, sir.

Mr. Baldridge: Thank you.

Trial Examiner: I think it was made clear in the consideration of objections to other pending exhibits that the Petitioner and Commission counsel, I believe both, recognized that the defendant company is entitled to introduce the evidence of depreciation but is objecting to the depreciation estimated on a basis of reproduction new.

Mr. Lee: That is right.

[fol. 1762] By Mr. Porritt:

Q. Mr. Haberly, will you briefly describe this exhibit?

A. Page 1 of the exhibit is a summary showing, in two adjacent columns, the reproduction cost new as of June 30, 1941, and the reproduction cost new less depreciation as of the same date.

The reproduction cost new is the same as that shown in Exhibit 83 for the total gas plant property exclusive of working capital, material and supplies, cost of developing business or going value.

On Pages 2 through 8, the condition percents as determined in my Exhibit 82, have been applied to the structures, measuring and regulating station equipment and general equipment. Condition percents as determined by Mr. Riddle and as set forth in Exhibit 81 have been applied to the mains and the condition percents as determined by Mr. Lehr set forth in Exhibit 80 have been applied to compressor station equipment exclusive of the cooling towers

and the elevated water tanks. Condition percents for these last two items were determined by me as shown in my Exhibit 82.

This exhibit, that is, Exhibit 84, is nothing more than a bringing together of the condition percents as determined by Mr. Riddle, Mr. Lehi and myself and applying them to [fol. 1763] the reproduction cost new as set forth in Exhibit 83.

Mr. Lee: Would those condition percents have the same application, as far as the percentage is concerned, to original cost as they do to reproduction cost?

. . . . . .

The Witness: They would, for all practical purposes.

However, if conditions for individual items were applied to the original cost figures in the same manner as they have been in Exhibit 84, the over-all resulting condition percent would be slightly higher, due to the fact that the property having the lower conditions has the lower original cost and thus these low conditions would receive somewhat less weight.

Such change would, however, be negligible.

Mr. Littman: Mr. Examiner, in view of that statement, I would like to state that we have no objection to the percent condition figures shown in the column in this exhibit labeled, "Condition Percent."

By Mr. Porritt:

Q. What are the percent conditions by accounts?

A. For organization, Miscellaneous Intangible Plant, Land and Land Rights—100 percent;

For Pumping Station Structures—96.38 percent;

For Measuring and Regulating Station Structures—[fol. 1764] 94.72 percent;

For Other Transmission System Structures—93.22 percent;

For Mains—97.79 percent;

For Pumping Station Equipment—96.72 percent;

For Measuring and Regulating Station Equipment—92.77 percent;

For Other Transmission System Equipment—98 even;

For Office, Furniture and Equipment—78 percent even;

For Transportation Equipment—71 percent even;

For Stores Equipment—90 percent even;

For Tools and Work Equipment—79 percent; and

For Construction Work in Progress—100 percent, the weighted average of which is—97.47 percent.

Mr. Culton: May I ask a question there.

These percentage items which you have given for the different account numbers, are these weighted figures?

The Witness: They are, sir.

Mr. Culton: In other words, in your Exhibit 84, you have separated the various percentages which together weight into the percentages which you have just read?

The Witness: That is correct.

By Mr. Porritt:

Q. Mr. Haberly, have you seen a proposed exhibit by Mr. Spitznagle using these percent conditions and are they [fol. 1765] correctly stated therein? A. They are.

. . . . . .

Q. Mr. Haberly, were you asked to prepare an exhibit setting forth the average age, probable remaining life and estimated salvage value of the short lived property, such as the furniture and fixtures, transportation equipment, stores equipment and the tools and work equipment?

A. I was.

Q. I show you an exhibit labeled "Michigan Gas Transmission Corporation, Average Age at June 30, 1941, Estimated Remaining Life and Estimated Salvage Value of Short Lived Property", and ask if this was prepared by you or under your direction? A. It was.

. . . . . .

(The document referred to was marked Exhibit No. 85 for identification.)

* * * * * * * *

[fol. 1766] A. The exhibit shows, opposite the various classes of short-lived property, first, the original cost of such short-lived property; second, the condition percent; third, the average age at June 30, 1941; fourth, the estimated remaining life as of the same date; and fifth, the estimated salvage in dollars. With the exception of the original cost and the average age, all of the figures are judgment figures.

Q. Are the percent conditions as shown in this exhibit, the same as you determined in Exhibit 82, labeled "Accrued Depreciation"?

A. They are. However, as can be seen from the exhibit, a separate condition percent is shown for the computing and adding machines under the general heading of "Furniture and Fixtures" and four separate condition percents are shown for the four classifications of Transportation Equipment.

These percent conditions are from the details by which the condition percents as shown in Exhibit 82 were built up and are, therefore, a further breakdown of the conditions as shown in Exhibit 82.

Only such property has been included in the calculations in this exhibit as will, in my opinion, have average lives of less than 25 years.

* * * * * * * *

[fol. 1767] Mr. Littman: Mr. Haberly, I would like to ask whether the amounts that you have included under the caption, "Salvage Value" are the amounts that might be expected to be recovered by way of salvage today?

The Witness: Yes, I believe that that would be the salvage which could be obtained today.

* * * * * * * *

The Witness: I may have answered the previous question incorrectly. The salvage value shown in the last column is the salvage value which I estimate could be received at the end of the remaining life.

That is, in connection with the computing and adding machines, four years hence.

. . . . . .

[fol. 1791] Trial Examiner: Consideration will be given at the proper time.

May I call your attention, gentlemen, at this time to page 1251 of the transcript in which you may recall the motion to strike the testimony with reference to reproduction cost and to exclude the proposed exhibits offered by Panhandle Eastern relating to reproduction cost and collateral subjects. The objection was pending and the Trial Examiner invited a statement from the attorneys for the Panhandle Eastern.

We have gone far enough in the record now with reference to the Michigan Gas Transmission Corporation so that I desire now to request counsel for the Michigan Gas Transmission Corporation at the proper time to make some statement in the record and I am quoting from the statement I made when the matter was before you at that time, shown in the transcript at page 1251.

I would like to have you point out on the record what peculiar facts are present in this particular proceeding as it affects your company which would take this proceeding,—as it affects the Michigan Gas Transmission Corporation,—out of that category. Now, the Commission in the case of the Chicago District Electric Generating Company and the opinion of the Commission, after the hearing concerning that company, referred to it in its opinion as a normal proceeding, a normal rate case.

[fol. 1792] You gentlemen representing the Michigan Gas Transmission Corporation were silent when Mr. Wheat was making his statements on this objection and if Commission's counsel have anything to add to what they have said on this question, they will have an opportunity, also, but their statement was quite complete, whereas you gentlemen have not had the opportunity to present such statement as you might wish considered bearing on this matter of the exclusion of reproduction cost, so we will give you an opportunity sometime after today, tomorrow before you rest your case, to make such state-

ment as you wish before there is any ruling. That is merely in order that you may have the fullest opportunity to present your views and make such statement as would differentiate this case.

The references to the pages in the record which you have will refresh your recollection as to the considerations which were then stated by counsel and remarked upon by the Trial Examiner.

* * * * * * * *

[fol. 1799] By Mr. Porritt:

Q. Mr. Haberly, have you been asked to prepare an exhibit showing the major items of materials and supplies restated at prices as of June 30, 1941?

A. I have.

Q. Did you make such a calculation? A. Yes, I did.

Q. I show you an exhibit labeled "Michigan Gas Transmission Corporation, Materials and Supplies, Restatement of Cost of Major Items at Prices as of June 30, 1941" and ask you if this was prepared by you or under your direction?

A. It was.

* * * * * * * *

(Document referred to was marked Exhibit No. 87 for identification.)

* * * * * * * *

[fol. 1801] Mr. Littman: We object to Exhibit 87 for the reasons already stated, that this is a reproduction estimate of the materials and supplies on hand rather than the actual cost of the materials and supplies on hand.

* * * * * * * *

Mr. Lee: Well, but, Mr. Porritt, the point I would like to get clear, I don't want to hold you up, but I think this is of great importance. You have simply repriced the materials and supplies that you had on hand, as I understand it, June 30, 1941, and you have given the original book costs and you have given the repricing cost which, in effect, is the reproduction cost.

Mr. Porritt: But in the working capital structure, Mr. [fol. 1802] Lee, is the amount of money that is necessary,

working capital as applied to the materials and supplies. There is a constant turnover and the amount of money that is required in working capital to keep constantly replacing those articles is the amount that is set forth in the last column.

Mr. Lee: Yes, but nevertheless it is predicated upon the original costs thereof as of the same date that you reprice them and I contend that in effect it is subject to the same objections which have been made by counsel for the Commission in which we have joined and we again join in this present objection.

Trial Examiner: Of course, we must all recognize the distinction that the working capital account is not a part of fixed capital.

* * * * * * * *

[fol. 1803] By Mr. Porritt:

Q. Mr. Haberly, will you explain this exhibit?

A. I was furnished a list of the major items of materials and supplies indicating the date of purchase of the various items and the original cost of such purchases. These original costs are shown in the first column of figures as set forth on pages 2 to 8, inclusive, of the exhibit, in each case opposite the description of the material.

I applied indexes to the original costs of the various items in order to restate such original cost in terms of [fol. 1804] cost of June 30, 1941. In several instances no indexes were available reflecting the change in price of individual items, and these items were carried over at their original cost.

Page 1 of the exhibit shows a summary of the materials and supplies which have been restated in terms of present cost. The first column of figures in the summary shows the total cost of materials and supplies per books as of June 30, 1941. The second column of figures shows the book cost of those materials and supplies to which present costs were applied. The third column shows the percentage of the cost of materials and supplies so handled. The last column shows the result of applying indexes to the book costs as shown in the second column.

The exhibit indicates that if $54,211 worth of materials and supplies, as shown in column 2 on page 1, had been purchased at prices current June 30, 1941, they would have cost $61,522 or an increase of $7,311 over their original cost.

* * * * * * * *

[fol. 1805] Mr. Lee: But under that supposition, what you have done is that you have valued that simultaneously as of June 30, 1941, valued it for the original cost simultaneously with the advance cost.

The Witness: I have applied an index to the original cost so as to restate that original cost at present cost, yes, sir.

Mr. Lee: So, in effect, the characterization of your second column is original cost which, in effect, amounts to carrying out the same theory of reproductive cost in your other exhibits.

The Witness: It does state the cost of replacing the item as of June 30, 1941.

* * * * * * * *

[fol. 1807] Mr. Culton: I think probably I can clarify one or two things. These items and the totals of which are shown on the first column on page 1 are all items which are not in the plant account, are they not?

The Witness: That is correct.

Mr. Culton: They are all excluded from the ordinary plant account?

The Witness: They are carried as materials and supplies.

Mr. Culton: And none of it has gone into the physical construction of the line? None of these items?

The Witness: It had not gone in as of June 30, 1941.

Mr. Culton: Now, you did not attempt to determine the present cost of all material of that type, did you?

The Witness: No, only 58 percent of it, larger items.

Mr. Culton: Then, to get what the present value would be of all of the materials and supplies, you would have to

add the difference in the cost of that 58 percent to the total shown in the first column, would you not?

The Witness: Yes, that is correct.

. . . . . .

[fol. 1809] Trial Examiner: Are there any questions by way of cross-examination at this time?

Mr. Littman: Yes, I have one or two.

Mr. Haberly, what is the amount that you are claiming here for materials and supplies? Which one of these figures are you relying on?. I would like to have the amount.

[fol. 1810] The Witness: I think that the use that is going to be made of this figure is to take the $93,413 shown on page 1 of Exhibit 87 and add there to the difference between column 4 and column 2, which is $7,311, which will result in total materials and supplies of approximately $100,000.

Mr. Littman: I see. Well now, one question about this broken valve that you and Mr. Lee discussed a moment ago. When that broken valve is replaced, at what amount is it replaced or at what cost is it replaced insofar as the plant accounts are concerned?

The Witness: It would probably go into the plant account at the cost at which it stands in materials and supplies if any change is made in the property account by virtue of the replacement.

Mr. Littman: You mean at the original cost?

The Witness: Yes.

. . . . . .

[fol. 1811] Mr. Littman: May I ask one question?

You used the term "original cost" in a number of your exhibits, Mr. Haberly. Are you referring there to book cost?

The Witness: Yes.

Mr. Littman: That is, there are no changes from the costs as they appear on the company's books?

The Witness: As I have obtained the figure from the books of the company myself or as it has been furnished to me from the books.

* * * * * * * * *

FRED A. SPITZNAGLE was called as a witness on behalf of Michigan Gas Transmission Corporation and being first duly sworn, was examined and testified as follows:

* * * * * * * * *

By Mr. Porritt:

* * * * * * * * *

My name is Fred A. Spitznagle. My business address is 327 South LaSalle Street, Chicago, Illinois.

[fol. 1812] Q. By whom are you employed and in what capacity?

A. Central Service Corporation, in the capacity of an accountant.

Q. Has Central Service Corporation been employed to advise and assist in the preparation of the data and evidence submitted by Michigan Gas Transmission Corporation in this case? A. They have.

* * * * * * * * *

Since attending high school for a period of about three and a half years, I have been continuously employed, except for a period of about two years, for 28 years in the public utility industry.

During this entire period I have been a student of all phases of accounting and taxation relating to the public utility industry.

During the period 1911 to 1918, I was employed by the Springfield Gas & Electric Company, Springfield, Illinois. When leaving this company I was chief clerk of the customers' accounting and complaint departments.

During the period 1918 and 1919, I attended the United States School of Military Aeronautics at the University of Illinois. I was commissioned a Second Lieutenant in the United States Air Service in August 1918. I resigned my [fol. 1813] commission in July 1919 after service in France.

During a period in 1919 I was employed by the Rockford Interurban & Street Railway Company in the capacity of assistant cashier.

During the period 1919 to 1924, I was employed in the capacity of auditor by the Indiana Power Company, Consumers Power Company and Knox and Sullivan County Light & Power Company, associated companies all operating in the same general territory in the State of Indiana.

During the period 1924 to 1937 I was employed as an accountant in the system of Utilities Power & Light Corporation, performing under the direction of a senior accountant or financial officer a large number of the duties hereafter detailed by me except the giving of testimony at hearings before the Federal Power Commission or State Public Utility Commissions.

During the period 1938 to date, I have been employed by Central Service Corporation to advise with and assist the management of client utility companies, counsel for the said companies and the management and other specialized departments of Central Service Corporation on the following matters, including the giving of testimony regarding financial and other fact statements prepared by me or under my supervision at hearings before the Federal Power Commission, Securities and Exchange Commission and other Government authorities:

[fol. 1814] General and commercial accounting practices; accounting procedures and methods; applications to the Federal Power Commission for sale of electric utility property; original cost studies required pursuant to order of the Federal Power Commission; Federal Power Commission annual reports; registration statements filed with the Securities and Exchange Commission for the sale of securities; annual periodical reports, applications and declarations prescribed by the Securities and Exchange Commission pursuant to the Securities Act of 1933 and 1934, and the Holding Company Act of 1935; applications to State authorities under State Blue Sky laws and to qualify securities as investments for savings banks and other State institutions; Federal and State tax returns, deficiency and other tax assessments and prosecution of protests to said deficiencies and other tax assessments;

financial statements and studies of the past, current and future operating results, fixed capital expenditures, working and other capital requirements.

* * * * * * * * *

Q. Have you prepared or had prepared under your supervision for introduction in this proceeding a number of exhibits? A. Yes; I have.

Q. Were such exhibits prepared from the books of [fol. 1815] account and records of the Michigan Gas Transmission Corporation?

A. They were so prepared and were based on explanations furnished by officers of the company, but no detail audit was made by me or anyone employed under my supervision of the books of accounts and records of the subject company.

Q. In your subsequent testimony regarding the exhibits your answers to the two preceding questions will relate to each such exhibit insofar as such exhibits contain information taken from the books and records of the subject company unless otherwise stated by you?

A. That is correct.

Q. Mr. Spitznagle, I hand you an exhibit entitled "Comparative Balance Sheet Per Books." Does this exhibit correctly show what it purports to show?

A. It does.

* * * * * * * * *

(Document Referred To Was Marked Exhibit No. 88 For Identification.)

* * * * * * * * *

[fol. 1816] A. Exhibit No. 88 shows as at December 31, 1936 to 1940, inclusive, and as at June 30, 1941 condensed balance sheets containing classified assets and liabilities of the Michigan Gas Transmission Corporation.

The assets are shown on page 1 and the liabilities on page 2.

Q. Referring to the item on page 1, classified as "Contractual Loans in Aid of Construction Made to Customers," what does this item represent?

A. Such item represents repayable loans which were made by Michigan Gas Transmission Corporation to distribution customers to extend the customers' natural gas service, thereby increasing gas sales of the Michigan Gas Transmission Corporation.

Q. You meant distributing customers, did you not?

A. That is correct, distributing customers.

Q. Referring to the item on page 1, classified as "Accounts Receivable, Customers' Service, etc.," what, besides receivables due from customers of Michigan Gas Transmission Corporation is contained in this item?

A. Michigan Gas Transmission Corporation under its transportation contracts with Panhandle Eastern bills and collects for gas delivered to customers of Panhandle Eastern, therefore, the amount due from such customers [fol. 1817] of Panhandle Eastern and payable to the latter is included for convenience in this item with an offsetting amount classified on page 2 as "Accounts Payable, Panhandle Eastern Pipe Line Company."

In addition, the amounts shown include minor other receivables, small amounts of expense advances and small loans and receivables due from employees.

Q. Referring to the item on page 1 classified as "Preliminary Survey and Investigation Charges," what does this item represent?

A. This item represents expenses incurred when investigating the feasibility of construction projects. When the project is approved and started, the amounts so classified are eventually classified in "Utility Gas Plant."

Q. Referring to the item on page 1 classified as "Deferred Sales Promotion Expense," what does this item represent?

A. The amount of $56,167 in the column headed "1937" represents grants made to distributing customers of Michigan Gas to assist such customers in meeting the expense of changing over from artificial to natural gas.

The amount of $3,374.07 appearing in the column headed "1939" represents Michigan Gas Transmission Corporation's portion of a like grant made to a Panhandle Eastern customer.

These items were charged to expense in the respective years 1938 and 1940.

[fol. 1818] Q. Referring to the item on page 1 classified as "Contingent Sales Promotion Expense." What does this item represent?

A. This item as set up on the books of the company is offset by the item on page 2 classified as "Contingent Liability for Conversion Costs—Contra." It is so treated as a convenience in keeping a record of items of this character which may become actual liabilities in the future. This item alludes to certain contractual discounts provided to assist distributors of natural gas.

Q. Referring to the item on page 1 classified as "Other Deferred Debits," what does this item represent?

A. The amount of $9,902.47 in the column headed "1937" represents legal expense in connection with contracts for delivery of natural gas to Ann Arbor, Michigan of $8,849.09 of which a portion was charged to expense in a subsequent period and a portion billed to Panhandle Eastern. The balance of $1,053.38 represents the cost of installing drips on transmission mains and was subsequently transferred to "Gas Utility Plant."

The amount of $18,042.29 in the column headed "1938" represents legal expense of $12,875.58, including the aforesaid $8,849.09 in connection with the contract for delivery of gas to Ann Arbor. The entire amount was subsequently treated as previously explained.

[fol. 1819] The balance of $5,166.71 represents expenditures incurred for measuring equipment and grading and so forth at compressor station site which was subsequently charged to "Utility Gas Plant."

Q. Now, referring to the item on page 2 classified as "Contingency Reserves", for what purpose was this reserve provided?

A. This reserve was provided to take care of possible additional assessments for Federal income tax for the years 1934 to 1939, inclusive, and interest thereon, based on deficiencies proposed by the Bureau of Internal Revenue with respect to some past years.

Q. Referring to the item on page 2, classified as "Other Deferred Credits," what does this item represent?

A. The amount appearing in the column headed "1936, 1939 and June 30, 1941" represents credit balances in auto-

mobile and miscellaneous clearing accounts. In subsequent periods these amounts were credited to like expenses which were cleared to various operating and construction accounts.

In the amounts appearing in the columns headed "1937" and "1938" there was $553.09 and $1,711.58, respectively, representing credit balances in the aforesaid clearing accounts and were subsequently treated as explained. The balance of the respective 1937 and 1938 amounts represents an estimated credit that was due Michigan Consolidated [fol. 1820] Gas Company of $30,006.72 in connection with gas billings for the contract year ended March 31, 1938 and a payment of $13,013.76 made by Panhandle Eastern for its share of sales promotion expenses subsequently paid out by Michigan Gas Transmission Corporation under contracts to distributing customers.

. . . . . .

[fol. 1821] (Exhibit No. 88 Marked For Identification, Was Received in Evidence.)

By Mr. Porritt:

Q. I hand you herewith an exhibit titled, "Earned Surplus Per Books", and ask that that be marked Exhibit No. 89 for the purposes of identification.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 89 For Identification.)

. . . . . .

A. Exhibit 89 details, by years, for the period March 1, 1936, to June 30, 1941, and for the twelve months ended June 30, 1941, all transactions recorded in the earned surplus account of the company.

The items, as detailed in this statement, I believe, are self explanatory.

. . . . . .

[fol. 1822] (Exhibit No. 89 For Identification Was Received in Evidence.)

Q. Mr. Spitznagle, I hand you an exhibit titled, "Capital Surplus", and ask that this be marked Exhibit No. 90 for purposes of identification.

(The Document Referred To Was Marked Exhibit No. 90 For Identification.)

A. Exhibit 90 shows, for the period March 1, 1936, to June 30, 1941, by calendar years, and the twelve months ended June 30, 1941, all transactions recorded by the company in its capital surplus account.

Q. Under the column headed, "1939", is an amount of $139,500. What does this item represent?

A. In the year 1939, I understand that the Columbia Gas & Electric Corporation restated on its books its investments in and loans to various companies, and that in [fol. 1823] connection with such restatement waived $139,500 due from Michigan Gas Transmission Corporation, thereby effecting a contribution to capital of Michigan Gas.

(Exhibit No. 90 For Identification Was Received In Evidence.)

Q. Mr. Spitznagle, I hand you an exhibit titled, "Preliminary Report on Original Cost Studies by Central Service Corporation" consisting of 27 pages, and at this time I would like to have this exhibit marked Exhibit No. 91 for purposes of identification.

(The Document Referred To Was Marked Exhibit No. 91 For Identification.)

Q. What information does your preliminary report on the original cost studies offered as Exhibit 91 show, and is the information submitted sufficient to advise the Federal Power Commission as to the original cost of the Utility Gas Plant of Michigan Gas Transmission Corporation?

[fol. 1824] A. We believe the information submitted is sufficient for the purpose you have just stated in your question.

This report is, to a large degree, self-explanatory, and has been made in accordance with paragraph 2, instructions for gas plant accounts, contained in the Federal Power Commission classification of accounts and prescribed for use by them as at January 1, 1940, but I will run through the report and outline, in a general way, the information it contains.

Pages 1 to 3, inclusive, contain a description of the books and records maintained by Michigan Gas and its predecessor and associated companies, in relation to the cost of the utility gas plant of Michigan Gas Transmission Corporation.

Pages 3 to 8, inclusive, detail the scope of our examination of the original cost studies conducted by the Company along with other related information.

Pages 9 and 10 contain a list of statement submitted in the report, namely, Statements A to I, inclusive.

Statement A, pages 11 to 14, inclusive, contains an outline of the origin and development of Michigan Gas Transmission Corporation.

Statement B, page 15, details for each acquisition by Michigan Gas and its predecessors, the original cost, the cost to the acquiring company, and the amount entered on the books of the acquiring company, of gas utility property acquired as an operating unit.

[fol. 1825] Statement C—none is included because as indicated in the index to these statements, none is required, in that the Utility Gas Plant of Michigan Gas does not contain any amounts arrived at by appraisal.

Statement D, page 16, contains the classified utility gas plant of Michigan Gas at January 1, 1940, and June 30, 1941, both immediately prior to reclassification of such utility gas plant in accordance with the system of accounts prescribed by the Federal Power Commission.

Statement E, page 17, contains a summary of the adjustments, subject to the comments on the bottom of that page, necessary to state as of January 1, 1940, the amount includible in Account 100, Utility Gas Plant.

Statement F, pages 18 and 18a, contains a classified statement of amounts includible in Account 100, Utility Gas Plant, as at January 1, 1940, and June 30, 1941, in accordance with the classification of accounts prescribed by the Federal Power Commission. There is also shown, in summary form, the ascertained overheads included in the original cost of utility gas plant.

Statement G, page 19, contains a balance sheet as at January 1, 1940, of Michigan Gas classified to show the utility gas plant before and after reclassification pursuant to instructions of the Federal Power Commission.

Statement H, page 20, does not contain the information called for but contains an explanation as to why such [fol. 1826] information is not presently available.

Statement I, pages 21 to 27, inclusive, details certain statistical information relative to the gas plant of Michigan Gas at June 30, 1941.

Q. Mr. Spitznagle, when is the original cost study of the Company required to be filed with the Commission?

A. It is required to be filed, pursuant to instructions of the Commission, not later than two years from the effective date of such instructions. The instructions were effective January 1, 1940, therefore the original cost study is due January 1, 1942, or sooner.

Q. Has Michigan Gas completed their original cost study?

A. The original cost study of Michigan Gas Transmission Corporation is not entirely completed, but is very near completion.

Q. Do your investigations indicate that the company's original cost studies, when completed, will coincide very closely with your exhibit No. 91?

A. It is my opinion that it will.

. . . . . .

[fol. 1828] (Exhibit No. 91 For Identification Was Received In Evidence.)

. . . . . .

[fol. 1837] By Mr. Porritt:

Q. Mr. Spitznagle, I hand you exhibit titled, "Original [fol. 1838] Cost Depreciated", and ask that that exhibit be given No. 92 for the purposes of identification.

Trial Examiner: It will be so marked.

(The Document Referred To Was Marked Exhibit No. 92 For Identification.)

* * * * * * *

Exhibit 92 shows, in the first column, the classified original cost of Utility Gas Plant of Michigan Gas, as reclassified in our Exhibit 91, "Preliminary Report on Original Cost Studies" and is subject to our comments contained in such "Preliminary Report."

The second column contains the percent condition of the classified utility property as determined by Messrs. Riddle, Lehn and Haberly, engineers employed to make such determination.

The third column shows the original cost amount of the classified items depreciated to the percent conditions shown in the second column.

The fourth column shows amount of observed depreciation for each classified item determined by the difference between the amounts in columns 1 and 3.

* * * * * * *

[fol. 1839] Q. Mr. Spitznagle, I hand you an exhibit titled "Statement of Contributions Made to Customers for Business Development" and ask that this exhibit be marked No. 93 for purposes of identification.

* * * * * * *

(The document referred to was marked Exhibit No. 93 for identification.)

* * * * * * *

A. Exhibit 93 contains the amount of all contributions made prior to the enactment of the Natural Gas Act by Michigan Gas to its customers and those of Panhandle Eastern and to whom Michigan Gas Transmission Corporation delivers gas, and does not reflect any portion of

such contributions made to the same customers by Panhandle Eastern.

At some points in my testimony these contributions are referred to as "grants." This exhibit lists each contribution made during the period 1936 to May 31, 1938, the [fol. 1840] Company to whom made and the amount contributed to the respective companies by Michigan Gas Transmission Corporation.

Q. You mean, Mr. Spitznagle, that all contributions made prior to the effective date of the Natural Gas Act, do you not? A. That is correct.

. . . . . .

Mr. Lee: I understand, Mr. Witness, that those contributions have ceased since the effective date of the Natural Gas Act?

The Witness: No, sir, they have not.

Mr. Lee: Why did your exhibit limit them to the effective date of the Natural Gas Act?

The Witness: Because this information is to be used in the rate base of the company and, pursuant to advice of counsel, it is believed that payments made subsequent to the enactment of the Natural Gas Act should not be included.

Mr. Littman: All of this money that you have listed in Exhibit 93 has been charged to the operating expenses of Michigan Gas Transmission Corporation in the past, hasn't it?

The Witness: That is correct. The exhibit indicates that in the heading there.

Mr. Littman: I take it that this exhibit was prepared as the basis for some form of going concern value, was it not?

The Witness: Yes.

[fol. 1841] Mr. Littman: It furnishes a basis?

The Witness: The cost of developing the business.

Mr. Littman: We object to Exhibit 93 for reasons stated at numerous times on the record. It is the basis of a claim for going concern value which is, of course, part and parcel of reproduction cost.

Mr. Lee: On behalf of the Petitioner, City of Detroit, I desire to concur and join in Mr. Littman's objection.

• • • • • • • • •

Mr. Porritt: This is money that was actually paid out by the company and as such—

Mr. Baldridge: (Interposing) May I complete that statement?

Mr. Examiner, this was money paid to customers. It was charged to operating expenses. If that had not been done, that additional amount of money would have been available for distribution.

This was all done at a time when the company was not subject to regulation. It was not a public utility and it could earn whatever it wanted and distribute whatever it wanted as it saw fit.

Now, the fact that it has elected to take money which it [fol. 1842] might otherwise have distributed to put it into the development of future business, that should entitle that company to recognition of that fact. That is an actual investment which it made in future business and, if it had not done that, it would not have been able to acquire certain of these contracts and to serve gas in certain communities where it is now being served.

I should restate that a little bit. It would not have been in a position to sell and would not now be selling gas to distributing companies which, in turn, supply their consumers in various communities.

With that in mind, I think that we can fairly say that this particular claim for business development or going concern value—I do not think the term makes much difference—has no relation whatsoever to reproduction value.

It is based on original cost. It is based on actual dollars that were taken out of the company's pocket and put into the pockets of distributing companies for the purpose of

developing its business in the future and without those contributions, it would not have been able to develop that business.

Trial Examiner: Was Mr. Littman correct in assuming that this proposed exhibit is for the purpose of developing some claim for going concern value?

Mr. Baldridge: Going concern value is again perhaps a term we might not use. It is certainly for the purpose of showing what the company has actually spent in de- [fol. 1843] veloping its business and it is an expenditure that has been made as truly as any expenditure for pipe or for compressor stations.

We do intend to put these expenditures into our rate base. We think we are entitled to do so.

Trial Examiner: Even if they have heretofore been charged to operating expense?

Mr. Baldridge: Let me again make this distinction clear, Mr. Examiner. It seems very clear to us.

We have not attempted to add to this figure any dollars contributed in this way after this company became subject to regulation. Before the enactment and effective date of the Natural Gas Act; a gas company of this kind was just another commercial enterprise and, like an oil company or any other company, it had a right to do as it liked with the money it earned and it could earn as much as economic circumstances and competition and other factors would permit.

Now, these expenses, or these moneys, were spent in those unregulated days, and I submit that there is no reason at all why the company should not now be allowed to add to its rate base something which amounted to an investment at that time.

If it had taken the equivalent amount of dollars out of moneys available for distribution to security holders and invested them in pipe or compressor stations, that would surely have been an element that would have been considered in making a rate today. It would be an actual investment.

[fol. 1844] Now, this investment was just as actual and just as sound and, I may add, considering the business as a whole, just as necessary.

* * * * * * * * *

[fol. 1846] Mr. Littman: The United States Supreme Court, of course, has passed on this subject in the Columbus Gas & Fuel case and the Dayton case, a copy of which opinions I am sorry I do not have with me at present. [fol. 1847] I thought I had copies of those opinions with me in my brief case, but I have not:

But Justice Cardozo, in those cases, rejected this kind of evidence as a basis for a claim for separate allowance for going concern value.

He rejected it on the ground that these costs had been incurred in years gone by and had all been charged to past operating expenses and that this type of proof was insufficient.

The Supreme Court, of course, has, on a number of occasions, refused to make a separate allowance or to permit a separate allowance to be made for going concern value.

This Commission has refused to make a separate allowance for going concern value. What will happen to the decision rendered by the Circuit Court of Appeals in the Natural Gas Pipe Line case, of course, I do not know. It is now pending before the Supreme Court of the United States.

However, I not only believe that this testimony is wholly incompetent as a basis for any claim for going concern value even if going concern value was to be permitted in this case as a separate allowance, because the United States Supreme Court has time and again held that past operating expenses cannot even be used as a guide for the purpose of an inclusion of a given amount as a separate allowance for going concern value, so it is not only incompetent, but it also forms an integral part of reproduction cost.

[fol. 1848] As a matter of fact, Mr. Biddison had a similar study in his Exhibit 39 and was frank enough to refer to it

as "reproduction cost", that is, it was one of the pages in his total exhibit and he frankly referred to it as "reproduction cost."

It is the cost which they would expect a purchaser to pay for their property if it were sold today and if it were reproduced today. It is all a part of reproduction cost as we understand it.

. . . . . .

[fol. 1852] By Mr. Porritt:

Q. Mr. Spitznagle, I have an exhibit titled, "Working Capital as of June 30, 1941" and ask that that so-titled exhibit be marked No. 94 for the purposes of identification.

. . . . . .

(The document referred to was marked Exhibit No. 94 for identification.)

. . . . . .

A. Page 1 of Exhibit 94 shows the reasonable amount of working capital required by Michigan Gas in the conduct of its business by summarizing the information and data detailed on pages 2 to 7 inclusive of this exhibit.

The total amount of working capital thus shown is $300,147.08 as at June 30, 1941.

Page 2 of Exhibit 94 shows the computation of the $47,175.05 included in working capital for cash fund op-[fol. 1853] erating expenses determined on the basis of the monthly average of certain pro forma operating expenses, for the twelve months ended June 30, 1941, for which working capital was employed for an estimated period of 45 days.

In making this determination, as shown on this page of this exhibit, the cost of purchased gas, amounts charged to income for taxes, amount of prepayments charged to income, and depreciation or amortization charged to income have all been excluded from operating expenses.

Page 3 of Exhibit 94 shows data with respect to the $100,723.78 included in working capital for material and supplies required to be kept on hand by the Company.

There is detailed on this page the amount invested in material and supplies by the Company at the end of each month plus an estimated amount for future increased cost of a portion of the material and supplies carried on hand.

This information is shown for a period of 18 months ended with June 30, 1941. There is also shown the average amount for the 18 month period and for the last twelve months in said 18 month period.

The amount of estimated increased future costs of material and supplies is based on a determination, made by Francis S. Haberly, Engineer, submitted as Exhibit 87 in this case, of the cost of replacing at June 30, 1941 prices, only 58 percent of the material and supplies on hand at June 30, 1941.

[fol. 1854] It will be noted from the tabulation on this page that the amount of material and supplies on hand at the end of the respective months has increased from $58,959.83 at January 31, 1940, to $93,412.78 at June 30, 1941.

Such increase has been due to the need for additional material and supplies to meet the requirements of expanding operations in that period, and the need for protecting the company against the ever increasing difficulty occasioned by the defense activities of our National Government in securing prompt delivery of material and supplies.

Therefore, we estimate that the amount of material and supplies on hand at June 30, 1941, adjusted in part to the cost of replacing 58 percent of such material and supplies at June 30, 1941 prices, represents the amount of working capital reasonably required to be invested in material and supplies.

Page 4 shows a tabulation of the quantity of gas in the line pack of the company, its cost per therm, its aggregate value, the value capitalized and not capitalized, at the end of each month from July, 1940, to June, 1941, and the average amount of said items for the twelve-month period ended June 30, 1941.

Line pack is gas stored in the mains and the amount at the end of any month represents an investment in gas carried on hand.

We have included $31,406.70 in working capital for line pack which is the average value of such line pack, not capitalized and carried on hand at the end of each month in [fol. 1855] the twelve months period ended June 30, 1941.

Page 5 is a copy of a letter dated September 30, 1941, received by the company from the National Bank of Detroit and signed by Elbert S. Burns, Cashier, which states that the minimum bank balance which it will require of the company in connection with its accounts is $116,303. We have included this amount in working capital.

Page 6 details, by months, for twelve months ended June 30, 1941, the amount invested by the company in prepaid expense, including the average amount invested during such period. The average amount of $5,538.55 has been included in working capital.

Page 7 is factual data with respect to the Company's cash position and is presented by months for the twelve months ended June 30, 1941.

It shows that the company maintains eighteen separate accounts in the National Bank of Detroit, the aggregate of the cash balances carried in such accounts, and other pertinent data in support of the minimum cash requirement included in working capital.

* * * * * * * *

[fol. 1860] GEORGE S. YOUNG, a witness, having been previously sworn, resumed the stand, was examined and testified as follows:

By Mr. Porritt:

Q. Mr. Young, have you prepared or had prepared, a statement setting forth the "Estimated Cost of Completing the Work in Progress at June 30, 1941, and Estimated Gross Income to be Derived from the Projects when Completed?" A. I have.

Q. This document which I now show you, entitled "Estimated Cost of Completing Work in Progress at June 30, 1941, and Estimated Gross Income to be Derived from the Completed Projects" is the statement to which you have just referred? A. It is.

* * * * * * * *

(The document referred to was marked Exhibit No. 95 for identification.)

* * * * * * * *

A. Under Column A are listed the various projects [fol. 1861] constituting work in progress as of June 30, 1941.

In Column B are shown the estimates of the total expenditures to be made under each project.

In Column C are listed the total amounts expended under each project at June 30, 1941.

In Column D are listed the estimated amounts required to complete each project after June 30, 1941.

The amounts listed in Column D are differences between those amounts listed in Column B and Column C.

In Column E are listed the estimated increases in gross operating income before depreciation and Federal income tax to be derived from completed projects in the first year after the date of completion.

* * * * * * * * *

Mr. Lee: Is this gross income predicated upon existing contractual prices you receive for the delivery of the gas?

The Witness: Yes, it is.

I might add, in connection with that, that the only one of these projects which will reflect an increase in income is that on Line 13, pertaining to the Monroe measuring station.

Mr. Lee: Does this exhibit have any relation to any work in progress incidental to the new contract between [fol. 1862] Panhandle and the Consumers Power Company?

The Witness: No, sir, it does not.

Mr. Lee: That new contract between the Panhandle and Consumers Power Company will enhance your income, won't it?

The Witness: Yes, sir, it will.

Mr. Lee: But that is in no way reflected in this exhibit?

The Witness: It is not, no sir.

Mr. Lee: Then, do we understand that there is no expenditure necessary by your company in order to carry out the requirements of that contract?

The Witness: Yes, I would say that there will be expenditures necessary, but they have not been undertaken as yet.

Mr. Lee: That is what I wanted to get clear. There is no work being done or no expenditures incurred or contracts entered into that will result in expenditures with reference to the Consumers Power ~~contract with~~ the Panhandle Eastern Pipe Line Company?

The Witness: No, sir.

Trial Examiner: However, the proposed Exhibit 95 is a reflection of the status as of June 30, 1941, and not as of today?

Mr. Lee: That is right.

Trial Examiner: Any other questions, gentlemen?

Mr. Littman: Yes, I would like to ask Mr. Young to explain the method whereby he arrived at the figures shown in column E, entitled "Estimated gross operating [fol. 1863] income before depreciation and Federal income tax, to be derived from completed projects."

Can you explain, generally, how you arrived at those figures?

The Witness: Well, in the case of the first item, "Routine minor additions to transmission system property," the item under "B"—$27,057, is the amount in a blanket budget to cover minor additions to transmission facilities and would not result in any increase in revenue. The $270 which is marked as a red figure would be the amount of taxes and insurance to cover those additions in property.

. . . . . .

Mr. Littman: Will you explain the method whereby you arrived at the balance of the figures in that column?

The Witness: Well, the second item, "Routine minor additions to general property," I think is covered by

Note A at the bottom of the page there, in that the amount of taxes applicable to the additions would be negligible.

That item is intended to cover the additions to the office equipment and furniture, tools and working equipment, which might be purchased and which would not result in any increase in revenue.

The Witness: The third item, $75,174, is a carry-over [fol. 1864] budget from the 1940 construction of the 24-inch loop pipe line to cover the settlement with the contractor which was not made in the year 1940 and also to cover the installation of concrete gate boxes; which was not done until this summer.

The note at the bottom, with reference to that item and to another item, I think is self-explanatory. The $750 item represents again the taxes and insurance by reason of this increase in capital from which there is no increase in income.

The explanation of the item on Lines 8, 9 and 10, I think, is the same. It is covered by the note B. The Edgerton compressing station was put into operation in 1940. The work, however, was not entirely completed and the carry-over budget, in the amount of $25,271 was taken to complete that work.

The next item, the construction of the Bluffton warehouse, again the amount of $295 represents the increase in taxes and insurance by reason of that construction and there is no income increase as a result of that installation.

The next item covers the construction of the Monroe measuring station to deliver gas for the account of Panhandle Eastern Pipe Line Company. There is an increase of revenue in that case.

As I recall, that amounts to $7600 and the $6877 item is the amount after operating expenses of that measuring station and after taxes and insurance.

Mr. Littman: Doesn't the figure that you just named as [fol. 1865] increased revenue by reason of the installation of the measuring and regulating station near Monroe represent an allocation of some kind?

The Witness: No, we are being paid fixed rates for the transportation of gas to Monroe and, on the basis of our

estimate of the delivery for the year after the completion of the station, we can calculate the increase in revenue from that operation.

Mr. Littman: And your working papers show the details of that calculation, do they?

The Witness: Yes, they do.

I might add also, in that connection, that there is a figure included in operating expenses which was deducted from the $7,600 figure to cover the cost of pumping to this location when the gas is delivered at Monroe.

The next item, construction of the Elwood measuring and regulating station, would result in no increase in income. We have a contract with the Central Indiana Gas Company whereby we were obligated to build additional points of delivery for them.

They asked that we build the Elwood station and it does not mean that we would deliver any more gas to them. Therefore, there would be no increase in income and the $540 item represents again taxes and insurance.

The last item, installation of two additional units at the Edgerton compressing station will not result in any increase [fol. 1866] in income. Those two units are being installed there so that we can make anticipated deliveries of about 7 million feet per hour to Detroit and, at the same time, maintain the contract pressure when delivering 7 million cubic feet per hour rate which is at a rate of about 168 million cubic feet per day, whereas our obligation to deliver in 24 hours is limited to 125 million.

Mr. Littman: That installation is for the purpose of taking care of an increased load, isn't it?

The Witness: No, sir.

Mr. Littman: It is not?

The Witness: It is not. It is for the purpose of taking care of this high hourly rate of delivery. However, the total in the course of the day will still not be more than 125 million.

Mr. Goodman: In connection with the figures in Column E, do they reflect, in any way, any consideration of savings in operating expenses?

. . . . . .

The Witness: No, they do not.

. . . . . .

[fol. 1867] Mr. Goodman: Do you have engineering studies under which these particular expenditures are justified?

The Witness: Yes, in the case of the items covered on Lines 5, 6 and 7, 8, 9 and 10, and 13 and 14, we have made calculations to justify those expenditures.

. . . . . .

[fol. 1869] Mr. Lee: The exhibit that you have just offered, marked No. 95 for identification has to do, as I understand it, solely with work in progress and partial expenditures thereon, for construction necessary to carry out, in your judgment, existing contracts with customers.

The Witness: Yes, I would say that the one referring to expenditures applicable to construction of Edgerton compressor station, in 1940; the one referring to expenditures applicable to the 24-inch loop line construction in 1940 and the construction of the measuring and regulating station near Monroe and also the construction of the measuring and regulating station near Elwood, Indiana, and also the installation of two additional units at Edgerton compressing station, are in that category.

Mr. Lee: This looping, has the entire line been looped?

The Witness: The 20-inch line extending from the Illinois-Indiana State Line to a point near Zionsville, a distance of approximately 70 miles, has been completely looped with 24-inch pipe line.

At one river crossing, we have put in a multiple river crossing in the loop.

. . . . . .

[fol. 1870] By Mr. Porritt:

Q. Mr. Young, have you prepared an exhibit showing the estimated cost to the company of this proceeding going on before the Federal Power Commission? A. I have.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 96 for Identification.)

. . . . . .

[fol. 1871] Mr. Littman: This is rate case expense. We would like to reserve an objection to this exhibit on the ground that rate case expenses are not to be considered in this case, at least for the purpose of testing the reasonableness of the present rates.

. . . . . .

Q. Mr. Young, did the Michigan Gas Transmission Corporation have any extraordinary or abnormal pipe line maintenance during the twelve months ending June 30, 1941?

A. Yes; in the amount of $4,572.92 to repair and reinforce a steep bank where a slip had occurred.

Q. Was the balance of the amount that was expended for pipe line maintenance during this period expended for ordinary maintenance? A. It was.

Q. Do you anticipate that larger expenditures will be required for extraordinary or abnormal pipe line maintenance during the life of the property? A. I do.

Q. What, in your opinion, constitutes extraordinary or abnormal pipe line maintenance?

A. [fol. 1872] Extraordinary or abnormal pipeline maintenance includes, in particular, the cost of: repair of large washouts caused by high water and heavy rains; repair of slips; repair of pipe line and river crossing breaks; the cost of applying cathodic protection where the nature of the soil and inspection of the pipe indicates that the pipe is being actively corroded and might corrode to a serious extent if anticorrosive measures are not taken; the cost of lowering river crossing pipe lines where erosion has removed the cover; reinforcing the pipe line near where mining operations have been carried on resulting in sinkage which endangers the pipe line; reinforcing pipe lines through congested areas which have developed since the pipe line was laid.

Q. What, in your judgment, is an annual amount which should be provided to take care of extraordinary and abnormal pipe line maintenance?

A. In my judgment, an allowance of $30,000 per year for extraordinary or abnormal maintenance of pipe lines, should be provided.

Q. Did the Michigan Gas Transmission Corporation have any extraordinary or abnormal maintenance in compression stations, measuring and regulating stations, and on field equipment during the twelve months ending June 30, 1941? A. No, it did not.

Q. Have any large parts been renewed?

A. No. In view of the fact that the property is quite [fol. 1873] new, the renewal of parts in equipment in compressor stations, measuring and regulating stations and in field equipment has not been substantial.

* * * * * * * * * *

Trial Examiner: To what line of inquiry were these last questions addressed? I assume that there is no exhibit yet before us that contains the $30,000 figure just mentioned for extraordinary expenses?

Mr. Porritt: It is an estimate of the maintenance cost that will be used in a pro forma statement.

* * * * * * * * * *

By Mr. Porritt:

Q. Should any provision be made, in your judgment, for the fact that the cost of renewing parts in equipment will increase?

A. Yes. In my judgment, an allowance of $8,000 per year should be provided for this purpose, which is $50,000 per compressor station for a twenty-five year period, a total of $150,000 for three stations or $6,000 per year to which has been added $2,000 per year to cover renewals in measuring and regulating stations and field equipment.

* * * * * * * * * *

[fol. 1879] Mr. Lee: What justification is there, in your opinion, for the expenditure of $30,000 a year upon the line from Zionsville to Detroit when there has never been any necessity for such expenditure since the line was built?

The Witness: Well, it is a judgment figure, Mr. Lee.

I think the fact that there have been no breaks in that pipe line does not mean that there will be none. We have

recent cases to cite, the break in the Colorado interstate line and the break in the Chicago pipe line.

[fol. 1880] Mr. Lee: But is this true, that in the operation of the Michigan Gas Transmission Corporation since its organization, there has been no amount budgeted of this kind in anticipation of such a condition as you have set forth?

The Witness: No, we have, of course, covered these things by maintenance as we went along.

Mr. Lee: And you have had no maintenance of this kind from Zionsville to Detroit?

The Witness: No, no extraordinary maintenance.

Mr. Lee: That is right, and this possibility of a maintenance has just developed since this rate case started, hasn't it?

The Witness: No, I would say not. That is something—

Mr. Lee: (Interposing) If it is good judgment, sound judgment, to have it now, why haven't you had it set up for the last five or six years, if it is so necessary?

The Witness: We have had it in our account each year for the last five years. That is, it has been included in maintenance.

Mr. Lee: But there has been no extraordinary appropriation of this kind, we will agree on that?

The Witness: No, that is right.

Trial Examiner: What do you mean you have had it in your account for the last five years?

The Witness: Any expenses of this kind have been [fol. 1881] included in our maintenance expenditures as shown on our financial statement.

Trial Examiner: You did not then have in mind a budget provision?

The Witness: No, sir.

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[fol. 1883] Mr. Littman: I would like to ask Mr. Young some questions.

Mr. Young, do I correctly understand your testimony to be that you are claiming $30,000 per year for so-called extraordinary maintenance in the future?

The Witness: That is correct.

Mr. Littman: That is, of course, in addition to the annual expenditures that have heretofore been required for maintenance?

The Witness: That is in addition to the amount which will be included in the pro forma statement which will be presented for the twelve months period ending June 30, 1941.

Mr. Littman: Yes. It is an additional maintenance item, isn't it?

[fol. 1884] The Witness: That is right.

Mr. Littman: In addition to the usual maintenance?

The Witness: That is right, in addition to what we have termed "ordinary maintenance."

Mr. Littman: And you are also claiming the sum of $8,000 per year by way of increased labor cost in making renewals.

Is that a correct statement?

The Witness: That is not $8,000 for the labor cost but $8,000 for the cost of material and labor.

Mr. Littman: And when you use the term "renewals" I take it you mean replacement?

The Witness: Yes, I am talking of replacement, such as a piston in an engine.

Mr. Littman: And that $8,000 per year is being claimed by you as an item of expense?

The Witness: That is correct.

Mr. Littman: In arriving at these amounts, did you follow the Federal Power Commission's Uniform System of Accounts?

The Witness: No, I did not give any consideration to that in arriving at these amounts.

I just set up $30,000 for pipe lines and $8,000 to cover the other items mentioned there.

Mr. Littman: And, so far as you know, those items might not all be allowed under the Uniform System of [fol. 1885] Accounts of the Federal Power Commission as items of expense but might be items of capital or classified elsewhere, is that correct?

The Witness: I cannot make a positive statement as to that at the present time.

I think that they would all be maintenance items, though.

Mr. Littman: But you do not know, because you said you did not follow the system of accounts.

The Witness: Yes, and I say that I do not think the system of accounts describes what should go in as maintenance and fixed capital, so far as replacement of an engine is concerned.

That is, replacement of a part in an engine.

Mr. Littman: Well, do you have working papers which show the detailed items that enter into this additional $30,000?

The Witness: I do not.

Mr. Littman: Can you supply it for our information and examination?

The Witness: It is a judgment figure.

Mr. Littman: How can we check to know whether part of it is or is not properly included under our system of accounts in maintenance or capital?

The Witness: I could probably furnish you a list of items which I think would probably be replaced in engines over a period of twenty-five years, in my judgment.

Mr. Littman: Where did you get this figure from? Did you build it up from detail, or what did you do?

[fol. 1886] The Witness: It is a judgment figure arrived at by discussion, and I might add that I had the benefit

of the experience of another pipe line company to base my judgment on.

Mr. Littman: What pipe line company?

The Witness: I would prefer not to mention the name of it. The figures were furnished to me in confidence.

Mr. Baldridge: It is not one of our companies, Mr. Littman. It is an entirely outside company and we would a little bit prefer not to mention the name unless it is important.

Mr. Littman: Mr. Young, does Michigan Gas Transmission Corporation now have some cathodic protection equipment?

The Witness: We are putting in some cathodic protection equipment at the present time. There was none included, however, as of June 30, 1941.

Mr. Littman: How is that charged on the books of Michigan Gas Transmission Corporation?

The Witness: It will be charged as maintenance.

Mr. Montgomery: Pardon me, Mr. Littman, what kind of equipment was that?

Mr. Littman: Cathodic protection.

Would you capitalize river crossings?

The Witness: Not repairs to river crossings.

Mr. Littman: Suppose an entire river crossing washed out. How would you charge it?

The Witness: I presume that would go to capital.

[fol. 1887] Mr. Littman: Would be charged to capital?

The Witness: I presume so.

Mr. Littman: Would a river crossing repair be extraordinary maintenance?

The Witness: Yes, I would say so. They do not occur every year. We have had no repairs to make thus far to river crossings.

However, I mentioned one possible source of expense in connection with that in my testimony.

Mr. Littman: Is extraordinary maintenance, then, something that does not occur every year?

The Witness: Well, in speaking of the river crossing, it may not occur every year, but some items of extraordinary maintenance are liable to occur every year.

Mr. Littman: The increased cost in the making of renewals would be charged, would it not, as a capital item?

The Witness: No, I do not believe so, Mr. Littman.

Mr. Littman: You are not an accountant, I take it?

The Witness: I am not an accountant.

Mr. Littman: You are not altogether sure about the answer to that question?

The Witness: I am not too sure, although it has been discussed.

Mr. Littman: If your Honor please, I wish to move to strike all of the testimony of Mr. Young on this with [fol. 1888] respect to the item of $30,000 for so-called extraordinary maintenance and $8,000 for so-called increased cost in making renewals.

The testimony is so vague, indefinite, and nebulous that we, of course, would have no way whatever of checking its accuracy. We do not know, and neither does this witness, what part of these amounts is chargeable under our system of accounts as maintenance of capital or otherwise.

I think the record is eloquent on the subject that this testimony has absolutely no foundation, in fact. It comes from sources which this witness is unwilling to disclose to us.

I think it would be highly unfair to expect the Commission counsel or its staff to be required to check evidence of this kind, so-called evidence.

As a matter of fact, I do not think it is evidence at all, and it has absolutely no evidentiary value. I do not know to what possible use the Commission could put this testimony, not knowing anything at all about its detail or where the items are to be charged and I, therefore, move that this testimony be stricken.

Mr. Lee: On behalf of the Petitioner, your Honor, I desire to join in the objection made by Mr. Littman on behalf of the Commission.

Trial Examiner: The motion is denied.

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[fol. 1894] Mr. Baldridge: Isn't it true, in the case of new property, that very little extraordinary maintenance is necessary over the first few years?

The Witness: That is correct.

Mr. Baldridge: And as the property gets older, you need a greatly increasing amount of extraordinary maintenance?

The Witness: Yes, I would say that is correct.

Mr. Baldridge: And isn't that borne out by the inves-
[fol. 1895] tigations you have made into the business and experience of other companies?

The Witness: That is correct, in the business and experience of the other companies whose record on this subject is available to us.

Mr. Baldridge: So that you think you are justified in assuming that, as the property passes beyond the first few years of its existence, the amount of extraordinary maintenance needed will increase considerably?

The Witness: Yes, I do.

Mr. Lee: But these other companies with whom you wish to make comparison had pipe lines of antique construction compared with this modern pipe line, didn't they?

The Witness: No, the pipe line to which we have referred was built in 1929 and the first item of extraordinary maintenance which was recorded was in 1933.

Mr. Lee: But what I am getting at is this pipe line, at least the portion of it from Zionsville to Detroit, was the most modern type of pipe line construction, wasn't it?

The Witness: It was.

Mr. Lee: And it is not comparable with any other type of pipe line unless it is also the most modern, is it?

The Witness: Yes, I would say that.

Mr. Lee: Is there any other pipe line in the country comparable to this pipe line, as far as modern method of [fol. 1896] construction and materials are concerned?

The Witness: Yes, I would say that there is.

Mr. Lee: Built subsequent to this or previous to this?

The Witness: Built previously and subsequently to this.

Mr. Lee: And did you study their records as to extraordinary maintenance?

The Witness: Their records were not available to me.

Mr. Lee: Then the only record that you made comparison with was the record of the pipe line owned by a company which was not comparable to this pipe line.

The records of the companies that owned pipe lines comparable to this one you had no access to?

The Witness: I did not say that the pipe line that I had reference to was not comparable. I think perhaps it is. It is a line, as I stated, that was built in 1929.

. . . . . .

[fol. 1898] Mr. Littman: I would like to inquire further, Mr. Young, so that I may understand your method.

Mr. Young: if one pipe length of pipe on the Michigan Gas Transmission Corporation's system is removed and replaced by reason of damage, how is the expense of replacing that length of pipe charged?

The Witness: I will have to refresh my memory on the length of pipe that is put through capital. I cannot answer your question.

Mr. Littman: Can somebody tell us the average length of pipe line on the system?

The Witness: You mean the average pipe length in our system?

Mr. Littman: Yes, 40 feet, isn't it?

The Witness: Forty feet, and some 20 feet.

Mr. Littman: Let's start out with the 20-foot length, now. How would you treat that 20-foot length?

The Witness: I would have to refresh myself as to whether that is put through capital. I think it is, but I would have to check that.

[fol. 1899] Mr. Littman: How did you treat that for purposes of making this estimate which you have submitted of $38,000?

The Witness: There would not necessarily be any renewal of pipe in the case of a break.

Mr. Littman: You said there was $8,000 a year for renewals of pipe.

The Witness: No, I said renewals of parts in compressor stations, measuring and regulating stations, and in field equipment, working equipment.

Mr. Littman: How about the $30,000 for extraordinary maintenance? That includes pipe, doesn't it?

The Witness: That includes breakage in pipe, as I mentioned here, repair of pipe line and river crossing breaks.

Mr. Littman: Well, how do you treat a 20-foot break?

The Witness: Well, I do not consider that we would have to replace any pipe necessarily in repairing a break. If the pipe should pull out a coupling, that same piece of pipe could be used in the repair. That is, the same pipe would again be joined.

Mr. Littman: How would you repair it?

The Witness: Well, in the case where it pulled out of a coupling—

Mr. Littman: (Interposing) You do not then anticipate any pipe breakages?

The Witness: There may be material failures of pipe, yes.

Mr. Littman: Well, with $30,000 a year for breaks alone, [fol. 1900] you would have to have a good many leaks to

take up all of that with leak clamps, wouldn't you? That would buy a lot of leak clamps, wouldn't it?

The Witness: Yes, it would buy a lot of leak clamps but I am mentioning a lot of items to make up that amount, repair of slips, repair of river crossing breaks.

Mr. Littman: How much of it is breaks in pipes and river crossings, and how much of it is not?

The Witness: I cannot state that.

Mr. Littman: You cannot state that?

The Witness: I do not know.

Mr. Littman: Well, suppose we have a 40-foot pipe length that goes out by reason of an extraordinary damage. How would the cost of replacing that pipe be handled?

The Witness: May I check that up and answer at a later date? I am not in a position to do that just now.

Mr. Littman: You do not know that now?

The Witness: I do not at this moment.

Mr. Littman: You did not know that when you made up this estimate?

The Witness: That was discussed at the time we made up this estimate. I do not remember it.

. . . . . .

[fol. 1901] Mr. Littman: Did you inquire into the accounting practice of those other companies or another company, with respect to what is charged to maintenance and what is not charged to maintenance?

The Witness: No, but they had listed items of abnormal maintenance, and I assumed that those items listed on the sheet which I had access to were not put through capital.

Mr. Littman: You made no investigation to ascertain whether that company to which you just referred, was fol-[fol. 1902] lowing the Federal Power Commission's system of accounts, did you?

The Witness: No, I did not.

Mr. Littman: Now, Mr. Young, I am going to read from Page 23 of the Federal Power Commission's Uniform System of Accounts prescribed for natural gas companies subject to the provisions of the Natural Gas Act, Account No. 141—Extraordinary Property Losses under the title of Deferred Debits.

. . . . . .

[fol. 1903] I want to read this particular account and then I am going to ask him a question about it. I read from this account:

"A. This account shall include, when so authorized or directed by the Commission, losses in service value of property abandoned or otherwise retired from service which are not provided for by the depreciation or other reserves and which could not reasonably have been foreseen and provided for. It shall include also, when so authorized or directed by the Commission, extraordinary losses, such as unforeseen damages to property which could not reasonably have been anticipated and which are not covered by reserves or by insurance."

. . . . . .

[fol. 1910] Mr. Baldridge: May I ask a preliminary question, Your Honor, which may serve to shorten it a little bit?

Mr. Young, are you now in a position to state what natural gas company you are referring to in making up your judgment figure?

The Witness: Yes, the Memphis Natural Gas Company.

Q. That company is in no way associated or affiliated with Michigan Gas Transmission Corporation?

A. Not to my knowledge.

Q. And the information was received how?

A. The information was received by me through Mr. O. H. Simonds of the Central Service Corporation, which corporation has been retained in this case.

. . . . . .

[fol. 1911] ROBERT S. DREW was called as a witness on behalf of Michigan Gas Transmission Corporation and being first duly sworn, was examined and testified as follows:

By Mr. Porritt:

Q. Mr. Drew, will you state your name and address?

A. Robert S. Drew, 231 South LaSalle Street, Chicago, Illinois.

Q. What is your present position, Mr. Drew?

A. Vice president of Continental Illinois National Bank & Trust Company of Chicago, in charge of the investment [fol. 1912] division of the trust department, responsible for development of general investment policies for supervising the buying and selling of securities, the analysis of securities, examination of trust account portfolios and for consultation on investment with customers of the trust department.

* * * * * * * *

I graduated from the University of Wisconsin with a degree of Bachelor of Science and Civil Engineering in 1913.

From 1913 to 1917 I was assistant engineer with the firm of Sloan, Huddle, Feustel & Freeman of Madison, Wisconsin.

In 1918 I was at the Field Artillery Officer School at Camp Taylor, Kentucky, and remained there as an instructor.

From 1919 to 1920 I was in the bond department of the Illinois Trust & Savings Bank in Chicago as a salesman.

From 1921 to 1926 I was supervising engineer with the Business Research Corporation of Chicago, industrial engineers.

From 1927 to 1941 I have been with the Continental Illinois National Bank & Trust Company of Chicago in the buying division of the bond department for four years and in 1931 I was assigned to the investment division of the trust department.

* * * * * * * *

[fol. 1913] On or about October 21 of this year Mr. Daniel C. Green asked the Chairman of our bank, the Continental Illinois National Bank & Trust Company, if there was a man in his organization qualified to give an opinion as to the question: "What rate of return should a company like the Michigan Gas Transmission Corporation earn on its invested capital or fair value in order to be able to finance by public offering of securities?"

The Chairman mentioned my name to Mr. Green and later asked me to give my assistance to him as a customer of our institution. No mention of fee or compensation was made and none will be charged.

Q. What contact have you had with gas companies' securities?

A. As a general policy we have not purchased natural gas pipeline securities for trust accounts. Our opinion is that natural gas pipeline securities have inherently a substantial risk factor which precludes their use for conservative trust investment.

We have bought and own in trusts a moderate amount of gas distributing company securities. Also there have been deposited in our hands as trustee, from time to time, [fol. 1914] relatively small amounts of natural gas securities which we have had to analyze and follow from an investment and market standpoint.

Q. As a result of your consideration of the problems, did you reach some conclusions?

A. In my opinion, the rate of return which a company like the Michigan Gas Transmission Corporation should earn on its invested capital or fair value, in order to be able to finance itself at this time by public offering of securities, is at least 8.5 percent.

Q. What information did you consider and examine in reaching the conclusions that you reached?

A. Among the information that I had access to were the following: "Investors' Appraisal of the Risks of Capital in the Natural Gas Industry as Compared with Other Divisions of the Utility Industry" Volumes I and II, prepared and filed by Paul B. Coffman, vice president of Standard and Poor's Corporation in this case. Then a typewritten statement taken, I believe, from the books

of the Michigan Gas Transmission Corporation, showing, among other things, gas deliveries, fixed assets, reserve for depreciation, operating revenues and expenses, gross income from operations for the calendar years 1932 to 1940, inclusive, and for the 12 months ended June 30, 1941.

In addition to the material mentioned above, I was given [fol. 1915] orally a broad outline of the case and a general description of the company and its business.

After examining the material furnished to me, I made use of information contained in Moody's Manuals, in Standard and Poor's published pamphlets, "Industrial Surveys" and "Security Markets," and other sources.

I found that the business and property of the following four companies most nearly approach those of the Michigan Gas Transmission Corporation: El Paso Natural Gas Company, Southern National Gas Company, Memphis Natural Gas Company and Interstate Natural Gas Company. These are four of the five companies which Mr. Coffman used in his study.

I made independent calculations for each of these companies to arrive at an average rate of return on their invested capital, including both stocks and bonds. In these calculations I used market values of their securities wherever they were available to me and estimated values where market prices were not available and income as reported for 1940. The results of this study were as follows:

El Paso, 8.9 percent on market value of invested capital; Southern, 10.2 percent; Memphis, 10.4 percent; and Interstate 9.4 percent. The arithmetical average of those four is 9.7 percent.

Inasmuch as only a portion of the securities of these four companies is publicly held and as the market on the [fol. 1916] latter is not a very active one, I wished to check the 9.7 per cent average mentioned above with the returns on securities which are more active in the market. The Dow-Jones industrial stock average is probably more closely followed by investors than any other index of market trends. This is an average of 30 active industrial stocks of representative companies in diversified industries. To these 30 companies I applied the same kind of calculation

as used for the four pipeline companies, using 1941 net income as estimated by Standard and Poor's, and market prices as of November 12, 1941, wherever they were available. Indicating the importance of these 30 companies, the aggregate market value of their securities was about $17,244,000,000 and net income was about $1,494,000,000. The average of the ratios of net income to market value of capitalization was 9.5 per cent. As a group, on a weighted basis, this ratio was 8.66 per cent.

Q. What would you say, in your opinion, would be the most economical method of financing publicly Michigan Gas Transmission Corporation?

A. Under present conditions, I believe the most economical method of financing publicly a company like Michigan Gas Transmission Corporation, assuming a total capitalization of $13,000,000, would be to set up a capitalization of one-half serial bonds and one-half common [fol. 1917] stock. My opinion is that the following setup would be favorably received by the investing public: $6,500,000 of 3.5 per cent serial bonds, one to sixteen-year maturities, and six and a half million dollars of common stock.

Now, as to the bonds, the interest the first year would be $227,500 which, I believe, would have to be covered at least five times after taxes. This would require net earnings after depreciation and taxes of $1,137,500. Interest and serial maturities combined would be covered 1.8 times. I believe these bonds could be sold to net the company about par.

With respect to the common stock after $227,500 of interest and $406,250 annual serial maturity, a total of $633,750, there would remain $503,750 earnings for the common stock. The price earnings ratio for the first year would be about 13. The rate of earnings on the common would be about 14 percent after interest, but before serial maturities and about 7.7 percent after the serial maturities of the bonds.

The $1,137,500 net earnings required for this setup would be about 8¾ per cent on the $13,000,000 capital.

[fol. 1918] Mr. Littman: To what extent did you rely on Mr. Coffman's exhibits in arriving at your conclusions as to rate of return?

Trial Examiner: Supplementing this question, I was going to ask Mr. Baldridge if the exhibits referred to by the witness were 63, 64 and 65 for identification presented in this hearing about October 8 or 9.

. . . . . .

[fol. 1919] The Witness: I am not familiar with the exhibit numbers. These are the two volumes that were furnished me.

Mr. Littman: Will you please read the titles of the two that you—

The Witness: I have already done so in my testimony, but I will read them again, "Investors' Appraisal of the Risks of Capital in the Natural Gas Industry as Compared with Other Divisions of the Utility Industry," Volumes I and II.

Mr. Littman: That is Exhibit 63 and Exhibit 64?

The Witness: Volume I is summary of analyses and Volume II is statistics supporting data in Volume I, Appendixes A, B and C.

Mr. Littman: You didn't examine Exhibit 65, a third exhibit, having numerous charts prepared by Mr. Coffman, did you?

The Witness: No, these are the only two exhibits that [fol. 1920] I have seen of Mr. Coffman's work.

. . . . . .

[fol. 1922] The Witness: Shall I answer Mr. Littman's question now?

You asked me a question which I haven't yet answered.

. . . . . .

Mr. Littman: I think it is simply this, whether you place any reliance on Mr. Coffman's third exhibit which is Exhibit 65 and I believe you stated that you hadn't ever seen that exhibit. Is that correct?

The Witness: That is correct.

. . . . . .

[fol. 1933] FRANCIS S. HABERLY, a witness having been previously sworn, resumed the stand and testified further as follows:

By Mr. Porritt:

. . . . . .

[fol. 1934] Q. Mr. Haberly, were you asked by Mr. Green to prepare an exhibit showing variations of the purchase power of the dollar as related to the Michigan Gas Transmission Corporation? A. I was.

Q. And did you prepare such an exhibit? A. I did.

Q. Mr. Haberly, in your statement of your qualifications and experience you referred to the fact that you had made many appraisals by the use of indexes and that your office currently prepared indexes relating to the cost of electric light and power construction, the cost of electric railway construction, and the cost of artificial gas construction.

Is that not correct?

A. Yes, that is true. I have made extensive use of indexes in many valuations which I have made both since I have been in business for myself and prior thereto. It is likewise true that indexes of construction cost of utility properties are computed monthly in my office based upon formulae and weightings which were developed by me.

In the course of such work, my office has accumulated a very extensive library of index data, not only relating to price movement of commodities and wages in general, but also with special reference to the materials, the equipment, [fol. 1935] and the labor costs entering into the construction of public utility property.

Data of this latter character are kept currently up to date and some of it extends back beyond the Civil War. In fact, in a trended appraisal which was made about five years ago, indexes were prepared and applied to original costs of property built as early as 1849.

Q. Mr. Haberly, would you be able to state about what percentage of your valuation work has been done by means of indexes?

A. I do not know the percentage of valuation which I have done by means of indexes, but I will say that the aggregate value of utility property which I have appraised, where the index system alone has been used in the determination of such value, amounts to something in excess of one billion one hundred million dollars.

Q. As a result of the work which you have done by means of indexes, and your familiarity with them, do you have a knowledge of what has been the tendency of prices of commodities since 1930?

A. Yes, of necessity, I keep myself generally informed of the movement of general commodity prices. The best-known index of general commodity prices, and I think the most accurately compiled, is that of the United States Bureau of Labor Statistics, which index is known as the All Commodities Index of Wholesale Prices and is com-
[fol. 1936] puted on a base of 100 for the year 1926.

This index includes a very comprehensive cross-section of prices in the field of agriculture, mining and manufacturing and includes farm products, foods, hides, textile products, fuel and lighting, metals and metal products, building materials, chemicals and allied products, house furnishings, and so forth.

The trend of prices of the All Commodities Index since 1930 has been somewhat erratic, inasmuch as the period from 1930 to date covers a period of great depression, a period of recovery, and the beginning of a World War.

The All Commodities Index stood at 86.4 for the year 1930 and declined to a low during the depression of 59.8, which point was reached in February, 1933.

The index then rose slowly to a new high of 88.0 in April, 1937, following which it sagged slightly during 1938 and 1939 due to a moderate slump in business.

Following the outbreak of the war, the index made a 4 point jump which was pretty well maintained throughout

the balance of the year 1939 and through the year 1940. Starting with 1941, the index has been rising quite steadily, the latest monthly figure being 91.8 for September, 1941.

The index of All Commodities, therefore, has risen nearly 14 percent in the first nine months of this year.

It is interesting to note the similarity of the movement [fol. 1937] of prices since the outbreak of the second World War, in 1939, with the movement of prices following the outbreak of the first World War in 1914.

Six months after the outbreak of World War I, the index of All Commodities had risen 1.2 percent as compared with 4.9 percent increase six months after the outbreak of the second World War. At the end of one year after the outbreak of the first World War, the index was 3 per cent above its pre-war level and one year following the outbreak of the second World War it was 3.2 percent above its pre-war level.

Two years after the outbreak of the first World War, the index was 23.9 percent above its pre-war level and two years after the outbreak of the present war it was 20.4 percent above its pre-World War level.

By August, 1916, the index had experienced a rise since the beginning of the war of 26.4 percent and for a like period, namely, September, 1941, which is the last date for which complete figures are available, the index showed a rise of 22.4 percent since the beginning of the present war.

To my mind this demonstrates that prices of wholesale commodities will, in all probability, follow a pattern somewhat similar to the movement of prices during the first World War.

Q. If, as you have just stated, prices during this war may follow a trend similar to that in the first World War, what does that mean will be the movement of prices in the [fol. 1938] next several years?

A. During World War I, wholesale Prices of All Commodities increased nearly one and one-half times in the period from 1914 to 1920 and may, if the present war continues, do somewhat the same thing in the next several years.

Price control legislation and price fixing may have some effect upon the extent of the rise, but, in my opinion, prices will rise despite such controls, although the rise may be much more orderly than in the first World War. I hope so, at least.

Q. Mr. Haberly, did prices act in a somewhat similar manner during the Civil War period, which started in 1861?

A. They did. The Civil War was a war within the boundaries of the United States and the effect upon prices was much more immediate, the average of Wholesale Prices for the year 1862 being [illegible] per cent above the average for 1861 and by 1865 was 1[illegible] percent above the average for 1861.

The same economic laws, in general, are at work in each major war and the shape of the curve of price rise varies only as to degree and time.

Mr. Haberly, following the cessation of hostilities, do prices in general return to the pre-war level?

A. They do. Wholesale Prices dropped from their maximum peak during the Civil War at a fairly uniform rate over a period of thirteen years, reaching the pre-war level seventeen years after the start of the Civil War.

[fol. 1939] Following the first World War, prices dropped quite precipitously from their maximum peak in 1920 and stabilized themselves at a level about 40 per cent above the pre-war level for a period of nearly eight years.

Then they dropped again quite sharply during the depression, which started in the latter part of 1929, and reached the pre-war level in the latter part of 1931, or seventeen years after the start of World War I.

Q. Mr. Haberly, so far you have been talking about the trend of wholesale Prices of Commodities. What has been the movement of wages of labor since 1930?

A. The trend of wages since 1930 has followed somewhat the same path as the trend of all commodities. Considering all wages, other than agricultural wages, there was a drop, due to the depression, of between 20 and 25 per cent from 1930 to a low point in 1933, then, due to the

efforts of the Administration, to stronger and stronger unionization of labor and, finally, due to the tremendous demand for labor as a result of the defense program, wages have risen by leaps and bounds until they are now nearly 20 per cent higher than they were in 1930, and better than 50 per cent higher than they were in 1933.

Q. Mr. Haberly, in the figures you have just quoted, you have been referring, have you not, to wages in general? Is that not correct?

A. That is so. I have been talking about wages in [fol. 1940] general, including common and skilled building labor, manufacturing wages, railway wages, public utility wages and road building wages.

In other words, it is an index which represents the general movement of wages in a variety of fields, excluding, as previously stated, agricultural wages.

Q. Mr. Haberly, did wages show tendencies to increase during the last two major wars in a manner similar somewhat to the increases experienced in All Commodities?

A. Yes, they did. During the Civil War, wages increased approximately 50 per cent and never returned to the pre-war level. In fact, they continued to rise slowly until the outbreak of the first World War.

During the first World War, wages increased until by 1920 they were 125 per cent above the pre-war level and, while some of that gain was temporarily lost during the depression of 1922 and again during the depression in 1932, 1933, and 1934, these losses have been made up and wages are now, I should say, about two and one-half times what they were in 1914.

Q. Mr. Haberly, do you expect that we will experience increases in wages during the present war such as were experienced in the former two wars you have just mentioned?

A. Yes, I think we can look forward to further increases in wages. In fact, we have been experiencing them. Skilled building wages, as reported by the Engineering [fol. 1941] News-Record for twenty cities in the United States, have increased slightly over 5 percent since 1939, while common labor wages have increased slightly over 11 percent.

Manufacturing wages for some twenty-five industries, as reported by the National Industrial Conference Board, have increased nearly 14 per cent since 1939. These percent increases do not reflect several further causes of increase in labor costs, namely, the 40-hour week and the necessity of paying time and a half for overtime and double time for Sundays and holidays.

No matter how well organized work may be, it is occasionally necessary to work overtime. In addition to this, Social Security tax must be paid on all wages, and this adds an additional four percent to the present cost of labor.

The increase in wages during the first two years following the beginning of World War I was 9 percent. This figure is taken from the All Wage Index, as computed by the United States Bureau of Labor Statistics, and, in my opinion, is in general accord with the average rise in wages thus far in this war.

Q. So far, Mr. Haberly, you have related the increases in wages that have occurred up to the present time since the beginning of the second World War.

Do you care to state whether you expect [these] will be further gains in wages provided hostilities continue for several years?

A. It is my belief that labor will continue to demand [fol. 1942] and receive further increases in wages. Labor today is very strongly unionized and it is watching the rising cost of living, the profits of industry, and rising taxes.

As long as these things increase, labor will demand increase in wages. I do not know and, frankly, I do not wish to hazard an opinion, as to what level wages may go, but I am definitely of the opinion that they will go in only one direction, and that is upward.

Unless the wage level is frozen, most material costs will rise, and if most material costs rise, then wages of necessity will rise. It is a vicious circle.

Mr. Haberly, could you state the change in wages since 1930?

A. Skilled building wages, again as reported by the Engineering News-Record, for twenty cities, have increased approximately 10 percent since 1930 and better than 50 percent since the low level reached by them during the depression in 1933.

Common labor wages have increased approximately 36 since 1930 and nearly 80 percent since 1932, this again being the low point reached during the depression. With regard to wages in the 25 manufacturing industries, they have increased nearly 40 percent since 1930 and slightly over 65 percent since the low point of the depression in 1933. The increase in wages in the 25 manufacturing industries this year alone has been about 11 [fol. 1943] percent.

Q. Mr. Haberly, have you read the testimony of Dr. David Friday and seen the exhibit which he presented during the presentation of the Panhandle portion of this case? A. I have.

Q. Do you agree with the conclusions which Dr. Friday reached?

A. As I recall the substance of Dr. Friday's testimony and his exhibit, it dealt very largely with the trend of commodity prices and wages before, during and after major wars and appears to have been very carefully and capably prepared.

While an analysis of past and present trends is based upon actual facts, the conclusions and predictions of future trends must be a matter of judgment. The evidence which I have just given, in so far as it deals with commodity prices and wages in general, covers much the same ground as did Dr. Friday in his exhibit and I am in general accord with him as to the probable future trend of prices and wages.

Q. In what way, Mr. Haberly, does the evidence which you have presented as the trend of wholesale commodity prices and of wages relate to the trend of construction and operating costs for public utility properties?

A. The factors which affect general commodity costs and wages likewise affect the costs of operating or building public utilities in a generally similar manner.

[fol. 1944] A public utility property consists largely of commodities plus the labor of manufacturing, fabricating and installing them. While the United States Bureau of Labor Statistics All Commodities Index contains a large number of commodities which do not affect directly public utilities, it does include two major groups of commodities which constitute an important part of public utility property, namely, a group called "Metals and Metal Products" and a group called "Building Materials."

The first group, Metals and Metal Products, is made up of a variety of items, including iron ore, pig iron, bar iron, cast iron pipe, steel pipe, steel billets, steel rail, steel sheets and wire, some of which items, such as cast iron pipe, steel pipe, rail and steel sheets enter directly into the construction, operation and maintenance of public utility property, while the other items I have just mentioned form the materials from which all the machinery and equipment used by public utilities is made.

The Metals and Metal Products group also includes such non-ferrous metals as aluminum, copper, copper wire, lead, zinc, and nickel, which, in more or less degree, are used by public utilities also.

The rise in price for this group, either from 1930 or since the beginning of the war, has been less marked than for the all commodity group as a whole due to the ceiling that has been placed on the price of certain metals and metal products.

[fol. 1945] The metals entering into utility plant require a high degree of processing into machinery, the cost of which therefore reflects not only the cost of the metal, but the cost of labor, which latter, as I have previously testified, has for 25 industries shown marked increases both since 1930 and since the bottom of the depression in 1932 and 1933.

From this, it follows that the trend of costs of mechanical and electrical equipment used by public utilities has been increasing during the period since 1930. That this is the case I will demonstrate more fully later in my testimony.

The second group of commodities, entering directly into the construction, operation and maintenance of public utilities is the group called Building Materials.

This group is composed of such materials as lumber, brick, cement, sand, gravel, crushed stone, structural steel, paint material, glass, tile, lime, pipe, roofing, and so forth, and since 1930 has increased around 18 percent and since the low point of the depression in 1932, almost 50 percent up to the present time.

The labor of fabricating the building materials just mentioned into buildings and structures of public utilities, as I have previously testified, has shown marked increases both since 1930 and since the low point of the depression in 1932 and 1933. Skilled building wages have increased approximately 10 percent since 1930 and better than 50 per- [fol. 1946] cent since 1933. Common labor wages have increased approximately 36 percent since 1930 and nearly 80 percent since 1932.

Q. Mr. Haberly, how does the trend of building material costs since the beginning of World War II compare with the trend for a similar period in World War I?

A. The index of building materials had risen about 19 percent up through September, 1941, over that prevailing during the last month preceding the present World War. For an exactly similar period of time after the start of the first World War, the increase in the index was nearly 28 percent or, in other words, the upward trend of building materials, so far in this war, has been only about two-thirds as great as it was in the first World War for a like period of time.

Q. Have you any figures indicating the price movements of specific items or groups of items entering into the construction of the property of the Michigan Gas Transmission Corporation?

A. Yes, I have. I can give you the trend of costs as relating to a number of items, for example:

The first two 1300 h.p. main compressor units, purchased by the Michigan Gas Transmission Corporation in April, 1936, cost $48,175 each; f.o.b. factory, with freight allowed, and the last one purchased was ordered in August, 1941,

at a cost of $61,983 f.o.b. factory, which, with freight of $1620, gives a cost of $63,603.

[fol. 1947] In other words, there has been an increase in price of Worthington compressors of this size since 1936 of 32 percent.

Compressors of the same size, purchased in 1937, cost about 2 percent more than those purchased in 1936, and those purchased in 1940 cost about 16 percent more than those purchased in 1936.

Expressed in other words, this means that the amount of money spent in 1936 for a main compressor would purchase only 98 percent of a compressor in 1937, and only 86 percent of a compressor in 1940, and likewise only 75 percent of a compressor as of June 30, 1941.

Q. Do you mean by this, Mr. Haberly, that the purchasing power of the dollar has been declining since 1936?

A. That is correct. As I have just stated, the dollar spent for compressor units in 1937 would purchase only about 98 percent of what it would in 1936; in 1940, only about 86 percent of what it would in 1936; and as of June 30, 1941, only about 75 percent of what it would in 1936.

The same decline in the purchasing power of the dollar has taken place in varying degree with respect to practically all other items of property as well as with respect to the labor necessary for the installation of such property.

To illustrate, the decline in the purchasing power of the dollar since 1936 for 180 kw. Engine-generators, present purchasing power as related to 1936 as 1.00 is now only [fol. 1948] .773; for Worthington pumps, it is now .774; for elevated water tanks erected is .692; for traveling cranes is .555; for steel pipe in large sizes is .900; for valves, .749; for main compressor buildings, erected, .736; for the labor of installing equipment, .568; for the labor of erecting structures, .550; and for the labor and expense of installing mains, .736.

Q. Mr. Haberly, have you prepared an exhibit entitled, "Michigan Gas Transmission Corporation, Variation in Purchasing Power of Dollar as Related to 'Gas Plant', 1936 equalling 100"? A. I have.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 97 For Identification.)

* * * * * * * * *

The Exhibit contains six charts which present graphically the variation in the purchasing power of the dollar as related to Station Structure Material; Station Structure Labor; Main Compressor Units; Station Equipment Labor; Steel Pipe, Large Sizes; and Mains Installation Labor.

These six groups constitute the most important elements making up the property of the Michigan Gas Transmission Corporation.

[fol. 1949] Following the charts, there is a folded sheet setting forth in tabular form the variation in the purchasing power of the dollar with respect to eleven important items of property, including those covered by the six charts.

The last column on this tabulation, which is headed "Composite of Total 'Gas Plant'," represents the variation in the purchasing power of the dollar as spent for all of the property constructed each year.

The figure of .862, as shown in the lower right-hand corner of the tabulation opposite the caption "Purchasing Power at June 30, 1941, of Actual Dollars spent on 'Gas Plant'," expresses the percent of property that could have been built at the time the various units of property were built by using today's dollar with its present purchasing power.

In other words, the same number of dollars as were originally spent for this property, if spent as of June 30, 1941, would build only 86.2 percent of the present plant.

* * * * * * * * *

[fol. 1952] Fred A. Spitznagle a witness, having been previously sworn, resumed the stand and testified further as follows:

* * * * * * * * *

By Mr. Porritt:

* * * * * * * * *

[fol. 1954] Q. Mr. Spitznagle, I hand you exhibit labeled "Statement of Income and Expense, per books," consisting of three pages, and ask, Mr. Examiner, that this be marked No. 99 for the purpose of identification.

(The Document Referred To Was Marked Exhibit No. 99 For Identification.)

* * * * * * *

A. Exhibit 99, page 1, is a condensed statement of income and expenses, per books, of Michigan Gas and its predecessor company, Indiana Gas Transmission Corporation, for the calendar year 1936 and of Michigan Gas for [fol. 1955] the calendar years 1936 to 1940, inclusive, and the twelve months ended June 30, 1941, as well as the six months periods ended December 31, 1940, and June 30, 1941.

Page 2 of this exhibit lists for the calendar years 1938 to 1940, inclusive, the twelve months ended June 30, 1941, and each six months period included in the latter period, the amount of charges paid by Michigan Gas to associated companies for management supervisory and other special services, and the operating and gas plant accounts to which such charges were recorded.

Page 3 of this exhibit sets out, with respect to the depreciation provision charged to income for the periods reported on in the condensed statement of income and expense, except the six months ended December 31, 1940, the depreciable base of gas plant, annual depreciation rate used, annual charge classified as depreciation, and facts as to depreciation on transportation and special equipment charged to transportation expense clearing accounts.

* * * * * * * *

Trial Examiner: The statement of income and expense identified as Exhibit No. 99 will be received without ob- [fol. 1956] jection, in evidence.

(Exhibit No. 99 For Identification Was Received in Evidence.)

Q. Mr. Spitznagle, I hand you an exhibit titled, "Statement of Income and Expense, per books, and After Adjustments and Redistributions," and so forth, consisting of

four pages and, Mr. Examiner, I ask that this exhibit be marked No. 100 for the purposes of identification.

(The Document Referred To Was Marked Exhibit No. 100 For Identification.)

. . . . . .

Exhibit 100, page 1, reflects, in part, with respect to the six months period ended December 31, 1940, and the six months period ended June 30, 1941, the same statement of income and expense as is shown on page 1 of Exhibit 99, just offered in evidence.

It also shows the amount of adjustments and redistributions required to be made to reflect the annual result per books of the operation of said six months periods on an annual basis, and it shows the result of operations so adjusted for the twelve months ended June 30, 1941.

It will be noted in this exhibit that the net gas operating [fol. 1957] revenues per books is $859,295.46 which is obtained by adding the amount shown on Page 1 for the six months ended December 31, 1940, of $316,903.74 in Column A to the amount $542,391.78 shown in Column D on the same line, which is Line 11 whereas, after the adjustments and redistributions, it is $969,993.36 which is the amount shown on Line 11 under Column G.

Pages 2 to 4, inclusive, detail the adjustments recorded and keyed, as such, on Page 1 of this exhibit, and I believe the adjustments as described, are self-explanatory.

. . . . . .

[fol. 1958] By Mr. Porritt:

Q. Mr. Spitznagle, I have an exhibit titled "Comparative Statement of Operating Revenue" and, Mr. Examiner, ask that this exhibit be marked No. 101 for the purpose of identification.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 101 for Identification.)

. . . . . .

Exhibit 101 lists the name of each customer of Michigan Gas and each customer of Panhandle Eastern to whom gas

deliveries are made by Michigan Gas Transmission Corporation and the operating revenue derived by Michigan Gas Transmission Corporation from such customers in the calendar years 1936 to 1940, inclusive; for the twelve months ended June 30, 1941, and in each six months of the latter period.

The information shown supports the classified and total operating revenues shown in the condensed statement of income and expense, submitted as Exhibits 99 and 100.

. . . . . .

[fol. 1959] (Exhibit No. 101 Was Received in Evidence.)

Q. Mr. Spitznagle, I have an exhibit titled "Operation and Maintenance Expenses" and, Mr. Examiner, ask that this exhibit be marked No. 102 for the purposes of identification.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 102 for Identification.)

. . . . . .

A. Exhibit 102 contains the detailed operating and maintenance expenses for Michigan Gas Transmission Corporation for the six months ended December 31, 1940, six months ended June 30, 1941, and twelve months ended June 30, 1941, classified in accordance with the classification of accounts promulgated and prescribed by the Federal Power Commission.

. . . . . .

[fol. 1960] (Exhibit No. 102 Was Received in Evidence.)

By Mr. Porritt:

Q. Mr. Spitznagle, I have an exhibit titled "Gas Sales, Gas Transported, Gas Used by Company, Line Losses and Gas Purchased", and ask, Mr. Examiner, that this exhibit be marked 103 for the purposes of identification.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 103 for Identification.)

. . . . . .

A. Exhibit 103 details with respect to Michigan Gas Transmission customers and those of Panhandle Eastern to whom gas is delivered by Michigan Gas the volume of gas, expressed in thousand cubic feet, delivered to such customers during the calendar years 1936 to 1940, the twelve months period ended June 30, 1941, and each six months period in the latter period.

It also shows the volume of gas used by the company, line [fol. 1961] losses of the company, and the total volume of of gas purchased during the same periods. In other words, the information shown is the volume of gas responsive to operating revenues in the periods outlined.

* * * * * * * * *

Mr. Littman: Are these figures as per books and records of the company?

The Witness: Books and records, yes, taken off of the books and records of the company, that is correct. I so testified at the beginning of my testimony.

* * * * * * * * * *

[fol. 1962] (Exhibit No. 103 Was Received in Evidence.)

* * * * * * * * *

[fol. 1964] By Mr. Porritt:

Q. Mr. Spitznagle, I have an exhibit titled "Estimates [fol. 1965] —Original Cost Rate Base—Pro Forma Utility Income before Allowance of Amortization of Investment—Annual Amortization Allowable—Pro Forma Utility Income Allowable and Deficiency in Pro Forma Utility Income over Amount Allowable", and, Mr. Examiner, I ask that this exhibit be marked No. 104 for the purposes of identification.

(The Document Referred to was Marked Exhibit No. 104 for Identification.)

* * * * * * * * *

A. This exhibit has been prepared to show the amount of utility income available for amortization responsive to and return on the original cost rate base, of Michigan Gas Transmission Corporation, based on the Company's operations for said twelve months period adjusted as here-

after explained by me, the annual amortization responsive to the original cost rate base, the return allowable on the original cost rate base and the original cost rate base.

The adjustments made in this statement are for the purpose of giving effect to changes in conditions in or since the twelve months period reflected per books as adjusted, and affecting the company's income for the twelve months period ended June 30, 1941, and to provide for proper amortization of the investment.

The adjustments referred to are explained as follows:

[fol. 1966] It will be noted that the first item on this statement originates on Exhibit 100 previously submitted in this case. The item of depreciation preceded by the numeral 1, in parentheses, on page one of this exhibit is added back to utility income because of the amount for amortization of the investment substituted at the bottom of this page under the caption "Annual Amortization", and so forth.

The next item of Federal income and excess profits tax is added back to income in lieu of the deduction substituted under item 11, in order that proper adjustment be made to cover the effect of United States Revenue Act of 1941 with respect to the Company's taxable income for the six months ended December 31, 1940, and some of the other adjustments made in this statement. Taxes for the calendar year 1940 are payable by the company under the Revenue Act of 1940.

The next item, prefixed by the numeral 3, is added back to the amount of utility income to exclude the amount of this item from expenses. It represents small expenditures for donations made by the company which under the Federal Power Commission classification of accounts must be included in an account designated "miscellaneous income deductions."

The next item, prefixed by the numeral 4, has been added to the amount of utility income in order to reflect in such income the amount of annual revenue the Company will be entitled to receive for gas transported under its contract [fol. 1967] with Kentucky Natural Gas Corporation.

The next item, prefixed by the numeral 5, has been added to utility income because of the inclusion of the amount of this item in working capital, Exhibit 94, offered for identification in this case.

The next item, prefixed by the numeral 6, has been deducted from the amount of utility income, based on the amount of the estimated effect on utility income of completing construction work in progress, as at June 30, 1941, as detailed in Exhibit 95 submitted for identification in this case.

The next item, prefixed by the numeral 7, has been deducted from utility income to provide for amortizing the expense of the instant case, as detailed in Exhibit 96.

Before explaining the next item, I wish to point out that the title of this item is not to be construed as a claim for the allowance of such item as maintenance. Actual expenditures incurred in the future with respect to this item will constitute expenditures for maintenance and renewal and replacements, and the latter item will result in retirements of property, all as prescribed in the Federal Power Commission Classification of Accounts.

This item, prefixed by the numeral 8, is deducted from utility income to provide for future expenditures of this character as explained, which are not included in the annual amortization provision included in this statement.

[fol. 1968] The amount used is as testified by Mr. George Young, in this case.

The next item, designated by the numeral 9, is deducted from utility income to provide for an annual wage increase made by the company on July 1, 1941.

The next item, designated by the numeral 10, has been deducted from utility income to give effect to numerous rate changes made in the period ended June 30, 1941, and contracted to be made.

During the period in question, numerous rate changes became effective, both with respect to charges made to distributing companies and municipalities and the amounts paid to Panhandle Eastern Pipe Line Company for the gas deliveries to those companies and municipalities, the

major change occurring during the period being a substitution of 3 and 4 cents rate for the demand commodity form of rate in most of the gas sales and transportation contracts and the corresponding change in the cost of such gas to Michigan Gas Transmission Corporation.

The new form of rate was offered to all companies and has been accepted by all except the Michigan Consolidated Gas Company and the Kokomo Gas and Fuel Company.

The effective date of the change varied for the different companies depending on their acceptance of the new rate. The following are the effective dates applicable to the various companies:

[fol. 1969] Indiana-Ohio Public Service Company—January 1, 1941;

Lynn Natural Gas Company—May 1, 1941;

Northern Indiana Public Service Company—July 1, 1940;

Public Service Company of Indiana—April 1, 1941;

Town of Lapel, Indiana—June 1, 1941;

Town of Pittsboro, Indiana—May 1, 1941;

Town of Roachdale, Indiana—May 1, 1941;

Indiana Gas Distribution Corporation—June 1, 1941;

The Ohio Fuel Gas Company—June 1, 1941;

Ohio Gas Light and Coke Company—November 1, 1940;

Central States Natural Gas Co., Inc.—November 1, 1940;

Toledo Edison Company—December 1, 1940;

In addition to the foregoing, the new rate has been accepted by the following companies, but the effective date of the change has not as yet been established by the Federal Power Commission:

Central Indiana Gas Company;

Pendleton Natural Gas Company;

Town of Montezuma, Indiana.

In making the recalculation, the revenue and gas purchase cost with respect to deliveries to all of the above-listed companies has been restated to give effect to the rates provided in the new contracts for the entire twelve-months' period ended June 30, 1941.

Effect has also been given in the restatement, to the new [fol. 1970] rates applicable to industrial gas deliveries which have not as yet been made effective by the Federal Power Commission.

In restating revenue derived from sales to Central Indiana Gas Company, consideration was given to the fact that under the provisions of the proposed contract, deliveries to certain customers of that company which, under the old contract, were classified as industrial deliveries, will, under the new contract, fall into the firm gas classification.

Viewing the industrial gas situation as a whole, the net effect of the new industrial rate indicates a reduction in Michigan Gas Transmission Corporation's utility income, before taxes, of industrial gas deliveries of $66,863.90.

Based on deliveries during the twelve-months period analyzed, the analysis indicates that if the rates now in effect and those rates incorporated in contracts which have been executed but have not as yet become effective had all been enforced during the twelve-months period ended June 30, 1941, utility income, before taxes, of the company would have been reduced in the total amount of $93,538.60.

The next item preceded by the numeral 11 is a recomputation of the Federal income tax of Michigan Gas Transmission Corporation with respect to the taxable income shown in this statement.

The balance of the items on this page, as well as those on page 2, will be explained by Mr. Daniel C. Green.

[fol. 1971] Pages 3 to 6, inclusive, describe the adjustments made in this exhibit.

. . . . . .

DANIEL C. GREEN, a witness called on behalf of Michigan Gas Transmission Corporation, being duly sworn, was examined and testified as follows:

[fol. 1972] By Mr. Porritt:

Q. Mr. Green, will you give your full name and address?

A. Daniel C. Green, 327 South LaSalle Street, Chicago, Illinois.

. . . . . .

I am a graduate of Purdue University, 1908, with a degree of Bachelor of Science, Electrical Engineering.

Q. What is your present position?

A. President and Director of Central Service Corporation, a corporation which specializes in rendering consulting, advisory, and special services to public utility companies in all phases of operation.

It is an independent corporation, neither controlled by, nor affiliated with, any other corporation or group.

. . . . . .

I first started in the utility business in San Diego, California, connected as Commercial Manager of San Diego Consolidated Gas & Electric Company, a company rendering electric and manufactured gas service. That was for the period January, 1909, to July, 1910.

I was then connected with the Oregon Power Company, Albany, Oregon, as manager of the company's operations which consisted of electric and water business, from July [fol. 1973] 1, 1910, to December 1, 1911.

I was then connected with the Oregon Power Company, Marshfield, Oregon, electric and manufactured gas, as General Manager, from December 1, 1911, to March 10, 1913.

I was then connected with the Everett Gas Company, Everett, Washington, electric and manufactured gas business, as Vice-President and General Manager, from December 1, 1913, to March 10, 1915.

. . . . . .

I then was connected with the Utah Power & Light Company, Salt Lake City, Utah, electric and gas business,

as Division Manager, from March 10, 1915, to September 15, 1916.

Then I returned to the Byllesby group, so-called, as Vice-President and General Manager of the Fort Smith Light & Traction Company, of Fort Smith, Arkansas, which company rendered electric, natural gas, and street railway service. That was for the period of September 15, 1916, to August 15, 1923.

I then returned to Utah Power & Light Company, Salt Lake City, Utah, as Vice-President and General Manager for the period August 15, 1923, to April 1, 1929.

During the same period, I was also Vice-President of Utah Light & Traction Company and the Western Colorado Power Company, Durango, Colorado.

[fol. 1974] I was then connected with the Electric Bond and Share Company, New York City, New York, a holding company, from April 1, 1929, to July 31, 1933.

On March 5, 1930, I was elected a Vice-President of that company.

I might say that the position of Vice-President and General Manager of the various operating companies that I have referred to, the duties as such were similar to the presidents of corporations today. In those days, the President of the local operating company was usually some man back at the main office of the holding company.

I merely state that to give you a better description, I think, of the duties I performed as Vice-President and General Manager, you might say, of an operating company.

From August 1, 1933, to July 23, 1934, I left the Electric Bond and Share Company and accepted an assignment as Manager for the Receivers of the Middle West Utilities Company, which was in receivership, Edward N. Hurley and Charles A. McCulloch being Receivers. The Middle West Utilities Company at Chicago, Illinois, was transferred to 77B Proceedings, July 23, 1934, and, at that time, I was appointed Trustee of the Middle West Utilities Company by Judge James H. Wilkerson of the District Court of the United States for the Northern Dis-

trict of Illinois and the company was reorganized and securities issued fourteen months later, November 27, 1935.

[fol. 1975-76] On reorganization of the Middle West Utilities Company into what was known as the Middle West Corporation, I was President and Director of that company from November 27, 1935, to October, 1937.

I resigned as President of the Middle West Corporation and as Director in October, 1937, to organize and did organize the company I am now President of, Central Service Corporation.

Q. Have you, in these various positions, had quite a broad experience in the financing of public utilities?

A. Naturally, when I was directly connected with operating companies, that problem was before me and especially later, as Trustee of the Middle West Utilities Company and as President of the Middle West Corporation and as a Vice-President of Electric Bond and Share, with those properties that I was delegated to follow.

* * * * * * * * *

Q. Mr. Green, will you please state for the record the circumstances under which your company, Central Service Corporation, was employed in connection with this case?

A. Mr. Beckjord, president of Michigan Gas Transmission Corporation, called me to New York City and advised that the corporation was a party to the rate proceedings before the Federal Power Commission, and asked that we accept the assignment of advising and assisting in the preparation of the data and evidence to be sub-
[fol. 1977] mitted in this case.

Q. Do you personally, or does your corporation own any securities of Columbia Gas and Electric Corporation or any of its subsidiaries and affiliates, including Michigan Gas Transmission Corporation?

A. I personally do not own any of these securities, nor does Central Service Corporation.

Q. Do you personally, or does Central Service Corporation own any of the securities of the Missouri Kansas Pipe Line Company or Panhandle Eastern Pipe Line Company?

A. No.

Q. From the record which you have submitted of your experience and qualifications, have you ever been connected with any company that is a subsidiary or an affiliate of any of the companies parties to this case?

A. I have never been connected at any time with any of those companies.

Q. Mr. Green, as President of your organization I assume that you personally have followed the work of your organization and the scope of testimony and exhibits which have been presented in this case.

Is that correct?

A. Yes, that is correct.

Q. Are you familiar with and have you studied the earnings statements of Michigan Gas Transmission Cor- [fol. 1978] poration and the various exhibits which have been presented in this case?

. . . . . .

[fol. 1980] In the future, we can reasonably expect great advancement in coal gas manufacturing plants. The coal gas manufacturing process will continue to be improved, and we can expect new commercial products to be recovered from coal to the point where the net cost of manufactured gas from coal will be competitive with natural gas transported the great distances that gas is now transported through the pipe lines of Panhandle Eastern and Michigan Gas.

[fol. 1981] I personally know of hydroelectric plants that were built 15 years ago that will have useful lives of not less than 100 years. The cost of the hydroelectric power at that time was considerably less than for power generated by coal steam plants.

Today, due to the advancement in the art of steam generation by coal, the cost of steam electric power is considerably lower than the hydroelectric power generated by those plants.

I cannot stress too strongly the possible competition that might face natural gas transported through this pipe line 15 or 16 years hence. Such competition might have the effect of greatly reducing, if not eliminating, the large

quantities of gas now transported through this pipe line. Obsolescence occurs; it does not accrue.

. . . . . .

[fol. 1983] Operating expenses as shown in this statement, Exhibit 104, are based on wage levels of the corporation existing as of July 1, 1941. Federal taxes are based on the Revenue Act of 1941, and local taxes, for the most part, on taxes paid for 1940.

The cost of living index is showing an upward trend. We can expect further increases in operating expenses due to increased wages, cost of materials, and other costs.

No allowance is made for these contingencies in the Pro Forma Income Statement, Exhibit No. 104, and, in my opinion, they are more than contingencies.

We have seen the effect of the new tax laws on the earnings of this corporation and others. We are daily reminded by all branches of our Federal government that we can expect further substantial increases in Federal taxes next year and the year following.

The costs of government of all local, special divisions, cities, counties, and states, are gradually increasing. We can expect them further to increase local taxes in the future. Local governments will be alert to devise new forms of taxation, all of which will further tend to increase the total tax items of any corporation.

[fol. 1984] No amount is allowed for this contingency in the Pro Forma Income Statement, Exhibit No. 104.

. . . . . .

The Michigan Gas Transmission Corporation is a wholly owned subsidiary of Columbia Gas and Electric Corporation, which I shall call Columbia Gas.

Its capital structure as of June 30, 1941, was as follows:

6 percent Demand Notes, payable to parent company	$5,900,500
6 percent Loans, payable to parent company	$2,420,000
44,800 shares no par value common stock	$2,240,000

Q. If this corporation were to be financed today as an independent corporation and not as a wholly owned subsidiary, what changes, in your opinion, should be made in its financial structure?

A. In my opinion, a sound financial structure to finance this corporation would consist of $5,600,000 principal amount 16-year serial debentures, with an assumed coupon rate of 3½ percent, and $5,300,000 par value of common stock.

Mr. Gorman: What is that opinion based upon, Mr. Green?

The Witness: It is based on my experience in working [fol. 1985] out recapitalizations and the securities to be issued in financing new enterprises.

Mr. Gorman: As an officer of the corporations which you have testified you were connected with previously?

The Witness: You mean, where did I get the experience?

Mr. Gorman: Yes.

The Witness: Various operating companies that I was the operating head of, during their refinancing; then with the Electric Bond and Share Company, following operations there of subsidiaries and, more particularly, where perhaps my opinion carried more weight, when I was trustee in the 77 (b) of Middle West Utilities which had to do with the refunding of many of the securities of many of their subsidiaries.

* * * * * * *

By Mr. Porritt:

Q. If this corporation were financed on this basis, what effect would such securities have on the Federal taxes deducted in determining the Pro Forma Income in Exhibit No. 104?

A. The Federal normal, excess profits, and surtax taxes paid, and to be paid by Michigan Gas, would be greatly increased.

* * * * * * * *

[fol. 1990] Mr. Littman: May I ask a question, please?

On what theory, Mr. Green, do you think that it is just and proper that excess profit taxes be paid by the gas consumers?

. . . . . .

[fol. 1991] The Witness: If the Federal Power Commission or any other regulatory body determines the policy that any form of taxes,—I do not care whether it is excess profits tax, the Federal normal tax, or any other tax,—is not to be considered an expense of the company in determining rates, you would have to then adjust your rate of return to offset that because, in my opinion, no investor would go buy securities of the company on any such basis.

Mr. Lee: Why couldn't you fix a rate that would not produce an excess profit and require such a tax?

The Witness: That comes to the question about what is a fair return.

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Q. The Pro Forma Income Statement, Exhibit No. 104, [fol. 1992] shows the annual amount for amortization of the investment. Is that correct?

A. Yes, sir.

. . . . . .

[fol. 2002] Q. You are aware of the fact that in these proceedings, counsel for the Commission has objected to the introduction of testimony regarding the reproduction new value of the physical property used in rendering service, and you are also aware of the contention or position taken by the Commission in certain other cases that the so-called rate base should be based on the original cost of the property and other elements entering into the rate base, such as working capital, and so forth.

If original cost is used as a basis of determining a rate base, does such method, in your opinion, interfere with or deprive the owners of any rights as investors?

A. It is my opinion that the use of the reproduction theory or the original cost theory, either one, does not deprive the investor of any rights or benefits, provided you properly define fair rate of return.

Q. Will you please explain more in detail your reasons for making this statement?

A. It is my conception that the rates of a public utility should be just and reasonable. The investor is entitled to a fair return on a fair value of his property used and useful in rendering service to the public.

As an example, if property is built today at a cost of one million dollars, and it is assumed that the fair rate of re- [fol. 2003] turn in today's dollars on property constructed with today's dollars should be 8 percent, the investor would be entitled to $80,000 annual return. If, however, this property was built during a period of lower prices, or when the dollar had a greater purchasing value than it has today, you must use reproduction cost as the rate base, if you are to use the 8 percent return. Or, if you use original cost, you must allow a higher return to compensate for the change in the value of the dollar.

Mr. Gorman: Is that what you construe to be the legal interpretation of the decision of the Court, or is that your opinion?

The Witness: This is purely my opinion.

Mr. Lee: (Interposing). It is a system we would like to see established.

The Witness: I certainly would, as an investor.

To use a homely illustration, if a person invests his money in a public utility and the company constructs property today for the public use, he is entitled to receive a fair return on his investment, and that fair return is equivalent to a certain amount of bacon and eggs. Each year thereafter, he is entitled to receive the same amount of bacon and eggs regardless of the purchasing power of the dollar.

. . . . . .

[fol. 2005] The Witness: My conception is that in a private industrial concern, we will say, where there is no regulation as to limiting your return, you will have swings, you will go way up during some years and earn 20 or 30 percent, and down to 1 or 2 percent, purely a risk.

Now, with a regulated business, the return is not guaranteed. You have a ceiling. That is really a fact, there is a

ceiling there, and the investor is entitled to a fair return on the fair value of his property.

Now, I am saying if you take one side of this equation, which is the rate base over here, and you are going to freeze that in original dollars spent and use that as that factor you must have over on this side that return in relation to the value of those dollars that you are going to pay him. In other words, you cannot pay him lead dollars.

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[fol. 2006] Mr. Littman: One question while you are on this subject, Mr. Green: Do you think the investor should assume any risks of the change in value of the dollar?

The Witness: In a regulated industry, no. He assumes enough risks in the business itself.

Mr. Littman: He should not stand any of those risks at all?

[fol. 2007] The Witness: I do not think so, no. If the dollar varies I think the return should be varied, if you are not going to vary the value over here of the investment.

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[fol. 2012) By Mr. Porritt:

Q. Mr. Green, based on your investigation of the affairs of Michigan Gas, including gross operating revenues and utility income as shown on its financial statement, as well as the Pro Forma Income Statement prepared by your organization under your direction, will you please state your opinion as to the reasonableness of the earnings of this corporation as of June 30, 1941, and the expected earnings in the near future?

A. Based on my study of the affairs of this corporation, the testimony of the witnesses, the exhibits, the adjusted income statement, pro forma income statement, and all factors which I have considered with reference to the present and immediate future earnings, it is my opinion that the Michigan Gas Transmission Corporation is not presently receiving an unreasonable return on its investment.

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[fol. 2016] WALTER C. BECKJORD, was called as a witness on behalf of Michigan Gas Transmission Corporation, being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Porritt:

Q. Will you please state your full name, Mr. Beckjord?

A. Walter C. Beckjord.

Q. Where do you reside?

A. Greenwich, Connecticut.

Q. Will you please state briefly your experience in the gas industry?

A. Well, I was born in St. Paul, Minnesota, in 1888.

[fol. 2017] I attended the public schools there and graduated from the University of Minnesota in 1909 with a degree of electrical engineer.

During the summer I worked in the utility business as a lineman and a ditch digger, and I started in an apprenticeship course with the St. Paul Gas & Light Company in 1906. I was construction engineer and electrical engineer and, also, in charge of gas works operation and pipeline construction.

In 1912 I went to Binghamton, New York, and made an electrolysis survey.

During the period from 1913 to '15 I made electrolysis surveys in Milwaukee, Wisconsin; Long Branch, New Jersey; San Antonio, Texas; and St. Joseph, Missouri.

In the period from 1915 to 1918 I was engaged in appraisal work, starting in in the Madison Gas & Electric Company, which is one of the subsidiaries of the American Light & Traction Company, which company operated extensive properties in Michigan, Detroit, Grand Rapids, Muskegon, later Ann Arbor, also, Binghamton, New York; Long Branch, New Jersey; Milwaukee and Madison, Wisconsin; St. Paul; St. Joseph, Missouri; and San Antonio, Texas.

I operated the Madison Gas & Electric property for a while and then was transferred to New York as assistant engineer of the American Light & Traction Company.

In 1918 I was sent to Kentucky to operate a coal mine [fol. 2018] to supply coal for Detroit. I spent about a year down there and later became president of the White Star Coal Company. That was sold and I was back in operating work for the American Light & Traction Company, engaged in rate work, construction work, gas and electric operation, the construction of electric plants.

I had something to do with natural gas in St. Joseph, Missouri, and San Antonio, Texas.

I became vice president and chief engineer and director of the American Light & Traction Company in about 1926 and was with that company in that position until about 1930.

In 1929 our offices were transferred to Chicago and at the beginning of 1930 I accepted a position as vice president and general manager of the Boston Consolidated Gas Company in Boston, Massachusetts.

I stayed there about five years and then accepted a position as vice president and general manager of the Columbia Gas & Electric Corporation, with headquarters, to begin with, in Pittsburgh.

I was elected Chairman of the Executive Committee in 1936, I believe, and in 1935 I became president of the Michigan Gas Transmission Corporation, which was organized to build the line from Dana to Detroit.

In 1938 I became president of the Columbia Engineering Corporation, still continuing as vice president and general [fol. 2019] manager of the Columbia Gas & Electric Corporation.

I think that brings me down to the present date, which positions I now hold.

I am a director of various subsidiaries of the Columbia Gas & Electric Corporation, including The Cincinnati Gas & Electric Company, The Dayton Power and Light Company, United Fuel Gas Company, Michigan Gas Transmission Corporation Binghamton Gas Works and some of the others.

Q. What connections have you had with the various trade organizations in the natural gas industry?

A. I first became connected with the American Gas Association activities in 1919. I was active on an electrolysis committee then.

In the period from 1926 to 1928, I was chairman of the technical section. In 1932, I think it was, I was chairman of the commercial section and I have been a director of that organization since 1932.

In 1939 I was first vice president of the American Gas Association and became president during the period of 1939 and '40.

Q. Did you negotiate the contract between the Panhandle Eastern Pipe Line Company and the Michigan Consolidated Gas Company?

A. Yes, in 1934 when I came with the Columbia organization I first started in negotiating on some contracts in eastern Pennsylvania which were in the territory sup- [fol. 2020] plied by the Atlantic Seaboard Corporation. That line had been built in the early part of 1931, as I recall it, before my connection with the system and contracts had never been consummated with the group of utilities around Philadelphia and I was at work on that at the same time.

Early in 1935, I started discussions with Mr. William G. Woolfolk, who was president of the Detroit City Gas Company, along the lines of bringing straight natural gas to Detroit from Texas.

I was designated as agent of the Panhandle Eastern Pipe Line Company by Mr. Burt Bay who was then president and I spent considerable time in Detroit in the spring of 1935.

I was, of course, very familiar with the problems at Detroit because I had been with the holding company some 23 years and was very familiar with the operating conditions in Detroit and the general layout of their plant and system, and in my discussions with Mr. Woolfolk I suggested the idea of using the demand and commodity rate, which I thought would be better suited to their conditions in Detroit than a straight flat rate that had been discussed with them in the years previous to that.

I believe there had been some discussions prior to 1935, but I was not familiar with those because I was not an employee of the Columbia Gas & Electric Corporation at that time.

There were, also, some brief discussions with Mayor [fol. 2021] Cousens. Frank Cousens of Detroit, about that time, who was very much interested in bringing natural gas to Detroit, particularly for the large industries located there, the automobile industry.

After considerable discussion we arrived at gate rates of 38 cents per therm per month and a cent and a half per therm for the commodity cost, commodity charge.

One of the principal difficulties we had to overcome was the fact that Texas is about 1200 miles from Detroit and there being only a single pipeline, it was considered a considerable operating hazard to have either straight natural gas or to have a system operating without a standby plant.

We discussed mixed gas operations, because at that time or just previous to this time that I speak of, Detroit had been getting a large share of their gas requirements from the Semet-Solvay who had a large by-product coke plant in Detroit and I think they were buying gas, about 26,000,000 a day, if I remember correctly, or thereabouts, and at sometime during the past they bought by-product coke oven gas from the Ford plant.

I first talked about mixed gas, but that didn't seem to be feasible under the conditions. Ford was then using all his own gas and there was some question of price with Solvay with which negotiations I am not familiar, but the result of [fol. 2022] it all was that we signed a contract during the summer of 1935, I believe it was August 31, 1935, calling for the delivery of approximately 90,000,000 feet of natural gas from Texas to Detroit.

In that contract we stipulated that water gas plants in Detroit which had a capacity of around 60,000,000 to 65,000,000 cubic feet, I believe, be converted to making 1,000 B.t.u. oil gas and we stipulated that those plants should be used for standby plants and kept in operation and rebuilt for making 1,000 B.t.u. gas, which would be the equivalent

of natural gas from Texas which has a B.t.u. content of about 1010, I believe, on the average.

Also, of course, in the original concept of the contract it was part of the picture that they should be used for peak shaving because it was anticipated that the peaks in Detroit would be quite large because it is a cold climate up there and very windy in the winter time and they need large quantities of house-heating gas to take care of the sudden peaks that come up.

You will find in the contract the stipulation that these plants should be maintained in operating conditions and also that the holders should be used for leveling the take of gas from the natural gas pipe line.

As I recall it, there were about 53,000,000 cubic feet capacity in holders which was spread out over some three [fol. 2023] or four or five holder stations and they were to be kept in operation to smooth out the takes of gas from the transmission line.

The contract was signed on August 31, 1935 and we started to get rights-of-way in Indiana and Ohio beginning that fall.

The Michigan Gas Transmission Corporation was organized, I believe, on November 4, 1935, but the contract could not be considered binding until after the consent decree had been signed, which was late in January, 1936. If my memory serves me right, it was January 29.

Construction on the line, we proceeded to get rights-of-way all the way through to Detroit, planning to utilize the existing pipeline of the Indiana Gas Transportation Company which extended from Dana to a point near Zionsville north of Indianapolis and then on to Muncie.

That line was a 20-inch line, as I recall it, as far as Zionsville and then 18-inch on to Muncie, but only the part as far as Zionsville was to be utilized in the construction of the Detroit line. That was a total distance of about 70 miles, and from there on to Detroit it was about 230 miles, through Indiana, the northwest corner of Ohio, and some distance in Michigan.

. . . . . .

[fol. 2024] That meant that we had to build 230 miles by the middle of the summer. Work couldn't start until early in April on account of the muddy condition of the soil. There were two contracts, one was with the Bibb Construction Company, who built the line as far as the Michigan-Ohio line, the other was the United Engineers and Constructors who built the line in Michigan. I have forgotten exactly that length, but I think it was about 65 miles.

Work was started early in April and at one time I think there were over 3,000 men on the job and they finished the job and got gas turned on, I think, on July 7, 1936. Actually it was officially turned on just a few days later, but immediately Detroit started their change-over they had some 425,000 or 430,000 customers whose burners had to be adjusted for natural gas, and that work was started in July, doing the work a section at a time. I think they divided the town into 26 sections, if I remember right and the work proceeded expeditiously until sometime in December when the change-over was completed and made effective January 1, 1937, at which time they were using complete straight natural gas.

[fol. 2025] In the meantime or shortly after that, we discussed the question of house-heating gas. As all operating men know, the load factor of house-heating gas is very low. It is around 26 to 28 percent and it is not particularly attractive business to the distributing company because it involves a large peak and in the case of Detroit with their demand and commodity rate it would involve a very high charge for that type of gas because on that load factor it would amount to around 65 plus cents per thousand feet of gas, so we concluded at that time that in order to develop the house-heating business in Detroit, which was good business as Detroit is a good market up to a certain point, that is, it is good business up to a certain point, we suggested a supplemental contract which fixed the load factor of house-heating gas at 50 percent, which meant a price of 4 cents per therm, a flat price of 4 cents per therm for house-heating gas. When I say "therm," I mean 100,000 B.t.u., which is equivalent to approximately 100 feet of gas, natural gas, so 4 cents a therm would be the equivalent of approximately 40 cents for 1,000 cubic feet.

It was stipulated in that supplemental contract that Detroit should have 20,000 house-heating jobs under that contract and more to be added later as the market grew and developed and in accordance with the conditions at the time.

That business developed very rapidly and starting out [fol. 2026] with around 500 house-heating jobs Detroit developed 20,000 jobs in the first two or three years and that contract was extended to 25,000 jobs, which I believe is now the present requirement.

In general, a house-heating job takes from 1700 feet to 2000 feet per maximum day so that 25,000 jobs would be the equivalent of 50,000,000 feet demand in one day.

Since that, due to the tremendous building activity in Detroit, there have been added a total of about 47,000 jobs at present, so the total take of natural gas in one day for house-heating only would be on the order of 80,000,000 feet. I cite those figures to give you some idea of the tremendous loads involved in taking care of that kind of business.

I think that brings us down to date. There has been various other supplemental contracts and while the first contract called for 90,000,000 feet per day, subsequent amendments have brought it up to 125,000,000 feet per maximum day, that is the capacity now that Detroit is entitled to take from the pipeline. I think that covers the point.

Mr. Baldridge: I would like to clear up something for the record. You say you signed a contract in 1935. You mean the 1935 contract was signed between Detroit City Gas Company and the Panhandle Eastern Pipe Line Company?

The Witness: Oh, yes, I was acting as agent for Pan [fol. 2027] handle Eastern and Burt Bay was president and he signed the contract in Detroit. He, of course, was familiar with what we were discussing and we kept him fully posted at all times as to our progress.

. . . . . .

Mr. Baldridge: Just to clear the record, also, the contract of March 17, 1936 was a contract which was signed

between Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation and that was the one which had to be approved and was approved by Mr. Gano Dunn as trustee.

The Witness: That is correct, I omitted to mention that. Gano Dunn had been appointed trustee of Panhandle Eastern Pipe Line Company under the consent decree and the contract between the two companies, between Michigan Gas [fol. 2028] Transmission Corporation and Panhandle Eastern Pipe Line Company, dated March 17, 1936, was approved by Gano Dunn as trustee and as I recall it was also approved by the Department of Justice. That is the contract that is now functioning between the two companies for a good share of the gas that is hauled by the Michigan company from Dana to Detroit and to other customers along the line.

There are some contracts that are made directly between Michigan Gas Transmission Corporation and customers in Indiana. I believe those are all listed in the record now.

. . . . . .

[fol. 2030] By Mr. Porritt:

Q. Mr. Beckjord what have you to say regarding compressor station erection on this line?

A. Well, to begin with the first compressor station was at Montezuma with two units of about 2600 horsepower.

[fol. 2031] That was the first winter. The second winter Zionsville station was constructed and the reason for the step-by-step construction method was that we were endeavoring to build capacity only as needed and this was later followed by additional units in those two stations and finally the construction of the Edgerton compressor station near Fort Wayne, Indiana, so that all three stations, Montezuma with six units of 7800 horsepower, Zionsville with 5 units of 6500 horsepower, and Edgerton with three units in active operation now and two more will be completed probably in December of this year, making 6500 horsepower there,—I think that adds up to 20,800 horsepower.

Q. Can you say what the capacity of the line was that was available for the winter period of 1937 and '38?

A. I think, to begin with, the capacity was about 70,000,000 feet of which 58,000,000 was for Detroit and then, subsequently, it was boosted up to 90,000,000 feet with about 83,000,000 for Detroit and in 19—perhaps I had better refer to a paper to make sure I have got that. In '36-'37 it was 70,000,000 feet, 58,000,000 for Detroit; '37-38 it was 109,000,000 feet with 84,000,000 for Detroit; in '38-39 it was 123,000,000 feet with 90,000,000 for Detroit; and in '39-40 the present capacity is approximately 160,000,000 cubic feet of which 125,000,000 is allocated to Detroit. That is daily capacity.

[fol. 2032] Q. Yes. What transmission facilities were added to increase this capacity?

A. Well, to begin with we utilized the 20-inch line already there from Dana to Zionsville, and later on that was looped in two jumps, the first one was, well, from the period I will put it '37 to '39. That 70 miles of line was looped with a 24-inch seamless steel line from Dana to Zionsville, which totals about 70 miles, and that completely loops the old line, the old 20-inch line.

Now, I might say that the new line to Detroit from Zionsville to Detroit is built for maximum working pressure of about 600 pounds. The line is designed for 700 pounds. It is a seamless steel line good for 700 pounds, but it is currently operated up to 600 pounds.

The line from Dana to Zionsville which was built about ten years ago in 1931 was built according to the then standards of construction for about 350 pounds pressure. That is, in general, the operating pressure that is used on the Columbia system from West Virginia up into Ohio, Kentucky and Pennsylvania and so forth.

It was felt advisable to use that line until its capacity was used up, first in order to save time because we were working against time to get gas to Detroit by July 1, 1936 and, second, to save the investment cost.

I believe, as I recall it, the total investment cost of the [fol. 2033] Indiana Gas Transmission Corporation which was taken over by Michigan Gas was approximately $1,800,000 or $1,900,000, I don't remember the exact figure, but that is in the record.

That was done to save time and to save the investment cost, but now that 20-inch line is completely looped with a 24-inch high pressure, seamless steel pipeline.

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The total costs of this investment, this is the additional investment, is around $10,000,000, including the compressor stations and the transmission lines which are built to Detroit.

With the Indiana Gas Transmission system taken into it, the present investment cost totals around $12,000,000. The exact figure is in the record.

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[fol. 2034] By Mr. Porritt:

Q. What tests have been conducted on the pipeline?

A. The original line, as I say, from Dana to Zionsville was constructed for 350 pounds, but that has since been tested up to 450 pounds and has proven very satisfactory.

There were some few leaks developed, but they were easily repaired.

The line from Zionsville to the Michigan-Ohio line is tested up to 600 pounds pressure and from there on in it has been tested up to 500 pounds for operating reasons, so the whole line is now fully tested and operating under those pressures I speak of.

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[fol. 2037] By Mr. Porritt:

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Q. What have you to say in regard to future construction?

A. Well, the line as now built has a capacity of approximately 160,000,000 feet and, of course, as the additional contracts that Panhandle has made up in Michigan come on and as additional growth occurs over the system, more compressors will have to be added and some more line-looping on the 22-inch section of the line.

[fol. 2038] We haven't made any great detailed estimates on the increased construction to be done, but on the

basis of the estimates that Panhandle made in their presentation here, we will have to spend about six and a half million dollars to bring the line up to sufficient capacity to meet their requirements. That is for looping and compressors, additional compressors.

Q. What equipment have you ordered for installation in the coming year?

A. Well, Montezuma is our key station and there are six units there now and we have ordered two more units. I believe they are working on 1300-horsepower units, which are promised for delivery some time in the middle of next year. It is becoming very difficult to get delivery on these units now. We have ordered them a long way in advance, hoping to get them. I believe they have an A-10 priority.

I am not clear as to just what that means, but I sincerely trust that they will be delivered next June so they will be in in time for the peak load next winter, that is, the winter following this one.

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[fol. 2041] Now, Detroit is what you call a one-industry city. It is practically all automobiles, and I have seen the time in my experience in Detroit when things were just as flat as a pancake, along in 1932 or thereabouts. As I recall it, the equivalent sales of gas in Detroit dropped to about 9,000,000,000 feet equivalent. Now they are up to say, 24,000,000,000 feet.

Well now, that is some spread and if you drop the sales of Detroit down to, say, half of what they are now, it would involve a very serious loss to the transmission company from Texas, which has built the capacity to supply the full load.

[fol. 2042] Now that, in my opinion, is a definite hazard. It may happen again. In fact, if the economists are right the depression after this war is going to be the worst that the world has ever seen. I don't like to be a pessimist and neither am I a prophet, but you can't help but read the future from the past sometimes.

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Likewise, we are meeting now, in our own system, quite a bit of competition from electricity. There are electrical

furnaces, both steel and brass, and they use great quantities of power. There are electrical heating furnaces for heat treatment of metals and with the tremendous amount of electrical capacity that is being installed now all over the country, when the war is over, believe me, there is going to be a tremendous amount of that energy for sale at very low prices.

The coal cost per kilowatt hour will probably be less than 2 mills and once industrial people get accustomed to using electricity they are very apt to continue to use it, [fol. 2043] and I would regard that as a very serious hazard in the possible future competition with natural gas, so that I don't think that anybody can rest assured that natural gas has a cinch in any industrial market. It is a very real hazard.

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[fol. 2056] Mr. Littman: Hasn't Panhandle Eastern been installing compressor equipment along their lines in order to increase capacity?

The Witness: Yes, I believe they installed two or three compressors this last summer.

Mr. Littman: Isn't that going to give some increased capacity for this winter?

The Witness: Well, that may be on certain portions of the line, but my understanding is that the capacity at Dana at the point of delivery to us will be substantially the same as it was last winter.

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[fol. 2057] Mr. Littman: Have you installed any compressor station equipment on your Michigan Gas Transmission System?

The Witness: Yes, we are putting in two more 1300 horsepower units at Edgerton station that is largely to take care of the hourly peak.

Mr. Littman: When will those be ready?

The Witness: I think it will be ready before Christmas, I hope.

Mr. Littman: Of course, that will increase your capacity?

The Witness: No, unfortunately not, that takes care of the hourly peak, but it does not necessarily mean a greater daily peak capacity for the reason that Detroit sometimes takes gas, I think it is, at the rate of seven or eight million feet per hour.

. . . . . .

The hourly rate, you see, is directly involved, because Edgerton station is only about 118 miles or so from Detroit and you can't pack the line a great deal in that distance and when the hourly peak is so high you have just [fol. 2058] got to keep the gas coming through all the time.

. . . . . .

[fol. 2108] Trial Examiner: At this time, we will receive in evidence the description of the physical property prepared by Mr. Young and marked for identification as Exhibit 77 and the System Map of the Michigan Gas Transmission Corporation marked for identification as Exhibit No. 78, without objection.

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[fol. 2119] P. McDonald Biddison, having been previously sworn, resumed that stand and testified further as follows:

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[fol. 2120] Trial Examiner: The Trial Examiner has assumed that a ruling on objections to reproduction cost evidence would be timely now when the cross-examination is about to commence.

Since the objection was first made, I have given renewed study to the Commission's precedents, to its rules and regulations and to such information as is available concerning the Commission's views and, after this study, I have concluded that the Trial Examiner should not burden the Commission at this stage of the matter with any presentation of this question for an interim formal ruling.

However, before any ruling is announced, I wish to give any further opportunity counsel may desire for further

argument, both in support of the objection or in opposition to it.

Counsel has presented fully in the previous sessions, considerations which are pertinent. I would, nevertheless, be glad to hear further from Commission's counsel if they have anything further to add and I will be particularly glad to hear further from counsel for the defendant company as to any facts in this record which distinguish this case from the Chicago District Electric Generating Company case to which frequent reference has been made and [fol. 2121] the reason why such facts, as you think may be present in this record to distinguish this case from that, would take this case out of the rule announced in that case and present this proceeding as something other than what the Commission has characterized as a normal rate proceeding.

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Mr. Littman: If your Honor please, we have heretofore stated, I believe quite fully, our reasons in support of our objection.

In view of the fact that your Honor has stated that you shall rule, I believe that it is your Honor's duty in these circumstances to follow the decisions and orders of the Commission.

I believe the precedent to be followed in this case clearly is the opinion of the Commission in the Chicago District Electric Generating case. I believe if that precedent is followed here, your Honor is required to rule out all evidence on reproduction cost.

I think all I need add at this time is that notwithstanding the repeated requests of your Honor that counsel for Panhandle Eastern come forward with facts or [fol. 2122] evidence or arguments that will or might distinguish this case from the Chicago District Electric Generating case, they have not done so.

Considerable evidence has been adduced by Panhandle Eastern since the objection was originally made. I have examined that evidence and I am unable to find any facts that have been presented that would warrant a finding by

your Honor that this case has been shown to be other than a normal rate proceeding within the meaning of that term as used in the Chicago District Electric Generating case.

So, in view of the record, the Panhandle Eastern Pipe Line Company having rested, and in view of the precedent established by this Commission, I believe that your Honor, under these circumstances, should sustain the motion to [fol. 2123] exclude reproduction cost evidence in this case.

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Mr. Wheat: I wish to state, Mr. Examiner, that Panhandle Eastern has fully spread upon this record the reasons why it believes that a ruling a favor of the objection and the motion of Commission's counsel would be a denial of its rights under the Federal Constitution.

There is one additional point which I think should be made upon the record before any ruling is had and Mr. Culton, my colleague, would like to make that statement now.

Mr. Culton: The point, Mr. Examiner, is this:

The Panhandle Eastern Pipe Line Company, until the passage of the Natural Gas Act, was a private concern. Since the passage of the Natural Gas Act, its properties have been devoted to public use.

It recognizes the effect of the Natural Gas Act in that respect.

Now, for the first time, its rates are being subjected to regulation. A determination of the fair price for the commodity which it sells, necessarily, under the theory under [fol. 2124] which this case has proceeded requires an investigation into the earnings of the company and whether or not it is making undue profits.

Frequently it is said that investment should be the base from which that conclusion is determined. If that is true, then the investment of a company which was formerly a private concern and now has its property devoted to public use for the first time must, in our opinion, be the value of that company's property at the time it was either subjected to regulation or it became a regulated concern under the passage of the Natural Gas Act.

Whether or not that value should be the value of its property as in 1938 or the value of its property at this time is not necessary to be here discussed because, under either of those bases, value or reproduction cost new is admissible as a circumstance from which we can determine the present value of its property.

Whether it be an absolute standard for the present value of its property or an absolute standard for its value in 1938 is a different question just as original cost is a matter for consideration in determining the value of its property, both now and in 1938.

. . . . . .

[fol. 2125] Therefore, we insist that since our rates first became subject to regulation in 1938 and first became subjected to regulation under this particular proceeding, we are entitled to show the value of its property, originally, its value in 1938 and its reproduction value at this time, so that the Examiner and eventually the Commission may obtain a knowledge of the present fair value of the property so as to determine whether or not the rates now being charged are such as result in unusual and excessive returns on the value of the property which is applied to public use.

That is a reason which we offer in addition to those which were referred to by Mr. Wheat at a former time. We insist that the thing that the Commission is seeking is not to determine whether or not our rates could be reduced [fol. 2126] without confiscation but whether or not, treating us fairly and the public fairly, a present fair value of our property should be determined and a present fair rate of return applied to that fair value.

. . . . . .

Mr. Liftman: If your Honor please, I think a complete answer to the statement made by counsel for Panhandle Eastern was made by this Commission in the Chicago District Electric Generating Case, Docket No. IT-5500, Opinion No. 63, wherein the Commission said as follows:

"We have been authorized by Congress to determine the [fol. 2127] actual legitimate cost of utility properties and

the depreciation thereon, viz., the prudent investment. We have been directed to determine other facts bearing on the fair value of such property, such as reproduction cost, when found necessary for rate-making purposes. There is nothing which makes a determination of reproduction cost necessary for rate-making purposes in this proceeding. On the contrary, such a determination would be not only valueless, but, in fact, obstructive of the orderly regulatory process.

"We concluded, therefore, that the rate base in this case is the actual legitimate cost of the property used and useful in furnishing the service subject to our jurisdiction, less the existing depreciation in such property, plus the working capital necessary to render such service."

I respectfully submit that inasmuch as Panhandle Eastern has presented no facts or arguments, which would in any manner tend to distinguish the instant case from Chicago District Electric Generating case, your Honor is bound by the Commission's decision in the Chicago District Electric Generating Corporation proceeding, and should sustain our motion to exclude reproduction cost.

Trial Examiner: Anything further, gentlemen?

Mr. Wheat: Nothing further. We have stated our points in full.

Trial Examiner: In answer to Mr. Wheat's remarks and [fol. 2128] supplementing what the Trial Examiner stated at the outset, I would like to add that as the Trial Examiner is advised, it is the considered view of the Commission that procedural due process does not require the certification to the Commission of questions concerning the admissibility of evidence with formal action thereon by it during the progress of a hearing or a proceeding.

The correct view upon this subject seems to be that the Trial Examiner should rule upon the admission or exclusion of evidence in proceedings referred to him, in accordance with the opinions, orders and rules of the Commission, unless the Trial Examiner himself upon and only after a special showing by a party in a proceeding should determine that important distinguishing facts have been shown and that a necessity therefore exists for certifying

the question or questions relating thereto to the Commission for a special ruling or instructions.

To express this view in another way, it is considered that the Trial Examiner should rule upon all matters of admissibility of evidence in accordance with the opinions, precedents and Rules of Practice and Regulations of the Commission, applying these authorities as he understands and interprets them, and should take no question on the admissibility of the evidence to the Commission for special instructions and unless and only after it should appear to him that a party in a case has made such a special showing in some particular matter upon which it is necessary [fol. 2129] to rule as would seem to require a variation in the regular procedure and which apparently takes the case in hearing out of the effect and purview of the rule, principle or precedent already established.

In the instant hearing, where the respondents are seeking to introduce evidence of cost of reproduction in a case which to the Trial Examiner appears to be a normal rate case and similar in its material aspects to the Chicago District case, in which the Commission has in the past ruled out evidence of cost of reproduction, it is concluded that it is the Trial Examiner's duty to exclude such evidence on his own responsibility and without seeking special instructions from the Commission.

It appears to the Examiner that the Respondents' offer of such evidence has not succeeded in so differentiating and so distinguishing the evidence in hearing from evidence in the case in which the Commission ruled out such evidence and have not shown such necessity for this type of evidence as to make it necessary to carry the question to the Commission for special instructions.

The Trial Examiner feels that no such distinction or differentiation has been made as would take the case at bar out of the effect and principle declared by the Commission in the Chicago District case.

It is, therefore, the ruling of the Trial Examiner that the [fol. 2130] objections to the proffered evidence are sustained. The motion to strike the testimony relating to reproduction cost is also sustained and all evidence of re-

production cost will be excluded from the record of this case.

* * * * * * * * *

Trial Examiner: Of course, under this broad ruling, there is a definite exclusion of your proposed Exhibits Nos. 39 and 39-A, 37 and 37-A, and, while there may be other exhibits involved, in such event the broad ruling will, of [fol. 2131] course, determine as to them.

* * * * * * * * *

[fol. 2132] Mr. Wheat: May I suggest, Mr. Examiner, that Panhandle Eastern Pipe Line Company would like the record to show an exception, first, to the broad ruling which the Examiner has made in connection with the objection and motion of Commission counsel;

* * * * * * * * *

May the record show those exceptions?

Trial Examiner: Certainly, Mr. Wheat.

* * * * * * * * *

Mr. Wheat: And we would like to have it understood [fol. 2133] that our exception goes as a separate exception to each exhibit which is or may be comprised within the ruling so made, and to each specific item of testimony which may hereafter be found so to be comprised.

Trial Examiner: The matter of separate exceptions applies to matters which you have heretofore noted, namely, the ruling and the exception to the reference in the other matters included in your first request, but as to exceptions on rulings not yet made, namely, to the admission or rejection of specific exhibits, the exception is not yet applicable.

Mr. Wheat: May I ask, Mr. Examiner, in that connection, whether your statement means there is not now a specific ruling that Exhibits 39 and 39-A and 37 and 37-A and any other exhibits which may have been mentioned by counsel be excluded?

Trial Examiner: The Trial Examiner, I think, remarked that we know definitely that Exhibits 39 and 39-A, 37 and 37-A, are excluded under the broad ruling and, I believe, also Exhibit 62. Is that not your—

Mr. Wheat: (Interposing) I think that was the substance of counsel's objection.

Trial Examiner: (Continuing) Exhibit 62 was not included in the original objection but I assume it would clearly fall within the broad ruling. That was Mr. Biddison's study of depreciation and present fair value based upon the reproduction cost new less depreciation.

. . . . . .

[fol. 2135] Cross-Examination

By Mr. Littman:

. . . . . .

[fol. 2145] Mr. Littman: Mr. Examiner, I ask that a document entitled "Form A-2 For Corporations, Securities and Exchange Commission, Washington, D. C., Registration Statement Under Securities Act of 1933, Panhandle Eastern Pipe Line Company, Filed November 18, 1940, Effective Date January 29, 1941, Registration No. 2-4597" be marked for identification with the next number.

Trial Examiner: It will be marked for identification as Exhibit 106.

(Document referred to was marked exhibit No. 106 for identification.)

By Mr. Littman:

Q. Mr. Biddison, I hand you Exhibit 106 for identification and refer you to page 8-5 of the balance sheet notes of that document and I shall read from Note A (1) and ask you to state whether I am reading correctly from that [fol. 2146] exhibit. "A (1) Property plant and equipment is stated at cost except for $2,417,948.52 thereof assigned by the board of directors to assets acquired as of August 31, 1930 as a capital contribution, and intangibles are stated at cost except for $2,398,402.19 thereof assigned by the board of directors to gas sales and purchase contracts acquired as of August 31, 1940 as a capital contribution."

Have I read correctly from that document, Mr. Biddison?

A. Yes, Sir.

Q. In view of the statement which I have just read to the effect that $2,398,402 of the book figures which you

have used for cost of gas sales and purchase contracts does not represent cost, do you still feel that your claim for the amortization thereof is just and proper?

A. Well, I don't know that this says it doesn't represent cost.

Q. It says, does it not, that the intangibles are stated at cost except for $2,398,402.19, Mr. Biddison?

A. It does so state, but it does not state that the item of $2,398,402.19 does not represent cost.

Q. Have you seen that statement before?

A. I think so.

Q. Did that statement put you on guard and cause you to investigate or want to investigate it?

A. No, because I have made no investigation whatever [fol. 2147] to determine cost of property. I have taken a statement of property furnished to me by the controller of the company and have developed the schedule to amortize property shown on that schedule.

Q. In view of that statement certainly there was some doubt as to whether it represented cost, to say the least, was there not, Mr. Biddison, in your mind when you read it?

A. No, and there isn't now. I do not know but it is my understanding that it represents a cost, a portion of the cost of acquiring certain items.

Q. You certainly didn't give the public the benefit of the doubt in that matter, did you, by investigating whether it did or did not?

A. I didn't give anybody the benefit of the doubt because I did not investigate. I did just what I stated. I took the statement furnished me by the controller of the company and worked out the schedule from that.

Q. Now, Mr. Biddison, if it should be established by evidence other than that which has already been called to your attention that part of this amount of $2,930,286, which you have amortized in line 5 of page 3 for gas sales and purchase contracts represents—

Mr. Wheat: (Interposing) You mean line 25.

By Mr. Littman:

Q. (Continuing) Line 25 represents other than invest- [fol. 2148] ment you will agree, will you not, that your allowance to that extent should be reduced?

A. I have so previously stated.

Q. Now, Mr. Biddison, looking again at that figure for gas sales and purchase contracts, I note that you have amortized that amount over a ten-year term. I also note that that is the only ten-year term that you use in this entire exhibit.

Will you tell us why you used a ten-year term rather than a 34-year term or a 26-year term or other terms shown on that page?

A. Where I am amortizing in this instance an item of intangible value, I think it is customary in utility practice to amortize such items generally over short terms. It is being so amortized by Panhandle Eastern in actual practice. Those are the moving reasons for the adoption of a ten-year term.

Q. Is your claim for $293,028.64, annual accrual for gas sales and purchase contracts shown in column "I", included in the total of $887,646.60 shown at the bottom of page 3 of Exhibit 66? You will find that, too, on line 27, Mr. Biddison, the total that I read. A. Yes, it is.

Q. That total of $887,646.60 is carried over to page 1 in line 1, column "C" headed "Annual Accrual" is it not? [fol. 2149] A. It is.

Q. Now, as of what date of the year 1931 is the amount of $887,646.60 placed into the sinking fund shown on page 1 of Exhibit 66? A. At the close of the year.

Q. The close of the year 1931; is that correct, December 31, 1931?

A. Yes, sir. Its first interest earning was during the year '32.

Q. I see. And is this same amount so set aside on December 31 of each year thereafter? A. Yes, sir.

Q. How many times?

A. Well, it is set aside ten times.

Q. That is down to and including December 31, 1940?

A. That is right.

Q. Isn't it a fact, then, Mr. Biddison, that the sum of $293,028.64 annual accrual for sales and purchase contracts is shown on page 1 to have been set aside ten times by

December 31, 1940 and, therefore, completely amortized by that date? Is that correct? A. Yes.

Q. We don't need to include it then in 1941, do we?

A. Yes, sir.

Q. If page 1 is to be believed—

[fol. 2156] Mr. Wheat: (Interposing) What was the answer, Mr. Biddison?

The Witness: Yes, sir.

By Mr. Littman:

Q. Yes it does or yes it doesn't?

A. It is to be included because the item is not yet amortized.

Q. Mr. Biddison, you just said a minute ago that page 1 shows it to have been completely amortized by December 31, 1940, did you not?

A. No, I did not say it showed it to have been completely amortized. Page 1 shows that if this practice had been in effect it would be amortized. It is not amortized in fact at this date.

Q. Well, Mr. Biddison, what do you mean to show by page 1, then, where you show a reserve and the accruals in each year and the balance as of December 31, 1940? What is the purpose of it?

A. Simply to show what that would have amounted to had this practice been in effect from the beginning of operations of this company.

Q. Well, does it mean something or doesn't it mean something? A. It means what I have stated it to mean.

Q. Well, you are suggesting, are you not, when you [fol. 2151] claim these amounts annually and show this is reserves, that this is the method that be followed?

A. I am suggesting that this be the method to be followed, yes, sir.

Q. Ten years means that it should have been done, doesn't it, that is, that it should have been amortized?

A. I don't know whether it should have been or not.

Q. Well, at least the way you have set it up on page 1, it would be amortized, wouldn't it?

A. If it had been amortized as shown on page 1 it would be amortized. [Is] is, in fact, not amortized at this date.

Q. As shown by you on page 1 it would have been amortized, Mr. Biddison?

A. If it had been amortized as shown by me on page 1 it would now be amortized, yes. It was not so amortized and is not amortized at this date.

Q. Well, a good part of it has been amortized, hasn't it, as a matter of fact, Mr. Biddison? A. Yes.

Q. How much of it has been amortized by the company or didn't you investigate that either?

A. Yes, Mr. Watkins' exhibit will show how much residual balance there is of that account. On page 2 of Exhibit No. 52, by Mr. Watkins, is shown data relative to the [fol. 2152] matter about which you are inquiring.

Q. Well, suppose you tell us what that means, then; what data you are referring to.

A. Well, I am not in a position to explain Mr. Watkins' exhibit, but I will refer you to gas sales and purchase contracts, line 40, column "M" and to reserve for amortization of gas sales and purchase contracts, line 42, column "M".

Q. Yes, now which of those two figures did you use in your Exhibit 62 for amortization purposes?

A. I used line 40.

Q. That is, you used the figure of $2,930,286.40, did you not? A. Yes, sir.

Q. That is, you didn't deduct the reserve shown in line 42 of page 2 of Exhibit 52 in the amount of $1,611,657.30 did you? A. Certainly not.

Q. It had been written off prior to that time, the last amount that I read had been written off prior to June 30, 1941, had it not? A. It doesn't so show on this statement.

Q. Oh, it doesn't? A. No, sir.

Q. Well, answer this question, whether it does or doesn't [fol. 2153] show it, do you know whether or not that amount has been written off?

A. Oh, all I know about it is that that amount is carried on [thier] current monthly and annual operating statements as not being written off.

Q. Will you turn to Exhibit 69, please?

Assuming that that amount had been written off, it would have to be deducted from your $2,930,286 figure which you amortized, would it not?

A. If it had been written off as not representing investment, yes.

Q. That is, you are not suggesting and you wouldn't suggest, would you, Mr. Biddison, that the rate payer pay an amortization allowance annually on property that has been written off?

A. Well, I might, I don't know, I would have to know the specific case. I am not trying to do that in this particular instance that we are talking about.

Q. Well, suppose it had been written off. Suppose $1,611,657.30 of this amount had been written off by the company, written off its books prior to June 30, 1941. Assuming that to be the fact, would you still claim that it would be proper and just to have the rate payers pay an annual allowance for amortization on that amount written off?

[fol. 2154] A. I don't suggest that the rate payers pay any annual allowance for anything except simply to pay for gas. That is the only suggestion that I make about the rate payers.

Q. Well, aren't you suggesting that this Commission adopt your annual accrual figure for amortization of Panhandle Eastern Pipe Line property in the amount of $1,450,299? A. Yes, sir.

Q. And aren't the amounts we are talking about included in that total?

A. Yes, sir. And I suggest that it is proper to include in that total the amounts required to continue the amortization of that original amount until the amortization is completed.

Q. Of the original amount? A. Yes, sir.

Q. Of $2,930,286? A. Yes, sir.

Q. Well, Mr. Biddison, the original amount of that account as shown on page 2 of Exhibit 52 in line 40 was $13,398,402, was it not, in 1931?

A. $13,409,544.31, I believe.

Q. You didn't provide for the amortization of that original amount, did you? A. No, sir.

[fol. 2155] Q. Why?

A. Because of that original amount there is only $2,930,286.40 presently existing on the books of account as invested.

Q. That is to say, you didn't use the $13,000,000 figure because all but what you claim to be $2,930,000-odd was written off?

A. Yes, and I understand that the bulk of that did not constitute cost. That is my understanding of it.

Q. It was write-up, wasn't it?

A. I understand it was, I don't know. I didn't make a detailed investigation to find out.

Q. Which was another reason why you didn't want to include the entire $13,000,000 of cost?

A. Well, it is not there any more so there is no reason for me to include it.

Q. Well, the thing we are inquiring about now, of course, is to ascertain whether the $2,930,000 that you used is all there, too.

A. It so shows on the statement furnished me.

Q. All right, and, of course, if you misinterpreted that statement to the extent that $1,611,000 had been written off, if it should be shown that you misinterpreted it that way; your annual allowance would have to be reduced [fol. 2156] accordingly, wouldn't it?

A. I know that there are substantial amounts being accrued annually on the books and that the amount accrued to date has not amortized the $2,900,000-plus, therefore, the allowance should continue until the amortization of the original amount is completed.

Q. But it has amortized $1,611,000, has it not?

A. I believe that is correct.

Q. All right, turn, if you please, Mr. Biddison, to Exhibit 69, page 2. Refer, if you will, to column "C", lines 12 and 13, which read—well, refer to those and tell me how much you have included in the column "C" entitled "As Per Books" in that exhibit. That is, how much have you included for gas sales and purchase contracts, of course?

Mr. Wheat: You are referring to lines 12 and 13 of page 2 of Exhibit 69, are you?

Mr. Littman: That is correct, Mr. Wheat.

The Witness: That includes gas sales and purchase contracts in toto in the amount of $2,930,286.40 and I have shown a deduction of the reserves of $1,611,657.30 to arrive at the amount of $1,318,629.10 as being gas sales and purchase contracts less the reserves.

By Mr. Littman:

Q. As being gas sales and purchase contracts "As Per Books" Column "C"? Is that correct?

[fol. 2157] A. No, sir, as being gas sales and purchase contracts less reserves as per books.

Q. Yes, well you deducted the reserves of $1,611,657 on page 2 of Exhibit 69 as you state, did you not? You deducted that reserve here?

A. Yes, and so explained what it is.

Q. Yes. Why didn't you deduct it for purposes of amortization?

A. Because the amount that has to be ultimately amortized is $2,930,286.40 and I think it should be amortized over a ten-year period.

Q. Even though part of it has already been amortized and written off?

A. Even although there has been an accrual in their reserve account for part of it.

Q. And even though you suggest by your Exhibit 69 that the book figures to be used by this Commission for rate purposes should exclude the amount of the reserve?

A. I made no suggestion of any such nature with respect to my Exhibit No. 69.

Q. What do you show Exhibit No. 69 for at all then, what is the purpose of it?

A. The purpose of it is to show the amount to be deducted from a statement of cost as per books for the amount of depreciation which has occurred in the property.

[fol. 2158] Q. Well, would you say, Mr. Biddison, that it is a correct statement that that amount of $1,611,657 has been extinguished from the books of the company?

A. No.

Q. You wouldn't say that?

A. No. My understanding is that it is in the reserve account.

Q. I refer you, Mr. Biddison, to page S-7 of Exhibit 106 which is "Notes to Income Account" and I am going to read it. I am sorry I don't have another copy.

"Note B. The registrant has provided amortization of gas sales and purchase contracts in the amount of $24,419.05 per month which will extinguish the net ledger balance at December 31, 1935 ($2,930,286.40) over a period of ten years. Of the original amount of gas sales contracts, other, $371,000 is being amortized."

Well, the latter part, of course, has nothing to do with this particular item. First, have I read correctly from this statement?

A. Yes.

Q. Mr. Biddison, I will ask you to turn to page 1 of Exhibit 66, again. You have amortized the gas sales and purchase contracts over a ten-year period on a straight-line basis, have you not?

A. Yes, sir.

. . . . . .

[fol. 2177] Q. I refer you, Mr. Biddison, to Mr. Davis' Exhibit No. 76, Page 4, and ask you whether the following statement is the one on which you based the purported life of 34 years:

"The combined gas supply controlled by your company"—I think perhaps before I read that, for the purpose of the record, I had better state that this is a part of a letter addressed by Ralph E. Davis, Inc., Engineers, to the Board of Directors of Panhandle Eastern Pipe Line Company, New York, New York, dated November 12, 1940.

"The combined gas supply controlled by your company in the Amarillo and Hugoton fields is, in our judgment, adequate to supply its present markets and any reasonably anticipated increase in the gas requirement of said markets for a period of more than 25 years."

Is that the statement on which you relied?

A. I think that is not the sole statement. If I may be allowed to refer to the exhibit?

Q. Before you look up another statement, let's clear this up, Mr. Biddison, if you do not mind.

Is that one of the statements on which you relied?

A. Yes.

Q. All right, you may refer to the exhibit and tell me any other statements or data that you relied on in addition to that, if you wish.

A. The immediately preceding paragraph:

[fol. 2178] "Both the Amarillo and Hugoton fields constitute reservoirs of gas from which gas withdrawals will not

necessarily be proportional to the reserves controlled by various producers. The reserves are, we believe, sufficient to meet the combined anticipated requirements for pipe line, carbon black and other uses for a period of more than 25 years."

Q. The statement to which you just referred has to do with the Amarillo and Hugoton field as a whole, does it not?

A. Yes, sir.

Q. And the one I read had to do specifically with the reserves of Panhandle Eastern Pipe Line Company?

A. That is correct.

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[fol. 2185] Q. Is Panhandle Eastern Pipe Line Company going to discontinue its leasing and its exploration activities as of June 30, 1941?

A. Not so far as I know.

Q. They are going, so far as you know, to continue and are presently continuing to explore and search for gas, are they not?

A. Yes, and to consolidate blocks and to avoid the ex-
[fol. 2186] pense of unnecessary drilling and of unnecessarily long and expensive gathering systems.

Q. Yes, they are going to go out and secure new gas reserves, aren't they?

A. I expect they will.

• • • • • • • • •

[fol. 2195] Q. Mr. Biddison, when did you first become employed by Panhandle Eastern Pipe Line Company?

A. I believe the first work I did for them was in the spring of 1937. I am not regularly employed by Panhandle Eastern Pipe Line Company.

Q. You are a consulting engineer for them and are called in from time to time to consult with respect to various phases of the operations of the property, are you not?

A. Yes, when they feel the need of my services.

Q. What have your duties been, generally, in that respect? I am not talking about this rate case now. We are all aware of your work in the rate case, but what have been your duties, generally, in the capacity of consulting engineer in the past?

A. Well, I have made some studies in the past on the question of the amounts to be accrued to reserve accounts.

Q. You mean reserve for depreciation or other reserves too?

A. For depreciation and depletion and amortization.

Q. May I interrupt there and ask for what years you [fol. 2196] made your recommendations with respect to accrual rates for depreciation reserves?

A. I have given the matter some consideration each year since 1937.

Q. Did you report to them?

A. I made no formal report to them on the matter whatever.

Q. Not in writing?

A. No, sir.

Q. Have you reported to the company orally?

A. Yes, and discussed the matter with them.

Q. Did you advise them as to what amounts they should charge, in your opinion, annually for amortization and depreciation?

A. It is more a question of my having examined what they were doing and reaching a conclusion in my own mind as to whether the amounts they were setting up were sufficient for the purpose.

. . . . . .

Q. Did you give them any advice about whether they should or should not amortize this organization cost and miscellaneous intangible plant cost?

A. No, I think the advice I gave them was only as to [fol. 2197] whether, as an over-all matter, the amount that they proposed to set up was sufficient for the purpose.

Q. Do you remember these two items?

A. Yes, I remember considering those matters, and forming my conclusions.

Q. You say at the time you made your studies preparatory to advising the company as to annual depreciation and amortization, you studied these two items, didn't you?

A. I gave them consideration in forming my conclusion.

Q. You did not tell them, did you, or you did not advise Panhandle Eastern Pipe Line Company to make an allowance for amortization of these two items, namely, Organization and Miscellaneous Intangible Plant?

A. I did not advise them to make an allowance for amortization of any item. I advised them as to my opinion as to whether their accruals in toto were sufficient for their purposes.

Q. And what was your advice in that regard?

A. My advice was that the amounts that they proposed to set up were sufficient.

Q. For what years, Mr. Riddison?

A. I think for the years 1937, 1938, 1939 and 1940, is my recollection.

. . . . . .

[fol. 2198] Q. What was your advice to them with respect to the accruals in their reserves for depreciation, depletion and amortization for those years?

A. For certain of those years, I advised that I thought that the amount of balances was normal for a property of that age and that condition.

Q. Do you remember which years?

A. No, I do not.

Q. Now, you stated you gave Panhandle Eastern some advice with respect to its depreciation policies.

Did Panhandle Eastern follow your advice?

A. I did not say that. I said that I had advised them as to my opinion of whether the amount they proposed to set up for these various years was adequate for the purpose or not.

Q. If the amount had been low, they would or would not do something about it, would they?

A. I do not know. I think that question should be addressed to them.

Q. Did they do anything about the depreciation—

A. (Interposing) The amounts they proposed to set up were arrived at after discussion between their employees and officials and myself.

Then, when a conclusion was reached and they proposed to set up those amounts, why, I concurred in the conclusion we reached and so expressed myself.

. . . . . .

[fol. 2199] Q. Did they take your advice with respect to the over-all amounts to be charged annually for depreciation, amortization and depletion?

A. It was not entirely my advice. It was a conclusion reached jointly.

Q. Suppose you tell us about it, Mr. Biddison?

A. I have told you. That is all there is to it that I can see.

We discussed the matter of what they were accruing. I made some computations of what I thought it ought to be for various classes and divisions of property and, in that manner, checked their ideas of what they thought ought to be accrued, and reached a conclusion as to how much it should be in toto.

Q. And out of the welter of discussion and conference, you and Panhandle Eastern were in agreement, were you not?

A. We got into agreement finally after these discussions.

Q. When? I mean, for what years?

A. I think it was for the years 1937, 1938 1939 and 1940. As I say, I am not certain offhand about the year 1937, but I believe those are the correct years.

Q. And you have already stated, no report was made by you in writing?

[fol. 2200] A. That is correct.

Q. No letter was written by you with respect to that subject?

A. Yes, I have written letters with respect to those subjects.

Q. Are those the letters that are contained in the Registration Statement?

A. Some of them have been used in Registration Statements, is my recollection.

Q. I take it that your answer with respect to an agreement on depreciation policy includes an agreement upon the adequacy and reasonableness and the propriety of the amounts accumulated in the depreciation reserves by Panhandle Eastern for depletion, amortization and depreciation? A. No, it does not.

Q. You did not agree with them? A. No.

Q. You did not agree at any time?

A. I have been asked my opinion on that and I have made some expression of my opinion on that.

Q. May I ask what those opinions were, sir?

A. Well, I think I had made the expression at some time or another, that I believed that the reserve balances were normal for a property of that age and of that condition.

I think I made some such statement as that in a letter.

[fol. 2201] Q. Well, can you state approximately when?

A. Well, sometime between 1937 and 1941, but I do not recall which year it was for. It may have been for more than one of those years.

Mr. Littman: Mr. Examiner, I would like to have marked for identification as Exhibit No. 107, a document entitled, "No. 11488, Committee on Stock List—New York Stock Exchange. Panhandle Eastern Pipe Line Company First Mortgage and First Lien 3% Bonds, Series B, Due November 1, 1960, Dated New York, February 28, 1941."

This appears to be an application for listing on the New York Stock Exchange of $12,000,000 principal amount of its first mortgage and first lien 3 percent bonds, Series B, dated November 1, 1940, and due [November] 1, 1960.

May it be so marked?

Trial Examiner: It will be so marked.

[fol. 2202] Q. Mr. Biddison, I read you a statement from Exhibit No. 107 for identification and ask whether it refreshes your recollection:

"The formulae consistently used by the Company and its Subsidiary Companies beginning with the year 1937 to develop an amount to be recommended to the Board of Directors as a proper provision for depreciation, depletion [fol. 2203] and amortization gives consideration to the 'wasting asset' theory and provides depletion on operated leaseholds on the basis of units of gas withdrawn, amortization of investment in unoperated land rights by the use of a composite life of ten years for such land rights, amortization of gas sales and purchase contracts at a

specific monthly rate as provided in the Company's Certificate of Incorporation and in amounts to conform to the contract period in certain instances, and an amount for the other transmission system properties determined by its Board of Directors which recognizes amortization in addition to a composite rate based on the age and estimated life of the properties. The propriety of the aggregate annual provision, as well as the reasonableness of the total reserves provided to date, has been substantiated by an opinion from an independent Consulting Engineer. Unless required to do otherwise by some regulatory authority of competent jurisdiction the Company expects to continue this policy."

I have read the last paragraph on the first page of that application.

Does that refresh your recollection as to whether you are the consulting engineer referred to in that statement?

A. Well, I assume that I am. I have worked with them on that matter.

Q. You do not know of any other consulting engineer [fol. 2204] that worked on that matter in 1939 or 1940, do you? A. No.

Q. Let me ask you, does this refresh your recollection as to the date as of which you advised the company as to the reasonableness of the total reserves provided to date of Panhandle Eastern Pipe Line Company?

A. I think I did something of that sort late in 1940.

Q. It is your best recollection it was late in 1940 that you did come to that conclusion?

A. Yes, I think I advised them of substantially the same thing, maybe at other times.

* * * * * * * * *

[fol. 2290] P. McDonald Budison, resumed the stand and testified further as follows:

Cross-Examination (Continued)

* * * * * * * * *

[fol. 2413] P. McDonald Biddison, the witness on the stand at the time of the taking of the noon recess, resumed the stand and testified further as follows:

* * * * * * * *

[fol. 2421] Cross-Examination

[fol. 2422] By Mr. Chamberlain:

Q. Mr. Biddison, I wish to call your attention to a portion of your testimony given yesterday in which the question was asked you with respect to the reserve account which is created under the plan of your Exhibit 68.

You were asked by Mr. Littman, as I read the transcript:

"Question: Can you enlighten us any further with respect to what is proposed to be done with it?

"Answer: Well, the money will be accrued in a reserve account and the retirement of property removed and abandoned will be charged from time to time against that reserve."

"Question: In other words, if I correctly understand you, Mr. Biddison, this annual amount of $675,573 will be credited to a reserve each year and whatever replacements are required from year to year will be charged to that reserve?"

"Answer: Whatever retirements are made, retirement and abandonments."

That is what you intended to answer? A. Yes, sir.

Q. Now, you stated yesterday that a retirement on account of the condition of the property constituted what you called a "mortality", is that right? A. Yes, sir.

Q. Now, you distinguish that as a deterioration, or you would consider that such a deterioration as distinguished from a change that was made on account of a [fol. 2423] public requirement or inadequacy?

A. Yes, sir.

Q. Now, what are the factors which you found in your studies because of what you term "mortality of pipe"?

A. The mortality of pipe is quite largely caused by corrosion of one sort or another.

Q. Well, you said this morning, if I recall correctly, that about three-quarters of the retirements were caused by corrosion, is that right?

A. Yes, sir, that is my estimate of about the proportion.

Q. What are the factors which constitute the remaining quarter of the reason for mortality in pipe?

A. Well, there are the requirements of public authorities, inadequacy.

. . . . . .

Some due to obsolescence.

Q. Anything else?

A. That is all that occurs to me at the moment. Those are the causes I have in mind.

Q. Now, you had the experience of a long study with [fol. 2424] respect to the Lone Star system, did you not?

A. Yes, sir.

Q. Now, you have known that property for many years, Mr. Biddison, have you not? A. Yes, sir.

. . . . . .

[fol. 2426] Q. How long a time did you put in on the study as to the amount of pipe turn-over on that system?

A. I do not know. I have worked on that at various periods for a considerable time and I have had help engaged on it for, I guess, it will amount to probably two years total time of a man but I have not been continuously on it so very much myself.

Q. Well, you have reached conclusions from the research and study that has been made by your staff?

A. Yes, and from studies made by other engineers working on the same problem for Lone Star Gas Company. I have used some of their data and they have used some of mine.

Q. And without asking at the present time as to any result of your work for Lone Star, I do want to ask you to be a bit more specific as to the causes of deterioration now which you found were factors in causing the ultimate retirement of pipe. You certainly have more than two or three?

A. As to well lines and gathering lines, the most important factor has been the life of wells and fields. That

has caused line and pipe removals but I have not embraced those in the figures which I have cited for main lines.

. . . . . .

[fol. 2427] (interposing) I might class those under the heading of either obsolescence or changed operating conditions.

. . . . . .

Now, the Lone Star has also had some heavy removals of pipe in their main line system due to the factor of changed operating conditions which we might class under the heading of obsolescence.

That is, they became obsolete in the location they were in and on that account, some major removals of lines have been made.

There are also the requirements of public authorities that have caused some removals and abandonments of pipe by the building of new roads, the changing of grade on roads, items of that sort.

Those items have been material in connection with the history of Lone Star removals and abandonments of pipe.

Then, the factor of pipe mortality due to pitting, the result of corrosion.

Q. Now, I understood you to say that your study confirmed the fact that they had about a 4 percent annual turn-over in their pipe due to all of these causes.

A. That is right.

Q. And that about 1.7 percent was due to the factors which caused deterioration in the pipe? A. Yes, sir.

. . . . . .

[fol. 2428] Q. What are the factors which would be operating within this 1.7 percent that caused the deterioration of the pipe other than corrosion now which you have mentioned?

A. The main factors in that are corrosion.

Q. Well, is that all?

A. I think that is the only factor in that particular item.

. . . . . .

Q. And by the same token, I judge that the one percent that you assert will be suffered by Panhandle Eastern will be due, then, to corrosion?

A. No, I think not. One percent covers all costs.

Q. Covers all costs. That is, you mean those due to inadequacy?

A. Inadequacy, public requirement and changed operating conditions.

* * * * * * * * *

[fol. 2430] Q. Well, now, it is a fact that Lone Star had a very small proportion of what we call the larger pipe, has it not?

A. Well, the Lone Star does not have any material amount of pipe as large as that of Panhandle Eastern, but they do have a considerable amount of 20-inch and 18-inch, 16-inch.

* * * * * * * *

[fol. 2432] Q. Now, are there any factors which were present in the Lone Star system that would not be present in the Panhandle Eastern system?

A. Yes.

The factor that the Panhandle Eastern Pipe Line system has better protective coating than on the bulk of the pipe in the Lone Star Gas system, is one.

Another factor of difference is that the Panhandle Eastern Pipe Line Company system draws its gas from two large fields, both of which have already had comparatively long lives and each of which will produce for a great many future years, so that the location of the main pipe line system of Panhandle Eastern is in a relatively fixed position for a considerable period of time to come, as compared [fol. 2433] to the system of Lone Star Gas Company which, beginning with 1909, has had to shift its source of supply in whole or in part, several times, requiring considerable rearrangement of its system.

Q. How many fields have they extended their lines to, to obtain gas?

A. I do not know that I could break it down for you into fields. I could name it to you, I think, suitable for your purpose in areas.

Q. All right.

A. They began operations with their supply based upon the Petrolia Texas fields near Wichita Falls and then extended northward from there into Oklahoma into the Chickasha and Duncan area.

The supply was augmented along about 1917 or 1918 by a line from the Fox Loco area of southern Oklahoma, that area being near Ardmore.

Then, about 1920 or 1921, they extended their system out into the Eastland-Breckenridge-Ranger area, that being westward from Fort Worth.

Then, in 1926, they brought in gas from the eastern portion of the Texas Panhandle Field through an 18-inch line running down to Petrolia. Then about 1935, they extended their supply system down into east Texas, Cayuga, Long Lake, and Buffalo fields, generally near Palestine south of Athens.

[fol. 2434] Those have been the major changes in their supply sources.

Q. They have involved the abandonment of much of the gathering system, have they not, in those various fields?

There have been constant changes?

A. There has been a considerable amount of abandonment and removal of field lines in that connection. Very few of those fields, though, are totally extinct or totally abandoned yet.

* * * * * * *

Q. You stated that you felt that on the Panhandle [fol. 2435] Eastern system the retirements would be materially less due to mortality than on the Lone Star system.

Now, what factors do your figure will be involved in that and which factors will operate to a lesser extent?

A. The factors which I think will lessen the amount of retirements due to corrosion is the protective coating on the system of Panhandle Eastern Pipe Line Company.

Q. And you did not expect to have any great amount of inadequacy in these lines for some time?

A. I think there will be some inadequacy, but I do not think that will be remedied by retirement and substitution of larger lines.

I think that it will be remedied by property additions.

Q. There has been a constant improvement in the way of the protective covering for pipe line, has there not, in the past ten years?

A. Only in the respect that we do have some mechanical methods of application. So far as the quality of the protection itself is concerned, I do not think there has been any material improvement.

The methods of application have been improved but I do not think that the materials themselves have shown any appreciable improvement. I know of nothing to indicate it.

Q. What are the factors that cause corrosion?

A. The factors that cause corrosion are dissimilarity [fol. 2436] of metals in contact with soluble salts or acids.

Q. And does that occur on the exterior of these mains entirely?

A. No, it does not entirely. When we speak of mains, I am speaking of mains in general now, not of any specific company's mains.

Q. Yes, and corrosion occurs then due to what causes?

A. Interior corrosion on pipe lines is generally caused by the presence of sulphur compounds, free oxygen, and moisture.

Q. Well, is there free oxygen in natural gas?

A. There is occasionally reported a trace of free oxygen in some natural gas analysis. As a general proposition, I think that that is an error in sampling or in analysis.

I do not believe that free oxygen really exists in natural gas, although occasionally an analysis will indicate a trace of it but, in connection with the operation of oil wells, it has been commonly found that air, with its oxygen content, would be mixed with the casing head gas from some

of these oil wells or casing head gasoline plants and some such gas is used in natural gas pipe lines in some localities.

Q. That would be only where they were buying casing head gas then?

A. That is the only place I know of where you can expect any oxygen in natural gas.

Q. And do they have any nitric acid corrosion?

[fol. 2437] A. I know of one instance where there was a nitric or nitrous acid corrosion on the interior of pipe in connection with the use of gas engine exhaust gases and stack gases off a steam boiler for dilution for control of the heating value.

That is the only instance I know of, of that class of corrosion.

Q. And do you know of substantial amounts of pipe that had been removed on account of that type of corrosion?

A. Yes, I know of several miles of 18-inch, I believe it was, removed on that account.

Q. But that is not a factor you would expect to find in Panhandle? A. No, sir.

. . . . . .

Q. Now, I wish you would describe for us the gasoline extraction plant that is in operation on the Panhandle system.

. . . . . .

[fol. 2438] A. I can give you the elementary process, at least.

The absorption process is the one that is used at the Liberal plant. In this process, natural gas is brought into the base of a vertical cylinder. As a matter of fact, they have several of these vertical cylinders, called absorbers.

The gas passes upward through these absorbers and in its upward passage, it is brought into intimate contact, through baffles and trays, with a descending stream of absorbent oil which is pumped in at the upper portion of this absorber.

The oil, in contact with the gas, absorbs from the gas some of the liquid fractions which have been carried in solution in the gas.

The natural gas is drawn off from the top portion of the absorber and passed on into the pipe line.

In this particular plant at Liberal, this gas, after having passed through the absorbers and had its gasoline content absorbed, is treated by a somewhat similar process in another apparatus where it is contacted with a liquid which absorbs water from it and the gas is, in that fashion, dehydrated.

From the absorbers, however, of the gasoline plant proper, the enriched oil is drawn off at the bottom continuously and passed to a still, a rectifying outfit.

In its passage to this still, it passes through some heat- [fol. 2439] exchanging apparatus so that it may pick up and utilize the heat in some of the oil that had already been denuded of its gasoline content in that still.

In the still, this enriched oil comes in contact with free steam. The combined effect of the heat imparted by the steam and the lowering of the vapor-pressure on the gasoline fractions in the oil due to the presence of the water vapors, causes the gasoline vapors to separate out from the oil vapors and they ascend in a dephlegmator column in which some partial condensation takes place and the small amount of the absorber oil that had been carried upward by those vapors are returned to the still and the gasoline fractions go off at the top, where they are carried to condensing apparatus and cooled down.

They may be, in this process, cooled completely in one operation, or cooled in several operations, and the gasoline so produced be produced in two or more fractions of different quality and the gasoline may be subsequently treated, if desired, in other fractioning apparatus so that its vapor tension may be controlled.

That is the general process.

Q. Well, now, what products, or what ones of the heavier hydrocarbons are taken out at this plant?

A. Well, those heavier hydrocarbons which are salable as natural gasoline and the general process in that respect would be to strip out everything heavier than butane; [fol. 2440] probably, and possibly take out some of the butanes and propanes.

. . . . . .

Q. Now, what parts of that plant would require replacement to the extent of 5 percent a year, $35,000 a year?

A. Well, I do not anticipate that any one particular piece of it will take $35,000 in a year. I anticipate, however, that on the average they will be required to replace that much per year because of the using up of apparatus, cooling tower coils are rather expensive pieces of apparatus and they do not last for ever in spite of the fact they are made out of brass tubes.

The cooling towers themselves require replacements, especially the towers, in spite of the fact that they are largely made out of redwood.

[fol. 2441] Pumps require replacements. Valves and fitting require replacements, instruments and controls require replacements. It is an over-all figure for a property of that class.

. . . . . .

Q. You would be able, I take it, to name any parts which would even approximate $35,000 a year for replacement, would you not, Mr. Biddison?

A. That is correct.

Q. And the plant would be of service until such time as it should be abandoned for some new type of equipment other than very moderate cost for replacements, is that right?

A. I have it in mind that plants of this type will be overhauled and modernized occasionally in order to be kept up to modern standards of efficiency.

Q. And how frequent would you expect that?

A. Well, I think there will be major changes in such a plant every ten, fifteen years. There would be major changes in the layout and design.

[fol. 2442] Q. Now, on the sheet from Mr. Watkins' working papers, there is indicated a retirement from this gasoline extraction plant of $35,806.35 in 1940.

Do you have any knowledge of what that was?

A. I think that that was in connection with the dehydration equipment. There was some dehydration equipment removed at about that time, either 1940 or 1939, I have forgotten definitely which.

. . . . . .

Q. That was designed as an improvement in the art?

A. As an improvement in the art and to provide additional dehydration capacity.

. . . . . .

[fol. 2462] Q. Wouldn't it be more accurate for you to say, Mr. Biddison, that the balance in a reserve built up by proper charges through the years does not at any given period represent the depreciation which you claim you cannot observe? Wouldn't that be more accurate for you to say that?

A. No, I think that would be less accurate. My statement is that it would only by a rare coincidence equal depreciation which has occurred in the property.

Q. Do you believe that annual allowances for depreciation should be harmonized with the amount to be deducted for existing depreciation?

A. I do not, I do not think they can be rationally harmonized.

Q. Mr. Biddison, I read you from pages 21 and 22 of the Federal Power Commission's Opinion No. 63 in the Chicago District Electric Generating Corporation proceeding, Docket No. IT-5500:

"The true conception of depreciation leaves no room to doubt that annual depreciation expense and actual existing depreciation must be harmonized. Annual depreciation measures the diminution in service life, capacity or utility in one year—actual existing or accrued depreciation is the total diminished service life, capacity or utility to the date of inquiry. To accept the one while denying the others is to be illogical and guilty of employing a dual standard with resulting injustices to the public or to the utility."

[fol. 2463]

Do you subscribe to the principle which I have just read?

A. I certainly do not. I think if they had had as much contact with property as I have had they wouldn't agree to it themselves.

Q. Well, we wanted to make certain that we understood your theory, Mr. Biddison.

When you speak of a replacement, do you mean the replacement by property of like purpose replaced in kind without betterment? A. Yes, sir.

Q. What is the distinction in your theory between addition, addition replacement and betterment?

A. Well, an addition would be the creation of a piece of property where none existed before. A replacement would be to take out one unit of property and put in its place a like unit. A betterment might or might not involve a renewal. It might be to take out one unit of property and replace it with a better or bigger or more efficient unit to serve a similar purpose. On the other hand, it might involve merely the working over of the [fol. 2464] existing unit to make it a betterment, some modernization of it.

Q. Can you predict any major retirements to be replaced in kind with property of like purpose without betterment?

A. Well, I think most any such replacement would result in some betterment, but that is not betterment as I understand the word used in classifications of work.

Q. Mr. Biddison, if an amortization plan is followed whereby each dollar of plant investment is amortized over its remaining life, would there be any need for any replacement allowance in addition thereto?

The Witness: May I have that read back?

(Whereupon, the pending question was read by the reporter.)

The Witness: Well, that would be a replacement allowance.

By Mr. Littman:

Q. As well as an amortization allowance?

A. It would be a replacement allowance on an amortization schedule.

Q. And, of course, no separate allowance for replacements would need to be made?

A. It would be the allowance for replacements.

Trial Examiner: You, nevertheless, propose that the [fol. 2465] annual accruals estimated in your Exhibit 66 for identification and your Exhibit 68 for identification shall run concurrently until the exhaustion of the field, do you not?

The Witness: That is correct.

By Mr. Littman:

Q. Mr. Biddison, I asked you a moment ago whether you predict any major retirements of property to be made in kind of like property without betterment. I believe you responded rather generally. Can you be more specific, can you name any major retirement that you expect will come about which will be replaced in kind with property of like purpose without betterment?

A. Yes. If a stretch of pipe be taken out of service because it is so badly pitted it is no longer suitable for service, it may well be replaced with an equal amount of pipe of the same size and character and with the same kind of protective coating thereon.

Q. With the same life expectancy?

A. With the same life expectancy in the same location.

Q. Can you name something other than the pipe that would come within the category that I described?

A. Yes, you can replace a valve.

Q. I said a major replacement, Mr. Biddison. I don't mean a valve or one piece of pipe, I mean something of major size.

[fol. 2466] A. Well, take a compressor unit. If one of the 1300 horsepower compressor units were required to be replaced at this date, it would be replaced with a unit substantially identical in all respects that would sit right on the same foundation.

. . . . . .

Q. Mr. Biddison, is it a fair deduction from your testimony that it is your judgment that this main transmission pipe such as is in place in the Panhandle Eastern system will have an average life of 100 years?

A. No, sir. The only thing that can fairly be deduced from my testimony in that respect is that I don't know what its average life is going to be and I don't think there is any method by which it can be foretold. I can make an estimate of what I think the replacement rate will be on it.

Q. And that rate is 1 percent a year?

A. That is correct.

Q. And does not that imply, then, an estimate of 100 years? A. It does not.

Q. At least 100 years?

[fol. 2467] A. It does not. I have tried to make it plain that I do not think average life can be determined from the replacement rate on steel pipe nor can the replacement rate be determined from average life. It makes no difference in the long run what the average life might be if you do know what the replacement rate is apt to be.

Now we can make some rational determination of what replacement rate is apt to be on steel pipe by a study of what replacement rates have been on other lines. We cannot make any determination of the average life of steel pipe in anybody's transmission system today, because to make a determination of the average life of steel pipe requires that steel pipe in some pipeline go through a life cycle. I do not have and have not heard of and cannot find out about any pipeline on which it can be said there has been a complete life cycle.

Q. And how long have steel pipes been in use?

A. Steel pipe has been in use in pipelines since 1898.

Q. That would be 43 years? A. That is right.

Q. And pipe that was put in at that time is still in use, is it not?

A. Well, I do not know whether pipe that was put in at that time is still in use or not. Steel pipe came into [fol. 2468] use for pipelines at about that time. The first steel pipe that was ever made was made about 1885, but in most all pipelines we find sections in which pipe will have a relatively short life, other sections in which it will have a relatively long life.

Now, if we have a pipeline in which 10 percent of the line is in what we might call hot spots and has to be

replaced at frequent intervals, say, that pipe has to be replaced every ten years, we might have 90 percent or the remainder of the line would be in a location where pipe wouldn't have to be disturbed for, well, say, 35 years.

Now, the average life of pipe under that condition is 32 and a half years. We have a replacement rate on it, however; during the 35-year period we will have replaced 10 per cent of it three and a half times and we will have replaced 90 per cent of it once.

Now, the replacement rate doesn't figure from that average life figure at all and you can take other combinations that will give you the identical average life and have entirely different replacement rates.

Q. Well then, how can you judge a replacement rate for Panhandle Eastern by taking the rates that you have found in other locations?

A. Simply because other locations cover a wide variety of conditions.

[fol. 2469] Q. They would have to be similar conditions, would they not?

A. Well, they would have to have variety enough that you wouldn't be confining yourself to a few of these hot spots.

Q. Well, if you leave the hot spot alone, leave that out of your calculation, how long do you estimate that steel pipe will last?

A. Well, I have no estimate on it. I have nothing on which to base an estimate. If we have no hot spots and no attack, I have no basis on which to estimate life.

Q. Well, isn't your estimate in this case based upon the same theory that is so often given for determining the life of cast iron pipe, a hundred years is long enough to estimate?

A. No, sir, it is not. It is not based upon that at all.

Q. I observe in your Exhibit No. 68 that you carry out the replacement rate on your transmission mains for the full 34 years. You have, however, a retirement of your Texas lines eight years before that period in which you would have pipe for use in replacing anything that went out. Why do you carry this for the full period?

A. Why, I do not carry this Exhibit 68 for any period. I have simply set up here what the present rate of accrual [fol. 2470] should be for the presently existing property. Now, as that property changes, the total amount of the accrual should change. There would be no accruals for the Texas property after it had gone out of service.

Q. Nor would there be any accruals for the balance of the property, because you would have pipe enough to replace anything you needed. I am speaking, of course, of the cost of pipe.

* * * * * * * *

The Witness: I don't understand that.

Q. I was trying to say that there would be no need of an accrual after 1957 for pipe on this transmission system because you would have pipe enough retired from your Texas division and yet you have carried your accrual through for the full period at the full amount.

A. I have carried the accrual only to the extent of showing what the annual rate should be of accrual. I haven't set it up for any period and carried it through to 1965 or to any other period. There would be no accruals whatever, either for the retirement schedule under my Exhibit 68 or for the amortization schedule of my Exhibit [fol. 2471] 66, for the Texas property after it went out of service.

Trial Examiner: As a matter of management then, Mr. Biddison, would it be proper to assume that periodic revisions of this estimation in Exhibit 68 would be made from time to time in the light of experience and the charges to the consumers adjusted accordingly?

The Witness: Certainly, Mr. Examiner. The determination of the rate of accrual for retirements and of the rate of accrual for amortization must be analyzed annually in the light of the changes that have taken place in the property and in the investment in property. No one can determine at this date a fixed figure for either purpose which will properly apply after the property value or the character of the property has changed.

Trial Examiner: And to follow that up somewhat conversely, why is there such a marked uplift in the trans-

mission line charges as compared with the actual experience of the company to date in replacement costs?

The Witness: The company should have been accruing what we might call a contingent fund to meet the impact of heavy retirements with which they will soon be faced. At the time those retirements are to be made there must be enough money accrued in the reserve to meet their cost.

This pipeline system has generally upon it a high-grade [fol. 2472] protective coating which has deferred the attack of the elements on the pipe and has deferred corrosion and pitting. That protective coating will not last forever. None of them do. Cold applications are good in some locations for a few years. The hot applications, such as this system has quite largely, are good for a few years longer. None of them are effective protection for a great many years.

As that protective coating breaks down the rate of corrosion and pitting will increase quite rapidly and they will be faced with a series of pipe replacements far in excess of the annual rates which I have here set up to be made in the course of two or three years to put that pipeline system in condition to continue to operate under the conditions for which it is designed.

After having one cycle of those heavy replacements, according to the experience that has been had by all other operating companies with whose experience I have had contact, they will have a little relief on replacements for a while. The rate of replacements will fall below the average rate only to be followed by another peak, probably of less intensity than the first one, and the replacements will run in cycles in that fashion.

It is for that reason that these amounts should be accrued in a reserve fund. If they were going to be expended at a uniform rate, there would be no use for a reserve fund. There would be no sense in a reserve fund. [fol. 2473] You would simply charge it directly against operations.

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[fol. 2481] P. McDONALD BIDDISON, a witness having been previously duly sworn, resumed the stand, was examined and testified further as follows:

* * * * * * * *

[fol. 2527] Q. Mr. Biddison, will you state in a general way just what items you propose to recover by the accrual under your Exhibit 67?

A. As shown on page 1, the cost less salvage of gas leases and of the wells drilled or to be drilled thereon.

Q. Does that include any provision for abandoned leases?

A. Yes, they are to be recouped through this depletion charge.

Q. Well, does your provision now recoup the company for the matter of the abandoned leases? A. Yes, sir.

Q. And in what way does it do that?

A. By accruing for the total cost of leases.

Q. Well, but you have the cost of present leases, do [fol. 2528] you not? A. Yes, sir.

Q. And have you added in anything for the cost of such future leases as you may have to purchase when an abandonment occurs in the field? A. I have not.

Q. How have you provided for the cost of abandoned leases?

A. Any leases which they now have which are going to be abandoned will be recouped through this charge, because their value is in the lease value which I have used.

Q. That would cover, then, presently existing leases?

A. Yes, sir.

Q. Now, how would you define depletion?

A. You mean as something which happens to the producing property or do you mean as an account on the books?

Q. Well, let's have it both ways, if there is any difference.

A. Well, as applied to the producing property, depletion means the diminution in the quantity of the product with which we are dealing. In the case of gas it means the lessening of the amount of gas possessed by the company.

Q. In other words, gas is a wasting asset?

A. Yes, sir.

Q. And the loss of the store of gas by use is really [fol. 2529] the depletion in that reserve, is it not?

A. Yes, sir.

Q. Now, you are giving evidence, of course, for the determination of rates, are you not?

A. Yes, sir.

Q. And was it your aim to follow the provisions for accounting for depletion that have been laid down by the Federal Power Commission?

A. No, my aim was to provide the requisite amount of money.

Q. Without regard to the accounting that is prescribed? A. Yes, sir.

Q. Let me ask you this, you gave me but the one definition. What is the definition as an accounting matter?

A. Well, a depletion reserve is a reserve account—

Q. (Interposing) Depletion, we were talking about, not the reserve. You mentioned that there was a difference between depletion from an accounting standpoint and from a physical or economical standpoint, I believe.

A. In accounting, as I conceive of depletion, it is an adjective modifying the noun "reserve", and, in that sense, depletion reserve is that reserve account in which may be accrued annual amounts proportionate to the amount by which the property has been depleted sufficiently to accrue the cost of the reserves by the time they are completely depleted.

* * * * * * * *

[fol. 2530] Q. Now, reading from Definition 13 of the System of Accounts promulgated by the Federal Power Commission, effective January 1, 1940, I find that—

"Depletion, as applying to natural gas producing land and land rights, means the loss in service value incurred in connection with the exhaustion of a natural resource in the course of service."

Now, that means the loss in value, does it not, of the investment used in public service, loss in service value?

A. I presume that is what it means.

Q. Now, on the matter of the abandoned leases, it is always an indeterminate amount, is it not, that is, as applied to the future?

A. It may be in some instances and, in other instances, the amount can be fairly closely predicted.

Q. Well, you mean that you can predict the number of leases that will be abandoned in that amount of acreage covering a period of 25 years?

A. No, I do not mean that I can. I simply mean that, in some instances, the prediction of the amount of abandoned leases might be impossible. In other instances, it might be done with a fair degree of accuracy.

[fol. 2531] Q. Well, now, if there is no attempt to determine that or to speculate on it, one can charge them off with absolute accuracy as they occur, can he not?

A. Yes.

Q. So that there is no reason for making an estimate as to the future cost for abandonment of leases?

* * * * * * * *

The Witness: Well, I think some determination of it must be made in matters of this sort, one way or the other. Certainly some provision must be made for it.

Q. Well, assuming it to be a charge against operation, that can be made without any necessity of speculation at the time it occurs, can it not?

A. At the time it occurs, there is no speculation about it in any event.

Q. No, that is factual, isn't it?

A. It is written off in one shape or another after it is known what the amount happens to be. There is no speculation about the amount to write off.

Q. Well, there is no real reason for speculating as to what that will be, is there, Mr. Biddison, in accounting?

A. Not in accounting, no.

* * * * * * * *

[fol. 2534] Q. Now, did you observe Account 503.2, which is the Utility Income Account under the Uniform System of Accounts?

A. Well, I have seen it, but I did not refer to it in this respect at all.

Q. Did you observe this provision?

"B. The charges to the account shall be made in such manner as to distribute the cost of producing natural gas

land and land rights over the period of their benefit to the utility based upon the exhaustion of the natural gas deposits recoverable from such land and land rights."

A. If that is the way it reads, I suppose I have read that, because I have read the classification.

* * * * * * * *

[fol. 2536] Q. Now, your proposed method does not comply with that at all, does it? A. I think it does.

* * * * * * * *

(Interposing) I have based it upon the exhaustion of the natural gas deposits recoverable.

Q. No, you have, for one thing, in there the depreciation upon your well equipment, have you not?

A. It is true that I have included for the recovery of investment in gas wells and for the recovery of investment in nonproducing leases, those items in my depletion account but I am not setting up a set of books. This is not a rule for the accounting department.

I am estimating what it is going to cost for certain purposes and I have done it in accordance with this Section 503.2 on Page 80.

Q. Now, the company has never accounted for depletion or for the depreciation of well equipment in this manner, has it? A. No.

Q. In other words, this would be an innovation?

A. That is not in the manner of any estimate.

Q. This would be an innovation in their accounting?

A. If they were to do it that way, that is correct.

[fol. 2537] Q. You were asked at the close of the session last night and this morning for a comparative statement of the depreciation and depletion which would be accrued, or rather amortization which would be accrued under your system as compared with what the company was doing.

It is correct, is it not, that you have omitted in the depreciation of plant the depreciation upon the well equip-

ment and had put it in what you term your depletion schedule?

A. That is correct.

Q. Now, your system attempts to look into the future and to provide for depletion upon the project for a period of 25 years, does it not? In other words, it is an average, isn't it, for a prospective period of 25 years?

A. No, sir, it is not.

Q. In other words, your depletion is not an average for that contemplated period?

A. No, sir, it is a depletion cost for the properties as they now exist.

Q. Do you mean that the depletion today is that amount?

A. I mean that the unit charge for depletion which I have estimated is that for the properties as they now exist.

Q. Well, then, you are depleting unproductive acreage, are you not?

A. I am accruing in a depletion reserve for the retirement of properties not now producing but estimated to have reserves.

[fol. 2538] Q. And you wish to charge off, then, as a present operating expense a reserve which will cover future operations which are, to a very considerable extent, speculative, is that right?

A. No, sir, I do not. I have set up a charge against present operations equal to the cost over the recovery of the reserves of land and leases and wells required to affect the recovery and set up that charge annually based upon the recovery during that year.

Q. But, in doing that, you necessarily enter into the realm of speculation as to how many wells must be drilled in the future and you apply a depletion to the cost of that operation which may or may not be necessary, do you not?

A. No, sir, I do not.

Q. In other words, you know today exactly how many wells must be drilled?

A. I do not, but I can make a rational estimate of the number of wells which will be required to be drilled.

Q. Do you know today how many wells are drilled?

A. Yes, sir.

Q. And you know how many acres those wells are draining, do you not?

A. No, sir, and neither does any other human being.

Q. All right, then you do not know how many wells you are going to drill, do you?

[fol. 2539] A. I can make a good estimate of how many wells will have to be drilled.

Q. You are starting out by determining depletion by injecting speculation. You must admit that.

A. I do not call it speculation. You can use any name you choose on it, but I make an estimate based upon information and knowledge.

Q. Well now, if that is true, then you have some knowledge as to the amount of drainage in the Hugoton Field in and about the present wells?

* * * * * * * *

The Witness: Well, I have a limited knowledge about drainage, yes, in the area.

* * * * * * * *

[fol. 2542] Q. You were speaking about the matter of your estimate as to the number of wells that would be necessary for the future recovery of this gas reserve, and you stated that you had some knowledge as to the matter of drainage in that field.

I observe on Page 4 of your Exhibit No. 67, that you have taken out of the Panhandle Field some 23,396 acres, they were in Sherman and Hansford counties, Texas, and placed them in the Hugoton Field: What was the reason for that?

A. Because, with the field outlined, as generally interpreted today, that acreage is part of the Hugoton pool rather than the Panhandle pool.

[fol. 2543] Q. In other words, the present concept is that the Hugoton Field extends through the Panhandle claim and into Sherman and Hansford counties, Texas, is it not? A. That is right.

Q. Now, theoretically, a few openings in one field would entirely exhaust the entire field, would it not?

A. Yes; in time.

Q. Now, then, the question of the amount of gas that could be produced from any one well would depend very much on the number of wells that were drilled in future in the areas surrounding it, would it not?

A. Yes, that would be one factor for that determination.

Q. You would have to, in some way, judge as to the amount of withdrawal from that field and the location in which those wells would be placed, would you not?

A. Yes, for the determination of the output of a particular well you would need to give that consideration.

Q. How many acres would one well drain in such a situation as you have in the field at the present time?

Mr. Culton: Which field?

Mr. Chamberlain: Hugoton.

The Witness: I don't know.

By Mr. Chamberlain:

Q. And do you have any way of computing how long it would take for a well to get to a point where it would not [fol. 2544] economically produce?

A. Yes, there are methods of doing that.

Q. How would you arrive at that?

A. I would compare the rate of changes in productive capacity with the cumulative withdrawals of as much of the well's history as was available. If there were no well history available, that matter could not be determined in such fashion; if the well history was too short, it might be misleading.

Q. Well, if a well had its pressure very much reduced by withdrawals, the reserve area, or whatever you call it, would again flow in, would it not? A. To some extent.

Q. It wouldn't do that except as there were wells outside beyond it which would exhaust the gas supply, would it? A. That is correct.

Q. Now, in estimating 25 years in the future, you must necessarily estimate as to how many wells may be placed in close proximity to the Panhandle wells, would you not?

A. No, not necessarily.

Q. You are able, then, Mr. Biddison, to sit here and tell us how many wells it is going to be necessary to drill within the next 25 years to obtain the reserve that is under this land?

A. I was able to [extimate] that on the basis of the regular procedure of development adopted by the Panhandle Eastern Pipe Line Company and that in general

[fol. 2545] use in the Hugoton area, that the well spacing would be one well per 640 acres; that there would be deviations from that because there are leases owned by Panhandle Eastern which are smaller than that, some of which will need to be drilled or surrendered.

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[fol. 2549] Cross-Examination (Resumed)

By Mr. Littman.

* * * * * * * * *

[fol. 2550] Mr. Biddison, we will now discuss your amount to be deducted for depreciation on book cost of property as set forth in your Exhibit 69: Do you have that exhibit before you? A. Yes.

Q. Am I correct in stating that the conclusion that you reached from this exhibit is that the amount of $3,903,142.46, shown at the bottom of Page 2, Column D, headed, "Deduction for Depreciation," represents the amount which, in your opinion, should be deducted for depreciation from book costs of Panhandle Eastern Pipe Line Company and subsidiary company property as of June 30, 1941?

[fol. 2551] A. Before answering the question I want to call attention to the fact that you didn't quite correctly read the figure; the figure is $3,903,102.46.

Q. I thought that was the figure I had read.

A. That is my estimate of the amount of the cost of that property which has been lost through depreciation as of June 30, 1941.

Q. That is to say, if the book cost shown in column C in the total were to be used as the rate base in this proceeding, do I correctly understand that the amount of $3,903,102.46 should be deducted for depreciation, according to your testimony; is that correct?

A. That is not correct. If the amount, as per books, in column C, constitutes value, then there should be no deduction for any purpose that I know of.

Q. What is the purpose of setting forth the figures in column D, if your statement is correct?

A. The purpose is to show that if column C represents value originally, that $3,903,102.46, that value has been lost through depreciation.

Q. And should be deducted from the amount shown in column C to secure the value new, less depreciation?

A. No, sir, it doesn't represent value new less depreciation at this date. If column C be considered to represent values when the various items were constructed, then the [fol. 2552] amounts in column D represent the amounts of those values that have been lost. If column C represents value today, then column C, less column D, represents something less than value today.

. . . . . .

Q. Well, if you want to secure the book cost less depreciation for purposes of this proceeding, what would you do?

A. If you wanted to obtain book cost less depreciation for that purpose, use column E, which is book cost less depreciation.

. . . . . .

[fol. 2554] Q. You are not agreeing that book cost be used as a rate base?

A. No, sir, I am not.

Q. I think you make yourself rather clear in that regard. Now, what is the purpose of this Exhibit 69?

[fol. 2555] A. To show the amount of the cost of this property which has been lost through depreciation.

. . . . . .

Q. Expressed in terms of book cost?

A. Yes.

Q. Well, what is your purpose in submitting this exhibit if, as you say, it has no connection with a rate base, or determination of a rate base?

Mr. Culton: There is a further objection to that. The attorneys in this case accept the responsibility for causing exhibits on different subject-matters to be submitted for the purpose of providing information. We have attempted to expedite this matter by furnishing the types of information that have been considered in various types of rate cases. This information was requested by counsel of this witness, so these tabulations were prepared and questions asked about them, and by the other counsel also.

Trial Examiner: Read the question.

(The pending question, as above recorded, was read by the reporter.)

Mr. Wheat: Before the witness answers, let it be understood that counsel takes the responsibility for having this exhibit prepared. The exhibit, as everyone knows, shows depreciation. Counsel for the Commission asked the specific question, "What is the depreciation existing in the [fol. 2556] property in relation to its book cost?" In response to that request, we, counsel for the Panhandle Eastern, Respondents here, asked the witness to prepare this exhibit. If there is any further statement of the purpose required, we will be glad to answer it.

Mr. Littman: We have had a pretty good opportunity to get acquainted with Mr. Biddison for the past 3½ days, I think we will all be inclined to agree he wouldn't do something just because somebody else asked him to; he had some purpose in doing it, we may presume, and it is for him to say whether he did or did not have something to do with the origin of this idea of putting this exhibit in evidence. If it is of no significance, I would like to know that; if it is, I would likewise like to know what is claimed by this exhibit; I would like to know the facts.

Mr. Wheat: It is purely a question of law.

Trial Examiner: The purpose of the exhibit is perfectly clear and the witness is, of course, not responsible for any legal theories, or what not; let's get right down to the merits.

The Witness: If I may, I want to correct a misapprehension that might be gained by the last question put to me by Mr. Littman: I haven't said this has no relation to the matter of the rate case.

* * * * * * *

[fol. 2557] Q. Will you define the term "depreciation" as it is used in this exhibit?

A. It is the loss in value on property occasioned by wear and tear, the action of the elements and obsolescence, which may be definitely determined.

* * * * * * *

Q. Would you say that your estimate of depreciation to be deducted from book cost represents the loss in service value, not restored by current maintenance, incurred in connection with the consumption or prospective retirement in gas plant in course of service from causes which are known to be in current operation and against which the company is not protected by insurance?

A. Yes, it will conform with that definition.

Q. I believe you stated that, in your estimate for depreciation to be deducted, there is reflected wear and tear and the action of the elements and obsolescence?

A. Yes.

Q. Does it reflect decay?

A. Yes.

Q. Inadequacy?

A. Insofar as any could be determined, yes.

[fol. 2558] Q. Did you deduct anything for inadequacy at any place?

A. I think not.

Q. Does it reflect changes in the art?

A. It is designed to do so if there were any discernible which produced a lessening in value.

Q. Did you discern any?

A. I don't recall any.

Q. And that means, of course, you didn't deduct any for that reason?

. . . . . .

Q. Does your depreciation deduction include or reflect changes in demand and changes occasioned by action of the public authorities, and, if so, did you deduct anything for it?

A. It doesn't reflect that and I have no deduction.

Q. Does it reflect anything for the assumed exhaustion of the natural gas supply?

A. It does not.

Q. I believe you mentioned that it did reflect obsolescence. Did you make any deduction for any obsolescence?

A. I did not.

Q. Does your estimated deduction for depreciation reflect any depreciation other than that which be observed by the eye?

[fol. 2559] A. Yes. I wish to correct the previous answer that I did allow for obsolescence in equipment in the local

area around Kansas City; that is a small portion of the total property.

Q. Is that the only instance in which you made any deduction for depreciation which cannot be observed by the eye, namely, the one exception of the local area?

* * * * * * *

Mr. Littman: I think he made answer to that question and also referred back to the previous question, but I think the witness can straighten the matter out.

Mr. Gorman: Your answer to that question is properly interpreted as being "Yes," is it not?

The Witness: I don't think it should be any other way.

By Mr. Littman:

Q. I think I know what Mr. Biddison has in mind. Mr. Biddison, leaving out of consideration for the moment the local area, does your estimated deduction for depreciation [fol. 2560] reflect any depreciation other than that which can be observed by the eye?

A. Yes.

Q. Will you give us some examples of instances wherein you have made a deduction for depreciation that is not observable by the eye?

A. Well, I have made a deduction on gas wells in both the Texas Panhandle field and the Hugoton field; that is not observable by the eye. I have made a deduction on the main gas compressor units, each of the main line compressor stations; that is not discernible by the eye. Also on the auxiliary electrical unit in each of the compressor stations.

Q. Automobiles and trucks?

A. Yes, and on automobiles and trucks, and on the main transmission line. The depreciation which I have allowed is not that which would be determined simply by the observations on test holes which were dug, but as a result of the application of those observations, together with the data made available in regular reports of inspection of pipe by the Panhandle Eastern Pipe Line Company, weighed out as to the length to which the data should properly apply.

Q. Mr. Biddison, perhaps you misunderstood my question. My question was, Does your estimated deduction for

depreciation reflect any depreciation other than that which can be observed by the eye? Now, with respect to the main transmission line that you mentioned, do I correctly under- [fol. 2561] stand you to mean that you used the observations and data of others as well as your own observation?

A. That is correct.

Q. But that was primarily for the purpose of ascertaining what the observation would have been if you had had a chance to see all of those particular test holes?

A. That is correct.

Q. Well, then, if we understand each other, and I think we do, with the exception of the items that you have named, other than transmission mains, you used the pure observation method and reflected in your estimated deduction for depreciation that depreciation only which could be observed by the eye? Now, am I correct in my statement? If you want to state it in your own language, it is perfectly all right for you to do it that way. I just want to know how much of your estimate represents the pure observation method, and what part of it does not.

. . . . . .

I think that is substantially correct, yes. There might be some minor variations from that, but I don't recall right now. The particular ones would be in the local area of wells and pipe lines which are a small fraction of the total.

Q. Yes, and Mr. Gorman calls my attention now to the [fol. 2562] matter of wells. You used the observation method on wells, or did you not?

A. I did not.

Q. Well, we will come to them, that specific item, later on, anyway, where we can discuss it more fully. I wanted at this point to get a general statement of your method. We agree that principally it was the observation method?

A. Principally so, yes.

Q. Now, you have from time to time in your direct examination referred to percentages in expressing your estimated deductions for depreciation. What does the term "100 percent condition" mean as you have used it?

A. It means as good as new; it has lost none of its original value; that it hasn't been damaged.

Q. The day a piece of equipment is first installed brand new it is in 100 percent condition, is it not?

A. Not always, but that is generally true; they may damage it in installing it.

Q. But excluding such damage you would agree it would be in 100 percent condition on the day it is first installed?

A. Yes.

Q. After it is used three years would it still be in 100 percent condition?

A. It depends on whether it had deteriorated or been damaged.

[fol. 2563] Q. You, then, can readily conceive of cases where property that is three years old would still be in 100 percent condition?

A. Certainly.

Q. Even though it is three years closer to the day when it would be retired?

A. Yes.

Q. Well, what does "zero percent condition" mean?

A. It means that all value has been lost.

Q. It does not represent the status at which the property is to be retired?

A. Not necessarily; quite often property is retired before it becomes zero percent condition.

Q. You say quite often; will you elaborate a little on that and give us some examples of that situation?

A. It is quite common in the operation of gas pipe lines that because some pipe needs to be removed that more pipe is removed at that time than that particular length which compelled removal. It may be economical, while the ditch is open and while the crew is there, to remove a considerable amount of additional line, not because it is necessary at that time to remove it, but because it is economical to do so. Some of this additional pipe may be a long ways from zero condition; it may have considerable value and considerable service life left. Furthermore, [fol. 2564] during changes in pipe line location of grade, it quite frequently happens that pipe is removed and abandoned without any reference to its physical condition. It is also true that there is a considerable amount of equipment subject to very little wear, subject to the action of the elements, which loses very little value up until the time some accident may damage or ruin it. It is also true of other equipment that it may remain in excellent shape

with very little loss in value up until the time somebody devises a better and more efficient piece of property to do the same work, at which time this equipment may suddenly lose value.

Q. You haven't deducted anything for the causes of retirement which you have just described, have you?

A. I have not deducted anything for causes which may in the future cause loss in value; I have attempted only to make deductions for those things which have caused loss in value.

Q. You made an allowance on the annual side, however, for those causes which you just described, have you not?

A. I have made an allowance for an accrual for those things which will happen in the future. The accrual is to take care of the present and future. I have made no allowance in the present condition of this plant for an amount to be deducted for depreciation which has occurred for items which have not occurred.

[fol. 2565] Q. And you have made such an annual allowance because, as you have heretofore testified, you know that they are going to happen?

A. That is correct, but they don't cause loss in value until they happen.

Q. Well, let's take the first example that you named: I believe you said that oftentimes pipe is taken up before it reaches zero percentage condition, and you gave an example of where there was a stretch of pipe that has to be retired by reason of deterioration and it was found economical to remove the pipe alongside of the deteriorated pipe as an economy. Have I correctly portrayed your thought in that connection?

A. Yes.

Q. Let's take that example: If at one of your inspection points you observed such a piece of pipe which had not yet reached such zero percentage condition, as you have described it, you would be very likely to record a percent condition of something as high as, say, 60 or 70 percent, might you not?

A. That is possible.

Q. In fact, it has happened in your long experience, has it not?

A. I expect so.

[fol. 2566] Q. What does 98 percent condition mean?

A. To me it means that 2 percent of the value has been lost.

Q. Does it mean that 2 percent of the service value has been lost?

A. Two percent of its value for any purpose has been lost; it doesn't mean that 2 percent of its life has expired; it means that 2 percent of its value has expired.

Q. Don't anticipate me too much, Mr. Biddison. Could you answer the direct question as to whether 98 percent condition means that 2 percent of its service value has been lost?

A. Yes.

Q. I believe that was the term that was used in the definition I read to you. But you don't consider, as you just stated, service value to relate to service life?

A. Yes, it is related.

Q. Well, you say it has a relationship: how much of a relationship do your percents have to life, service life?

A. I can tie them up to service life in some cases; in some cases I cannot. In the case of these main compressor units I have assigned service lives not in terms of years during which they might be kept in position, but in terms of operating hours that they might be operated.

Q. Well, that was one of the exceptional cases, was it not, Mr. Biddison?

[fol. 2567] A. That is right.

Q. There you did relate your percent condition directly to service life in terms of hours?

A. That is right.

Q. But that, as we agree, was an exception rather than the rule?

A. No.

Q. You didn't do it that way for the pipe?

A. No.

Q. That is, you didn't determine the life of the pipe and try to relate your percent to that?

A. That is right because I don't think the pipe is consumed in service in any such fashion; I think that gas compressors are.

Mr. Goodman: Could I inject at this point just to ask one question?

Mr. Littman: Yes, certainly.

By Mr. Goodman:

Q. Could you tell me what a piece of pipe in the main transmission system which is marked or graded or valued by you at 98 percent condition, will fail to do in comparison with a pipe in 100 percent condition?

A. Yes, I can tell you.

Q. Well, what do you say?

A. It won't fail to do anything that the pipe in 100 [fol. 2568] percent condition will do.

Q. Now, if you will turn to Exhibit 69, Mr. Biddison, I call your attention to line 8, on page 1, entitled "Leaseholds," which have a book cost, as shown in column C, of $1,745,207.39, and which, as shown in column E, have a book cost, less depreciation, of exactly the same amount. Obviously, you made no deduction for depreciation on account of leaseholds, did you?

A. That is right.

Q. Is it your testimony that there has been no depreciation on these leaseholds since they were acquired by the company at the book cost shown in column C?

A. Yes, and on the other hand I think there has been a very great appreciation in these leaseholds since their acquisition.

Q. Mr. Biddison, I am now talking about physical depreciation from book cost. Now, what would be your answer?

A. There has been no physical depreciation in leaseholds.

Q. Did the leases cost the company any more than $1,745,207.39?

A. All I can tell you about that is that that is the cost as furnished to me, as given from the books.

Q. Do you know how much gas has been withdrawn from those leaseholds since they were first acquired by the [fol. 2569] company at the cost shown in column C?

A. I think I can determine that figure.

Q. I think your Exhibit 67, page 5, might show that. Have you found the figures?

A. I think so; as I add it up it is 159,873,106 m. c. f.

Q. That is the amount of gas that has been withdrawn from those leases since they were acquired by the company at the cost shown by the figures in column C?

A. That is right.

Q. Doesn't Exhibit 67, page 5, show that the gas reserves of the company in the field are approximately 20 percent depleted?

A. It shows that a little less than 20 ~~percent~~ of that which is ultimately expected to be produced has been produced.

Q. And that is what is commonly called depletion, is it not?

A. No, that is past production.

Q. What do you call your allowance, your unit allowance, for that past production? I think it is in a heading of this Exhibit 69, is it not, "Unit Charge for Depletion"?

A. I have a depletion unit charge set up on page 2 of Exhibit 67.

Q. Now, these leases have suffered depletion, then, since they were acquired by the Panhandle Eastern Pipe Line Company at the cost, per book, shown in column C, [fol. 2570] have they not?

A. Yes.

Q. And you made no deduction whatever for depletion?

A. That is correct.

Q. Why?

A. Because in Exhibit 69 I was showing the amount by which the property had suffered depreciation.

. . . . . .

Q. Mr. Biddison, can't you get away from reproduction cost for a moment and talk about book cost? Should there be a deduction made for the depletion which you yourself have admitted has come about from that book cost?

A. Not for any purpose that I know of.

Q. Well, of course, you don't propose that this exhibit be used for any purpose?

A. It is not my function to determine what they will be used for.

. . . . . .

[fol. 2574] By Mr. Littman:

[fol. 2575] Q. Is the figure shown in Column C entitled "As Per Books" in the sum of $1,745,000 useful for any purpose in this proceeding?

A. I think it may well be. It is my understanding that the matters of cost and value are matters to be considered in a proceeding of this sort.

Q. Now, Mr. Biddison, you have used that figure, as a matter of fact, haven't you?

A. Yes.

Q. For what purpose?

A. To show the cost of those leases.

Q. For what other purpose or have you forgotten?

A. I used it in Exhibit No. 67.

Q. You surely did. For what purpose?

A. To determine the unit charge for depletion.

Q. Of leaseholds?

A. Of leaseholds, for leaseholds and wells.

Q. And so your annual allowances for depletion of leaseholds uses, as a base for that depletion, the book cost which you show in Column C, in the amount of $1,745,000, is that not correct?

. . . . . .

[fol. 2577] Q. Now, what is the purpose of a unit depletion allowance based on book cost of leaseholds, Mr. Biddison?

A. To recover, by proportional charges applied to the production, the amount of the cost by the time the production is completed.

Q. That is, to return the investment in leaseholds to the company as they are depleted?

A. That is correct.

[fol. 2578] Q. Now, you would not want to suggest, would you, Mr. Biddison, that the company receive or recoup its investment in these leases and, at the same time, earn a return upon the undepreciated, undepleted original investment in those leases?

A. I would certainly suggest that that would be the minimum to which this company should be subjected.

. . . . . .

[fol. 2580] By Mr. Littman:

Q. Now, assuming, Mr. Biddison, that we are down in 1964 with only one more year to go according to your estimate of the end of the life of this property and assuming that you had been collecting, as you suggest, I mean the

company had been collecting, as you suggest, $136,614 a year on the average for depletion which, of course, includes depletion on leases.

Let us assume at that time the book cost of the leaseholds still stands on the books at $1,745,000. Would you still suggest that there be no deduction from the book cost figure for depletion?

A. You mean, there would be no deduction for depletion from the book cost of leases, is that the proper [fol. 2581] interpretation of your question?

Q. Depletion or depreciation, there would be nothing in this Column D?

A. Yes, sir.

Q. Yes, there should be a deduction then?

A. No.

Q. Or yes, there should not be a deduction?

A. There should be no deduction.

Q. Notwithstanding the fact that the company will have been recovering and recouping its investment in these leases through all those years at the rate of $136,000 a year down to 1964?

A. Yes, sir, by virtue of the fact that they are in there at their cost and not in there at their value.

Q. They should earn a return on the original book cost or something higher, notwithstanding the facts that I have assumed?

A. Yes, sir.

Q. Now, let us look at the item of rights-of-way for transmission system properties in Exhibit 69, Page 1, Line 27.

I note that the cost per books for that item is $1,181,039.97 and you have deducted nothing for depreciation. Is that correct?

A. That is correct.

Q. Why?

[fol. 2582] A. Because I do not think they have depreciated. I do not think they have lost value.

Q. Don't rights-of-way lose value?

A. They lose value suddenly when they are abandoned. Up until that time, if you are justified in operating the property thereon, they have not lost value.

Q. Something like the "One Hoss Shay," it collapses on the last day of its life, is that right?

A. It might be more like a house which burns down and loses value suddenly. As long as that burning down has not happened, the loss has not occurred.

Q. Well, how about the pipe that runs over those rights-of-way? Does that all accumulate depreciation like a house that burns?

A. No, sir, it does not.

Q. On the last day?

A. It does not.

Q. But the rights-of-way do?

A. Substantially so, yes.

Q. I am sorry, I do not get the distinction. Would you mind telling me why the one does and the other does not?

A. Well, we will take this example:

If I laid a pipe line ten years ago that was going to run for 30 years, it would still have 20 years of life today. The right-of-way for that line might have cost me $1,000,000. I [fol. 2583] would have 30 years over which to amortize it. I think today that right-of-way is worth $1,000,000.

That is, it has not lost its value because, if I had not built that pipe line ten years ago, I would put it in today even though I only had 20 years future life for it and I think the value of the one right-of-way today would be precisely that of the other one, that there would have been no loss in value of the first piece of right-of-way.

Mr. Lee: May I ask a question?

Then it is your idea that the duration of the term for the use of the right-of-way does not affect its value?

The Witness: That is right. It does affect the rate at which you must accrue funds by which to effect the retirement.

Mr. Lee: You would say that an easement for this purpose that has 20 years to go is just as valuable as the easement that has 30 years to go?

The Witness: Yes.

By Mr. Littman:

Q. If you had two rights-of-way, Mr. Biddison, one that had 20 years to run and one that had only one yar to run, assuming all other things to be equal, which one would be worth the more?

A. The longer-termed one would be the more valuable if you had a requirement for the longer term.

Q. I said all things being equal. The longer one would [fol. 2584] be worth more than the shorter one?

A. If you had a requirement for the longer term, but if you hadn't, one would not be more valuable than the other.

Q. Yes. Looking at the annual allowance side, you have made an annual allowance for the replacements of these rights-of-way, have you not, in your Exhibit 68?

A. Yes.

Q. In the amount, I believe, as shown in Line 15 of that exhibit, of $1,181.04 per year?

A. That is right.

Q. And you have proposed that substantially that amount would represent the proper amount from the beginning down to June 30, 1941?

A. No.

Q. You would have to calculate to tell exactly what it would be, but you would at least apply the rate of .1 per cent to compute on the right-of-way for an annual allowance for replacements?

A. That is correct.

Q. That would amount to a sizeable sum of money, would it not?

A. Yes, it would.

Q. But you will have collected that, that is, the company will have collected that under your theory for ten years and yet you make no adjustment for depreciation? [fol. 2585] A. That is right.

Q. Will you please turn now to the item of gas wells shown in Line 9, in the book amount of $2,620,290.94 for which you make a deduction for depreciation of $216,232.61, leaving a "book cost less depreciation" shown in Column E of $2,404,058.33?

What method was used to arrive at the deduction for depreciation for that account?

A. In most cases, I have deducted one percent per year of age but, in those cases where specific deterioration was determinable by examination of records, I have made additional allowances beyond the allowance of one percent per year of age.

Q. How many wells were depreciated by you on the so-called life method of one percent per year that you just described?

May I ask, were those wells in the Local Area?

A. Exclusive of Local Area wells, I have depreciated 114 wells on the basis of age and I have depreciated 23 wells on the basis of factors other than age factors [producting] a lower condition than the age figure would prodnce.

Q. Now, the age method that you described was to take a straight flat one percent per year, is that right?

A. That is right.

Q. That would indicate a life, on the average, of 100 [fol. 2586] years for each well, would it)not?

A. No, sir, it would not.

Q. Would it indicate a physical life of 100 years?

A. No, sir, it would not.

Q. The 23 wells that you based on factors other than age were depreciated how? Describe your method, generally.

A. In the Hugoton Field, the Gregory No. 1-19 needs the setting of an additional string of casing. The original producing string appears to have been perforated by corrosion. I have, therefore, deducted 25 percent of the cost of this well.

Q. How did you arrive at 25 percent?

A. That is a judgment figure as to the amount of value that has been lost by virtue of the fact that there is some leakage in the casing.

Q. Did you observe that well?

A. No, I got this information from data on file in the Production Department of Panhandle Eastern Pipe Line Company.

Q. In other words, the casing represents approximately 25 percent of the entire cost of the well and you, therefore, deducted 25 percent from new to get your percent condition?

A. No, I estimate that by virtue of the fact that the casing has been perforated at some point, that the well has lost 25 percent of its value.

Q. I see. Will you proceed to explain your method [fol. 2587] please?

A. The Youngren No. 1-24 in the same field shows indications of caving conditions and it is estimated that it will probably have to be reworked.

It is also stated there is probably some material in this hole, some junk material left there at the time of drilling or at the time of cleaning out.

Q. What percent condition did you place on that well?

A. I deducted 25 percent on that well for that condition.

Q. Did you see that well? A. Yes, sir.

Q. How much of the well did you see?

A. I saw that portion of it which is above ground.

Q. And that portion of it which is above ground represents what portion of the total cost of the well, approximately, in percentage?

Something like five percent, would you say?

A. Close to that.

Q. How long did you spend at that well?

A. Three or four minutes.

Q. And what did you do during that three or four minutes, Mr. Biddison?

A. Just looked at the well.

Q. Did you take a picture of it?

A. I believe I did.

[fol. 2588] Q. How much of the three or four minutes was spent in taking the picture?

A. Probably thirty seconds.

Q. All right. Will you proceed with the next one?

A. Crawford No. 1-31, on this well which is proposed to be acidized, it appears that the cementing of the casing was not as good a job as is required preliminary to acidization and it is proposed to re-cement this casing before acidization and for that well I deducted 15 percent.

Q. How did you arrive at the 15 percent, Mr. Biddison?

A. That is my estimate of the value lost by that well by the failure of the cement job to last.

In this same field, the Gaskell No. 1-100 is in the same condition as for the Crawford well just referred to, and for it I have also deducted 15 percent.

Q. A judgment estimate? A. Yes, sir.

Q. Did you see that well?

A. I do not recall. I would have to run through my field notes to determine that.

Q. Now, you have cited several examples. Is that representative of the method and manner in which you determined the percent conditions on the 23 wells that were based upon a determination other than the basis of age?

A. That is correct. I endeavored to give effect to the [fol. 2589] information that was available as to conditions of these wells which detracted from their value even though you could not see it by observation.

Q. Now, that is a total of 137 wells that you determined a percent condition for.

How many of those wells did you observe?

A. I will have to make a count on that before I could tell you. I have to count from my field notes.

Q. Can you give us a general idea, Mr. Biddison? We would not hold you to an exact figure.

A. Well, in the Panhandle Field, I judge I saw 15 or 20 wells.

In the Hugoton Field, about half-a-dozen. That is as near as I can make a guess at it right now.

Q. Yes. When I used the term "saw", I do not mean driving by in a car, you understand. I mean, a detailed observation, what you would call an inspection.

A. Yes.

Q. How many did you actually inspect?

A. Well, I think probably in the Panhandle Field 15 or 20 and maybe something like a half-a-dozen in the Hugoton Field. That is as near as I can give it to you from memory.

Q. That is around 30 out of the 137, roughly?

A. Say around 25, roughly.

Q. And you spent three or four minutes at each?

[fol. 2590] A. Yes.

Q. And you took a picture of each one, did you not?

A. No, I did not take a picture of each one.

Q. About how many of those that you observed did you take a picture of?

A. I probably took pictures of half of what I looked at.

Q. What is the basis of your one percent deduction per year for depreciation on the 114 wells?

A. It is an allowance to take care of the known fact that these wells would depreciate. That depreciation accelerates with age and, in comparatively young wells, the amount of depreciation is hardly detectable and cannot be determined in any event, by purely surface inspection.

Q. Now, will you name the factors or causes that bring about the retirement of a well? First, name the most important one.

A. Depletion, depletion of reserves.

Q. That is correct, the exhaustion of the gas. Why didn't you use that as the basis of determining the depreciation on the wells, bearing in mind, Mr. Biddison, that you used that basis for the determination of your annual allowance for depletion?

A. Because that does not fix the amount by which a well has depreciated. If you were justified in drilling a [fol. 2594] well upon a tract of land, the value of that well is not reduced just the minute you drill it in by virtue of the fact that 25 percent of the total reserve of that tract had been withdrawn before you drilled the well.

Q. Now, are you talking about the well without gas in it or are you talking about the well and the gas together.

A. I am talking about the well and the effect of previous withdrawals upon that well.

Q. Who is going to buy a well without any gas in it, Mr. Biddison?

A. I have not suggested that anybody would.

Q. Well, in the hypothetical case that you are giving us, I understood you to say it was a well without gas.

A. No, sir, I did not say any such thing as that.

Q. Your valuation, the valuation you are speaking of is the value of the well without the gas, isn't it?

A. It is the value of the well.

Q. Without the gas?

A. I am not including the value of the gas in the value of the well. I am speaking of the value of the well.

Q. Without the gas?

A. The gas is not part of the well.

Q. Can't you answer me yes or no?

A. I will answer any questions susceptible of being answered that way.

[fol. 2592] Q. Are you talking about the value of the well without the gas in it now, separate and apart from the gas?

A. I am talking about the value of the well separate and apart from the value of the gas, but I am not talking about a well that would not produce gas and that does not have gas at its location.

* * * * * * * *

[fol. 2597] P. McDonald Biddison having been previously sworn, resumed the stand and testified further as follows:

* * * * * * * *

Cross-Examination (Continued)

By Mr. Littman:

[fol. 2598] Q. Mr. Biddison, at the close of yesterday's session, we were discussing Exhibit 69, which shows the amount deducted by you from book cost for depreciation to determine the amounts which are shown in Column E to be the "book cost less depreciation" and we were discussing particularly the well account shown in Line 9 of that exhibit.

I believe you testified near the close of yesterday's session that the major cause for the retirement of gas wells is exhaustion of the gas supply.

Is that correct?

A. Yes, sir.

Q. And I believe you were going to enumerate other causes that brought about the retirement of gas wells and we had not completed that line of inquiry.

Did you want to state what other causes there are, if any?

A. Wells may sometimes be retired because of peculiar conditions arising in the producing sand, such as caving of the hole, water intrusion, salting up of the producing sands and wells may also be abandoned because of failure of casing.

There are rare instances when a well may need to be abandoned because of blow-outs around the casing.

Q. Those items which you have just named, of course, effect, do they not, the ability of the well to produce gas?

A. Yes.

. . . . . .

[fol. 2601] Q. Mr. Biddison, do you know of any instance in which any of Panhandle Eastern's wells have been retired by reason of cave-in, watering up, salting or failure of casing, which, I believe, summarizes the reasons you just made?

A. No, I do not.

Q. In some of those instances, at least, cannot the well be repaired for future use after a cave-in or a failure of casing or after some of the other things occur which you named?

[fol. 2602] A. Yes, quite often, and I have called attention to some instances where rehabilitation was in immediate contemplation with respect to some of those wells but, on the other hand, they are matters that do cause the abandonment of gas wells.

Whether the wells can be reworked and put in good condition depends upon the extent and locality of the damage that is done.

Q. You mean, sometimes they can be rehabilitated after these events occur and sometimes they cannot?

A. That is right.

Q. Generally, may we not agree that the predominant cause of retirement of wells is the exhaustion of the gas supply?

A. That is right.

Q. And you did not use the depletion of the gas supply as a basis of measuring the depreciation of the wells, did you?

A. No, sir, I did not. I used the depletion method to set up the accruals for ultimate retirement.

Q. That is, the annual allowances for accruals?

A. Yes, sir, but I did not use depletion in order to determine the amount of value which the wells had lost at this

time because the value which they have lost at this time is not a function of depletion.

Q. In your opinion, of course?

[fol. 2603] A. Yes, sir, in my opinion and in the opinion of a great many others.

* * * * * * * *

[fol. 2608] By Mr. Littman: And did you make a determination of the amount to be deducted for depreciation for 80 wells in the Hugoton Field?

A. Yes.

Q. Very well.

A. I think I should explain that a little bit.

Q. Proceed.

A. I made a calculation of the amount to be deducted for depreciation on each well based upon its reproduction cost and thereby determined a figure to be deducted for depreciation for the wells in the Panhandle Field and a separate figure for the wells in the Hugoton Field.

Q. And you used the same percentage for deduction of depreciation for purposes of Exhibit No. 69 applied to book cost, did you not?

A. That is true, but I do not believe I separated that by fields in making that application to the book cost figures.

Q. I see. Well, let's talk now about the 80 wells in the Hugoton Field, Mr. Biddison.

Now, with the exception of four wells which I believe [fol. 2609] you described yesterday, the balance of the wells, namely, 76, were depreciated by you how?

A. One percent for each year of age.

Q. That is to say, you had before you the date of the completion of each of these 76 wells in the Hugoton Field and you simply deducted one percent per year of age for each well, did you not?

A. Yes, sir.

Q. In other words, if I correctly understand you, if a well was drilled in 1939, you simply deducted 2 percent for depreciation for that well?

A. That is right.

Q. Now, how did you arrive at that one percent figure?

A. That is a matter of judgment.

Q. Can you elaborate for us on that method, Mr. Biddison?

Let me get at it this way: Did you have any working papers that showed the process whereby the one percent per year was reached?

A. No, sir, that is a primary figure. That is the beginning point. I used one percent not because I believed that each well in that field has lost value to the extent of one percent per year of age. Many of those wells will have lost value at less than that rate; some of them have lost value at more than that rate, but, upon the average, a group [fol. 2610] of wells will, in my opinion, lose value on the average at about one percent per year for a considerable period of time.

It may well be that that rate will be accelerated at later dates, particularly if, at later dates, there be an appreciable amount of water encroachment.

Q. Did you base the one percent judgment figure per year upon any experience of Panhandle Eastern in the Hugoton Field?

A. No, sir.

Q. Or in the Panhandle Field, Texas Panhandle Field?

A. No, sir. There is no record of experience in those wells by which such a matter could be determined or even investigated.

Q. Did you determine that one percent figure from any other experience?

A. That is a matter of my own general experience in the handling of gas producing properties.

Q. In other gas fields?

A. Yes, sir.

Q. Not in these gas fields in which Panhandle Eastern operates, however?

A. Not as a manager myself of producing properties, no, but I have had access to information on other peoples' records as to what happened to some of their gas wells.

Q. Are you talking now about the Panhandle Field and [fol. 2611] the Hugoton Field?

A. I am talking particularly about the Panhandle Field.

Q. What does that experience show?

A. That experience showed that, with a few exceptions, wells showed no signs of any physical depreciation for long terms, 15 years or more.

Q. That is to say, if you looked at those wells, you could not observe any material physical depreciation, is that what you mean?

A. That is partly it.

Q. What is the rest of it?

A. And there were no indications manifested by the operating characteristics that indicated anything in the way of deterioration.

Q. Now, you did not observe any part of the wells owned by Panhandle Eastern that was below the surface of the ground, did you?

A. No, I previously acknowledged that.

Q. Nor of any other wells in the Panhandle Field?

A. No, I have never been below ground on any of those wells.

Q. Then what did you observe in those wells that caused you to come to the conclusion that you state you just reached with respect to your claim that there was no physical depreciation that you could observe? What do you mean by that?

[fol. 2612] A. I mean, as I said, that the records of their operations showed no indications of any deterioration.

Q. In other words, the records showed that they were still able to efficiently produce gas?

A. That is right. There was nothing in the operating records which indicated that anything had gone wrong.

Q. This one percent figure is kind of a loose estimate, is it not, Mr. Biddison?

A. I think that would be a matter of opinion. I think it is a good estimate.

Q. Is it one of those round and flat figures that you referred to the other day as being a judgment figure?

A. No, it is just a straight up and down one.

Q. Now, any school boy starting out with the premise of one for each year could have taken these 76 out of the 80 wells in the Panhandle Field and computed the amount of depreciation on that basis, couldn't he, Mr. Biddison, by just taking one percent for each year?

A. Certainly, that is really a matter of arithmetic.

Q. It was not much of a trick to do that?

A. No.

Q. Now, as to the remaining four wells, you varied the procedure somewhat, did you not?

A. Yes, sir.

Q. And that was, I believe, because you had received [fol. 2613] some information from the Production Department to the effect that something was wrong with those four wells as you described yesterday?

A. Yes, sir.

Q. Mr. Biddison, will you refresh my recollection whether you covered the four wells in the Hugoton Field yesterday?

A. I believe I did.

Q. Suppose we go back to one of them again. Let's take the Crawford No. 1-31-5464C. I believe that well is shown on Page 3 of Schedule 4 of Exhibit 17, Line 15.

Will you state what caused you to vary the procedure on that well?

A. The information I have is that this well is to be acidized, that the cementing of the casing is in such a condition that re-cementing is required before it can be acidized.

Q. When was that well installed or completed?

A. I do not believe I have a list here that gives the completion date on that well.

Q. Do you have the date of completion on the other three wells that you described yesterday for which you used a different method than the one percent per year method?

A. No, sir, I do not. I have such a list in my papers some place, but I do not have it with me.

Q. Now, going back to the Texas Panhandle Field, there are 55 wells in the Panhandle Field.

[fol. 2614] Mr. Culton: Just to clarify the record, do you know if that Crawford well is a partnership well or 100 percent well, Mr. Biddison?

The Witness: That Crawford well is a partnership well, 50 percent ownership in Panhandle Eastern.

By Mr. Littman:

Q. Now, there are 55 wells in the Panhandle Field upon which you made a determination of percent condition, are there not?

A. That is right.

Q. Thirty-six of which were determined by the straight one percent a year deduction method, is that correct?

A. Yes, sir.

Q. And 19 of which were by a somewhat different method which we will soon have you describe. Now, you have the dates of those wells, haven't you, before you?

A. Yes, sir, I do.

Q. Suppose we go to one of the 19 wells in the Panhandle Field on which you varied the usual procedure. Let's take the Sneed well No. 1025A and it also has the number 1-33 opposite it. When was that well first installed?

A. The completion date on that was 7-15-1931.

Q. What percentage did you deduct for depreciation of that well?

A. Fifteen percent.

[fol. 2615] Q. That is 5 percent more than would be indicated by the application of one percent for each of the ten years of its expired life?

A. That is correct.

Q. Now, will you tell us how you went about getting that 15 percent depreciation on that one?

A. The data on that well shows a poor job of cementing with water leaking in the well as the result. That is not depreciation. That is just bad construction.

This well also needs a new master gate, that is, the master gate that is on there needs to be retired and a new one put on.

Q. Isn't that the well that requires frequent blowing to keep flowing?

A. If it has some water leaking in it, frequent blowing might be required. I do not have any note to that effect.

Let me get straight on this, maybe I am reading the wrong well.

Q. This well is shown on Line 30 of Page 7 of Schedule 4 of Exhibit 17.

Mr. Culton: The Sneed well in Section 33 is what it is.

The Witness: The Sneed 1-33 well No. 1025A, requires frequent blowing to keep it flowing and, on that well, my deduction for depreciation is 15 percent.

By Mr. Littman:

Q. May I clear up this part of the record, Mr. Biddison. [fol. 2616] Your previous answer with respect to that well was in error, was it not?

A. Yes, the data which I gave applies to a different Sneed well.

Mr. Culton: What was the completion date on this well, if you have that figure before you?

The Witness: 7-15-1931.

Mr. Culton: You had the correct completion date, then?

The Witness: Yes, sir.

By Mr. Littman:

Q. Now, you may proceed with your explanation as to how you arrived at the 15 percent. The well was 10 years old?

A. It is my estimate that a well in that condition has lost 15 percent of its value. The situation can be remedied by additional investment, as will be needed to be done in most of the wells in this territory in any event, by the installation of a syphon.

Q. Well now, if that condition which you described which requires frequent blowing to keep flowing were not present, you would have placed a percent depreciation on that well of 10 percent, would you not?

A. That is right.

Q. You merely added another 4 percent depreciation by reason of the condition which you described?

A. Five percent, 5 percent is right.

[fol. 2617] Q. I beg your pardon, 5 percent.

Now, how did you arrive at that figure of 5 percent, Mr. Biddison?

A. That is my judgment of the amount of value that is lost by reason of that condition.

Q. Do you know how much money would be required to be spent to put that well back into 10 percent depreciation or 90 percent condition?

A. I do not know whether any amount of money would do that or not.

Q. Did you inquire of the production department how much money they expected to expend to remedy the condition which you describe?

A. No, I did not inquire as to the amount of money that would be required to remedy the situation. I estimated the amount of value that had been lost by virtue of the situation.

Q. How could you determine that this well should be depreciated 5 per cent below what it ordinarily would be depreciated at without making some investigation of the amount of expenditure that would be required to repair this condition which you describe?

A. I did not make any such determination. I determined that, in my judgment, this well had lost 15 percent of its value by virtue of the condition it was in.

I did not add 5 percent to 10 percent. I deducted 15 [fol. 2618] percent from the value of this well on account of the condition it was in.

Q. Mr. Biddison, if it did not have this condition which you describe, you would have put this well in 90 percent condition, would you not?

A. I would have deducted 10 percent.

Q. Well then, didn't you just add another 5 percent by reason of the condition which you found?

A. No, sir, I did not. I deducted a total of 15 percent for this particular well on account of the condition it was in.

Q. Did you have any further information about this well other than that you were told that it required blowing to keep flowing?

A. Yes, I had information that that condition would eventually be remedied by the installation of a syphon as is contemplated for practically all wells in both the Hugoton and Panhandle field.

* * * * * * * *

[fol. 2619] Q. Well, let's have a look at the Thompson well No. 1-25-1041A in the Texas Panhandle Field which is shown on Page 8 of Schedule 4 of Exhibit 17 at Line 37.

A. The information is that the Thompson well makes a little moisture.

Q. Did you have any other information on that well?

A. No, that is the sum total of my notes.

Q. Now, Mr. Biddison, when was that well completed?

A. December 17, 1937.

Q. Will you look again, isn't that 1938?

A. My data show 1937.

Q. All right. Now, if you had not been advised that this well "makes a little moisture", how much would you have deducted for depreciation for that well?

A. Four percent.

Q. How did you arrive at the deduction of 15 percent?

A. That is my judgment that, because of this water condition, the well has lost some value and I estimate that loss to be 15 percent.

Q. With no other information than the notation to the effect that it makes a little moisture?

A. Yes. If there had been information available that this moisture was caused by faulty cementing, by the failure of the cementing or by the leakage of casing or some [fol. 2620] such factor as that, if there had been such information, I would have made a notation of it and would likely have had a different deduction for depreciation.

Q. Now, did you make any determination of how much would be required to be spent to put this well back in 96 percent condition?

A. No, I do not think anybody could make any such estimate as that.

Q. You have no idea of what would be required on this particular well to make the repair?

A. I do not think it can be done by repairs. I do not suppose it would be physically possible to ever put this well back in condition where this did not exist.

Q. What might cause this moisture condition?

A. Condensation of moisture out of the gas as it flows from the producing sand into the well bore.

Q. Well, I am referring now to what condition in a well might cause this to occur? Is it a condition that is inherent in the sand or is it caused by some difficulty in the well itself?

A. It may be caused by peculiar sand conditions at the proximity of the well bore. If the sand conditions be such that there be a material throttling of the gas close to the well bore, there is a refrigerating effect produced which tends to produce condensation in the well bore.

[fol. 2621] These conditions may exist in a well upon drilling in and they may develop at a later period. It is also true that water can come into a well through a bad job of cementing or through perforated casing.

Q. And you did not know what was the cause of this moisture condition, did you?

A. My notes were compiled on the basis of accounting for defects in the wells, if any were known to exist, which would cause any of these features.

I know, from my notes, of no defect in the casing or cementing job that would cause this.

Q. Some of those causes you mentioned do not have anything to do with the depreciation of a well, do they, Mr. Biddison?

A. Yes, if the cementing job goes bad, that is depreciation. If the casing corrodes and leaks, that is depreciation.

Q. What of the sand condition which you described?

A. I would say if the hole caves, that that depreciates the well. If bottom hole water were to come in, I would say that would depreciate the well. If the sand salts up so as to produce a throttling near the well bore with a resulting refrigerating action that causes precipitation of moisture in the well bore, I think that depreciates the well.

[fol. 2622] Q. Are there any conditions that might cause this moisture that do not have anything to do with depreciation of a well which you can think of? A. Yes.

Q. Name us a few of those, please?

A. It might have existed from the beginning, in which case it has not produced depreciation.

Q. So far as you know, that might be the cause?

A. So far as I know now, it is true that this might have existed on this well from the beginning. I do not now recall any information as to when this situation was first noticed.

Q. Now, what do you mean by a "little moisture"? How much moisture is "a little moisture"?

A. Enough so that it is noticeable when a well is blown but not enough to produce material difficulties in the operation of the well.

Q. Well, suppose we go to the Burnett well No. 1031A. It also has another number, namely, 1-81, in the Texas Panhandle Field. It is shown in Schedule 4, Page 8, Line 4 of Exhibit 17. When was that well completed?

A. That well was completed November 7, 1935.

Q. Why did you vary the procedure in determining the amount of depreciation to be deducted for that well? When I speak of "vary the procedure", I mean, why did you not use the straight one percent a year deduction method?

[fol. 2623] A. The information on this well is that this well does not feed properly, cause not determined.

Q. Will you enumerate the reasons why a well does not feed properly?

A. Well, there may be several reasons. It might not feed properly because of water in the well bore. It might not feed properly because of wetting of the producing sand in the neighborhood of the well bore. It might not feed properly because there was not any gas left. It might not feed properly because of caving of the well bore. It might not feed properly due to some construction in the flow string caused mainly by sand and rock particles having been carried upward in the flowing stream. It might not feed properly due to the deposition of salt in the producing sand.

Q. Would you put a figure of 20 percent depreciation on that well regardless of whatever caused that well to feed improperly?

A. No, I put that 20 percent on there because the cause had not been determined. If the cause had been determined, I might well have used a lesser percentage, depending on what the cause had been known to be.

Q. You would have used, I presume, your usual one percent a year deduction if you had known that the cause sprung from a condition that did not have to do with de-

[fol. 2624] preciation, is that a fair statement? A. Yes.

Mr. Culton: Mr. Littman, at this time, and so that the record may show, it might be advisable for me to state into

the record the meaning of the different identifications we have on these wells. We all understand it but the record does not show.

The name, for instance, with respect to the last well, I believe it was Burnett, refers to the name of the lessor. The No. 1, most of these have been No. 1 so far, refers to the number of the well on the lease, whether it is the first well, second well and so forth. The number following the dash, for instance 1-81 means that that was the first well drilled on the Burnett lease on section 81 and the next number, for instance 1031A, is the number of the well on the company records, representing the file in which the record of that well is found and "A" means it is in Texas.

The capital letters represent different States; I believe "A" for Texas, "C" for Kansas, "E" for Missouri.

Trial Examiner: What is the letter for Oklahoma?

Mr. Culton: I do not know whether it is "B" or "D", Mr. Examiner, because we do not have any wells there yet, but I assume it is "B" since it is coming up. We will soon have a "B" well since we are now drilling there.

By Mr. Littman:

Q. Now, this method which you have described gener- [fol. 2625] ally occurred and was used for 19 wells in the Panhandle Field and by that I mean the method other than the straight one percent a year method?

A. That is correct.

Q. And for only four wells in the Hugoton Field?

A. That is correct.

Q. And all the rest of them were straight one percent a year, to summarize your testimony? A. Yes, sir.

Q. Now, will you please turn to your list of wells in the Local Area and describe, generally, the method used to depreciate the wells in that Local Area? It was the depletion method, wasn't it?

A. The basis for depreciation on these wells is to depreciate them substantially on the basis of their rock pressure decline below 35 pounds, 35 pounds being estimated by me to be the economic pressure limit at which drilling would be justified in that area.

Q. In other words, when you came to the wells in the Local Area, you then did base the depreciation upon the exhaustion or depletion of the gas supply, did you not?

A. Not strictly so, no.

Q. Mostly so?

A. No, sir. I definitely did not use the depletion method of depreciating the value of gas wells in the Local Area.

[fol. 2626] I believe that when the rock pressure in a field has declined to the point at which the drilling of wells would not be economically justified, that the existing wells are depreciated through obsolescence substantially in the proportion that the existing rock pressure is below that figure at which drilling would be economically justified and it is upon that basis that I did depreciate the wells in the Local Area.

Trial Examiner: Mr. Littman, will you refer us to a list of wells that you classify as wells in the Local Area?

Mr. Littman: You mean other than Exhibit 62?

Trial Examiner: Yes.

Mr. Littman: I am sorry I cannot refer to a list in this record other than that which appears on Page 8 of Exhibit 62.

Trial Examiner: Do you wish that list that you were evidently using copied into the record?

Mr. Littman: I think it would be well at this point to copy into the record Column A which appears on Page 8 of Exhibit 62.

Trial Examiner: Excluded Exhibit 62.

Mr. Littman: Yes.

Trial Examiner: I will now hand the reporter that list and she may extend it into the record at this point since there seems to be no objection on the part of anyone.

[fol. 2627]

Line No.	Item	
1	Local Area—	Kansas
2	Wendte	#1-5003C
3	Day	#3-5024C

4	Tulloss	#3-5056C
5	Tulloss	#4-5057C
6	Tulloss	#5-5058C
7	Borland	#5-5086C
8	Borland	#6-5087C
9	Borland	#7-5088C
10	Ischey	#1-5092C
11	Detwiler	#1-5089C
12	Lewis	#1
13	Total-Local Area—Kansas	
14	Local Area—	Missouri
15	Morgan	#1-7105E
16	Pendelton	#1-7036E
17	Pendelton	#2-7037E
18	Boten	#1-7055E
19	Boten	#2-7056E
20	Boten	#3-7059E
21	Boten	#4-7060E
22	Boten	#5-7080E
23	Boten	#6-7081E
24	French	#1-7008E

[fol. 2628]

25	Rich	#1-7022E
26	Total—Local Area—Missouri	

[fol. 2629] By Mr. Littman:

Q. Mr. Biddison, have you completed your description of the method used for depreciating the gas wells in the Local Area? A. Yes, sir.

Q. Am I correct in understanding your method, that it was the depleted condition of the wells in the Local Area that caused you to find such a high rate or amount of depreciation?

A. It was the fact that depletion had occurred to such an extent that drilling of the wells would not now be justified.

Q. But this is an entirely different method of basis of depreciating wells than that which you used for the wells in the Hugoton and Texas Panhandle fields, is it not?

A. Yes, because it is an entirely different situation. I have tried to adapt the method to the situation that exists, or use a method adaptable to the situation that exists with respect to all these wells.

Q. That is to say, you did not use the physical condition method, so to speak, in determining the depreciation for the wells in the Local Area, did you?

A. No, sir, I did not, because I do not think that that would produce the measure by which they have lost value. I think they have lost value to a greater extent than the [fol. 2630] extent of their physical deterioration.

Q. In other words, the wells themselves in the Local Area are still in good physical condition, are they not?

A. Fairly good, yes.

Q. Notwithstanding the fact that you, in this case, disregarded that physical condition and looked rather to the depleted condition of the field to find the answer?

A. That is right.

Q. Now, is that condition going to someday come about in the Panhandle and Hugoton gas fields? A. Yes.

Q. Do I understand that there will come a time in the Panhandle field and the Hugoton field when you will change your method of determining the amount to be deducted for depreciation?

A. There will come a time when if I have a similar proposition before me, I will use a different method.

In other words, when the conditions in those fields are such that the drilling would not be justified if the wells were not already in existence, I would deduct for depreciation an amount generally in excess of that represented by the deterioration which had occurred, and would base the deduction upon the amount by which the rock pressure had declined below the point at which development was justified economically.

Q. Now, when were the last rock pressure readings [fol. 2631] taken on these Local Area wells?

A. 1936, in September.

Q. The data which you used, then, for determining your depreciation for the Local Area wells, was five years old, was it not? A. Yes, sir.

Q. Did you have any rock pressure reading on the first well in Kansas, called the Wendte No. 1-5003-C?

A. No, sir.

Q. What was the rock pressure reading in 1936 on the next well, the Day well?

A. Thirty pounds.

Q. Did you have any rock pressure reading on the next well called Tulloss No. 3? A. No, sir.

Q. The reading on the Tulloss No. 4 was what?

A. Sixty pounds.

Q. And the Tulloss No. 5?

A. Seventy-five pounds.

Q. The Borland No. 5?

A. Twenty-five pounds.

Q. The Borland No. 6? A. No test.

Q. The Borland No. 7? A. Fifteen pounds.

[fol. 2632] Q. The Ischey No. 1? A. Thirty pounds.

Q. The Detweiler No. 1? A. No test.

Q. The Lewis No. 1?

A. No test for rock pressure.

Q. Now, let's go through the wells in the Missouri Local Area, the Morgan No. 1?

A. Seventeen pounds.

Q. The Pendleton No. 1? A. No test for pressure.

Q. The Pendleton No. 2? A. Fifteen pounds.

Q. The Boten No. 1? A. Eighteen pounds.

Q. The Boten No. 2? A. Seventeen pounds.

Q. The Boten No. 3? A. Nineteen pounds.

Q. The Boten No. 4? A. Seventeen pounds.

Q. The Boten No. 5? A. Seventeen pounds.

Q. The Boten No. 6? A. Nineteen pounds.

[fol. 2633] Q. The French No. 1?

A. Fifteen pounds.

Q. The Rich No. 1? A. Twelve pounds.

Q. Those wells are all still in operation, are they not?

A. They were as of June 30, 1941, yes, sir.

Trial Examiner: They were all shallow wells that were rather inexpensive, were they not?

A. Very inexpensive wells, Mr. Examiner. The total estimate of original cost of these wells is only about fifteen thousand and some odd dollars. That is based upon the book cost of those wells for which a separate cost can be ascertained from the books and an estimated figure for other wells which were required in connection with leases and for which the separate cost of the wells could not be ascertained.

Trial Examiner: How old are they?

The Witness: I do not have a record here of the individual age, but some of these wells are in the neighborhood of ten years old. Some of them may be a little older than that.

Mr. Wheat: I may state in response to the Examiner's questions that I am informed by Dr. Bartle those wells were brought in starting in 1929 and 1930.

Trial Examiner: Thank you.

[fol. 2634] By Mr. Littman:

Q. Did you see any of these wells in the Local Area?

A. I have seen a few, not very many and I did not make specific notes as to any well in the Local Area. I saw a number of them in 1938 but I only saw a few of them which could be seen from the highways, driving through in the inspection of 1941.

Trial Examiner: These, I assume, are all dry gas wells?

The Witness: Yes, sir.

By Mr. Littman:

Q. Now, going back to the wells in the Panhandle and Hugoton fields, do I understand that you would expect to find the depreciation taking place at an accelerated rate along towards the end of the life of these wells?

A. Yes.

Q. In other words, it would be a rate higher on the average than 1 percent a year? A. Yes, sir.

Q. That being the case—assuming that that is the fact—your rate of 1 percent does not represent an average age over the entire life of the well, does it? I should have said "average rate" over the entire life of the well. I didn't mean to say "average age".

A. No, it doesn't. It represents my estimate of that which has occurred.

[fol. 2635] Q. I am now speaking of the 1 percent per year rate.

A. I am too. 1 percent per year is my estimate as the average figure for these wells to represent the amount of depreciation which has occurred in those wells except for those wells for which I have made other specific allowances as has been pointed out.

Q. But it doesn't represent the average rate that would be expected per year over the entire life of the well. Is that correct? A. That is correct.

Q. Would it be higher or lower over the average of life?

A. It would be higher over the average life.

Q. Now, Mr. Biddison, referring again to Exhibit 69 in lines 30 and 31, you make a deduction of $7,802.70 from book cost for depreciation of transmission measuring station structures, do you not? A. Yes, sir.

Q. How many transmission measuring and regulating structures are owned by Panhandle Eastern Pipe Line Company and its subsidiary, Illinois Natural Gas Company?

A. I don't have anything before me from which I can give you that figure.

Q. Can you give us a general figure?

A. No, I have nothing before me from which I can do [fol. 2636] that. I can refer to Exhibit No. 39 and obtain that figure, I believe; but I don't have anything before me now from which to obtain it.

Q. Will you please determine that figure at the next recess? A. Yes, sir.

Mr. Littman: Off the record.

(Discussion off the record.)

The Witness: This Schedule 8 is not a complete listing of those buildings.

Trial Examiner: Identify Schedule 8, Mr. Biddison.

The Witness: Exhibit 17.

By Mr. Littman:

Q. Well, suppose you supply the figure later on, Mr. Biddison, in order to save time.

You do know that there are a great many of these transmission measuring and regulating structures, are there not? A. Yes, sir.

Q. They run well up into the hundreds, do they not?

A. Yes, sir.

Q. How many of them did you personally observe and make inspection notes on?

A. Well, I will have to count that up.

Q. Can you give us the figure now?

A. It will take me some little time to make a deter-[fol. 2637] mination on that, to count them up.

Q. Do you have a general idea of how many you observed?

A. Under this classification I probably observed about 75.

Q. I see. Well, now, what percentage did you deduct for depreciation of the production stations in Texas?

A. 10 percent.

Mr. Wheat: And what stations are you talking about, measuring stations or something else?

Mr. Littman: The production stations.

Mr. Culton: What line is that?

Mr. Littman: I am not referring to any line.

Off the record.

(Discussion off the record.)

By Mr. Littman:

Q. You gave us the figure for your production stations in Texas and in Kansas? A. 10 percent.

Q. How about the Kansas Local Area?

A. 10 per cent.

Q. Missouri Local Area? A. 10 percent.

Q. Now, what percentage of depreciation did you deduct for the purchase stations in Texas?

A. 10 percent.

[fol. 2638] Mr. Culton: I am really asking for information. Do you mean purchase measuring stations and production measuring stations?

May I understand you one way. I don't know whether there is such a thing as a production station. There is a

production measuring station, of course, and I am just asking for information myself.

Mr. Littman: I am using Mr. Biddison's language and terms at this time. I would be glad to have him explain the meaning.

Mr. Culton: That is the reason I asked you which line you are talking about.

Mr. Littman: Transmission measuring and regulating station structures.

Mr. Culton: That is why I asked the question. You didn't use the word "measuring".

Mr. Littman: Of course, I am talking about the transmission measuring and regulating station structures.

By Mr. Littman:

Q. Now, we have gotten down through the Oklahoma purchase stations. How about Kansas purchase stations?

A. 10 percent.

Q. The Kansas Local Area? A. 10 percent.

Q. The Missouri Local Area purchase stations?

[fol. 2639] A. 10 percent.

Q. What percent of depreciation did you deduct for the wholesale sales stations, speaking now of transmission and regulating station structures in Texas? A. 10 percent.

Q. In Indiana? A. 10 percent.

Q. Now, Mr. Biddison, will you state how you arrived at the 10 percent figure for depreciation for the production stations in Texas, Kansas and Missouri?

A. From what I saw of their stations it is my estimate that 10 per cent of their value has been lost.

Q. Did you make detailed notes as to each station that you saw? A. Yes.

Q. Well, now, will you give us—

A. No, not as to each station I saw, but as to each station of which I saw enough to justify a notation.

There were numerous stations which I saw just in passing by on which I made no notations.

Q. Did you give the ones that you saw 10 percent in each case, or did you give some more or some less, and then average them up?

A. I gave them more or less, and upon reviewing my notes I used 10 percent as representing the average of all [fol. 2640] the observations, not the numerical average but the concluded average.

Q. They all look pretty much alike, don't they, Mr. Biddison? A. Yes.

Q. You couldn't tell from looking at any one of them what its age was, could you? A. No, sir.

Q. They are all painted, I presume. A. Yes, sir.

Q. What did you observe about these structures other than the paint on the outside that gave you enough information upon which to base a determination of a percentage depreciation?

A. Well, I noted whether the painting on it was in good condition and whether it needed paint. In some cases I noted whether or not there had been a thinning of the galvanized coating on galvanized sheets, whether the windows and doors were in good condition, and items of that nature.

Q. Did you examine any of the structures and I am now speaking of the transmission regulating and measuring stations structures in the Local Area? A. Yes.

Q. How many? A. I believe only one.

Q. How many of them are there in the Local Area? [fol. 2641] I think there are seven.

Q. You applied the percent depreciation to the remaining six based on the one that you saw in that area?

A. Yes, sir.

Q. And generally that same method was used throughout for the purpose of determining the amount to be deducted for depreciation on these structures? Is that not correct?

A. That is correct. My object was to see enough of the structures to form a conclusion as to the general condition in which they had been kept, and, from that to form a conclusion as to the amount of value which has been lost by depreciation.

Q. Do you know whether or not the ratio of those which you saw to those which you did not see was 1 to 10 or what, throughout the system?

A. I think it would be nearer about 1 to 3.

Q. Well, you will check that, will you not, during the noon recess and give us the figure based upon the actual count?

A. I will try to get that at noon.

Q. Now, are the measuring stations in the Local Area going to be of any value after the gas is totally exhausted in those wells?

A. No, except for such salvage as there may be there and there will be practically none in the structures.

Q. Now, that day is close at hand, is it not?

[fol. 2642] A. Yes, sir, it is.

Q. Yet you did not base depreciation of the structures in the Local Area upon the depleted condition of the field, as you did in the case of the wells in that field?

A. That is correct, I did not do so.

Q. Why?

A. On the production measuring station structures in the Local Area, I believe I should have depreciated them more heavily. However, as to the gas purchase stations in the Local Area they are not in quite the same condition as the production measuring stations because production is being maintained by these other producers and the life of those structures and that equipment will be considerably longer than for the company's own production.

Q. Mr. Biddison, is it simply a coincidence that you have so many flat 10 percents for deductible depreciation on these structures, some of which are located in Texas, others in Kansas and others in Oklahoma and others in Missouri?

A. No, it is the result of the fact that I think this property in general has lost 10 percent in value.

Q. Now, you mean your thought is general or the result is general?

A. The result is general. I think in general these properties have lost 10 percent in value.

Q. That is another round figure, is it not?

[fol. 2643] A. One of the digits in there is a round one. I don't think it would be possible to determine with a high degree of accuracy the amount by which these structures have depreciated without consuming a great many times the amount of time that was available in which to make a determination and without entailing an expense that would be almost as much as the amount of the figure we are trying to ascertain.

Q. Well, Mr. Biddison, some of those production stations in Texas and purchase stations in Texas, are approximately ten years old, are they not?

A. That is right, and some are of very recent construction.

Q. Now, according to Mr. Hinton these structures will be abandoned in fifteen years when, according to his estimate, the gas will be exhausted in the Panhandle field.

As a matter of fact, you used a remaining life of fifteen years in Exhibit 66, did you not, Mr. Biddison?

A. That is substantially right, yes.

Q. Now, insofar as all of those production stations and purchasing stations in the Texas field are concerned, they only have a remaining life of fifteen years, don't they?

A. That is right.

Q. And some of them having been built in 1931 have had almost a half of their life exhausted by now, have they not?

A. Well, if they are ten years old and have fifteen [fol. 2644] years of future expectancy, 40 percent of the life has expired.

Q. But, of course, you didn't relate your percentage to be deducted for depreciation to the life of that property, did you? A. Certainly not.

Q. Or of any property in the Panhandle Eastern System with some minor exceptions?

A. That is correct, because I do not think that the relationship of age to the life fixes the amount by which property has depreciated.

* * * * * * * *

[fol. 2647] The Witness: The deduction in column D, line 36 on Exhibit 69, is the composite result of the deductions from several groups or classifications of measuring station equipment.

[fol. 2648] On some of this equipment the deduction is 5 percent, some is 10 percent, and some is 15.

By Mr. Littman:

Q. Have you completed your answer, Mr. Biddison?

A. Yes.

Q. Now, coming back to the deduction of the flat 5 percent for the equipment in the Local Area, is it your

testimony that the salvage value of that equipment is anything like 95 percent?

A. No, I didn't testify to that.

Q. You know that the field is about to be abandoned, do you not?

A. I know that the company owned wells are about to be abandoned.

Q. And what is going to happen to this equipment?

A. It will be used at other locations for similar purposes.

Q. By Panhandle Eastern? A. Yes.

Trial Examiner: Let me ask you, Mr. Biddison: This testimony you have been giving about the depreciation, the last few pages of questions and answers, have you been basing your deductions for the depreciation covering the life consumed in any way on a prospective salvage value? Has that been taken into consideration?

[fol. 2649] The Witness: No, sir, Mr. Examiner. What I have taken into consideration was simply the amount of value which I believed to have been lost, that value being fixed after investigation of the property.

Trial Examiner: You are not basing it on salvage value or on depletion, but rather on physical conditions?

The Witness: That is correct.

By Mr. Littman:

Q. Will you describe briefly what this regulating station equipment looks like? I am speaking about regulating and measuring station equipment generally.

Trial Examiner: You probably mean of what does it consist, don't you, Mr. Littman?

By Mr. Littman:

Q. Of what does it consist. I don't mean for you to go into great detail on that, Mr. Biddison.

Mr. Culton: I think Mr. Burnham's Exhibit has a photograph of it, if I am not mistaken.

The Witness: The measuring and regulating stations consist in general of pipe running into the station lot from the transmission main and have attached a meter either

of the orifice type or of the displacement type, and a regulator whose function is to automatically reduce the pressure of the incoming gas from whatever pressure that may be, to a uniform predetermined pressure.

[fol. 2650] The gas may pass first through the meter and then through the regulator, or the reverse order may be used.

The regulating device and the meter are in some cases housed in a single structure and in some cases they are separately housed. Regulation is not always performed in connection with measurement, but in the case where both functions are performed the gas is again conducted through a pipe from the site of the measurement and regulation, back to the transmission main, there being a cutoff valve in the transmission main between the inlet connection to the measuring station and the outlet connection from the measuring station, -

Now, in connection with this measuring and regulating equipment there are valves of various sorts and sizes; quite often there are welded steel headers, and generally there are recording gauges to record the pressure, and in the case of displacement meters the volume, which passes through the meter, as well, and in the case of orifice meters and gauge would record the pressure on the orifice and the pressure drop across the orifice.

Some of these stations are multiple stations; others may have two or more runs of pipe through such a station with the appurtenant meters and fittings and regulators.

. . . . . .

[fol. 2651] Q. Now, have you examined a number of stations in which that equipment is?

A. Yes, sir I have.

Q. On the average, how much time did you spend at each station examining the equipment?

A. Probably ten minutes?

Q. And what did you do during that ten minutes in order to determine this percent?

A. Looked at the equipment, looked the equipment over.

Q. What did that consist of: just having a look around?

A. That is right.

Q. Did you open up any of the equipment and take a look inside?

A. No, sir, I did not.

Q. That can be done, can it not, on certain of the equipment?

A. It can be by shutting the station down or taking part of it out of operation.

Q. Well, did you look at the works in the meters?

A. No, sir.

Q. You can do that without shutting it down, can't you?

A. No, sir.

Q. What equipment could you make a thorough examination of without shutting down the station?

[fol. 2652] A. The outside surfaces of all of it, and that is all.

Q. Is it much of a trick to shut down a station and start it up again?

A. Well, these stations which are serving communities must be kept in operation or some other means provided whereby the communities can be supplied with gas. If it is a measuring station on a well it requires shutting off the well.

Q. Do these stations have by-passes?

A. The measuring stations to some of the distribution plants would have by-passes, but those on wells generally not.

Q. Well, what about the pipe in the station? Did you examine that? A. Yes.

Q. What did you see outside of the paint on the pipe?

A. That is about all you could see, and I determined that it was kept well painted and there were very seldom any indications of any corrosion whatever.

Q. You didn't scrape the paint off of this pipe? A. No.

Q. Did you observe any depreciation on any of the equipment other than merely the deterioration in the paint?

A. That is about all I could see.

Q. Do you have any working papers that show any detailed study of this equipment?

A. You have had all the working papers that I have [fol. 2653] on that matter.

Q. We don't have any papers that show any detailed study and we assume that that is the fact.

A. There is not much detail to the study. I have observed the equipment and reached a conclusion as to the amount by which it has lost value.

Q. You didn't put down a percent for each part of the equipment that is housed in these regulating and measuring structures, did you?

A. No, sir, I did not.

Q. It was just a general percentage estimate for the whole works, was it not?

A. That is correct.

Q. Based upon what you have referred to as your judgment? A. Yes, sir.

* * * * * * * *

[fol. 2659] By Mr. Littman:

Q. Well, let us then discuss the $40,001.80 of gathering lines other than Local Area lines which is included in Line 20 of Exhibit 69.

Is my understanding correct that you made a deduction of 10 percent for depreciation of those $40,000-odd worth of lines? A. That is correct.

Q. How many miles of well lines are represented by that account? I am still talking about the $40,000-odd.

A. I do not know.

[fol. 2660] Q. Can you give us a rough idea?

A. No, I cannot. I have not any figures on this available here.

Q. Did you make any detailed inspections on any of those lines? A. Yes.

Q. How many inspections did you make?

A. I am not certain of the division of my observations between what are classed well lines on Exhibit 69 and other lines but as to what I have called well lines in my compilation for Exhibits 39 and 62, I have but one observation on a well line and that would generally correspond to gathering lines as shown at Line 20 on Exhibit 69.

There may be some of the others of my observations which really would apply on what is classed on Exhibit 69 as gathering lines but I cannot sort it out here.

Q. Well, I understand your testimony to be on direct examination that you did not make any detailed inspections of these gathering lines but that you applied the findings on other gathering lines to these particular gathering lines which you had classed at one time heretofore in this proceeding as well lines.

A. That is substantially right. However, I find my notes do show that I inspected Line AW-1032 and the designation "AW" means that it is a well line in Texas. [fol. 2661] Q. Did you make any inspections on the $18,695 worth of Local Area gathering lines that you mentioned a moment ago? A. I did not.

Q. So that out of the total of $59,707.45 which appears in Line 20 of Exhibit 69 entitled "Gathering Lines," you made the one personal inspection?

A. That is correct and I based my deduction upon the condition found on other lines in the area as respects the gathering lines in Hugoton Field and Panhandle Field.

. . . . . .

[fol. 2674] By Mr. Littman:

Q. Now, referring to the gathering lines in the Local Area which you claimed have a book cost of $18,695.65 and which you claimed you found 80 percent depreciated, what method did you use to determine the depreciation for those lines, bearing in mind that you have already stated that you did not inspect those lines.

A. The method which I used was to give consideration to the fact that many of those lines would have short future life, that a great deal of it had never been very well protected when it was originally laid and that its value as of today was not greatly in excess of junk value so I just depreciated it 80 percent.

Q. It was based very largely, was it not, upon the depletion of the gas supply?

A. No, sir, rather upon the fact that the life of those lines in any one location in that area is short and total supply of gas in that area, from wells not owned by Panhandle Eastern Pipe Line Company; is expected to con- [fol. 2675] tinue for quite a long while but the life of individual wells is short and these lines require considerable shifting and rearranging to keep up with the shift in the center of production.

For that reason, I am satisfied, upon inquiry, that the lines themselves have suffered considerable physical depreciation, and it is also true that loss through obsolescence is imminent on a good deal of that property so, combining all of the factors, it is my judgment that they are worth about 20 cents on the dollar so I depreciated them 80 percent.

Q. When you speak of obsolescence in this instance, you are referring to obsolescence by reason of the depletion of the gas field or by reason of the depletion, rather, of the wells served by these lines?

A. That is right.

Q. In other words, this is an entirely different method used by you in the Local Area than was used by you in determining the percent of depreciation for similar lines in the Panhandle Field and Hugoton Field, is that corect?

A. Yes, sir, because the conditions are different. I applied a method which I thought would account for the conditions.

Q. Now, what condition usually brings about the retirement of a line that serves a well which you have sometimes referred to here as well lines and which is classified here as gathering lines?

[fol. 2676] A. The line may become pitted, rusted out, for one thing. As the well becomes old and the rock pressure lower, they may become inadequate for another thing and require to be changed on that account.

This is quite a common reason because, as the rock pressure declines, in order to maintain production it often becomes desirable to install well lines of larger diameter.

Another factor, of course, is the failure of the well itself.

Q. That is to say, the exhaustion of the gas in the well served by the line?

A. Yes, sir.

Q. Isn't the last cause the most prevalent one for lines that serve individual wells?

A. I think so, yes, sir.

Q. That is to say, may we not agree that ordinarily the well line will outlast the supply of gas coming from a particular well, physically?

A. No, I would not say that. I would not say that. I will agree with you, however, that exhaustion of the gas supply of a well is the most common cause for retirement of a well line.

Q. You fully expect that to be the case with the well lines or gathering lines that serve particular wells in the Panhandle Field, would you not, inasmuch as according to [fol. 2677] your testimony that field will be exhausted, according to your Exhibit 66, within 15 years from today?

A. I expect the bulk of the retirements of well lives in that area to be due to exhaustion of gas supply, yes sir.

Q. And what would you say with respect to the lines in the Hugoton Field?

A. The same thing.

Q. Now, let us proceed to the lines called "Transmission Mains" shown in Exhibit 69 at Page 1 on Line 37:

How many miles of gathering lines are included in the classification labeled "Transmission Mains", from the book cost of which you deducted $2,741,396 for depreciation?

Incidentally, when I speak of gathering lines now, I am not referring to the trunk gathering line, so-called, by you running from Windmill Junction northward.

A. I do not believe I have any figure with me from which I can give you that.

Q. Will you furnish that figure later in order to save time?

A. I will try and obtain it for you, yes, sir.

Q. Incidentally, before I forget, are you prepared to state now how many transmission station metering and regulating structures there are in the Panhandle system?

A. No, sir, I did not get an opportunity to get that compilation made.

. . . . . .

[fol. 2680] By Mr. Littman:

Q. Mr. Biddison, I believe you were going to tell us the approximate mileage of the gathering lines other than the trunk gathering line which runs from Windmill Junction north. When I use the term "trunk gathering line" for that Windmill Junction line, I am, of course, using your term, you understand.

A. Excluding the 22 inch line from Windmill Junction to Liberal Station, according to the statement in Schedule 11 of Exhibit 17 there are approximately 383 miles of gathering lines outside of the Local Area.

Q. How many inspections did you make on those 383 miles of gathering lines?

A. Forty-nine.

Q. Were you present at each of those inspections?

A. Yes.

Q. Now, what is the approximate length of the line which you have called a trunk gathering line, extending from Windmill Junction, Texas to Liberal Compressor Station in Kansas?

A. I believe it is about 110 miles.

Q. How many inspections did you personally make on that line?

A. Thirty-nine.

Q. Did you make any inspections on the Beaver River [fol. 2681] crossing on that line?

A. No.

Q. On Cimarron River crossing of that line?

A. Yes, sir.

Q. You deducted approximately 5 percent, did you not, for this so-called trunk gathering line, for depreciation?

A. Yes, sir.

Q. How did you make a determination of the percent to be deducted for the Beaver River crossing which, as you say, you did not inspect?

A. I included it with the balance of the lines.

Q. You did not apply the finding made by you upon inspection of the Cimarron River crossing to that of the Beaver River crossing, did you?

A. No, sir.

. . . . . .

Q. What percent did you deduct for depreciation of the Cimarron River crossing which you state you inspected?

A. I used 95 percent.

Q. 95 percent condition or 5 percent—

A. Or 5 percent deduction, yes, sir.

[fol. 2682] Q. What was the deduction for depreciation on the Beaver River crossing which you did not inspect?

A. 3 percent.

Q. Now, if you had applied the finding by inspection of the Cimarron River crossing to that of the Beaver River crossing, you would have deducted approximately another 2 percent, would you not, for depreciation?

A. Yes, sir.

. . . . . .

Q. Now, Mr. Biddison, you stated that you have determined the percent to be deducted for depreciation for the Beaver River crossing from the other inspections which I take it were not at river crossings. Is that correct?

A. Yes.

Q. That is, for this line.

[fol. 2683] A. Yes. It is in at the same percentage of deduction for depreciation as the balance of the line in the state of Oklahoma.

Q. Now, how did you arrive at such a conclusion as that, not having made any inspection at all on the Beaver River crossing?

A. My conclusion was that in view of the conditions noted on the pipe line, that an allowance of 3 per cent for that section of the line including the river, was an ample allowance for the depreciation which had occurred upon it.

Q. You are merely restating your conclusion, Mr. Biddison. I wanted you to give me the reason for the conclusion.

A. The reason for it is that having made the inspection it is my opinion that a 3 percent allowance for depreciation upon that section of line, including the river crossing, was an ample allowance for the depreciation which had occurred.

Q. That is not the method you used for determining the percent to be deducted for depreciation on river crossings on the main line, was it?

A. No, sir. I think it was in some instances but not in all of them.

Q. Why did you vary your method here from the usual one followed, or was there no reason for it particularly?

A. Well, I could have done it this way or some other [fol. 2684] way, but I just picked out this method to do it. That is all.

Q. Wouldn't you ordinarily expect to find conditions at river crossings, where, as here, the crossing is under the

river, different than conditions ordinarily found elsewhere on such a line?

A. Yes.

Q. River crossings such as the one at Beaver River, you would ordinarily expect to find in a further depreciated condition that elsewhere ordinarily, would you not?

A. Yes.

Q. Well, let's turn to main lines, and when I use the term "main lines" now, I am referring to the main transmission line running from Liberal Compressor Station north and east to Dana Station at the Indiana-Illinois State Line.

I exclude the lateral lines from this term, and I include the loop lines within the term.

Will you please state the approximate mileage of the main lines as I have defined them?

A. Approximately 1,157 miles.

Q. And how many inspections did you personally make on those main lines?

A. 298.

Q. Will you state the percent which you deducted for depreciation of the main lines within the meaning of the ferm as I have defined it?

[fol. 2685] A. Approximately 3.6 percent.

Q. Now, of course, that is the largest account, isn't it?

A. Yes, sir.

Q. What is the size of pipe embraced within the meaning of that term?

A. 20 inch, 22 inch, and 24 inch.

Q. Now, there are a number of river crossings on the main transmission lines, are there not?

A. Yes, sir.

Q. How many of those river crossings did you personally inspect? When I use the term "inspect", Mr. Biddison, I mean a detailed inspection.

A. I believe only on the Arkansas and the Missouri and the Mississippi Rivers.

Q. The Mississippi River crossing is an overhead crossing, is it not?

A. There is both an overhead crossing and an underwater crossing.

Q. Which one did you make the detailed inspection on?

A. Both. Of course, on the underwater crossing we had to excavate to see the pipe. The overhead crossing was visible from the bridge and from the approach.

Q. I see. Well the Arkansas River crossing is on the main line, called Kansas Line 100, is it not—well, and Kansas Line 200, the latter of which is the loop line?

[fol. 2686] A. That is correct.

Q. You did not make any examination, I take it, or detailed inspection, of the Neosho River crossing in Kansas?

A. No, sir.

Q. Or the Osage River crossing?

A. No, sir, I did not.

Q. How did you determine the percent of depreciation for those latter two river crossings, Mr. Biddison, not having inspected them?

A. I used my judgment and assigned a figure that I thought was ample to cover any depreciation that might have occurred upon them.

Q. Your judgment in that regard was based upon what facts?

A. Upon the inspections I did make on river crossings and upon my knowledge of the general care in maintaining this property.

Q. Well, can you tell the condition of one river crossing by examining another river crossing, especially when they are two different rivers?

A. No, but one can form an enlightened judgment as to what the condition of the property in general is by making observations upon selected items of that property.

That is the general practice in sampling and in inspection.

Q. Why didn't you inspect the Neosho River crossing [fol. 2687] and the Osage River crossing?

A. Purely and simply because there was a dead line set as to when I had to appear before this Commission with the data which I was accumulating.

Q. That is to say, you did not have ample time to make the inspection?

A. That is correct. However, I did make such inspections as would, in my judgment, be required to determine

the value and condition of the property for the purpose of purchase or sale.

. . . . . .

Q. Well, there are two crossings at each of these three rivers, if I correctly understand you, are there not, Mr. Biddison, that is one for the loop line and one for the main line?

A. I am not sure I know which three rivers you are talking about.

Q. I am referring to the Arkansas River, the Neosho River and the Osage River.

A. That is correct.

Q. And you applied your findings by inspections on the Arkansas River crossings, to those of the Neosho River [fol. 2688] crossings and the Osage River crossings, did you not?

A. That is right.

. . . . . .

[fol. 2689] Q. Now, Mr Biddison, there are some river crossings on the main lines entitled "Main Line 100" and "Loop Line", "Main Line 200", are there not?

A. Yes, sir.

. . . . . .

[fol. 2690] Q. The Missouri and the Mississippi River crossings. You did not examine the Lamine River crossing, did you?

A. No, sir.

. . . . . .

I applied to the Lamine River crossing the data which I derived from the Missouri River crossing.

Q. Now, at what hour of the day or night did you make an inspection of the Missouri River crossing?

A. This inspection was made on August 22, 1941.

Q. Do you recall what hour of the day or night it was that inspection was made by you?

A. I believe this was rather late in the evening.

Q. Do you remember what time it was?

A. No, I made no record of the time of day of any inspection.

Q. As a matter of fact, this inspection was made by you after dark, wasn't it?

A. Partially so.

Q. You took a picture at this inspection point too, did you not, Mr. Biddison?

A. Yes.

[fol. 2691] Q. That is, with your camera, the same one that you described a moment ago?

A. Yes, sir.

Q. And you used a flash bulb to get that picture, did you not, because of the darkness?

A. I did in an attempt to get that last picture.

Q. What was the last answer?

A. I did in an attempt to get the last picture.

Q. We are referring now to the Missouri River crossing?

A. Yes, sir, and I say in an attempt to get the last picture at that river crossing I used a flash bulb.

Q. Did you take any other pictures at this particular crossing?

A. I believe so. I made two shots at that river crossing, one on the group of lines on Line 100 and one on the group of lines on Line 200.

Q. Which one of those lines was inspected by you after dark?

A. Group of lines on Line 200.

Q. Do you know a Mr. George Shattuck who is a member of the engineering staff of the Federal Power Commission? A. Yes, sir.

Q. He was present with you at that latter inspection, was he not? A. Yes, sir.

. . . . . .

[fol. 2693] By Mr. Littman:

Q. What is the fact with respect to these two river crossings, Mr. Biddison? Will you give us a description of these two river crossings?

A. On the Missouri River?

Q. I am talking about the Mississippi.

Mr. Wheat: The Examiner asked about the Missouri.

. . . . . .

[fol. 2694] The Witness: On the Missouri River both the crossing on the original Line 100 and on the Loop Line 200, or underground crossings, multiple crossings.

Mr. Wheat: You mean underwater crossings?

The Witness: Yes, sir, laid in the stream bed and the multiple lines on each side of the river carried up to comparatively high ground to be out from the flood plain.

On the Mississippi River crossing the original crossing is on a bridge and in 1936 an additional crossing of the Mississippi River was made upstream from the bridge as a multiple line underwater crossing.

Q. Now, when you make an inspection on a river crossing that passes under the river, what kind of an inspection do you make? You don't look at the pipe in the water, do you?

A. I did not do so.

Q. Is that usually done, or can it be done?

A. Well, it can be done by going in there and taking off the probable five to six feet of cover and sending a diver down, but otherwise it cannot be done.

Q. What is the method you used?

A. What I did was to look at the pipe on the multiple line approaches to the stream.

Q. Is that on one side or both sides?

A. I looked only on one side.

Q. How far was that ordinarily from the bank of the [fol. 2695] river?

A. Well, on the Missouri River that was about a quarter of a mile, I believe, possibly one-half.

Q. Why didn't you make your inspection at a point closer to the river than one-quarter of a mile or one-half of a mile?

A. Because we were in the flats where we had the river bottom soil and river bottom conditions and I picked a location that would be fairly accessible.

Trial Examiner: May I ask, Mr. Biddison, if you are able to state, what is the effect of corrosion on these pipes that are laid under river beds? Is it greater or less or similar to the corrosion in the ordinary soil?

The Witness: It is very much less than the corrosion which you ordinarily experience on the land approaches to the streams.

Pipe lines continuously submerged in water, except in some rather unusual cases where you might have mine water overflow or drainage from some chemical plant that would produce a high acid condition of the water, show very little effects of corrosion after a great many years and, that is true even on lines laid under salt water.

These lines under salt water will quite generally corrode at the water line where the pipe is subjected both to the salt in solution and oxygen from the air, but those parts [fol. 2696] continually submerged corrode very, very slowly, and will last a great many years without any difficulty from pitting.

I have never known of difficulty in the stream bed of an ordinary river from pitting.

Mr. Wheat: May I ask a question also along that line?

Are any of the crossings of this line we are talking of in this case, the river crossings, so located as to be just below a mine or some chemical plant such as you mentioned in your last answer?

The Witness: Not on the main lines. There may be some minor situations in that respect with regard to some of the smaller lateral lines in the state of Illinois.

By Mr. Littman:

Q. I take it from the answer you have just given that the depreciation on well constructed underwater crossings then, would be very slow?

A. Yes, sir, it would be very low. The underwater crossings may require a high rate of accrual to maintain them against factors other than the deterioration of the pipe, but as to deterioration of the pipe itself in such a stream crossing, that is very slow.

Q. I take it from your last answer that the annual allowance for depreciation in such instance should be high, but that the deduction for depreciation from book cost [fol. 2697] should be very low.

A. Comparatively so, yes, sir.

Q. Did you make any tests of the waters in these rivers to ascertain their corrosive effect on these main lines?

A. No, sir, I did not.

* * * * * * * *

[fol. 2700] Q. Now, what kind of inspection did you make of the overhead river crossing of the Mississippi River?

A. Well, the inspection on the Mississippi River I find was confined to the overhead crossing and I simply looked at it as we went over the bridge.

Q. In an automobile?

A. I believe we got out on the east side and went down below the bridge approach to look at the pipe bends at that side of the crossing.

Q. How much time did you spend looking at the pipe [beds]?

A. Just a few minutes.

[fol. 2701] Q. The rest of your inspection of that overhead river crossing consisted of looking at it while driving by in an automobile?

A. I looked at what could be seen from the approach on the west side too. I do not believe I got out of the car at that point, though.

Q. I see. And, of course, in that time you had no opportunity to uncover the pipes?

A. No, made no attempt to uncover them.

Q. Then, in reality it appears that you made actual inspections on two river crossings—by actual inspections I mean detailed inspections—namely, the inspection of the Missouri River crossing, that is two of those, and one of the Arkansas River crossing. Or was it two on the Arkansas River?

A. One crossing on the Arkansas River.

Q. My statement then is correct?

A. Two on the Missouri and the overhead crossing on the Mississippi.

Q. And you applied your findings on those, one of which was determined by an inspection made after dark, to all the other river crossings of the main lines, is that correct?

A. Well, I based my deduction for depreciation upon all the other main line river crossings upon the observations that I made at the ones which I did inspect.

[fol. 2702] Q. Now, there are a number of river crossings on the Illinois Line number 100 and the Illinois loop line number 200, are there not? A. Yes.

Q. Am I correct in stating that there are two river crossings, namely, the South Sangamon River and the Illinois River?

A. On Line 100, yes, sir.

Q. And, of course, you made no inspections on those rivers? A. That is correct.

Q. Now, the lateral lines have some river crossings, too, have they not? A. Yes, sir.

Q. By the way, did you make any inspections on any of the lateral lines? A. Yes, sir.

Q. Which lateral lines did you inspect? When I use the term "inspect" I mean to make a detailed inspection.

A. 96 lateral line inspections were made.

. . . . . .

[fol. 2707] P. McDonald Biddison, a witness, having been previously duly sworn, resumed the stand, was examined and testified as follows:

. . . . . .

[fol. 2709] Cross-Examination (Continued).

By Mr. Littman:

Q. Mr. Biddison, at the close of last Friday's session, we were discussing the account in Exhibit 69, Page 1, Line 37, titled, "Transmission Mains."

I believe you stated that there were approximately 1,157 miles of main lines included within this account, including the loop lines, as distinguished from gathering lines, trunk gathering lines, lateral lines and Local Area lines.

[fol. 2710] I do not recall at the moment whether you stated how many inspections had been made on the main lines thus classified. Could you give us that figure, please?

A. 91.

. . . . . .

Q. What I am seeking is the breakdown of the account entitled, "Transmission Mains" shown in Line 37 of Ex-

hibit 69 in the amount of $46,511,611.72 as between gathering lines, the figure of which I believe you gave us, trunk [fol. 2711] gathering line, main lines including loop lines, lateral lines and Local Area lines.

Can you state what percent condition you found or, stated conversely, what percent of depreciation you deducted for the main lines, including the loop lines?

A. In determining the deduction for depreciation on transmission mains in Exhibit No. 69, I did not break that item down into the detail which you have mentioned.

I weighed out my determinations on the classification which I had used in connection with the determination of reproduction cost and in that determination I had depreciated transmission mains.

I have divided the item of transmission mains, amounting to $46,511,611.72 into $1,666,783.92 of Local Area transmission mains and $44,844,827.80 of other transmission mains. I have depreciated the Local Area transmission mains 49.6363 percent and I have depreciated the $44,844,827.80 of other transmission mains 4.2682 percent.

The amount by which I have depreciated Local Area mains is $827,329.86. The amount by which I have depreciated other transmission mains is $1,914,066.95. The two make a total of $2,741,396.81.

Trial Examiner: When you said local transmission mains, Mr. Biddison, you are referring to the Local Area production, so-called, in this proceeding?

[fol. 2712] The Witness: The mains in the Local Area around Kansas City, yes, sir.

Trial Examiner: You are not referring then to well lines in the field, that is, in the major fields of Hugoton and Panhandle?

The Witness: No, sir.

Mr. Wheat: Nor are you referring, Mr. Biddison, to so-called lateral lines, are you?

The Witness: I am referring, in that connection to the lines in the local area field around Kansas City as they are

so classified upon the books of Panhandle Eastern Pipe Line Company.

By Mr. Littman:

Q. Then it is the $44,844,827.80 figure that includes the lateral lines, is it not? A. Yes, sir.

Q. And the so-called trunk gathering line of 110 miles which you spoke of last Friday? A. Yes, sir.

Q. And it also includes some gathering lines, too, does it not? A. Yes, sir, it does.

Q. You are not prepared to give us a breakdown of that $44,844,000 figure as between the classes that I just named, are you?

[fol. 2713] A. No, sir, I did not make such a breakdown of the miles and do not have the data for such a breakdown. I think I would have to get that out of Kansas City.

Q. What were the figures against which you applied your basic percentages?

A. My basic percentages were applied against reproduction cost new and in weighing the observations out against the general class of the property, I found that the weighted amount to be deducted on this item of $44,844,827.80 of transmission mains, other than local area, as carried on the books, was 4.2682 percent.

Q. In other words, in securing the percent of depreciation to be deducted of 4.26 percent for transmission mains other than the Local Area transmission mains, you did not ascertain a separate percent for each of the classes of other transmission mains, did you?

A. Not for each of the classes as they are classed in the accounts. I did not weigh my observations out by classes on the book cost of property.

I weighed them out on reproduction cost of property and applied the resultant figure to the total book cost.

* * * * * * * *

[fol. 2714] Trial Examiner: Mr. Biddison, when you made an inspection to determine the existing depreciation in a certain piece of property, would you have a different conclusion as to the existing depreciation if you had made that inspection as a preliminary to a computation of reproduction cost new less depreciation than if you had been

making your inspection without reference to any estimation of reproduction cost new?

The Witness: No, I would have had identically the same figure—

Trial Examiner: (Interposing) Of existing depreciation.

The Witness: (Continuing)—I made a determination of what proportion of value had been lost and what I deter- [fol. 2715] mined was the proportion of value and then I have applied that to at least two different methods that might be considered in determining the value. My proportion would be the same, no matter how the value was obtained and my proportion would be the same, no matter what the cost was, whether it might be considered high or low.

* * * * * * * * *

The Witness: In an estimate of reproduction cost new? I determined that, based upon that reproduction cost, the percentage of value to be deducted for depreciation which had occurred in the property on well lines, gathering lines, [fol. 2716] trunk gathering lines, main lines and lateral lines, excluding any Local Area lines of any sort, character or description, was $1,710,828.99.

That was on property in the amount of $40,083,188.80 and amounts to 4.2682 percent.

I have, therefore, in Exhibit No. 69, depreciated $44,844,827.80 of book cost of well lines, gathering lines, trunk gathering lines, main lines and lateral lines by 4.2682 percent or in the amount of $1,914,066.95.

Now, in addition to that amount of depreciation on the book cost of what, in Exhibit 69, is called "Transmission Mains" and which does include all of the lateral lines, all of the main lines, the trunk gathering line and the greater part of the gathering lines and well lines, I have depreciated $58,707.45 of gathering lines, so-called, upon the books of Panhandle Eastern Pipe Line Company by $18,957.70 which is composed of $14,956 52 of deduction for Local Area lines and $4,001.18 of other gathering lines.

The proportion in which the Local Area lines have been depreciated is by 80 percent applied to $18,695.65. The proportion by which the other lines have been depreciated is 10 percent applied to $40,011.80.

Now, the amount of $58,707.45 of gathering lines, as now classified in Panhandle Eastern Pipe Line Company's accounts, represents gathering lines which have been classi-
[fol. 2717] fied in accordance with the requirements of the Federal Power Commission.

* * * * * * * *

[fol. 2719] By Mr. Littman:

Q. Have you completed your answer? A. Yes.

Q. Mr. Biddison, did you make any inspections on the loop lines that were installed in 1938?

A. No, sir, I did not. I did inspect some of the 1937 loop lines but I believe none of the 1938 loop lines.

Q. Did you inspect any of the looped lines that were installed in 1939?

A. No, sir, I did not.

Q. Did you inspect any of the loop lines that were installed in 1940?

[fol. 2720] A. No, sir, I did not.

Q. Were there any installed in the first six months of 1941, that you recall?

A. I think there was a little bit of construction work still in progress from last year's program.

Q. You did not examine any of the loop lines that were installed in the first part of 1941? A. No, sir.

Q. Now, those loop lines which I have named which were installed in the years 1938, 1939 and 1940, and which you did not inspect, constitute a rather substantial part of the present transmission mains, do they not?

A. Yes, sir.

Q. Don't take the time to look it up now, but can you tell me approximately how many miles of loop lines were installed in total?

A. I would have to look it up to give you anything within reason.

Q. Well, do you have a copy of Exhibit 15, Mr. Burnham's map of the system?

A. No, I do not have a copy of it.

Q. I believe Mr. Burnham's map, Exhibit No. 15, shows in light green color the loop lines that were installed in 1939 and 1940.

A. I have some figures here that indicate that the 1939 [fol. 2721] and 1940 program was about 133 miles.

Q. Did you make any deduction whatever for depreciation on any of the loop lines installed in 1938, 1939, 1940 or 1941?

. . . . . .

The Witness: On the Liberal loop in 1937 construction, I deducted one percent; on the 1939-40 construction, I deducted nothing.

On the Greensburg loop for the 1937 construction, I deducted one percent; for the 1939-40 construction, I deducted nothing.

On the Haven loop for the 1937 construction, I deducted one percent; for the 1939-40 construction, I deducted nothing.

For the Olpe 1937 construction, I deducted two percent; for the 1939-40 construction, I deducted nothing.

For the Louisburg loop for the 1937 construction, I deducted one per cent; for the 1939-40 construction, I deducted nothing.

For the Houstonia loop for the 1937 construction, I [fol. 2722] deducted two percent; for the 1939-40 construction, I deducted nothing.

For the Centralia loop for the 1937 construction, I deducted one percent; for the 1939-40 construction, I deducted nothing.

For the Pleasant Hill loop for the 1937 construction, I deducted one percent; for the 1939-40 construction, I deducted nothing.

So, in general, I deducted one to two percent on 1937 construction and nothing on the later construction.

In two sections, however, I deducted two percent on 1937 construction based upon the fact that they were the sections in which depreciation appeared to have taken place the most rapidly on the older construction.

By Mr. Littman:

Q. In other words, to summarize, you made no inspections on any of the looped lines constructed subsequent to 1937?

A. That is correct.

Q. And you placed that all in 100 percent condition?

A. Yes, sir.

Q. Notwithstanding the fact that some of them were two and one-half years old as of June 30, 1941?

A. That is correct—not 2½ years, 1½ years.

Q. Well, it would be closer to two, wouldn't it?

A. No, it would be closer to 1½. They were completed along at the close of the year.

. . . . . .

[fol. 2724] Q. We would appreciate your securing it at your early convenience.

Now, the main line in the Local Area to which you alluded a few minutes ago were not personally inspected by you at all, were they?

A. That is correct.

Q. That is the Local Area main lines. I believe you answered a similar question with respect to Local Area gathering lines?

A. Yes, sir, and a similar situation exists with regard to Local Area well lines. The same situation exists with regard to all lines classed as Local Area lines.

Q. Am I correct in stating that you used a flat 25 percent deduction for depreciation on the main lines in the Local Area? I believe you testified to that at transcript Page 1193.

The Witness: Will you read me that question?

[fol. 2725] (Whereupon, the pending question, as recorded, was read by the reporter.)

The Witness: No, that is not correct. In connection with Exhibit 69, I just explained here a short time ago what I did with respect to the lines in the Local Areas.

Mr. Wheat: I think the deduction was around 80 percent, was it not, Mr. Biddison?

The Witness: The deduction was 80 percent upon those lines which, in Exhibit 69, are called gathering lines and the deduction was 49.6363 percent for the other Local Area lines included in the group of transmission mains on Exhibit 69.

Now, I think likely that the figure you are referring to was used with regard to a certain group of those transmission mains as classified in my reproduction estimate.

. . . . . .

By Mr. Littman:

Q. Well, whatever your deduction was for depreciation on the main lines in the Local Area, it was not based upon inspection, is that correct?

[fol. 2726] A. That is correct. It was not based upon inspection because I made no inspection.

Q. What was it based on?

A. It was based on the consideration of the field conditions in that field.

Q. What do you mean by "field conditions?"

A. That the lives of lines are short because the lives of wells are short. Therefore, there is considerable shifting of lines in that field and considerable obsolescence in pipe lines in the field.

Q. Now, is it a proper method to depreciate a main line on the basis of the rate of depletion of gas in the fields from which it takes gas? Is that a proper method?

A. If a field from which a pipe line takes gas is so depleted that the installation of that pipe line would not be justified, then that pipe line has lost value through obsolescence and, in any estimate of its value, that obsolescence should be given full force and effect.

If the obsolescence has not occurred, it should not be given any effect.

Q. In other words, you begin to switch from the observation method to this so-called depletion method or whatever you want to call it, the minute the gas supply begins to run low, is that correct?

A. No, sir, I do not switch.

[fol. 2727] Q. When do you make the change?

A. I have got a consistent policy in that regard and I try to give effect to the factors that produce depreciation

and when I believe obsolescence has produced depreciation, I give it effect and when I do not think obsolescence has produced depreciation, I do not give it effect.

Q. Well, in your opinion, will the main transmission lines of Panhandle Eastern reach this stage when you will begin to give effect to the obsolescence in the lines?

A. Sure.

Q. Approximately when?

A. I have not estimated the date and I do not read the crystal.

Q. How far depleted, would you say, that the gas field would have to be before you begin to change your method from that of observation to the one which you just described?

A. They would have to be depleted to the extent of when the laying of the lines would not be feasible economic venture on account of the life of the supply.

Q. That is similar to the method employed by you in depreciating wells, is it not?

A. That is correct.

Q. Now, inasmuch as pipe of all kinds which make up the various types of lines represents, by far, the largest [fol. 2728] amount of the property owned by Panhandle Eastern, I would like to examine you a little further with respect to the method used by you in arriving at the observed percents which you deducted for depreciation.

I believe you described that numerous test holes were dug and that four feet of the pipe was uncovered, is that correct?

A. Six feet of pipe was uncovered by the test hole and out of the six feet, four feet was cleaned of its protective coating so that four feet of pipe could be inspected and two feet of the protective coating could be inspected.

Q. And then you made notations with respect to what you saw at each particular point, both as to the coating and as to the pipe itself, did you not?

A. Yes, sir.

Q. Now, what were you particularly interested in with respect to the pipe? Were you looking for general corrosion?

A. I was looking for any kind of corrosion.

Q. You had them in about four or five different classes, did you not? Will you briefly enumerate those again for us so that we can discuss them in connection with this point? Will you proceed with your answer, Mr. Biddison?

A. I made notations as to whether there was no rust, whether there was definite surface rust, whether there was shallow metal attack and if there were measurable pits, [fol. 2729] I recorded the depths of those pits, the deepest pit in each foot of the continuous four feet of pipe that was exposed.

Q. How did you translate those data to percents? If you wish, you might take a typical inspection sheet and cite it as an example.

A. I did not translate any particular inspection sheet to a percentage but I did draw alignment charts to represent sections of this pipe line so that the conditions that had been found, both in my inspection and in the routine reports of inspections by Panhandle Eastern's employees, could be utilized.

Taking the section from Liberal station to Greensburg station—

Q. (Interposing) Which page of your working paper notes are you referring to now?

A. I am referring to a set of charts, a copy of which has been furnished to the engineers of the Federal Power Commission and I am referring to Page 3 of that set of charts.

Q. Thank you.

A. The survey station on this pipe line for Liberal station is Station 5700 plus 00.

Mr. Wheat: How was that now?

The Witness: Station 5700 plus 00 and the station number for Greensburg station is Station 10,348, plus 80. Now, between Liberal station and Greensburg station on Line C-100 I made five inspections on Line C-100.

. . . . . .

[fol. 2731] Q. Just before the recess, Mr. Biddison, you were explaining the method used by you to determine the amount to be deducted for depreciation and you were giv-

ing us that method with respect to that portion of the main transmission line extending from Liberal Station to Greensburg Station.

Will you please proceed with your explanation?

A. On the alignment chart which we have been referring to, that is page 3 of the set of charts, I have indicated by a letter "a", a lower case "a", that at the point where this "a" is located I made an inspection and found no rust.

Where a small letter "b" is located, it indicates that upon that line at that location I made an inspection and found definite surface attack, and where a "c" appears it indicates that at that point I made an inspection and found a shallow metal attack.

Where a solid vertical line appears upon that line on the chart it indicates that I made an inspection and found definite measurable pitting and the height of that vertical line indicates the depth of the pitting in mills, that is, in thousandths of an inch.

A similar code is used on this chart to indicate the results of inspection by employees of Panhandle Eastern Pipe Line Company. Those inspections are indicated by capital letters and the depths of pitting, where pitting was found to exist, is indicated by a broken vertical line.

[fol. 2732] On this chart at Station approximately 6010 plus 00, there appears a capital "A" indicating that the Company's inspection at that point disclosed no rust. Between that point and Liberal Station I also had an inspection with the same result, that is, no rust showing. But at Station approximately 6040 plus 00 my inspection showed pitting to the extent of about 30 mills maximum.

Q. Just a minute. Is that the average of the deepest pits on each of the four foot sections?

A. No, that is the deepest pit.

Q. In the entire exposed portion of the pipe at that point?

A. Yes, sir.

Q. Pardon the interruption. Go right ahead.

A. I have, therefore, classified this section of line from Liberal Station up to the point at which the pitting was observed, as having no rust up to a point half way between the eastward observation of no rust and the first observation of pitting. That is, from Station 5700+00 to station 6,400+00.

Engineers for the Federal Power Commission, I believe, have photostatic copies of the work paper on which I tabulated such a classification.

Q. What percent condition did you put that portion of this line in which extends from Liberal Station to the mid-
[fol. 2733] point that you describe, between the point where no rust was found and the point where pitting was found?

A. 99 per cent.

Q. What is the distance for which you found a 99 percent condition?

A. Well, in this particular stretch that distance is 70,000 feet.

Q. That is approximately 14 miles, isn't it?

A. Yes, sir.

Q. And how many inspection points did you personally view over that stretch?

A. Two—no, over that stretch of 70,000 feet, one.

Q. And then you had the inspections of the Company at another point?

A. Yes, sir.

Q. You were not there when the Company representatives inspected that point, were you?

A. No, sir.

Q. Will you please proceed with your explanation?

A. From the location of the first observation where pitting was discovered, going eastward, that is at Station approximately 6840+00.

Q. Will you please proceed with your explanation?

A. From the location of the first observation where pitting was discovered going eastward, that is at station [fol. 2734] approximately 6840+00, the next eastward observation was at station approximately 6875, and from a point roughly half way between those last two observations or station 6850+00 to midway to the next observa

tion, that is, to station about 7200, I have classed that as no rust.

Q. What was that mid point that you just mentioned?

A. From station 6850 to station 7200.

Q. That is the mid point between what two stations?

A. Well, it is approximately the mid point between station 6840 and station 6870 or 6875.

Q. How did you establish the 7200 as the mid point?

A. Well, I think that was done just by eye to make a guess at a mid point there. It looks like I might have missed it a little bit.

Q. It looks like it is not anywhere near the mid point to me, Mr. Biddison. Will you make the determination of the mid point now?

A. The mid point should be approximately 7037.

Q. How many miles were you off on your original mid point, approximately?

A. About three.

Q. You were in error then three miles on that inspection? A. Yes.

Q. Will you proceed with your explanation, Mr. Biddison?

A. From station 6400 to station 6850 I have shown that [fol. 2735] the latter point for the latter stretch which you described. Would you mind doing that for us?

A. In that stretch where no rust was shown, I have assigned a condition of 99 percent. If definite surface rust was shown, I have assigned a condition of 98 percent. If the conditions shown were that of shallow metal attack, I have assigned a condition of 97 percent, and for those sections in which there was pitting, I have assigned a condition of 95 percent.

Q. Did you assign that 95 percent where there are pits everywhere over the system?

A. Yes, sir.

Q. Without any reference to the depth of the pits?

A. That is correct, because the depth of the pits is generally pretty small, and I think that a 5 percent allowance on all these stretches is ample to cover the amount at close to the maximum depth of pitting.

Q. You found some pits that were half way through the pipe, didn't you, Mr. Biddison, at some points?

A. I think we may have on some lateral lines. We are talking now about main lines.

Q. Yes, we are talking about main lines. Didn't you use the same general method on the lateral lines, however? A. No.

Q. Let's confine ourselves at present to the main lines.

* * * * * * * * *

[fol. 2737] I note that you have some pits that were 100 mills in depth, do you not, between Liberal Station and Greensburg Station on the main line?

A. At two points, yes, sir.

Q. You used 95 percent condition at those two points, did you not?

A. Yes; and I also used 95 percent condition at points where the maximum pitting was 20 mills, 25 mills and 30 mills.

Q. And you used 95 percent condition on other parts of this line, inspection points, where the depth of the pitting was in excess of 100 mills, did you not?

A. No, I didn't specifically do that. I used 95 percent on those sections that were pitted.

Q. Without consideration—

A. (Interposing) Without segregating the shallow pit depth sections from the maximum pit depth sections. I used 5 percent as an average.

Q. How did you arrive at that 95 percent? In other words, how did you arrive at a deduction of 5 percent for depreciation at points where you saw what you call measurable pits?

A. That is my judgment by which the pipe has lost value on the average. It is not a result of a mathematical calculation or algebraic equation.

Q. In other words, you have no working papers to show any basic figures from which this 5 percent depreciation was reached?

[fol. 2738] A. That is my basic figure.

Q. And the same is true, is it not, of your 97 percent which you recorded where you saw a shallow metal attack?

A. That is true, and it is also true of my 98 percent when I found definite surface rust, and also true of my 99 percent when I found no rust.

I simply allowed that even in spite of the fact that you couldn't find anything there, there probably was some little deterioration.

In general those percents are arrived at by making allowance for the fact that there probably is some deterioration that you have not been able to see, just on the law of averages.

Q. You mean it is there but you might have possibly missed seeing it?

A. I mean that it is normal expectancy that there would be something there on a line of that age in those stretches, even if you didn't see it at the particular spot where you made your inspection.

Q. Then, as I understand your method you considered the following factors in arriving at the percents: first, whether or not there was rust; second, the appearance of definite surface rust; third, the shallow metal attack; and fourth, the presence or absence of pits. Is that correct?

A. Measurable pits.

Q. Measurable pits?

[fol. 2739] A. Yes, sir.

Q. My summary is generally correct, is it not?

A. That is correct.

Q. And nothing else?

A. That is right, that is, as to pipe alone. These figures do not relate to the condition of the protective coating.

Q. They relate to the condition of all pipe observed by you?

A. Of all pipe in the main lines.

Q. What do you mean by measurable pit? What is the difference between measurable pit and one that is not a measurable pit?

A. None of this pipe is absolutely smooth, and due to that slight roughness you quite often find a point at which you can detect that there has been some action upon the steel itself, but on account of the pipe roughness you have no way in which you can measure it.

That is generally true when it is less, say, than five mills.

Sometimes you can detect a brightening of the surface that looks a good deal like the result you would obtain by

etching with an acid, that is so slight that you can detect the discoloration of the surface, or you may be able to feel it with your thumb nail, but it is too small to measure with ordinary instruments used for that purpose.

Q. Wouldn't that be called shallow metal attack?
[fol. 2740] A. Yes, sir.

Q. In other words, you then took it out of the category of pitting and put it in the category of shallow metal attack, where the pitting was approximately under two mills?

A. Well, if it were such that you couldn't with any certainty measure it with a measuring device such as we were using, the common device used for that purpose, I called it shallow attack.

With that measuring device you can measure down to five mills and anything under that you can't be sure whether you are measuring pipe roughness or just fooling yourself as to whether or not you are measuring at all.

Q. Did you use a different method than that which you have described, in determining the percent of depreciation to be deducted for the "trunk gathering line", to use your term, in describing that portion of the line running from Windmill Junction to Liberal Station?

A. No, sir, I used the same method.

Q. Now, how about the gathering lines? Did you use the same method for those? A. No, sir, I did not.

Q. Will you describe the method you used to determine the percent of depreciation for those lines? Let me ask you this while you are seaching through your papers:

Whether you used the same method on field lines and [fol. 2741] gathering lines.

A. No, sir, I used that method only on the main lines.

Q. But my question is: Did you use a different method on both gathering lines and well lines?

A. Yes, I used a different method. I did not use the same method.

Q. But it was the same method for the latter two?

A. In general, a determination on gathering lines was made for gathering lines and the results then used for well lines.

Q. All right. Now, will you please explain the method used for gathering lines and the well lines?

A The gathering lines in the Texas field, using both my own observations and those shown in the company's reports, I had twelve observations at which no rust were shown, I had four at which there was definite surface rust, and I had six at which there was shallow metal attack, and I had five at which there was pitting.

Now, assigning to the condition of no rust a value of 98 percent, to the condition where there was surface rust a value of 97 percent, to the condition where there was shallow metal attach a value of 95 per cent, and to the condition where there was actual pitting a value of 90, I arrive at a weighted figure of 95.77 for pipe in those lines, and I used a condition of 95 percent even.

Q. Now, Mr. Biddison, I notice you have changed your [fol. 2742] percents for similarly described conditions.

Now, on the field lines or, rather, on the gathering lines, you ascribe a percentage of 98 where there was no rust, whereas on the main lines you used a percentage of 99 where there was no rust. Why the difference?

A. It was just simply that in my judgment there is more apt to be more deterioration in those lines in the field under those conditions than on the main lines.

Q. What would be the cause for that?

A. Well, the cause for that would be that the lines in the field do not have as good a protective coating, did not have originally, and have not held up as well.

I am simply allowing in that estimate for the conditions that I can foresee that would affect those values.

Q. What kind of coating did the gathering lines have?

A. A great many of those are coated with a cold paint, whereas the main lines are, in general, coated with a hot application.

Q. What is the name of that paint?

A. Ace paint, I believe it is.

Q. Wasn't that paint, namely, Ace paint, used on the main lines?

A. No, that is very largely a bitumastic coating applied hot.

Q. Now, when you found pitting on the gathering lines, [fol. 2743] you put those lines in 90 percent condition, whereas when you found pitting on the main lines, you put them in 95 percent condition. Why the difference?

A. Because I think those conditions represent more depreciation on those lines than they do on the main lines.

Q. Those same conditions? A. Yes, sir.

Q. Can you give us any further reason than the mere repetition of your conclusion? What is the basis for your conclusion?

A. I think that in the field lines that because of the general condition of the protective coating, there is very likely an amount of depreciation on the pipe itself by virtue of attack on the pipe itself, than is represented by the observations, and I simply allowed for it.

Q. You didn't see any more depreciation at a point on a field line where you used a 90 percent condition, than you did at a point on a main line to which you ascribed a 95 percent condition, did you?

A. No, but I allowed for that, which I think represents the facts.

Q. The unobserved facts?

A. Yes, sir. It was my opinion that they had suffered that much depreciation and so I set it down at those figures.

[fol. 2744] Q. Even though you didn't see it?

A. Yes, sir.

Q. You didn't make any allowance for any depreciation which you did not see on the main lines, did you?

A. I certainly did. I took off one percent on those main lines where there wasn't a sign of rust, just for that very reason.

Q. And you took off two percent on the gathering lines where the same condition exists?

A. That is right.

Q. Are these percentages related to 100 percent? By that, I mean when you find a field line in 90 condition that means it is 90 percent of 100 percent, does it not?

A. That is what percentage means.

Q. And 100 percent means what?

A. It means perfect condition, that it has suffered no loss in value.

Q. So far as you can see.

A. It means that it has suffered no loss in value if it is 100 percent condition.

Q. So far as you can see?

A. See or not see it. If it is 100 percent condition it has suffered no loss in value.

Q. Now, 90 percent condition is related, is it not, to a zero point, or is it? A. Yes.

[fol. 2745] Q. When is zero point reached?

A. When all value is lost.

Q. And when does that come about?

A. That comes about when you can't use the article for the purpose for which it is intended.

Q. You mean, it is the point at which the pipe line will not carry gas?

A. No longer serve to carry gas. That is correct.

Q. And this pipe may possibly be removed, may it not, and retired from service, before that point is reached?

A. Yes.

Q. Then, your zero percent condition has no relation whatever to the abandonment of the pipe by reason of the alleged exhaustion of the gas supply, before it has reached the physical stage at which it will carry no gas?

A. Certainly not.

Q. How much pitting is necessary to put a pipe in zero percent condition under your theory?

A. It depends upon the pattern of the pitting.

Q. Will you give us an example?

A. If there be scattered individual pits, that is, pits not connected with each other, and which perforate the pipe walls to the extent that it is more economical to remove the pipe than to patch up the pits, then I think that pipe has reached zero value.

[fol. 2746] If, on the other hand, the corrosion pattern is one of scaling off on comparatively large areas, the pipe may reach zero value when this erosion has penetrated less than half way through the pipe walls because under those conditions the pipe walls may be so weakened that the pipe would no longer withstand the stresses to which it was intended to be put.

So, as I say, it depends upon the pattern of the attack upon the pipe how far that must go before all value is destroyed.

Q. What zero point did you have in mind?

A. Any zero point that brings the pipe into condition where it is of zero value, that is, not suitable for use any longer for such gas transmission, no matter what brought it about.

Q. Now, if you found at an inspection point that the deepest pit was as much as 75 percent through the pipe wall, what percent condition would you put that pipe in?

A. That would depend entirely upon the pattern of that pitting as to whether or not there were many other pits in that vicinity, whether this was a pit of small diameter or a large patch.

Q. You can conceive of a situation then, I take it, under those circumstances, where a pit at a point is as much as three-quarters of the way through a pipe wall, and it could still be in 90 percent condition?

A. Yes, I can conceive of where you could have a hole [fol. 27474] clear through it and still be in 90 percent condition if it is one of those pits that you could go in there and quite readily patch up.

On the other hand, I can conceive also of a pitting pattern, and I have seen many of them, that have not gone halfway through the pipe walls and yet the pipe was in substantially zero condition.

Q. You didn't take into account, did you, Mr. Biddison, the pattern of the pitting in the method you described for either the main lines or the gathering lines?

A. Yes, sir.

Q. I thought you said, wherever you found pitting on the field lines, you used 90 percent and on the main lines you used 95 percent. Is that correct? A. That is right.

Q. Will the pattern that you speak of ever affect those percentages?

A. They were generally the one pattern, that is, isolated, scattered pits. We did not have any of that pattern where such areas were eroded away so as to have any measurable effect on pipe wall strength. That would have been a different proposition, had we seen those.

Trial Examiner: We will recess until 2 o'clock.

(Whereupon, at 12:35 p. m. the hearing in the above entitled matter was recessed until 2:00 o'clock p. m. of the same day.)

. . . . . .

[fol. 2748] By Mr. Littman:

Q. Mr. Biddison, you have made a great many pipe inspections on natural gas lines, have you not? A. Yes, sir.

Q. Throughout your experience? A. Yes, sir.

Q. Have you, at any time, ever seen such pipe at any time at such inspection point which was in zero percent condition? A. Yes.

Q. Will you describe such pipe at one or two of those inspection points, what did it look like?

A. I cannot sit down and describe today a particular piece of pipe. I can only say, in general, that it looked like it was not worth anything, that it ought to be out and not in service.

Q. Can't you be a little more specific than that? Don't you have some recollection of the appearance of the pipe? [fol. 2749] A. Well, I have seen some pipe in the last sixty days that was in zero percent condition.

Q. At an inspection point?

A. Yes.

Q. Then that is recent enough for you to have a fairly vivid recollection of the situation. Can't you describe that particular pipe?

A. Well, I have seen more than one. I do not know whether I can pick out a particular one or not but I have seen pipe that was down close to that percent condition in the last sixty days.

That pipe was, generally, heavily pitted and had a number of leak clamps on it.

Q. About how many leak clamps?

A. I do not know.

Q. What was the diameter of the pipe that you are speaking of, approximately?

A. I think one was 16 and another 18 that I found in zero percent condition. That is my recollection.

Q. And what was the approximate thickness of that pipe?

A. Well, I think the 16-inch was either a quarter or 5/16, I am not certain which; and the 18-inch, I believe

that was 5/16, that is my recollection of about what the thickness was of that pipe.

Q. How much of that pipe was uncovered at the inspection point?

[fol. 2750] A. On the 16-inch, we had six feet uncovered. On the 18-inch, at one inspection hole, we had six feet uncovered and at points close to there, there were half joints uncovered that could be seen.

Q. Was the pipe leaking gas at the time?

A. No.

Q. How many leak clamps were observed in the six-foot section that was uncovered on the one?

A. I do not remember.

Q. Was there more than one?

A. Yes.

Q. Was it pretty heavily pitted?

A. Yes, very badly pitted.

Q. But there were not any holes other than those which might have been under the leak clamp?

A. That is right. There were some almost through.

Q. Do you know what kind of soil was observed at that point?

A. No, I do not. I do recall that, on the 16-inch pipe, it was in a swale. There was a low spot where the drainage was comparatively poor but I do not remember what the soil characteristics were.

I feel sure that it was not in the black waxy belt but just what the soil was I do not recall.

[fol. 2751] Q. Have you ever seen pipe in a natural gas system at an inspection point which was in zero percent condition and which did not have any leak clamps on it?

A. Yes.

Q. What caused you to put that pipe in zero percent condition?

A. Because the corrosion had been so heavy the pipe walls were so thin that I thought it was unsafe for use and ought to be discarded.

Q. How thin? A. I do not remember.

Q. Well, it was quite thin, practically gone, wasn't it?

A. Well, thin enough that I thought it was unsafe for use. I do not know how thin that was now because I have nothing before me about it. That is just one of the things

that have occurred in a long experience, occurred many times.

Q. Now, I believe you stated that you used a different method to determine the depreciation to be deducted for the lateral lines than that which was used for the main lines and the field lines and well lines.

Will you describe the method used on the lateral lines?

A. For the lateral lines in Kansas, I have taken the reports on pitting and paint condition of Panhandle Eastern Pipe Line Company and I have classified them as to [fol. 2752] whether there was no rust, whether there was definite surface rust or shallow metal attack or pitting.

On those laterals, 9 observations out of 14 showed no rust; 5 out of 14 showed definite surface rust. Weighing those observations produces 97 percent. I have, therefore, deducted 3 percent from those laterals.

Q. Have you completed your answer, Mr. Biddison?

A. Yes.

Q. Do I understand that you personally made no inspections on any of the lateral lines in Kansas?

A. That is correct.

Q. You utilized certain inspections made by company employees?

A. Yes, sir, on which there are routine inspection reports.

Q. Didn't they find any pits anywhere on this line?

A. There are none reported on the observations in Kansas.

Q. Does that mean that there were not any or does that mean that they did not record any, whether they saw them or not?

A. That means that none showed up at the points where they made the inspection.

Q. Mr. Biddison, do you know anything about the lateral line which runs from the main line in Kansas for a distance of approximately 32 miles down to Mildred, Kansas, called the Mildred lateral?

A. I know of such a line, yes.

[fol. 2753] Q. You have never seen it?

A. I have seen a little bit of pipe out of it.

Q. Isn't it a fact that that lateral is one which was the subject of a proceeding before the Federal Power Commission in an abandonment proceeding?

A. I so understand.

Q. Do you know what is being done with that line at present?

A. I understand it is being taken up and relayed some place in Illinois.

Q. Do you know how much money is being spent by Panhandle Eastern to recondition that pipe?

A. I do not think any is being spent to recondition it. I understand the line is being taken up and relayed.

Q. It is your understanding that that pipe is not going to be reconditioned prior to relaying?

A. I understand that it will be cleaned up prior to relaying but that is not what is generally referred to as a reconditioning job.

It is being put in shape for relaying. There is a little distinction there between reconditioning for use in its location and reconditioning for use in another location. It is not being reconditioned because it was in bad shape at all. It is simply being put in the best condition it can be put in for the new location.

[fol. 2754] Q. Do you know whether or not Panhandle Eastern expects to weld the pits on that pipe?

A. No, I do not know whether there are any on it or not.

Q. If Mr. Burnham, who is the company's Chief Engineer, testified that the Mildred lateral line was in 10 percent condition—I beg your pardon, in 90 percent condition or 10 percent depreciated as he did in a proceeding before this Commission in which the company requested the abandonment of that line, would you say that he was in error?

A. I do not think he so testified. That is not my understanding but I do not think that I am in a position to argue with him about a matter that is his own judgment.

Q. You do not know what he testified to in that regard, do you? A. I do not. I was not there.

Q. Obviously, if he testified that this line was in 90 percent condition and you testified that it is in 95, both of you could not be right, could you?

A. I have not testified it is in 95 percent condition.

Mr. Wheat: Mr. Littman, you said 10 percent and prior you said 90 percent.

Mr. Littman: I corrected that to 90 percent condition or 10 percent depreciation. I corrected that.

Mr. Wheat: I see.

By Mr. Littman:

[fol. 2755] Q. Now, that is the method by which you determine the percent condition of the lateral lines in Kansas. Did you inspect any of the lateral lines in Missouri?

A. Yes.

Q. Before proceeding to the question of the lateral lines in Missouri, did I understand you to say that you did not put the lateral line, called the Mildred lateral, in Kansas, in 95 percent condition?

A. I did not assign a specific condition to any single lateral line in the State of Kansas. I deducted 5 percent of the value from the lateral lines in Kansas as a whole group.

Q. Over what period of time were these inspections made on the lateral lines in Kansas to which you alluded a few minutes ago?

A. They are the inspection reports for the year 1940 and '41, mostly in '41 is my recollection now.

Q. Assuming that the Mildred lateral line is to be taken up from its location running from the main line down to Mildred, Kansas, and removed to Illinois, wouldn't that pipe be considered by you to have been fully depreciated?

A. I do not know what you mean by "fully depreciated." You mean depreciated down to zero?

Q. Yes, depreciated down to zero and retired from the service of Panhandle Eastern Pipe Line Company.

A. Certainly not. We depreciated it down to not less [fol. 2756] than recovery value at that time. If it had been known that it were going to be moved—

Q. (Interposing) What about the labor cost of installing that line? What happens to that?

A. It is lost when you remove it.

Q. It certainly is in zero percent condition, is it not, under those circumstances?

A. If it is known, if that fact be known. It was not known at the time I made the inspection.

Q. Well, when did you make the inspection? You did not make any inspection on this line, Mr. Biddison, did you?

A. I made the inspection on the system and that is the inspection I am talking about. I previously stated I did not inspect that particular line.

Q. Well, assuming the fact is that this line, this Mildred lateral, is now being taken up and sent over into Illinois for use in Illinois, what would you say with respect to the labor cost of installing that line in Kansas? Is it or is it not in zero percent condition?

A. It is gone now, certainly.

Q. Is it in zero percent condition? A. Yes.

Q. If you had known that situation when you made this inspection, would you have put that labor cost of installation in zero percent condition?

[fol. 2757] A. I would have depreciated the whole line down to its recovery value. That is exactly what I would have done.

Q. Now, we were discussing the Missouri lateral lines and I believe you stated you made some inspections on those laterals. Will you give us the number, please?

A. I made one.

Q. There are approximately 266 miles of laterals in Missouri, are there not, as shown in Schedule 11 of Exhibit 17?

A. If I can refer to Exhibit 17, maybe I can answer your question. This schedule shows there to be 266.77 miles of lateral lines in Missouri.

Q. Well, did you base your percent condition of the Missouri lateral lines on that one inspection that you made? A. I did not.

Q. What did you base it on?

A. I based it upon the routine inspection reports made by Panhandle Eastern Pipe Line Company's employees which, on the Tipton lateral, showed pitting at three locations and, at one location, showed shallow metal attack and which, on the Fayetteville lateral, one report showed pitting to the extent of 15 mills and, on the Jefferson City lateral, showed no rust at four locations and showed definite surface rust at one location.

Q. One man's opinion of what is definite surface rust and what is not might or might not coincide, is that correct?

[fol. 2758] Mr. Wheat: Coincide with what?

Mr. Littman: The two men's opinion.

Mr. Wheat: You said one man's opinion might not coincide—

Mr. Littman: (Interposing) Coincide with the opinion of another. I am sorry I did not complete the question.

The Witness: Well, I suppose there would be times when there might be a little divergence of opinion on that, yes.

By Mr. Littman:

Q. And the same is true of the other factors that you have named here from time to time, which you ordinarily take into account in determining your percent of depreciation, is that correct?

A. I suppose there is room for a little bit of difference of opinion but, among competent observers, that difference would very seldom arise.

Q. Who were the men that made these inspections on behalf of the Company?

A. The Division Superintendents in each section.

Q. Did they receive their instructions from you with rsepect to the observations at these inspection points?

A. They did not.

Q. But it was upon these inspection points, with one exception, that you relied in determining your percent condition for the lateral lines in Missouri, is that correct?

A. That is correct.

[fol. 2759] Q. Are there any lateral lines in Missouri that nobody inspected?

A. Yes.

Q. Will you name those lateral lines in Missouri upon which you had no inspection data?

A. If I have access to a map.

Q. I believe Exhibit 15 is pinned on the wall and I believe that it shows the lateral lines.

A. There is a small tap to Centerview, a short tap to Houstonia and a short tap to Pilot Grove.

Q. Could you give us the approximate distances from the legend on the map? We won't hold you to exact distances, Mr. Biddison, but I would like to have an idea about what you mean by "A short tap."

A. There is no scale shown on this map. I have to make a pretty long guess at this but those taps—

Mr. Wheat: (Interposing) Do you want to change that answer, Mr. Biddison, as far as the scale on the map is concerned?

The Witness: (Continuing) Those taps that I referred to are pretty short. I have found a scale on the map and the Centerview tap shows it to be about 2½ miles; the Houstonia tap about 4 miles; the New Franklin tap about 2 miles; the Columbia tap about 10 or 11 miles; the Moberly tap about 20 miles with a branch off of it of about 5 miles.

The Centralia tap is about 4 miles and the Fulton tap [fol. 2760] about 20 miles; Boonville tap about 4 miles. The Wellsville tap is about 15 miles. There are two or three other small sized taps of a couple of miles or so, the Bowling Green tap is about 5 miles.

By Mr. Littman:

Q. How about the Windsor tap running south from a point just west of Houstonia station? Were any inspections made on that lateral?

A. No, sir.

Q. How long is that lateral, approximately?

A. About 10 miles.

Q. Now, Mr. Biddison, how did you arrive at the percent of depreciation for these lateral lines which you just named and on which neither you nor the company made any observations?

A. On the Tipton lateral, it is my estimate that there has been a loss of 30 percent in value. Therefore, I deducted from the value of the Tipton lateral 30 percent. On the—

Q. (Interposing) Pardon me, would you mind explaining how you arrived at that 30 percent before proceeding to the next lateral?

A. That is my judgment as to the amount of value that has been lost by virtue of the fact that, in four of the lo-

cations, there has been considerable pitting and, at one location, it is a shallow metal attack.

Q. Now, that Tipton lateral is one that you had some [fol. 2761] inspection data on that was made by the company?

A. Yes, sir.

Q. I see. Proceed with your explanation, Mr. Biddison.

A. On the observations on the Fayette lateral and Jefferson City lateral, they being the company's inspections, since there was pitting only at one location out of 7 inspections, I estimate that there has been a loss in value of 5 percent on the pipe and I have, therefore, deducted 5 percent from the value for all the pipe and equipment in the lateral lines in the State of Missouri exclusive of the Tipton lateral.

. . . . . .

By Mr. Littman:

Q. You did not accord any weight to the observations on the Tipton lateral then, did you?

A. Yes, I applied the observations on the Tipton lateral to the Tipton lateral.

Q. That lateral was found to be 30 percent depreciated, was it not?

A. That is my estimate of it, yes, sir.

Q. The other two laterals which you named, namely, Fayette and Jefferson City, on those you found approxi- [fol. 2762] mately 5 percent depreciation, did you not?

A. I did not find that from the observations but I used 5 percent for the Fayette lateral, the Jefferson City lateral and the other laterals in the State of Missouri.

Q. Why?

A. To allow for the loss in value which had occurred on them.

Q. How did you know 5 percent loss had occurred on them, Mr. Biddison?

A. That is my estimate on what had occurred, based on the information which I have recited.

Q. Let me get at it this way: There were observations made by the company representatives of the Tipton lateral, is that correct?

A. Yes, sir.

Q. And were there observations made on the Fayette lateral?

A. Yes.

Q. And were there observations made on the Jefferson lateral?

A. Yes.

Q. And those three laterals were the only three upon which any observations had been made, is that correct?

A. I think that is right, yes, sir. Those are the only ones I find of record.

[fol. 2763) Q. Now, the Tipton lateral was found to be 30 percent depreciated, is that correct?

A. That is my estimate of the depreciation that has occurred in its based upon the information.

Q. At the inspection points on the Tipton lateral?

A. Yes, sir.

Q. And the percent of depreciation ascribed by you to the Fayette and Jefferson laterals was 5 percent, is that correct?

A. Based upon the observations there, I estimate there has been 5 percent depreciation occur in the other lateral lines in the State of Missouri, exclusive of the Tipton lateral. These other lateral lines include the Fayette lateral, the Jefferson City lateral, and the conclusion I have reached is based upon the inspections on the Fayette lateral and the Jefferson City lateral.

Q. Without giving any weight or effect to the inspections made on the Tipton lateral, is that correct?

A. That is correct.

Q. Now, will you tell me, Mr. Biddison, how you can arrive at a conclusion that a lateral, such as the Moberly lateral and its stub totaling 25 miles in length was in 95 percent condition without having made any observations on that lateral and without having before you anybody else's observations on that lateral?

[fol. 2764] A. I have not said that that lateral was in 95 percent condition nor that it had suffered 5 percent depreciation. I have said that, based upon the data which is available to me on the Fayette lateral and the Jefferson City lateral, that I estimate there has been a loss in value of 5 percent on the lateral lines in the State of Missouri, exclusive of the Tipton lateral.

Q. Well now, how much is being deducted from book cost in your Exhibit 69 for the Moberly lateral?

A. I have not made any segregation of the Moberly lateral in that respect.

Q. Well, it certainly would be 5 percent, wouldn't it? It would have to be, wouldn't it?

A. I have not made any deduction on the Moberly lateral, as such. I have made a deduction on a group of laterals as an over-all figure for the group.

Q. None of which exceeds 5 percent depreciation?

A. It is 5 percent on the group. I have not segregated the group and applied individual figures to them.

Q. The group that you speak of is the group on which you did not ever make any observations and is the group on which neither the company's representatives nor anybody else, so far as you know, ever made any observations, is that correct?

The Witness: Will you read me that question again?

(Whereupon, the pending question, as recorded, was [fol. 2765] read by the reporter.)

By Mr. Littman:

Q. When I speak of "group", I mean the group exclusive of Tipton, Fayette and Jefferson laterals.

A. No, the group includes the Jefferson and Fayette laterals. The group includes all lateral lines in Missouri exclusive of Tipton lateral.

Q. Well, Mr. Biddison, do you think that the data that you had on the Tipton, Fayette and Jefferson lateral was sufficient data upon which to predicate a true and correct percent condition on the other lateral lines in the State of Missouri?

A. Of course, it is not as good as if you had twice as much information but it is enough upon which to draw a rational conclusion.

Q. Why didn't you weight into your judgment the findings on the Tipton lateral?

A. Because my information that I secured upon inquiry indicated that on this line, conditions were particularly severe and the information obtained upon the inspection of the main line running clear across the State did not indicate that such conditions were at all general in the State.

Q. Well, you certainly used two laterals, namely, the Fayette and Jefferson laterals which showed the lowest percent of depreciation and applied that to the remaining laterals in Missouri which you did not observe?

[fol. 2766] A. I used the only other two available. If there had been ten others available, I would have used them.

Q. Why were the conditions on the Tipton lateral so extraordinary as not to be usable as data?

A. I do not know. All I know is that the conditions indicated by the reports show them to be unusable.

Q. Now, did you make any inspections on any of the laterals in Illinois? A. Yes, sir.

Q. How many inspections did you make? A. Five.

Q. Were there any lateral lines in Illinois upon which neither you nor company representatives made any inspection? A. Yes.

Q. Will you name those, please, and give the approximate mileages from Mr. Burnham's map No. 15?

A. Roodhouse lateral, about 5 miles; Jacksonville lateral, about 10 miles. There may be, in addition, some branches of laterals on which there were no inspections. I cannot determine that without an analysis of the inspection reports on the alignment map.

Q. Now, there were a number of river crossings, were there not, on the lateral lines in the States of Missouri and Illinois?

A. Yes, there are some river crossings on some of [fol. 2767] those laterals.

Q. For instance, there is in Illinois the San Gamon river crossing and the Illinois River crossing, is there not?

A. Yes, and the Mackinaw River and Salt Creek.

Q. You did not make any detailed inspections on any of those river crossings, did you, Mr. Biddison?

A. No, sir, I did not.

Q. In Missouri, there is the Salt River and Turkey Creek crossings, is there not? A. Yes, sir.

Q. The Mississippi River crossing and the Missouri River crossing, is that correct? A. Yes.

Q. Did you make any inspections on those river crossings, Mr. Biddison? A. No, sir.

Q. Now, speaking of inspection points, generally, at which you personally were present, Mr. Biddison, who

selected the various inspection points over the pipe line system? I am now speaking of all of the lines that were inspected?

A. I did.

Q. Will you describe, generally, the method pursued by you in selecting these inspection points?

A. Well, the method was to roughly secure a fairly uniform distribution of observations over the pipe line [fol. 2768] system and restrict the observations mostly to the larger lines.

Q. May I interrupt to ask, Mr. Biddison, who determined the number of inspection points? A. I did.

Q. What was the basis of the number selected? Was it based upon the amount of pipe or what? What governed that situation?

A. Well, the thing that governed was my judgment of the number of inspections that would be requisite to make a rational determination of the condition of those mains.

Q. And by mains here, you are talking about the entire pipe line?

A. That is right. I had it in mind as to well lines, that observations upon the larger gathering lines would give a comprehensive picture of the situation that existed upon pipe lines in either of the producing fields and that, therefore, it would not be necessary to make inspections on the smaller well lines, that their condition would be in accord, generally, with the condition found upon gathering lines.

As to the Local Area around Kansas City, it was my idea that it was not advisable to use time inspecting that pipe when it was required that we be prepared for this hearing by a specified day which did not allow much time for preparation and that their value could be predicated upon the prospects of future life if they had not already suffered obsolescence.

[fol. 2769] Q. May I interrupt to ask, did you use the company's soil survey in locating the inspection points?

A. I did not.

Q. You knew there was such a survey, did you not?

A. I knew some soil survey work has been done.

[fol. 2770] Q. Now, did you use a map to assist in the selection of the inspection points?

A. Yes, sir. I did.

Q. And did you spot the inspection points on the map over the lines?

A. Yes, sir. I made approximate locations upon a system map and I discussed the number of locations and their approximate location with representatives of the Federal Power Commission prior to making the final and definite locations.

That was done with the view that those representatives might themselves wish to make some locations and in the final analysis, I, myself, made all the locations and using this system map as a guide, the locations were marked off upon alignment sheets so as nearly as possible, to obtain locations that would be convenient of access by automobile.

Q. How did you determine the spacing between inspection points on the lines?

A. I first examined the total number of holes and then gave them a fairly uniform distribution along the lines.

I originally had about 60 test holes upon the main lines, and I subsequently added about 31 more.

Q. You didn't select these points on the basis of, for example, one inspection point for every so many dollars [fol. 2771] of pipe, did you?

A. No, sir. I did not.

Q. It was kind of a random selection, was it?

A. I don't know whether you would call it random or not. It was a selection made in just the fashion I stated. I selected a number of holes and then gave them a fairly uniform distribution over the main line system.

Q. At points that were easily accessible by automobile?

A. Well, at points that we thought would prove to be fairly ready of access.

Q. Now, were those holes dug at precisely the point or points designated by you on this map?

A. No, there were a few instances where the locations were moved a little bit.

Q. What were your instructions with respect to the exact point at which the inspection holes should be dug?

A. If this proved to be a point where it would be of considerable inconvenience to the land-owner, or a location where there were obstacles to digging, or where it was solid rock so that the digging of the hole would be unduly expensive, the field superintendent had freedom of action to move the location.

Q. How far could he move it one way or the other?

[fol. 2772] A. I didn't set any limit on it.

Q. And he did move some of those inspection points, did he not?

A. Yes.

Q. Your inspection point was designated on the map close to a road in each instance, was it not?

A. I picked locations on the map which were close to what were designated as roads on the map.

Q. And you left the matter of the precise location in the hands of the superintendent?

A. I gave the station location for the hole and gave instructions which I have already recited, but if, as a matter of practicability, the location was one where the digging of a hole would be unduly expensive, or would cause a property owner undue inconvenience, it would be satisfactory to move the location.

Q. Now, Mr. Biddison, you mentioned something a moment ago about representatives of the Federal Power Commission in connection with these inspection points. Did any representatives of the Federal Power Commission select any inspection points?

A. No, sir. They refused to do so on the final analysis.

Q. So that the selection of the points was entirely yours and that of the superintendent?

[fol. 2773] A. The selection of the point was entirely mine, as I have previously explained two or three times.

* * * * * * * *

Q. Mr. Biddison, I believe you testified that the inspections which you made for the purpose of this proceeding were the same as that which would be required to determine the value and condition of the property for the purpose of purchase or sale, is that correct?

A. Yes, sir.

Q. Does your percent condition represent the proportion of the pipe lines which a prospective purchaser would expect to receive for his money?

Mr. Culton: May I have that question read, again?

(Thereupon, the last question was repeated as recorded by the reporter.)

By Mr. Littman:

Q. Expressed in percent of condition new, if that will help clear it up.

A. Well, it might or it might not, depending upon the condition of sale.

Q. Well, then, what do you mean when you say that the inspections which you made for the purposes of this proceeding, were the same as those which would be required [fol. 2774] to determine the value or condition of the property for the purpose of purchase or sale?

A. Well, if a purchase or sale is to be made, there is usually some bargaining about it. But the matter of what the value is is always a matter for consideration, and it is this value that I sought to determine by use of the results of my inspection and other factors.

Q. Well, does your percent condition then represent the percentage of the value of the pipelines which a prospective purchaser would expect to pay?

A. I think what a prospective purchaser would pay is a matter of bargaining, but the value is a guide to him in making his negotiations.

Q. And this percentage would be your recommendation to a prospective purchaser in that connection, would it not, if you were representing the prospective purchaser?

* * * * * * * * *

The Witness: The percentage which I have deducted is the percentage which I would tell a prospective purchaser if I were working for him, or a prospective seller if I were working for him, by which the property had lost value.

By Mr. Littman:

[fol. 2775] Q. Now, what is the purpose for which a purchaser would use this property?

A. In making up his mind what price he could afford to pay for it.

Q. Perhaps you misunderstood my question, Mr. Biddison.

To what use would you expect a purchaser of this property to put this property of Panhandle Eastern's system? What would a prospective purchaser be expected to use this property for?

A. The only purpose I know to use it for would be to transmit, produce and sell natural gas. That is what it is designed for and used for and usable for.

Q. And what you have said, of course, is true of the pipe line, isn't it?

A. It is useful for the transportation of the gas; yes, sir.

* * * * * * *

Q. Now, don't you think that under those circumstances, a purchaser of this property would take into consideration in the fixing of the price that he was to pay for this property, the length of time that this line will remain useful for the purpose of carrying gas?

A. Yes, I feel right sure he would.

Q. And would he make some deduction from cost new [fol. 2776] by reason of the claimed depletion of the gas supply?

A. No, I think not. On the contrary, I think he would pay a handsome bonus for the fact that the thing is finished; operating, the plant is proven and tested, operating efficiently, the market is developed, and the concern has a history of business and success rather than a prospect.

Q. And suppose this purchaser were contemplating buying this property in 1964, one year before, according to your claim, the gas supply would be exhausted.

Would he then deduct anything by reason of the fact that practically all of the gas supply has been exhausted?

A. I feel sure he would.

Q. Certainly. And he would make a deduction in his own mind a good deal sooner than 1964, would he not, by reason of the claimed exhaustion of the gas supply?

A. I think probably he would.

Q. Have you made any deduction from your value or book cost by reason of that element, Mr. Biddison?

A. No, because that element is not operative as to value on this property and will not be operative on this property until after such time as, due to the failure of gas supplies, the construction of the system would not be an economic venture.

Q. But it is operative right now, as far as you are concerned, in fixing an annual allowance for amortization, is it not?

[fol. 2777] A. Certainly. We have to accrue for a great many things that we know will happen, things which do not cause loss in value until they occur, but the certainty that they are going to occur requires that we accrue for them in advance.

Mr. Lee: May I ask a question?

Then what happens to those accruals predicated upon the time you have fixed, if the occurrence does not take place and you continue in business?

The Witness: If the occurrence doesn't take place, that is just a pice of good luck.

Mr. Lee: It is a piece of poor luck for the consumer in the meantime, isn't it?

The Witness: That may be. On the contrary, it is a piece of bad luck for the owners of the property if those things occur and they have not accrued for them. So the best one can do is to exercise an intelligent judgment in taking care of the things which experience has shown us do occur in such a business.

. . . . . .

[fol. 2783] By Mr. Littman:

Q. You said a minute ago, Mr. Biddison, that a prediction had to be made about the abandonment date of this property. You have not made any prediction yourself, have you?

A. I have taken the abandonment date predicated as coincident with the time when gas production from these [fol. 2784] fields will not be profitable.

Q. That is simply a way of saying that you made an interpretation of the statement submitted by Mr. Ralph

E. Davis and based upon that interpretation you arrived at your abandonment date in 1965.

Isn't that all it amounts to?

A. That is substantially it and I have so explained it several times.

Q. So that it is not your prediction, but if it is anybody's prediction it is Mr. Davis'. Is that correct?

A. That is a result of his written statement and I have used the period through which he predicts sufficient supplies, or substantially that period, as a period by the end of which amortization of the property should be complete.

Q. And Mr. Davis didn't make any prediction about this property being abandoned in 1965 either, did he, Mr. Biddison?

A. No.

Q. Now, before leaving the subject of transmission lines and other lines included within the meaning of that term, I believe you testified this morning that where you found pitting at inspection points on that part of the main transmission line leading and extending from Liberal station to Greensburg station, you used a factor of 95-percent condition and, that when you came to the gathering lines and found pitting of the same type and sort, you classed those lines as in 90 percent condition.

[fol. 2785] Is that substantially your testimony?

A. That is what I did do and that is what I said I did.

Q. Now, you gave as the reason for that the fact that the gathering lines were covered with Ace paint which is a cold application, whereas the transmission lines were covered with a hot application of paint.

Is that a correct statement of your testimony?

A. There are exceptions to that, but that is a rather general situation. In the field they have used a lot of that Ace paint.

Q. Are there any other reasons why you went from 95 to 90 percent on the field lines and gathering lines?

A. Yes, as I explained this morning and as I will try to do again, because the field lines are not as well protected as are the main transmission lines, and because of the field conditions in general as affecting pipe, I have made an

additional allowance on field lines for depreciation above those that I allowed on the main lines for the same viewed conditions as a matter of judgment.

Q. What are these field conditions in general that you speak of? I think I understand what you mean when you talk about paint, but the field conditions in general is something I do not understand.

A. In general, on field lines you have the opportunity for some of these small but rather intensively corrosive [fol. 2786] spots due to the blowing of drips and items of that sort.

Q. Don't you have drips on the main lines?

A. Yes, you have drips on the main lines but you do not have the liquid in those main lines as you would in the field lines.

Q. You would not have much in his line. This is the line closest to Liberal station where the gas is dehydrated.

A. You don't have much in any of the lines because the gas is dehydrated before it goes to the main lines. But you do have it in your field lines.

Q. That is a matter of corrosion, isn't it?

A. No, sir, it is not. As I was explaining, the drips from the field lines produce conditions around the lines which produce concentration of action on the pipe and, numerous elements of that sort affect field lines that you don't have on the main lines.

Further than that, you have exposed fittings on field lines that are subject to damage from stock and conveyances that get around over the producing areas, and it is for those things that I made an additional allowance from what I would have made had I seen the same conditions on the pipe on the main line system.

Q. Was that by the observation method?

A. You can call it any name you want to. I am trying to explain to you what I did and why I did it.

Q. You didn't see any effects of what you just de- [fol. 2787] scribed, did you, on these lines?

A. Yes, certainly I did.

Q. As reflected at your observation points?

A. My observations were on lines which I have classed as gathering lines and for them I have made a determination of condition and given that condition to include the well lines.

Q. All right. Now, tell us at what inspection points did you observe the effect of drips that you explained a minute ago?

A. I don't know, but I do know that I saw drips and saw the accumulation of stuff that you find around drips in proximity to pipe lines. And I know it is common to find that in fields, and you find it in the Hugoton field and in the Panhandle Field. It is in every field that I have ever been in.

Q. You didn't see the effect of it on the bare pipe, the exposed pipe, at an inspection point, did you?

A. If I did, I don't know. If I did I have not made a notation of it to that particular effect, that I now recall, at least.

Q. At any rate, one of the major reasons for the difference between the 90 and 95 percent condition which you have described, was due to the difference in the protective coating?

A. Due to what I consider to be the effects of that difference in coating. The major element is just my judgment, but I think as a matter of common sense, one can [fol. 2788] expect a greater loss in value on lines of that sort than you would find on the main lines from identical observations at scattered locations and one should make allowance for it.

Q. Although you didn't see it?

A. That is right.

Q. But where you had two of the same things, the same conditions observed on a transmission line and on a gathering line, pitting in both places of the same kind, you put the transmission line in 95 percent condition and you put the gathering line in 90 percent condition?

A. No, I did not.

Q. That is what I thought you said.

A. No, that is not what I said.

Q. What did you say?

A. I said that on the main lines for the average condition of pitting which I found, I made a deduction of 5 percent on that proportional part of the length which I computed to be pitted, and then I said that on the gathering lines where I had data that showed there was pitting, I estimated that on the average that meant a loss of 10 percent value.

Pitting on none of these lines is severe. In most cases, it is trivial.

Q. Was that 10 percent based at all upon the fact that those gathering lines might be taken up ahead of the main transmission lines?

[fol. 2789] A. No, sir, it was not.

Q. Now, you have made a deduction, as shown on Exhibit 69, from the book cost for compressor station structures shown in Line 29 of Page 1 in the amount of $57,773.53 which, according to my arithmetical computation amounts to a deduction of 4.4 percent. Is that correct?

A. That appears to be 4.39 percent.

Q. Now, did you personally visit and inspect all of the compressor station structures?

A. No.

Q. Which ones did you not inspect?

A. I did not inspect the ones in the Local Area around Kansas City.

Q. Did you inspect all the others?

A. I inspected structures at all the other compressor stations, I did not make notations on every structure inspected.

Q. Well, now, will you give us the method used by you in arriving at your percent for compressor station structures, using as an example, for instance, the Lewisburg compressor station?

In the first place, tell me how long you were there, approximately?

A. Well, I was in Lewisburg about an hour and a half.

Q. What did you do when you were there?

A. I looked at the compressors in the main compressor building. I looked at the shop equipment in the shop [fol. 2790] building and the auxiliary equipment in the auxiliary building.

Q. Pardon me, Mr. Biddison. May I interrupt you and ask you to confine your answer to observations on the transmission station structures as distingnished from the equipment?

How much time did you spend making observations on the structures as distinguished from the equipment?

A. I couldn't separate those two because I was looking at one or the other alternately.

Q. About half the time on each would, you say?

A. I don't know.

Q. What did you examine about the structures?

A. I looked to see if they were well maintained, whether corrosion was manifest, whether windows and doors were intact and, I looked for signs of deterioration.

Q. Do you recall offhand in what percent condition you placed the Lewisburg compressor station structure?

A. For the compressor building at Lewisburg station I have deducted 10 percent.

Q. Do you have any breakdown of that percent as between the various items of property?

A. No, sir.

Q. That is an over-all figure for the entire structure?

A. That is correct.

Q. Now, in order that it may be perfectly clear, you didn't put a percent condition on the foundation, for instance, and then on the floors and then on the lighting, [fol. 2791] heating and plumbing, and then on the siding and roof, did you?

A. No, sir, I did not.

Q. How did you arrive at this over-all 10 percent?

A. That is my judgment after having looked at the structure and found that so far as the framing was concerned there was no deterioration noticeable, but having also noted that there was some loss of zinc on the galvanized coating on the corrugated sheets.

Q. What part of the cost, would you say, of a structure of this kind, is represented by the walls and roof, that is, the corrugated sheet iron to which you referred?

A. I can't give you a breakdown on that. I have nothing before me that would give it.

Q. Do you have a rough idea of approximately the percentage of the over-all cost?

A. I have nothing before me. It would be purely a guess on my part in the absence of any information being available.

Mr. Culton: You might refresh his memory, Mr. Littman, from what you are looking at there.

By Mr. Littman:

Q. Did you look at the roof of this compressor station structure at Lewisburg?

A. Yes.

Q. How did it look to you?

[fol. 2792] A. It looked like some of the galvanizing was pretty thin on it, on the old portion.

Q. Did you make any inquiry of any one at the compressor station with respect to the condition of that roof and the corrugated sheet-iron walls?

A. I don't recall having done so. I don't think I did.

Q. Well, in what percent condition, you having observed this roof and the walls, would you put the roof and the walls?

A. I didn't segregate it. As I stated, I deducted 10 percent for the structure.

Q. Well, you looked at it, didn't you?

A. Yes.

Q. Well, tell us.

A. I have told you.

Q. Tell me now. What percent would you have put it in had you made a segregation? You saw it, and it wasn't very long ago.

A. I don't know. I deducted 10 percent on the building as a whole, and I did not make a separate determination of the amount to be deducted on the constituent items thereof, nor did I make any records from which I could do so.

Q. Did I ask you, Mr. Biddison, whether you did or didn't? I asked you now to state the percent condition which you would, in your opinion, place upon the walls and roof of the Lewisburg compressor station.

[fol. 2793] A. I don't know.

Q. You were talking a minute ago about the condition it was in. You said it had lost some metal and so forth. Don't you remember enough about it to give us an idea of the percent condition?

A. No, sir, I do not. My field notes do show that on the main building, the galvanized sheets were about 90 percent condition, but I have no segregation whatever as between walls and roof, but the over-all figure on those sheets.

[fol. 2795] By Mr. Littman:

Q. Now, you have made an allowance or deduction for depreciation as shown on Page 2 of Exhibit 69 near the bottom of the page of $42,540.70 for depreciation on the gasoline system property.

That represents a deduction for depreciation of 6 percent, does it not?

A. That is substantially it. It looks like it would be just about that.

Q. All of this property described in Lines 19 to 29, inclusive, represents the Liberal gasoline plant, does it not?

A. Yes, sir, and Lines 26 and 27 represent construction work in progress at the gasoline plant.

Q. Yes, that is a small item. And, of course, you have made no deduction for depreciation on that?

A. That is correct.

Q. Do you know when the Liberal gasoline plant was constructed? A. 1936.

Q. So that at June 30, 1941, this plant was approximately 4½ years old, wasn't it? A. Yes.

Q. Now, your deduction of 6 percent for depreciation represents an average depreciation of 1.33 percent per year since the gasoline plant was constructed 4½ years ago, does it not?

[fol. 2796] I am speaking now of an average.

A. The total amount which is depreciated divided by its age represents a figure about like that.

Q. Now, you are claiming in Exhibit 68 for an annual allowance for replacements on this gasoline plant as shown in Line 33 of that exhibit the sum of $34,993, or 5 percent per year, are you not?

A. Yes, sir, that is correct.

[fol. 2797] Q. At any rate, your claim for annual allowance for amortization and for replacements on the Liberal gasoline plant totals approximately $50,000 a year, does it not?

A. Yes.

Q. And your deduction for accrued depreciation over the expired life of Liberal gasoline plant of 4½ years is only $42,540. Is that correct?

A. That is right.

Q. Now, let's turn to general office equipment, Mr. Biddison. You have deducted approximately 15 percent for depreciation on that equipment, have you not?

Line 2 of Page 2 of Exhibit 69 shows office equipment as per books in the amount of $78,082.36, and the deduction [fol. 2798] for depreciation in the amount of $11,712.35, which makes a reduction of 15 percent, does it not?

A. Yes, sir.

Q. Now, how did you go about determining the depreciation to be deducted for the office equipment?

A. That is simply my judgment of the amount by which that equipment has lost value.

Q. Did you observe all of the office equipment owned by Panhandle Eastern Pipe Line Company, wherever located?

A. I don't think so.

Q. How much of it did you observe approximately, in percentage?

A. Well, I think probably I have seen 75 or 80 percent of it.

Q. Did you ascribe a definite percentage to each item of office equipment that you observed?

A. I did not. I estimated that, on the whole, it had lost about 15 percent of its value.

Q. How did you estimate the 80 percent of this equipment that you didn't see?

Mr. Wheat: The what percentage?

Mr. Littman: The 20 percent. I am sorry.

The Witness: I didn't estimate it. I estimated that, on the whole, this $78,082.36 worth of office equipment had lost 15 percent of its value in one estimate. I didn't [fol. 2799] segregate it down between property which I had seen and property which I had not seen. I didn't break it down at all in any way, shape or fashion.

Q. How did you arrive at the percent condition of the property which you did not see, by the observation method?

A. I didn't arrive at it separately. I arrived at the conclusion from what I did see, that the property as a whole had lost value to the extent of 15 percent and, therefore, I deducted 15 percent.

Q. Without looking at one-fifth of it?

A. That is right.

. . . . . .

[fol. 2801] Q. Suppose you tell us upon what you based this 15 percent. What did you look for, and what did you see? Tell us about it.

A. I saw the equipment was generally in excellent condition and showed little signs of wear and tear; that the machines and calculators were in excellent shape; that the steel filing cases showed practically no wear and tear.

Some of the office furniture and fixtures was of quite recent purchase.

Now, I have at various times examined office furniture and fixtures in detail and assigned a specific condition to each and every individual item on the inventory, and having done that in some other cases, I think I have been expe-[fol. 2802] rienced enough in looking at that sort of material that I can form an over all judgment that may not be exact, but is close enough to the truth to serve the purpose and very little in error, if any, one way or the other.

Mr. Lee: Did you have before you the books of the company showing what this furniture cost?

The Witness: I did not.

By Mr. Littman:

Q. You had to have the cost of the property or some basis of cost in order to make a proper weighting, and in order to arrive at a properly weighted percent condition, did you not?

A. As I have previously stated to you, Mr. Littman, in regard to this item of office furniture and fixtures, and I will state it again, I did absolutely no weighing on it whatever.

It is my judgment that that property as a group has lost 15 percent of its value.

Mr. Lee: Without [tell] us what that value is from which you deducted 15 percent?

The Witness: Yes. The value against which I applied the 15 percent is shown in the exhibit which we are discussing.

* * * * * * * *

[fol. 2806] P. McDonald Biddison, a witness, having been previously sworn, resumed the stand, was examined and testified as follows:

Cross-Examination (Continued).

By Mr. Littman:

Q. Mr. Biddison, did you make an inventory of the property of the Panhandle Eastern Pipe Line Company and its wholly-owned subsidiary, Illino Natural Gas Company?

A. I compiled an inventory.

Q. What was the basis of your compilation of inventory?

A. The basis of my inventory was a statement of the property upon the plant and property records, details of property records maintained by the Gas Production Department, details of gas property maintained by the Engineering Department of Panhandle Eastern Pipe Line Company, and with respect to some small classifications of comparatively small amounts of property, a field check and inventory. That applied, however, to a very small amount of property.

Q. Is that the character of an inventory that you usually make for purposes of rate proceedings?

A. It is if there is sufficient information available. If there be not sufficient information available, it is some-
[fol. 2807] times necessary to resort to field count in order to obtain suitable inventory. That is seldom necessary, however.

Q. Well, let me see if I correctly understand your testimony with respect to inventory.

You relied on the records or inventory made by the company, did you not?

A. Very largely.

Q. In other words, you did not go out and make your own inventory of the property, did you?

A. I didn't go out and make a new count on the property. I relied on the data which was available in the office, with some supplemental checks in the field on some few items and spot checking on general items.

Q. Do you know, of your own knowledge, whether all the property whose book cost is reflected in Exhibit 69, is all present and accounted for as used and useful in the public service?

A. I do not.

Q. In arriving at your weighted percent of depreciation to be deducted, did you base your percentages upon the assumption that all the property whose cost is included in Exhibit 69 was all present and accounted for as used and useful in the public service?

A. It was not necessary to make any assumption whatever in that regard. I determined the percentage by which [fol. 2808] various classifications of property have lost value. I have applied those percentages to the stated value.

Q. Well, in arriving at your basic percentages of depreciation, you took the company's inventory at face value, did you not?

A. I did not take any inventory in connection with Exhibit 69. I simply applied the results of my observations to the stated book value of the various classes of property.

Q. Well, I am now speaking of your original determination of the depreciation based on the reproduction cost of the property.

A. In my reproduction cost estimate of the property I made spot checks to check the inventory, and I checked the records in the Engineering Department against those on the plant and equipment records to reconcile any discrepancies, and to make sure that there were no material errors in inventory that would affect the result.

Mr. Wheat: May I ask the witness a question?

Mr. Littman: Yes.

Mr. Wheat: In this last answer, you were referring to what you did in connection with Exhibit 62, were you?

The Witness: Yes, and 39.

By Mr. Littman:

Q. How extensive was your spot check of the company's inventory?

[fol. 2809] A. Well, I checked the footage of pipe on various lines as shown by the plant and equipment records, with the footage shown by the Engineering Department's survey records upon completion of lines.

I checked the fact that the compressor stations are substantially as called for by those records.

I have been in every one of them. I had been in all of them prior to the time of preparation of this case and knew what most of them contained. I have been in every one of them since.

I have seen a great many of the structures under the heading of "Transmission system measuring station structures." I have seen a great many of the wells and well measuring station structures and their equipment. I have taken photographs of the system from one end of it to the other.

Q. Did you make any inventory of the office equipment? A. I did not.

Q. Did you make any check of the company's inventory of the office equipment? A. I did not.

Q. In other words, you cannot state positively that all of the office equipment which appears on the company's books as of June 30, 1941, is present and accounted for and used and useful in the public service, can you?

A. Obviously not, since I didn't take an inventory of it, [fol. 2810] obviously not.

Q. Do you know what amounts have been accumulated in the depreciation reserves of the Panhandle Eastern system June 30, 1941? I mean by "depreciation reserves" reserves for depreciation and amortization and depletion.

A. No, sir, I do not have that data before me.

Q. Do you have a copy of Exhibit 48 before you?

A. No, sir.

Mr. Culton: It is Mr. Watkins' balance sheet.

The Witness: No, sir.

By Mr. Littman:

Q. I hand you a copy of Exhibit 48 and refer you to Page 2, lines 28 to 33, inclusive, and ask you whether I am correct in stating that the balance in the reserve for depreciation of gas plant as of June 30, 1941, was $9,345,403.01?

Mr. Wheat: Are you asking this witness to testify as to a fact on that or whether he sees that figure on that exhibit?

Mr. Littman: I am asking him whether he knows that to be a fact.

By Mr. Littman:

Q. Do you know that to be a fact?

A. All I know is that the figure is correctly read from the line and page of the exhibit quoted.

Q. Do you know whether or not that is the correct balance in the reserve for—

A. (Interposing) All I know about it is—

[fol. 2811] Q. Just a minute. —For depreciation of gas plant as of June 30, 1941?

A. All I know about it is that the figure was correctly read from the line and page of the exhibit quoted.

Q. Am I correct in stating that the figure shown for reserve for amortization and depletion of producing natural gas land and land rights, as of June 30, 1941, is $403,389.43 as shown on that exhibit?

A. All I know is that the figure has been correctly read from the line, page and exhibit quoted.

Q. And am I correct in reading from that exhibit that the reserve for abandoned leases at June 30, 1941, was $386,721.48?

A. All I know is that the figures were correctly read from the line, page and exhibit quoted.

Q. Do you have an opinion as to whether or not the total of those amounts of $10,135,513.92 represents reasonable and proper reserves?

A. Yes, I have an opinion on that matter.

Q. And what is that opinion?

A. My opinion on that matter is that as a matter of corporate business policy those reserves are a satisfactory balance for the present situation.

Q. And they are reasonable and proper?

A. From a corporate and business standpoint, yes, sir.

[fol. 2812] Q. Well, what other standpoint do you have in mind?

A. Well, from the standpoint of testing for what may be called the reserve requirement, I do not know whether they are in line or not.

Q. You advised the company, did you not, that the aggregate annual provision and the total reserves provided to date, were reasonable and proper?

A. I have so advised them upon occasion.

Q. And am I correct in stating that the total deduction that you recommend from book cost for depreciation is the amount shown at the bottom of page 2 of Exhibit 69 in the amount of $3,903,102.46?

. . . . . .

The Witness: I have not recommended it as a deduction from book cost. I have computed it as the amount by which the property had lost value, basing the computation upon book cost.

By [the] Littman:

Q. The figure that I have read you is the total deduction? A. $3,903,102.46, yes, sir.

Q. Before leaving Exhibit 69, Mr. Biddison, I would like to take up the account shown on Page 1 of that exhibit entitled, "Compressor station equipment" shown in Line 34, which has a book cost of $8,436,264.23, and [fol. 2813] from which you deducted for depreciation the sum of $622,777.63.

I believe you have explained generally the method used by you to determine the depreciation to be deducted. That method was based upon the total hour life and expired hour life of the machinery, was it not?

A. It was for the main compressing units and for the auxiliary engine and generator units. It was not for any other property.

Q. Can you state the total life used by you for engines Nos. 500, 503, 504 and 505 at the Olpe station?

A. Are those numbers of main compressor units?

Q. Yes.

A. I have based the life of the main compressor units at Olpe station upon 300,000 engine-hours.

Q. And what was the expired life expressed in hours of these engines?

A. One engine had operated 14,881 hours.

Q. Which one was that?

A. No. 500. No. 501 had operated 15,087 hours; No. 502 had operated 15,329 hours; No. 503 had operated 14,808 hours; No. 504 had operated 14,014 hours; No. 505 had operated 12,180 hours.

Q. Mr. Biddison, did you know at the time you made your estimate of the depreciation to be deducted for these engines, that several of the cylinders had been [fol. 2814] changed from their original positions due to repair of cracks and leaking liner joints?

A. Yes, sir. I have before me a record of those changes.

Q. Did that affect your determination of depreciation? A. Yes.

Q. How?

A. That is one of the things that I am accounting for by this allowance of deduction in value based upon engine-hours used.

Q. Does your 300,000 engine-hour figure take those things into account that I just named, such as cracks and leaking liner joints?

A. Yes, and if these things become serious and of great moment they will depreciate an engine more than the engine-hours basis that I have used.

If they are not of any moment, then the engine does not depreciate as much as in proportion to the engine-hours, the way I set it up.

Q. Now, on the Haven station your deduction for depreciation was there also based upon relating the expired life in engine-hours to the total life expressed in engine-hours, was it not? A. That is right.

Q. Do you recall whether it was the same total engine-hour life at the Haven station as at the Olpe station, namely, 300,000 engine-hours?

[fol. 2815] A. No, sir. At Haven station I used 325,000 engine-hours total life.

Q. Mr. Biddison, I don't recall whether you have stated on the record the total engine-hour life used by you for each of the compressor stations.

I know you gave some of them in your direct examination but I don't know whether they were all given. Could you refresh my recollection on that?

A. No, but I can put them in the record right now.

Q. And then we will have them all at one point in the record.

A. The total lives for engines and operative engine-hours which I have used in the determination of the amounts to be deducted for depreciation which has occurred in that equipment is as follows for the main compressor engines:

Sneed station ..... 325,000 hours;
Hansford station ..... 200,000 hours;
Liberal station ..... 350,000 hours;
Greensburg station ..... 325,000 hours;
Haven station ..... 325,000 hours;
Olpe station ..... 300,000 hours;
Lewisburg station ..... 350,000 hours;
Houstonia station ..... 325,000 hours;
Centralia station ..... 300,000 hours;
[fol. 2816] Pleasant Hill Station ..... 300,000 hours;
Glen Arm station ..... 350,000 hours;
Tuscola station, for the horizontal units, 300,000 hours;
for the vertical units ..... 200,000 hours.

Q. Have you completed your answer? A. Yes.

Q. When you made your determination of depreciation of the compressor equipment at Haven station, did you know that during the 1941 over-haul four of the power cylinders at that station were found to be cracked and were repaired by the chain lock process?

A. Yes. I had a letter before me telling me about that. I asked for a statement of matters of that sort in this connection.

Q. Did that affect the total number of engine-hours which you used, up or down? A. No.

Q. In other words, am I correct in understanding that you would have used the same total engine-hour life whether you were in possession of that information or not?

A. Certainly, I would use the same engine-hour life. The engine-hour life is predicated upon a general knowledge of the way in which machinery of this character

performs. I have been working with machinery of this character since 1905, and based upon experience during that period I set up these lives for units of the various [fol. 2817] classes.

Now, the condition on these cylinders is one of having been repaired and taken care of; not a condition of being out of repair.

Q. Am I correct in understanding that you would have used 325,000 engine-hours of life for the compressor engines at Haven station irrespective of whether these repairs had been made?

A. Certainly because the life is not predicated upon whether or not you are going to have a crack or two in a cylinder or in an exhaust valve part.

The life is predicated upon how long you are going to be able to keep the unit in service.

These things here may readily affect how much it will cost you to keep the units going throughout that life, but they are not the things that fix the life.

Q. And you have made a provision for replacements to take care of repairs such as those which I have described, in your Exhibit 68, have you not?

A. No, sir. These repairs are maintenance. There is no replacement of a unit there at all. It is a plain, ordinary repair charged to maintenance.

Q. Now, if an entire cylinder were replaced, what would that be charged to?

A. Under the classification of Panhandle Eastern Pipe Line Company that is a retirement and would be charged [fol. 2818] against the reserve account.

Q. And if these repairs to the cracked cylinders do not hold up and the entire cylinder has to be replaced, of course the cost of the entire new cylinder would come out of such an allowance as that made by you in Exhibit 68?

A. That would be the net effect of it. That would not be the process, I suppose, through which the matter would be carried. The new cylinder would be a capital charge and the one removed would be charged against reserve.

The net result is the same as I mentioned and that is the way I usually like to think of it but to do so in a

proceeding of this sort gets you snarled up when you are providing for retirements or replacements.

Mr. Chamberlain: Would the cylinder be a unit?

The Witness: It is under the classification used by Panhandle Eastern Pipe Line Company.

Mr. Chamberlain: But not in the present Uniform System of Accounts?

The Witness: This classification in use by Panhandle Eastern Pipe Line Company is in accordance with the classification requirements of the Federal Power Commission.

Mr. Chamberlain: And under that they have determined that the cylinder would be a unit?

The Witness: That is correct.

* * * * * * * *

[fol. 2820] Trial Examiner: May I ask a question in connection with your testimony as to the exhibit marked for identification as 69?

After listening to these questions and answers the Trial [fol. 2821] Examiner's understanding of the purport of the entire testimony with reference to this exhibit might be condensed into this question which I will now ask:

Your deductions for depreciation as shown in this proposed Exhibit 69 reflect only your judgment of the present physical and mechanical condition of the property, as an indication to you of the percentage of useful life or capacity for service already consumed.

And in this study you have not taken into account the fact that this property may not be worn out before the gas is exhausted.

Is that a correct statement?

The Witness: Not quite, Mr. Examiner.

The deductions do include some allowances for obsolescence, they do include some allowances for loss in value or loss in service life, that cannot be seen. They do take

into account in the Local Area the fact that the reserves have been heavily depleted.

It is true, however, that generally the amount of deduction for depreciation which I have estimated is that which can be determined by investigation of the physical aspects of the property.

It is not, on the other hand, a determination of the deduction on the basis of making the deduction in proportion to the expired life in years compared to the total life in years.

* * * * * * *

[fol. 2822] Mr. Lee: (Interposing) But the last part of the question as given by the Examiner was: "Have you taken into account the fact that the property may be worn out before the gas supply is exhausted".

Mr. Wheat: "May not be worn out."

The Witness: Yes, sir, I have taken that into account and I feel certain that the property will not be worn out at the time the gas supply is exhausted.

On the other hand, I feel certain that the property will be in pretty good operative condition at the time the gas supply is exhausted and for that reason there must be provided an accrual to make the replacements that will be required to let it operate until the supplies are exhausted, and because it will have been maintained in a highly efficient state of operation, in order that the investment in it may be recouped there must be an allowance made for amortization of that investment because this highly efficient plant when the reserves are gone [fol. 2823] will be worth just salvage value.

There is another sense, however, I think, in which maybe I have not answered that part of your question, and that sense is that I have not predicated the deduction for depreciation upon any ratio of past production to total reserves. I have not considered that in general this property has depreciated, because of the partial depletion up to date of its reserves and because of the shortening of its total life by the expired life expressed either in years or in reserves.

Trial Examiner: This answer may or may not clarify the problem that was in the Trial Examiner's mind. It seems to me, Mr. Biddison, in your Exhibit 66 you approached the retirement problem purely from the standpoint of the life of a wasting asset, the exhaustion of the gas reserves, but I did assume that in your proposed Exhibit 69 you had attempted to measure depreciation from a standpoint purely of the present physical condition without regard to the number of years that this property would be required in its present purpose or its present service.

I think this will all clear up, undoubtedly, on the redirect, but the answers which Mr. Biddison has just given have rather—

Mr. Culton: (Interposing) Clarified it to some extent in your mind?

Trial Examiner: To some extent.

[fol. 2824] Mr. Littman: I think, Mr. Examiner, that in view of the fact that we have just completed our cross-examination on Exhibit 69 it might be wise to go over the various elements that he did or did not consider, to make certain on this record as to just what they were.

It won't take a minute, and I think it will clarify this record.

By Mr. Littman:

Q. Mr. Biddison, did you consider in arriving at your estimate of depreciation to be deducted, the wear and tear—and I appreciate you have answered this once but I think it should be summarized again here at this point while your recollection is refreshed and so is ours—did you consider wear and tear? A. I did.

Q. Did you consider decay? A. I did.

Q. Did you consider the action of the elements?

A. I did.

Q. Did you consider inadequacy? A. I did.

Q. Did you make any deduction for inadequacy?

A. I did.

Q. In what instance—in the Local Area?

A. No; in general on my allowance on the gasoline plant. I have made some allowance there for inadequacy.

[fol. 2825] Q. Is that the only place or are there others?

A. That is the only one that I recall now.

Q. If there are others, they would be—

A. Minor amounts.

Q. Did you consider the factor of obsolescence?

A. I did.

Q. Where? A. Particularly in the Local Area.

Q. Are there any others that you now recall [then] the Local Area, in which you made any deduction for obsolescence?

A. Not that I recall. If there be others, they are of less amount even than the Local Area property.

Q. Did you consider changes in the art?

A. Yes, but I do not think I have any allowances that could be particularly attributed to changes in the art.

Q. You considered it but you didn't find any or make any deduction for any. Is that correct?

A. That is correct.

Q. Did you consider changes in demand and requirements of public authorities? A. Yes, sir.

Q. Did you make any deduction by reason of such fact?

A. I don't recall having done so. I think I did not.

Q. Did you consider and did you give effect to the ex-
[fol. 2826] haustion of the natural gas supply?

A. I did where I thought that exhaustion or approach of exhaustion had reached the stage that it produced an effect upon value.

Q. Now, your answer with respect to the effect that you gave to it applies only to property in the Local Area, does it not? A. That is correct.

Q. In other words, is my understanding correct that you gave no effect to the exhaustion of the natural gas supply anywhere in the entire Panhandle Eastern system other than in the Local Area? A. That is correct.

Q. Now, in setting up your annual allowances for amortization in Exhibit 66, and in setting up your allowances for depletion in Exhibit 67, and in estimating your annual accruals for replacements in Exhibit 68, taking the three together, I will ask you whether you considered the following elements— A. Yes, sir.

Q. Decay? A. Yes, sir.

Q. Action of the elements? A. Yes, sir.

Q. Inadequacy? A. Yes, sir.

[fol. 2827] Q. Obsolescence? A. Yes, sir.

Q. Changes in the art? A. Yes, sir.

Q. Changes in demand and requirements of public authorities? A. Yes, sir.

Q. And did you consider the exhaustion of the natural gas supplies? A. Yes, sir.

Q. And the latter answer applies to the entire Panhandle Eastern system, pipe lines, compressor stations and all of its physical properties, does it not? A. Yes, sir.

Trial Examiner: Mr. Littman, there would be no question as to the definition of "obsolescence" as used by the witness.

Mr. Littman: I have been reading to this witness the various elements that appear in the Uniform System of Accounts prescribed for natural gas companies on Page 4 of "Definitions", which in part reads as follows:—I will read the sentence that includes the elements:

"Among the classes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities, and in the case of natural gas companies, the exhaustion of natural resources."

[fol. 2828] Trial Examiner: Mr. Biddison, in your first answer to the question addressed to you by the Trial Examiner, if I correctly remember it, you used the word "obsolescence".

I think perhaps it might be well for you to define "obsolescence" as you used it in that answer.

The Witness: My recollection is that in that answer I used that term in speaking of investment in the Local Area.

Trial Examiner: You did not so limit it, but that may be included in your explanation.

The Witness: In the Local Area around Kansas City the properties have lost value by reason of the fact that reserves have been heavily depleted, and the investment would not now be made in full if it had not already been made.

That is, the present situation does not justify the making of the investment.

Now, under those conditions, I consider that obsolescence has taken place. It is that form of obsolescence resulting from the wasting away of the asset upon which the business depends, and the condition is referred to in the definition given in the Federal Power Commission classification of accounts which has just been read by Mr. Littman.

It is that particular condition that I have referred to under several circumstances as being a form of obsolescence.

Mr. Goodman: I understand your testimony in this way and will you please tell me if it is a correct understanding.

[fol. 2829] That in estimating the depreciation of a particular unit of property, you did not consider as bearing upon the amount of depreciation the fact that it was used in connection with a wasting resource.

You gave no consideration to the effect of a wasting resource if, in your judgment, an investor in the property would have found it advisable to place a new unit there of the same general type if the present one were to go out of service.

The Witness: That is correct.

Trial Examiner: Any other questions at this time in regard to Exhibit 69?

Mr. Chamberlain: One question I would like to ask here.

Cross-Examination

By Mr. Chamberlain:

Q. You acted as a consulting engineer for Panhandle Eastern in respect to the preparation of their registration statement for the issuance of bonds and their listing agreement with the New York Stock Exchange as mentioned heretofore, and in doing so it is correct, is it not, that you passed upon the propriety or reasonableness of the aggregate annual provision and, secondly, the reasonableness of the total reserves provided to date?

A. I have passed upon such matters upon several occasions.

Q. Well, now, in 1940 you passed upon the reasonableness of the provision for depreciation, depletion and amortization for the years 1938, 1939 and 1940, did you not?

A. I don't think I did all that in one year, for more than the one year.

Q. I call your attention to Exhibit 107 and the statement in Paragraph A at the top of Page 74.

Mr. Culton: What is the item which you are showing him? Is it a letter from Mr. Biddison or a statement from somebody else?

Mr. Chamberlain: A statement that the management has been informed by P. McDonald Biddison, an independent consulting engineer of Dallas, Texas, that in his opinion the annual amounts provided for depreciation, depletion and amortization were reasonable for this purpose.

The provisions for the years 1938, 1939 and 1940 were equal to 2.90 percent, 3.20 percent and 3.16 percent of consolidated property, book, plant and equipment accounts at the beginning of the respective years.

The Witness: Yes, that is the company's statement.

By Mr. Chamberlain:

Q. You did not do that?

A. I never said anything about that percentage proposition they have there. I never made any statement about what that was or what it should be.

Q. You mean you did not go through the formula of ascertaining the percentage, although you said that the [fol. 2831] amount was reasonable?

A. I mean by my statement that I did not determine those percentages.

Q. You mean you did not perform the mechanical feat of determining the percentage after determining that they were reasonable?

A. I didn't determine those percentages at all. Those are somebody else's determinations and you can take an amount of money and divide that by another amount and find it is a certain percentage. Somebody else did that, and not me.

Q. All right, then, I refer you to Page 73 of Exhibit 107 which shows the annual accruals for depreciation,

depletion and amortization of property account and equipment, and also the amortization of gas sales and purchase contracts, and ask you whether the figures for that were not submitted to you and whether it was not from those figures that you made your determination of reasonableness?

A. I think that is correct. I think those are probably substantially the figures that I advised them I thought were reasonable.

Q. Then, the percentages that are quoted on Page 74 are merely mathematical computations from what you said were reasonable, are they not?

A. That is correct, and it is quite apparent that I would [fol. 2832] not go out and state that a percentage figure was reasonable on property when the sums we are talking about contain items for depletion which don't properly tie in with property value.

Q. I think it would be a good time to get in the record here these facts and figures. It won't take but a few moments.

I hand you Exhibit 106 which is a registration statement of Panhandle Eastern under the Securities Act of 1933, Registration No. 2-4579, filed November 18, 1940, and I will ask you to state into the record the amount of the property, plant and equipment account as of the beginning of each of the years 1938, 1939 and 1940 as it was given to you at the time of making these conclusions.

A. I don't know whether those figures are on that page or not.

Q. Would you mind looking?

A. I can't identify the figures. All I can do is read the figures that are stated there. Whether they are the ones I used at that time, I don't know.

Q. Do you suspect that they gave the wrong figures?

A. I have no suspicions at all. I am telling you I don't know.

Q. All right. Were you to look at Schedule 5 identified as S-15, what do you find to be the balance of that account as of the beginning of the year 1938?

A. $58,060,015.10.

[fol. 2833] Q. Now, what does that show the amount of the account at the beginning of 1939 was?

A. $58,547,869.68.

Q. And what was the amount at the beginning of 1940?

A. $59,479,728.22.

Q. And what was the amount of the account at the close of 1940 which would necessarily be the beginning of 1941?

A. $64,854,956.29. Each of these amounts is qualified by a statement on this page of note A on the balance sheet, I don't know what that refers to.

Q. Well, that doesn't qualify your—

A. (Interposing) It doesn't qualify my reading of the figures from the page, but it might qualify their interpretation in some respects. I don't know.

Q. Now, Mr. Biddison, was not a copy or proof of that registration statement under the prospectus sent you before it was filed, and did you not check it before they filed it? A. No.

Q. You did not see that?

A. Well, I think I have seen it, yes. I think probably I have a copy of it.

Q. You haven't the slightest idea that the figures are not correct?

A. I don't have any reason to doubt their correctness at all.

. . . . . .

[fol. 2835] By Mr. Chamberlain:

Q. Mr. Biddison, do I understand you correctly, that you merely gave them a judgment figure of what would be a reasonable accrual on that property?

A. I gave them my judgment after investigation.

Q. But your judgment was that the aggregate amount which had been accrued each of those three years was sufficient. How could you do that without knowing what amount had been accrued and upon what amount of property it was accrued?

A. I did know the amount of property on which it was being accrued and I did know the amount of accrual for the various purposes.

Q. Then, is your objection to adopting the figures appearing in the prospectus as to the amount of the accruals? Is that your objection, that you do not want to adopt those

figures? I call your attention to Page 73 of Exhibit 107 and ask you if—

Mr. Littman: That is 106 for identification.

Mr. Chamberlain: No, 107, the prospectus.

Mr. Littman: Oh, I am sorry.

By Mr. Chamberlain:

Q. I ask you if the figures following the line reading: "Depreciation, depletion and amortization of property, plant and equipment" and the figures following the lines [fol. 2836] "Amortization of gas sales and purchase contracts" do not cover the entire amount of accruals which were submitted to you as being the aggregate which you were to determine the reasonableness of.

A. I don't know. If had copies of my letters here on that matter I think I could tell that, but I can't recall those figures after two or three years.

Mr. Wheat: We can furnish copies of those letters to you, Mr. Biddison.

Trial Examiner: Mr. Culton, you might perfect the record perhaps, on this incident.

Mr. Culton: We will furnish those as exhibits.

Trial Examiner: You have now handed Mr. Biddison some data which will perhaps refresh his recollection. That is what I had in mind and I have now stated it for the record.

Mr. Culton: We will now clear it up by presenting to the witness letters signed by him and addressed to Panhandle Eastern Pipe Line Company or different officers of it, dated December 13, 1937, December 29, 1938, December 8, 1939 and January 11, 1941, which we ask to have marked for identification as the next exhibit numbers, Mr. Examiner.

Trial Examiner: These will be marked as indicated and in the order read as Exhibits Nos. 108, 109, 110 and 111 for identification.

(The documents referred to were marked for identifi- [fol. 2837] cation as Exhibits Nos. 108, 109, 110 and 111, respectively:)

Mr. Culton: We will have copies of those and deliver them to you immediately after lunch.

The Witness: In exhibit 107, page 73, the amount shown to have been accrued for depreciation, depletion and amortization, including in amortization gas sales and purchase contracts is $2,055,500.

Mr. Wheat: May I ask for what year you are reading, Mr. Biddison?

The Witness: For the year 1938. I reported to them upon December 13, 1937—

Trial Examiner: Whom do you mean by "them"?

The Witness: The Panhandle Eastern Pipe Line Company. I reported to them that the amount which they at that time proposed to set up, $2,055,000, was within approximately $60,000 of the amount I considered proper.

Continuing for the year 1939 there is shown to have accrued $2,200,000 for the same purpose and, upon December 29, as shown by Exhibit 109—

Mr. Wheat: What year?

The Witness: December 29, 1938, as shown by Exhibit 109, I advised them that the amount of $2,100,000 which was the amount then proposed to be set up, was a reasonable provision, and continuing, for the year 1940 there is shown to have been accrued $2,210,000, and I advised Panhandle Eastern Pipe Line Company upon December 8, [fol. 2838] 1939, as shown by Exhibit 110, that the amount which they proposed to set up, $2,200,000, was a reasonable provision.

I have furthermore advised them upon January 11, 1941, as shown by Exhibit 111, that the amount which they proposed to set up for these same purposes for the year 1941, namely, $2,400,000, was a reasonable provision for depreciation, depletion and amortization.

Mr. Wheat: In that connection, Mr. Examiner, may I advert to the statement which at the request of counsel and the Examiner I made, I think on the second day of the

cross-examination, which showed that Mr. Watkins' Exhibit 49 disclosed that for the year 1941 with six months actual and six months estimate, the provision for these items would in his estimation be $2,414,657? I think the record should be tied in there so that it will show.

Trial Examiner: I am glad you referred to that. You will find that, gentlemen, commencing at Page 2482 of the transcript and I think that reference will be of interest in connection with all of Mr. Biddison's testimony given this morning.

Mr. Chamberlain: Your estimate as to the reasonableness of these accruals included, did it not, the amount, or an amount for the amortization of the gas sales and purchase contracts which were carried on the books of Panhandle during the years 1938, 1939 and 1940 as $2,930,236.40—

[fol. 2839] Mr. Wheat: From what are you now reading?

Mr. Chamberlain: Exhibit 52, page 2.

The Witness: Yes, sir, I do.

By Mr. Chamberlain:

Q. And in the operating statement on Page 73 of Exhibit 107, the amount of amortization for gas sales is stated separately from that covering the depreciation, depletion and amortization of property, plant and equipment account? A. Yes, sir.

By Mr. Chamberlain:

Q. Referring to Exhibit for identification No. 111—well, I will waive that because it shows it includes a provision for amortization of the gas contracts.

A. Yes, sir, each of those accruals includes that provision.

Q. Now, Mr. Biddison, the depreciation which you have computed in your Exhibit 69 is as of June 30, 1941, is it not? A. Yes, sir, June 30, 1941.

[fol. 2840] Q. The depreciation which you found there would be as great as it would be—or, it would be in excess of what it would have been there on December 31, 1940, would it not, or at least not less?

A. I judge it would be in excess of that existing six months previously.

Q. I make no point of the difference, but it would have been as much, would it not, at the end of December—or a little less?

A. I think so. I can't think of any reason that would reverse that general trend.

Mr. Wheat: Difference in additions?

The Witness: Difference in additions could change it as a matter of percentage, but as to the amount of dollars I don't see anything to change the general forward trend at that time.

By Mr. Chamberlain:

Q. It would be substantially the same amount, would it not?

A. The difference would be so small as to be very difficult of determination.

Q. Now, in reaching your conclusions that the aggregate of the cumulative reserve was reasonable to cover the depreciation, depletion and amortization on the property, I refer you to Page 71 of Exhibit 107 which shows the reserve for depreciation, depletion and amortization of [fol. 2841] property, plant and equipment as of December 31, 1940, and this is consolidated and is $9,189,501.24.

Now, that figure was at your disposal in order to make your determination, was it not?

A. I don't know if that exact figure was or not, but some figure representing that definitely was.

Q. It is substantially so, isn't it?

A. I have no reason to doubt the correctness of the figure here.

Q. Now, again referring to your Exhibit 69, you have made a careful examination of the depreciation on that property, have you not, and made your determination as to what that is? A. Yes, sir.

Q. Now, what is the balance, then, that would be covered in this $9,189,501?

A. That is simply the residue that is left in the account.

Q. Is that the amount, then, for amortization of the property plus the depletion of your gas lands only?

A. It is stated that the reserves for depreciation, depletion and amortization embrace that figure of $9,189,501.24.

. . . . . .

[fol. 2842] By Mr. Chamberlain:

Q. If I understand you correctly, Mr. Biddison, then it would be your judgment that of the $9,189,501.24 which had accrued for depreciation, depletion and amortization of property, plant and equipment, that not to exceed $3,903,102.46 would represent the depreciation existing in the plant account including gas wells, is that correct?

. . . . . .

The Witness: That is correct.

By Mr. Chamberlain:

Q. And the balance, then, would represent the depletion in leaseholds and amortization of the property?

A. Yes, sir, that is correct.

Q. I call your attention to Exhibit 108. I note the absence in Exhibit 108 of a statement which is contained in each of your Exhibits Nos. 109, 110 and 111, these for identification, to the fact that it is your opinion that the reserves for retirements, depletion and amortization at December 31, 1938, are reasonable reserves based on age and estimated life of the properties.

[fol. 2843] What was the reason for its omission in your letter of December 13, 1937, Exhibit 108?

A. I do not know. I just suppose I was not asked to make an expression on the matter and, therefore, did not do it. That is the only explanation I can give at this time. That is something that is not very fresh in my mind.

Q. Yes. I call your attention to Exhibit 52 on Page 2, which shows the gradual accumulation of the reserve for depreciation of gas plant and ask if the condition of that reserve up to and including 1937 refreshes your recollection as to your reason for its omission?

A. No, sir, it does not. I can give you no explanation of its omission except that I presume that I did not make an expression on it because I was not asked for an expression on it.

Q. You knew they had been accruing very light reserves up to that time, Mr. Biddison?

A. Yes, sir, that is correct.

Q. And that, up to that time the reserve was not such as would cover the depreciation on the property based on the age-life theory?

A. I do not know anything about that point. I made no investigation on that point.

Q. Then, in 1937, you made no investigation with respect to that?

[fol. 2844] A. No, sir, I did not.

Q. Then, in 1938, 1939 and 1940 you were asked to form an opinion with respect to the sufficiency of the reserve based upon the age-life theory?

A. No, sir, and never made any expression of it based on the age-life theory. When I say "age-life" theory in that respect, I mean the use of the relation of age to life as a measure of loss in value on property.

Q. I read from Exhibit 110 for identification, your letter to Mr. Neuner, Vice President of Panhandle Eastern under date of December 8, 1939:

"Further, in my opinion, the reserves for retirements, depletion and amortization at December 31, 1939, are reasonable reserves based on age and estimated life of the properties."

A. I meant by that that these properties had a long future life and that they had a low average age. I do not mean by that at all that I based the sufficiency of the reserve accruals upon any ratio of expired life to total life because I did not do that.

Q. You continued that statement each year, did you not, for the years 1938, 1939 and 1940 and also in your letter of January 11, 1941? A. I believe so.

* * * * * * *

[fol. 2846] Mr. Littman: I understand that.

Mr. Examiner, that completes, for the present, our cross-examination of Mr. Biddison on his exhibits. However, there is a matter I would like to have clarified in [fol. 2847] the record before going to another subject.

Is my understanding correct, Mr. Examiner, that Exhibit No. 39 entitled, "Panhandle Eastern Pipe Line Com-

pany and Subsidiary Companies Reproduction Cost New of Plant and Property in Business as of June 30, 1941" has been excluded in its entirety?

Trial Examiner: That is true.

Mr. Littman: Is it also true, Mr. Examiner, that Exhibit No. 39-A which is entitled, "Correction Sheets for Exhibit No. 39" is also excluded?

Trial Examiner: That is also excluded. The ruling of exclusion was made on November 24 and the ruling of exclusion applied, generally, to exhibits establishing reproduction cost or in which the reproduction cost element was conspicuous and while no specific mention was made at that time of Exhibit 70 and Exhibit 71, the ruling then made would also exclude proposed Exhibits 70 and 71.

Mr. Littman: Is my understanding also correct, Mr. Examiner, that Exhibit No. 62 is also excluded?

Trial Examiner: The ruling would also embrace the exclusion of proposed Exhibit 62 which was specifically mentioned in the ruling on November 24.

Mr. Littman: Now, we made an objection to Exhibit No. 38 which was presented by Witness Morton and which consists of two pages. I do not recall that your Honor had [fol. 2848] made any specific ruling as to the said Exhibit No. 38.

Trial Examiner: There has been no ruling that would affect the admission or exclusion of Exhibit No. 38.

. . . . . .

[fol. 2849] Trial Examiner: There being no objection to the reception in evidence of the studies marked for identification as Exhibit 69, this exhibit will be received in evidence.

. . . . . .

Mr. Culton: Defendant notes an exception separately as to the exclusion of each of the Exhibits 39, 39-A, 62, 70 and 71.

. . . . . .

Mr. Littman: Is my understanding correct, Mr. Examiner, that Mr. Wallace's Exhibits 37 and 37-A are excluded?

[fol. 2850] Trial Examiner: These were excluded by the ruling of November 24.

Mr. Culton: And the same exception for the Defendant.

* * * * * * * * *

[fol. 2851] Mr. Littman: If your Honor please, I would like to inquire of counsel for Panhandle Eastern Pipe Line Company whether they propose to make a claim here for going concern value separate and apart from reproduction cost?

The reason I ask that question is in order that I may know how to proceed with my cross-examination. I understand that Exhibit 38 has not been ruled upon by the Examiner.

I understand that Mr. Biddison made an estimate of going concern value based upon the data submitted by Witness Morton in Exhibit 38. Now, I would like to know upon the record whether counsel for Panhandle Eastern are claiming going concern value separately and apart from their reproduction cost estimates?

I think we are entitled to have that information before proceeding.

Mr. Wheat: Mr. Examiner, the company is offering its witnesses on facts now. We will make our contentions at what we deem to be the appropriate time, I assume. We have offered certain facts in respect to the cost of attaching business. Your Honor has ruled with respect to an exhibit which contained certain of those facts and we believe erroneously so ruled in respect, at least, to those facts.

I refer, of course, to Exhibits 39, 39-A. We intend, of course, at the appropriate time and when argument is provided on the matter of the rates of the company to make the appropriate contentions based upon facts which [fol. 2852] have been adduced in this record.

Trial Examiner: It is the recollection of the Trial Examiner that there has been some discussion in the record as to going concern value or the cost of developing business and it is also the Trial Examiner's recollection that counsel for the Commission have perhaps tentatively

expressed a doubt whether the cost of developing business is an inherent element in the presentation of the evidence of reproduction cost new.

Whether claim for going concern value or the cost of developing business would be relevant in the situation we have here, we will adhere to the historical cost or actual cost of the property. Is that a correct statement, Mr. Littman?

Mr. Littman: Perhaps I had better amplify my statement a little further in order to make my position clear.

I contended at the outset that all of this claim for going concern value was part and parcel of Mr. Biddison's reproduction cost estimate. He labels it as such in Exhibit 39. He calls it reproduction cost and, in his summary, he calls it fair value after depreciation.

Now, in his Exhibit 39, he clearly shows that this purported claim for going concern value which he labels clearly and definitely as reproduction cost is composed of three elements: First, a claim for "value of gas purchase contracts"; Secondly, a claim for so-called "cost of business development" which consisted of two items, one, [fol. 2853] "Payments to utility companies" and two, so-called "Carrying costs on that portion of plant idle pending the development of business."

Now, the last element, namely, "Carrying costs on that portion of the plant idle pending development of business" was a figure derived by Mr. Biddison from Mr. Morton's Exhibit 38.

That is, it was Exhibit 38 that formed the basis for the figure adopted by Mr. Biddison.

Now, it is my recollection that I inquired of Mr. Biddison during his direct testimony as to whether or not all of these costs were a part of his reproduction cost and he said they were and that being the case, we objected to it as a part of reproduction cost and your Honor has sustained that objection thus far to everything except the basic exhibit, namely, Exhibit 38.

Now, your Honor has stated in ruling on the objection to reproduction cost that counsel for Panhandle Eastern

Pipe Line Company would be given every opportunity to offer all evidence other than reproduction evidence and they might revise their exhibits and make a new proffer of evidence which, in their opinion, does not represent reproduction cost.

I say that we, at this time, have no objection whatever, and I want to be perfectly clear about this, to counsel of Panhandle Eastern Pipe Line Company coming forward, if they desire, with evidence of going concern value if it [fol. 2854] is not based upon reproduction cost and if it is not, in fact, reproduction cost; reserving, however, all of our rights to object to it on any other ground considered necessary and requisite at the time.

In other words, we invite counsel for Panhandle Eastern Pipe Line Company to offer and present any evidence that they may desire to present on the subject of going concern value which they claim is not reproduction cost.

If they wish to do that, of course, they are at liberty to do so. I want it distinctly understood that our objection heretofore made to this going concern value was because this witness labeled it reproduction cost and we assumed that he meant what he said. Moreover he testified that it was reproduction cost and your Honor rightfully excluded it.

Mr. Wheat: May I ask when he testified this was reproduction cost only?

Mr. Littman: That is my recollection of it and I shall produce the record reference of it after lunch or correct my statement if I am wrong.

Mr. Culton: He did not testify it could be used only in reproduction cost.

Mr. Littman: No.

Mr. Culton: He said it was an element that could be used in determining reproduction cost.

[fol. 2855] Mr. Littman: If I said it was only reproduction cost, then I mis-spoke myself.

Mr. Culton: You did not use the word "only" but that is an inference that could be drawn.

Mr. Littman: This is my recollection of what happened about a month or so ago. I asked him if it was a part and parcel of reproduction cost and he said it was.

Mr. Wheat: May we have that citation because we do not find that in our transcript.

Mr. Littman: I shall give you the page to which I have reference.

Mr. Culton: Page 560 is what I have. Your question was:

"And they represent real costs and actual money expended on the history of this plant rather than mere past losses?"

Mr. Littman: My question was that?

Mr. Wheat: I think that was my question.

Mr. Littman: I do not think I asked any such question as that.

Mr. Wheat: That was my question.

Mr. Culton: What he stated was those costs would be incurred in the reproduction of the property.

Mr. Littman: Yes, there was some inquiry by me that I had reference to.

Mr. Culton: This is what he testified to while he was on the stand also:

[fol. 2856] "They represent value because they are costs which would be incurred in the reproduction of this property, and they are costs which would be escaped by a purchaser who purchased the property with this business which has been attached by the expenditure of that money."

Mr. Wheat: And, of course, we shall, at the appropriate time, make such appropriate representation to the Commission as may properly appear from the facts which have been adduced on this record, whatever type of rate base they may apply to.

Mr. Littman: Well now, Commission counsel take this position: that counsel for Panhandle Eastern should make their position clear here.

They either want this going concern value or they do not. Now, if they want to sit idly by and claim that error has been committed on reproduction cost, I presume they are entitled to take that position. But if they are making any claim here for going concern value to be used in connection with an original cost is used as rate base or with a book cost rate base, separate and apart from reproduction cost, so far as we are concerned, they are at liberty to claim it.

Mr. Wheat: And the law will apply to those facts which are then shown in the record, Mr. Littman.

Mr. Littman: Well, you either want it or you do not, Mr. Wheat. You have not said you do.

Mr. Wheat: We have offered the testimony and it is in the record.

[fol. 2857] Mr. Littman: As a part of the reproduction cost. Do you want it separate and apart from reproduction cost?

Mr. Wheat: Mr. Littman, a witness in this proceeding offered a judgment with respect to this figure and that now appears of record and whether you are embarrassed by the fact that the entire Exhibit 39 and Exhibit 39-A have, upon your motion, been rejected, cannot now concern us.

The fact is we have offered this testimony and we intend to use this testimony as a basis for whatever claim may appear appropriate at the appropriate time. They are facts which we deem to be relevant to this entire proceeding and we suggest that if you have any question about this, you cross-examine Mr. Biddison upon the point.

Mr. Littman: My question, of course, has not been answered on the record.

Mr. Wheat: May I add, Mr. Littman, that it is our understanding that the item of going concern fits with any kind of rate base however it may primarily be developed.

Trial Examiner: This discussion is somewhat academic since there have been no objections stated to the proposed

Exhibit 38 which, I believe, was the basis for this discussion.

. . . . . .

[fol. 2864]

O. W. MORTON, a witness, having been previously duly sworn, was examined and testified further as follows:

Cross-Examination

. . . . . .

[fol. 2895] By Mr. Goodman:

Q. In the case of the Michigan Gas Transmission Company, you know that they built their line subsequent to the making of the Detroit contract and for the purpose of supplying its requirements, isn't that right?

A. That is my impression.

Q. So that when they made their investment and provided the capacity, they had an actual market already secured, is that right?

A. I believe that is correct.

Q. Yes, and what was the interval of time from the completion of their construction project to its attaining capacity use, do you know?

[fol. 2896] A. I do not recall that, Mr. Goodman.

Q. Well now, as an engineer, you would have some knowledge or judgment on that, wouldn't you? Well, Mr. Morton, for all substantial practical purposes, they reached substantial capacity use when the line was completed, isn't that so?

A. I do not know that.

Q. You do not. Well, you took, I take it, the situation shown in Column C as your standard for capacity use, didn't you? That is, referring to Exhibit 38?

A. No.

Q. You did not. Will you show me the distinction between what my question implies what you did and what you actually did do? A. I cannot do that.

Q. You cannot. Does your inability to do that arise out of failure to understand my question?

A. I do not believe that it is worded so that I can get your point, Mr. Goodman.

Q. I see. Now, if you will refer to Page 2 of your Exhibit 38, can you point out upon what basis you have predicated the attainment of capacity use?

A. The attainment of capacity use, I do not recall ever having used that phrase, Mr. Goodman, and I do not understand what you mean by it.

[fol. 2897] Q. I see. Well, you have developed certain figures which you have designated as percent of unused capacity, is that right? A. Correct.

Q. Now, what is the base of that percentage?

A. There are five methods shown on this sheet to which you refer.

Q. All right. Can you indicate to me what is the standard of reference used by you under any one method which you have used for the making of your determination of percent of unused capacity?

A. The standard of reference was what I termed in my testimony as the "loaded year".

Q. What year was that?

A. Which year was October 1, 1936, September 30, 1937, and the performance of that year is the standard to which we have referred the other periods shown in the study.

Q. That is what I thought.

Now, I made reference to Column E before on Page 1, but the figures in Column F would be more applicable, is that right? That is the year that you have in mind?

A. That is the period to which we have referred the other periods.

Q. October 1, 1936, to September 30, 1937?

A. Correct.

[fol. 2898] Q. That is your "loaded year." In other words, you have taken the performance of that year as the representative or standard of loaded capacity?

A. Yes, sir.

Q. Referring to the figures in Line 18, maximum line capacity, for your standard of reference, you have 125,000 M. c. f. which appears in Column F, is that right?

A. Correct.

Q. Now, the corresponding figure appearing in Column E is 80,000, isn't that so?

A. Correct.

Q. Now, as a matter of fact, if you had only a maximum capacity of 80,000 M. c. f. how then can you use 125,000 M. c. f. as a standard of comparison?

A. The 125,000 shown in Column F is the capacity of the main pipe line for the period October 1, 1936, September 30, 1937.

The figures shown in previous columns, that is, A, B, C, D and E, Line 18, 80,000 M. c. f. to be exact, was the capacity of the main line system of Panhandle Eastern Pipe Line Company for those periods shown in Columns A, B, C, D and E.

Q. Exactly, and so, as a matter of fact, if you had a maximum day up to 80,000 M. c. f. prior to September 30, 1936, you had substantially all of the capacity, that is, you had substantially all of the load that your capacity could [fol. 2899] accommodate, didn't you?

A. Under the existing conditions, yes.

Q. As a matter of fact, between January 1 and September 30, 1936, your maximum day was slightly greater than your maximum capacity, is that so?

A. Correct.

Q. In other words, it carried an over-load?

A. Correct.

Q. Yet the purport of your exhibit denies that you obtained maximum use up to September 30, 1936, isn't that so?

A. The purport of the exhibit does not carry with it the idea that the line was carrying all of the gas for which it was designed in that period.

Maybe I can explain it this way. I believe the point you are making, Mr. Goodman, is that since the capacity of the line was 80 million during those early years and since it carried a load of 82 million at one time, then it must have been fully loaded. That is the point that you are making and that is true, that it was fully loaded under the conditions at which it was operating, that is to say, with three compressor stations, but it was not carrying the load for which it had been designed, namely, a full complement of compressor stations and that total capacity being 125 million.

Q. What is the present capacity of the line?

A. The present capacity of the line is 250 million a [fol. 2900] day sales capacity.

Q Well, was the line designed for that?

A. The distinction which I think maybe we should make is that the line, as it stands today, is a looped line, whereas all of these comparisons were made by me on this exhibit, Exhibit 38, on the basis of the original single line.

Q. But as a matter of design, there is contemplated the ability to increase capacity, isn't there?

A. I believe that is correct.

Q. So that you cannot say that this line was in no sense designed for an ultimate capacity of 250 thousand M. c. f. per day, can you?

A. On the other hand, I cannot say that it was not designed as a single line.

Q. You know, as a matter of fact, that when the line was designed, was projected, it was designed in such a way that its capacity could be very substantially increased and increased considerably beyond 125 M. c. f. per day?

A. Now, you say it was designed in such a way that that could be done. Any single line can have its capacity increased by merely adding another line alongside it so that you could not say that this line was specifically designed to be expanded into two lines or three lines or four lines.

That is the inherent fact that goes with the construction of any single line.

[fol. 2901] Q. Well, at any rate, you then have taken as your standard of capacity the maximum performance of a single line, is that correct?

A. That is the basis for one of the five methods shown in Exhibit 38.

Q. Now, is all of the main transmission system looped?

A. No.

Q. It is not?

A. No.

Q. So that the capacity of 250 thousand M. c. f. does not arise merely by multiplying a single line capacity of 125 thousand M. c. f. by two at all, does it?

A. No, there is no relation there.

Q. So, as a matter of fact, this single line, in part, is accomodated to a capacity of 250 thousand M. c. f. per day, isn't it?

A. Not the single line.

Q. Not even in part?

A. The only thing it has a capacity of 250 million cubic feet a day is the combination of two lines with full power.

Q. Well, I asked you if your main transmission line was all looped and you said no.

A. Right.

Q. Does your main transmission line have a capacity [fol. 2902] of 250 thousand M. c. f. or is that capacity a total system capacity?

A. We have used the term indiscriminately. I think maybe you and I are drawing too fine a point as to what is the main line. Panhandle Eastern—

Q. (Interposing) Yes, I am wondering as to that. In other words, do you make up your 250 thousand M. c. f. capacity from more than one line?

A. Yes.

Q. You do. How many lines?

A. At the present time, that capacity is the capacity that goes with a single line plus a certain percentage of looping which has been accomplished to date together with ample powering and we, in our descriptions here, have referred to that as "the line."

Q. Now, I notice that on your various tests of capacity here you get variable figures, thus, according to your first method which you characterized as the volume method, you get for the year 1936 as percentage of unused capacity, 39.26.

For your second method, you get 44.5. For your third method you get 25.8. For your fourth method, 13.04, and for your fifth method, 21.95, all in terms of percent unused capacity.

Now, can you tell me of what particular use such wide [fol. 2903] variations are or, put it differently, what is the particular validity of any one method when you show another method which varies the percentage in wide latitude?

A. I have not attempted to defend one of these methods as against another. I have not attempted to translate the

results that you find here other than to state that, in my opinion, each one of the five methods shown constitutes a fair measure of the unused capacity of the system during the early periods before the pipe line had attained the load for which it had been designed.

Q. Do you mean that each method is equally defensible, is that right?

A. I cannot even say that. I merely say that we have here five different ways of doing the same thing.

Q. Now, Mr. Morton, are you familiar with the methods in general use in the gas business and in the power business for determining percent of unused capacity?

A. I was not aware that the art had developed to the point where you could say there [way] any method in general use.

Q. Did you know that in the power business, engineers generally computed it on the basis of relation of peak demand capacity?

A. I have some familiarity with that, yes.

Q. But you suggested other methods and excluded the simple relation of maximum demand capacity?

[fol. 2904] A. Yes, I made no such showing.

Q. Now, Mr. Morton, is your testimony concerning the time required to attain capacity output after completion of the pipe line, predicated upon speculative considerations or is it based upon the actual experience of the Panhandle Eastern Pipe Line Company?

A. I studied the performance and my study indicated to me that the actual experience of the company was such, during this loaded period, as to justify that period as a fair basis of comparison.

Q. Well, do you mean to offer this, that is, your testimony and your conclusion about it, as something predicated upon your experience with the company in the development of its business? Isn't that so?

A. Yes, this is closely related to my experience with the business.

Q. Now, your claim, Mr. Morton, that based upon your knowledge of the company's experience that it is just and reasonable to allow, in the present calculation of rates, for costs of carrying unused capacity?

A. That question goes to the use to which this exhibit is to be put?

Q. Not at all, not at all. That goes to your own qualifications here.

A. I have attempted to show here five different ways [fol. 2905] of doing this job and as to the translation of the results into the determination of those things that we have previously talked about in this rate case, I have no opinion.

Q. I see. In other words, as to the ultimate propriety of that situation, its prudence or its imprudence, its necessity or its lack of necessity, you express no opinion other than the statement that it just happened?

A. What was the last word you said?

. . . . . .

Q. Are you prepared, Mr. Morton, to vouch for the proposition that the failure to obtain capacity use within the time you have stated and as to which you have testified is a reasonably prudent and proper result or situation?

A. I have no opinion on that matter.

Q. You have no knowledge on that subject, have you?

A. No.

. . . . . .

[fol. 2906] Q. And you do not want your testimony to be construed as relating in any way to the necessity of this time lag, its reasonableness, its prudence, at all, do you?

A. That is correct.

Mr. Goodman: I move that the testimony of the witness in relation to Exhibit 38, predicating a going value, going concern value or supplying basic data for going concern value, be stricken or that the proffer of the exhibit in evidence be rejected because, although the showing is made of a time-lag between investment and the attainment of capacity use and of taxes, interest, operating expenses, being incurred within the period of time lag, there is no testimony in the record which in any sense justifies as reasonable and proper that such a situation should exist and evidence is not entitled to reception, as such, unless there is some reasonable justification for the situation presented.

For all that appears, the circumstance may and the inferences would be the result of a misconceived venture. We

do not know. There is nothing in the witness' testimony or in any testimony in relation hereto that brings it down to the point that it was reasonable, it was prudent, it was necessary to incur this time lag of which he predicates and upon which he predicates an allowance in rate base for the calculation of rates.

Mr. Littman: If your Honor please, we would like to [fol. 2907] join in the motion made by Mr. Goodman primarily for two reasons.

First, because this entire exhibit represents an attempt to capitalize past operating expenses, past ad valorem taxes and past interest payments. None of these charges were ever capitalized on the books of the company as appears from the face of this exhibit.

Moreover, there has been no showing whatever and I think this is of the utmost importance, there has been no showing whatever that this so-called purported cost attributable to unused capacity was necessarily incurred.

There is no explanation [so] to why it was incurred. No connection whatever has been brought into this proceeding which would tend, in any manner, to link these figures to the issues before us in this proceeding which are, of course, the question of the reasonableness of the rates.

What caused this unused capacity, what brought it about, the circumstances surrounding it, all those questions are unanswered. The burden of making a showing with respect to this exhibit is certainly not upon our shoulders or upon the shoulders of the Intervenors.

The burden is clearly upon Panhandle Eastern to make some showing which would tend to justify the inclusion in capital of these past operating expenses. No such showing has been made and I, therefore, submit the motion to strike this exhibit and all testimony made in connection with this [fol. 2908] exhibit should be sustained.

* * * * * * * * *

[fol. 2916] Cross-Examination

By Mr. Chamberlain:

* * * * * * * * *

[fol. 2928] O. W. MORTON, having been previously duly sworn, resumed the stand and testified as follows:

Cross-Examination (Continued)

* * * * * * * *

[fol. 2931] Q. Mr. Morton, do you know that in 1930 a contract was entered into by which Columbia Gas and Electric Corporation agreed to purchase of Panhandle Eastern Pipe Line Company their excess capacity up to 20 million cubic feet a day at 18 cents per thousand for such period as they had the excess capacity and later to buy the gas at 26½ cents?

A. I never knew anything or heard anything about that.

Q. Did you know that a demand was made upon your company for a contract against a purchase contract by Missouri Kansas Pipe Line Company seeking 20 million cubic feet of gas per day at 18 cents and that it was refused by your company?

A. I knew nothing of that.

* * * * * * * *

[fol. 2932] Q. You have presented an exhibit here in which you are showing what you believe to be the cost of the unused capacity in the Panhandle Eastern Pipe Line from the beginning of service in 1932 up to the time when the capacity was fully sold in 1937, have you not?

A. Yes, that is correct.

* * * * * * * *

[fol. 2933] Q. How did you come to prepare the exhibit?

A. Why, Mr. Biddison asked me if I would prepare for him the cost of carrying unused capacity on this pipe line.

* * * * * * * *

Q. Then you did propose a method of determining going value for this case, did you not?

[fol. 2934] A. In the early stages of our defense in this rate case, we discussed going value and I made some figures, but it was decided that I did not know enough about going value to present the thing.

Q. Well, you understand that your exhibit is directed toward obtaining an allowance in the rate base, did you not?

A. I have heard Mr. Biddison's testimony as to the use he made of these figures and I believe that that is approximately the use to which he put it from what I have heard him present here on this witness stand.

Q. That is the use you expected to be made of it, wasn't it, when you prepared it?

A. Yes, I thought Mr. Biddison would use it. I cannot say in that particular connection, however.

* * * * * * * *

[fol. 2935] Q. Let me ask you now to tell us — let me ask you first whether you ever made a study of rates for Fulton, Missouri?

A. I do not remember. I imagine that I did.

* * * * * * * *

[fol. 2936] Q. I wish you would state whether your company refused to sell gas to Fulton, Missouri, and, if so, what their reason was?

A. This is just from memory. I am not an officer of the company and I do not know the policies, but I do not mind telling you that I think that there was a matter that went up to the Supreme Court involving service to Fulton.

Trial Examiner: You mean the Supreme Court of Missouri?

The Witness: I believe it went to the Supreme Court of the United States, involving service to Fulton, in which it was said that Panhandle Eastern had refused service to Fulton, Missouri, but I still do not recall why. I do not know why.

By Mr. Chamberlain:

Q. Now, you read accounts of that in the papers, Mr. [fol. 2937] Morton, did you not?

A. Yes, there were things in the paper about that.

Q. And Fulton had to appeal first to the Missouri Public Service Commission, did they not, to get gas?

A. I am not sure, but I think they did.

Q. Then the matter went through the courts to the Supreme Court of Missouri, did it not?

A. I believe so, yes.

Q. And your company was finally compelled to serve them gas, was it not?

A. As I recall, they were not compelled to. There was a settlement of the matter before it was finally decided by the Courts and, in [order] words, the parties got together and we proceeded to give them gas then.

Q. Now, about what time did you proceed to give them gas?

A. I cannot remember the date it started. I cannot remember.

Q. It was many years after they had made their application for gas, was it not?

A. Yes, it was.

Q. And after there was some change in the management of your company?

A. I do not recall whether there was any change in the management in the interim or not.

[fol. 2938] Q. What do you recall about Fayetteville, wasn't there a Fayette, Missouri, or Fayetteville?

. . . . . .

The Witness: Fayette, Missouri.

. . . . . .

Q. Now, Mr. Morton, don't you know it to be a fact that your company refused service to these municipalities, saying that if was their policy not to sell to municipal distributing agencies?

A. Now, I do not know that.

Q. And do you not know that that was the matter at issue in the litigation in respect to Fulton, Missouri?

A. Yes, I know that.

. . . . . .

[fol. 2939] Q. Do you know of auditors of the Federal Trade Commission being in your offices for weeks gaining information for their examination?

A. I knew there were some auditors in our midst from a Federal agency or department, but I did not know which one.

[fol. 2940] Q. Did you not read, in your local papers, the results of the testimony taken in respect to your company and its relations with Columbia Gas and Electric Corporation.

A. Over the years, I have read all of that that has appeared in the newspapers on the subject, in our local papers, I mean.

Q. And did you not read the reports of the Federal Trade Commission which were in published form?

A. I do not recall.

. . . . . .

[fol. 2941] Q. Did you ever hear that Columbia Gas and Electric Corporation and their officers, Mr. Gossler, Mr. Reynolds and Mr. Monroe claimed there was a territorial allocation of the State of Indiana, whereby Panhandle had agreed not to sell gas to Missouri-Kansas Pipe Line Company for use north of a line which would extend east and west across the State of Indiana at Terre Haute?

A. No, sir.

. . . . . .

Q. Were you ever, at any time, called upon to make an estimate of the cost of service of gas prior to 1935 for any community in Indiana or Michigan north of a line which would extend east and west across the State from Terre Haute?

. . . . . .

[fol. 2942] The Witness. Not to my knowledge.

. . . . . .

Q. Now, did you know of a contract having been made late in 1931, for the service of gas to Columbia through Indiana Gas Transmission Company at the Indiana-Illinois State Line at 18 cents per thousand cubic feet?

A. Yes.

Q. You knew of that contract?

A. Yes, sir.

Q. Now, do I understand that you were not called upon to determine the cost of that service?

A. That is correct.

Q. That was determined by others than you?

A. Not by me, at any rate.

Q. Not by you. Now, do you know that Missouri-Kansas Pipe Line Company made a demand upon Panhandle Eastern for the service of gas at that point in 1931 and threat-

ened legal action against them if they would not sell it to them?

A. I know nothing of that.

Q. Did you not hear that Mr. Monroe said that he would not furnish it to them under any circumstances if they were to use it in Indianapolis?

A. I heard nothing like that.

Q. Were you ever called upon to make a study of the cost of service at Indianapolis?

[fol. 2943] A. Yes.

Q. When was that?

A. About two or three years ago.

Q. That was after 1935?

A. It was.

Q. And you were never called upon before that time?

A. I was not.

* * * * * * * * *

[fol. 2945] Q. Now, what, if any, studies did you make which were formal in the early years of your employment and which were used in fixing rates during the early years, 1931, '32, '33 and '34?

[fol. 2946] A. I cannot recall any studies that were put up in a formal way and were used in fixing rates.

* * * * * * * * *

[fol. 2947] Q. To try to get at the question a little more concretely, I call your attention to the fact that, in Illinois, you had a 40-cent city gate rate, did you not?

A. Very early, up to about 1933, as I recall it.

Q. Yes, I think that is right.

A. We had such a rate.

Q. Now, tell us how the gate rate of 40 cents for Illinois was determined and what part you had in that determination?

A. I had no part whatsoever in determining that rate, Mr. Chamberlain.

Q. That rate, then, was not based upon any cost study [fol. 2948] which you made which would indicate that that should be the rate, is that correct?

A. That is a correct statement.

Q. Now, let me ask if you did not read in the press dispatches in 1933 that the Illinois Commerce Commission

either annulled or refused to permit that rate to continue?

A. I do not recall that that is the circumstance surrounding the discontinuance of that rate, but I will go along with you to the extent that the rate was discontinued and probably on account of some objections that were made before the Illinois Commission, under whose jurisdiction we operated at that time.

Q. But your company maintained that gate rate until about 1933, did they not?

A. I think we had two gate rates until 1933, at which time we dropped the 40-cent one and, as I recall it now, the reason that was dropped was because the other one was cheaper and they preferred to take a newer rate which we had inaugurated in about 1931 or 1932.

. . . . . .

[fol. 2949] Q. Now, you had a 40-cent rate at the Indiana-Illinois Line, did you not?

A. I do not recall that.

. . . . . .

Q. You had an 18-cent rate, didn't you?

. . . . . .

The Witness: I remember that there was a contract and I testified a few minutes ago that I had some knowledge, however hazy it may be, that there was a contract between Panhandle Eastern and Columbia interests under the terms of which gas, under certain circumstances and having a certain degree of interruptibility, was available at 18 cents at the Indiana-Illinois State Line.

[fol. 2950] It is my recollection that that same contract called for 26-cent gas on a firm basis. It is a long time ago, and I never even reviewed these things before I came in here.

By Mr. Chamberlain:

Q. Now, tell us why your company did not sell gas to Lincoln, Illinois, for a period of years?

A. I do not know why the company did not sell gas to Lincoln.

. . . . . .

Q. You have no recollection whatever about the difficulty at Lincoln, Illinois?

A. Now, I have some recollection that there was some difficulty in connection with inaugurating natural gas service at Lincoln.

Q. And you know, do you not, that the company distributing gas at Lincoln offered to pay the full expense of the lateral line to serve Lincoln and yet they refused it?

[fol. 2951] A. No, sir, I do not know that.

Q. I wish you would search your memory about that.

A. No, I do not know that.

Q. How close is your main transmission line to the City of St. Louis?

A. I believe we go within 80 miles of St. Louis.

Q. And were you aware of the inquiry made by a special natural gas committee of the Board of Aldermen of the City of St. Louis early in 1935 in which they were making an inquiry into the question of obtaining adequate supply of natural gas for service in the City?

A. Yes, sir.

Q. And did you know that Mr. Bay was there as a witness? A. Yes, sir.

Q. And did you know that they made an application to him for a supply of gas which he declined to furnish?

A. I know that an application was made or at least they were discussing the subject. I do not know that the service was refused.

Q. You never made a connection with St. Louis, I take it? A. No, we did not.

Q. And the territory was then served by Mississippi River Fuel Corporation?

A. Another natural gas company, yes.

. . . . . .

[fol. 2952] Q. Did you hear of the offer that was made by the Phillips Petroleum Company to join with Mr. McNabb in building a line to connect your transmission line with St. Louis and asking for a supply of gas?

A. I remember that there was something like that in the wind at that time.

Q. Your company never made a connection?

A. No, we never made a connection.

Q. Were you ever called upon to make a study for the cost of your service to Emporia, Kansas?

A. I do not recall having been called upon to do so.

Q. Do you recall a demand by Emporia in 1932 for gas service? A. I do not.

Q. You do not recall its refusal? A. I do not.

Q. Were you aware of the filing of an antitrust suit by the United States Government against the Columbia Gas and Electric Corporation and certain of their officers, including Mr. Bay, in March of 1935?

A. Yes, sir.

Q. And did you know the charges that were made in [fol. 2953] that action with respect to stifling competition and attempting to wreck Panhandle Eastern so that its securities might be bought in by the Columbia people?

A. If the newspapers stated those things at the time, then I was aware of all of them.

Q. You knew Mr. Bay was a defendant in that case?

A. Yes, I did.

Q. Did you know later on it was settled? A. Yes.

Q. Did you know that Mr. Bay and, by the way, Mr. Bay was Vice-President of your company, was he not?

A. He was.

Q. Did you know that the receivers of Missouri-Kansas Pipe Line Company brought an action for some $180,000,000 [—] Columbia Gas and Electric Corporation, certain of its officers and Mr. Bay on a charge of having conspired to prevent the sale of gas by Panhandle Eastern and to prevent competition with the Columbia Company in Ohio?

* * * * * * * * *

The Witness: In general, I am familiar with all of that.

* * * * * * * * *

[fol. 2954] Q. Did you know of a request of your com-
[fol. 2955] pany for gas for Detroit by Mr. Reeser?

A. No, sir.

Q. In 1934? A. I never knew of him.

Q. Didn't you know of his meeting Mr. Neuner in Kansas City, seeking a supply of gas for Detroit?

A. I knew nothing of it.

Q. Do you know who he is? A. No, sir.

Q. Did you know of a request by Benedum Trees Company of Pittsburgh for gas for service in Detroit?

A. No, sir.

Q. Do you know anything of an application of J. W. Rice for service of gas to Detroit? A. No, sir.

Q. Do you know of any effort whatsoever that was made by officers of Panhandle Eastern to obtain a Detroit market prior to 1935?

A. I do not.

. . . . . .

[fol. 2956] Mr. Wheat: Mr. Examiner, on reviewing Exhibit 38, we have noted that the note at the bottom of Page 1 is erroneously stated. The note now reads:

"Includes only operating expenses that vary with M.c.f. sold."

I am informed that it should read:

"Excludes operating expenses that vary with M.c.f. sold."

I would like to ask Mr. Morton if that is true.

The Witness: That is correct.

. . . . . .

Trial Examiner: The original and official exhibit is not in the room at this time, so it will be necessary for us to remember this correction.

. . . . . .

By Mr. Chamberlain:

[fol. 2957] Q. Just one or two questions more, referring to Exhibit 38, Mr. Morton, I take it that you have deducted from your investment the investment in the Argos line and the Local Area, together with a portion of the line which was used for transportation?

A. That is correct.

Q. And by transportation, do you mean the transportation for others?

A. Yes, specifically gas transported for Northern Natural Gas Company.

Q. Now, in attempting to arrive at the value of the unused portion or the unused capacity, did you make any attempt to reconcile that with what will be a fair return upon the property?

A. Fair return did not enter into this study.

. . . . . .

[fol. 2959] Trial Examiner: In order that the record may be complete, I wonder if it would not be well, through this witness or some other witness or by statement of counsel, to include in this record some definition of the phrase "load factor" as used by this witness and at other points in the record already?

. . . . . .

The Witness: Load factor, as generally used, means the ratio of the maximum day to the average.

When we say "annual load factor", we mean the ratio between the maximum day and the average day for 365 days.

When we say "monthly load factor", we mean the ratio of the maximum day for that month as compared to the [fol. 2960] average day for that month.

I might add that it is a rather tricky term and that we should be pretty cautious about using it. It would be much better, in my opinion, if we would just say the relation or the ratio of the maximum day to the average day. It is more understandable to everyone, I believe.

Trial Examiner: When you use the phrase "load factor" with a prefix of a definite percentage, what significance does that indicate?

For instance, a 70-percent load factor?

The Witness: That means that the average day is 70 percent of the maximum day.

For example, if we sold one million cubic feet on the maximum day, and we sold an average of 700 thousand cubic feet on the average day, then the load factor would be 700 divided by a thousand, which is equal to .70 or, as we say, 70 percent.

It merely describes the relation between the average day to the maximum day.

Trial Examiner: Thank you.

By Mr. Chamberlain:

. . . . . .

Q. Now, I would suggest that, for the benefit of the [fol. 2961] record, Mr. Morton define what load factor is when applied to a contract such as that of the Panhandle with the Detroit City Gas Company?

A. That is just what I had in mind when I said that it is a tricky term.

Load factor, in my opinion, should not be used except just as I have stated it a while ago so very carefully. If we tried to talk about the load factor with relation to the Detroit contract or the load factor with relation to some other complicated situation, then we are really getting away from load factor and we are talking about something else entirely.

Load factor can only be just what I have said.

Now, we have misused it, all of us, so much that it is not uncommon at all for any of us to refer to the load factor erroneously, particularly in connection with the Detroit contract, but I think we could bring out the thing you have in mind much better by not tying load factor at all to the Detroit contract.

Q. Well, the contract itself provides for a load factor, does it not, provides a rate based upon load factor?

A. The contract provides a rate that fluctuates with the load factor of the base load as defined in that contract.

. . . . . .

[fol. 2962] Q. In other words, the load factor, as used, with respect to that contract, means the ratio of the average day of the year to the maximum day within the month of December, January, February and March, does it not?

A. That is a correct statement.

. . . . . .

[fol. 2963] Q. Let me suggest one more thing. You have in effect what is known as the 3 cent-4 cent rate for good load factor gas and bad load factor gas, do you not?

A. Yes, we have what is known as a 3- and 4-cent rate.

. . . . . .

Trial Examiner: I think Mr. Chamberlain used the phrases "good load factor" and "bad load factor",—did you not?

Mr. Chamberlain: Yes, I did.

Trial Examiner: I wonder if those phrases might not need defining?

The Witness: Now, if we want to talk about good load factor and bad load factor, which are relative terms as applied to the 3- and 4-cent rate, so called 3- and 4-cent [fol. 2964] rate, why, perhaps this will clear it up if I would say that we have offered in Indiana a rate which we call the 3 and the 4-cent rate and the 3-cent rate applies to all gas used during the months of June, July, August and September.

The 3-cent rate applies to the average quantity consumed during those four months for the balance of the eight months of the year and that gas we call "good load factor gas" because the consumption is fairly regular throughout the year.

It is a purely relative term. Then the remainder of the gas which is not sold at 3 cents is sold at 4 cents and that is the balance or the remainder of the gas and roughly, but only roughly, represents the house heating sales which are high in winter and low in summer and which, therefore, have a poor load factor.

By Mr. Chamberlain:

Q. Well, the gas sold under your schedule of rates for Indiana which is, as you say, a 3-cent-4 cent rate, is actually sold on a load factor basis, is it not?

A. Only in so far as the procedure I have described could be called a load factor basis.

Q. The good load factor gas comprises the gas sold in the four summer months and an equal amount sold in each of the eight other months?

A. That is right.

Q. In other words, your good load factor gas is 100 [fol. 2965] percent load factor, is it not?

A. No, it is not because, as I have defined load factor, it was, as I said, the ratio of the maximum day to the average day.

. . . . . .

Q. Yes, but if you will limit your consideration to the

equal take for each day of the year—let me change that—does it not comprehend that the monthly take of each month of the year shall be uniform in so far as the 3-cent portion applies?

A. Approximately, and I think maybe we can get this straightened out by my saying that the approximate load factor of the 3-cent gas is 100 percent.

Q. Then the rate of 4 cents applies to all gas which is [fol. 2966] taken at less than approximately 100 percent load factor?

A. Yes.

* * * * * * * *

Trial Examiner: While we have these definitions grouped, are there other technical terms, Mr. Morton, that are involved in the various contracts that will be considered in this hearing?

I have in mind one in particular and that is "interruptible gas" or "interruptible service."

Perhaps you have others, and I think that this is a good time to cover by definition the technical meaning of such terms.

The Witness: I cannot think of any except the one that you have mentioned, Mr. Examiner, and the term "interruptible" as it is used is, I might say, a loose term.

It is rather difficult of definition. I could only define it in a most general way. We think of "interruptible" as being gas, usually taken by industry, which can be interrupted in favor of the firm customers or domestic customers when the supply becomes limited through some cause or other.

* * * * * * * *

[fol. 2991] By Mr. Chamberlain:

Q. Mr. Morton, you deem it fundamental, then, in your business, that the increased sales would produce lower prices, or lower costs for your company?

[fol. 2992] A. That depends upon the load factor characteristics of the proposed loads that you speak of.

Q. Then, as your company increased its sales, would you expect a gradual reduction of revenue or increase in

A. Our unit rate has been about the same, year after year.

Q. That is, your average revenues?

A. Per M. c. f..

Q. What has been the fact as to your load factor? Has that improved or decreased?

A. I don't know which way it has gone, up or [done.]

Q. Well, it is certain that you have increased your sales every year since 1933, is it not?

A. That is correct.

Q. And is it not true that the average revenues which you have collected from the public have increased every year?

A. Which we have what?

Q. Average revennes per M. c. f. which you have collected from the public have increased every year, have they not?

A. The average rate has remained fairly constant. It may have increased slightly.

Q. Would you look at Exhibit 58 on Page 1 and refresh your recollection as to the average amount per M. c. f. received by your company since 1933?

A. In 1933 it was 21.08 according to this schedule, in [fol. 2993] 1934, 21.08; in 1935, 21.10; in 1936, 21.74; in 1937, 22.58; in 1938, 23.17; in 1939, 23.28; and in 1940, 23.35.

Q. Now, there has been an increase every year there since 1934, has there not, and that was the same as 1933?

A. There has been a slight increase.

. . . . . .

Q What was the amount of sales in 1933?

A Eleven billion plus.

Q. And in 1940 it was how much?

A. Fifty-six billion.

Q. And has there been a fairly uniform increase in sales during each of the intermediate years?

A. There has been an increase.

. . . . . .

Q. Now, one other question as to the sales in Indiana. [fol. 2994] Under the contract you mentioned, made at

the close of 1931, did you have more than one customer in Indiana for the years 1932, 1933, 1934 and 1935?

A. No.

Q. And who was that customer?

. . . . . .

The Witness: Indiana Gas Transmission Corporation.

. . . . . .

Q. And that was a subsidiary of Columbia Oil and Gasoline Corporation?

A. Yes, sir.

Q. Now, will you just make a quick computation and see if it was not a set 18 cent rate there for 1932, 1933, 1934 and 1935, which was the time prior to the filing of the ac-[fol. 2995] tion by the United States Government in the anti-trust case?

. . . . . .

The Witness: It appears to me from an inspection of this record that the average rate paid during those years, 1932 to 1935, inclusive, for sales to Indiana, was 18 cents per M. c. f.

Q. Now, let me ask you whether the sales to Michigan Gas Transmission Corporation are not included under the Michigan sales in Exhibit 59?

A. In Exhibit 59 it appears to me that the sales shown under the heading "Michigan" include only those sales made to Michigan Consolidated Gas Company and the Ann Arbor folks.

Q. Yes. Then, such sales as Michigan Gas Transmission makes in Indiana would be found in Column L under the title "Indiana"?

. . . . . .

[fol. 2996] The Witness: This is Mr. Watkins' Exhibit No. 59, and it appears from an examination of it by the witness that the figures you referred to were sales that were made by Panhandle Eastern Pipe Line Company to Michigan Gas Transmission Corporation for resale by the latter company in the State of Indiana.

. . . . . .

Q. Now, I wish you would make a quick computation as to the average revenues received for gas sales in Indiana which includes that sold to Indiana Gas Distribution Corporation and Michigan Gas Transmission Corporation for the year 1939.

A. On inspection of this Exhibit 59, it appears to me that the rate was approximately 20 cents plus.

* * * * * * * * *

[fol. 2997] Q. Then, will you state the average revenue received by your company from Michigan Gas Transmission Corporation for resale in Indiana for the year 1939?

[fol. 2998] A. It appears to be in excess of 20 cents per M. c. f.

Q. But less than 21?

A. Yes.

Q. What was the average revenue received for 1941 for the same thing?

A. Approximately 21.1 cents.

Q. And the Michigan Gas Transmission Corporation is a wholly-owned subsidiary of Columbia Gas and Electric Corporation?

A. I understand that it is.

Q. And you understand that rate to be for gas at the Indiana-Illinois State Line?

* * * * * * * * *

Mr. Chamberlain: I am asking for the average revenue received for M. c. f. of gas from the wholly-owned subsidiary of Columbia at the Indiana-Illinois State Line.

I understood you to say about 21.1 cents.

* * * * * * * * *

The Witness: From an inspection of Mr. Watkins' Exhibit 59, and dividing the revenue received by the M. c. f. sold, the unit rates which I have testified to appear to be the correct ones.

* * * * * * * * *

[fol. 3001] O. W. Morton, the witness upon the stand prior to the noon recess, resumed the stand and testified further as follows:

. . . . . .

[fol. 3003] Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Morton, do you have before you Exhibit No. 38?

[fol. 3004] A. Yes, sir.

. . . . . .

Q. When did you first commence your work on Exhibit 38?

A. I first commenced work on the general subject that is covered here in Exhibit 38 in July.

Q. Of 1941?

A. Of 1941.

. . . . . .

Q. Who requested that you commence the making of the study that eventually resulted in Exhibit 38?

A. The first information I had that there would be such an exhibit came in a meeting which was held, and at that meeting there were present all of the key men that you have known in this rate hearing, Mr. Neuner, Mr. Creveling, Mr. Wheat, Mr. Culton, Mr. Biddison and a few others.

That was in a meeting about July 25, 1941.

Q. It was at that meeting that it was decided that you were to commence your studies, is that correct?

A. Yes, sir.

Q. What instructions did you receive with respect to [fol. 3005] the making of this study?

A. At this original meeting about the only instruction I received was to post myself on the subject matter, to look into it and give it some thought and report back.

Q. What do you mean by the term "subject matter" as you used it in your last answer?

A. At that time, we were using the term "going value" or "going concern value" and that is the general subject matter that I was asked to look into at that time.

Q. That is, the term "going value" or "going concern value" was used during this conference to which you just alluded, was it not?

A. Yes.

. . . . . .

Q. How about other meetings? Did you have other meetings with these gentlemen?

A. Yes, later on we had other meetings at which we discussed the thing farther.

. . . . . .

[fol. 3006] Q. And what instructions did you receive at those meetings?

A. Well, it is difficult to state instructions received at each of the meetings but, after a series of them and after we had discussed what I knew about the subject, why, it was decided that possibly I had better not work up going value for the company at all.

It was decided that maybe I had better talk to Mr. Biddison on the subject and he seemed to have a better grasp of what was wanted and so I stopped working on my own initiative.

Q. And when was that?

A. That must have been two weeks after the date that I started, say, maybe early August.

Q. And it was about that time that you then had a talk with Mr. Biddison about what you were to do?

A. I might say that it was not the first talk but it was about that time that it was definitely decided by the management that possibly my general information on this subject was not as good as it should be and that, therefore, I had best talk to Mr. Biddison about it.

Q. Now, you had prepared some studies up to the time that this decision was made, had you not?

[fol. 3007] A. I had done some work. I do not know whether you would call them studies or not.

Q. Were they in writing?

Did you finish your answer, Mr. Morton? I am sorry to have interrupted you.

A. Yes, I had finished.

Yes, I had made some rought calculations and these I had discussed with the management from those rough

calculations and I think it was at that time that it was decided that maybe I had better talk to Mr. Biddison.

Q. Did those rough calculations look anything at all like what you now have in Exhibit 38? Were they similar studies?

A. Well, yes, they were along the same general line.

Q. Well, at any rate, it was decided, as you stated, that you were to carry on your work under the supervision or direction of Mr. Biddison, is that generally correct?

A. In general, that is true.

Q. Now, what instructions did you receive from Mr. Biddison? I am now speaking about the time that or shortly after it was decided that Mr. Biddison was to take charge of this subject?

A. Well, I showed Mr. Biddison what my ideas were, and he told me he thought that, in general, I was getting along pretty well and he offered some suggestions, told me how he thought it should be done and his instructions [fol. 3008] were not specific but, in general, he outlined the five methods that we show here in Exhibit 38.

. . . . . .

Q. I am not asking you to repeat word for word, Mr. Morton; that would, of course, be impossible, but I want you to give us your best recollection, generally, of what he said and what you said about the five methods.

A. Well, I cannot tell you just how Mr. Biddison put it. We had a conference and, as I say, he looked over what I had done and he offered suggestions as to what should be done.

I remember specifically that we were talking about how to make eliminations. I had not cleared up my mind as to how some of these things should be eliminated from this study, some of the things that are not involved in the study, how we would eliminate them from our figures and he offered some advice in that connection but, other than that, [fol. 3009] I do not believe I can reproduce our conversation.

Q. Well, was the term "going concern value" or "going value" mentioned in your conversation with Mr. Biddison?

A. I do not recall whether he used the words "going concern value" or "going value." He may have used the

term but, by that time, we were using a term, in so far as my work was concerned here, as the cost of carrying unused capacity on the line, on the main line. I know that he did use that term.

Q. But you are not sure whether he used the term "going value" or "going concern value"?

A. No, I do not know whether he applied that term or not to what we were doing.

Q. When was the decision made as to who was going to testify with respect to Exhibit 38, and with respect to any figures to be derived from Exhibit 38?

A. Well, I have named the date when we started and I have named the date when Mr. Biddison and I had our talk and undoubtedly, between those two dates, July 25 when I was given the general rough assignment and August, the early part of August, 8th, 9th, 10th, somewhere along in there, it was decided that Mr. Biddison was the man that knew more about this than I did and, therefore, should be the one to present the matter.

Q. Well, I am afraid you are going to have to be a little more specific.

Will you please turn to Page 1 of Exhibit 38? Looking at [fol. 3010] the figure shown in Line 2 called "investment total," did Mr. Biddison tell you to get those figures and put them in an exhibit?

A. No.

Q. You did that on your own responsibility, so to speak?

A. Yes.

Q. Would the same answer apply to the figures shown in Line 4?

A. Yes.

Q. Would the same answer apply to all of the rest of the figures shown on that page?

A. Yes, these are all basic statistics used in developing this mathematical study of mine and I assembled those figures after I had received my initial instruction from the company to look into this matter.

Q. Did Mr. Biddison instruct you to use the figures precisely as you have used them on Page 1 of Exhibit 38?

A. If you mean by that, did Mr. Biddison outline step by step what I was to do, I will say no, that, in general, he

indicated that this method was satisfactory and offered suggestions in the development of the figures.

Q. He did not tell you precisely what figure to use for this, that, or the other item that appears on Page 1 of Exhibit 38?

A. No, he allowed me quite a bit of lee-way. He asked [fol. 3011] me to develop this story here and gave me general advice on its development.

. . . . . .

[fol. 3012] Q. But the figures that you used were submitted to Mr. Biddison for his approval, is that correct?

A. That is correct.

Q. And the figures finally used on Page 1 of Exhibit 38 did meet with his approval?

A. Absolutely.

Q. Were any of the figures originally submitted by [fol. 3013] you to Mr. Biddison for Page 1 of Exhibit 38 changed by reason of any suggestion of Mr. Biddison's?

A. At some times, there was some change that Mr. Biddison suggested.

. . . . . .

Q. Well then, were the figures changed by you in accordance with his expressed desire in the matter?

A. They were either changed by me or else set up by me in accordance with his expressed desire. I cannot recall whether some figure at some stage of the game was prepared and then handed to Mr. Biddison and then he suggested a change and handed it back to me, or whether I gave him a general outline of what I was doing and he suggested a method of doing it.

Q. Well, when you completed Page 1 of Exhibit 38 at last and then had it reproduced as it now appears, I take it you and Mr. Biddison were in hearty agreement as to the figures appearing on that page?

A. Yes, sir.

Q. Now, let's turn to Page 2 of Exhibit 38. Here you show "Five Different Methods of Calculating Interest, Ad Valorem Taxes and Operating Expense"—should not that be "Expenses," plural, or doesn't it make any difference? [fol. 3014] A. I do not know that there is much choice. You can make it either way, as far as I am concerned.

Q. (Continuing) "And Operating Expense Attributable to Unused Capacity."

Now, who conceived these five methods?

A. These five methods did not just spring out of one man's head. The generalissimo, the motivating men behind these five methods is Mr. Biddison, but these methods were discussed with me, I think Mr. Neuner, they were discussed with him and so you could not say that they sprung into being from out of my head but I do think, as I say, the motivating force behind them is Mr. Biddison.

* * * * * * * *

[fol. 3015] Q. What about the last two shown on Page 2 from Lines 42 to 51, inclusive?

A. You probably recognize those as being gotten up by somebody who had read the Chicago Case. I read the testimony on the Chicago Case and those two methods are pretty close to the two that you may find in that other.

Mr. Gorman: Is that the Chicago District Electric Generating Case?

The Witness: No.

Mr. Gorman: It is Natural Gas Pipe Line of America?

The Witness: Natural Gas Pipe Line, yes.

By Mr. Littman:

Q. Who told you to read that case and submit the latter two methods?

A. As I said before, we had what I choose to call a council of war about July 25 and at that council of war the management outlined the part that each would play in this as they saw it at that time, subject to revision, of course, and it was at that time I was given the assignment of looking into this general subject and finding out what I could about it and it was from instructions received at that meeting that my reading of that Chicago Case developed.

* * * * * * * *

[fol. 3016] Q. Well, you recognized, did you not, while you were in the course of preparing Exhibit 38, that it was to be used in this proceeding as a basis for a claim for going concern value?

A. At one time, I thought that was what it was but, as I say, I apparently was not an expert at that thing and so they figured they had better turn it over to somebody else that knew more about it.

I suspected, or rather I knew, what I was doing here would be used as one of the elements of so-called "going value."

Q. You prepared this study for the purpose of furnishing the data to Mr. Biddison which was to form a basis of his testimony on that element of going concern value?

A. Yes.

Q. Of course, you said you read the Chicago Case rather early in your work in this connection, did you not?

A. Yes, I did.

Q. And the Court in that case did use, I believe, the [fol. 3017] term "going value" or "going concern value", did it not?

A. I believe that is what they called it when they presented it in that case.

Q. So that you were not in the dark on the purpose, generally, to which this exhibit was to be put?

A. That is correct.

Q. As a matter of fact, Mr. Morton, in order to make an intelligent study on the subject at all, you would want to know the purpose to which the exhibit was going to be put, wouldn't you?

A. Yes.

Q. Now, as I understand your Exhibit No. 38, you have undertaken to compute the interest, ad valorem taxes and operating expenses attributable to unused capacity by five different methods, is that correct?

A. That is it.

Q. And those five different methods and the conclusions with respect to each of those five different methods appear, do they not, on Page 2 of Exhibit 38, in Column G?

A. That is correct.

Q. Now, under the first method, you arrived at the conclusion that the amount of interest, ad valorem taxes and operating expenses, attributable to unused capacity was $6,465,590?

A. Yes, sir.

Q. And by the second method, $6,680,062, is that cor- [fol. 3018] rect? A. Yes, sir.

Q. And so on to the bottom of Column G?

A. Yes, sir.

Q. Now, without going into detail at this time, is there any amount included in any of the figures shown in Column G, other than (1) past operating expenses; (2) past interest, and (3) past ad valorem taxes?

A. I do not think there is.

Q. In other words, my statement to the effect that the amounts shown in Column G include only those three types of items is correct?

A. That is correct.

Q. They do not include a dollar of any capital expenditure, do they?

A. That is correct.

Q. And it follows, does it not, naturally, that the company has never, itself, capitalized any of the amounts of any part of the amounts shown in Column G on Page 2 of Exhibit 38?

A. I am not sure that in our bookkeeping procedure at some stage of our development or at some time during all of these years, I am not sure that some of these dollars were not accounted for by the accountants as capital or charged to capital investment, I believe is the term.

Q. If there are such instances, would they be rather [fol. 3019] minor, in your opinion?

A. I hesitate to answer that in either way because of this sort of thing that is running through my mind, and you can appreciate it.

I do know, from hearsay, I do not know it but I understand that in the early days of this company everything was capitalized.

Mr. Culton: May I remind you this first column only starts with April 1, 1932, and that was the date of the capitalization.

We concede that your question is correct, Mr. Littman, from the company's standpoint. We concede that the answer to your question should be yes.

Mr. Littman: Yes, Mr. Culton. I am earnestly endeavoring—

Mr. Culton: (Interposing) I knew you were, that is why I said what I did.

Mr. Littman: (Continuing)—To ascertain that my understanding of these figures is correct.

Mr. Culton: We are willing to stipulate that April 1, 1932, was the date of capitalization and is the time they capitalized for business operation.

Mr. Littman: I can appreciate the witness' caution with respect to the figures back in the early years. We are not concerned here with those.

[fol. 3020] The Witness: That is right.

By Mr. Littman:

Q. What do you mean by the term "attributable to unused capacity"?

A. That is just my choice of words, Mr. Littman. I believe that you can as easily say, "operating expense incurred on account of" or rather, to make the complete statement—"five different methods of calculating interest, ad valorem taxes and operating expense incurred on account of or as a result of there being in this system in the early days some unused capacity."

Q. And I take it that it is your testimony that the amounts shown in Column G of Exhibit 38 represent the interest, ad valorem taxes and operating expenses properly attributable to unused capacity?

A. Those are results that come about from an engineering calculation. When you say "properly attributable to unused capacity", I think that you have asked the witness to go beyond the exhibit here.

They are merely the figures that result from an engineering calculation of these things, as I see them.

Q. Mr. Morton, if Column G includes expenses, for instance, that are not properly attributable to unused capacity, they should be excluded, should they not?

A. Well now, if you are asking me whether I think the [fol. 3021] figures that have been submitted by Mr. Biddison are properly attributable to unused capacity, I do not believe I should attempt to answer that.

Maybe we can get on better if I just tell you that those are my calculations over there (indicating), on the book of rules as laid down here which are plainly stated

of the operating expense, ad valorem taxes and interest attributable to unused capacity.

Q. You are then not willing to testify, Mr. Morton, that the operating expenses, interest and ad valorem taxes included in Column G are properly attributable to unused capacity?

A. What is "properly"?

Q. What do you understand the word "properly" to mean or "proper" to mean?

A. Isn't it enough, Mr. Littman, when I tell you that that, in my opinion, represents the interest, ad valorem taxes, operating expense attributable to unused capacity?

Q. Attributable to such an extent that they should be included for purposes of this proceeding?

A. Now, again, you are asking me to go beyond the story I have here.

Q. Well, in your opinion, are these expenses, ad valorem taxes and interest amounts which are included in Column G all attributable to unused capacity?

A. Yes.

[fol. 3022] Q. And I take it by that answer you mean that they all have something to do with and have a direct relationship to the unused capacity of the system in the periods shown by you in Exhibit 38, of course?

A. Yes, that is true.

Q. Now, you used the term "unused capacity". To what are you referring when you use the term "unused capacity", the entire Panhandle Eastern Pipe Line system or some part of it or what?

A. I am referring to that capacity that was built in the main line of the Panhandle Eastern Pipe Line Company and was there prior to the time the line became loaded to a degree somewhat approximating that for which it was designed.

Q. You are a rate engineer, are you not, Mr. Morton?

A. Yes, I am.

Q. In your opinion as a rate engineer, should the amounts shown in Column G under any one or under any combination of the five methods in your opinion, be included in a rate base for purposes of determining reasonable rates?

A. I have no opinion about that.

Q. So that we may have no mistake about this, I want to make certain that my understanding is correct, that, in your judgment, every dollar shown in Column G has a relationship to, and a connection with, the unused capacity of the Panhandle Eastern Pipe Line system for the [fol. 3023] period shown in your exhibit?

A. If you add the words "main line", the answer is "yes."

Q. I am perfectly willing to add the words "main line".

Now, in order that we may make certain of the mechanics of your exhibit, I am correct in stating, am I not, that the amounts shown in Column G are parts of the larger amounts of interest, ad valorem taxes and operating expenses which are shown at the foot of Page 1 in Line 26?

A. They are.

Q. That is to say, if you added up all of the figures shown in Line 26 of Exhibit 38 at the bottom of Page 1, you would then have all of the interest, ad valorem taxes and operating expenses for the 4-½ year period from April 1, 1932, to September 30, 1936, inclusive, with some minor exceptions which are shown clearly on your Page 1?

A. I believe that is true.

Q. You appreciate that I am trying to get the philosophy of this exhibit rather than to bog down the record with details at the moment, Mr. Morton.

A. All right.

Q. According to my calculations—you correct me later if you wish, if I should be wrong—the total amount shown in Line 26, if you added all the items, would come to $9,793,173. Is that your general understanding of it?

[fol. 3024] A. Were you adding the sum of those figures shown on Line 26?

Q. Yes, sir. A. All right.

Q. Now, your figures shown in Column G represent an allocation or a portion of that $9,793,000 figure which I just read, based upon a percentage of so-called unused capacity in the years shown, is it not?

A. I believe that is correct.

Q. Generally, and omitting details, if the unused capacity by one of your methods were to be over the 4-½

year period, let us say, 50 percent, then you would simply take 50 percent of the $9,793,000 figure and transfer it over to Column G, is that generally the situation?

A. That is generally so.

Q. I am not holding you strictly to these percentages. They are assumptions purely for the purpose of short-cutting the method and getting it on the record.

A. All right.

Q. Now, were the amounts of interest, taxes and operating expenses which are shown in Exhibit 38 incurred by Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company only?

A. The title of this indicates that it is Panhandle Eastern Pipe Line Company and subsidiary companies.

[fol. 3025] Q. Of course, we have had some difficulty with that before, Mr. Morton, so I would appreciate it if you would tell us what other companies are included.

A. Yes. Some figures from the Central Distributing Company undoubtedly are in there.

Some figures from the Texas Interstate Company are undoubtedly in there because we see here, from the title, that we have tackled this from the standpoint of Panhandle Eastern Pipe Line Company and subsidiary companies.

I might say the amount is very small from any of those other companies, aside from Panhandle Eastern and Illinois Natural Gas Company, which, at that time, was Panhandle Illinois Pipe Line Company.

Q. Now, did you mention Central Distributing Company? A. Yes, I did.

Q. When was that company incorporated?

A. Central Distributing Company is only three or four years old, but its predecessor was the Central States Gas Utilities Company and that was one of the subsidiaries of Panhandle Eastern, since its beginning, as I recall, since very early days.

Q. When was Central Distributing Company dissolved?

A. I believe it was July 1, 1937—correction—I believe the Central States Gas Utilities Company became the Central Distributing Company on July 1, 1937 or 1938.

. . . . . .

[fol. 3026] Q. Mr. Morton, did you want to make a statement with respect to unused capacity or your definition of that term?

A. Yes. During the recess it was called to my attention that it sounded as though I did not feel that the figures shown in Column G, Page 2 of Exhibit 38 were properly attributable to unused capacity.

I understood the question to be whether or not these figures were properly includable in the rate base and I did not wish to testify as to the propriety of their inclusion in the rate base but I did, however, intend to convey the idea that I felt they were properly attributable to unused capacity.

Q. Have you ever used the figures shown in Exhibit 38 or similar figures in preparing rate schedules for the company?

A. No.

Q. Just before the recess, we were discussing the names of the subsidiary companies and the subsidiary companies themselves which were included in Exhibit 38 or, perhaps, [fol. 3027] stated another way, we were discussing the subsidiary companies of Panhandle Eastern Pipe Line Company whose operating expenses, taxes and interest were included in the figure shown in Exhibit 38.

I would like at this time, for the purpose of facilitating this cross-examination, to have marked for identification with the next exhibit number a document submitted to Commission's counsel by Mr. Watkins in response to an inquiry addressed to Mr. Watkins when he was on the stand in direct examination.

This exhibit is entitled, "Panhandle Eastern Pipe Line Company and subsidiary companies—table to subsidiary companies of Panhandle Eastern Pipe Line Company."

Attached to this exhibit are the following schedules which I would like to have marked as Schedules 2 and 3, respectively, and to have the first page of the exhibit marked as Schedule 1.

I will read the title on the next two schedules. Schedule 2 has the following heading: "Subsidiary Companies of Panhandle Eastern Pipe Line Company Included with

Panhandle Eastern Pipe Line Company in Consolidation; Balance Sheet Per Books, Earned Surplus Per Books, Capital Surplus Per Books—Gas Plant"; and Schedule 3 headed as follows: "Subsidiary Companies of Panhandle Eastern Pipe Line Company Included with Panhandle Eastern Pipe Line Company in Consolidation Statement of Gas Produced."

I will ask, Mr. Examiner, that this exhibit be given a [fol. 3028] number and that the three pages be marked Schedules 1, 2, and 3.

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(The Document Referred to was Marked Exhibit No. 112 for Identification.)

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By Mr. Littman:

Q. Now, on the first page of Exhibit 112, Mr. Morton, which is called Schedule 1, Mr. Watkins shows the names of subsidiary companies, their dates of incorporation, and their dates of dissolution.

Now, would you mind reading into the record the names, date of incorporation and dates of dissolution of those subsidiaries of Panhandle Eastern Pipe Line Company whose interest, ad valorem taxes and operating expenses are included in your Exhibit 38?

A. This study has been prepared on a consolidated basis—

Q. (Interposing) By "this study", you mean Exhibit 38?

[fol. 3029] A. Yes. Exhibit 38 has been prepared on a consolidated basis for convenience and such of these companies as were existing at the date shown in the studies were included.

Q. And those dates included in the studies are April 1, 1932 to September 30, 1936, as shown in Columns A to E, inclusive, on Page 1 of Exhibit 38?

A. Correct.

Q. Well now, with that statement, would you mind reading the names of those companies which you believe to be included in your study in Exhibit 38?

A. I believe the following companies' statistics are included in Exhibit 38:

Central Distributing Company;

Central Pipe Line Company;

Central States Gas Utilities Company;

Illinois Natural Gas Company;

Macon Gas & Electric Light Company;

Missouri-Kansas Gas Company;

Panhandle Illinois Pipe Line Company;

Texas Interstate Pipe Line Company.

Q. Now, the dates of incorporation of each of those companies and the dates of dissolution of each of those companies appears in Exhibit 112, but I think, at this point, it might be well to read those dates into the record for each of those companies so that we may know what [fol. 3030] years' figures are included in your Exhibit 38.

A. The date of incorporation of the companies:

Central Distributing Company—November 17, 1934;

Central Pipe Line Company—August 25, 1933;

Central States Gas Utilities—August 15, 1928;

Illinois Natural Gas Company—

I would like to correct the record to the extent that I do not believe any Illinois Natural Gas Company figures appear in it, since it was not incorporated until 1938.

Q. Yes, that would be true, and that would naturally follow, wouldn't it, because your study does not go beyond September 30, 1936, in so far as amounts attributable to unused capacity are concerned, is that correct?

A. Correct.

And the dates of incorporation:

Macon Gas & Electric Light Company—January 25, 1888;

Missouri-Kansas Gas Company—June 27, 1928;

Panhandle Illinois Pipe Line Company—August 16, 1930;

Texas Interstate Pipe Line Company—February 12, 1930.

The dates of dissolution: Central Distributing Company, referring to a footnote on Schedule 1, Exhibit 112, indicates the date of dissolution of Central Distributing Company as follows: In January, 1941, Panhandle Eastern Pipe Line Company distributed to its stockholders the [fol. 3031] common stock of Central Distributing Company in payment of a dividend.

Continuing with dates of dissolution of the various companies:

Central Pipe Line Company—November 26, 1937;

Central States Gas Utilities Company—April 15, 1935;

Macon Gas & Electric Light Company—March 18, 1938;

Missouri-Kansas Gas Company—October 11, 1935;

Panhandle Illinois Pipe Line Company—July 30, 1938;

Texas Interstate Pipe Line Company—October 31, 1936.

Q. How long have you been employed by Panhandle Eastern Pipe Line Company? A. Since 1931.

Q. You are no doubt familiar with the companies whose names you have read, are you not? A. Yes, I am.

Q. Now, what was the business of Central Distributing Company?

A. They are a distributing company, as the name indicates. They receive their gas at the city gates and distribute it to their various retail customers.

Q. Now, Panhandle Eastern Pipe Line Company no [fol. 3032] longer owns that company, does it?

A. That is true.

Q. Do you know how many cities Central Distributing Company served, let's say, during the 4½ years of your study from April 1, 1932, to September 30, 1936?

A. Central Distributing Company served several small towns in Kansas and Missouri, approximately twenty in number. The total number of customers was about 3,500 at that time.

Q. Now, can you state the nature of the business conducted by Central Pipe Line Company during the 4½ year period that you used in your study?

A. No, I cannot. I have some general knowledge of it but I cannot state the exact business of it.

Q. Do you have any general recollection of the type of business in which it was engaged?

A. It was a separate corporation set up in Illinois for the purpose of owning a certain lateral line, as I recall it.

Q. Do you remember where the lateral line began and where it ended?

A. I believe that it was the Hoopston lateral in eastern Illinois.

Q. Now, what was the nature of the business carried on by Central States Gas Utilities Company during the 4½ year period?

[fol. 3033] A. They were the predecessor of the Central Distributing Company and carried on a distributing business.

Q. How many communities did you say were served by Central States Gas Utilities Company and the predecessor, Central Distributing Company?

A. I said about twenty.

Q. Would it be more accurate to say that those companies served 16 communities in Kansas and 13 communities in Missouri?

A. I had in mind the number served from the main line only. Apparently yours includes Local Area too.

Q. How many retail customers were served by those companies?

A. I said about 3,500, but I think now it is nearer 3,000. Of course, it varied over the years, beginning the period with, say 2,000 and ending the period with 3,500.

Q. Now, we might go to Macon Gas & Electric Light Company. What was the nature of the business carried on by that company?

A. They had a little manufactured gas plant up at Macon, Missouri.

Q. They manufactured gas? A. Yes, sir.

Q. Did they manufacture any electricity? Their name seems to indicate they might.

A. It is a misnomer; they did not.

[fol. 3034] Q. Do you know the population of Macon, approximately? A. Four thousand.

Q. Now, the Missouri-Kansas Gas Company, what was the nature of its business during the 4½ year period?

A. I believe it was a small gas production company in the Local Area.

Q. You are now referring to the Local Area that has been heretofore described in this proceeding as an area in Missouri and Kansas and in the vicinity of Kansas City, Missouri?

A. Correct.

Q. Now, the Texas Interstate Pipe Line Company, will you give us some information with respect to the operations of that company?

A. That was the producing company of the Panhandle system in the Hugoton and Amarillo fields.

Q. Now, referring again to Column G, of Page 2 of Exhibit 38, do not the figures in that column include the costs of manufacturing artificial gas which were incurred by Macon Gas & Electric Light Company during the period from April 1, 1932, through September 30, 1936?

A. I think an infinitesimal amount is included in that column as you have described it.

Q. What do you mean by "an infinitesimal amount"?

A. In respect to the total figures which we are dealing, these subsidiaries that were included in the study we are [fol. 3035] discussing here were very, very small.

Q. When does an amount become infinitesimal and when does it cease to become infinitesimal in dollars, in your opinion?

A. Now, that is very difficult to answer because no one knows. It is a relative term.

Q. You see, Mr. Morton, that is why I asked for your definition. My idea of infinitesimal may be different from yours and I wondered what you meant by it.

A. I am afraid I would not be able to give you a definition of what constitutes a very small part which we call an infinitesimal amount, but I am repeating again the amounts included in this study that go with those companies that you believe should be excluded are very small in respect to the total.

Q. What product did Macon Gas & Electric Light Company use for the purpose of manufacturing artificial gas? Was it coal?

A. Yes, they used coal and enriched it with oil.

Q. Now, will you explain how the cost of that coal and oil from which artificial gas was manufactured could be considered an operating expense attributable to unused capacity of this pipe line, Mr. Morton?

A. If we are going to analyze this thing down to that point, Mr. Littman, we will be here a long, long time, be-
[fol. 3036] cause this did not purport to be anything except an engineering calculation based upon the statistics of the company.

Now, to answer your question specifically, there is no way that I know of that you can say that the oil and coal as used up a Macon should enter into that figure and I would like to add that it does not affect it one way or the other very much.

Q. Even if there was a dollar's worth in there, it ought to go out, shouldn't it?

A. Not in my mind, my conception of the problem, Mr. Littman. As we conceived this, we started out here to find out how much of the interest, ad valorem taxes, operating expense was attributable to unused capacity in the main line system of Panhandle Eastern Pipe Line Company and its subsidiaries which were principally Panhandle Illinois Pipe Line Company and the Texas Interstate Company, a producing company.

It is just a question of my conception of the problem.

Q. Does your conception of the problem embrace the inclusion in operating expenses attributable to unused capacity of a natural gas pipe line the cost of buying coal and oil with which to manufacture manufactured gas in Macon?

A. I was treating this project as a whole. Specifically, that small item, I can offer no particular reason for including that small item except to say that I was treating this problem in its broader aspects, such as this: I have
[fol. 3037] dropped points after the decimal. Many of my calculations have not been, if you will notice, carried out to the cents. They are to the even dollars.

A matter of judgment enters into this thing. It was my judgment that it was entirely proper to include all of those little companies.

Q. Now, will you answer my question, please, Mr. Morton? I think you may have forgotten the original question and I think it can be answered yes or no.

. . . . . .

The Witness: Since that expense was a part of the total expense of operating this project and since I included the expenses as a whole, I did not feel it necessary or proper to go to the detail of eliminating it.

By Mr. Littman:

Q. You did not bother to eliminate it?

A. That is correct.

Q. But you did bother to make certain eliminations, did you not, Mr. Morton?

A. Certain eliminations were made.

Q. All right. Suppose you tell us about the eliminations that you bother to make? Let's look at Page 1.

A. I selected what I thought were the pertinent and important eliminations and I did not try to make small eliminations that I felt would not greatly affect the answer. [fol. 3038] Q. Well, we will get to the question shortly of how large or how small these are, Mr. Morton, but for the time being, you want to leave those costs of buying coal and oil for the purpose of manufacturing artificial gas in your study?

A. Yes, that is all right.

Q. Now, how about the cost of reading meters in these various communities served in Missouri and Kansas by the Central States Gas Utilities Company?

Are the expenses of reading those meters in here too, in your Exhibit 38?

A. The expense of reading those meters is in Exhibit 38.

Q. How about the cost of advertising for new customers in those communities? Is that included?

A. Yes, sir.

Q. How about the cost of repairing a leak in a gas main or in a service line in one of these communities, in Missouri or Kansas, which was served by Central States Gas Utilities Company?

Are such costs also included in your total in Column G as "attributable to unused capacity"?

A. There are.

Q. What of the cost of billing these distribution customers by the companies that you named? Are those costs included in your Column G for the 4½ year period which you used as the "not loaded" period?

[fol. 3039] A. Yes, they are included.

Q. Should they be included? Should all of these expenses which I just enumerated be included in your totals in Column G as expenses "attributable to unused capacity" of Panhandle Eastern Pipe Line system?

A. Since those expenses formed a part of the operating expenses of the Panhandle Eastern Pipe Line Company and subsidiary companies, I believe that they properly belong in here.

Q. Now, will you please enlighten us as to what connection, if any, that character of expense which I just named had to do with the operation of the main line of Panhandle Eastern Pipe Line Company?

A. The expenses I have that I am talking about in this study are not necessarily expenses that are associated directly with the pipe line operation.

I have treated this in an over-all general way. I have taken the total expense of doing business, whether it is reading a meter or fixing a leak or whether it is paying the salary of the president of this combined enterprise and I have allocated this total operating expense to use and unused capacity on a percentage basis and since these small expenses you mentioned are in there, they have been treated just as the larger expenses are treated.

Q. Now, would you answer my question, Mr. Morton, please.

. . . . . .

[fol. 3040] The Witness: There is a connection between the expenses of a distributing company and the expenses of the Panhandle Eastern Pipe Line Company which is the main transmission company.

They were affiliated companies. They were engaged in the same general endeavor and that is the sale of gas along the main line of this company.

Now, there is a connection between the expenses of the distributing company which sold main line gas and of the transmission company that carried it there.

Q. A connection between those expenses and what, unused capacity of the pipe line?

A. Yes.

Q. Wherein?

A. Since they were a part of the whole expenses of operating the project as I have explained and since I have split down the whole expense of operating the project into used and unused capacity, they may properly be included.

Q. Well now, suppose Panhandle Eastern Pipe Line Company had owned a very large distributing company [fol. 3041] during this 4½ year period or suppose that Panhandle Eastern Pipe Line Company's subsidiaries owned such a large system.

Let us suppose that that system had incurred, let us say, $3,000,000 of operating expense in the manufacture of gas. Would you have treated that $3,000,000 of expenses incurred in connection with the manufacture of gas as an expense attributable to unused capacity of the natural gas pipe line system?

A. That would have been a question of treatment. If the amount had been large in proportion to the total and if, in my judgment, it did not belong in there, I would certainly have removed it.

Q. You entertain some doubt about whether you would or would not remove it, do you not, Mr. Morton?

A. If it had been large in proportion to the total amount and would greatly affect the answer, I would have removed it.

Q. What would you have done if it was as much as $3,000,000?

A. I would have taken that figure out of this.

Q. Suppose it were $2,000,000?

A. I would have taken that out.

Q. Suppose it were $1,000,000?

A. I would have taken that out.

Q. Suppose it were half a million dollars?

A. I do not know. I do not know how I would handle that.

[fol. 3042] Q. You might leave that much in?

A. I might or I might not, dependent upon how important it seemed. Importance, after all, is a great factor in the preparation of a study like this, its relative importance to the answer.

Q. Well, one-half million dollars a year would make a radical change, would it not, in your figures shown at the foot of Columns A, B, C, D and E on Page 1 of Exhibit 38, would it not?

A. Yes, half a million dollars would have been very important in that answer.

Q. It would give you quite a bit more going concern value, wouldn't it, too, if you had included another half-million dollars in there?

A. Yes, it would have.

* * * * * * *

[fol. 3043] Q. How many of these seven companies that you named were producing companies, I mean, natural gas producing companies, Mr. Morton?

A. I believe two.

Q. Namely, Missouri-Kansas Gas Company and Texas Interstate Pipe Line Company?

A. Yes, sir.

Q. Did Texas Interstate Pipe Line Company own the wells and some production system property in Texas Panhandle Field and in the Hugoton Field?

A. Yes, sir.

Q. And that was the company that was taken over by Panhandle Eastern itself, was it not?

A. That is correct.

Q. And that system now forms a large part of the present production system, does it not?

A. Yes, sir.

Q. Now, Missouri-Kansas Gas Company produced gas in the Local Area, is that correct?

A. Yes, sir.

Q. And that Local Area is presently a part of the en-[fol. 3044] tire Panhandle system, is it not?

A. That is right.

Q. Now, the ad valoremi taxes incurred on the distribution system owned by Central States Gas Utilities Company and Macon Gas & Electric Light Company are included, are they not, in Column G?

A. Yes, they are included.

Q. And you still think they should remain in Column G?

A. I think that is entirely O. K. for them to be in there.

Q. I take it that all of the ad valorem taxes paid by all of the companies which you named with, I think, the exception of Illinois Natural Gas Company, are included in Column G, are they not?

A. Yes, they were all a part of the consolidated companies.

Q. Now, is the same true of interest incurred by all of those companies during the 4½ year period?

A. Yes, sir.

Q. What do you mean by the term "interest" as used in this exhibit? I have particular reference to Line 49 entitled "Interest Charges." What kind of interest does that include?

A. That applies to the bond interest, the actual out-of-pocket interest that was paid out by the consolidated [fol. 3045] companies as a result of the fact that they were in business and had property bonded.

It also included note interest and any other small items of interest that we usually group under the heading of "Other."

Q. Now, those interest charges as shown in Line No. 19 are rather large amounts. Of course, those are the basic amounts used, are they not?

A. Yes, sir, those are the amounts that were used; the basic amounts.

Q. They range from $1,335,289 for the period shown in Column A from April 1, 1932, to December 31, 1932, to $813,694 for the period January 1, 1936, to September 30, 1936.

What is generally the range, is it not?

A. Yes, sir.

Q. Do you consider interest paid on the bonded indebtedness as a proper basis upon which to compute going concern value, Mr. Morton?

A. I am not able to talk to you much about what is a proper basis of going concern value. I have no conviction on that matter that you asked me about then.

Q. Well then, you are not personally making any suggestions along the line of whether it should be included in any rate base for rate-making purposes, are you?

A. No, I am not.

Q. Well, did you make a suggestion to Mr. Biddison [fol. 3046] that this amount should be used for purposes of his study?

A. No.

Q. Well, you said you sold him a few times on a few items. Would you mind giving us some of those items that you sold him on and convinced him that he should include in this study?

A. Well, it was not necessary for me to convince Mr. Biddison. From my conversations I could tell very early in the first discussion we ever had of it that, to his mind, interest charges were certainly a very important part of a calculation that would show costs attributable to unused capacity.

Q. And you agreed with that, didn't you?

A. Yes, I think they are part of the costs that may properly be shown as properly attributable to unused capacity, some of that cost.

Q. For purposes of forming the basis of an estimate of going concern value?

A. Well, I am not too familiar with the subject of going concern value, so when you ask me if it is proper as forming the basis for going concern value, I do not have any opinion on that.

Q. Suppose Panhandle Eastern Pipe Line Company and its subsidiary companies had not had any bonded indebtedness during this 4½ year period of so-called unused capacity. How much would you have included in Line 19?

[fol. 3047] A. None, or nothing.

Q. Well, in your opinion, the greater the bonded indebtedness of a company, the greater the going concern value?

A. I do not know about that.

Q. If one company has a low rate of interest on its bonds, and another company has a high rate of interest on its bonds, would you want to recommend to this Commission that the latter should be given a greater going concern value than the former?

A. I am not testifying on going concern value. I do not know.

Q. But if you made the study for a gentleman such as Mr. Biddison who was making an estimate of going concern value, you would submit a study which would show

considerably more interest "attributable to unused capacity" for the latter character of company than for the former character of company that I have described, is that not correct?

A. I can agree with you if you change your question just to the extent that if I were submitting to him a study purporting to show interest attributable to unused capacity.

Q. Yes, on that account.

A. On that last character of company, the figure would be larger.

Q. Now, you made a study on your own hook, so to speak, before Mr. Biddison came into the picture and took [fol. 3048] over, and I will ask you whether or not your original study included such an item as interest charges as a basis of going concern value.

A. Yes, that is true.

Q. Well, you then do believe that it should go into a rate base, don't you?

* * * * * * * * *

The Witness: I did believe it should go into a rate base. I now have no opinion.

By Mr. Littman:

Q. Now, did your original study comprehend the inclusion of operating expenses as one of the bases for your determination of going concern value?

A. Yes.

Q. So at that time you entertained some ideas of your own on that subject?

A. Exactly.

Q. Well, let's see what those ideas were. Do you have [fol. 3049] any ideas on the subject now?

A. No, I am convinced that I do not know much about going value.

Q. Well, let's go back to the old days when you had some views on the subject.

If one company had high operating expenses by reason of inefficient management and another company had low operating expenses by reason of efficient management, all other things being equal, which one would receive the greater going concern value if operating expenses were to be taken as the test?

A. I do not know.

Q. Well, Mr. Morton, if you were submitting basic data for use in connection with a going concern study such as appears in Exhibit 38, the company having the higher operating expenses by reason of inefficient management would receive a larger amount in Column G, Page 2 of your Exhibit 38, than the company having lower operating expenses by reason of efficient management, is that correct?

A. That is correct, if we followed the formula that we have shown here in these five methods.

Q. Do you consider that a proper method that produces such a result?

A. A proper method for arriving at costs attributable to unused capacity following the formula that I have used here, I would say yes.

[fol. 3050] Q. Now, your study, particularly that part of it which is shown on Page 1, Line 21, "Operating Expenses—Partial" includes every dollar of delay rentals paid on unoperated acreage by Panhandle Eastern Pipe Line Company and its subsidiary companies during the entire period.

From April 1, 1932, to September 30, 1936, does it not?

A. It does.

Q. Will you please look at your working papers and tell me how much has been included in Line 21 of delay rentals paid on unoperated acreage?

A. For what period, did you say?

Q. For your 4½ year period which I believe you have characterized from time to time as the "Not loaded period."

A. I do not have the sum added.

Q. Well, you have got $66,319 in the nine months of 1932, have you not? A. Correct.

Q. $85,691 in the calendar year 1933? A. Correct.

Q. $85,824 in the year 1934; $85,265 in the year 1935, and $63,445 in the nine-month period in 1936 from January 1 to September 30 in that year?

A. Correct.

. . . . . .

[fol. 3051] Q. According to my arithmetic, it is $386,544. Does that sound right to you?

A. That appears to be correct.

Q. If it is incorrect, I wish you would please correct it later. A. Yes.

Q. Now, do you know whether the company proposes to capitalize delayed rentals paid subsequent to September 30, 1936?

A. No, I do not.

Q. You have a pretty good idea, though, that they do not intend to, don't you? A. Yes.

Q. By "yes", you mean that my statement is correct?

A. Correct.

Q. Perhaps it would be well for you to tell us what delayed rentals are? I am not sure whether the record has a descriptive statement of that or not. I would appreciate it if you would make a brief statement descriptive of the meaning of that term.

A. I previously stated that I was not an accountant but perhaps my rough knowledge of it will suffice.

Q. All we want is a general description.

A. Those are payments that are made to land owners by the company in lieu of drilling of wells.

Q. And that acreage is commonly called unoperated or [fol. 3052] undrilled acreage, isn't it?

A. I believe so.

Q. Well, does unoperated acreage represent used capacity or unused capacity, Mr. Morton?

A. I think it depends upon the circumstances.

Q. Suppose you give us the circumstances in which you would consider unoperated, undrilled acreage to be used capacity?

A. Let me discuss the unused capacity for a moment to get my thoughts clear on it.

If you made contracts or purchased something in excess of that which was immediately required because you were going to need it after a while, in the interim between the time you purchased it and the time you did use it, it would be unused and, therefore, in this study here would have been treated as unused capacity.

Now, I have only treated a portion of these delayed rentals as unused.

Q. I do not know whether you had completed your answer? A. Yes.

. . . . . .

Q. Well, none of it is used, is it, until it is drilled? [fol. 3053] A. Well, I do not think you necessarily have to have something immediately active to say that it is in use. I submit that an inanimate object could be used.

Q. Under your theory, delayed rentals might just as well be capitalized in 1940 as in 1935, might they not?

A. I do not believe I understand your question.

Q. What don't you understand about it?

A. You say these delayed rentals might as well be capitalized in 1940 as 1935.

Q. Under your theory, it would be just as proper, according to your theory, to capitalize them in 1940 as to capitalize them in 1935?

A. Perhaps I do not have enough knowledge of accounting to get at what you are speaking about, Mr. Littman.

Q. Let me put it this way: The use that is being made of this exhibit is, that these amounts that you have in Column G or amounts very similar to them, it is claimed, should be capitalized, that is, they should be made a part of the rate base upon which the company claims that it is entitled to earn a reasonable return."

Mr. Wheat: Of course, you understand, Mr. Littman, there has been no suggestion that it has been capitalized in the technical sense of that term.

Mr. Littman: In the practical sense—

Mr. Wheat: (Interposing) No, nor in the practical [fol. 3054] sense of the term. That is what I think is bothering the witness, that it was capitalized.

Mr. Lee: But it is in the rate base—

Mr. Wheat: (Interposing) I think what is included in the rate base and what is capitalized is a highly different problem. I think the question is confused.

The Witness: But that question goes way beyond this study that I have made here, which is just my idea of the costs attributable to unused capacity.

Mr. Lee: But the object and end of the study, though, regardless of how you characterize it, is to get the money there represented into the rate base upon which you want a return, isn't that true?

The Witness: If you want to make an assumption, Mr. Lee.

Mr. Lee: Isn't that why you made the study?

The Witness: That is perfectly all right. But, as I say, that is so far ahead of the thing we are talking about here that your witness cannot give you any enlightenment on that subject at all.

Mr. Culton: I suggest counsel address the questions on propriety to the witness who testified on propriety. This witness has stated he had done nothing except to determine what it cost the company to carry unused capacity.

He has not testified as to what should go into the rate base or anything. Mr. Biddison has testified on those matters.

[fol. 3055] Mr. Lee: Yes, but he and Mr. Biddison worked so closely together and it is a part of the general mosaic of the picture they are painting here and it is common-sense he knows what the objective is and no matter what you call it, the objective is to get it into an enlarged rate base and get a return on it.

He knows what we are talking about. He is not confused or misled, or anything.

By Mr. Littman:

Q. Let me get at the matter this way, Mr. Morton.

You understand, I am not trying to confuse you deliberately.

Is it not true, under your theory, that delay rentals might just as well be called "expense attributable to unused capacity" in 1941 as in 1935, is that not correct?

A. Why, I think that is true.

Q. Now, isn't it a fact that, under your theory, the greater the delay rentals paid, the greater the amount that you find attributable to unused capacity and the greater the going concern value, if your study is to be used for going concern value?

A. Well, is it necessary for me to assume that it is going to be used for going concern? Couldn't I just answer your question by saying that the greater the delay rental, the greater under this study here, showing costs attributable to unused capacity, the greater would be the [fol. 3056] costs attributable to unused capacity.

Q. That is satisfactory. That is your testimony?

A. Yes, sir.

* * * * * * * *

[fol. 3059] O. W. MORTON, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued).

By Mr. Littman:

Q. Mr. Morton, at the close of yesterday's session, we were discussing Exhibit 38. I wish you would please turn to Page 1.

Now, in Lines 1 and 2, you show the total investment. Will you briefly describe what is included in those figures, just generally, without giving us the details.

A. I might refer here to my memorandum, which incidentally, is included with my working papers which you have seen.

Q. Yes.

A. My memorandum to the Accounting Department requesting this information.

"We will require average investment in property, plant and equipment for each of the periods broken down into—

(1) Main line;

(2) Local Area;

(3) Argus;

(4) Hugoton 16-inch line;

[fol. 3060] (5) Liberal Compressor Station.

"The purpose of this segregation is to obtain figures that will enable me to make certain allocations."

That is the request and the information shown in Lines 1 and 2 is information sent to me by the Accounting Department in reply to that request.

Q. So that the total in Line 2 includes all of the property that you have just described? A. Yes, it does.

Q. Then you make certain deductions, do you not, from that total, as shown in Lines 3 and 4? These deductions are for "Argus, Local Area and portion used in transportation".

Would you please give us the breakdown of those figures as between the three classes which are named in Lines 3 and 4?

A. Yes. That information is shown on the third work sheet, my work sheet No. 3. On that work sheet we show the total investment in the Local Area forwarded to me by the Accounting Department and, incidentally, that Local Area investment which we have taken out of the total includes one of the subsidiaries to which we were referring yesterday, the Missouri-Kansas Gas Company.

I have since found that that subsidiary is listed here in Local Area and, therefore, was deducted from this entire presentation we have made in Exhibit 38.

Q. When you speak of deductions, are you speaking of [fol. 3061] deductions of investment and gross revenues?

A. Yes.

Q. Are you including deductions for—

A. (Interposing) Yes, the operating expenses also are taken out of this picture so that that item that we discussed yesterday is not in here at all.

Q. That is, as to the—

A. (Interposing) Missouri-Kansas Gas Company.

Q. Missouri-Kansas Gas Company? A. Yes.

Q. How about interest? A. That is out.

Q. That is out also? A. Yes, sir.

Q. Will you proceed with your explanation?

A. You were asking me to give you a breakdown of the items which are totaled on Line 4, Page 1. Those totals consist of three items; the investment which was furnished me [be] the Accounting Department representing the total investment in the Local Area which is not related to the

main line system and, therefore, I felt should be eliminated from this study; it also includes Argus investment, that is, the investment in some wells out in western Kansas with which you are perfectly familiar that that has nothing to do with this main line story; and also includes an al- [fol. 3062] located portion of the main line which was used for transportation of gas for Northern Natural Gas Company.

That is the detail of the three items, the total of which is shown on Page 1, Line 4.

Q. Now, will you explain why you deducted the investment used for transportation on behalf of Northern Natural?

A. That was a service for which the pipe line was not designed. My conception of its probably was this: Here was a pipeline of some 860 miles in length. It had been constructed for the purpose of furnishing a market at some future date but, in the interim, there were certain parts of it that were not loaded, namely, out of the 860, about 800 miles of it was not loaded. For a short time, we were able to carry some emergency gas for the Northern Natural Gas Company at a very small rate and, during the time that we carried this gas for the Northern Natural Gas Company, that section of the line carried a pretty fair load and I felt that, in a story that is to show the cost of carrying unused facilities, it had no place, so I eliminated it.

Q. Did you eliminate any part of the production system investment that was being used to serve Northern Natural?

A. No, I did not.

Mr. Culton: Was any portion of the production system used to serve Northern Natural?

The Witness: I believe this Northern Natural gas was [fol. 3063] produced from another source other than ours.

Mr. Culton: I thought counsel might have an erroneous understanding of the facts there.

Trial Examiner: What is the fact as to that, Mr. Culton?

Mr. Culton: We picked it up from their wells and transported it.

Trial Examiner: It was merely a transportation service?

Mr. Culton: That is right.

Trial Examiner: You were not selling gas?

Mr. Culton: We were not selling gas from that particular service. We were selling Argus but that gas was not used in these facilities at all.

Mr. Littman: Mr. Culton, you are quite familiar with that situation?

Mr. Culton: I think so.

Mr. Littman: Would you mind telling us where this gas was picked up and from whom it was secured and where it was delivered? Perhaps you can tell that.

Mr. Culton: I have a general idea, but I think the witness can be more specific about it.

The Witness: Roughly, the story is this: They had their own production out there around Hugoton, Kansas.

By Mr. Littman:

Q. By "they", you mean Northern Natural?

A. Northern Natural, or else had made arrangements [fol. 3064] for some production out there and, pending the time of their building a pipe line over to it, they made an arrangement with us, under the terms of which they would use our pipe line since it was unloaded and had a lot of unused capacity in those days, they would use our pipe line until such time as we told them to get off and we picked up this gas out there and carried it up to Liberal, and from Liberal station east about 80 miles, to the point of their main line intersection with ours and there we turned it back to them.

Q. So that you made an elimination from investment of the investment applicable to that classification for the purposes of this study?

A. Yes, I did.

Q. And you made an elimination from the gross revenues?

A. Yes, I did.

Q. For that?

A. Yes, and also the operating expenses in connection with that service.

Q. Yes. How did you make the elimination from operating expenses? What method was used?

A. I used a very simple, direct standard usual engineering procedure. Very simply explained, it is just this: That if the investment necessary to do a certain thing was so much of the total, then the operating expenses that might be eliminated from the total was just in proportion [fol. 3065] to the investment that was there.

Q. And that proportion of deduction was the proportion of all of the expenses?

A. Yes, sir.

Q. You applied a ratio to the total?

A. That is right, a ratio to the total project.

Q. And did you apply the same method with respect to making a deduction for interest?

A. Yes; I did. No interest is in there for that.

Q. And what you have said with respect to Northern Natural, I presume, would go also for the Argus and Local Area?

A. That is true, the same general approach.

Q. Now, Mr. Morton, I refer you now to line 21 "Operating Expense, Partial." Now, will you explain what expenses are included in that line?

I believe yesterday we agreed that all delay rentals were included?

A. Yes, in general, I did this: You asked what is included in that line. I realized from my studies that there was, let us say, an average of 55 percent unused capacity in this line.

I reasoned then, by a very simple process, that if there was 55 percent unused capacity in the line, that probably 55 percent of the operating expenses of this whole project were being incurred because of this unused capacity.

[fol. 3066] Q. You mean 55 percent of all the operating expenses less that proportion of them which you have explained you have deducted?

A. You are anticipating me, I am building up to that. As I say, I felt that if there was 55 percent unused capacity in the line, then it would be a reasonable assumption to just

sit right down and take 55 percent of all the operating expenses and say that they were incurred because of unused capacity but, after I studied the problem a little bit, I could see that there were some expenses in this project that I could not say were there because of unused capacity.

I could see that there were some very large items, like purchased gas, for example, the cost of purchasing gas. Well, that has nothing to do with unused capacity so I just eliminated it from this whole study.

I am discussing a little bit in detail these operating expenses that you have asked about.

There is the next item on that list and I am looking at the list which I requested the Accounting Department to furnish me, and the next item of expense, the next general classification is "Purchased Gas Expense."

Well, that expense is expense that results from employing men to read meters out there in the field and to pay for their transportation, maintained their cars and supplies and equipment.

Well, in those days, we had more or less of a skeleton [fol. 3067] force out there. This skeleton force was maintained, whether we sold 10 billion a year or 20 billion a year, just about the same size. It had no relation to the fluctuations of the amount of gas sold.

It appeared to me to be largely an item that was related to unused capacity but, to be on the safe side and to avoid long, detailed discussions on it, I eliminated it from this study. I eliminated all of that expense.

Now, the next item is the one that we were discussing, "Delay Rentals." As I say, I analyzed these expense account, in general. I did not go into them in detail to find out all of the charges that have been made of the four or five year period against every account.

I just treated them in general and said, "What is this delay rental? Well, that is an expense that is incurred on account of maintaining acreage." That is what delay rental really is. It is one of the expenses incurred with maintaining acreage.

Now, that acreage was maintained not for the present time but for the future time when the line would become loaded, so it seemed to me, and I think it is quite apparent to you, that the acreage was lying there awaiting the time when it could be used in the fully loaded activities of this pipe line so the operating expense, it seemed to me like the most natural thing in the world to assume that the operating expense that was incurred in maintaining that unused [fol. 3068] acreage, if you please, unused because it was there awaiting the time when it would be used for a fully loaded line, it seemed to me that that expense certainly should be given careful consideration in arriving at those expenses that were attributable to unused capacity during the early years of this project.

You want me to go right on through the group?

Q. Yes.

A. The next item we have here is "Gas Wells"—

Mr. Chamberlain: (Interposing) May I ask there, I beg your pardon, then you did not eliminate the cost of the delay rentals in your computation?

The Witness: The net effect is that some of the cost of the delay rentals shows up in this study, Exhibit 38, as expense incurred on account of unused capacity, so the answer is, I did not eliminate it.

Mr. Chamberlain: Well, is it all included? That is, the 55 percent proportion of it?

The Witness: No, I am glad you asked me that, Mr. Chamberlain, I had overlooked that point. We are looking now at total expenses. I am looking at delay rentals for the year 1933, to be specific, which was $85,691.

Now, 10 percent of that $85,600 was eliminated when we went through our operating expense and took out everything connected with Local Area, Argus and Northern Natural.

[fol. 3069] That is to say, 10 percent of that dropped out of the picture before we started and then, of the balance, which would be some $78,000, of the balance only a portion have I charged into the cost or against the cost of carrying unused capacity and that proportion is based upon the

percentages shown in the five different methods, about 60 percent.

By Mr. Littman:

Q. Now, this 10 percent that you spoke of, how did you arrive at that?

A. You asked about the items on Line 4, that is, Northern Natural investment, Local Area investment and the investment in Argus.

Now, I took that investment which is about 10 percent of the total, by the way, and applied that percentage to the total operating expenses, I took out right at the start 10 percent of the operating expenses and threw them clean out of this whole story because they had nothing to do with it.

Q. Will you proceed with your explantion?

A. Gas Well Royalties were a very small item during those years. Of course, gas well royalties has nothing to do with unused capacity in the system and so, naturally, I threw it out.

Now, the next item I have listed as expenses which were considered in arriving at the cost of carrying unused capacity, the next item is "Production Department, Other." [fol. 3070) Production Department, other, means, expenses incurred in operating our production department, which have nothing to do with the delay rentals or gas purchased expense or the cost of gas or rather, when I say, "nothing to do with it," I mean after we eliminate from all production expense the cost of gas purchased and purchased gas expense and delay rentals and royalties, then we have a residue which is left which, by the way, averages about $40,000 a year, and that represents the cost of maintaining a production organization.

A large part of that goes to the office in Kansas City. Now, my conception of this thing was that this whole production expense, almost all of it that is, the portion that is classified here as "production, other," was attributable to unused capacity because we were maintaining a big standby force there to operate this big project although we were not selling very much gas out of it but because it carried the title, "Production", I omitted it.

I just leaned over backwards and threw it out of this study because I was afraid that when the time came and we got to discussing it, we would spend too much time and detail on it and it does not amount to much anyway, $40,000 a year, so I just threw it out but I do not believe it should be out and it does offset many of the small items we have discussed to this point.

Now, the next item was "Transmission". I asked the Accounting Department to give me a breakdown of all the [fol. 3071] transmission expense just under two heads. I did not ask for details at all.

As I say, we tried to avoid detailed studies in these expense accounts because that is an interminable proposition. There are many millions of items that have been charged, literally millions of items that have been charged to these accounts over these periods.

I asked the Accounting Department to give me the transmission expense in two headings; (1) compressor stations, and, (2) other transmission expense.

I asked for it under these two headings because I knew that part of the compressor station expense should go out of this picture. I knew that some of the compressor station expense was proportional to the amount of gas carried and had nothing to do with unused capacity, so I wanted compressor station expenses separate so I could eliminate it.

Now, in eliminating compressor station expense, I have eliminated a great deal of the value or the cost that should go in this study.

As I say, I have eliminated it completely. You wonder why I say that. It is because of this: During all those years, we maintained a standby force, we maintained standby equipment, supplies and materials of all kinds at these compressor stations awaiting the day when they would be fully used.

Now, a lot of that expense, as I say, was attributable to [fol. 3072] unused capacity. I think that will be clear on the face of it without my going any further in detail, but I eliminated every bit of it from this study because I felt we were going to need some leeway in some of these items.

I knew that there would be some definite items included here inadvertently or in my haste to get a quick picture drawn. I knew there would be some items included if you debated them out, item by item, which would not belong in there, so I left that leeway in these other accounts to take care of such items.

Now, next, we come to "Transmission Expense"—

Mr. Wheat: (Interposing) Pardon me. Mr. Morton, you did not give a sample amount of this compressor station expense.

The Witness: The total compressor station expense averaged for the period about $100,000.

By Mr. Littman:

Q. Averaged for what period?

A. For the entire period of this study.

Q. You mean 4½ year period?

A. Yes, it is about $100,000 per year, is what I intended to convey. To be specific—

Q. (Interposing) Just a minute. You have confused me.

Now, we are speaking of a 4½ year period from April 1, 1932, to September 30, 1936. Now, is the $100,000 for the entire period or is it $100,000 per year over the 4½ year period?

[fol. 3073] A. $100,000 per year over the 4½ years.

Mr. Chamberlain: Now, that is compressor station expense?

The Witness: Yes, sir.

Mr. Wheat: And you eliminated all of it?

The Witness: I eliminated all of it.

* * * * * * * * *

The Witness: The next item that I have is a very sizeable item. It is "Transmission, Other". It averaged close to $200,000 a year for the entire period. I considered all of this expense in arriving at the amount of operating expenses chargeable to unused capacity during these years, and when I say "considered all of it," I do not mean that

I included all of it as operating cost of carrying unused capacity.

I mean that I considered it and I applied to it the percentages and the method shown in Exhibit 38.

By Mr. Littman:

Q. You mean, you included all of it in Line 21, don't you?

A. I mean I included all of it in Line 21, but after Line 21, I eliminated some of it, about 10 percent of it, on account of Local Area, Argus and Northern Natural, and then I eliminated about 45 percent of the balance on the ground that it certainly was not due to unused capacity.

That left about 55 percent of all of that shown under [fol. 3074] "Transmission, Other." It left about 55 percent of it in the answer.

Now, the next item that I have listed is "Distribution." That item averages about $18,000 a year, I think. You asked yesterday why we should include an item that was labeled "Distribution" in a study like this.

Mr. Culton: That amounts to how much per year?

The Witness: That amount to about $18,000 per year, and you said at the time you asked me whether or not meter reading of the distribution customers' meters should be included in here.

First, I want to state that I did not include all of distribution expense in the final answer which final answer is my figure of the cost of carrying unused capacity in this system.

By Mr. Littman:

Q. Just a minute, you did not include all of anything in your final figure, did you?

A. That is right.

Q. Now first, let's talk about Line 21.

. . . . . .

[fol. 3075] The Witness: Line 21 is merely an intermediate step in this process of arriving at the operating expense attributable to unused capacity.

. . . . . .

[fol. 3076] Q. I am going to put to you a very simple question.

State whether or not you have included in Line 21 all of the distribution operating expenses which you just described a moment ago.

. . . . . .

[fol. 3077] I would like the record to show that.

The Witness: All of that expense entitled "Distribution" is carried over to Line 21.

Q. Now, did you make any deduction from that amount of distributing expense included in Line 21 before you got down to Line 26?

Let's put it that way. Have you made any deduction in Line 26 or before you reached Line 26 from that distribution system? A. Yes.

Q. All right. Now, you may state what you deducted.

A. The total deduction from the totals shown on Line 21 is shown on Line 24 and is—I would like to strike that—the deduction in operating expenses that we are discussing and the expenses which are shown in Line 21 amount to about 10 percent for Local Area gas transported, Argus pipe line elimination and from the balance, I have eliminated about 45 percent on an average as being the amount that was attributable to used capacity, leaving in unused capacity about 55 percent of the balance.

Q. And you are way ahead of me again. I would like to go through this step by step in order that the record may show clearly what you did. We are going to get to [fol. 3078] that 45 percent and we will give you every opportunity to explain it, but tell me, Mr. Morton, whether you made any deduction in Line 24 from the total distribution system which was included in Line 21. I am speaking now of distribution expense. A. Yes.

Q. Now, what deductions did you make?

A. Line 24 shows the total of all deductions from operating expenses shown in Line 21 which were made as a result of using the Argus, Local Area and Northern Natural Gas allocation.

Q. Can you tell us what that allocation was?

A. Since that property was about 10 percent of the total property, why, the effect of washing that through the operating expense means that we have reduced the operating expense by about 10 percent.

Q. I see. In other words, if I correctly understand you, and we are now speaking of distribution system expenses; you put all of them in Line 21 and then you made an elimination in Line 24 of approximately 10 percent to get the 90 percent balance approximately in Line 26, is that correct? A. That is correct.

Q. After you had your amount in Line 26, you then applied your percentage of unused capacity for each of the periods? A. That is correct.

[fol. 3079] Q. Is that right? A. That is correct.

Q. That brings us down to the 45 percent which you were speaking about, roughly.

A. Yes, it does. The next item——

Q. (Interposing) Just a minute. Why did you allocate distribution expense on the same basis as you allocated the Argus, Local Area and transportation expense?

A. I just took the total and allocated the total and since the distribution formed a part of the total, it went right along with the total.

In other words, I made no separate study, as I said before, no separate detailed study of each account.

Q. Well, did these distribution systems have anything to do with the transportation of gas for Northern Natural?

A. I have thought about this distribution system in connection with this whole matter since we discussed it yesterday, and it is quite apparent to me that this distribution business is just as much a part of the unused capacity of this system as any of the other items that we have discussed.

Q. Even though one of these distribution systems was carrying artificial gas?

A. Even though one of them happened to be caught in the net with the Central Distributing Company which was selling gas on the main line.

Q. Now, will you answer my question, please, Mr. Morton?

[fol. 3080] A. Your question was, as I recall it, whether or not the distribution system has any connection with the Northern Natural Gas?

Q. Yes. A. Was that it?

Q. Yes.

A. I see no connection between the two.

Q. Well, what connection did these distribution systems have with the Argus sales?

A. This had no connection with the Argus sales.

Q. What connection do these distribution systems have with the Local Area situation?

A. Of course, in that case, you do realize that much of the distribution is in the Local Area around Kansas City. A large part of our distribution activities were in the Local Area.

I might say that if I had made a detailed study of that distribution account, I would have eliminated more than was eliminated by using the 10 percent that we spoke of.

Q. I do not know whether you had completed your discussion of these expenses or not, Mr. Morton? I want to give you every opportunity to do so.

A. No, sir, I can go right along through them. The next item that we have here—

Q. (Interposing) We are still talking about Line 21; [fol. 3081] are we not? That is, the total figures included in Line 21 and then you are tracing the deductions?

A. That is correct.

Q. We have discussed so many other things since then that I wanted to make sure that we were talking about the same thing now.

You may proceed.

A. The next item we have in this detail of operating expenses consisted, the total of which appears in Line 21, is customers' accounting and collecting.

This item amounts to about an average of eighteen or nineteen thousand dollars a year. I included that along with the other expenses considered.

Mr. Wheat: Which is that item, Mr. Morton?

The Witness: This item now is customers' accounting and collecting.

Mr. Wheat: Thank you.

The Witness: The theory under which that was included, if we have to have a detailed theory for the inclusion of each one, is that a great deal of the accounting that we had, the accounting force which we had in the company was maintained because we were a growing company and we were preparing to handle larger affairs than we were at that time handling.

Therefore, I thought that certainly a portion of the customers' accounting and collecting was attributable to unused capacity. [fol. 3082]

By Mr. Littman:

Q. Just before you leave that point, had you finished your answer on that character of expense that you have called "Customers' Accounting and Collecting Expense"?

A. Yes, sir.

Q. You would expect, would you not, Mr. Morton, that the customer accounting and collecting expense would go up when Panhandle Eastern attached more customers, wouldn't you?

A. Yes, but not proportionately, and that is the point I am making.

Q. You mean, not exactly proportionately?

A. That is right, not exactly proportionately, or even approximately proportionately. You see, part of that force, as I say, is a standby force, occupying a large office, awaiting the time when they, like the pipe line, would be used.

Q. Now, that customers' accounting and collecting expense includes, does it not, accounting and collection expense in connection with the distribution systems?

A. A great deal of that is attributable to the maintenance of the distribution system.

Q. In other words, this is all in addition to the $18,000 you mentioned a moment ago, is it not? We are now talking about a separate character of expense.

A. Yes, the two together just about form the annual expense of the whole Central Distributing Company. [fol. 3083]

Q. Now, a company such as Panhandle Eastern Pipe Line Company, which is a wholesale company, does not,

when it confines itself strictly to wholesale business, have very many customers in number, does it?

A. When it confines itself strictly to wholesale business, I think that is true.

Q. And that is the purpose for which this system was originally designed, isn't it?

A. I think so.

Q. Now, in the years when Panhandle Eastern owned these distribution systems and had these various retail consumers to serve directly through its subsidiaries, it, of course, had a higher amount of customer accounting and collecting expense than it would have had, had it confined itself strictly to wholesale business, is that correct?

A. Yes, it costs more to carry on that kind of business than a wholesale business.

Q. But you still feel that you were justified in including a part of that expense?

A. Yes, because we have included the revenues too, you see, from that business, and the M. c. f. also in our study. We did not just weight it down with the operating expense. We have got everything of this company in there, all of the Central Distributing Company activities.

[fol. 3084] I might say to you, if we threw the whole thing out it would not affect the answer one percent.

* * * * * * * * *

Q. You are talking about one item?

A. I am talking about the Central Distributing system. If you threw all the items out you would not affect the total one percent.

Q. But in addition to the amount you are talking about—

A. (Interposing) The total of all of the subsidiaries we talked about yesterday is less than one percent.

Q. Well, are you prepared to give us a detailed itemization of all of this character and type of expense?

A. I am prepared to tell you that it would not affect the answer over one percent.

* * * * * * * * *

Q. Suppose you answer my question.

[fol. 3085] A. I have made a study that is detailed enough to assure me that what I have said is true.

Q. Detailed enough to convince you, but we do not know about it, Mr. Morton. Is it in your working papers?

A. I have prepared, since you and I talked, a study, Mr. Littman, showing that if we threw out every subsidiary that we have discussed, we would not affect the answer $100,000 out of five and one-half million dollars.

Q. Have you made a detailed audit of the company's books to ascertain the amount of expense involved in distribution and the interest charges?

A. There is no use in my saying I have made a detailed audit. I have made over-all figures and made enough allowances for every kind of error that might creep in, and still do not get any appreciable error in the answer.

Q. Suppose you tell us how much interest Central States Gas Utilities Company paid during these 4½ years?

A. I do not know the interest Central Distributing paid, but in this study, I have not considered the interest Central Distributing paid. This is a consolidated story. The inter-company payments of interest do not show up here, in this item.

Q. They are certainly included, are they not, in the totals at the bottom of Page 1?

A. We do not add every interest that every subsidiary [fol. 3086] pays to the parent company and duplicate it each time as it goes from one subsidiary to the other. This is a consolidated statement of interest.

Q. I understand that, of course, it is a consolidated statement. Did Central States Gas Utilities Company have any outstanding bonds?

A. No, I do not think it did, as I recall it.

Q. Do you know whether they did?

A. I am quite sure they did not.

Q. Do you know whether any of the other companies, subsidiary companies, that we discussed yesterday, whose bond interest is included in here, had any outstanding bonds?

A. I do not see how that would affect this story at all.

Q. If they had any outstanding bonds and paid any interest, that interest would be included, certainly, would it not, in Line 19?

A. Yes, sir, if they paid interest to the parent company, which they did, why, it would be washed out in this story, since we are considering a consolidated story.

Q. Well, if they paid it to others than the parent company?

A. If they paid it to others than the company, that is true, it would.

Q. It would be included? A. Yes.

* * * * * * * *

[fol. 3087] Well, do your working papers show the amount of interest paid by these subsidiary companies to outsiders?

A. If any was paid to outsiders by these subsidiary companies, it shows on my working papers, entitled "In-
[fol. 3088] terest Expense."

Q. Does it show a breakdown of the interest?

A. This is a consolidated story and does not show the breakdown of interest payments between the inter-company relations.

Q. And the figure that you used as interest payments was furnished to you by someone else, wasn't it?

A. This figure was furnished to me by the Accounting Department.

Q. And you are not personally familiar with those figures, are you?

A. I am to the extent that I discussed them with the Chief Accounting officer and he explained—

Q. (Interposing) Just a minute. I object to what the chief accounting officer explained. I asked you whether or not you, of your own personal knowledge, knew the breakdown of the figures that you used for the purposes of this study with respect to interest?

A. I, of my own personal knowledge, have not gone into the books of the company to obtain details that back up these over-all consolidated figures that have been handed me by the accounting department, that is correct.

Q. So that it follows, does it not, that you do not, of your own personal knowledge, know how much bond interest is included in your figures that was paid by these subsidiaries to outsiders?

[fol. 3089] A. Not as individual companies, but as a total, yes.

Q. Of course, your total is shown on Page 1 of Exhibit 38, is it not, and what you have just said with respect to interest is true, also, is it not, of the ad valorem taxes shown in your study?

That is to say, you have no personal knowledge of the details of those taxes, do you?

A. That is correct. The Commission has seen all of my working papers, every one that applies to this, and it is shown on the face of them just what it is.

Q. And those working papers do not show any breakdown, do they?

A. They do not show a breakdown. They show totals consolidated.

Q. And the same is true, is it not, of the operating expenses? You do not know, of your personal knowledge, the details of those operating expenses, do you?

A. All of these figures are on a consolidated basis. I do not know the individual amounts contributed to the total by each of the separate subsidiaries.

Q. It follows then; does it not, Mr. Morton, that you do not, of your own personal knowledge, know what proportion of the expenses, taxes, and interest attributable to these distributing systems that we have named are in-

[fol. 3090] cluded in your total figures and study in Exhibit 38?

A. Study 38 and the figures shown in that study do not reflect the individual company's interest payments.

Q. Are you talking about interest payments by those companies to Panhandle Eastern, their parent company, or to others?

A. It shows no detail as to either of those.

Trial Examiner: At the beginning of your testimony this morning, Mr. Morton, as the Trial Examiner recalls it, you read the substance of a request which you had made of the Accounting Department.

Is it correct to say that your request was for a consolidated statement of the items to which you made reference?

The Witness: It is.

Trial Examiner: And when you say a consolidated statement you mean that we shall understand that the

statement was to include all of the subsidiaries which were named yesterday?

The Witness: Yes, sir.

Trial Examiner: And your entire Exhibit 38 is based on the data and information you obtained from the Accounting Department in response to that request?

The Witness: Yes, sir.

Mr. Coulton: May I ask if that Accounting Department is the department of which Mr. Watkins is the head?

The Witness: It is. I understood all of the figures in [fol. 3091] this rate case were to be submitted on a consolidated basis.

Mr. Wheat: At any rate, that is what you have attempted to do?

The Witness: Yes, sir.

Trial Examiner: And, of course, you can obtain full detailed information as to any of these matters concerning which Mr. Littman has interrogated you, if given time?

The Witness: Yes, sir.

By Mr. Littman:

Q. Now, have you completed your enumeration of the expenses and the manner in which deductions were made? I believe the last one you mentioned was "Sales Promotion Expense." Are there any others?

A. "Administrative and General" is the next large one. By the way, I do not wish to skip any of them. "Sales Promotion Expense", I do not believe I have discussed that.

Q. I think you did—I am sorry—yes, that is right, "Sales Promotion Expense" you did not yet touch upon.

A. That is, as you know, expense that is incurred on account of efforts to build load. I felt that we were maintaining a sales organization that was consistent with the efforts of a sales organization operating with a fully-loaded line, and that these expenses were attributable to unused capacity in much the same manner as were the other items that I have mentioned above.

[fol. 3092] The next item—

Q. (Interposing) Just a minute before you go to the next item.

In Line 21, you have included every dollar of sales promotion expenses incurred by Panhandle Eastern and its subsidiary companies, all of which you named yesterday?

A. That is correct.

Q. Including the distribution system sales promotion expenses?

A. That is correct.

Q. Now, have you completed that character of expense? Suppose you give us the next.

A. The next item is a large one, and amounts to about $200,000 a year.

Mr. Wheat: By the way, you did not state the average of the sales promotion expense.

The Witness: That average is about $35,000 a year, thirty-five to forty thousand dollars.

The next item is "Administrative and General", averaging around $200,000 a year. I felt that the administrative and general expense that was incurred during these, shall we say, lean days, was largely incurred on account of, and was attributable to unused capacity, so I considered all of that expense in this study although I believe I explained before the total of none of the items is carried over into the final answer.

[fol. 3093] By Mr. Littman:

Q. Of course, your exhibit clearly shows that you work from Line 19 with respect to expenses, make certain deductions and then secure your percentage of so-called unused capacity and work over, after applying the percentages of unused capacity by five methods, until you get over to Column G.

That is clear in your exhibit, isn't it?

A. Yes.

Q. Well, do these administrative and general expenses include all of such character of expenses incurred by, not only Panhandle Eastern Pipe Line Company, but its

wholly-owned subsidiaries, namely, Central Distributing Company, Central Pipe Line Company, Central States Gas Utilities, Macon Gas & Electric, Missouri-Kansas Gas Company, Panhandle Illinois Pipe Line Company and Texas Interstate Pipe Line Company?

A. That is correct.

Q. Does that character of expense which you described as administrative and general expenses include the salaries of executives?

A. It does.

Q. Of all of these companies?

A. It does.

Q. What other type and character of salaries are included in that?

A. That is a catch-all title, administrative and general. [fol. 3094] We show there all of the expenses in connection with salaries and expense of doing business principally in the main office other than those which we have previously described in detail.

Q. Does that complete the list of expenses, Mr. Morton?

A. It does.

Well, there is a small item which bears the title "Non-operating Expense". Now, I was working pretty fast trying to get an answer to this thing, using over-all methods, rounding off percentages, and, generally, short-cutting it to the point where I thought the answer was correct, however, and just to avoid any argument on the subject, I just threw out all non-operating expenses.

I felt some of them were attributable to unused capacity but it is just another one of those items where I tried to lean over backwards to be on the safe side, and I threw the thing out for consideration entirely.

Q. Will you name one item you considered attributable to unused capacity in the non-operating expenses?

A. Non-operating?

Q. Yes.

A. I never even reviewed the items that are charged in the non-operating expense. I think if I talked about it a while and looked into it a little bit, I could tell you what is in it, but I thought since we are just going to throw it out

of this study anyway, lock, stock and barrel, in order to be [fol. 3095] on the safe side, we might just as well not spend any time hunting it up to see what it was.

Q. If you never looked at it and do not know what is included in that category of expenses and you are unable to name any at this time that have any connection with unused capacity of the pipe line system, how can you say that you were leaning backwards when you threw them all out?

A. I figured that is a fair statement to say that you are leaning backwards and on the safe side when you throw something out completely from your study without even examining it, since it would take so much time to do so and it seemed to me like that is leaning over backwards.

I feel sure, if we would analyze an account that has charges of ten to fifteen thousand a year in it, some of them could be said to be attributable to unused capacity, but it is just typical of the methods I used, Mr. Littman.

Q. You are sure if you looked long enough and hard enough you would find them in there?

A. Yes, I feel sure that some of the non-operating expense of this company during those years was attributable to unused capacity and had a direct relation to the fact that we had here a big project that was getting ready to go to town but had never gone yet.

Q. Suppose in browsing through those expenses which you have characterized in that last group, you had found [fol. 3096] some expense incurred in connection with manufacturing gas. Would you have included those in your study?

A. I would not have picked out any portion of a general heading like this and tried to split it down. I was not working to that fine a limit. No, I would still have left it out.

For all I know, there might be some expenses with that Macon Company right there automatically eliminated.

Q. Now, Mr. Morton, what daily line capacity did you use as 100 percent capacity?

A. I used as the basic figure, a capacity of 125 million cubic feet.

Q. And that is shown, is it not, in Line 18, Column F, on Page 1 of Exhibit 38?

A. Yes.

Q. What annual delivery did you adopt as standard or loaded, to use your term, year?

A. What annual delivery in cubic feet?

Q. In M.c.f.

A. Yes, I used the figure 39,219,025 M.c.f.

Q. Well, you are reading the wrong figure, I believe, Mr. Morton?

A. From that figure, I eliminated 2,057,116 M.c.f. to get the figure shown on Line 16 of 37,161,909 M.c.f.

Q. It was the latter figure, namely, 37,161,909 M.c.f. that you did finally adopt as the annual delivery for the [fol. 3097] standard or loaded year, is it not?

A. For one or two of the comparisons I have made in the five studies, yes.

Q. Well, I would like to be clear on it. You did not use the 39,219,025 M.c.f. figure for any purpose, did you, in this study?

A. Except the starting point.

Q. In other words, you were working toward the 37,000,000-odd figure?

A. The latter figure, yes.

Q. And you used that 37,000,000-odd M.c.f. figure as the annual delivery for the standard or loaded year for purposes of this study?

A. Of course, you may appreciate by looking at page 2 that that figure itself was again adjusted to reach the standard for comparison.

Q. Yes.

A. However, that is the basic figure and I think that is the basic figure and the starting point.

Q. Well, so we won't have any misunderstanding about it in the record, and I hope we won't—

A. (Interposing) Neither do I, Mr. Littman.

Q. I certainly think we can get together on this. In your Method No. 1—I have been referring to Methods 1, 2, 3, 4 and 5 in the order in which they appear on Page 2 [fol. 3098] of Exhibit 38. You do not have any objection to my referring to them in that way, do you?

A. No.

Q. Now, what annual M.c.f. sales figure did you use in working out your Method 1?

Mr. Wheat: Mr. Littman, just so the record will be clear, couldn't we have the record show that what you are referring to now is Method 1 is what Mr. Morton has headed, "Direct Investment-Volume Method".

The method that you are referring to as No. 2 is Mr. Morton's "Direct Investment-Revenue Method".

The method you are referring to as No. 3 is Mr. Morton's "Direct Investment-Max. Day Method".

The method you are referring to as No. 4 is Mr. Morton's "Adjusted Base Year-Volume Method."

And the method to which you are referring as No. 5 is Mr. Morton's "Adjusted Base Year-Revenue Method."

It seems to me that with that in the record, we can be completely clear.

Mr. Littman: Yes, indeed, I think that will assist materially in conducting this cross-examination.

The Witness: To answer your question, Mr. Littman, Page 2 plainly shows there on Line 28 that I did use the figure that we were speaking of, of 37,161,909 M.c.f. brought over from Line 16.

[fol. 3099] It is self-explanatory almost there, if you notice.

Mr. Littman: Sometimes.

Mr. Culton: Line 5 divided by Line 16 is what you referred to?

The Witness: Yes.

By Mr. Littman:

Q. And that same 37,161,909 M.c.f. figures is also used in connection with Method No. 4, is it not?

A. Yes.

. . . . . .

By Mr. Littman:

Q. At the time we reached the recess, you had given us the three basic figures for the so-called loaded or standard year, namely, the figures for the total daily capacity and for the annual delivery and for the annual revenue.

Now, what was the delivery load factor during your standard or so-called loaded year?

A. I do not recall having that figure. I cannot tell you right off what the load factor was during the standard or loaded year.

[fol. 3100] Q. Mr. Morton, wouldn't it be calculated in this way? You have a slide rule there and a calculator there, and you tell me if I am wrong.

Take the 37,161,909 M.c.f. shown in Column F. of Line 16 and divide by 365 days to get the average M.c.f. sales per day. That would be your first step?

A. Correct.

Q. Now, what would you get?

A. 102—

Q. You are working the slide rule, aren't you?

A. Yes.

Q. We get 101,813 M.c.f. as the average daily delivery. Wouldn't you divide that figure by the 125,000 M.c.f. shown in Column F, Line [redacted], called "Maximum Line Capacity-Daily M. C. F." to secure the delivery load factor for the standard or loaded year?

A. Now, I defined load factor the other day as being the ratio between the maximum delivery and the average delivery for any given period. The figure you have read would be to divide the average day by the maximum line capacity so that the answer to your question is "no."

Q. Suppose then, Mr. Morton, you use the actual peak day delivery shown in Line 17, Column F in the amount of 121,455 M.c.f. instead of the 125,000 M.c.f. and tell me what load factor you would get?

[fol. 3101] A. The answer is 84 percent, in round numbers.

Q. Yes, we get 83.84, certainly close enough.

Now looking again at Line 18, I notice that you have in Columns A, B, C, D and E, during the entire 4½ year period from April 1, 1932 to September 30, 1936, inclusive, the figure of 80,000 M.c.f. as the "Maximum Line Capacity-Daily M. C. F." Is that correct?

A. Yes, sir.

Q. What does that 80,000 figure mean? What does it really represent?

A. That represents the capacity of the pipe line during those years, the maximum daily capacity of the pipe line during those years.

Q. In other words, if I correctly understand you, that is the most gas that Panhandle Eastern Pipe Line Company could be expected to get through their lines in any given 24-hour period?

A. Yes, sir.

Q. I presume there are some minor exceptions to that, are there not, Mr. Morton?

A. Yes.

Q. Because I notice immediately above the 80,000 figure, in Column E, the actual delivery in the maximum day as shown in Line 17 exceeded somewhat the rated capacity, if you don't mind my calling it that?

[fol. 3102] A. Yes, that is true.

Q. But, for all practical purposes, the 80,000 represents the true daily capacity during that 4½ year period?

A. Yes, sir.

Q. Now, looking to the extreme right of Line No. 18, I note that the capacity of your system increased from 80,000 M. c. f. to 125,000 M. c. f.

That is to say, between the period shown in Column E, to-wit, January 1, 1936, to September 30, 1936, and the period shown in Column F, namely, October 1, 1936, to September 30, 1937, the capacity of the system was increased by 45,000 M. c. f. per day, is that correct?

A. Yes, that is true.

Q. I should have called that daily capacity?

A. Yes.

* * * * * * * *

[fol. 3103] Q. Now, we were discussing the fact that the daily capacity has increased from 80,000 M. c. f. to 125,000 M. c. f. as shown in Columns E and F.

Now, assuming Mr. Morton—before we go to the next question—that was an increase of approximately 56 percent, was it not?

A. Yes, sir.

Q. Assuming that the pipe line was delivering at 100 percent capacity throughout 365 days in any year between

April 1, 1932, and September 30, 1936, what amount of gas would have been delivered annually on that basis?

A. 29,200,000.

Q. That is secured, is it not, by multiplying 80,000 M. c. [fol. 3104] f. daily capacity in the 4½ year period by 365 days, is that correct?

A. Correct. I should have said, 29,200,000 M. c. f.

Q. Doesn't that figure of 29,200,000 M. c. f. represent 7,961,909 M. c. f. less than the annual deliveries which you took for the standard or loaded year delivery?

A. That is correct.

Q. You took for your standard or loaded year a delivery figure of 37,161,909 M. c. f. shown in Column F, Line 16, did you not? A. Yes, sir.

Q. In other words, in order for the pipe line to have delivered the amount of 37,161,909 M. c. f. which it delivered in your loaded year, the pipe line would have been called upon to deliver 7,961,909 M. c. f. in excess of its total annual capacity in any of the years prior to October 1, 1936, is that correct?

A. That is the result you get from this mathematical computation, yes, sir.

Q. Well, isn't it true?

A. Yes, that is true.

Q. In other words, to put it in more simple language, the system, as it existed during the entire 4½ year period shown in Columns A, B, C, D and E, from April 1, 1932, to September 30, 1936, could not have delivered anything like 37,161,909 M. c. f., could it?

[fol. 3105] A. It could not.

Q. You would not mind telling us, would you, for the purposes of the record, what percentage does the 7,961,909 M. c. f. represent of the 29,200,000 M. c. f. figure? We get, 27 percent. Is that right? A. 27, plus.

Q. Assuming that prior to October 1, 1936, the pipe line had been delivering gas at the load factor which you have stated for the loaded year, namely, 84 percent, what annual delivery would have resulted?

A. You are asking now—I just want to get the record straight, or be sure I understand you—how much gas would have been delivered in a 12-month period if—

Q. (Interposing) Prior to October 1, 1936.

A. Prior to October 1, 1936, if the pipe line had operated at 84 percent of its capacity. I get out of that, 24,600,000 M. c. f.

Q. That is pretty close. We have 24,528,000 M. c. f. Is that not about right?

A. That is satisfactory.

Q. The slide rule does not come quite as close, does it, in such large figures? A. That is true.

Q. Now, this amount of 24,528,000 M. c. f. represents how much less than the annual delivery in your loaded year?

[fol. 3106] A. That would be 37,161,909 less 24,600,000, both in M. c. f., or approximately 12,500,000 M. c. f.

Q. And that amount of 12,500,000 M. c. f. represents what percentage of 24,528,000 M. c. f.?

A. That is approximately 51 percent.

Q. Have you ever seen Exhibit No. 58, Mr. Morton, which—

A. (Interposing) I believe I have. I do not recall at the moment, however.

Q. Suppose I hand you my copy of it. It is an exhibit which was prepared and submitted by Witness Watkins entitled, "Statement of Gas Revenue, Period from April 1, 1932, to June 30, 1941".

Now, before I inquire about any figures on this exhibit, did you help in the preparation of this exhibit, Mr. Morton? A. I did not.

Q. You have seen it before, however?

A. I have seen it.

Q. Can you state, as the company's rate engineer, whether or not the average M. c. f. figures shown in Column B in Exhibit 58, Schedule 1, are correct?

Mr. Wheat: I read that "average Per M c. f."

Mr. Littman: Average per M. c. f., that would be more accurate.

The Witness: Undoubtedly, those figures are correct.

By Mr. Littman:

[fol. 3107] Q. What would you consider to be a representative average figure per M. c. f. for the 4½ year period prior to October 1, 1936, during which period you state the pipe line capacity was not used to full capacity?

A. Between 21½ and 22 cents per M. c. f.

Q. Well now, using that figure and assuming that the pipe line had been operated at a 100 percent load factor, that is, at 100 percent capacity throughout the entire 4½ year period prior to October 1, 1936, will you state what annual revenue would have resulted in each of the periods shown in Columns A, B, C, D and E, in your Exhibit 38, using the average revenue of 22.6 cents?

* * * * * * * * *

Mr. Littman: You said 22 cents?

The Witness: I used the figure 21½ to 22 cents?

Q. We will use the 22-cent figure, I am sorry.

A. I would just as soon use the 21.6 if that is what you have there. In these engineering calculations, the round figures, we frequently use them.

[fol. 3108] Q. Suppose you use the figure 22, Mr. Morton, which is your figure, the 22-cent figures which is the one you said would be the most representative of the average revenue for the 4½ years.

Trial Examiner: The statement, as I recall, was between 21½ and 22, is that right, Mr. Morton?

The Witness: Yes, that is so.

Trial Examiner: If you are going to make some extended computations, I suggest you get at your average figure accurately and use that instead of an assumed figure.

By Mr. Littman:

Q. Which one would you feel would be more representative?

A. I feel we could use 21.75 satisfactorily.

Q. All right, then suppose we use that amount.

A. Now, I am multiplying for the calendar years 29,200,000 M. c. f. by 21.75 cents. The result is $6,350,000. That would have been the revenue each of the calendar years on the premise that you have made, and for the two; nine-months' period, we would have had 75 percent of $6,350,000, which would be $4,760,000 that the revenue for the entire period would have been three times $6,350,000—

Q. (Interposing) I do not particularly care for a cumulative figure, Mr. Morton.

A. I was thinking you had asked for it.

[fol. 3109] Q. Well, let's see. In other words, if Panhandle Eastern Pipe Line Company had been using its lines at 100 percent capacity throughout every day of the 4½ year period prior to October 1, 1936, which period you use as the "Not Fully Loaded Period", the total revenue would have been $6,350,000 per year, per calendar year?

A. Correct.

Q. Whereas, the revenue in your loaded year of October 1, 1936, to September 30, 1937, was $8,953,083 as shown in Line 10, Column F, is that correct?

A. Yes.

Q. In other words, to put it more simply, Panhandle Eastern Pipe Line Company could not have possibly reached any revenue approximating the $8,953,000 which it reached in your loaded year—it could not have accomplished that with its existing capacity in any of the 4½ years which preceded the loaded year. Is that a correct statement, in more simple form?

A. That is true.

Q. In other words, I am correct, am I not, in stating that the revenue in the loaded year of $8,953,083, as shown in Column F, Line 10, is 141 percent of the total revenue that could have possibly been obtained in any preceding year, even if the system had been operating at 100 percent capacity in every day of those years and sold the gas at the prevailing price that you mentioned?

[fol. 3110] A. That seems to be approximately correct.

Mr. Wheat: What was that percentage, Mr. Littman?

Mr. Littman: 141.

Mr. Wheat: Thank you.

By Mr. Littman:

Q. Assuming that the pipe line had been operated at an 84 percent load factor which you calculated for us a few moments ago, during the entire 4½ year period prior to October 1, 1936, will you please state what annual revenue would have resulted in each of the periods shown in Columns A, B, C, D, and E, using your average revenue of 21.75 cents per M.c.f.?

A. I believe that is the figure that I had started to give you a while ago; that is $6,350,000 for each of the

three periods, B, C, and D, and 75 percent of that is $4,760,000 for the two periods A and E, that is, the two nine-months' periods.

Q. I do not believe you are answering the specific question I have put to you, Mr. Morton. I appreciate that this line of inquiry may be rather difficult to follow, but I am going to ask that the question be read again and see if you wish to make a correction.

. . . . . .

By Mr. Littman:

[fol. 3111] Q. You see, what I want is the annual figure. You do not need to give us the figure for each column. I want the annual figure.

A. I was apparently giving the 100 percent load factor figure. As I understand it now, we would multiply the capacity of 80,000,000 by 84 percent by 365 to obtain 24.6 million M.c.f. which, in turn, we multiply by 21.75 which I calculate here on the slide rule to give us an annual revenue of $5,350,000.

Q. In other words, to state it more simply, the $5,350,000 revenue figure which you just named is that revenue which Panhandle Eastern would have derived per year prior to October 1, 1936, if the system had been operated at an 84 percent load factor and assuming the revenue of 21.75 cents per M.c.f.?

A. That is approximately correct, as I see it.

Q. Now, this revenue in the loaded year shown by you in Column F, Line 10, of $8,953,083 represents what percentage of the revenue figure which you just named in the amount of $5,350,000?

We get 167 percent.

A. I get 167 percent.

Q. Well, it is clear, is it not, from these calculations, that in your study as shown in Exhibit 38, you have compared the use of the system as it existed in the 4½ years [fol. 3112] prior to October 1, 1936, with the use of a system having more capacity than was actually available and installed during those 4½ years, is that correct?

A. Not directly, not without proper consideration of the fact that during the loaded year more capacity had been

put into the line, not without adjustment for the additional capacity.

I have not made a direct comparison between, let us say, a large apple and a small peach. I have adjusted that apple to the size of the peach before making any comparisons.

Q. Did you make any adjustments, such as that which you have described in connection with your methods Nos. 1, 2 and 3?

A. In No. 1, we might discuss them separately, here is what I did: In No. 1, I show the investment per M.c.f. during a loaded year and the other years.

Q. Without adjustment?

A. No adjustment is necessary for that kind of a comparison.

Q. Well, we may quarrel about that a little later, but the fact of the matter is, that you made no adjustment in your Method 1, did you?

A. Only the adjustment that is inherent in comparing investment per thousand during one year with investment per thousand during another period.

[fol. 3113] On its face, it would be quite an unfair comparison to adjust either one of those figures either up or down. That is a very simple thing.

The investment per thousand cubic feet sold during this year as compared to the investment per thousand cubic feet during some other period, there is no adjustment there, that is a very simple calculation.

Q. Mr. Morton, what do you mean by the term "capacity" as it is used in the title of Page 2 of Exhibit 38, "Five Different Methods of Calculating Interest, Ad Valorem Taxes and Operating Expense Attributable to Unused Capacity"?

A. I can best describe that by saying that capacity, as we use the term here, is not limited strictly to the physical carrying capacity of the pipe line.

That term as used here, embraces the conception of capacity to earn money as well as the capacity to carry gas physically through the line.

Q. Then it does not mean capacity of the pipe line, does it?

A. It is not limited strictly to capacity of the pipe line.

Q. Well, does the term "capacity" as you have used it in that caption include capacity in the sense that it has reference to the capacity of the pipe line?

A. It does.

[fol. 3114] Q. You are referring then in your caption to unused capacity of the pipe line system of Panhandle Eastern or not?

A. I have just explained what I meant by capacity as used here, Mr. Littman. I hesitate to repeat it again. We can have it read back again—

Q. (Interposing) I am afraid I did not understand your answer, Mr. Morton, which is why I am asking the question again in a little different way. To me, it seems that the word "capacity" expresses capacity of a pipe line.

You say, as I gather it, it might or might not. I want you to tell me what you mean by it.

A. I might amplify that, yes, to this extent.

You will notice in Method 2 there, for example, "Direct Investment-Revenue Method", in that method I compare the investment that has been put in this pipe line per dollar of revenue taken from the sale of gas, the investment per dollar during a year when the pipe line was earning and going to town, as we say, with periods when the pipe line was not earning and was not doing so well, when its inherent capacity for earning was there but was an unused earning capacity.

Q. Then you are speaking, in Method 2, of earning capacity, are you?

A. There is no reference in Method 2 to the physical daily maximum ability of the pipe line to carry gas. Some [fol. 3115] of these methods are not related at all to the physical ability of that pipe line to carry gas, except in so far as earnings are related to ability to carry gas.

Q. Well, let's be specific and let's look at Method 2. In Line 34, you use the term "Percent Used Capacity". Now, what kind of capacity are you talking about there?

A. That method has no reference to any particular capacity other than the one that I have described as capacity.

Let's examine a little closer and see if I can get what you are heading at, Mr. Littman. In Line 1, we show the investment per dollar of revenue received.

Mr. Culton: You mean, Line 33?

The Witness: Line 33, thank you.

We show investment per dollar of revenue that was inherent in this pipe line during those various periods. That is to say, let's select, for example, the year 1934.

We had an investment in this pipe line of $15.78 per dollar of revenue taken from it.

By Mr. Littman:

Q. In twelve months?

A. In twelve months, but during another twelve months period, when the line was loaded and when it was earning a revenue somewhat commensurate with the plan of those who started the project, the investment per dollar of revenue at that time was $4.92, so that in 1934 we had three [fol. 3116] times as much investment per dollar of revenue taken out of the line as we had during the year when the line was doing what it was supposed to do.

Therefore, we conclude that we had only about 30 percent of its capacity used during the year 1934, or, another way to put it, about 70 percent of that investment per dollar of revenue that was inherent in this situation in 1934 was there because of some future time and not being used in the year 1934.

Q. Well, you use the $4.92 shown in Line 33 as 100 percent, do you not?

A. You may call it that.

Q. What do you call it in this exhibit? What do you call that?

A. I have never called it—I see right underneath I have 100. That is O. K., 100 percent.

Q. What do you label it in this exhibit?

A. 100 percent, a base for comparison.

Q. What do you label it in this exhibit? What do you call it in this exhibit, 100 percent?

A. Do you wish me to read Line 34?

Q. Yes.

A. Percent used capacity.

Q. Yes. Now, what does that have to do with capacity, Mr. Morton? Where does capacity enter into that figure at all?

A. I think, Mr. Littman, it is apparent on its face, I [fol. 3117] cannot go any farther than to point out to you what that line says and again repeat that the figures shown on Line 34 represent my calculation of the percent of used capacity in the system at those different periods.

Q. Now, the term "Percent Used Capacity", as you have used it in Line 34, does not have anything to do with the capacity of the pipe line system to carry gas, does it?

A. Only in so far as whatever relationship there is existent between investment and revenues and ability to carry gas.

Q. Could you answer my question yes or no?

A. I do not believe I could answer your question yes or no.

Q. Well, your 100 percent "percent used capacity" relates to a dollar figure, $4.92, doesn't it? A. Yes, sir.

Q. And the $4.92 merely represents the amount of investment per dollar of revenue received for the gas which was actually sold in the period October 1, 1936, to September 30, 1937, and that is all it represents, is that correct?

A. That is correct.

Q. As a rate engineer, do you think it is proper to call such a figure 100 percent used capacity, Mr. Morton?

A. I think it is all right to use this figure in arriving at my conception of the percentage of used and unused capa- [fol. 3118] city during these different periods.

Q. I understand that, but I am asking you whether or not you consider the terminology or the description which you have used of "percent used capacity" as properly descriptive of $4.92 which was derived in the manner I have described?

A. Yes, I think, as I have used it here, it is properly done.

Q. Well, what would you call the percent that would be arrived at by making an actual determination of the actual daily capacity of a pipe line? Would that also be "percent used capacity" for 100 percent?

A. That could be used as one of the methods, yes, sir.

Q. In one instance, you would have the total capacity in M. c. f. as representing "percent used capacity" and, in

another case, you would have $4.92 and you would call it the same thing?

A. That would be all right.

Q. Well, I guess you could call anything most anything you want, Mr. Morton, but I want to make certain that we understand that you do not claim that the figures in line 34 represent used capacity of the pipe line itself.

A. Well, of course, we both realize that there can be a great deal of play on terminology, Mr. Littman.

Q. Let's look at the term that you use in Line 29, "Percent Used Capacity". At the end of that line, you have [fol. 3119] in Column F, 100. Is that 100 percent used capacity? Is that what you mean by that figure?

A. Yes, that means what it says.

Q. But it says exactly what Line 34 says, doesn't it?

A. Yes, it says the same thing. I have used the same description all the way through.

Q. Does it mean the same thing?

A. Yes, it means the same thing.

Q. Well, you have $1.18 there whereas you had $4.92 down below; do you still say it means the same thing?

A. Yes, it is just another way of doing the same thing.

Q. Using the same words to describe it?

A. That is all right for this study.

Q. When you use the term, "Percent Used Capacity", you are not referring to the physical capacity of the pipe line, are you?

A. Only in so far as it might be related to investment or earning power. There is a certain relation, we must both of us concede, that there is a very close relation between capacity of the line, the physical ability to carry gas, its capacity to earn and the investment that is in there for the purpose of establishing a going and earning proposition.

Q. Now, in the line immediately above Line 29, that is, in Line 28, you have the term "investment per M. c. f.", and that is derived, is it not, simply by taking the invest- [fol. 3120] ment in each of the periods shown on the previous page and dividing that investment by the number of M. c. f.'s sold in that year?

A. That is the way to do it, yes, sir.

Q. That gives you $1.18? A. Yes, sir.

Q. And you call that 100 percent capacity?

A. Yes, sir, $1.18 investment per M. c. f. during the loaded year is 100 percent capacity in this study.

Q. Now, I believe you said that that $1.18 has something to do with the physical capacity of the pipe line. Let's see whether it has. As you just stated, the $1.18 is obtained by a straight mathematical division.

Was the total number of M. c. f.'s sold in the year October 1, 1936, to September 30, 1937, the total amount of M. c. f.'s that could be sold? Does it represent the capacity of the pipe line? You can answer that yes or no, can't you?

A. No.

Q. Now, does the investment figure which you use in Column F, line 16—I beg your pardon, Column F, Line 5—does that investment have anything to do with the capacity, physical capacity, of the system? You can answer that yes or no, can you not? A. Yes.

Q. In other words, I presume what you mean now is that since this particular amount of money that you used, [fol. 3121] that is, $44,022,170, in Column F, Line 5, represents total investment, that that investment had a certain capacity and that, therefore, the investment has something to do with capacity. Is that generally true?

A. That is a little more specific than I believe that I would care to make it. What I am answering is the general question, as I understand the question I am answering—is there any relationship between investment and capacity—and I just can answer that right out by saying that, in general, as your investment goes up your capacity goes up. There is usually, on pipe lines, some relationship between them.

Q. But it is not a direct relationship necessarily, is it?

A. I know that it is not a direct relationship.

Q. Now, let's look at your third method. There you used the same phrase, "Percent Used Capacity" in Line 39, 100 percent. This time, it means $362, doesn't it?

A. It means that the investment per M. c. f. on the maximum day during the loaded year was $362, that I used that as 100 percent capacity.

Q. In deriving that figure, did you use the actual capacity of the system for any 24-hour period?

A. I used the investment of the system divided by the maximum day on the system.

Q. Maximum day delivery?

[fol. 3122] A. Maximum day delivery.

Q. Not the maximum capacity of the system?

A. That is correct. That figure represents the investment that was in this project in the loaded year per thousand cubic feet carried on the maximum day's delivery.

Q. Well, obviously, the figure of $362, which you call "Percent Used Capacity", does not refer to the physical capacity of the pipe line system, does not?

A. It does not refer directly to the 80 million a day or the 125 million a day which we frequently refer to as the capacity of the system.

Q. In other words, your answer is, "no, it does not refer to physical capacity"?

A. That is correct.

Q. Now, let's look at the fourth method. There you used the identical term in Line 44, "Percent Used Capacity" and you have 100 percent.

This time it refers to 23,783,622 M.c.f., does it not?

A. Yes, it does.

Q. And that was not the M.c.f. capacity, was it, of the system for the year October 1, 1936, to September 30, 1937?

A. No, that was not the physical capacity of the system.

Q. In your Method 5, you used the same term again, "Percent Used Capacity" and there, this time, it means $5,729,973. Those dollars are what, revenues?

[fol. 3123] A. Yes, that is revenue.

Q. Revenues for 12 months, are they not?

A. Yes, sir.

Q. That would have been derived upon certain assumptions? A. Correct.

Q. Now, you would not say that, in these circumstances, the 100 percent refers to any such thing as the capacity of this pipe line system, would you?

A. Mr. Littman, you have asked me that several times.

Q. But we are on a new method. We are on the fifth method, you know.

A. If we are trying to get at the facts here, let's get at them. I have previously told you what my conception of capacity as used in this study is, and I have not changed it since we started the examination on these five different methods.

There is a relation, as I said before, and I want to make it plain that I do believe and I think it is generally conceded that there is some relation between earning power, investment and ability to deliver, or capacity.

There is some relation there that is very plain to anyone who has fundamental ideas about pipe lines. In general, the greater your capacity, the more money you have to have in the system.

[fol. 3124] Now, there is a relationship. I cannot say that none of these methods are not related at all to physical capacity. I do not want to say that.

Q. Well, they are not very much related to physical capacity, are they?

A. I do not know how much.

* * * * * * * *

[fol. 3125] Q. Mr. Morton, will you please turn to Page 2 of Exhibit 38. In Line 28, you used the term, "Investment Per M.C.F." Does that refer to the M.c.f. annual sales?

A. Yes.

Q. Well now, two of these periods that you have, namely, the period shown in Column A and in Column E, are not annual periods, are they? A. That is correct.

Q. What M.c.f. sales did you use for those two periods?

A. Well, I did there what I have explained before. It is not comparing a big apple with a little peach. I reduced them to the same basis.

On my direct examination covering this, I stated that I had made proper adjustment for nine-months' periods, so that, what I have done is to take a nine-months' period and set it up to what it would have been over a year's period at the same rate.

[fol. 3126] Q. Where did you make that adjustment?

A. Well, now, that remark I made is to apply to those places where such adjustment is necessary to reach a proper answer.

Now, in this direct investment—volume method—

Q. (Interposing) That is No. 1?

A. No. 1, the intermediate step does not show. Let's see if I can show you how we got that. I have divided Line 5 by Line 16.

Q. In each case?

A. And for the Column E, let us examine that. I take 40 million and divide it by 15.5. Now, there is one—

Q. (Interposing) Would you mind spelling out those figures?

A. Yes, I take 40 million from Line 5 and divide it by 15.5 at Line 6.

Now, that gives me 259, which we get—

Q. (Interposing) What is this 15.5 that you are talking about? I would like to have you read the entire figure, if you don't mind.

A. All right. I have divided the total investment shown on Line 5, just as the exhibit shows—

Q. (Interposing) Column F?

A. Column E.

[fol. 3127] Mr. Wheat: That is $40,109,403?

The Witness: $40,109,403 by the figure found on Line 16, Column E, which is 15,512,181 M. c. f.

By Mr. Littman:

Q. That gave you what? A. That gave 259.

Q. $2.59? A. Yes; $2.59.

Q. Now, you do not mind if I make it clear, that is the figure shown on Column E on page 2, Line 28?

A. That is correct.

Q. Before you go to the next step, that figure of $2.59 is not investment per M. c. f. of annual sales, is it?

A. Let me examine that a minute.

Q. Perhaps we could save time, Mr. Morton, by suggesting that possibly you made your adjustment in the 60.74 figure which appears in Line 29, Column E.

A. Yes, thank you, Mr. Littman, that is correct. I was disturbed for a moment there to see that the $2.59 is not the investment per M. c. f. of annual sales. That figure is the investment per M. c. f. of nine months' sales.

The adjustment to take care of the nine-months' period is made in the next line.

Q. And the adjustment is not in the $3.59 figure?

A. That is correct. I do not doubt, if you will wait [fol. 3128] just a moment and I will check this, that I have taken 75 percent of the $2.59 to get a figure which would be comparable to $1.18 which shows in Column F and, sure enough, that is the way it works out.

Q. So that we may agree, may we not, Mr. Morton, that the $2.59 figure shown in Column E, Line 28, as investment per M. c. f. is not comparable to the $1.18 figure in the same line in Column F, is it?

A. That is correct and let me add that the percentages underneath that are derived from these figures with proper adjustments, however, are comparable, in my opinion.

Q. And is the same situation true with respect to the $10.61 figure which appears in Line 28, Column A, for the nine-months' period, April 1, 1932, to December 31, 1932?

A. Yes, that is true.

Q. And that figure is not comparable to the $4.43 figure which appears in Column B on the same line?

A. That is correct.

Q. Now, are there any other instances where that situation prevails as between nine months and one year's period? Don't you have the same situation—

A. (Interposing) We do all the way through, and I believe it is in four of the five methods, as I recall it now, but I am sure in at least four of the five methods it was necessary to adjust for nine months' periods. Of course, [fol. 3129] it is apparent on the face of it that it is not fair to compare a nine-months' figure to an annual figure.

Q. Yes, and we wanted to make certain that we understood the mechanics behind these figures so that we would not improperly compare them.

Now, turning back to Page 1, if you please, I think you have a typographical error probably in one of these figures. You do not mind if we make a correction, if that is the case, do you, Mr. Morton?

A. Not at all. I would not be surprised to find an error.

Q. Well, suppose you look at the figures in Column D on Page 1, particularly the figure in Line 14, "Argus, Local Area and Transported", in the amount of 25,510,846 M. c. f.

A. Yes.

Q. Isn t there a correction to be made on that figure?

A. Yes, undoubtedly there is come correction to be made there. I am looking back through my working papers to find the correction.

The figure on Line 14 should read, "15,510,846 M. c. f."

Q. That is the figure in what column?

A. Column D, Line 14.

Q. That should be 15,510,846 M. c. f.?

A. Yes, sir.

[fol. 3130] Q. Now, Mr. Morton, just before the noon recess we were talking about comparing the use of the system as it existed in the 4½ year period prior to October 1, 1936, with the use of the system having more capacity than was actually available and installed during those 4½ years, and I believe you stated that an adjustment had been made to take care of that situation, did you not?

A. Yes, sir.

Q. And I believe you stated that that adjustment had been made to compensate for that comparison in all five methods?

A. Wherever I thought it was required. I can trace it [fol. 3131] through to find out whether it was in five, or just four of the five. I believe it is immaterial at the moment.

Q. Let me get at it this way: The adjustment that you spoke of with respect to Method 1 was the weighting of the investment in the respective years, was it not? That is, you took into consideration the amount of investment in plant in each of the years compared. Was that what you referred to when you said you took into consideration the difference between the situation as it existed in the 4½ year period prior to October 1, 1936, and in the year after October 1, 1936?

A. Yes, in that method I took into consideration the investment per thousand of cubic feet sold during each period.

Q. But isn't it true, that in that method, namely, Method No. 1, you did not take into consideration or make an adjustment of those periods on the basis of the actual physical capacity of the system?

A. We are back where we started on that. Would it help any, Mr. Littman, if we just would strike out the title that we have used on Lines 29, 34, 39, 44 and 49 and just, instead of saying, "Percent Used Capacity", just leave that line blank and not name that at all?

This phraseology that I have used here or terminology, "Percent Used Capacity" is an engineer's choice of words attempting to describe something that he thinks pertinent to the answer, and I did not spend a great deal of time in [fol. 3132] selecting that title.

Now, if it would help us any, I would be glad to make that line blank, just show percentages, because it is only a working step to the answer that you find on that line entitled "Percent Used Capacity" all the way through.

Q. I think it would be helpful, and I think it would eliminate some confusion that has resulted among the staff and myself. I certainly concur. If you wish to suggest a different title or one that more closely describes the situation, why, that would be satisfactory, but if you say it is purely a working step, I think we could strike it.

A. That is my suggestion. Now, any name that you might designate for it—

Mr. Wheat: (Interposing) You would leave, wouldn't you, the parentheses showing what you did in that line?

The Witness: Certainly, only to help in tracing through the computation, however.

By Mr. Littman:

Q. Now, this striking of "Percent Used Capacity" would apply to each of the five methods, would it not?

A. Yes.

Q. That is Line 29. How about Line 30, "Percent Unused Capacity." That is the same situation, is it not?

A. Now, let's consider that a moment. That "Percent Unused Capacity" is one of the basic figures I am using to [fol. 3133] get at my answer and I would not care to strike that line without giving it some thought.

Q. Well, let's strike the "Percent Used Capacity" for the time being.

Mr. Culton: We are not striking that. He said, if you want to strike it completely, the words mean nothing. If

you do not understand them—we think that the words are very accurate and the fact that you do not understand them does not mean that we do not understand the way they were used, so we are leaving them in the exhibit as they are.

If you cannot understand those three words and want to strike them from your mind and leave what he says there as being what he has done there, that is O. K.

Mr. Lee: Why can't you clarify it by putting in a definition of what you mean?

Mr. Culton: We think he has made a very clear definition, and if counsel cannot understand it, it is frequently like I am when somebody of another profession says something, it is just one of those things that sometimes happens to us lawyers.

Mr. Littman: We understand it, that is not our difficulty, Mr. Culton, but we could never understand why he called it what he did.

Mr. Culton: I have lots of times been unable to understand testimony. That is just one of the unfortunate results of being a lawyer and trying cases where other pro- [fol. 3134] fessions are involved.

Mr. Lee: The question is, doesn't it leave the impression that it is the capacity of the line he is talking about? That is the impression I got from the exhibit.

Mr. Wheat: Isn't it true, Mr. Littman, that since the examination has been had and the witness has explained so fully what he did and everything, there is certainly nobody that is fooled by this terminology and, as the witness has stated, if you have some suggestion as to some other terminology, I am sure we would be glad to consider it.

I do not think anybody is under any misapprehension at all as to what the witness was trying to do and what he did and he has stated that there is a general relationship all the way through between these various things that he has for his own purposes labeled, "capacity."

Mr. Littman: I personally think your witness' suggestion is an excellent one, but if you do not believe that it is

a good one, why, I presume you can do as you please about it.

By Mr. Littman:

Q. Well, getting back to our question, comparing the system before September 30, 1936, with the system after October 1, 1936, in the first three methods shown on Page 2, you did not make any adjustment in direct proportion to the difference in physical capacity of the pipe line as it existed in those two periods?

[fol. 3135] A. That is correct. I felt that the fact that I was stating "Investment per M.c.f." was a sufficient comparison between one period and another, without making any kind of adjustments.

As a matter of fact, an adjustment in a situation like that would, in my opinion, have been out of order.

Q. An adjustment of what kind would have been out of order?

A. An adjustment in a situation like that would have been out of order.

Q. Now, Mr. Morton, looking at the adjusted base year method which we have called Nos. 4 and 5, I notice that you have an adjusted base year method starting in Line 42 that seems somewhat comparable to Method 4, that is, Method 1 is "Direct Investment-Volume Method"; Method 4 is, "Adjusted Base Year-Volume Method".

I also note that you have an "adjusted base year-revenue method" which seems to be comparable to the method of No. 2 which was a "direct investment-revenue method."

Now, why didn't you show a sixth method on this page, namely, "Adjusted Base Year-Max. Day Method"? It appears to me like one of these is left off.

A. In making that comparison, I have compared the investment to the Max. day for each of those periods. That is to say, I show what the investment is per M.c.f. of gas [fol. 3136] delivered on the Max. Day.

Mr. Wheat: You mean, you are talking about Method 3 now?

The Witness: I am talking about Method 3. For example, taking the year 1934, I took the total investment

that we had in 1934 and I divided it by the maximum day that obtained on the pipe line in 1934 and I found that the investment per maximum day delivery was $779.

Now, during a loaded period which would be that shown in Column F, I divided the investment of that year by the M.c.f. sold on the maximum day and I got $362.

Now, it is quite apparent that the 1934 figure is almost twice as large as the loaded year figure. Therefore, I said about half of the investment was being used and about half of it was not being used during 1934 and it seemed to me that no adjustment of any kind, such as you have questioned me about, was necessary to complete the comparison.

Mr. Wheat: Mr. Littman, I believe possibly the witness has confused what you said in your question.

Mr. Littman: I am afraid he has.

Mr. Wheat: May I just ask a question that may clear that up. As I understood Mr. Littman, he asked you why you did not add a sixth method which would be "Adjusted Base Year-Max. Day Method."

Well now, if you had tried to make a sixth method on that basis, your answer just now given would show that [fol. 3137] you could not have an adjusted base year of a maximum day, could you? You were using a maximum day, weren't you?

The Witness: There might have been some adjustment that another calculator could have made there, so I cannot say there could not have been such, but I cannot concede, any logical way of setting up a method that compares to Method No. 3.

By Mr. Littman:

Q. Let me ask you this, Mr. Morton, these five methods that you have set forth on Page 2 of Exhibit 38 are not the only methods that you have worked up, are they?

A. I have worked out other methods; roughly, however.

Q. Have you ever worked out the method that I just described?

A. No, sir I never worked out an adjusted Max. Day method.

Q. What would you think of such a method? You have told me you did not think it was necessary to make an adjustment of your Method 3, but here is another method that seems to follow quite logically from your Method 3. What would you think of such a method?

A. I would have to see how it would work out. I would have to have more details. Offhand, it seems to me you have done a fair job and done all that you can do along that line when you take the investment of each year and [fol. 3138] divide by the maximum day of each year.

Then you automatically take care of any fluctuations in investments and Max. Day. You are comparing a unit there, which unit is investment per Max. Day of sales on this pipe line.

Q. Well, you worked out a so-called supplemental method for Method 1 which you have put in here as Method No. 4. They are more or less comparable, aren't they?

A. They are comparable at some points, yes.

Q. In other words, in the fourth method you use the Volume Method, do you not?

A. Yes, I do. I relate the volume of each year to the volume of the loaded year with proper adjustment before that relation, however, of the loaded year.

Q. Now, with respect to your second method, called "Direct Investment-Revenue Method", you have offered a supplemental method called "Adjusted Base Year-Revenue Method", which has many features in common with your No. 2 Method?

A. Yes, I would say so.

Q. But you did not do that, Mr. Morton, when you came to your third method, called "Direct Investment-Max. Day Method". I wonder whether you have told us fully why you did not do it? Have you given all of the reasons that you can think of as to why you did not do it?

A. The mere fact, Mr. Liftman, that four resembles one and the fact that five resembles two, would not make it [fol. 3139] necessary that you set up a six to resemble three. Your logic is that since I have two pairs here, I should have three pairs.

Q. You do not mind my natural curiosity, do you, in that regard?

A. Not at all, just go right ahead.

Q. You could now express no opinion as to the validity of such a method or do you want to express an opinion as to the validity of using a comparable so-called adjusted "Base Year-Max. Day Method". What would be wrong with doing that?

A. I believe that such a study could be set up. Of course, we have not discussed the rules under which it would be set up, and so a fellow would have to be pretty careful about how valid it was until he knows more about the specifications for this adjustment.

Q. You mean, you would like to know how much money you get first, before you can tell whether it is a good method?

A. No, I would like to know what adjustments you were going to make and on what basis.

Q. You have no criticism to offer at this time of such a method—withdraw that—there are sufficient figures in your exhibit, are there not, on which to work out such a sixth method?

A. We have sufficient statistics here to work out almost any number of methods and the answer to your question is "yes".

[fol. 3140] Q. And without first working it out, you would not want to express an opinion as to whether such a method would be good, bad, or indifferent?

A. I have a natural curiosity, as you do, about just what adjustments you are going to work into this thing.

Q. Well, there would not be much of an adjustment to it. It would be your adjustment, the 80 over 125 adjustment that you use in your fourth and fifth methods. Is there anything wrong with that?

A. Now, you are getting specific. When you do that, do you propose to compare such adjusted Max. Day to the full investment that existed during those periods? In other words, you have two apples, are you going to chop one up before you compare them?

Q. I am asking you whether, in your opinion, it would be proper to do a sixth method using your own figures as the basic data and using your own adjustment?

Now, I am not a rate engineer. I am asking you what you think about the matter. That is one good thing about being a lawyer in these proceedings. We do not have to express our opinions until later.

A. You have used the phrase, "and using your adjustment". I have made dozens of them here, so that isn't a sufficient description of the adjustment that you would use to enable me to give you a good answer.

[fol. 3141] Q. Have you ever computed a method of calculating interest, ad valorem taxes and operating expenses attributable to unused capacity which method was called the "ratio of investment method"?

A. Not that I recall.

Q. Do you remember ever using such a method and getting a figure of $3,400,000 which would logically be shown in Column G?

A. I have made studies that yielded figures larger than those shown in Column G, and I have seen one, or recall a figure pretty close to $3,400,000 that I worked out on some preliminary study.

Q. Did you submit that one to Mr. Biddison for his examination?

A. I do not know that Mr. Biddison ever saw that one. I just do not know. I do not believe he did.

Q. You do not believe you did?

A. No.

Q. Did you submit it to Mr. O. J. Neuner?

Mr. Wheat: Don't you mean, G. J. Neuner? Maybe the carbon copy you have before you isn't as good as the one I have.

The Witness: I recall writing Mr. Neuner a memorandum in which I discussed some of my preliminary studies, yes, and from your refreshing my memory, by reference to this memorandum, I feel sure you will find the figure $3,400,000 on that memorandum referring to some preliminary [fol. 3142] study I made in connection with this cost of unused capacity.

By Mr. Littman:

Q. Do you have a copy of that letter?

A. I do not have a copy with me.

Q. The letter to which I refer or memorandum which I refer to is dated August 19, 1941. Is that the one you have?

Mr. Wheat: August 19, 1941. I will be very glad if you would like to have this marked as an exhibit—

Mr. Littman: (Interposing) We will handle this matter as we see fit.

By Mr. Littman:

Q. Read the copy that Mr. Wheat handed you, if you will, and state whether or not that is a correct copy of your memorandum? A. That is.

Q. That is a memorandum dated August 19, 1941, addressed by you and written by you to Mr. G. J. Neuner, is that correct? A. That is correct.

Q. Now, will you please read that letter into the record?

A. (Reading) "August 19, 1941

(To) Mr. G. J. Neuner

(From) G. W. Morton

"It is quite apparent that there was unused capacity in [fol. 3143] the system prior to the Fall of 1936. This is illustrated by the fact that Gross Earnings for the period October 1, 1936 to September 30, 1937, were $9,318,459 whereas earnings for prior periods were:

Nine Months 1932 (April 1—December 31)	$1 427 494
1933	2 585 397
1934	3 048 518
1935	3 611 865
1936	3 611 865
1936 (January 1st to October 1st)	3 786 273

"Since earnings for 1935 (for example) are 38.8% of $9 318 459, we might say that only 38.8% of our investment was used and useful during 1935 and, therefore, the balance of the investment amounting to 61.2% (which had been made in advance of the time when it was to be used because it was economical to do so) was not useful in producing revenue for the company. It would seem logical,

therefore, to recognize in some way, that fact that during 1935 taxes, interest and certain operating expenses and other charges were incurred by the company on account of this 'unused capacity which had been installed prior to the time it was needed because it was economical to do so.'

"In the Chicago case these items were put in as 'going value.' Mr. Hamilton's presentation was based upon the ratio of earnings during a fully loaded year to the earnings during the unloaded years and Mr. Emery's determination [fol. 3144] was based upon the ratio of the gas delivered during those years. The amounts were practically the same. Certain adjustments had to be made by Hamilton and Emery and will have to be made in our case to rationalize the presentation.

"It happened that before the Chicago line was loaded (and in our case too) the company made some additional investment in order to fully power the line. It was obviously not logical to make a direct comparison between loaded and unloaded periods without making some adjustment for the additional investment that had been put into the loaded line. The capacity before loading was 175 MM per day. The capacity after loading was 210 MM per day.

"Accordingly, Hamilton and Emery adjusted the earnings for a loaded year before making any comparisons. They took the earnings or MCF during a loaded year and reduced them by 35/210ths in order to get a base for comparison with former unloaded years. Or putting it another way, they multiplied earnings or MCF during a loaded year by 175/210 in order to reduce the loaded year to a proper base for comparison with former unloaded years. In explanation of this adjustment, they pointed out that the line carried 90% of its full capacity on an average day during the loaded year and that the use of their factor 175/210, merely embodied the assumption that the line would have carried 90% of its full capacity on an average day during the time the capacity was 175 MM if a full 175 [fol. 3145] MM maximum day load had been realized during the unloaded years. Perhaps, if instead of the use of such a factor as a basis for adjusting a loaded year to arrive at a base, they had assumed a base annual earning or MCF delivery during each of the lean years bearing the same relation to the 175 MM as the annual MCF or

earning during the loaded year bore to the maximum capacity of 210, the comparison might have seemed simpler. Mathematically the answer is the same. With such variations as seemed necessary I have applied the methods described to our situation.

"It happens that we transported considerable quantities of gas for the account of Northern Natural Gas Company during the early years at an average rate, over the entire period, of 1.5¢ per MCF. In the development of unused capacity values I have eliminated the MCF and the Revenues from this source because the property, as built, did not contemplate such a load, as is evidenced by the size of the Hugoton line and during the loaded period (Sept. 1936 - Sept. 1937) no gas was transported for account of Northern Natural Gas Company. To be consistent, I have also eliminated from Unused Capacity that portion of the main line and Liberal compressor station and investment used in carrying this gas. Likewise, I have eliminated Argus and Local Area earnings investment and MCF because our whole story is tied to Main Line Capacities.

"There are several approaches to the problem. For example, we might take the investment during the loaded [fol. 3146] year ($51,393,417) and apply the ratio 80.125 to it and by comparing this figure with the actual investment during the 'unused' years obtain a measure of investment in unused capacity. This method yields a measure of investment in unused capacity. This method yields a 'going value' of approximately $3,388,000 before depreciation and contributions. A summary of the roughly approximate amounts obtainable before depreciation and contributions, by the three methods is as follows:

Ratio of Revenue Capacity	$5,700,000
Ratio of Sales Capacity	5,400,000
Ratio of Investment	3,400,000

"I have reduced this to writing partly to clarify my own arguments and partly to supply you with additional information to assist you in coming to a conclusion as to the most logical method for us to use in arriving at 'going value'.

"(Signed) O. W. MORTON"

Q. Now, Mr. Morton, referring to the "ratio of investment" method whereby you arrived at a sum of $3,400,000, with whom did you discuss that method?

A. I discussed that method with Mr. Neuner. I do not know, I may have even discussed it with Mr. Biddison. I cannot remember who was present at all of the many conversations and meetings that we have had on the subject of preparing for this rate case.

Q. Who turned thumbs down on the ratio of investment [fol. 3147] method?

A. That I do not know.

Q. Somebody did, evidently, because you did not use it.

A. I may have turned it down myself and I rather think I did.

Q. Didn't it give you enough going concern value, Mr. Morton? Is that why you turned it down?

A. What is enough going concern value?

Q. Well, Mr. Biddison thinks he ought to have at least [illegible] million dollars of it. I suppose that would be his idea of what would be the amount. Is that why you turned it down?

A. No, I suspect that, in working this out, there was some logical reason for turning it down, some reason other than the one you have mentioned.

Q. But you do not recall it now?

A. But I do not recall it now.

Q. You take a very active part, do you not, in designing the rates and tariffs under which Panhandle Eastern Pipe Line Company sells gas, do you not?

A. Yes, I do.

Q. When the company designed the rates and tariffs under which it now sells its gas, were those rates designed to include a return on going concern value?

A. You are referring now to a large group of rates?

Q. Any of them or all of them.

[fol. 3148] A. With any of them, which one?

Q. The ones with which you had something to do and have personal knowledge of.

A. I do not recall that going concern value was discussed one way or the other in the last provision of the rates in which I participated.

Q. Well, you made calculations and computations in arriving at the rates, did you not?

A. Mr. Littman, your question presupposes that we can sit down and just grind out, at the desk, exact costs and then just reduce that to a rate schedule and file it.

Now, as a matter of fact, in the development of rates there are many, many factors that have nothing to do with the cost of delivering the product.

For example, customer acceptance. You do not want a rate that is so cock-eyed that nobody would buy gas under it. I am trying to answer your question. I am trying to point out to you that you cannot reduce rate making to a mathematical formula in which you just sit down and you say, "This item is for this; this item is for this; this item is for going value", and so on.

I have not been able to identify going value, as such, in any of our rates.

Q. Then you have no recollection of ever predicating a rate on behalf of Panhandle Eastern Pipe Line Company [fol. 3149] over your ten years as a rate engineer upon any so-called going concern value, to the best of your knowledge?

A. I recall that in setting up the rate in Illinois, that one of the elements that entered into that—it was way back in 1931—when we had our little run-in with the Illinois Commerce Commission and made a showing before them on a new rate we were trying to put into effect—one of the elements in that rate was going concern.

Q. That was in a proceeding before the Illinois Commerce Commission? A. Yes; that was.

Q. Do you recall of any other instance?

A. No, I do not recall that subject coming up in connection with the rates which we have on file now.

* * * * * * * *

[fol. 3150] By Mr. Littman:

Q. Mr. Morton, will you please turn to your exhibit No. 40, entitled "Panhandle Eastern Pipe Line Company Sys-[fol. 3151] tem Estimated Main Line Sales—Years 1941-1946, Inclusive."

As the title indicates, Mr. Morton, in this exhibit you have set forth your estimate of main line sales of the

Panhandle Eastern Pipe Line system for the six years 1941 to 1946, inclusive, have you not?

A. That is correct.

Q. The sales shown in Column C for 1941 are actual for the first six months and estimated for the last six months of the calendar year, are they not?

A. Yes, they are.

Q. And the total for 1941, as shown in Line 26, is 62,057,500 M. c. f., is that correct?

A. That is correct.

Q. What pressure base did you use for the volumes of gas shown in this exhibit?

A. We customarily carry on our statistical reports M. c. f. sales in terms of the base at which they were actually sold and my estimates are prepared on the same basis.

That is to say, that some of them are one base, and some another. Predominantly, they are the standard with which you and the Commission are most familiar with, 30 inches saturated.

Q. Is that the same as 14.73 tmosphere? A. It is.

Q. Do I understand that it is your conclusion that the gas sales of the system will not remain at the 1941 figure [fol. 3152] of 62,057,500 M. c. f., but that they will increase in the succeeding years 1942 to 1946, inclusive, and in the total amounts shown in Lines 26 and 27 of your Exhibit 40?

A. That is correct.

Q. Now, looking at the top of your Exhibit 40, you show the sales in M. c. f., both annual and maximum day for Detroit. Does that mean the City of Detroit or does that mean the entire Detroit area?

A. That means the area which we commonly refer to as Detroit, being that area served by the Michigan Consolidated Gas Company.

Q. It includes the City of Detroit?

A. It includes the City of Detroit and vicinity.

Q. And environs of the city. Now, in Line 3, Column D, you show the estimated sales to Detroit for the year 1942 to be 27 million M. c. f., an increase of 3 million M. c. f. over 1941, do you not? A. That is correct.

Q. What part of the 27 million M. c. f. represents increased sales to the presently connected burner tip customers?

A. Now, I do not have that broken down between increases to the presently connected customers and the new customers which we expect will come on to our lines.

Q. In making your estimate, you did not make any such determination?

[fol. 3153] A. I made no such distinction between customers, yes, sir. In other words, these are the increases, whether or not it comes from the existing customers or comes from new customers that might be added to their systems during the year.

Q. Do I understand then, that you arrived at your increase of 3 million M. c. f. between 1942 and 1941 on an over-all basis, without making any breakdown or distinction between customers?

A. I am looking now at Work-Sheet No. 1, which gives the total for Detroit, all the details that I have used in the preparation of this estimate.

I see that at the end of 1941, there were 48,000 house heating customers and, at the end of 1942, I estimate there will be 10,000 more, which is 58,000 house heating customers and that the average for the year 1942 will be 53,000 house heating customers; that the total consumption of all house heating customers that will be connected, whether they are new ones or old ones, the total consumption of the combined group will be 86 million therms, or approximately 8,600,000,000 cubic feet.

I show on that work sheet also, that the remainder of the gas to be sold to Detroit for resale for purposes other than house heating will increase from 170 million therms this year to 184 million next year.

Q. What is that, 174 million—

A. (Interposing) 170 million therms to 184 million [fol. 3154] therms, which is approximately 17 billion cubic feet this year to 18,400,000,000 next year, but those figures are not segregated as between old and new customers.

The addition of the two quantities of gas which I have named, namely, 8,600,000,000 and 18,400,000,000 gives us

our figure of 27 billion cubic feet which is shown as next year's estimate.

Q. Can you enlighten us as to how you arrived at these increases? You merely told us that, in your opinion, there would be increases, if I correctly understand your testimony thus far. A. That is true.

Q. Can you enlighten us as to the method you used to arrive at that?

A. Yes, I would be glad to give you the background of that and this is essentially the method you will find running through this entire exhibit.

I keep separately statistics on Detroit, the number of house heating customers by months. I can go back five years, by months, and indicate and show you very quickly how many house heating customers Detroit has so I know from the past performance about how many new house heating customers will be added to the line for each year and for the last three years, it has been about 10,000 house heating customers added each year.

I just assume we will add 10,000 more next year, and that [fol. 3153] the next year will be just like the past two or three years. I keep a record of the house heating consumption, or the consumption per house heating customer, rather, in Detroit.

I keep myself informed on such matters. I use that information in predicting how much they are going to use next year. In brief, the past history is my best aid in estimating the future consumption in all these cases.

Trial Examiner: That statement does not, however, apply to the estimates included in Line 8, does it? There you seem to have some arithmetical progression.

. . . . . .

The Witness: No, you cannot be too specific in laying down your rules on how you go about this estimating. For example, in Line 8, that reflects a great deal of new business, new customers.

Specifically, those to be added in Pontiac, Flint, and Saginaw and all that whole Michigan peninsula.

. . . . . .

The Witness: Under the Consumers' contract so that, of course, we would have to handle that a little differe than the way we did Detroit, because we do not have five years' history on those folks.

Trial Examiner: While you are on Line 8, explain the large increase indicated between the years 1945 and 1946.

[fol. 3156] The Witness: The estimator judges that between the year 1945 and 1946 that local gas up there in Michigan is going to play out and we will have to pick up the whole load instead of a large part of the load that we will be carrying up until 1945.

In other words, the sudden increase is due to the fact that they are running out of gas up there.

By Mr. Littman:

Q. Well, your working papers do not show the basic data that you used in making your assumption as to increased load which you described, do they, Mr. Morton?

A. I think they use the basic assumptions.

Mr. Wheat: You mean they include—

The Witness: (Interposing) I think they include the basic assumptions used because I show there on that working sheet the total sales in 1937, '38, '39 and '40, and I would say that that is basic data for estimating the following years. That is pretty good basic data, it seems to me.

Mr. Lee: May I ask a question?

Mr. Littman: Surely.

Mr. Lee: Are these prophesized increases predicated upon present gate rates under the present contract?

The Witness: Yes, I have, you might say, been forced by circumstances to assume a continuation of the present rate levels in my estimates because I would have no [fol. 3157] grounds whatsoever of supporting any other estimate that I might base it upon.

For example, if I said to you that these estimates are based upon a 10 percent reduction or a 10 percent increase in rates, I would have a harder time making the estimate stand up, and I believe it would be less logical than if I

just went ahead on the assumption that the present rates were going to remain in effect.

By Mr. Littman:

Q. Were any of the estimated increases shown by you in Lines 3 and 4 for Detroit furnished to you by Michigan Consolidated Gas Company, either in whole or in part?

A. No, sir, they furnished me no information whatsoever, although I believe they would have if I had requested it.

Q. I thought you said you had, in your possession, the consumption—

A. (Interposing) Yes, I have in my possession all of the statistics regarding our sales to Detroit for a long period of time.

You see, Detroit would not have to furnish me with those figures because that is a part of the Panhandle Eastern record, the record of how much gas they sell to Detroit.

Q. How about the breakdown as between various classes of customers in Detroit?

A. It happens that the monthly bill which we render [fol. 3158] Detroit shows a tremendous amount of detail along those lines. It shows the number of house heating customers on the face of it.

Q. You furnish that to Michigan Consolidated, do you?

A. The way the proposition works is this: Detroit is our customer. We sell gas to Detroit but Michigan Gas Transmission Corporation acts as our agent, if you please, and renders the bill to Detroit on our behalf.

They send us copies of all those things, of course, and then we make out a bill to Michigan Gas Transmission Corporation billing them for the gas. They collect the money.

Q. Where does Michigan Consolidated Gas Company come into this picture? Don't they furnish you some information? I am talking about the Detroit distributing company. Don't they furnish you with some information with respect to the number of customers and the consumption by each customer, and other information?

A. We have no formal arrangements with them for obtaining that information. Perhaps this would answer your question—

Q. (Interposing) The thing I would like to know is—

A. (Interposing) Where I get my information?

Q. Where you get your information.

A. Yes. I am trying to anticipate you so we can rush it along. I go up annually and, in connection with the con- [fol. 3159] tracts between the two companies, audit the records of the two companies.

Q. Of what two companies?

A. Panhandle Eastern's relations to the Detroit company. The Detroit company's record of its sales to its customers is one of the figures which I personally look at every spring as it is one of the requirements of the existing contract.

In other words, we have access to their records and they are always glad to give us information and the information we have actually reflects their sales in Detroit.

Q. Then you have a breakdown by customers for your use in preparing estimates and so forth, is that correct?

A. We have a breakdown by customers, not possibly as much in detail as you might think, because we do not go into their records and find out how much of their gas is sold to commercials, and how much is sold to industrials, but we do find out how much is sold to house heating customers.

. . . . . .

[fol. 3162] By Mr. Littman:

Q. How did you arrive at the 142,000 M. c. f. figure for the maximum day in Detroit shown in Line 4, Column D?

A. That was the figure that I computed, consisting of two parts; one, the maximum demand attributable to the house heating business plus, two, the maximum demand attributable to the remainder of the business.

The house heating demand was 84 million and base load demand was 58 million.

Q. Are you talking about M. c. f. now, or cubic feet?

A. Excuse me, 84 million cubic feet, 58 million cubic feet, making a total of 142 million cubic feet.

Q. Did you utilize a load factor in arriving at the figures which you just mentioned?

A. Yes, that is shown on my work sheet also. I used 80 percent load factor in arriving at the maximum day applicable to the base load.

Q. And what load factor did you use for the house heating load?

A. I got that by a very rapid calculation involving three factors, namely, my estimate of the number of degree days on the maximum day, the number of cubic feet consumption per customer on that maximum day and the number of house heating customers.

I multiplied together the number of customers times the [fol. 3163] consumption per degree day times the degree days, and arrived at a figure which, roughly, in my opinion, represents the maximum demand we might expect during the coming winter from the house heating load at Detroit.

Q. Can you give us a typical example of the method applied by you?

A. A typical example of this method might go something like this: Suppose we knew that we were going to have—

Q. (Interposing) Pardon me, perhaps it might be better for you to take the actual figure that you gave, maximum demand for house heating business of 84,000 M. c. f. and give us the basic figures.

A. Yes. The basic figures that went into that appear roughly here on my work sheet to have been 70, which represents the degree days times 25, which represents the consumption per customer per degree day, times the number of house heating customers, which we expect to be on the lines as of the last of December, namely, 48,000, and those three things multiplied together give you your 84 million cubic feet.

Q. You mentioned a figure of 70. 70 what? What is that?

A. That is 70 degree days.

Q. What do you mean by a "degree day"?

A. That is the number of degrees below a base of 65 on the given day in question. Meaning, more specifically, that [fol. 3164] on a day when your temperature is zero, you have 65 degrees in that day. On a day when your mean temperature is 10 above zero, you have 55 degree days be-

cause that temperature is 55 degrees for that day below your base of 65.

Q. Now, you mentioned a figure of 25. Will you tell us what that represents?

A. Yes, that is just a rough rule-of-thumb that I find works out mighty well in estimating the consumption to be expected per house heating customer per degree day at Detroit.

In other words, that is how much gas a house heating customer will use for every degree of temperature below 65. It is a yardstick.

Q. What is that 25, cubic feet, or what?

A. Yes, that is the figure I use in this instance.

Q. I believe you gave us the increases for the maximum day in 1942 over that experienced in 1941, but I do not believe you explained—withdraw that—was that same method applied by you in the case of Detroit for the years 1943, 1944, 1945 and 1946 as shown in Lines 3 and 4 of your Exhibit 40?

A. Yes. I am looking at my work sheet and I observe from inspection of this work sheet that I used the same method that I have described for every year at Detroit.

Q. That is, you used the same load factor?

A. Yes, I used the same load factor.

Q. And did you use the same unit consumption for [fol. 3165] house heating customers? A. Yes, I did.

Q. Now, looking at Line 6, called Michigan Gas Industrial. I note you have no sales whatever for the year 1941 but you have annual sales of 1,040,000 M. c. f. in 1942. Will you explain that figure?

A. That title there, Lines 5, 6 and 7, other industrial—Michigan, or rather, "Other—Michigan" and the subheading is "Industrial" represents the industrial sales I expect to be made in Michigan during 1942 outside of those made to the Detroit company.

Mr. Lee: That is all of the Consumers' contract?

The Witness: Principally, that is Consumers' figures. There is also included there a little gas for Monroe and Adrian, Michigan, as I recall it.

Mr. Lee: But that has nothing to do with the Detroit area?

The Witness: It has nothing to do with the Detroit area.

By Mr. Littman:

Q. Is that a new market that you expect to secure in 1942?

A. Yes, that is a new market.

Q. Is it expected that the sales, industrial sales shown in Lines 6 and 7 for the years 1942 to 1946, inclusive, are to be made to a distributing company or distributing com-
[fol. 3166] panies? A. It is.

Q. What is the name of the distributing company?

A. Principally Consumers Power Company.

Q. Can you name any others?

A. As the years go on, others are added to that list. Without taking too much time or going too far into the work sheets, unless you request it, I will say to you that I believe that figure is principally Consumers Power, almost entirely, but there is, in addition to that, some business which we expect to pick up of an industrial nature at Monroe, Adrian, possibly some at Battle Creek is in there, and I believe that those are the principal ones that I can name.

Q. How about Pontiac and Flint?

A. That is in Consumers Power. Pontiac and Flint are Consumers Power.

Mr. Lee: May I ask a question?

Mr. Littman: Surely.

Mr. Lee: These distribution customers that you refer to, not those that you expect you will get some time in the future but that you already have gotten that will be operated in a short while, you have contracts with them, have you not?

The Witness: We have contracts with Consumers Power, Monroe, yes.

Mr. Lee: Adrian?

The Witness: I am not sure about Adrian. We have [fol. 3167] been negotiating with Adrian.

Mr. Lee: And likewise Battle Creek, you have been negotiating with?

The Witness: And we have a contract with Battle Creek.

Mr. Lee: So this anticipated increase in business outside of the Detroit area is pretty well covered by contracts already entered into?

The Witness: That is true. We seriously expect to serve that area.

By Mr. Littman:

Q. Will you give us a breakdown of this 1,040,000 M. c. f. figure in 1942 as between distributing companies?

A. I do not believe I can find that at the moment in my working papers, but I wish to repeat again that it is almost entirely Flint and Pontiac and other Consumers Power accounts.

Trial Examiner: May I call your attention, Mr. Morton, to Exhibit 59, which is a statement prepared by Mr. Watkins of gas revenues by states, covering a ten-year period to December 31, 1941, and in Column R, there appears to be a total of 32,397,585 representing sales for six months of the year 1941.

May I ask whether the same figures that are shown in that table are embraced in your figures in Column C for 1941?

The Witness: Yes, sir, Column C includes—

Trial Examiner: (Interposing) Column C in Exhibit 40—

[fol. 3168] The Witness: (Interposing) In Exhibit 40.

Trial Examiner: (Continuing) Is intended to reflect the same sales reflected by Column R in Exhibit 59?

Mr. Culton: That is Line 15, Mr. Examiner, Column R, total of 32 billion.

The Witness: Yes, sir.

Trial Examiner: That is supposed to represent six months of 1941?

The Witness: That is a thing that confused me.

Trial Examiner: Your Column C represents the entire year based on the first six months?

The Witness: It does.

Trial Examiner: But it does cover the same area?

The Witness: Yes, sir.

Trial Examiner: In other words, total sales?

The Witness: Yes, sir, total main line sales.

Trial Examiner: Well then, is your Exhibit 40 complete and does it represent all sales of the company? I call your attention, as a basis for that question, to the fact that on your Exhibit 40 appears a tabulation, commencing at the top, east of Dana and below, west of Dana.

Do the sales west of Dana include all States?

The Witness: The sales shown on this study do include all States and all sales which we are making and expect to make on the main line system of Panhandle Eastern Pipe Line Company.

[fol. 3169] Mr. Culton: This does not include Argus or the Local Area?

The Witness: That is the point I believe the Examiner is getting at. This study does not include sales to the Argus Pipe Line Company nor in the Local Area.

Trial Examiner: What the Examiner is approaching now is this question: Do your estimates of increased business during the next five-year period include estimates of increased business in the States west of Dana?

The Witness: Yes, sir, they do.

Trial Examiner: And the estimates for the entire area now served by your company, as shown on your proposed Exhibit 40, will not exceed the total contemplated pipe line capacity of 125 million M.c.f.?

The Witness: Our pipe line capacity at present is 250 million.

Trial Examiner: That is 250 million now?

The Witness: Yes, sir.

Mr. Wheat: And the total maximum day, your Honor, over-all for 1941 is 240,394,000 M.c.f. in Line 27, Column C, of Exhibit 40.

Trial Examiner: I wanted to understand this. You are relating estimates to your total capacity and, in your Exhibit 38, you had an original capacity of 80 million shown.

Mr. Wheat: That is correct.

[fol. 3170] Trial Examiner: In the early years, which was then increased to 125 million?

Mr. Wheat: Correct.

Trial Examiner: And at what point does it step up to 250 million?

Mr. Wheat: That was included, of course, in the testimony of Mr. Creveling and also Mr. Burnham, but there are a number of steps there and I am sure the witness is giving you, in general, the steps.

Trial Examiner: That is what I wanted to bring out and relate to these exhibits. At what point do you step up from 125 million capacity, which was discussed this morning, to a greater capacity, and what is that capacity?

Mr. Culton: What the Examiner desires to know is, what is the capacity at this time, the Max. Day capacity at this time?

Trial Examiner: With relation to the years covered by the exhibits.

Mr. Wheat: Possibly I could get that by asking the witness a question.

In Exhibit 38, Mr. Morton, you showed, approximately, for the year 1937, did you not, a capacity in the pipe line of 125 million cubic feet?

The Witness: Yes, sir.

Mr. Wheat: Now, since the year 1937, there have been increases in the capacity in the main pipe line, have there not?

[fol. 3171] The Witness: There have been.

Mr. Wheat: So that, at the present time, as testified by several [witness] here, the main line capacity is now 250 million, is that correct?

The Witness: That is correct.

Mr. Wheat: Now, can you, from any notes that you have here, state the times when the capacity was increased by certain amounts which add up to the present capacity of 250 million?

The Witness: I have before me a memorandum which I sent to Mr. Paxton and which formed the basis of a report to the S. E. C., so I know that it is official with respect to those matters you have inquired about.

The capacity in December of the various years on our pipe line was as follows:

December, 1935— 80 million

December, 1936—125 million

December, 1937—180 million

December, 1938—200 million

December, 1939—200 million

December, 1940—250 million

December, 1941—250 million.

Trial Examiner: Now, does that represent the maximum capacity which had been produced by all betterments now in process or contemplated immediately?

The Witness: No, sir. That represents the capacity as [fol. 3172] it stands today before any of the improvements which we are working on have been made.

Trial Examiner: And can you state, in that connection, whether the contemplated improvements, including your extended line in Michigan and your completion of looping program, are you able to state what effect that will have on the capacity?

The Witness: That, your Honor, has been testified to, I am quite certain, by our chief engineer, Mr. Burnham, and I believe that this, roughly, outlines what he has told me on the subject, that our present capacity is 250 million;

that we have under construction and planned now and are going to go forward with as rapidly as possible, as rapidly as we can get the pipe, with construction that will raise the capacity of this pipe line to something very close to the figure I have shown here for 1943, namely, 243 million.

Mr. Wheat: You mean 343 million.

The Witness: 343 million.

Trial Examiner: So that your estimates beyond 1943 will not be beyond the capacity of the present contemplated improvements?

Mr. Culton: The 1942 estimates, Mr. Examiner, cannot be served by the present line. I remind the Examiner that Mr. Creveling testified that we will have to complete some looping which the company has in mind for next summer in order to be able to handle the load for the win-[fol. 3173] ter of 1942 and 1943. I think he also testified that we are going to be running pretty close to the shore during the current winter of 1941 and 1942 and that to reach what is estimated for the winter of 1942 and 1943, some additional looping, for which contracts have been made and which they expect to complete next summer, will be in progress and that additional capital will be required later to complete the program so as to account for an adequate Max. Day to meet these peaks in the various years that are shown on this exhibit.

. . . . . .

[fol. 3174] By Mr. Littman:

Q. Now, Mr. Morton, we were discussing the figure in Column D, Lines 5, 6 and 7 of 1,040,000 M. c. f. annual sales to industrials in Michigan other than industrials at Detroit.

Does that amount represent gas sales which are already contracted for?

A. They are contracted for, to this extent, that we have contracts with Pontiac, Flint, that is to say, the Consumers Power, and that is where most of that gas is going.

Q. Can you tell us how much?

A. I find here on my work sheet 4-A, that I have estimated that of that total industrial sale expected in 1942,

680 million out of the 1,040 million would be expected to be sold at Pontiac, Flint and Owosso.

Q. Let me get those figures on a comparable basis. Your exhibit speaks in terms of M. c. f. Would you mind talking also in terms of M. c. f.?

A. All right. I should say that out of a total of 1,040,000 M. c. f., it appears from my working sheet here that I [fol. 3175] have estimated that Pontiac and Flint and Owosso will take 680 thousand M. c. f.; Jackson, Kalamazoo and Marshall, 160 thousand M. c. f.; Battle Creek, 200,000 M. c. f.

Q. Now, what is the basis of those estimates? You have not sold any gas yet, have you?

A. That is true.

Q. How did you arrive at those figures?

A. Those figures have their origin back in reports and studies which were made sometime ago regarding the Consumers Power System and the Michigan load up there in Michigan.

[fol. 3176] Q. Studies made by whom?

A. My first reference, and you will find it here in my working sheets, is from the Consumers Power people themselves. They have sent us a very fine summary consisting of many pages, of the industrial plants which they regard as likely prospects and which they believe that they will sell gas to when we come to Michigan, and that is the basis for that estimate.

Trial Examiner: Are those communities served now by gas?

The Witness: Most of them are served by manufactured gas. As a matter of fact, I do not believe I have named any that were not already served with manufactured gas, and possibly some of them with natural gas.

By Mr. Littman:

Q. You are not now referring to the industrials, are you? We are presently discussing, namely,—

A. (Interposing) He said communities.

Q. What about the industrials?

A. Now, those industrials, I am unable to tell you right offhand whether or not they are receiving service now. I could probably find it here among this wealth of information which I boiled down into this estimate.

Q. Well, who worked up that estimate to which you just alluded, for the sale of industrials in 1942?

A. Well, I worked up the final figure, but, of course, [fol. 3177] as I say, it is based upon reports which we received from Consumers Power folks.

Q. That accounts for 680,000 M. c. f. of it?

A. Yes. Now, the other—are you inquiring about the other?

Q. I am sorry to have misled you. That accounts for 840,000 M. c. f. of the total of 1,040,000?

A. Yes. Now, the next figure, I said that went to make up the total of 1,040,000 M. c. f., is expected to come from Battle Creek, and I made that estimate personally without any assistance from anyone other than my general knowledge of what you might expect from Battle Creek.

Q. How did you go about arriving at it?

A. I think it is rather difficult, Mr. Littman, to describe to you what I am forced to call "subconscious processes." I probably thought something like this or worked something like this: I took Brown's Directory, which is a directory of all gas companies showing the consumption and sales that they had experienced in the past up there at Battle Creek.

Q. Just a minute. Sales to whom?

A. That the Battle Creek Gas Company has made to its customers.

Q. Do you mind if I interrupt at this point to clear up some of these matters as we go along?

[fol. 3178] Now, the sales in Battle Creek are artificial or natural gas sales?

A. They are artificial, as I recall it, at the present time.

Q. Does the local distributing company in Battle Creek make any sales to industrials?

A. They have quite a bit of industrial sales at Battle Creek, yes. It is quite an industrial center. You see indications of it on breakfast food boxes; their signs.

Q. Well, is the figure of 200,000 M. c. f. to be sold to industrials at Battle Creek based upon the last year's sales to industrials at Battle Creek?

A. No, it is not directly related to that but only insofar as I have looked at their sales on a manufactured gas

basis, and I have looked at the town, in my mind's eye, and I have said, "If these people with this kind of town can sell this much manufactured gas at the high prices that manufactured gas is sold, that they will sell 200 million on a natural gas basis at the prices at which natural gas is going to be made available to them." That is about the entire process.

• • • • • • •

[fol. 3191] O. W. Morton a witness, having been prev-
[fol. 3192] iously sworn, resumed the stand and testified further as follows:

Cross Examination (Continued)

By Mr. Littman:

• • • • • • • •

[fol. 3193] Q. Now, at yesterday's session, we were discussing the estimates shown from Lines 5 to 7, inclusive, for Michigan called "Other Industrial". Will you please give your explanation as to the method followed by you in arriving at the estimates shown for the years 1942 to 1946, inclusive?

A. The figures on Line 6 represent my estimate of the industrial sales which we expect to be made in Michigan through the coming years outside of those that might be included in Detroit.

The basic data for arriving at most of the amounts shown on this line comes from industrial surveys which have been made in Consumers Power territory and forwarded to us.

The estimate, as I said, is principally gas expected to be sold in Consumers Power territory, that is, Pontiac, Flint, Owosso, Jackson, Kalamazoo and Marshall, but there is included also, in this line, 200,000 M.c.f. to 500,000 M.c.f. down through the years at Battle Creek, Michigan.

The amounts, in comparison to some of the other totals, are not large, and unless you indicate otherwise, I will [fol. 3194] make a more extended explanation on the larger items, and cut down my explanations on the smaller items.

I believe that is the only information I can volunteer, at the moment, on that particular setup of figures shown on Line 6.

Q. Do you have working papers in support of this estimate of other industrials in Michigan which you just—

A. (Interposing) Yes, I do. You will find in my working papers a summary of such data on work sheet No. 4-A. There are other details behind that summary, and these you will find in typewritten sheets which constitute the industrial survey that was made in that territory and forwarded to us by the Consumers Power Company.

I understand that you have made copies of the typewritten sheets to which I last referred.

Q. Will you please include among the typewritten work papers to be submitted to us, work sheet No. 4-A that you just alluded to, and any other working papers that you prepared in connection with this estimate?

A. I will be glad to do so.

Q. What was the sheet number on Detroit?

A. The working sheet number on Detroit was, No. 1.

Q. What is contained on work sheets Nos. 2, 3 and 4?

A. Work sheet No. 2 is a detail of the estimated sales at Ann Arbor, Monroe and Adrian, Michigan, and at the [fol. 3195] bottom of work sheet No. 2 is shown a total of these three towns.

Work sheet No. 3 is an estimate of total sales to be experienced in southern Michigan, assuming local gas is depleted at the end of five years from December 31, 1940, and it is a memorandum which is, in fact, a summary of the sales that are expected to be made in Consumers Power territory in Michigan.

Q. Mr. Morton, have you finished your answer?

A. Yes.

Q. What is contained in work sheet No. 4?

A. Work sheet No. 4 is a summary which shows the totals of Sheets 2 and 3.

Q. Mr. Morton, I note that in Column G for 1945 the annual sales for Other Industrials in Michigan is 1,718,000 M.c.f. and, that for 1946 there is a rather sudden increase, or a great increase, to 3,323,000 M.c.f.

Also, that in 1945, the maximum day figure is 5,270 M.c.f., whereas it increases greatly to 10,040 M.c.f. in 1946. Will you please explain the reasons for this increase in your estimate?

A. That is brought about by a circumstance which we discussed yesterday. The depletion, or I should say, the estimated depletion, in the local supply of gas in Michigan, it is anticipated that we will be serving a portion of the Michigan load up until that time and that as soon as their gas runs out, which has been predicted, I understand, [fol. 3196] officially by the Michigan Public Service Commission in their 1940 report, by the time that gas runs out, or rather, I should say, when the gas runs out, will pick up the entire load.

Q. What assurance do you have that you will secure such a load? Do you have a contract for it?

A. Yes, we have a contract with Consumers Power Company for that business, and we also have a contract, as I testified yesterday, with Battle Creek and these other customers that are indicated here as being included in this estimate, have expressed a great deal of interest in our natural gas, and I have no doubt that we will execute contracts with all of them shortly.

Q. Is the contract to which you have just referred with Consumers Power on file with the Federal Power Commission?

A. Yes, it is.

Q. Do you know of the number of that contract?

* * * * * * * * *

[fol. 3197] By Mr. Littman:

Q. Am I correct in understanding that a part of the 3,323,000 M.c.f. figure in Column H, Lines 6 and 7, is not contracted for?

A. That is correct.

Q. Do you have a breakdown in your working papers to show how much?

A. Specifically, we have no contract with Lansing and Grand Rapids and possibly one or two of the others that appear in that group.

Q. Now, will you please give us a segregation of the figures in Lines 6 and 7, as between distributors and direct customers?

A. All of the gas which we have estimated in those lines has been estimated on the basis of our sales to distributors.

Q. None of it is directly to industrial consumers?

A. That is correct.

Q. Now, will you give us the breakdown of those same figures, showing how much of this gas is presently contracted for; secondly, that amount which is contracted for but has not yet been served; and, third, that which has not yet been contracted for, and the reason for your inclusion of the latter class in this estimate?

A. None of this gas is being served at the present time.

[fol. 3198] Q. I might state, Mr. Morton, if you can save time by referring to any working papers that show the detail that I am requesting, that will be sufficient, if you will identify the working papers.

A. My working papers do not show on their face how much of this gas has been contracted for, how much has been contracted for and not served, and how much has not been contracted for at all, but maybe this would give you the information you want:

From examining the working sheets, it is quite apparent to me that about 90 percent of the gas that we have been discussing on Lines 6 and 7 goes to the Consumers Power territory which has been contracted for.

Q. Does that 90 percent apply to both Lines 6 and 7 for each of the years 1942 to 1946, inclusive?

A. It does.

Q. Does the 3,323,000 M.c.f. figure in Column H include sales to any communities other than those which you named as the subject of the Consumers Power Company contract?

A. Yes, they include sales to Battle Creek, Lansing, Grand Rapids, and possibly some others, the names of which I cannot recall at the moment.

Q. Would Mount Pleasant, Michigan, be one of those?

A. I have that one listed in my work sheets, and the answer is, "yes."

[fol. 3199] Q. Will you please read the paragraph in your working papers that includes the City of Mount Pleasant?

A. It is numbered 4; Lansing, Grand Rapids, Saginaw, Bay City, Alma, Clare, Big Rapids, Muskegon, Mount Pleasant. That figure appears once only in the whole record, and that is for the year 1946.

Of course, the estimate is a very rough estimate for the year 1946.

Q. What period is covered by your working papers?

A. It happens that my working papers are prepared on the basis of a ten-year estimate extending to 1951.

Q. Now, Mr. Morton, suppose we go to the next classification shown in Lines 8 and 9 for Michigan domestic, commercial, and other.

Will you please explain the method used by you in arriving at the estimates shown in those lines through 1946?

A. That, I might say, is a companion estimate with the two lines above, Lines 6 and 7. The figures shown on Lines 8 and 9 are the domestic and commercial sales in the same territory which we have been discussing.

Those figures are principally sales which we expect to make to Consumers Power. They include Battle Creek. They include, as the title would indicate, since they are under "Michigan, Other," all other domestic and commercial sales which we expect to make in the State of Michigan outside of Detroit.

[fol. 3200] They include Ann Arbor, Adrian, Monroe; beside the Consumers Power territory that we have named. They include Lansing, Grand Rapids, Saginaw, Bay City and Alma, and so on, but only during the fifth year on the latter group.

The basis for this exhibit, or the foundation or working papers back of it go back to summaries, estimates, surveys, that were furnished us in great detail by the Consumers Power Company for their territory, and the estimates for Battle Creek Adrian, Monroe and Ann Arbor were prepared by me from data which I have on hand.

The figures are a rather large part of the total, running an average of 5 billion cubic feet or 5 million M.c.f. per year.

You will note, just as the industrial sales jumped from 1945 to 1946, the domestic-commercial sales also take that

same jump, and this is due to the same reason that the industrial sales jumped, as I have explained before; namely, the depletion of local gas in Michigan.

Mr. Wheat: What are the numbers of those work papers?

The Witness: The numbers of the work sheets covering this estimate are 2, 3, 4 and 4-A.

By Mr. Littman:

[fol. 3201] Q. Referring to the figure 10,296,200 M.c.f. shown in Line 8, Column H, and the figure immediately below it, 42,760 M.c.f. for the maximum day, will you state whether or not all of that is embraced by the present contract with Consumers Power?

A. No, as I explained before, these figures are companion figures to the industrial study just above. They apply to the same territory, principally, however, to the Consumers Power territory but include, as I have said, some other towns in Michigan.

Q. Will you name the other towns in Michigan and the distributing companies?

A. I am unable to do that because my memory has about reached the breaking point on this discussion of these work sheets.

The towns, as I have enumerated several times before this morning, are: Adrian, Monroe, Battle Creek, Grand Rapids, Lansing, outside of Consumers Power, that is what you asked for.

There may be a few more which I cannot recall, but they are not very important.

Q. Can you state what part of the M.c.f. figures that I read are contemplated to be sold to those communities which you just named and which are outside the scope [fol. 3202] of the Consumers Power contract? You may do that approximately.

A. Yes, I understand. I was going to say that that particular breakdown does not exist here on these work sheets.

It is something that has to be worked out, but from just an inspection of them here, it is easily seen that the Consumers Power will take about 90 percent of this total.

Q. Can you give us a breakdown of the 90 percent figure as between territory served by Consumers Power under contract and that which will not be served under that contract?

A. A breakdown as between what classifications?

Q. As between the territory now contracted for and territory not now contracted for.

A. Well, I am under the impression that all of the Consumers Power territory has been contracted for, as I recall it, and this is from memory.

The contracts that exist between ourselves and Consumers Power call for service to all of these towns for all of this gas. In other words, it is already contracted for. I would say 90 percent of all of the gas we are talking about has been contracted for.

* * * * * * * *

[fol. 3203] Q. Mr. Morton, am I correct in stating that the territory in which Consumers Power Company now sells gas embraces the territory in and about Lansing, Michigan, Ithaca, Michigan, and Bay City and Saginaw?

A. I knew they operate in Bay City and Saginaw. I do not know about Ithaca, and Lansing is a Consumers Power town, I believe.

Q. Now, your 1496 estimate of 10 million M.c.f. for domestic, commercial and other in Michigan includes, does it not, sales to the territory of Lansing, Ithaca, Bay City and Saginaw?

A. It does.

Q. Does the 1945 figure, in the amount of 5,451,000 M.c.f. include such sales?

A. It does not.

[fol. 3204] Q. Can it be determined from your working papers how much of your 10,296,200 M.c.f. estimate applies to the Lansing, Ithaca, Bay City and Saginaw territory?

A. It appears that about 6 million M.c.f. out of the 10 million M.c.f. has been estimated as applying to Lansing, Grand Rapids, Saginaw, Bay City, Alma, Clare, Big Rapids, Muskegon and Mount Pleasant.

Q. Now, turning to your estimate for Indiana and Ohio, you show in Line 11 and in Line 12, your annual sales and maximum day sales to industrials in those States for the years 1941 to 1946, inclusive.

Will you please explain the method whereby you arrived at those estimates?

A. That sale applies almost entirely to industries in and around Muncie, Indiana. We have several years' past records on these sales and, from a study of these records and from my personal knowledge and experience, I have estimated that the sales this year under this classification will be about 10 million M.c.f. based upon this year's sales and the prospects, as I see them, for the ensuing years.

I have estimated for the 1942—11 billion plus; 1943—12 billion plus; 1944—almost 13 billion; 1945—13 billion plus; 1946—13 billion, 700 million, a very gradual increase of sales to industries in the State of Indiana.

Q. Now, what were the actual sales to these industries [fol. 3205] in 1940?

A. The actual sales for 1940, according to the record which I have here in front of me was 7,682,862 M.c.f.

* * * * * * * *

Q. How much of this 10,250,000 M.c.f. in 1941 is actual, and how much of it is estimated?

A. Well, at the time I made this estimate,—I see it is dated August 6 here in the corner—I probably had only six or seven months' experience so that the 1941 figure shown here is probably six months actual and six months estimated.

[fol. 3206] Q. Have you verified your estimate recently?

A. No, I have not, except in a most general way. I watch the daily deliveries through the pipe line and I also watch the deliveries at King Station which, by the way, is the station where we deliver the gas for the Muncie group and those sales are holding up nicely, and I won't be surprised but what they exceed the figure I have shown here for 1941.

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TRANSCRIPT OF RECORD

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Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. III.

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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[fol. 3207] Q. Well, Mr. Morton, are all of the sales shown in Lines 11 and 12 called "industrial sales in Indiana and Ohio" to be made through distributing companies?

In other words, are any of thes les to be made directly to the industrials?

A. My estimate contemplates no direct industrial sales by Panhandle Eastern. Of course, that is a matter of discretion to the management in years to come; but, as regards this particular estimate we are speaking of, and as far as I have anything to do with it, why, it has been prepared on [fol. 3208] the basis of sales just as they are now being made.

Q. Are all of those sales presently contracted for and being made to persons who are being served?

A. I would say that this estimate of mine, like all of my estimates that I have made here, contemplates some new customers but 95 percent of it is to customers who are now connected.

Q. You cannot give us the names of the new customers?

A. I cannot.

Q. By the term "customers", as you have used it, are you referring to the industrial customers or to the distributing company?

A. I mean both. I think that there will be an increase in the individual customers purchasing from distributing companies over the years, and I think also my estimate contemplates possibly the addition of another distributor or two.

You see, you cannot be too definite about these estimates that run for years into the future.

Q. I do not recall whether I asked you for the page numbers of your working papers?

A. No, you did not, on that particular estimate that we are discussing, and work sheet No. 5 covers all of the details that I have.

Q. And you will submit work sheet No. 5 along with the others?

[fol. 3209] A. Yes, sir.

Q. Now, will you please explain the method used by you in arriving at the estimate shown in Lines 13 and 14 for "Indiana and Ohio-Other (Including Company Use)"?

A. Yes, that estimate covers all of the sales that I estimate will be made in Indiana and Ohio, outside of the industrial which we have just been discussing.

That sale comprises the domestic and commercial sales, principally, of distributors throughout the State of Indiana and a very, very small sale in the State of Ohio; so small as not to merit any extended discussion.

That figure, as I say, is almost entirely a sale of domestic-commercial to distributors in Indiana, namely, Public Service Company of Indiana, Northern Indiana Public Service Company, Central Indiana Gas Company, Indiana Gas Distribution Corporation and Kokomo Gas & Fuel Company.

Now, that estimate, you will notice, increases very slowly from year to year. At the present time, it is running about 5,200,000,000. I estimate—

Q. (Interposing) Just a minute. Five billion—

A. (Interposing) Five million, two hundred thousand, M. c. f.

Q. Thank you.

A. I estimated for 1942 an increase from 5,200,000 to 5,600,000 M. c. f.; next, 6 million M. c. f., 6,400,000 M. c. f. [fol. 3210] 6,800,000 M. c. f., 7,200,000 M. c. f.

Q. That is a flat increase of—

A. (Interposing) 400,000 M. c. f. per year, a rather gradual, nominal increase. That is based upon the fact that I do not see any great expansion of natural gas consumption in Indiana for domestic-commercial use in the near future.

I do not contemplate any addition of any large number of customers, but just a slow, gradual growth of the presently connected customers, and possibly a very slight increase in new customers.

Q. Are those sales all contemplated to be made by the present distributing companies?

A. Almost in their entirety. The estimate probably includes, and undoubtedly does include, one or two small

distributors not now connected to the line who will subsequently be connected.

Q. And will you name those?

A. I think now particularly of the Greenfield Gas Company.

Q. Any others?

A. At the time the estimate was made, I had in mind also Richmond Gas Company. Since the estimate was made, Richmond Gas Company has come on to the lines and is now taking gas.

No, I cannot name, specifically, any more, but, un- [fol. 3211] doubtedly, there will be, as the years go by, some small distributors not now taking gas who will begin taking gas shortly.

Q. In other words, this estimate of "Other Indiana and Ohio" shown in Lines 13 and 14 did not contemplate any very large new territory?

A. That is correct.

Trial Examiner: May I ask whether that is, in part at least, due to the fact that the States of Indiana and Ohio, or those portions of those States, rather, adjacent to your lines and the line of the affiliate as well as Panhandle Eastern, are presently served from local fields?

The Witness: No, this did not contemplate that fact. This estimate contemplated the fact, I might say, that most of the customers who are within economic reach of our lines through those states are now taking gas from us.

I believe the local areas to which you refer are, in most instances, too far away from our lines to be served by us anyway.

By Mr. Littman:

Q. Before going to the next item, I would like to go back for a moment to the industrials in Indiana and Ohio, the estimate for which is shown in Lines 11 and 12.

What Ohio territory is embraced by your estimate of the industrial?

A. There isn't any of that estimate for industrial gas [fol. 3212] contemplated for Ohio.

Q. Now, do you have working papers in support of your estimates shown in Lines 13 and 14 for other than industrial in Indiana and Ohio? A. Yes.

Q. What are the page numbers?

A. Work sheet No. 6 covers that.

Q. And you will submit that page along with the others?

A. I will be glad to do so.

Q. Now, will you please explain your estimate shown in Lines 15 and 16 for Kentucky Natural Gas Company?

A. We made a contract with Kentucky Natural Gas Company in the summer of 1941. The contract is dated June 27. The minimum provisions of that contract call for their taking 1,650,000 M. c. f. per year for the first three years, 2,500,000 M. c. f. for the next two years, which takes us through 1946.

There was existent at the time of the execution of this contract what we call a deficiency, a certain amount of gas which they were supposed to have taken but had not done so under the minimum provisions of a certain contract.

They were, in other words, 140 million cubic feet short of their contracted takes, so, in arriving at the Kentucky Natural estimate, I was able to follow what I thought was a most logical procedure. I merely used the minimum stated in the existing contract, and added to it the shortage which [fol. 3213] they had left over from other years, and spread it over a reasonable length of time of about two years.

That is about all of the supporting data that the estimator has for the estimate on Kentucky Natural Gas Company, and I might add that I think that is all that was needed.

Q. What was the basis of your determination of the maximum day shown in Line 16 for Kentucky Natural Gas Company?

A. By knowing, as I do, that they have some very good operators who are attempting to take this gas on an even basis, day to day basis, and after watching the deliveries through our connection with them and confirming this, I felt quite assured that they would be able to maintain an excellent load factor through that connection; not 100 percent, because that is almost impossible of attainment due to fluctuations of pressure in the line, but I estimated that they would be able to maintain a 90 percent load factor, that is to say, that their maximum day would not exceed their average day by more than 10 percent.

Q. Do you know whether the contract with Kentucky Natural Gas calls for a uniform take?

A. The contract does not call for a uniform take, as I recall it. It says nothing about their taking uniformly. They are on a two-part rate, so it is to their interest to take on a uniform basis.

Q. Do you have working papers to support your estimate?

[fol. 3214] A. Work sheet No. 7 supports this evidence.

Q. You will submit that along with the others?

A. Yes, sir.

Q. Now, that takes us to the group that you have classified as "West of Dana." First, under this class, is industrial shown in Line 20. Will you please explain the estimate for that class which I have just named and which appears in Lines 20 and 21 of your Exhibit 40?

A. The average figure over the years is rather substantial, averaging about 14 million M. c. f. under this classification. Much of the gas we sell west of Dana, and when I say "we" this time, I am really over in our own territory, in the Panhandle Eastern territory and Illinois Natural Gas territory.

Much of the gas, as I was saying, that is sold over here is sold directly by us to industries. It comes right out of our line and goes right to the brick plant or the industry, whatever it may be, and we bill the customer directly for it.

About five-eighths of it is sold to Other Distributors who, in turn, resell it to industries.

The work sheet which is, by the way, No. 8, indicates the history, by months, of these sales to industries direct and indirect since April, 1939. Our records are very complete. We could have carried it back to 1936, but we thought that [fol. 3215] would be enough history upon which to base the future estimate, so the work sheet shows the details from 1939, by months.

It indicates that for 1940, the sale was 1⅓ billion; it indicates that for 1941 and we had six months actual and we used six months estimated, will be about 14 billion.

We next go to work sheet No. 9, which is also a part of this estimate, showing the estimate for the future and

there, I have shown on that work sheet that the sales for 1941 will be 13 billion; 1942—14 billion; 1943—14 billion 300 million, and so on, with a very gradual increase over the years.

I have not estimated any great increases in that territory, on the theory that we are now serving almost all of the market that is available to natural gas pipe line.

Q. I note that your have an increase of one million M. c. f. in 1942 over your 1941 estimate, whereas, in subsequent years through to 1946, your increases are approximately three to five hundred thousand M. c. f. Can you explain that situation?

A. I can. The rate of increase at present is sufficient to justify, in my judgment, an increase of one million M. c. f. between 1941 and 1942. Past history supports that.

Now, as for the future, I do not see anywhere in the territory justification for assuming that the rate of increase will be as rapid as it has been in the past.

Therefore, the increase of 1943 over 1942 will be considerably less than 1942 over 1941. It is just a matter of not [fol. 3216] having the business there.

Q. Are the sales shown in Lines 20 and 21 to the industrials west of Dana for all of the years shown in Exhibit 40, sales to presently connected customers, or does your estimate contemplate sales to other customers as well?

A. Almost in their entirety, I would say as much as 95 percent are to be made to presently connected customers. You can see that the increases, as I have shown down through the years, are very modest.

Therefore, you would naturally judge from this that there isn't going to be a great increase in the number of new customers. I suspect, sitting here studying this estimate, that it is too conservative.

Q. Will you submit the work papers for this latter estimate, please, which are, I believe, Nos. 8 and 9?

A. Yes, I will be glad to.

Q. Now, that leaves one more: And that is the domestic and commercial sales west of Dana shown in Lines 22 and 23. Will you please explain the method followed by you in arriving at these estimates?

A. That is a companion estimate to the one that we have just discussed. We talked about the industrial west of Dana and now we come to the domestic and commercial sales west of Dana on the system of Panhandle Eastern and Illinois Natural Gas Company, main line only.

[fol. 3217] We have in our records, and I show here on the work sheet, which is No. 10, the sales which we made to that class of business in 1938, 1939, and 1940, and it is noted that the growth per year is about 500,000 M. c. f. I do not see ahead of us in that territory any rapid expansion of our facilities or any large cities to be added other than, I might mention, Bloomington and Normal and Galesburg, Illinois.

As I say, I do not see any great expansion ahead of us, so I have merely estimated a flat increase of approximately 500,000 M. c. f. per year. The supporting statistics are a little more in detail than they have been on some of those estimates farther to the east, as you will note from the work sheet No. 10, probably due to the fact that we have at our finger tips there in the Kansas City office considerably more data on the characteristics of these sales than we do some of the sales farther east.

My work sheet shows that I estimate the customers to increase from 145,000 which they are approximately at this time—

Mr. Culton: (Interposing) You mean the customers of the distributing company?

The Witness: The customers of the distributing companies. From 140,000, instead of 145,000, from 140,000 as they are at present to 145,000, 150,000, 155,000 and so on, increases of about 5,000 customers per year which is purely a judgment figure, and I believe that is all that I have to offer unless you have specific questions on that.

[fol. 3218] By Mr. Littman:

Q. What are the work sheets for Lines 22 and 23?

A. That is covered by work sheet No. 10.

Q. Will you please submit that along with the others?

A. Yes, sir.

Q. Referring to the lines which are called Max-Day in Exhibit 40, are the amounts shown in those lines the ac-

tual maximum day expected for each class, or does it merely represent the contribution expected by each class on the expected peak day? Which is it?

A. The record I am quite sure is clear on that point, because on direct examination I testified, and I am repeating again, the maximum days shown on this estimate are the contributions of the respective loads to our system.

Q. Did you make any estimates of the actual peak loads to be expected for each class?

A. No, I dealt strictly in terms of the contributions on our maximum day.

Q. Now, do you have any further working papers in support of your estimate shown in Exhibit 40 which we have not called for, Mr. Morton?

A. I made none. These are the only working papers which I made, except, of course, scratch sheets upon which I made additions and threw in the waste basket.

[fol. 3219] I purposely retained them all because I knew you would want to have a good, clear record of what was done and how it was done.

Q. Now, Mr. Morton, in your judgment as rate engineer of Panhandle Eastern Pipe Line Company, do you expect these sales shown in your Exhibit 40 to be made, in fact, in the years 1941 to 1946, inclusive?

A. Yes, I do.

Q. And, in your judgment, this estimate is conservative, is it?

A. No, I am not going to tell you that. This is right on the nose as far as I know. It is not conservative nor is it the opposite. I think these are exactly the quantities that will be sold.

Of course, when I say "exactly," you understand what I mean: That this is exactly my estimate but that, of course, that they may be wrong 5 percent one way or the other or 10 percent.

Q. Up or down?

A. Up or down.

Q. Mr. Morton, I believe you testified on direct examination that you had prepared this estimate originally for the purpose of advising the management of the sales that might reasonably be expected in the next five years. Is that a correct statement?

[fol. 3220] A. I recall very well, and I am glad that you brought up that subject.

The inference of the question, although it did not show in the record, the accent upon the words when the question was asked me, left the impression in my mind that the interrogator wished to know whether we had warped this estimate for the purpose of establishing some point before this Commission and I hastened to add that the estimate had been prepared—I cannot recall the exact words—but I denied that there was anything special about it.

Now, I would like to make a complete statement about this: This estimate is made in response to a request from the management to me. The management requested me to make this estimate knowing that this rate case was coming up.

They wanted me to set the figures down in my own way and as honestly as I could, those were my instructions, to make an honest, straight-forward estimate of the sales for ten years because, they said, "We think we are going to need it in this rate case".

That was the way the assignment came to me, long before we had made our plans as to what our defense would be in this case, at one of the early meetings, so I sat down and I started building up an estimate for a ten-year period for use in this rate case.

* * * * * * * *

[fol. 3221] Q. Have you, at any time, made any estimate of the revenues expected to be derived from the sales shown in Exhibit 40?

A. I had no occasion to do so, and did not do so.

Q. Have you made any estimate of sales on behalf of the management with respect to future years.

A. I have not had occasion to advise the management except in so far as 1942 is concerned. I have, within the last few weeks, prepared our budget for 1942 of the sales that we expect to make, with the revenues.

Q. In other words, you have an estimate of the 1942 revenues? A. Yes, I do have.

Q. You do not have such an estimate for 1943?

A. No, I do not.

Q. I presume your 1942 estimate of revenues is predicated on your Column D in Exhibit 40, is it not, or something close to it?

A. It pretty closely approximates Column D in Exhibit 40. I was a little surprised to find out how close it did come, having been made four or five months after this [fol. 3222] one. You understand, don't you, that if I would make another estimate today it would necessarily be different from this one that we are looking at.

Trial Examiner: Mr. Morton, may I ask whether the company has maintained an active sales promotion policy during recent years throughout the territory served by Panhandle Eastern?

The Witness: Mr. Examiner, that is a question that goes to management. I might just tell you what I think of it, though, since you have asked me, but I wish you would please understand that there is always danger in a rate engineer's testifying for the management's policies.

We maintain, what I personally think is an active new-business policy. That is merely personal opinion. I think that we work hard at getting new business.

Trial Examiner: Is that true throughout the system? In other words, do you try to pick up industrial and commercial customers wherever possible throughout the system?

The Witness: Yes, we do. We work at that thing, whether it is on Panhandle Eastern property or some of the distributors' property.

Trial Examiner: So that, your answer to my question would be that you have maintained an active sales promotion policy in recent years?

The Witness: Yes, sir.

Trial Examiner: Throughout the system?

[fol. 3223] The Witness: That is my opinion.

* * * * * * * *

Trial Examiner: I was going to simply ask again the question that was asked yesterday, whether your estimate of future sales contemplates the continuance of an active sales promotion policy throughout your system.

The Witness: Yes, it certainly does. Now, when you tie that to my estimate, why, I feel a little bit better than answering to these policies about the company.

Trial Examiner: And your estimate contemplates what you consider the maximum safe estimate of expansion based on a continuance of present policies?

The Witness: Yes, it does.

Trial Examiner: And it takes into account also, the ability of your company to fill the demand if your estimate is correct?

The Witness: Yes, it does.

* * * * * * * * *

By Mr. Littman:

Q. Mr. Morton, I believe you said if you were making this estimate today you might have a different result. Would you expect the result to vary materially from that which you show in Exhibit 40?

A. I would not. Some of those years would be up and [fol. 3224] some down, I suspect. I know some of the accounts would be up and some down.

Q. But over-all, it would remain more or less the same?

A. That is true.

Q. Now, how did your most recent 1942 estimate compare with that which is shown in Column D of Exhibit 40? Was there much variation up or down?

A. There was not over 3 percent variation up or down.

Q. Was it up or down?

A. It was down. Some sales have not materialized as rapidly as I anticipated last August and the reason is quite apparent. Our inability to get shipments of pipe is going to delay us beyond the period when I expected that we would be able to start making these sales up there in Michigan shown on Lines 5, 6, 7, 8, 9, of this study.

That Michigan situation has moved back six months, I would say, due to our inability to get pipe shipments. Of course, at the time I made this, things looked a good deal rosier. As I say, it was early August.

Mr. Culton: That is so far as getting pipe is concerned?

The Witness: Yes, sir.

Mr. Culton: That is what you mean by "rosy"?

The Witness: Yes, sir, that is what I mean by "rosy".

By Mr. Littman:

Q. The picture, in so far as it concerns the sales of [fol. 3225] gas still looks about as rosy today or more so than it did before? A. It does.

. . . . . .

[fol. 3227] By Mr. Littman:

Q. I will ask you this, Mr. Morton: Whether or not you have at any time prepared any estimate of revenues for the years 1943, 1944, 1945 and 1946, or any one of those years?

A. I honestly do not know whether I have done so or not. Now, there are occasions, as you know, when I am requested to make up this kind of estimate or that kind of estimate. That is my business, this estimating.

I want to say this to you, that there is not existent in my office, nor have I made an estimate that you could put alongside of this one here and compare it with this one.

In other words, your question, and I have heard it before, sounds like you would like to know if I have made estimates as a regular routine thing for the management to keep them advised, in a form about like this, for three or four years—

Q. (Interposing). Referring to Exhibit 40?

A. Yes, referring to Exhibit 40, for three or four years in advance. We do not carry such a thing. We only work one year in advance. That is all we need to work, one year in advance.

Now, every fall, as I have said before, we go to work and we prepare budgets covering the next year's work and we prepare all of that stuff in detail, but we do not have an [fol. 3228] estimate anywhere in the office, nor have we ever had, so far as I know of, anything like this that we are talking about, this Exhibit 40 and its supporting papers.

Q. Well, I was not necessarily referring, Mr. Morton, to an estimate that you could lay side by side with exhibit No. 40 and say this is the revenue for this, that or the

other class. I had reference, when I referred to the years 1943 to 1946, inclusive, whether you had submitted any estimates to your company of revenues to be expected in those years from sales to, for example, Consumers Power Company or this, that, or the other company.

Have you ever submitted such estimates?

A. I have submitted estimates to them covering Greenfield and Bloomington and Galesburg for three or four years in advance, little individual projects like that.

Now, on this Consumers Power, I did not make up any other estimate myself on Consumers Power, but an estimate certainly was made up on Consumers Power and, as you see here, from these work sheets in my file.

I have looked at it. I do not know how many years in advance it is. * * * To answer your question, I know of no estimates that I have made around that office for future years for any project except the smaller towns like those I have mentioned.

[fol. 3229] Q. Mr. Morton, you could estimate, could you not, the revenues expected to be derived by Panhandle Eastern and subsidiary company from the sales shown in Exhibit 40 based on present rate schedules, could you?

A. I could.

* * * * * * * *

[fol. 3230] Trial Examiner: The Trial Examiner has several times wondered exactly the field the Defendant has opened up by asking for inclusion in the future rate base the estimated cost of future construction and future betterments.

[fol. 3231] Mr. Culton: Mr. Examiner, at the proper time the Defendant will not insist that the future construction which will be required to produce additional volumes of gas is necessary for consideration in determining whether or not the present rates are excessive.

It will insist that the additional costs required to produce and transport the same volumes of gas now being produced and transported are matters that should be taken into consideration in determining whether or not the rates are excessive.

It does take the position, and will take the position at the proper time, that the future capital expenditures required for the purpose of producing and transporting additional quantities of gas are necessary for consideration of the Commission in determining the return which the Defendant company should be permitted in the future in order to attract capital necessary for the making of these additional expenditures.

Relating this case to the Chicago case, I point out that in the Chicago case the line was already loaded and the future capital expenditures were not expenditures for the purpose of producing additional quantities of gas but expenditures required for the purpose of carrying on the then-volume of business, and that is the contention which we make in this case, that in determining whether or not the present rates are excessive, the Commission should take into consideration the expenditures which will be required in the future to produce, transport and dispose [fol. 3232] of the same volumes of gas now being handled and that the capital expenditures required for additional volumes of gas are for consideration in determining rate of return, as such. That is, the number of dollars we are going to be required to go to the public for and get in the future.

Mr. Littman: If your Honor please, it seems to me that the picture Mr. Culton paints will be incomplete without the data with respect to the revenues to be derived from these increased sales.

* * * * * * *

[fol. 3233] O. W. Morton, the witness under examination at the time of the taking of the noon recess, resumed the stand and testified further as follows:

Cross-Examination—Continued.

By Mr. Littman:

Q. I believe that at the noon recess I was stating the reasons for the request which I made of this witness to supply, first, his estimate of revenues to be derived from sales of gas shown in Exhibit 40, which estimate, according to the testimony of this witness, was prepared and is

in writing, and is in his office, and he expects to submit it to the company as his estimate of revenues for the year 1942; secondly, I request that this witness submit an estimate of the revenues expected by him to be derived from sales of gas shown in Exhibit 40 for the years 1943 to 1946, inclusive.

. . . . . .

[fol. 3234] Mr. Wheat: The gross revenue which will result from the application of the figures shown by the wit-
[fol. 3235] ness in Exhibit 40 for these respective years, based on the present rate schedule.

By Mr. Litman:

. . . . . .

A. On this exhibit I have plotted cost of gas plant against total annual sales on the system; the scale applying to gas plant reads in the millions of dollars, and the scale applying to annual sales is in billions of cubic feet. It will be noted that the sales over the past three years have increased at the rate of approximately 7 billion cubic feet per year.

The only significance that I personally am able to draw from this is the fact that in the light of the performance of the past few years, the estimate for the future, with respect to annual sales in M. c. f. is not out of line. In other words, our past performance indicates that we
[fol. 3236] have been growing very rapidly, at the rate of about 7 billion cubic feet per year, and this detailed study of future years, this estimate of mine, Exhibit No. 40, shows about that same growth, so that is about the only significance that I attach to this Exhibit 41.

Q. Now, what is the source of the figures for the curve "Gas Plant—classified?"

A. That is the book records of the company, and the statistics supporting that curve are shown in one of Mr. Watkins' exhibits. I have merely plotted some of the figures that have been hitherto offered in this case.

Q. I will hand you a copy of Mr. Watkins' Exhibit 52, and ask you whether page 2, line 38, of that exhibit, entitled "Total Gas Plant—classified," shows the figures that you have used for that purpose in your chart, Exhibit 41.

A. They appear to be identical; these appear to be the figures I used.

Q. In other words, you can't tell from the chart the exact dollars nearly so well as you can from this exhibit?

A. That is correct; for all practical purposes these are the figures.

Q. Yes. Now, are the figures representing the curve "Annual Sales" the same as those appearing in column "Q" of Exhibit 58; and I hand you a copy of Exhibit 58?

A. They are.

. . . . . .

[fol. 3237] Q. The Examiner has asked you about sales promotional work, and I would like to ask a few additional questions with respect to that:

Now, your company sells only to utility and special industrial companies, does it not?

A. Yes, that is true.

. . . . . .

[fol. 3239] Q. Well, you expected then a vigorous sales promotional activity to get the results that you set out in Exhibit 40, did you not?

. . . . . .

A. (Interposing) I expect some of those results will come about without the necessity or without the assistance of a vigorous sales campaign, but I believe the total would be achieved only through it, and that is what I was referring to; the total would be achieved only through some vigorous sales promotion policy.

. . . . . .

[fol. 3240] Q. Now, does that sales promotional department spend its time soliciting and adding new business or in retaining its old business?

A. Our sales efforts are directed to both; we have no sales department as such, so I can't answer your question as respects a sales department, but the promotion efforts of our company are directed along the lines of retaining the old business and adding new customers.

Q. In allocating that expense, however, you have allocated all of it to unused capacity, did you not?

A. In this unused-capacity study, I regarded sales promotional expense as just as much an expense of doing business as any of the other expenses, and I did include it in my calculation of operating expenses attributable to unused capacity, but I didn't use the entire amount in the final answer.

[fol. 3241] Q. You didn't use the entire amount?

A. No. I started with the total amount, but when you finally come through to the final figure which appears away over on the right-hand column, around $5,500,000, only a fraction of the expense attributable to sales promotion finds its way into that figure.

Q. What proportion, then, finds its way into the final figure?

A. I would say very close to 50 percent, during those early years. In other words, I say by this study of mine, using the 1938 unused capacity, I say that in my opinion, in the opinion of the estimator, that 50 percent of certain operating expenses during all these early formative years was attributable to unused capacity, and in this expense is listed what we refer to as business promotion.

Q. Now, I take it that you feel it would be necessary for a distributing gas utility to maintain a sales department just the same as your own?

A. Undoubtedly that is true.

Q. And that results in a double loading on the public, or the gas consumer, does it not, in that there is a loading of expense in which you seek to promote sales to the distributing utility, and again when the distributing utility seeks to promote sales to the public: Is that correct?

[fol. 3242] A. I think I would object to the use of the term "loading on the public." In all business there is expense connected with its operation, and we all know that the public finally bears the expense of running a utility, in our case, and in your case in Detroit the same as in our line; so I think it is a little unfair to ask a man to testify that we are loading on the public some double charges because we maintain sales promotion efforts in both our transmission lines and in our distribution efforts.

Q. I am asking you just the plain fact whether or not that constitutes a double charge or loading on gas consumers for sales promotion.

A. I have explained my position and I think I made my answer clear to that question.

. . . . . .

[fol. 3281] By Mr. Chamberlain:

Q. Now, referring to your Exhibit 38, you spoke of attempting to ascertain the cost of the unused capacity in the main line. What did you mean by that?

A. I meant by that, that in my judgment, there was a period during the operating of this pipe line when it was operating at considerably less than its designed capacity or the capacity for which its [designors] had built it, and that it cost the company some out-of-pocket money to carry this unused capacity over what I have termed the lean years and that these costs, consisting of actual out-of-pocket interest, ad valorem taxes and certain operating expenses, were incurred because of such unused capacity and I attempted in this study, of course, to make a mathematical calculation on five different methods as to what those costs attributable to unused capacity should be.

Q. Let me put it this way, or let me put a question this way. In the letter which you directed to Mr. Neuner and which you read into evidence yesterday, your suggested that, in arriving at going value, recognition should be given to the fact that the company had, during its early years, idle capacity, and now I quote: "which has been made in advance of the time when it was to be used because it was economical to do so."

Now, will you expand on that a little bit and give us your [fol. 3282] rationalization of why you should have an allowance for the unused capacity of the transmission line?

A. I think it is quite clear Mr. Chamberlain, to all of us, and I think you probably have heard Mr. Biddison explain this same thing, that it is impossible to build what we term a "rubber pipe line" that would expand with the increasing markets.

It would be uneconomical to build a 4-inch line to carry the first year's business and an 8-inch line to carry the second year's business, and so on.

The designers of this pipe line system apparently expected to get a load that would fully fill a pipe line of 24,

22 and 20 inch capacity, so they built one of that size, expecting to fill it with gas because it was economical to build a pipe line that size.

They only put three compressor stations on it, but it was designed for 11. So, during those early years, when it had those three compressor stations on that size line, it had a capacity of only 80 million cubic feet.

That was all the gas it could carry. Later on, when they added the full complement of the compressor stations, it had a capacity of 125 million.

Now, in that interval between the time they built that line and the time it started carrying its full load of 125 million, there was some unused capacity in the line and it was [fol. 3283] the cost of carrying that unused capacity that I tried to measure here in dollars and cents.

. . . . . .

Q. Well, is it fair to say that you are approaching it from the standpoint of a distributing electric utility which is building a large power plant and over-building for the present time to take care of what would be reasonably anticipated for its future needs?

A. Well now, there are some points of similarity in the two things, but there is more flexibility in the case of the power plant than there is in the case of the thing we are talking about.

They can expand gradually as the load comes on. They do not have to install all the capacity needed to carry their final load at the outset. There is some similarity, yes, but [fol. 3284] the degree is considerably different, as I say.

. . . . . .

[fol. 3291] Q. Mr. Morton, what is the relative capacity of a pipe line, let us say, one twice the diameter of the other?

. . . . . .

[fol. 3292] The Witness: I think Mr. Chamberlain means what is the carrying capacity at certain pressures or at any given pressure in a pipe line, let us say 2 inches as compared with one having a diameter of 4 inches.

By Mr. Chamberlain:

Q. Yes.

A. What is the relationship of diameter to capacity. Now, I cannot answer that from memory, Mr. Chamberlain. I could tell you this much, that it is not a very hard job, but that it would probably take 10, 15 minutes, maybe, for me to work out enough information to satisfy myself that I had answered that correctly from Weymouth's formula.

The capacity of the pipe line varies, not directly with the diameter, but as some power of the diameter and, for the moment, the power has escaped me, but I believe it is the eight-thirds' power of the diameter so that, if my recollection is correct, then the pipe line that is twice as large as the other would carry 2 D to the eight-thirds' power—well, [fol. 3293] it is diameter to the eight-thirds power as compared to the other diameter to the five-thirds power.

. . . . . .

Q. All right. What I am trying to get at is, there is an economy and a very substantial economy, if you were going to develop the given capacity, by building one large main instead of two small ones which would afford you the same capacity?

A. Yes, there is economy in building the larger pipe line, of course.

Q. You were using a rule-of-thumb here yesterday. Now, you know the rule-of-thumb by which these natural pipe lines have been projected and talked about. What has been used in the industry as [a] example of the cost of building a pipe line per inch of diameter per mile?

A. I am sure you are speaking of the $1,000 per inch of diameter.

[fol. 3294] Q. That is right. Then a 10 inch line under that rule-of-thumb would cost about $10,000 a mile, is that right?

A. Yes, under that rule, that is right.

Q. Whereas a 20-inch line would cost about $20,000 a mile? A. Yes.

Q. And the one would have, to be very careful, three to four times the capacity of the other one, would it not?

A. Yes, sir, correct.

. . . . . .

[fol. 3295] Q. If you had a load of 40 million feet of gas a day and you wanted to build a pipe line with a capacity of 80 million, what proportion of the cost would be for this excess capacity?

A. It would depend entirely on what you wanted to make it, whether you wanted to approach it on a straight proportional basis or on the increment cost basis. There are arguments both ways.

* * * * * * * * *

[fol. 3302] Q. All right. Now, land rights and land, did you buy any greater right-of-way than you would have, had you had a line of half the capacity?

A. Now, that I cannot say because I did not go, as I say, into the individual accounts that go to make up this story. I just tackled it from an over-all standpoint.

Q. Don't they have a standard right-of-way for these natural gas pipe lines?

A. I guess I sound dumb, but I don't know that.

Q. You do not know that, but supposing I put this to you and see if you know this. Would it require a wider right-of-way to lay a 24-inch main than a 16-inch main?

A. I do not know.

Q. You know you have paralleled your lines in many cases on the same right-of-way that you had to start with?

A. I know we have paralleled the line, all right, but I do not know about the right-of-way arrangements.

* * * * * * * * *

[fol. 3303] Q. Now, I understood your testimony yesterday that you were attributing to unused capacity, let us say just abstractly, 55 percent of the general and administrative expense covering the 4½ year period. Is that in general right?

[fol. 3304] A. In general, that is true.

Q. Now, rather than state what I understood, will you state again your reason for allocating that proportion of the general and administrative expenses to unused capacity?

A. That goes back to the entire conception of what the study is for.

Q. You are talking about your study?

A. Yes. As I stated many times before, we built a pipe line which was intended to take care of a certain load because it was economical to build a pipe line of that size.

Now, during the early years of the project, it did not carry the load for which it was designed and by five different mathematical ways, I have indicated what percentage of the project I thought was not being used during those early years, and I attempted, by use of those percentages, to arrive at what seemed to me to be fair measures of the cost of carrying unused capacity, and those costs consisted of interest charges, ad valorem taxes, and operating expense.

There may have been others, but those are the only three that I used.

The reasoning generally was this, and I am getting closer to your question, that since there was, let us say, 50 percent unused capacity in this project during, let us say, 1934, then it followed that 50 percent of the expense of running this big project could be allocated reasonably [fol. 3305] to this unused capacity.

Of course, we did not take 50 percent of all of the operating expenses because we realized that some of them would cause a good deal of argument if we put them in here and it would be a little difficult to justify something that, right on the face of it, had no connection with unused capacity, so we threw out some of them but, in general, that is what we did.

Since we had 50 percent unused capacity during those years, I took 50 percent of certain operating expenses as having been incurred on account of keeping in running shape this project.

Q. Well, you took the 50 percent of general and administrative expenses, did you not?

A. Yes, I did.

Q. And that was on the theory that you were staffed with sufficient employees to operate a plant transporting its full capacity, is that right?

A. I do not know whether that exactly applies or not. I think about all we could say about that is, that since it appeared that 50 percent of our capacity during those years

was not being used, then 50 percent of our expense during those years was there because of unused capacity.

Q. Well now, let's apply that a little more concretely. That includes the salary of the president, does it not?

A. Yes, undoubtedly that did.

* * * * * * * *

[fol. 3310] Mr. Littman: Mr. Examiner, in accordance with our usual policy of endeavoring to clear up the situation with respect to exhibits as each witness completes his testimony, I would like to make a statement with respect to the exhibits of Mr. Morton.

We have no objection to Mr. Morton's Exhibit No. 40, "Estimated Main Line Sales, Years 1941-1946, Inclusive."

We have no objection to Mr. Morton's Exhibit No. 41, which is a chart entitled, "Panhandle Eastern Pipe Line Company and Subsidiary Companies-Sales and Gas Plant by Years".

We do, however, renew our objection to Exhibit 38, which was submitted by Mr. Morton. I have stated on this record the basis of our objections to Exhibit 38. Briefly, to reiterate our position, it is simply this:

We object to any evidence in this proceeding relating to a separate allowance for going concern value. We believe that such a separate allowance will not need to be made in this case so, in the first place, we reserve our objection on that score throughout the entire proceeding.

Secondly, the evidence submitted by Mr. Morton cannot conceivably furnish a proper basis for going concern value. As we have already stated, the exhibit simply undertakes to allocate a portion of past operating expenses, [fol. 3311] and past taxes and past interest to a so-called total which this witness calls "attributable to unused capacity."

This so-called capacity has no relation, in our opinion, and I believe in this witness' opinion, to the physical capacity of this pipe line system. It includes expenses which are obviously unconnected with any unused capacity of the pipe line system.

Some of those, as your Honor will recall, are distribution system expenses incurred in connection with the operation of distribution systems which are not even now owned by Panhandle Eastern Panhandle Pipe Line Company.

They include the cost of reading meters in communities in Kansas and Missouri, the cost of repairing services and mains, the cost of advertising, the cost of soliciting customers. It includes an unascertained amount of interest paid by a number of subsidiary companies whose operations had nothing to do whatever with the operation of the main pipe line system which is the subject of this proceeding.

But assuming that all of those expenses were proper and could be capitalized into a rate base under the guise of going concern value, we believe that the evidence fails to support the method used by this witness to arrive at the amounts properly applicable or attributable to unused capacity.

Those, briefly stated, are the grounds for our objection. We believe that this exhibit, namely, Exhibit 38, should be [fol. 3312] excluded.

Trial Examiner: Some reference was made yesterday to further data that had been requested of Mr. Morton and I would like to know whether the data, which, I assume have not been furnished, will have reference to Exhibit 38?

Mr. Littman: Those data will not affect Exhibit 38. Those data relate to Mr. Morton's Exhibit No. 40 and possibly to No. 41, but particularly to Exhibit No. 40.

In other words, we merely want the underlying working papers for Exhibit 40. I believe that counsel on the other side of the table will agree that Mr. Morton's working papers to be furnished, and additional data, such as estimates of revenues, do not have any relation to Exhibit 38 but relate particularly to Exhibit 40.

Trial Examiner: Referring to Exhibit 38, I will ask counsel for Panhandle Eastern Pipe Line Company whether the sums shown in Line 26 comprise merely a part of the sums which have heretofore been charged to the operating expenses of the company and its subsidiaries?

Mr. Culton: They include those items, save and except the excepted items relating to Argus, the Local Area and the transportation of gas.

Trial Examiner: But they do constitute a part of operating expenses which have been charged, as such, on the books of the company?

[fol. 3313] Mr. Culton: That is correct.

Trial Examiner: And the segregation of a part is only for the purpose of allocation to estimate what you term "the cost of developing the business"?

Mr. Culton: That is right, the cost of carrying the unused capacity.

Trial Examiner: Exhibits 40 and 41, so marked for identification, will be received without objection.

. . . . . .

Trial Examiner: The objections of Commission Counsel to the reception of Exhibit 38 will be overruled and this exhibit will be received for what it may be worth, although there is, in the view of the Trial Examiner, considerable merit in the objection.

The fundamental bases stated in the objection will, of course, be given consideration when the evidence is reviewed.

. . . . . .

[fol. 3316] P. McDonald Biddison, a witness, having pre-
[fol. 3317] viously been duly sworn, resumed the stand and testified further as follows:

. . . . . .

[fol. 3334] Mr. Littman: I wanted to be straightened out on just what Mr. Biddison was referring to when he referred to the cost of developing the business, whether he was referring to the two items or one; namely, payments to utility companies and, carrying costs on that portion of plant idle pending development of business.

. . . . . .

The Witness: I refer to the sum of the two.

By Mr. Wheat:

Q. As used by you in your exhibit what?

A. Well, I have used it in Exhibit No. 39 and I have used it in Exhibit 62.

Q. At least, you have used it in those two exhibits which already have been made the subject of a refusal order by the Trial Examiner, is that correct?

A. That is correct.

. . . . . .

[fol. 3574] P. McDonald Biddison, a witness, having been previously sworn, resumed the stand and testified as follows:

Redirect Examination (Continued).

. . . . . .

[fol. 3579] Mr. Littman: (Interposing) Pardon me, Mr. Culton.

Do you mind if I ask one question to clear up something?

Mr. Culton: Go ahead.

Mr. Littman: Mr. Biddison, with respect to the breakdown by you just referred to in Exhibit 39 from Page 156 to 350, did you use that breakdown in connection with making your determination of depreciation?

The Witness: Yes, sir, I did.

Mr. Littman: To what extent? Would you mind telling us to what extent you used that breakdown?

The Witness: This equipment in Exhibit No. 39 is summarized by classes of use and location on Page 155 of Exhibit No. 39.

That summary is a summary of the data on the succeeding pages which details the installations and that summary on Page 155 is the data shown in Column B and Column A on Page 19 of Exhibit 62, and it is the data to which, in my working papers, I made application of the figures of percentages to be deducted for depreciation.

Mr. Littman: Do I understand that you arrived at a percent of depreciation for each and every item of equip-
[fol. 3580] ment listed on Pages 156 to 350, inclusive, of Exhibit 39?

The Witness: I do not know whether you understand that or not, but I want you to distinctly understand that you should not understand it that way, because I have explained it otherwise.

I determined an amount in percentage to be deducted for depreciation for each class and location of property in the recapitulation sheet on Page 19 of Exhibit 62.

Mr. Littman: In other words, you worked from the recapitulation sheet shown on Page 19 of Exhibit 62, rather than from the details shown from Pages 156 to 350?

The Witness: That is right. The things which I saw are the details which are shown in the various pages of Exhibit No. 39.

The things to which I applied my percentage, resulting from those observations, are the items appearing in Column B on Page 19, Exhibit 62.

. . . . . .

[fol. 3638] By Mr. Wheat:

. . . . . .

[fol. 3639] Q. Now, Mr. Biddison, when approximately did
[fol. 3640] you make the inspection to which you have testified with respect to the company's pipe line.

A. This inspection began, starting from Amarillo on August 17, 1941. I continued over the system to its eastern end, returning to Kansas City upon August 26, 1941.

I did not do any inspecting on Sunday, the 24th of August nor upon Thursday, the 21st of August. I did, at a later date, however, inspect Louisburg compressor station and Olpe compressor station.

Q. Did anyone accompany you on this inspection trip?
A. Yes, sir, I was accompanied by two engineers.
Q. Please state their names.
A. Of the Federal Power Commission's staff.

Q. Who were they?

A. Mr. Shattuck and Mr. Bodner, except they did not accompany me upon my inspection of Louisburg station and Olpe station.

Q. Now, prior to the commencement of this inspection trip on August 17, 1941, at Amarillo, Texas, had there been any discussions of such an inspection and, if so, what were they, and please detail for the record what the situation was in that respect?

A. I began work on this Panhandle Eastern situation in preparation for this hearing on July 22 at which time I attended a conference in Kansas City.

. . . . . .

[fol. 3641] Q. Generally, who was present and what was the nature of the conference?

A. I cannot give a list of those present because I do not have such a list.

Q. Do you remember, in general, who were there?

A. Well, I know, of course, that I was there, and that Mr. Burnham was there, Mr. Creveling, the president of the company; Mr. Paxton.

Q. Who is Mr. Paxton?

A. He heads their accounting force from Kansas City. He is secretary and treasurer, I believe, is his title.

Mr. Neuner, the operating vice-president, was there. I believe Mr. Glenn Clark, the company's attorney, was present at the conference, and I believe Mr. Carl I. Wheat and Mr. Don Culton were present at that conference.

. . . . . .

Q. Yes. What was the general nature of the conference?

[fol. 3642] A. The general nature of this conference was to discuss the question of how to prepare for this hearing on which a date had been, at least tentatively, set.

Q. And was anything discussed at that conference with reference to the inspection of the company's physical properties for the purpose of determining the amount of depreciation or loss of value which had occurred therein?

A. Yes, that matter was discussed, and it was understood, as a result of that conference, that I would make the inspection and that the representatives of the Federal

Power Commission would be given an opportunity to see, during that inspection, whatever I saw.

Q. Do you know, Mr. Biddison, whether a communication was addressed by the Panhandle Eastern Pipe Line Company to the Federal Power Commission in connection with or inviting representatives of the Commission to accompany you on this tour of inspection?

A. I know it was understood at that conference that that would be done and that subsequent events indicated the invitation had been extended.

Mr. Wheat: I would like, Mr. Examiner, to read this short letter into the record and I will hand the copy to the reporter and it is understood with the Commission that if, on examination, it does not check with the copy they received, we will discuss the matter and make the check.

[fol. 3643] Trial Examiner: Very well.

Mr. Wheat: All right, sir.

This is dated July 23, 1941.

"Federal Power Commission, Washington, D. C.

Attention: Mr. Leon M. Fuquay

Re: City of Detroit and County of Wayne vs. Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation—Docket No. G-200.

"Gentlemen:

"In connection with the above proceeding, Mr. P. McDonald Biddison, Consulting Engineer, Dallas Gas Building, Dallas, Texas, is making a valuation of our physical properties. Commencing on or about August 4, he will make an inspection tour for the purpose of determining the present condition of these properties, and during this tour he will inspect portions of our pipe lines which are to be uncovered at various locations designated by him.

"Thinking that the Commission, through one of its engineers, might wish to observe the condition of these properties in connection with this case, or in connection with its own investigation under Docket No. G-207, we invite you to designate some member of your staff to accompany Mr. Biddison on this tour. His transportation over our

system would be provided by this company and should he desire to inspect portions of our pipe lines not uncovered for the purposes of this inspection tour, we will be glad [fol. 3644] to cause such other portions to be uncovered for his inspection.

"If you desire to avail yourselves of this opportunity to inspect the physical properties of this company, please give us the name and address of the one you designate to make this trip and we will have Mr. Biddison contact him as soon as possible.

Very truly yours,"

I believe it was signed by J. D. Creveling, as president of the company.

By Mr. Wheat:

Q. Now, Mr. Biddison, do you know whether the Panhandle Eastern Pipe Line Company received an answer to that letter from the Federal Power Commission?

A. Yes, I saw a reply, a telegram which I think was in reply to the letter which you have read.

Q. Well, is the letter which I show you under the letterhead of the Federal Power Commission the reply itself?

A. Yes, I have previously seen that letter.

. . . . . .

Mr. Wheat: This letter is under the letterhead of the Federal Power Commission, Washington, dated July 26, 1941.

[fol. 3645] "Mr. J. D. Creveling, President,
Panhandle Eastern Pipe Line Company,
1221 Baltimore Avenue,
Kansas City, Missouri.

Re: Docket No. G-200, Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation

Dear Sir:

"This is to acknowledge receipt of your communication dated July 23, inviting a member of the Commission's staff to accompany Mr. Biddison in an inspection of your properties in connection with the above investigation.

"Mr. H. Zinder, Chief of the Division of Rates and Research, will be in the field and in the vicinity of Kansas

City the week of July 28. In view of this fact, Mr. Zinder has been requested to call upon you Saturday morning, August 2, on his arrival in Kansas City and arrange for a meeting with you to discuss this matter. It would be advisable if Mr. Biddison could be present at such a meeting, so that questions or procedure on the inspection, number of inspections contemplated, and the plans generally, may be discussed. Following this conference and Mr. Zinder's report, a decision will be reached concerning the nature and extent of the Commission's participation in the inspection.

"In view of the above circumstances, it is suggested that arrangements for the commencement of the inspection be delayed from August 4 until August 18. This would permit Mr. Zinder time to return to Washington and to make [fol. 3646] whatever arrangements are necessary for some members of the staff to reach Kansas City for the start of the inspection.

"If the above arrangements are satisfactory, please confirm them by return wire.

Yours very truly,"

(Signed) LEON M. FUQUAY,
Secretary."

I have also here a carbon copy of a telegram:

from "Kansas City, Missouri,
July 28, 1941,
3:55 P. M.

Leon M. Fuquay, Secretary
Federal Power Commission
Washington D. C.

"Arrangements suggested in your letter of the twenty-sixth satisfactory. Will be glad to see Mister Zinder Saturday morning August, second.

(Signed) PANHANDLE EASTERN
PIPE LINE COMPANY
By G. J. Neuner, Vice President."

That is also subject to counsel's check.

By Mr. Wheat:

Q. Now, Mr. Biddison, as a result of the passage of letters between the company and the Federal Power Com-

mission, was a conference held in Kansas City with Mr. Zinder present?

A. Yes, sir.

[fol. 3647] Q. When was that held?

A. On August 2nd.

Q. Who was present there, so far as you can remember?

A. Mr. Neuner, Vice President of Panhandle Eastern Pipe Line Company, Mr. Glenn Clark, attorney for Panhandle Eastern Pipe Line Company.

I believe Mr. Don Culton, counsel for Panhandle Eastern Pipe Line Company in this case, was present at that meeting.

I was present, and Mr. Zinder and Mr. McAllister of the Federal Power Commission were present.

Q. Members of that Commission's staff?

A. Yes, sir.

Q. Now, will you relate briefly your recollection of what was said with respect to the inspection in question?

A. I outlined about the number of inspections that I anticipated making and I had a map somewhat similar to the map that hangs on the wall.

Q. Exhibit 15?

A. Exhibit 15 in this case, on which, on the main line system, I had indicated, generally, the locations of some of the points at which I wished to make inspection.

I explained that I was making provision for that number of inspections which I thought it would be desirable to make of such a property in case of a purchase and sale and did not propose a large number of test holes.

[fol. 3648] I advised that I had indicated, generally, certain locations upon this map and suggested that it would be advisable for representatives of the Federal Powe Commission make additional locations equal to half the locations which I had selected.

They asked for a copy—

Q. (Interposing) When you say "they," who do you mean?

A. Mr. Zinder and Mr. McAllister. Which one made the request specifically, I do not know. It was sort of a joint request that they be furnished with a copy of that map and

that the matter of locating such additional test holes would then be referred to engineering numbers of the staff of the Federal Power Commission.

Q. Mr. Biddison, right there, did they express any dissatisfaction with the number of test holes that you proposed?

A. On the contrary, both Mr. McAllister and Mr. Zinder expressed satisfaction with our viewpoint that a large number of such inspections was not necessary for the determination of the facts pertinent to this kind of an investigation.

Q. For adequate sampling of the property?.

A. That is right.

* * * * * * * *

Mr. Gorman: Do you, by your answer, intend to indicate they [they] thought that was a sufficient number and [fol. 3649] sufficient for determining depreciation in the property?

The Witness: I am not trying to indicate anything. I am simply telling what happened.

Mr. Gorman: Yes. I did not want any improper inference to be given to your statement.

Mr. Wheat: I am sure no improper inference could be drawn from the statement of the witness.

By Mr. Wheat:

Q. Was anything else said about the number of test holes?

A. Yes. A comparison was made during that discussion as to our viewpoint on that matter in the light of the large number of holes either dug or planned to be dug by some other natural gas utility having cases pending or undergoing hearing before the Commission.

Q. What was said in that connection?

* * * * * * * *

In your answer, Mr. Biddison, you said "in view of that matter." By "that matter," you meant what?

The Witness. Our view as to the matter of how many test holes were to be dug during this inspection.

. . . . . .

By Mr. Wheat:

Q. What was said in connection with this item you just mentioned, some other company having too many test holes?

[fol. 3650] A. I cannot make a quotation on that, although I can say in regard to what was said on the matter, the idea was expressed by these gentlemen that we had adopted a logical procedure in that matter.

Q. Now, you also, did you, acceded to the request made by the Commission through its secretary that you postpone the start of this investigation from around August 8 to August 17 or 18? Is that so?

A. That is correct.

Q. In the meantime, Mr. Biddison, did you send on to Mr. Zinder or Mr. McAllister in Washington this copy of this map you have mentioned and also a list of the points where you proposed to dig test holes?

A. I arranged for that map to be sent. I did not send it myself.

Q. Well, it was sent, was it not?

A. I am sure it was. Later information indicated that it had been properly received.

Q. Now, did anyone representing the Commission at any time actually suggest to you any additional places for making test holes?

A. No, sir.

Q. And did you, yourself, on your own volition increase the number of test holes by around 50 percent?

A. I did at a later date and after conference with Mr. [fol. 3651] Shattuck and Mr. Bidner, after their arrival at Kansas City.

Q. When did they arrive in Kansas City?

A. I do not have a record of that with me.

Q. Sometime after the 2nd of August?

A. I think I can give an approximate date on that. I think it was about August 4.

Q. At any rate, it was after this conference of August 2nd, was it not?

A. Yes, sir.

Q. And prior to your start on August 17 from Amarillo?

A. Yes. It may have been later than the date I have given.

Q. Did you request either of these gentlemen to make a designation of additional test holes?

A. I did.

Q. And are we to understand that they did not do so?

A. They did not do so.

Q. Now, as a result of that, did you make these additional designations?

A. I did and, in doing so, I marked them upon a map from which the station and plus number could be identified in the presence of Mr. Shattuck and Mr. Bodner.

Q. You mean, you marked them on the map in the presence of those gentlemen?

A. Yes, sir.

[fol. 3655] P. McDONALD BIDDISON a witness, having been previously sworn, resumed the stand and testified further as follows:

Redirect Examination (Continued)

By Mr. Wheat:

Q. Mr. Biddison, at the close of the hearing yesterday, you were discussing the program which you had developed for the examination of the pipe lines of the Panhandle Eastern Pipe Line Company in conjunction with certain members of the staff of the Federal Power Commission.

Now, I wish you would proceed with your discussion of what you did and particularly with respect to the digging of various test holes for the examination of the line and its condition.

A. When it developed that the engineers for the Federal Power Commission, Mr. Shattuck and Mr. Bodner, would not select additional locations for inspection on lines above the number which I had already located, I myself made the additional locations in their presence.

Q. How did you go about doing that?

A. I generally divided the districts, between locations which I had already selected, into substantially equal dis-

tances and put these locations as intermediate locations.
[fol. 3656] Q. Where did you put them?

A. Intermediate locations between the locations which I had previously selected.

Q. When you say you put them, did you put them on a map or something like that?

A. I marked them on a map and marked them according to its location and plus number on the alignment sheets.

Q. This you say was done in the presence of the members of the Federal Power Commission staff?

A. Yes, sir.

Q. I wish you would state, in general, what the basis was for your designation of test holes and their locations?

A. The basis was to have a fairly uniform distribution of test holes so selected that they could be reached by automobile, in order to save time.

For that reason, the locations were made close to what appeared to be roads that could be traveled by automobile.

Q. And after you had made these locations upon this map, how was the actual mechanism of getting the test holes dug arranged?

A. An assistant tabulated these locations by pipe line districts and furnished the information to the superintendent of pipe lines, who, by letter, advised district superintendents of the location of these test holes, of the length of pipe to be uncovered, of the clearance to be provided [fol. 3657] around the pipe, of the amount of protective coating that was to be removed, and of the probable date at which they might expect us to require the holes to be ready.

Q. Was there any effort on your part or, so far as you know, on the part of anyone connected with Panhandle Eastern Pipe Line Company, to make any selection of test hole points other than as you have testified?

A. No, sir, nobody else had anything to do with it.

Q. And you made your selections solely from the map as you have testified?

A. Yes, sir.

Now, my instructions to the pipe line department were that in case any of these locations proved to be such that it would interfere with land owners' rights of property, that

they could be moved a reasonable distance without placing a specific limit on what was reasonable.

There were a few locations changed for that reason. I think one was changed because the digging would have been in very hard rock, and one or two were changed to get them out of crop locations into open field locations, but the locations were made as originally specified, with very few exceptions.

Q. Now, some questions were asked you on cross-examination with respect to the locations for inspection which you designated at certain of the river crossings.

I believe you testified that, in those instances, you in- [fol. 3658] spected pipe in some portion of the flood plain of the river at the crossing.

A. That is correct.

Q. Would it be your opinion that if there were corrosion or other deterioration of the pipe, that an examination of the pipe in such location would disclose such corrosion?

A. Yes.

Q. And would it be your opinion that if there were any corrosion in connection with the pipe in the river crossing, that an examination in the area of the river's flood plain would be the best possible place to make the examination for corrosion?

A. Yes, sir, there is more pipe, in general, on the land sections in the flood plain on these stream crossings than there is in these stream beds.

That is not true of all stream crossings, but it is of a number of them.

Q. Now, Mr. Biddison, you were also asked on cross-examination whether you made specific examination of the pipe at certain of the river crossings. It is a fact, is it not, that you arranged your examination to make inspection at certain of the river crossings, but not at all of them?

A. That is correct.

Q. Now, is it your opinion that your examination of the pipe at those certain river crossings was sufficient to give [fol. 3659] you a reasonable and fair basis for judgment as to the river crossing pipe of this company?

Q. And where is that conclusion contained in your testimony?

A. It is contained in the deductions I have made for depreciation in Exhibits 62 and 69.

* * * * * * * *

Now, will you go back, Mr. Biddison, to the time of your [fol. 3660] conference in Kansas City, at which time you made the selections of these additional locations for test holes on the map in the presence of these two members of the Federal Power Commission's staff.

What was the next step in connection with this inspection trek?

A. After completing the locations, the next step was to notify the pipe line department of those locations so they could have these holes dug.

Q. Now, about when was that done?

A. I do not have copies of the correspondence on that.

Q. I am not asking that detail, but about when was it done in relation to these conferences and the start of your trip?

A. Well, it was done within two days after the locations had been posted on the maps, and I believe prior to August 10.

I think it was sometime during the week of August 3 that notification was given to the pipe line department, to my best recollection.

Q. Yes. Now, then, what was the next step?

A. The next step was to go to Amarillo and to start inspections.

Q. Did you drive from Kansas City to Amarillo?

A. No, sir, I took the night plane from Kansas City to [fol. 3661] Amarillo and got in Amarillo about 3:30 or something of that sort in the morning and met the representatives of the Federal Power Commission in the lobby of the Herring Hotel about 6:00 o'clock on Sunday morning.

Q. That was August 17?

A. Yes, sir, and we began inspection that day in the Panhandle Field.

Q. And what did you do there?

A. We drove in automobiles to the locations in the field where I had selected spots for inspection. We had a field superintendent with us to direct us to these locations. At each location, I went down into the hole, made the inspection of the pipe, its full circumference—

Q. (Interposing) What did you do in making this inspection?

A. That is what I am trying to tell you.

Q. Let's have this in detail so the record will show just exactly what was done by you and the representatives of the Federal Power Commission.

A. I made an inspection of the pipe for its full circumference and I made an inspection of the protective coating on that pipe in each of these locations, it had been directed that there be six feet of total pipe exposed of which four feet was to be cleaned of its protective coating so that four feet of the pipe surface could be examined and two feet of [fol. 3662] the protective coating could be examined.

* * * * * * * *

Q. Proceed.

A. Now, at these locations, with a few exceptions, I made photographs of the pipe.

Q. We will come to that later, but I am glad to have you state what you did in that connection.

A. At each location, I made notations of my observations, and I have before me the forms on which those notations were placed at the time.

* * * * * * * *

[fol. 3663] Q. In other words, had the paint been removed from four feet of that six feet that had been laid bare by the digging away of the earth from the pipe?

A. That is correct.

Q. All right, proceed.

A. The inspection was by P. McDonald Biddison.

Q. Was anybody else there at the time who looked at that pipe? A. Yes, sir.

Q. Who was there?

A. Representatives of the Federal Power Commission, Mr. Shattuck and Mr. Bodner.

Now, in general, Mr. Bodner made the actual inspections of pipe and Mr. Shattuck made the notations di-

rected by Mr. Bodner to be made. In other words, Mr. Shattuck generally kept the records and Mr. Bodner generally made the direct inspections of the pipe.

. . . . . .

[fol. 3664] Q. Now, Mr. Biddison, before you proceed in connection with this photograph, did you take photo-
[fol. 3665] graphs at all or practically all of these test hole locations?

A. I did. There were one or two locations where I did not attempt to take pictures because of darkness, but, except for that, I attempted to take pictures at each location and I do have such pictures, with a few exceptions. I did not have a perfect score on it, but a pretty good batting average.

. . . . . .

[fol. 3666] Q. All right. Now, how many inspections did you make of the pipe of this company? A. 116.

Mr. Littman: May I inquire if that represents the total number of inspections made by you on all types and kinds of pipe?

Mr. Wheat: That is what I meant by my question. I wanted that answer.

The Witness: Yes, sir.

By Mr. Wheat:

Q. How many was that? A. 116.

. . . . . .

[fol. 3667] Q. Were the representatives of the Federal Power Commission staff present at all of your inspections?

A. Yes, sir, at every one.

Q. Did they also make notations, to your knowledge, at each one of these locations? A. Yes, sir.

Q. Did either one of them actually inspect the pipe at those locations?

A. Yes, sir, there was an inspection made by one or the other, or both, at every location.

Q. One acted as inspector and the other as secretary, is that true?

A. That was the general rule. As the general rule, Mr. Bodner made the inspections and, as a general rule, Mr. Shattuck made the record. In some locations, how-
[fol. 3668] ever, Mr. Shattuck also made some inspections, and at each location they took soil samples.

. . . . . .

[fol. 3669] Mr. Littman: Will you please explain what you mean by the word "bond"? You said the bond was good.

The Witness: The attachment of the coating to the pipe
[fol. 3670] surface is referred to as the bond. If it adheres tightly, the bond is good. If this paint simply lays on the pipe without adhering, there is no bond.

In this location, there was definite surface rust with shallow attack on the metal about one pit per square foot but the depth of pits was not measurable.

. . . . . .

[fol. 3671] Mr. Littman: What did you term each of these two situations, Mr. Biddison? Didn't you term one shallow surface attack and the other you referred to that
[fol. 3672] as pits or pitting? I would like to be sure about it.

The Witness: On this particular observation, I have noted both, that there was definite surface rust and that there was shallow metal attack.

Mr. Littman: And inasmuch as there were no measurable pits, you did not use the classification of "pitting", did you?

. . . . . .

[fol. 3673] By Mr. Wheat:

Q. Now, Mr. Biddison, I don't want to ask you to read each one of these, of course, but I would like to have you go forward with your explanation of what you and the representatives of the Federal Power Commission's staff that you mentioned did on this joint inspection trip that you took?

A. I cannot tell you anything about what they recorded because I do not know what they recorded at any location.

Q I am not asking you that, Mr. Biddison, but what they did and what you did.

A As an example of a location where pitting was found, I will refer to test hole No. 5 on Line A1 [o] at Station 30 plus 00, this being in Moore County, Texas, in Section 1, Block B13, of the D. H. Railway Survey.

[fol. 3674] In this location, [was] was standard, we had six feet of the line uncovered, of which four feet was bared and two feet of paint showed.

My notation upon this location shows that the general topography was rolling, the immediate location was high. I made no notation as to drainage. The soil was red, sandy clay loam, vegetation was pasture. The earth was moist.

The coating was protected. There was no cracking or checking of the coating. Its physical condition was normal. It was very pliable, its bond was good. There was no indication of corrosion and there was shallow pitting at back and the pipe was pitted. I remember that the dimpgage put on one of the four feet of pipe which had been bared was 10 mils, that the dimpgage put upon the next one foot out of this four feet was 9 mils, that the dimpgage put upon [the] the next one foot of the four consecutive feet was 10 mils, that the dimpgage put out of the last foot of the four feet bottom was 9 mils and that is typical of the notations which I made with regard to pits. That is, where pits were found, the four feet nearest of bare pipe was divided off into one foot lengths and a determination made of what was the dimpgage put on each one [fol. 3675] of those four one foot sections.

Now, I know that the engineers of the Federal Power Commission recorded additional data as to distribution of pits around the circumference of the pipe and recorded in each one foot out what the dimpgage put additional pits, but as to what those records were on that, I have no knowledge, never having seen one of those records.

Q Well, you mean to say they never made available to you the records which they took on this joint inspection trip in the manner that One made available your record of what you took?

A That is right, and I did not ask them for it either.
Q At any rate, you have never seen it?
A That is correct.
Q They never offered to show it? A No, sir.

Mr Latiman He said he never asked for it.

Mr Wheat I did not ask that. I asked if they ever offered it to him.

Mr Latiman He said he did not ask for it.

Mr Wheat I asked if they ever offered it to him.

By Mr Wheat:

Q Now did the Commission representatives object to this type inquiry?

Mr Latiman I object to that.

Now if Mr Wheat is going to start varying out and half baked references I think he appears to be varying out of this thing. I would like to ask that a half be called so it is not much like asking a man when did you stop beating your wife?

[illegible] Now all of these negative inferences that are sought to be drawn from this thing are highly improper.

Mr Wheat I did not put anything but the facts.

Mr Latiman For instance, question as to whether the representatives of the Federal Power Commission ever objected to this and was told not to do that? We will never get through with this proceeding if we are going to indulge in those kind of inferences. They have no probative weight. What the Commissioner's representatives did not do would certainly have no reflection one way or another on what the witness did.

It seems to me that we are getting into a realm of wild speculation.

Mr Wheat Mr Examiner, had counsel for the Commission not sought to draw such inferences in his cross examination and had he not asked the witness questions with respect to those representatives of the Federal Power Commission who went with Mr Biddison on this joint

inspection, I should, of course, not be asking these questions.

I may say that I have here before me three certain questions which I have written down and which I propose to ask and in connection with this objection I should like to read these questions so that Mr. Littman may be [fol. 3677] informed precisely what I expect to ask.

I believe in connection with his cross-examination that I have a complete and unqualified right to ask these questions. They are as follows:

Did these Federal Power Commission representatives or either of them object to any of the inspection locations where you and they actually inspected this company's pipe line?

Did they or either of them express disapproval of any such location?

Did they or either of them request an opportunity to inspect the pipe in question at any location other than those where the test holes had been dug?

Were they or either of them refused any such opportunity?

Mr. Littman: As to the first two, of course those are highly irrelevant. What difference does it make? If Mr. Biddison wanted to run along the pipe line and fly a kite, that was all right with us. We did not care what he did do or did not do. Whether or not we objected to what Mr. Biddison was doing, would not have any relevance to this proceeding.

Now, if they want to draw inferences from the fact we went along with Mr. Biddison on these inspections and did not object to what he did and say that we, therefore, approved everything Mr. Biddison did, well, that is a new kind of sophistry.

[fol. 3678] Trial Examiner: The Trial Examiner is constrained to interpret these questions which Mr. Wheat has just read as containing no innuendo and will permit them to be asked.

Mr. Wheat: That is correct, there is no innuendo intended. We are merely trying to get at the facts of this inspection.

Trial Examiner: I am of the same mind as to the inquiry made by Commission counsel in cross-examination.

By Mr. Wheat:

Q. Now, Mr. Biddison, did these two Commission representatives or either of them object to any of the inspection locations [were] you and they actually inspected this company's pipe?

Mr. Littman: Object.

Trial Examiner: Overruled.

The Witness: They did not to me and I know of no other place where any objection was registered.

Mr. Littman: Note an exception.

By Mr. Wheat:

Q. Did they or either of them express disapproval of the selection of any such location?

Mr. Littman: Object. He said they did not express any approval either. We are wasting a lot of time here.

Mr. Wheat: Mr. Examiner, it seems to me this objection is futile in view of your ruling. I have already read these questions and you have ruled upon them.

[fol. 3679] Trial Examiner: He may answer.

Mr. Wheat: Why can't Mr. Littman's objections go to them all?

The Witness: They did not to me and I do not know of them having done so to anybody else.

Mr. Littman: Exception.

Trial Examiner: Note an exception.

By Mr. Wheat:

Q. Did they or either of them request an opportunity to inspect the pipe at any location other than where these test holes that you testified had been dug?

Mr. Littman: Object. He has answered that question at least five times to my knowledge.

Trial Examiner: Overruled.

The Witness: Not to me and I do not know of them having made a request to anybody else.

Mr. Littman: We certainly acknowledge and concede that no request was made.

By Mr. Wheat:

Q. And did these representatives of the Federal Power Commission who accompanied you upon this joint inspection trip or did either of them request that any additional test holes be dug at any point along the line?

Mr. Littman: Object.

The Witness: They made no such request of me and I do not know of such a request having been made to any- [fol. 3680] one else.

Mr. Littman: Exception.

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[fol. 3684] Mr. Littman: I would like to have Mr. Biddison tell us the inspections at which Mr. McIlhattan was present? Was he present with you at all of the inspection points?

Mr. Wheat: Yes, tell us about that.

The Witness: It is possible he might have been absent at one or two, but I think [we] was present at every inspection.

Mr. Littman: You have not told us what he did. Would you mind if he would tell us what Mr. McIlhattan did?

Mr. Wheat: No, that is fine.

Mr. Littman: I thought you wanted to get a complete picture.

The Witness: He conducted me over the pipe line and mostly drove the car.

Mr. Littman: Did he make any inspections in the line?

[fol. 3685] The Witness: Not all of them; some of them he did. I have no record of how many he was in but he did inspect in some of the holes and some he did not.

Mr. Culton: The cathodic protection equipment is under his jurisdiction, is it not?

The Witness: Yes, sir.

Mr. Culton: So it was of importance to him to know what the condition of the pipe line was aside from any connection with the rate case?

The Witness: That is correct.

By Mr. Wheat:

. . . . . .

[fol. 3715] The Witness: I want to explain, with regard to this picture, that it is a flashlight picture, and not much of a picture.

Mr. Littman: Mr. Biddison, have you identified that picture as the one that was taken at the river crossing?

The Witness: Maybe I should have given it a little further identification.

Mr. Littman: Yes, and try to tie it in with the cross-examination.

The Witness: This picture is the one taken at night, and is the one about which Mr. Littman questioned me during my cross-examination.

Mr. Littman: Which river crossing was that?

The Witness: On the Missouri River crossing, east side [fol. 3716] on the new line, Line 200.

Mr. Littman: That is on the loop line?

The Witness: Yes.

. . . . . .

[fol. 3762] P. McDonald Biddison, a witness, having been previously sworn, resumed the stand and testified further as follows:

. . . . . .

[fol. 3780] Mr. Littman: Mr. Examiner, you will recall that during the course of redirect-examination of Mr. Bid-

[fol. 3781] dison, Mr. Biddison stated, in response to inquiry by counsel for Panhandle Eastern, that his estimate of going concern value was not necessarily reproduction cost.

Of course, the record will show exactly what he did say. It is my understanding that Mr. Biddison's position is that his estimate of going concern value is not reproduction cost.

Mr. Wheat: I think you will find, Mr. Littman, that he did not say what you say he said, but that he did say that cost of carrying unused capacity in this pipe line as determined factually by Mr. Morton and as those figures were finally used by him, Mr. Biddison, was not referable solely to reproduction costs.

Mr. Littman: And I believe he also testified to the same effect with respect to an amount of $552,992.48 which appears on Page 966 of Exhibit 39 entitled, "Total-Payments to Utility Companies."

Your Honor will recall that we have objected to Exhibit 39 in its entirety, and to Exhibit 62 in its entirety, on the ground that all of the figures shown therein represented this witness' estimate of reproduction cost new and reproduction cost new less depreciation.

As a matter of fact, in Exhibit 39, the heading, "Reproduction Cost New" appears throughout and, in Exhibit 62, particularly in the general summary on Page 2, Column B is headed, "Reproduction Cost—New", Column C is headed, "Deduct for Depreciation" and Column D is [fol. 3782] headed, "Present Value", and at the foot of that page, the title appears, "Total-Plant, Property, Business."

Now these items of going concern value appeared under those headings, both new and both as to present values, and I asked Mr. Biddison at one point in this record whether or not the term "Present value" was, in his opinion, synonymous with reproduction cost new less depreciation and he stated it was.

Well, at any rate, that was the basis of our objection to these going concern value figures was that they were re-

production costs. Since this witness has taken the position and has stated upon this record that his estimate of going concern value is not necessarily reproduction cost, we would like to, at this time, withdraw our objection, which objection was based upon the fact that it was reproduction cost, we would like to withdraw our objection to Page 966 of Exhibit 39, and we would like to withdraw our objection, which was made on the same basis, to corrected Page 965 of Exhibit 39-A.

Your Honor will recall that Page 965 originally appeared in Exhibit 39 but it was corrected and presented as Corrected Page 954 of Exhibit 39-A.

Now, the titles of those pages are as follows, the title of Page 966 of Exhibit 39 is "Panhandle Eastern Pipe Line Company and Subsidiary Companies Cost of Business Development."

[fol. 3783] The title of Corrected Page 965 of Exhibit 39-A is, "Panhandle Eastern Pipe Line Company and Subsidiary Companies Values of Gas Purchase Contracts."

We would like to withdraw our objection to those two pages which objection, as heretofore stated, was based upon the fact that we considered that the figures contained thereon represented reproduction cost, and we also wish to withdraw our objection made on the same ground to the testimony given by this witness in direct examination with respect to those two pages.

We would like to have it distinctly understood that we are reserving our right to object to this testimony and to these two pages and the estimates contained thereon on any other ground and, of course, if it should develop on cross-examination that these figures are, in truth and in fact, referable to reproduction cost, we, of course, reserve our right to renew our objection on that ground.

In short, Mr. Examiner, we wish to cross-examine this witness on this subject and we think perhaps the best way to handle it would be to have these two pages copied into the record at this point, so that reference may be made in cross-examination to the figures shown thereon.

Trial Examiner: Disregarding for the sake of correctness any technicalities, I construe your statement just made to be that you desire now to have read into the recorded Corrected Page 965 of excluded Exhibit 39-A as well as the original Page 966 of excluded Exhibit 39 [fol. 3784] and, if that is not permitted, you are, in effect, saying to counsel for Panhandle Eastern that you make no objection to their offering those pages which you have specified as exhibits.

Mr. Pittman: The latter is correct, except that we reserve our right, of course, to object for any further ground.

Trial Examiner: On some other ground, yes.

Mr. Wheat: We have already offered these pages, among others, and do not deem it incumbent upon us to reoffer them.

Of course, they are offered in this record, Mr. Examiner. They have been offered several times and we believe erroneously excluded, along with other pages which we believe were erroneously excluded.

Trial Examiner: There is no modification of the ruling heretofore made which includes, in toto, the exhibits referred to.

Mr. Wheat: May we have an exception to that ruling, too?

Trial Examiner: Certainly. If they are to be brought into the record, I assume that it might be by counsel for Panhandle and as to whether they might be brought in by counsel for the Commission, there might be discussion. At least, I should want the matter discussed if there is objection on the part of Panhandle Eastern counsel.

Mr. Wheat: I just want to say that the record is perfectly clear not only in the direct testimony of the witness as to the amounts in question but in his redirect testi- [fol. 3785] mony in connection with the nature of those figures. Counsel for the Commission having neglected to cross-examine him thereon, the record is perfectly clear as to the nature of the figures, and as to whether or not they are referable solely to reproduction cost, we deem it entirely incumbent on counsel for the Commission to make his election as to how he wishes to proceed in this matter.

We believe the record is clear.

Trial Examiner: You have no objection to his request that these pages be copied into the record at this point and that he cross-examine upon them?

Mr. Wheat: Not at all, your Honor. We have offered them for all purposes and they are in our offered exhibits.

Trial Examiner: Very well. The reporter will at this point copy into the record Page 966 from excluded Exhibit 39 and, following that, Corrected Page 965 from the correction sheets offered at Exhibit 39-A.

Corrected (Page) 965

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Value Of Gas Purchase Contracts

Line No.	Item (A)	Purchase Price (B)
1	J. M. Huber Corporation	$ .035
2	King Oil Company	.025

[fol. 3786]

Line No.	Item (A)	Purchase Price (B)
3	Navajo Production Company	.035
4	Northern Natural Gas Company	.035
5	Shamrock Oil and Gas Company	.035 to 1941
6		.035625 1942 to 1951
7		
8		
9		Cost at
10	Purchases	Contract
11	Year M. C. F.	Price
12	(A) (B)	(C)
13	1939 14 862 264	$ 517 454
	1940 16 427 962	571 248
14	1941 20 376 400	707 850
15	1942 22 365 000	786 772
16	1943 23 000 400	812 352
17	1944 22 544 500	793 124
18	1945 23 964 000	843 075
19	1946 18 738 000	660 165
20	1947 18 738 000	660 165
21	1948 18 726 000	659 865
22	1949 17 110 500	603 501
23	1950 15 505 000	547 387

Value at 4-1/2¢ (D)	Difference (E)
$ 668 802	
739 258	
916 938	$ 209 088
1 006 425	219 653
1 039 068	226 716
1 014 502	221 378
1 078 380	235 305
843 210	183 045
843 210	183 045
842 670	182 805
769,973	166 472
697 725	150 338

[fol. 3787]

Line No.	Year (A)	Purchases M. C. F. (B)	Cost at Contract Price (C)	Value at 4-1/2¢ (D)	Difference (E)
24	1951	13 909 500	491 524	625 928	134 404
25	11 Yr.				
26	Totals	215 067 300	$7 565 780	$9 678 029	$1 585 314
27		Total Value — Gas Purchase Contracts			$1 585 914

Line No.		Present Value of Difference 7 % Interest (F)
14	1941	$ 209 088
15	1942	205 288
16	1943	198 014
17	1944	180 711
18	1945	179 514
19	1946	130 511
20	1947	121 963
21	1948	113 851
22	1949	96 887
23	1950	81 769
24	1951	68 318
25	11 Yr.	
26	Totals	$1 585 914
27	Total Value— Gas Purchase Contracts	$1 585 914

[fol. 3788] (Page) 966

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Cost Of Business Development

Line No.	Item (A)	Amount (B)
1	Payments to Utility Companies	$
2	Sharing expense of house-heating campaigns	
3	Bowling Green Gas Company, Bowling Green, Missouri	152 50
4	Citizens Gas Company, Hannibal, Missouri	651 00
5	Missouri Edison Company, Louisiana, Missouri	42 00
6	Missouri Power and Light Company, Jefferson City, Mo.	4 930 50
7	Missouri Utilities Company, Columbia, Missouri	1 314 00
8	Central Illinois Electric and Gas Company, Lincoln, Ill.	453 00

9	Central Illinois Light Company, Peoria, Illinois	16 674 00
10	Central Illinois Public Service Company, Springfield, Ill.	3 225 00
11	Illinois-Iowa Power and Light Co., Champaign, Illinois	5 688 00
12	Payments on account Contracts with Michigan Consolidated Gas Co. Detroit, Agents,	
13	Change-over, House-heating	371 076 00
14	Ann Arbor, Contract expense of Michigan Gas Trans. Corp.	12 875 58
15	Conversion of Appliances	14 723 20
16	House heating customers	1 154 88

[fol. 3789]

Line No.	Item (A)	Amount (B)
17	Payments on account Contracts Michigan Gas Transmission Corp.	
18	Shanahan Group, Change-over costs	73 047 98
19	Public Service Co. of Indiana, Construction Cost	11 323 32
20	Shanahan Group (Huntington), Change-over cost	2 961 50
21	Central Indiana Gas Co. (Sterling Glass Co) Change-over Cost	1 116 50
22	Public Service Co of Indiana (Ingersoll Steel Disc)	
23	Construction Cost	3 080 00
24	Ohio Gas Light and Coke Company, Napoleon, Ohio, Change-over Cost	875 49
25	Ohio Gas Light and Coke Company, Napoleon, Ohio,	
26	Change-over and advertising	4 672 75
27	Toledo Edison Co., Advertising and promotion expense	2 156 00
28	Kentucky Natural Gas Company	11 349 77
29	Kokomo Gas and Fuel Company (Continental Steel) Construction cost	10 449 51
30	Total — Payments to Utility Companies	553 992 48
31	Carrying Costs on that portion of plant idle pending	
32	development of business	5 500 000 00
33	Total — Cost Of Business Development	$ 6 053 992 48

[fol. 3790] By Mr. Littman:

Q. Mr. Biddison, on Page 966 of Exhibit 39, which has been copied into the record, you show "Total Cost of

Business Development" in the amount of $6,053,992.48, do you not? A. Yes, sir.

Q. Is that your estimate of the cost of business development, so-called? A. Yes, sir.

Q. Now, that is made up of two items, is it not, namely, "Payments to Utility Companies" in the amount of $553,992.48 and "Carrying Costs on that portion of plant idle pending development of business" in the amount of $5,500,000.

A. That is correct. Those are two main subsidiaries. There is further subdivision of the item of "Payments to Utility Companies."

Q. Now, referring to payments to Utility Companies in the amount of $553,992.48, do you know how this amount has been charged on the books of Panhandle Eastern Pipe Line Company and its subsidiaries?

* * * * * * * *

[fol. 3791]. The Witness: In a general way I know that payments of this nature are included in the item, "Other Gas Sales and Purchase Contracts," which appears in an exhibit by Mr. Watkins beginning in the year 1931—

Trial Examiner: (Interposing) What is the exhibit number, Mr. Biddison, and the page?

Mr. Gorman: Exhibit 52, isn't it, Mr. Biddison?

The Witness: Yes. (Continuing)—and showing various amounts for each year subsequent thereto up to and including June 30, 1941.

I do not know whether each item on Page 966 of my Exhibit 39 has been charged against that account, but that account in general represents items of this nature.

Trial Examiner: Will you read that answer?

(Whereupon, the last answer, as recorded, was read by the reporter.)

Trial Examiner: You are referring now to Lines 43 and 44 of Page 2, Exhibit 52, are you not?

The Witness: Yes, sir.

By Mr. Littman:

Q. Do you know, Mr. Biddison, whether the amount of $365,334.99 which appears in Mr. Watkins' Exhibit 52, Page 2, Column M, Line 44, is included in the amount of $553,992.48 shown on Page 966 of Exhibit 39 in Line 30?

[fol. 3792] A. I do not actually know. I believe it to be.

Trial Examiner: You have no particular statement in your present position, Mr. Biddison, of the data included on Page 966, have you?

The Witness: No, that is all the data which I have on that matter.

By Mr. Littman:

Q. Where did you obtain the figures that are used to obtain the total of $553,992.48 which you call "Payments to Utility Companies"?

A. Not having my work papers over here on Exhibit 39, I am not able to give you a direct reference on that. I obtained that from an officer of the Panhandle Eastern Pipe Line Company and I think I have stated on the record just which one it was.

I do not now recall whether I obtained that information from Mr. Watkins or whether I obtained that from Mr. Paxton.

Q. At all events, you did not make an examination of the books and records of the Panhandle Eastern Pipe Line Company and subsidiary companies yourself, did you?

A. I made some examinations for specific purposes, but I did not myself take this from the books of the company.

Q. Now, you have referred to some specific purposes. Do those specific purposes embrace any of the items shown on Page 966 of Exhibit 39?

[fol. 3793] A. No, sir.

Q. Well, what did you ask this officer of Panhandle Eastern to give you?

A. I asked for a statement of these payments made to utility companies for the purpose of developing sales.

Q. You say, "to these utility companies." Did you give that officer a list of these companies, or did you just

ask him for a list of payments made to any and all companies?

A. I asked for a list of the payments made to utility companies for the purpose of developing business and I was furnished that information. This is the listing.

Q. Now, did you ask for anything other than that which you have just explained? A. No, I think not.

Q. Would your working papers show how these amounts, these items which go to make up the total $553,000-odd were charged on the books of the company?

A. No, sir, they would not.

Trial Examiner: For the convenience of counsel, it may be stated that the original testimony of Mr. Biddison with reference to Page 966 appears in the transcript at Page 555, continuing past Page 560. Do you wish to refer to that at this time, either counsel?

Mr. Littman: Yes. I have that before me.

By Mr. Littman:

[fol. 3794] Q. I take it from your answers to my previous questions that you have no personal knowledge of these items that go to make up the "Total Payments to Utility Companies" in the amount of $553,992.48?

A. That is right.

Q. Now, do I understand it to be your testimony that the amount which I have just named is the correct and proper amount to be included in a rate base for rate making purposes in this proceeding?

A. I think the items on Page 966 are proper to include in the rate base.

Q. How about the dollars on Page 966 that go to make up the total of the $553,000?

A. I think the amount is a proper one to include as a portion of the rate base.

Q. Can you tell us how you can arrive at such a conclusion without knowing anything, of your own personal knowledge, with respect to those figures?

A. I don't think that is very complicated. They represent costs. I didn't incur them. And the amounts have been stated based upon information which was derived from sources in which I have full and complete confidence.

* * * * * * *

[fol. 3795] Q. Now, you say they represent costs. Do you know that of your own personal knowledge?

A. No, but they were stated to me to be costs by the sources from which I secured the information, and I have full and complete confidence in that source.

Q. Suppose this source had handed you a figure of $1,000,000. Would you have included that amount in this exhibit as your estimate of one of the elements of the cost of business development?

A. If they had given me a statement that showed $1,000,000 with the details showing where the money went, I certainly would have used it, yes.

Q. Did you get any details as to where the money went as to these expenditures of $553,000?

A. I got the detail as shown on Page 966.

Q. Is that what you mean by "detail"?

A. That is exactly the detail to which I am referring and to which I testified.

Q. Suppose they handed you a figure of $50,000,000 with this detail, would you have testified on this stand in this proceeding that this represented your estimate of the amount to be included for "Cost of business development"?

A. I don't think I would have been silly enough to consider a $50,000,000 figure in this connection, no; but when somebody hands me a statement of costs incurred [fol. 3796] and states they do represent costs according to their records and they are from an officer of the company, I think I would use it.

Mr. Wheat: May I ask, Mr. Littman, are you questioning the validity of the amount shown as $500,000? If you are, we will be glad to furnish you any detail about it.

Mr. Littman: We are challenging every dollar that is shown on this Page 966. We do not feel that it is our duty to make a case on behalf of Panhandle Eastern Pipe Line Company and subsidiary companies.

* * * * * * *

[fol. 3798] Q. Let's look at some of these details, to use your terminology, Mr. Biddison.

Here is a rather fat item in Line 13 on Page 966 in the amount of $371,076 called "Payments on account Con-

tracts with Michigan Consolidated Gas Company, Detroit, agents, house heating."

Do you know when that amount was paid?

A. I know that payments were made on account of that contract over a period of years. I have read the contract between the Panhandle Eastern Pipe Line Company and the predecessor company of Michigan Consolidated Gas Company, in connection with the supplying of natural gas for Detroit by Panhandle Eastern Pipe Line Company.

I know that that contract provides for certain payments, some of these payments being based upon the number of house heating customers attached by the distribution company at Detroit.

I do not recall all the terms of it, but I have read those terms and know that such a provision exists in that contract.

Q. Now, will you answer my question, please, Mr. Biddison? A. I have done so.

Q. Will you give us the dates on which the payments were made, Mr. Biddison?

A. I will not, because I don't know them and have so stated.

[fol. 3799] Q. Do you know anything else about that item other than that which you have already stated?

A. That is the general information that I have in mind on that contract. There may be some additional details which I know about which I cannot now recall.

Q. You don't know how this amount was charged on the books of Panhandle Eastern Pipe Line Company, do you? A. I do not, and I have so stated previously.

Q. That answer goes for all the items that go to make up the $553,000? A. Yes, sir.

Q. Can you state the names of the companies and individuals to whom this amount of $371,076 was paid?

A. I cannot.

Q. Would it refresh your recollection if I were to state that approximately $100,000 of that was paid to a gentleman by the name of Parrish? Would that refresh your recollection at all?

A. No. I recall that there was a payment made by somebody to a man by that name, but whether it is in this account or not, I don't know.

Q. Do you know who Mr. Parrish is?

A. I know of a Mr. Parrish who at one time organized the pipe line system which is now Panhandle Eastern Pipe Line Company.

[fol. 3800] Q. If the fact should be that a portion of this amount of $553,992.48 had been charged on the books of the company as past operating expenses, would that make any difference in your so-called estimate of so-called "Cost of business development"?

A. No, it wouldn't make a bit of difference to me where they charge it. This is a statement of costs, and if it cost them that, it cost them that, regardless of how it was charged.

. . . . . .

[fol. 3801] Q. Mr. Biddison, did you ask for any further detail than that which you show on Page 966?

A. No, I asked for information as to what payments had been made for the purpose of developing business. I knew that payments had been made. I knew that certain contracts for the sale of gas called for payments to be made, and I asked for that information to be furnished to me.

It was furnished to me and I took from the information which was furnished, the data which I wished to use, and that is what is shown on Page 966.

On the original tabulation from which I took this I think there was some additional information as to some of the dates, but I didn't copy that whole information that was available.

Trial Examiner: Do you have those original sheets furnished you in your work papers to which you referred?

The Witness: No, sir, I do not. I have in my work papers, as I recall it, only the data which I copied off from the statement which was available, and I believe [fol. 3802] that corresponds precisely to what is shown on Page 966.

At the lunch hour, I will secure the work papers on which Page 966 is based and either confirm the statement that nothing else is shown, or produce anything additional which I have. Whatever I do have, I have with me at the hotel.

By Mr. Littman:

Q. I don't suppose you can tell us whether any part of this amount of $553,992 had been written off by the company in past years?

A. I think some parts of it had been. I so concluded from an examination of Exhibit No. 52.

Q. You are not prepared to state how much has been written off? A. No, sir, I am not.

Q. You are, however, of the opinion that $365,334.99 of this amount of $553,992.48 are "Payments to utility companies" yet remains in the book accounts of the company? That is your general impression, is it not?

A. It is, and I so concluded from an examination of Exhibit 52.

Q. Now, if that is the fact, and I think it might be the fact, would it be proper, Mr. Biddison, to add this amount of $365,334.99 to the present book cost of the company which already includes that $365,334.99?

[fol. 3803] A. No, I don't think it would be proper to throw in part of it and throw it all in again, certainly not.

Q. In other words, your Exhibit 69—I wish you would please turn to it—Page 2, Line 15, shows that that amount, to-wit $365,334.99, is included on the books of the company as "Other gas sales and purchase contracts."

A. Yes, sir.

Q. Now, I believe you have testified that your going concern value of which "Payments to utility companies" forms a part, was not solely referable to reproduction costs. Is that correct?

A. Well, I have not said a word about "going concern value" in this case. I have not used that term.

Q. Well, your lawyer has. You don't think this is a part of going concern value?

A. I have not called it going concern value and I have strictly avoided the use of the term because I don't understand what anybody else means when they use it, and

I don't think anybody else would understand what I mean if I were to use it, so I have not used the term.

Q. You used the term "cost of business development."

A. Yes, sir, I did.

Q. And this item of $553,000, of course, forms an integral part of that cost of business development?

A. That is correct.

[fol. 3804] Q. Now, no matter what you call it, if this Commission were to use book costs, for example, as a rate base, it would be improper, would it not, to include that $365,344.99 twice? A. Why, certainly.

Q. So that this amount of $553,992.48 of "Payments to utility companies" is, strictly speaking, referable to your reproduction cost, is it not, Mr. Biddison?

A. No, sir, it is not. It is referable to the determination of the rate base, no matter how it is determined.

Q. But it should go in once?

A. Once in each rate base only, that is absolutely correct.

Q. So that if book cost or original cost were used and the capitalized amount of $365,334.99 were included in such rate base, there would be no necessity of including that part of your "Cost of business development" in the same amount again?

A. In the same amount is correct. I think the difference should be added.

Mr. Culton: Have you heretofore prepared an exhibit on that basis?

The Witness: I have.

Mr. Littman: On what basis?

Mr. Culton: If book cost were the remaining factor.

By Mr. Littman:

Q. Now, the difference—you don't know what the dif-[fol. 3805] ference represents, do you, or how it was charged on the books of the company?

A. I don't know how it was charged on the books of the company, but you can readily ascertain the difference by a little subtraction of one from the other, or in the determination of the rate base you can deduct this amount of "Other gas sales and purchase contracts" in the amount of $365,334.99, and in lieu thereof, add the cost $553,992.48.

. . . . . .

Mr. Culton: I will state, at a later date we shall present an exhibit prepared by Mr. Biddison, showing what the rate base would be on the assumption that book cost is appropriate, in which he had indicated the sum shown on the books as the item for "gas sales and purchase contracts" and from the plant account and he then added [fol. 3806] an aggregate covering the cost of business development and the value of gas purchase contracts.

Trial Examiner: That procedure, however, does not eliminate the $553,992.48 which has been under discussion?

Mr. Culton: It does not. It does eliminate the $365,000 and includes the $500,000.

Trial Examiner: In other words, it simply avoids the duplication which apparently has been developed?

Mr. Culton: It does.

Mr. Littman: All of which, if I may remark on the record at this time, verifies my original objection to this so-called going concern value as being referable to their claimed reproduction cost. Let's get on [the] the next item.

By Mr. Littman:

Q. Mr. Biddison, the next item is in the amount of $5,500,000 as shown on Page 966 of Exhibit 39 in Line 32, entitled, "Carrying costs on that portion of plant idle pending development of business."

. . . . . .

And you obtained or derived the figure of five and a half million from a consideration of Mr. Morton's Exhibit 38, did you not? A. That is correct.

[fol. 3807] Q. Did you advise Mr. Morton how to prepare Exhibit 38?

A. I told Mr. Morton what I desired to develop and discussed with him methods by which it could be developed.

Q. Did you give him the five methods that he used which are shown on Page 2 of Mr. Morton's Exhibit 38?

A. I don't know whether these methods originated all with Mr. Morton or with me, or partly with Mr. Morton and partly with me.

We discussed various methods of developing this cost of carrying capacity while load developed, and in final analysis, after discussing the various methods, I was satisfied to develop the five methods which we used and so advised him.

Q. Before you requested Mr. Morton to work up his Exhibit 38, did you have any preconceived notion as to what the result would be? A. Not the slightest.

Q. If Mr. Morton's studies had shown the amount of interest, ad valorem taxes and operating expenses allegedly attributable to unused capacity to have been about $2,000,000 instead of about five and a half million to six and a half million, how would that have affected your estimate? A. By just about that amount of money.

Q. In other words, your opinion has its roots and foundation in Exhibit 38?. A. That is right.

[fol. 3808] Q. Now, which of the five methods of calculating interest, ad valorem taxes and operating expenses attributable to unused capacity, found by Mr. Morton, do you consider the best and most accurate?

A. I have no choice between them. As a matter of prediction one might make a choice, but for the estimate of something which did happen I think the matter should be tested by such logical methods as may be obtainable and, in the final analysis I have not selected any particular one of these methods as being my choice based upon the fact that they produce results not widely disproportionate, and I have adopted a figure which is not the high one, not the low one, not the intermediate one, and not the average.

Q. How did you arrive at the [$5,500,00] figure from these different amounts which range from a low of $5,115,567 to a high of $6,680,062?

A. As a matter of judgment considering those high and low figures and the intermediate figures.

Q. You didn't add them up and divide by five, did you?

A. No, sir, I did not. I may have done that, but I didn't secure my answer in that fashion.

Q. How did you know that you should take $5,500,000 rather than, let us say, $5,250,000?

A. That is my judgment, that about $5,500,000 is a logical conclusion of what that cost actually was, based upon these studies.

. . . . . .

[fol. 3809] Q. Can you give us the mental process by which you derived $5,500,000 from these figures which are in some instances about $1,000,000 apart? I am curious as to how you did that.

A. In consideration of these figures which have been developed here, it is my estimate that $5,500,000 is a fair estimate of the cost of carrying that capacity.

Q. Is there any doubt in your mind, Mr. Biddison, if you had ten engineers look at these five different figures varying more than $1,000,000 in some instances, you would get ten different figures from that?

A. I suppose probably you would, but they would not be very far apart.

Q. All right. Are you familiar with the figures in Exhibit 38?

A. Well, I have examined the details going through there, but I am not familiar with the detail figures.

I have examined them at one time. The details were developed by Mr. Morton and he is the man who would have to explain the details, not me.

[fol. 3810] Q. Well, let's be a little more specific. This exhibit is predicated upon past interest, past ad valorem taxes and past operating expenses which Mr. Morton and you have concluded are attributable to unused capacity. Is that right? A. That is correct.

Q. Do you express an opinion that these amounts shown by Mr. Morton are in truth or in fact attributable to unused capacity, based upon your own personal knowledge?

A. Not based upon my personal knowledge, because I have no personal knowledge of what the operating costs were at that time.

I have not investigated what they were at that time.

Mr. Morton did make the investigation and he made the compilation.

Mr. Lee: May I ask a question now?

Mr. Littman: Certainly, Mr. Lee.

Mr. Lee: Did you make any effort to ascertain the history of the company during that period for the purpose of determining whether or not the failure to achieve the full use of capacity may have been due to the policies and the conduct of the company itself rather than the lack of markets?

The Witness: I made no investigation as to what methods the company had pursued during that period to attach business. I know that in any natural gas project there is a period of development during which there can be no expectancy of fair return upon the money invested.

[fol. 3811] A company of that nature is fortunate if in the first year their revenues are sufficient to pay their out-of-pocket expenditures. They are again fortunate if, in the second year, their revenues are enough that they can begin to set aside something to the depreciation reserve.

And, they are again fortunate if, at the end of the five-year period, they have developed load enough on a projected system that they may have some net earnings.

No system can be installed with a small pipe at a low investment and then expanded in diameter to meet the growing load.

It is inherent in the business that initial investments must be made to provide capacity far in excess of that initially required, and it is typical of the business that such a system once built requires in the neighborhood of five years to develop its load.

. . . . . .

[fol. 3813] Mr. Lee: If I understand now, his answer is that he made no investigation of the history of the company during that period,—if I understand correctly, then I am satisfied. Is that your position?

The Witness: No, I have some knowledge of the history of the company during that period. I did not make

that investigation in connection with the compilation of this report.

Mr. Lee: Did you consider it in connection with the compilation of the report?

The Witness: Yes.

Mr. Lee: What weight did you give to it?

The Witness: I gave it this weight: I felt that the development of this project up to the capacity attained in the basic year, was substantially a normal development [fol. 3814] of that kind of a project.

. . . . . .

[fol. 3816] The Witness: I predicate the use of this data upon the conclusion that no matter what had been the squabbles during the interim, that the development had followed a normal pattern of development. That is the beginning and the end of the consideration I gave to all those matters.

. . . . . .

[fol. 3818] P. McDonald Biddison, the witness testifying at the time of the noon recess, resumed the stand and testified further as follows:

Recross Examination (Continued)

By Mr. Littman:

Q. Mr. Biddison, at the close of the morning session, we were discussing Mr. Morton's Exhibit No. 38 and the conclusions which you drew from that exhibit.

I refer you to Exhibit 38, Page 1, Line 21, entitled, "Operating Expense—Partial" and ask you whether you can state the types and character of expenses that are included within the meaning of that term in the figures shown in Columns A, B, C, D and E?

A. No, I cannot give you a breakdown on those figures. They have been explained by the man who compiled them, Mr. Morton.

Q. And you are not able to state from your own knowledge what operating expenses are included in those columns?

A. No, because I did not do the job. Mr. Morton did the job.

Q. Did you tell Mr. Morton what types and kinds of expenses to include?

[fol. 3819] A. I told him to include those items that did not vary with the amount of gas sold and to exclude compressor station operation and exclude the production expenses. Now, beyond that, the job is Mr. Morton's.

Q. Did you have anything to do with the deductions from those amounts of operating expenses which are shown in Lines 23 and 24 and which are included, in part, in the figures shown on that line?

A. I had nothing to do with any of the figures on this page or the next one. The work was done by Mr. Morton.

Q. I take it by your answer that you are not familiar with the details of the figures which I just referred to?

A. That is correct. I reviewed the work during the course of its preparation, but I did not do the work and I am not thoroughly familiar with all of the details.

Q. Is the same true with respect to the interest charges which appear in Line 19 of Exhibit 38?

A. As I said before, it is true of every figure on this page and upon the next page.

Q. Now, Mr. Wheat asked you a question at Page 560 of the transcript—I will have to get a copy of it.

Trial Examiner: I have it right here, Mr. Littman.

(A document was handed Mr. Littman.)

By Mr. Littman:

Q. The question is as follows; and I might say that he was referring to the $5,500,000 figure which you used [fol. 3820] and which you called "carrying costs on that portion of plant idle pending development of business."

"Question: And they represent real costs and actual money expended on the history of this plant rather than mere past losses?

"Answer: That is correct and they represent value because they are costs which would be incurred in the reproduction of this property and they are costs which would be escaped by a purchaser who purchased the property with this business which has been attached by the expenditure of that money."

Did you make that answer to that question, Mr. Biddison?

A. I did.

Q. Now, when you made that answer to Mr. Wheat's question, you did not know of your own personal knowledge that these amounts represented costs, did you?

A. I know in this way, that I had a compilation made for me by an employee of Panhandle Eastern Pipe Line Company whose duty it was to determine what those costs had been and, on that basis, I referred to them as costs and believe them to be costs.

Q. Your knowledge is, of course, hearsay, is it not, with respect to these costs, so-called?

A. No, sir, it is not hearsay. It is a result of an investigation performed by an employee of Panhandle Eastern Pipe Line Company at my direction and reported to me by him.

[fol. 3821] Q. Do you know what he did? Do you know what he did?

A. I have the results of what he did before me.

Q. Do you know what he did?

A. Yes, he compiled Exhibit No. 38.

Q. Did he examine the vouchers and make an audit of these so-called costs?

A. I do not know exactly how much detail he went into.

Q. You do not know what he did at all except as it is reflected by Exhibit 38, do you?

A. I know what he did as reflected by Exhibit No. 38 and the working papers which support it.

Q. And further than that, you do not know, do you?

A. That is correct.

Q. Is the sum of $5,500,000 the amount which you estimate would be incurred in the reproduction of the property and the business of Panhandle Eastern?

A. I estimate that that sum would be incurred in the reproduction of that property, yes, sir. Further than that, I believe it to be a fair estimate of the amount which was incurred in the development of the business.

Q. And when you use the term "cost", you are not referring to capital cost but you are referring to past operating expenses, past interest and past ad valorem taxes, are you not?

A. I am referring to costs of that nature, no matter how they were classified in accounting practice.

[fol. 3822] Q. Well, I want to make certain we understand what you mean when you use the word "cost", Mr. Biddison. It may not make much difference to you, but it may make some difference to others and I want to be sure we understand each other.

Mr. Culton: We think the answer is plain, Mr. Examiner, without that lecture.

By Mr. Littman:

Q. The term "Cost" as you have used it here in connection with Exhibit 38 refers to past operating expenses, past ad valorem taxes and past interest, does it not?

A. It includes some of those items, yes, sir, as costs. I have not included, and Mr. Morton did not include, any allowance whatever for one item which could be construed to be cost, and that would be the item of depreciation which occurred upon this property during this period.

At my direction, this estimate was limited to those costs which required the expenditure of moneys.

Q. Now, when you use the term "cost" here, you are not referring to amounts which have been capitalized by the company on its books, are you, Mr. Biddison?

A. No, sir, I have stated before I refer to what the costs were no matter whether capitalized or not capitalized and no matter how they were classified in accounting practice.

Q. In other words, you were not referring to the term "cost" as is defined in the Uniform System of Accounts prescribed for natural gas companies by the Federal Pow-

[fol. 3823] er Commission, were you?

A. Well, it may be cost as defined some places in there and it may not be as defined in other places.

Q. Would you mind answering my question, Mr. Biddison? What is the fact, if you know?

A. I have answered it to the best of my ability.

Q. I take it from your answers that you are using the term "cost" in the broad sense and not in the accounting sense. Perhaps that is the difficulty that I am having.

In other words, if I can convey to you what I have in mind, in a sense every expenditure is a cost in the broad sense, is it not?

A. Yes, sir.

Q. And you are using the word "cost" as including out-of-pocket expenditures, is that correct?

A. That is correct. I have tried to say that several times.

Q. Well, you cannot make it too clear on the record for me, Mr. Biddison, even though it may seem to you a little repetitious.

Now, will you please turn to Page 965 of Exhibit 39-A, I believe you have testified that the value of gas purchase contracts is $1,585,914, have you not?

A. Yes, sir.

[fol. 3824] Q. And you arrived at that conclusion from the figures and computations shown on Page 965 of Exhibit 39-A, have you not? A. Yes, sir.

Q. Does any part of the amount of $1,585,914 represent actual cost or investment?

A. No, sir. There may have been some costs in connection with these contracts but the figures on Page 965 of Exhibit 39-A do not represent costs. They represent an estimate of value.

Q. Now, Mr. Biddison, is this figure of $1,585,914 referable solely to reproduction cost?

A. No. It is simply an estimate of the value which I ascribe to the fact that Panhandle Eastern Pipe Line Company has those contracts in existence.

Q. Now, if book cost or original cost were used as the rate base in this proceeding, in your opinion, would it be proper to add the sum of $1,585,914 to such rate base?

A. I think it would be proper to include this value in the rate base no matter how determined. Now, the wording of your question was a little bit confusing to me. I do not see how you can take book cost as the rate base and still talk about including something else in the rate base. I can conceive how you could take book cost as a portion of the rate base and include therewith other items that are proper to be included.

[fol. 3825] Q. Perhaps we might be a little more specific and make certain that we understand each other.

Please turn to Page 2 of Exhibit 69, which exhibit shows, in Column C, the purported book cost of Panhandle Eastern Pipe Line Company and subsidiary companies.

Now, in Lines 12 and 13, you show an amount in Column C and Column E, $1,318,629.10 for "gas sales and purchase contracts (less $1,611,657.30 reserves)", do you not?

A. Yes, sir.

Q. Now, the point I am driving at, Mr. Biddison, is if that figure of $1,318,629.10 were included in a rate base as the book cost of gas sales and purchase contracts, obviously the amount of $1,585,914, which you estimate to be the value of gas purchase contracts should not be added thereto, should it? A. Obviously.

Q. So that, obviously, this amount that you show on Page 965 of Exhibit 39-A in the amount of $1,585,914 is not referable to book cost or original cost, is it?

A. No, and I have never intimated that it was.

Q. But it is referable to reproduction cost, is that correct?

A. It is referable to a rate base no matter how determined, whether through reproduction cost, book cost or just reaching out in the air for a figure. It is still referable to a rate base.

[fol. 3826] Q. Well, we are agreed, are we, that the two that I read to you should not be included in one rate base at any rate, are we not? A. Certainly.

Q. Now, is my understanding correct that in Column B, that is, the Column B that appears at the top of corrected Page 965, Exhibit 39-A, you show the present purchase price paid by Panhandle Eastern Pipe Line Company to the companies shown in Column A for gas purchased from those companies? A. Yes, sir.

Q. Now, let's look at Line 1, J. M. Huber Corporation. The price, according to this exhibit, is 3½ cents per M. c. f., is it not? A. Yes, sir.

Q. Can you advise us whether that is a flat price or an average price or what kind of a price it is?

A. The price is 3½ cents for the first ten years and thereafter, at five-year periods, adjustments are to be made to the weighted average price paid by pipe line

companies piping gas out of South Hutchinson County and North Carson County.

Q. When was that contract entered into?

A. The date on that contract is September 21, 1935.

Q. Then there remains only about four years of the first ten-year term, does there not?

[fol. 3827] A. That is right.

Q. Does that ten-year term run from the date of the contract or the date of the first delivery, do you know?

A. I do not know on that point.

Q. Now, you have included the purchases from J. M. Huber Corporation for how far into the future?

A. For 11 years.

Q. Will you explain how you arrived at the 3½ cent price for the entire term of 11 years?

A. I simply used the 3½ cent price without correction therefor.

Q. Mr. Biddison, my recollection of your answer with respect to how that price was to be determined for the latter period has escaped me. Would you mind repeating that part for me?

A. After ten years, the adjustments are to be made to the weighted average price paid by pipe line companies piping gas out of South Hutchinson County and North Carson County.

Q. Mr. Biddison, it is altogether probable, is it not, that four years hence, when those adjustments are to come into play, the price of 3½ cents may change, may it not? A. Yes, sir.

Q. You took the 3½ cent price and applied it to what volume of gas, Mr. Biddison?

A. The application of price is made to the volume esti-

[fol. 3828] mated to be purchased under these contracts by Mr. Hinton and—

Q. (Interposing) Had you finished your answer, Mr. Biddison?

A. I am trying to find some more detail on this matter which I am having a little trouble locating.

Q. Very well. Perhaps you can read into the record the precise amounts of purchases for each of the years applicable to the J. M. Huber Corporation; if so, I would greatly appreciate it.

A. That is what I was looking for. There is a working sheet of mine that gives that detail. It is not in position where it belongs here.

* * * * * * * *

[fol. 3829] By Mr. Littman:

Q. Have you been able to find the work sheet showing the amount of purchases to be made or the amount of purchases of gas to be purchased by Panhandle Eastern Pipe Line Company from J. M. Huber Corporation?

A. No, sir, I have not. It does not appear to be in the working papers which I have with me.

In this tabulation, I call attention to the fact that on Exhibit 39-A, Page 965, at the close of the year 1945, as indicated at Line 18, there is a material reduction in the amount of purchases under these contracts.

Q. You mean under all of the contracts? A. Yes, sir.

Mr. Culton: What is the reduction?

The Witness: The reduction amounts to about 5,226,000 M. c. f. per year. Now, it is my recollection that that is the point at which I dropped the purchases from the J. M. Huber Corporation in compiling that table. I will, however, check that matter and furnish a breakdown of the quantities in Column B.

By Mr. Littman:

[fol. 3830] Q. Very well. You will submit such a statement for the purchases under each of the contracts shown on Page 965 of Exhibit 39, will you not?

A. Yes, sir. It is my recollection that I dropped this contract at that time and I should have done so, and I believe I did. I will submit the detail in order to show completely what I did in that connection.

Q. And in connection with the rest of the contracts?

A. Yes, sir.

Q. Very well.

Now, the second contract that you have listed is that of the King Oil Company and you show that the price paid by Panhandle Eastern for gas purchased from that company is 2½ cents. Can you state the date of that contract, please?

A. I do not have the date on that contract. I have a memorandum as to the term.

Q. Will you give us the information that you have with respect to that contract?

A. The term is for as long as gas is produced in paying quantities.

Q. Is the price a flat price?

A. Yes, sir.

Q. Of 2½ cents for each and every M. c. f. produced?

A. Yes, sir.

Q. And can you state whether the purchases from the [fol.3831] King Oil Company are included in each of the years shown on Page 965 of Exhibit 39-A down to and including 1951?

A. Yes, sir, they are.

Q. Will you give us the same information with respect to the third contract, namely, Navajo Production Company?

A. The contract is to be effective so long as it is profitable to the purchaser.

Q. Now, is that contract price a flat rate or is it an average, or what?

A. It is a flat rate, 3½ cents.

Q. Per M. c. f.?

A. Yes, sir.

Q. Now, what are the facts with respect to the next contract, Northern Natural Gas Company?

A. It is for a term of eight years. The contract was made September 27, 1935, and, therefore, runs to 1943.

Q. Have you then included any purchases after 1943 in your tabulation on Page 965?

A. No, sir.

Q. That leaves the fifth contract, namely, that of Shamrock Oil and Gas Company. Will you give us the same data with respect to that?

A. The price is 3½ cents, but at the expiration of the present contract for the supply to Detroit, if the price at Detroit is increased or decreased, the price of that gas shall be increased or decreased in the same percentage.

[fol.3832] Mr. Lee—I take it you assumed a decrease on Detroit for that?

The Witness: I did not. The provision is effective as at the end of the existing Detroit contract and I had no reason to make any assumption in that regard.

. . . . . .

By Mr. Littman:

Q. When does the Detroit contract expire, if you know?

A. About 15 years from sometime in 1936, I think is the fixed term of it but I do not know whether there be a definite or absolute termination date on it or not.

Q. Well, do the purchases shown in Column B include purchases from Shamrock Oil and Gas Company through each of the years shown, including 1951?

A. Yes, sir.

Q. Is my understanding correct, Mr. Biddison, that the theory of this exhibit is that Panhandle Eastern Pipe Line Company has certain contracts under which it purchases gas at a price below 4½ cents per M. c. f.?

A. That is correct.

Q. And that in view of the fact that it has these advantageous contracts, there attaches thereto a certain [fol. 3833] value and you have computed the value?

A. That is correct.

Q. Now, the 4½ cents per M. c. f. which you showed in Column D, on corrected Page 965, Exhibit 39-A, represents what?

A. It represents the general field price for high pressure sweet gas at the wells.

Q. Where?

A. In the Panhandle Field of Texas.

Q. How did you arrive at that market value or present value of gas at the well head in the Panhandle Field?

A. From a general consideration of prices on gas of recent determination rather than from the old contracts made in the early days of the field.

Q. In other words, you determined that figure?

A. Yes.

Q. Without assistance from others?

A. I think I had assistance from others, yes, I had information from others on it.

Q. But it resulted from your own personal investigation of the market price, did it?

A. It is my determination.

Q. How many contracts did you consider in arriving at that market value?

A. I do not know. I have not made any recording of all the information which I used in that connection. I have [fol. 3834] participated recently in some negotiations in regard to piping of gas out of the Panhandle Field and, in that connection, gained some information as to the value of gas at the well head in the Panhandle Field.

Q. Can you be a little more specific about that? Can you give us an approximate number of contracts that you considered?

A. No; and I gave consideration to the fact that payments for royalties in the Panhandle Field are being continuously based upon higher and higher gas values whereas, at one time, those royalties were based upon a 2-cent well price.

They have been quite generally stepped up by the consent of the producing gas companies to higher and higher figures.

Q. Well, can you give us the names of some vendors whose sales you used as the basis of this so-called 4½ cent market price?

A. I gave consideration more to the basis on which royalties are now being paid than I did to any recently negotiated sales contracts.

In that connection, it is my recollection that royalty payments by Texoma Natural Gas Company are now on a 4½ cent basis and have been for some little time.

Q. Are you sure about that, Mr. Biddison?

A. That is my recollection of it.

Q. Can you name any other vendees or vendors, any [fol. 3835] other contracts or arrangements on which you can say that you based this 4½ cent field price?

A. I think I could, Mr. Littman, if I had a little time to refresh myself on this. Being called for cross-examination on something which had been ruled out and without the opportunity to refresh myself has handicapped me some.

I believe that Panhandle Eastern itself is now paying royalty in that field on a 4½ cent basis. That is my recollection of their base.

Q. Well, do I understand that you predicated this market price primarily upon a consideration of royalties paid?

A. Primarily because I do not know of recent contracts in any great quantity for purchase in that field.

Q. Will you please explain how royalties are determined in the field?

A. The royalty provision is generally one of one-eighth of the product.

Q. Of what price, Mr. Biddison?

A. One-eighth of the product and, in making that compensation, the compensation is generally made in cash at what is construed to be the value per unit of the amount of royalty gas or oil produced.

Now, in the case of natural gas in the early days in the Panhandle Field, those royalties were, in a great many cases, based upon a 2-cent well head price and as conserva- [fol. 3836] tion measures because effective, as the takes of gas became more equitably distributed among land owners and as an encouragement to prevent riotous over-drilling; the base for the payment of royalty was gradually stepped up and as markets increased, realizing that marketable gas had a higher value than gas which could not be disposed of, the general basis for the payment of royalties in the Panhandle Field has gradually increased until today I think that in the western Panhandle Field, 4½ cents at the well head for high-pressure sweet natural gas is a fair measure of its present well head value.

. . . . . .

By Mr. Littman:

Q. I believe we were discussing, just before the recess, the matter of how you established the so-called market price of 4½ cents per M. c. f. You are not engaged in the business of buying and selling gas in the Panhandle Field, are you, Mr. Biddison? A. No, sir.

Q. You have never been so engaged, have you?

A. No, sir.

Q. Do you know what royalties are being paid by the five vendors shown on Page 965 of Exhibit 39-A to their [fol. 3837] lessors? A. No, I do not.

Q. Did you make detailed investigation of the royalties paid in the Texas Panhandle Field? A. I did not.

Q. Now, referring to Column B of Page 965, Exhibit 39-A, headed, "Purchases M. c. f.", will you briefly explain how you made the determination of those figures?

A. Those are the estimates made by Mr. Charles Hinton, production engineer of Panhandle Eastern Pipe Line Company, as to the amounts of such purchases for the respective periods.

Q. Do you know whether those amounts of purchases are predicated upon Mr. Morton's estimated future gas sales?

A. I do not know exactly how Mr. Hinton made those determinations. I secured this data from his working papers and it is his estimate of those sales, that is, sales by these companies, and purchases by Panhandle Eastern Pipe Line Company.

Q. I presume if there are any questions we would like to have answered with respect to those purchases shown in Column B, we should ask Mr. Hinton when he comes here for cross-examination? A. That is correct.

Q. I believe you alluded, Mr. Biddison, to the fact that the market price of gas in the Panhandle Field of Texas has been going up in recent years. Will you please briefly state the reason for that?

[fol. 3838] I believe you started to state some of the reasons. You mentioned, for instance, the fact that conservation laws had been passed and put in effect in the State of Texas, and, secondly, as I recall, the building of pipe lines such as Panhandle Eastern Pipe Line Company has built has created a market for gas.

Now, those things all have an effect, do they not, upon the market price at the well head, of gas in the Texas Panhandle Field? A. Yes.

Q. Isn't that a market that the gas consumer himself has created to a large extent?

A. No, I don't think the gas consumer has ever created any market any place. Somebody else created the market by getting some gas consumers attached.

Q. You don't think, then, that the use made by the burner tip users of gas in Detroit, for example, is having any effect upon the market price of this gas?

A. Certainly it is.

Q. Of course, it is. It is what kind of an effect?

A. It has the effect that as such use increases, the market for gas increases.

Q. And as the market for gas increases, the so-called market value of gas increases, does it not?

A. That is a general rule. There are exceptions?

[fol. 3839] Q. And as the market value increases, then the wider the spread between the contract price of gas paid by Panhandle Eastern to these five vendors and the so-called market price. Is that correct?

A. That is correct, yes.

Q. And then it follows, does it not, the higher the purported "value of gas purchase contracts."

A. I believe that follows, axiomatically.

Q. Now, we have a final figure of $1,585,914 shown at the foot of Page 965 of Exhibit 39-A. Doesn't this amount, in reality, represent the savings anticipated by the company by reason of its having contracts for the purchase of gas at a lower price than the claimed present market value of that gas?

A. It represents the present value of the future savings to be effected by purchasing gas under these contracts, over buying that gas at 4½ cents. It doesn't represent all the savings.

Q. I presume you are now referring to the 7 percent discount interest rate that you use and apply in Column F?

A. That is right.

Q. That is correct? A. That is right.

Q. The "difference" as shown in Column E represents the actual total savings, does it not? A. Yes, sir.

[fol. 3840] Q. And the amount of $1,585,914 represents the so-called present value of that savings based on a 7 percent interest calculation. Is that correct?

A. That is correct.

Q. Now, doesn't your estimate depend upon the market value of gas remaining constant at 4½ cents throughout the next 11 years?

A. No, sir, it does not. It is dependent upon 4½ cents being its present market value. If that market value were to increase in the future there would be some additional savings in that respect. I think that price will increase in the future, but I have given it no effect in the determination of present values.

Q. Well, the exhibit is predicated upon your assumption, is it not, that the price will remain—that is, that the market price will remain at 4½ cents for ten or eleven years in the future. Isn't that true?

A. No, it is not, because I have not made any such assumption. I have used 4½ cents as the present value and I have applied that as the future value because it is the present value, always having in mind the expectation that those values would increase; but, I have not, in this compilation, given any effect whatever to that expectation.

I have used 4½ cents as my estimate of the minimum price and future value, not that it will remain constant.

[fol. 3841] Q. Well, perhaps we can get at it this way. Assuming that the market price of gas at the well head in the Texas Panhandle Field were to drop to 3½ cents tomorrow and stay at that price throughout the next eleven years, what would your value be?

A. It would be somewhat less and, conversely, if that price were to rise, my value would be somewhat more.

Q. Well, if it was 3½ cents it would be quite a bit less, wouldn't it?

A. Yes, and if it was 5½ cents; it would be quite a bit more.

Q. Now, of course, that is what I was referring to when I said that the calculation you have made here is primarily based upon an assumed price of 4½ cents per M.c.f. for gas at the well head for the next ten or eleven years.

A. No, it is not that. It is based upon the assumption that 4½ cents is the present price and the minimum in the future.

I make no assumption that it will remain constant. I make the assumption it will not decline, and I do not capitalize any excess savings over and above the 4½ cent figure.

Q. Mr. Biddison, I am sorry that we have to quarrel about that, because I was certain that I understood this exhibit, and now I am not so sure about it.

Now, let's look at Column D. You are using a figure of [fol. 3842] 4½ cents. That means 4½ cents per M.c.f. Do we agree on that?

A. Yes, sir, it does, and I have used it for each year in Column—

Q. (Interposing) You use it for 1941, do you not?

A. Yes, and in 1942, and in 1943, and in 1944, and in 1945, and in 1946, and in 1947, and in 1948, and in 1949, and in 1950, and in 1951.

Q. And in each of those years you multiply the 4½ cents by the number of M.c.f.'s purchased for each of those years, do you not?

A. Yes, sir.

Q. And you, in that manner, obtain the values shown in dollars in Column D, do you not?

A. That is correct.

Q. Well, that was my understanding.

And you say that does not mean that you are using a 4½ cent per M.c.f. for each of those years?

A. No, I did not say that, Mr. Littman. I said that I did not assume that 4½ cents would be the field price for gas throughout all that time.

I thought I had made it plain that I used 4½ cents during that time as being the minimum, that I disregarded the expectation that there would be any increases.

I did not think there would be any decrease.

[fol. 3843] Such savings as would result from an increase over the 4½ cent price in the future, I have ignored in the determination of present value.

Q. And you have ignored any decrease in the market price of gas, if any should perchance result, have you not?

A. That is correct, because I do not think there will be any. I think the tendency will be in the other direction, but I have given no effect to the tendency which I expect.

Q. In other words, you used the 4½ cents throughout the 11 years? A. Again, I did.

Q. That is what I understood you did. Do you know what the market price at the well head is for gas in the Hugoton Field?

A. I think there is some considerable variation in that. I don't have anything before me now relating to that matter.

Q. Have you finished your answer? A. Yes.

. . . . . .

By Mr. Littman:

Q. Did you make an examination or an investigation of the contracts of the Panhandle Eastern Pipe Line Company for the purchase of gas in the Hugoton Field, such [fol. 3844] as that which you have presented here with respect to the Panhandle Field in Texas?

A. No, except to a very limited extent, and that indicated that there were no purchase contracts under which there would be any material saving for any material length of time.

Q. Do you know, Mr. Biddison, whether Panhandle Eastern Pipe Line Company has gas purchase contracts in the Hugoton Field that are in excess of 4½ cents per M.c.f.?

A. No, I don't. I don't remember the scales on those. I have had occasion to examine some of them at some times and, in this connection, I did go into the matter far enough to know that there was no great amount of difference on the whole or for any great period of time, between the contract price and the general field price.

. . . . . .

[fol. 3846] By Mr. Littman:

Q. Now, Mr. Biddison, I call your attention to the annual report of Panhandle Eastern Pipe Line Company filed with the Federal Power Commission for the year 1940, and I call your attention to some contracts under which the average cost per M.c.f. is 5 cents, the names of those being—

Mr. Culton: What State are you reading from?

Mr. Littman: I will read them across the line.

By Mr. Littman:

Q. To-wit—I will give the names of the vendors and then the gas field and the point of receipt, the amount, the number of M.c.f.'s purchased, and the average cost:

W. L. Sidwell Oil and Gas Company, Hugoton Gas Field, point of receipt Stevens County, amount $3,424.15, M.c.f.'s 68,483, average cost per M.c.f., 5 cents.

The same company, Hugoton Gas Field, point of receipt, Morton county, the amount is $3,316.60, the number of M.c.f.'s purchased is 66,332, and the average cost per M.c.f. is 5 cents.

The next one is Saturn Oil and Gas Company, the gas field is Hugoton, the point of receipt is Morton County, [fol. 3847] the amount, $13,592.90, the number of M.c.f.'s is 271,858, the average cost per M.c.f. is 5 cents.

Now, that same company also, as shown by this page here, delivers gas from the Hugoton gas field to Grant and Stevens counties in the amounts of $29,245.65 and $42,975.40, respectively, the number of M.c.f.'s being 584,973 and 859,508 M.c.f.'s, respectively, the average cost being 5 cents.

Also, there are shown to have been made to Panhandle Eastern by Southwest Kansas Oil and Gas Company from the Hugoton Field, the point of delivery being Stevens County, the amount being $10,061.45, and the number of M.c.f's being 201,229, at an average cost of 5 cents per M.c.f.

There are also shown to be some sales—well, let's confine ourselves for the moment to those which I have named in the Hugoton Field.

Mr. Culton: You agree that is not all the sales in the Hugoton Field?

Mr. Littman: There are others at 4 cents and I note one at 4½.

Mr. Wheat: While you are about it, why not read the names of the companies in the record so we will have them?

Mr. Littman: I will read any you wish.

Mr. Culton: I don't believe you called all the 5 cent companies, did you?

Mr. Littman: I called all the 5's. I will name the others.

[fol. 3848] Mr. Culton: Well, can't we stipulate there are numerous companies buying at 4 cents, some at 4½ and these which you have named at 5?

Mr. Littman: That is correct.

By Mr. Littman:

Q. Now, Mr. Biddison, in view of the fact that Panhandle Eastern Pipe Line Company has these contracts for the purchase of gas in the Hugoton Field at 5 cents per M.c.f., which is ½ cent higher than the so-called market price that you have placed on gas in the Panhandle Field, what opinion do you have with respect to giving us a little credit for the contracts that are higher than the market price of gas you have used, or don't you think that ought to be done?

A. I don't know what kind of credit you are asking for. The facts which you have related show that Panhandle Eastern Pipe Line Company is buying gas in the Panhandle Field at prices considerably lower than those generally prevailing in the Hugoton Field.

Now, I don't know what credit would be due to anybody on account of the Hugoton Field prices by virtue of that. I just don't understand it.

Q. Well, here is what I would like to know, Mr. Biddison: whether this so-called value of yours is made on a so-called one-way street basis, that is, whenever the contract is below 4½ cents per M.c.f., whether you want to put an amount in the rate base under the guise of value [fol. 3849] of contracts, and whether when the price that you pay is higher than the market value, whether you want to deduct something by reason of the contract being disadvantageous. What is your position on that?

A. Well, now, if there are some contracts higher than the gas value, I would give that consideration, and find out the reasons for it. I don't know of any that are higher than the gas value.

Q. Higher than what? A. Than the gas value.

Q. Well, here are some that I have named that are 5 cents, which price is ½ cent higher than that which you used as the basis of market value in your studies shown in Exhibit 39-A, page 965.

A. They are not in the Panhandle Field of Texas. They are in an entirely different location, 100 miles or more away, closer to the market, where the gas is produced under different circumstances with a different production

cost for gas, and you may have cited from the same page that in the Local Area in the neighborhood of Kansas, which is a still gas produced under different conditions, 300 miles further away, at different costs of production, that the prices are 7 and 8 cents.

Q. That is correct, and I believe that this exhibit does show that, 7 and 8 cents.

Mr. Wheat: What exhibit?

[fol. 3850] Mr. Littman: The annual report to which I have just referred and which Mr. Biddison has seen, does show that prices are paid as high as 7 and 8 cents in the Local Area.

By Mr. Littman:

Q. You, however, did not make any investigation of the contracts in the Hugoton Field, did you, Mr. Biddison, to ascertain the facts with respect to whether or not Panhandle Eastern was paying in excess of the market value to some vendors in that field? Did you?

A. I didn't conduct any investigation to determine that particular point. I did find out something about the prices being paid in that area.

As a matter of fact, I was somewhat familiar with those prices from having reviewed a similar compilation as the one which you have placed before me, but of about a year's higher age.

I don't know of any indication that Panhandle Eastern, under any gas purchase contract, is paying higher than the market value.

Q. Well, I believe you have already stated that you don't know what the market price of gas is in the Hugoton Field. Isn't that correct?

A. I have stated that there was considerable variation in that price.

Q. Well, the sum and substance of it all is that you [fol. 3851] did not make a similar study of the Hugoton Field such as that you have presented in Exhibit 39-A?

A. No. I made enough study to determine, in my opinion, that there was not enough difference between the contract prices Panhandle Eastern Pipe Line Company was paying and anything that might be construed as the

general field average, to justify placing any valuation upon the savings to be so effected.

Therefore, I didn't make any such determination of value.

Q. What investigation did you make? Please be specific, this time.

A. I made inquiry as to prices generally being paid, as to contracts for purchase of gas in the Hugoton Field.

Q. Of whom did you make inquiry, and what was the extent of your inquiry?

A. The extent of my inquiry was that I inquired of Mr. Hinton, who was production engineer, as to the prices being paid under the various contracts in the Hugoton Field, and based upon his information which he gave me in answer to my inquiries, I decided there was no material amount of saving to be effected under those contracts, under what might be construed as the average or general field price.

Q. Did you inquire of Mr. Culton too? A. I did not.

Q. Now, have you stated the entire extent of your inquiry on that subject? A. I have.

[fol. 3852] Q. You didn't ask Mr. Hinton the basis underlying his conclusions which you so readily adopted, did you?

A. I didn't adopt his conclusions, and didn't ask what conclusions he might have in the matter.

Q. What did you ask him?

A. I asked him the prices that were being paid under the contracts under which Panhandle Eastern Pipe Line Company bought gas in the Hugoton Field.

Q. And he told you, and you adopted what he told you. Is that it?

A. No, I didn't adopt it. I have not made any use of it.

Q. What did he tell you?

A. He told me what the prices were that were being paid.

Q. All right. By whom—give us the names of the companies—

A. By Panhandle Eastern Pipe Line Company to the producers of gas in the Hugoton Field from whom Panhandle Eastern Pipe Line Company purchases gas.

Q. I am asking you what inquiry you made with respect to the market price of gas? A. I didn't make any.
Q. That's what I thought.

* * * * * * * *

[fol. 3861] P. McDonald Biddison, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

* * * * * * * *

[fol. 3862] Recross Examination (Continued).

By Mr. Chamberlain:

* * * * * * * *

[fol. 3879] Q. Now, I refer to Exhibit 108, which is your letter to Mr. Paxton, under date of December 13, 1937. You refer, to start with, in these words: "Provision for retirements, depletion and amortization for the year 1938", and in the body of the letter, you state that in keeping with his request, you have observed and compared the amount which the officers of Panhandle Eastern expected to suggest as the proper provision for retirements, depletion and amortization on a consolidated basis for the year 1938, and have found this amount, $2,055,000, is [fol. 3880] within approximately $60,000 of the amount which you consider proper and shall include in the report on the valuation of the Panhandle system properties which you have now in progress of completion.

* * * * * * * *

Q. Now, I call your attention further to Exhibits 109 and 110, in which you again refer to the provision for retirement, depletion and amortization on a consolidated basis, and, in the latter part of these two exhibits, you refer to the reserves for retirement, depletion and amortization at the end of the year, stating that they are reasonable reserves based on an estimated life of the properties.

Now, why, in those cases, do you use the word "retirements" instead of depreciation?

A. Well, in those letters, I am referring to the accrual to a fund ordinarily called a depreciation reserve account into which there would go accruals for the purposes which I have mentioned in these letters.

The intent of the expression is to include accruals for all purposes for which accruals are generally made to depreciation and depletion accounts.

. . . . . .

[fol. 3886] Q. In other words, then, we get right back to your depletion plan in Exhibit 67, and it is your judgment that you must indulge in a very considerable amount of speculation to determine the correct amount of the amortization charge or depletion charge?

A. Is that a question?

Q. Yes.

A. No, it is not. It is my opinion to do it that you have to make a rational estimate.

Q. First, you have got to determine the life of the field, have you not?

A. The life of the field needs to be determined, either as to years or as to its life in terms of units of production.

[fol. 3887] If it be determined first as to years, then that requires some estimate of the production during that term of years.

. . . . . .

[fol. 3894] Q. Now, your next speculation comes in the question of whether these wells will get their proportion of the reserves in that field, does it not?

A. Yes.

Q. And if the gas should be drained away and they did not get it, your estimate would be off again?

A. That is true.

Q. And if they had early wells and drained the others, it would get a larger percentage? A. That is right.

. . . . . .

[fol. 3895] Q. Now, in these Exhibits 109, 110 and 111, you have stated that, in your opinion, the reserves for retirement, depletion and amortization at the close of the year are reasonable reserves based upon age and estimated life of the properties.

Has anything changed your mind as to the estimated lives of this property since your letter of December 29, 1938, Exhibit 109?

A. I do not think so, no.

Q. In other words, when you wrote 109, it was your judgment that the property had an estimated life of 25 years?

A. I think I had in mind that it was safe to assume 25 [fol. 3896] years future life.

. . . . . .

Q. Let me ask, Mr. Biddison, the period you have used for the remaining life of the Texas Panhandle Field for amortization purpose?

. . . . . .

Q. I asked you what period you used?

A. The period which I used for the Texas Panhandle Field is to December 1, 1957.

Q. That would be 16 years, would it not?

A. Well, it is 26 years following December 31, 1931. It is 16 future years from 1941.

Q. Now, I would like to ask you what method you took [fol. 3897] to determine the proper accrual for depreciation, depletion and amortization on the Panhandle system in 1937 and 1938?

A. I determined a depletion unit for leases and wells. That unit was based upon reserves estimated by Ralph E. Davis and, as I recall it now, the future development costs were based upon the number of wells which he estimated to be required to produce the reserves.

I also estimated the accruals which would be required to meet the cost of retirements while the project was operative, and I combined these two with an estimate of requirements for a sinking fund for ultimate amortization. The general scheme by which I tested the matter at that time is about as I have presented the matter in this case.

. . . . . .

[fol. 3899] Q. Your system, as I understand it, is a comprehensive system which, in your judgment, if followed, will return to the utility the full investment and not appre-

ciably more during the period which you estimate to be the life of the field. Am I correct in that?

A. That is correct.

. . . . . .

[fol. 3901] Q. And in that year, by your Exhibit No. 111, you recommended as proper what Panhandle Eastern has suggested as a proper provision of $2,400,000, is that right?

A. That is the figure recommended as a proper figure for the year 1941, as shown in Exhibit 111, yes, sir.

. . . . . .

[fol. 3902] Q. Now, an accrual of $2,400,000 that you recommended included the amount that was being accrued for the amortization of gas contracts in the sum of about $336,000, did it not?

. . . . . .

A. For amortization of gas sales and purchase contracts, this exhibit shows for the year 1941, $329,110.13.

. . . . . .

Q. And you understood they were amortizing over a period of ten years at least $2,900,000 of gas purchase [fol. 3903] contracts, did you not?

A. Yes, sir.

Q. And your Exhibit No. 111 specifically provides that the amount is one which includes provision for the amortization of gas sales and purchase contracts, does it not?

A. Yes, sir.

. . . . . .

[fol. 3904] Q. Then for your accrued provision for 1941 of $2,400,000, about what portion would be for the depletion and amortization of property, as distinguished from the gas purchase contracts?

What I want, Mr. Biddison, is the continued relationship of that percentage to the property if it be true.

A. And for what period did you ask that?

Q. 1941. You approved $2,400,000. Now, if the $329,- [fol. 3905] 000 or whatever it is, $336,000, or some-

thing, be deducted, the balance would be for the amortization of property, would it not, including the depreciation and depletion?

A. Yes.

Q. All right. Now, will you make that deduction, approximately, and give us the percentage, in other words, that you accrued for the year 1941?

A. Well, the accrual for depreciation, depletion and amortization of plant, property and equipment as part of the $2,400,000 shown in Exhibit 111 would be about $2,070,890.

Q. That is right, and what percentage now would that be of your property account as of the beginning of the year?

A. About 3.19 percent on $64,854,956.29 of property account shown in Column F of Schedule 5 of Exhibit 106.

Q. Then without regard to the method you used in arriving at the proper amount of the accrual, it did maintain practical uniformity with your previous recommendations on the property account?

A. Yes.

. . . . . .

[fol. 3906] Q. Yes, but what I am trying to get at, I am trying to get the reason for this recommended departure from their policy as to these accruals.

Was your recommendation due to the fact that you did not think that what they were accruing during those years was sufficient to fully amortize the property within the period which you deemed to be conservative in judging its life?

A. Well, I realized that prior to about 1937, their accruals had been very low, but I did not make any determination as to whether there was an insufficiency as to one particular result or possibly some other result.

I simply conferred with them on what the accruals should amount to in view of the property that then existed, and started from that point on forward.

Q. Yes, I realize that too, and that before that time, there were reasons why those accruals were inadequate, but when you were asked to determine the amount which

[fol. 3907] would be proper and reasonable for those purposes, it necessarily implied the purpose for which the accruals were to be made, did it not?

In other words, whether it was merely for depreciation and depletion or whether it was made to cover both of those and the future amortization of the property?

A. Well, it was necessary for me to test it out as to whether the amount of money proposed to be set aside would accomplish the three-fold results of providing for depletion, for retirements while the property was operative, and, eventually, getting the capital sum back.

* * * * * * * *

[fol. 3910] Q. Now, let us see what you have recommended here, using your corrected exhibits and see if we understand now, correctly, what you feel should be accrued upon the present existing property for the entire purpose of amortization, depletion and depreciation plus, apparently, the amortization of gas purchase contracts.

Will you give us the amounts now that are necessary to be accrued?

A. From Exhibit No. 66-A, Line 14, Column C, Page 1, —$1,466,224.63 for amortization of property.

From Exhibit 68-A, Line 38, Column D,—$681,680.82.

This is for the purpose of meeting the cost of retirements which will be incurred while the property is operative.

Now, in addition to these amounts, there should be charges for depletion on the amount of gas produced. I do not have before me an estimate of the amount of gas to be produced for the year 1941.

Q. Didn't you read that amount into the record on November 27?

* * * * * * * *

[fol. 3911] The Witness: I have before me those figures which I think I read into the record at some stage of these proceedings.

* * * * * * * *

Q. I thought you did. I have it as of the date November 27, but I have a little larger amount. I have here $143,873.69. Do you have that?

A. I do not have that figure before me. That might be the figure based upon the estimate for the year 1941.

* * * * * * * * *

Trial Examiner: I have Mr. Wheat's statement here at Page 2782 of the transcript, and I will hand this to Mr. Biddison.

* * * * * * * * *

[fol. 3912] The Witness: On Page 2487 of the record, these two figures are explained.

* * * * * * * * *

That is my statement in reply to a question by Mr. Wheat.

Then, at Line 13, Mr. Wheat explains the figure he read is $136,614.11 and the figure for 1941, based upon the estimate of the actual gas volume for that year, and which I read into the record a moment ago, is $143,873.69, so the smaller figure represents the application of the depletion units which I determined to the actual production for the year 1940, while the larger figure is an estimate for the year 1941.

Q. Well, I assume that if you were attempting to arrive at the amount which should be accrued, you should use the larger figure, Mr. Biddison?

A. That is correct.

Q. All right. Now, the sum of the three is the amount which you indicate should be accrued, is it not?

[fol. 3913] A. That is correct, yes, sir.

Q. And what is that? A. $2,293,779.14.

Q. Then the careful study that you have made and the corrections that you have gone through have shown you that your suggestion as to a proper provision for 1941, as shown by Exhibit 111, was about $106,000 high?

A. It indicates that, yes.

* * * * * * * * *

Will you now give us the amounts which have been included in this accrual for the amortization of gas con-

tracts for purpose of subtracting that from the total amount of your amortization to ascertain the amount which is accrued upon the property account alone?

A. I think that amount is $317,384.50. It is composed of three items.

Q. I put down two items here, $293,218.64.

. . . . . .

And $23,910.67.

. . . . . .

A. There is a third item, Mr. Chamberlain, which you [fol. 3914] apparently missed.

. . . . . .

You will find the third item on Page 17, Column K, Line 26 of Exhibit 66-A in the amount of $445.19.

Q. Yes, I overlooked that. Will you deduct that, then, from the total amortization of $1,468,224.63, and give us the amount of the accrual upon the property alone?

A. $1,150,840.13 is the accrual on property alone for amortization.

Q. All right. Now, will you add the accrual for replacements and depletion, and give us the percentage that that bears to property, plant and equipment account?

A. The amount is $1,976,394.64.

Trial Examiner: What year is that for?

Mr. Chamberlain: 1941.

. . . . . .

Q. Now, will you use your machine and give us the percentage that that bears to your consolidated property, plant and equipment account at the beginning of the year?

. . . . . .

[fol. 3915] A. Using the figure from Exhibit 106, Schedule 5, of $64,854,956.29, the ratio is that of 3.047 percent.

Q. Yes. Now, referring to Exhibit 49, is it not a fact that the company by this exhibit shows that it proposes to accrue for amortization and depletion of the property $2,078,171?

. . . . . .

The Witness: $2,078,171.

. . . . . .

Q. Now, will you add to that the amount that they propose to accrue for amortization of gas contracts which appears to be in the sum of $336,486?

A. This makes $2,414,657.

Q. Then how much is that in excess of the amount which you have concluded would be the proper amount to accrue for all of those purposes?

A. $120,878.

. . . . . .

[fol. 3919] P. McDonald Biddison, a witness, having been previously sworn, resumed the stand and testified further as follows:

. . . . . .

Q. At our last session, you testified that in your Exhibit 66-A, you had provided for an annual accrual for amortization of gas contracts in the aggregate amount of $317,348.50, as I recall it.

Now, why did you provide in your amortization schedule for the annual accrual on these contracts?

A. Well, because they have to be amortized and this is an amortization problem that I was dealing with, so I included them with the other amortization.

. . . . . .

[fol. 3921] Q. And then did you make some effort before presenting your exhibit to this Commission to ascertain whether the book entries which you propose to amortize represented cost or value, or did you not?

A. I did not make any investigation of the matter. I took the book entries as being cost.

Q. And did you have any information from the company as to whether or not the book entries for gas purchase contracts in the sum, I believe, of $2,930,286.40 were write-ups?

A. No, sir, I did not.

Q. Did you have information that the other gas purchase contracts which appear on the ledger sheets and may [fol. 3922] be identified in Exhibit 52, Page 2, in the sum of $365,334.99 were write-ups?

A. No, sir, I did not.

. . . . . .

[fol. 3937] Q. Would the fact that the development of the business of Panhandle Eastern followed a normal or ordinary pattern entitle a utility, in your judgment, to have in its rate base an amount which represented a charge, or which represented an amount computed as the cost of carrying unused capacity if it had been possible for the officers to have readily sold the capacity of the line during the development?

. . . . . .

[fol. 3938] The Witness: I think I can best answer Mr. Chamberlain's question by a broad statement of opinion on this matter as I view the matter, and that is this:

I believe that when an operating company has become successful, has proved that its project was sound, has gotten on an operating basis where they are earning a fair return and have overcome all these difficulties of business attachment, that they are entitled to have considered as part of their rate base an amount representing what is the normal cost of development of business regardless of whether, during the early period of operation, they made money or lost money; regardless of whether, during the early period of operation, their judgment was sound or unsound.

The fact that the difficulties have been overcome and that the business has been attached adds a value to the project which it otherwise would not have. It adds a value above that of the cost of the physical elements of the prop-[fol. 3939] erty and anybody who sets out to buy a utility property would, in my judgment, pay more for the one which had overcome those handicaps that usually beset an industry than it would for one who was still in the throes of it.

. . . . . .

[fol. 3940] Q. But it is your belief that a business which has become a going business is entitled to that allowance, whether it had made money from the start or not, is that right?

A. That is right.

Q. And whether it could have made money had it been so inclined from the start, is that your feeling?

A. That is right.

• • • • • • • •

[fol. 3943] Q. If the stockholders in control of Panhandle Eastern were engaged in an illegal conspiracy to prevent the company from selling any more gas than such amount which pay only its fixed charges for the purpose of forcing the other and minority stockholder into bankruptcy and the security into an enforced sale, would you still say they were entitled to an allowance of what you term "cost of development," covering that period in which they were so engaged?

A. If they have developed the business and that expense would not be incurred by a purchaser, I think the value inheres and should be included in the rate base no matter what has been the past history or the past litigation, and I do not think it makes any difference whether the stockholders fought among each other or whether there were floods and storms.

The question is answered by what has happened as to the full development of the business at this time.

• • • • • • • •

Mr. Goodman: Mr. Biddison, in presenting a figure of development cost or development value, you made a certain [fol. 3944] use of what you considered to be the actual cost of carrying unused capacity, is that right?

The Witness: Yes, sir.

• • • • • • • •

Mr. Goodman: Now, you had in mind a certain normal pattern of development, did you not?

The Witness: Yes.

Mr. Goodman: And you then used the figures of development cost as something which corroborated your gen- [fol. 3945] eral estimate of what the normal situation as to development cost would be, is that right?

The Witness: No, I did not make any separate estimate of it.

Mr. Goodman: You found, did you not, first, that a company, and specifically this company, would be entitled on the basis of a normal pattern of development, to have an allowance in a rate base for the calculation of rates for development cost according to a normal pattern of development.

You then looked at the figures and saw that these figures were, in general, in accordance with such normal pattern and, therefore, you determined to testify to development costs in accordance with those figures.

Now, do I state it substantially correctly?

The Witness: Suppose I tell you what I did?

. . . . . .

Trial Examiner: I think perhaps, Mr. Goodman, you unduly limit the witness when you say "determined to testify."

Mr. Goodman: Yes, I think so. I think that part is bad. I want the question stricken, and I will try it again.

Now, Mr. Biddison, you had in your mind that a business such as this and, specifically, this business, ought to be entitled to an allowance in its rate base to be used in the [fol. 3946] calculation of rates for the cost of developing business, is that right?

The Witness: That is right.

Mr. Goodman: And you also had in your mind that that allowance should be something in accordance with a normal development pattern, isn't that right?

The Witness: That is right.

Mr. Goodman: You looked then at the costs of carrying unused capacity, is that right?

Mr. Wheat: What did you say? Is that what?

Mr. Goodman: You made yourself familiar with the costs of carrying unused capacity, as reported to you, is that right?

The Witness: That is right.

Mr. Goodman: And you found that those costs were in accordance with your idea, then, of the normal development pattern?

The Witness: That is right.

Mr. Goodman: And, therefore, you predicate your allowance upon the considerations which I have mentioned in my questions and which you have confirmed, is that right?

The Witness: That is right.

. . . . . .

[fol. 3948] Q. Now, if by the deliberate act of the management the date was deferred for many years in overcoming these initial difficulties incident to operating and taking on of patronage, would you say that the going value would be increased by the years of delay and measured by the cost of the carrying charges on the unused capacity?

A. I have not said anything about going value and I do not know what you mean when you use the words.

Q. Well, change it to cost of developing the business. I will state it again if you want it.

[fol. 3949] Is it your opinion that if the management of a company would deliberately and unnecessarily delay the development period and, by reason of their own negligence or desire, they delayed the overcoming of these initial difficulties incident to operation and the gaining of patronage for, let us say, nine years, would you say that they were entitled to add into the rate base an amount for the cost of development based upon the carrying charges of the unused capacity for the full period of nine years?

A. Not necessarily. It would depend upon whether or not the period was a normal period and whether the rate of development was a normal rate of development.

If, however, after all these things had happened, the business was finally attached and developed, then there is a value that inheres in the property which can be measured by the normal cost of that development.

Q. Then, that allowance would have no direct relationship to the amount of time which was consumed in overcoming these initial difficulties, I take it?

A. Only if the amount of time consumed were a normal amount of time.

Q. And then, in this case, you adopted 4½ years and you allowed the carrying cost of the unused capacity for the full period, did you not?

A. Yes, sir.

[fol. 3950] Q. And that was on the theory that that was merely a normal period of development of this business?

A. Yes, sir.

Q. And it is your philosophy here that the company is entitled to that allowance, whether the management actively engaged in overcoming these initial difficulties and could have overcome them within a year after the property was put into operation had they so desired?

A. Yes, sir, it is my opinion the value inheres in a property even if the management had actually attached all this business 30 seconds after they hooked up the last joint.

Q. You say it inheres in the business. Let me ask if it is your philosophy that the company is entitled to collect as against the public for an allowance in the rate base for the cost of such development which is unnecessarily delayed by the deliberate act of the management?

. . . . . .

Q. You would not allow it then, if the delay was purposefully caused by the management?

A. I would allow only that which would be a normal cost.

Q. Does that normal cost differ under different cir-

[fol. 3951] cumstances or is there some standard that you go by that you would allow a company or make the company an allowance without regard to its own individual development?

A. I think one can set up a measure of the matter from experience and development of business in such cases and apply it regardless of the actual history.

Q. Did you make any investigation, Mr. Biddison, to ascertain whether this period of 4¼ years was a normal period of development with respect to Panhandle Eastern Pipe Line Company?

A. I know from my own experience that it takes about five years to get the development of a business in the natural gas industry.

. . . . . .

Q. I asked you whether you had made any attempt to ascertain the facts with respect to this individual company?

A. Well, knowing that five years is a normal period to do it in, I come to the conclusion that this five years or [fol. 3952] substantially five years is a normal period.

Q. Then you were led to believe that this was perfectly all right because you considered that a normal period, is that right?

A. That is precisely it.

Q. And you made no attempt then to investigate to find out whether it could have been developed in a much less period, did you?

A. No, sir, I did not.

Q. You made no specific investigation of this company at all, did you, with respect to the policies and conduct of the management with respect to taking on business?

A. No, sir, I did not.

Q. And you have presented your exhibits in this case without having made any such investigations?

A. Certainly.

. . . . . .

Q. And you were in Texas when the pipe lines were built out from the Panhandle Field?

[fol. 3953] A. I was there when some of them were built from that area.

Q. Now, are you familiar with the experience of some of those lines with respect to putting on business?

A. Yes, sir.

Q. Tell us now how long the Natural Gas Pipe Line Company of America was in getting its business on?

A. I cannot tell you.

. . . . . .

[fol. 3954] Q. And now, what about Northern Natural? How long did it take them to put business on?

A. I haven't any statistics on Northern Natural before me. I know it took some little time to get the business on.

[fol. 3957] Q. And now you know it to be a fact, do you not, Mr. Biddison, that Northern Natural, by the sale of interruptible gas, boiler gas and dump gas, paid its way from the start?

A. No, I know that Northern Natural did sell some interruptible gas in its early history and I guess still does.

Q. Now, you know, as a matter of fact, that it made an outstanding record, do you not, simply by selling gas at a low price pending the time when the business would be developed and the sales made more to domestic and commercial consumers?

A. I understand they pulled themselves through a very critical period by doing that.

Q. And it was the same period that Panhandle Eastern went through, is it not?

[fol. 3958] A. I believe so.

Q. The time was identical, was it not?

A. I believe so, substantially so.

Trial Examiner: When you refer to a critical period, do you have reference to the condition of the particular company mentioned or to economic conditions generally prevailing?

The Witness: To the latter, producing the first effect.

[fol. 3976] Q. Mr. Biddison, did you not direct the making of Exhibit 38?

[fol. 3977] A. I outlined the policy for the making of Exhibit 38.

Q. And you had direct consultation with Mr. Morton about it?

A. Well, I had some consultation with him. I don't know whether it is properly referred to as direct or not.

Q. Well, so far as you know, he did what you asked him to do, did he not?

A. Yes.

Q. And these figures, if he has taken them down correctly, represent what you intended to have him represent, do they not?

A. Yes.

Q. And they are the basis upon which you have formed your judgment in suggesting to the Commission an allowance of five and a half million dollars in the rate base of Panhandle Eastern for the cost of business development, is it not?

A. For the cost of carrying idle capacity as an item in cost of business development.

Q. Now, will you refer to, let us say, Line 5, Column D, and state the amount of the investment in Panhandle Eastern as at the close of 1935 upon which—

. . . . . .

[fol. 3978] A. $37,716,811.

By Mr. Chamberlain:

Q. And is that about the average of the investment during that development period?

A. Very close to it, at least, according to the statement.

Q. Now, what per cent, then, is five and a half million dollars which you suggest as a normal allowance under the cost of business development, as compared with the investment?

A. 14.56.

. . . . . .

[fol. 3980] Q. What is the percentage that you have set up for the cost of business development as compared with the average cost of the property plant and equipment account as of the close of 1935?

. . . . . .

[fol. 3981] A. 16.05 per cent.

. . . . . .

The Witness: I divided the $6,053,992.48 at Line 33, Column B, Page 966 of Exhibit 39 by $37,716,811 shown at Line 5, Column D, of Page 1, of Exhibit 38.

. . . . . .

[fol. 3987] Q. Now, you found that this pipe line was erected toward such industrial centers as Indianapolis and Detroit, did you not?

[fol. 3988] A. Yes. Directed towards across Missouri and Illinois and the State of Illinois, eastern industrial center, there is a big industrial development in Indiana, and there is a big industrial development in Ohio, as well as a big industrial development in Detroit and other portions of southern Michigan.

Q. And did you make any study as to what efforts had been made by Panhandle Eastern Pipe Line Company to obtain sales contracts in either Indianapolis or Detroit prior to 1935?

A. I did not, nor any place else.

Q. Were you aware that the contract in Detroit was obtained after the Department of Justice had brought an antitrust action against the stockholders in control of Panhandle Eastern Pipe Line Company seeking to compel divestment of their interests in the pipe line?

A. Well, I knew some such action had been had, but I am not certain as to the sequence of events in regard to it.

At any rate, I didn't make an investigation of it in this connection.

Q. Did you make an effort to ascertain the policy of the management of Panhandle Eastern Pipe Line Company with respect to the sales of gas during this development period?

A. I did not.

[fol. 3989] Q. Did you know that they adopted the policy of refusing to sell natural gas to municipalities or to municipally-owned utilities?

A. No, sir, I did not.

Q. Would the refusal to sell gas have any bearing, in your judgment, as to the right to collect for the cost of business development?

A. I don't know what you mean by collecting for the cost of business development.

Q. Well, if the company absolutely refused to sell gas, would you base your claim for business development or the cost of development in the same way that you have made it in this case?

A. Well, I don't know. I would have to investigate the merits of the dispute before I could answer that.

Q. Well, I take it you would give them the same amount for four and a half year's cost of carrying this capacity, whether they could have sold the gas or not, is that right, during that period?

A. I don't know, I say I would have to investigate the merits of the dispute.

Q. Well, suppose there were no merits in it: it was simply a refusal to sell to a municipality, would there be any merit in that?

A. I would think so, Mr. Chamberlain, but I will repeat [fol. 3990] what I have previously stated several times, that after the business is attached, then I think it is proper to include in the rate base that amount which would be normal to be incurred in attachment of the business, regardless of the merits of all the past disputes they have had, and whether their policy was good or bad, and whether they took the business on quick or slow.

. . . . . .

[fol. 3991] Q. Did you make any inquiry whatsoever as to whether the management of Panhandle Eastern Pipe Line Company repeatedly refused to sell natural gas in territory which was being served by other utilities?

A. I did not. I have repeatedly so stated, that I didn't make any inquiries along those lines.

Q. All right. Now, you knew of the inquiry before the Federal Trade Commission with respect to Senate Resolution No. 83 of the 70th Congress which was reported in various parts of Document 92?

A. Yes, I know of that.

. . . . . .

Q. You have read various of the documents with respect to Panhandle Eastern that were published in those reports, have you not?

A. Yes.

Q. And you know the history of the company, in a general way, at least?

A. I have an idea of the history, yes. I don't know it in detail, but I have an idea of it.

. . . . . .

[fol. 3999] Q. Mr. Biddison, I am placing before you part No. 84-1 and part No. 84-a of the Federal Trade Commission reports in response to Senate Resolution No. 83 of the 70th Congress, being Document No. 92, and parts 84-1 and 84-2 and I would like to ask you to take a look at those, and the indexes, and see if you do not recognize them as volumes which have been in your possession and which you have scrutinized?

A. Well, I believe they are. I think I have copies of them in my files and I have referred to various volumes of this report, I think probably to these two upon occasion.

Q. I also hand you parts 82 and 83, and ask you if you have not had those and scrutinized them?

A. Yes, I have had those, and I have made some references to them in some studies I have made.

* * * * * * * * *

[fol. 4000] Q. And you have made no effort to look through those reports to see what the past history of the company has been with respect to sales?

A. I have referred to those volumes at various times for various purposes, but I have never read all of any of the volumes nor analyzed the information in there about the various controversies.

* * * * * * * * *

[fol. 4001] Q. Now, let me ask you one question. Did you or did you not read a copy of a letter written by Mr. T. B. Gregory to Mr. Minnig which happens to be printed on Page 375 of Part 82 and to relate to the matter of sales for some point in Missouri on application to the Panhandle Eastern Pipe Line Company?

A. I do not remember ever having read it. I might have, though, but I just do not know.

Q. Well, did Mr. Gregory ever tell you that he had refused sales from the Panhandle Eastern Line in 1934 for the reason that they had commitments of gas to be carried which would be sufficient to absorb the entire capacity of the line with a proper safety factor under normal conditions?

[fol. 4002] A. No, sir, Mr. Gregory did not tell me that, nor did he tell me anything else about Panhandle Eastern Pipe Line Company at any time.

I have never discussed Panhandle Eastern Pipe Line Company with Mr. Gregory nor any other pipe line company nor any other gas company.

Q. You will not say you did not read that letter, Mr. Biddison, I take it?

A. I will say I do not know whether I read that letter or not, I do not know. I may have, but I do not know.

Q. All right. Let me ask you whether you recall reading the testimony of Mr. William G. Maguire which appears on Page 401 and several pages following of part 82?

A. I do not know whether I read that or not.

Q. Do you know that you did not read it?

A. No, I say I do not know whether I did or not.

Q. In other words, you have no recollection if you did read it?

A. That is right.

Q. And I take it that you did not go back and examine these before you prepared your exhibit on the cost of business development?

A. I have so definitely stated, two or three times.

Q. And did you have information prior to making out that exhibit that the Kansas City Power & Light Company [fol. 4003] desired gas from Panhandle Eastern in 1932 and would take 10 million feet a day at around 13 or 13½ cents and that the management of Panhandle Eastern refused?

A. No, I did not.

Q. And you do know, however, that they went 200 miles farther and sold a large amount of industrial gas to the Atlas Cement Company at Hannibal, Missouri, do you not, at about 11 cents?

A. I do not know at what price they sold that gas.

Q. And you have not had the exhibits in this case which showed at what price they sold the gas?

A. No, sir, I have not.

Q. Now, do you recall reading in this Volume 82 in the testimony of Mr. Maguire that he had a commitment for sale of natural gas with the Great Lakes Steel Company at Detroit for use in their open hearths and soaking pits at Detroit?

* * * * * * * *

The Witness: No, sir, I do not know what contracts Mr. Maguire may have obtained.

By Mr. Chamberlain:

[fol. 4004] Q. You never heard of that?

A. I might have heard of it. I do not know. I have heard that company discussed some time or other as a possible gas market, but I do not know what the situation was in regard to the discussion now.

Q. And did you read in that same volume, 82, on Page 332 with respect to Mr. Maguire giving up the negotiations with respect to Mr. Gossler?

A. No, I do not. As a matter of fact, I read very little about the various arguments in those documents. I was interested in other matters.

Q. You knew that arguments had occurred, I take it?

A. Yes, at least I had heard that they had occurred. I had no personal knowledge of them.

Q. Did you not know that at the City of Fulton, Missouri, they requested gas service and had to fight the Panhandle Eastern through the Missouri Commission and the Supreme Court of the State in order to get it?

A. No, sir, I do not know anything about that matter.

* * * * * * * *

Q. Did you not see the controversy between Panhandle Eastern and that municipality printed in the papers and the trade magazines?

[fol. 4005] A. I might have. I do not know.

* * * * * * * *

Q. Do you remember anything about the controversy with Fayette along the same line?

A. If I did, I have no recollection of it and I do not know what the controversies were, if there were any.

Q. Now, did you make inquiry as to the form and amount of the rate that Panhandle Eastern sought to establish in Illinois in 1932 and 1933 during what you used as the development period?

A. I did not.

Q. You made no effort, I take it, to find out whether they made a rate which was too high to permit of its use by the public?

A. I made no investigation of it.

Q. Do you recall reading from the copy of the minutes of Panhandle Eastern which are printed in Volume 82 of Page 890, wherein the president of the company, then your friend Mr. Crawford, made the statement that it was agreed that any gas to be taken under the contract of September 17, 1930, by Columbia Gas and Electric Corporation would be for supplying Indianapolis and Northern Indiana territory extending to Detroit and other points in Michigan and connecting with existing pipe lines in Ohio and that [fol. 4006] it was likewise definitely agreed that any gas to be taken under such contract with Missouri-Kansas Pipe Line Company would be only for the purpose of supplying gas to southwestern Indiana through Terre Haute and south to Nashville, Tennessee, and that, "Panhandle Eastern Pipe Line Company hereby notifies both Columbia Gas and Electric Corporation, and Missouri-Kansas Pipe Line Company that it does not consider that either of them would be entitled to gas under such contract, if the gas is to be used in violation of the above agreement for the purpose of interfering with the distribution of gas by the other party."

Do you remember reading that?

A. I do not remember that.

Q. You have heard about that, haven't you, Mr. Biddison?

A. No. I have heard there were arguments about some contracts but I have never investigated what the argument was about, and have not been interested in such features as that in this connection or in any other connection.

Q. You had heard about the difficulties they had as to the allocation of territory, had you not?

A. I understood there was some question about the allocation of territory but I never investigated what the relative attitudes on the matter were, and I do not know anything about it now.

[fol. 4007] Q. Then you did know there was a dispute as to allocation of territory?

A. I have known there had been some such disputes, yes, but, as I say, I do not know anything about the attitudes of the various parties in the matter, have never made an investigation in the matter and have never attempted to find out about it.

Q. Do you recall the investigation which was instituted by the Counsel of the City of St. Louis looking toward a gas supply and the inquiry made of Panhandle Eastern for gas for that area?

A. I think there was some such thing as that about 1938, if I recall, but I do not have any information about the extent of the matter.

Q. That was much earlier than that, was it not, because their line was fully used in 1937.

A. Well, I recall that there was something occurred about the matter at about that time. About any earlier propositions on it, I do not have any information.

Q. Didn't you read in the public prints at that time that they refused to sell gas to St. Louis because that territory was being served by Mississippi River Fuel Corporation?

A. I do not recall ever reading any such thing. I read a great many things to which I do not attach enough importance to try to remember.

[fol. 4008] Q. Do you recall reading on Page 977 of Volume 82 a statement made by Mr. Munroe, who was then president of Columbia Oil and Gasoline Corporation, that the capacity of the line was about 80 million feet daily, but that you would not be safe in assuming over a 50 percent load factor and when Mr. Russell stated to him that any proposition could not be a success operating at 50 percent of capacity, Mr. Munroe replied, "Well, that is all we can expect."

Did you read that?

A. I might have. I do not know whether I did or not.

. . . . . .

[fol. 4009] Q. Now, in your testimony, you referred to the matter, as I recall it, along the line of an economy in the construction of a pipe line to build additional capacity for future use. Is that right?

A. I believe I made such a reference, yes, sir.

. . . . . .

[fol. 4010] Q. Well, may I read this to you from Pages 557 and 558:

"Panhandle Eastern would not have been justified in building a smaller line with the expectation of increasing from the 80 million capacity to the 125 million capacity by looping; it simply would not have been economical to have done so. You can make a rough comparison of it on the basis that a single 24-inch line, such as they did build, would cost about $30,000 per mile, and an 18-inch line, having, roughly, half the capacity of the 24-inch, would cost about $20,000 a mile; so that the two 18-inch lines would have cost about $40,000 a mile compared to $30,000 per mile for the 24-inch line."

Do you recall testifying in those words?

[fol. 4011] A. That sounds like what I said.

* * * * * * * * *

It is possible to build an 18-inch line under some conditions for around $20,000 a mile and, under other conditions, at about maybe less than $18,000 a mile. It is also possible on the 24-inch line that you might have a price variation from $30,000 a mile down to something less than $24,000 a mile, maybe down, in some instances, to as low as $22,000 a mile.

I did not try in that example to state the costs precisely for either size of line but to give an idea of the fact that when you got done, two 18-inch lines would cost you ma-
[fol. 4012] terially more than one 24-inch would cost.

* * * * * * * * *

Q. Well, you can tell the relative capacity of those two lines, can you not, how much more than double the 24-inch line will carry than the 18-inch line?

A. Yes, that can be calculated within a fair degree of accuracy.

Q. Would it not be a little over twice as much in the 24-inch line?

A. Well, I do not remember right now, except that two 18-inch lines is somewheres close to the capacity of the 24.

* * * * * * * * *

[fol. 4018] The Witness: I used that proportion of the cost of the actual system which was unused up until the capacity was required.

Q. That is right.

A. And I divided the cost of that system as between used and unused capacity in the ratio of loading to non-loading.

Q. Direct ratio?

A. Yes, sir.

Q. And not with respect to what the excess cost would have been or what the excess cost was over and above what it would have cost to have built the line for the 50 percent capacity?

A. In proportion to what the excess cost was, not in proportion to what the excess cost would have been if [fol. 4019] something else had been built.

Q. No, I will illustrate it this way. If you had a 50 percent capacity in your line used and the line had cost you any amount, let us say $30,000,000, you have then computed the cost of carrying this unused capacity on the basis of one-half of the total cost, have you not?

A. Yes, sir.

Q. And if you had to build a line to serve one-half of the capacity, it would cost you not one-half of that cost but more, would it not?

A. Yes, sir, it would.

Q. Then you are not computing your estimate of this cost on the cost of what was spent for the excess capacity, but directly proportionate to the demand which was made upon the line?

A. I am doing both. I am allocating the costs proportionately between used and unused capacity as those factors existed, and the cost which I am using in each case is the cost of that capacity.

. . . . . .

[fol. 4053] P. McDonald Biddison a witness, having been previously sworn, resumed the stand and testified further as follows:

. . . . . .

[fol. 4082] By Mr. Littman:

Q. Now, Mr. Biddison, you discussed the matter of the selection of the inspection points and the making of the inspections at some length in your redirect examination,

and you made numerous references to members of the Federal Power Commission's staff.

I believe you testified that on July 23, 1941, Panhandle Eastern Pipe Line Company invited the Federal Power Commission to designate some member of its staff to accompany you on your inspection tour. Is that correct?

A. I do not know that that is quite correct. As I recall it, my testimony was that at a conference on the preceding day it was decided to do that, and I knew that it had been done.

Now, it is possible that the day on which it was done was the 23rd, if the letter supports that date—I don't know [fol. 4083] exactly about that now without the letter before me.

* * * * * * * * *

Q. Then you testified that, thereafter, you had a conference with Mr. Zinder and with Attorney McAllister, both of the Federal Power Commission, did you not?

A. Well, I think I stated Mr. Zinder and Mr. McAllister, without qualifying their positions.

Q. Now, that conference was held on what date?

A. I believe that was August 1. I am not certain on that.

* * * * * * * * *

[fol. 4084] Q. Now, you had a map at that time which you had prepared showing the inspection points which you had proposed to visit, did you not?

A. Yes.

Q. And can you tell us at this time how many inspection points were on that map, that is, on August 2?

A. No, I think there were about 50 on there. I do not know the exact number now.

* * * * * * * * *

[fol. 4085] Q. Suppose you give us the conversation that was had at this conference with respect to these test holes and inspections.

Maybe that would be specific enough for you to recall. I am not asking you for the conversation word by word, but your best recollection of it.

. . . . . .

[fol. 4093] The Witness: I produced a map on which I had marked in pencil the proposed locations of about 50 test holes and explained to those present at the conference that, in addition to the number of test holes so located on that map, I thought there should be added about another 25 locations, that is, about 50 percent more; that with the addition of that number of holes, it was my idea that we had enough test holes to sample this property in view of its age and probable condition; that it was at least as many holes that I would think necessary to dig to examine the pipe in the case of a purchase and sale of the property.

By Mr. Littman:

Q. That was your part of the conversation, is that right? In other words, those are the things that you said in substance, Mr. Biddison?

A. Yes.

Trial Examiner: Proceed with your answer.

[fol. 4094] The Witness: I further suggested that the additional locations might well be selected by representatives of the Commission if they desired to do so.

Mr. Zinder and Mr. McAllister being present, both expressed the idea—

By Mr. Littman:

Q. (Interposing) Just a minute, I want the conversation now.

Mr. Wheat: As he best can recollect it.

The Witness: Both expressed the idea that the number of holes so selected would be sufficient. They were glad and so expressed themselves, that an extremely large number of holes had not been decided upon and a comparison was made in that respect by Mr. McAllister with some other utility, which one I do not now recall, as to the large number of holes dug or proposed in connection with a similar situation.

At the suggestion of Mr. McAllister or Mr. Zinder, I do not now know which, Mr. Neuner agreed—

By Mr. Littman:

Q. (Interposing) Just a minute, I object to what Mr. Neuner agreed. I want the conversation or the substance of the conversation.

Trial Examiner: Let him make his broad statement and complete it first, then you may go back over it if you wish.

. . . . . .

[fol. 4095] The Witness: Mr. Neuner agreed to furnish them with certain maps and I know an attempt was made to get those maps in the mail upon the same day so that those maps would be available to engineers of the Federal Power Commission in connection with location of test holes.

Now, that is the substance of the conversations as I recall them now on this matter.

By Mr. Littman:

Q. Did Mr. Zinder or Mr. McAllister tell you that you should not make any more inspections than you had planned to make? A. No.

Q. You were a free agent with respect to the number of inspections that you wanted to make, were you not?

A. Yes.

Q. For your purposes? A. Yes.

Q. And they were not telling you how many you would require for your purposes, were they? A. No.

Q. And you were not telling them how many they required for their purposes? A. No.

Q. Do you know the purposes, if any, to which they [fol. 4096] expect to put the inspections that they made?

A. Only what would be a natural supposition. So far as knowing, no, I do not know.

Q. Of course, the number of inspections that are made would be largely governed, would it not, by the uses or purposes to which the person who makes them intends to put them, isn't that correct?

A. It might well be.

Q. Well, now, was the word "sampling method" used in this conversation, to the best of your recollection?

A. Yes, it was.

Q. Who used it?

A. I did.

Q. Of course, you considered the inspection points which you had selected as adequate sampling for your purposes, did you not?

A. Yes, sir.

Q. I think you stated another 50 inspections were selected by you in addition to those which you first made on the map at the conference, is that right?

A. Another 25 or 30, as I now recall it.

Q. I believe you have stated that the Federal Power Commission representatives took no part whatever in the selection of those additional points, is that right?

A. That is correct.

[fol. 4097] Q. Now, are you undertaking to draw any inference or inferences from the fact that the Commission representatives did not object to what you did at any time, either at the inspection points or at the time when the inspection points were selected?

A. No, I am not drawing any inferences. I am merely testifying here.

Q. You would not say that it would be proper to conclude that there was an agreement, necessarily, as to anything simply because representatives of the Federal Power Commission were present and did not object to those things which you did? You would not interpret that to be an agreement, necessarily, would you?

A. No, not necessarily.

Q. So that we may be perfectly clear about this, I believe you mentioned that representatives of the Federal Power Commission took some soil samples at each of the inspection points, did you not?

A. Yes, sir.

Q. You did not object to that, did you?

A. Certainly not. They can have all the soil they wanted from around there—

Q. (Interposing) That is right.

A. (Continuing) So far as I was concerned.

Q. And you would not consider it proper for anyone to [fol. 4098] conclude from your failure to object that you agreed to the use to which the Federal Power Commission's representatives will put those samples?

A. Hardly, no.

Q. I believe you said you had about 50 points selected on the map when you came to the conference in Kansas City on August 2, that you selected some additional points. Why were additional points selected?

A. So as to embrace the total number which I originally had in mind to be inspected. I simply allowed I would select about two-thirds of them and allow engineers of the Federal Power Commission to select the other third.

Then, when they did not care to make the selection, I went ahead and completed the number.

Q. Then you went into the field to make the inspections with Mr. Bodner and Mr. Shattuck, and I believe you have described, in some detail, what each of you did.

Now, you referred to Mr. Shattuck as being Mr. Bodner's secretary, I think, on one occasion. You did not mean to infer from that statement that Mr. Shattuck did not get into some of the inspection holes?

A. I do not think I referred to him as being Mr. Bodner's secretary at all, and I distinctly stated that I thought that he had been in a number of the inspection holes, but that the general rule was that Mr. Shattuck kept [fol. 4099] the records and Mr. Bodner did the work in the holes. That was the substance of my statement in that respect.

* * * * * * * * *

By Mr. Littman:

Q. You testified at Page 3663 of the transcript:

"Now, in general, Mr. Bodner made the actual inspections of pipe and Mr. Shattuck made the notations directed by Mr. Bodner to be made. In other words, Mr. Shattuck generally kept the records and Mr. Bodner generally made the direct inspections of the pipe."

Then you made a further answer that doesn't relate to this particular point.

Isn't it a fact that Mr. Shattuck checked numerous measurements of pits, particularly at times when there was some disagreement as to the precise measurement of pits?

A. Mr. Shattuck did check numerous times, certainly. I have not precluded him from inspecting quite a number of times by making the observation that the general practice was for one man to make the observations on the pits and the other one to keep the records on it.

I am not trying to belittle the activities of Mr. Shattuck in that respect. I simply, in response to a question, stated what the general practice was. I did not keep a record as to how many holes Mr. Shattuck went into. It was not any of my business.

[fol. 4100] Q. You, as a matter of fact, do not know what representatives of the Federal Power Commission were doing, other than that which you saw them do, is that right?

A. Why, certainly that is right.

Q. That is, you did not know what was being recorded by them on their inspection sheets because you did not see their inspection sheets?

A. I never saw their inspection sheets. I do not know what they recorded on them.

Q. You did hear them call out pit depths and certain other observations that were made, did you not?

A. I did hear them call out pit depths and locations upon the pipe and I did see Mr. Shattuck making notations as Mr. Bodner called them out.

Q. Now, I believe your counsel was making some point about your not having seen the inspection sheets of representatives of the Federal Power Commission.

Now, you have testified, have you not, that you have never requested a copy of them, is that correct?

A. That is right.

Q. And you did turn over photostat copies of your inspection sheets to representatives of the Federal Power Commission, did you not?

A. Well, I made copies of mine available through some method. I have forgotten whether it was photostat or no., but I made copies available to them.

[fol. 4101] Q. And that was done only after request, was it not?

A. That is right.

Q. In other words, neither of you were necessarily supplying data to the other except upon request, is that right?

A. That is right and I have not asked for anything.

Q. The Trial Examiner, during the course of your redirect examination asked you whether or not the relations between the representatives of the Commission and yourself were harmonious or otherwise, and you stated at Transcript, Page 3680, as follows:

"They were absolutely harmonious. The relations were very friendly. I do not know of anything about which there was any disagreement throughout the trip."

Now, I want to make certain that I understand what you mean by the term "Disagreement." You are not inferring from that statement that there was an agreement as to what would be observed or the use to which any party was going to put the data?

A. No, sir. I mean only just what I said, that we did not have any disagreements. No matters arose about which we had argument and disagreement in connection with the work. We might have had some differences of opinion about political matters and social subjects and disagreed on those, but as to our work, we had no matters of disagreement.

* * * * * * * *

[fol. 4162] By Mr. Littman:

Q. There were some disagreements with respect to pit measurements, were there not, Mr. Biddison?

A. I would not say there were disagreements with respect to them. There were some occasions upon which the measurement of one party did not check with those of the other, and I think upon one or two occasions, some attention was called to that fact, but there was no attempt by either party to reconcile those measurements, although there were times at which one party or the other rechecked measurements if some comment had been made by the other that they did not check the figure.

Q. In other words, the observation record made by yourself and by the Federal Power Commission's representatives do not represent any agreed figures, do they?

A. No, sir, they do not. Each party put down the ob-
[fol. 4163] servations as he saw them without regard

to anybody else's opinion on the matter. It was seldom that any opinion was expressed but there were some occasions that the calling out of pit depths disclosed that the two parties making measurements had not gotten the same result.

. . . . . .

[fol. 4105] Mr. Littman: I desire, if your Honor please, to make a very brief statement with respect to these inspections.

I think our position can be made clear in this fashion.

It was kind and courteous of Panhandle Eastern to invite representatives of the Federal Power Commission to accompany Mr. Biddison on his inspection tour and, of course, we appreciate that.

It meant a matter of saving time and expense. I do not want anything that I have said to be construed otherwise.

. . . . . .

We entered into no agreement with Mr. Biddison with respect to what he should do or how he should do it. He was a free agent and I believe the testimony now is clear that we were free agents, each of us, utilizing the data [fol. 4106] in the manner in which we best see fit.

I am making this statement here simply because I think it would be unfortunate if counsel or anyone else were to endeavor to claim that we agreed necessarily with Mr. Biddison's method of doing things simply because we accompanied him on his inspection trip.

. . . . . .

[fol. 4113] Rufus M. Smith, a witness, having been previously sworn, resumed the stand and testified further as follows:

Cross-Examination.

By Mr. Littman:

Q. Mr. Smith, you prepared Exhibit No. 30, did you not? A. Yes, sir.

Q. Now, on Pages 1 and 2 of this exhibit, you state your qualifications and experience, do you not?

A. Yes, sir.

Q. Now, on Page 2, you state that "my duties as geologist for Panhandle Eastern Pipe Line Company have required me at all times to keep in close touch with development and producing conditions in the areas in which Panhandle Eastern owns reserves; watch the performance [fol. 4114] of the wells in those fields; and advise the management with respect to its producing operations," do you not?

A. That is true.

Q. Now, will you elaborate on your duties and give us a more detailed statement as to what you do?

A. Well, in keeping in touch with the development and producing conditions in the areas in which Panhandle Eastern owns reserves, we receive copies of logs of wells that are drilled by other companies and they are studied.

We receive sets of sand cuttings or samples from numerous wells drilled by other companies. These are filed and studied from time to time.

Q. What else do you do?

A. We make studies in regard to various conditions in this field, such as the location of water below the producing formations, the location of the first producing formations and the subsequent formations which produce gas.

Pressure maps, of course, are made as we constantly watch the decline of the rock pressure in the field.

Q. Who is your immediate superior?

A. Mr. H. W. Pope.

Q. What is your official title? A. Geologist.

Q. What is Mr. Pope's title?

A. Superintendent of Land, Lease and Production.

[fol. 4115] Q. Is it a part of your duties to determine what acreage shall be acquired by Panhandle Eastern Pipe Line Company?

A. I am consulted on that, often times.

Q. Who consults you on that? A. Mr. Pope.

Q. Who makes the ultimate determination as to whether a lease should or should not be acquired, you or Mr. Pope?

A. Mr. Pope, in conjunction with the management of the company, Mr. Neuner and others.

Q. And is the same true with respect to acreage that is abandoned or disposed of? A. Yes, sir.

Q. In other words, Mr. Pope calls you in for consultation? A. That is true.

Q. But he makes the ultimate decision?

A. That is true.

Q. In conjunction with the management?

A. I merely recommend.

Q. And what is the fact with respect to well locations, and by that, I mean locations at which wells are to be drilled?

A. When the fields are such as they are, well locations are usually made more on lease requirements than most anything else.

Q. Who makes the ultimate determination with respect [fol. 4116] to the drilling location?

A. The same gentlemen, Mr. Pope and the others.

Q. Are you called in to consult with the others, as well? A. Make recommendations.

Q. Have you ever advised the company as to the gas reserves in acreage which it owned or contemplated leasing?

A. In a general way.

Q. When did you make such an estimate last?

A. I say in a general way; by that, I mean relatively. If there are several tracts which are available, one might be a better one to obtain than another by its location in respect to the field boundaries, so it would be a relative proposition, rather than a specific reserve per acre.

Q. In other words, your estimates in that connection would not be that you have concluded that so many cubic feet of gas will be found in any particular acre, is that right?

A. That is true.

Q. Have you ever made such an estimate for the company as that which I have just described? That is, a given estimate of reserves per acre or for a number of acres?

A. Yes, I have.

Q. When did you last do that?

A. I made up an estimate of that kind within the past two months.

[fol. 4117] Q. Are you speaking of the estimate that is contained in Exhibit 30?

A. There is one made since then for the company.

Q. Will you please give us a general description of the estimate?

A. It conforms practically to the figures which I used in Exhibit 30, practically the same per-acre figures as are used in Exhibit 30.

Q. Does it look like Exhibit 30, that is, I am referring to the estimate?

Mr. Culton: I am wondering if counsel really understood what he meant.

Mr. Littman: Perhaps I didn't.

Mr. Culton: He said he used the same per-acre figure that he used in Exhibit 30.

By Mr. Littman:

Q. Did the estimate which you just made and submitted to the company show the reserves based on the eight different abandonment pressures used in Exhibit 30?

A. It was not a total figure. It was merely a per-acre figure. That was given to the accounting department for, I believe, their setting up some records in which the reserves will be depleted annually under each separate lease according to the production which comes out of each separate lease.

Consequently, the reserve for each lease was calculated [fol. 4118] from the average per-acre reserve figure times the number of acres in the lease.

The abandonment pressure used there, I believe, was 50 pounds.

Q. In other words, if I understand you correctly, your most recent estimate submitted to the company stated that the original amount of gas per acre was 17,700 M.c.f. for what you have designated as Class 1 acreage and 5,000 M.c.f. for acreage classed as Class 2?

A. Yes.

Mr. Culton: In which field?

Mr. Littman: In the Texas Panhandle Field.

By Mr. Littman:

Q. Incidentally, we are talking about the Texas Panhandle Field, are we not? A. I assumed that.

Q. Inasmuch Exhibit 30 relates solely to that field?

A. Yes.

Q. Perhaps it would be well to have that understanding at the outset.

Mr. Culton: I thought the record should be clear that that is what we are talking about.

Trial Examiner: It might be inquired at this point, however, whether Mr. Smith is thoroughly familiar with the Hugoton Field also.

[fol. 4119] By Mr. Littman:

Q. Are you familiar with the Hugoton Field?

A. Yes, sir.

Q. Thoroughly familiar with it, as the Trial Examiner has inquired?

A. There may be some question about what thoroughly means.

Mr. Culton: I think we stated during the examination that both Mr. Smith and Dr. Bartle had worked together in connection with the Hugoton Field but, in order to expedite the evidence, we had had Mr. Smith prepare the figures for the Panhandle Field and Dr. Bartle prepare the figures for the Hugoton Field.

Trial Examiner: I assume, Mr. Smith, your duties are equally in the two fields now?

The Witness: Yes, sir.

By Mr. Littman:

Q. Do you have your acreage map for the year 1932 which has been identified in this case as Exhibit 19?

A. No, I do not.

Mr. Culton: We did not know what maps you wanted to examine him about. You had copies of them. There was no reason for us to anticipate—

Trial Examiner: Mr. Smith, here is a copy of that map.

(Whereupon, a copy of the map referred to was handed the witness.)

[fol. 4120] By Mr. Littman:

Q. Now, on this map, which has been identified as Exhibit 19, you show in colors the acreage controlled by Panhandle Eastern Pipe Line Company as of March 31, 1932, do you not?

A. That is true.

Q. Now, does that include the acreage which was subject to gas purchase contracts or does it just include the acreage which was held by Panhandle Eastern?

A. There is no gas purchase contract acreage shown.

Q. There was some acreage, however, subject to gas purchase contracts as of March 31, 1932, was there not?

A. I believe that there was one or possibly two, gas purchase contracts at that time.

Q. But that acreage you have stated is not shown on that map?

A. It would be a very small amount, possibly 1,280 acres, or some such matter.

Q. What is the purpose of this map which has been identified as Exhibit 19, Mr. Smith?

A. It was prepared to show the difference between the acreage picture in the early history of Panhandle Eastern Pipe Line Company as against the present acreage pattern of Panhandle Eastern in Texas Panhandle.

Q. Did you use this map in connection with making your estimate of the reserves in the Panhandle Field?

[fol. 4121] A. No, sir.

Q. You did not submit a map showing the situation as of 1933, did you? A. No, sir.

Q. Or as of 1934, 1935 or subsequent years?

A. No, sir, only 1941.

Q. 1941. Why did you select 1932 rather than 1933 or 1934, or some other year?

A. 1932 was approximately the time Panhandle Eastern began taking gas from this area.

Mr. Littman: If your Honor please, perhaps it would be well for us to note our objections to the exhibits as we discuss each, in order that your Honor will have in mind the objection in connection with the particular testimony as the testimony is given.

We object to this exhibit for the reasons stated by the witness, that it serves no useful purpose in this case other

than to clutter up the record. It was not used by this witness in arriving at his estimate of reserves and merely shows the acreage picture as of some nine years ago, and it has no bearing whatever upon the issues involved in this proceeding.

We think that while it is harmless, to use your Honor's term, it does unduly encumber the record, and we are very anxious that no needless exhibits be in the record, and we feel it our duty to object on the ground of immateriality.

[fol. 4122] We shall note our objections to these exhibits as they are discussed.

Trial Examiner: Very well.

By Mr. Littman:

Q. Now, will you please turn to your next exhibit, which has been identified as Exhibit 20, this exhibit being named, "Present Acreage Map."

Mr. Smith, I do not believe you have stated in your testimony, and I do not believe you show on this map, as of what date the map speaks, and I would appreciate it very much if you would tell us the date.

A. That was an oversight. It should show as of June 30, 1941.

Q. And the legend on the map merely shows, does it not, the ownership of the leases indicated? A. Yes, sir.

Q. Very well. Now, if you will please turn to Exhibit 21, which appears to be a contour map. I will ask what you conceive to be the purpose of this map?

A. It shows the location of the Amarillo Gas Field in the Texas Panhandle and the subsurface structure of said gas field.

Q. Would you give us a concrete example of these elevations and tell us what is indicated on the map?

A. The map indicates that the top of the Wichita-[fol. 4123] Albany Anhydrite would be found on the John Ray Dome at 1500 feet above sea level, the John Ray Dome being located in north central Potter County.

Q. That sand which you have just named is one of the producing sands, is it? A. No, it is not.

Q. What is it?

A. It is a marker that is used by geologists in determining whether or not the formation is running high or low and, in a way, predicts the quantity of the gas to be obtained after the well is completed.

Q. Don't these contours show the elevations above sea level of the top of the Panhandle Lime? A. Yes, sir.

Q. Is the Panhandle Lime another name for that structure which you just gave a moment ago?

A. The Panhandle Lime is another name for Wichita-Albany. However, the top of the Panhandle Lime is not productive and the Panhandle Lime is really not a lime.

The top of it isn't. It is an Anhydrite.

Q. Now, the contours that you are measuring on this map are measured from the top of a structure, are they not?

A. It indicates the contours found on the structure and, roughly, gives you a picture of what the structure [fol. 4124] looks like with a high point over here (indicating), another higher point at another place on the map and it slopes toward the flanks with the fault at the south side.

Q. Well, what does that have to do with the producing structures?

Mr. Culton: Counsel, if you would use the words "producing formation" instead of "producing structure," you would be talking some language that the witness could understand.

The structure does not produce. It is the formation that produces.

Mr. Littman: Well, I used the term "producing sand" or "sands" a moment ago.

Mr. Culton: That is all right.

By Mr. Littman:

Q. I understand there are various terms for these things. Which would you prefer to use, Mr. Smith?

A. Sands or formation, either is proper.

Q. Sands or formation, very well.

Will you please explain what relationship these contours have to producing sands in the Panhandle Field?

A. It indicates the underlying producing structure.

Q. Does one conform with the other?

A. Substantially.

Q. The thing that disturbs me is, Mr. Smith, and I do not clearly have in mind, is how far above the producing [fol. 4125] sands are these elevations that you have shown on this map?

A. Approximately 800 feet.

Q. And the convolutions of the one are followed generally by the other?

A. That is true. This is a good marker for that reason. This has been selected and has been used for years to make contour maps on structures in the Panhandle of Texas.

Q. I see. Will you please state what relation exists, if any, between the elevations shown on your contour map, Exhibit 31, and the gas reserves in the Panhandle Field?

A. The principal relation between this contour map and the gas reserves in the Panhandle of Texas is that, generally speaking, the above-average producing acreage is found on the high points of the structure and the below-average producing acreage is found on the edges of this structure.

Q. Now, do I understand your testimony then to be that acreage located near the top of the structure is more favorably located for production of gas than acreage located on the lower parts of the structure?

A. Generally speaking, that is true. However, there are numerous exceptions to that rule.

Q. But that is a general rule, is it not?

A. That is true.

Q. Now, I believe you testified in your Exhibit 30 that the leaseholds of Panhandle Eastern Pipe Line Company [fol. 4126] are, "favorably located for the production of gas", did you not?

A. Yes, sir.

Q. And that testimony, I take it, is predicated upon the fact that Panhandle Eastern's acreage is, in fact, located along the top or near the top of this structure?

A. That is true, generally speaking.

Q. Now, you do not show on this map the location of Panhandle Eastern's acreage and so I shall ask you to

state, generally, the location of Panhandle Eastern's acreage with respect to the contours of this map.

(Whereupon, the map was handed the witness.)

Mr. Culton: Is that the same map now?

The Witness: Yes.

Acreage controlled by Panhandle Eastern Pipe Line Company in Carson County, lies generally above the 1300-foot contour. In Potter County and southern Moore County, Panhandle Eastern Pipe Line Company's acreage lies generally above the 1100-foot contour. Is that sufficient?

By Mr. Littman:

Q. Isn't there some acreage located above the 1500-foot contour, Mr. Smith?

A. Yes, sir, there is.

Q. Approximately how much, roughly?

A. Probably 1000 acres.

Q. I note in your 1941 acreage map to which we referred [fol. 4127] a moment ago, Exhibit 20, there were numerous open spaces in the Panhandle Eastern's acreage, and by that I mean, a kind of checker-boarding situation that exists. Is that generally correct?

A. That was explained, to a certain extent, in my testimony, that Panhandle Eastern originally designed their acreage pattern when the field was new, to make a checker-board pattern that way, so as to at least have some of the better acreage, if not all, even though they might have to surrender some of the poorer acreage at a later date.

Then, as time went on, an attempt was made to obtain more premium acreage, so to speak. However, it was impossible by that time, to acquire solid blocks. That, I think, explains the so-called open spaces in our acreage pattern now.

Q. Now, having in mind the situation which you have just described and the generally favorable location of Panhandle Eastern's acreage, what would you say with respect to the desirability of Panhandle Eastern's acreage in so far as drainage is concerned?

A. I would say it was in an average position.

Q. With respect to those open portions representing leases that are owned by others, do you know whether or not there are offsetting wells on those leases, generally?

A. In a great many cases; there are.

Q. And in many cases, there are not?

[fol. 4128] A. I would say in a few cases there are not, but in the majority of the cases, there are offsetting wells.

Q. Now, the fact that Panhandle Eastern's reserves are situated near the highest structural point of the entire Panhandle Field would indicate that Panhandle Eastern's acreage would be among the last to be ultimately abandoned, isn't that correct? A. Not necessarily.

Q. Well, I have in mind, particularly, encroachment of water. Wouldn't the fact Panhandle Eastern's reserves are located along the highest structural point be a favorable factor in that regard?

A. That would probably be true, except for a, you might say, unnatural condition, or maybe an unexpected condition, which apparently is developing on the northeast portion of the field.

It appears now that water is coming in rather rapidly in east central Moore County. You might call it a finger appears to be projecting itself southwestward through that portion of the field.

Q. So that the acreage that is in the path of this encroachment and which is located along the lowest structural points will be the first to be abandoned for that reason? A. Yes, sir.

Q. And those which are located along the top of the [fol. 4129] structure will be the last to be abandoned?

A. They will be later.

Q. Yes. Is this water encroachment to which you have just referred encroaching upon the Panhandle Eastern's acreage?

A. Yes, sir, and it has made itself evident in the last two and three years.

Q. Has Panhandle Eastern abandoned any operated leases by reason of that? A. No, sir.

Q. Has it abandoned any other leases by reason of it?

A. No, sir, not up to the present time.

Q. When you state that Panhandle Eastern's acreage is favorably located for the production of gas, does that, or

does that not, mean that greater production per pound of drop in rock pressure will be obtained than on the average in the field?

A. Yes, I think it indicates that greater production per pound-drop will be produced from above-average acreage than average or below-average.

Q. Is that due to migration or due to the fact that the acreage had more gas under it to start out with?

A. I would say, due to the fact that it had more originally.

Q. Now, if you will look along toward the top of the map which indicates the north, you will observe two of your contour lines which are marked 900 feet. I notice that they [fol. 4130] do not join. If you had extended this map further to the north, would you have joined those two contour lines somewhere?

A. I think you will find on another exhibit that those lines are dashed up there as probably being located there, but not positively being located at that position.

Q. Can you give us the number of the exhibit to which you have just referred?

A. I think it is the 1941 rock pressure map.

Mr. Culton: We have no 1941 rock pressure map in Texas.

The Witness: No; but it does show the outline of the field, I think, Mr. Culton.

Mr. Culton: Mr. Smith, will you state just exactly what you are pointing out to counsel, and from what map you are pointing?

The Witness: On Exhibit 27 which shows the outline of the Texas Panhandle Field as well as the approximate outline of the Hugoton Field, north of the north line of Moore County, the lines outlining the field are dashed rather than solid, due to the fact that the exact location of the boundaries of the field are not known.

By Mr. Littman:

Q. Now, do these dashed lines on Exhibit 27 represent the 900-feet contour?

A. Approximately. However, this is not a contour map and merely attempts to show the approximate outline of the field.

[fol. 4131] Q. Now, I gather from your testimony, Mr. Smith, that there is considerable doubt as to where the Panhandle Field ends up at the north and where the Hugoton Field begins. Is that a correct statement?

A. There is considerable doubt as to whether the two fields join at all.

Q. And why is that a matter of doubt?

A. Because there has not been sufficient development up to date to prove whether it does join or does not join.

Q. You mean to say, there has not been sufficient drilling, when you speak of development?

A. Yes, sir.

Q. Before we leave Exhibit 21, I note you have a line running diagonally like that is designated "A" at one end and "A" at the other.

Mr. Culton: A^1.

By Mr. Littman:

Q. "A" and "A^1".

A. That indicates a location of a cross-section which appears in a later exhibit. However, the cross-section is generalized and does not intend to show exact conditions existing along this A-A^1 line.

Q. Well, we will get to that in just a minute. I believe that typical structure which you have just referred to appears in your next exhibit, which is numbered Exhibit No. [fol. 4132] 22 and we will come to that very shortly. That is why I wanted you to make it clear that your cross-section is supposed to represent this line, is it not, which you have referred to as A-A^1?

A. Roughly. However, I do say that the cross-section has been generalized and does not pretend to show exact conditions existing along that A-A^1 line.

Q. I notice that the A-A^1 line does not run through very much of your Panhandle Eastern acreage, does it?

A. No, it does not.

Q. Is our understanding correct, that it misses the bulk of Panhandle Eastern's acreage and actually goes through perhaps two or three leases, is that correct?

A. That is true. However, we did not prepare the cross-section to show conditions existing under Panhandle Eastern's acreage or conditions existing under any particular acreage, but merely to give an idea, in a general way, of

the conditions that exist in the Panhandle Field below the surface.

Q. Suppose we have a look at Exhibit 22, which is the "Panhandle Cross-Section" and perhaps we can then better discuss the situation from that.

Trial Examiner: May I ask at the outside, Mr. Smith, whether your chart marked for identification as Exhibit 22 is prepared on commercial print?

The Witness: No, sir, this is not commercial print. It [fol. 4133] was prepared in our drafting room, but was partially taken from a text book.

Mr. Culton: Give the Examiner the name of that textbook.

The Witness: "Geology of Natural Gas", which was edited and compiled by Henry A. Ley.

Mr. Culton: Was that also in Cotner and Crum's article in Geology of Natural Gas?

The Witness: An article in that Geology of Natural Gas book just referred to, written by Cotner and Crum, contained a cross-section similar to this one in the exhibit.

By Mr. Pittman:

Q. Now, you stated that this cross-section was taken, in part, from the source which you named and was prepared, in part, in your drafting room.

Would you mind stating for us which part was prepared in the drafting room and which part was prepared from the sources which you named?

A. The general print was copied almost exactly from the textbook. The coloring was put on to show generalized conditions existing in the Panhandle Field.

Q. Did you designate how these colors should be put on this map? A. Yes, sir.

Q. But you did not personally prepare the printed portions of this map?

[fol. 4134] A. No, it was prepared in our drafting room.

Q. But from the source that you named?

A. Yes, sir.

Q. Mrs. Peterson—was that the name?

A. No. It is taken from an article written by Cotner and Crum appearing in Henry A. Ley's book, "Geology of Natural Gas", published by the American Association of Petroleum Geologists.

Mr. Wheat: Do you know the date, approximately?

The Witness: I do not remember, exactly, the date. I have a copy of the book at the hotel and will be glad to bring it over and show it to you gentlemen if you like.

By Mr. Littman:

Q. Mr. Peterson did not have anything to do with this map?

A. No, sir. I assume you refer to Mr. Peterson with the Texoma Natural Gas Company?

Q. Yes.

. . . . . .

By Mr. Littman:

Q. Do you have before you Exhibit 22, "Panhandle Cross-Section"?

A. Yes, sir.

[fol. 4135] Q. Is that an actual cross-section?

A. No, sir.

Q. What does it represent?

A. It is a generalized cross-section representing typical conditions existing in the Amarillo Field in the Texas Panhandle.

Q. What is the horizontal scale of this cross-section?

A. I do not know.

. . . . . .

[fol. 4136] By Mr. Littman:

Q. Can you state, Mr. Smith, the point on this cross-section where the well, for instance, where this well is located that you have shown on this cross-section?

Trial Examiner: Isn't there some relationship between the structures shown in Exhibit 21 for identification and Exhibit 22 for identification?

The Witness: Yes, sir, that was brought out by a question by Mr. Littman.

Trial Examiner: If you follow through that relationship, wouldn't you give us some information of importance with reference to Exhibit 22 for identification?

The Witness: Exhibit 21 shows the location of the John Ray Dome in north central Potter County. The location of John Ray Dome is also shown on the cross-section on Exhibit 22.

By Mr. Littman:

Q. Pardon me; where is that shown?

A. At the upper left-hand corner of the map, or rather the cross-section.

Q. Where is this well that is shown on this typical cross-section located?

A. The approximate location of the well shown on the typical cross-section is where the line A-A' crosses the Moore-Hutchinson County line.

[fol. 4137] Q. Well, is that an actual well?

A. No, sir. There are wells which exist there.

Q. But the well shown on this cross-section is a hypothetical well?

A. That is true.

Q. You could not tell me, for instance, where the point on the cross-section which is located, let us say, two inches to the right of this hypothetical well is located on any map, could you?

A. Approximately.

Q. But not exactly?

A. No, sir.

Q. Can you give us the name of the wells which establish the various elevations shown in this so-called cross-section?

A. No, sir; I cannot definitely. However, there are numerous wells which exist along the line A-A' which might have been used in establishing this cross-section.

Q. You do not have any personal knowledge of that, do you?

A. No, sir. The principal reason we made an exhibit of this kind, Mr. Littman, is that I could have made a detailed cross-section using actual wells which exist in the Amarillo Field, but time was so short we did not have sufficient time to make an exhibit of that kind. Consequently;

[fol. 4138] we generalized a cross-section which was already available.

Q. Can you testify from your own personal knowledge that the situation which is shown to exist at the point where this hypothetical well is shown on this cross-section actually prevails as it is shown here?

A. I cannot tell you where it does actually prevail. However, there are probably dozens of wells in the Texas Panhandle where such a condition does exist.

Q. Do you mean to say there is in existence a well whose log will show exactly the situation which you have shown at the point indicated by the hypothetical well?

A. I believe there are.

Q. You cannot give us the name of any such well, can you?

A. No, sir.

Trial Examiner: May I ask about your Exhibit 21, whether 900-foot contour, with possible exceptions, represents the outer boundary of the productive area?

The Witness: Not necessarily.

Trial Examiner: Is there a relationship?

The Witness: Only in this way, that the 900-foot contour is getting rather low on the structure. However, you will notice in Exhibit 21 that wells appear outside the 900-foot contour in northwestern Moore County, and also appear outside the 900-foot contour in northwestern Hutchinson County.

[fol. 4139] Mr. Culton: Mr. Examiner, in view of the Examiner's question a while ago, I desire to present for his inspection the Cotner and Crum drawing from which this was taken, showing there is no horizontal scale shown.

The witness can testify that is the one from which he got the cross-section.

(Whereupon, a book was handed the witness.)

By Mr. Littman:

Q. Now, the drawing to which Mr. Culton has just referred does not seem to me to resemble very closely the drawing which is shown in Exhibit 22.

Mr. Culton: I would like to ask the geologist if he thinks it resembles it.

Mr. Littman: I was just going to ask him.

Mr. Culton: Ask your own geologist if it resembles it.

The Witness: It was taken directly from this cross-section printed in the article referred to.

Trial Examiner: Mr. Smith, your answer does not relate to anything preceding it in the record. You are now referring to Exhibit 22 for identification and the work to which Mr. Culton made reference and the statement you have just made relate to the cross-section which was previously discussed. Is that right?

The Witness: I mean by the article referred to, the book titled, "Geology of Natural Gas", edited by Henry A. [fol. 4140] Ley, published by the American Association of Petroleum Geologists at Tulsa, Oklahoma, in 1935, in which an article appears entitled, "Geology and Occurrence of Natural Gas in Amarillo District, Texas", by Victor Cotner and H. E. Crum, beginning on Page 385.

Mr. Culton: Where is the cross-section? Is it paged?

The Witness: The cross-section appears on the back of Page 387—it is actually Page 388.

Trial Examiner: Following up the question I asked a moment ago, you say there is gas production outside of the area defined by the 900-foot contour?

The Witness: Yes.

Trial Examiner: Referring now to Exhibit 21 for identification?

The Witness: Yes, sir.

Trial Examiner: Is it the general agreement or consensus among geologists and the practical gas men in the field as to the location of the 900-foot contour?

The Witness: At the time this map was made, Exhibit 21, that was the location of the 900-foot contour, as near as could be placed.

However, subsequent drilling may have revised the location of that 900-foot contour.

Trial Examiner: These contours are under constant revision, are they not?

[fol. 4141] The Witness: Yes, sir.

Trial Examiner: What would you say as to the situation now? Do the contours shown on your Exhibit 21 for identification represent the consensus among gas men in that area at the present time?

The Witness: In a general way.

Trial Examiner: What do you mean by that?

The Witness: I mean by that, that there has been no great revision of the general idea of this geologic structure in the past five or six years.

Trial Examiner: Has the exploration that has occurred in the last five or six years resulted in any marked extensions?

The Witness: Only to the northwest.

Trial Examiner: How extensive have those been?

The Witness: I believe that it has extended the field probably three to five miles.

Trial Examiner: That would involve a very large acreage, would it not?

The Witness: Quite a bit.

Trial Examiner: It would run into thousands of acres, would it not?

The Witness: Yes, sir.

Trial Examiner: And that process of exploration outside of proven gas fields is still continuing, is it not?

[fol. 4142] The Witness: Yes, sir.

Trial Examiner: Would you say that in any direction from the proven fields, the tests have been sufficient to liminate further extension of the present proven fields from the standpoint of production of gas?

The Witness: The field is fairly-well defined by production and dry holes at the present time. However, it might be extended to the northeast by small wells, to the northwest, but I do not believe it will be extended to the south any further than it is presently known.

Trial Examiner: How old is this field at the present time?

The Witness: Approximately 15 years.

Mr. Littman: You were speaking of the Texas Panhandle Field, were you not?

The Witness: Yes, sir.

Trial Examiner: Will you pardon the interruption, Mr. Littman?

Mr. Littman: I am glad to have you interrupt at any time to clear up any points of uncertainty.

By Mr. Littman:

Q. Mr. Smith, are the red blotches shown on this cross-section meant to indicate the precise location of gas?

A. No, sir.

Q. What do they indicate, if anything?

A. Typical locations of gas.

[fol. 4143] Q. I notice that one of those red colors goes into the Pre Cambrian and Granite on the left-hand side of this cross-section. Is there any gas to be found in the Granite?

A. Only in crevices.

Q. And that is what you meant by the red crayon?

A. Yes.

Q. You do not have any reference to any particular existing crevice at that point, do you?

A. No, sir.

Q. And that is true of your other colors, it is?

A. Yes, sir.

Q. You state at Page 9 of Exhibit 30, in the first paragraph that production from any of the horizons shown in Exhibit 22 has a direct effect on all other producing formations in the reservoir.

What do you mean by that statement, Mr. Smith?

A. I was trying to find the sentence to which you are referring.

Q. In the first paragraph on Page 9, the third sentence: "Necessarily, therefore, production from any of the horizons shown has a direct effect on all other producing formations in the reservoir."

Do you find that statement?

A. Yes, sir. I mean by that, that generally speaking, there is a connection between all producing formations, [fol. 4144] whether it be gas or oil which I have attempted to illustrate on Exhibit 22.

Q. Do you mean that the gas in this field is contained in a common reservoir?

A. Yes, sir.

Q. Now, this cross-section is not typical of the entire Panhandle Field, is it, Mr. Smith?

A. I would say it was.

Q. Isn't it typical only of the cross-section indicated by line A-A' in your Exhibit 21?

A. To a certain extent, that is true, but by the placing of this color on there, red for gas, green for oil and blue for water, I have attempted to show most of the conditions which exist in various parts of the field, in all parts of the field.

Q. But the structure such as you have shown in this cross-section is not the structure that you would encounter in other parts of the field?

A. No, you are right, there.

Q. Is oil being produced by this hypothetical well shown in this cross-section, Exhibit 22?

A. Yes, sir.

Q. Is this well typical of Panhandle Eastern's wells?

A. No, sir.

Q. Is my understanding correct that Panhandle East- [fol. 4145] ern's wells do not produce any oil, is that true?

A. That is true.

Q. Well, is your hypothetical well typical of the wells, generally, in the Panhandle Field?

A. Those which produce oil.

Q. Are there many of those in the Panhandle Field?

A. Yes.

Q. I am talking about the West Panhandle Field.

A. Yes, there are a great many.

Q. There are, but generally, they are located some distance from the Panhandle Eastern's acreage, are they not?

A. The closest wells of this type to Panhandle Eastern acreage are along the south line in the vicinity of Borger, Texas, in Hutchinson County, and northern Carson County.

Q. Now, the structures shown in this typical cross-section are not typical of Panhandle Eastern's acreage, are they?

A. Some Panhandle Eastern acreage occurs very close to a structure similar to this.

Q. However, the cross-section only pierces two or three of Panhandle Eastern's leases, is that not correct?

A. That is correct. However, as I stated before, this is not a detailed cross-section made from actual well logs, but is a generalized or typical cross-section, wherein we intend to show typical conditions existing throughout the [fol. 4146] Amarillo, Texas, Field in the Texas Panhandle.

Trial Examiner: Mr. Smith, you must have some schematic key for the showing of gas, oil and water in the 300 feet immediately above sea level. Would you explain that, referring again to Exhibit 22 for identification?

The Witness: That is the general relationship of oil, gas and water when they occur together, the water being found at the lowest elevation and oil immediately above that and gas above the oil.

Trial Examiner: Do the parallel horizontal lines disregard the structure?

The Witness: Yes, sir, generally.

Trial Examiner: They are meant, then, to indicate the sequence, the lowest being water, the next being oil and the final gas?

The Witness: Yes, sir, generally speaking, in Panhandle Field, water is found very close to sea level elevation, within 100 or 200 feet.

By Mr. Littman:

Q. Well, did you use this cross-section, Mr. Smith, for any purpose in connection with the estimate of gas reserves which you have submitted in Exhibit 30?

A. No, the chief purpose of the cross-section was to enlighten the Federal Power Commission as to the existing conditions in the Panhandle Field.

[fol. 4147] Q. Will you please turn to Page 11 of your testimony in Exhibit 30? In the first paragraph, the first line, you state that the initial pressure of the Panhandle gas field was approximately 430 pounds per square inch at the well head. A. Yes, sir.

Q. Corresponding to a pressure in the producing horizon of approximately 471 pounds per square inch, is that correct? A. Yes, sir.

Q. In that statement, do you refer to the entire Panhandle Field or to the West Panhandle Field?

A. The West Panhandle Field.

Q. Would you, for purposes of this record, tell us the line of demarcation between the West and the East Panhandle Field?

A. Yes, sir. I believe I have an exhibit here which shows that.

On Exhibit 31, the line of demarcation between the East and the West Panhandle Field occurs very close to the right hand edge of the map in central Gray County.

Q. Now, you referred to the initial pressure as being "approximately 430 pounds per square inch at the well head."

What degree of tolerance do you allow by using the term "approximately"? I take it that is not an exact figure.

[fol. 4148] A. That is true. I would say that is the average. However, some initial well head pressures were as high as 440 pounds, others were as low as 420 to 418 pounds.

Q. How accurate would you say this 430-pound figure is, as an average?

A. I believe that is a good average.

Q. And exact calculation, within 100 pounds, would you say, within 5 pounds, or what?

A. I would say it was within one pound of the average.

Q. Did you make this calculation of the average rock pressure? A. No.

Q. Where did you secure the figure?

A. I secured the figure by having studied well logs and examined Texas Railroad Commission Reports durring the past five years.

Q. Did you add the initial rock pressures for a number of wells in the field and then divide by the number of wells? A. No, sir.

Q. Would you give us an idea of how you arrived at it?

A. By observation that the earliest wells that were drilled averaged approximately 430 pounds. I mean by that, wells that were drilled prior to 1930. The well head pressure averaged about 430 pounds.

Q. When was the discovery well drilled in the Panhandle Field, do you recall?

[fol. 4149] A. The discovery well was drilled in 1918 in northern Potter County.

Q. Well, Mr. Smith, I am still not clear as to the precise method whereby you arrive at this figure of 430 pounds per square inch which you have stated is a precise figure with a tolerance of not more than one pound one way or the other.

Is there anything that you could do to clear me up on that? In other words, you say it was not calculated by you and I am still at a loss to know how you arrived at it?

A. Well, let's assume, for instance, that prior to 1930 there [was], say, 100 wells producing gas similar to those connected to Panhandle Eastern Company pipe line.

The majority of these wells were drilled prior to the great withdrawals that the field is subjected to now. Merely by observing the initial shut-in well head pressure, I noted that they ranged from points equally on either side of 430 pounds, and, consequently, selected 430 pounds as the average.

Q. Well, do you have such a list of wells that were producing prior to 1930?

A. I did not say producing. I say, were drilled prior.

Q. Were drilled prior to 1930, I am sorry.

A. I could obtain a list of that kind. I have records which would supply a list of that kind in Kansas City.

Q. You did have such a list when you calculated the [fol. 4150] 430 pounds, did you not? A. Yes, sir.

Q. How many wells were on that list?

A. I do not remember.

Q. Can you give us a general idea?

A. There may have been as many as 200.

Q. But you did not total the initial pressures of those wells and divide by the number of wells, did you, to get a calculated figure?

A. I have arrived at calculations of that. I have had the idea that 430 pounds was the initial pressure for so long, I do not know how long.

* * * * * * * *

[fol. 4151] By Mr. Littman:

Q. Did you select this figure 430 pounds because it is accepted in the industry, or did you calculate it yourself? Let's get at it that way.

A. I selected it partially because it is accepted in the industry, but also partially because of the knowledge I have myself.

Q. You have Exhibit 23, the rock pressure map of 1932?

A. Yes.

Q. To what use did you put this map in arriving at your estimate of gas reserves of Panhandle Eastern in the Panhandle Field?

A. This is one of a series of rock pressure maps which tend to show the rock pressure conditions in the Texas Panhandle Field since the early days of the field.

Q. You say, it tends to show the rock pressure. What do you mean by that? Doesn't it show it?

[fol. 4152] A. Which shows the rock pressures.

Q. Did you prepare this map? A. No, sir.

Q. Who did?

A. It was copied from a map we have in our files, as stated in the testimony.

Q. By a map in your files, you mean the files of Panhandle Eastern Pipe Line Company? A. Yes, sir.

Q. You do not know whose handiwork it is? A. No, sir.

Q. Well, I take it, then, that you cannot personally

vouch for the accuracy of the information shown on this map. A. That is true.

Q. Have you ever used this map for the purpose of obtaining a 1932 weighted average pressure of the Panhandle Field? A. No, sir.

Mr. Littman: Before leaving this Exhibit No. 23, if your Honor please, I would like to, as we go along, note an objection to the Exhibit 23 and also to the previous Exhibit No. 22, the Panhandle Cross-Section.

Trial Examiner: Do you wish to develop your objection fully later, or do you wish to do so now?

Mr. Littman: Perhaps I can state very briefly the ground of my objection.

[fol. 4153] With respect to Exhibit 22, the Panhandle cross-section, the witness testified that he did not utilize this cross-section in arriving at his estimate of gas reserves, that the cross-section was not a true cross-section, but was purely a typical cross-section; that even the well shown thereon was a hypothetical well, and that the coloring on the map did not indicate the exact locations of gas, but was shown thereon purely for purposes of indicating where gas might or might not be.

The testimony further shows that oil was being produced by this so-called typical well, and the testimony is clear that Panhandle Eastern's wells do not produce any oil.

The testimony further shows that the cross-section is not typical, that is, the structural portions of the cross-section are not typical of Panhandle Eastern's acreage nor of the entire field, but it is typical only of a line designated as A and A' which pierces only one or two or three leaseholds of Panhandle Eastern.

In short, the cross-section is merely a very pretty picture that might be used in a class room; and I am not at all challenging the sincerity or the earnestness with which this witness is presenting his testimony.

I merely am stating that it has no probative value in this proceeding and would serve no useful purpose, other than to encumber the record.

Now, with respect to the next exhibit, namely, Exhibit [fol. 4154] No. 23, the rock pressure map—1932, this map was not used by the witness in arriving at his estimate of reserves.

It is of unknown origin. This witness does not know who did the job and, so far as we know, no one else knows who gave birth to it.

Mr. Culton: If you do not care about 1932 being in, we have no objection to 1932 pressure map being stricken. It was put in there for just such information as it would give the Commission.

The Witness: There is one thing that has been overlooked, that I want to bring to your attention, that is, all of these rock pressure maps are of both the Hugoton Field and the Panhandle Field.

Mr. Culton: We have no objection to Exhibit 23 for 1932 being stricken so far as the Panhandle is concerned.

We thought the Commission might be interested in seeing the picture that existed at that time.

Mr. Littman: Those, briefly stated, are the grounds for the objection, if your Honor please.

Trial Examiner: Does the statement of the witness that this also includes the Hugoton Field affect the nature of your objection at this time?

Mr. Littman: It does not, if your Honor please, for the reason that the author of this exhibit is unknown and this witness cannot vouch for the accuracy of the information [fol. 4155] contained thereon.

Moreover, it purports to show a situation which prevailed something like nine years ago.

The Witness: Mr. Littman, when I said the author was unknown, that applied only to the Texas portion of it.

Mr. Littman: I am sorry.

Mr. Culton: That is all I had reference to also. There will be plenty of proof as to the Hugoton Field.

By Mr. Littman:

Q. Do you happen to know who the author is of the portion of the map which discloses the Hugoton Field?

A. Yes, sir, it was prepared under my supervision.

Q. That part was? A. Yes.

Q. I see. But you are not testifying here with respect to the Hugoton Field, are you? A. No, sir.

Q. Do you know whether Mr. Bartle made any use of this map in arriving at his estimate?

A. I am quite sure he did.

Q. Well, what is the basis of your information with respect to the rock pressures in 1932 in the Hugoton Field?

A. The rock pressure map of the Hugoton Field which appears on Exhibit 23 was prepared from actual tests made on wells in the Hugoton Field.

[fol. 4156] Q. Was it prepared by you.

A. Under my direction.

Q. Now, you refer to wells. Where did you secure the list of wells that you used for this purpose?

A. From records which we have on individual wells in the Panhandle Eastern offices in Kansas City.

Q. Are those the wells of Panhandle Eastern Pipe Line Company, or are they the wells in the entire field?

A. The entire field.

Q. And those are on file in the offices of the company?

A. Yes, sir. I have a great deal of that data in my work sheets.

Mr. Culton: Could you obtain that information as to Panhandle in 1932?

The Witness: Yes, sir.

Mr. Culton: Did you obtain it?

The Witness: I did not. A lot of our work was done as it was done due to the time element which we had to combat, and we could probably have made our exhibits much more elaborate and much more detailed, had we had more time for preparing them.

By Mr. Littman:

Q. And you would have done so?

A. Yes, sir, gladly.

. . . . . .

[fol. 4158] By Mr. Littman:

Q. Who prepared this map identified as Exhibit No. 24?

A. It was prepared under my direction from a Railroad Commission map of Texas.

Q. What part of it did you prepare and what part did the Railroad Commission of Texas prepare?

A. It is merely a copy of the Railroad Commission's map.

Q. The same situation is true with respect to Exhibit 25, rock pressure map of 1939, is it not? A. Yes, sir.

Q. And the same situation is true with respect to Exhibit 26, which is the rock pressure map for 1940?

A. That is true in all cases with Texas but not Hugoton with the exception of 1941, which was prepared, as far as we could from data that was available at that time from actual tests made by Panhandle Eastern Pipe Line Company.

Q. The 1941 rock pressure map was prepared by you?

A. Yes, sir.

Q. And all of the Hugoton data was prepared by you?

A. That is true.

Q. But so far as the 1938, 1939 and 1940 Panhandle Field rock pressures, those are not yours?

[fol. 4159] A. Those are not mine.

Q. Did you use Exhibits 24, 25 and 26, which are the rock pressure maps for 1938, 1939 and 1940, for the preparation of your estimate in this proceeding?

A. Not directly. As I stated before, they were a series of maps which were prepared to show the isobaric pattern in the Texas Panhandle Field principally because it is a progressive picture and seemed to us to be very enlightening.

Q. Well, you said you did not use these rock pressures directly. What do you mean by that? Did you use these rock pressures indirectly in estimating your reserves?

A. The data on those maps were considered, yes.

Q. By you? A. Yes, sir.

Q. How did they enter into your consideration in estimating gas reserves?

A. I have studied the decline in rock pressure for a number of years and they influenced the method that I used in arriving at the reserve figures in my testimony.

I have studied a great many other things which also entered into the method that I used.

As a matter of fact, the more that you can learn about any field, the more accurately you can estimate the reserves of that field, whether it be rock pressure, overflow, samples [fol. 4160] or what not. They all have their influence in the final judgment of the reserves estimated to be contained in the gas field.

Q. You have reference now, do you, to background knowledge rather than a specific application?

A. That is true. I think that background knowledge is important.

Q. In other words, if I correctly understand your testimony, you did not use these rock pressure maps for 1938, 1939 and 1940, to-wit, Exhibits 24, 25 and 26, respectively, for purposes of calculating the reserves which you estimated, but as a more or less general background knowledge, is that correct? A. That is true.

Q. Now, did you use the rock pressures shown in Exhibit 27 for the year 1941 for purposes of making a calculation of reserves, or did you not?

A. No, it was not used either, directly.

Q. But it was also background knowledge similar to that which you stated for the previous three years?

A. Yes, we are still talking about the Amarillo Field, not the Hugoton Field.

Q. Yes. You did not make any estimate for the Hugoton Field. A. That is true.

[fol. 4161] Q. For the purposes of this proceeding?

A. That is true.

Q. Could you have used the data shown on rock pressure maps, Exhibits 24, 25 and 26 and 27 for purposes of estimating the reserves of the Texas Panhandle Field by the rock pressure decline method? Would they be suitable for that purpose?

A. I do not think so.

Q. Why, Mr. Smith?

A. Because I have experimented with that method and I found that it gave a figure which did not appear to be reasonable.

Q. You mean by the use of the isobars shown on these exhibits which I have just named? A. Yes, sir.

Q. Will you please give me the intervals between the isobars on each of these maps?

A. The isobaric intervals on these maps is 50 pounds.

Q. Do you think that may explain why the information did not prove to be accurate, the fact that the intervals were that far apart? A. No, I do not.

Q. How do you account for the so-called unreasonable figure that you secured by using the rock pressure decline method based on the information contained in these rock pressure maps?

[fol. 4162] A. The chief reason is you cannot arrive at an average present rock pressure.

Q. Can you tell us why you cannot do that?

A. Because it must be a weighted figure, and it is almost impossible to know how to weight it.

Q. Why? What is the reason for that?

A. A weighted rock pressure figure is weighted with respect to acreage. That is, the rock pressure existing in each of these bands is multiplied by the number of acres existing in those bands.

Q. Now, you are referring to the bands on your maps, Exhibits 24, 25, 26 and 27? A. That is true.

Q. Pardon the interruption.

A. Even though you have a great many shut-in well head pressures within those bands, it is still impossible to know just how many acres each one of those wells influence.

For that reason, it is impossible to arrive at an exact figure of the number of acres to use in weighting.

* * * * * * * *

[fol. 4165] C. H. Hinton a witness, having been previously sworn, resumed the stand and testified further as follows:

By Mr. Goodman:

Q. Mr. Hinton, you have stated that planning for a period ahead is a necessary condition in the natural gas business, is that right? A. That is correct.

Q. And you are the man who does a certain element of planning about production, is that so?

A. That is correct.

Q. Is that part of your regular routine? A. It is.

Q. And referring to your regular routine, just how do you go about developing your plans? I mean, give me the routine of it.

A. All right. The first thing is to determine what amount of gas is required for the main line peak day load. The next thing is to determine just what the field condi-
[fol. 4166] tions are. That is—

Q. (Interposing) Let's stop here at the first thing, Mr. Hinton. The determination of the main line peak load is something furnished to you by some company official, is that right?

A. Mr. Morton usually furnishes that information.

Q. You say he usually furnishes you that information?

A. Yes.

Q. And he furnishes that to you not as a matter of Morton personally, but as a part of an established routine, isn't that so? A. That is correct, yes.

. . . . . .

Mr. Morton usually takes the present load and then what new contracts are added to the present load, are added thereto and that is furnished in September or the latter part of August for the start of the planning of the next year's budget.

Q. So that you begin with a regular routine which consists of adding the contract requirements for the ensuing year to the existing contract requirements, and that is furnished to you by Mr. Morton and is a report made of that to the officials of the concern?

[fol. 4167] A. Yes, sir.

. . . . . .

Now, the sales are then converted over to the production pressure base, the main line capacity being calculated on 30 inches mercury saturated is about 14.73 pounds and our production pressure base is 16.4 pounds.

Then, we add to the sales the line loss that has been determined through the several years operation and the fuel required to operate the compressor stations on the main line, and that is what we term as the Liberal input, the requirement which is the sales plus line loss plus fuel requirement.

Q. Yes.

Now, you then prepare your estimates concerning the cost of producing the gas necessary to supply this demand, do you not? A. That is true.

Q. Mr. Morton not only gives you the peak demand, but he gives you the volume?

A. That is right, annual.

Q. The annual volume? A. Yes.

. . . . . .

[fol. 4169] Q. Do you not, in conjunction with the management then, maintain a certain plan or sketch of the probable future operations? A. Yes, we do.

. . . . . .

Q. It has some name, you would have to have some way of identifying it.

A. It is mostly verbal, Mr. Goodman. That is, in a natural gas company, there are many days that the people concerned about the development will get together and talk the matter over, and if it looks as though some information is lacking that should be worked up, why, then, it is worked up.

I do not believe it has any definite name.

Q. I see. So that, as a matter of fact, you cannot show that there is committed to writing any definite plan for the expansion of output beyond the requirements of the next ensuing year, is that right?

A. Up to this year.

. . . . . .

[fol. 4170] Q. Well, but I am interested, Mr. Hinton, solely in your regular routines, wholly apart from any rate case.

So far as your regular routines go, you do not have committed to paper any plan of expansion of output beyond the year 1942?

. . . . . .

A. As far as I am concerned, our future is usually in the form of a huddle, you might say. We all get together and talk about what we may expect in the next two or three years.

Q. Has that get-together taken place during this year?

A. Yes, it has taken place every year, and many times a year probably.

. . . . . .

[fol. 4171] Q. Now, when you speak of your load factor, you have in mind the relationship of your average daily delivery to the peak day, is that right?

A. Yes, that is right.

Q. From what you have said, am I correct, then, in understanding that your future forecasts, as shown in Exhibit 43 and testified to in Exhibit 42, are matters expressly prepared for this case and are not part of the company routine?

A. I believe that would be right, Mr. Goodman. I think that has been one thing that this case has caused us to do that we should not have done heretofore, and that is to make just this kind of study, and the study is just the same for this case as it would be for our future picture, and this will probably be followed very closely all the way through.

Q. Yes, but that is a matter for the management, isn't that so?

A. Well, the management has looked over this plan and they picked a lot of bugs out of it. It has been changed around. This is not the original plan we started off with. We did not make just one study on this and say, "That is [fol. 4172] that." We spent hours on this planning, how we could develop more efficiently, and get the gas into Liberal at a lower cost.

Q. And by "we", to what men besides yourself do you refer?

A. Mr. Pope, Mr. Neuner, Mr. Burnham, and Mr. Creveling and Mr. Morton and Mr. Smith, the geologist.

Q. For the year 1942, you have made a separate estimate of the production requirements and costs wholly apart from Exhibits 42 and 43 here, have you not?

A. Yes, sir.

Q. And what became of that estimate?

A. At this time, it is probably being whipped into shape to present at a budget meeting.

. . . . . .

[fol. 4173] Q. In connection with your studies, Exhibits 42 and 43, here, have you developed unit costs paralleling those studies?

A. Not quite paralleling, because we have found, in practically every case, that our present budget figure exceeds the figure which is used in this study here.

[fol. 4174] That is due to an increase in material costs. It is due to increasing labor costs, and I believe that, in every case that I can think of, with one exception, that those costs have been increased.

That one exception is the well which we are drilling in Texas County, Oklahoma, at this time. Due to the fact that it is very hard to get pipe at this time, we are leaving the line out of that well, and the cost of that well has been reduced by that amount.

. . . . . .

[fol. 4175] Q. On the first paragraph of Page 4.

"The unit costs for producing and gathering the gas will be substantially higher than those heretofore existing."

That is concluding the first paragraph on Page 4.

A. That is a true statement.

Q. Well, now, I did not ask you that. I asked you if you have produced those unit costs.

A. Showing an increased cost per M. c. f?

Q. That is right.

A. This does not refer to any from one month to the next. It is an over all picture—

Q. (Interposing) I did not ask you that question. You had better read the question.

. . . . . .

[fol. 4176] The Witness: As the pressure declines in the fields, it takes more horsepower to handle the same amount of gas. It requires more wells to get the same amount of gas.

Therefore, there is a decided increase in the cost per M.c.f., due to the fact that there are more extensive operations and more equipment required, and that is what this

has in mind here, when I say that the gathering of gas will be substantially higher than those heretofore existing.

* * * * * * * *

[fol. 4187] Rufus M. Smith a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued).

By Mr. Littman:

Q. Mr. Smith, at the close of yesterday's session, we were discussing your rock pressure maps for the years 1938, 1939, 1940 and 1941, Exhibits 24, 25, 26 and 27 for Identification.

[fol. 4188] I believe you testified that these maps were not suitable for the purpose of estimating the reserves of the Texas Panhandle Field by the rock pressure decline method, is that correct?

A. That is true.

Q. However, I believe you stated that you did make an estimate of the reserves in the Texas Panhandle Field by that method?

Mr. Culton: He did not make such a statement.

The Witness: I said I attempted to make that.

By Mr. Littman:

Q. Well, what do you mean by "attempted"?

There seems to be some difficulty here in the definition of terms.

A. In order to make a reserve study of a field by the production per pound of drop method, it is necessary to have an equilibrium pressure at the time the study is made, to compare with the initial pressure.

In my opinion, it is impossible and impractical from a practical standpoint, to obtain an equilibrium pressure of the Panhandle Field.

The figures that I used are those obtained from Railroad Commission reports, which are inaccurate by reason of the method that they used in obtaining them.

Q. Can you give us the reference to the data of the [fol. 4189] Texas Railroad Commission which you used that you just referred to as being inaccurate?

A. It is found in the annual report on the Panhandle oil and gas field of July, 1940, issued by the Railroad Commission of Texas.

Q. Now, will you state what you consider inaccurate about the method used by that commission, and stated in that report with respect to ascertaining the present—you used the term—

A. (Interposing) Equilibrium.

Q. (Continuing)—equilibrium rock pressure. Is that another term for weighted rock pressure?

A. That is true, in a way. By that I mean, they attempt to arrive at approximately the equilibrium pressure by calculating a weighted average rock pressure.

Q. I see.

Now, will you tell us what you deem to be inaccurate about the method used?

A. The method used—I do not believe it so states in here—

Q. (Interposing) "In here,"—by "in here", you are referring to the annual report?

A. In this 1940 Railroad Commission report on the Panhandle oil and gas field; but by investigation I have found that their average weighted rock pressures are ob- [fol. 4190] tained by referring to the various pressure bands on their annual rock pressure map, multiplying the area of each of the bands times the average pressure existing within those bands, and dividing by the total area of the several areas used.

Q. Now, what do you consider inaccurate about that, Mr. Smith?

A. It is a rough method. It is very crude, I might say.

Q. What is crude about it, and what is rough about it?

A. Well, the pressures of the wells existing in those bands vary from one side of the band to the other within a range of 50 pounds, so, obviously, if you select an average pressure it will be half way between the two, and that is assuming a great deal.

Q. Well, the 50 pound isobaric intervals to which you have just referred is the same interval that you used in

your rock pressure maps, Exhibits 24, 25, 26 and 27, is it not? A. That is true.

Q. And, in your judgment as a geologist, that kind of an interval cannot be relied upon for purposes of making an accurate determination of the weighted average rock pressure in a field?

A. Yes, that is true.

Q. What would you say about the use of a 10-pound isobaric interval?

A. That would come closer to solving it, but still would [fol. 4191] not solve the problem.

Q. Would it come very close to solving the problem?

A. No, I do not think it would be sufficiently close to get a reasonable figure.

Q. Well, what would, in your judgment, come close to getting a reasonable figure?

A. I do not believe that any of the methods that have been used are very accurate, including my own.

Q. Well, you are stating, I take it, that the science of geology is not an exact science?

A. I believe we made that statement yesterday, Mr. Littman.

Q. Off the record, however.

Have you ever heard of isobaric intervals being used that were less than 10 pounds?

A. I do not believe so.

Q. In other words, 10 pounds is just about as close an interval as is ever used by geologists, generally?

A. Unless you would use a very large-scale map, it would be impractical to use a smaller than a 10-pound interval.

Q. Then, I gather from your testimony, Mr. Smith, that, in your opinion, no reasonable estimate can be made under existing methods of the weighted average rock-pressures in the Panhandle Field of Texas?

A. I would like to answer that question this way:

[fol. 4192] That, in my opinion, the only way to find the correct equilibrium pressure would be an impractical project, that of shutting in the entire field, all the wells of the field, for a great length of time, until all wells had approximately the same well head pressure; then, you would have the equilibrium pressure of the field.

Q. How long a period would all these wells have to be shut in, in order to get such a reading?

A. I say it is impractical. It might take five or ten years to stabilize throughout the entire field.

Q. Well, the effect of doing what you suggest as impractical and theoretical, to-wit, shutting in the wells for a number of years, would all have the effect of giving a higher over-all rock pressure reading, would it not, than readings that would be secured by, let us say, a three-day shut in?

A. I do not know whether it would be higher than the weighted pressure or lower than the weighted pressure. It would be different from the calculated weighted pressure.

Q. Well, how long are wells ordinarily shut in before rock pressure readings are taken, generally?

A. Seventy-two hours.

Q. And when a reading is taken, at the end of 24 hours, let us say, it is less than it is at 72, is that right?

A. That is true.

Q. And a reading taken at 48 hours is higher than the [fol. 4193] one taken at 24, but less than the one at 72, is that right?

A. That is true.

Q. So in all probability, if you had the well shut in longer than 72 hours, you would still have a higher rock pressure reading, wouldn't you?

A. Except for one thing. On one side of the field, the pressure is very low. On the other side of the field, it is much higher. If those

Q. (Interposing) What field?

A. On the west sweet field, or rather the west field, so consequently, if it be stabilized, the one would raise and the other would lower, in order too reach a common pressure throughout the field, and the equilibrium pressure would be some place between the maximum and the minimum.

Q. Well, your maps which show the rock pressures for the years 1938, 1939, 1940 and 1941, namely, Exhibits 24, 25, 26 and 27, respectively, are maps which you do not consider accurate for the purposes of determining any weighted average rock pressure?

A. They are merely the best information available, but not sufficiently accurate to determine an average weighted rock pressure.

Q. Well, you then did not use the rock pressure decline methods? A. No, sir.

[fol. 4194] Q. But you did speak yesterday about having tried it and having secured what you called a "not reasonable figure."

What figure did you secure that you considered to be unreasonable?

A. I do not remember just offhand exactly what the figure was.

Q. Was it an estimate of the original gas content per acre?

A. I have attempted to use that method several times but, from the annual Texas Railroad Commission reports on the Panhandle Field, I find that one year there is one production per pound drop in rock pressure, the next year an entirely different production per pound drop in rock pressure.

There is no consistency in the production per pound drop as stated in their reports.

Q. And that result was predicated upon a 50-pound isobaric interval?

A. That is true.

Q. And, in your opinion, it cannot be used for purposes of determining gas reserves?

A. Accurately.

Q. Accurately.

Now, to what do you attribute this so-called incongruous result of having a decelerating rate of production per pound of rock pressure decline, Mr. Smith, to the inaccura-[fol. 4195] cies that result from the use and application of the Texas Railroad Commission's data, or what?

A. That, together with some other factors.

Q. Will you name the other factors, please?

A. Some of the other factors are variations in the character of the reservoir, the fact that the gas is being withdrawn from Dolomitic beds, from pure Limestone

beds, from Granite Wash formations, as well as from crevices in Granite Wash, as shown on the cross-section; the fact there is oil production there; the fact that water is encroaching in some portions of the field; the fact that the field is not being withdrawn equally by all producers.

There are a number of other factors. I do not recall any more, right now.

Well, did you use the so-called porosity method of estimating the reserves in the Panhandle Field?

A. Yes, sir.

Q. That method also has some other names, doesn't it, such as volumetric method?

A. Volumetric.

Q. Let us have all the of the synonyms, so we will understand each other in this cross-examination.

A. Porosity, thickness of pay method, sand thickness porosity method, I believe it is also called.

Q. Well, without going into the details of that method [fol. 4196] at this time, you must, in order to make a determination of the reserves in a gas field by the porosity method, also have the weighted average pressure in the field, don't you?

Mr. Culton: You say, the weighted average pressure of the field?

Mr. Littman: Of the gas field, yes, sir.

The Witness: No, only the weighted average pressure of the area to be considered.

By Mr. Littman:

Q. What is the difference? Suppose I wanted to ascertain the reserves in a whole gas field. Wouldn't I have to have the weighted average pressure of the entire field under your method?

A. That is true.

Q. And I would have to have the same weighted average pressure under the rock pressure decline method, would I not? A. Yes.

Q. Inasmuch as you say that these pressures cannot accurately be determined in any event—

A. (Interposing) I beg your pardon. You do not have to have the present weighted average pressure under the method I used.

Q. What do you have to have?

A. You have to have the initial pressure only.

Q. You can determine it also by having the present [fol. 4197] weighted pressure, can't you?

A. That is not the method I used, however.

Q. You used the initial pressure?

A. I used the initial pressure only.

Q. Weighted initial pressure?

A. No.

Q. In order to make it accurate, you should have a weighted initial pressure, should you not?

A. Not necessarily the weighted average. The initial pressure should be constant throughout the field without any variations whatsoever.

Q. It should be, but it isn't?

A. That is true, it was not.

Q. No field ever was, was it?

A. None that I have had any contact with.

Q. Then, you do have to have a pressure, either initial or present, in order to compute by any method, isn't that true?

A. That is true, but it is much easier to obtain the initial pressure, whether you call it weighted average or merely initial pressure, than it is to obtain the present weighted average.

Q. I believe you stated yesterday that you had a list of wells from which you made a determination of the original pressures in the field, did you not?

[fol. 4198] A. Yes.

Q. And you said there was considerable variation, did you not?

A. I said there was a variation of possibly five to ten pounds, either way, from the 430 pounds. However, in the present pressure, there is much greater variance than five or ten pounds.

As a matter of fact, there is probably 250 pounds variations between the present pressures.

Q. Are you now speaking of the west Texas Field, or the entire field?

Mr. Culton: You mean West Panhandle Field.

By Mr. Littman:

Q. West Panhandle Field.

A. West Panhandle Field.

Q. Well, you did not, in any event, make a weighted average initial rock pressure determination, did you?

A. You might call it that, even though it might have been done mentally, it was an average.

Q. Well, you are talking about getting accurate. What would you do if you wanted to get an accurate original weighted average rock pressure? How would you go about it?

A. Since I was not there at the time, and was unable to take any of the initial pressures or see them taken with dead weight gauges or spring gauges, I would attempt to [fol. 4199] get articles that had been written on it by men who were there at the time.

I would value their judgment. I would get whatever other statistics were available, including logs of wells which were drilled at that time which contained the initial rock pressure, and from those data, to the best of my ability, determine the initial rock pressure of that field.

Q. You skipped pretty fast over the last part of that. You said from those data you would get it. What would you do with those data?

A. I would take the rock pressure reports for those data, add them up, divide by the number of tests and determine the initial average rock pressure.

. . . . . .

Q. Wouldn't you weight those pressures as against the territory or acres?

A. It would not be necessary, if there had been no gas withdrawn.

Q. Even though there was a variation in initial rock pressures?

A. Absolutely. Those variations would probably be due principally to the inaccuracy of the apparatus used in getting the test.

[fol. 4200] Q. These readings that established the initial rock pressure of the field were taken over a period of years, weren't they?

A. A short period of years.

Q. How many years?

A. Possibly three or four.

Q. And gas had been withdrawn from time to time?

A. In very small quantities up to that time.

Q. So that the rock pressure reading, obviously, on each new well that was drilled did not reflect the virgin pressure of the entire field, did it, other than perhaps the first one, or is that not correct?

A. I do not think the amount of gas that had been withdrawn from the field in those first three or four years, considering the fact that this is such a large reservoir, would make even one pound difference in the rock pressure.

Q. We will come back to your method a little later. I had not intended to discuss it at this point, but the fact is that you did have to use an initial rock pressure?

A. That is right.

Q. As one of the elements in calculating the reserves in the Panhandle Field?

A. That is true.

Q. Now, do you have Exhibit No. 27 before you, which is the rock pressure map for 1941?

[fol. 4201] A. I believe the exhibits are on the floor there that I used yesterday, Mr. Littman.

(The document was handed the witness.)

Mr. Culton: Which exhibit was that you mentioned?

Mr. Littman: Exhibit 27.

By Mr. Littman:

Q. Now, you show certain rock pressures in the Panhandle Field, do you not, on that map?

A. Yes, sir.

Q. Do you show the pressures for the entire portion of the Panhandle Field, including the portions in which Panhandle Eastern's acreage is located?

A. This 1941 map is incomplete, as far as the whole Panhandle Field is concerned. At the time it was made, we had only tests on the wells connected to Panhandle Eastern Pipe Line Company.

Consequently, we put as much information on here as was available at the time.

Q. In other words, the map is incomplete in that it fails to show the rock pressures on a substantial part of Panhandle Eastern's acreage, is that correct?

A. Yes, that is correct.

Q. What is the porosity of the pay sand under the acreage controlled by Panhandle Eastern?

A. There is a great variation in those pay sands you [fol. 4202] have under Panhandle Eastern's acreage, as well as under the entire field.

Q. What is the average pay thickness under Panhandle Eastern's acreage?

A. The average pay thickness is between 70 and 80 feet.

Q. And what is the average over the field, over the entire West Panhandle Field? A. Seventy feet.

Q. In other words, Panhandle Eastern's acreage, in your opinion, has a thicker pay sand, does it not?

A. Slightly, on the average.

Q. Now, that is the over-all average, that you have given for the Panhandle Eastern acreage, is it not?

A. I gave two figures, Mr. Littman, one of 70 feet and one slightly over 70 feet, which I indicated was my estimate of the thickness of pay sand in the Panhandle Eastern acreage.

Q. I believe you said from 70 to 80, is that right?

A. Yes, I did.

Q. You have, in your Exhibit 30, divided Panhandle Eastern's acreage into Class 1 and Class 2, have you not?

A. Yes, sir.

Q. By the way, when I speak of Panhandle Eastern's acreage, I am going to, at all times, refer to the acreage which Panhandle Eastern has under lease, as well as that which it controls by gas purchase contracts.

[fol. 4203] A. I assumed that.

Q. That is, unless otherwise stated.

Now, what is the average pay thickness under the Class 1 acreage owned and controlled by Panhandle Eastern?

A. I would say between 70 and 80 feet.

Q. And what is the average of the Class 2?

A. I do not know exactly. It would be something somewhat less than 70 feet.

Q. Can you tell us, approximately, how much less?

A. I can guess at it.

Q. I want your best judgment, however. If it is just merely a guess, I do not think it would help the record any.

A. I would say, approximately 45 feet, in my opinion.

Q. Now, how did you arrive at this 70 foot figure and this 45 foot figure?

A. I arrived at the 70, slightly in excess of this 70 foot figure, by using all the logs of the wells of Panhandle Eastern Pipe Line Company which contained sufficient data to determine the pay thickness, added those thicknesses and divided by the number of wells, the answer being over 70 feet.

Q. How many wells did you use in making this calculation, and state whether or not a list of these wells is shown in your Exhibit 30?

A. No, a list is not shown in Exhibit 30.

Q. Can you state how many wells you used?

[fol. 4204] A. I believe there was right about 40 wells that we used, that had sufficient data to accurately determine the pay thickness.

* * * * * * * *

Q. I believe you stated that you used 40 wells for the purpose of determining the average pay thickness in the Panhandle Eastern acreage in the Panhandle Field?

A. Approximately. There may have been more than that, but I believe it was about 40.

Q. And you are going to furnish us with the list?

A. Yes, sir.

Q. You will give us the farm and well number, the county, location and the pay thickness and also any other identifying features that you can supply, will you not?

A. Yes, sir.

Q. Now, were those all Panhandle Eastern's own wells [fol. 4205] or were those 40-odd wells the wells of others?

A. Some of them were gas purchase wells.

Q. But all of them are—

A. (Interposing) Connected to Panhandle Eastern Pipe Line.

Q. Very well. Now, you have a list of wells shown in Schedule 1 of Exhibit 30, have you not? A. Yes, sir.

Q. I see 34 wells. Did you use these wells for the purpose of determining the average pay thickness?

A. Some of these wells.

Q. Can you designate in the record, by line number, the wells of Schedule 1 that you used in your determination, that is, which of these wells are included in the list of 40?

A. One, 2 and 3; Lines 14, 15; Lines 26, 28.

Q. Does that complete it?

A. Yes, that is all.

Q. In other words, you have pointed to all of the wells shown in Schedule 1 which are connected to Panhandle Eastern's lines, have you not? A. Yes, sir.

Q. Now, how many acres of leases are owned and controlled by Panhandle Eastern Pipe Line Company?

Mr. Culton: You mean, in the Panhandle Field?

[fol. 4206] By Mr. Littman:

Q. In the Panhandle Field, yes.

A. 65,429, as shown on Schedule 2 of Exhibit 30.

Q. The approximately 40 wells that you had would average about one well for every 1,600 acres, would it not, approximately?

A. That is hardly the way to arrive at a figure of that kind, since some of the wells used, or rather, some of this acreage, would not be applicable to those 40 wells.

Q. How much of the acreage of this 65,000 acres would not be applicable to these 40 wells?

A. Approximately 40,000.

Q. 40,000 is applicable? A. Is not applicable.

Q. In other words, do I understand that 40 wells that you used were used by you to determine the average pay thickness for approximately 15,000 acres?

A. The difference between 65,000 and 40,000 is 25,000.

Q. I am sorry, it is 25,000. Is my understanding correct, using 25,000?

A. I do not know just exactly what you are leading up to, but the reason I only used 40 wells instead of all of the wells connected to the pipe line was due to the fact that information was not available to accurately determine the pay thickness of the remainder of the wells.

[fol. 4207] Q. Well, I am simply trying to understand what you did, Mr. Smith. You straighten me out if I am wrong.

My understanding of your testimony is that the 40 wells that you did utilize for purposes of determining average pay thickness were applicable to approximately 25,000 acres in the Panhandle Field. Is that correct?

A. Directly, but were used as determining the average pay thickness under the entire 65,429 acres.

Q. Then, doesn't it follow, that, on the average, you have one well determining the situation for approximately 1,600 acres on the average?

A. If you divide 40 into 65,429, I think you would get approximately that figure.

Q. Well, you do not think it is proper to draw that kind of conclusion? A. No, I do not.

Q. Well, let's look at it another way. You say that the 40 wells are applicable to approximately 25,000 acres.

A. That is true.

Q. How did you determine the average pay thickness on the remaining 40,000 acres of Panhandle Eastern's reserves?

A. I used that figure to apply to all 65,429 acres because that was the best information that I could obtain from the well logs that I had.

Q. Well, how many wells does Panhandle Eastern and [fol. 4208] its gas vendors have in the Panhandle Field?

A. 110.

Q. Now, you had approximately 70 more wells from which to secure data, did you not? A. Yes, sir.

Q. And why didn't you secure data with respect to pay thickness from those wells?

A. Because they were drilled early in the history of the field and accurate data was not kept on a great many of them. In addition to that, very often when a large amount of gas is encountered, it is almost impossible to determine the thickness of pay from which that great volume is coming.

Q. Will you explain why that is true?

A. The reason being that the samples from those formations are blown out of the hole and cannot be caught and examined, whereas, when a small amount of gas is blowing

from a hole, usually the samples will accumulate in the bottom of the hole and can be brought to the surface by running the bailer down the hole, collected and examined.

Q. Will you tell us what a bailer is?

A. A bailer is a long tube made of pipe with a valve in the bottom.

Q. Now, where do you go to get the data as to pay thickness, from the well log?

A. From the samples, together with the driller's log. [fol. 4209] Q. Well, now, the driller keeps a log as he drills, does he not? A. That is true.

Q. And he makes a record of each strata and the thickness of each?

A. As near as he can determine it.

Q. And it is quite difficult, is it not, to make an accurate determination? A. That is true.

Q. What difficulties or troubles does a driller encounter with respect to determining the thickness of these strata encountered? How does he know when he hits one or the other?

A. He determines the increase in open flow by use of a pitot tube. This pitot tube is made of a piece of pipe, one end of which is bent in a semicircle. It is so constructed that the outer end of the semicircle falls at about the center of the casing from which the gas is flowing. The other end of this piece of pipe is attached to a piece of rubber tubing.

The other end of the piece of rubber tubing is attached to a manometer. This manometer is a "U"-tube containing mercury. The force of the gas on the small section of bent end of the pitot tube changes the level of the column of mercury in the manometer.

[fol. 4210] Behind this "U"-tube are two scales, one on each arm of the "U"-tube. There can be determined the amount of rise in one column of the mercury and the amount of fall in the other. The sum of the two is the difference between the levels of the mercury which is usually expressed in inches.

A table is referred to then to determine a multiplier. This multiplier is used to multiply times the square of the diameter of the casing from which the gas is coming.

After the multiplier and the square of the diameter are multiplied together, the open flow is determined.

Q. Well, that gives you the open flow. How do you relate that to the pay thickness? Proceed.

A. That is done from time to time, and increases in the volume of gas coming from the casing are noted by the driller on the log.

Naturally, if there is an increase of gas coming from the casing, more gas has been encountered in the bottom of the hole. At the same time, the driller notes the various formations which he is drilling in, whether it be limestone, Shale, Dolomite, Granite Wash or what not.

Q. How does he obtain that?

A. By obtaining samples. Lowering the bailer in the hole, taking the bailer out and taking the samples out of the bailer and examining the samples and then later, they are filed in the office.

[fol. 4211] Q. And as you have indicated, he cannot do that when the well is large?

A. When the volume of gas is large, the cuttings are blown from the hole and cannot be caught in the bailer and brought to the surface.

Q. Isn't that situation which you have just described the normal situation in the Panhandle Field?

A. Sometimes it is, sometimes it is not.

Q. Most of the time it is, isn't it?

A. I would say about half the time it is and half the time it is not, because there are large wells and small wells in the Panhandle.

Very often you can catch samples from the large wells before the great volume of gas has been reached. Very often your can catch samples below the point at which the great volume of gas is reached.

Q. Well, if you had 10 different drillers drilling this well, you would probably get 10 different answers on the pay thickness, wouldn't you?

A. That is true. For that reason, the best way to determine the thickness of pay is by using the driller's log in combination with a study of the samples under the microscope.

Q. That is, if you have any samples?

A. Yes, sir.

[fol. 4212] Q. When you get the sample, it is usually a powdery substance, is it not?

A. It is very fine.

Q. What do you do with it then?

A. Examine it under the microscope.

Q. And what can you see under the microscope? What can you determine by looking at it?

A. You can determine whether or not there was any porosity. There must be porosity or there will be no gas.

Q. Of course, your know that before you look at it under the microscope, do you not?

A. That is true.

Q. What is the advantage of looking at it under the microscope?

A. If you find that the driller has logged an increase in gas and the samples reveal that there is porosity in the samples, I believe it is safe to assume that there has been a gas pay at that depth.

Q. What can you observe by microscope of one of these powdery samples that would reveal the identity of the strata?

A. My college training enables me to be able to determine whether or not the substance in the sample was shale, lime, dolomite, granite wash and such.

Q. Well, what could you see that would identify the sand with respect to whether or not it was a producing sand?

[fol. 4213] A. If there is the presence of porosity.

Q. The sand is all ground up and pulverized when you look at it, isn't it?

A. It is in rather small particles. That is the reason we use a microscope, in order to be able to see them better.

Q. Can you tell anything about porosity looking at these fine granules? A. I think I can.

Q. Can you tell the percentage of porosity by any such method as that?

A. Not definitely. I can only estimate.

Q. You would not come very close either, would you, by that method?

A. That is a matter of opinion.

Q. We will come to the porosity question a little later. I meant to stick close to the pay thickness for the time being.

Now, you testified that a number of different drillers would probably secure different results in their logs. Isn't it also a fact that different geologists would also secure different results when they examine the same log and the same samples from the same well?

A. Yes, the human element will enter into it.

Q. And there would be some very wide variations and [fol. 4214] differences, would there not?

A. Not necessarily. That is the reason that we use the driller's log and the samples in conjunction, so as to be able to determine, as nearly as possible, the actual circumstances with all data that we have.

That is practically all of the data that is available from drilling the well, the driller's log and the samples.

Q. You use it because you do not have anything better to use?

A. That is true. You cannot see down in the hole.

. . . . . .

Q. Mr. Culton: You said, "is compensated." I wondered if you meant "is not compensated."

[fol. 4215]

Mr. Littman: Whether or not that flow of gas is or is not compensated, yes.

The Witness: I do not know what you mean by the "decline of gas."

By Mr. Littman:

Q. I mean the decline in gas from that which is originally secured when the pay sand is first struck.

A. Do you mean that you get a certain open flow and then later you have a less open flow than you did have formerly?

Q. That is right, and then you come into some more production as you drill deeper, that is the situation.

A. That is possible.

Q. It occurs quite frequently, does it not?

A. I would not say so, no.

Q. Well, when it does occur, how can you, as a well driller, accurately determine the thickness of the various pay strata in those circumstances?

A. By the same method. I would use a driller's log wherein he records the various open flows as the drilling of the well progresses, and by examination of the samples, determine whether or not porosity existed at the point where he recorded an increase.

The only other interpretation to your question that I can [fol. 4216] see is that sometimes, after the pay streak is reached and an open flow test is taken, later it may blow down slightly to a slightly lesser volume, but—

Q. (Interposing) That is the situation—

A. (Continuing)—but that decline is not usually great. The blow-down, so-called, is not usually great.

Q. Well, when it blows down like that, what do you attribute it to?

A. The fact that the head has been blown off the gas in the formation in which it was originally contained.

Q. Do you, or do you not, count that in the depth of the sand?

A. It is considered, yes.

Q. In various ways by various drillers?

A. Well, the drillers do not determine the thickness of pay.

Q. Doesn't the driller make some record on his well log concerning the thickness of the strata encountered?

A. Yes. However, he does not determine for me what I think the thickness of pay is. I use his log in conjunction with the samples to determine what I think the thickness of pay is.

Q. You do not know what he would interpret the situation to be?

A. Yes, I have his idea on the log.

[fol. 4217] His idea would be different from someone else's idea?

A. His idea would influence my opinion to a certain extent.

Q. And various drillers might interpret, and probably would interpret, that situation differently?

A. That is natural.

Q. Well, at any rate, in order to get an exact determination of reserves by the porosity method, you have to know the exact weighted average pay thickness throughout the area for which you are making the determination, do you not?

A. That would be the best thing to have, yes. When you do not have it exact, then you must use the best thing you have.

Q. No matter how inexact it is?

A. No matter how inexact it might be.

Q. Now Mr. Smith, another element that is required in determining reserves by the so-called porosity method is to determine the porosity, is it not?

A. Yes, sir.

Q. Just a moment, before I go to porosity, can you state how many of the 40 wells that you used for the purpose of determining its average pay thickness is lodged in the Class 1 and Class 2 acreage?

A. No, I cannot, not at this time. I could designate [fol. 4218] that on the list which I will supply you.

Q. I wish you would add that bit of information to the schedule which you will supply.

A. Yes, sir.

Q. You do not have any recollection at all as to how many, approximately?

A. I would rather not say at this time.

Q. Now, what porosity of pay sand under the acreage controlled by Panhandle Eastern did you use?

A. Twenty percent.

Q. Is that a straight, flat 20 percent for the entire Panhandle Eastern acreage? A. The Class 1 acreage.

Q. That is for the Class 1. How about the Class 2 acreage?

A. I did not estimate the porosity of the Class 2 acreage.

Q. Can you give us any ideas that you may have on the subject as to the porosity of the Class 2 acreage?

A. It would probably be less, possibly in the neighborhood of 15 percent.

Q. Now, how did you arrive at the porosity of the acreage in the Panhandle Field?

A. I have taken what is generally accepted by other geologists who have worked on this same problem.

[fol. 4219] Q. I take it by that answer that you did not undertake an independent investigation of your own?

A. That is true.

Q. Have you ever seen any cores taken from acreage controlled by Panhandle Eastern?

A. Not in the Panhandle of Texas.

Q. Now, perhaps for the purpose of the record, we had better explain what a core is. Of course, it is a core of the producing sand that I am referring to.

A. A core of the producing sand is a cylindrical column obtained by using a rotary drill with a coring bit containing a core barrel and represents the strata penetrated by the drill from the surface to the bottom if the core bit is used during the drilling of the entire well.

Q. How large is a core?

A. It might be various diameters. It might be two inches in diameter or it might be three inches in diameter, or it might be 2-½ inches in diameter.

Q. And how long?

A. As long as the core bit and core barrel is used on the rotary tools.

Q. Approximately?

A. Some of them go from the surface to the bottom. Others go from the top of the producing formation to the bottom of the well. Sometimes a section merely ten or [fol. 4220] twelve feet is taken. It varies.

Q. Have you ever seen any cores taken from the pay sand of acres controlled by Panhandle Eastern?

A. Not in Texas Panhandle.

Q. Neither has anyone else?

A. Not as far as I know.

Q. And why is that true? Isn't it a fact that you cannot get any?

A. It would be difficult to obtain a good core of a producing formation in the Texas Panhandle.

However, some cores have been taken by other companies.

Q. In the West Panhandle Field? A Yes, sir.

Q. Will you please give me the name of the company that has taken a core, and the well from which it was taken?

A. In the article referred to yesterday—strike what I started out with, because I do not find what I expected

there—I have seen some cores that were said to have been taken from the wells in Texas Panhandle.

I do not know what wells they were taken from. I have also read that cores have been made from wells in the Texas Panhandle and porosity determinations have been made from these cores.

I cannot cite any specific examples right now.

Q. Are you now referring to cores that were taken from [fol. 4221] the producing horizons?

A. Yes.

Q. You understand, do you not, that if the cores were taken from the producing horizons, they would be taken from the least porous portions, would they not?

A. Probably.

Q. That is to say, you would get the harder part of the producing sand which, in all probability, does not produce much gas?

A. That would be the most likely thing to get.

Q. In other words, is my understanding correct, Mr. Smith, that the good producing portions of the producing sand in the Texas Panhandle Field is rather a soft substance that is more or less chalk-like in nature?

A. I would not say it was chalk-like.

Q. Suppose you describe it.

A. The producing formations that I have examined, the Dolomite is rather a hard, crystalline substance with a great many pores apparently existing.

The Lime was not chalk-like but more inclined to be brittle. The Granite Wash, of course, is an unconsolidated substance which would disintegrate very easily.

Also, it is my belief that porosity varies in the Texas Panhandle Field from zero to 100 percent, the 100 percent probably occurring most frequently in Limestone subter- [fol. 4222] ranean caverns, Granite fissures or crevices.

Q. And the zero would occur in what kind of strata?

A. The zero would occur in solid granite, Limestone without porosity, Dolomite without porosity.

Q. Now, I believe you stated that cores are taken by the rotary drill? A. Yes, sir.

Q. What kind of drills are used in the Texas Panhandle Field?

A. Our drilling practice is to drill to the top of the producing formations with a rotary rig, and complete the well with a cable tool rig.

Q. Now, will you briefly describe this cable tool rig?

A. The cable tool rig is chiefly a steel cable with a string of tools on the bottom, consisting of a rope socket, a set of jars, a stem and cable tool bit.

This bit operates very much like a churn drill, being raised and lowered and the cutting accomplished by the fall of the bit on the various formations.

Q. In other words, the drilling is accomplished by the percussion method? A. Substantially.

Q. And that percussion has the effect of pulverizing the pay strata, does it not?

A. I do not consider it pulverizing, Mr. Littman.

[fol. 4223] Q. You correct me—

A. (Interposing) Something pulverized, I would say, would be like a powder that a pharmacist might make, using a mortar and pestle to pulverize the substance.

The samples I have examined are more like sand, or very fine gravel than a powder.

Q. Very fine is what you used, and I used the term "pulverized". It is satisfactory to use, "very fine"?

A. Yes.

Q. In order to determine accurately the reserves under acreage, you have got to know the exact porosity of the pay thickness, the pay sand, do you not?

A. As near as can be determined.

Q. Now, how do you go about determining the porosity after you have the sand? What do you do with it to determine the porosity of it?

A. The best method of determining the porosity would be from cores, running porosity tests on the cores obtained from the various producing formations.

Q. In other words, the accepted method and the best method, is to take the core? A. That is true.

Q. And take it to the laboratory? A. Yes, sir.

Q. And then what do they do with it in the laboratory?

[fol. 4224] A. I cannot define exactly the steps, the mechanics of making a porosity test. There are several methods, however.

Q. Well, Mr. Smith, it is rather intricate, is it not, the method that they use?

A. I believe the general idea is displacing the pores within the core by a liquid and determining the amount of liquid which entered the pores in comparison to the total volume of the core being tested. That is one method, at least.

Q. Now, on these 40 wells that you used for purposes of determining the pay thickness in the acreage of Panhandle Eastern, did you have any porosity tests made?

A. No, sir.

Q. Any cores for those wells? A. No, sir.

Q. Or have any samples for those wells?

A. Yes, sir.

Q. Why didn't you?

A. I did not have any cores to be tested.

Q. That is one of the difficulties in the Panhandle Field, is it not?

A. That is true. There are many.

Q. And that is one of them, but if you wanted to be exact about it, that is what you would have to do, namely, take a core out and send it to the laboratory and have tests made?

[fol. 4225] A. That would be the most accurate way of determining the porosity, but you could not determine the porosity by examining any one core. You would have to test many, many cores to determine the average porosity.

Q. That is precisely what I was coming to next.

As I understand it, Mr. Smith, when you got through sending this one core to the laboratory and having it tested for porosity, you would know what the porosity is for that one piece, and that is all, isn't that right?

A. That is true.

Q. You could not, by that method or manner, determine what the porosity was for an entire acre, for instance, without sending the entire acre up to the laboratory, could you? A. That is true.

Q. Nobody ever did anything like that, did they?

A. Not to my knowledge.

Q. Do you know of any tests that have been made of the producing sands in the Panhandle Field for porosity?

A. For porosity tests?

Q. Yes.

A. I have heard that some have been made and was led to believe that the cores that I saw belonging to other companies had been tested for porosity.

The porosity figure that I used, 20 percent, was used because it has been accepted for the last 15 years as being [fol. 4226] the—I would not say 15 years either—for the last 8 or 10 years, as being the porosity average of the Texas Panhandle Field.

Q. Have you ever heard of a geologist by the name of Ralph E. Davis? A. Yes, sir.

Q. Did you hear him testify in this proceeding?

A. No, sir.

Q. Do you consider Mr. Davis an authority on the subject of geology in the Panhandle Field?

A. He has made a great many studies of the Panhandle Field. I really do not know what it would be necessary to determine whether or not he is an authority.

Q. Well, considerable reliance has been placed upon Mr. Davis' judgment and estimates in this proceeding, and I take it you do not consider the reliance misplaced?

A. No.

Q. I am going to read you what Mr. Davis said at transcript Pages 1526 to 1527 and then ask you a question about it. This is Mr. Davis talking:

"Nobody has ever taken a core of even a single well, so far as I know, and had the porosity determined throughout the pay zone from top to bottom but even if he had done that and had it done for 25 wells, he still would have only 25 samples in a field 125 miles long so he would not have anything anyway."

[fol. 4227] So far, you and Mr. Davis are in substantial agreement, are you not?

A. That is true.

Q. I will read on:

"He would have another one of these little things, one-quarter inch long, to measure the Washington Monument with. We know pretty well how thick the producing zone is in the Amarillo Field from data from more than a thousand wells. I think the figure is 71½ feet average

thickness but nobody knows whether the porosity is 20, 30 or 35 percent. The boys who use 20 think 20 is a good figure to use. I think 30 would be a better figure myself. The reason I think 30 would be better is because it must be 30 if the answer we have by the other method is right."

Do you agree with Mr. Davis' conclusion that 30 percent is the proper porosity figure? A. I do not.

Q. You used 20? A. Yes, sir.

Q. And, of course, if you had used 30 in your calculation, you would have come out with a much higher estimate of reserves, is that correct?

A. That is true. I imagine it would have been approximately 50 percent higher.

Q. Approximately 50 percent higher, is that correct?

[fol. 4228] A. That is what I said.

Q. Well, there are differences of opinion as to porosity and as to other matters, I take it?

A. I can only say that that is most widely accepted, that the porosity of the Texas Panhandle Field is 20 percent.

Q. Now, will you tell us what you mean by, "most widely accepted"? Who are the men, generally, who accept it, and tell us how you arrived at that conclusion?

A. Mr. Cotner and Mr. Crum agreed that 20 percent was the average porosity in the Texas Panhandle Field. I have talked to numerous other men and read numerous other papers, where 20 percent was taken as the average porosity.

I believe the gentleman you mentioned yesterday, Mr. Peterson, of the Texoma Natural Gas Company, takes 20 percent as the average porosity.

Q. You spoke about these gentlemen agreeing on 20 percent. Do you mean by that to imply that they sat down and kind of reached an agreement not to disagree about this 20 percent?

A. I do not mean that at all. I think each man's work was independent of the others.

Q. But you are not at all certain about how each man arrived at the 20 percent?

A. No, I am not. I only know that they have used that.

Q. Yes, and you know that there are other geologists [fol. 4229] that do not use it?

A. Mr. Davis, for instance.

Q. Any others that you can mention or name that do not agree with the 20 percent figure?

A. I do not recall any others, right offhand.

Q. You do not doubt there are others that disagree?

A. I do not doubt it. It is entirely natural that individuals would differ in opinions.

Q. On such a highly controversial subject?

A. On porosity, as well as many other subjects.

Q. Well, have you ever made a study of the methods used by each one of these geologists that you have named who have arrived at a figure of 20 porosity?

A. I have read some of their studies, yes.

Q. But you did not participate in their methods?

A. No, sir, I did not.

Q. Are you certain that you know the precise and exact data used by them to arrive at this 20 percent figure?

A. No, I do not.

Q. In other words, you are relying upon the authority of the individual, rather than upon any particular individual method followed or used by the individual geologist, is that a correct statement?

A. I do not understand exactly what you mean by authority.

[fol. 4230] Q. I use it in this sense, Mr. Smith, that oftentimes we accept the statement of a gentleman distinguished in a given field simply because he made it and because we respect his ability and his background and his reputation, as contra-distinguished from those instances where we make our own independent investigation of what he did to arrive at his conclusion.

Do you see now what I am driving at?

A. Perhaps I had better answer the question this way, that the reason I accepted these gentlemens' opinion in the first place, it appeared reasonable to me. In the second place, all of the men who have used that figure of 20 percent have had a great deal of experience over a long period of time in the Texas Panhandle Field and, as you say, I valued their opinion, in view of their experience.

Q. Let's analyze what you have just said for a moment. You say that their conclusions sounded reasonable to you?

A. Yes, sir.

Q. Now, you made no independent check to ascertain whether or not their conclusions were or were not reasonable, did you?

A. No.

Q. By that statement, I take it you mean it just struck you as being about right, but you did not have any particular data to tie it to?

[fol. 4231] A. That is true. I think we all accept other people's opinions if we consider them capable of making logical decisions and of good reasoning power.

Q. Do you know whether or not any of these gentlemen upon whom you so heavily relied for the basis of this 20 percent porosity had ever made any actual porosity tests of the producing sand in the Panhandle Field?

A. No, I do not know whether they have, or whether they have not.

Q. Can you state for us, Mr. Smith, what the average rock pressure of the acreage controlled by Panhandle Eastern was as of June 30, 1941, or have your already stated that you could not make such a determination?

A. I do not believe I have stated it previously, but I do not know.

Q. Have you ever undertaken to make such a determination?

A. I do not believe I have.

Q. Have you ever undertaken to do so for any date of the year 1940?

A. Yes, and also the year 1941—you said the average rock pressure under wells on Panhandle Eastern acreage?

Q. The average rock pressure of the acreage controlled by Panhandle Eastern on or about June 30, 1941.

A. No, not that.

[fol. 4232] Q. Not that; and you did not do that for any of the years 1940, 1939, 1938 or 1937?

A. No, sir.

Q. Now, you have just indicated, Mr. Smith, that you did make some determination of average rock pressure. Now, will you state which one you made?

A. They were arithmetical averages of the wells now existing on Panhandle Eastern acreage.

Q. Is that contained in your Exhibit 30?

A. No, sir.

Q. I did not recall whether it was, but I wanted to make certain that my recollection was correct. Do you have such determination with you?

A. It does appear in my exhibit.

Q. What page?

A. Schedule 8, Page 4, Column D, Line 26.

Q. Now, these data are shown as of July, 1940?

A. Yes, sir.

Q. Do you have the same figure for 1941?

A. Yes, sir.

Q. And that is in column—

A. (Interposing) No, it does not appear on the exhibit.

Q. I looked at Column G, and I notice now that is total production. Where does your 1941 figure appear?

A. I have it here. It was not available at the time the [fol. 4233] exhibits were made.

Q. Perhaps it would be well to read it into the record at this point.

A. The arithmetical average rock pressure of wells connected to Panhandle Eastern Pipe Line Company in the Texas Panhandle Field as of the summer of 1941, is 324.43 pounds.

Q. Is the figure that you have given me the total figure for both company-owned wells and the wells owned by gas vendors?

A. All those connected to Panhandle Eastern Company's lines in the Texas Panhandle Field.

Q. You could not break that figure down in the same manner as you did for Schedule 8, I do not mean by individual wells, but I mean by classes of wells?

A. Yes, I can.

Q. I would appreciate it if you would do that, Mr. Smith.

. . . . . .

[fol. 4237] Rufus M. Smith, resumed the stand, and testified further as follows:

Cross-Examination (Resumed)

By Mr. Littman:

Q. Mr. Smith, at the conclusion of the morning session you were about to read into the record the 1941 figures

with respect to rock pressures of the wells owned and controlled by Panhandle Eastern. Would you mind doing [fol. 4238] so now?

A. I refer to Exhibit 30, Schedule 8, page 4, column D.

The arithmetical average of the 53 wells mentioned in Line 24 for 1941 is 298.02 pounds. The arithmetical average for the 57 wells mentioned in Line 25—in both instances this is Column D—for 1941 is 348.54 pounds.

I believe that makes all three figures which we were going to bring up to date.

Q. I presume the figure for Line 23, Column D, is already included in one of the tables that you have named, is it?

A. I have a new figure that could be inserted there for 1941, Line 23.

Q. Would you mind giving us that figure, please?

A. That figure of Schedule 8, page 4 of Exhibit 30, Column D, Line 23, for 1941 will be 341.28 pounds.

Q. And the figure for Line 26, Column D, for 1941 is the one which you read into the record just before the close of the morning session, to-wit, 324.43 pounds?

A. That is correct.

Q. Which represents the grand total for 110 wells in Texas?

A. That is correct.

Mr. Culton: While you are on that would you mind [fol. 4239] giving us the relative value of Line 4, for 1941, the 22 Huber wells?

The Witness: That figure is 242.41 pounds for 1941.

By Mr. Littman:

Q. Mr. Smith, do you know of any test having been made to determine porosity of the producing formation in any gas well in the Panhandle field?

A. It is my impression that I was shown a core of a gas well in the Panhandle field which had had porosity tests run on it. As I said this morning, I cannot say what well that was or where it was located, because I don't remember.

Q. Do you know the result of the test?

A. As I recall the porosity varied considerably in various tests that were run throughout the core.

Q. Can you give us the figures?

A. No, I cannot. However, I have reason to believe that the porosity throughout the field will vary from zero to 100 percent, as I stated this morning.

Q. Now, do you know who made the tests on that particular core?

A. No, sir.

Q. Do you know of any other tests that have been made?

A. No, sir.

[fol. 4240] Q. And, as I recall your testimony this morning you stated that the core which you saw was probably from a part of the producing sand which was not highly productive?

A. Probably so.

Q. And that was because of the fact that the more productive portion of the sand is of such character that it will not permit the taking of a core?

A. That is true.

Q. Do you know the name of the company from whose lease this particular core was taken?

A. No, I don't. As I remember—it has been several years ago—I believe the core was in the office of the Columbia Fuel Company of Amarillo, Texas. The geologist had it there.

If I remember correctly it was in that office, but I don't know what company drilled the well.

Q. Do you recall whether or not the core was in Mr. McCue's office in Amarillo?

A. No, it was in the same office, but in the office of Mr. Hemsell. They are in the same office together in Amarillo, Columbia Fuel Company.

Q. In the same building?

A. In the same building.

Q. Going back for a moment to the approximately 40 wells from which you determined the average pay thick-
[fol. 4241] ness of the producing horizon underlying the Panhandle Eastern acreage, do I understand that you merely totalled the thicknesses and then divided by the number of wells?

A. That is true. I obtained an arithmetical average.

Q. Isn't there another way of determining average pay thickness, namely, a method by which you weight the thickness as against the acreage?

A. There probably is. I don't believe it could be accurately done, however. There would be a great many exceptions made if a method of that kind were used.

Q. In other words, you would have to assume by the method that I have suggested, a certain area around a well having a given pay thickness?

A. That is true.

Q. Is that method very commonly used?

A. I don't know of any case where it has been used.

Q. Of course, when you merely take the total thicknesses of 40 wells, or some such number, and divide by the number of wells, you are making quite a few assumptions, too, by that method, are you not?

A. That is true. However, the figure that I obtained from that operation agrees very well with authorities' estimates of the average thickness of pay in the Panhandle gas field.

[fol. 4242] Q. Who are the authorities to which you are referring?

A. Well, these two gentlemen who wrote the paper referred to previously, Cotner and Crum, in which I believe they estimated the pay thickness to be 69½ feet. Some others of whom I read have estimated it to be 70 and 72 feet, all of which are very close together.

Q. Now, the estimates of these experts have reference to the entire Panhandle field, do they not?

A. Yes, sir.

Q. As distinguished from the Panhandle Eastern's acreage?

A. Yes, sir.

Q. Have these other experts ever made a determination for Panhandle Eastern's acreage?

A. No.

Q. That determination was made by you from the approximately 40 wells that you have told us about a few minutes ago?

A. Yes, sir.

Q. Now, you have made an estimate of the remaining gas content of Panhandle Eastern Pipe Line Company in

its acreage in the Texas Panhandle field, which is shown in Exhibit 30, have you not?

A. Yes, sir.

[fol. 4243] Q. I note that you use from time to time a description "Remaining Gas Content," in describing your estimate of reserves. What do you mean by "Remaining Gas Content"?

A. The gas remaining in the formations of the Panhandle gas field.

Q. As of July 1, 1941?

A. Yes, sir.

Q. Does it mean the reserves now under Panhandle Eastern's acreage which will be recovered by Panhandle Eastern?

A. Not necessarily.

Q. Well, will you explain what you mean by "Not necessarily"?

A. I mean that I don't know at what abandonment pressure the field will be abandoned.

Q. Suppose you turn to Schedule 3 and we will refer to specific figures. Now, the amounts that you show at the foot—

A. That is page 2?

Q. Schedule 3 of your Exhibit 30. Schedule 3, page 1, and page 2.

At the foot of the columns D, F, H, and J, of each of those pages, you have figures which purport to represent the number of m.c.f.'s, do they not?

[fol. 4244] A. Yes.

Q. Now, each one of those figures represent the recovery at the abandonment pressures shown at the top of the columns, do they not?

A. That is true.

Q. You have eight different figures, each one representing a different abandonment pressure.

A. That is right.

Q. Now, I am referring to those figures at the foot of each of those pages.

Do these figures represent the amount of gas as of July 1, 1941, which will be recovered by Panhandle Eastern Pipe Line Company at the assumed abandonment pressures shown at the top of each of those columns?

A. That is my estimate of what the figure would be at the various abandonment pressures.

Q. Now, you start out with an abandonment pressure of 150 pounds and then you go to 125, and then to 100, to 75, to 50, to 30, to 25, and to zero, do you not?

A. Yes, sir.

Q. And I take it from your answers previously made that you are not testifying with respect to which abandonment pressure will actually be the true abandonment pressure of the field?

A. That is absolutely true.

[fol. 4245] Q. In other words, you merely show the estimate upon the eight assumptions?

A. That is true.

Q. Now, do you mean that this gas is in place in the acreage at present?

A. That at least that amount is in the acreage at present if taken down to the various abandonment pressures.

Q. In other words, you are not including in this estimate any gas under somebody else's acreage?

A. No, sir.

Q. That may or may not be recovered through Panhandle Eastern's wells?

A. No, sir.

Mr. Culton: Nor are you taking into consideration any that might be drained from somebody else's leases.

The Witness: That is absolutely true.

By Mr. Littman:

Q. In other words, you are taking gas in place as you can best estimate it?

A. That is true.

Q. And, of course, this estimate shown on Schedule 3 includes the estimate of gas in the acreage subject to gas purchase contracts with Panhandle Eastern Pipe Line Company?

A. That is right.

[fol. 4246] Q. Now, are these reserves shown at the foot of these eight columns, what might be properly described as recoverable reserves?

A. It is sometimes referred to in that manner and you might say that that is true.

Q. That is, of course, based upon the assumed abandonment pressure? A. That is right.

Q. Now, I know that the abandonment pressures have quite a great effect upon the amount of gas that will be ultimately recovered, do they not?

A. Yes, sir.

Q. Would you mind reading into the record the eight figures for each of the abandonment pressures that you have used? A. That are found on Line 19?

Q. Yes.

Mr. Wheat: I think possibly that might be misunderstood, Mr. Littman. Do you mean the amounts for the eight abandonment pressures?

Mr. Littman: Yes.

Mr. Wheat: You couched your question a little the opposite of that, and I wondered if you mean it.

Mr. Littman: I am glad to have you correct me at any time I misspeak myself. That is why I thought it would be [fol. 4247.] well to read each figure into the record at each abandonment pressure.

The Witness: I estimated remaining gas content in the Texas Panhandle field under acreage constituting reserves of Panhandle Eastern Pipe Line Company as of July 1, 1941, at a pressure base of 16.4 pounds absolute as found in Exhibit 30, Schedule 3, page 1, line 19, in Column D, as 387,361,187 m. c. f. at 150 pound assumed abandonment pressure.

In Column F, 445,520,475 m. c. f. at an assumed abandonment pressure of 125 pounds.

In Column H, it is 503,679,762 m. c. f. at an assumed abandonment pressure of 100 pounds.

In Column J, it is 559,798,371 m. c. f., at an assumed abandonment pressure of 75 pounds.

On page 2 of the same exhibit, same schedule, Column D, Line 20, 618,977,998 m. c. f. at an assumed abandonment pressure of 50 pounds.

Column F, is 663,872,884 m. c. f. at an assumed abandonment pressure of 30 pounds.

Column H shows 675,096,607 m. c. f. at an assumed abandonment pressure of 25 pounds.

Column J shows 733,255,894 m. c. f. at an assumed abandonment pressure of zero pounds.

Q. The figures which you have just read represent the gas which you estimate will be recovered by Panhandle [fol. 4248] Eastern Pipe Line Company at each of the abandonment pressures that you have named?

A. At least that much.

Q. Will you please describe what you mean by "at least that much"?

A. This estimate was made, in my opinion, on a very conservative basis as stated in my written testimony. It was made on what I consider the basis of the average in the field.

I stated that it was conservative several times in the testimony, and I have an exhibit in here attempting to show why I made the statement that it was a conservative estimate.

Schedule 5 of Exhibit 30 is a comparison of open flow potentials from the Texas Panhandle field.

On Schedule 5 I have shown that the average potentials of the wells connected to Panhandle Eastern Pipe Line in Texas are greatly in excess of the average potentials of the wells in the rest of the field.

Q. Indicating that the—

A. Indicating that if anything there will be a greater recovery from Panhandle Eastern acreage than from the average of the rest of the Texas Panhandle field.

Q. In other words, in making this estimate, if I understand you correctly, if you erred you did so on the side of making a low rather than a high estimate?

[fol. 4249] A. That is what I attempted to do, to make a conservative estimate.

Q. Now, in addition to these assumed abandonment pressures, ranging from 150 pounds down to zero, as you have read them into the record, you have used the so-called recovery factor, have you not?

A. Yes, sir.

Q. And will you please state the effect of using the recovery factor?

A. The recovery factor in fact makes the estimate even more conservative. However—

Q. (Interposing) By how much?

Q. By 10 percent. The reason the recovery factor was used is due to the fact that as far as I know, and as far as I have been able to learn, there has never been a gas field in history which yielded all the gas which was originally in place.

The Texas Panhandle Field is no different from the other fields. There are factors which prevent the ultimate recovery of all the gas originally in place in that field. Some of these factors are the unequal withdrawal of gas, the encroachment of water, the inefficient drilling practices of some of the producers, especially in the early days of the field, the varied types of the formations from which the gas is being produced.

[fol. 4250] There are some others.

Q. Well, isn't that one reason why you use these various abandonment pressures, namely, for the purpose of stating that you are not going to recover all the gas and, therefore, you are going down to 25 or 30, or 75 or 100 pounds, rather than down to zero pounds?

A. I don't say that it will be abandoned at 150 or any other assumed abandonment pressure, or even the zero abandonment pressure.

Q. Well, I didn't mean to infer that you were, but I understood that when you used an abandonment pressure of, let us say, 50 pounds, the reason for using that abandonment pressure of, for example, 50 pounds, was because it is assumed that you will not get all of the gas out of the ground and, therefore, you will abandon at 50 pounds rather than at a lower pressure?

A. That is true, and—

Q. (Interposing) Why did you—

Mr. Wheat: Let him finish his answer.

By Mr. Littman:

Q. Have you finished your answer?

A. No, I have not.

Q. Proceed.

A. That is true, and yet, even so, you must make a further reduction for the amount of gas which will be ob-
[fol. 4251] tained, if for no other reason than applying a safety factor.

Q. Well, the effect of using this 90 percent recovery factor in each instance, is the same as if you had used, instead of 50 pounds, for instance, a slightly higher abandonment pressure. Is that correct?

A. It has the same effect.

Q. Well, we will come back to the recovery factor a little later. I didn't mean to go into it quite as deeply at this point.

I wanted to be certain that I understood how this exhibit worked.

Now, will you please turn to Page 1 of Schedule 3? I would like to have you give us a description of, let us say, the first five or six lines so that we may make certain that we understand how this exhibit works. Is my understanding correct, first, that you have the company-owned and drilled Class 1 acreage in Line 1?

A. Yes, sir.

Q. An an original amount of gas shown at Column D of 540,664,200 M. c. f.? A. That is right.

Q. Now, you don't have the description "M. c. f." throughout this schedule. Am I correct in understanding that all figures are on an M. c. f. basis?

A. The heading indicates that, Mr. Littman, "abandon-
[fol. 4252] ment pressure M. c. f."

Q. That heading applies to the entire schedule?

A. Yes, sir.

Q. I am sorry. Now, tell us how you secured your figure of 540,664,200 M. c. f. for Class 1 acreage. Is that shown in another schedule?

A. Yes, sir, that is shown in Schedule 2 of Exhibit 30.

Q. And there you show that you have 30,546 Class 1 acres?

A. Yes, sir, company-owned and drilled.

Q. Company-owned and drilled, Class 1. And you use for that acreage, an "original amount of gas M. c. f. per acre," as shown in Column D of Schedule 2, of 17,700 M. c. f., do you not? A. Yes, sir.

Q. And the amount of 540,664,200 M. c. f. is simply the result of multiplying the number of acres by the 17,700 M. c. f.? A. That is true.

Q. Now, is the same true with respect to the amount shown in Line 2 of Schedule 3, Page 1, Column B, of 3,700,000 M. c. f.? A. Yes, sir.

Q. And that is the result of multiplying 740 acres of company-owned and drilled Class 2 acreage by a 5,000 M. [fol. 4253] c. f. amount of gas per acre?

A. That is true.

Q. Now, will you please follow through on Page 1 from those figures?

A. The figures you have just read appear in Column B, Schedule 3, Page 1, Lines 1 and 2 of Exhibit 36.

In Column B, Line 3, the figure is the sum of the first two figures.

Q. Would you mind now, going to Column C and going across?

A. Column C is obtained by applying the 63.1 percent to the 540,664,200 M. c. f. and obtaining 341,159,110 M. c. f.

Q. [And] I correct in understanding that the amounts shown in Column B represent the original amount of gas in the ground before any drilling occurred on that particular acreage? A. Yes.

Q. Now, how did you arrive at this 63.1 percent shown in Column C? What does it represent?

A. That represents the percentage of gas which would be removed to the assumed abandonment pressure of 150 pounds.

Q. Rather an intricate calculation is required to arrive of that?

A. A formula is used, and various figures inserted in the formula and the percentage arrived at.

[fol. 4254] Q. But the sum and substance of it is that the amount shown in Column C is the amount that would be recovered if you used an assumed abandonment pressure of 150 pounds?

A. Before the recovery factor is applied.

Q. That is in Column D, is it not?

A. That is true.

Q. And there you take 90 percent of Column C?

A. That is true.

Mr. Culton: Right there, so that we may understand that, 150 pounds was the sand face pressure rather than well head pressure, wasn't it?

The Witness: That is true.

Mr. Culton: And the same is true of all of them?

The Witness: The original amount is the sand face and the remainder appearing under the abandonment pressure headings on both Page 1 and Page 2 are at the well head.

By Mr. Littman:

Q. The 150 pound abandonment pressure shown on Page 1 of Schedule 3, however, is at the well head?

A. That is true.

Q. And that is true of the other abandonment pressures? A. Yes, sir.

Mr. Culton: But the sand face was used as the base in determining percentage?

Mr. Littman: Which percentage, Mr. Culton?

[fol. 4255] Mr. Culton: 63.1. I am just asking him. I don't know myself.

The Witness: The original amount of gas in Column B of both Page 1 and Page 2 of Schedule 3, Exhibit 30, represents conditions at the sand face.

Now all the other figures on these two pages, under the general heading, "Abandonment Pressures" were calculated to the well head.

By Mr. Littman:

Q. Calculated by a formula? A. Yes, sir.

Q. Which is represented by the percentages shown for each of the assumed abandonment pressures immediately above the letters C, E, G and I on Page 1 of Schedule 3?

A. That is right.

Q. Well, will you please explain Lines 5 and 4?

A. Lines 4 and 5 are deductions made from the calculated amount of gas, due to the fact that withdrawals have been taken from the calculated amount of gas for production into the pipe lines as well as unmetered production

which is an estimated figure due to wells blowing open during the course of drilling, tests which are made, wells which are opened up and conditioned at various times during the year and that gas, you might call wasted.

Q. Did you make this estimate of unmetered gas?

[fol. 4256] A. Yes, sir, and I have a schedule in this exhibit to show how it is made.

Q. And that schedule is—

A. Schedule 4.

Q. Well, you show the results of how it was made, but you don't state there how you arrived at this particular figure.

A. I will be glad to explain it.

Q. Would you mind doing that for us?

A. In Schedule 4 of Exhibit 30, Column C, the 260,000 M. c. f. in the heading of Column C represents the gas wasted while the wells were being drilled.

There the average open flow of the wells considered was approximately 26,000 M. c. f. I assumed that each one of the wells considered blew open while drilling approximately 10 days under full open flow, or possibly 20 days under half the final open flow.

That would be 10 times 26,000 M. c. f., or 260,000 M. c. f.

In Column D I considered it reasonable to use the figure of 4,333 M. c. f. per well per year as the amount of gas wasted during conditioning of the wells, which is the amount of gas which would be blown from an average well during the course of four hours, or one-sixth of 26,000 M. c. f., four hours being one-sixth of 24 hours.

In Column E I used the figure of 542 M. c. f. which was [fol. 4257] withdrawn while the wells were being tested each year.

The 542 was [arriving] at by taking 1/48th of 26,000 M. c. f., or the equivalent of one-half hour of blowing open per well per year.

Line 1 of the same schedule for the year 1931, shows there were 23 producing wells. Under Column D 23 wells at 4,333 M. c. f. per well per year, gives 99,659 M. c. f. for those wells for that year.

Similarly, in Column D 23 wells tested at 542 M. c. f. per well for that year would give a figure of 12,466 M. c. f.

Does that explain it sufficiently?

Q. Yes. Well, now, the important figures on this Schedule 3, of course, would be the figures appearing in Column B, Original Amount of Gas. Isn't that correct? The whole thing is predicated upon the accuracy of the original amount of gas which you used.

A. That is the first figure and various computations are made from that figure.

Q. And if those figures are wrong, everything else in this schedule is correspondingly off, isn't it, because everything else in this schedule is predicated upon the accuracy and correctness of your original gas content?

A. It is according to what you mean by "wrong." I have stated previously that this is an estimate and that I consider the estimate conservative.

[fol. 4238] If by "wrong", you mean the figure is too low and should be higher, I will admit that.

Q. Well, I was merely undertaking to elicit that fundamentally the figures shown on Schedule 3 of the amount ultimately to be recovered on the various assumed abandonment pressures, is predicated upon the correctness and accuracy of the original amount of gas which you stated to be 17,700 M. c. f. for Class 1 acreage and 5,000 M. c. f. for Class 2 acreage. A. That is correct.

Q. Incidentally, you could have avoided the necessity of deducting unmetered and metered production from original gas content if you had determined in the first instance the present amount of gas in the acreage by determining a weighted average rock pressure, could you not?

A. Except that I do not believe a true weighted average rock pressure could be determined.

Q. And that is why you went back to the original gas content in the field—

A. (Interposing) Yes, sir. I thought I could get a much more accurate figure as to the initial rock pressure, due to the fact that the variations in the original wells as to their initial rock pressure was much less than the variations in the wells at the present time.

As I stated this morning, the variation in those initial wells was 10 pounds one way or the other, whereas pres-

[fol. 4259] ently the variations in rock pressure throughout the field go through a range of 125 pounds or 150 pounds either way from the approximate average.

Q. Now, the 17,700 M. c. f. figure of original amount of gas, does not represent recoverable gas, does it? A. No.

Q. Now, I want you to convert that 17,700 M. c. f. figure to recoverable gas reserves per acre, based on a 50 pound abandonment pressure. You can calculate that for us, can't you? There is a machine on the desk.

A. Yes. Just a minute. There would be approximately 13,668 M. c. f. per acre.

Q. Have you taken off your recovery factor?

A. Yes, sir. I have just divided the figure appearing on Schedule 3, Page 2, Line 1, Column D, 417,500,896 M. c. f. by 30,546 acres.

The only other operation that I could do quickly here would be to divide the total number of acres into the figure appearing in Line 20, Column D of 618,997,998 by 65,429, but from that you would get an average of both Class 1 and Class 2 acreage.

Q. Well, you tell me if I am wrong, but I thought that what you would do would be to take your 17,700 M. c. f. and take first 85.8 percent of that—

A. (Interposing) It can be done that way.

[fol. 4260] Q. And then, take 90 percent of that.

A. It can be done that way.

Q. That is the figure I thought you would take.

A. I arrive at the same figure, 13,668.

. . . . . .

Q. Now, you have used the 90 percent recovery factor, have you? A. Yes.

Q. That figure would represent the original recoverable reserves per acre of Class 1 acreage, would it not?

A. No.

Q. Based on a 50 pound abandonment pressure?

A. That is the original amount before any production is withdrawn.

Q. Yes, that is what I mean, the original recoverable reserves, before any production had been withdrawn.

In other words, I was trying to get you to convert your 17,700 M.c.f. to recoverable reserves based on a 50 pound abandonment pressure.

Now, will you please make the calculation for the Class 2 acreage? In other words, convert the 5,000 M.c.f. to [fol. 4261] the recoverable figure based on a 50 pound abandonment pressure.

A. 3,861 M.c.f.

Q. For the Class 2 acreage?

A. For Class 2 acreage.

Q. Do you know what Mr. Ralph E. Davis' estimate of original recoverable reserves per acre for the West Panhandle Field was as made in this proceeding?

A. No, I don't.

Q. His estimate, as stated at transcript, Page 1529, was 18 million or 19 million feet per acre, which means 18,000 or 19,000 M.c.f. per acre, as compared with your 13,668 M.c.f. figure for Class 1 acreage and 3,861 M.c.f. for Class 2 acreage; would it be your testimony that Mr. Davis is wrong and that you are right?

A. He might be nearer right than I am.

Q. Now, will you please turn to Page 15 of your testimony in Exhibit 30, Mr. Smith? A. I have it.

Q. In the second paragraph on that page you make the following statements:

"Numerous qualified geologists have reached the conclusion that the average 'pay thickness' in the better portion of the gas producing area of the Panhandle Field is approximately 70 feet and the average porosity for such pay formation is approximately 20 percent. From [fol. 4262] these determinations they have estimated the average content in that area to be approximately 17.7 million feet per acre. I concur in that conclusion."

Is that your testimony?

A. Yes, sir.

Q. Who are these "numerous qualified geologists"?

A. Two of them are the two men who have been referred—previously, Mr. Cotner and Mr. Crum. Some others, to name a few, would be Mr. Thompson of Amarillo. I don't remember his initials.

Q. Is that T-h-o-m-p-s-o-n?

A. T-h-o-m-p-s-o-n.

Q. Would J. D. sound right?

A. I believe that is right, J. D. Thompson. And, Mr. Peterson—

Q. C. J. Peterson? A. Yes, C. J. Peterson.

Q. Anyone else?

A. I think Mr. C. Don Hughes has estimated the reserves in the Panhandle Field on this same method, using similar figures. I don't know of any other right offhand.

Q. On Page 17 of your testimony in Exhibit 30, the fourth paragraph, you make the following statement:

"It is recognized by geologists generally that based on an average sand thickness of 70 feet and an average [fol. 4263] porosity of 20 percent, the average original content in the better portion of the field was approximately 17.7 million feet per acre at virgin pressure. It is also recognized generally by geologists that the average original content in the poorer class of acreage (in which I include wells having less than 5 million cubic feet potential open flow at virgin pressure) was approximately 5 million per acre."

Are these "geologists generally" and "generally by geologists" the same gentlemen whom you have just named?

A. Substantially.

Q. Well, are there any others that you attribute this statement to?

A. There is another one, whose name I can't remember, that had worked particularly on the value assigned to the second-class acreage.

In that value assigned to second-class acreage I refer particularly to Mr. C. Don Hughes. All those men are of Amarillo, Texas.

. . . . . .

[fol. 4264] By Mr. Littman:

Q. Mr. Smith, we were discussing the numerous geologists upon whom you relied and to whom you referred on Pages 15 and 17 of your written testimony in Exhibit 30.

Now, those geologists did not make any tests to determine the porosity of the producing formation in any gas well in the Panhandle Field, did they?

A. I do not know positively. They certainly did a lot of studying in attempting to arrive at an average porosity figure for the field as noted in a footnote to the article referred to previously —

Mr. Culton: (Interposing) The Cotner and Crum article?

The Witness: I am going to that.

Mr. Culton: All right.

The Witness: Namely, the article written by Victor Cotnér and H. E. Crum, appearing in "Geology of Natural Gas" on Page 385, there in this statement:

"The following geologists have contributed material or criticism in the preparation of this paper, to all of whom the writers express their appreciation: L. M. Oles of the Prairie Oil and Gas Company; J. D. Thompson, Jr., Consulting Geologist; W. E. Hubbard of the Humble Oil and Refining Company; T. F. Newman of the Skelly Oil Company; Frank T. Clark of the Empire Gas and Fuel Company, and Richard W. Camp of the Consolidated Gas Utilities Company."

[fol. 4265] In addition to those, an article written about 1925 or 1926 or 1927 and published in the Bulletin of the American Association of Petroleum Geologists. This article was written by C. Max Bauer. He gave his idea of the porosity of Panhandle Field and, as I remember, substantiated his deductions by listing several cores which had been taken and porosity tests run on those cores.

By Mr. Littman:

Q. Do you know the names of the wells from which these cores were taken?

A. I believe it appears in the article mentioned. I have that article in the Kansas City office, and I will be glad to refer to it and give the names of those wells if they appear in the article.

Q. Do you recall what the porosity tests of those cores revealed?

A. If I remember correctly, the average was very close to 20 percent.

Q. Now, these gentlemen whose names you read in the footnote as having contributed material or criticism in the preparation of this paper, to what paper does that footnote refer?

A. The title of the paper is, "Geology and Occurrence of Natural Gas in Amarillo District, Texas", written by Victor Cotner and H. E. Crum.

[fol. 4266] Q. You do not know what particular material was furnished or contributed by those gentlemen whom you named, do you?

A. No, sir, I do not.

Q. You do not know whether those gentlemen contributed material related directly to this so-called 20 percent porosity figure or not?

A. No, sir, I do not.

Q. Then I take it from your testimony that you do not know the manner or method employed by these "numerous qualified geologists" in arriving at their porosity figure of 20 percent?

A. No, sir, I do not.

Q. And as you have stated, you have not made any independant investigation of your own in that respect?

A. That is true.

Q. Do you know what rock pressures these geologists used in arriving at this estimate of 17,500 M.c.f. per acre?

A. An initial rock pressure of 430 pounds well head.

Q. You know that each one used that?

A. Yes, sir.

Q. The pay thickness you have already described, have you not, with respect to their method?

A. Yes, sir, it was very close to 70 feet, perhaps 69½ or 71, but very close to 70 feet.

[fol. 4267] Q. You have never examined any of the working papers of these geologists, have you?

A. No, I have not.

Q. Isn't it a fact, Mr. Smith, that Cotner and Crum have never made any porosity tests?

A. I cannot say as to that.

Q. Did you rely upon a report written by them which appears in the American Association of Petroleum Geologists Bulletin?

A. I referred to that and that report possibly influenced my decision to use this method.

Q. And what is the date as of which that paper that you referred to was written?

A. It was originally published in August, 1933, and revised in 1935.

Q. And none of these geologists that you have mentioned have ever made any porosity studies or pay thickness studies with respect to the acreage controlled by Panhandle Eastern Pipe Line Company, is that correct?

A. Not as far as I know.

Q. Now, in order that I may understand your exhibit, I would like to have you explain the method used by you in arriving at the Class 1 and Class 2 acreage.

A. Exhibit 31, showing the initial open flow on a map of the Texas Panhandle gas field, the Class 1 acreage is that [fol. 4268] located in all the various classifications from 5 million cubic feet per day to above 40 million cubic feet per day.

The Class 2 acreage is that located in the classification below 5 million cubic feet per day.

Q. Now, your Exhibit 30 does not show the names of the particular leases which you classed as Class 2 and Class 1, do they?

A. That is true.

Mr. Culton: You said Exhibit 30. Did you mean 30 or 31?

Mr. Littman: I mean, his Exhibit 30. His written testimony and schedule. 31 is a map.

By Mr. Littman:

Q. Nor do your working papers show the list of acreage so classed?

A. No, sir.

Q. Do you have such a list?

A. No, sir, I do not. The reason I did not make such a list is because there is a very small amount of acreage in the Class 2 and, by comparison of the present acreage map with Exhibit 31, it can readily be determined which acreage lies in the Class 2 classification and, of course, the remainder lies in the Class 1.

Q. Now, the Class 2 acreage lies where with respect to the map, Exhibit No. 31 for identification?

A. In the gray area on Exhibit 31.

[fol. 4269] Q. You mean in the uncolored area?

A. No, the gray area.

Q. The gray area, within the heavy blue line, is that right?

A. Yes, sir.

Q. Do the various lines of demarcation, as indicated by the coloring on this map show the lines of demarcation with respect to the various open flows within each color class?

A. As shown by the legend here, the wells having an open flow above 40 million are in the areas colored yellow.

The wells have open flows from 25 to 40 million are in the areas colored green.

The wells having open flows from 10 to 25 million cubic feet per day are located in the areas colored red.

The wells having open flows from 5 to 10 million cubic feet per day are in the areas colored blue, and the wells having open flows below 5 million are in the areas colored gray.

Q. Thank you. Did you prepare this map, Exhibit No. 31 for identification?

A. It was prepared under my direction.

Q. Who originally prepared it?

A. Mr. C. Don Hughes.

Q. He is a geologist of Amarillo, Texas, is he?

A. That is true, a consulting geologist.

Q. And you made some changes in respect to the or-

[fol. 4270] iginal Map which was prepared by him?

A. A few minor changes.

Trial Examiner: The basic map is a commercial map, isn't it?

The Witness: No, I do not believe it would be called a commercial map. It was one which Mr. Hughes supplied me, loaned me, you might call it.

By Mr. Littman:

Q. What, if anything, did you personally have to do with the determination of the open flows that appear on this map?

A. You mean in testing the wells?

Q. No, I meant whose data is reflected on this map?

A. The data taken from official Railroad Commission tests.

Q. Was it taken by Mr. Hughes or by yourself?

A. It was taken by neither of us.

Q. I do not mean the original test that was taken. I mean, who actually decided where the colors were to go and what particular areas were to be included within the 40 million cubic feet class and the 25 to 40 million cubic feet class, and so forth?

Trial Examiner: In other words, who laid out the boundary lines of the pressure zones?

The Witness: Mr. Hughes did originally, and I spot [fol. 4271] checked the map by reference to records I had of the initial open flow of various wells, and where I found inaccuracies in Mr. Hughes' map, I made revisions.

By Mr. Littman:

Q. Did you make a check of the original data from the original source which was the Texas Railroad Commission?

A. The figures that I used were tests from the Railroad Commission of the initial open flow of these various wells.

Q. Now, do you know, as a matter of fact, that all the wells included within the blue area, for instance, which is classed by you as 5 to 10 million cubic feet are, in fact, wells that do not exceed 10 million and do not go under 5 million?

A. Generally speaking, yes. By generally speaking, I mean this: That I spot checked it. I did not check every single well whose location appears on this map, but I did check at random wells which appear on the map, to determine in a general way whether or not these lines were accurate.

Q. Well, it is a fact, is it not, that some of the blue areas contain wells whose open flow exceeds 10 million cubic feet?

A. That could be true.

Q. In other words, you did not undertake by this map to be so exact as to exclude all wells beyond and below the amounts shown for each class?

[fol. 4272] A. I did not include any wells in an improper classification on here that I found to be in an improper classification.

Mr. Culton: Did you check all of the Panhandle Eastern's wells?

The Witness: I did check all of the Panhandle Eastern's wells in regard to this classification.

By Mr. Littman:

Q. You do not show the open flows of the individual wells anywhere in your exhibits from which data on this map was made?

A. No.

Trial Examiner: May I ask, Mr. Smith, what publications are currently issued by the Texas Railroad Commission with reference to the Panhandle Field?

The Witness: Annual Reports are issued which contain summaries of activity in the Panhandle oil and gas field during the year subsequent to the issuance of the Reports.

Trial Examiner: You mean, the year preceding?

The Witness: The year preceding the issuance of this Panhandle oil and gas field report.

Trial Examiner: How long has it been customary to issue such reports?

The Witness: I believe, since about 1936.

[fol. 4273] Trial Examiner: We had in this hearing the series of reports since they began to issue them [would] it did not give us a great deal of official data with reference to development of the field as a whole?

The Witness: Yes, sir.

Mr. Culton: Mr. Examiner, I do not know whether those are all available or not. If they are not at the Commission's office, I happen to have a personal file, I think, of every one that has been issued, and I will be very glad to make them available to the Commission.

Trial Examiner: I think we might appreciate that, Mr. Culton. Of course, it is not my thought in making the suggestion that any great part of it would be incorporated into the evidence, but there might be some part that will be material to incorporate into evidence, and it would be advantageous if we might all have them for reference during the further hearing.

Mr. Culton: The Commission probably has a set. Claude Brown, I know, had a set several years ago, and I assume the Commission probably has received those issue in the last two or three years, but I will see to it that do have a set available in this case for any use a[t] ie desires to make of them.

Mr. Gorman: May I inquire whether that is the general report of the Railroad Commission, or is that a specific [fol. 4274] report on the gas field?

Mr. Culton: That is their annual Panhandle Field Report.

Mr. Gorman: I think we probably have that in our library, Mr. Examiner.

Trial Examiner: Do you know whether the Commission issues any other periodic reports relating to this field and, if so, what they have been to date?

The Witness: They issue annual schedules of the tests on all wells in Panhandle Field, setting forth the open flow potential of the well for that year, the rock pressure and the proratable acreage under that well, together with the location and number and company owning the well.

That is done once each year. From time to time, they also issue other reports, not regularly, however, which summarize these annual open flow and rock pressure schedules.

Trial Examiner: Is a license for drilling required to be filed which is followed by the filing of the log of the wells now being drilled?

The Witness: Yes, sir.

Trial Examiner: So the Commission has logs of all wells?

The Witness: They have attempted to get logs of all wells and they have, I think, 99 percent of them.

Mr. Culton: I will say, Mr. Examiner, until a few years back, there was no requirement that those logs be filed with the Commission but, for a few years, it has been a require- [fol. 4275] ment to have the logs filed with the Commission.

Trial Examiner: And that has enabled you to check and have fairly reliable data?

Mr. Culton: On all wells that have been drilled in recent years, logs are available, I think.

I have known of a few instances, and one of them relates to one of our gas purchase wells, it is one of the Navajo wells—

Trial Examiner: Some of these records of the Railroad Commission might be of considerable use to us, and I wanted to ask further whether they also require reports on abandonment.

The Witness: Definitely, they do.

Trial Examiner: And do they issue those reports, or are they included in any publication they issue?

The Witness: In the back of this 1940 Report, there is a section devoted entirely to wells having been abandoned during the past year.

Other reports contain similar information of that kind.

Trial Examiner: Do the maps and charts included in these annual reports indicate the field extensions?

The Witness: To a certain extent, but it is not very accurate, Mr. Examiner, because they are on such a small scale.

Trial Examiner: But the basic data is doubtless included?

The Witness: Yes, sir.

[fol. 4276] Mr. Gorman: I wonder, Mr. Examiner, as a matter of general information if you would be interested in having Mr. Culton or Mr. Smith give you a short, general summarization of the proration law which is in effect in Texas, which might indicate to you the information which the Railroad Commission does require of producers in that State?

Mr. Culton: I can give it in about one sentence.

Trial Examiner: It would be very much appreciated, and I think it is also material.

Mr. Culton: There is a proration law in Texas applying to sour gas. There is no proration law in Texas applying to sweet gas, that law having been held to be invalid by the Supreme Court of the United States in so far as the sweet gas is concerned, in a case in which I participated.

The opinion was written by Justice Brandeis.

Trial Examiner: What was the case?

Mr. Culton: Thompson versus Consolidated Gas Utilities Corporation, decided about January, 1936, or 1937 in the Supreme Court.

Trial Examiner: Do you have the citation?

Mr. Culton: No. I have lost track of the notices of the Law Edition, but I think it is the 83d Law Edition. We can get the exact citation and we will be glad to furnish it in the record.

Trial Examiner: That does not, however, necessarily [fol. 4277] represent the law as pertaining to this particular problem.

Mr. Culton: I just started to remark, Mr. Examiner, that although it is not required by any proration law, there are other statutes giving the Railroad Commission of Texas general supervision over the drilling and operation of both oil wells and gas wells, including authority to the Railroad Commission to promulgate regulations with respect to drilling, producing and abandoning all of those wells.

In compliance with that statutory provision, the Railroad Commission of Texas has promulgated rather a large number of rules dealing with those subjects, and those rules are at this time, and for several years past have been, pretty well followed in the Panhandle of Texas.

The Witness: Mr. Culton, isn't there one provision which restricts the production to 25 percent of the open flow?

Mr. Culton: The law restricts the production to a maximum of 25 percent of the open flow, but that is not a proration proposition. That is an absolute maximum production.

The properties of Panhandle Eastern Pipe Line Company are all located in the sweet gas area, so the proration regulations of the sour gas area do not apply to any of Panhandle Eastern's wells.

For several years past, the Commission has adopted the policy of taking these tests every summer in the Panhandle, the tests of the potential producing capacity of the wells [fol. 4278] and the tests of the existing pressures.

These field boys can check me on this, but I think they have done that every year for several years.

Have they skipped a single year?

The Witness: No, I do not think so.

Mr. Culton: I think that they have made those tests every year. It is quite a job. They have quite a good many different men employed in it, usually getting boys who are taking courses in petroleum engineering at the different schools and universities in the State.

The Witness: As a matter of fact, for one or two years, they took two tests during the year. I think another thing might be added, and that is the fact they changed their method of testing last year from the pitot tube method to the back-pressure method.

Mr. Culton: That is for testing open flow capacities.

The Witness: Open flow capacities, and also they require that no more spring gauge rock pressure tests be made but all rock pressure tests be made with dead weight gauges.

Mr. Culton: All those changes tend to make more certain the results attained. That is, that character of test is likely to be more consistent than other types of tests.

The Witness: They will be very much more consistent and also will indicate more nearly that which the open flow test pretended to indicate. By that I mean, the ability of [fol. 4279] the well to produce.

. . . . . .

[fol. 4280] By Mr. Littman:

Q. What character of open flows are reflected on your map, Exhibit No. 31?

A. All pitot-tube open flows.

Q. Are they the original open flows or the open flows at some dates after the original drilling?

A. They are original open flows, initial open flows.

Q. They are the initial open flows?

A. Yes.

Q. At what rock pressure?

[fol. 4281] A. At the rock pressure at the time the well was drilled.

Q. Isn't it a fact that that map purports to represent a conversion of these open flows to a 430-pound rock pressure?

A. That is true. My first answer was incorrect. They are converted to the initial rock pressure of the field.

Q. I am sorry, but I did not quite get the last part of your answer. Suppose you explain the conversion and what this map actually shows with respect to the open flows?

A. It shows the initial open flows of the wells drilled throughout the field, corrected to the initial rock pressure of the field of 430 pounds.

Q. And who made the calculation with respect to the correction?

A. Mr. Hughes.

Q. Do you know how Mr. Hughes made that calculation?

A. Not exactly, no. I presume it was made by direct proportion that if the present pressure is 400 pounds and the open flow is 10 million, then the initial open flow would be 430 over 400 times 10 million.

Mr. Culton: Is there a Bureau of Mines correction factor applied, or do you know about that?

The Witness: It probably was. I do not know for sure.

By Mr. Littman:

[fol. 4282] Q. Well, isn't it a fact that Mr. Hughes used what is known as a type curve to convert these open flows to 430 pounds rock pressure?

A. That is right.

Q. Would you mind stating now what the fact is with respect to how Mr. Hughes determined the open flows?

A. I am not entirely familiar with that curve. However, I do know he used that curve in making his corrections to the initial pressure.

I do not know the mathematical operation through which he went to make the correction.

Q. Do you, of your own knowledge, know whether the curve utilized by Mr. Hughes was a proper curve for the purpose?

A. It seems to me that it was a curve in a publication by the Bureau of Mines. I am not sure of that.

Q. Isn't it a fact that the curve was based on the wells of Texoma?

A. I do not know.

Q. You do not know whether it was based on 1943 of Texoma Company wells, do you?

A. I do not know.

Q. Well, at any rate, you then utilized this map for the purpose, among other things, of arriving at your Class 2 acreage which had an original gas content of 5,000 M. c. f. per acre?

[fol. 4283] A. Yes, estimated.

Q. Why do you use the 5 million open flow basis of determining this Class 2 acreage? What relation does that have to the amount of gas in that acreage?

A. That is just an estimated figure, that it would be approximately that.

Trial Examiner: Isn't this merely a reclassification of your lands in the light of drilling experience?

The Witness: To a certain extent, Mr. Trial Examiner, the marginal acreage, in my opinion, would be much below the more prolific acreage and the classification merely divides it between the marginal and the average or above-average of the field.

For that reason, I selected the 5 million per acre as an approximate figure for the marginal acreage.

By Mr. Littman:

Q. It isn't a very good reason, is it?

A. No, it is not.

Mr. Culton: How many acres are involved?

Trial Examiner: It is small.

The Witness: 1,920, three sections.

By Mr. Littman:

Q. Out of a total of how many acres?

A. 65,429.

[fol. 4284] Trial Examiner: By the way, there is one question I want to ask you that I forgot.

Has the United States Bureau of Mines made any extensive investigation of the Panhandle Field and issued publications based on their study?

The Witness: I am not familiar with them. I am sorry.

Trial Examiner: You do not know of any?

The Witness: No, I do not.

Mr. Culton: I have not seen any, and Dr. Bartle, who watches that closely in his line of work, informs me he has seen none.

Trial Examiner: There would be no other Governmental agency that would have studied that?

Mr. Culton: That is right.

By Mr. Littman:

Q. Mr. Smith, you cannot tell how much gas is contained in an acre by looking at the open flow, can you?

A. No.

Q. Am I correct in understanding—I might say that I have learned what little I know about this very recently—that the open flow merely tells you something about the ability of a well to produce gas?

A. From a relative standpoint. That is, if a well has an open flow of 5 million cubic feet per day, and another well has an open flow of 25 million cubic feet per day, you [fol. 4285] will conclude from that that one will produce about five times as much as the other in one day.

Q. That is, it is a function of time, is it not?

A. Yes, sir.

Q. Rather than amount of reserves. Open flow has to do with permeability, has it not?

A. A great deal.

Q. Another way of stating it is, it has to do with conductivity?

A. The ability of the gas to pass from its initial place into the well bore.

Q. That is right. In other words, if you had nothing before you other than an open flow reading, no matter how correct that reading may be, you could not estimate from that open flow the content of the gas in any particular acre, could you?

A. I think not.

Q. Then your estimate of this Class 2 acreage was not, in fact, based upon any given porosity or any given sand thickness, was it?

A. No, sir.

Q. That so-called porosity method holds true only for the Class 1 acreage?

A. That is true.

Q. And as you have indicated, there was not very much [fol. 4286] Class 2 acreage?

A. That is true.

Q. Approximately 1,700—

A. (Interposing) 1,920.

Q. 1,920 acres, and you did not use the open flow figures at all in estimating your reserves for the Class 1 acreage, did you?

A. No, sir.

Q. Now, I would like to have you explain for us, in theory, the porosity method of determining gas reserves. I want you, Mr. Smith, to assume a given area, let us say, one acre, and I would like to have you tell us what measurements you would have to have in order to determine exactly how much gas is in the hypothetical acre.

A. I would have to know the porosity of the producing formations.

Mr. Lee. May I bother you just a moment there. Would you mind defining that term "porosity"?

The Witness: Porosity is the percentage of void space in a unit volume of formation.

Mr. Gorman: Is that an open space as distinguished from solid matter?

The Witness: That is true.

Mr. Littman: Let me ask you, if we had a box full of ping-pong balls, the spaces between the balls would repre- [fol. 4287] sent the porosity of that container, would it not?

The Witness: That is true.

Mr. Lee. Well, may I just ask another question, from the standpoint of a man in the street trying to get some knowledge of the subject?

The Witness: Certainly.

Mr. Lee: Does the open space within the given area—how does that become a yardstick or a standard of measurement as applied to the probable capacity of the well, and I will go just one step further, is it because in that open space there is an area for the gas?

The Witness: Which is favorable for the accumulation of gas.

Mr. Lee: Repeat that—which is what?

The Witness: Which is favorable for the accumulation of gas. There is a reservoir in that formation.

By Mr. Littman:

Q. In other words, Mr. Smith, if you had a very hard granite, the porosity of the granite would be zero, would it not?

A. As a usual thing, granite has no porosity. It is very dense. There is no pore space in there. There are no voids.

Q. And; therefore, it cannot be expected to hold gas or anything else?

[fol. 4288] A. That is true.

Q. That would be the zero extreme, would it not?

A. That would be the zero.

Q. And if you have a cavern in the ground, that would represent 100 percent porosity because every cubic foot of the cavern could hold gas?

A. That is true.

Q. Now, will you please give us the theory of the porosity method? We have a theoretical, hypothetical acre, and we want to know exactly what we would have to have in order to determine precisely how much gas is under that acre.

A. We would have to have the percentage of porosity.

Q. Of every cubic inch of producing sand in that acre? I am talking about theory now, Mr. Smith.

A. Theoretically, yes, for an absolute determination.

Q. That is right.

A. We would have to have the thickness of the formations which contained this porosity, the exact thickness.

Q. And which contains the gas?

A. Down to the millionth of an inch.

Q. That is right. What else would you have to have?

A. We would have to have the pressure of the gas in that void space under this acre at every point, every square centimeter of the acre.

[fol. 4289] Q. The weighted average—

A. (Interposing) No, we would have to know the uniform pressure.

Q. And that is, of course, because this sand will contain more gas if it is compressed?

A. That is true.

Q. And thereby, a greater pressure?

A. That is true. We would have to know whether that pressure is the same at the top of the producing formation as it is at the bottom of the producing formation, which it probably is not.

We would have to know all about every cubic centimeter or millimeter of the producing formations under that acre of ground. Of course, that is absurd. It is an impossibility.

Q. Well, perhaps I should not have taken an acre, perhaps I should have taken a given container and propounded my hypothetical question because I wanted to make certain that I understood the theory of the method.

At any rate, the more accurate your information in regard to (1) porosity; (2) thickness of sand and (3) pressure, of course the more accurate your estimate of reserves, is that true?

A. That is true of every problem. The more accurate your information the more accurate your result.

[fol. 4290] Q. Now, nobody knows, as a matter of fact, what the porosity is of the Panhandle Field or any other field, do they?

A. That is right. Until the field is finally produced, the last drop of gas is taken from it, then—

Q. (Interposing) Then it is too late.

A. It is too late; and you would also have to know exactly the thickness of all of those pay formations then.

Trial Examiner: While you are on that, haven't you had any outcrops of any of these formations?

The Witness: The outcrops would not show any porosity, Mr. Examiner.

Trial Examiner: No information can be gained that way, then?

The Witness: Not as to percentage of porosity, no, sir, because if there was porosity and permeability in the outcrop, the gas would have escaped probably ages ago.

Trial Examiner: I was thinking of the geological formations themselves.

The Witness: These formations do outcrop and the outcrops have been studied.

Trial Examiner: That is what I had in mind. Isn't that your starting point in estimating porosity in the ground?

The Witness: No, sir.

Trial Examiner: Where you have that?

[fol. 4291] The Witness: No, sir.

Trial Examiner: In comparing your own formation of the outcrop with the cuttings from the wells, isn't that the method used?

The Witness: That is our method of correlating the geologic age of the formation from which the gas is produced but it would not contribute to our knowledge of the formation where the gas reservoir exists.

Mr. Culton: In that connection, Mr. Examiner, I happen to have some photographs taken of the outcrops of the Granite Wash in Oklahoma.

The worst trouble about them is that I happen to be shown in some of the photographs—I am the straw man—I also have some samples of Granite Wash taken out of the outcrop in the different stages of decomposition.

I shall bring a set over and let the Examiner look at them tomorrow and I will bring some samples of the Granite Wash in different stages of decomposition when I come back from Amarillo.

I can appreciate that the Examiner has a little curiosity about those, just like I did.

By Mr. Littman:

Q. Now, you have already testified that, in order to determine the porosity accurately, you must have cores tested in the laboratory, have you not?

[fol. 4292] A. Yes. Even then you would not have exact figures.

Q. But if you want to come even close, you have got to take the cores out and test them in the laboratories, isn't that right?

A. Yes.

Q. And cores, as such, have never been taken from the true producing sand in the Amarillo Field, have they, as far as you know?

A. I won't say that. I would say that probably the cores have not been taken from all of the producing formations in the Amarillo Field, but when you say true producing formations, I do not agree.

Q. By "true," I meant the more highly productive.

A. That is probably true.

Q. In other words, when you do get a core, you get about the worst part of the pay sand, do you not?

A. The part contributing the least gas.

Q. By reason of the fact that it will hold together since it is not very porous?

A. That is true.

Q. And then, after you get the core out and you do look at it and you know, in the first place, that it does not represent the most representative portion of the pay sand and after you do make laboratory tests of it, well, then what do you have?

[fol. 4293] A. You have the porosity in a very limited area.

Q. In other words, you then know the porosity?

A. Of the cores.

Q. Of the core that you have, and you cannot testify nor can anyone else testify, as to the porosity one foot or two feet away, isn't that right?

A. That is true. That is one reason why we apply that 90 percent of recovery factor, because of the variable condition of the reservoir, that the porosity is one thing one

place and another thing another place and, consequently, all of the gas can never be gotten out of the reservoir because permeability does not exist which is favorable to getting the gas out of the reservoir.

Q. It might be 10 percent up, rather than 10 percent down, might it not?

A. It might.

Q. But your estimate reflects the downward trend wholly and solely, does it not?

A. My estimate, as I said several times, is conservative.

Q. Well, now that we have discussed porosity—incidentally, you do testify, do you not, that great variations are found as to porosity throughout the entire field, the Panhandle Field?

A. Absolutely, from zero to 100 percent.

[fol. 4294] Q. And you have offered in evidence a number of exhibits that demonstrate that fact, have you not?

A. Yes, sir.

Q. And those exhibits are two sand graphs which I think are designated as Exhibits 28 and 29 which show the situation with respect to 34 wells, is that correct?

A. That is right.

Q. And, as a matter of fact, you say at Page 16 of your written testimony, do you not, that:

"These graphs clearly demonstrate that the productivity of the wells does not always increase in the same proportions as it increases in aggregate pay thickness which necessarily means that in the different pays encountered, varying percentages of porosity exist."

Is that your testimony?

A. That is right.

Q. Then the next thing you have to have to be accurate is a good determination of the thickness of pay stratum or strata, is that right?

A. That is right.

Q. You cannot be very sure about that either, can you, Mr. Smith?

A. No, you cannot.

Q. As a matter of fact, there are great variations throughout the Panhandle Field in thicknesses of pay, are there not?

[fol. 4295] A. That is correct.

[fol. 4301] RUFUS M. SMITH a witness, having been previously sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Smith, at the close of yesterday's session, we were discussing the "numerous qualified geologists" referred to by you on Page 15 of your written testimony in Exhibit 30, and "geologists generally" referred to by you in your testimony on Page 17 of that exhibit.

Also, we were discussing the average thickness of the producing sand, commonly called "pay thickness" in the Panhandle Field.

Now, it goes without saying, does it not, Mr. Smith, that the thicker the pay sand, the higher the estimate of gas reserves by your method. Is that correct, generally.

A. That is true, providing the porosity remains the same throughout the thicker section. Assuming that the porosity is uniform, it would naturally follow that you would have a greater content of gas in the thicker pay section.

Q. Well, if you had used an average sand thickness in excess of the thickness which you did use of 70 feet, then [fol. 4302] under your method you would have estimated a higher gas reserve content, would you not?

A. That is true, if I still used the 20 percent porosity.

Q. Yes, and you did use the 20 percent porosity, did you not?

A. Yes, sir.

Q. Now, I believe you stated yesterday that one of the geologists upon whom you relied was a Mr. C. J. Peterson, is that correct?

A. I had read some of the results of some of his studies.

Q. And did he arrive at the conclusion that the average pay thickness was 70 feet?

A. Approximately that thickness.

Q. Now, he is then one of the authorities upon whom you relied for the purpose of using the 70-foot average pay thickness, is that correct?

A. That is correct.

Q. Mr. Smith, do you know to what field or fields this 70-feet pay thickness of Mr. Peterson's applied?

A. The West Panhandle Field.

Q. I take it from your answer, that it is your understanding that Mr. Peterson's 70-feet average did not embrace the area commonly known as the East Panhandle Field?

[fol. 4303] A. That was my impression.

Mr. Littman: If your Honor please, I think Exhibit 76, which was presented by Mr. Davis, contains a map of the Texas Panhandle Field that might be helpful for our purposes, inasmuch as it is a fairly small and concise map, and I would like to make reference to it now.

By Mr. Littman:

Q. As I have just stated, Mr. Smith, this is one of the maps presented in Exhibit 76 by Mr. Davis. Does the map, so far as you can observe it here before you, correctly show the general outline of both the West and East Panhandle Field?

A. Generally, speaking, yes.

Q. Now, will you please point out for us on this map the line of demarcation between the so-called West and East Panhandle fields?

A. The line of demarcation between the West and East fields is a line approximately the center of Gray County, running north and south.

Q. Now, Mr. Davis has shown on this map the general location of the leaseholds of Panhandle Eastern Pipe Line Company, and those of the gas vendors in red and green blocks.

Does Mr. Davis' colors showing that acreage coincide, generally, with your understanding of where the acreage is [location]?

Mr. Culton: That is what year?

[fol. 4304] Mr. Littman: July, 1939.

The Witness: There have been probably some revisions since that time of a minor nature, but since the map is

rather small-scale, I can only say that it is approximately the location of the various blocks of acreage owned or controlled by Panhandle Eastern Pipe Line Company.

By Mr. Littman:

Q. Yes. Mr. Smith, I do not propose to hold you exactly to these blocks, but I did want to use this map for our purposes here because it is small and does show the entire picture on one small page.

What I am getting at specifically is, Panhandle Eastern does not hold or control any acreage in what is known as the East Panhandle Field, does it?

A. That is correct.

Q. And, as a matter of fact, does not own or control any acreage for a considerable distance to the west of the line of demarcation between these two fields, does it?

A. That is correct.

Q. Can you tell me approximately the distance between the line of demarcation between the East and West Panhandle fields and the point at which Panhandle Eastern's acreage commences in the West Panhandle Field?

A. I would estimate it to be 35 or 40 miles.

Q. And, as a matter of fact, the bulk of Panhandle [fol. 4305] Eastern's acreage is located even further west of that line than the 35 miles, is it not?

A. Yes.

Q. Now, am I correct in understanding that Panhandle Eastern's acreage is located, that is, in the Panhandle Field, generally in the southern portion of Moore County, in the northern portion of Potter County, in the northwestern portion of Carson County, and some in the extreme southwest section of Hutchinson County, is that correct?

A. That is correct.

Q. There is a little acreage in what is known as Hartley County, but that is rather insignificant, is it not?

A. Yes, sir.

Q. Now, is it not a fact, Mr. Smith, that the pay thickness in the East Panhandle Field is considerably less than the thickness in the West Panhandle Field?

A. I believe the average pay thickness in the East Field is less than the average pay thickness in the West Field.

Trial Examiner: While you are discussing the West Panhandle Field, referring to Davis' map contained in Exhibit 76, I wonder if you can give us a statement about the other major producers of gas adjacent to the Panhandle properties in the locations which you have designated?

The Witness: You mean by that, Mr. Trial Examiner, the names of those companies?

[fol. 4306] Trial Examiner: Yes.

The Witness: In Carson County, Cities Service has considerable acreage adjacent to Panhandle Eastern acreage.

Mr. Culton: Where does that line go to? The Examiner would probably like to know in connection with each of those companies, roughly where the line goes to, I assume.

Trial Examiner: Yes. Of course, it is evident from this map that you have a possibility, in view of your location, of a sharply competitive situation, and I thought this would be a good time to develop the nature of that possibility.

The Witness: The Cities Service line goes from their leases in Carson County, generally speaking, through Oklahoma, Kansas, their largest market being served, I believe, is Kansas City, Missouri.

Trial Examiner: I am not thinking of that Mr. Smith. I would just like to know the names of the companies that occupy the area disclosed by this shaded portion of the map in Exhibit 76, in a general way without too much detail, confining your statement to what you have described as the West Panhandle Field.

The Witness: In addition to the Cities Service, the Texoma Gas Company holds leases in the same section of Carson County where Panhandle Eastern's acreage is held.

Trial Examiner: May I ask, is that production designed for the Denver market or some other market, just a broad notation.

[fol. 4307] The Witness: Texoma is designed for the Chicago market, I believe.

Trial Examiner: Just state, generally, what the market is, and proceed.

The Witness: In addition to that, Texoma has acreage adjacent to Panhandle Eastern's acreage in southern and central Moore County.

Canadian River, whose lines go to Denver, holds acreage adjacent to Panhandle Eastern's acreage in northern Potter County and [southerwestern] Moore County.

In Hutchinson County, Panhandle Eastern's acreage is adjacent to acreage which supplies gas to various carbon black plants.

Trial Examiner: That is getting on the edge of the sour gas, is it not?

The Witness: Yes.

In central Moore County, Panhandle Eastern's acreage is adjacent to Phillips Petroleum acreage, Shamrock Oil and Gas Corporation acreage, which serves gasoline plants and carbon black plants in Northern Moore County.

I believe that is generally the picture.

Trial Examiner: Thank you.

Mr. Culton: Did you give the picture for the Canadian line to Denver?

[fol. 4308] The Witness: Yes.

Mr. Culton: And also the South Plains line?

The Witness: I did not give the South Plains line.

Mr. Culton: It is just the same acreage. The same acreage serves South Plains and the Denver line.

The Witness: And Red River also comes in that category, and the West Texas Gas Company also comes in the same category.

I do not know just where those [line] go to. Perhaps Mr. Culton could clear that up.

Trial Examiner: That is gas produced by which company?

The Witness: It is in the same picture as the Canadian River Gas Company.

Mr. Culton: Points on the South Plains.

The Witness: Numerous small communities.

By Mr. Littman:

Q. Mr. Smith, can you state what markets are served from the East Panhandle Field, generally? The Lone Star Gas Company is one of the companies that takes gas from Wheeler—

A. (Interposing) Lone Star, Shamrock Oil and Gas Corporation has some acreage over there in the East Field.

I believe Cities Service has some acreage over there in the East Field. There are a number of smaller companies which have acreage over there. A great deal of it, as I understand, is used for serving gasoline plants.

[fol. 4309] I do not know of any long-distance pipe lines which go from the East Field.

Mr. Culton: Consolidated goes to Wichita?

The Witness: Consolidated Gas Company goes to Wichita, Kansas.

Mr. Culton: And Lone Star and United. Have you ever done any work in the East Field at all?

The Witness: No, I have only kept track of the East Field in a very general way.

Trial Examiner: Is the Chicago area served at all from the West Panhandle Field, Mr. Smith?

The Witness: Entirely.

By Mr. Littman:

Q. Mr. Smith, do you have with you the article written by Mr. C. J. Peterson upon which you relied and to which you referred yesterday? A. No, I do not.

Q. Mr. Smith, I hand you a photostatic copy of a paper entitled, "Details of Data Used in Exhibit No. 43; C. J. Peterson, Witness as Requested by Federal Power Commission.

"I. List showing Areal Divisions and Name, Location and Thickness of Gas Pays in 627 Gas Wells Used in De-

termining Average Weighted Thickness of Gas Pay in Best Commercial Gas Area—Texas Panhandle. Pages 1 through 26.

[fol. 4310] "H. Explanation and Calculation of Weighted Thickness of Gas Pay Per Acre—In Best Commercial Gas Area, Texas Panhandle Field. Pages 27 and 28."

A photostatic copy of Mr. Peterson's Exhibit No. 219 in the case commonly called the Canadian River Case which was heard by the Federal Power Commission in the past year: I hand you this exhibit.

Mr. Culton: We offer it in evidence without having read it.

Mr. Littman: Let's talk about it a little bit, first.

By Mr. Littman:

Q. Now, I believe you will find on Page 28, a summary of the various pages of that exhibit, and at the foot of that page, you will note that Mr. Peterson has the following: "70 feet used." Do you see that? A. Yes, sir.

Q. Now, I want you to look at that summary page and the rest of the exhibit, and tell me whether or not Mr. Peterson did, in fact, arrive at that 70 feet of pay thickness by averaging in the pay thickness of the East as well as the West Panhandle Field.

A. Apparently he did.

Q. And that is contrary to the understanding which you had a few minutes ago, is it?

Mr. Culton: This witness has not said he has ever seen [fol. 4311] this instrument before.

The Witness: This is the first time I have ever seen this. I did not know it existed, in fact.

However, we have not any quarrel about the pay thickness of the West Panhandle Field.

I have repeatedly said that my 70-foot figures which I used for the pay thickness was very probably low, less, if anything, than the actual pay thickness.

By Mr. Littman:

Q. Well, the 70 feet that you used would more nearly represent Mr. Peterson's conclusion with respect to the

thickness of the entire Panhandle Field, both West and East, is that right?

A. Apparently, from the exhibit which you have just shown me.

Q. And that is contrary, is it not, to the understanding that you had of Mr. Peterson's conclusions a moment ago, when you said, I believe, that Mr. Peterson's pay thickness of 70 feet was based upon the West Panhandle Field?

A. Well, perhaps Mr. Peterson has revised his idea. The material to which I referred was not this material and I am reasonably sure that the material to which I was referring stated that he considered 70 or 72 feet as the average of the west Panhandle Field.

Q. That is, of course, contrary to what you see before [fol. 4312] you here?

A. That is true, but he may have revised his opinion or done further work and further study and got different results.

Q. Well, do you know the date of Mr. Peterson's article, the one to which you just referred a moment ago?

A. I believe it was about 1939, the one I was referring to.

Q. Then the revisions that Mr. Peterson made, as reflected in his Exhibit in the Canadian River Case—

A. (Interposing) Would have been made in the last two or three years.

Q. And you were not aware of these revisions?

A. I was not.

Q. Now, referring to Page 28 of Mr. Peterson's exhibit it is obvious from that page which [summaries] the data appearing in the first 26 or 27 pages of that exhibit, that the average pay thickness in the sweet gas area of the West Panhandle Field is greater than the 70 feet average for the entire Panhandle Field, both East and West?

Mr. Culton: Just a minute. I have not seen that, but I am willing to say that counsel is misquoting it. Doesn't he say that that is the better part of the Panhandle Field? It doesn't say the field as a whole.

"In the best commercial area of the Texas Panhandle Field."

[fol. 4313] It doesn't say the entire field. He is just selecting the best part of it for that computation.

Mr. Littman: Yes, the best commercial gas area of the entire Panhandle Field, both West and East, is that correct?

The Witness: That is what it says.

By Mr. Littman:

Q. And your Class 1 acreage represents all except, I believe, 1900 acres of Panhandle Eastern's acreage?

A. That is true.

Q. Also in the best commercial area, is it not?

A. It includes considerable of the mediocre, but not the poorest. My second classification is only the poorest acreage, but my No. 1 classification includes the best and the mediocre acreage, if you would break it down into three classes.

Q. Well, do you know what Mr. Peterson means when he refers to "best commercial gas area"?

A. I would assume that he means the area from which the greatest per acre return will be gotten.

Q. But you did not make any investigation of what he meant? A. No, sir, I did not.

Q. But you did use his average pay thickness?

A. From a former article.

Q. I do not remember which you answered the question [fol. 4314] that I put to you a moment ago about Page 28, or not. I shall ask it again.

A. Will you read the question again?

Q. Suppose I just ask it again. It is obvious from Page 28 of Mr. Peterson's exhibit that his average pay thickness for the sweet gas area in the West Panhandle Field is greater than that of the average of the entire Panhandle Field, both East and West, is that correct?

A. As shown on here, that is true. However, he is not including the same area to which I have referred, but only the best portion, I will say, of the Class 1 classification which I used.

Q. You do not know that of your own knowledge, do you?

A. I have to assume, because I have not read this in detail.

Q. Now, he has listed the wells he used for the purpose of determining these pay thicknesses from Pages 1 to 26, inclusive, and I think you will find them listed in there by counties. Suppose you look at those wells and satisfy yourself on that point.

By the way, I think you will find a considerable number of Panhandle Eastern's wells listed there.

A. From hastily looking over this, I still believe that he selected the best gas producing area out of the West producing field for his consideration.

[fol. 4315] Q. He used 307 wells in the West sweet gas area of the Panhandle Field, did he not?

A. Yes, sir, which is less than half of the wells in the West sweet area. The Railroad Commission Report of July 1940 states at that time there were 752 wells in the West sweet area.

Q. And which is over seven times more wells than you used?

A. That is right. However, I was only considering Panhandle Eastern acreage.

Q. And you would have used more, of course, if you had been able to get the data but you could not because the well logs were not adequate for that purpose?

A. That is true. I used the best information I had.

Q. Will you state what the average pay thickness would be in the sweet gas area of the West Panhandle Field by the use of Mr. Peterson's data?

A. If these pencil figures are correct, apparently the average thickness in the sweet gas area of the West Field is very close to 78 feet.

Q. Now, I might say, Mr. Smith, you are at liberty to check our figures on these at any time and make any corrections that you wish. A. Thank you.

Q. Now, if we exclude from consideration the acreage [fol. 4316] in west Gray County in which Panhandle Eastern possesses no acreage and we use Mr. Peterson's data as indicated on Page 28, what would be the average thickness of pay? A. Apparently, that would be 81.08.

Q. And the circumstance that causes Mr. Peterson's pay thickness to be reduced to 70 feet is simply because the balance of the gas field, to-wit, the East Panhandle

Field and the sour gas areas, are included in the total average and that brings the total down to 70 feet?

A. Apparently, from that exhibit, he has also considered the best commercial area in the East Field, in order to arrive at the 70 feet.

However, if he had considered the entire West sweet field and no part of the East Field, he might also have arrived at a figure of 70 feet average pay thickness.

. . . . . .

[fol. 4317] Trial Examiner: May I interject a question at this point? The depth of wells which you class as producing wells of the Panhandle Company is sufficiently uniform to indicate a very great uniformity of geologic formation in the area where the wells lie. Is that characteristic of this West Panhandle Field?

The Witness: Not necessarily. On the higher parts of the buried Granite Ridge, very often wells are limited to 2000 feet or less.

Mr. Culton: That is from the surface?

The Witness: From the surface. However, other wells [fol. 4318] which are on the flanks of the Granite Ridge go as deep as 3,600 feet or almost twice as deep as those which are drilled on top of the ridge. I think by reference to that cross-section map, you will understand more nearly—

Trial Examiner: (Interposing) I think I understand what you have in mind. Now, apart from your higher structures where your conditions are not typical, I assume, is the the formation rather uniform?

The Witness: On the higher parts of the Granite Ridge, the gas does not occur in the Granite Wash formation for the Granite Wash formations are accumulated along the flanks of the ridge, because the Granite Wash has originally come from the top of the ridge.

Consequently, you are limited to your Dolomitic and Limestone pay formations on top of the ridge, whereas, on the sides, you drill in the Granite Wash pay in the lower parts of the well which is very often extremely

prolific, having a much greater porosity than the Limestone and Dolomite.

Does that answer your question, sir?

Trial Examiner: In general. Apart from the wells near the higher sections, you usually have several formations that are producing, do you not, encountered in the individual wells?

The Witness: Yes, sir.

Trial Examiner: And how [may] producing strata are there as a rule, to make up your total of 70 feet?

[fol. 4319] The Witness: Sometimes as many as ten; usually 7.

Trial Examiner: Do you find a uniformity between the wells as to this fact?

The Witness: No. Very often pay sands will be encountered in one well; and in another well, one mile distant, these sands will be entirely absent.

Let me illustrate. One well may have 7 or 8 pay sands totaling maybe 80 feet of pay thickness, while, a mile away, you may have the same formations but without the porosity and, consequently, may get a section with 4 producing formations totaling maybe 50 feet.

That is what I meant when I made the statement that there were a great many variations in the field, even though the beds are similar in each of these two hypothetical wells.

The porosity did not extend from one to the other.

Trial Examiner: Thank you.

By Mr. Littman:

Q. Will you please refer to Schedule 1 of Exhibit 30.

Now, on this schedule, you have listed 34 wells for which you show the pay thickness in Column F and the initial natural open flow in Column G. Who made the determination of the pay thicknesses shown in Column F?

A. I assisted in making that tabulation with the pay thicknesses. However, the major part of the work was done by another man, Mr. Boyd.

[fol. 4320] Q. Was he your assistant?

A. He was assisting in this work, yes.

Q. And is he the same gentleman who assisted you in ascertaining the sand thicknesses of the 40-odd wells that you used for purposes of arriving at the 70 feet?

A. No, I would not say he had anything to do with the 70 feet. He did make some studies on this exhibit, and also he assisted Dr. Bartle in some of his exhibits.

Q. Who assisted you in the preparation of the work on the 40-odd well logs that you referred to in your testimony yesterday, of Panhandle Eastern?

A. Dr. Bartle assisted some.

Q. Well, in your opinion, are these pay thicknesses shown in Column F correct? A. Yes.

Q. As a matter of fact, I believe there are seven wells on this sheet that were included in the 40-odd wells upon which you relied in arriving at your 70 feet of pay thickness, is that correct? A. I believe so.

Q. Now, I call your attention to Line 3. A. Yes.

Q. Which refers to a well owned by Panhandle Eastern Pipe Line Company called the J. T. Sneed No. 1-6, which is located in Potter County.

[fol. 4321] A. Yes, sir, in Moore County.

Q. I am sorry, in Moore County.

Now, you find that that well has a pay thickness of 32 feet, do you not?

A. Yes, sir.

Q. And that was one of the wells upon which you relied in arriving at your pay thickness of 70 feet for the average of the 40 wells in the Panhandle Field owned by Panhandle Eastern? A. I believe it was.

Q. Now, I want you to refer to Exhibit 130 for identification, which is Mr. Peterson's Exhibit 219 in the Canadian River Case.

A. I noticed that when I was glancing through, there was a discrepancy between his thickness of pay and mine.

Q. Yes, I was trying to find it here.

A. Perhaps if he knew more about that well, he would agree with me.

Q. Well, of course, you think you are right, and probably Mr. Peterson thinks he is right. What pay thickness

did Mr. Peterson find on that well as disclosed in Exhibit 130 for identification? A. 75 feet.

Q. As compared with your pay thickness of what?

[fol. 4322] A. 32 feet.

Q. It is more than 100 percent off, isn't it?

A. If he had had the experience with that well that I have had, he would certainly be closer to my estimate of pay thickness.

Q. Perhaps you and he will have an opportunity to thresh that out some day but, as you have stated yesterday, it is not an uncommon thing and, as a matter of fact, it is a very common thing for geologists to disagree on pay thickness? A. And not only geologists, to disagree.

Q. Who else disagrees? A. Lawyers, I think.

Q. We disagree on everything.

Trial Examiner: Some require more "pay" than others.

By Mr. Littman:

Q. On Line 27, you show a well belonging to Cities Service Company which is called the Burnett No. 21, located in Carson County. Will you please find that well on Mr. Peterson's exhibit? A. I have it.

Q. Now, what pay thickness did Mr. Peterson put on that well? A. 127 feet.

Q. And what pay thickness did you put on that well? A. 65 feet.

[fol. 4323] I do not know what information Mr. Peterson had on the well. I only had the logs supplied me by Cities Service Company. He may have been able to examine the samples and may be more nearly right than I am.

I can only say that, apparently, the log which I had was a good one.

Q. How could you tell by looking at the samples anything about the pay thickness?

A. We went through that yesterday, Mr. Littman.

Q. You want to refer back to what you said about that yesterday? A. Yes, sir.

Q. To save time. All right. Let's get down into Mr. Culton's territory. Now, I notice in Line—

Mr. Culton: (Interposing) Just what do you mean by that?

Mr. Littman: Texoma Natural Gas Company.

Mr. Culton: Texoma is no more my territory than Panhandle Eastern or Phillips or Cities Service Company or any other client that I may have had sometime.

Mr. Littman: Don't take that too seriously, Mr. Culton.

By Mr. Littman:

Q. Line 29 on Schedule 1 shows a well owned by Texoma Natural Gas Company which is called the Burnett No. 1-S for which you show a pay thickness of 61 feet.

Now, what pay thickness did Mr. Peterson ascribe to that well, as shown by Exhibit No. 130? A. 128 feet.

[fol. 4324] Q. Well, let's look at the next line, which is Line No. 30.

A. Since that is one of Mr. Peterson's wells—pardon me.

Q. Which one is Mr. Peterson's own well?

A. This Burnett No. 1-S, I rather think he would have samples information which was considerably more than I had. I merely had a log which Mr. Peterson supplied me.

Q. Well, that is one of the difficulties that a geologist has, in determining pay thickness?

A. That is true. That is one of them.

Q. One of many of them?

A. That would be more nearly correct.

Q. Well, we will go now to Line 30, which is a well belonging to Texoma Natural Gas Company called the Burnett No. 2-T for which you have a pay thickness of 63 feet.

Will you please give us Mr. Peterson's estimate of pay thickness for that well? A. 150 feet.

Q. And Line No. 31, we have another well owned by Texoma Natural Gas Company called the Daver Well. I believe Mr. Peterson refers to that as the Bauer No. 1-G, for which you have a pay thickness of 73 feet as shown in Column F of Schedule 1 of Exhibit 30.

[fol. 4325] A. And Mr. Peterson has 144 feet.

Another reason why Mr. Peterson's figures are likely to be more accurate than mine on a good many of his wells, is that he has stayed on the well during the entire time that the well was drilling through the pay section and, consequently, should be better able to estimate the pay thickness than I would be, since I was not there.

Mr. Culton: You are referring to the Texoma wells?

The Witness: The Texoma wells: but I was not estimating the reserve under any Texoma wells, merely the Panhandle Eastern acreage.

By Mr. Littman:

Q. Now, in Line 32 of Schedule 1, you show the Crutchfield No. 1-E well owned by Texoma Natural Gas Company, for which you found a pay thickness of 85 feet.

Will you please state what pay thickness was found for that well by Mr. Peterson? A. 144 feet.

Q. Now, the wells that you have read from Mr. Peterson's exhibit appear on Page 1, do they not, of Exhibit No. 130?

A. Four of them do. Some of the others are on subsequent pages.

Q. Now, do you find the A. D. Smith No. 1-E well on [fol. 4326] your exhibit? A. I do not.

Mr. Culton: You do not describe it at A. D. Smith—

The Witness: Perhaps you mean the Smith No. 1-E, Line 33.

By Mr. Littman:

Q. Perhaps you can tell me whether that is the same well as the one which Mr. Peterson has described on Page 2 of Exhibit No. 130 which is the fourth one from the bottom of that page.

A. Apparently, they are the same well.

Q. Now, you found a pay thickness of 61 feet for that well? A. And Mr. Peterson shows 123 feet.

Q. Did you identify another well on Mr. Peterson's exhibit that you have included in your list on Schedule 1?

A. Apparently, on Page 3, the M. J. McLaughlin No. 4-M corresponds to a well on Schedule 1, Exhibit 30, Line

34, wherein Mr. Peterson shows 76 feet pay thickness, and I show 41 feet pay thickness.

Q. Now, that is the last well shown in your Schedule 1, isn't it? A. Yes, sir.

Q. We have already discussed the A. D. Smith 1-E, have we not? A. We have.

[fol. 4327] Q. Do you find the R. S. Coon, 1-M well in your Schedule 1 of Exhibit 302. A. Line 7.

Q. Now, that well is owned by the Texoma Natural Gas Company, is it not? A. Yes.

Q. Now, what pay thickness did you find?

A. 28 feet.

Q. And what pay thickness did Mr. Peterson find for that well? A. 17 feet. We are getting closer together.

Q. Yes, well, that one was not very thick. Do you find the R. S. Coon well, No. 2-M on Schedule 1 of Exhibit 30? A. In Line 6.

Q. And what is your pay thickness for that well?

A. 18 feet.

Q. What is Mr. Peterson's thickness for that well?

A. 50 feet.

Q. Now, referring to Line 4, the R. S. Coon well No. 11-M, what pay thickness did you find for that well?

A. 32 feet.

Q. What pay thickness did Mr. Peterson find?

A. 55 feet.

Q. You have a well called the J. W. Moore, et al, 1-P? [fol. 4328] A. Yes, at Line 19.

Q. And that is Line 19 of Schedule 1 of Exhibit 30?

A. Correct.

Q. And what pay thickness do you have for that well?

A. 74 feet.

Q. And what pay thickness did Mr. Peterson find?

A. 175 feet.

Q. Do you find the T. Thompson well No. 1-P in your schedule 1? A. At Line 20.

Q. And what is your pay thickness? A. 58 feet.

Q. What is Mr. Peterson's pay thickness?

A. 123 feet.

Q. Do you find the J. T. Sneed No. 13-E well in your Schedule 1 of Exhibit 30? A. At Line 16.

Q. What is your pay thickness? A. 46 feet.

Q. And what is Mr. Peterson's pay thickness?

A. 66 feet.

Q. Do you find the J. T. Sneed well No. 10-P in your Schedule 1? A. Line 18.

Q. And what is your pay thickness as shown in that schedule? A. 40 feet.

[fol. 4329] Q. What is Mr. Peterson's pay thickness?

A. 95 feet. The same applies to all of those Texoma wells, where undoubtedly Mr. Peterson had more information than I did and possibly his figures are much more accurate.

However, these pay thicknesses were not used in arriving at my average, and I was not considering reserves under Texoma acreage, only that under Panhandle Eastern acreage.

Q. Well, one of these wells was used that we have been talking about the past few minutes?

A. That is true.

Q. Namely, the J. T. Sneed No. 1-6 appearing in Line 3, is that correct? A. That is true.

Q. For which you found a pay thickness of 32 feet and Mr. Peterson found a pay thickness of 75 feet?

A. That is true, but I do not think Mr. Peterson knows as much about that well as I do.

Q. Well, and we, of course, do not have your list of 40 wells but perhaps you can tell us whether or not Mr. Peterson has included a good many of your 40-odd wells in his list of 130. We do not know, frankly.

A. I do not, either.

[fol. 4330] Q. Well, when we secure your list and your pay thicknesses, then, of course, the differences, if any, will appear, is that correct? A. That is true.

Q. But this does illustrate, does it not, Mr. Smith, the wide variations in findings of pay thicknesses as between competent geologists, is that correct?

A. I would say so.

Q. In other words, what we have been talking about is not an unusual thing. It is the usual thing, is it not, this wide discrepancy and variance in ascertaining pay thickness?

A. It is common, yes, for everyone to have differences of opinion.

Q. Now, under the porosity method, an accurate determination of pay thickness is, of course, essential to an accurate estimate of gas reserves, is it not?

A. That is true, to be able to tell definitely how much gas is there. However, in estimates, the word "estimate" of course is self-explanatory, that it is not accurate but only someone's idea as to what probably is or was or might be.

Q. Well, of course, one of the difficulties of the porosity method and its application is the difficulty of ascertaining the precise pay thicknesses throughout the area involved, is that not correct?

A. That is true, and I think that all other methods [fol. 4331] used in estimating reserves also have their difficulties and inaccuracies, as well as this one.

I would not have selected this one had I not thought I could obtain the most accurate estimate of the reserves under Panhandle Eastern's acreage.

Q. But there are other methods of ascertaining reserves which are not beset with the difficulty which we have been talking about for the last hour, namely, the difficulty of ascertaining the accurate pay thicknesses?

Mr. Culton: You mean reserves under a particular tract of land?

Mr. Littman: Yes.

The Witness: Not that difficulty, but some other difficulties which I consider much greater.

By Mr. Littman:

Q. All of which indicates, of course, there are still further differences of opinions among geologists?

A. Yea, verily.

Q. Now, one of the methods that does not require the ascertainment of pay thickness is the rock pressure decline method, is that correct? A. That is true.

Q. When the rock pressure decline method is used, you do not have to determine any such thing as porosity either, do you?

[fol. 4332] A. Only equalized pressure presen., which is a bigger problem than I would want to tackle in the time that I made this study.

Q. You have already indicated that you have some quarrel with the rock pressure decline method, but I did want to make it clear upon this record that the rock pressure decline method does not comprehend any application whatever of any calculation of (1) pay thickness or (2) porosity. Is that correct?

A. That is true. I do not throw the rock pressure decline method out entirely. In some fields, I think that is the best method to use, but not in the Texas Panhandle Field.

Q. Dr. Bartle used it, didn't he? A. That is true.

Q. In other words, you are not attacking the rock pressure decline method as a general method?

A. That is right.

Q. But you are saying that it is not a good method to use in the Panhandle Field of Texas?

A. That is absolutely correct.

Q. Now, I believe you stated yesterday that you used a so-called 90 percent recovery factor which, in effect, results in a 10 percent lower estimate of gas reserves than you would have otherwise found, is that right?

A. That is true.

[fol. 4333] Q. Now, one of the reasons which you give in your testimony for using a 90 percent recovery factor is, "the varying differences in depth of pay under varying differences in porosity and permeability." Is that correct? A. I do not believe I said "depth of pay."

Q. I stated this was one of the reasons that you gave. Will you turn to Page 19 of Exhibit 30 and I think we will soon be able to tell whether I copied the testimony correctly or incorrectly in my notes.

A. You are right, I did say "depth of pay."

Q. That appears in the 9th and 10th lines from the bottom of Page 19 of Exhibit 30, does it not?

A. Yes, I have it.

Q. Now, how do those factors affect the ultimate recovery, Mr. Smith?

A. Well, one way of explaining that would be to take the two hypothetical wells which I was talking to the Trial Examiner about earlier, wherein I explained that the various pay formations were not continuous throughout the field, and I think it is safe to deduct from that

that there may be pay formations between wells which never will be tapped.

The fact that porosity and permeability are not continuous would not permit all the gas to be withdrawn. The depth of pay, I do not remember just exactly what I did have reference to there, unless it might be that the deeper pays would be more vulnerable to the encroaching [fol. 4334] water and the water would consequently keep some of the gas from being recovered.

The fact that the wells are drilled on an irregular pattern would tend to create differences of pressure between wells and would have an effect of keeping some of the gas from reaching a well bore.

Q. You mentioned those factors a little further down on the page. I was inquiring particularly with respect to "the varying differences in depth of pay and the varying differences in porosity and permeability", as distinguished from the other factors which you named, and I was trying to ascertain how those factors which I just quoted from your testimony could possibly affect the ultimate recovery.

A. I believe I have answered that question.

Q. Well, as to the varying differences in depth of pay, you used a 70-foot average, did you not?

A. That is true. That is thickness of pay, however, not depth of pay.

Q. What is the distinction, as you use it?

A. The thickness of pay is made up of the aggregate thickness at which gas is found in the production section. I mean by that, there may be one pay thickness of 5 feet, another of 20 feet, and all those added together would make the average of 70 feet thickness of pay.

[fol. 4335] The depth of pay would be the depth beneath the surface of the ground, which might be 2,000 feet, might be 1,500 feet, or might be 3,500 feet.

Q. How would that affect the recovery?

A. As I said, the deeper pays would be closer to the water encroachment. As it got down near sea level, there would be more likelihood of some of the gas being prevented from reaching the well bore by water encroachment.

Q. And your contours show that Panhandle Eastern's acreage is located near the top of the structure, is that not correct?

A. I mentioned also the fact at the same time I made that statement, that water had been noticed to be coming from the northeast part of the field and was fingering in, so to speak, toward the Panhandle Eastern acreage.

Trial Examiner: The record shows the use of acid as one of the artificial means, so to speak, of increasing the production of a properly drilled well.

Are there others?

The Witness: Not in use at the present time. Shooting has been used but is not used currently.

Trial Examiner: That is what I had in mind. I did not know.

[fol. 4336] Mr. Culton: Will you tell the Examiner why? What happened to the shooting?

The Witness: Shooting has been found to increase the difficulties with which gas is produced. It fractures the formation at the point where the shot is discharged and permits particles of shale and lime and granite wash to be produced with the gas and greatly increases the producing problems, for one reason.

Another reason, very often a cavy formation or cavy condition results from shooting the wells, and that has to be combatted during the entire life of the well.

Trial Examiner: That would be particularly damaging because of the fact that you used so much open hole?

The Witness: Yes, sir.

Trial Examiner: There is no way of knowing, of course, when you use acid just how effective that acid is going to be? In other words, in some wells you encounter a much larger predominance of limestone formation than you would in others, and I assume that a good deal of the acid treatment is more less wasted?

The Witness: You can determine prior to acidization, to a certain extent, what the effect of the acid will be, by examination of what samples you have.

Trial Examiner: Your cuttings?

The Witness: And testing the solubility in acid of those [fol. 4337] cuttings.

Trial Examiner: Is the acid treatment all applied after the completion of the well, or is it applied in steps as the drilling proceeds?

The Witness: Some companies use an acid treatment immediately before drilling in the granite wash, which is probably a very good method. That is, they drill down to approximately the top of the Granite Wash pay zone and acidize the well, then drill into the Granite Wash after the well has been acidized.

The step method which you are probably referring to is the one wherein we use, say, 1,000 gallons of acid first, then later another step would be a 2,000-gallon treatment, and [possible] a third would be a 6 or 7,000-gallon acid treatment, wherein we progressively reach back away from the well bore to increase the size of the bore and thus permit a greater number of pores or greater permeability to be in contact with the well bore.

Trial Examiner: Of course, there is no way of determining the effective zone of the acid reaction?

The Witness: No, sir, that can only be estimated.

Trial Examiner: Either it works or it does not work, and your measure of success is in the production increase?

The Witness: Yes, sir. I do not believe the acid will cause wells to produce any more, but it will probably cause [fol. 4338] them to produce faster.

It may, of course, if it reaches into, and eats out a nonporous zone or nonpermeable zone and permits a permeable zone to be in contact with the well bore by increasing the diameter of the well bore, the production would be increased.

Trial Examiner: A faster and greater production would be synonymous in case there was an offset well nearby?

The Witness. That is true.

. . . . . .

By Mr. Littman:

Q. Well, Mr. Smith, we were discussing the 90 percent recovery factor and you had explained how, in your opinion, the depth of pay would affect the amount of recovery.

Now, as to porosity and permeability, how would those factors affect the recovery, bearing in mind that you use an average porosity of 20 percent, to be conservative?

A. That average porosity of 20 percent does not mean that it is uniformly 20 percent throughout the field, by any manner of means.

That average porosity of 20 percent may vary, the two extremes from 5 percent up to 100 percent.

Q. You mean it varies up and down? A. Yes, sir.

[fol. 4339] Q. But the average is 20 percent, isn't it?

A. Yes, sir.

Q. According to your—

A. (Interposing) That is the figure I used.

Q. Why did you assume here—withdraw that—why do you then knock off another 10 percent of your entire estimate which was arrived at by the average?

A. On the face of it, since it varies that much in the well bores, it stands to reason that it will also vary outside the well bores similarly, and if it does vary similarly away from the well bores, then there will be places away from the well bores which will have so little porosity and permeability that the gas contained there away from the well bore will never reach the well bore.

Q. I understood when you used a figure of 20 percent porosity, that that 20 percent took into account the variations up and down.

A. It does.

Q. Why do you always assume conditions below rather than above the average?

A. You mean, that it would be just as safe for me to assume that all these pay formations were connected or continuous throughout the field.

I think the evidence points the other direction, since in one well, you get 10 pay formations, and in another well, [fol. 4340] you get 5 or 3.

Q. But the average of those formations with respect to porosity is, according to your testimony, a conservative 20 percent, is it not?

A. Yes.

Q. Why knock off something from that merely because, in some instances, porosity is greater and in some instances it is less than 20 percent.

I simply cannot understand why, and I am asking you to explain why.

A. Because that porosity is not continuous and the permeability is not continuous.

Q. But the 20 percent is the average, is it?

A. 20 percent is the average which I assumed, yes.

Q. Isn't it a fact you took off 10 percent for the purpose of being conservative, to use your language of yesterday?

A. No, sir, not necessarily.

Q. It was one of the reasons, is it?

A. That is one of the reasons, and the other is that I cited, with the encroachment of the water, which would prevent all of the gas from being recovered which is evidenced by the fact that there is great variation in the exhibit which has been offered, compiled by Mr. Peterson.

The fact of the great variation in thickness of pays [fol. 4341] which range there, I believe, from 18 feet up to 175 feet, would indicate the great variations throughout the field. It would certainly stand that they are not continuous if, in one well, you have 18 feet and, in another well, you have 175 or almost 10 times as much.

Q. Well, I understood that your average of pay thickness took into the account the ups and downs, and that the average was struck having those ups and downs in mind.

Now, is my understanding correct?

A. No, but this is a different matter. This is an entirely different matter from an estimation of the amount of gas under the various pieces of acreage.

Q. Now, you have offered some sand thickness graphs which have been designated as Exhibits 28 and 29.

A. Yes, sir, and with those graphs, I intended to show graphically the great variations throughout the field.

Q. In what?

A. Porosity, permeability, thickness of pay, potential of the wells.

Q. All of which indicates the difficulties encountered in determining the porosity and sand thickness?

A. Correct.

Q. To what use did you put these graphs, in computing the estimate of gas reserves of Panhandle Eastern that appear in Exhibit 30?

[fol. 4342] A. To substantiate the 10 percent recovery factor.

Q. For any other purpose, other than to show the variations——.

A. (Interposing) Throughout the field.

Q. That is described?

A. To show the general character of the field.

Q. Have you ever made an estimate of the amount of gas which Panhandle Eastern could expect to produce from its wells in 1940?

A. No, not in any one year.

Q. But you have made an estimate with respect to productivity? A. As shown in Exhibit 30.

Q. Well, that is in toto, is it not? A. Yes.

Q. But you have not made any estimate of the amount of gas which Panhandle Eastern could expect to produce from its wells for any given year, have you?

A. No, sir.

Q. Who selected these 34 wells which are reflected in your sand graphs?

A. Mr. Boyd, Dr. Bartle and myself.

Q. Why were these particular wells selected?

A. They most nearly indicated the point which we wanted to bring out.

[fol. 4343] Q. That is, the point of the variations?

A. Yes, sir.

Q. In pay thickness and porosity and permeability?

A. Yes.

Q. Why didn't you use 34 of Panhandle Eastern's own wells for this purpose?

A. No particular reason.

Q. Are these wells representative of the situation that prevails in Panhandle Eastern's acreage?

A. Probably so.

Q. How many of these wells that you show in sand graphs, Exhibits 28 and 29, are Panhandle Eastern's wells?

A. Six of them are owned by Panhandle Eastern Pipe Line Company, and one other is connected to Panhandle Eastern Pipe Line Company.

Q. That makes 7 out of the 34? A. Yes.

Q. Please refer to Schedule 5 of Exhibit 30.

A. Yes, sir.

Q. Do the columns headed, "Open flow potential—M.c.f." refer to initial open flow or to the open flow as of each of the years 1935 to 1940?

A. The open flow of each of the years.

Q. You do, however, show the initial flow down at the bottom of the page, do you not? A. Yes, sir.

[fol. 4344] Q. Did you use the data on this schedule to compute your estimate of remaining gas?

A. This schedule was made up principally to show that the wells connected to Panhandle Eastern Pipe Line Company are above the average of the remainder of the field in open flow capacity.

Q. For example, for the year 1940, this schedule shows that Panhandle Eastern's wells have a 50 percent larger open flow potential than the average wells in the Panhandle Field, is that correct?

A. That is correct, approximately 50 percent.

Q. Have you at any time made an estimate of remaining gas content of Panhandle Eastern's acreage based upon the existing rock pressures rather than upon the original rock pressures?

A. I have studied that and attempted to make an estimate of that, from time to time.

Q. You never concluded your studies in that regard?

A. That is true.

Q. Can you state what initial quantity of gas you found per acre upon the method that you utilized, the present rock pressure rather than the estimated—

A. No, I cannot.

Q. You do not recall any figures you can give us at [fol. 4345] this time with respect to the estimate that you made?

A. No, I cannot.

Q. Now, just one or two more questions, and these relate to the rock pressure maps for the years 1938, 1939, 1940 and 1941 which have been designated for identification as Exhibits 24, 25, 26 and 27.

Is my understanding correct, that you prepared that part of these maps with respect to the Hugoton Field as well as that for the Panhandle Field?

A. I worked with Dr. Bartle on that part of the map.

Q. Was it a joint enterprise or—

A. (Interposing) I would say yes, it was a joint enterprise.

Q. Now, what isobaric intervals are shown on those maps? A. Ten-pound intervals.

Q. For the Hugoton Field?

A. For the Hugoton Field.

Q. And from what source was the information obtained for the purpose of establishing the rock pressure bands for the Hugoton Field?

A. From well tests that are taken annually on those wells.

Q. On which wells?

A. The wells in the Hugoton Field, all wells in the [fol. 4346] Hugoton Field.

Q. That is, this rock pressure map was constructed from data derived from not only Panhandle Eastern's own wells but from the wells of others in the field?

A. All other wells in the field.

Q. Why didn't you use 50-pound isobars in the case of the Hugoton Field as you did in the case of the Panhandle Field?

A. Because 50-pound isobars would not have shown as clearly the existing conditions in the Hugoton Field as the 10-pound isobars do, and if 10-pound isobars had been used in the Texas field, in order to make the two comparable, it would have been a maze of lines and probably not comprehensible.

Q. You mean, the map would be too small to be utilized for purposes of showing 10-pound isobaric intervals?

A. The scale of the map would have been too small, yes.

Q. Well, there isn't any doubt in your mind, is there, that that part of the map which shows the 10-pound isobaric intervals is much more accurate than the part of

the map which shows the Panhandle Field by 50-pound intervals?

A. That is true. Another reason why we used the 50-pound was because those maps were already available as published by the Texas Railroad Commission, and we did not have sufficient time to work up a 10-pound isobar [fol.4347] map on the Texas Field from any records that we had or could obtain.

Q. I take it you consider it would have been desirable to do so? A. Certainly.

Q. Now, you stated that in making the map for the Hugoton Field for the years 1938 to 1941, as shown in Exhibits for identification 24 to 27, inclusive, and respectively, you utilized the rock pressure readings from all of the wells?

A. That is true.

Q. Will you please state the source of the information?

A. I believe in all cases the reports as published by the Kansas Corporation Commission were used.

Q. Now, Dr. Bartle made direct use of the Hugoton Field rock pressure maps 24 to 27, inclusive? A. Yes.

Q. In arriving at his estimate of reserves?

A. That influenced it. I believe, after a study was made of those maps and figures obtained from data on the maps, and the Kansas Corporation Commission Reports, that also another method was used in arriving at the per-acre reserve of the Hugoton Field, namely, the thickness of pay, porosity method.

Q. Well, the fact is, however, that as to the lower part of these maps, which shows the Panhandle Field and the [fol. 4348] 50-pound isobaric intervals for rock pressures for the various years, you did not use those, strictly speaking, in calculating your reserves, did you?

A. No.

Q. Mr. Smith, you have also made an estimate of—withdraw that—in Schedule 7 of your Exhibit 30, you show the Hugoton production to Argus Natural Gas Company by Panhandle Eastern Pipe Line Company, do you not?

A. Yes, sir.

Q. You, however, did not make an estimate of the reserves that are subject to the Argus Natural Gas Company contracts, did you?

A. No, neither Dr. Bartle or myself.
Q. Those were excluded from consideration?
A. Yes, sir.

. . . . . .

GLENN G. BARTLE, a witness, having been previously sworn, resumed the stand and testified further as follows:

Cross-Examination.

By Mr. Littman:

Q. Dr. Bartle, you prepared Exhibit No. 36, did you not? A. Yes, sir.

Q. Will you please turn to Page 2? A. All right.

Q. Of your written testimony. I note there are two page 2's. A. Yes.

Q. I am referring to the second one.

A. Yes, sir.

Q. On that page, you made the following statement:

"I have indicated the probable boundaries on all sides of the rock pressure and open flow maps hereafter discussed by a broken line."

Which maps do you refer to by that statement, Dr. Bartle?

[fol. 4353] A. The rock pressure maps are the ones that were introduced in evidence by Mr. Smith because he was referring to the south part of it.

Now, that same map reaches on up into the north part of the Hugoton area. Those are the exhibits beginning with No. 24, the ones we have been referring to.

Q. I believe they are Exhibits 24, 25, 26 and 27 for identification? A. That is right.

Q. Being rock pressure maps for the years 1938 to 1941?

Mr. Culton: And also 1932; wasn't there?

Mr. Littman: 1938, 1939, 1940 and 1941.

The Witness: The 1932 map would be Exhibit No. 23. The 1938 map is No. 24. Anyone of those maps shows the boundary line as we now think it to be, not as we thought it to be at any specific date in the past.

By Mr. Littman:

Q. In other words, the line to which you refer in the testimony which I have read is the line which represents your present judgment?

A. That is right.

Q. Suppose we look at the latest of those maps?

A. All right, the 1941 rock pressure map.

Q. That would be Exhibit 27.

[fol. 4354] A. You notice that this is a dotted line. We do not attempt to say the exact ultimate limits of this field, and we are not making an estimate of the whole field for that reason.

I will be glad to go around the field with you, showing you the dry holes and the wells near the edge, if you care to have me do so, indicating the basis for this dotted line as of the present time.

Q. Before you do that, Dr. Bartle, it may be well for you to do just that later, but we have not stated, as yet, in the record, that we are now discussing the Hugoton Field.

We want the record to show that, do we not?

A. Yes, sir.

Q. If I correctly understand your testimony, this dotted line is your best judgment as to the present boundary of the Hugoton Field, is that right?

Mr. Culton: You mean present judgment as to the boundary?

The Witness: Yes.

By Mr. Littman:

Q. Present judgment as to the boundary?

A. That is right.

Q. Would it be the present boundary, in so far as it is shown on your 1941 map, would it not?

[fol. 4355] A. That is right. We did not think there was any reason for going back into our 1932 conception or our 1938 conception, since that was only of historic interest.

Q. When you used the term "probable boundaries on all sides", in your testimony on Page 2, you are referring to that dotted line shown in this map which is Exhibit 27?

A. That is right.

Q. Now, on Page 2, you make the following statement, "the total area within the broken line is approximately 2,540,000 acres," is that correct?

A. That is correct, that is a statement of information.

Q. Have you ever made an estimate of the total original recoverable reserves for this area?

A. For this whole area?

Q. Yes, for the area embraced by this dotted line and which you state embraces 2,540,000 acres.

A. No, I have not. I have not classified this acreage separately into various classifications. It is possible that further development will bring about such a classification.

So far as the Panhandle Eastern's acreage which I evaluated in this exhibit—

Q. (Interposing) Exhibit 36?

A. Exhibit 36, I assumed that the acreage which they have located was of the same order, that is, we did not give more than one estimate. We used this estimate of 9,500,000 at the sand face.

[fol. 4356] Q. 9,500,000 cubic feet?

A. Cubic feet per acre at the sand face as applying to all of the Panhandle Eastern acreage.

Q. Pardon me, may I interrupt right there?

The 9,500,000 cubic feet figure to which you have just referred is your estimate of the original amount of gas?

A. Of the original amount of gas at the sand face. That is not the amount recoverable.

Q. Pardon the interruption, I thought it would be better to clear that up as we went along.

A. Yes.

Now, as to the amount of production which could be expected at the edges of this field, I do not believe it is yet possible to make a classification of acreage that would be at all accurate but, for the Panhandle Eastern acreage scattered to some extent across this field, we are still using the same figure.

Q. Namely, the 9,500,000 cubic foot?

A. The 9,500,000 cubic feet.

Q. To be exact, that figure is 9,541,000 cubic feet; is it not? A. That is right.

The wells at the edge of the field, in many cases, have had a smaller open flow. As to how many of the spots [fol. 4357] scattered away from this withdrawn area will turn out to be good, that would still be impossible to tell.

Undoubtedly, there will be some good spots and some poor spots scattered over the field as a whole.

Q. What, in your judgment, would be the proper original gas content per acre figure to use for the entire area in the Hugoton Field of 2,540,000 acres embraced by the dotted line?

A. I have no basis for any other figure than the one of 9,500,000 which I believe to be the true figure for the withdrawn area.

As I have tried to say, I think that in the other regions which are not now withdrawn and in which we have less information, there will undoubtedly be some good spots and some poor spots.

I have no basis, though, for any other estimate than that.

Q. When you used the term "withdrawn area", will you indicate on the map, Exhibit No. 27, what you refer to?

A. The area chiefly which is colored some other color than the light yellow, buff. That is the area which has suffered a decline of pressure to 430 or below.

That makes up on the latest map here a total of about half a million acres—I will give it to you exactly—467,640 acres which is less than one-fifth of the total area within [fol. 4358] the dotted line.

Q. So that there is a considerable area within the dotted line boundary of the Hugoton Field for which you state you cannot now make an estimate of original gas content?

A. Except on the assumption that the behavior of that will be comparable to this withdrawn area.

Q. And what is your best judgment with respect to that? Is it your best judgment at this time that the areas outside of your areas of withdrawal will yield approximately the same original gas content as that which you have assigned to the areas within your areas of withdrawal?

A. As I said to you, I have no basis for any other estimate than the 9,500,000. I think that there will be good spots develop, as good as this, and perhaps even better.

I feel quite sure that there will be large areas of this 2,500,000 which will be less.

Q. But on the average, what would you say?

A. On the average, I would think it would be about the same.

Q. That is the same, namely—

A. (Interposing) 9,500,000 per acre.

Q. 9,500,000 cubic feet per acre?

A. At the sand face.

Q. At the sand face? A. Yes.

[fol. 4359] Q. And the area that we have been talking about, as you have just stated, which is outside of the areas of withdrawal and yet within the total boundary—

A. (Interposing) Within the dotted line—

Q. (Continuing) —represent approximately four-fifths of the entire area within the boundary?

A. That is right.

Q. Now, does all of Panhandle Eastern's acreage, and by that I mean acreage not only owned by Panhandle Eastern but subject to its gas purchase contracts fall within these so-called areas of withdrawals which you have described?

A. I believe not. The operated acreage does, but the unoperated acreage, of course, does not.

Q. Would you mind giving us one or two examples of that situation?

A. It will be necessary to refer to the exhibit that Mr. Smith introduced in evidence of Panhandle Eastern acreage holdings, the number of which I do not remember.

Q. I will be very glad to hand you my copy of Exhibit 30, Dr. Bartle.

(Whereupon, a document was handed the witness.)

The Witness: The map that he introduced—

Mr. Culton: (Interposing) The ownership map.

The Witness: The ownership map.

Mr. Littman: Do you know the exhibit number of that, Mr. Culton?

[fol. 4360] The Witness: A comparison of that map and any one of these pressure maps would give the information I desire.

Mr. Culton: No. 20.

Mr. Littman: Exhibit No. 20.

The Witness: You want me to give some acreage that Panhandle Eastern owns which is not within the withdrawn area?

By Mr. Littman:

Q. Yes, generally, Dr. Bartle, don't spend much time on it.

A. All right. For instance, this area in western Seward County, northwest of Liberal in Township 32-34 and 33-34.

Q. That is a considerable amount of acreage.

A. That is a considerable block of acreage which is not in an area which has been withdrawn, at least, not enough to give us any accurate data as to the value of that acreage.

However, in my estimate, I considered that to be of the value of 9,500,000 at the said face even though I had little data to support that estimate.

Q. And I see some other acreage outside of the areas of withdrawals.

A. The area in Texas County, Oklahoma, both north and south of the village of Optima in Oklahoma, Townships 4-16 and 3-16, that makes a block of acreage which is [fol. 4361] not drilled and from which there has been no gas withdrawn.

Q. And that is a considerable block of acreage also, is it not?

A. That is a considerable block, yes.

Q. Without going into any further detail at this time, there are some other considerable blocks of acreage that fall outside of the areas of withdrawal?

A. That is right. Probably the place which I am farthest out on the limb is Hansford County, Texas, in which we own acreage and which is far from production.

Q. That sticks out kind of like a sore thumb at the bottom of the map. That is away from your areas of withdrawal, is that right?

A. That is right.

Q. I hope you will pardon my homely analogy.

A. We will all have a lot of homely analogies, perhaps.

Q. And, notwithstanding the fact that those acres are outside of your areas of withdrawals, you did, nonetheless, accord to them the original recovery of 9,500,000 cubic feet?

A. No, the full original amount of gas at the sand face.

Q. I am sorry. A. Of 9,500,000.

[fol. 4362] Q. Of original gas content?

A. Yes, and the reason I did that was because I had no other information which would apply more specifically.

Q. Now, Dr. Bartle, you suggested a moment ago that you were going to tell us how and why you drew the dotted boundary line. You are perfectly at liberty to go right ahead and tell us about it.

Mr. Culton: I wonder if you could explain that better if it were on the board?

The Witness: Perhaps.

By Mr. Littman:

Q. Pardon me, Dr. Bartle, before you proceed with your explanation, is my understanding correct that when you used the term "at the sand face", that that term is synonymous with "original gas content"?

A. Original gas content, yes.

Q. But at the pressure which would be expected to be found at the sand face? A. That is right.

Q. What pressure would that be, approximately?

A. Absolute. That is an absolute pressure, I believe, of 476. I have it in my figures, if you want it.

. . . . . .

[fol. 4365] GLENN G. BARTLE, a witness, having been previously sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued):

By Mr. Littman:

Q. Dr. Bartle, at the close of the morning session, you were about to explain the method used in drawing the dashed line indicating the general boundary of the Hugoton Field on Exhibit No. 27.

A. Yes.

Q. Would you proceed now with your explanation?

A. I might call attention to the fact that this Hugoton Field, as we are using the term, is not the original Hugoton Field around Hugoton but the extension of the same into this very considerable area, everything outside of the Texas Panhandle Field which Mr. Smith has discussed.

This is a very considerable area then, reaching from a [fol. 4366] point west of Garden City and east of Lakin, Kansas, to southern Sherman and Hansford counties, Texas.

The information we have on the edge wells or on the wells near the boundary would be important, then, in knowing how large the whole field is. That does not mean that there could not be dry holes drilled within the area which we have dashed and colored.

All that means is that there have been no wells that were absolutely dry drilled as yet.

Some of these edge wells are as follows:

In Texas County, Oklahoma, the Three Way Oil Company drilled a well known as Johnson No. 1 in Section 11-1-18. That well is near Hardesty. At this point, the well—

Mr. Culton: (Interposing) Is that marked with a circle?

The Witness: Marked with a circle on the exhibit.

The well showed a small amount of gas estimated at 2 million at 2,560 and 2,620. It was drilled to a total depth of 4,600 feet, but it seemed to be so small that we have dropped that outside of the boundary of the field.

Another well in the same general region was Allison & Sturdevant No. 1, Gailey, Section 30-2-18, immediately east of the village of Hardesty. The open flow of that well, natural, was only 300,000 cubic feet per day at a depth of 2,698 to 2,750. After a shot, however, that showed about 2 million open flow and I have put that inside of the produc- [fol. 4367] tive area.

In the same region, the Underwood-Jollife No. 1 Well, in Section 28-3-19, indicated on the map, was reported

entirely dry at the depth of 2,717 and I put that outside the boundary of the field.

Trial Examiner: By the way, Dr. Bartle, the field boundary which you have sketched on this map is your own conception of the boundary of profitable production?

The Witness: That is right.

There might be a question about profitability in many of these cases, but, there is a considerable amount of gas, enough to justify being included in the Hugoton Field is my conception.

Near Texhoma in the same county, the Home Development Company drilled Allison No. 11 in Section 4-1-12.

Mr, Culton: That is on the west side?

The Witness: That is on the west side of the field, a point immediately north of the village of Texhoma.

This well was reported to have 10 million cubic feet per day at a depth between 2,670 and 2,850. It continued drilling to a total depth of 3,040.

Another well in the same section, the Washoma Petroleum, Allison No. 1, had gas estimated to be between 5 and 10 million feet per day at 2,710 and was drilled to a total depth of 4,071.

[fol. 4368] However, these wells were never connected and the report was incomplete. There are no samples available, nothing that would indicate the accuracy of that report.

Furthermore, we have observed a tendency for the well drillers, particularly in a remote area, men who are used to getting large wells in the Texas Panhandle Field, to roughly estimate a larger amount of gas than later indications would justify.

It is possible that this should be included within the boundary of the field. I did not think so. If we did include that, that would extend the boundary a little bit farther west in Texas County, Oklahoma.

In the vicinity of Hooker in the same county, the Peerless Oil Company drilled Elmore No. 1 in Section 28-5-18,

about four miles east of Hooker. The original open flow was 2,500,000.

After acidizing, it showed 12,464,000 with a good gas record at 2,646 and between 2,701 and 2,738. I have, therefore, put it inside the boundary of the field.

In the same area, the World Petroleum, Deardorf No. 1, Section 2-4-19, indicated on the map, was completely dry, although it drilled to a depth of 3,432, seeming to be outside of the Hugoton Field. I have, therefore, drawn the line between this small producing well and this dry hole.

Near Goodwell in the same county, Hagy-Harrington & [fol. 4369] Marsh drilled Becker No. 1 in Section 4-1-13 reported about 8 million cubic feet of gas, and I have included that in the field.

Only two miles west, Hagy-Harrington & Marsh drilled Peek No. 1 in Section 6-1-13, which reported 2,750,000 feet of gas between 2,834 and 2,885. That is the only information I have that seems to apply in Texas County, Oklahoma, except of some interest, perhaps, a recently drilled dry hole in Beaver County, T. K. Loffland, No. 1 Fee in Section 13-6-21 at the extreme edge of my map.

Mr. Culton: Extreme right edge?

The Witness: Extreme right edge of my map, a point about 15 miles southeast of Liberal, Kansas. This well was completed about the middle of September for a dry hole.

In Texas, the situation is much the same. In Hansford County, the Texas Mineral Investments, Norton No. 1, drilled in Section 123 of Block 2, G. H. & H. was a dry hole or a well with only ½ million, 500,000 cubic feet of gas from 3,005 to 3,055. Such a small showing did not seem to justify inclusion in the Hugoton Field.

In the same county, Curley Hobbs, No. 1 Pearson-Hitch, Section 290, Block 2, G. H. & H., indicated on the map, reported gas at 2,680 to 2,685 and again at 2,730 to 2,825, a total of 5,100,000 cubic feet open flow. It is not clear from that log whether that was after shooting or before, but, in any event, I have included that within the Hugoton Field [fol. 4370] on the basis of that 5 million well.

The Caldwell No. 1 Adriance, in Section 21, Block 3, G. H. & H., in the extreme southern part of Hansford County, reported only a gas show at 2,952 and at 3,070. Therefore, it has been left outside of the Hugoton Field in a region presumed to be dry even though it is immediately north of a portion of the Texas Panhandle Field, making an indention or embayment of the dotted line farther west than might be logically expected.

The Oklavania No. 1 Coots, Section 13, Block 45, H. & T. C., is a dry hole drilled to 4,585 in the same county. That is immediately east of the production that we have been discussing.

The Oklavania No. 1 Whitson in Section 2, Block 4T, T. & N. O., southeast of the former dry hole, was also dry at 3,510.

The I. T. I. O. No. 1 O'Laughlin, Section 2, Block 2, W. C. R.R., northeast of the former dry hole, was dry at 3,249.

It will be noticed that these depths are sufficient to penetrate the formations which would be expected to bear gas if there is a comparison between the Hugoton Field at Hugoton or the Texas Panhandle Field toward the south.

In Sherman County, Texas, the Phillips Petroleum, L. M. Price No. 1, drilled in Section 33, Block B-2, G. H. & H., indicated on the map, showed only 1,000,000 of gas at 2,105 [fol. 4371] and 1,500,000 of gas at 3,140. Although drilled to a total depth of 4,004, a very small well, yet it seems to belong inside the gas production area on the basis of that showing.

Hagy, Harrington & Marsh, Freeman No. 1, in Section 46, Block 2, G. H. & H., that is in the northeastern Sherman County near the Hansford County line, showed 15,445,000 cubic feet of gas open flow at 2,776 to 2,933. Not on a detailed log, obviously.

Possibly this well was acidized in order to obtain that much open flow, although the log record is not clear on that point; but I have included that within the area of the gas field.

Gibson Oil Company, Bivins No. 1; in Section 35, Block B-3, G. H. & H., indicated on the map, showed gas at 2,980, and 3,030, at 3,050, estimated to between 10 and 15 million cubic feet; was drilled to a total depth of 3,660 and is included in the area inside of the gas field.

Marland No. 1 Flores in Section 64, Block 3-T, T. & N. O., in the extreme southern part of Sherman County, had a small showing of gas, amount not estimated by the drillers, at 3,045. It was drilled to a total depth of 4,003 and I have drawn the line near that well but have left that immediate area outside of production.

I. T. I. O., Bryant, in Section 369, Block 1-T, T. & N. O., indicated on the map, is the farthest west well, was re- [fol. 4372] ported to have 33 million cubic feet of gas at 2,600 to 2,900; again not a detailed log, a little difficult to tell a great deal about it; but, with that large report of gas, not only at 2,600 to 2,900, but at 2,900 to 3,050 and an oil showing at 3,980, led me to put that inside of the gas field, which might conceivably be a separate gas field, as far as I can tell.

That well went to a total depth of 5,138 where it encountered granite and was probably acidized to get this large amount of gas.

I. T. I. O., Davis, in Section 404 in the same area, Block 1-T, T. & N. O., showed 34,900,000 at 2,700 to 3,282, drilled to a total depth of 3,850 and is inside the gas field.

Phillips Petroleum, O. I. Jones No. 1, in Section 161, Block 1-C, G. H. & H., in Sherman County, indicated on the map, northeast of Stratford, showed gas apparently in very small amount at 2,925 but was completed as a dry hole at 3,850 and is, therefore, outside of the boundary line.

Coming on up into Kansas in Morton County, Kansas, Watson No. 1 in Section 27-34-40, near Rolla, south of Rolla, also inside the field, with a total gas showing of 5,917,000 picked up in many places in the hole at 2,508, 2,560, 2,585, 2,670.

Although there is no production log on it, I included that in the gas field and that is a well that has been drawn from.

[fol. 4373] Burton No. 1 in Section 11-33-40, indicated on the map, is also a producing well although it only showed 1,572,000 and 20 feet of pay sand and there was water encountered in that hole at a depth rather high in the formation.

Chambers No. 1 in Section 25-33-40, Morton County, indicated on the map, showed 1,500,000 at 2,575, with a showing of gas at 2,460. It is, therefore, put inside of the gas field.

P. E. Simmons No. 1, Section 16-32-39, one of the Panhandle Eastern's wells, indicated on the map, showed 2,900,000 at the time it was drilled, but it had already dropped to an open flow of 1,398,000.

It was acidized later to 11,312,000. It is a small well, a difficult well to operate, apparently only has about 17 feet of pay and is near the edge of the field.

Completely outside of the field in Morton County, Hydraulic Oil Company, Butts, in Section 22-34-43, northwest of Elkhart, Kansas, showed only a showing of gas at 2,296, 2,435, 2,508 and 2,960, apparently very little porosity.

The estimate for all of those showings for that well was three-fourths of a million cubic feet of gas. It was drilled to a total depth of 3,450, which, considering that it is high on the structure, makes it one of the deeper wells of the field, but was, for all practical purposes, a dry hole, and seems to condemn the idea of extending this gas field toward the west.

[fol. 4374] This Hydraulic Oil Company, Butts, is also shown on my geologic cross-section and has been studied very carefully by all of us who are interested in this field.

On up into Stanton County, very few wells have been drilled, but there is one.

Western Production Company, No. 1 Plummer, in Section 11-29-41, near the village of Johnson in Stanton County, Kansas, was completely dry as far as we can tell at a total depth of 3,005.

In Grant County, Colorado Utilities, Sullivan No. 1, in Section 12-29-38, indicated on the map southwest of Ulysses, reported 4 million cubic feet of gas but the State test in 1938 only showed 560,000.

In spite of that, I have included that as a part of the Hugoton Field. It was drilled to a total depth of 2,715.

In Hamilton County, Kansas, W. J. Sherry, Porter No. 1, Section 30-25-41, indicated on the map southwest of Syracuse in the region which is called by geologists the Syracuse anticline, was completely dry to a depth of 6,453.

There was a dry hole which was drilled on a structure mapped by the U. S. G. S., the United States Geological Survey, which apparently did not extend the Hugoton Field even into that favorable area.

By Mr. Littman:

Q. May I interrupt there to inquire, Dr. Bartle, the distance of the well that you last mentioned from the [fol. 4375] western boundary of your outline?

A. About 14 miles. Each of these (indicating) is a mile.

Q. I thought you were referring to the well up above, were you not?

A. I am sorry, yes, this well is 26 miles.

Q. What is the name of that well, now?

A. W. J. Sherry, Porter No. 1.

It happens that in the immediate vicinity of Syracuse and Lakin, there is a folio of the United States Geological Survey which was prepared many years ago, indicating the general geology of that region.

Q. How did you happen to draw that dashed line at a point approximately 26 miles east of that well that you just named?

A. On the basis of these other wells in Kearny County and in Grant County, obviously, that is much out of the area and it is only stratigraphic information that we can get from that.

However, I have no well 5 or 2 or 3 miles from the edge of the boundary, and I brought this in because it was located on a favorable geological structure and very deep but still unsuccessful. I brought it in for what it was worth.

In Kearny County, Tri-State-Campbell No. 2, Section [fol. 4376] 7-25-35, indicated on the map immediately southeast of Lakin, had 3,260,000 open flow at 2,462, 2,573, 2,670.

This 3,000,000 well was acidized to a total open flow of 9,500,000 and is, therefore, inside the area of the Hugoton Field.

In Finney County, Lone Star, Hamlin No. 1, in Section 31-24-34, indicated on the map, came in for 2,700,000, was acidized to 13,000,000 and is, therefore, inside the area.

In the same county, Kansas Pipe, Spratt No. 1, in Section 31-24-33, although it only came in for 800,000 in three different places at 2,533, 2,570, 2,680, was acidized to a total open flow of 4,600,000 and is, therefore, put inside the area.

In Haskell County,—I am almost through with this resume,—Kuhn-Neilson No. 1, in Section 21-28-32, indicated on the map north of the village of Sublette, came in for 1,750,000 at 2,716 and is put inside the area, although it is a very small well.

In the same county, Helmerick Payne, Trimpa No. 1, in Section 28-28-33, indicated on the map, made 3,000,000 open flow at 2,694, 2,715, 2,765, 2,882. Completed to a total depth of 2,978 and it is put inside of the gas field.

In the same county, Kuhn-Meridith No. 1, in Section 10-30-33, immediately northeast of the village of Satanta, made 100,000 only, 100,000 cubic feet open flow per day at 2,548, 2,650, 2,685, was drilled to a total depth of 2,782. [fol. 4377] In spite of that extremely small well, only a showing in any gas field, I put that inside of the gas area, gas producing area.

In Seward County, Vickers, Hitch No. 1 in Section 33-32-34, north of Liberal, came in for about 3,000,000, the exact amount not known because it was only estimated.

Other drillers at the same time estimated it to be dry entirely. The last gauge on that well showed 750,000, so evidently those who estimated it to be completely dry were wrong; but, at the same time, it is a small well.

The production was between 2,552 and 2,590, and between 2,640 and 2,715. It was carried to a total depth of 4,037 and is inside the gas field.

It is also one of the wells from which we have considerable subsurface information as shown on the geologic cross-section.

T. W. Slick Well, Pyle No. 1, in Section 14-33-33, in Seward County, indicated on the map, showed gas at 2,650, but there was no other showing although it was drilled to a total depth of 5,032.

It is, therefore, marked outside the field and the line is drawn between this well and the one immediately west, which had a small amount of production.

The Seward-County Oil, Sealy No. 1, in Section 20-33-33, indicated on the map, is the one to which I just referred, [fol. 4378] and showed 1,000,000 open flow at 2,654 and 2,689, 2,749; was drilled to a total depth of 2,764 and is inside the area.

I have gone around the field with you for the purpose of indicating the basis for such a dotted line and we have not closed off the possibilities of other wells being found outside the area.

On the other hand, we have included within the gas field a great number of wells and a considerable amount of acreage which seems to be rather small.

Mr. Lee: Dr. Bartle, may I ask a question?

The Witness: Yes.

Mr. Lee: Did you indicate only one Panhandle well in all that area?

Mr. Culton: He is just going around the edge.

The Witness: That is right. I was going around the edge of the field, and it happened that only one applied which belonged to the Panhandle Eastern Pipe Line Company.

By Mr. Littman:

Q. There has not been sufficient drilling in and about this Hugoton Field, Dr. Bartle, so that one can say that it can be defined with any degree of definiteness?

A. It is defined with a degree of definiteness which I indicated by going around. Of course, that is the reason we have the whole thing as a dashed line rather than as an absolute field-limit line.

[fol. 4379] You can see why I hesitate to ascribe the same amount of gas to all portions of the field.

Eventually, we will be able to classify this acreage, and we will be able to tell more accurately where are the good places in it and where they are not, because I have included inside the field wells which are little more than showings.

Q. When you used the term "good wells and poor wells", are you referring to the open flow?

A. Yes, as an indication of the productivity of the well.

Q. Now, while open flow readings would indicate the productivity, they would not necessarily indicate the volume of gas in the surrounding acreage, would it?

A. They certainly would indicate the volume of gas in the surrounding acreage. They would not establish it absolutely, but just the same as an oil well comes in for a large potential, it is presumably a better investment than one that comes in for a very small potential, so a well that has a large open flow can reasonably be expected to produce more than a well that has only a showing of gas. That is the error in our thinking, if you will pardon me, in disregarding the amount of open flow and depending entirely on pressure, because a little well is not as big as a big well.

Unfortunately, we do not have a perfect method of meas- [fol. 4380] uring that. We have to measure that by open flow, but that is the closest thing we have to a true potential of the productivity capacity.

Q. But you cannot make an estimate of gas reserves by a consideration of the open flow and nothing else?

A. There is a very good way of estimating reserves by the decline of open flow. It happens that it does not apply to this field because of acidizing of the wells, but there is such a thing as estimating gas entirely by the decline of open flow.

There is something to be said in behalf of that.

Q. You did not use that method in making your estimates of the reserves of the Hugoton Field?

A. Because recent acidizing changes the open flow conditions, but certainly the decline of open flow is something to be considered and certainly the capacity of the well is to be considered very much and it is absurd to say that a half-a-million cubic foot well is as good an investment

and that you can make as much return from it as from a 25 million foot well.

That is the kind of an absurdity that we fell into this morning, in my opinion.

Q. Is there a direct relationship between open flow and gas in place?

A. I do not know. Certainly there is some relation-[fol. 4381] ship, whether it is direct or not, it could not be established.

Q. How do you determine it or, let me put this question, how would you determine it?

A. How would I determine the gas in place? I determined it in my calculations here on the basis of porosity and the amount of gas under pressure and the amount of acreage available and that is the basis of my method.

That is the reason I chose that method. However, the open flow is certainly a factor, and I would not hesitate to use the decline of open flow method if it was not for the incidence of acidizing of these wells.

* * * * * * * * *

Q. You stated that there was some relationship between open flow and gas in place? A. Yes.

Q. Can that relationship be determined in advance?

A. Not absolutely, of course. Other things determine the amount of gas which can be extracted from a well. The open flow, of course, is a rough measure of permeability and that, of course, as we have indicated, is a matter of yielding and speed.

[fol. 4382] The time element that we discussed comes in there, but the actual amount of gas, of course, has to be there before it can yield, and there is certainly a relationship between big wells and big production, small wells and no production.

When your open flow is gone, the well is gone. If you have only a half-a-million to start with, half-a-million open flow, it is going to decline and be gone in a short time, of course.

Q. But how can you determine the amount of gas in place by knowing the open flow potential and nothing else?

A. I think you need to know all these other factors. You need to know the gas pay thickness. You need to know the area of the field. You need to know the porosity, as far as we can determine it.

All these other factors, I think, ought to come into a general study of the problem, but certainly one of the things that is important is the size of the well; and that is what open flow means, the size of the well.

Q. It means the deliverability of the well?

A. No, open flow is not exactly the same as the deliverability. Open flow is the theoretical factor determined by the pitot tube method described by Mr. Smith yesterday.

That is the theoretical figure that that gas well should yield to the air in 24 hours.

[fol. 4383] Now, actually, as a matter of fact, we do not want to leave these wells open, yielding to the air for 24-hour periods, and we would only take a percentage in any event, but that is the only term that we have for—I cannot think of the term they use in the oil industry—for the capacity of the wells, that is really what it means, for the capacity of the wells.

Now, deliverability depends upon other conditions. It depends upon the line pressure and the size of the hole and all these other things that would let the well yield from its open flow.

That is, their percentage. Open flow is not identical with deliverability. Mr. Hinton will be discussing deliverability at a later date.

My only objection to your thought is the assumption that a small well is as good an investment and will yield as much as a large well.

I do not know how much a small well will yield, but I am sure it will be less than a large well.

Q. Well, the only thing I wanted to make clear was, that you cannot make an estimate of the reserves in place, by measuring the open flow of a well.

A. Not until after it has had a history.

Q. That is right.

Now, at the bottom of Page 3 of your written testimony [fol. 4384] in Exhibit 36, you refer to the Northern Natural Gas Company and Panhandle Eastern Pipe Line Company providing the two chief markets since 1932.

A. Yes.

Q. For the gas produced in the Hugoton Field, do you not? A. That is right.

Q. Will you state the portion of gas withdrawn by each of these two companies from the Hugoton Field during the past few years in relation to the total annual withdrawals?

A. I can get that from the company records. I do not believe I have it in any of my exhibits.

Mr. Smith's paper has it, I believe. That is a matter of company statistics, which I am willing to discuss, although the company men probably could give it with less difficulty. I have Mr. Smith's testimony.

Mr. Culton: I do not know whether you understood his question or not. He asked you for the takes by Northern Natural and Panhandle Eastern as compared with all of the takes in the field. Is that what you are looking for?

The Witness: It is a very substantial amount of total takes of the field. I can give you the exact figures by thumbing through the company's records, if you want them.

By Mr. Littman:

Q. Perhaps you could give us that after the next recess? [fol. 4385] A. It is a large amount. I believe I am correct in my statement that these two companies take most of the gas from that field.

Q. I would like to have it separately as to each company for the takes.

A. Yes, I will check up on that.

Q. Is it your opinion, Dr. Bartle, that the ultimate boundary of the Hugoton Field will probably extend beyond the dashed line which you have shown on Exhibit 27?

A. It is my opinion that there will be gas discovered in the area beyond the dashed line. It is also my opinion that there will be some dry holes drilled within the area of the dashed line.

Of course, the magnificent thing about this thing is that, up to date, there has been no absolutely dry well. That cannot continue indefinitely, of course, in this extremely large area.

Q. But you do expect that eventually the boundary—

A. (Interposing) Will be changed.

Q. (Continuing)—will be extended?

A. Extended and constricted. That is the reason I dashed the line instead of making it solid.

Q. Do you think the total area will remain about the same in acres?

[fol. 4386] A. I do not know. I would be glad if I did.

Q. What do you think the probabilities are that it will eventually be a larger area than the 2,000,000, I think you said 2,540,000 acres?

A. I have no basis for an opinion that it will be either larger or smaller. That is an extremely large area already. I hope it will extend on over into western Kansas and Nebraska, but I doubt it.

Trial Examiner: I wonder, Dr. Bartle, if you studied the logs of explorations east and west of the present Hugoton Field?

The Witness: I have to some extent, sir.

Trial Examiner: Give us some idea of the extent of those explorations in each direction and your knowledge of them.

The Witness: They have not been extensive. They have not been intensive, of course. There have been a few scattered wells drilled in the vicinity of Dodge City, northeast of the Hugoton Field.

Trial Examiner: What are the distances that you have in mind now?

The Witness: Twenty, 25 miles away. There was a recent test for oil in Kearny County, northwest of this area, which is producing a small amount of oil at the present time.

Trial Examiner: Was there any gas in that well?

The Witness: Not that I know of. There is oil, though, [fol. 4387] from the formations deeper than the Hugoton Field.

Of course, the normal prospecting for oil in Kansas or for gas in Kansas, as a matter of fact, would probably not be from these Permian formations we are discussing, but from deeper Mississipian or Ordovician formations, and most of the wildcat wells would be looking for oil, of course, because it is more valuable.

Trial Examiner: Are the drilling methods such as would take them through it—

The Witness: (Interposing) Yes, they would.

Trial Examiner: (Continuing)—the formations that you have at Hugoton without discovery of gas?

The Witness: No, it has come to be the common custom of coring of the formations and I think that most wildcat holes in western Kansas would end up with some knowledge of the formations which produce gas in the Hugoton Field.

Up to date, none of them have opened up new gas fields at that horizon or any other, although there is that new oil.

Trial Examiner: What extent have those explorations reached in the west?

The Witness: There is, I believe, if I can indicate on the map, this new oil in Kearny County which would be, I believe it is in Townships 22, either 21 or 22, whereas the north line here is Township 24 and there has been one or two wells drilled there.

[fol. 4388] That is, in northwestern Kearny County, they had a showing of oil and now one that is just finally being called a well. Of course, there is the Shallow Water oil field in northern Finney County. It may be in Scott, but it is near the boundary line and that, of course, that is Mississipian oil production, three or four wells there.

Up to date, of course, those wells have not had a pipe line outlet and so the small amount of oil that they have had has been marketed only by trucking.

Trial Examiner: Do you consider the remainder of Stanton and Morton counties west of the field as eliminated?

The Witness: Perhaps not absolutely eliminated, but certainly it is very discouraging.

Trial Examiner: You do not look for gas discoveries in those areas?

The Witness: No. Immediately north in Finney County and in eastern Kearny County, of course, we could extend the field on, perhaps.

Mr. Culton: Dr. Bartle, is there any formation condition there on the west of the point that the Examiner is asking you about?

The Witness: Yes.

Mr. Culton: That would make you have that discouraging situation?

The Witness: My cross-section goes across the field to [fol. 4389] the Butts well that we mentioned in Morton County, and I have indicated on that cross-section that the porosity condition is less favorable.

This whole thing is a stratigraphic trap, of course, and if you do not have a dolomite or limestone that is porous enough to hold gas, why, the gas will not be there.

It seems to be accumulated on this monoclinal dip in the porous area, rather than due to any geologic fold or structual trap.

Trial Examiner: Your testimony indicates you would expect an extension to the north.

The Witness: A possibility to the north, yes, sir.

Trial Examiner: Rather than to the east or to the west.

The Witness: Yes, sir.

Trial Examiner: And I believe someone has stated that the geologists do not expect the Hugoton and Panhandle fields to connect, I mean by way of production.

The Witness: That is entirely a matter of definition. These dry holes in Hansford County which I pointed out would indicate that if there is a connection, it has to be around about a semicircle toward the west.

Trial Examiner: You would not say then, that the area between the two fields is wholly eliminated or wholly explored?

The Witness: That is the reason we indicated this area [fol. 4390] in Sherman and northern Hansford County as part of the field, and that is why, I believe, Panhandle Eastern has certain acreage in that region.

By Mr. Littman:

Q. Your estimate of the remaining gas content of Panhandle Eastern's leases in the Hugoton Field and of the leases under gas purchase contract in that field, exclusive of the reserves on which Argus Natural Gas Company has first call, is shown in Schedule 3 of your Exhibit 36, is it not?

A. I believe so.

Q. Do the reserves shown at the foot of each of the Columns D, F, H and J on Page 2, and Columns D, F, H and J on Page 3, represent recoverable reserves at the assumed abandonment pressure shown at the top of those columns?

A. At an abandonment pressure shown at the top of the column and a recovery factor of 90 percent, that is right.

Q. And you have shown the estimate of reserves upon eight different abandonment pressures, have you not?

A. Yes, sir.

Q. Ranging from 150 pounds down to zero pounds abandonment pressure?

A. At the well head, yes, sir.

Q. Why do you submit these eight estimates on these various abandonment pressures rather than one estimate?

A. I do not know when the wells will be abandoned and [fol. 4391] so, for your convenience, I estimated it at eight different abandonment pressures.

Q. Do you have any opinion as to the pressure at which it is expected the wells in the Hugoton Field will be abandoned?

A. No, I have no opinion as a geologist on that point. I think that depends upon the conditions of operation, the economic factors involved, rather than the geologic factors.

[fol. 4392] By Mr. Littman:

Q. Dr. Bartle, referring again to Schedule 3 of Exhibit 36 in Column D, you show the original amount of gas for the various classes of acreage, do you not?

A. Yes, the classification there is not on the basis of productivity as Mr. Smith's classification was in Texas, but on the basis of ownership.

Q. That is, you had one class of acreage with respect to the original amount of gas?

A. That is right. This is a matter of company ownership and drilled and undrilled. The classification then is an arbitrary thing depending on the progress of the company at any one time.

Q. And you used as your original amount of gas per acre the figure of 9541 m. c. f. per acre, is that correct?

A. That is correct, at sand face.

Q. Before going into your method of arriving at 9,541 m. c. f. per acre, I would like to ask why you haven't included in your estimate the reserves which are subject to the Argus Natural Gas Company's contract?

A. I show that in a separate table which is in the same exhibit, Schedule 4, page 2: That also is a matter of convenience on the basis of company ownership and dedication.

Mr. Culton: And the estimated remaining reserves are shown on page 3?

[fol. 4393] The Witness: That same schedule, pages 3 and 4, is the remaining gas content in the Hugoton field under dedication to the Argus.

By Mr. Littman:

Q. I would like to have you explain step by step how you arrive at the estimate of 9,541,000 cubic feet per acre of original amount of gas.

A. I used the porosity pressure method, porosity method which has been referred to. I estimated the average gas pay in this field as 40.4 feet. I estimated the porosity as 18.6 per cent. I calculated the initial absolute bottom hole pressure as 478, and took as the pressure we wanted 16.4, so my equation is 40.4 times 18.6 times 43,560, which is the number of square feet in an acre, times 478, divided by 16.4, which makes a total amount of gas at sand [base] of 9,541

m.c.f. That is gas pay times porosity, times the number of square feet in the acre, times the absolute pressure divided by the surface pressure, which gives the result in gas per acre at sand face.

Q. Will you please explain how you arrived at an average pay thickness of 40.4 feet?

A. In 1939, in the preparation of an article which I wrote with Mr. Smith, company geologist, which article was published in the American Association of Petroleum Geologists bulletin of that year, I made a study of the logs [fol. 4394] of all of the wells for which there was any reasonably accurate log available. There were 183 at the time in the Hugoton field, scattered over the Hugoton field.

* * * * * * * * * *

Q. Can you state how many wells there were?

A. At that time, yes, there were 285 wells at that time.

Q. And 183 of that number whose logs were intelligible?

A. That is right, with respect to the gas pay, in my opinion. At that time I got an average gas pay of 40.4 feet. Since that time I have examined logs of other more recently drilled wells and made an effort to see if that is about the proper gas pay thickness. New wells seemed to substantiate that and so I used the same figure which I had in 1939. This, then, is on a basis of an average of 183 wells in 1939, verified by an examination of thirty or forty more wells since that time.

Q. How many of Panhandle Eastern wells, both owned and controlled, are included in those 183, approximately?

A. Most of them; we wouldn't know exactly because we took all the wells in the field that had a log that was in- [fol. 4395] telligible. Panhandle Eastern wells in the main are well drilled. It is possible that some of them in the early days of the drilling didn't have complete information. I didn't select them because they were Panhandle Eastern wells or leave them out because they were not; I was trying to get the situation in the field as a whole.

Q. I gather from your testimony that 40.4 feet of average pay thickness is the average for the entire Hugoton field, is it not?

A. That is my opinion.

Q. And doesn't necessarily represent the average of Panhandle Eastern acreage?

A. I believe it does represent the average of Panhandle Eastern acreage, since Panhandle Eastern wells are scattered all over the field and represent a substantial number of this total of 183, so I believe that is a fairly accurate figure; not absolutely accurate, of course, but fairly accurate figure for the field as a whole, or Panhandle Eastern wells.

Q. Would you say that Panhandle Eastern acreage is located in better portions of the Hugoton field or merely the average portions?

A. When there were wells drilling in the Hugoton field and there was a lot of territory in the whole field undrilled, it is to be expected that every producer would cluster [fol. 4396] around the larger wells.

After those wells were drilled pipe lines were laid into those good areas, so that the development of any gas field, including this one, is not regularly scattered over the whole field, but in the region where good wells were drilled at an early date, and where pipe lines were laid, so that these people have a connection for their wells.

Now, with that in mind we will get what we call our sweet spots developed early, and in order to continue the same degree of productivity it will be necessary for other sweet spots to develop.

Now, as far as Panhandle Eastern's own wells and gas purchase wells are concerned, they are not scattered equally throughout the whole field, but, I believe, are as advantageously located as the average in the field, and that the average in the field is clustered around what I have described as sweet spots.

Trial Examiner: The real picture, Dr. Bartle is, am I right, the acreage within this entire field as you have defined it on this map marked for identification, Exhibit 27, I believe, is pretty thoroughly consolidated at the present time?

The Witness: That is right.

Trial Examiner: And the developments have, naturally, as you say, extended out from the best early wells?

[fol. 4397] The Witness: That is right.

Trial Examiner: And is now subject to further extension as market demands develop for more oil?

The Witness: That is right.

Trial Examiner: And while the field is now well known in this area near Hugoton there have been no developments around, for instance, Guymon, which would entitle you now to chart that area in great detail, as you are able to do in the Hugoton area?

The Witness: It happens, Mr. Examiner, that your illustration is not exactly accurate. In fact, there were early wells at Guymon; if you had taken any other place on the map what you say would have been entirely correct, but there has been a little unusually good information in that region.

Trial Examiner: Well, your holdings indicate that you believe in the Guymon area, as you have indicated on the map there.

The Witness: That is right: Other places in the gas field will be developed as the market needs require and as large wells are developed in any certain area.

Trial Examiner: You say "needs," you mean the development of further markets?

The Witness: Yes.

By Mr. Littman:

[fol. 4398] Q. Dr. Bartle, I don't believe you have answered my specific question—

A. And that question was—

Q. (Continuing)—as to whether, in your opinion, the acreage owned and controlled by Panhandle Eastern Pipe Line is located in better than average portions of the Hugoton field, that is, as you have outlined it in Exhibit 27.

A. I don't believe that we have any right to say that it is better than the average in the withdrawn area.

Now, we have already admitted we do not know how much will be produced from the area which is outside of the withdrawn area, making up three-quarters of the field,

so that I think that our average for the other wells in comparison, for instance, with the Northern Natural wells, I think would be about the same.

Q. Now, how did you determine the average porosity of 18.6 per cent which you used in arriving at your estimate of gas reserves?

A. An average porosity figure is, of course, a judgment figure. I was influenced in making my judgment of the average porosity by a study of the gas producing formation, by a microscopic study of samples; by a comparison of the strata found in various portions of the field, and by the behaviour of the wells, as indicated in the series of maps showing the pressure decline; by a comparison of the porosity of other fields, and as careful an analysis of [fol. 4399] the field as a whole as I was able to make.

The figure 18.6 per cent happens to be the same figure which I used in 1939 in the publication previously cited. I wouldn't hesitate to change that figure, however, if I found evidence indicating that the porosity was either larger or smaller.

Q. The figure of 18.6 per cent suggests, Dr. Bartle, that it is a calculated figure, and I am wondering whether you didn't have a certain calculation to arrive at that figure.

A. In the 1939 publication it was a calculated figure; I would have no hesitation, however, in changing that percentage if I saw any grounds for so changing it. I believe that the behaviour of the wells is one way of knowing something more about the field than simply the porosity.

Q. Will you please state the method whereby you calculated the figure of 18.6 per cent in the first instance?

A. By use of the pressure decline method and the estimate of the thickness of the pay. It seems to me that the behaviour of the wells were such as to justify that estimate of 18.6 per cent porosity, in relating this to the behaviour of wells. However, that is not the only indication that I get for the percentage, 18.6.

Q. Well, Dr. Bartle, I believe you said that you calculated this figure of 18.6. I take it by that you mean that you [fol. 4400] had certain figures and made certain calculations and arrived at a precise amount of 18.6 per cent. Now,

what I want you to state for the record is how you arrived at this 18.6; give us the calculation.

A. In the 1939 paper, or in this series of maps which I have submitted of the same type, which is much better evidence—

Q. You arrived at 18.6 per cent for the first time when?

A. In 1939.

Q. Will you give us the calculation you used in arriving at this 18.6 per cent?

Mr. Culton: You are now looking at the same document, a copy of which Mr. Littman has before him.

A. "Relative Porosity and Permeability of producing formation of Hugoton Field, Kansas, as indicated by gas withdrawals and pressure decline."

Mr. Culton: Yes, the same document that Mr. Littman has a copy of?

The Witness: I think so. In 1939 we believed that that Hugoton field of Kansas only showed a withdrawal area of 379,200 acres; a withdrawal of gas of 161,300,368 m. c. f.; a withdrawal per acre of 425 m. c. f.; an initial rock pressure of 435 pounds per square inch; an averaged weight rock pressure in the withdrawn area of 416.33 pounds per [fol. 4401] square inch; a withdrawn per pound decline of 8,959,029 m. c. f., which would make a calculated initial reserve of 3,897,177,615 m. c. f., which reduced to acreage would make a calculated initial reserve per acre as of that time of 10,277 m. c. f., or 10 million cubic feet per acre.

This would indicate an amount of gas which reduced in volume by pressure would occupy a space seven and a half feet in thickness, and since production is believed to be from a formation 40.4 feet in thickness, it would [indicated] a porosity of approximately 18.6 per cent in order to establish that much space.

Q. In other words, Doctor, as I understand your testimony, you arrived at this figure of 18.6 per cent of porosity by the use of the rock pressure decline method?

A. Yes; I said that in the first place, we used that originally in 1939; as a matter of fact, the name of the article is, "Relative Porosity and permeability of produc-

ing formation of Hugoton Field, Kansas, as indicated by gas withdrawals and pressure decline."

Now, in order to establish the true porosity, other factors should be considered. I have enumerated those, certainly including the factor of the reasonableness with respect to other gas fields withdrawals as they have been taken from abandoned gas fields; all of those other factors.

Q. Do you consider those factors to represent reliable [fol. 4402] criteria upon which to make a determination of porosity?

A. Why, yes. The whole problem of establishing of this porosity is a matter of judgment. It might be a little different from 18.6; maybe that is misleading in assuming a pretense to accuracy; however, it is about right. The whole problem of establishing porosity is a severe one. We have had great long discussions here the last few days about cores.

Now, obviously a core is only for a small area and particularly in a limestone or dolomite reservoir there could be great variation a short distance laterally from that core. As a matter of fact, there is even a great variation within a core itself, so that doesn't mean very much. The only way that we could tell what the porosity has been is after all the gas has been withdrawn from it. If then the limits of the field are known it is possible to go backward on the proposition and see what the effective porosity must have been. As a matter of fact, I have done that in cases of abandoned fields near Kansas City, and I expect to do that more so.

I hope eventually if we can get enough men reporting back about abandoned gas fields, that we can really establish this business of porosity to where a judgment figure is more accurate all the time. In the meantime we have to do the best we can.

[fol. 4403] Q. Isn't it a fact, Doctor, that along with the volume you must have pressure?

A. Of course.

Q. Now, Dr. Bartle, in the calculation which you have just given us you found from your data that the initial

reserve per acre in the Hugoton field was 10,277 m. c. f., is that correct?

A. That is right.

Q. And you, as a matter of fact, relied upon that figure?

A. Not particularly.

Q. Well, in the calculation for the purpose of arriving at your 18.6 per cent figure, is that correct?

A. Yes.

Q. Now you have used what amount of initial reserve per acre for the purpose of your present estimate?

A. Nine million five, instead of ten million two.

Q. Well, is [ ] the 10,277 m. c. f., an accurate figure to use for purposes of calculating the precise porosity figure which you are using in this proceeding?

A. I have never contended this was a precise figure and do not now contend. As a matter of fact, we are not going to worry a great deal about the difference between nine million five and ten million two; the difference is due to more careful calculation.

[fol. 1404] Q. In the 1941 figures of the absolute pressure?

A. I plead guilty to a slight difference, and I believe I was a little off in the absolute pressure in 1939, and I believe I am a little more accurate now.

Q. But you didn't reflect any of that in arriving at your 18.6 per cent porosity, did you? It doesn't seem to affect your 18.6 porosity?

A. That is right. There is a little difference in the absolute pressure which makes that difference; it is a matter of no moment, in my opinion.

Q. Well, have you calculated how much more gas you would have secured by way of an estimate on the Hugoton field had you used the initial reserve of 10,277 m. c. f. per acre instead of 9,541?

A. I haven't made that calculation. This is a matter of order of magnitude, and I am perfectly willing to be convinced that 18.6 is not quite right. I am perfectly willing to plead guilty to changing these figures on the basis of the absolute pressure. I regard that of no particular importance considering the order of magnitude involved. If it would please you any better to take 19 per cent or 18½ per cent, I don't believe it would be quite as good, but we wouldn't worry much about it. 18.6 per cent is a little less

than 20 per cent, as Mr. Smith has discussed it in the Texas field.

[fol. 4405] It seemed as to the amount of gas which has been produced in certain other abandoned fields—I believe it to be about correct; an estimated figure.

Q. The thing I would like to have you straighten me out, Dr. Bartle, and which disturbs me is this: if the rock pressure decline method is good and sufficient for the purpose of arriving at a percentage of porosity, why isn't it good enough for the purposes of arriving at an estimate of reserves? Why use that method in the first instance?

A. If you are going to make a study of a field you want to get all the information you can about it; you want to know about the stratigraphy, the formations, how they are laid down; you want to know all you can, all about the thickness of the pay, which is not an accurate figure, but which you have to estimate as best you can.

Q. You don't have to know anything about the thickness of the pay if you make your estimate by the rock pressure decline method, do you?

A. You must.

Q. But you don't use it in the calculation of reserves under that method?

A. You use it very directly—and that was the error we fell into this morning—you use it directly in so far as the gas pay was the thing that makes the space in which the gas has to be held.

[fol. 4406] Q. But you don't estimate thickness in arriving at your estimate by the rock pressure decline method, do you?

A. If you are using it as a simple engineering method, disregarding entirely the voids, why that doesn't appear in your arithmetical average, but as a matter of fact, the greatest weakness of the rock pressure method is that you don't know the size of the gas reservoir and certainly the thickness of the gas pay is a matter of the greatest importance in establishing the size of the reservoir.

The greatest weakness of the rock pressure decline method is in estimating the size of the reservoir.

Q. You don't need to know the size of the reservoir to determine the volume of gas that is contained if you have

the proper initial pressure and the proper present pressure?

A. Oh, yes. If you don't know the size of the reservoir then you don't know how much you are getting per pound rock pressure decline.

Q. Assuming a tight container.

* * * * * * * * *

[fol. 4407] The Witness: If you had a tank buried underground that was completely empty or a tank completely filled with gas so that there is complete communication in that tank, nothing to stop it, you could estimate the size of the container in that case by withdrawal of the gas subject to certain corrections and modifications by following Boyle's law.

Now, the greatest weakness of the rock pressure decline method is the fact that you do not have such a tank, and the tank consists of all this scattered gas pay thickness of which we have been talking.

Q. Well, you don't have to know the size of the tank in your sort of case.

A. Yes, you calculate the size of the tank; that is the purpose of the method, otherwise the whole thing doesn't make any sense.

Q. Suppose you give me the factors that you have to [fol. 4408] know in order to make a determination of initial reserves by the rock pressure decline method, just as you have done in your article; and I note that you do not have in your article, in your calculation of how you arrive at this figure 10,277 m. c. f. of initial reserves per acre, any showing of the size of the container.

A. You have the volume of the gas; the calculated volume of the gas.

Q. That has been withdrawn?

A. No. The calculated volume of the gas there in the first place, and that certainly fits into a container. The container happens to be scattered through a lot of rock formation; that is what we mean by the volume; the calculated volume.

Q. Well, you enumerate the things you must have in order to determine reserves by the rock pressure decline

method. You have got to have, first, the initial rock pressure; is that correct?

A. Yes.

Q. That is what I am trying to get at. I want you to give me the figures you have to have.

A. You have to have the initial pressure, which should be the virgin pressure of the field.

Q. What else?

A. The amount of gas that has been withdrawn; the [fol. 4409] total measured and unmeasured gas withdrawn from the reservoir; you have to have the equilibrium pressure of the gas—

Q. That is the rock pressure reading?

A. In the equilibrium for that field. I would like to talk more about that. Shall I do that now?

Q. I wish you would continue with your list and elaborate later.

A. All right. From the amount of gas which has been withdrawn and the amount of loss of pressure you can divide and find out the loss of pressure per pound drop. Now, that gives you a method which is not exactly accurate of estimating the original calculated volume.

Q. Now, what is that method called?

A. Multiplication.

Q. Isn't it called rock pressure decline method?

A. Multiplication is what we are talking about now. You get the amount of gas withdrawn per pound, or per ten pounds—whatever you are using—and multiply that out and find the calculated initial volume of the gas. Now that certainly fits into a container; it comes from a container. If you want to figure how big that container was under the ground it is a matter of porosity. If it is not under the ground, if it is in the tank, it is a matter of cavity.

Q. But, Dr. Bartle, you had arrived at the amount of gas remaining before you even mentioned anything about [fol. 4410] the container, isn't that right?

A. The amount of gas remaining—

Q. Well, the original gas contained had been arrived at by you in this calculation without any reference to the volume or size of the container. You calculated the size of the container; that is what you are doing on all this process, calculating the size of the container.

A. Of course, that is subject to certain inaccuracies. Shall I take that up and talk about that now?

Q. Well, it is accurate enough for you to determine a porosity figure, is it not, as you did in 1939 in your article of 18.6?

A. It is accurate in so far as it reflects the history of the field; it is worth something in determining porosity.

Q. And it was good enough for you to stand by it?

A. Sure, I stand by it, now. That is the reason I made this much better series. I made a series of five maps as to the behaviour of the wells because I think that is a matter of importance in turning out the picture of this field.

Q. Nothing has happened since July 1, 1939, as of which date you calculated the initial reserve per acre of 10,277 feet to cause you to change your—

A. Percentage?

Q. Your porosity figure of 18.6 per cent, arrived at by the use of the rock pressure decline method; is that correct?

[fol. 4411] A. Of course, I have in evidence here much more detail on that point. We calculated the thing in 1932, 1938, 1939, 1940, and 1941. Those figures are in evidence.

Q. Yes, they were in your exhibit.

A. That is right.

Q. Let us take a look at that for a moment. You say that is on what page of Exhibit 36?

A. That is schedule 1, pages 1 and 2. They are calculations for the various years beginning in 1932, skipping to 1938, in order not to duplicate unnecessarily.

This is the story of the behaviour of the wells and I certainly believe that behaviour of the wells ought to be considered in such a study. However, I have to go back to the geologist's method of calculating a reserve after studying the behaviour of the wells.

Q. Now the figure of 9,541 cubic feet which you have adopted for the purpose of estimate—

A. Is not identical with any of these figures.

Q. It is lower than any of these figures, is it not? Isn't that a more accurate way to put it?

A. The 9,541 was used there, and this is 9,568. I believe that is 27 lower than the other one.

Q. It is not lower than the lowest of the years, but it is considerably lower than the most recent experience as in-
[fol. 4412] dicated by years, and shown by the year 1941, is it not?

A. Nine million seven was in 1941, compared with nine million five. I wouldn't say a difference of less than two per cent is of considerable moment in a calculated figure. I think we are getting pretty close together. If it was 50 or 75 per cent difference it would be something to talk about, but I think as long as we are talking about something less than two per cent it is not very important; I think we are in pretty much agreement. I have no pretense that my figure of nine million five is within two per cent of accuracy, or that any other such figure is ever going to be within two per cent of accuracy.

The chief difficulty, of course, is getting at equilibrium pressure, and the weighted rock average is only one way of getting at that figure. I used that method because we don't have any better: As a matter of fact, a deviation from Boyle's law is more than three per cent, because natural gas is not a perfect gas.

Q. Does the temperature correction tend to compensate the difference?

A. From Boyle's law, yes. It doesn't exactly compensate, the main problem is getting the equilibrium pressure.

Q. Do you have any interest in the production down there in the Hugoton field?

A. I have some interest in gas wells when they are paid for.

[fol. 4413] Q. To whom do you sell gas?

A. To Panhandle Eastern.

* * * * * * *

Louis F. Sperry, a witness, having been previously sworn, resumed the stand and testified further as follows:

[fol. 4561] Cross-Examination

By Mr. Littman:

Q. Mr. Sperry, you are the Treasurer of Panhandle Eastern Pipe Line Company, are you not? A. I am.

Q. How long have you occupied that position?

A. Just short of five years.

Q. What position, if any, did you occupy with Panhandle Eastern Pipe Line Company prior to that time?

A. None.

Q. Do you hold any other position besides that of Treasurer? A. No.

Q. You have prepared Exhibit 74 which summarizes your direct testimony, have you not?

A. I do not know to what you refer. You mean those four or five short summaries—

Q. (Interposing) Yes.

A. (Continuing)—that I put in supplemental to my original testimony?

Q. Yes.

Mr. Wheat: That is Exhibit 74, the four typewritten sheets of summary.

The Witness: I did not know it had been given a number, but that is true.

* * * * * * * * * *

[fol. 4562] Trial Examiner: Thank you.

By Mr. Littman:

Q. And your testimony in this case has related, thus far, to the subject of working capital, has it not?

A. That is right.

Q. Will you please turn to Exhibit No. 74?

* * * * * * * * * *

The Witness: I think I have a copy here, yes.

By Mr. Littman:

Q. Is my understanding correct that Table 3 of Exhibit 74 enumerates six items which make up your estimate of the total requirement for working capital for Panhandle Eastern Pipe Line Company and its affiliate, Illinois Natural Gas Company? A. That is correct.

Q. Now, the total estimate for working capital is $1,569,000, is it not? A. That is correct.

Q. The first item listed on Table 3 is "Normal cash funds for operating expenses", in the amount of $470,000, is that correct? A. Yes.

[fol. 4563] Q. How was this allowance determined, Mr. Sperry?

A. I took figures initially from the annual cash reports of the company which outline the amounts of cash actually expended by months by the corporation for all purposes.

I took from this schedule the total aggregate amounts by months for such expenditures of the total as are applicable to this case, and that gave me the total amounts expended by months for the period in question.

I then subtracted from such amounts any items which are not properly included in the working capital requirements, such as are included in a rate base, and I found that over a period of a year and a half prior to June 30, that we had paid out for purely operating expenses a total of $5,609,600.

Q. You mean June 30—

A. (Interposing) 1941, which is the cut-off date on my testimony, which is approximately $311,666 monthly.

I corrected that figure of $311,000-odd monthly for an estimated 45-day period, which makes that amount approximately 467,000, which I then rounded out to $470,000, the figure you mentioned.

Q. Now, you just spoke of "cash reports". Are you referring to the company's cash book?

A. No, I am referring to the annual cash forecast, which the company prepared every month for my purposes, which is transcribed from the cash books of the company. It is a summary of those books.

[fol. 4564] Q. You now use the term "forecast."

A. Yes.

Q. Does that represent the actual cash expenditures?

A. Yes, it represents actual cash expenditures for those months of the year which have elapsed and a forecast of our cash requirements for estimated expenditures for the balance of the year.

In other words, these cash forecast reports are prepared on a 12-months' annual basis, so many months actual, so many months estimated, to the end of the year.

I have used only those months which have elapsed and which show the actual amount of cash expended during those months.

Q. What is the source of those actual cash expenditures?

A. Those are taken directly from the cash books of the company.

Q. Were those cash reports prepared by you?

A. No, they are prepared in my Department, in the Accounting Department, the Treasurer's Department.

Q. Now, if I correctly understand your testimony, the figure which you first secured was the sum of $5,609,600 for an 18-months' period prior to June 30, 1941, is that correct? A. That is right.

Q. Now, that sum was secured after making certain deductions, was it not?

[fol. 4565] A. That is correct.

Q. Now, who made the deductions? A. I did that.

Q. And those deductions were subtracted from the total amounts shown in the cash reports, is that correct?

A. That is right.

Q. Then you took 45 days of that total 18-months' period to secure the sum which you rounded out to $470,000, is that correct? A. That is right.

Q. The mathematics of that would be taking 45 547's of $5,609,600, is that right? A. That is right.

Q. Now, will you enumerate the items that are included in this sum of $5,609,600 which represent the entire amount before allocation to the 45 days, and will you also enumerate the items that you excluded?

A. Included in the total are gas expense—

Q. (Interposing) And by gas expense—

A. (Continuing) Expense for gas purchased or produced.

Q. The actual cash payments?

A. Actual cash payments by months.

Q. For all gas purchased during the 18-months' period?

A. All gas purchased or produced, yes; other operating [fol. 4566] and maintenance expenditures.

Q. May I ask you to explain what you mean by that latter class?

A. Included in that would be the chief operating expenses of the company, including wages, overhead, and direct expenditures for operations.

Q. That includes overheads? A. Yes.

Q. Does it include payments for wages? A. Yes.
Q. Does it include ordinary maintenance? A. Yes.
Q. And other general operating expenses?
A. That is correct.
Q. What else does it include?
A. Regular construction expense on which no interest is charged during construction. That regular construction expense is of the nature of maintenance and the taxes.
Q. What taxes are included?
A. Included in the compilation is such taxes as production taxes, franchise, sales, workmen's compensation and unemployment taxes.

As I will indicate in a minute, certain other taxes are deducted from this compilation.

Q. Now, have you completed your enumeration of all of the items that were included?
[fol. 4567] A. Those are the only classifications included.

Now, excluded from those total cash expenditures are certain taxes such as ad valorem, income taxes and capital stock taxes, both Federal and State; also excess profits taxes.

Also excluded from the above cash expenditures are any amounts which we had paid during those months for materials and supplies, and any amounts which we had made on account of prepayments, the reason for those latter exclusions being that we have made separate claim for those items later on.

Q. You did not want a duplication?
A. We did not want a duplication.
Q. Will you proceed with the other deductions?
A. Those are all.

Mr. Culton: You deducted interest and sinking fund?

The Witness: The interest and sinking fund were not included. These are purely operating expenses.

By Mr. Littman:
Q. Didn't you also deduct capital items upon which interest during construction was charged?
A. They were never included.

Q. Weren't they included in the cash book?

A. Yes, but they were not included in this compilation. Such items as expansion construction, interest, sinking fund, preferred stock dividends, common stock dividends, other capital items of that kind were never in-
[fol. 4568] cluded.

The amounts that were included originally were purely operating amounts.

Q. When you use the term "included", what do you mean by that?

A. Included in the amount which you have described as $5,000,000-odd.

Q. That was the final amount you got after making the deductions? A. Yes, that is correct.

Q. That is, $5,609,000-odd figure is a net figure after deductions, is it not?

A. That is correct, but it does not include any items of a capital nature.

Q. I understand that to be your testimony, Mr. Sperry, but isn't it a fact that the amounts expended by the company for capital items upon which interest during construction was charged do appear in the cash book?

A. Yes, they go through the cash book, but they do not go in the cash book under the operating items which I have just enumerated.

Q. Who makes the exclusion in that regard?

A. The operating department, that is, the accounting department.

Q. In other words, the cash reports which you receive did not include any capital items in which interest dur-
[fol. 4569] ing construction was charged?

A. Yes. Let me clarify that.

The schedule from which these figures were taken is divided into two parts; first, operating expenditures, or expenditures of an operating nature, from which I have taken these figures and; second, in a separate classification, capital expenditures or non-recurring expenditures of a capital nature, and the second half of that report I have not used here at all. The figures I testified to are purely operating figures.

Q. What would you say of the item which you did include of normal, regular construction expenses?

A. That is of the nature of maintenance. That is a recurring item which we pay out every month, construction needed to keep our present operating facilities in good condition, and it is simply another form of maintenance.

Q. Aren't such items eventually charged to the capital account? A. No, in many cases they are not.

Q. In some cases they are, are they not? A. Yes.

Q. When are they and when aren't they?

A. I think ultimately the large percentage of them go into our capital account.

Q. Yes.

[fol. 4570] A. But during the period covered by this report, that is, the month to month expenditures, they are not put into our property account.

Neither is any interest charged on account of construction.

In other words, it is money that we expend every month which does not appear in our rate base, and on which we get no credit unless it is included in the working capital for rate making purposes.

Q. Then when this cash report comes to you, there has already been made a segregation as between the normal regular construction expenses of the nature of maintenance on which no interest during construction is charged, according to your testimony, and the capital items upon which interest during construction was charged, is that correct? A. That is right.

Q. You did not make that segregation yourself, did you? A. No.

Q. We will come back to those items a little later. I wanted at this time only to have you summarize the items that were included at Page 457 of the transcript.

You testified, in part, as follows, and I am starting with the last sentence on that page:

"Excluded from this consideration were amounts paid for materials and supplies, pre-payments and ad valorem, income and capital stock taxes as well as payments for interest, sinking fund and other capital expense items".

[fol. 4571] A. That is right.

Q. Now, it was that statement, Mr. Sperry, that led us to believe you had first included and then deducted it.

A. Yes, I can see you might have had that impression. As a matter of fact, capital items such as interest, sinking fund and dividends, were never shown on this schedule.

Q. They were shown on the schedule?

A. No, they were never shown on the schedule.

Mr. Culton: Do you mean they were not shown on the schedule which you prepared for this case?

The Witness: That is right. They have no part in it and they are no part of my working papers.

By Mr. Littman:

Q. But they are shown on the cash reports?

A. They are shown on the cash reports to which I refer as the source of this information.

Q. That was the report that I referred to.

A. Yes. If you will notice my working papers, you will see there are no items of a capital nature, no interest, no sinking fund or dividends, certain operating expenses less certain deductions—let me show you the record from which I took these items.

Q. In other words, you are now handing me one of the cash reports?

[fol. 4572] A. That is the cash report which I used constantly—

. . . . . .

Q. Now, this is an annual cash forecast by months to December 31, 1940, compiled as of January 3, 1941, for Panhandle Eastern Pipe Line Company, and subsidiary companies, is it not? A. That is correct.

Q. Now, you were going to explain some of the figures on this sheet. Will you please do it in such manner so the record will show?

A. I indicated to you that the figures used in my study for purposes of this case were operating figures taken

from the first half of this schedule, the upper half of this schedule, and that such items of a capital nature as interest, sinking fund and dividends were no part of it.

Those appear in the last part of the schedule.

Q. I see.

A. The figures that you have been using from my working papers include no interest or capital items.

Q. You do not mind if we keep this cash report, do you, Mr. Sperry? A. Not at all.

Q. Am I correct in understanding that this cash report [fol. 4573] to which you just alluded and the title of which I just gave, was not a part of your working papers?

A. No, that is not a part of my working papers. That is part of the books of the company.

Q. Now, will you please state how much of this amount of $5,609,600 applies to the year 1940, and how much to the first six months of the year 1941?

A. That part which applies to the year 1940 was $3,391,400, and that part which applied to the first six months of 1941 was $2,218,200.

Q. Mr. Sperry, did Panhandle Eastern Pipe Line Company own any distribution systems in 1940?

A. I believe that we had, I guess, during all of 1940, I believe we owned a small distribution system called the Central Distributing Company.

Q. What was the full name of that company?

A. Central Distributing Company.

Q. Does Panhandle Eastern Pipe Line Company now own that distributing company?

A. No, it disposed of it sometime, I believe, in 1941.

Q. What towns and communities did Central Distributing Company, which you named, operate in, in the year 1940?

A. A number of small and scattered communities in Missouri and Kansas.

Q. Now, what product did the Central Distributing Company distribute?

[fol. 4574] A. It distributed natural gas.

Q. In the year 1940? A. That is correct.

Q. Do you know how many customers it served in 1940?

. . . . . .

[fol. 4576] The Witness: Here is approximately the information that you wish. These figures would indicate that Central Distributing Company had around 4000 meters altogether.

Mr. Wheat: When, Mr. Sperry?

The Witness: That apparently was in June, 1940.

By Mr. Littman:

Q. I think that will serve the purpose for the present, Mr. Sperry, and give us some idea as to the size of the distribution system owned by Panhandle Eastern Pipe Line Company through its subsidiary companies in 1940, and I believe you have testified that Panhandle Eastern has [fol. 4577] since disposed of these distribution systems?

A. That is correct, as of January 1, I believe, 1941.

Q. Now, the figures which you used in compiling your estimate of working capital include, do they not, the operating expenses of those distribution systems?

A. That is correct, for the year 1940.

Q. But not for the year 1941 because of the disposition of that company as of January 1, 1941?

A. That is correct.

Q. Now, Mr. Sperry, Panhandle Eastern Pipe Line Company does not propose to go into the business of distributing gas in communities, does it, at least not for the present? A. Not that I know of.

Q. Am I correct in understanding that your working capital figures include the 45 days allocation of payments for wages by the Central Distributing Company during 1940?

A. Included in my figures for 1940 are the Central Distributing figures to the extent of about $4,000 per month.

Q. For the year, that would be close to—

A. (Interposing) Around $48,000.

Q. Around $48,000?

A. To that extent, there may be some distortion in there.

Q. Now, the $48,000 that you are referring to, is that after allocation?

[fol. 4578] A. That is making no allocation. The amount involved was so inconsiderable and the labor involved of

taking them out of the consolidated figures from which I was working was so great that I did not think it was worth while doing it.

Q. Well, if you had eliminated this $48,000, what effect would that have had upon your estimate of working capital? A. Very little.

Q. Well, whatever effect it would have had, it would have served to decrease your total estimate, wouldn't it?

A. By about $6,000 aggregate,—no, it would be less than that. It would be materially less than $6,000 aggregate, because my study was made as of an 18-months' period, and there is a total of perhaps $48,000 distortion in the 18 months.

Q. Well, however small the amount, it does not belong in this working capital study, does it?

A. I believe my inclusion of it was for sound reasons, Mr. Littman. Any schedule of this kind, any study of this kind, is bound to be in round figures, not refined right down to the last cent.

There are other things which I could have added to our working capital study of a small nature which I did not add because of the labor involved, and the fact that we had very little time in which to prepare it.

We could have refined this down to a finer figure which, however, for these purposes, I do not think would have been justified.

[fok 4579] Q. Wasn't the amount of distribution system expense set out as a separate item in your statement?

A. The statement from which I took these figures is a consolidated statement with inter-company items eliminated.

Q. But wasn't there a separate item shown of distribution system expense?

A. No, that is all in operating expense.

Q. Well, if the amount had been larger, you would have [exluded] it?

A. If there had been any considerable amount capable of distorting the answer, I certainly should have taken it out.

Q. Don't you have access to the records that were used to make up the consolidated statement?

A. Yes, we could go back to the original books and break them down, but it would have been a matter of great labor.

Q. Couldn't you have gone back to the original statement from which the consolidated statement was made?

A. Sure, we could have, if we had had time.

Q. That would not have taken much time?

A. Yes, this is quite a job to do on short notice.

Q. Well, at any rate, it is your best estimate at present that $6,000 would be approximately the amount?

A. It would be less than $6,000.

Mr. Wheat: The witness testified it would be materially less than $6,000 which I have just taken down in [fol. 4580] notes from his testimony. Is that true, Mr. Sperry?

The Witness: That is right. It would be about 1/18th's of $48,000, I would say.

By Mr. Littman:

Q. You will agree that, as a matter of principle, distribution system expenses should not be included in working capital for purposes of this proceeding?

A. No, I would not admit that. I have no opinion on that.

Q. You mean to say that you would include amounts incurred in connection with the operation of distribution systems in your estimate of working capital, even if you knew that you could very quickly ascertain the amounts and deduct them for purposes of this rate proceeding?

A. I have no opinion on that, Mr. Littman. I have not studied that phase of it. Panhandle Eastern is not predominantly a distributing company. It is a wholesale company.

Q. It is not a distributing company at all, is it?

A. Not at the present time, no.

Q. Now, on what theory would you want to include any distribution system expense for purposes of this rate proceeding?

A. I am not prepared to answer that. I have not studied that phase of it.

[fol. 4581] Q. You do not know that much about working capital?

A. I do not know that much about rate regulation.

Q. Well, do you know enough about the subject of working capital to testify in this proceeding on the subject and submit an estimate on the subject for this Commission's consideration?

A. My effort has been here to accurately estimate the amount of dollars that is required by this company to have at all times to carry on its business, and I base my opinion only upon the experience that I have had sitting on the top of the till, watching the money go out.

I think that my figures adequately and accurately represent the amount of dollars which it has been necessary to pay out over a specified period, and I believe that we are justified in asking for a return on that number of dollars.

Q. You have in your last answer referred to proper amounts of working capital required for the purpose of carrying on the business.

A. That is right, operating the business.

Q. Now, what business is Panhandle Eastern going to be engaged in for the next three or four years, to the best of your knowledge?

A. I assume it is a continuation of our present business.

Q. Which does not include, in any part, the operation of distribution facilities, is that correct?

[fol. 4582] A. I think that is correct.

Q. Well, certainly you know enough about working capital, Mr. Sperry, to know that there should not be included in an allowance for working capital in the future, any sums that are related to the operation of distribution systems?

A. As I say, I have no opinion on that. I have not studied that, but I say this, that even if that inclusion is an improper one, as you intimate it is, it does not amount to over two or three thousand dollars in the aggregate.

Q. Is it or is it not a proper one?

A. I do not know, frankly.

* * * * * * * * *

[fol. 4585] Q. Who made the determination, Mr. Sperry, as to what items should be included and what items should be excluded from working capital?

A. I think I will have to take that responsibility.

Q. Well, you feel competent to do that, do you?

A. As I told you, I feel competent to estimate rather accurately how many dollars have gone through the till and for what purposes, and how many dollars it is necessary for us to have in the till to continue the operation of our business efficiently.

That is the only point to my study. I am not trying to interpret rate cases in any way. I am trying to determine how many dollars it is necessary for us to have and on which I think we are entitled to a return.

Q. For rate making purposes?

A. For the purpose of this study, yes.

Q. The thing I want to get clear, in view of counsel's statement, is whether you were making this study for rate making purposes or whether you were making it for some other purpose? Which one did you make it for?

A. I made it for purposes of this proceeding.

Q. For rate making purposes?

A. But understand, Mr. Littman, this is a mathematical compilation, nothing else. I am not trying to philosophize about rate making at all. I am simply trying to [fol. 4586] ascertain the number of dollars it is necessary for us to have in order to do business.

Q. It isn't just mathematical, is it, Mr. Sperry?

A. Pretty much, yes.

Q. There is pretty much judgment involved in inclusions and exclusions, is there not?

A. Very much so, yes.

Q. And how much should be allowed for this, that or the other item, is that correct? A. That is right.

Q. Well, suppose you knew that there was, let us say, half a million dollars of distributing system expense in your final estimated figure. Would you say that that amount should go out or should stay in?

A. I do not know, but I certainly should study it more carefully than I did when $2,000 or $3,000 was involved.

Q. You did not study it very carefully?

A. I did not study that principle, no. I left Central Distributing figures in because I thought they did not fundamentally distort the picture, and it was a matter of some labor and some difficulty to get them out.

Q. But, as a matter of principle, you are not prepared to testify whether those distributing expenses should stay in or go out?

A. That I will not pass on, no. I do not know.

[fol. 4587] Q. I believe you said that the amount of the distributing expenses would be approximately 1/18th of $48,000. Wouldn't it be more correct to say 1½/18th's of $48,000 in view of the 45-day period?

A. I would think so, yes—wait—we are talking about the aggregate of the moneys involved before the 45-day period applies. We are talking about the $5,000,000 total, aren't we?

Q. Yes.

A. In the $5,000,000-odd total, there may be a possible distortion here of $48,000. If you correct that to a 45-day period, then I should think it would be 1½/18th's.

Q. Rather than 1/18th?

A. Yes, I think that is correct.

Mr. Wheat: May I ask a question for clarification. You mean, do you, Mr. Sperry, that 1½/18th's of $48,000 would be the outer limit of the distortion you mentioned?

The Witness: Yes, in this $470,000 item concerning which we have been talking.

By Mr. Littman:

Q. I believe you mentioned something about not having sufficient time in which to make the elimination of the distribution system expenses.

If you had had sufficient time, would you have made the elimination?

[fol. 4588] A. Had we had sufficient time, we might have taken a different approach to this whole study. I do not know. We had a limited time, and I did the best I knew how in that period.

Q. Did you receive any instructions from anyone as to how to prepare this entire study?

A. I do not think I did, very much.

Q. Well, your answer indicates you received some little instruction. Who instructed you?

A. I think I had some guidance from our counsel as to how this thing had been approached in the past by

other companies, but the work on it is mine and I will have to stand or fall on it.

Q. By counsel, you mean Mr. Culton?

A. Mr. Culton.

Q. Did you and Mr. Culton discuss distribution expenses?

A. I do not think that was ever mentioned, no.

Mr. Culton: I told you, did I not, to determine how much money you, as Treasurer of this company, thought should be on hand at all times for general running expenses of the company?

The Witness: That is right.

Mr. Culton: And that is as far as my instructions went?

The Witness: That is right.

By Mr. Littman:

Q. Do you have a copy of Exhibit 49, which is Mr. [fol. 4589] Watkins' exhibit? A. No, I have not.

Q. Showing the income statement?

A. No, I haven't got it.

Trial Examiner: I will hand the witness my copy of Exhibit 49, if you wish.

The Witness: Thank you.

(Whereupon, a document was handed the witness.)

By Mr. Littman:

Q. Are you familiar with this exhibit, Mr. Sperry?

A. I think this is the first time I have seen it, probably.

Q. Now, I refer you to Line No. 9 on schedule 1 of Exhibit 49 which shows the operating and maintenance expenses and I refer you to Column J for the year 1940, which shows the operation and maintenance expense for that year to be $3,000,764.52. Do you find that figure?

A. Yes.

Q. Does that comport with your understanding as Treasurer of the company?

A. Does that what?

Q. Does that comport with your understanding of these figures? Does that figure look correct to you?

A. If it is Mr. Watkins' work, it certainly is correct, I think.

[fol. 4590] Q. Now, what was the average for the entire 8¾ year period shown in this exhibit as shown in Column L? A. The average?

Q. Yes.

Mr. Wheat: You mean, what does Mr. Watkins show in Column L on Exhibit 49 as the average, is that correct, Mr. Littman?

Mr. Littman: That is correct, and I think what I said is correct, too.

Mr. Wheat: Probably, but I wanted to make sure.

The Witness: You refer to the figure of $1,787,885?

Mr. Littman: Yes.

By Mr. Littman:

Q. You did not use the recorded operating expenses in arriving at the normal cash funds for working capital, did you?

A. No, I used cash figures completely.

Q. Which cash figures were taken from the cash book as you have heretofore testified? A. That is right.

Q. Now, the figure that you arrived at for the year 1940 is approximately $391,000 more than the recorded operation and maintenance expenses in that year, is that correct?

A. You are referring to what, my figure of $3,391,400?

Q. That is correct.

A. That figure is greater than the operation figure in Line 9 under Column J.

[fol. 4591] Mr. Wheat: Of Exhibit 49.

The Witness: Of Exhibit 49; but I call your attention to the fact that this figure of $3,391,400 includes some taxes which are not included in operation and maintenance expenditures on the income account.

It may include some other things too. They are not comparable, however.

By Mr. Littman:

Q. It includes construction items, too, does it not?

A. Yes. You cannot compare operating figures with cash figures, Mr. Littman, without elaborate reconciliation.

Q. I am not undertaking to make a direct comparison, Mr. Sperry. A. No.

Q. But it is a fact, is it not, that two items that would account at least in part for the difference between the cash book figures and the recorded figures are taxes and certain construction items, is that correct?

A. Certainly those, and maybe some others, I do not know. I have not analyzed this carefully yet.

Q. Will you state the amount of charges to plant account that are included in your allowance for working capital before the 45-day allocation?

A. I do not understand that question. Would you please read it to me?

. . . . . .

[fol. 4592] The Witness: For the year 1940, a total of $461,500. For the six months ending June 30, 1941, $483,100.

By Mr. Littman:

Q. That makes a total of $944,600 of charges to plant account that are included in your allowance for working capital, is that correct?

A. That includes the amount of dollars which we spent in that 18-months' period for regular construction of the nature of maintenance.

Q. Isn't it a fact that this amount of $944,600 represents charges to plant account and not maintenance?

A. I cannot answer that accurately at the moment. In our business, it is necessary for us to regularly spend money for the maintenance of our property in such a way as to classify it as regular construction, recurring construction of the nature of maintenance on which no interest is charged for construction, and those are the items to which I refer.

Q. Well, "of the nature of maintenance", to use your term would, of course, not mean maintenance, isn't that correct?

A. It is very similar to maintenance. It is construction that is needed in order for us to carry on our present business without any reference to expansion.

Q. Didn't you just testify a minute ago that none of [fol. 4593] this amount of $944,600 is included in Line 9.

of Exhibit 49, Schedule 1, called "Operation and Maintenance Expense"?

A. No, I did not say that. I do not know whether any of it is or not. I am not talking about the earnings records at all. I am talking from cash records, and my point here is that regularly our company has to use this kind of cash in these amounts in order to maintain our present property.

Q. You are not prepared to say whether any part of the $944,600 is charged to maintenance?

A. I really do not know, no. I do not think it is charged to maintenance. It is charged to regular construction.

Now, what it is charged on the earnings records, I do not know. I am not talking from the earnings record here at all.

Q. What are you talking from?

A. I am talking from cash records. I am trying to indicate fairly how much cash it has been necessary for us to have in the till right along for certain purposes.

Q. Perhaps this will clear up the matter, Mr. Sperry.

It is a fact, is it not, that the $944,600 that you mentioned represents capital charges to plant account, does it not?

A. It may, or they may be earnings items, I do not know. I am not the accounting officer of the corporation. I do not account for these things in the earnings records.

* * * * * * * *

[fol. 4596] By Mr. Littman:

Q. Mr. Sperry, at Page 456 of the transcript, your counsel asked the following question and you made the following answer:

"Q. Are the items included in your study or are any of them included or reflected in the plant accounts of the corporation?

"A. No. None of the items included in my study are reflected in the plant account."

* * * * * * * *

[fol. 4598] Q. In view of the answer that you gave to the question which I read, you undertook in your direct testimony to testify with respect to what is and what is not

included in the plant accounts of the corporation, did you not?

A. Yes. I stand on that testimony.

Q. With respect to what?

A. The items included in my study.

Q. Now, are you prepared to tell us how the $94[illegible],600 that you mentioned a moment ago is charged on the books of the company?

A. Again, I would like not to be questioned on how the accounts run. I am not an accounting officer. I know that we had expenditures of those amounts during those particular months for those purposes.

My testimony will go only to the amount of cash which we have had to pay out for certain purposes in the corporation.

Now, if you want to examine how those are subsequently accounted for, or how they are currently accounted for, you will have to ask the accounting officer.

Q. Regardless of how the items are charged on the books of the company?

A. My testimony goes only to a cash study.

Mr. Littman: If your Honor please, I think that at the time this witness made this study, he made it for the purpose of showing the amount of working capital to be added [fol. 4599] to Mr. Biddison's reproduction cost, and I do not think that the witness was particularly disturbed for that reason with what was or what was not charged to capital or expense, and he was not concerned with how these items were charged on the company's books.

However, in view of the fact that your Honor has excluded reproduction cost evidence in this proceeding, leaving in the evidence of book cost and original cost, it is of greatest importance for this record to show how these amounts are charged, whether they are charged to capital or whether they are charged to expense, and that, if your Honor please, is why I am so insistent upon having this witness enlighten us.

Now, if he does not know, of course we cannot secure the answer from this witness, but it seems to me that in the light of what has transpired on this record, counsel for

the company is under obligation to have the record show how these amounts were charged.

Mr. Wheat: Have you asked him directly, or do you want now to ask him directly, whether he knows or does not know?

Mr. Littman: I thought I had asked him that several times, but I shall try again.

Trial Examiner: The Trial Examiner put that question very definitely, and the witness has now declared that he stands upon his answer to the question quoted by Mr. Littman on Page 456.

[fol. 4600] The question to which the witness then responded was:

"Are the items included in your study, or any of them, included or reflected in the plant accounts of the corporation?"

Now, it would seem to the Trial Examiner that this witness might care to somewhat review that testimony with counsel and develop whether or not we have contradictory statements which appears to the Trial Examiner have developed in the record this morning.

[fol. 4601] By Mr. Littman:

Q. If I correctly understand your testimony, you do not know how the amount of $944,600 was charged on the books of the company, do you?

A. I don't know where it found its way ultimately.

Q. You can't give us any idea of approximately how much of the amount found its way into the plant account, and how much found its way into operating expenses?

A. I can't at the moment, no. I will say this: That at the time that that money went out of the till, at the time that money was expended it was no part of plant account nor did we receive any return on it as a part of plant account.

Mr. Wheat: You mean it was no part of the plant account.

The Witness: It was no part of the plant account.

By Mr. Littman:

Q. By the term "return" you mean you received no interest on these amounts?

A. I mean it could not have been part of our rate base; it was not part of our plant account.

Q. That is, at that time?

A. At that time.

Q. But may have become later?

A. It may have subsequently, surely.

Q. When you made the answer to which I called your [fol. 4602] attention a moment ago on page 456 of the transcript were you referring to all the items in working capital or—

A. (Interposing) Is that the answer "No, none of the items included in my study were reflected in the plant account."?

Q. Yes.

A. Yes, I believe the answer to your question is yes. I took pains to ascertain carefully that none of the items in my study were being used by Mr. Biddison in his study, either materials or supplies or construction expenditures. In other words, there is no overlapping between Mr. Biddison's figures and my figures.

Q. You were referring to Mr. Biddison's reproduction cost new less depreciation?

A. His appraisal of our plant account, yes, sir.

Q. You know, do you not, that Mr. Biddison included certain work orders in his reproduction cost, do you not?

A. No. I don't know his method of approach, but I do know that in the preparation of my work I went over carefully with the Accounting Department to make sure that none of the items which I was using in my study were being used in his. We reviewed that with some care.

Q. But you can not make that statement with respect to relating your working capital to book cost or original cost, can you?

The Witness: Will you read that please?

[fol. 4603] (Whereupon, the pending question was read by the reporter.)

By Mr. Littman:

Q. If you don't understand that question, perhaps I can clarify it.

Is your estimate of working capital referable to original cost or book cost?

A. It has nothing to do except with the cash figures of outgo.

Q. Well, of course, actual cost is actual cash, isn't it?

A. Yes, but any cash that went out of our company for plant upon which we thereupon obtained a return on our rate base is not included in my figures for working capital. In other words, our expansion expenditures, for instance, construction expenditures for expansion which are capitalized and on which interest is charged during construction are no part of my study.

Q. Do you know whether or not the company includes on its books work orders against which no interest during construction is charged?

. . . . . .

[fol. 4604] The Witness: I think it is. I am groping a little bit at it.

Is that another way of asking whether any of this construction of the nature of maintenance, which we have been discussing, is covered by work orders?

Mr. Littman: That is one part of it.

The Witness: That might be.

By Mr. Littman:

Q. But you don't know for sure?

A. I don't know offhand, no. I think it is probable.

Q. Well, let me get at it this way, Mr. Sperry: The company does capitalize amounts upon which no interest during construction is charged. Is that correct?

A. Yes.

Q. Now, can you tell by looking at the cash book, Mr. Sperry, upon what items interest is charged and upon what items interest is not charged?

A. I don't know whether the cash books would show that or not. I assume they would. Again, I would like to disclaim knowledge of the accounting of it. I would rather have Mr. Watkins answer those questions.

I know this: The items which I have included here in my working capital study have carried no interest during construction. We have had no return on them.

Q. How do you know that?

[fol. 4605] A. Well, I know it by definition. That is the way these items on my cash forecast were set up, the construction work of the nature of maintenance on which no interest is charged during construction.

Q. Why is not interest charged during construction on some of those?

A. I don't know. I suppose because it is of the nature of maintenance.

Q. Well now, someone in your company makes the decision with respect to what items shall carry interest charges and which ones shall not. Is that correct?

A. That would be the accounting officer, I would say.

Q. When is that decision made?

A. I don't know.

Q. Isn't that decision made not from the cash book but by the accounting officer from the work orders?

A. I assume it is made at the time construction budgets are approved. We divided our construction into two different kinds of construction, first, the construction which we have been talking about here this morning and, second, the expansion construction.

They take the form of separate budgets and they are separately accounted for on that cash forecast sheet, if you will notice. On the expansion construction we carried out, interest is charged.

[fol. 4606] On the regular maintenance construction which is necessary to support the present level of business, which has nothing to do with expansion, interest is not charged. That takes the form of the items we have discussed here, normal construction expenditures of a maintenance nature.

Q. Well, who made the determination for your purposes as between the items upon which interest is charged and the items upon which interest is not charged?

A. The Accounting Department which prepares that cash sheet.

Q. I call your attention, Mr. Sperry, to the $461,500 figure which you read into the record a moment ago as rep-

resenting the charges to plant account included in your working capital allowances for the year 1940 which are referred to in the annual cash forecast, which you used in preparing your estimate, as "Construction Regular".

A. That is right.

Q. How do you know that no interest is to be charged on that amount of $461,500?

A. That no interest will be charged on it or that no interest has been charged on it?

Q. Well, that no interest has and no interest will.

A. I am told by the Accounting Department that no interest is charged on that.

Q. And were you told by the Accounting Department [fol. 4607] that no interest will be charged on that amount?

A. If any of that item finally finds its way into the plant account when the books are closed, interest may then start to accrue. It may go into the regular plant account, but at the time these funds are spent no interest is being charged.

Q. Well, obviously, no interest is charged until the money is actually expended, isn't that correct, in any event?

A. That is right.

Q. So that when such part of this amount of $461,500 as will be capitalized on the books of the company does finally become capitalized and interest is then charged thereon for construction, you then have a duplication of that extent in your estimate, do you not?

Mr. Culton: You said "If that is done", did you not?

Mr. Littman: When it is done.

Mr. Culton: There is no testimony that it will be done. He testifies that it goes into plant account and, of course, if they are after interest—

The Witness: (Interposing) If that money should be allocated to plant account, then it becomes part of our rate base upon which we are entitled to earn a return, but until [fol. 4608] it goes there and while it is being spent here, the company is not obtaining any return on it unless it is included for rate-making purposes in the working capital allowance.

By Mr. Littman:

Q. Well, doesn't the amount go to plant account the moment it is spent? A. No, I don't think so.

Q. You are not sure about that?

A. No, as I say, I don't know the accounting of these items, I know that the money is being spent.

Q. Well, does the company expend any cash for interest during construction? A. No.

Q. Therefore, interest during construction never appears on the cash book which is the book that you studied?

A. Interest during construction is a book item, it is not a cash item.

Q. And, therefore, the interest during construction never appears on the cash book?

A. I would think that was correct.

Q. And the figures that you used for purposes of this study were the figures that were derived from the cash book. Is that correct?

A. That is right.

Q. So that you can not tell from the cash book or from [fol. 4609] figures derived from the cash book actually how much has been expended for interest during construction, can you?

A. We don't expend interest.

Q. Well, how much is charged for interest during construction?

A. If it is a bookkeeping item, purely and simply, it doesn't appear on the cash books anywhere.

Q. Well, will you explain briefly the company's policy with respect to interest during construction?

A. I can't do that, Mr. Littman.

Q. You can't tell us, for instance, the rate of interest that is charged? A. No.

Q. Or the period of time over which interest is charged?

A. No.

Q. Or the minimum size of the job upon which interest is charged? A. Those are accounting matters.

Q. Well, you do not, then, know of your own knowledge whether the sum of $944,600 of charges to plant account in the year 1940 and the first six months of 1941 are those upon which no interest during construction was charged?

A. Yes, I know that interest was not charged.

Q. You know that of your own knowledge?

A. I know it by definition on our books.

[fol. 4610] Q. I am asking if you know it of your own knowledge.

A. If you mean have I seen the accounting of it, no. The Accounting Department has represented to me that no interest is being charged on the items for construction which I have included in my working capital study.

Q. Well, assuming, Mr. Sperry, that the entire amount of $944,600 was charged to plant account on the books of the company, would you say that the entire amount is properly includible in an estimate of working capital for purposes of this proceeding?

A. Certainly. The fact remains that we have spent that money and haven't had a return on it.

Q. And the only reason why no return has been had on that amount under those circumstances is simply because the company, itself, elected not to charge any interest on that amount during construction. Is that right?

A. The reason it hasn't had any return is that it is not part of our rate base; unless it is included in working capital, it is not part of our plant account.

Q. Well, will you answer my question, specifically, Mr. Sperry?

* * * * * * * * *

The Witness: The company elected to account for it in this way rather than to immediately capitalize it? Is [fol. 4611] that what you mean?

By Mr. Littman:

Q. I am assuming that the amount is capitalized, Mr. Sperry, and I am asking you whether or not the company's failure to receive a return upon these capital amounts is due to its own election to not charge interest during construction.

A. It is due to its own chosen accounting methods, yes.

Q. And now what you are proposing to do is to change that accounting method? A. No, not at all.

Q. To change the election?

A. No, not at all.

Q. That is the effect, isn't it?

A. I simply propose to seek to include these sums in our working capital allowance as being recurrent monies that are spent month in and month out and on which we

do not get a return unless it is included in our working capital allowance.

Q. And the effect of doing what you propose will be the same as if the company had originally elected to charge interest on those amounts?

A. That may be so.

Q. Well, it is so, isn't it, Mr. Sperry?

A. I don't know whether there would be any practical difference or not. I don't see any at the moment.

[fol. 4612] Q. Mr. Sperry, assuming that this amount of $944,600 represents construction that was completed on the average of, let us say, three months, the company would have ordinarily, had it charged interest during construction on this amount, charged three months' interest on it, would it not?

A. You will notice that those amounts are expended over a period of 18 months almost regularly and recurrently, so that the average time would be nearer nine months rather than three months.

Q. How long are these amounts kept in the construction work-in-progress account?

A. Again, I don't know how or when those monies are accounted for.

Q. Well, assuming that it is three months, the actual interest charged by the company would cover a three-month period, would it not?

A. Had they been capitalized and interest been charged?

Q. Yes.

A. I would assume so. Again, that is an accounting matter.

Q. And under your method, you are capitalizing the entire amount and asking for a return, an annual return on the entire amount, are you not?

A. No, only for 45 days. We are asking for a return [fol. 4613] on 45 days.

Q. An annual return? A. Yes.

Q. For each year in the future?

A. In other words, we have averaged these amounts for 18 months and then asked for an allowance of 45 days' return.

Q. The amount of interest capitalized is determined as a matter of managerial judgment as to the proper amounts and methods, is it not?

A. I suppose so, yes.

Q. You are not familiar with those methods? A. No.

Q. You mentioned a moment ago that the period that you took for interest during construction and, as a matter of fact, for the entire cash amount was 45 days, did you not?

A. No. You asked me, I believe, if we were claiming this whole amount, the full 18 months period. I said "No", that we were asking for a return, not on the 18 months period, but on a 45-day period.

Q. Yes. Now, how did you determine that 45-day period?

A. It is arbitrary and a matter of judgment on my part.

Q. I am speaking now of the 45-day period for purposes of interest.

A. I am talking about the 45-day allowance for all working capital items.

[fol. 4614] Q. Yes. Now, let's talk about a 45-day period for this particular item, namely, the item of interest during construction. How does the 45 days stack up with the company's own experience in charging interest during construction?

A. I don't know.

Q. You don't know whether 45 days is right or not with respect to the company's own experience?

A. My theory on the 45 days is that all items of working capital for the 45-day period are equally applicable to all items which we have claimed for working capital and one of these items is the amount which we have spent for recurring construction in the nature of maintenance.

Q. Well now, you have already testified that you do not know the period of time over which interest is charged by this company. A. No.

Q. Is that correct?

A. That is on expansion projects, which we are not talking about here at all.

Q. Well, I am talking about the $944,600, Mr. Sperry.

A. That is right.

Q. And I am speaking about the 45 days which you applied. A. That is right.

Q. Now, you have testified, have you not, that you were [fol. 4615] not familiar with the company's policy with re-

spect to the period of time over which interest is charged by the company?

A. No, that is an accounting matter about which I can't testify.

Q. In other words, my statement is correct, that you are not familiar with that matter. Now, how can you say that the 45-day period that you used with regard to this particular item that we are now discussing is correct or not?

A. I don't say it is correct or not: I say that on all items of working capital, including this one, we have arbitrarily asked for a 45-day allowance.

Q. Well, it is just an arbitrary matter, is it?

A. That is a judgment factor.

Q. Judgment of what?

A. It seems to us that that is a reasonable and representative approximation of the lag period as applied to working capital expenditures and we believe consistent with the practice before Power Commissions.

Mr. Goodman: You mean by the "lag period" the period between the provision of the money and reimbursement?

The Witness: Yes, the initiation of service to the customer and our repayment therefor.

Mr. Goodman: By that do you mean the period between the monetary provision and the reimbursement? Is that what you mean?

[fol. 4616] The Witness: That is right.

By Mr. Littman:

Q. What does the lag period have to do with the period of time over which interest during construction is charged?

A. I don't believe that I represented that it did have anything to do with it. I said this: That there are certain items of working capital, of cash for these various purposes which we would like to have as an allowance. Those items aggregate over a period of 18 months almost five odd million dollars of money that goes out of the till for these particular purposes.

Now, in asking for a working capital allowance, we have to assume a lag period. We have assumed 45 days as an allowance, as a reasonable and representative allowance.

Q. Does that have anything to do with the company's experience? I am now referring to the 45 days.

A. Yes, it is predicated on the company's experience.

Q. Do you expect to get your construction expenditures back in 45 days?

A. Mr. Littman, I don't believe that that is the point.

Q. Well, the point is that the 45 days doesn't have anything to do with the period of time over which interest is actually charged by the company. Isn't that correct?

A. We pay out regularly and monthly certain amounts of money for various purposes, cash, which, as we have [fol. 4617] developed this morning, aggregate five million odd dollars over a period of 18 months. Now, in that one of those items is regular recurrent construction expenditure in the nature of maintenance. In my opinion that is a perfectly sound basis for including that in your working capital requirement.

* * * * * * * * *

Q. Do you know whether these items replace other items of construction?

A. No.

Q. In many instances they do, do they not?

A. I don't know.

* * * * * * * * *

[fol. 4618] By Mr. Littman:

Q. To the extent that it does replace other items of construction, then to that extent the replaced items are in the rate base, are they not, already?

A. Yes, I would think so.

Q. And return has been earned by the company and is presently being earned by the company on those items, is that correct?

A. That might be. I would think that that is so. Without having more time to think through your question I think that is right.

Q. Now, I believe you stated here recently that these expenses in the nature of maintenance or charges in the nature of maintenance are constantly recurring.

A. Yes.

Q. What do you mean by that? They are rather static?

A. No, I mean that they have these expenditures. These expenditures occur to a varying degree each and every month. There is no month in which they do not occur.

Q. The fact of the matter is that they are not static, isn't that correct?

A. Yes, they fluctuate.

Q. And construction fluctuates considerably from year to year, doesn't it?

[fol. 4619] A. Well, this type of construction has been fairly consistent, I think, over a period of years.

Q. It wasn't very consistent in the last 18-month period, was it?

A. Well, let's see. It was considerably more per month in 1941 than it was in 1940. It averaged in 1940 about $40,000 a month. This year it has averaged about $80,000 a month.

Mr. Wheat: Pardon me, you mean the first six months.

By Mr. Littman:

Q. That is a fluctuation of 100 per cent, isn't it?

A. Yes. That is quite a fluctuation.

Q. I would say it is too.

A. There was one month, May, in which we expended $118,000 for this type of construction. I can't tell you why at the moment.

Q. Then your allowance, which is based partly upon construction expenditures for this 18-month period, can hardly be called a normal or equalized cash requirement, can it?

A. No, I would say that this indicated clearly that our expenditures are increasing all the while for this type of construction and that the average for the first six months this year was probably more representative of what it is going to be. The item shows a tendency to increase here.

Q. You mean in the last six months?

[fol. 4620] A. Yes, the last six months here in 1941 have required a materially larger amount of money than they did in 1940.

Q. Have you checked to ascertain what the situation was for the last six months of 1941?

A. No, my cutoff date is June 30. The estimate which we prepared on July 8 indicated it would be substantially more the last six months of 1941 than it was the first six

months. I don't know whether that has been borne out by experience, but that was the estimate.

Q. The company wasn't able to get a good deal of pipe that was on order, isn't that correct?

A. If that was pipe, that would probably be construction expenditure for expansion purposes and wouldn't be included in this category.

I haven't the December figures, but our estimate through November would make it appear that we had spent in the last six months more than we spent in the first six months, but about $200,000 less than we expected to spend. In other words, our total of this category for the 12 months ending December 31, 1941 shows this item to be $961,000 with one month estimated as against $1,100,000 with six months estimated.

Mr. Culton: Do you have the actual figures through November?

The Witness: I have the actual figures through November and they would indicate that the acceleration in [fol. 4621] that item has continued.

By Mr. Littman:

Q. Will you please refer to Exhibit 52, which is the exhibit prepared by Mr. Watkins showing the gas plant? Will you please refer to page 2 of that exhibit? On line 38 of page 2 is shown the total gas plant classified amounts for each of the years 1930 through June 30, 1941.

A. That is item 42, you say?

Q. No, line 38.

A. Pump station equipment.

Q. On page 2.

A. Yes.

Q. Now, in 1940 these figures show that there was approximately $5,000,000 more construction than in 1939. Is that right?

A. It shows that the overall gas plant had increased by that amount a little over $5,000,000 during that period.

Q. In the preceding period there was a slight increase?

A. Yes.

Q. And there is a slight increase in the previous period, 1937-1938?

A. Yes.

Q. Then, there was considerable construction between 1936 and 1937, is that correct?

A. Yes.

[fol. 4622] Q. In other words, it shows a considerable fluctuation through the years, does it not?

A. It shows we added a lot of property in 1937 and a lot more in 1940, but in the intervening years not so much.

Q. Do you have Exhibit 49 before you?

A. Is that Exhibit 49 and the same line?

Q. I am referring to line 9 of Schedule 1 of this Exhibit, headed "Operation and Maintenance Expenses". Isn't it a fact that the average operation and maintenance expenses for the years 1932 to 1940 are considerably less than the 18-month period that you have used?

A. Sure, they are bound to be. We were doing very much less business in those earlier years. Furthermore, that trend upward is continuing now at a very fast rate. Our operation expenditures increase every year and will increase at a faster rate from now on.

Q. And why did you select the last 18 months as the test period?

A. That came about in this way: In trying to find a formula to develop these figures, trying to find a simple way of presenting them, I took the first full year's figures which I had at my disposal, which was the calendar year 1940.

Having compiled those figures, I then brought them down to the nearest date which I could, which was June 30 at that time, 1941, and I noticed that the 1941 figures were [fol. 4623] very much higher than the 1940 figures. On the other hand, in the interest of conservatism, I used the whole 18 months instead of the last six. We could have improved our case materially by using the last six, but I felt that it was proper for me to use the longer period.

Q. Now, referring to your 45-day period, which you have already described as a lag period, did you make a study to determine the actual elapsed time between the payment of operating expenses and the receipt of revenues?

A. No, sir, I did not. That would have involved a good many weeks' work which we didn't have at our disposal.

Q. It would have been desirable to do that, would it not?

A. If we had had lots of time that could have been done; we didn't have. Furthermore, the precedents for this particular period seems to be very adequate. Regulatory commissions have accepted it in a great many cases and it rather squared with my own judgment from experience on this lag, and so I used it arbitrarily. It is a judgment factor and I can defend it only on the basis of judgment.

Q. That judgment was not based upon a study of the company's actual experience, was it?

A. No, I talked with our accountants about that and I found that they had in one other case made an elaborate study of lag. I went over their approach to it. It was a [fol. 4624] scientific approach but a very involved one. It would have taken weeks to work out and we just didn't have that time. Furthermore, it, in my opinion, would not have altered the answer very much.

Q. How do you know?

A. I should have liked to have asked for an amount sufficient at all times to cover sixty days but, in my opinion, 45 days is a safe minimum and a conservative period for which to ask.

Q. That is based on court decisions and commission decisions that you have read?

A. It is based primarily on my own judgment as to how much cash you ought to have and it is consistent with opinions in other representative cases.

Now, in the case of the Natural Gas Pipe Line Company they approached it more scientifically. Their company is very similar in some respects to ours. They claim 49-odd days, I think. We are claiming a little less than that.

Hope Natural claimed 45 days.

There have been others.

Q. Well, let's test your 45-day period, Mr. Sperry, with the actual experience of the company. What is the largest item of cash operating expense of your company?

A. Wages, I would say.

Q. What would you say of gas purchased expense?

[fol. 4625] A. I don't think that is as large as wages, but it may be.

Q. Well, I think you will find that that is the largest.

A. It may be.

Q. At any rate, it is one of the largest?

A. That is right, it is one of the largest.

Q. Will you read into the record the amounts paid by Panhandle Eastern in 1940 for gas purchased?

A. Instead of gas purchased, let's call it "Gas Expense", because that is the item that I have here and I am not sure that they are synonymous. There may be some produced production expense, gas expense.

Q. We understand that is the amount paid by Panhandle Eastern to its gas vendors for gas purchased.

A. Yes.

Q. Very well.

A. In round figures, $1,187,000.

Q. $1,187,000?

A. Yes.

Q. And what was the amount for the first six months of 1941?

A. $676,000.00.

Q. And that is a total of $1,863,000, is it not?

A. Yes.

Q. That is included for the 18-month period in the [fol. 4626] amount of $5,609,600, which you referred to a while back?

A. Yes.

Q. Now, on what day of the month are gas purchases paid for by Panhandle Eastern Pipe Line Company?

A. We usually pay for our gas on the 20th of the month.

Q. Now, on what day of the month are gas revenues received?

A. That varies but a majority percentage is usually paid from the 23rd to the 26th of the month following its sale. In other words, if we start delivering gas to Detroit on the first day of January, we usually get paid for it on the 25th or 26th day of February. Now, there are exceptions to that, but in general that is the predominant part.

Q. Now, when is payment made for the gas purchases?

A. They are payable on the 20th of the month following the take-out.

Q. In other words, the payments for gas purchased and the receipts for gas sold are on a comparable basis, are they?

A. No, not quite.

Q. Well, except the one that is on the 20th and the other is around the 25th.

A. No, not exactly that either.

Q. What is the situation?

A. We purchase substantially all our gas on a fiscal [fol. 4627] month basis with a cut-off on the 22nd of the month. We pay for it less than 30 days later, the 20th of the following month.

In the case of gas deliveries we start delivering on the first of a month and we collect about 55 days later, so there is a difference in lag there, you see.

Q. Let's see if I understand your testimony correctly. The revenue derived by Panhandle Eastern from gas sold by it is received not later than the 26th of the month?

A. Approximately, of the following month.

Q. Following the month of delivery?

A. Following the month of delivery, yes.

Q. And am I correct in understanding your testimony to be that the payment for gas purchased by Panhandle Eastern is made on the 20th day of each month following the date of delivery?

A. Yes. Not following the date of delivery, it is following the date of billing. They usually read our meters for gas delivered around the 22nd or 23rd of the month. We pay for it the 20th of the following month. We have had that gas.

Well, in these circumstances which you have described there really isn't any lag at all in it?

A. Yes, there is some lag.

Q. That is, lag between the purchases and the payments. You say there is some lag?

[fol. 4628] A. Oh, yes, there is some lag. It is pretty hard to determine just exactly what it is, Mr. Littman.

Q. Well, the lag is in favor of the company, isn't it?

A. Oh, no.

Q. Why isn't it?

A. Well, let's start with the 22nd of the month when they read our meter and charge us for some gas. We pay for that gas the 20th of the following month. We start service to our customer on the first of the month, we get paid 55 days afterwards or thereabouts or the 26th of the following month. During that time it is necessary to carry some of that gas, I mean carry the customer for some of that gas. There is some lag. It is pretty hard to tell just exactly what it is, but there is some lag there.

Q. How much of a lag is there?

A. I don't know. I am frank to say I have spent sometime trying to determine what the lag is, but it is one of those things that would have to be worked out by a good deal of work on the part of our accountants.

Q. There wouldn't be any such lag as 45 days, would there?

A. No, I wouldn't think so.

Q. Can you give us a general idea of what the lag would be?

A. I am frank to say that this question of lag and [fol. 4629] trying to prove statistically how many days' lag there is in this working capital defies me, I can't tell you.

Q. The lag would be considerably less than 45 days, wouldn't it?

A. The lag is something and it is less than 45 days in the case of purchased gas.

Q. And it is less than 15 days.

A. Then you have got the question of produced gas and there is a different lag altogether there when we pay for that. It is just one of those things, one of those questions which to me, at least, — and maybe it is because I am a poor mathematician, just defies statistical analysis. I just can't tell you.

Q. You have a good idea it is less than 45 days?

A. I have testified it is less than 45 days in the case of purchased gas, yes; there is no doubt about that.

Q. And in the case of purchased gas it is less than 10 days, isn't it?

A. No, I wouldn't say that.

Q. What is your best judgment?

A. I can't give you a judgment. I can't reduce that thing to mathematics. If I could I would. I am not trying

to evade it. I simply say it is one of those things that defies careful analysis on my part. I have spent a lot of time on that in trying to arrive at a satisfactory answer. [fol. 4630] I know this, and I will testify sincerely to this, that the allowance that I have asked for for overall working capital purposes is not excessive in the light of our experience. If we start doing business on the first day of the month and operate for 45 days with $470,000 here for working capital for operating expenses, I am certain that sometime between the first and the 45th day we would be out of cash, see?

Q. Well, you can't tell us why you are certain?

A. To that extent it would have to be a judgment factor. I just can't do it statistically.

* * * * * * * *

[fol. 4631] Louis F. Sperry a witness, having been previously sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Sperry, at the close of this morning's session, we were discussing the matter of the date of payment by Panhandle Eastern for gas purchased and the date of receipt by Panhandle Eastern of gas revenues.

I would like to make certain that I understand your testimony on this subject thus far. Is my understanding correct that the gas vendors are paid on the 22nd day of the month?

A. Twentieth of the month.

Q. And their meters are read on what date?

A. Twenty-second or 23rd of the preceding month.

Q. Now, the gas revenues are received on what day of the month?

A. The majority percentage is paid for between the 23rd and the 26th of the month following delivery. There are other sales with payments on other days, but the pre-

ponderant amount comes within the four days I have men-
[fol. 4632] tioned, within the 23rd and the 26th.

Q. Now, the largest single customer of Panhandle Eastern is the Michigan Consolidated, is it not?

A. That is right.

Q. Michigan Consolidated Gas Company?

A. That is right.

Q. Which serves the City of Detroit?

A. Yes.

Q. Will you give us the 1940 revenues received from that company?

A. Approximately $5,700,000.

Q. That is for the year 1940?

A. Yes.

Q. On what date does Panhandle Eastern receive the revenues from Michigan Consolidated Gas Company?

A. Usually about the 25th of the month.

Q. As a matter of fact, doesn't Michigan Consolidated pay first to Michigan Gas Transmission Company?

A. They deposit in a special account for us in Detroit through the courtesy of Michigan Gas Transmission, yes. We delegate Michigan Gas to collect that account for us, and it is deposited in a special account for us in a Detroit bank.

Q. When is it actually paid by Michigan Consolidated?

A. It becomes good funds in Detroit usually on the 24th or 25th of the montth. It becomes usable to us in
[fol. 4633] New York or Kansas City a day or two later than that, but you might say, for the purpose of this argument, the 25th is a fair day to state.

Q. Now, in the light of your testimony thus far, I would like to go through two or three typical months for the purpose of ascertaining how these revenues are received and gas expense paid.

Would it be correct to say that you start receiving gas from vendors on the 22nd of the month?

A. We can start any day you want in the month.

Q. Let's start on January 22, for instance.

A. All right.

Q. And the meters of the gas vendors are read on February 22nd and February 23rd, a month later, is that right?

A. Yes.

Q. Now, the gas that has been purchased by Panhandle Eastern from its vendors and received from its vendors during the period January 22 to February 22 is paid for on March 26, is it not?

A. That is right.

Q. So that, all in all, there is a period of approximately 60 days between the date of first delivery and the date of payment, is that correct?

A. That is right.

Q. Now, with respect to gas revenues, the deliveries [fol. 4634] start on, let us say, January 1. Would that be correct?

A. No, you have to start on January 22, the same day that you started your gas sales. You start the same day that you started your gas purchase.

Q. Well, with respect to the gas that you sell during the month of January, during the calendar month—withdraw that—isn't it a fact that the gas revenues are paid by calendar months?

A. Yes.

Q. Now, taking the calendar month of January 1 to January 31, the revenues received from the gas sold in that month are received on February 23 to February 26?

A. That is right, but that is December gas.

Q. Which get paid on February 23 to 26. You are being paid for gas that you delivered in January, are you not?

A. Yes, 22 days before the date you assumed we started delivery.

Q. On the 23rd of February to the 26th of February; you receive the revenues for all the gas that you deliver in the calendar month of January?

A. That is right, which gas we took from the vendors in December, starting the cut-off date with December 22nd.

Q. Don't you deliver the January gas in January?

A. Sure.

Q. In other words, the gas that you deliver up in [fol. 4635] Detroit, for instance, during the month of January, was purchased from the vendors in the month of January, was it not?

A. Yes; it was purchased from them in January, but the meter was not read until January 22nd.

Q. That is right.

A. That is right, but we still have got to pay them for their December bill before we get any money for the January gas.

Now, if you are trying to establish lag here and that is what you are doing, apparently, you have got to start with the same cut-off date, both on gas purchased and on gas sold.

It is not fair to take the 22nd day of the month cut-off for gas purchased and January 1 for gas sold.

Q. Now that we have established the actual dates of payment to vendors and the actual dates of receipt of revenues, will you tell us how much lag there is based on those dates?

A. I told you this morning I cannot figure it. There is lag, but I cannot tell you how much, and I do not believe you can figure how much because of the difference in cut-off dates, you see.

Q. Didn't you mention a 55-day lag this morning?

A. Yes, between the beginning of service and the receipt of the check, from the beginning of service on the first of any month to the receipt of the check.

Q. That is a 55-day lag with respect to revenue, is it [fol. 4636] not?

A. It is a maximum of 55 days lag on one day's business.

Q. And you have already testified that the lag with respect to gas purchased is 60 days, is that right?

A. No. You quoted a specific example where there would be a 60-day or approximately a 56-day lag on a particular purchase of gas.

I do not think you can generalize on either one of those statements.

Q. Let me put it this way. 60 days elapsed between the day when you first buy gas and the day that you pay for it?

A. Sometimes, only when that day happens to be the 22nd day of the month.

Q. Well, that is a maximum, isn't it? It couldn't be more than 60 days?

A. No, that is right.

Q. That would be a maximum lag with respect to gas purchased, would it not?

A. Yes.

Q. The 60 days?

A. Yes.

Q. And the maximum lag that you could possibly have with respect to gas revenues is 55 days?

A. If you collected your bill on time, that is correct.

Q. And you do collect your bills on time?

[fol. 4637] A. Not always, sometimes we don't.

Mr. Lee: You do from Detroit?

The Witness: Yes, Detroit usually pays on time.

Mr. Lee: You are talking about Detroit?

The Witness: No, we are talking generally.

Mr. Lee: Usually it does. You do not know of any instance where it did not, do you?

The Witness: I think once or twice there have been a mutual arrangement to delay payment. It may be due to measurement difficulties. It has no reflection on Detroit credit. They pay promptly.

Mr. Lee: What I am getting at is, there is no lag so far as the Detroit payment to your company is concerned.

The Witness: Usually there is not. You mean there is no lag between the day it is due and the day we get it?

Mr. Lee: Correct.

The Witness: No, it is very seldom late, and sometimes it might be early, by mutual agreement. I have seen times when we asked for their check a day or two ahead of time because we needed the money.

By Mr. Littman:

Q. And they complied with your request?

A. I suppose they have, yes.

Q. This date of the 23rd to the 26th of the month, these dates are the ones on which you receive substantially all [fol. 4638] of your revenues, is that correct?

A. The 23rd to the 26th?

Q. Yes.

A. Yes, that is when the preponderant amount of our payments come in.

Q. Certainly by the 26th of the month, you receive more than enough money with which to pay all of your operating expenses, isn't that correct?

A. For what period?

Q. Well, for the month.

A. For what month?

Q. For any month, for the month in which the revenues are received.

A. Sometimes your expenses overlap. Sometimes they are not all for that particular month. Understand, Mr. Littman, our 45-day period applies not alone to gas purchased, gas sales, but applies to other operating expenses, ordinary construction, taxes and other matters, and in order to get a fair estimate of average lag or average elapsed time during which the company has got to have something in its till to pay bills, you have got to analyze everyone of those things in detail scientifically.

Q. You did not do that?

A. No. I testified this morning that was a job for public accountants that would take weeks to do. However, I [fol. 4639] am just as much interested in this subject as you are, but I repeat it was impractical to do it.

It was difficult to do it and, in my opinion, it was unnecessary to do it, because our experience indicates that we have got to have so much cash in the till in order to pay our bills and, in spite of all of the planning you can do ahead of time, you have got to have working capital. You have got to have cash with which to pay bills.

Q. Well, of course, one way of getting that cash is to get your revenues before you make any payments for operating expense.

A. That would be grand.

Q. What would be grand?

A. That would be fine, if everybody would pay us in advance for gas, but they do not.

Q. That is what we are here trying to ascertain; whether or not you, as a matter of practice, do receive your revenues before the time that it is required that you pay your operating expenses.

A. Yes.

Q. Now, that is what I would like to know, and going back to our original train of thought, you have testified that a 60-day period is the maximum lag for gas expense.

A. Maximum possible, yes, if we pay our bills on time.

Q. And you do pay your bills on time?

[fol. 4640] A. And we do pay our bills on time.

Q. What is the maximum lag with respect to gas revenues? A. That we cannot control.

Q. Isn't it 55 days?

A. In most cases, our credits are good. The people who do business with us are responsible and, in most cases, they pay on time. In some cases they do not, and we are helpless.

Q. Those cases are minor?

A. They are not any considerable portion of our revenues.

Q. Now, excluding from present consideration for the moment those minor exceptions to which you have just alluded, the maximum lag period on the revenues is 55 days, is it not? A. Usually, yes, sir, in most cases.

Q. So that, taking the two maximum lag periods, the gas revenues are received five days before your gas expense?

A. No, not at all. That does not follow. One day's consumption of gas, the purchase of gas on our part, could take place five days after one day's revenue from the sale of gas.

Q. Is there anything to prevent your company from—

Mr. Lee: (Interposing) Mr. Littman, pardon me, but that condition would be taken care of because it would fall in the following maximum period, would it not?

The Witness: In other words, in the meantime we have [fol. 4641] got to pay for some more gas. If we collect from Detroit on the 25th for any gas that has been sold them, we have still got a bill coming in to pay for a month's gas before we get another check from Detroit.

If we get $1,000,000 from Detroit today—

Mr. Lee: (Interposing) Not if you synchronize your maximum day for payment to the vendor with your maximum day for collection of revenue.

The Witness: Mr. Lee, that is why we have to have working capital, because you cannot synchronize the payment to the vendor and your collections. You have just got to have money to tide yourself over because your collections do not come on the same day that your expenditures do.

Mr. Lee: At the most though, under your statement, the condition could only exist from the initial month's take and selling?

The Witness: No, that is not so, Mr. Lee, because remember we are talking here, or have been talking today, only about one item of expense.

Mr. Lee: I am only talking about that.

The Witness: Namely, purchase of gas.

Now, we produce half our gas and the expenses of producing gas are constant, day by day, week by week, month by month. The lag period there is entirely different. All that Mr. Littman is exploring today is half our gas re- [fol. 4642] quirements and only that which is covered by purchase contracts.

Mr. Lee: But if, for the moment—and I don't want to break in on Mr. Littman, but while this is fresh in our minds I would like to get this point cleared up—let us confine ourselves to the Detroit market alone, which is 40 percent of your entire market, as I understand.

Isn't it an actual fact that, so far as gas purchased is concerned, take your own illustration, that you have the money for that from the local distribution company before you are called upon to pay for it?

The Witness: No, that is not so. I will tell you why.

No matter what date you take, we have got to pay for that gas or some gas before we get paid for some other.

Mr. Lee: Only after the first month. Only from the first month in the beginning.

The Witness: If it is possible to assume, which it isn't, if it is possible to assume that this company starts operating today, fresh and new, with all of the volume of business we have got on our books—

Mr. Lee: (Interposing) No, I mean a situation analogous to this, where I go to work for you for $20 a week and you hold back my first week's wages, which is the custom in business practice, and you always owe me that money, but thereafter, I am always caught up and you are caught up with paying me.

It isn't a continuous performance, is it?

[fol 4643] The Witness: No, but this is what you are getting at, Mr. Lee. This is January 5th, today. I do not care what the relative dates are. The fact remains I have got to pay for a month's gas this month before I get any receipts from Detroit, and I have got to have the money in the till to do it. Do you see?

Mr. Lee: No, I do not.

The Witness: On the 20th day of this month, I have a bill coming in.

Mr. Lee: By the time you get that check through there and it clears back to your bank, you will have received a deposit in the Detroit bank on the 22nd.

The Witness: No, we do not kite checks. The fact remains I have got to pay for gas on the 20th, and I do not get the money from Detroit until the 25th.

Mr. Lee: You could get it on the 22nd. You could make a draft on the bank if you wanted to.

The Witness: No, I have the dates here for all last year on which I received those payments, and they average around the 24th or the 25th, and the funds are not good for use until the day following. That is Detroit money.

Mr. Lee: Why is there two days intervening when it is paid—

The Witness: (Interposing) It is the mechanics of collection.

[fol. 4644] Mr. Lee: (Continuing) On the 22nd, it is there to your credit.

The Witness: I do not believe it is paid on the 22nd. It may be mailed on the 22nd.

Mr. Lee: I am assuming it is put right in the bank by the Detroit company.

The Witness: My records show we do not get it until the 24th or 25th, and then it is in Detroit. What that particular mechanics is that accounts for that one or two days, I do not know, but no matter how you stymie these dates around, your have got to have working capital in your till in order to pay your bills, and that is just a question of finding out what the first amount of that working capital is.

By Mr. Littman:

Q. How many days do you have to take—

A. (Interposing) I have asked for an average of 45 days.

Q. You have asked for that? A. Yes.

Q. But how much do you actually have to have, based upon the experience of this company?

A. Based upon the experience, my five years sitting on this till, I would object strenuously to starting today with less working capital than we have asked for as an allowance in order to get through the next 45-day period, week [fol. 4645] in, week out; month in, month out; year in and year out.

Q. That his your ultimate conclusion?

A. That is my conclusion.

Mr. Lee: That is the only factor you can give?

The Witness: I think I have supported this with my figures. I think I have shown you where I have got to have $500,000 for operating expenses, another "X"-hundred thousand dollars for material and supplies, and another "X"-thousand dollars for pre-payments.

I have compiled these figures honestly and conservatively. I have not tried to put the best foot forward. I have tried to make it realistic.

I have taken an 18-months' period instead of a 6-months' period and I think it is a fair presentation.

By Mr. Littman:

Q. Is this 45-day period specifically required for the purpose of gas purchase expense?

A. Mr. Littman, the 45-day period which we request is a judgment factor which spreads not only to gas purchase. That is only one item, but it passes to wages, taxes, prepayments, materials and supplies and everything else.

Q. Let's look at this one item for the moment and confine ourselves to this one item. Will you answer my question, namely, is the 45-day period necessary for the purpose of gas purchase expense?

[fol. 4646] A. No. I testified this morning that the lag between gas purchase and gas sale was not 45 days and you asked me how much it was, and I told you it defied analysis. I cannot tell you.

I know it is not 45 days, but I know the aggregate amount of these cash payments which we have outlined here does aggregate around 45 days and I know it would not be safe for me to sit here on just that amount of money and be able to pay all my bills in the next 45 days without sometime or other running out of cash.

Q. Confining ourselves to gas purchase and gas revenues, according to your testimony, you state that you allow your customers a shorter credit period than is allowed to you by your vendors. Is that correct?

A. No, I do not recollect that.

Q. Isn't that your testimony?

A. What is that again?

Q. Don't you say you allow your customers a shorter credit than is allowed by you to your vendors?

Mr. Culton: When did he testify to that, Mr. Littman?

The Witness: I do not remember that.

Mr. Littman: The billing dates showed that.

Mr. Culton: You asked if he testified that.

Mr. Littman: Well, let him state if that is correct.

The Witness: We agree to pay our vendors on the 20th [fol. 4647] of the month for gas taken out up to the 22nd of the previous month.

Most of our sales contracts provide that our customers will pay us approximately 45 days after we begin the service to them.

By Mr. Littman:

Q. Now, which of those periods is the shorter, the revenues period or the expense period?

A. I would say the expense period was shorter—yes, certainly.

Q. How do you figure that?

A. Are you including in your question other items than just the gas purchased?

Q. No; I am just talking about gas purchased.

A. You are not talking about gas produced?

Q. I am talking about gas purchased, which is the amount you read to me in this morning's session, amounting to $1,187,200 for the year 1940, and $676,400 for the first six months of 1941. A. Yes.

Q. That is the figure I am referring to.

A. I misunderstood slightly. The period between the cut-off at the well, the day the meter is read to the time we pay for it is approximately 28 days.

Q. Which period—

[fol. 4648] A. (Interposing) That is the period we have to pay in. The period we collect from our customers is the period between the first of the month and the 25th of the next month, which is approximately 55 days.

. . . . . .

[fol. 4649] Q. Well, suppose the period of receipt of revenues and payment for gas purchased were synonymous. Would you require any working capital on that account? A. Well, they are not.

Q. Let's suppose they were. Would you require any working capital on that account?

A. Yes, we would have to have working capital anyway.

Q. In other words, let's see if you correctly understand my proposition.

Suppose you collected the revenues for the gas sold during the preceding month and suppose you paid for gas purchased in the preceding month at the same time.

What, if any, amounts would you require for working capital in those circumstances?

A. We would require working capital for wages, taxes—

Q. (Interposing) I am talking about the amount re-
[fol. 4650] quired, if any, on account of gas purchase expense.

A. Well, Mr. Littman, I hardly know how to answer that question.

In the first place, it would be impossible for that to happen. We have got to have gas in our line before we can sell it. We have got to buy gas before ~~we can sell it~~ or produce it.

Q. You have a separate provision in here for line pack. Excluding from consideration the item of line pack, which is a separate item anyhow, my question is, suppose all of the gas that you sell during the month of January, we will say, is paid for on the 20th of February and your revenue derived from the sale of that particular gas is received on the 20th of February.

I am asking you what amount would be required, if any, for working capital in those circumstances.

A. And assuming that both bills are paid promptly in every case, is that right?

Q. Yes.

A. In other words, there is no credit risk, one way or another?

Q. And assuming that the amount of revenues is more than ample—

A. (Interposing) In that case, if that were possible physically and assuming there were no credit risks, in so-
[fol. 4651] far as it only pertains to the gas purchased itself, no other expense, there would be no requirement for working capital.

Q. All right. What is there to prevent your company from operating its business in just that way?

A. It is perfectly impractical to operate business in that way.

Q. Why?

A. In exactly the same way it would be impossible for you to get paid in advance for everything you do.

Q. You are not paying for gas in advance, are you?

A. No.

Q. You are paying for gas as long as 60 days after you receive it, are you not?

A. In some cases.

Q. That is the longest period. The shorter period is 30 days. There is at least 30 days—

A. (Interposing) 28 days. We pay for our gas somewhere between 28 and 58 days after we get it.

Q. And you receive your revenue—

A. (Interposing) You cannot tell me, nor can I tell you, how much we pay for between those periods. You cannot measure it, but somewhere between those periods, we pay for it.

Q. So you are not paying for gas in advance, are you?

A. We are going back to the same question, which I conceded sometime ago, namely, there is not a 45-day lag [fol. 4652] between the payment for gas and the receipt from the customer.

Q. It is considerably less than 45 days?

A. It is something less than 45 days. I do not know how much, and neither do you.

Q. Well, I will tell you, so far as we are concerned, there is a lag in favor of the company, but that is our opinion.

A. That is right.

* * * * * * * * * * *

By Mr. Littman:

Q. Is it your testimony that you cannot calculate a lag for purchases and sales where the sales do not precisely coincide?

A. I have testified that I have not been able to satisfactorily estimate the lag that takes place in our particular business to the extent of determining mathematically accurately, exactly how many days that lag is.

Q. Nor anywhere near accurately?

[fol. 4653] A. I cannot do it. Now, maybe somebody else can, but I cannot do it. I do know that I need approximately 45 days' money to run the business.

Q. Well, you feel that way about it?

A. Yes, sir, that is my judgment.

Q. But we are still very anxious to have you be specific and tell us why you need it.

A. I am not trying to obstruct you in that, Mr. Littman.

Q. I understand that. My purpose is to go into some details so that we can get the basis of it.

Now, we know, do we not, from your testimony thus far, that the detailed data we have at hand does not support your assumption as to gas purchase expense. We may agree on that?

A. I admit there is less than a 45-days' lag there.

Q. Just one other thing in this regard, which I would like to clear up before we go to the next subject.

Did you state in your testimony here a moment ago that it was possible to pay for gas in advance of receiving the revenue for it?

A. That it was possible to what?

Q. Withdraw that.

Was it your testimony, in answer, I believe, to one of Mr. Lee's questions, that the company paid for gas in advance of receiving the revenue for it?

[fol. 4654] A. Sure.

Q. Will you name the day, or any day of the month on which it is possible for Panhandle Eastern to pay for gas in advance of receiving the revenue for it?

A. We will pay for gas on the 20th of this month for gas purchased last month before the time when we have received pay from our customers this month for gas sold last month.

Mr. Goodman: Would you be specific about the dates?

The Witness: Yes. We get paid by Detroit on the 25th. On the 20th, we pay for purchased gas.

Mr. Goodman: Wait a minute, don't go so fast. You know there is more than that date involved in the picture you are talking about.

The Witness: No, that is predominantly the correct date.

Mr. Goodman: Just a minute, please. You have a reading on certain dates, a so-called cut-off period. Is that right?

The Witness: Yes.

Mr. Goodman: What is the date for that on sales? Without bothering to look it up, to me this is a simple

thing, and I want you to tell me wherein this question is wrong.

You pay and you charge for gas by the month. Consequently, the average period for the month of gas receipt and gas delivery is 15 days, isn't that right, in either case?

The Witness: Go on.

Mr. Goodman: That is the average, all right. In ad-
[fol. 4655] dition, in both instances, you have a period from the cut off to the day of payment, so that if you take the cut-off from the date of payment plus 15 days, you have the time lag in both cases, which may be compared. Isn't that right? Is there anything complicated about that?

The Witness: To me, it is.

Mr. Goodman: I see. All right.

I wish you would answer Mr. Littman's question by dates, rather than by general conclusions.

The Witness: Mr. Littman asked me if there was any day of any month where we pay for gas before we get paid for gas, and I say almost any day of any month prior to—

Mr. Goodman: (Interposing). Show that by reference to the cut-off period and the date of payment for sale of gas and for receipt of gas.

The Witness: Wait a minute. I am not answering that question. I am saying that we have to pay for gas this month to the extent "X" dollars on the 20th of the month, and we do not get paid by our customers until around the 25th of this month, so there is a period there of at least five days when we are using working capital—

Mr. Littman: (Interposing) Not more than five days, isn't that a more accurate answer?

The Witness: For about five days.

By Mr. Littman:

[fol. 4656] Q. Which is comparable with your 45-day lag?

A. Not at all. That is just one factor in the 45. My 45 spreads to the other expenses of operation, not alone purchased gas.

Q. I am, of course, speaking of purchased gas.

A. I cannot confine my remarks to that.

Q. Can you give us a specific example of any day in the month where you will have a lag greater than five days for the purchased gas expense?

A. I do not know.

Q. Name one. A. I do not know.

Q. Well, you have named one that had five days.

A. Yes.

Q. Can you name one that had six days?

A. No, I cannot name one offhand, either more or less than that period. That is about the characteristic period.

Q. That is the characteristic period, about five days?

A. But understand—

Q. (Interposing) Is that right?

A. (Continuing) But understand the gas in those two cases is for different periods of time, for different cut-off dates. That is why you just cannot generalize on it.

Q. Is it your testimony that five days is the characteristic period?

[fol. 4657] A. It is a characteristic period for that type of transaction, yes.

Q. You cannot give us any other day of the month on which your payment would be in advanced more than five days, can you, under any circumstances?

A. Let me think, I think I can. If we should stop selling a customer on the 31st of a month, we would still have to pay for gas on the 20th of the following month, and we get nothing from the customer. Is that right?

Mr. Littman: Will you read that answer back?

The Witness: Maybe that isn't correct.

Mr. Goodman: No, it is not.

The Witness: It is not.

Mr. Goodman: You would collect your check on the 20th of the month for the gas you deliver.

The Witness: I think that is right. I do not think that is a good case.

By Mr. Littman:

Q. Then you are unable to give us any example?

A. No, I think that is correct.

Q. Of greater than a five-day lag for payment of gas expense?

A. I wouldn't make it on such general terms.

Q. What will you say about it?

A. I say because there are different cut-off dates in- [fol. 4658] volved here, which point you just cannot get around, no matter how you try.

Q. According to your testimony, would it be true, Mr. Sperry, that the greater the credit period you receive from your vendors, the more working capital you need?

Mr. Culton: If the Court please, this witness has not said he based his 45 days on the lag. He said it was a judgment figure from a credit standpoint, and all of this interrogation is on the assumption as if he had said there was a 45-day lag on this gas and that was the reason for it.

Mr. Littman: If your Honor please, this gas purchase expense constitutes 30 percent of his entire requirement for so-called normal cash funds for operating expenses, and if he cannot sustain his 45-day lag on this item, then I say that he is probably in great error in arriving at his total allowance.

Mr. Culton: He has not based it on lag. He had based it on the judgment a man is not going to start business without cash on hand even though he may expect to sell his stock in trade for cash. He has not based it on lag.

Mr. Lee: I submit Mr. Culton made an objection and the question that is pending should either be allowed or disallowed before Mr. Culton makes an explanation of what he thinks it ought to be. It is a very important question that is pending.

Trial Examiner: It would not be very helpful to us at [fol. 4659] this stage of the proceedings to argue out these questions.

The Trial Examiner hasn't been convinced that the 45-day lag is applied to gas purchases and sales. It has been

made a component element of the general testimony of this witness that a 45-day lag is required or is involved in financing.

Mr. Culton: He has not testified he based it on lag.

Trial Examiner: But the Trial Examiner has been unable to recall any testimony of this witness that a 45-day lag is required as to gas purchases and sales, and in contrast with that, the testimony is apparently now that a five-day lag is at least typical.

Mr. Culton: So far as lag is concerned of this item.

Trial Examiner: So far as gas purchases and sales are concerned.

Mr. Littman: Which constitutes 30 percent of the entire amount.

Trial Examiner: There again, we are getting into an argument. Referring to the testimony of Mr. Sperry and in fairness to him, he has repeated that the estimate of 45 days is a judgment figure.

When that is analyzed and applied only to gas purchases and sales, it is reduced to a five-day lag. Am I not correct?

Mr. Wheat: Not according to the witness' testimony, because the witness stated it could not be reduced to a mathematical lag period since the cut-off days differed. I [fol. 4660] am simply quoting from what the witness has said, and I think that should be added to the statement.

Trial Examiner: I think this cross-examination is proceeding properly and that we are interested in Mr. Sperry's analysis of the several elements which go to make this judgment figure of 45-day lag.

* * * * * * * *

The Witness: By credit period, you mean what, Mr. Littman? Time elapsing between the reading of the meter and the time we have to pay them?

By Mr. Littman:

Q. Yes, or the time elapsing between the period when you get your gas.

A. I would say the credit period is the shorter.

Trial Examiner: There is one other business factor I do not think you have mentioned. You pay, of course, gas purchases by company checks?

The Witness: Yes.

Trial Examiner: And on what bank are they drawn?

{fol. 4661} The Witness: On a Kansas City bank.

Trial Examiner: How many vendors are settled with by check each month?

The Witness: There are a large number of checks.

Trial Examiner: Can you state what, on the average, is the period required for the collection of these checks and the return against the company?

The Witness: I suppose there is a two or three-day float there. Most of them go to Kansas and north Texas. There is probably a two or three day floating period. There is probably a two or three-day floating period between the time we receive checks from the customers. Those would tend to wash.

Trial Examiner: They would tend to wash, except in the comparative size of the two?

The Witness: Yes.

Trial Examiner: The reason I brought that up was because sometime ago it was stated a credit was made at Detroit.

The Witness: Yes, that was for convenience, of course.

Trial Examiner: For the settlement of the Detroit account?

The Witness: that does not help us in our collection on a per diem basis. It simply makes it more convenient for all parties.

By Mr. Littman:

Q. Now, you have just testified in response to my last {fol. 4662} question that the shorter the credit period that you receive from your vendors—withdraw that—you just testified that the greater the credit period that you have

for the payment to your vendors, the less working capital you would need. Is that correct?

A. If I understood your question correctly, Mr. Littman, I simply meant this, that the sooner you have to pay for your gas, the more money you have to have to pay it with. That is, the longer you have to use that money before it is reimbursed from your customer.

Q. You understand the credit period to be the period between the date the meter is read and the date the payment is made?

A. I have never heard that referred to, but I understand what you mean, I think.

Q. What is the credit period, as I have defined it, for gas purchase expense? Is it not 30 days, approximately?

A. Yes.

Q. 28 days?

A. 28 days.

Q. And what is your credit period with respect to gas revenues?

A. Approximately 45 days.

Q. Aren't you wrong there? You read the meter on the first of the month, do you not?

[fol. 4663] A. Yes.

Q. And you get paid between the 23d and the 26th of that month, according to your testimony, do you not?

A. Yes, I would say that was around 25 days.

Q. Around 25 days, which is approximately the same credit period in both instances, is it not? A. Yes.

Q. I believe you have testified on several occasions that Panhandle Eastern pays its gas vendors on the 20th of the month. Is my understanding correct?

A. That is right.

Q. Now, isn't it a fact that, under Panhandle Eastern's contracts, that company does not have to pay for the gas which it purchases until 30 days after the reading of the meter?

A. I do not know. It is our custom to pay on the 20th.

Q. You have not made a study of the contracts for the purpose of making such determination, have you?

A. Not in this case, no.

I would be surprised if it would be other than that. We usually recite in both of our sales contracts and purchase

contracts the day of the month on which the bill is to be rendered and the day on which it is to be paid. It is usually spelled out in the contract.

Q. I just want to ask you one more question about these [fol. 4664] gas purchases.

I have made the statement from time to time on this record that the gas purchase expense represents approximately 30 percent of your entire allowance of $470,000 for normal cash funds for operating expenses. Am I correct in that?

A. I have not figured it.

Q. Will you kindly compute it in percentage?

A. Well, in 1940, it constituted $1,187,000 out of a total of $5,150,000 gross expenditures. Now, wait a minute—

Trial Examiner: (Interposing) Take a few minutes, Mr. Sperry, if necessary, and compute the percentage that Mr. Littman has asked for. It will make the record more concise.

The Witness: All right.

Mr. Littman: I cannot give you that figure because you have asked me for gas purchase expense, and I have not that segregated from gas production expense. My gas expense is lumped here, including both gas purchased and gas production and our discussion to date has had to do entirely with gas purchased.

By Mr. Littman:

Q. Well, Mr. Sperry, isn't the figure which you gave me some time ago of $1,187,200 for 1940 and $676,400 for the first six months of 1941, the gas purchase expense?

A. No, that is gas expense, over-all gas expense.

Q. What do you mean by over-all gas expense?

[fol. 4665] A. There would probably be a considerable item there of production expense. We only buy half our gas. We produce about half of it.

Q. In other words, this amount of $1,863,000—

A. (Interposing) That does not constitute gas purchase expense on gas purchase contracts, I am confident.

Mr. Chamberlain: Exhibit 57 shows that.

By Mr. Littman:

Q. Exhibit 57, Column M, Lines 9 and 14, I am sure, shows that—

A. (Interposing) Is that an earnings or cash item?

Q. This is Mr. Watkins' exhibit, entitled "Statement of Gas Purchased from April 1, 1932, to June 30, 1941."

Now, Line 9 shows for 1940 that the company expended $1,090,106.83 for gas purchased and for the first six months of 1941, as shown in Line 14, Column M, the amount is $602,157.66.

A. You see, those figures would not tie into my cash figures accurately, in the first place because there is a lag between the cash expenditure and the earnings expenditures and receipts.

Q. But aren't these two figures comparable?

A. I would say that they should be roughly comparable.

Q. Now, in view of Exhibit 57, what is your testimony with respect to the $1,863,600 amount which you just dis- [fol. 4666] cussed a minute ago? Does that, or does that not represent the cost of gas purchased?

A. No; you mean the figures in my schedule?

Q. Yes.

A. I would say that it is not. I would say that there is some production expense in there too.

Q. Wouldn't you say certainly that the very large bulk of it was gas purchase cost?

A. I would think so, yes.

Q. If the production system expenses are included in your $1,863,000 figure, then you do not have them anywhere else, do you?

A. They might be, some of them.

Q. Are they in twice?

A. No, there would be no duplication.

Q. Can you tell me whether or not this $1,863,000 figure included in your working papers for the 18-months' period prior to June 30, 1941, includes all production system expense or not?

A. I cannot tell you without getting those figures broken down in Kansas City.

Q. Your working papers do not show that?

A. No, I have taken these figures right off my cash sheet. From my standpoint, you see, it does not make any

difference. It is money that goes out, and it goes out every [fol. 4667] month. That is the only thing I am interested in. I think the preponderant amount of it is gas purchased.

Q. Gas purchase cost? A. Yes.

. . . . . .

[fol. 4672] By Mr. Littman:

Q. Can't we agree that practically all of this amount of $1,863,600 for the 18-months' period preceding June 30, 1941, does, in fact, represent gas purchase costs?

A. I think I admitted that about fifteen minutes ago, before this wrangle started.

Q. I believe you said the majority of the amount is?

A. I think the predominant part is, sure.

Q. Could we agree that practically all of it is, within $100,000?

[fol. 4673] A. I do not see why not.

Q. That is our understanding, and in view of Mr. Watkins' figures, we won't be far from right if we say it was within $100,000, would we?

A. Furthermore, in answer to the question which gave rise to this argument, that does constitute slightly in excess of the 30 percent of the total figure which we are talking about.

. . . . . .

[fol. 4674] By Mr. Littman:

Q. Mr. Sperry, another item which you testified was included in your estimate of normal cash funds for operating expenses was the payment for wages. Is that correct?

A. That is right.

Q. Had you calculated the lag with respect to payments for wages? A. No.

Q. Do you have any idea what the actual lag is?

A. No. I know the dates at which wages were paid.

Q. Do you mind stating for the record the dates on which wages are paid by Panhandle Eastern Pipe Line Company. That is to say, the date of the month?

A. Field employees, other than supervisors, are paid for a fiscal week, beginning Friday morning to Thursday night. Employees, other than supervisors, are paid each Thursday morning to Wednesday night. Office and Field Department Supervisors are paid for the first half of the month on the 15th of the month, for the last half of the

month on the first of the following month. Officers and department heads are paid by the month on the last day of the month.

Q. Can you give us the breakdown as between those four classifications?

[fol. 4675] A. I haven't got them. I haven't broken them down at all.

Q. Do you have any idea which of those four classes constitutes the largest expense over a given month?

A. The weekly payroll constitutes our largest payroll as distinct from the semi-monthly and the monthly.

Q. Now, as to the weekly employees, what is the maximum lag that you would have for the employees that are paid by the week?

A. Well, they are paid immediately their week is finished. They work from Friday to Thursday night and are paid just as soon as the check can be prepared.

Q. Now, as for the first week of a given month—

A. (Interposing) They would be paid on the 7th of the month.

Q. They would be paid on the 7th of the month?

A. If it happened to be the right day, yes.

Q. And the revenues for that month are derived by Panhandle Eastern during the next month, are they not, on or about the 23rd or 25th of the month? A. Yes.

Q. So that as to the one week, that is the first week of [fol. 4676] the month, you have a lag of how much?

A. Well, according to that way of figuring it, we would have about a 48-day lag.

Q. A 48-day lag? Well, isn't that generally the correct way of ascertaining lag?

A. As I say, I haven't explored it from that angle, Mr. Littman. My whole study here has been to determine the amounts of cash that have gone out of the company and to average those over a period of 18 months, which is certainly a fair period, a conservative period to average them, and then to simply say that from a judgment standpoint I feel that we would be in danger of either running out of money or of sacrificing our credit if we didn't have 45 days cash on hand.

Now, you see this is a perfect example of the approach I haven't made to this problem. This is one of the things that a detailed accountant's report might ascertain for us,

but it was impossible to obtain that—impracticable to obtain that, so I haven't approached it from the standpoint of breaking each one of these down into days lag, as you are trying to do. My judgment is that we need 45 days cash in the business.

Q. Well, I am going through the component elements to see whether or not the facts justify your conclusion, Mr. Sperry.

[fol. 4677] A. Well, that is all right.

Q. And that is why I am taking this much time. Now, starting business on the first day of January of a given year, Panhandle Eastern pays its weekly employees at the end of the first week, does it not?

A. Yes.

Q. And does not collect the revenue derived—at least in part—from those services until approximately the 23rd to 25th of the succeeding month, is that right?

A. That is right.

Q. Am I correct in saying that, generally, the proper method of determining the lag with respect to that first week's wages is by counting the days from the 7th day down to the 23rd or 25th day of the succeeding month. Is that right? A. Yes.

Q. I believe you said that the lag for the first week would be about 48 days, is that right?

A. I would think so.

Q. Now, what would the lag be for the weekly employees for the second week's wages in January?

A. I would say seven days less than that.

Q. That would be 41 days.

. . . . . .

[fol. 4678] Q. Now, with respect to the third week's wages, the lag would be 7 days less [then] 41?

A. Right.

Q. Or 34 days. Is that right? A. Right.

Q. And the lag would be 27 days for the fourth week's wages. Is that right? A. Right.

Q. And so on until you got down to the 25th day of the succeeding February. Is that correct?

A. That is right.

Q. So that your maximum lag is 48 days for the weekly employees. Is that correct? A. Right.

Q. Now, as to the employees who receive their wages on the first and 15th of the month, those employees will have rendered two week's services in January before they receive any remuneration, would they not? A. Right.

Q. And the lag for those employees would be a maximum of 41 days, is that right? A. Right.

Q. And, of course, successively less until we get down [fol. 4679] to the 20th of February? A. Right.

Q. Now, the monthly employees—and I believe you are one of those, are you not? A. Yes.

Q. The lag, for instance on your salary check would be approximately 29 days, would it not? A. Yes.

Q. So that the average lag for payments of wages, which is one of the items included in your estimate for "Normal Cash Funds for Operating Expenses", is something less than 45 days which you assumed. Is that correct?

A. I would think it would be on that approach, yes.

Q. Now, another item that you have is called "Ordinary Maintenance." When are those ordinary maintenance expense paid? Can you give us any idea on that?

A. No, I don't think you can generalize on that. They are paid when they are incurred. We pay our bills at intervals, convenient intervals.

Q. Approximately 30-day intervals, would you say?

A. No, less than that, I think we pay in less than 10 days ordinarily, a week or ten days.

Q. A week or ten days after receipt of the bill?

A. Yes.

[fol. 4680] Q. Ordinarily, when are the bills rendered? The first of the month?

A. I don't think you can generalize on that. There are as many customs as there are people in business.

Q. Now, ordinary maintenance consists of labor and materials, does it not?

A. Yes, that is right.

Q. Now, is the labor which you include in the category of "Ordinary Maintenance" the same or different than that included in the item which you have called "Payment For Wages"?

A. It is all lumped in there together, all maintenance and all labor.

Q. Is this a different species of labor?

A. No, it would be the same. The labor would be included in the maintenance. You see, when we run our books, we divide labor into two categories, operating labor and maintenance labor, and they are so classified on our books. For purposes of this cash study, it is all lumped in together.

Q. Now, the labor incurred in connection with ordinary maintenance consists of laborers on Panhandle Eastern's payroll, does it not?

A. It consists for the most part of regular employees.

[fol. 4681] Q. And they are weekly employees?

A. Once in a while there will be a few other employees that are hired for particular jobs and then are released, but the preponderant part of our labor cost every year is to regular employees and our regular employees do most of our maintenance work.

Q. And insofar as their pay is concerned, they would fall into the category of the weekly employees, would they not? A. Yes.

Q. And you have already discussed the approximate lag with respect to those employees, have you not?

A. Yes.

Q. Now, as to the materials used for maintenance, doesn't that consist largely of pipe, tubing, and well equipment and the like?

A. It embraces all of those items. I would say that pipe, as such, wouldn't consfitute a large percentage of the total. I think that the average maintenance expenditure is mostly smaller stuff than pipe. We keep an inventory of pipe all the while.

Q. You don't pay cash, do you, for the materials used?

A. No; we pay as soon as the bill is rendered or immediately after a bill is rendered.

[fol. 4682] Q. And it takes some time for the bill to be rendered after the delivery of the materials, does it not?

A. There, again, you can't generalize. You go to a hardware store and buy—on small supplies you probably would pay cash for it, kept in the petty cash books. If you ordered from a factory it might be the first of the next month before you got your bill for it. There is just no universal rule of thumb on it.

Q. Well, in any event, some time elapses between the date when you receive the material and the date when you pay the bill?

A. On the average there would be a few days, anyway.

Q. Then you have an item called "Overheads." Can you tell us anything about the lag on payment of overheads?

A. Well no, not very much. Your overheads would be your rents and your gas and electric, and things of that kind. Constant expenses, and some of those are prepaid. To the extent they are prepaid, they would be taken out of this and put into prepayments for the purpose of this study. Some of them are paid after the services are rendered, like the gas bill, electric bill, telephone bill. You just can't generalize on those small items.

Q. Thus far, considering the items that we have discussed, I fail to find any that would justify the taking of a lag of 45 days. Can you name some that would—

[fol. 4683] A. (Interposing) I can't name any specifically. I am still of the opinion that 45 days cash requirement is not only necessary to maintain the credit of the corporation, but it would be dangerous to cut it below that.

I also would like to point out, Mr. Littman, that in my testimony I pointed out that no single 45-day period is exactly comparable to another 45-day period. There are many 45-day periods which would take a lot more cash than the average which we have requested here, just as there are 45-day periods which would require less cash, but a fair, satisfactory, minimum average would be the amount specified here, $470,000, here it is.

Q. You can not, however, give us any detailed items of expense upon which you base that conclusion, can you?

A. I think you have to have experience in those matters to properly judge what the proper amount is, just the same as you do in your family budget. I couldn't come to you and say that a $100 balance was all that was necessary for you to keep in your family exchequer in order to pay for the bills that come in, but if I had your income and expenses over a period of five years, I could pretty well know how much of a bank balance I would have to have in your place to pay those family bills when they came in.

The same thing is true of a corporation. You just have [fol. 4684] to sit on the lid and watch the money go out

and after a while you begin to get the feel of it. You begin to realize how much money you do have to have in order to keep your bills paid and your credit good.

Q. Well, I understand, Mr. Speery, that you have an opinion as to the amount of money that you would like to have as cash working capital, and, of course, you are entitled to your opinion on that subject, however, what I would like to know is whether or not, in your opinion, you feel that these amounts are justified from a standpoint of regulation and for rate making purposes?

A. Let me answer that in three ways: First, I do think it is the minimum amount that we could satisfactorily get along with.

Secondly, I point out to you that we customarily keep three and four times this amount, and have regularly over a period of years, and that we are uncomfortable if we don't have several times the amount that we ask for, for inclusion in the base rate.

Third, I would like to point out that there is another factor and that is, if you are down to your last dollar you haven't any credit and that you have got to have ample funds in your till at all times or you lose your credit.

Now, the study which I have made here and the figure [fol. 4685] at which I have arrived for these purposes of $470,000 cash, in my opinion, is the minimum satisfactory amount. It is the absolute irreducible minimum under which I wouldn't dare go, and I wouldn't feel that I was able to take this company to the money market for funds unless I had much more than this in my till.

Q. Well, for corporate purposes you feel it would be advisable to have this amount and more?

A. It isn't a case of advisable; it is a case of necessity. How much confidence would you have in the ability of this corporation to carry out its contract and to carry on its business without any idea of expansion at all, if you found that we had less than 45 days requirements of cash in our books? You would think we were crazy if you saw a $70,000,000 corporation with a $20,000 bank balance. What would you think? You would know darn well we were one jump ahead of the sheriff, and, perhaps, not quite one.

Q. Well, Mr. Sperry, this amount that you provide, $470,000 for so-called "Normal Cash Funds for Operating Expenses," was not based on any actual company experience with respect to the amounts required by that company. Is that right?

A. Yes, it was based upon the recited experience here over an 18-month period of actual expenditures for [fol. 4686] specified purposes and I have been careful to exclude from those items certain other items or certain items which are not, perhaps, properly includable for purely operating expenses, such as the taxes which are excluded here. In other words, the only purpose of this study was to indicate the minimum amount necessary for these particular purposes based on 18 months experience.

Q. Based on a 45-day lag?

A. No, based on 18 months experience to show what the average per diem expenditure of cash had been and, after arriving at the per diem expenditure, then using judgment only as a factor, we estimated that it wouldn't be satisfactory for us to have less than 45 days cash with which to do business.

Now, let's not confuse 45 days lag with 45 days cash requirements because they are not the same. We have talked about lag simply in an interpretative way on some of these figures, but the fact remains that what we are claiming here is enough cash to do 45 days average business month in and month out, and that is not too much to ask, in my opinion.

Q. But you have no details to support the 45-day lag period, have you?

A. I am not trying to support 45 days lag, I am saying that I think it would be unsafe for us to have less than 45 days cash on hand, which is a different matter.

[fol. 4687] Q. But you have no details to support the 45 day period?

A. I have told you that when we discuss lag, that I have not been able to scientifically and through a firm of accountants, ascertain that that is exactly the exact number of days, but I tell you, as treasurer of the corporation, that in my judgment it would be unsafe to have any less cash than that on hand.

Q. That is based on your general judgment?

A. Based on judgment, yes.

Q. And not on any specific data?

A. No, but it is in the light of the experience cited here.

Mr. Wheat: By "the experience cited here," you mean that shown on your exhibit?

The Witness: In my working papers, yes.

By Mr. Littman:

Q. Now, you have testified that you estimated the amount of cash working capital required for emergencies in the amount of $100,000. Is that correct?

A. Yes.

Q. Now, will you name the emergencies that this amount of $100,000 is supposed to cover?

A. I can give you some examples of that, yes. I have two of them in mind particularly.

[fol. 4688] In 1937—I think it was '37, it was soon after I came with the company—we had a line break in Texas. It was strictly an act of God. It couldn't be foreseen, it swept out a river crossing, and within 15 to 20 days it required an expenditure of cold cash on our part of very close to $100,000.

Now, you will find no reference to that in our Earnings Statement. It didn't affect earnings at all. It never appeared in our Income Account, but it hit the till for the amount that was necessary to effect repairs and effect repairs quickly.

Now, it is a perfect example of the kind of emergency that can arise and if you don't have cash to meet it, you are just plain out of luck.

Now, I have also in mind such accidents as failure of collections. Supposing, Mr. Lee, that something happened to the Detroit Company that made them delay in their payment of their bill to us for a few days. It is hard to conceive of a thing happening that would delay very long because their credit is good and they pay on the button, but suppose there is an air raid on Detroit and the bank should close for four or five days. Where would we be sitting here without that check for eight or nine hundred thousand dollars?

[fol. 4691] By Mr. Littman:

Q. This $100,000 line break that you spoke of a few minutes ago, Mr. Sperry, how were those repairs of the line break charged? On the line of the company?

A. No, I don't know. Probably construction work in progress, but I don't know. That, again, is an accounting matter.

Q. Well, do you know whether or not it was all charged to maintenance or repairs or whether it was charged, at least in part, to the depreciation reserve?

A. No, it might have been replacements; it might have been repairs; it might be improvements; it might be permanent property or it might simply be in anticipation of the collection of insurance, but the fact remains it requires $100,000 or approximately that for a period of two or three months, and if we didn't have that money, we were embarrassed. We did have it.

Q. Well, do you know how many pipe lines were destroyed by this catastrophe?

A. No; I think a mile or two swept out, but I am not sure. It was a shallow river crossing and the pipe was not buried very deep, and a cloud burst came and swept [fol. 4692] away a good deal of line.

Q. Now, you know, as a matter of fact, do you not, Mr. Sperry, that the cost of replacing that line would be charged to the depreciation reserve?

A. I don't know where it was charged, that is my point. I only know it required cash.

Q. Well, wouldn't you want to know where it is charged before you make an allowance for such an emergency in working capital? A. No.

Q. That wouldn't make any difference to you?

A. No, Mr. Littman. I have indicated and have given you figures to support the minimum number of dollars that I think we can operate our company at, and that is around $470,000. That is minimum.

Q. It is this $100,000 item I am talking about?

A. Yes; now in addition to that, I think it is only business prudence and it is necessary for the credit standing of this corporation that we have a slight margin, usable margin, if you please, so that if additional expenditures

come about or if there is a period of 45 days when $470,000 is inadequate, that we will have a little kitty to use, and for lack of a better figure I have set $100,000.

Now, I can't prove to you whether $50,000 is the right [fol. 4693] figure or $200,000 is the right figure, but there should be a little margin of safety there.

Q. And you are not interested in what that $100,000 is to be used for, whether it is to be used for capital replacements or otherwise, are you?

A. So long as it is a cash requirement that needs to be met immediately and which can not be immediately reimbursed, I am not interested. It is working capital that is required for the daily operation of the business to meet contingencies which are recurrent, but which cannot be adequately foreseen.

Q. Why do you have a depreciation reserve?

A. The depreciation reserve is a bookkeeping item, Mr. Littman.

Q. Yes, I understand that, but what is the purpose of it?

A. I suppose it is to charge-off your property over the life of the enterprise. It isn't to produce cash.

Q. Isn't that one way of providing cash to take care of some of these items?

A. Sometimes it operates automatically to produce cash but that isn't the purpose.

Q. Let me see if I understand your theory of working [fol. 4694] capital. Do you mean to say that it is your theory of working capital that every dollar of cash that a company has in its till is necessary working capital?

A. Not at all. My study wouldn't indicate that I thought that, would it?

Q. Well, don't you know, Mr. Sperry, that any items of cash that are spent for purposes of capital replacements don't have any place whatever in a working capital allowance?

A. That may very well be, Mr. Littman. I am merely saying this that there are a certain number of dollars, which I believe are $470,000, necessary to the day-in-day-out operation of this business without any provision at all for the unexpected contingency. While $470,000 for that one purpose may be adequate, there should be a little

margin above that for the contingencies and to make up for the uneven flow of cash, and that is the figure of $100,000 which I am using.

Q. Isn't it a fact, Mr. Sperry, that in order for this $100,000 cash for emergencies to be allowable in the rate base as working capital, it would necessarily have to be for the purpose of maintenance and repairs only. Isn't that correct?

A. Well it might be, it might be or to provide for the uneven flow of cash.

[fol. 4695] Q. For maintenance or repairs?

A. Operations.

Q. Not capital expenditures, is that correct?

A. All right, all right, yes.

Q. Well then, that being the fact, you cannot say that every dollar of the $100,000 that was expended by your company for the catastrophe that occurred in Texas, to which you alluded a few minutes ago, was required to be maintained at all times in working capital?

A. No, but a part of it might.

Q. How much of it? A. I don't know.

Q. Well, certainly only that part of it which was required for maintenance and repairs?

A. Perhaps, and, perhaps that is $50,000 or perhaps it is $200,000, I don't know. I have taken as a judgment figure $100,000. Now, that may be too high or it may be too low, but, in principle, I think that it is sound.

Q. Do you know of any instance where Panhandle Eastern Pipe Line Company has expended $100,000 in cash for maintenance or repairs on an emergency?

A. No, but I know of a case where cash fluctuated from month to month by as much as $182,000.

[fol. 4696] Q. What does that have to do with emergencies?

A. And that is for purely operating costs. That arises out of the nature of our business which is seasonal and it is one of the contingencies for which this $100,000 is expected to provide.

Q. Mr. Sperry, am I correct in understanding that this $100,000 that you have provided for emergencies is not confined to the cash required for maintenance and repairs?

A. No, I didn't say that. I say that it is to provide for emergencies and contingencies which cannot be adequately foreseen but which is sure going to happen from year to

year, and that among those contingencies are such things as line breaks which might involve additional expenditures for maintenance and other operating costs which could be paid for only out of this $100,000 kitty.

Q. Well, have you provided enough in this estimate to take care of capital replacements?

A. No, we made no attempt to do that. This is for purely operating purposes.

Q. All right, such as maintenance and repairs, or what?

A. Or uneven flow of cash or for default in collections or for other contingencies.

Q. Well, your title "Cash for Emergencies" embraces [fol. 4697] a cushion to take care of an uneven flow in cash?

A. Yes, that is [an] contingency—an emergency, yes.

Q. You call that an emergency?

A. It might be.

Q. Then by "emergency" you are not referring entirely to such things as line breaks?

A. Not entirely physical, no. We have in this company, Mr. Littman, chiefly seven or eight customers. The default on the part of anyone of those customers in any one month, the delay in their paying us might give us a cash emergency. I don't say it is likely. Most of our customers are of good credit standing, but supposing through no fault of their own they should fail to pay us some month, without a reserve for a contingency of this kind, it might embarrass us.

Q. Do you know of any instance over the approximately 10 years of life of this company where any large customers failed to pay on time? A. Yes.

Q. When?

A. My recollection is that the Cities Service Gas Company in Kansas City, which is one of our large customers, didn't pay us this year for around five months' gas. Now, [fol. 4698] I have forgotten what that amount was, but it was a considerable amount. The reason was this: That their old contract with us had expired, a new one had, for certain reasons, not been negotiated, and until it was negotiated they withheld funds.

It was perfectly ethical on their part, but it deprived us from—I have forgotten—a good many thousand dollars of revenue that was due us.

That is a perfectly possible contingency, a perfectly possible emergency for which this cash should be available.

. . . . . .

Q. Mr. Sperry, you are not testifying that the only cash that this company is ever going to have on hand is the amount that you are providing here for working capital?

A. No, I am talking about cash which we require for the day-to-day operation of the business.

[fol. 4699] Q. Well, you are going to have, at all times, large sums of cash on hand such as cash that is accumulated for the payment of taxes that are not paid until the year after, such taxes are incurred?

A. Not for purposes of this study.

Q. You are going to assume that the company is going to be "broke" except for the cash that you are providing here?

A. I am providing here for minimum amounts of working capital cash, without which I think the company would be in danger of losing its credit.

Q. Do you provide a reserve for bad debts and operating expenses? A. No.

Q. I believe if you will check that, I think you will find—

A. (Interposing) We have a reserve in the Income Account but it isn't represented in cash. There is no cash in any figure here.

Q. Now, will you name or describe an emergency—I am speaking now of a physical emergency—that would require the outlay of $100,000 of cash for maintenance or repairs? A. I can't do that.

[fol. 4700] Q. It would have to be a pretty big sized one?

A. Yes, that is only one of the contingencies I have mentioned.

Q. Do you know that Mr. Biddison testified here that a pipe length less than 40 feet might constitute a repair or a charge to maintenance, and that a damage or replacement to more than 40 feet of pipe would constitute a replacement through charges to the depreciation reserve?

Mr. Wheat: You are speaking now of the accounting phase of replacing pipe, are you?

Mr. Littman: Yes.

The Witness: No, I am not familiar with what the line of demarcation is.

By Mr. Littman:

Q. You are not familiar with the Commission's System of Accounts with respect to how such items are charged?

A. No, I am not an accountant, Mr. Littman, I have nothing to do with the accounting for this company.

Q. You are not an engineer? A. No.

Q. Well, then, in so far as physical emergencies are concerned, you cannot describe or imagine one that would require anything like $100,000 for maintenance or repairs can you?

[fol. 4701] A. Yes, I can imagine one, but I don't know that I can justify it.

Q. Well, let's have your imagination on that subject?

A. Well, I don't know, Mr. Littman, on physical matters to what extent $100,000 would be used up, but certainly a company which does twelve or fourteen million dollars worth of business a year and which has assets of $70,000,000 is subject to contingencies which can't be foreseen, and to meet which $100,000 is a very modest sum, in my opinion.

. . . . . .

Q. Well, do you agree that in so far as physical emergencies are concerned, you should not provide any amount in excess of that which should be charged to maintenance or repairs? A. Or operating expenses.

Q. Or operating expenses? A. Yes.

Q. In other words you agree that you should not make any provision here for capital replacements?

A. That was not in my mind at all.

Q. Now, if Mr. Biddison is correct in stating that any-[fol. 4702] thing in excess of 40 feet of pipe would be from an accounting standpoint a replacement, you have to have quite an imagination to imagine the number of catastrophies that would occur to use up $100,000 at one time?

A. Unless the physical happening increased your operating expenses materially.

Q. So that you cannot tell us how much of this $100,000 is just for the purpose of leveling off the amount of cash

that you want on hand for smoothing out purposes and how much of it is for the actual physical emergencies, can you?

A. No, I can't tell you whether $50,000 or $200,000 is the right amount, or what part of the $100,000 should be earmarked for this, that, or the other purpose.

Q. It is simply—

A. (Interposing) A judgment figure, completely.

Q. And you have no details to support it?

A. No, except the testimony I have just given.

Q. Are the extraordinary losses and serious accidents, covered by this item of cash for emergencies, matters which are covered not fully by insurance?

A. They might or might not be covered by insurance, I would say. To the extent that they are physical, they might be. To the extent that they are not physical, they wouldn't be, of course.

[fol. 4703] Q. In other words, you can't tell us whether these extraordinary losses and serious accidents are those which are not fully covered by insurance?

A. No, as a matter of fact; I haven't included in my claim for working capital, Mr. Littman, articles of that nature and I might very well have done so. There are a number of things which I could have claimed as properly includible in working capital which I have left out and among them are deferred costs, pending insurance adjustments; for instance, I have made no claim for that item in my working capital study and yet it is probable that it is perfectly justifiable to be included.

I have not included, in my working capital study, advances to employees, deposits with agents or good-faith deposits, deferred legal expenses of a nature of retainers, all of which are items of expense of a corporation which might properly be included in a working capital basis, but those things are not in here and to the extent that they are not in here, you might earmark them against the $100,000 kitty.

Q. Well, doesn't this $100,000 allowance cover losses which could not have reasonably been foreseen and provided for?

A. You mean losses to physical plant?

Q. Yes. A. No.

[fol. 4704] Q. It does not?

A. No. That would be a capital expenditure, wouldn't it?

Q. Well, what do you say? A. I think it would.

Q. You think it would? A. Yes.

Q. Now, another amount that you have provided for in your cash working capital is $200,000 for "Minimum Bank Balances". A. Yes.

Q. Now, that is all in addition to the $100,000 item to which you alluded a few moments ago and in addition to the $470,000 that we discussed this morning.

A. Yes. You will notice I said a minimum balance of $200,000, not an average balance, a minimum balance. I base that figure of $200,000, first, on my experience with the banks and their requirements for banking corporations of this kind and, secondly, upon a definite exploration of the subject which I made with Mr. Kemper, President of the Commerce Trust Company in Kansas City, which bank has our active account. We keep in that bank $700,000 or $800,000 or $900,000 at all times. We check against them. In many cases we will draw 25,000 or 30,000 checks a year against them. Our activity is considerable.

Furthermore, we asked them for a good deal of credit [fol. 4705] information. We checked with them all of our credit risks every year, we checked with them all of our country bank balances every year. We bank with a lot of small country banks, petty checking accounts. Those have to be checked. They do a lot of work for us.

Now, I asked Mr. Kemper in a formal letter, and without discussing it with him orally, in the light of the activity which had taken place in our account in the past years what he figured we would have to keep in his bank in the way of a minimum bank balance to support the activity. I have had the following letter from him dated July 31.

Mr. Wheat: 1941?

The Witness: Yes.

"We are pleased to have your letter of July 29 in which you make inquiry as to the minimum gross balance your company should maintain with Commerce Trust Company in order to compensate us for the activity of your account.

"We have had our Analysis Department cast up your figures and it appears that on the basis of the activity in the last three months compared with past activity and with some allowance for additional business in the future that you should maintain with us a minimum balance of $200,000 or more.

"Very truly yours, James M. Kemper."

I don't believe that that is at all out of line with what other banks would require. We carry balances in eight [fol. 4706] different banks, sizeable balances. We don't use them as much as we do the Commerce Trust Company, but were we to concentrate all of our funds in one bank and let that bank do all of the work, I don't feel that we could let our balance go below the $200,000 and I think we should keep an average balance of substantially more than that in the account in order to compensate them for their activity.

By Mr. Littman:

Q. What balance did you have in your bank accounts at June 30, 1941?

A. I don't know, but at the present time we have got around $4,000,000. I can look up the June 30 figure, if you wish it.

Q. As a matter of fact, I believe you testified that it amounted to $7,446,000 as of June 1941. Is that correct?

A. Yes, that is correct.

Q. In other words, you haven't had any difficulty keeping considerable cash balances in your bank accounts, have you?

A. We have always carried large amounts of cash, because we feel that large amounts of cash are necessary in our business, much larger amounts than we have asked for an allowance on for working capital purposes.

Q. Now, I refer you to Mr. Watkins' Exhibit No. 49 which is the company's income statement, particularly to lines 10, 17 to 20, inclusive. Isn't it a fact that the company's income deductions for depreciation and taxes [fol. 4707] amount to well over $4,000,000 annually?

A. For depreciation and what?

Q. And taxes.

A. Well, I haven't the exhibit before me.

(Whereupon, Exhibit No. 49 was furnished the witness.)

The Witness: In lines what?

Mr. Littman: Exhibit 49, line 10 and lines 17 to 20, inclusive.

Mr. Wheat: Mr. Littman, may I ask you, are you asking a question on the basis of any cash item and depreciation or was that included in your question?

Mr. Littman: I am merely asking him whether or not the company deducts from income the amount of approximately $4,000,000 a year for depreciation and taxes.

Mr. Wheat: We will stipulate that whatever is shown on this exhibit is deducted.

By Mr. Littman:

Q. Do you know that?

A. Yes.

Q. It does amount to well over $4,000,000 a year, doesn't it?

A. Apparently from these figures.

Q. Now, depreciation is a non-cash item of expense, is it not?

A. Not necessarily, no.

[fol. 4708] Q. Well, most of it is a non-cash item, isn't it?

A. Not necessarily. A good part of it might go for replacements immediately—

Q. Well, what is the fact?

A. (Continuing) in which case it is definitely a cash item.

Q. Well, certainly as to that part which is not expended in a given year there—

A. (Interposing) Let me say this: You can't depend on your depreciation being a non-cash item; ordinarily and sometimes it is.

Q. Do you know what the balances were in the depreciation reserve as of June 30, 1941.

A. Yes, around eight or nine million dollars.

Q. Certainly those deductions were not cash items to that extent over the life of the company.

A. No, that is right. The first few years of an enterprise like ours they are usually not cash items.

Q. We can agree that for the most part, certainly in the earlier years of the company, they are not cash items. Is that right. A. That is right.

Q. Now, as regards taxes, particularly income taxes, those are not paid until the year following the year in which they are incurred. Is that correct?

[fol. 4709] A. In some cases, yes.

Q. How about Federal income tax?

A. That is right, there is a period there between the time they have accrued and the time they are paid.

Q. Well, a considerable period, is there not?

A. Yes.

Q. These two items are a source of funds amounting to approximately $4,000,000 for the year, are they not?

A. Surely.

Q. And the simple fact of the matter is, Mr. Sperry, that these two items alone provide a source of funds far in excess of the so-called necessary minimum cash balances. Is that correct?

A. Granted that that is so, I don't see that that is pertinent to our discussion. We are asking for an allowance of certain cash for working capital purposes, working capital purposes by which we mean funds necessary for the doing of day-to-day business. In that are around $470,000 irreducible minimum for operating expenses, a $100,000 kitty and we have added $200,000 for the keeping of balances; whether they are available from other sources or not is immaterial. If that is a requirement that we must meet in order to keep in business in the customary way, then we should have allowance for it.

* * * * * * * *

[fol. 4713] Louis F. Sperry, a witness previously called and sworn, resumed the stand and testified further as follows:

Cross-Examination—Resumed.

By Mr. Littman:

Q. Mr. Sperry, on December 31, 1940, your company's balance sheet showed a liability for taxes accrued of $2,333,000. Is that correct?

A. I have not that balance sheet here, but that sounds like it was correct. Have you got a balance sheet you can show me?

Q. I think we have. I hand you a copy of Exhibit 48.

A. Thank you.

Q. Which is the company's balance sheet submitted by Witness Watkins.

A. Taxes accrued of how much, Mr. Littman, please?

Q. $2,333,000 as of December 31, 1940.

[fol. 4714] A. Yes, that is correct.

Q. When is that sum payable to the Government?

A. To the extent that that is income or excess profits tax, it becomes payable during a period several months later than the December 31 date that you mentioned. I assume, without checking it, that a large part of that tax reserve is probably in the nature of income and excess profits tax accrual.

Q. When was that sum paid to Panhandle Eastern by the customers?

A. That item, Mr. Littman, is an accrual item and is deducted from time to time as an expense of doing business on our books, presumably out of the revenues which the customers pay us regularly during the calendar year.

Q. You mean month by month, do you not?

A. Yes.

Q. Throughout the year 1940, and some of it was accumulated in previous years, was it not?

A. Possibly, yes.

Q. So that even if no allowance whatever were made for cash working capital, your company would still have a large part of the $2,333,000 in its till at all times, would it not?

A. I wouldn't say that it would have a large part at all times. It would have a portion of that accrued from month to month.

[fol. 4715] Q. Well, your total allowance for cash working capital amounts to $900,000, does it not, as shown by your Table III of Exhibit 74?

A. What is that, $900,000?

Q. $900,000 cash. I have reference to items 1 to 4, inclusive.

A. Item 4 is not a cash item. Items 1, 2, and 3 aggregate ~~$770,000, but item~~ 4 is a prepayment item which is not a cash item—yes, sir, it is too.

Q. I assumed that was right.

A. Yes, surely, $900,000.

Q. $900,000—

A. That is right.

Q. (Continuing) —is the amount of cash that you estimate is required for cash working capital?

A. Yes, that is correct.

Q There would certainly be, at least, that much cash on hand at all times in the till accumulated for income tax, would there not?

A. There is no assurance of that, no. In other words, there might be many times during the year when our total cash on hand might be substantially less than the accrued tax item.

Q. Well, do you mean less than $900,000?

A. Yes, it might conceivably be. It has many times in the past. Our cash balance, many times in the past, has [fol. 4716] fallen far below $900,000.

Q. Those were in the days when taxes were much lower?

A. Yes. They were in the days when the company was much less profitable than today, too.

Q. But that is not the fact today, of course?

A. That is not the fact today, but there is no reason for thinking that it might not recur.

Q. Well, what are the probabilities?

A. I would say that insofar as management can control it, that our cash at all times will much exceed $900,000 and we will try to keep it there from the standpoint of maintaining our own credit.

Q. In other words, you would expect this condition that you have described to continue in the future and that you will at all times have at least $900,000 cash on hand for the payment of taxes?

A. We attempt, as a management policy, to have not less than $1,500,000 in cash at all times for purposes of maintaining credit.

Q. Now, you have made an allowance, as shown by item No. 5 on Table III of Exhibit 74, of $635,000 for materials and supplies?

A. Yes.

Q. Am I correct in understanding that your Tables I and II show further details with respect to that item?

[fol. 4717] A. Yes, that is correct.

Q. As a matter of fact, the details show the amount to be somewhat in excess of the round figure of $635,000?

A. Yes.

Q. Namely, $635,479.26?

A. That is correct.

Q. You testified on direct examination that the materials and supplies on hand at June 30, 1941, amounted to $261,000, did you not?

A. Yes, sir.

Q. Is this amount reasonably representative of the materials and supplies which have currently been kept on hand by Panhandle Eastern Pipe Line Company and its affiliates over the past few years?

A. Without meaning to be exact, I should say that that was in line with what we usually have kept in the past.

Q. And reasonably representative?

A. I think so, yes.

Q. Do you know what the inventory of materials and supplies was at June 30, 1941?

A. I can give you that, I think.

Q. I believe Exhibit 48 would show that.

A. I have it in the official statement for Panhandle Eastern for June 30, 1941; materials and supplies aggregate in round figures around $269,000.

[fol. 4718] Q. Exhibit 48, page 1, line 13, column "N", shows the amount to be $268,861.80.

A. I would think that that was correct.

Q. Now, the inventory of materials and supplies at June 30, 1941, was the highest of the past seven years, was it not?

A. I believe it was.

Q. Exhibit 48, line 13 of page 1, shows that to be the fact. Do you want to see the exhibit?

A. No, I do not care to. I think that is correct, because by that time management had seen the necessity of adding materially to our inventory of parts, because it had foreseen the possibility of stringency, it had also observed the fact that we had had inadequate supplies in some departments previous to that, which at times embarrassed us so that we were already at that time accumulating heavier materials and supplies.

Q. At the end of 1940 the materials and supplies on hand amounted to $212,314.42. Does that sound reasonable?

A. That sounds like a correct statement.

Q. And at the end of 1939 the amount on hand was $159,321?

A. That sounds like a correct statement.

Q. And in 1938 the amount was $165,267?

A. That sounds reasonable.

[fol. 4719] Q. In 1937 the amount was much greater, namely, $237,963. Does that sound right to you?

A. That sounds correct.

Q. I am reading from Exhibit 48, line 13. At any rate, you have taken the sum of $268,861 as of June 30, 1941, which is the highest amount of materials and supplies that has been on hand in the past seven years, and used that as the starting figure, did you not? A. Yes.

Q. And you added a considerable amount to that figure to arrive at the total of $635,000, is that correct?

A. Yes, a very considerable amount, a very considerable percentage.

Q. It amounts to better than twice—

A. (Interposing) Yes, it is over 200 per cent.

Q. And you have arrived at the additional amount by adding the estimates of materials and supplies that you expect will be required for a period in the future?

A. For the present and the immediate future.

Q. The details of which you gave in your direct testimony?

A. Yes, I think I gave details of it and it was worked out in great detail in my work sheets to which you have had access.

Q. Have you made a study and analysis of the materials [fol. 4720] and supplies actually issued during 1940 and 1941?

A. I wish you would clarify that just a little bit, if you will.

Q. Do you know how much in dollars of materials and supplies were issued in 1940 and 1941?

A. The words "were issued" puzzle me. I do not know quite what you mean.

Q. From the warehouses?

A. How much was taken out of warehouses and how much put in?

Q. Yes.

A. No, I have no record of that.

Q. Have you ever made a calculation of the average turnover of materials and supplies?

A. No, I have not made any such analysis.

Q. It is important to know that, isn't it?

A. Yes, and our operating men certainly would know it. Our operating men in Kansas City would have full cognizance of those facts.

Q. Do your working papers show that?

A. No; my working papers show three things: first, the amount of materials and supplies now warehoused plus amounts of additional materials and supplies which are or were, at the time of this report, already ordered.

Second, it shows those two categories plus additional [fol. 4721] amounts which our operating heads expected to put on order within a very short period, namely, three months from that approximate July 1 date; and, third, it shows those combined categories plus additional materials and supplies which our management expected and intended to put on order after a three months date.

I classified it in that way so that our materials and supplies problem could be fairly and intelligently presented here for purposes of this hearing.

Q. Did you have any discussion with your operating men with respect to the average turnover of materials and supplies?

A. No, but I had extensive conversations with each department operating head as to the classification of these orders, the situation in which they found themselves as to immediate supplies, and the need for the additional supplies. I had our operating heads catalog in detail, item by item, what they had on hand, what they needed and when they needed it. All of those reports, Mr. Littman, were embodied in my working papers, to which you have had access in the last three months.

Q. And the total of $635,000 is merely the addition of those figures?

A. That is correct.

Q. Without any deductions of any kind?

A. Without any deductions, that is correct.

[fol. 4722] Q. Of any kind?

A. In other words, I have not edited those figures, I have depended upon the department heads knowing what

they wanted and why they wanted it. The figures, however, have been edited and inspected and refined by the operating heads of our business, namely, Mr. Neuner, our vice-president, and Mr. Creveling, our president, so that they represent far more than just estimates. They are intelligent appraisals carefully checked as to our requirements.

Q. Well, now, the amount of materials and supplies on hand as of June 30, 1941, amounted to $261,086, did it not?

A. And 61 cents, yes, sir.

Q. Suppose we omit the pennies.

And the amount of materials and supplies which were on order as of June 30, 1941, amounted to $105,004. Is that right?

A. That is correct.

Q. Which gives the total that appears on Table II in line 1 of $366,090. Is that right?

Mr. Wheat: You mean column 1?

Mr. Littman: Yes.

The Witness: Yes, that is correct.

By Mr. Littman:

Q. Now, the amount of materials and supplies in addition thereto, which it is expected will be ordered within 90 [fol. 4723] days after June 30, 1941, amounted to $131,064, did it not? A. That is correct.

Q. You show merely the cumulative total in column 2 on Table II of Exhibit 74, do you not?

A. $497,154.

Q. And to that amount you added the sum of $138,275 of materials and supplies which you claim is expected to be ordered after the 90-day period. Is that right?

A. That is correct. I understand that amount to be $138,145. Is that what you said?

Q. I said $138,275, but it does not make a great deal of difference. I believe the correct arithmetic would be $138,324. I think that would be more correct. Is that right?

A. That varies about $200 from my figure here, but I think it is inconsequential.

Q. Giving the total that you have in column 3 of $635,479.26? A. That is correct.

Q. And that total was arrived at by the pure addition of the figures you received from the various departments?

A. That is right.

Q. It is clear from your testimony, is it not, Mr. Sperry, that you did not deduct anything for future issues of materials and supplies?

A. There, again, I am a little bit vague as to what you mean by "future issues."

[fol. 4724] Now, you have testified that there were no deductions made from any of these amounts that were submitted to you by the department heads. Did you not?

A. Yes. In other words, these figures totaling $635,000 would be the amount of materials and supplies as of July 1, or approximately July 1, 1941, with all of these supplies to be ordered, delivered, and on hand as of that date.

Q. Without any deductions?

A. Without any deductions. Naturally, Mr. Littman, if a valve is withdrawn from a warehouse to be put into the line and comes out of materials and supplies inventory, it would immediately be put on reorder and replaced just as soon as it was taken out.

Q. Well, you have all of the materials and supplies included in your total which were on hand at June 30, 1941, and which were on order for at least 90 days in advance of that time.

A. And more than 90 days.

Q. Approximately how far into the future?

A. My $635,000 figure represents not only the materials on hand as of July 1 but the materials and supplies that we purposed to have on hand over several months following, all of which, however, constitute materials and sup-[fol. 4725] plies which we felt it would be desirable to have as of July 1, first, in the light of our reasonable expectancy of business.

Q. Well, now, you have a 90-day period that you mentioned a few minutes ago from June 30, 1941? A. Yes.

Q. And then you have orders to be made after the 90-day period? A. Yes.

Q. Now, what I would like to know is how far after the 90-day period does that extend.

A. I cannot give you that in days or weeks, but it was a period not long after the 90-day period, maybe an additional three or four months, two or three months. It was not, in other words, in the indefinite future. It was something that we contemplated doing as soon as we could turn ourselves to do it.

Q. Can we say, then, for all practical purposes it would be approximately six months from June 30, 1941?

A. Yes, not to exceed that.

Q. Yes. Then, this does not represent an average inventory, does it?

A. No, it represents the kind of inventory we would like as of today or as of three months ago.

Q. Of course, over a six months period there is a considerable amount of materials and supplies that are used up. [fol. 4726] Is that correct?

A. Yes, which materials and supplies would be immediately replaced. In other words, this represents the kind of a static inventory which we would like to maintain under present business conditions. We would not like to have to fall below the $635,000 inventory once we reach it.

Q. Well, of course, materials and supplies that are on order are not paid for until received?

A. No, but what we are asking for here is an allowance of working capital sufficient to pay for them as soon as they can be delivered. The reasons why we have not got them in our warehouses now are physical reasons and we either need those inventories or the money with which to pay for those inventories as soon as they can be delivered.

Trial Examiner: You might explain what you mean by "physical reasons", Mr. Sperry.

The Witness: The reasons have to do, Mr. Examiner, with priority orders, with the difficulties that obtain in getting physical materials and supplies from fabricators. In other words, manufacturing and delivery difficulties.

Trial Examiner: Related to the fact that the country it at war?

The Witness: Yes.

By Mr. Littman:

Q. Did you ask the men who submitted the figures of [fol. 4727] amounts on order whether they actually needed and required those materials as of June 30, 1941?

A. Yes. I asked them to give me a list of the materials and supplies, first, that they had on hand, second, that they urgently needed and that they would feel that it was dangerous, in view of the circumstances, to be without. These are the compilations of their answers.

Q. Well, there is always a certain amount of materials and supplies that is ordered ahead of time. Is there not?

A. They are all ordered in anticipation of need, except when there is a sudden break. We try to keep an inventory of parts that have to be replaced and except in cases where we have a sudden and unanticipated need we keep spares available.

Q. I do not believe you answered my question directly.

A. I am sorry. Let me have the question again.

(The pending question, as above recorded, was read by the reporter.)

The Witness: The answer is yes.

By Mr. Littman:

Q. And you think it is proper to simply add six months of orders, total them up and get the proper amount of inventory for purposes of this proceeding?

A. No, that is not what we have done. Let me explain. Around June 30 one factor began to emerge in connection with our materials and supplies problem and that was that [fol. 4728] we were going to have very great and increased difficulty in promptly getting materials and supplies, first, due to the fact that manufacturing facilities were slowing up due to war requirements; second, due to priority machinery, and that led to a study of material and supply requirements which we ought to have made previously but which we had not made previously. That resulted in bringing the whole question of our stock of replacements into sharp focus.

When it came into sharp focus, meetings were held between the various department heads and the operating management and we came to the conclusion that our policy, our heretofore policy of materials and supplies, had been

a very inadequate one, that there had been times when we were embarrassed because we had kept so small a set of replacements on hand, that we had been niggardly, and very niggardly, in stocking materials and supplies.

That policy of undue economy, I think, had been a hangover from the days when this company had inadequate working capital, when it did not have excess funds with which to properly stock its warehouses. That condition had been allowed to go on.

Q. When was that condition that you just described?

A. That condition prevailed in the years 1932 right through, maybe, 1937.

Q. How about 1931?

[fol. 4729] A. Well, undoubtedly then, but there probably wasn't as much need for materials and supplies at that time, because the property was in the course of construction.

Q. Well, they had more materials and supplies on hand, according to Exhibit 48, in 1931 and 1932 than in any other year subsequent thereto.

A. Well, maybe that was because it was in the course of construction, because the property was in the course of building at that time. I do not know about the classification, whether the parts were carried then in property or in materials and supplies. At any rate, the figures which we are talking about this morning are an outgrowth of two distinct facts which happened in June or July of this year, first, the fact that we were alarmed at being unable to get prompt deliveries, and, second, the fact that we did wake up to the fact that we did not have enough materials and supplies and had not had f[illegible] several years.

Q. In other words, the first factor that you named was simply this: That the company recognized that materials and supplies would probably be difficult to secure in the future and that, in view of that circumstance, it would be wise to accumulate a goodly supply for the future?

A. Yes, that was one reason.

Q. Now, let's look at this amount of working capital at the end of the six months' period, namely, as of December [fol. 4730] 31, 1941. Now, assuming that all of the materials and supplies that were ordered by your various departments were received prior to December 31, 1941, would you

have any such amount of materials and supplies on hand as that which you estimate in the amount of $635,000?

A. Yes. If the materials and supplies concerning which we have been talking had not only been ordered at this date but had been delivered and paid for, we would now have an item on our books of materials and supplies of approximately $635,000.

Q. Well, do you mean to say that there have not been any materials and supplies used up in the last six months?

A. Yes, but to the extent they have been used up, they have been reordered again and replaced, so that the $635,000 total would not be reduced.

Q. Well, have you checked into that?

A. Yes, I have, and I might say that the materials and supplies which I estimated would be on order within the next three months have all been ordered with the exception of those materials and supplies in that category for which we cannot get priority ratings, and that they are on their way to be delivered or else are delivered, and that a portion of the materials and supplies, which I estimated would be on order after September, are on order after September 1 and more are being ordered every day.

[fol. 4731] Q. You want a return in this rate case on materials that are on order and not yet received, do you not?

A. Yes, I want to have cash for the materials and supplies which we would have liked to have had and which we needed and which we should have had on June 30 in the present circumstances.

Q. And you want a return, also, on those materials that are on order that you know very well, due to priorities, will never be received?

A. No, I do not think we can adopt any such theory as that. I think we shall make strenuous efforts to get every bit of this stuff.

Q. But you know you are not going to be able to get all of it.

A. I think we are going to get a lot of it. Don't forget, Mr. Littman, that we are a defense industry and that the Government is cooperating with us to the utmost extent that it can to get these things. We have been beset with difficulties, but difficulties not on purpose on the part of the Government but difficulties arising out of red tape.

Q. Now, Mr. Sperry, your estimate was made as of June 30, 1941.

A. Approximately, yes.

Q. And six months since that time which was contemplated by your estimate have since expired?

[fol. 4732] A. Yes.

Q. And we now have some actual experience to look to and to compare with your estimate, have we not?

A. Yes.

Q. All right; now, what was the amount of materials and supplies on hand at June 30, 1941?

A. It is $261,086.

Q. I meant December 31, 1941.

A. I do not know. We have not any figures for the year-end yet.

Mr. Culton: I call Commission counsel's attention to the fact that on page 64 of the document he has examined, Prospectus of Panhandle Eastern Pipe Line Company, the figures for September 30, 1941, are shown as being $321,000.

By Mr. Littman:

Q. Is Mr. Culton's statement correct, Mr. Sperry?

A. I would have to look at your document to check it, Mr. Littman. What figure did you say?

Q. I think the document that you filed with the Securities and Exchange—

A. (Interposing) $321,277.

Q. Is that the amount of materials and supplies on hand as of September 30, 1941? A. Yes.

Q. Now, that leaves only three months to go to get up [fol. 4733] to $635,000?

A. Yes, sir, that is indicative of the very condition that we are worried about, that we won't be able to get deliveries as fast as we need them. That is why we are trying to be forehanded in accumulating materials and supplies to $635,000.

Trial Examiner: Some reference has now been made to some document filed with the Securities and Exchange Commission. For the purpose of clarity I think perhaps it should be identified.

Mr. Culton: I shall refer to the document, Mr. Examiner, as the prospectus of the Panhandle Eastern Pipe

Line Company in connection with its proposed $10,000,000 first mortgage and first lien bonds and 150,000 shares of cumulative preferred stock, which prospectus has recently been prepared by the Panhandle Eastern Pipe Line Company.

The Witness: I would like to have you mention that that is a red herring prospectus. Refer to the date because it isn't final.

Mr. Culton: The date being January blank, 1942.

The Witness: Draft number what?

Mr. Wheat: It is not on there.

The Witness: It is probably an original draft.

Mr. Wheat: It is clear that this has not yet been filed.

The Witness: It is not a final prospectus, that is why [fol. 4734] I want it read into the record that it is a red herring prospectus.

By Mr. Littman:

Q. Is the amount you refer to as working capital as of September 30 accurate? A. Yes.

Q. That is what we are referring to.

* * * * * * * *

[fol. 4735] Q. I take it that the amount of $635,479, estimated by you for materials and supplies, simply represents the amount that you think you would like to have on hand if you could get it?

A. That is the amount that, if we were absolutely free agents, we would have on hand today, that we would have had as of June 30 and that we will continue to have, based on our present expectancy of business. That is the approximate amount which we will continue to have in that particular inventory item from now on, as long as present conditions exist.

Q. You do not have it now?

A. No, we do not, but we either need that inventory or the money with which to purchase that inventory. That is why we are asking it as part of our rate base.

Q. It represents the amount which you would like to have?

A. It is the amount that we should have and that we are determined to have and will have just as soon as deliveries can be effected. It is the amount to which we are actually or potentially in the immediate future committed. In other words, it is the amount that we have on hand or on order, substantially, and which has got to be paid for.

[fol. 4736] Q. Do you at any time expect to have $635,000 of materials and supplies actually on hand?

A. Yes, I hope to have them in the not too distant future.

Q. Yes.

A. Just as soon as the factories can deliver them to us.

Q. I am not talking about on order, I mean all at one time on hand. A. That is correct.

Q. $635,000?

A. Yes, that is right. This is a $70,000,000 property, Mr. Littman, and potentially a larger property than that, and on a $70,000,000 basis, $635,000 of replacement parts does not loom very large.

Q. Well, did you make the determination or the conclusion that you had to have $635,000 worth of materials and supplies on hand?

A. No, sir, that was made by our operating organization, the men who were responsible for the operation of the property.

Q. They handed it to you and you accepted it?

A. They handed it to me, it was then put through two refining operations, both in general conference and in specific conference with Mr. Neuner, who was vice-president in charge of operations, and, again, with Mr. Creveling, [fol. 4737] who was president of the corporation. It was only after those refining processes that I used the figures.

Q. To what extent was the figure refined? Was it changed?

A. Yes, it was. I think this is a true statement: Our operating heads found that it was advisable to cut down in many cases some of the materials and supplies which the operating department heads felt they needed. The figures which emerged and which I have used represent a downward revision from the original figures as produced by the operating department heads.

Q. Well, the amount that they felt they needed was, of course, over a six-month period, was it not?

A. That was not the basis. The basis was what they needed at the present time in the light of all the circumstances.

Q. Mr. Sperry, how can you say that all of this was needed by them at one time when a substantial part of it was not to be ordered until after 90 days had elapsed?

A. I said in the light of the present circumstances, Mr. Littman.

Q. Well, now, who decided to conclude that it was all needed at one time, you or someone else?

A. I think my testimony is clear on that point. If we could have this $635,000 item housed in our warehouse to-
[fol. 4738] day and paid for, that would be the ideal situation, and that is the situation which we would like to have.

Q. That who would like to have?

A. The operating management of Panhandle Eastern Pipe Line Company, the president, the vice-president, and the other operating heads.

Q. Well, how about the operating men from whom you secured your information in the first place? How do they feel about that?

A. They would like even more.

Q. Well, they certainly have not ordered $183,000 worth of these materials and supplies. They had not even ordered those materials and supplies as of June 30, 1941, had they?

A. $105,000 had been ordered at the time that I made this study. $131,000, approximately, have been since ordered, and some part,—I don't know how much,—of $138,000 in addition to that are already on order.

Q. Well, now, the $138,000 was not ordered until 90 days had elapsed from June 30, 1941?

A. Yes, it takes time to do some of these things.

Q. And isn't that pretty good evidence that the men who waited 90 days before placing the orders didn't feel that they needed them immediately?

A. No, not at all. It takes time to shop around for
[fol. 4739] these things and to specify them. We do not take the first catalog that appears on the desk and order carte blanche. We analyze the market, find where we can buy to the best advantage and put things on order. Furth-

ermore, some parts have to be engineered and specifications have to be drawn up, so that it takes time to put materials and supplies of this volume on order.

Q. Well, who told you that?

A. Why, I just know it, I don't believe anyone told me that.

Q. No one told you that, none of these operating men told you that, did they? A. Not that I know of.

Q. They didn't tell you why they weren't going to place the order until three months to six months had elapsed from June 30, 1941, did they?

A. No, I don't think they had to, Mr. Littman.

Q. And that wouldn't indicate to you at all, would it, that they didn't need that material immediately, you say?

A. No, I will stick to my original testimony, that the company felt and it still feels that it is desirable, that it is sound to have $635,000 worth of this type of inventory in the light of all the present circumstances that face us and that we would like it in the warehouse now.

Q. You would like it in the rate base, too?

[fol. 4740] A. We want it in the rate base, because it has to be either in the warehouse or funds have to be available to pay for it.

Q. Can you testify, Mr. Sperry, of your own knowledge, that the operating men want all of these materials and supplies, or wanted them all as of June 30, 1941?

A. I can if I can believe the English language.

Q. Well, why do you wait?

A. It certainly was the approach that we took and it was the testimony that these operating heads gave me, and you can see that that is all recited in quite some detail and worked out, item by item, carefully, in the work sheets to which you have had access.

Q. Well, why then did the operating men wait from three to six months before they even placed their orders, if you know of your own personal knowledge?

A. Because in some cases you just can't place orders sooner than that.

Q. Well, do you know the facts or are you testifying generally about what you generally think?

A. This is general knowledge.

Mr. Culton: I would suggest that Mr. Creveling identified all these and he is available for cross-examination as to the three-month period and the six-month period.

By Mr. Littman:

[fol. 4741] Q. Who decides in the first place what materials and supplies are needed? A. Who decides?

Q. Yes.

A. The operating management, Mr. Creveling and Mr. Neuner, will decide on policy. The operating department heads would requisition those materials and supplies as it appeared that they were desirable and those requisitions would be passed upon by the top men before the Purchasing Department got the order.

Q. Well, who places the order first?

A. The initiative on materials and supplies comes from the field men when they use up a part or when they see the need for a part.

[fol. 4742] That goes through the operating department head. It would go through D. K. Stephens of the pipe line department, George Koch of the compressor department, Sam Taylor of the automotive department and Mr. McEllhatten of the communications department.

They would then approve or disapprove of the need and would go to the operating head of the company, Mr. Neuner, and obtain his consent to the order of those substantial purchases.

Then the matter would be referred to the purchasing department, who would place the order after shopping around the market, so you see it is quite some machinery, and it takes time, and we pride ourselves that we do an expert job of purchasing after full investigation of what the market offers.

Q. And you don't know what was in the minds of the operating men that initiated these orders, do you?

A. All I can say is that they indicated the need. I have full confidence in their judgment on it.

Q. They indicated the need over a six-month period, did they not?

A. They indicated that that is what they would like.

Q. And they placed some orders immediately as you have set them forth, did they not?

A. Yes, and scheduled other orders for just as soon as the machine could function.

Q. And they told you that they weren't going to order [fol. 4743] $131,000 worth of these materials and supplies until three months after June 30, 1941, is that correct?

Mr. Wheat: Mr. Littman, do you really mean what you said? That they weren't going to order it until three months? I read it that it was to be ordered within three months, and I wondered what you meant.

Mr. Littman: That is right.

Mr. Wheat: I am glad you corrected that.

By Mr. Littman:

Q. I will withdraw my question.

(Continuing) And it is a fact, is it not, Mr. Sperry, that the operating men at June 30, 1941, had not placed any order for the $131,063 worth of materials and supplies, but stated that they would probably order them within the 90 days ensuing, is that correct?

A. They didn't say they probably would, they said that they would proceed to.

Q. Proceed to? A. Yes.

Q. From time to time throughout the 90 days, is that right?

A. And if you carefully went over the work sheets during the last three months, you will note that these lists of materials and supplies comprise literally thousands of different types and kinds of items, and that if each one [fol. 4744] of these were ordered through the ordinary purchasing department, it would take months simply to specify and put them on order.

Q. Well, the fact is, they didn't contemplate ordering them except during the 90 day period? I am speaking of $131,000 worth.

A. We contemplated ordering them just as fast as the machinery could function. If they could all have been ordered on one day and properly specified and properly checked as to markets, that would have been done, but these things take time.

Q. Well, are you telling us what the operating men told you?

A. No, I am telling you what I believe to be the case.

Q. And the operating men in submitting their estimate to you advised you that they were not going to order $138,000 worth of these materials and supplies until after 90 days had elapsed from June 30, 1941, is that correct?

A. That is right. In other words, there are different degrees of imminence here in the deliveries, but all the deliveries are contemplated.

Q. And after 90 days had elapsed from June 30, 1941, of course, there were certain materials and supplies that had been taken out, had there not?

A. Yes, which were, in turn, ordered for replacement.

Q. And used up?

A. Yes, which were, in turn, ordered for replacement in [fol. 4745] addition to these amounts.

Q. You would like to have a return on those, wouldn't you?

A. No, I would like to have a return on the aggregate of $635,000.

Q. Although not on hand?

A. That is right but on order.

Q. Yes, and although not delivered?

A. That is correct.

Q. And although not on the shelves of your company?

A. That is correct, that is the provision that I want to have. I want either cash or the materials and supplies to that amount.

Q. In other words, you want $105,000 worth of materials and supplies that have been on order, you want $131,000 worth of materials and supplies that were to be ordered within 90 days from June 30, 1941, and you want $138,324 of materials and supplies to be ordered after 90 days from January 30, 1941, a total of—

A. (Interposing) $374,392.

Q. Now, is my statement correct?

A. That is correct.

Q. Now, you have included in your estimate the sum of $34,000 for "line pack" shown in Table III of Exhibit 74, Item 6?

[fol. 4746] A. That is correct.

Q. Upon what theory are you claiming $34,000 for line pack?

A. Mr. Littman, please don't try to get me in trouble on the technical aspects of line pack, because I am not an

engineer. I depend entirely upon the report of Mr. Burnham to whom I addressed the question, and whose working papers I think you still have, because they have never been returned to me.

The ordinary company has an inventory which is a legitimate part of working capital. It so happens that the inventory in the case of Panhandle Eastern Pipe Line Company is the gas in its line, which costs money to produce and which the company will never be able to sell because if the company goes out of business, that line pack will stay in the line and will not be marketed.

It, therefore, is an item of inventory, if you please, that has some value and you and I might quarrel considerably about what that value is, but it has some value, and we believe that we are entitled to include that value in our working capital, just as a merchandising company might include its inventory in its working capital.

Now, I don't profess to know what that gas is worth. We tried several formulas trying to set it up and establish it on a fair basis. We found a great deal of difference of [fol. 4747] opinion in our company as to what we should call the worth and I might add that the final figure which I used, which I use on my own responsibility, is a very much more conservative opinion than was recommended to me to be used by others in our company, because they thought the gas was worth more for this purpose than I did.

Q. Mow many M. c. f.'s of gas did you use for purposes of this estimate?

A. As I say, I can't give you any information on that line pack unless you give me back my working papers.

Q. I am sorry. I thought you had received that.

A. No, you still have them. They were given to you supplemental to this package, they were prepared by Mr. Burnham and given to me in a separate package, and I have given them to you, and I have never had them back. I think I have a summary here of what I did. I may have my memorandum to Mr. Burnham and a summary of his reply. Let me just see if I have.

Q. Do you have the figure in your papers of—

A. (Interposing) $34,000.

Q. Do you have a figure of $841,578 M. c. f.'s—

A. (Interposing) Wait a minute, I will tell you what I do have. I have a resume of pipe line storage studies from March 1, 1941, to July 31, 1941, showing that we have in storage in our line a total of 956,830,000 cubic feet of [fol. 4748] 14.73 ounce gas.

Q. On Page 470 of the transcript, you testified that the line pack amounted to approximately 851,578 M. c. f.?

A. Yes.

Q. On a 16.4 pound pressure base? A. Yes.

Q. And that you calculated your allowance at the rate of 4 cents? A. At the well head.

Q. Per M. c. f. at the well head, making an inventory value of $34,063, is that correct?

A. That is correct.

Q. And you rounded that sum off to $34,000 for line pack? A. That is right.

Q. The thing I would like to know is whether this 851,578 M. c. f. of gas represents the total line pack for all the lines?

A. Yes, I think that that is the capacity of our system at any one given moment.

. . . . . .

By Mr. Littman:

[fol. 4749] Q. Mr. Sperry, the amount of $34,000 for line pack included in your estimate of working capital represents the value of the gas which is packed in all of Panhandle Eastern's lines, is that right?

A. That is my understanding.

Q. Do you know whether the plant accounts of the company contain $70,108 for gas used in testing and packing the lines in the initial test in 1931?

A. No, I am not familiar with that.

Q. Well, do you know whether or not the company has capitalized on its books the value of gas used in testing and packing the lines?

A. I made some inquiries on that subject in the course of preparing my report on proposed working capital requirements. My recollection at the present is that some of the line pack was capitalized either in 1931 or in 1932 at a time, however, when our capacity was very small compared with the present, both because of the reduced

pressures at which we were then operating with relation to our present pressures and with relation also to the cubic capacity of the line, and I felt that, in making my appraisal here of $34,000 which represents a 4-cent price on the present line pack, that I had more than enough compensated for any small capitalizing that might have been done there by taking such a low figure of value, and I am not at all [fol. 4750] sure that there was anything capitalized at that time.

Q. You would not call a figure such as $70,108 which, according to our information, was capitalized for testing and packing the line in 1931, a small amount, would you?

A. I would say, without knowing that particular item, Mr. Littman, I would say that that particular expense to which you refer was probably for initially purging the line, cleaning it, when the line was originally built, in which case it is quite a different thing from the inventory line pack to which I have been referring.

The inventory line pack to which I am referring is the static amount of gas which is always in our line by reason of the fact that when you deliver gas you have got to put new gas in one end and take out at the other, and you have got to push the gas that is in the line through.

Q. Isn't that done in the purging operation?

A. No, purging is simply cleaning the line, blowing gas through and letting it come out at the other end into the open air, and cleaning out dust and particles of that kind.

Q. What do they then do?

A. That gas is gone.

Q. The gas that was used in purging is gone?

A. Yes.

Q. But the gas that immediately follows it?

[fol. 4751] A. That is part of this static amount of line pack.

Q. Yes.

A. But if you purge a line, you put some gas in one end and pull it out at the other, and it is gone out into the open air. That is an item of expense. That is not an inventory item at all. It does not affect the inventory.

Q. Now, referring to the amount of gas that immediately follows purging; the gas and which is left in the

lines immediately after the purging operation, did you inquire whether or not the value of that gas was capitalized as well as the value of the gas that went out into the air in the purging operation?

A. I made no inquiry at all about purging operations, because that is an item of expense that does not enter into this question at all.

I did make some inquiry as to whether any of the initial line pack which stayed in the line when it was originally built or up to the end of 1931, was capitalized, and my recollections are a little vague on the subject now, but I know that I did explore it and felt that the inclusion of this $34,000 item was a perfectly safe and conservative amount to include in working capital, whether the relatively smaller amount of gas had been capitalized or not in earlier years.

Q. Can you give us the amount that you refer to as a small amount?

[fol. 4752] A. No, I cannot. As I say, my recollections on that point now are vague. I crossed the bridge, but I cannot give you the facts, as I found them, at this moment.

Q. Well, to the extent that the company has included in its plant accounts the value of gas used in packing the line, to that extent, at least, you have made a duplication; have you not?

A. If there is any amount in some other place in our proposed rate base which represents line pack, then it should not be duplicated here, but my recollection is I crossed that bridge rather adequately and found that there was not.

Q. When you made this working capital estimate, Mr. Sperry, you were making it primarily in conjunction with Mr. Biddison's reproduction cost estimate, were you not?

A. I checked with Mr. Biddison on every phase of my study after I had made it and had the accounting department and Mr. Biddison's men both check to see whether there was any duplication or overlapping between my base and his, and I found that there was no such duplication, and the accounting department so certified to me.

Q. There would not be any duplication, of course, where this amount that you estimated is added to a reproduction cost estimate, would there? There could not be

any duplication there, because Mr. Biddison does not have any such item in his reproduction cost estimate, does he? [fol. 4753] A. I do not know. I am frank to say I cannot testify about Mr. Biddison's material.

Q. Well, your inquiry as to duplication, Mr. Sperry, was directed toward determining whether or not there was any duplication as between your estimate and Mr. Biddison's estimate, is that correct?

A. No, I will tell you how I approached it. These materials and supplies we have been working on, I made sure that I had nothing in materials and supplies that he may have had in property account.

Q. By "he", you mean whom?

A. Mr. Biddison might have in the property account, because in some cases, for instance, on lengths of pipe, we might be carrying some extra pipe as materials and supplies and some extra pipe as property account, and those matters I explored and made certain that there were no parts carried in materials and supplies which were carried in property account.

I also ascertained to my satisfaction that this line pack item which I was including in my working capital allowance was not provided for or duplicated in any of Mr. Biddison's base, so that while I cannot certify to you the details of that, I am quite sure of my ground.

Q. Do you mean—

A. (Interposing) I cannot tell you, for instance, what accounting might have taken place as regards line pack [fol. 4754] in the past, but I am certain that I am not wrongfully including it here.

Q. Now, if the Commission were to adopt an original cost or book cost rate base, it would be very important, would it not, to see that there is no duplication of line pack as between your estimate and the amount included for that purpose on the books of the company?

A. Yes, that, I would think, would be proper.

Q. And you are not sure whether there is or is not any duplication?

A. I have testified I do not believe there is, Mr. Littman, but I am also testifying that I cannot give you page and verse of how I explored that, or to what extent there may have been accounting entries in the past.

Q. In other words, you do not know of your own knowledge whether there is or is not a duplication?

A. I cannot swear here on the stand that some of the line pack has not been capitalized in the past. I do not know whether it has or not at this moment, but I remember carefully canvassing that at the time and feeling that it was perfectly proper for me to include this item here.

Q. Do you recall whether or not there was mentioned in connection with your canvass a figure of $70,108 which appears in the plant accounts of the company for gas used in testing and packing the line?

[fol. 4755] A. No, I am quite sure that no such figure was ever discussed with me, and I also lean to the feeling that that probably is a purging operation and a matter of expense which is quite different from the line pack which finally emerged.

Q. I am talking about the item of $70,108 which is charged to plant account. A. Yes.

Q. Not expense, Mr. Sperry.

A. That is right, but isn't that an item before 1932?

Q. It is an item that was incurred during construction in 1931, according to our information.

A. Haven't we heard somewhere in this case that a good deal of expense was capitalized in 1931 or 1932?

Mr. Culton: March 1932, I think the testimony shows, the company capitalized everything as of that date. It is the testimony of Mr. Watkins.

The Witness: If that were expense of purging the line at that time and was then capitalized, it would not bear upon the subsequent line pack at all, you see.

It would be a matter of expense that had been capitalized, not a matter of setting up a value for inventory.

By Mr. Littman:

Q. If the book figures of cost were to be used for a rate base for purposes of this proceeding, the cost of [fol. 4756] packing the lines should not be included there, and also included in your estimate, should it?

A. Unless the line pack is materially greater now than it was when the original line pack was capitalized. If we say 200 million cubic feet was capitalized in 1931 as the then capacity of the line and if now our capacity and our

line pack is 851 million, then it would be perfectly proper to ask for an allowance now on the difference between the 200 million then capitalized and the 851 million now to be capitalized.

Q. On the difference, but not to make a duplication?

A. Yes.

Q. Now, Mr. Sperry, do you know what the company's practice has been with respect to charging the cost of packing the new lines and lines built subsequent to 1931?

A. No, I do not know that we have any practice of capitalizing them. I do not think we have. I do not think that it appears on our books as an item. I am not sure. I know that when we buy gas for our own use, that we charge ourselves with it at a very much higher rate than I have put in here.

Q. Isn't it a fact, Mr. Sperry, that the company's annual financial statements show a separate item of line pack in plant account?

A. I cannot answer that question at this moment.

Trial Examiner: May I ask, Mr. Littman, whether the [fol. 4757] System of Accounts indicates the propriety of the inclusion of this item as working capital? I think we have a question of some interest here as to whether such an item should be a part of capital or plant account, or a part of working capital.

Mr. Wheat: That is true, your Honor. Doubtless, it is a technical matter.

Trial Examiner: And it seems a good time to ascertain the views of counsel with reference to it.

Mr. Littman: I understand that our Uniform System of Accounts does not have a separate subject such as working capital. Working capital is made for rate making purposes from the balance sheet accounts by grouping a number of items such as materials and supplies and so forth, and so I believe that our System of Accounts is silent on that subject.

Mr. Wheat: I do want to say, Mr. Examiner, that in the Natural Gase Pipe Line Company of America case, the company's evidence on working capital did include a sum for packing gas in the line, and that this, as I understand

the decision, was accepted by the Commission for the purpose of its order in that proceeding.

Mr. Lee: Did or did not include?

Mr. Wheat: Did include it, yes, Mr. Lee.

I also understand that in the Canadian River Case which is now pending awaiting decision, Commission's counsel made a similar suggestion to that which Mr. Littman is [fol. 4758] now apparently suggesting to the witness, that if gas in the line had previously been capitalized, then it should not be separately and in a duplicate manner allowed as a part of working capital.

I would think, Mr. Examiner, that the exploration of whether this is in the account in any part, particularly in the item mentioned by Mr. Littman, would be a proper field of examination of Mr. Watkins.

It is obvious that Mr. Sperry is not informed in respect to this particular matter of the accounting for the original gas that went into the line. I am wondering whether that would not be the case.

Of course, it is also obvious, Mr. Examiner, that the capacity of the line has been so greatly increased since 1931, that any capitalization on any fair basis of line pack at that time would be obviously inadequate with respect to the present plant of the Panhandle Eastern Pipe Line Company.

Mr. Littman: Well, the point we are seeking to develop here, if your Honor please, does not deal with the propriety of including an amount in working capital or elsewhere in the rate base for line pack.

I wanted to make certain, however, that there be called to the attention of this witness and the company the situation that it is our understanding that the company has from time to time, not only in 1931 but subsequently thereto, capitalized on its books in the plant accounts the value of [fol. 4759] gas used for not only purging the line, but also packing, as well as purging the line.

Mr. Wheat: Mr. Littman, may I make this statement: We will stipulate on behalf of Panhandle Eastern Pipe

Line Company, there should be no duplication of such an item, and I will also state, Mr. Examiner, that we will endeavor to ascertain the fact in more detail than Mr. Sperry is now prepared to testify on this particular matter.

Mr. Littman: I understand that Mr. Sperry's estimate was primarily made for the purpose of going along with Mr. Biddison's reproduction cost estimate, in which event there would be no duplication but, inasmuch as the Trial Examiner has indicated that the rate base to be used in this case will be other than reproduction cost, we are, of course, very anxious that there be no duplication, and I can see that this witness is not familiar with the accounting practice and I, therefore, shall defer this line of inquiry.

Mr. Wheat: Irrespective, Mr. Examiner, of any potential rate base, we will undertake to develop the facts in this regard.

Trial Examiner: That, of course, is proper and the thought the Trial Examiner had in suggesting the question was to ascertain whether counsel are in agreement that the cost of, or investment in the packing of the line is properly included as an item of working capital.

[fol. 4760] Mr. Littman: If you Honor please, we are willing to agree that the item of line pack is a proper item to be included in the rate base for rate making purposes. A proper amount for line pack, of course, represents an investment that is frozen in the business and without which the business cannot operate and so, our line of inquiry was not at all directed toward the establishing that the item itself was improper, but it went rather to the matter of accounting duplication.

Have we made ourselves clear?

Trial Examiner: You are apparently then in agreement that this is properly under consideration as an item of working capital?

Mr. Littman: As an item of working capital or as an item of plant account.

Mr. Culton: May I suggest in this connection that the amount which you referred to as having been used in 1932 or spent in 1931 is not computed on a 4-cent basis.

That was at a time when the price of gas was much higher than 4 cents. I think your investigation clearly shows that they did not use the price which has here been used for that gas. Most of that gas was gas purchased at much higher prices.

Mr. Wheat: In any event, Mr. Littman, we will attempt to ascertain the fact in that regard and offer that.

Mr. Littman: I did want to make this clear to your [fol. 4761] Honor, that line pack may properly be a part of working capital, provided, however, that it is not included elsewhere in the plant accounts of the company and duplicated.

Mr. Wheat: We will stipulate to that.

Trial Examiner: This last statement brings you completely in accord as to the propriety of considering it as a part of working capital, leaving only the amount to be determined and one question which has just arisen in connection with the determination of the amount apparently is related to the pressure.

Mr. Culton: The pressure and the other element of capacity.

Mr. Wheat: And the price of the gas.

Trial Examiner: The pressure and also the price of the gas. I do not know to what extent that has been covered in the record, but I assume that the pressure which has been stated is in accordance with commercial custom and practice. If it is not so, I assume also it will come up in further examination.

Mr. Culton: For the Examiner's information, when the line was first constructed, there was very little pressure in it, and naturally, very little gas.

For example, the gas ran from the Panhandle Field to the compressor station at Liberal under the well pressure, which shows that very little volumes of gas were being car- [fol. 4762] ried in the line at that time.

Later, as the pressures were stepped up and as the size of the pipe line increased, of course very great increases

of volumes in gas necessary for line pack occurred, so that the line pack in 1931 and 1932 was a small percentage of the line pack which the company has at this time.

By Mr. Littman:

Q. Mr. Sperry, will you please turn to Table 4 of your Exhibit 74?

In that table, you show "Total Cash, Pre-Payments, and Materials and Supplies Actually Maintained by the Company at Certain dates in the Past."

These figures are shown from June 30, 1937, through June 30, 1941, at various dates.

Mr. Culton: And also December.

The Witness: At half-year intervals all the way through.

Mr. Littman: I see.

By Mr. Littman:

Q. Now, in your direct testimony, you referred to these amounts as "aggregate actual working capital."

What do you mean by that?

A. They represent the same items of working capital for which we have asked allowance in our tables. In other words, this table, No. 4, indicates that while we have asked for an allowance of $1,569,000, I believe it is, for working [fol. 4763] capital allowance, in this rate base, that we have also kept at these periods specified, total cash, prepayments, materials and supplies substantially in excess of those amounts which we have asked to have included in our present rate base.

Q. What conclusion do you wish to be drawn from that?

A. I wish to conclude that the allowances which we have requested are conservative; that they are low in proportion to what we have felt in the past we have actually needed for those purposes.

Q. Do you think it is proper to draw any such conclusion as that?

A. Yes.

Q. From these figures?

A. Yes, I do.

Q. Mr. Sperry, these huge sums that you show on Table 4 are simply the total of the company's cash on hand and materials and supplies on hand and pre-payments, are they not?

A. That is correct.

Q. And the bulk of these figures simply represent cash on hand, do they not?

A. The cash on hand is the largest item in these figures but, Mr. Littman, this is a good example of our deep conviction that in order to maintain the credit of this company and to keep our avenues of raising funds open, that [fol. 4764] especially in the light of the fact that we are dynamic and going, we need large sums of working capital on hand at all times and we have felt that it was necessary to leave large sums of working capital on hand at all times for that purpose.

Q. Now, these sums that you have shown in Table 4 are not working capital at all, are they, Mr. Sperry?

A. Yes, they constitute items of working capital.

Q. Do you know what the definition of actual net working capital is?

A. We have not been talking about net working capital. We have been talking about working capital for rate making purposes, working capital allowances.

Q. Do you suggest that these amounts you have in Table 4 have anything to do with working capital for rate making purposes?

A. They are exactly the same three items as constitute the bulk of our requests for allowance for working capital, in other words, simply the cash, pre-payments and materials and supplies.

They do not, for instance, include other items of working capital which we have on our books, such as accounts receivable which are not part of this case.

Q. Well, according to this table then, the more cash you have on hand, the more working capital you are entitled to, is that it?

[fol. 4765] A. Not at all, but I think this is a splendid example of how important the company thinks it is to have an adequate supply of cash and materials and supplies on hand and if we do not have such adequate amounts

of cash and materials and supplies on hand, we think our credit would suffer.

We think it would be impossible for us to render the service that the public is entitled to from our property.

Q. You have not made any deductions from these figures for current liabilities, have you?

A. No, sir, these items do not purport to be a complete list of all the items which appear on a company's current assets and current liabilities account.

They purport to be simply the total of the three items which constitute the bulk of the allowance which we have petitioned for inclusion in our rate base as working capital items.

Q. They are simply the total of current assets without the accounts receivable, aren't they? That is all they amount to?

A. They are an incomplete recital of both current assets and current liabilities, but they are an indication that we feel it is necessary to keep ourselves in a strong current position.

Q. Maybe it indicates that to you, Mr. Sperry, but isn't it a fact that men who work with figures such as these [fol. 4766] use the figure which is called "actual net working capital", do they not?

A. Yes, and that, of course, is a subject which we have not discussed at all in this hearing, have we?

Q. No, we have not, and if we are going to make any comparison between the amounts which you have suggested be allowed here, don't you think it would be proper or more proper, rather, to compare it with the actual net working capital, instead of the so-called aggregate actual working capital?

A. Well, let's not go beyond the point which I testified to, namely, that this is given simply as an indication of our feeling that it is necessary for us to keep ourselves in a strong liquid position.

Q. Can you tell us what actual net working capital means? What is actual net working capital?

A. What is what?

Q. Actual net working capital.

A. Current assets, minus current liabilities.

Q. And that is an accepted, recognized term and definition, isn't it?

A. I think that is conventional, yes.

Q. Will you determine the actual net working capital for 1940 from the company's balance sheet, Exhibit No. 48?

A. According to this classification which I assume is correct, total current and accrued assets of the company [fol. 4767] as of the end of 1940 were $5,491,000 rounded out and the total current and accrued liabilities were $3,171,000 rounded out.

Q. That leaves what amount?

A. That leaves about $2,320,000 as net working capital.

Q. Now, the $5,491,136 which you read into the record a moment ago as representing for the year 1940 the company's assets contains how much cash?

A. $3,744,000.

Q. Now, what amount did you claim is required by way of cash working capital?

A. For purposes of what?

Q. Cash working capital.

A. For inclusion in a rate base?

Q. Yes.

A. We have made request, I think, for somewhat around $900,000.

Q. $900,000, that is right. That is our understanding of the total of the first four items on your Table 3.

A. Which we think is a very conservative request.

Q. Now, will you please substitute for me the $900,000 in place of the $3,744,000 of cash that the company actually had on hand at the end of the year 1940, and tell me what the actual net working capital would be on that basis?

A. I do not see that that is relevant at all.

Q. Whether it is relevant or not, would you mind tell- [fol. 4768] ing me?

A. Perhaps you would like to make the subtraction. It is a matter of subtracting $2,600,000 from the net working capital which I outlined a minute ago.

Q. Well, using your $900,000 cash figure in place of the actual cash figure of the company for 1940 and making the calculation of actual net working capital on that basis, what would the result be?

A. The result, as I see it, would be a working capital deficit.

Q. It would be zero, wouldn't it?

A. It would be worse than that, it would be a deficit.

Q. It would be a minus or negative working capital, wouldn't it?

A. Yes, it would be a working capital deficit, we call it.

Q. In other words, your creditors supply you with working capital, do they not?

A. Not at all. That does not follow.

. . . . . .

[fol. 4775] C. H. HINTON, resumed the stand, and testified further as follows:

Cross-Examination (Resumed).

By Mr. Littman:

Q. Mr. Hinton, did you prepare Exhibits Nos. 42 and 43 and the maps which have been identified as Exhibits 44, 45, and 46?

A. Yes, I prepared Exhibits 42 and 43, and did the preliminary work on the maps, but the rest of them were completed under my direction, that is the actual coloring of the maps.

Q. That is to say, all of these exhibits which I have just named were prepared by you or under your direction and supervision?

A. That is correct.

[fol. 4776] Q. Now, Exhibit 43 contains your written testimony from pages 4 to 41, inclusive, does it not?

A. Yes, sir.

Q. The present position which you occupy with Panhandle Eastern Pipeline Company is that of production engineer?

A. That is correct.

. . . . . .

Q. You had arrived at a number of conclusions in your Exhibits Nos. 42 and 43. In order that the record may be clear and in order that I may have you express an opinion as to whether my understanding of these general conclusions is correct, I would like to take up several of them

and inquire whether my judgment or understanding of these conclusions is correct. One of these conclusions, as I gathered, is that capital expenditures on the production and gathering system south and west of Liberal compressor station in the aggregate amount of $4,983,432 would be required over the next five and one-half years to the end of 1946 if Panhandle Eastern's load were not increased beyond the present annual demand. Is that correct?

A. That is correct to the extent that it is possible to prepare a correct estimate with the exception or with this to be included, that it is necessary to spend this amount to protect leases which will be lost to the company otherwise. [fol. 4777] Q. I gathered from your answer that generally my statement is a correct representation of one of your general conclusions?

A. Yes, sir.

Q. And am I correct, further, in gathering from your answer that not every dollar of this $4,983,423 is necessarily for the purpose of producing what you have referred to as the basic load?

A. That is correct, Mr. Littman. If we did not have to protect some of our leases and guard against the losing of the leases, why, it would not be necessary to spend that amount of money to maintain the production level to supply our present market, for the market as of the mid-year 1941.

Q. Now, of course, we are speaking of the Panhandle field, are we not?

A. No, we are speaking of the Panhandle and the Hugoton field.

Q. That is right, we are speaking of the production system. Now, some of the wells, whose cost of drilling you include among the capital additions or capital expenditures, to which I have referred, are wells that are to be drilled, not for the purpose of immediately securing gas, but for the purpose of maintaining the leases. Is that right?

A. That is correct; however, if we did not drill some of the wells on the acreage which is now top leased by others, [fol. 4778] it would be necessary to make further expenditures in the Hugoton field of Kansas in order to meet our present load.

Q. Now, without going into details at this time,—we will probably go into greater detail later,—can you give us an idea of approximately how much of the $4,983,423 of capital expenditures are required to be expended by reason of the maintenance of leases and such other matters as you have just mentioned as distinguished from those expenditures which must necessarily be made in your judgment for the purpose of securing the amount of gas contemplated to be produced for the basic load?

Do you understand my question?

A. I believe that I do, yes, sir.

That is approximately $1,494,000; for the five and a half year period we could keep from spending that money, but ultimately we would have to spend that amount anyway, so it is just a matter of putting off that expenditure.

Q. To put it another way, you are going to expend the amount of—

A. $1,494,000, or approximately.

Q. (Continuing) —in advance of actual need?

A. That is right.

Q. Now, the figure that you have just given includes, not only the wells, but also the gathering lines and other [fol. 4779] expenditures?

A. That is right, with the exception of the camp at Optima, Oklahoma. I did not include that in this figure here. I can.

Q. It would not be a very large amount, would it, Mr. Hinton?

A. No, it is small.

Q. Don't bother to give us an allocation.

Now, another general principle or conclusion that I gathered from your exhibit is that capital expenditures on the production and gathering system south and west of Liberal compressor station in the aggregate amount of $7,147,219 will be required over the next five and a half years to the end of 1946, in order to permit the company to deliver to its main pipe line the volumes of gas which Mr. Morton has estimated will be required during that same period, is that correct?

A. That is correct.

Q. Now, what part of the sum of $7,147,219 represents expenditures not immediately required for that purpose?

A. By "not immediately", do you mean within this five and one-half year period?

Q. Yes, I mean within the five and one-half year period, for the purpose of producing the amounts of gas contemplated by your so-called anticipated load.

[fol. 4780] A. In the event that we have no valid proration in Hugoton field, Kansas, the amount will be very nearly the same as the $7,147,219.

. . . . . .

Q. Will you please explain what you mean by "valid proration"?

A. I mean this, that if the development of Panhandle Eastern Pipe Line Company in the Hugoton field, Kansas, is not curtailed by a proration order, we will spend approximately this amount of money. In the event that we did have valid proration, why it would exceed this in all probability.

Q. Who would issue this proration order?

A. The State Corporation Commission of Kansas.

Q. How would that proration order affect the situation, Mr. Hinton?

A. Well, in order to explain that, I will probably have to explain how proration works in the State of Kansas.

. . . . . .

By Mr. Littman:

Q. Well, am I correct in understanding that the pro-
[fol. 4781] ration law of Kansas has a material bearing upon your exhibits? A. Oh, yes.

Q. Then, it would be wise, I think, to have you explain your understanding of the proration situation.

A. In December, 1938, the State Corporation Commission placed an order upon Hugoton field, Kansas,—

Q. You are speaking of the State Corporation Commission of Kansas?

A. Yes, sir, I believe I said that, did I not?

(Continuing) —and under this order it was necessary that every operator in that field be developed so that their participation in the total production of the field was equal

to their total development, that is, if the development of each company—

It will probably be easier to give an example. If Panhandle Eastern had development which gave them a 50 per cent participation in the Hugoton field, then they were entitled to 50 per cent of the total production from that field.

Q. Over what period? Annual periods?

A. Those, at that time, were monthly. It has now been changed to six months. The reason that this proration order has a very far-reaching effect upon the capital expenditures declared by Panhandle Eastern is that other [fol. 4782] companies can set the pattern for the field, that is, if it takes ten wells of average size to give an allowable of 5,000,000 feet and this company that is taking 5,000,000 feet, instead of having ten wells, has twenty wells, it means then that every other company that produces gas in that field must change their ratio of development to withdrawal to meet that twenty wells for 5,000,000 feet.

Q. Why, in order to avoid drainage?

A. No, it is just an order that everybody shall take from their wells the same amount, that is, for the same size well. Any producer that sets the pattern for that field can change the ratio of requirements there over a two or three months period, so that we might have to drill many more wells than we now have included in our plan.

If you will notice, we have very few wells in the Hugoton field, Kansas. Now, then, if that development shifts around in the Hugoton field so that a new pattern is set, why then we would have to drill wells that we don't contemplate drilling now to take the same amount of gas from Hugoton field, Kansas.

Q. In other words, a change in the proration would have the effect of increasing your capital expenditures?

A. Yes, sir, it could. I don't say that it would, but it readily could.

Q. And you have not made any estimate upon that [fol. 4783] contingency?

A. No, sir, that would be almost impossible to use on an estimating base and it has been ignored in this amount shown here.

Mr. Lee: Isn't the proration schedule under the law of Kansas a matter of litigation now?

The Witness: That is correct, it is.

Mr. Lee: And haven't some of the lower courts invalidated it?

The Witness: I am not sure about that, Mr. Lee.

Mr. Lee: Is it being enforced?

The Witness: No, sir.

Mr. Lee: So that all that you talk about is up in the air as far as enforcement is concerned, isn't it?

The Witness: It has just been before the District Court out there.

Mr. Lee: By injunction, wasn't it?

The Witness: And it is going back to the Commission for rehearing, or the State Supreme Court, and that will probably happen some time this month.

Mr. Lee: But the law that was passed,—you said in 1938?

The Witness: Yes, sir.

Mr. Lee: Has resulted in making it inoperative since 1938, hasn't it? That is the contest on the law?

[fol. 4784] The Witness: Well, it has been inoperative a great deal of the time, but there have been times in each period when it has been in effect.

Mr. Lee: But it hasn't been in effect in your own knowledge in the Hugoton field in Kansas? It would have to be practically in effect to be of any importance, because, isn't it true that litigation was started to enjoin the right from the time it became effective under the statute?

The Witness: That is correct, and it is now getting to the point that we are now likely to find out which way it might go within the next few months.

Mr. Lee: And if the Court invalidates it, then that matter of proration is out of the window until they pass another proration law, isn't it?

The Witness: I don't know how that works legally.

Mr. Lee: You know that the authority of the Commission in Kansas is predicated on that proration statute, don't you?

The Witness: Yes, sir, I do know that, but I don't know what effect any court decision might have on the future.

Mr. Lee: No, but I say the present law, if invalidated by the Supreme Court of Kansas will result in wiping out proration until some new statute is enacted and sustained, won't it?

The Witness: I believe that is the way it works, yes, sir.

* * * * * * * *

[fol. 4786] By Mr. Littman:

Q. Well, Mr. Hinton, I gather from your testimony that excluding from consideration the proration situation, $7,147,219 will all have to be expended in capital expendi-

[fol. 4787] tures over the next five and a half years, to the end of 1946, in order to permit the company to deliver to its main pipe line the volume of gas which Mr. Morton has estimated will be required during that same period?

A. I believe that this figure is very nearly correct. There are two wells which might be kept out of this, but which would probably cost us a little bit more from an operating standpoint if we did not drill on it. I refer to the two locations on the Canadian River bed which is a State lease, which does not expire.

Q. You might not have to drill those to secure this quantity of gas required for the anticipated load?

A. That is correct. That would be a matter of some $40,000.

Q. Mr. Hinton, you testified at page 32 of your Exhibit 42, referring to this so-called anticipated load, that, "but we know that larger volumes of gas will be required and that such increases, in large part, will be beyond the control of the company. To serve present markets and the anticipated increases, capital expenditure of a more realistic

figure will be required. To serve the existing markets, as well as anticipated increases, the capital expenditures required will be at least the sum of $7,147,219."

Is that correct?

A. As nearly as I am able to estimate, yes, sir.

[fol. 4788] Q. In other words, it is your testimony that the company will, in reality, be called upon to produce the amount of gas estimated by Mr. Morton, which you have referred to in your exhibit as the "anticipated load," is that correct?

A. Yes, sir.

Q. I take it, then, that the capital expenditures with respect to the so-called basic load, which does not contemplate any increases, are more or less of an academic question, are they not?

A. We used that, first, on our problem as a base and figured from that the increased cost.

Q. Based upon an assumption which you, in your own heart and mind, know will not be the situation in the next five and a half years?

A. To what assumption do you refer?

Q. Well, the assumption that I was referring to was the basic load. You know, don't you, that there will be no such thing as a basic load in the next five and a half years?

A. That has been proven for the period from June up to now, yes, sir. I don't know what it will be at the end of five and a half years, but I think that Mr. Morton's figures are going to be very close to what our load will reach.

[fol. 4789] Q. In other words, you are a disciple of Mr. Morton in that you are already making preparations to meet the increased demand which Mr. Morton has estimated will be made upon the system in the next five and a half years, is that correct?

A. Yes, sir.

Q. Now, another general conclusion that you reached was that the operation and maintenance expenses, which would be incurred in the Panhandle and Hugoton fields, in order to produce and deliver to the main pipe line at Liberal compressor station an amount of gas equivalent to the volumes now being produced over the next five and a

half years, would increase in those years in the total amounts shown in Schedule 3 of Exhibit 43. Is that a correct statement? A. Yes, sir.

Q. And am I correct in stating that a further conclusion that you reached is that operation and maintenance expenses which will be incurred in the Panhandle and Hugoton fields in order to produce and deliver to the main pipe line at Liberal compressor station the volumes of gas which Mr. Morton has estimated will be needed to fulfill Panhandle Eastern's market requirements over the next five and one-half years are those expenses which are set forth in Schedule 4 of Exhibit 43?

A. Yes.

[fol. 4790] Q. Now, commencing on page 4 of your written testimony in Exhibit 42, near the bottom of the page you set forth a number of "principles and assumptions," which you followed in arriving at the conclusions in your exhibit and in making your studies. The first one which appears on page 4 reads as follows:

"1. Panhandle Eastern will, so long as economically advisable, continue to apportion its takes between the Panhandle field and the Hugoton field on approximately the present basis."

Is that one of the principles that you follow or assumptions that you follow?

A. That is correct, Mr. Littman.

Q. Now, I refer you to Schedule 5 of Exhibit 43, entitled, "Probable Production From Panhandle Eastern's Own Wells and Wells Under Gas Contract (Panhandle Field) During the Period July 1, 1940, to December 31, 1956."

Were the figures shown in Schedule 5 arrived at by a calculation involving the percentages discussed by you under the assumption No. 1, which I read a moment ago?

A. As long as it was economically possible.

. . . . . .

[fol. 4791] Q. Do you understand my question?

A. Yes, I feel that I do. In other words, you want to know if I based that schedule on the application of the same percentages that we used in the year 1941 down through the years.

The answer is no, because it is not economical to do so. We did that as far as we could to give every lease owner, [fol. 4792] every producer as near the same benefit from their contract as possible, but only to the point where it did not cost Panhandle Eastern too much money to do so.

Q. How far through the years did you apply the percentages which are shown on page 5 of your written testimony?

A. Down to 1944. That is, they are approximate, they are within one per cent.

Q. In other words, if I understand you correctly, you apportioned the take as between the Panhandle field and the Hugoton field in almost the exact ratio as in the past for 1941, 1942, 1943, and 1944?

A. No, I said until 1944, but it, perhaps, might be well to go on from there. In the year 1944, in order to meet our peak requirement at Liberal, it was necessary to make further developments in the Hugoton field. In order to develop our leases in the Hugoton field to the point where we would be able to meet our peak requirement, it was necessary that we take slightly more gas from the Hugoton field for the year 1944, but as the load increased in 1945 we, again, went back to about the same percentage and that continued through the year 1945.

Q. Well, then, 1944 is an exception?

A. It was caused by having to develop to meet our anticipated peak load requirement at Liberal, inasmuch as [fol. 4793] we had to drill these extra wells, build the extra pipe line, why, we had to give these landowners somewhere about the same pull as we had been giving the others.

In 1944 our annual load from the Hugoton field was 22,568,683,000 cubic feet. From Texas we took 55 billion cubic feet. Our load increased—

Q. Are you speaking of the year 1942?

A. 1944 to explain—pardon me.

Q. I think you read a wrong figure.

A. I did, that should be 54 billion, instead of 55 billion.

Q. What was the figure for the Hugoton field?

A. I read the 1944 figure instead of the 1943 figure there.

In order to straighten this up and show what happened, perhaps it would be well to show what was taken for the year 1943 from each field.

Q. I think that would be a good idea.

A. The amount being 54 billion cubic feet from the Panhandle field of Texas, 19,051,408,000 cubic feet from the Hugoton field, making a total of 73,051,408,000 cubic feet. But in order to meet the anticipated peak load daily load for 1944, it was necessary to make some additional development in the Hugoton field and the total load increased to 77,568,683,000 cubic feet, and the increase from [fol. 4794] the Panhandle field of Texas was only one billion feet, so that changed the percentage up to 29.10, which was out of line from the split between the fields that we had been using.

Does that explain it all right, Mr. Littman?

Q. Yes, that explains the exception for the year 1944. Then, thereafter, did you go back to the same percentage of taking from the two fields?

A. To the year 1945 we did. At that time we had reached what we felt would be the maximum amount of gas that we could take from the Panhandle field of Texas with a reasonable investment. From the year 1945 on the load increases coming from the Hugoton field and that changes the percentage to a point where a greater per cent comes from the Hugoton field than had been taken from it in the years 1941 through 1945.

Q. What governs or fixes the take from the Panhandle field from 1946, and thereafter?

A. The capacity of the system and the ability of the wells to deliver gas at economic pressures.

Q. Both? A. Both.

Q. At the same time?

A. Yes. If we had a different system, it would probably be economical to produce wells at lower pressures, but it would not be a sound investment to install that type [fol. 4795] of system.

Q. Are you speaking now of the present system?

A. No, I am not. I am speaking of the system which has been revised or looped and is included in the capital expenditures shown in Schedule 2 of Exhibit 43.

Q. That is for the anticipated increased load?

A. Yes, sir.

Q. Then, is my understanding correct that Schedule 5 of Exhibit 43 is referable wholly to the anticipated future load?

A. I am sorry, I didn't get one word there. Is what?

Q. Is referable wholly to the anticipated increased load? A. Yes, that is right.

Q. This schedule No. 5, to which I just referred, could not be used in connection with the basic load, so-called?

A. No, sir.

. . . . . .

[fol. 4800] Q. Your exhibits do not show the figures for the Hugoton Field which are comparable to those shown in Schedule 5 for the Panhandle Field which, of course, is for the anticipated future load?

A. That is correct.

Q. I would like to have you read into the record the comparable figures, Mr. Hinton, in the same detail as shown in Schedule 5 of Exhibit 42.

A. How do you want that, Mr. Littman? Do you want me to read those in, mention the year first and then the amount?

Q. I think, perhaps, the reporter might make a tabu-[fol. 4801] lation on one of the pages similar to that shown in Schedule 5 and then you could read across, that is, having one column "Period" and in the second column "The Panhandle Eastern Wells" and in the third column "Gas Purchased Wells".

Perhaps it might save time, Mr. Hinton, if you could furnish us with an exhibit showing the figures which I just requested and, also, showing the data for both fields under the basic load.

A. In other words, you just want the total that we expect to take from both fields, that is, the amount from each field under both the basic load and the anticipated load?

Q. Yes.

A. And that is not to be split between company wells and gas purchased wells?

Q. I would like to have it split as between the company wells and gas purchased wells, showing the same detail as you show here in Schedule 5.

A. That is going to be rather difficult to work out in the Hugoton field, because while we have it established in Kansas, we are not too familiar with what size well we are going to get either in Texas County, Oklahoma, or Sherman County, Hansford, and that will change the proportion between the produced gas, that is, the gas produced by Panhandle Eastern, and that purchased by Panhandle Eastern.

Do you understand what I mean?

[fol. 4802] The value of the well governs the division between purchased and produced gas.

Trial Examiner: In other words, you don't feel confident in estimates that you can make now based on advance history?

The Witness: Well, not down and through 1951, because there has been so little drilling down there, and especially in the Hansford County acreage. I could make one, but it would be a pure estimate.

. . . . . .

[fol. 4803] By Mr. Littman:

Q. What factors governed the determination of the total withdrawals for each of the years 1941 to 1956 shown in Schedule 5 of Exhibit 43?

A. Acreage and potential. That is, the proration formula which is used in the Panhandle Field, Texas, governed the division of the loads shown on Schedule 5, Exhibit 43.

Q. Mr. Hinton, my question had reference to the total take from the Panhandle Field, which consists of the total of Columns B and C.

A. What governed the total?

[fol. 4804] Q. Yes, what factors governed your determination of the total withdrawals for each of the years shown in Schedule 5?

A. The division between the two fields of the total load based on the same division as was effective for 1941, with the exception of the year 1944, which was curtailed to some extent over what it might have been were it not for the fact that it was necessary to develop Hugoton Field to a greater extent in order to meet the peak day requirement in the Liberal station.

Q. Is my understanding correct, that you took the total requirement from both fields and simply applied a percentage for each of the years to secure the total take from the Panhandle Field except for the year 1944?

A. A near percentage, I would say, because we kept the take from the Panhandle Field in round numbers, and in order to do that, why, it fluctuated the percentage to a certain extent which was less than a total of one percent.

Q. Now, how far down through this schedule does that situation prevail?

A. Down to the year 1946.

Q. But that method was not used, namely, the percentage method, was not used after 1946?

A. That is correct.

[fol. 4805] Q. That is, my statement is correct? A. Yes.

Q. What method was used to arrive at the total take from the Panhandle Field represented by the totals of Columns B and C for the year 1947 down through 1956?

A. Horsepower and pipe line capacity.

Q. In other words, from 1947 down to 1956, you arrived at the total production for the Panhandle Field by assuming that you would take out all of the gas that you could take out with the gathering and transmission facilities on hand?

A. No, I would not say all that it would be possible to take out, because, as that load becomes smaller, in all probability the development of the field will be held back in the Hugoton Field and the amount of gas that will be taken from the Panhandle Field will be taken during the peak load months for two reasons, and that is that it will cost the company less money in the way of capital expenditures and the other is that when the pressure gets down to a lower point, it will not be economical to try to produce a gas well every day out of the year.

Q. Let's take each of the years, Mr. Hinton, and see if we cannot get a better understanding of your method.

Now, what was the total estimated future load for the year 1942?

A. 68,101,459,000 cubic feet.

Q. You mean M. c. f.?

[fol. 4806] A. No, I said 68 billion. If it were M. c. f., it would be 68 million.

Q. I am sorry. Now, would you mind stating your figures in M. c. f. because they are so stated in Schedule 5 and it may be easier to follow?

A. I intended to ask you which way you would rather have me use those.

Q. I think M. c. f. would be much more convenient.

Now, you have determined that out of the 68,101,459 M. c. f. required to be produced to meet Mr. Morton's 1942 load, that you would take 50 million M. c. f. of the Panhandle Field and 18,101,459 M. c. f. from the Hugoton Field. Is that correct? A. That is correct.

Q. Now, what I am seeking to have you explain is, how did you arrive at the 50 million M. c. f. amount which, of course, represents the total of Columns B and C in Schedule 5 of Exhibit 43 for the year 1942?

A. The foundation for those figures for the two fields is based on our acquiring greatest percent of gas in place possible without curtailing production to the extent that we would be doing an injustice to the landowners on which the wells are located.

Q. Are you speaking of the Texas Panhandle Field?

A. I am speaking of both fields.

Q. How did you arrive at the division or apportionment [fol. 4807] of take between the two fields, that is, between the 50 million and the 18 million-odd M. c. f.?

A. By applying the development of our company showing how we would participate in each field in relationship to the total development in each field, and taking all possible from the acreage surrounded by the areas of greatest withdrawal by other companies and without cutting back the Hugoton Field production where the withdrawal is much, much lighter than it is in the Texas Field.

Q. Is the method by which you arrive at the apportionment of take as between these two fields shown in your working papers, Mr. Hinton?

A. No, sir, I do not believe it is. I mean, it would be very difficult to put this on paper. It is something that you just learn by being in contact with the two fields and knowing about what the rate of withdrawal is per acre from the areas in which the wells are located.

Q. Well, is it simply a judgment figure?

A. To some extent, it is a judgment figure, but it is influenced by what is actually happening.

Q. Is there any mathematical computation behind the apportionment?

A. To some extent, yes.

Q. To what extent?

A. To the extent that it is necessary to find out what [fol. 4808] the per acre withdrawal is around the different wells owned by the company and trying to keep the withdrawal in proportion to what is happening around our leases as nearly as possible without cutting back the production from the landowners to a point where the company feels that it would not be fair.

Q. What was there to prevent you from concluding that you could have taken 40 million M. c. f. from the Panhandle Field in 1942, rather than 50 million in 1942?

A. Because 40 million from the Panhandle would not come in nearly protecting our reserve in the Panhandle as the 50 million will.

Q. What was there to prevent you from withdrawing 60 million from the Panhandle Field for the year 1942?

A. The fact that it is necessary to have sufficient development in the Hugoton Field to meet our four-months' winter requirements, and supply our peak day and if we had that development in the Hugoton Field, then it is necessary that we take some gas from each of those wells all through the year, and in order to give the landowners a fair share of the production, it was necessary to take that amount of gas from the Hugoton Field.

In other words, if we would take 60 million M. c. f. from the Panhandle Field, that would mean that we would only be taking approximately 8 million from 137 wells in the Hugoton Field, which would not be proportionate with [fol. 4809] the take of the wells surrounding our leases in that field.

Q. What was there to prevent you from taking 52 million M. c. f. from the Panhandle Field in 1942, rather than precisely 50 million?

A. Fifty million is a round figure, and if we would have taken 52 million based on our anticipation of market requirements for the year, it would mean that we would not be protecting our Kansas reserve inasmuch as the

withdrawal from the Hugoton Field will increase for that year.

Q. Well, in other words, if you had done what I suggested and had taken 52 million M. c. f. from the Panhandle Field in 1942, you would have had to take 16 million M. c. f. from the Hugoton Field and do you suggest that that could not be done?

A. That could be done, Mr. Littman, but I do not think it would be as good a business as it is to take it as the way we have it down here.

Now, you will remember that we have developed Oklahoma gas from 1941 to 1942 and the amount of gas that we are going to take from the same area of Hugoton Field will be approximately the same, but the increase in that amount comes from Texas County, Oklahoma, of the Hugoton Field.

Q. Now, under the basic load, your working papers show that 16 million M. c. f. would be taken from the Hugoton Field, is that correct?

[fol. 4810] A. That is correct, which means that we would not be able to protect our reserves and meet the withdrawal of the field and by not meeting the withdrawal, not taking approximately the same proportion from our acreage as is being taken from others, it means that our reserves would be diminished without our being able to get full benefit from them.

Q. You manage to do that under the basic load, do you not?

A. No, we do not, and under the basic load, the total recovery from our reserves would be much, much less than it will be by increasing our market.

Q. Now, was the method used for the year 1943 with respect to determining the total takes as between the two fields the same as that which you have described for the year 1942?

A. Hardly. It wasn't exactly the same. In other words, we will not take quite as much per acre from the Hugoton Field in 1943 as we have here for 1942.

Q. Why?

A. Due to the fact that we have a load increase that will have to be met from the Oklahoma acreage, and in order to supply the increase from the Oklahoma acreage, it is neces-

sary to drill more wells and by the amount of acreage which we will have by drilling from 1942 to 1943, it will [fol. 4811] mean that we will be taking somewhat less per acre in the Hugoton Field in 1943 than we did in 1942.

Q. This is kind of a trial and error method, is it not, Mr. Hinton? I am earnestly endeavoring to ascertain what you did.

A. Yes, I would say that it was more trial than error though, because when we get the answer, we do not feel we have the error left.

Q. I was not implying there was an error, necessarily, in your method. I was merely using a term that is used to express a cut and try method.

A. Yes, using an engineering term, of cut and fill.

Q. That is the type of method that you have used?

A. Yes, sir.

Q. And I presume that is the type of method you feel must be necessarily used?

A. It has to be watched down through the years. It is not possible to make a forecast this many years in advance and say that this is going to be exactly the right figure, because the withdrawal could change from the two fields very decidedly, and, of course, then we would not be protecting our reserve exactly as we would like to by using the same set of figures, but it is as good as I believe anyone could make at the present time.

Q. In other words, circumstances may arise which would [fol. 4812] substantially alter the proportion of take as between the two fields?

A. That is true. For instance, if the carbon black industry was moved to the Hugoton Field from the Texas Field, why, then I would say that we would probably have to take the volumes that we have set for the Panhandle Field down here from the Hugoton Field, and the volume we have set for the Hugoton Field from the Panhandle Field.

Q. Now, you have given us a description of the method used in 1944 for the purpose of arriving at the total amount to be taken from the Panhandle Field and the total amount to be taken from the Hugoton Field, have you not?

A. Yes, sir.

Q. Or did you want to elaborate on that?

A. Well, I am willing to go ahead and explain if there is anything that is not clear about it. I will be glad to answer the question.

Q. Is the method used in 1945 the same that was used in 1943 for the purpose of determining the take as between the two fields?

A. Yes, with this exception, that by the time we reach 1945, our withdrawal per acre from the Panhandle Field will be increased, but we feel justified in increasing that, due to the fact that we would have never, with the exception of possibly the past year, been able to protect our re- [fol. 4813] serve in the Panhandle Field in proper order, due to the fact that we did not have the market.

Q. In other words, it is advantageous, you feel, to take it out of the Panhandle Field as quickly as possible?

A. That is the economical way to get the gas from the Panhandle Field.

Q. Would you explain why it is best to do that from an economical standpoint?

A. The pressure decline in the Panhandle Field is becoming more pronounced each year, and the 60 billion feet of gas that we could get in 1946 will cost us less than that 60 billion that we get in 1948, due to the fact that we will have to have more wells on the line; we will have to probably have several individual compressors on the various wells.

Our ratio of compression will be different at the Sneed Station; more fuel will be required; more engine hours will be required to get that same amount of gas into and through the Sneed Station as the pressure declines in the field.

Q. What about drainage?

A. As long as we are taking at a rate that is comparable with the other producers in the area in which we operate, why, we are not going to suffer a great deal of drainage.

However, if we could take, say, if we had a reserve there of a trillion feet and if we could take that trillion feet all within the next ten years, it would be worth much more [fol. 4814] to us than if we have to take it over a period of 15 years.

In other words, if we were assigned a certain amount of gas, the shortest possible time that we could take that amount of gas out, why, the less it will cost us.

Q. I take it then, that one of the controlling considerations in the preparation of this Schedule 5 and this estimate is the element which you mentioned a moment ago, namely, that you are endeavoring to get this gas out of the Panhandle Field as quickly as possible, having in mind the market?

A. We are trying to take so that we do not lose any more of the reserve which we originally had in the Panhandle Field.

. . . . . .

Q. Now, you have just completed your explanation of the method used for the year 1945, have you?

A. I believe that would apply pretty well to any year, Mr. Littman.

Q. Was the method that you used in 1946 to determine the 60 million M. c. f. withdrawal from the Panhandle Field any different from the methods used in the previous year?

A. Yes, to this extent, that in 1946 we anticipate a load which makes it necessary that we take a greater amount of gas from the field.

[fol. 4815] In other words, the percentage changes from between 26 and 27 percent to almost 35 percent from the Hugoton Field.

Q. Why?

A. Because at that time we will be taking a total amount of gas of 92,034,276 M. c. f. estimated, and we do not feel that we can economically develop in the Panhandle Field to take annual loads greater than 60 million feet and, for that reason, instead of going ahead and spending many thousands of dollars which would be necessary to take amounts in excess of 60 million feet, we are then changing our development up to the newer area in the Hugoton Field where we feel that we will get an ultimate recovery of much more gas for the same capital expenditure.

Q. Sixty million M. c. f. withdrawal from the Panhandle Field which is first reached in 1945 and continues

through 1948 is the largest withdrawal of any shown in your Schedule 5, is that correct? [—].

[A]. Do you use any different method in 1947 to determine the 60 million M. c. f. take from the Panhandle Field?

A. We feel that is all that our development will carry and at that time, as in 1946, we are working in an area of declining pressures and it would not, we feel, or I feel, be a good investment to go in there and put in additional horsepower in large number and larger pipe lines in order to get what extra amount that we could get over the 60 million M. c. f.

[fol. 4816] Q. What method did you use in 1948?

A. In 1948, the same.

Q. Now, looking at 1949, the total take from the Panhandle Field by Panhandle Eastern drops from 60 million M. c. f. to 55 million M. c. f.

How did you arrive at that figure?

A. The pipe line capacity, ratio of compression, the deliverability of the wells.

Q. You could not get any more gas out in that year?

A. That is a round figure and that can fluctuate either way. I feel it is very close to correct, but I do not mean to say that it will be exactly 55 million M. c. f.

Q. Now, does the method used for the year 1949 apply for the remaining years through 1956 shown in Schedule 5 of Exhibit 43?

A. Yes, it does.

Q. Mr. Hinton, a few moments ago, you made reference to production per acre. Do you have a certain standard production per acre that you seek to derive from the acreage in the Panhandle Field and from the Hugoton Field?

A. I do not believe I would call it a standard. It is that withdrawal per acre that is set by the total withdrawal from the entire field.

Did I make myself clear? In other words, if we had a [fol. 4817] thousand acres in a field and the take was 5 million a year from that field, see, that would mean that there would be 500 M. c. f. per acre, I believe, withdrawal and that is the way we take the entire field, find out what the total withdrawal from the entire field is and especially

around close to the areas in which we operate, and try to regulate our withdrawal so that we will suffer the least amount of migration of gas to outlying leases.

Q. You have named all of the factors that govern the determination of the total withdrawals as between the two fields, have you?

A. All I can think of, Mr. Littman. I believe they have all been covered.

Q. Now, referring back to your Principle 1 which appears at the bottom of Page 4 of your written testimony in which you state:

"Panhandle Eastern will, so long as economically advisable, continue to apportion its takes between the Panhandle Field and the Hugoton Field approximately on the present basis."

Isn't it apparent, Mr. Hinton, that that so-called principle or assumption did not have very much to do with the working out of your Schedule No. 5?

A. I would say that it had a great deal to do with it; on the contrary. If it were not for the fact we were trying to carry on the present practice, we would immediately [fol. 4818] have jumped up our withdrawal from the Panhandle Field by maybe 10 to 15 billion a year over what we have it here.

In other words, we would have paid no attention to the protection of the reserve in the Hugoton Field and the treatment of the landowners. We would immediately have gone down there to try to get the 40 or 50 billion feet of gas at a higher pressure which would have come at a less cost to the company, so I feel we have stuck to that very closely, and that it is governed by economics entirely.

* * * * * * * * *

Q. When did the economics cause the apportionment of take as between the Panhandle Field and the Hugoton Field to change from the approximately present basis?

A. I would say, the year 1946.

Q. And thereafter?

A. And thereafter.

Q. So that you have only four full years wherein the apportionment of take as between the Panhandle Field

[fol. 4819] and the Hugoton Field is approximately on the present basis? A. As long as economically possible.

Q. Before I go to your second assumption, what is the present annual capacity of the main line from Sneed compressor station to Liberal station?

A. On the basis under which we have to operate with a load factor such as we have, it is now approximately 45 million M. c. f.

Q. And what is the maximum daily capacity?

A. We have recently reached 165 million of 8-ounce gas, that is 14.73 gas.

Mr. Culton: Roughly, what would that be on 16.4 divided by about 110?

The Witness: It would be about 149.

By Mr. Littman:

Q. What additional capacity will be provided on this main line running from Sneed compressor station to Liberal station by the capital additions which you estimate will be required under the future load?

A. There will be the installation of two 1300 horsepower units at Sneed making a total additional horsepower of 2600 horsepower; there will be two 650 units installed at the Hansford station, making a total addition of 1300 horsepower to that station; the line from the present Hansford station south will be looped with 22-inch [fol. 4820] pipe, a distance of about 32 miles; the present pipe line from Liberal station south will be looped for a distance of about 35 miles with 26-inch pipe.

The section of pipe from the intake side of Sneed station down to Windmill Junction, that is a point where the present 18 and 20 join into a single 20-inch line will be looped with 26-inch line a distance of 2.7 miles from Windmill Junction southwest to what is known as Zofness station.

That strip of present pipe line which is 20 inches in diameter will be looped with 22-inch pipe a distance of, as I remember, 8 miles and from Zofness station west, the present 12-inch line will be looped with 20-inch line and the present 16-inch line will be looped with 16-inch line.

Q. Now, what additional capacity will be provided on the line running from Sneed compressor station to Liberal

compressor station by reason of these capital additions which you mentioned?

A. I believe that is 220—I cannot find it right now. I have been working on several problems lately trying to get different volumes in there using the least amount of steel, and I have been changing these things around until that figure has slipped my mind, but I believe it is 220 million.

Q. 220,000 M.c.f. maximum daily capacity?

A. That is right.

Mr. Culton: Is that into Liberal or out of Sneed or both?

[fol. 4821] The Witness: It is into Liberal, out of Sneed.

By Mr. Littman:

Q. And what is the additional capacity which will be provided for that line by capital additions under the basic load?

A. Under the basic load, we can get by there for some time with the addition of extra horsepower, and I do not remember whether the pipe line enters into the 5½ year period or not.

It will eventually have to come to take care of the amount of gas we want from there.

Q. The capital additions are shown in your Exhibit 42 under the basic load from Pages 21 to 26?

A. Yes, that does have to occur under the basic load.

Q. You mean, you expect to loop the line between Sneed compressor and Liberal compressor stations?

A. We expect to loop from Liberal to Hansford, but not from Hansford to Sneed. The reason of the other loop is to pick up the Oklahoma gas in the future and at the same time utilize part of that capacity to be able to come into Liberal station at a more desirable intake pressure.

Q. Now, what will be the additional capacity provided by the capital expenditures under the basic load for this line as between Liberal station and Sneed station?

A. If the horsepower was put in at the present time [fol. 4822] and provided our dehydrating unit at Sneed works as it looks like it is going to and our condensate

separator works, it will be approximately 15 million per day.

. . . . . .

Q. In other words, the present capacity of 165,000 M.c.f. would be increased to 180,000 M.c.f.?

A. That is correct.

Q. Under the basic load expenditures?

A. That is right.

Q. And to 220,000 M.c.f. per day under the anticipated load expenditures?

A. That is right.

Q. Now, your second Principle or assumption reads as follows:

"It will continue to apportion its production between its own leaseholds and its gas purchase contract acreage on the basis now existing."

Is that correct?

A. That is correct.

Q. Who fixes the amount of gas to be produced from each company well?

A. I do.

Q. That is left very largely to your discretion?

A. Almost entirely.

[fol. 4823] Q. Who fixes the amount of gas to be produced from each gas purchase contract? A. I do.

Q. And that, of course, is left to your discretion very largely?

A. It is all based on the value of the well and the proration formula in the field and this is based on the fact that we assume that the same proration formula will continue in both fields as at the present.

Q. You used the term "based on the value at the well"?

A. Of the well.

Q. Value of the well?

A. That is right, the number of acres contained in the lease on which the well is drilled and the open flow of that well and, in Kansas, the pressure of the well.

Mr. Culton: You did not refer to dollar value then?

The Witness: No.

Mr. Culton: Gas value?

The Witness: Yes, gas value.

By Mr. Littman:

Q. That is the proration formula, is it not?

A. That is right. That is what this pertains to.

Q. The allocation is 50 percent to acreage and 50 per cent to open flow potentials?

A. In the Panhandle Field.

[fol. 4824] Q. In the Panhandle Field. Now, what is the proration formula used in the Hugoton Field?

A. The last order in the Hugoton Field was a division of the total production and the apportionment was on the basis of 80 percent of the total production being divided as governed by the well head pressure on each lease, the number of acres on each lease.

That is, the well head pressure times the number of acres contained in the lease was the basis for the division of 80 percent of the total production.

The other 20 percent was divided on the basis of a 20-minute pitot tube open flow test.

However, the 1938 order was the same with the exception that the division of the total production was 75 per cent and 25 percent and we have continued to prorate on that basis and will continue to do so until some further order comes up, because the last order has never been effective and by changing from one method to another, it is a very considerable task and if the present order does become effective and we operate under it, then our field will not be badly out of balance and we can get our wells in a proratable standing and adjustment whenever that occurs.

Q. You said a minute ago you were going to operate under the—what method?

A. The reason I gave both of them was that I could not [fol. 4825] say that we operate under the present Kansas proration order.

I explained what that was and then I explained that we are operating under 75 percent of our total production being allocated on the basis of pressure times acreage and 25 percent to a 20-minute pitot tube open flow test.

Q. Do vendors have the right to put compressors on their own wells and produce gas in excess of the present proportion?

A. No, sir. We tell them how much gas they are to put into our line and they are at liberty to put compressors on their line, but still the amount of gas that they put into our system is governed entirely by their participation in the total system.

Q. Is the allocation in the Panhandle Field prescribed by law?

A. No, sir, that is an outgrowth of the old proration order that was once in effect in the sweet field, sweet Panhandle Field, but I would have to get a lawyer to say what case that it was ruled out but it is no longer effective.

There is a sour gas proration order but no sweet gas proration order. This 50-50 is the old sweet proration order.

Q. There is nothing to prevent you—

A. (Interposing) I would not say, without a lawyer.

Mr. Culton: I think it is appropriate for me to say their contracts provide they take on the same ratable basis they [fol. 4826] take from their own wells. Those contracts are not in evidence, but it is a matter of fact.

Their contracts provide that Panhandle Eastern take from these other parties on the same proratable basis as they take from their own wells.

By Mr. Littman:

Q. Of course, there is no limitation with respect to increasing your take from both your own wells and the gas purchase wells in a given field, is there?

A. Do you mean by "given field" one that is not operated under a valid proration order?

Q. I mean the Panhandle Field.

A. The Panhandle Field?

Q. Yes.

A. That is correct. The take could be increased or decreased. It is governed by good judgment, we hope, our rate of withdrawal.

Q. What would you say as to the Hugoton Field?

A. At the present time, I do not think that I would want to spend too much money as an independent operator

in the Hugoton Field, because they are getting to the point in this proration case where there is going to be some decision made and if it is necessary to operate in the Hugoton Field under the present order, then it will be entirely up to others as to how much gas can be taken from the Hugoton Field.

[fol. 4827] Q. Now, what would be the effect upon the total amount of gas recovered by Panhandle Eastern if Panhandle Eastern would draw more heavily upon its own wells?

A. I am sorry, I do not believe I get that question.

Q. What would be the ultimate effect upon the amount of gas eventually recovered by Panhandle Eastern if the company were to draw more heavily than it now does upon its own wells?

A. I would say that there would be a breach of contract there. That is, our contracts with our purchase companies all have ratable take clauses, and it would be impossible to do that without breaking the contract.

Q. Let me put that same question to you, assuming that Panhandle Eastern were to increase its take equally and ratably as between its gas vendors and its own wells but stepped the entire production up.

What effect would that eventually have upon its own production?

A. It would mean that we would, in all probability, get the benefit of some gas migration.

Q. It would have the effect, would it not, of draining the areas of others?

A. What others?

Q. Other leaseholds owned by others?

A. Yes, but when you say "others," you are taking in [fol. 4828] a great deal of territory, because you might not be draining the adjoining lease at all. The formation might be such that there would be compensated drainage clear back to a point in the field where there had been no development to date.

Q. It would have the effect, would it not, of increasing the total amount of recovery eventually by Panhandle Eastern?

A. Yes, it would.

Q. And that is one of the advantages in taking it out faster, is it not?

A. It would be an advantage if we were trying to take advantage of that, but we have the name of fair operators in both of those fields and we intend to keep that name, and for that reason we are developing in such manner as to avoid a rate of withdrawal which would be termed as exorbitant by other operators in the field, and that is one element that enters in the development system of our company.

Q. Mr. Hinton, your third assumption appears on Page 6, and reads as follows:

"Additional wells in Panhandle Eastern's reserves in the Panhandle Field will be drilled on only its own leases."

In your discussion of that assumption, you point out that there are 15 locations on the leaseholds in the Panhandle Field belonging to Panhandle Eastern Pipe Line Company, do you not?

[fol. 4829] A. That is right.

Q. Aren't those 15 wells set forth in your statement of capital expenditures to be made under both the basic and anticipated loads?

A. Yes, sir. Going back to 3 there, I just wondered if you noted the exception of the one location that there may be an additional purchase well or an additional well drilled on acreage under a gas purchase contract?

Q. Yes, I noted that. I was confining my question to the 15 locations on the leaseholds in the Panhandle Field owned by Panhandle Eastern.

Now, those 15 wells are going to be drilled under both the basic and the anticipated load theories, is that right?

A. That is correct.

Q. Which leads me to believe, and I want you to tell me whether I am correct or not, that the reason for drilling these wells is primarily because of the obligations of existing lease contracts?

A. Well, I do not know whether we would say obligations or not, I would say, under the terms of the present lease, we are not obligated to drill under all of those, and I am not sure whether we are obligated to drill on any or not.

We could let those leases expire, but if we wanted to keep them as part of our reserve and be assured that we could continue to have them, it will be necessary to drill [fol. 4830] them, because somebody might come in there and offer $25 or $50 an acre for those same leases and renew them or top-lease our present lease.

Q. The point I am making is simply this, Mr. Hinton, in so far as the basic load is concerned, it would not be necessary to drill these 15 wells to provide sufficient gas?

A. No, it would be economical to drill them, though.

Q. It would be advisable to drill them?

A. It would be economical to drill them, as well as advisable.

Q. But not because of the immediate requirement of gas?

A. No, that is right, but in order to avoid paying a renewal cost and also in order to get the benefit of those wells as a participating element in the total market from the Panhandle Field, it will be cutting back the amount of gas which we buy and making a total over-all saving to Panhandle Eastern which was taken into consideration, as well as the lease term.

Q. Well, Mr. Hinton, the last sentence in the first paragraph of Page 6 was the one that I was trying to have clarified. You say:

"The time for drilling these wells will be determined by the demands for additional gas and the obligations of existing lease contracts."

[fol. 4831] Now, in so far as the basic load is concerned, the time for drilling these 15 wells will be determined—

A. (Interposing) By the terms of the lease.

Q. By the terms of the lease, is that right?

A. Yes.

[fol. 4835] C. H. Hinton a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Hinton, does Panhandle Eastern expect to secure additional acreage in the Panhandle Field?

A. No.

Q. Why?

A. That is practically an impossibility.

Q. Why?

A. Because there is no acreage left to secure that lies within the area in which we operate and which would be economical to develop and connect to our present system.

Q. Have you made a full and thorough investigation of that?

A. Yes, sir.

Q. Does Panhandle Eastern expect to secure additional supplies of gas from vendors in the Panhandle Field?

A. I do not think so.

Q. Why?

A. Because if we did secure additional gas there, it would mean that we would take less gas from the acreage which we have under lease and which would not permit our recovering the amount of gas which we should re- [fol. 4836] cover from our own acreage and that which is now under gas purchase contract.

Q. I am afraid I do not understand your answer, Mr. Hinton.

A. It again goes back to the rate of withdrawal per acre from the Panhandle Field in order that we would be able to withdraw from our own acreage and that which is now under gas purchase contract the amounts of gas which would insure that we are protecting our reserve.

If we took on the additional acreage, it would mean that the rate of withdrawal per acre would be curtailed to the extent that we would not be able to get the amount of gas that we should from our present acreage.

Q. Why?

A. Because we would be taking less gas per acre each year by the addition of more wells.

Q. I am afraid I still do not understand your answer.

A. Perhaps I should give you an example.

Q. Very well.

A. We will assume that our rate of withdrawal per acre from wells connected to our system at the present time is 500 M. c. f. per year.

Q. Now, you are speaking of both the company-owned wells and vendors' wells?

A. That is right.

[fol. 4837-4847] We will assume that we connect 20 additional wells. The amount of gas which we would take per acre would be reduced in the proportion that the 20 additional wells would participate in the total market or the total withdrawal by Panhandle Eastern and by declining that rate of withdrawal, it would place us in the position that we would not be able to take as much gas from the reserve which we have at the present time as we will without the connection of additional wells.

Q. Do you mean that these 20 additional wells would drain your present acreage?

A. No.

Q. Is that what you mean?

A. No. You just have to take into consideration the total withdrawal by everyone from the Panhandle Field and if we at this time would connect additional wells, it would mean that we would retard the amount of gas that we take from each of the present wells, and we feel that we have about the proper development there for the system which we feel it would be economical to develop to take the production from the Panhandle Field.

Trial Examiner: May I ask if there is some understanding between the competitive companies that in any way affects the statement you have made?

The Witness: There is none. It would be better, perhaps, if there were.

[fol. 4848] Mr. Lee: May I ask a question there?

Would that addition you have referred to, would that situation operate to preclude Panhandle from obtaining additional wells in the field if they were available?

The Witness: No. When you say, "preclude," I do not know exactly what the interpretation of that would be.

Mr. Lee: You told Mr. Littman that there were no more gas leases, as I understood it, or purchases of wells available in the Panhandle Field.

The Witness: That are not under lease.

Mr. Lee: Would the condition that you have just described prelude Panhandle from taking on additional leases if the opportunity were afforded in that field?

The Witness: It would, in this respect, Mr. Lee. The amount of gas that has been withdrawn from that field to date and the field performance indicate that the remaining length of life of that field does not extend over a great number of years, and in order to add these additional wells and maintain our rate of withdrawal per acre, it would mean that we would have to spend many thousands of dollars to increase the capacity of our pipe line system from both the gathering standpoint and the trunk gathering line from Sneed into Liberal, Kansas, and it is debatable whether that would be a wise expenditure, taking into consideration the status of the Panhandle Field at this time.

[fol. 4849] By Mr. Littman:

Q. Do I understand you to mean that if a gas vendor had a number of wells, let us say, some reasonable distance from your acreage so as to exclude the question of drainage, and wanted to sell gas to your company, let us say in the amount of 5 million M. c. f. per year, that you would not be interested in buying that gas?

A. I do not think we would unless the picture would take a radical change from the future that we have in mind. When I say "we," I mean the company.

Q. Suppose it were 10 million instead of 5 million M. c. f. Would that change the picture any?

A. No, because with our present projected estimated market, we have laid out a development program which is believed to be the most economical from the standpoint of the production of gas by this company.

Q. Well, you mean that you are more or less wedded to a definite program which you have submitted in your Exhibit 42 of capital expenditures and withdrawals, is that right?

A. No, I would not say that we were wedded to any definite program, except that program which is backed by figures that show it is sound economics to develop as we have laid out our plan.

Mr. Goodman: May I ask a question at this point?

Mr. Littman: Certainly.

[fol. 4850] By Mr. Goodman:

Q. You have developed a plan for what you regard as the most economical exploitation of the field in view of your markets, is that right?

A. As nearly as possible.

Q. And if you acquired more acreage, that would be a substantial deviation from that plan?

A. Do you mean more acreage in the Panhandle Field of Texas?

Q. In the Panhandle Field.

A. That would.

Q. And it would effect a less economical exploitation of the field?

A. It would mean more capital expenditure and it would mean less recovery.

Q. I understand. The total result, in your judgment, would be that the acquisition of more acreage in the Panhandle Field would result in a less economical exploitation of the field in comparison with the plan that you have now?

A. There is only one way that I would qualify that, and that would be that if our company would be able to have at this time, without spending a great deal of money, an additional 50,000 acres in the Panhandle Field, then I would say it would probably justify our rearranging our system.

[fol. 4851] Q. Yes. In other words, it would depend upon the costs involved in modifying your present plan?

A. That is right.

Q. And the results that could be secured?

A. Weighed against the development in the Hugoton Field.

Q. Yes, I follow you.

Now, Mr. Hinton, how long has that plan to which you have just referred been in existence?

A. In a vague sort of form, for the past several years.

Q. Well, have computations been made concerning the ultimate economy of that plan?

A. There have.

Q. And where do those computations appear?

A. I am not sure that they have been filed away carefully. They might be difficult to find, but they have been made and they have been studied and then probably laid aside.

The management has gotten the general idea in mind and they were never carried further into detail.

Q. You have a fundamental plan for the exploitation of the Panhandle Field showing the costs of that exploitation and the results which may be secured, haven't you?

A. You mean outside of the study here? (Indicating)

Q. Well, you answer.

[fol. 4852] A. Not a detailed study showing dollars and cents all the way along. It is one of those things that in the gas business the general idea is obtained by making various sets of figures.

It is presented to the management and when it is felt that the management has the problem in mind, then it is not pursued further into detail.

Q. But you have some approximation of unit costs of exploiting that field, haven't you?

A. Yes, if we did not—

Q. (Interposing) You would not know where you were?

A. That is right.

Q. You would not have the basis of material to determine whether it would pay to take on additional acreage?

A. That is right.

Q. In other words, that involves some idea of what you will spend to exploit the field entirely, doesn't it?

A. I would say that it does, not in a detailed sort of way, but the key to that problem, Mr. Goodman, is the total amount of gas, what percent of the gas that was originally in place can be recovered by a company.

Q. That is right, that is right.

Now, the cost of recovering it approximately, an approximation of the cost—

A. (Interposing) That is right.

[fol. 4853] Q. (Continuing) No doubt not in the form of the exact itemization of the cost items, but by such

generalities as one customarily uses in projecting plans for a rather remote future, is that right?

A. That is correct.

Q. Do you make those studies?

A. I make probably the most of them.

Q. And who passes upon them?

A. When I get something in mind that I feel should be called to the attention of the management, I take it to my immediate superior first.

Q. Who is he?

A. Mr. H. W. Pope.

Q. Mr. Pope.

A. And he will usually call Mr. Neuner and then there will probably be four or five of the department heads go over the problem and see whether it is sound or not. The idea—

Q. (Interposing) Just a minute. As a matter of fact, the fundamental project for the exploitation of the Panhandle Field is something which is Mr. Neuner's responsibility, isn't it?

A. I do not believe that you could say that would be Mr. Neuner's total responsibility.

Q. Well, I do not mean to speak in terms of total, but [fol. 4854] he is the top man on it, isn't he, for all practical purposes?

A. No, that would go to Mr. Creveling before any definite action was taken on a major problem.

Q. Well, I am not referring to definite action, I am referring to that fundamental master plan of the exploitation of the field and the development of the tentative and fairly standard unit costs which you use to guide you and as generally used by the management as a rule of thumb in determining whether it would be advisable to take on more acreage or as being basic to your immediate reaction that it would not, for example.

A. It is most certainly true that Mr. Neuner would have to have the plan well in mind.

Q. Yes, perhaps better in mind than you would, is that right?

A. Well, looking at the over-all picture, certainly. Looking at the production end of it, probably not as well, because he would not have time to go into the detail that I would have on that problem.

Q. Now, what written form do these studies take?

A. There are very few studies that are prepared that are made in final written form. Most of the studies—

Mr. Culton: (Interposing) If you have some example, show him one.

Mr. Goodman: Wait a minute. I do not want to be interrupted here.

[fol. 4855] The Witness: Most of the studies are made on 14-column paper with notations along and they are presented in pencil. They are seldom typed.

By Mr. Goodman:

Q. Do you carry, or do your make, a private reference study, that is to say, do you keep a general fundamental study as a matter of your private records for your own guidance in that matter?

A. I have a great many files of figures to which I refer from time to time after they have been prepared, perhaps two or three years.

Q. Well, do you systematize that and keep it together as a matter for your fundamental reference?

A. I hate to answer that question, because that is one of my weaknesses, that is, filing. I oftentimes have difficulty in going back and finding what I want, but since I am under oath here, that is what I have to say.

Q. Now, you say you have developed this in terms of unit costs governing the complete exploitation of the field, is that right?

A. That is right.

Q. And what units do you use? Do you have that in mind or on paper?

A. The units that I use include the royalty cost.

[fol. 4856] Q. The what?

A. The royalty cost. That is the royalty on the gas which is produced from our own leases, the purchase price of gas at the well head, the capital expenditure and the operation.

There are many items which I cannot get until it is possible to have the Accounting Department furnish the

data, that is, on amortization, the depletion of reserves from the standpoint of income tax and, well, you are more familiar with accounting than I am and I will probably miss some of them, but there are many items that are set up on the accounting records which I do not use or do not make myself.

They come from the Accounting Department, and it is seldom that I have the opportunity to compile a complete cost. That is, I base my studies usually on the cost of gas, purchase cost at the well head and weigh that against the capital expenditure required to change the amount which we get from our acreage from each field, and it is the governing cost as far as I am concerned, because the amortization and the depletion is a figure that is going to occur, in my judgment, about the same anyway, and I think those would be the governing factors on the control of a development in the gathering system of our company.

Q. Let me see if I understand you correctly. You take as a standard for the purposes of reference, the purchase [fol. 4857] cost of gas at the well head and then, in determining whether a particular development of a project is advantageous or not, you compare the costs or the unit cost of that which would result from that project if that project were carried through with the purchase cost of gas at the well head, is that your fundamental method?

A. Yes.

Q. And point of reference?

A. Yes, sir.

Q. And what figure do you use for the purchase cost of gas?

A. The purchase price.

Q. What figure is it? Is it one figure or may it be many figures?

A. No, I take the method of proration for that field and find out what different costs participate in the total market. That is, we have 2½ cent gas, we have 3½ cent gas, we have 4, 4½ and 5 cent gas, and in order to determine the cost of gas, why, it is necessary to find out to what extent each price of gas participates in the total market.

Q. I see.

Now then, you find out a standard of reference for purchased gas, and then you prepare a cost study for producing gas under the new project or the contemplated project?

A. Yes. (Indicated by nod of head.)

[fol. 4858] Mr. Wheat: Did you answer the question "yes"?

Mr. Goodman: He answered "yes."

Mr. Wheat: He nodded his head, and I wondered if the reporter got it.

By Mr. Goodman:

Q. And that project is justified or not fundamentally by the relation of those figures, the unit cost on production in comparison with the unit cost of purchase, is that right?

A. Always keeping in mind that the greatest percent of the amount of gas estimated to be in place will be recovered.

Q. I see.

Now, do you have in mind, Mr. Hinton, a substantial development project for the recovery of gas in the Panhandle Field?

A. I would say that it is a medium extensive program.

Q. I mean, do you have in mind a project—

A. (Interposing) You mean a definite—

Q. (Continuing) A definite project.

A. Yes.

Q. What is the name of that project?

A. Well, I do not suppose—

Q. (Interposing) The one you have in mind.

A. (Continuing) I do not suppose that it has this title on paper, but if I were going to make a title for it right now, I would say that it is "The additional requirement [fol. 4859] to the Panhandle Field, Texas, gathering system to secure the greatest ultimate recovery from reserves under lease and under contract at this time."

Q. And that project was reduced to a comparison with the unit cost of purchased gas, is that right?

A. No, because that includes purchased gas all the way through. That includes 53 wells now under gas purchase contract.

Q. I do not think you have quite answered my question.

I first had in mind definitely a project as we were talking about it, in which you would have occasion to compare the relative advantage of the project in comparison with the cost of purchased gas.

A. No, I believe that you have missed the point that I have tried to bring out, and that is this:

That in order to obtain a high percentage recovery from our present reserves, it is necessary that we take the approximate amount of gas which we have laid out or assembled in this study here, that is, Exhibit 43, Schedule 5, and in order to take the amount of gas that we have listed in this Schedule 5 of Exhibit 43, it is necessary to make the additional capital expenditures which have been set out, the reason being that the original line was not designed to carry these volumes of gas and it is not a study weighing between company cost and purchase cost of gas.

[fol. 4860] It is a capital expenditure that is required to take from both company and gas purchase wells amounts of gas which it is believed will give us our greatest ultimate recovery for the economical capital expenditure required.

Mr. Littman: You are now speaking, and have been speaking, of the anticipated load, haven't you?

The Witness: Yes.

By Mr. Goodman:

Q. Put that out of your mind for the moment, and go back to the subject of our previous questions and answers.

We were talking about a method of determining the advantage of a particular project for the recovery of gas, and you mentioned a fundamental basis of reference, the unit cost of purchased gas, and I asked you to—

A. (Interposing) No, Mr. Goodman, I did not say the unit cost of purchased gas alone. It is a combination of the cost of company gas and purchased gas. It is a weighted figure.

In other words, if there is 50 percent of it that is based on the royalty cost and 50 percent on the purchase price, why, it is a combination of those two figures that actually set the cost of that gas at the well head.

Q. All right.

Now, I ask you to have in mind a specific project, exemplified by that mode of calculation. I do not see it in Ex-
[fol. 4861] hibit 43. That is not anything I had in mind.

I had in mind a specific project which exemplified unit cost calculations.

A. And by unit cost, what do you mean that that unit cost should include?

Q. Well, I do not care what it includes. I want a unit cost, not of material, but of the product, namely, of gas.

A. I would say that 43 is a specific problem and the cost of that gas under 43—

Mr. Littman: (Interposing) You mean Exhibit 43?

The Witness: Exhibit 43 in Texas at the present time, that the weighted average will be, as I recall, 1.8549 cents per M. c. f.

Mr. Littman: May I have that figure, please?

(Whereupon, the figure indicated was read by the reporter.)

The Witness: May I check that back?

Mr. Littman: It might be well to do that.

By Mr. Goodman:

Q. That is something that was developed in supplement to Exhibit 43, is that right?

A. That was developed for the 1942 budget.

Q. Now, I had asked you about that before?

A. That is right.

Q. And your counsel had stated that Mr. Burnham would be the—

[fol. 4862] Mr. Culton: (Interposing) That is not so.

Mr. Goodman: What is not so?

Mr. Culton: That I stated Mr. Burnham would testify on that. Mr. Burnham's testimony was related to the Consumers Power Company estimate.

That is what I told you Mr. Burnham would make an estimate on.

Mr. Goodman: Was it agreed that you would then produce Mr. Hinton's figures?

Mr. Culton: You may get any information Mr. Hinton has.

The Witness: That was my understanding, but Mr. Culton spoke up and said we would be glad to furnish that, and I brought the files on the strength of that, to give you that information.

Mr. Goodman: All right.

Just a minute, rather than consume time here by question and answer, I would prefer to see the information first.

Mr. Culton: Any time, sure.

The Witness: Sure.

Mr. Goodman: Is that all right?

Mr. Wheat: First let's get his check on the figure he quoted from memory, so the record will be clear.

Mr. Goodman: Yes.

Mr. Wheat: You were looking for the correct out-of-[fol. 4863] pocket cost figure. Can you give that now?

The Witness: I can tell you one thing, it is within, I would say, 10/10,000's of a cent, but I had better check it.

Well, I find that I do not have that weighted back on this page. Would it be all right if I do that at the lunch hour and give you that figure, or I will give it at recess.

It is a matter of adding these up and dividing.

Mr. Goodman: That is all right.

Mr. Littman: What page of your working papers are you referring to?

The Witness: This is not a working paper. It is the estimated cost of gas at well head, 1942. It is a budget file that Mr. Goodman requested.

Mr. Littman: Those papers and that file were not turned over to the staff of the Commission with your working papers?

The Witness: No, sir.

Mr. Littman: May I see that table for a few moments?

The Witness: Yes. It is not weighted back there, as I thought it was. I usually do that.

. . . . . .

[fol. 4864] The Witness: The figure was 1.8709.

Trial Examiner: Now, so that your answer may be complete, will you state what that figure is?

Mr. Littman: That is 1.8709 cents?

The Witness: Yes, per M.c.f., that figure being the amount of money which is paid for royalty and for the gas purchased.

It is a combination of those two. The figure that I gave from memory was in error, due to the fact that we have increased our royalty rate from 4 cents per M.c.f. to 4½ cents, the past year.

By Mr. Goodman:

Q. Mr. Hinton, you have produced a folder of papers and you have indicated that you intend to present to me [fol. 4865] that folder of papers in compliance with a request of mine. A. Yes, sir.

Q. Now, will you state the request which you consider that that folder complies with?

Mr. Culton: We submit that is highly improper interrogation, Mr. Examiner.

Trial Examiner: I assume what Mr. Goodman is asking for is a definite statement by Mr. Hinton as to what this folder contains. Is that not true?

Mr. Goodman: Well, this folder is presented in compliance with a request.

Now, I want the presentation to have a purport and the witness to state the purport of the presentation, rather than to deal with some generalty.

In other words, I want him to state his understanding of the request which the presentation complies with and the nature of the folder itself.

Mr. Culton: We submit that it is improper interrogation, Mr. Examiner.

The Witness, as the Examiner has suggested, can state exactly what the folder is.

Mr. Goodman: No.

Trial Examiner: The record will show that almost exactly, I think, but I think now that Mr. Hinton should state just what this folder is and we know that this folder [fol. 4866] and its contents have been offered to Mr. Goodman for his examination.

The Witness: This folder, which is titled, "Estimated Cost of Gas at Well Head, 1942", is probably somewhat in error, because——

Mr. Wheat: You mean the title is in error?

The Witness: The title is in error, because that might lead anyone to believe that the cost of gas at the well head included the cost of operation and the amortization of investment and many other things that it does not include.

What this folder does include is the amount of gas which Panhandle Eastern proposes to take from the west sweet Panhandle Field, Texas; the portion of the Hugoton Field located in the State of Kansas and the portion of the Hugoton Field located in Oklahoma.

It shows that the gas will be prorated and the amounts of gas which will be produced from each field and portion of the field and the amount which will be purchased; the unit cost showing that one-eighth of the royalty at 4½ cents and the proportion of the purchased gas which will be purchased at 2½ cents and 3½ cents plus one-eighth of the one-half cent increase in royalty which will be paid to the Shamrock Oil and Gas Company.

I believe that that describes it to the extent that you wish.

[fol. 4867] By Mr. Goodman:

Q. What was the occasion of your assembling those papers and bringing them here?

A. The original purpose of assembling these papers, these calculations, was to furnish Mr. Morton the cost of gas per month for the year 1942, and when I say cost of gas, I mean royalty and purchase price, in order that he could include that figure in his 1942 budget and know the amounts, approximately, that would be required to take care of this cost each month during the year.

The reason that this file was brought here was at your request.

Q. And what request do you refer to?

A. A request that you made during a period of cross-examination of several days ago, at which time you indicated that you would like to know the amount of money that we were paying for gas.

Q. You then say that this is in response to a request of mine to know the amount of money you were paying for gas? A. The bringing of this file here, yes.

Q. Yes, and it is offered for that purpose?

A. That is correct.

Mr. Goodman: All right.

Trial Examiner: May I ask, Mr. Hinton—it may not be necessary when the papers are examined—but I would like to have you state whether this computation involves [fol. 4868] only the cost of gas that is purchased outright, and the cost of gas on which royalty is paid?

The Witness: The royalty cost only, not the cost of gas on which royalty is paid, because it does not—

Trial Examiner: (Interposing) Well, that is true.

The Witness: It is just the royalty cost.

Trial Examiner: It is just the royalty item?

The Witness: Yes, sir, that is correct.

Trial Examiner: It does not include production costs?

The Witness: No other costs.

Trial Examiner: And it does not include data with reference to gas produced on land wholly owned by the company if there are any such areas?

The Witness: You mean, other than just the royalty on that gas? It does not include that.

Mr. Culton: What the Examiner is getting at is, I think, the fact the company does not have fee-owned land. It pays royalty on all—

The Witness: (Interposing) Yes, that is true. I am sorry, I missed your point. We do not own any land or any royalty.

Mr. Culton: Does that include what gas is produced in Local Area?

The Witness: No, this is just for the fields described.

[fol. 4869] Mr. Littman: What fields are those?

The Witness: The Local Area Field.

Trial Examiner: He has named them, Mr. Littman.

The Witness: I described them.

Trial Examiner: The Panhandle, except the sour gas area and the Hugoton in Oklahoma and Kansas. Is that not right?

The Witness: That is correct.

Mr. Littman: You totaled the costs of royalties and the cost of gas purchased in those fields.

The Witness: No. They show on separate sheets the figure which I gave of 1.8709 cents per M.c.f. applies only to the West Panhandle Field, Texas.

Mr. Littman: And that figure was obtained by totaling for that field the cost of gas purchased and the total royalty cost and dividing the sum of the two by the number of M.c.f.'s, is that right?

The Witness: The total number of M.c.f.; yes.

Trial Examiner: These papers, then, do not contain a similar computation for the Hugoton Field?

The Witness: Yes, they do, but—

Trial Examiner: (Interposing) It is separate?

The Witness: (Continuing)—but I interpreted Mr. Littman's question there to mean that this figure which I gave would apply to a combination of both fields rather than the Panhandle Field alone, and I wanted to make it clear that this does apply only to the Panhandle Field, [fol. 4870] Texas, gas.

Mr. Littman: That is, the 1.8709 cent figure?

The Witness: Yes.

By Mr. Goodman:

Q. Mr. Hinton, now the papers in this folder include all of the papers that you handed to Mr. Morton, is that right?

A. No, sir. The paper which I handed to Mr. Morton is the summary of the detail sheets here.

In other words, it is necessary to make rather extensive calculations, because we have to determine what proportion of the gas will be produced and what proportion will be purchased and when all of these calculations are made and the answers obtained, they are placed on the summary sheet, which goes to Mr. Morton, and he retains that for his budget files.

Q. And is the summary sheet in the folder too?

A. No, sir.

Q. In other words, you do not show me the summary sheet at all?

A. I show you what is on the summary sheet, but I show it by a collection of detailed sheets.

Q. All right.

Now, except for the summary sheet, the folder is complete in connection with what you gave to Mr. Morton?

A. Yes, sir, that is correct.

[fol. 4871] Cross-Examination (Resumed)

By Mr. Littman:

Q. Mr. Hinton, a while ago we were discussing the matter of securing additional gas supplies from other gas

vendors than those who are now under contract with Panhandle Eastern.

Have you even made an investigation to ascertain how much additional gas could be secured from the Panhandle Field by Panhandle Eastern from additional gas vendors?

A. In a rough sort of way, yes, sir.

Q. What did your investigation disclose?

A. That there is acreage which is under lease to other companies at this time that could be developed and probably placed under gas purchase contract.

Q. At what price?

A. It did not go that far. It is assumed that the price would be the usual purchase price of gas in the field.

Q. The usual field price: and what is the field price?

A. All the way from .6 of an M.c.f. up to 4 cents, I believe.

Mr. Wheat: Six-tenths of a cent per M.c.f.?

The Witness: Six-tenths of a cent. I believe there is some gas that sells for 6 cents down there. In the area in which we operate, the average price is 3½ cents per M.c.f., usually with an agreement in there concerning taxes and the application of higher royalty rates to apply [fol. 4872] to that price.

Mr. Culton: That is on long-time contracts?

The Witness: Yes, sir. Well, purchase contracts are usually for the life of the lease.

By Mr. Littman:

Q. And the average field price would be close to what amount? A. Three and one-half cents per M.c.f.

Q. In the Panhandle Field?

A. In the West Panhandle Field, in the areas in which we operate.

Q. Now, Mr. Hinton, can you give us an idea of how much gas you found might be available by purchasing from other gas vendors than those who are now under contract?

A. I do not recall that figure exactly. I believe it is around 11,000 acres.

Q. And approximately where was this acreage located?

A. Moore County, Texas.

Q. Can you give us a general idea of how much gas might be expected to be secured from that amount of acreage, let's say, over the same period as that which you show in Schedule 5 of Exhibit 43?

A. If you will tell me at what rate of withdrawal you want me to base it on, I believe I could tell you fairly closely. The rate of withdrawal would govern the amount of gas that could be recovered to as much as 50 percent. [fol. 4873] Q. Well, I think it would be best for you to assume the same general rate of withdrawal as that which you assumed for purposes of Schedule 5 in Exhibit 43.

A. In order to take at the same rate of withdrawal into our system, it would be necessary that we have a market increase out of the Panhandle Field that would be equivalent to the amount that we would withdraw per acre.

Q. That is the main barrier that stands in the way of your advising the company to go out and secure this additional gas purchase reserve, is that correct?

A. And after we had that—

Q. (Interposing) Is that correct, sir?

A. That is correct, yes.

Q. You see, when you nod your head, the record does not show that, and I would like to have you speak your answer into the record, if you did not.

A. I will do my best, sir. I would like to go ahead—

Q. Yes.

A. (Continuing) And tell you a bit further what would happen.

If we would add 11,000 acres to our present property and take at the same rate of withdrawal we are taking from our property, it would be necessary, in all probability, to loop the entire distance between Sneed and Liberal and add many thousand horsepower.

[fol. 4874] Mr. Wheat: Of compressor power?

The Witness: Yes.

By Mr. Littman:

Q. That is, of course, based upon the assumption that you would take it out as fast as you are taking it out and at the same rate of withdrawal as shown in Schedule 5 of Exhibit 43? A. Yes, sir.

Q. And if you did not take it out that fast, you would not have to necessarily construct these additional facilities to which you have referred?

A. But if we did not take it out that fast, we would not recover the same amount of gas which is connected to our system at the present time, because by retarding that withdrawal, it would mean that we would not meet the average of the field and, therefore, there would be a migration of our gas to other portions of the field.

Q. In other words, you would not get all of it?

A. We would not be protecting our reserve.

Q. But you would get a substantial part of it?

A. We would, in all probability, get a substantial part of it, but the cost per M.c.f. would go considerably higher than it is under the plan we have set forth.

Trial Examiner: Is the drainage factor different in the [fol. 4875] Panhandle Field from what it is in the Hugoton Field?

The Witness: Yes, sir.

Trial Examiner: In what way?

The Witness: First, by the total withdrawal from the field and, secondly, that the Hugoton Field is a tighter formation of less thickness and migration of gas in that field is not as free as it is in the more porous Panhandle Field with the greater thickness through which it can travel.

Trial Examiner: Reference has been made to a development in the Hugoton Field involving the drilling of one well per square mile as a means of removing all of the commercially profitable gas.

Is that same rule true in Panhandle?

The Witness: I would say that it would be easier to drain a square mile in the Panhandle Field, Texas, by one well than it would in the Hugoton Field.

Trial Examiner: Because of the freer migration of the gas?

The Witness: That is right, the permeability being higher there.

Now, the reason I say that, is due to the fact that I have spent many hours studying the reaction of wells blown into the atmosphere and studying the length of time that is required to build up the pressure and the Texas wells show that they are far superior in permeability, the Texas formation to the Hugoton, Kansas, formation.

[fol. 4876] Trial Examiner: Are you able to state whether or not the competitive area of the Panhandle Field where wells of competing companies are rather close to each other, whether there has been difficulty in those competitive companies taking their requirements that have been marked or outstanding?

The Witness: Do you mean daily requirement or annual requirement?

Trial Examiner: I was thinking of total recovery from a given area.

The Witness: Yes, total recovery, there has been and probably always [—] be that trouble.

Trial Examiner: Will you give us some further light on those competitive factors; why you are in close competition?

The Witness: It is felt that the close competition to all producers of sweet gas is the sour gas field which is located in the northern part of Moore County, where the withdrawal per acre is more than twice what it is in the sweet field, and the recent pressure maps indicate that the withdrawal is beginning to be felt in the sweet gas area.

Trial Examiner: In other words, the sweet gas is migrating into the sour gas area from which the gas has been rapidly withdrawing?

The Witness: The pressure maps indicate that that is what is happening.

[fol. 4877] Trial Examiner: These factors you have now described are related to the prediction that the Panhandle Field will be less long-lived than the Hugoton Field.

The Witness: That is correct, yes, sir.

By Mr. Littman:

Q. Now, Mr. Hilton, I do not believe that you have yet answered my question as to the approximate amount of gas that you would expect to recover from these 11,000 acres owned by gas vendors, assuming the same rate of withdrawal as that shown in your Schedule 5 of Exhibit 43 and assuming the facilities which you assumed are required to carry the gas to the market?

A. Well, before I make an answer to that question, I would want to get that acreage, see where it is located, see what development has taken place immediately around the acreage, and to examine some of the logs in that vicinity, because to just make an answer to that problem without giving it consideration could run into errors that would be far beyond approximate.

In other words, it is not a question that can be covered just offhand.

Q. Well, Mr. Hinton, I understand that no such estimate as that which I have asked you to make would be exact, but I thought you might give us some general idea.

It would be a substantial amount of gas, would it not? [fol. 4878] A. Yes. If you want to assume a figure, why, say 10 million an acre. That is a good, round figure.

Q. You mean that would not be an unreasonable figure to assume?

A. Not if that acreage is located where I remember it. It could be an unreasonable figure if that is farther to the margin or around areas in which there are a show of water in the wells at the present time or around which small wells have been developed.

Q. Do you mean 10 million M.c.f. recovery per acre?

A. Yes. After all, that is just an assumed figure, but probably not unreasonable.

Q. It is an assumed figure, but the figure you gave me was the total recovery figure, was it not? A. Yes.

Q. And to the best of your ability with the information that you have at hand and your general knowledge of the field, the 10 million M.c.f. figure is your best judgment of the amount of gas that would be expected to be recovered from these 11,000 acres? A. Yes.

Q. Now, when did you last make an investigation of the amount of purchased gas that might be available to Panhandle Eastern?

A. It has been some time. It is just a knowledge that [fol. 4879] you get of the field by being around it.

You know that there is a certain amount of available acreage. It is possible that it could all be under contract at this time, but I still believe that there is about that much.

Q. Available? A. Yes.

Q. To Panhandle Eastern?

A. I would imagine that we could probably make a contract for it if we so desired.

Q. Now, the 11,000 acres of gas acreage which is available to Panhandle Eastern is that which is in the immediate vicinity of Panhandle Eastern's present acreage, is that right? A. Fairly close, yes.

Q. Now, there is additional acreage available out further and beyond that locality, is there not?

A. Yes, there is a great deal of marginal acreage which will probably never be drilled at all.

Q. Well, isn't there other acreage available that is owned by individuals that would be willing to sell gas?

A. I am not sure about that because I have not been concerned about that.

Q. You have not made an investigation of that?

A. No.

Q. In other words, you have not made an investigation of how much gas is available for purchase in the entire Panhandle Field?

[fol. 4880] A. No, because it would not be a sensible thing to do from the standpoint of our company.

Q. You are primarily interested in the acreage close to your lines at this time, is that right?

A. We are concerned in getting the greatest amount of gas from the Panhandle Field that can be obtained under the proper economic development.

Q. Now, the economic picture may change very rapidly, may it not?

A. Well, it may. It hasn't in the past several years but, of course, there are lots of things that are changing now quite rapidly.

Q. I think we can all agree on that.

The economics, to use your term, of operation in the Panhandle Field may be entirely different ten years from today than it is today, isn't that correct?

A. That all depends on what happens to the rate of withdrawal.

Q. And nobody is any too sure about the rate of withdrawals either, are they?

A. No, not too sure, but our daily report of last week showed that the daily withdrawal from the Panhandle Field was about 74 million per day greater than it was a year ago for pipe line use only.

[fol. 4881] Q. Well, the economics which you have been interested in are primarily those of today, are they not?

A. No, I would say they are those of today and of the next several years.

Q. The immediate future? A. Yes.

Q. How far into the future?

A. I would say, at least ten years.

Q. Did you make a detailed study of the advisability and the economy of acquiring any part of these 11,000 acres under gas purchase contract?

A. I do not recall making a study of that particular thing, no. We have made a great deal of studies on the connection of gas purchase acreage, and I would say that we have connected probably more distress gas wells than any other one company that operates in either of the fields.

Q. In other words, you have not made such a—

Mr. Culton: (Interposing) Would you mind letting him explain what he means by "distress gas wells"? That is a term that he and I know the meaning of, and you gentlemen probably do, but the record does not show it.

The Witness: A distress well is a well that is owned by a man who thought he could get a market when he drilled and later found he was unable to get a market and rather than let that develop or stay there with that investment in it, the company entered into a gas purchase [fol. 4882] contract with the producer.

Trial Examiner: Usually at a very advantageous price?

The Witness: No, I would say that it would be the average of the field.

Mr. Culton: Some of them have been more advantageous than others, though?

Trial Examiner: In other words, there is a commercial factor that enters in?

Mr. Culton: Of course, we would not purport to do it and lose money, would we?

The Witness: We have lost a great deal of money by connecting those wells.

Mr. Goodman: I thought the term "distress well" indicated that relief of distress was a big-hearted gesture.

The Witness: And that is exactly what I would say was meant.

Mr. Culton: Complete your answer. You had started to answer the question as to the cost to the company.

The Witness: That same thing would happen if we would connect those 11,000 acres we are discussing at this time. That would cost our company many thousand dollars to go in and connect that acreage.

By Mr. Littman:

Q. And the primary reason why you do not step in and [fol. 4883] acquire that acreage is simply because you do not, at this time, have the market for it, is that correct?

A. That is correct.

. . . . . .

[fol. 4884] By Mr. Littman:

Q. Mr. Hinton, you have from time to time referred to figures which represent production-per-acre figures. Will you state whether or not you have at hand the production-per-acre figures that you used in arriving at your estimates in Exhibits 42 and 43? Perhaps before giving us those figures you might define what you mean by the term "production-per-acre".

A. It is the number of m.c.f. produced per acre per year.

Q. Throughout the entire field?

A. Oh, of course, that is an average. That doesn't mean taking into consideration the certain number of feet away from the well bore that a certain number of m.c.f. is produced from and declining that on out from the well bore, but what it does mean is the number of acres under lease and it does not mean the total withdrawal area of any well.

Q. Well, in your previous discussions you have stated that you, at various times, compared the production-per-acre figures of Panhandle Eastern's acreage with that of all operators in the Panhandle field.

A. Yes sir, I have, but I do not have those figures with me.

Q. Do you know what the average for the entire Panhandle field was in 1941, for instance?

[fol. 4885] A. Offhand, I do not,—I can tell you,—for the year 1941, because the total production figures are not yet tabulated. That is obtained by an exchange between companies and the data from the Railroad Commission, and that is not yet out for the year 1941.

Q. Do you recall the figure for the year 1940?

A. I do not, but I can furnish that figure to you.

Q. Well, suppose you supply the figure for the year 1940.

A. Now then, when you asked for that figure, did you want it for the entire Panhandle field, did you want it for the west Panhandle field, or did you want it in the areas in which we operate and that, in my opinion, is the figure that should be used?

Q. Well, is that the one that you used, the latter one?

A. Yes, sir.

Q. What we want is the figure that you considered, so we will ask for the latter character of figure.

A. The latter figure, however, is governed by the overall picture of the field, that is, the sour gas must be taken into consideration on that, not as a figure to show what the withdrawal is in these particular areas, but to show what is happening to the entire field in order that we can forecast what the influence of this heavier withdrawal from the sour gas area will be upon the areas in which we operate.

. . . . . .

[fol. 4888] Q. Mr. Hinton, be more specific with reference to the production-per-acre figures. You testified that you used certain production-per-acre figures to arrive at the figures shown in Schedule 5 of Exhibit 43. I would like to know what those figures are. You are now showing me the page of your working papers?

A. That is right. That is File No. 39. It is a group [fol. 4889] area summary and it shows the number of wells that had been drilled up to July 31, 1936 and on down through July 1941 in each area. It, also, shows what the withdrawal from each of these areas had been for those years and it shows what the withdrawal per acre in each of those areas had been.

Now, the only thing that I don't have here to furnish for your information is what the withdrawal from the Panhandle Eastern acreage has been through those years compared to this and I have it somewhere, but I thought it would be in the folder here. It is possible that I worked it out and did not place it in these folders, but I have data here so that I can readily work that out and furnish it to you.

Q. Well, these areas to which you have referred are the areas in which the Panhandle Eastern production system is located.

A. That is correct, and is shown on an exhibit,—I don't know what number,—but it is a group area map.

Mr. Culton: I think it is 44, I am not certain.

The Witness: It is either 44 or 46.

Mr. Wheat: Just a second, we will get that.

Trial Examiner: 46.

Mr. Culton: That is right. I have checked on it.

By Mr. Littman:

Q. Now, what is the source of the data shown in your [fol. 4890] working papers, File No. 39? A. Yes.

Q. Which shows the summary of withdrawals and acreage by group areas in the Panhandle field?

A. The records of the Railroad Commission, located at Pampa, Texas.

Q. And does it include all of the acreage line within the various groups termed "A" to "G", inclusive?

A. Yes, all within the boundary lines of those group areas.

Q. That is acreage owned by the others as well as Panhandle Eastern?

A. All acreage, regardless of the owner.

Q. And all wells? A. And all wells.

Q. What effect did you give, in arriving at your conclusions in Exhibit 43, to the average production per acre throughout the entire west Panhandle field?

A. I only gave consideration to these group areas as governed by the total west Panhandle field, also, the east sweet field and the west sour field. We operate in a certain portion of the west sweet field and the group areas there are so divided as to give us like operating conditions in each of those areas. Now, if we would only take the areas as outlined there, and not give consideration to the outlying portion of the field, why, we would get an an- [fol. 4891] swer which would not be even close to approximately right.

Do I make myself clear?

Q. No, you don't, Mr. Hinton. Perhaps if you would elaborate on that a little we would follow you better.

A. I believe the best way to explain that would be to put up your group area map.

Q. Exhibit No. 46? A. Exhibit No. 46.

Q. Very well.

Mr. Culton: Do you have your copy with you?

The Witness: I didn't save one.

Is there an exhibit here that shows the outline of the Panhandle field of Texas?

Mr. Littman: Yes, Exhibit 75 or Exhibit 76. I think Mr. Davis' exhibit contains a small map.

Mr. Culton: I think it would be better to use the latest rock pressure map. It probably has more of the things you want to talk about on it, the 1940 rock pressure map.

Trial Examiner: That is Exhibit 26.

The Witness: Now, in determining what is the proper procedure to take, from the standpoint of the Panhandle Eastern Pipeline Company, in finding out what our rate of withdrawal should be from its acreage in the Panhandle field, we weigh like areas as nearly as possible with what is happening in general in that area. In other words, we [fol. 4892] have in the group "A" a group of 15 company wells.

Trial Examiner: You are referring now to Exhibit 46 for identification?

The Witness: Yes, sir.

Now, we know that by looking at the pressure map over here, which is Exhibit 26, this general area which is covered by group "A" lies in the eastern portion of the west sweet field and that the pressure gradient from the north part to the south is 250 pounds. Therefore, we know that in the short space covered by this group there is going to be a decided migration of gas from this area into the areas of lower pressure.

Mr. Culton: May I suggest that you explain, for the purposes of the record, what you mean by a pressure gradient of 250 pounds.

The Witness: The difference of the maximum and minimum pressures that prevail in that area.

Trial Examiner: I think it might be well also, Mr. Hinton, for you to explain the relationship of the area to which you now refer in your group "A" to that area of development for the production of oil extending, roughly, from Pampa to Borger on the border line of this pressure zone, which you have referred to.

Mr. Culton: I suggest, also, in that same connection [fol. 4893] that we show the relationship to the sour gas area.

The Witness: The area immediately east and to the north, cutting out the northeast corner of group area "A", is an area of long-term oil production and that, in all probability, accounts for a large part of the gas that has been produced, of which a large part of it has not been

metered, that has caused the low pressures to the northeast side of "A".

Now, "A" is the easternmost area of the general area in which Panhandle Eastern has development. Now, we come over to area "B" and we find a situation that is altogether different; that is, it might be well to tell how many wells are located in area "A" at the present time, as of July 31, 1941 there are 98 wells.

By Mr. Littman:

Q. And those wells are owned by not only Panhandle Eastern, but the others? A. That is correct.

Q. And other producers? A. And other producers.

Now, we come over to group area "B" and we find a decidedly different situation. That is, there are not many wells in that portion of the Panhandle field and the rate of withdrawal is now about the same as it is in "A"?

Mr. Culton: You mean the rate of withdrawal per acre?

The Witness: Per acre, but the difference in pressure [fol. 4894] in the two areas shows that there is a far greater amount of gas remaining in group area "B" than in group area "A".

Mr. Culton: Is there as great a pressure gradient in "B" as there is in "A"?

The Witness: No, the pressure gradient in "B" is 100 pounds.

Going up to area "C" we, again, come very close to the oil development—

Mr. Culton: (Interposing) Where is the oil development with respect to "C"?

Pardon me for butting in, Mr. Examiner, but I thought I might help him elucidate that.

Trial Examiner: I will appreciate it if you will watch those answers and see that they develop the facts fully in connection with these statements.

The Witness: Will you please read my answer?

(Whereupon, the last answer was read by the reporter.)

The Witness: (Continuing) Which lies to the northeast border of "C" and, in fact, I believe that there is oil production within a very few miles east of "C" to the northeast and there are a few oil wells which do not show on this map that are located in the extreme east edge of area "C" just to the north of the Canadian River.

Area "C" is an area which suffered a great deal of drainage during the time when gasoline plants were operating and the gas was blown to the air. There is no [fol. 4895] way of telling exactly how much gas has been produced from that area, but, again, we encountered lower pressures in "C" and the general history of that area shows that the average well drilled in this portion of the field has a much sharper pressure decline than those in area "B".

Mr. Culton: What is the pressure gradient of "C", approximately?

The Witness: About 150 pounds, that being from 200 to 350.

Now then, we come up to area "D" here, which has considerable development for the size of the area, there being 19 wells and the total acreage in "D" being 19,763 acres. The rate of withdrawal from "D" is comparatively light, yet we find that there is a low-pressure area that is coming in from "D", apparently, from the sour gas area.

Although this is not connected yet, I believe that next year's map will show that this low-pressure area coming down into "D" is coming from, not only the southern part of the sour gas area, but up further withdrawal is much heavier. For that reason the life of "D" would be less than in the area of "B" where there is less development, less migration. The migration in "B" can be only to the east. In "D" it is up where the withdrawal per acre is approximately twice what it is in this total area in which we operate.

[fol. 4896] Mr. Wheat: You mean toward the northwest?

The Witness: Yes.

Mr. Culton: What kind of production is coming from the northwest?

The Witness: Sour gas.

Mr. Culton: There is another sour gas area up to the northwest of "B", then?

The Witness: This is all sour gas.

Mr. Culton: That is what I wanted you to bring out.

The Witness: In fact, these two wells here which are owned by the King Oil Company and which are now connected to our line, at one time were pronounced as sour wells.

Mr. Culton: That location is near the north boundary line of "D" and "C".

The Witness: That is correct and just south of Sneed compressor station.

They do contain a slight amount of sulphur at this time, but not enough to keep them out of the sweet-gas class.

We come on down to area "E" here, which is an area of lighter development yet than "D" and is bordered on the south by acreage which is owned by the Canadian River Gas Company, which is only in a small part developed in comparison to the general development of all companies in the Panhandle field.

Now, the areas of "F" and "G" are, again, threatened by the sour gas area to the north and by the fact that the [fol. 4897] Texoma Natural Gas Company has shifted production from the low pressure area to the east of the field over into this area.

By Mr. Littman:

Q. By "this area", you mean "E"?

A. "F" and "G", and have carried on intensive drilling campaigns. The rate of withdrawal from both "F" and "G" will undoubtedly increase to a large degree within the next two or three years.

Now then, in this study when we weigh the total withdrawal of these companies, we not only take into consid-

eration the present rate of withdrawal, but we also determine how many available locations are remaining and at what pressures they can extract on these wells. Therefore, we can fairly well determine what the shift of production from one area to another will be and that is considered as well as the past rate of withdrawal.

Now then, I wonder if I have made myself clear.

By Mr. Littman:

Q. Can you read into the record at this time the rates of withdrawal for each of those areas for, let us say, the year 1941 or 1940?

A. Either one that you want.

Q. Suppose we have both.

A. The rate of withdrawal from area "A", which consists of 74,893 acres for the year 1941, was 573 m.c.f. per acre; from area "B", which consists of 31,309 acres, the [fol. 4898] rate of withdrawal was 553 m.c.f. per acre.

Q. Mr. Hinton, are those for the calendar years 1940 and 1941?

A. Yes, sir. All Railroad Commission figures are calendar-year figures.

Q. From January 1 to December 31?

A. Yes, inclusive.

Q. Of 1941?

A. No. These are mid-year figures. I should have put that mid-year in there earlier, but if you think it best to repeat it, I will. Withdrawal figures that have been read are from August 1 to July 31, inclusive.

From area "C", consisting of 65,901 acres, the rate of withdrawal for 1941 was 590 m.c.f. per acre; from area "D", consisting of 19,763 acres, the rate of withdrawal was 361 m.c.f. for 1941; for area "E", consisting of 39,059 acres, the rate of withdrawal for 1941 was 560 m.c.f. per acre; for the group area "F", consisting of 31,475 acres, the rate of withdrawal for 1941 was 609 m.c.f. per acre; for the area "G", consisting of 32,685 acres, the rate of withdrawal was 518 m.c.f. per acre.

Mr. Culton: For the purpose of clarification, that is for the term August 1, 1940 to July 31, 1941?

The Witness: That is correct.

[fol. 4899] Mr. Culton: All right. Now, your other figures are from August 1, 1939 to July 31, 1940?

The Witness: What are the figures?

Mr. Culton: I thought you were going to give the two years. Didn't you ask for both, the two years?

The Witness: Did you want the two years?

Mr. Littman: I want those for the preceding year.

Mr. Culton: That would be from August 1, 1939 to July 31, 1940, wouldn't it?

The Witness: Yes.

Well, it will not be necessary to call those acreages again, will it?

Mr. Littman: No, let me make this suggestion, Mr. Hinton, would you mind preparing a table which will show the production per-acre figures that are included in your working papers?

Mr. Culton: Couldn't he just add those seven figures to this and he will have it in the record all in one place. If he now gives that from the summer of 1939 to the summer of 1940, you will have it all there.

Mr. Littman: Yes, but you have other years, do you not? Your study includes what years?

The Witness: From August 1, 1935 to July 31, 1941, inclusive.

By Mr. Littman:

Q. I see. Now, do you have a breakdown of those [fol. 4900] figures, which would show the production-per-acre of Panhandle Eastern's acreage?

A. For those years?

Q. For those years.

A. No, I will have to prepare that because it would be in this file if I had it, because this is a group area summary file.

Q. You have heretofore made such a study, have you not? A. Yes.

Q. Will you prepare a statement for each of these years, 1935 through 1941, showing both the production-

per-acre figures for the Panhandle Eastern's own acreage and for the total acreage in each of the sections of areas?

A. I think that would probably be a very good idea, because there is one thing on the summary of these group areas that I think should be brought out and that is to show that the recovery or withdrawal per acre has practically doubled from July 1935 up to July 1941 in these areas. I believe that I would like for you to have that, so that you will understand that there is a problem there in keeping in step with the general change of the rate of withdrawal in these areas.

Q. Very well. We will appreciate it if you will furnish us such a statement, Mr. Hinton, at your earliest convenience.

Now, how did you apply and use those figures of withdrawal per acre in arriving at the figures shown in Sched- [fol. 4901] ule 5 of Exhibit 43?

A. By the information that was assembled it was possible to show approximately what pressures we would be able to expect in each of these group areas through the various years. The pressure, of course, is the key to the amount of gas that a well will deliver into the pipeline system.

Q. Now, can you give us a specific example of how you applied the figures of withdrawal per acre in arriving at this? Did you make a mathematical calculation?

A. Yes, I have made many mathematical calculations.

Q. Now, for instance, let us say, in one of those areas you had an average withdrawal for the year 1939-1940 of, let us say, 500 m.c.f. Now, what did you do with that figure? That is what I am trying to find out.

A. I took that figure and applied it to the number of acres that we had and from that answer I could tell whether we were in step with the field, whether our rate of withdrawal per acre was high or whether it was low.

At the same time I kept in mind that up to date we had not obtained as much gas for the pressure drop in our acreage as had been obtained from the field as a whole. Therefore, that threw us behind in what we should have obtained for the present field pressure. In keeping that

in mind it is my intention to reverse migration of gas eventually, that is gas that has formerly migrated from [fol. 4902] our leases to others, to take a rate of withdrawal that it will enable us to take because the flow will be reversed and we will get back what we have lost to date.

Trial Examiner: Is there a prospective development for oil which might affect your future problem in this regard?

The Witness: Not in the Panhandle field. In the Hugoton field there is a prospect.

Mr. Culton: These areas have already, heretofore, been tested?

The Witness: Yes. Now, there are new wells going down in proven areas.

Mr. Culton: But other areas than these, "A" to "G"?

The Witness: They are well defined.

Mr. Culton: That is the question the Examiner had in his mind, whether these particular areas have already, heretofore, been tested for oil and found non-productive.

Trial Examiner: And we might add to that inquiry whether or not the gas is being processed for casinghead gasoline as actively as it was in the past years or in the earlier development of the former Pampa field.

The Witness: No, my remembrance is that it was only a small part of what it was originally.

Trial Examiner: Does that affect your problem, that fact?

[fol. 4903] The Witness: Yes, it does in this respect, that if there were, at the present time, being the same amount of so-called casinghead gas processed as there was in former years, why then our expectant recovery would be diminished by the volume that was being processed. You will note that I named that "so-called casinghead gas".

Trial Examiner: Yes. Does the rule of practice of the Texas Railroad Commission in any way affect that sit-

The Witness. It does.

Mr. Culton: In what way? Explain that.

The Witness: The gas-oil ratio has been set. That was formerly neglected.

Mr. Culton: In other words, formerly there was no limit to the amount of gas to be produced with one barrel of oil, whereas now there is a limit?

The Witness: That is right. I think they have done a very good job on their gas-oil ratio work.

Trial Examiner: Well, that is tending to conserve your reserve?

The Witness: That is correct.

By Mr. Littman:

Q. Mr. Hinton, who drew the boundaries of these group areas referred to as "A" and "G", inclusive?

A. I did.

Q. And what governed the establishment of those [fol. 4904] boundaries?

A. Two things, areas of like operating pressure on the pipeline system and areas of like productive areas, that is, wells of similar size.

Q. Yesterday we were discussing the so-called principles and assumptions upon which you based your study, comprehended by Exhibits 42 and 43. One of these is No. 5, which appeared at the bottom of page 6, entitled, "As the Panhandle Field Declines the Company must look more and more to its reserves in the Hugoton Field".

Now, on page 7 you make the following statement: "The Panhandle field will not be a one-horse shay; it will not suddenly cease producing, but in my opinion its decline in productivity will be an ever-increasing rate."

Will you tell us what you mean by that statement?

A. I mean by that statement that we take the data on the field, that is the pressure records, and the amount of gas that has been withdrawn, and we find that there is a tendency there that when we apply the weighted average pressure of the field to the amount of gas withdrawn

er number of pounds to produce the equivalent amount of gas.

Q. Now, looking at Schedule 5 of Exhibit 43, again, I thought perhaps your statement had reference to the fact that Panhandle Eastern, for example, was not going to be able to produce as much gas in the latter part of the [fol. 4905] 15-year period as in the first part of the 15-year-period shown in that schedule.

A. Yes sir, I believe the schedule showed that quite clearly.

Q. And that is what you had reference to, that kind of performance?

A. No, I mean that where a well in this area is now producing, say, a million-feet-per-pound drop, just for example, that as the field further declines it will take two pounds to produce that same million.

Mr. Culton: A two-pound drop?

By Mr. Littman:

Q. Well now, speaking of the time elements, what would you say with respect to the time required to get the gas out in the latter period as compared with the present period?

A. It would take a great deal longer.

Q. In other words, you had that in mind as well as the increase in the drop of rock pressure per unit of gas produced?

A. It will take a great deal longer and it will be impossible to obtain the same amounts, because it wouldn't be there to obtain.

Q. Well, even if it is there to obtain, I understand your testimony to be that it will take a longer period of time to produce it.

[fol. 4906] A. That is correct, Mr. Littman, it will.

Q. In the latter period than in the former?

A. Yes, sir.

Q. And is that true, generally, of gas fields whose life has expired and whose performance can be viewed in retrospect?

A. With the exception of a gas field that has a water or oil drive.

Q. Well, there is no such thing present in the Panhandle field, is there?

A. No, but answering your question as to all gas fields, yes, they would have to be included.

. . . . . .

[fol. 4907]

C. H. Hinton, a witness, having been previously duly sworn, resumed the stand and testified as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. On Page 7 of your Exhibit 42, you state the following so-called principle and assumption:

"The Panhandle Field is a highly competitive one and one of varied producing characteristics," do you not?

A. Yes, sir.

Q. On that page, you state that "a production engineer charged with the duty of obtaining from his company's reserves production of given volumes at any time is faced with many major problems, particularly is this true in the Panhandle Field."

Why is this particularly true of the Panhandle Field and what do you mean by that statement?

A. In order to obtain a given volume at a given time, it is necessary that development must be carried on that is considerably in excess of the average daily requirement for the company and the fact that it is necessary to develop and drill wells in excess of the average daily requirement with a load factor similar to the one of Pan-
[fol. 4908] handle Eastern, it means that so much acreage must be developed that it is difficult to compete with the withdrawal of other companies with higher load factors.

Q. Is that condition one that is peculiar to the Panhandle Field?

A. Yes, I would say that it is, for this reason;

That the heaviest withdrawal is taken by pipe line companies and the carbon black industry, all of which

have a load factor much higher than Panhandle Eastern load factor.

Q. Now, is it your plan, Mr. Hinton, to so operate your production system so that you will receive in the future at least the share of the reserves in the field as are represented by Panhandle Eastern's holdings of acreage in the field?

A. Yes, at least that amount and, desirably, greater amounts.

Q. As you indicated this morning, you are going to endeavor to get more than your share and expect to do so?

A. Not more than our share over the entire picture, but more than our share if production would be started from the field as of June, 1941.

In other words, in this field if the development were just starting and there was a uniform spacing program in the field, then we would expect only to withdraw at a rate that would compare with other withdrawals, but in the past, we have not withdrawn at that rate.

[fol. 4909] Therefore, our recovery has, to date, from that field indicated that we have a reserve that would be far less than the one that is estimated.

That is, if our reserve would be computed today on a pressure decline base for the amount of gas that has been taken by this company in comparison with the pound decline in the field, why, our indicated reserve would be considerably less than it is.

For that reason, we feel that we have not had our share to date and by stepping up our production to a rate that will be higher than the average of the field, we hope to get back that which we have not gotten up to this date.

Q. Do you agree with testimony of Mr. Rufus Smith, to the effect that Panhandle Eastern's acreage is located in the better portion of the Panhandle Field?

A. I certainly do.

Q. And you are aware, are you not, of the fact that Panhandle Eastern's wells have a 50 percent better average open flow potential than the average of the wells throughout the West Panhandle Field?

A. I do not know just what the percentage is. I know that it is higher than the average.

Q. Does 50 percent sound reasonable to you?

A. Taking the entire Panhandle Field, I would say that [fol. 4910] it would be a reasonable figure.

Q. Mr. Smith shows a comparison of the open flow potentials of Panhandle Eastern's wells with those of the wells in the field in his Exhibit 30.

The schedule to which I just referred is Schedule 5 of Exhibit 30.

I hand you that schedule and ask you whether you have seen it before?

A. I do not believe I have seen it in this form. I think this was taken from the annual reports of the Texas Railroad Commission, the way it is set up here. I believe that it was.

Q. And doesn't that schedule show substantially what I stated a moment ago, that the average open flow potentials of the wells of Panhandle Eastern are approximately 50 percent above those of the average of the field?

A. No, it does not show it to be quite that much, I do not believe—well, it possibly is when you would add them all up. They show to be better at least.

Q. And you would say 50 percent would not be very far off, generally, wouldn't you? Of course, it could be calculated exactly from this schedule but, for purposes of discussion, what would you say?

A. If I were just looking that over, I would say 25 percent.

[fol. 4911] However, if Mr. Smith said 50 percent, he has undoubtedly made the calculation.

Q. Well, the fact is that Panhandle Eastern's wells have a much higher open flow potential than the average of the Panhandle Field? A. Yes, sir.

Q. And what effect would that have upon the deliverability of your wells? A. On the deliverability?

Q. On the ability of your wells to produce at least as much, if not more, gas than the average?

A. It would indicate that the ability of our wells to deliver gas would be in excess of the average deliverability of the wells in the field.

Q. So that the problem of taking the gas out is not so much a physical one as it is a matter of markets?

A. Not in 1941 or 1942, it is not.

Q. You mean my statement is not correct?

A. I mean it is correct for the present and for the next three or four, I do not remember, six or seven years, probably, but after that time, then it would not be correct, because the problem of getting the gas out would then enter into the production angle.

Q. How?

A. Because the wells would no longer be capable of [fol. 4912] delivering the desired amount of gas.

Q. Well, the wells throughout the field would suffer the same fate, would they not, with respect to ability to produce gas? A. No, sir, they would not.

Q. Why?

A. Because a large part of the gas taken from the Panhandle Field goes to pipe lines that are so designed that they can operate at much lower pressures than our operating pressures, or to the carbon black industry, where it is possible to operate at comparatively low pressure and, of course, the working pressure at the well head governs the amount of gas that that well will deliver, so, if our system was designed so that we could operate at 100 pounds lower pressure or if we had a local market so we could operate at, say, 200 pounds lower pressure, our development problem would be entirely different than it is.

Mr. Culton: Suppose you explain what you mean by "working pressure". I do not think that has been explained in the record.

The Witness: The working pressure is the back pressure against which a well produces gas.

Mr. Culton: In other words, it is the pressure in the gathering line?

The Witness: In the gathering line, or the critical flow [fol. 4913] prover or whatever the apparatus might be upon the well.

By Mr. Littman:

Q. Well, one of the reasons why you suggest the capital expenditures detailed in Exhibit 42 is for the purpose of

reducing those pressures so that you may be enabled to increase your withdrawals?

A. That is correct. If we did not make that capital expenditure, then it would not be possible to take the amounts of gas that are set out in Schedule 5 of Exhibit 43.

Q. Now, when you have made the capital expenditures and installed the facilities contemplated by Exhibit 42 under the anticipated load, you will then be withdrawing at least, if not more than, your prorata share of gas in the field, will you not?

A. Well, until such time as the pressure in the field declines to the point where it is possible for the short distance local market pipe lines and the carbon black industry to go ahead and take their present rate of withdrawal, but at such time it will no longer be possible for us to go ahead and take our present rate of withdrawal without spending tremendous sums of money to increase our capacity to the point where we will be able to operate wells at a comparable pressure.

Q. When do you expect that to occur?

A. I think that we will have a drop-off in our deliverability to the point where we will no longer be able to maintain 60 billion a year, about 1948.

[fol. 4914] Q. Then in 1949 you would expect to withdraw 55 billion cubic feet from the Panhandle Field?

A. That is right.

Q. Then 50 billion in 1950? A. Yes, sir.

Q. Then 45 billion in 1951? A. Yes, sir.

Q. And so forth, isn't that right. A. Yes, sir.

Q. As shown by totaling Columns B and C in Schedule 5 of Exhibit 43?

A. Of course, that does not mean that that will be to the M.c.f. as set out there, because it would be impossible for anyone to make that accurate an estimate of what can be withdrawn, but I do believe that those will be fairly close to the figures which we will experience.

Q. Now, on Page 9 in your written testimony set forth in your Exhibit 42, you make the statement at the end of the first paragraph as follows:

"It is doubtful whether the true equilibrium pressure has ever been ascertained at any date subsequent to the time production was first commenced."

Why is that a fact?

A. The application of known mathematical formulas [fol. 4915] applied to equilibrium pressures would not give the result that we obtain by that application on the weighted pressures which we have.

Q. Now, what particular equilibrium pressures are you referring to here in this statement? Those of the Texas Commission?

A. Yes, sir, those are the Texas Railroad Commission's annual weighted pressures as shown on their pressure maps and published in the annual reports.

Q. And, in your judgment, those are not absolutely correct and true equilibrium pressures?

A. I feel that they are as true and correct as it is possible to get an equilibrium pressure on that field, taking into consideration the well spacing and the distance between wells.

Mr. Culton: Mr. Littman, I think it is fair to the Railroad Commission to state that they do not contend that those weighted average figures represent the equilibrium pressure.

Mr. Littman: I so understand, Mr. Culton, and I wanted the record to be clear.

Mr. Culton: Yes.

Mr. Littman: That it was not necessarily a matter of any errors on the part of the staff of the Texas Railroad Commission but, by reason of the inherent nature of the problem itself.

Is my statement generally correct, Mr. Hinton?

[fol. 4916] The Witness: Yes, I am glad that it was brought out that no criticism was being made of the Texas Railroad Commission.

By Mr. Littman:

Q. Well, can you state what isobaric intervals are used by the Texas Railroad Commission for purposes of determining the equilibrium pressure?

A. Yes, sir. The isobaric interval used on the annual pressure maps is 50 pounds.

Q. And, of course, those are the ones that you used?

A. Yes.

Q. Isobaric intervals of 10 pounds would be more accurate, would they not?

A. It is all according to what scale map you were working on.

Q. All things being equal, Mr. Hinton?

A. All things being equal, I think there would be a slight advantage there to use the 10-pound interval, although I have tried it in several cases on 20 pounds against 50; and the results are very close, because when you start to draw your 10-pound or your 20-pound interval, you are still at a loss to know where that line should be drawn.

Q. But all things being equal, you would get a more exact result by using the 10-pound isobaric interval, would you not?

A. Well, possibly a slightly more accurate result, but I [fol. 4917] do not think that the increase in accuracy would be worth the extra work.

Q. Now, will you state briefly the reasons why the true equilibrium pressure cannot be obtained for the Panhandle Field? I believe you undertook to do that but I do not think you gave us very much detail on that subject.

A. I do not think that it can be reached, because no one knows what lies away from the well bore, any more than the result of production indicates and, in order to reach a true equilibrium pressure, it would be necessary to know exactly where the pressure line would be placed and the reason that an equilibrium pressure is difficult to reach in the Panhandle Field is due to the fact that there are, in many cases, several thousand feet between wells, some of it running into miles, and it all depends on what the pressure is in that area between the wells, how much the pressure gradient is before it is possible to draw in a pressure contour line correctly.

The fact that there is the great variation in pressure from one edge of the field to the other governs the rate of flow of that gas from areas of higher pressure into areas of lower pressure that will work very closely on the ratio of the difference of absolute pressure squares.

That is, if we have an area of 400 pounds and we square that down to 300 pounds, the difference in squares between 300 and 400 pounds will be approximately the same as the [fol. 4918] difference in the squares between 300 and 250 pounds.

I do not know, I haven't worked them out, but it will be approximately that. Therefore, the rate of migration is governed by the pressure and in drawing in the pressure contours, it will be necessary that every bit of this information be taken into consideration.

However, regardless of the care that you give the application of the theory of the difference in squares, it still would depend upon the formation and unless you knew exactly that we had the same permeability, we would still have a problem confronting us, which we do.

Q. Now, Mr. Hinton, on the next page, namely, Page 10 of Exhibit 42, you have set forth a table in which you show in the third column the pressure loss in pounds over the Panhandle Field for various periods from the beginning of the field down to August 1, 1940, do you not?

A. Yes, sir.

Q. And those pressure losses were taken from the reports of the Texas Railroad Commission, were they not?

A. The pressures were and I believe that production also includes an estimate of unmetered gas as well as metered gas.

Q. I was confining my question to information on the present pressures.

A. Yes, they are Railroad Commission pressures.

[fol. 4019] Q. I gather from your testimony that there is a certain amount of tolerance inherent in the figures of the Texas Railroad Commission?

A. Yes, I would say that there would necessarily have to be, on an area of this magnitude.

Q. And the area reflected in these figures in the table shown on Page 10 of Exhibit 42 embraces the entire Panhandle Field, does it not?

A. Yes, sir.

Q. Both east and west? A. That is correct.

Q. Within what limits would you say that these figures shown in Column 3 headed, "Pressure loss in pounds" are accurate for all practical purposes?

A. It would be very difficult to name a percentage of error in that figure, but I think it would be comparatively low, due to the fact that it would have the tendency to be a compensating error, rather than an error of multiplication.

Q. Well, would you say that the degree of accuracy would be within one pound or two pounds or what?

A. I think that it could easily be within one pound.

Q. That is, one way or another, either up or down?

A. Yes.

Q. For each of the figures shown in the five columns?

A. That is true.

[fol. 4920] Q. Headed, "Pressure loss in pounds"?

A. Yes.

Q. Now, Mr. Hinton, in your direct testimony, you discussed your capital additions for the basic and for the anticipated load, but there are certain items that you did not discuss in detail, and I want to go through some of them for our information.

Will you please turn to Page 26 of Exhibit 42 on which page you start your list of capital additions to provide for the anticipated load from June 30, 1941, through 1946.

You won't need to refer to the basic load figures which appear from Page 21 to Page 25, inclusive, because the anticipated load figures embrace the basic load figures, do they not?

A. Yes.

Q. Now, looking at Page 26, have all of the capital expenditures listed on that page been made in the last six months of 1941 which have expired since you last testified in this proceeding?

A. They all have been made with the exception of the drilling in of the well located near Guymon, Oklahoma, in Hugoton Field, Oklahoma.

Q. Is that well now being drilled?

A. It has been drilled and the production string of casing has been set. I just talked to the office at noon and they have had 17 below zero weather out there and they are shut down.

[fol. 4921] They have not torn down the rotary rig yet.

Q. When will that well be completed and in service?

A. As soon as it gets warm enough that the water won't freeze. Probably we can pick out a few warm days through January or February to complete it.

Q. Have you purchased the new automobile listed on Page 26 as Item "e"? Fortunately, we have.

Q. Now, is this new automobile purchased to replace one that had been traded in?

A. No, sir. If that had been, it would not have been a capital expenditure. It would have been an operating expense. Q. You did not trade an old automobile on this new one, did you? A. No, sir.

Q. Now, throughout your capital expenditures for the anticipated load, you, I think, have some other automobiles and trucks?

A. That is right.

Q. That are expected to be purchased?

A. Yes, we hope.

Q. Well, did you expect to retire some of your automobiles and trucks during the next five years?

A. Certainly. We will retire them, but they will be [fol. 4922] immediately replaced by other equipment, by similar equipment. When you say "retire", do you mean to reduce the number of automotive units?

Q. I mean to retire an automobile from service, to trade it in on another one or to sell it or dispose of it because of its age.

A. Yes.

Q. You do expect to lose some automobiles, in other words, between now and the end of 1946?

A. Certainly.

Q. Due to wear and tear and so forth? A. Yes, sir.

Q. Have you made any deduction from your capital additions for the automobiles that are going to be retired from service?

A. No, because they will be replaced by similar units: as soon as one unit is retired, that will be replaced by another like unit.

Q. You have not included in these figures in Exhibit 42 the units that will be purchased for the purpose of replacing those that are retired?

A. No, sir.

Q. In other words, the automobiles and trucks that you include in your exhibit are only additional units?

A. That is true.

[fol. 4923] Q. Is that correct? A. Yes, sir.

Q. Now, in 1942, which is shown commencing on Page 27, you have an item shown as "b. Install liners in two old wells in the Panhandle Field."

Do those old wells now have liners?

A. No. If they did have liners and we had these two liners in the budget, it would not be a capital expenditure. It would be a maintenance item.

Q. Now, throughout the entire exhibit, you have a number of—well, I mean throughout that part of this exhibit which relates to these capital expenditures, you have numerous provisions for installation of liners.

Are you stating that in each and every instance where you have made a provision for a capital addition for the installation of liners, that those are not for the purpose of replacing or renewing old liners, but will be installed in the wells for the first time?

A. Yes, sir, everything is an addition and not a replacement that is included in this list.

Mr. Culton: Pardon me, I wonder if it would not be advisable at this point, so the record may be clear, to explain the difference between a well using liner and tubing and the wells as they have heretofore been operated without liner and tubing.

[fol. 4924] Mr. Littman: Very well.

The Witness: The reason that we have included liners in our future capital expenditures is due to the fact that, as pressure becomes lower in the field, it is more difficult to clean the well bore by blowing the well to the atmosphere, and in order to keep out all cavings possible from the well bore, these liners are installed.

A liner is merely a piece of pipe of small enough diameter that it can be lowered down the production string. The slots are either cut in rectangular shape, triangular shape, or in circles, and these slots permit the gas to feed into the well bore and at the same time hold back the cavings.

What else?

Mr. Culton: The tubing.

The Witness: A well that is tubed can be produced either through the tubing or if no packers are set, it can be produced through the old production string and in event that it is produced through the old production string;

why, the tubing merely acts as a syphon and is usually placed within two or three feet of the bottom of the well to take off the water from the well bore with the least waste of gas.

Mr. Culton: On your new wells, what is your practice as to liners and tubing?

The Witness: We do not complete a well in the Panhandle Field without a liner.

[fol. 4925] Mr. Culton: That is on the new wells?

The Witness: On the new wells, unless it is a large well and the flow will not permit us to install a liner. I am afraid we are not going to have many more of the type that we will not be able to install liners.

Mr. Culton: Pardon me for interrupting, but I thought that distinction might be pointed out.

By Mr. Littman:

Q. Now, in the year 1942, as shown by Item "c", you have made a provision for the installation of tubing in various old wells in the Panhandle Field, and I believe in the Hugoton Field, as well?

A. No, we have no tubing in 42 in the Hugoton Field.

Q. Is this all new tubing, or is it tubing that is installed to replace old tubing?

A. We do not have tubing in any well at this time in either field. The item "c" install tubing in two old wells in Panhandle Field costing $4,262" should be revised, because we have changed our mind about those two wells since this was made, and instead of running tubing in these wells, we intend to run another production string because we have studied the problem a little more thoroughly, and one of those is on the State Permit 1-106 well, and we feel that by running another production string, that we are going to be able to cement off water that is now coming into the well from above.

[fol. 4926] The other is for our Sneed 1-23 well; and we have had samples of water analyzed and find that the analysis of the water indicates that it is coming from above, rather than from two old abandoned holes which we thought was the source of the water in this well, so

rather than to take the last resort on this Sneed 1-23 well, we are going to—

Mr. Culton: (Interposing) What would be the last resort?

The Witness: Tubing—we are going to run a production string and see if we cannot yet save that well and get more production than we would by tubing.

By Mr. Littman:

Q. Would that increase or decrease your capital expenditure?

A. That would at least triple that item.

Mr. Culton: By that, what do you mean?

The Witness: It would be in excess of $12,000 instead of $4,000.

Mr. Culton: All right. The cost would be in excess of $12,000 instead of $4,000, the two wells together?

The Witness: Yes, sir.

By Mr. Littman:

Q. And would that $12,000 all be classed by Panhandle Eastern as capital addition?

A. Yes, I think it would, because it would be material that would be used in the further completion of this well. [fol. 4927] In other words, it we would have drilled that well and encountered the trouble at the time of the drilling, it would have been necessary to run another string of pipe, and that has happened on many wells in the Panhandle Field.

Therefore, I think it justifiable to include it as a capital expenditure.

Q. The next item you have is Item "d Acidize five old wells in Panhandle Field," costing $7,750. Have these five old wells been acidized before?

A. No, sir.

Q. This will have been the first acidizing operation?

A. That is correct. If they would have been acidized previously, that would be a maintenance item.

Q. Now, Mr. Hinton, throughout this study of future capital expenditures, you have numerous items similar to Item "d," which I just read and which we just discussed.

Are all of these acidizing operations comprehended by this exhibit those which are being made for the first time?

A. There may be one or two exceptions to that. I do not quite remember. What I mean by exception is, that in the years gone by, meaning the last three or four years, sometimes upon the completion of a well, we merely put in a treatment of acid which we term as a wash shot.

That is to clean out the well bore and make the well somewhat easier to maintain, but not with the thought of getting the ultimate increase in the open flow of that [fol. 4928] well and in that case where we put in the final shot, that is listed as a capital expenditure.

I am not sure whether there are or there are not some of those wells included.

Q. It is your testimony, then, that all of the acidization operations comprehended by your Exhibit 42 are those which will be charged to capital by the Panhandle Eastern?

A. I feel that everything included is a justifiable capital expenditure.

Q. Have you discussed the matter with the accounting staff that determines how matters of this kind shall be charged?

A. Yes.

Q. And they so advised you? A. Yes.

Q. Now, Item "e" on Page 27 is, "Lay well lines for five wells in Panhandle Field", costing $15,395. Will you state how many feet of well line you include for each well and the size of the pipe?

A. I would if somebody did not have File No. 32 of the working papers out.

. . . . . .

[fol. 4929] By Mr. Littman:

Q. Are you now prepared to answer the question I put to you just before the recess?

A. That was concerning item "e" on page 27 of Exhibit 42.

Q. That is right?

A. Yes, there will be 475 miles of 4-inch pipe required to connect those five wells.

. . . . . .

Q. Now, on page 27 of your Exhibit 42 you have an item listed as item "h", called "Increased capacity of present gathering line by looping existing lines and additional gathering lines costing $422,464". Will you state [fol. 4930] the breakdown of this line as to sizes of pipe and lengths and location?

A. I believe that I can give that correctly. It was given yesterday in yesterday's testimony. If I go ahead and give you those figures now and check them against the work sheets, then will it be permissible to make any necessary correction on the amounts?

Q. It will be satisfactory for you to correct your present figures, if you should find them incorrect.

A. That includes the looping of the present line commencing at the intake side of the Sneed compressor station and extending in a southwesterly direction for a distance of 2.7 miles.

* * * * * * * *

Q. You have a legend on Exhibit 45 which would be helpful.

You may proceed with your explanation.

A. The 2.7 miles of pipe just described commences at the intake side of the Sneed compressor station, which is located on the western portion of the Basemore Survey, Moore County, Texas, and extends in a southwesterly [fol. 4931] direction 2.7 miles. The size of this line is 26 inches o.d.

Q. Outside diameter? A. Right.

Q. That brings us to a point where the present 18-inch line coming in from the southeast and the present 20-inch line coming in from the southwest join. Isn't that point called Windmill Junction?

A. Yes. I can't make it out on the map or I would identify that section number.

We then expect to loop from Windmill Junction in a southwesterly direction to a point on the system known as Zofness Junction, which is located in Section 29, Block 6-T, T. and N. O., Moore County, Texas.

Q. Will you give us the distance of that last connection?

A. I believe that distance is eight miles and it is to be 24-inch o.d. pipe. From the described point of ending of this line it is then planned to loop the present 12-inch line, which is directly west of said point, for a distance—I can't recall that distance but it is to the point where the present system is enlarged to 16-inch pipe. That will be 20-inch pipe.

Q. You can give us the approximate distance, can you not, Mr. Hinton, each square being a mile?

A. It looks to be 6.33 miles.

From that point in an almost straight westerly direc-
[fol. 4932] tion it is planned to loop the present 16-inch pipe line with another 16-inch o.d. pipe line to a point near the center on the north line of Section 25, Block 44, H. and T. C. Survey, Houston, Texas.

I believe that that is all of the major looping that was included in that.

Q. That takes care of the gathering line from Zofness to Sneed by looping, does it not?

A. And, also, to the west of Zofness out near the extreme end of the present system, the extreme west end of the present system.

Q. Now, you, also, refer, in your description of that item on page 21, to certain additional gathering lines to serve new roads. Have you described that gathering line or those gathering lines? In other words, I would like to have the balance of the facilities embraced by this item.

A. There is an additional gathering system which commences at the center of the north line of Section 28, Block 44, H. and T. C., and extends southwesterly approximately one mile to the center of Section 29, Block 44, H. and T. C. This will be 8-inch i.d. pipe.

Q. And what is the length?

A. Approximately a mile.

Q. Are there any other facilities embraced by this item. A. Not gathering lines.

[fol. 4933] Q. Well, have you described all of the items included within the item "h" on page 27, for which you expect to expend the sum of $422,464?

A. No, I do not believe so. That is all I see here at the present time and it will bear checking when I get the work papers.

Q. You will check the matter when you get your working papers and report any additional facilities, if there are any?

A. Yes. It seems to me that it would be much better if we could wait until those working papers do get here, because it would save us the time of repeating this, if that would be all right with you, if you have any other thing that you could go ahead with.

Q. I do not believe, Mr. Hinton, that we will have any other situations like this for the year 1942. Let's see how well we can get along.

A. All right.

Trial Examiner: Mr. Hinton, you have been making reference to Exhibit No. 45, have you not, in the location you have just pointed out on the map?

The Witness: Yes.

Mr. Culton: Perhaps you had better clarify that by showing that this construction which you are talking about all has a certain color on the map, does it not?

The Witness: Yes, it is all colored brown.

[fol. 4934] By Mr. Littman:

Q. Before we leave that item, Mr. Hinton, I call your attention to your testimony at pages 716 and 717 of the transcript in which you made the following statement in response to the following question:

"Q. And this is the character of additional gathering line capacity that you think will be needed in this particular situation?

"A. It could be taken care of in either manner and we studied both methods of trying to increase our load into Zofness. The design of our pipe line system is such that it is almost necessary to loop the greatest part of it, even if we went to what we might term 'a centralized horsepower' and, therefore, we decided that probably the looping would be better because we would spend about the same amount of money and we would cut down the operating cost at another compressor station, which would be located out near the Zofness Camp."

Q. Did you mean to use the term "centralized horsepower"? A. Yes.

Q. Or decentralized horsepower?

A. That would be termed as "centralized field horsepower". If it was a decentralized system, it would mean that we would take care of each individual well with a small booster, but by centralized that would mean that there would be a compressor station built in Section 29, Block 6-T, N., T. and N.O., Moore County, Texas, and the [fol. 4935] production would come into that station and it would be boosted or the pressure would be increased by that station, so that we could come into Sneed station at a higher intake pressure.

Trial Examiner: May I ask a question, Mr. Hinton, about the mechanical factors in the production of gas? I assume when you go into a new field and bring in a new well in a newly constructed gathering line, the gas would come into the newly constructed line, we will say, at the rock pressure which might range upwards of 400 pounds per square inch.

The Witness: It will be all according to the type of well and what volume of gas you want to take from the well. For instance, a well in the Hugoton field of Kansas that was drilled at a virgin pressure of between 435 and 445 pounds and operated at 400 pounds would not deliver the same amount of gas by any means that a well in the Panhandle field that was drilled at virgin pressure and operating against 400 pounds would deliver into the line. It would vary in each field and that is what I am trying to bring out.

Trial Examiner: That is by reason of the different rate of production due to difference in permeability of formations?

The Witness: Yes.

Trial Examiner: All right. Now, your well, we will say, continues to feed into a gathering line at an assumed [fol. 4936] pressure of upwards of 400 pounds per square inch, continuing until that pressure drops. The problem of pressure is not a problem for you until the pressure becomes less than the pressure you desired to maintain in your line, is that true?

The Witness: That it true.

Trial Examiner: And what then happens?

The Witness: There is one of two things which usually happens and that is that the well ceases to produce gas or there is horsepower installed to aid in delivering gas into a pipe line.

Trial Examiner: Now, in what way does the use of compressors aid the induction of gas into the pipe line?

The Witness: It lowers the pressure against which the well is forced to produce its gas.

Trial Examiner: So that instead of a pressure against which the new gas has come, you are approaching a vacuum condition or a lessened pressure?

The Witness: A lessened pressure but considerably far from a vacuum.

Trial Examiner: Will you ever reach the point where there is an actual vacuum beyond your entrance valve?

The Witness: No.

Trial Examiner: That is impractical?

The Witness: That would be very expensive.

Trial Examiner: So that you are simply taking ad- [fol 4937] vantage of the natural pressure and that can not be assisted from a practical standpoint?

The Witness: No.

Mr Culton: Mr. Hinton, I am wondering if the Examiner's questions couldn't be amplified on by explaining the difference between the use of field compressor stations and the centralized plant about which you spoke? In other words, in one of them you take the gas immediately at the well, do you not, and boost its pressure in the field compressor station, but in the centralized station you put on something in the nature of a suction at the gathering point?

The Witness: Well, it is just a matter of assembling the horsepower in one place or scattering it out of the field.

Mr. Culton: But one pushes and the other pulls. That is the ordinary way of saying it, isn't it?

The Witness: Well, that is the ordinary way of saying it, but it is erroneous because you never—

Mr. Culton: (Interposing) Never get down below zero, I understand.

The Witness: No, you never actually suck gas. All that happens is that the pressure is lowered to the point where the gas of the higher pressure will flow to the area of lower pressure.

Mr. Wheat: Mr. Hinton, is it possible that the Examiner had in mind the fact that there have been some gas [fol. 4938] fields in which they have said they were pulling against a vacuum? That is not true in the Panhandle field and, in your opinion, will not be true, commercially? Is that correct?

The Witness: That is correct.

Trial Examiner: Well, the effect of charging the pipe at the Liberal station at a high pressure, if all valves between that station and the field were open, would, to a certain extent, be the effect of suction back of the compressor, would it not?

The Witness: Well, when you speak of suction, I am thinking of something that has a direct pull.

Trial Examiner: Well, doesn't it have that very thing?

The Witness: No, sir.

Trial Examiner: In order to produce your volume of gas under the high pressure?

The Witness: No, sir, I don't think that it does. It just merely lowers the pressure so that there is a pressure gradient which is efficient to enable the desired volume of gas to flow.

Trial Examiner: In other words, the Liberal compressor station does not accomplish more than to remove the resistance?

The Witness: That is correct.

By Mr. Littman:

Q. Item "p", shown on page 27, is an item for the construction of the Cimarron River crossing for loop line, [fol. 4939] costing $220,384. Will you please identify on your map, Exhibit No. 46, the Cimarron River crossing and give us the number of the line and the location by section number?

A. Well, the location of that river crossing will be, in all probability, Section 26, Township 33, Range 32, Seward County, Kansas.

Q. The Cimarron River is not shown on that map.

A. No, it is not.

Q. And what is the number of the line?

A. It is four 16-inch lines and I don't know what you mean by "number". To what number do you refer?

Q. Well, what is the loop line number?

A. I don't know.

Mr. Culton: You refer to the accounting practice, don't you?

Mr. Littman: I understand these lines have certain numbers.

Mr. Culton: That is for accounting purposes on the accounting records.

The Witness: No, for operation, also.

Mr. Culton: Are they?

The Witness: Yes, sir.

By Mr. Littman:

Q. But you do not recall the number?

A. I do not recall what it is.

[fol. 4940] I might add that the result that may be obtained by the installation of the river jetties may have something to do with the location or the relocation of the proposed river crossing.

Q. Now, on page 28 you show an item "r", the construction of the gathering line from Section 31, Township 4 to near Optima in Texas County, Oklahoma, at a cost of $324,180.

A. That is correct.

Q. What is the size, length and location of that gathering line?

A. That will be a 22-inch o.d. line, the distance will be approximately 15 miles and it will leave the present 22-inch line in the southeast quarter of Section 31, Township 4, Range 19, Texas County, Oklahoma, and extend west to the approximate center of the south half of Section 34, Township 4, Range 16 west.

Q. Now, your next item on that page is item "s", "Construct gathering line in Oklahoma connecting with the Optima line at a cost of $856,606".

A. That is right.

Q. At which point will the latter line connect with the one which you just described?

A. Near the center of the south half of Section 34, Township 4, Range 16.

Q. Now, will you please give a description of the gathering line embraced by item "s"?

[fol. 4941] A. The first gathering line will extend from the center of said Section 34 in a south and slightly easterly direction, a distance of approximately 7½ miles, and it will be 12-inch i.d. pipe.

The next line will start from the same point in said Section 34 and extend in a southwesterly direction a distance of 8.4 miles to a point in the approximate center of the northwest quarter of Section 12, Township 2, Range 15, Texas County, Oklahoma. At that point this gathering line reduces from a size of 16 o.d. to 12 i.d. pipe and extends to a point in the northwest quarter of Section 4, Township 1, Range 15, a distance of 5.8 miles, thence in a westerly direction slightly south this pipe is extended with 10-inch pipe for a distance of 6.3 miles to a point in the southwest quarter of Section 9, Township 1-14, thence in a westerly direction the extension is made with 8-inch pipe for a distance of 6.1 miles to a point in the southwest quarter of Section 9, Township 1-13 west, all in Texas County, Oklahoma.

Q. Now, that completes the branch that runs from the central point that you gave a moment ago as south and then west. Now, I notice some other branches on the map.

A. We again start near the center of the south half of said Section 34-4-16 and extend in a northwesterly direction with 16-inch, o.d. pipe a distance of 16.7 miles. [fol. 4942] The size of the pipe is here reduced to 10-inch and extends in the same general northwesterly direction, a distance of 4.6 miles.

Q. (Interposing) Will you give us the point on the map?

A. Yes. That is from the center of Section 36, Township 5, Range 13 and 10-inch pipe extends to a point near the center of the northwest quarter of Section 20, Township 5, Range 13.

Branching off from the 16-inch line, heretofore described, at a point near the center of the north half of Section 5, Township 4, Range 14 and extending in a northerly and slightly easterly course to a point near the center of the southeast quarter of Section 29, Township 5, Range 14, a distance of 1.6 miles, there will be laid a 6-inch line.

Q. Now, is that called a gathering line?

A. Yes. A gathering line is a line that serves more than one well.

From a point near the southwest corner of Section 7 another gathering line takes off of the 16-inch line and runs in a northeasterly direction to a point near the center of Section 6, Township 4, Range 15 west. There this line divides and a branch runs to the northwest which will be 8 inches inside diameter and this will extend to a point near the center of the south half of Section 25, Township 5, Range 14 west, a distance of approximately 1.7 miles.

The other branch from the end of the 10-inch line lo- [fol. 4943] cated near the center of the north half of Section 6-4-15 will extend northeasterly to a point near the center of the southwest quarter of Section 28, Township 5, Range 15.

There is, also, another line that takes off from the end of the 22-inch trunk gathering line that will start near the center of the south half of Section 34, Township 4, Range 16 west and extend in a northeasterly direction a distance of 5.0 miles and this pipe will be 16 inches, o.d.

At the end of the 16-inch line, which is in the northeast quarter of Section 12, Township 4, Range 16, a line will extend almost due east to a point in the northwest corner of Section 12, Township 4, Range 17, a distance of approximately 5.3 miles.

Then, from the end of the same 16-inch line there will be a line that will extend in a northwesterly direction to the center of Section 8, Township 5, Range 16, a distance of approximately 6.8 miles and this line will be eight inches inside diameter.

I believe that completes the description of all the gathering lines.

Q. Does that complete the description of all of the facilities embraced within the item "s" on page 28?

A. I believe that it does, Mr. Littman.

Q. Well now, you may, of course, check your answer later and supply any corrections or additions, if you wish, [fol. 4944] but I am very anxious that you do that so that we may know that if you don't have any corrections later that we may rely upon the testimony and description.

A. Well, we know that there will be corrections because I am not that good at scaling.

Q. Those distances which you have given are approximate, having been measured by you by the scale on the map?

A. And estimated in most cases.

Q. Now, in this exhibit you used the term "well lines" and "gathering lines". A. Yes.

Q. You have already defined the term "gathering lines" as used by you. Now, will you define the term "well lines" as used by you in this exhibit?

A. A well line is a pipe line that is used to transport gas from the well to the gathering line.

Q. And the well line serves only one well, does it not?

A. Except in rare cases where a location is drilled that was not planned in the development and then sometimes the well line to the original well is extended to the other well but it is still carried on the books as a well line.

Q. Well, is there any such exception in your Exhibits 42 and 43? A. No, sir, there is not.

Q. You see, this is important for us to know so that we [fol. 4945] may make certain that we understand precisely what lines are included within each of these items.

A. Yes. I think it would be helpful for you to have that detailed information and as soon as the photostatic sheets arrive here, if the other file doesn't turn up, why, that will be furnished.

Q. Very well.

Now, your next item "t" on page 28, "Construct well lines for 20 new wells costing $47,610", can you give us the total length of pipe and the sizes of pipe for each length? I meant to say on the length of each size of pipe for these new wells.

A. I can give it to you approximately.

About 14.69 miles, all 4-inch, i.d. pipe.

Q. That is the total mileage for the 20 well lines?

A. Yes, sir.

Q. I should say for the 20 wells and 20 well lines.

A. I wouldn't argue with you about it.

Q. You have an item on page 28 called item "x", "Construct office building at Hugoton Camp, costing $7,000". A. Yes, sir.

Q. Why do you include this item?

A. Because there is no place for any clerical work out there at the present time.

Q. Don't they have an office building in the Hugoton [fol. 4946] Camp now?

A. Yes, we do. We have two rooms that are approximately nine feet by 10 feet and there are many times 20 men in those two rooms, so you can readily see that there is small chance of doing any of the clerical work required and it is necessary that it be done just whenever enough of the men get out so that it can be done.

During the wintertime operation in that field a large crew is required due to the type of gas that is produced in Hugoton field and it is often necessary that these fellows wait around the office until such time as word is carried back by a chart changer telling them which well lines have to have attention.

. . . . . .

Q. Now, looking at the list of capital expenditures contemplated and estimated for the anticipated load for the year 1943, I see that item "e" shows the construction of well lines for five new wells in the Panhandle field at a cost of $23,335. Will you give us the length of pipe and size of pipe?

A. Yes, sir. The total amount of pipe required is 7.20 [fol. 4947] miles and that is all 4-inch, i.d. pipe.

Q. By the way, were all of the well lines to which you referred as being covered by item "t" in the previous year, 1942, located in Texas County, Oklahoma?

A. Yes.

Q. Do you have the information available for the five wells in 1943 embraced by item "e" as to length of line for each of the five wells?

A. Yes, sir.

Q. You have your working papers here for that?

A. I do.

Q. Will you please read those into the record?

A. For the Purvin-Redmond well, located near the center of Section 69, Block 44, H. and T. C. Survey, that line will extend .20 of 1 mile to a point near the same location, of course.

The Hauneman, located near the center of Section 100, Block 44, H. and T. C. will extend from a point near the center of Section 69, Block 44, H. and T. C., to the well and will be approximately 1 mile in length.

The Kilgore 56 will be located near the center of Section 56, Block 44, H. and T. C. Survey, and will extend to a point near the center of the south line of Section 57, Block 44, H. and T. C., and the total distance will be approximately 1 mile.

[fol. 4948] The Kilgore near the center of the north half of center Section 57, Block 44, H. and T. C., will extend to a point near the center of the south line of Section 57, Block 44, H. and T. C., and will be approximately 70 miles in length.

The Taylor will extend from a point near the center of Section 5, Block 1, J. P. Survey, and will extend to a point in the southeast quarter of Section 23, Block 1, J. P., and will be a distance of 4.30 miles, making a total of 7.20 miles for the five wells all located in Moore County, Texas.

Q. On page 29 you have item "g." You have an item of construction of additional gathering lines to serve new wells in Panhandle field, costing $7,815. Will you describe those facilities?

A. Yes.

Q. And give the location.

A. That is a gathering line for the purpose of taking on the Purvin-Redmond well and will extend from a point near the center of Section 69, Block 44, H. and T. C., Moore County, Texas to the south line of Section 58, Block 44, H. and T. C., Moore County. It will be 6-inch i.d. pipe and approximately 1.5 miles in length.

Q. Mr. Hinton, I refer you to item "k" on page 29, which provides for the construction of well lines connecting 10 Oklahoma wells costing $20,710. Will you give us a description of those well lines?

[fol. 4949] A. Yes, sir. I believe, probably, the best way to identify those would be to mention the farm name and then describe the line. I think it would be about as clear that way as any.

Q. And I think it would be well to point to the map, Exhibit No. 46.

A. The first well line is to the Beer lease and that is located near the center of the south half of Section 20-5-14 and that extends in a southeasterly direction to a point in the southeast quarter of Section 29-5-14. It is a 4-inch i.d. line of approximately 1.03 miles in length.

The Duer is in the center of the south half of 12-4-17 and extends in a northwesterly direction to a point in the northwest quarter of Section 12-4-17, a distance of .47 of 1 mile.

All of these pipe lines will be 4-inch inside diameter pipe, so I won't read the diameter each time.

The third well is the Heimsath. That is located in the center of the north half of 21-4-15 and extends in a northeasterly direction to a point in the northeast quarter of 21-4-15, a distance of .22 of 1 mile.

The Miller is in the center of the south half of 19-2-17 and extends in a westerly direction to a point in the southeast quarter of Section 23-2-16, a distance of approximately 1.30 miles.

[fol. 4950] The Miller—this is the second Miller well—is located near the center of Section 23-2-16 and extends to a point in the northeast quarter of Section 23-2-16, a distance of .40 of 1 mile.

Another Miller well is located near the center of the north half of Section 25-2-16. The pipe line extends to the northwest quarter of 25-2-16 a distance of .42 of 1 mile.

Another Miller well is located near the center of the northwest quarter of Section 36-2-16. The pipe line extends to near the center of line of 25-2-16, a distance of .90 of 1 mile.

The Stamper is located from a point near the center of the west half of 17-3-16. The line extends to a point in the southeast quarter of 17-3-16 and that line is .68 of 1 mile.

Then the Stratton is near the center of the west half of 18-1-16 and the pipe line extends in a westerly direction to a point on the west ling of 18-1-16, a distance of .27 of 1 mile.

The White is near the center of the west half of Section 2-3-16. That line extends in a northwesterly direction to a point in the northeast quarter of Section 20-3-16, a distance of .70 of 1 mile, all being 4-inch inside diameter pipe and all located in Texas County, Oklahoma.

Q. Now, on page 29 you have an item called "n", "Construct additional gathering lines serving new Hugoton [fol. 4951] wells, costing $52,710." Will you please describe those facilities?

A. The items under "n," page 29, Exhibit 42, include a 6-inch line which starts in the northwest quarter of Section 4-1-15 and extends in a southeasterly direction to a point on the west line of Section 18-1-16; a distance of 4.2 miles, the diameter of the pipe being 6-inch i.d.

Q. Does that complete your description?

A. No, sir. It is what is known as the Miller block extension, which begins near the southeast quarter of Section 11-2-16 and extends to the northwest quarter of Section 25-2-16 and that will be a 12-inch line 2.7 miles in length. Both lines described will be in Texas County, Oklahoma.

Q. Now, before leaving 1943, I note that you have a section on your map, Exhibit No. 46, colored in green, which is for the year 1942.

A. Yes, sir.

Q. In Section—

A. (Interposing) 26-4-17.

Q. (Continuing). Called Duer. This patch of green seems to be isolated from the rest of the system. Will you explain what facilities are embraced by that part of the legend?

A. The lease on the Duer well includes the northeast quarter of Section 26-4-17 and by drilling the well on this [fol. 4952] acreage here the entire lease was secured, so that will be secured acreage but not pro-rated acreage at this time because it would be in excess of a 640-acre unit, which is the maximum unit that we use in our proration formulas.

Q. You don't intend to drill the portion colored in green to which I just referred? Isn't that right?

Mr. Culton: You mean during the period that this covers.

The Witness: No, not during the period which this map covers, but that puts us in an excellent position to either trade acreage with some other company that has a similar base to add to ours or to buy adjoining acreage to that.

By Mr. Littman:

Q. Well, you haven't included any facilities for the connection of that lease, have you?

A. No, sir. We will just save $80 a year in delayed rent.

Q. Now, looking at the year 1944, which commences on page 29 of Exhibit 42, you have an item "e", "Laying well lines connecting five new wells in Panhandle field, costing $15,071." Will you please describe those facilities?

A. You understand that I do not have my working papers for this year and the description will be approximations which I may correct afterwards.

Q. This is one of the years for which you do not have the working papers?

[fol. 4953] A. Yes.

Mr. Culton: We are in the Panhandle field now. You have the Hugoton but—

The Witness: (Interposing) No, we are over in another year now.

By Mr. Littman:

Q. Well, do you have your working papers for the year 1945?

A. I believe I have. Yes, I do.

Q. Well, let us skip 1944 for the present and go to 1945. I call your attention to an item of "h" on page 30 of Exhibit 42, calling for the construction of well lines to connect 10 new wells at the Hugoton field, costing $36,234. Will you please describe those facilities?

A. Yes. Do you want them pointed out on the map?

Q. Not if your description is sufficient for purposes of locating them on the map.

A. It is.

You understand that five of those are in the Kansas portion of the Hugoton field and five in the Oklahoma portion of the Hugoton field. The ones which will follow are those that are in the Oklahoma portion of the Hugoton field.

The Chittenden is near the center of the northeast quarter, Section 3-4-16 and the pipe line extends to a point in the southwest quarter of 35-5-16, 4-inch line 1.1 miles in length.

[fol. 4954] The Fisher is near the center of 32-4-13 and the pipe line extends to a point near the center of 33-4-13, Texas County, Oklahoma, and the length is 1.03 miles.

The Jones is near the center of the east half of 4-3-13 and the pipe line extends near the center of 33-4-13, Texas County, Oklahoma. It is approximately 1 mile in length.

The Wright is near the center of the north half of Section 24-4-16 and the pipe line extends to a point in the southwest quarter of 24-4-16, being .35 of 1 mile.

The Zbinden is near the center of the southwest quarter of 29-4-16. The pipe line extends to a point near the center of the north line of 23-4-16, Texas County, Oklahoma and is 4-inch line, .35 of 1 mile in length, a total of 3.83 miles for the five lines.

The well lines which will be located in the Kansas portion of the Hugoton field are the Collingwood and the line will extend from a point near the center of the north half of Section 5-29-34 to a point in the northeast quarter of 8-29-34, Haskell County, Kansas, a distance of 3.1 miles; the Hayward and Friend extend from a point near the center of Section 36, Township 34, Range 40 to a point near the center of Section 6, Township 35, Range 39, Morton County, Kansas, 1.52 miles; Hoffman and Davis is near the center of 29-28-36 and the pipe line extends to a point in the southeast quarter of 31-28-36, Grant County, Kansas, a [fol. 4955] length of 1.60 miles; the Hooper will extend from a point near the center of the south half of Section 22, Township 30, Range 35 to a point near the center of the north half of Section 10, Township 30, Range 35, Grant County, Kansas, 2.45 miles in length; and the Miller is near the center of 29-28-37 and the pipe line will extend to a point near the northwest quarter of 32-28-37, Grant County, Kansas, a distance of .68 mile, all 4-inch inside diameter pipe and the total of the five wells is 7.35 miles.

Q. Now, the last letter item for the year 1945 is item "j" on page 31, "Construct additional gathering lines to serve new wells in the upper Hugoton field, costing $135,257." Will you please describe those gathering lines?

A. Yes, sir. There will be two gathering lines in Texas County, Oklahoma, the first being what will be known as the Jones and it will be a line that will start near the center of Section 22-4-13, Texas County, Oklahoma, and extend to near the center of 33-4-13, Texas County, Oklahoma, a 6-inch i.d. line, 2.3 miles in length.

The Wright will be the next gathering line and it will commence in the northeastern quarter of Section 23-4-16, Texas County, Oklahoma and will extend to a point in the southwest corner of 24-4-16, Texas County, Oklahoma. It will be a 6-inch inside diameter line of a length of .60 of 1 mile.

[fol. 4956] In Kansas the following gathering lines will be built: The first will be known as Collingwood and it will commence in the southwest quarter of Section 2, Township 30, Range 35, Grant County, Kansas and extend to a point in the northeast one-quarter of Section 8, Township

29, Range 34, Grant County, Kansas. It will be an 8-inch inside diameter line, 6.3 miles long.

The next will be known as the Ulysses and that will be a line that will commence in the northeast quarter of Section 9, Township 29, Range 36, Grant County, Kansas and extend to a point in the northwest quarter of Section 32, Township 28, Range 37, Grant County, Kansas. This will be a 10-inch inside diameter line that will be 7.6 miles in length.

Q. Does that complete the description of all the facilities embraced within item "j" on page 31?

A. It does.

Q. And that brings us to the end of the year 1945?

A. Right.

Mr. Culton: Except for 1944.

Mr. Littman: Yes.

The Witness: 1944 and the corrections on 1942.

[fol. 4959] C. H. HINTON, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Resumed)

By Mr. Littman:

Q. Mr. Hinton, will you please turn to Page 31 of your Exhibit No. 42, on which page you set forth the capital additions which you estimate will be required to be installed in that year in order to meet the so called anticipated load?

In Item "f" on that page, you provide for the construction of well lines to connect 20 new wells in the Hugoton Field, costing $63,913. Will you please describe those facilities?

A. The additions under capition "f", Page 31, Exhibit 42, are well lines which will be required to connect wells that will be drilled during the year 1946, 10 of which are located in Texas County, Oklahoma, and 10 in the Kansas portion of the Hugoton Field.

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(Pages 1521 to 2016)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. IV.
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United States Circuit Court of Appeals
EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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The first well in Oklahoma to be connected is the Arnold, and the line will start at that well, which is near the center of the west half of Section 31, Township 4, Range 17, and it extends to a point in the southwest quarter of Section 30, Township 4, Range 17, Texas County, Oklahoma.

[fol. 4960] It is a 4-inch line, .68 of one mile in length.

The next well is the Banta. The line will start near the center of the south half of the northeast quarter of Section 8, Township 3, Range 16, and will extend to a point near the center of the south half of Section 9, Township 3, Range 16, Texas County, Oklahoma.

It will be a 4-inch I. D. line, .83 of one mile in length.

The next well is the Bartels. The line will start near the center of the northwest one-quarter, Section 30, Township 4, Range 15, and will extend to a point near the center of the northwest quarter of Section 30, Township 4, Range 15, Texas County, Oklahoma. It is a 4-inch I. D. line and .05 of one mile in length.

The next is the Bateman. The line will start near the center of the northwest quarter of Section 8, Township 5, Range 17, and will extend to a point in the southwest quarter of Section 9, Township 5, Range 17, Texas County, Oklahoma. It is a 4-inch I. D. line, 1.20 miles in length.

The next is the Findley. It will start near the center of the north half of Section 16, Township 5, Range 13, and will extend to a point near the northeast quarter of Section 20, Township 5, Range 13, Texas County, Oklahoma. It is a 4-inch I. D. line, 1.38 miles in length.

The next will be the Hammond. The line starts near the center of the east half of Section 19, Township 3, Range [fol. 4961] .16, and extends to a point in the southwest quarter of Section 20, Township 3, Range 16, Texas County, Oklahoma. It is a 4-inch I. D. line, .60 of one mile in length.

The next is the Hoeme. That line will start at a point which is approximately 100 feet west of the center of the east line of Section 9, Township 4, Range 17, and will ex-

tend to a point in the northeast quarter of Section 9, Township 4, Range 17, Texas County, Oklahoma. It is a 4-inch I. D. line, .20 of one mile in length.

The next is the Howell. It starts near the center of the west half of Section 32, Township 5, Range 15, and extends to a point in the southeast quarter of Section 32, Township 5, Range 15, Texas County, Oklahoma. It is a 4-inch I. D. line which is .20 of one mile in length.

The next is the Olsen. It starts near the center of the south half of Section 9, Township 2, Range 16, and extends to a point near the center of Section 11, Township 2, Range 16, Texas County, Oklahoma. It is a 4-inch I. D line, 2.05 miles in length.

The next is the Peerless Oil Company, and the line will start near the center of the north half of Section 23, Township 3, Range 16, and will extend to a point in the northwest quarter of Section 23, Township 3, Range 16, Texas County. It is a 4-inch I. D. line which is .50 of one mile in length.

That is the total of the 10 wells to be connected in the [fol. 4962] State of Oklahoma portion of the Hugoton Field, a total of 7.69 miles.

In Kansas, the first well to be connected on this line is the Berg. The line will start near the center of Section 15, Township 33, Range 34, and extends to a point near the center of the north half of Section 22, Township 33, Range 34, Seward County, Kansas. It is a 4-inch I. D. line, .56 of one mile in length.

The next is the Huxman. The line starts near the center of Section 14, Township 30, Range 34, and extends to a point near the northwest corner of Section 28, Township 30, Range 34, Haskell County, Kansas. It is a 4-inch I. D. line that is 2.80 miles in length.

The next is the Leigh. The line starts near the center of the east half of Section 27, Township 28, Range 38, and extends to a point near the center of Section 25, Township 28, Range 38, Grant County, Kansas. It is a 4-inch I. D. line, 1.70 miles in length.

The next is the Miller. The line will start at a point located in the southwest one-quarter of Section 1, Town-

ship 29, Range 35, and will extend to a point in the northwest quarter of Section 17, Township 29, Range 34, Grant County, Kansas. It is a 4-inch I. D. line, which is 2.34 miles in length.

The next is the Newby. That line starts at a point near the center of the east half of Section 28, Township 31, [fol. 4963] Range 37, and extends to a point in the northeast one-quarter of Section 27, Township 31, Range 37, Stevens County, Kansas. It is a 4-inch I. D. line which is one mile in length.

The next is the Pettijohn. This line starts at a point near the center of Section 14, Township 31, Range 39 West, and extends to a point in the northwest one-quarter of Section 14, Township 31, Range 39, Stevens County, Kansas. It is a 4-inch I. D. line which is .38 of one mile in length.

Another Pettijohn well, from which the connecting line will start at a point near the center of Section 15, Township 31, Range 39, and extend to a point near the center of Section 15, Township 31, Range 39, Stevens County, Kansas. It is a 4-inch I. D. line, which is .1 of a mile in length.

The next is the Pricherd. The connecting line will start at a point near the center of Section 22, Township 31, Range 39, and extend to a point near the center of Section 15-31-39, Stevens County, Kansas. It is a 4-inch I. D. line, which will be one mile in length.

The next is the Sullivan. The connecting line will start at a point which is near the center of the south one-half of Section 5, Township 29, Range 37, and will extend to a point in the northeast quarter of Section 32, Township 29, Range 37, Grant County, Kansas. It is a 4-inch I. D. line, which will be 1.47 miles in length.

The next is the Williams. This line will start near the [fol. 4964] center of Section 32, Township 27, Range 37, and will extend to a point in the southeast one-quarter of Section 33, Township 27, Range 37, Grant County, Kansas. It is a 4-inch I. D. line, which will be .68 of one mile in length.

The total length for the 10 wells located in the Kansas portion of the Hugoton Field will be 12.03 miles.

Q. The next item concerning which I would like to inquire, which appears on Page 31 of Exhibit 42, is Item "h", "Construct additional required gathering lines in the Hugoton Field, costing $149,291."

Will you describe these lines, giving the sizes of pipe and the length of pipe and the location?

A. Yes, sir. The Oklahoma gathering lines are described as follows:

The Arnold gathering line will start at a point in the northwest quarter of Section 26, Township 4, Range 16, Texas County, Oklahoma, and extend to a point in the southwest quarter of Section 30, Township 4, Range 17, Texas County, Oklahoma. It is a 6-inch I. D. line, 1.8 miles in length.

Q. With what line will that connect?

A. That will connect to the general gathering system in Oklahoma. If you would like it more fully described, I can show you on the map.

Q. I think it would be best for you to point to the map in describing these facilities.

[fol. 4965] A. The line just described, which will be called the Arnold gathering line, connects to the 16-inch line which extends in a northeasterly direction from the converging point of the Oklahoma gathering system, and to the east the Arnold well will be connected into this line, which will be drilled during the year 1946.

Q. And that is shown colored in blue on the map, Exhibit No. 46?

A. That is correct.

Q. To which you have just referred?

A. Yes, sir.

The Bartle gathering line will start near the center of the west line of Section 18, Township 4, Range 15, Texas County, Oklahoma, and will extend in a southwesterly direction to a point in the northwest quarter of Section 30, Township 4, Range 45, all in Texas County, Oklahoma.

It will be a 6-inch I. D. line, which will be 1.9 miles in length.

The next line will be known as the Tyrone. Now, we will call this the Tyrone line, because it extends up north to

the vicinity of the Town of Tyrone, and in the laying out and naming of the gathering lines, why, it is well to have some name that everyone understands and can identify that line by, because we don't remember the numbers so well that are on the map as we do the names.

[fol. 4966] The Tyrone line will start at a point in the northeast quarter of Section 12-4-16 and will extend in a northeasterly direction to a point in the southwest quarter of Section 9, Township 5, Range 17, Texas County, Oklahoma. This will be a 6-inch line, which will be 6.3 miles in length.

The connection on the southern end to the 16-inch line, which is really an extension in the same direction of the 16-inch line that runs northeasterly from the central point of the gathering system at Oklahoma—

Q. (Interposing) And which was one that you described as being one of the capital additions to the gathering lines in 1942?

A. In 1942, yes, sir, shown in brown. The line that it connects to is shown in brown, and the line just described is shown in blue.

Q. Now, are there any other gathering lines included in Item "h" on Page 31?

A. Not in the State of Oklahoma, but in Kansas we do build some gathering lines.

The first line will be called the Pettijohn gathering line because it will be built primarily to pick up the Pettijohn acreage or production from the Pettijohn acreage, and it will start at a point in the northeast quarter of Section 4, Township 31, Range 38, Stevens County, Kansas, and extend in a southwesterly direction to a point near the center [fol. 4967] of Section 15, Township 31, Range 39, Stevens County, Kansas. This will be a 10-inch I. D. line, which will be 5.3 miles in length.

The next extension which will be built will be an extension to the Ulysses extension, and the line will start in the northwest quarter of Section 32, Township 28, Range 37, Grant County, Kansas, and will extend to a point near the center of the east half of Section 25, Township 28, Range 38, Grant County, Kansas. That will be an 8-inch line, 4.7 miles in length.

The next line will be known as the Williams gathering line. It will start at a point in the southeast quarter of Section 21, Township 28, Range 37, Grant County, Kansas, and will extend to a point near the northeast corner of Section 33, Township 27, Range 37, Grant County, Kansas. This will be an 8-inch line, which will be 4.5 miles in length.

Q. To what line does that connect?

A. The Williams gathering line will connect on the south to the extension of what is known as the Grant County, 18-inch line. The Grant County 18-inch line—that might be a misnomer, because it is only an 18-inch line from the Liberal intake side of the Liberal compressor station up to a point where a line joins it in the northwest quarter of Section 28, Township 30, Range 34, and then it reduces to a 16, and continues in a northwesterly direction to a point in about the northeast corner of Section 24, Township 29, Range 36.

[fol. 4968] It then reduces in size to a 12-inch line for the next, approximately, 4 miles, and then the extension is a 10-inch line, and that is where the Williams line will connect to the present system on that 10-inch line.

Q. Now, have you described all of the gathering lines that are included within Item "h" on Page 31, Exhibit 42?

A. Yes, that is all.

Q. Mr. Hinton, you have an Item "i" on Page 31, "Construct new compressor station near Town of Hugoton, serving areas west of Hugoton at cost of $362,398," and an Item "j," entitled—

A. (Interposing) Pardon me. I am inclined to think that we have a direction mixed up there. We don't serve areas west of Hugoton from that compressor. It should be east.

Q. Then a correction should be entered?

A. Yes. That is on Page 31, Exhibit 42, under Item "i."

Q. In the second line the word "west" should be changed to "east"?

Mr. Wheat. That is the first "i" appearing on the page?

The Witness: It is questionable there. What that compressor is for is to take care of lowering the pressures west of the station, but the gas will travel to the east, and I thought that that might be clarified a little bit there by showing that the gas will not travel to the west.

[fol. 4969] Mr. Wheat: That is the Item "i", under 1946, is it not?

The Witness: Yes, sir.

Mr. Wheat: The second "i" item which appears on Page 31?

The Witness: That is correct.

By Mr. Littman:

Q. Are you suggesting that the word "west" be changed to "east" on that line?

A. I just brought it up for clarification there.

Mr. Culton: Suppose you point out on the map the areas that will be served around the Town of Hugoton, so that it will be clear.

The Witness: The blue triangle here (indicating) shows the proposed location of this compressor station and, probably, the reason that I said it was to serve areas west of there is because I was thinking that it would take care of these wells (indicating), but inasmuch as there is distribution and transportation in this case, why, it might lead somebody to believe that that gas is going to travel to the west instead of the east.

Mr. Culton: I think your word is all right, if that is the situation, because it does serve the wells that lie west of Hugoton.

The Witness: That is right. I just thought perhaps it should be clarified.

Mr. Culton: I think the language is all right.

[fol. 4970] The Witness: I am not sure but what I interrupted your question there.

By Mr. Littman:

Q. I was then going to ask you to describe those facilities and, also, the facilities embraced by the next item,

"j," "Construct dehydration plant in connection with new compressor station, costing $70,000."

A. All right, sir.

By 1946, it is going to be necessary, in my opinion, to install horsepower to maintain the desired load through that portion of the Hugoton system and, in order to be able to take the amount of gas from that section of Hugoton Field which we would want to take, it will be necessary to install 2600 horsepower and, of course, as soon as that pressure is boosted to a point which is above the critical freeze point in that field, it will be necessary to install a dehydration plant.

The dehydration plant will be built in conjunction with the proposed compressor station.

Mr. Culton: By the way, may I interject this question:

Do you find any difference on the freeze point in the Hugoton Field from that which exists in the Panhandle Field?

The Witness: Yes, there is some difference, and there is considerable difference in various portions of the Hugoton Field as to the type of freeze which we encounter.

Mr. Culton: In other words, there is a greater likeli- [fol. 4971] hood of freeze, even at the same temperature, in the Hugoton Field than there is in the Panhandle Field?

The Witness: Apparently, that is the case, because that is what we have experienced.

Mr. Culton: Do you know why that is?

The Witness: No, I do not.

Mr. Culton: Does there happen to be any difference in the chemical constituents of the gas?

The Witness: Oh, yes. The heat values of the two gases are different and the gasoline recovery is different in the two fields.

Mr. Culton: Do you suppose those differences might have some effect on the difference of the freeze point?

The Witness: Yes, I would say that they do.

Mr. Lee: What is the difference in the heat value?

The Witness: Why, in the Panhandle Field, our range of heat value is from about 1060 to—I don't believe we have any lower than 1020 in that field. That is 30 inches saturated.

Mr. Lee: That is B. t. u.'s per thousand cubic feet?

The Witness: Yes.

Mr. Lee: What did you say, 1020 to 1050 in the Panhandle?

The Witness: 1060. Those figures are approximate.

Mr. McRee: That isn't per thousand, is it? It is per cubic foot, isn't it?

The Witness: Per cubic foot.

[fol. 4972] Mr. Lee: When you speak of that 1020, you speak of it in the hundred-thousands, don't you?

The Witness: No, that is per cubic foot.

Mr. Lee: Yes, that is right.

Trial Examiner: There is an atmospheric pressure there, a density factor?

The Witness: Yes, that is 30 inches saturated, and in the Hugoton Field the highest that I can recall is 1034. The lowest is just below 990, that is on the same 30 inches saturated.

Mr. Lee: Are you familiar with the fact that what is actually delivered to the customer in Detroit varies, approximately, between 990 and 1010?

The Witness: I know there is usually a variation there of about 15 B.t.u.'s, and I don't recall it being down as low as 990.

It usually runs from about 1004 to 1014, in that range there. There might be a few days that it would get down that low, but not many.

Trial Examiner: That is on the same density factor, is it, Mr. Lee?

Mr. Lee: Well, I presume so, your Honor.

The Witness: That is the 14.73. That is the reason we have gone to 30 inches saturated, for comparison. We formerly took those on a 2-pound pressure base, and then we took quite a few heat-value tests on 14.65-pounds pressure base, and then we have started testing to 14.73, be-
[fol. 4973] cause our calorimeters are set to 14.73.

We are establishing heat values by calorimeter tests now, rather than by fractional analyses which we formerly used.

Mr. Culton: That is all I had on that, Mr. Littman. I just thought it might be advisable to bring up the fact that there is a slight difference in the freeze point in the two areas.

By Mr. Littman:

Q. Have you been able to locate your working papers that show the details of the capital additions for the years 1942 and 1944?

A. Yes, sir.

Q. Do you have them with you?

A. No, they are in the air mail from Kansas City right now, and they were not lost at the office of the Federal Power Commission at all, but the loss was due to my method of filing, I believe.

Mr. Culton: We have already discussed that method of filing.

By Mr. Littman:

Q. Do you expect them sometime today?

A. I though that they would be in this morning, but I think that they have an extremely heavy incoming mail into the hotel, and I would imagine that they are there but have not been sorted yet.

[fol. 4974] Q. Well, we can discuss further the years 1942 and 1944 after your working papers arrive.

Mr. Hinton, you made certain assumptions, did you not, with respect to the suction pressures at the various main compressor stations, including Liberal compressor and the stations south and west of Liberal. Is that correct?

A. Yes, I believe you call that an assumption.

Q. Well, you had to use certain figures? A. Yes.

Q. Now, those compressor stations are at Liberal, Sneed, Hansford and Hugoton, are they not?

A. The proposed station at Hugoton.

Q. Now, those suction pressure figures were used in connection with arriving at the figures shown in Exhibit 43, Schedule 5 of Exhibit 43?

A. Yes. They did govern this amount.

Q. Will you state what figures you used for each of those compressor stations, year by year, for the entire period under, first, the basic load and, second, under the anticipated load?

Mr. Culton: Is that suction pressure?

Mr. Littman: Yes. And by "period", I mean through the year 1956.

Mr. Culton: I wonder, so that the record might be clear, [fol. 4975] if we might have him explain just what is meant by suction pressure, since the word is really a misnomer from an actual standpoint.

It is apparently used, but just what do you mean by the words "suction pressure"?

The Witness: The pressure in the pipe line at the intake side of the compressor station.

The Sneed suction pressures for the years 1942 to the year 1957 are estimated to be as follows—

By Mr. Littman:

Q. (Interposing) Now, are these under the basic load, or are these under the anticipated load?

A. These are under the anticipated load, and I don't believe that I carried the basic load pressures on down there, but they can be read from the curves because, as the field pressure declines, then the intake pressure at the Sneed station will be governed by the decline of the field pressure.

Mr. Culton: That intake pressure is what is ordinarily referred to as suction pressure of the station?

The Witness: That is right.

By Mr. Littman:

Q. What is the number of the folder of the working papers that you have before you?

A. No. 11, group area, rock pressure summary, Texas.

Q. What is the number? A. 11.

[fol. 4976] Q. File No. 11?

A. Yes. I have two pressures for Sneed, because we will be dividing the header at Sneed as soon as we install the two additional engines, and by dividing the header, I mean that, on the intake side of the compressor station it is necessary that a pipe be laid parallel to the horizontal length of the compressor station in order that each engine and compressor may have piping removed for an intake and a discharge piping system.

As soon as we install the two additional engines at the Sneed station, there will be a Merco-Nordstrom gate placed in this header, which will enable the station to operate at different pressures from the line, the present 18-inch line and the present 20-inch line.

Do you have the idea now of what will happen?

Q. Yes.

A. So that, for that reason, we have these two Sneed suction pressures.

Now, they are the same for a—

Q. (Interposing) Do you have two trunk gathering lines there?

A. Well, we will have before these engines are installed. The looping was described in "1942, Capital Expenditures", and there will be two lines coming into the station.

[fol. 4977] Q. Now, you are going to read the intake pressures at Sneed compressor station for the years under the anticipated load requirements?

A. Yes.

Q. Now, the first one is for what pipe line?

A. The first will be for the pipe line serving areas "A", "B" and "C".

Q. Which areas are shown on the map, Exhibit No. 46. Is that an 18-inch line running southeast from Liberal compressor station from Sneed?

A. From the Windmill Junction, which is just south of the Sneed station.

Then, this 18-inch line runs in a southeasterly direction to a point just south of the old town site of Deahl, Texas.

Q. Very well. Do you wish to read the figures?

A. For the year 1942, we estimate that we can carry a Sneed intake pressure of 293 pounds,

Year	Pressure, pounds.
1943	285
1944	273
1945	261
1946	247
1947	231
1948	216
1949	208
[fol. 4978] 1950	190
1951	172
1952	154
1953	136
1954	118
1955	100
1956	80
1957	60.

For the group areas "D", "E", "F" and "G", the estimated pressures at the intake of Sneed compressor station will be as follows:

Years	Pressures, pounds.
1942	293
1943	288
1944	276
1945	261
1946	246
1947	228
1948	210
1949	210
1950	192
1951	174
1952	154
1953	134
[fol. 4979] 1954	114
1955	90
1956	70
1957	50.

Mr. Lee: Mr. Witness, are those estimated declines inevitable, or may there be conditions that will result in very little decline over that period of years, as far as pressures are concerned?

The Witness: It could be possible that there would be no decline at all, if everyone would stop taking gas from the field right now.

Mr. Lee: Well, but are there mechanical conditions that can reduce the decline?

The Witness: Not the formation decline.

Mr. Lee: Well, can they reduce the decline so far as getting out the reserves is concerned?

The Witness: Do you mean as far as furnishing these pressures that have been set up for the intake side of the Sneed station?

Mr. Lee: Increasing them, yes.

The Witness: Yes, by spending many thousands of dollars, it would probably be possible to come into this station at a higher pressure by installing horsepower on a decentralized system throughout the entire field.

[fol. 4980] Mr. Lee: Well, you have discussed something about that.

The Witness: Yes.

Mr. Lee: Just one other question—pardon me for breaking in on you there—while you are talking about the decline, is that on the assumption that the decline is throughout the entire area with the present number of wells, or with the prospective number of wells?

The Witness: With the prospective number of wells and the prospective development by others, and an estimate that is based on what is believed will be approximately the amount of gas which will be withdrawn, year by year, from the Panhandle Field.

Mr. Lee: Does it take into contemplation any possible increase in your acreage?

The Witness: No.

Mr. Lee: It is predicated upon the present acreage?

The Witness: But the acreage is not the controlling factor in the life of the Panhandle Field at all. It is the rate of withdrawal.

Mr. Lee: Yes, I understand, but if you went out and acquired 10,000 more acres, virgin acres that may have great gas reserves, that would make a change, wouldn't it?

The Witness: Not particularly, no, not as long as we are operating under the present conditions, because if we went out and added 10,000 acres to our present holdings in the Panhandle Field, it would mean that we would be [fol. 4981] taking a smaller amount of gas from each well, but the same total amount would be taken from the field.

That would mean that other companies would be pulling heavier from adjoining acreage, therefore, the addition of 10,000 acres to our present acreage would have very little influence on the total length of life or the total term in which we could operate in the Panhandle Field.

By Mr. Littman:

Q. Now, Mr. Hinton, will you please state the intake pressures for the Hansford pressure station, first, under the anticipated load?

A. That will be rather easy, because for about the next ten or twelve years, that intake pressure will be 300 pounds, and it will drop off from 300 pounds after that, in the proportion that the Sneed discharge pressure will force it to drop off.

Mr. Culton: Explain that. Does the Sneed pressure control that pressure?

The Witness: Yes, as the intake pressure of the Sneed station declines, it is necessary to maintain the same discharge pressure out of that station, which changes the ratio of compression and means that more horsepower is required to compress the same amount of gas.

Mr. Culton: That is, at the same discharge?

[fol. 4982] The Witness: Yes, at the same discharge.

Now then, the Hansford station is a station that is powered with 650 horsepower units, and in order to get good

efficiency from those engines, it is necessary to hold about the same ratio of compression at all times.

Therefore, we are installing additional horsepower at Sneed so that we can maintain the 300-pound intake pressure at Hansford station, because that will result in the greatest efficiency from the horsepower which we will install.

Mr. Culton: In other words, the intake at the Hansford station is controlled by the output at the Sneed station?

The Witness: That is correct.

By Mr. Littman:

Q. What would you expect the intake pressure at Hansford compressof station by 1956 to be?

A. By 1956, in all probability, there will be additional horsepower installed between the two stations, because at that time we will be using the Sneed station as a two-stage station and will be handling less gas.

Of course, we will not have the pressure drop in the line, because the volume will be down, but, at the same time, we will be starting out of Sneed at a lower discharge pressure, because it will no longer be possible for the six units, which we feel will be the total horsepower installed at Sneed, to pass or compress enough gas to get the gas into Hansford.

[fol. 4983] Therefore, it is anticipated that adjustments will have to be on that line in the form of additional horsepower further up the line; that will be a small unit, probably a rotary blower type of compressor that will take care of that problem as it comes up, and we will still try to hold 300-pound intake at the Hansford station.

Q. Through 1956?

A. Yes.

Q. Can you give us the pressures for the Hansford station under the basic load?

A. It will be the same. That station is designed for a 300-pound to get into Liberal at the proper pressure.

Q. Now, will you state the pressures for the Hugoton station which, according to your testimony, is expected to be constructed in 1946?

A. I have not established a definite pressure for Hugoton Field, because the withdrawal to date has been very low. I mean the total withdrawal from the field.

There is only some 250 or 260 billion cubic feet of total withdrawal, but the past year we experienced a rather sharp pressure decline in that field, and that is the first year that there has been anything like an even heavy withdrawal.

It has been running around somewhere 100 million cubic feet a day withdrawal.

The pressure decline average for the field was between [fol. 4984] six and seven pounds for the past year. It does not take an extremely low pressure in the Hugoton Field to require additional horsepower, because those wells are forced to work at a lower pressure, and I believe that we can get along until 1946 without horsepower, but I am not sure.

However, I know that we will put it off as long as we possibly can, but I feel sure that we will need horsepower in that year.

Q. Well, I ask you for the suction pressures that you would expect to use in 1946 and thereafter for the Hugoton compressor station or, perhaps, I had better say, what suction pressures you did use in arriving at the figures shown in Schedule 5?

A. What suction pressures?

Q. I beg your pardon. Withdraw that. Perhaps I can state it more clearly.

I asked you to state the intake pressures for the Hugoton station which you used in arriving at your production as to the Hugoton Field.

A. 310 pounds gage.

Q. For 1946?

A. Yes.

Q. What about the other years down to 1956?

A. I do not make any attempt to go down through those years. Here we have a field with an estimated re- [fol. 4985] serve of, well, all the way from 6 trillion to 13 trillion, the estimates of various geologists, I believe.

There has been a total of 250 billion feet withdrawn, and anybody that would try to go down through a field that has had no greater withdrawal than that would certainly be sticking his neck out.

Q. Well, I take it that you didn't use any specific intake pressure for purposes of making your estimates with respect to the Hugoton station?

A. Yes, we know that we would use 310 pounds there, because that would get us below our freezing trouble, and if we had horsepower, we know that we would go at least that low, because we would have to install sufficient horsepower to give us a ratio of compression where it would be possible to work with that low intake pressure.

Mr. Culton: You didn't determine or ascertain the capital expenditures for that later period of the life?

The Witness: No, sir.

By Mr. Littman:

Q. The thing I would like to know is whether you used the 300-pound pressure figure?

A. 310.

Q. I thought you said 300.

A. If I did, I should have said—

Mr. Culton: (Interposing) 310 gage is what he said.

[fol. 4986] Suppose he explains what he means by "gage."

The Witness: That is just the pressure that we read by gage without adding anything for the atmospheric pressure.

By Mr. Littman:

Q. Did you use that pressure for the Hugoton compressor station for the year 1946 and subsequent years in arriving at your estimate of production?

A. I feel reasonably sure that we can still maintain 310-pound intake pressure at the side of the proposed Hugoton station in 1946, because we will have looped, by that time, a few of the bottle necks in the present system, and the fact that we have installed horsepower is not due to the inability of the wells to produce a certain amount of gas, but it is because we want to transport a greater

quantity of gas through the present 16-inch line to augment the peak day requirement into Liberal station.

Q. How much decline do you expect by 1956?

A. 1956?

Q. Yes.

A. In what field?

Q. In the Hugoton Field.

A. I wouldn't say.

Q. At the intake of the Hugoton compressor station?

A. If you will tell me what the rate of withdrawal from the Hugoton Field will be, I will give you that figure.

[fol. 4987] Q. Well, I cannot tell you that, of course.

A. And I don't believe anybody else can, therefore, it would be impossible to make an estimate.

Q. What pressure did you use for the intake side of the Hugoton compressor station for 1947?

A. I didn't use it, I didn't go beyond 1946.

Q. Now, what intake pressures did you use for the Liberal compressor station?

A. I am not sure that I can tell you all of those, because those were worked out—Mr. Burnham can tell you when he comes—but they tell us what our discharge has to be, and we do not tell them what their suction has to be.

Do you understand? That is where the main line takes over, at the Liberal station, and they tell us at what pressure we must come into that station.

I am not sure that I can remember all of those, Mr. Littman.

Q. Will you state the pressures at which the field lines come into Liberal compressor station?

A. At this time?

Q. Yes.

A. There is a minimum of 225 pounds. That is a minimum order and the maximum is 385 for the past year.

Q. Well, now, what pressures did you assume for purposes of your study?

[fol. 4988] A. Pressures between 275 and 300 pounds.

Q. For all the field lines?

A. No.

Q. For what field lines?

A. For the Kansas lines on the intake side of Liberal station. The Texas line runs slightly lower than that.

Q. What figure?

A. I believe that we would find that that would average between 250 and 260.

Q. There is more than one Texas line going into Liberal, is there not?

A. Not at this time.

Q. But you expect there will be more than one, inasmuch as you are building some additional facilities?

A. Yes.

Q. Under your anticipated load?

A. That is correct.

Q. What pressures did you assume for those lines?

A. Approximately the same pressures, because as those lines are built, they will be required to transport the same proportional amount of gas that the present system will carry.

Therefore, the ratio of compression to the Sneed station will remain practically as it is, and the incoming pressure or the intake pressure at Liberal station will be approximately the same. That is governed by volume rather than [fol. 4989] design of new lines.

Q. Now, what would you say with respect to the Oklahoma gas coming into the Liberal compressor station?

A. We had hoped to get a production of 1½ million feet per well average and come into the Liberal station at a suction pressure of between 250 and 260 pounds.

That, again, is rather difficult to make an estimate of, because we have no wells in there at this time, and, as you know, we are just completing our first well.

Q. Well now, is that a separate line?

A. Yes, that is a separate line.

Q. Well, have you made any estimate for these various lines for the various years from 1942 down to 1956?

A. Not calculating an estimate, but just going on knowledge. It is one of those things that you know is reasonably close to right, and if you spent six months trying to calculate it, you might not be any closer to being right than just your first instinct of it, carrying on of experience.

Q. Do you have any idea of what the pressures would be in 1956?

A. Where?

Q. At Liberal, for the Kansas line.

A. Oh, by 1956 we will, in all probability, be coming into the intake side of the Kansas station at approximately the same intake pressure as we are using at this time.

[fol. 4990] Trial Examiner: You mean the Liberal station?

The Witness: The Liberal, because by 1956 it is going to be necessary to install many, many more horsepower in that field to come into Liberal station.

Mr. Culton: You mean individual compressors?

The Witness: I mean there will be field compressors of several thousand horsepower each. The reason that this problem will be cared for in this way is because, at the present time, the Liberal station is so designed,—water piping, the headers and the general piping layout of the station,—in such manner that it would be almost an impossibility to add the additional required horsepower to take care of the pressure decline at that point.

Therefore, it is assumed that it will be taken care of at points in the field system.

. . . . . .

[fol. 4991] By Mr. Littman:

Q. Mr. Hinton, you assumed and used certain average well head working pressures in making your estimate for each group, "A" to "G", inclusive, in the Texas Field, did you not? A. Yes, sir.

Q. And that was for each of the years 1942 through 1956? A. That is correct.

Q. Now, there are a good many of such figures, are there not?

A. Yes, there are several.

Q. In order to save time, will you please submit to me a typewritten copy of those average well head working pressures for each of the areas?

A. Yes, if you so desire.

Q. I would prefer it in a statement form and then perhaps we can make it an exhibit and get it in the record in that manner, rather than to take the time to read it into the record.

A. Of course, all of those pressures are in my working papers, but if you prefer to have them typed, why, that can be done. I am sure there is a stenographer available around Washington somewhere.

Q. We would appreciate a statement of those well head pressures.

Mr. Culton: Mr. Littman, I am wondering—that, of course, would be rather lengthy, and I believe there is [fol. 4992] another exhibit we plan to make—I am wondering if there is any possibility that that can be postponed until Saturday, the making of those exhibits, do it Saturday?

Mr. Littman: You mean, you can submit the statement on Saturday?

Mr. Culton: No, I mean wait until that time to prepare it, because I anticipate, during this hearing, the witness won't have much time to do that.

Mr. Littman: That would be satisfactory.

The Witness: It will mean that I will have to go through these detailed sheets and copy all of those pressures on one sheet to get it in exhibit form and, of course, that will take some time.

Mr. Littman: Well, I would certainly be satisfied if we could get them by Saturday.

Mr. Culton: What I had in mind was, he probably would not be able to do it before Saturday, use Saturday for it.

Trial Examiner: I understand you are about to introduce another subject for cross-examination?

Mr. Littman: Yes.

Trial Examiner: Before Mr. Hinton leaves this subject, I will ask him to refer to the rock pressure map of 1940, which is exhibit 26 for identification, and I would like to ask whether the heavy, straight lines marking the southerly boundary of the pressure area as defined on this map are [fol. 4993] arbitrary lines, or do they mark the actual partial boundaries to the south or southwest of that known gas production area?

The Witness: The line referred to, the heavy outline line, is an actual line. It might perhaps be misleading, due to the fact that two parts of the southerly boundary of the field are straight lines.

Those straight lines in the outline boundary show where there exists a known fault, and over to the southwestern part of the Panhandle Field, the fault line is the southern line of the Panhandle Field and, also, the approximate northern line of the known helium field which is used to furnish gas to the helium plant owned by the United States Government, located west of Amarillo.

Trial Examiner: The line to which you refer is the diagonal line in Potter County north of Canadian River?

The Witness: That is correct.

Trial Examiner: And the line in Carson County, which is also a long, straight line, I understand also represents a definite fault?

The Witness: It does represent a definite fault that has been established and located by actual drilling.

Trial Examiner: Thank you.

Mr. Culton: It might be a good idea to state, for the purpose of the record, a fault represents a place where there has been a slippage of the earth so that formations [fol. 4994] which at one time were continuous are now found at one elevation on one side of the fault line, and at another elevation at the other side of the fault line.

The Witness: That is right. A fault is established by the difference in elevations of like formations within a short space.

Mr. Littman: If your Honor, please, I would like to have marked for identification with the next exhibit number, a table entitled, "Future Division of Production Between Fields Considering a Reasonable Expected Load Increase."

Trial Examiner: This will be marked for identification as Exhibit No. 131.

(Exhibit No. 131 was marked for identification.)

Mr. Littman: I would also like to have marked for identification as Exhibit No. 132, a table entitled, "Future Division of Production Between Fields without Consideration for Increased Loads, Pressure Base 16.4 Pounds."

Trial Examiner: This will be marked for identification as Exhibit No. 132.

(Exhibit No. 132 was marked for identification.)

By Mr. Littman:

Q. Mr. Hinton, Exhibits Nos. 131 and 132 were supplied by you in pursuance of my request of the day before yesterday, were they not? A. They were.

[fol. 4995] Q. And they contain dath copied from your working papers?

A. Yes. I would like to explain the asterisk which appears for the year 1946 on the West Panhandle Field on Exhibit No. 131 should not be there.

Neither should the footnote on this exhibit be there, the reason being that you will note that the footnote says, "Beginning this year it is assumed that the J. M. Huber Corporation and Northern Natural Gas Company purchase contracts will be relinquished."

Now, that footnote was copied over by my clerk and should not appear on this. For the purpose of establishing a value for gas purchase contracts, those two contracts were eliminated, but I felt reasonably sure there was a chance that those contracts would be renewed and have carried them down as still being connected to our line in these figures, although they were taken out of the gas purchase contract evaluation.

Mr. Culton: You are referring to Mr. Biddison's testimony in that. You furnished figures to him and he eliminated those figures in valuing the gas purchase contract?

The Witness: That is correct, so if the footnote and the asterisk be marked out, why, this will be correct.

It might be well to make it clear that all of these figures are M. c. f. on a 16.4-pound pressure base, on both Exhibit No. 131 and Exhibit No. 132.

[fol. 4996] By Mr. Littman:

Q. Do I understand your testimony to be that the figures shown in Exhibit 131 for the West Panhandle Field

reflect purchases under the J. M. Huber Corporation and Northern Natural Gas Company purchase contracts throughout all of the years shown?

A. That is correct, yes, sir.

Q. Is my understanding correct that Exhibit No. 131 relates to what you have called, in your Exhibit 42, the "anticipated load" and sometimes the "future expected load"? A. Yes, that is correct.

Q. And the Exhibit No. 132 has reference to the so-called "basic load", is that right?

A. And the basic load is the approximate present load—not the present, the 1940-41 load.

Q. The figures on Exhibit No. 132 in the extreme right-hand column, "Total Main Line" are the total sales figures which were estimated by Mr. Morton, are they not?

A. No, I do not believe they are based entirely on Mr. Morton's estimate. It is a 12-months' load ending—yes, they are six months actual, and six months estimated, is what it is.

Q. That is for the year 1941?

A. 1941, yes, sir.

Q. What about the years 1942 through 1960?

[fol. 4997] A. If you will notice, that figure is constant through all years.

Q. I was speaking of Exhibit 131, Mr. Hinton.

A. Excuse me, I thought you said, 132.

Q. I am speaking of the anticipated load.

A. Yes, those are Mr. Morton's estimated figures.

Q. Weren't there some adjustments made from Mr. Morton's sales figures to arrive at those shown in the extreme right-hand column, Exhibit No. 131?

A. Yes, these do not represent sales at all. These figures are production figures and the title, I believe, will make it clear, "Future Division of Production Between Fields."

Mr. Morton's figures were handed to me on the basis of sales. From that we have determined, through years of operation, about what percent of line loss we can expect to encounter, and we know, by many years experience and operation, about what fuel will be required for the compressor stations.

Therefore, that amount of gas is added to the sales to establish the required input at the Liberal compressor station.

Mr. Culton: Does this include gas used for testing and clean-outs and things like that?

The Witness: No.

Mr. Culton: It is only the gas that goes into the line?

The Witness: Line loss. In other words, if we would have a serious line failure, why, that gas would not come [fol. 4998] in as a flat percent application to the sales load.

Mr. Culton: What I am getting at, though, do you include in this the gas which is used in testing the wells or clean-out jobs, or things like that, or would that be in addition to this?

The Witness: No, sir, as I have said, this is the required amount at the intake side of the Liberal station.

By Mr. Littman:

Q. And you have also made an adjustment to a 16.4 pound pressure base, have you not?

A. Yes, our sales are on a 14.73, or 30 inches of mercury, saturated, and our field pressures, our production pressures, are on a 16.4 pound pressure base.

Q. On Page 38 of your written testimony contained in Exhibit 42, in the last paragraph, you state that you developed a pressure trend curve for the Panhandle Field as a whole, based on past performances and on the assumption that the pressure reports of the Texas Railroad Commission are accurate. Is that correct?

A. That is right.

Q. Will you produce that pressure trend curve?

A. Yes.

Mr. Littman: Mr. Examiner, I would like to have marked for identification as Exhibit No. 133, a chart entitled, "Panhandle Field, Texas, Pressure Trend." May this be marked?

[fol. 4999] Trial Examiner: This proposed exhibit will be identified as Exhibit No. 133.

(Exhibit No. 133 was marked for identification.)

By Mr. Littman:

Q. I hand you Exhibit No. 133, Mr. Hinton, and ask you if this chart shows the curves to which you referred in the testimony to which I just alluded a moment ago?

A. Yes, it does.

Mr. Littman: If your Honor please, we do not have copies of this chart.

Mr. Wheat: Possibly it won't be necessary, on this particularly technical chart, Mr. Littman, to bother about copies.

Mr. Littman: We are having marked for identification as exhibits our own copies. Perhaps we can later determine whether we want additional copies or not.

Mr. Culton: We have no point about it.

Mr. Littman: You have the tracings for this chart, have you not?

The Witness: Yes, I do.

Mr. Littman: And copies could be readily made if they are required?

The Witness: Right.

Mr. Littman: Are the tracings in Kansas City?

The Witness: They are.

By Mr. Littman:

[fol. 5000] Q. Was the curve shown in Exhibit No. 133 developed from data contained in your working papers, which data are shown in a sheet of your working papers which I now hand you? A. Yes, it was.

Mr. Littman: I would like to have marked for identification as Exhibit No. 134, the sheet I just handed the witness, entitled, —

The Witness: (Interposing) But not this sheet alone. This is the application of withdrawals applied to the performance of the field. This is a portion of the calculations used in extending the curves.

Mr. Littman: Well, am I correct in understanding that the sheet of your working paper, a photostatic copy of

which I now hand you and which I will have marked for identification, does contain certain data from which you derived the curves shown in Exhibit No. 133?

The Witness: That is right. This is the past production and estimated future production from the Panhandle Field, Texas, on a 16.4 pressure base.

Mr. Littman: I would like to have marked for identification the photostatic copy of one sheet of Mr. Hinton's working papers, which is entitled, "Past Production & Estimated Future Production from Panhandle Field, Texas, 16.4 Pound Pressure Base," as Exhibit No. 134.

Trial Examiner: It will be so marked.

[fol. 5001] (Exhibit No. 134 was marked for identification.)

By Mr. Littman:

Q. Doesn't Exhibit No. 134 contain the data from which you plotted the curves which appear in Exhibit No. 133?

A. It contains the result of previous data, and the curves were plotted from this result marked in Columns A, B and C.

Q. Now, I would like to have you explain the source and derivation of the figures shown in Exhibit No. 134.

At the left hand column, you show the years first in 1926 and earlier, and then each of the years 1927 down through 1960, do you not?

A. That is correct, as far as the annual withdrawals are concerned. The pressures are not shown for years previous to 1935, because it was impossible to obtain data to establish those pressures.

Q. Well, I was just talking about the column headed "Year" for the present.

Now, are those calendar periods from January 1 to December 31 of each of the years shown?

A. Yes, those are calendar years.

Q. Now, in the second column, you show figures which are called, "Annual Withdrawal M. M. C. F."

Now, what do those figures represent?

A. The annual withdrawals from the Panhandle Field, Texas.

[fol. 5002] Q. Now, the first figure of 247,425 M. m. c. f. represents the amount of gas withdrawn from the beginning of the Panhandle Field through the calendar year 1926, is that correct?

A. As nearly as it was possible to obtain a correct figure at that time of the unmetered gas that there was. There was a considerable quantity of gas estimated for that year.

Q. What is the source of those figures headed, "Annual withdrawal"?

A. For the year 1926 and earlier—

Q. (Interposing) Well, for all the years shown. If the sources are different for the various years, you might give each.

A. They are different. Up to the year 1935, I might say midyear, 1934, those figures shown are from a combination of actual metered gas and the best judgment that Victor Cotner and H. C. Crum were able to apply to the unmetered gas.

I have talked to Mr. Cotner in detail about how he went out and gathered this information and I feel that, as far as the actual gasoline plants and the metered gas is concerned, that those figures shown are fairly close to accurate.

However, I do not think that this represents the total amount of gas that came from the Panhandle Field.

Q. You mean the amount that has been taken out is larger than that represented by the figures shown in your column headed, "Annual Withdrawal" on Exhibit No. 134?

[fol. 5003] A. Yes, I think it is larger and there is more than one certain specific thing that leads me to believe that.

One is the action of pressure curves, of which I have probably plotted a hundred in the last ten years on this field, trying to arrive at some method of finding what we could expect in the future, and the other is the fact that we know that there has been a great deal of gas produced

from this field through oil well production which has been termed as "casing head gas."

Q. And the casing head gas is not included in the figures headed, "Annual Withdrawal"?

A. Not up to that time, because it was not compulsory to meter casing head gas. There was no gas-oil ratio, and it was possible for an oil producer to use any amount of gas that he desired, to produce a barrel of oil.

Q. Up to what time?

A. Let's see, I believe that started in the early part of 1935, but I am sure that by August, 1935, that it was effective.

Q. In other words, the figures after August, 1935, include the casing head gas?

A. They do include the casing head gas.

Q. But prior thereto—

A. (Interposing) No, it is just an estimate of it, and it is pretty difficult to make an estimate of casing head gas.

[fol. 5004] It is fairly easy to make an estimate of gas that is used in gasoline plants and that is not metered because it is possible to know the capacity of those plants, but when you are just producing gas to the air, it is a pretty difficult proposition to make too accurate an estimate of it.

Q. Now, have you given all of the sources of the figures shown in the column headed, "Annual Withdrawal"?

A. I believe that there is some consideration given there to gas blown to air, that is, after the year 1935.

Q. I believe you explained that you secured the figures through the year 1935 and prior thereto from an estimate made by Messrs. Cotner and Crum?

A. Prior to that date, yes, sir.

Q. Prior to 1935? A. Yes.

Q. Now, what is the source of the figures from January 1, 1935, to the end of 1940?

A. The Railroad Commission records.

Q. Of Texas?

A. Of Texas, along with certain additions which it was felt should be added to give consideration to the pound decline and not getting a warped idea of potential recovery, the addition being that of gas necessary in the drilling in of new wells and the blowing of old wells, both

during maintenance periods and for the purpose of cleaning well bores.

[fol. 5005] Q. Then the figures include, as they stand in the second column of this exhibit, the total gas production from the Texas Panhandle Field?

A. Yes, as nearly as it can be estimated along with the well-established data, that is, the metered gas.

Q. Including casing head gas? A. Yes.

Q. Throughout all of the years shown?

A. Not all of the casing head gas up to 1935, because at that time they were paying particular attention to the gasoline plant use, rather than trying to trace down casing head gas.

Q. Do your working papers contain and show the assembly of the figures from the various sources that you have described?

A. I am not sure whether they do or they do not. If mine don't, I believe that those of Rufus Smith will probably show those.

You understand, in getting up a list of figures like this, it is necessary to almost go and visit with the [follows] who have compiled these figures in the early days, to feel sure that they may be depended upon and I have talked with Mr. Peterson, and he has compiled a great many figures; Mr. McCue of the Columbian Fuel Company.

I have talked with Mr. Cotner and I have talked to Mr. Hughes, and I talked to Mr. Massa. All of these gentle-[fol. 5006] men have lived in the Panhandle with this gas field, and I believe that the figures shown here are about as accurate as could be obtained, but I am not sure that I do have the details showing how these figures were finally reached.

Mr. Culton: Mr. Hinton, can you tell us who these gentlemen are? I do not know whether the record shows as to all of them or not?

The Witness: Mr. Peterson is geologist for the Texoma Natural Gas Company, and Mr. McCue is a scout out of the Amarillo office of the Columbian Fuel Company, and Mr. Cotner is Vice President of the Columbian Fuel Company who lives in New York now. He moved up there recently.

Mr. Massa is a consulting engineer at Pampa, Texas, and Mr. Hughes is a consulting geologist at Amarillo, Texas.

Mr. Culton: Mr. Massa was in charge of the Pampa office of the Railroad Commission for a number of years, was he not?

The Witness: He was. He is probably more familiar with the old records of the Railroad Commission at Pampa than anyone you would be able to contact.

By Mr. Littman:

Q. We have Mr. Smith's working papers, and will ask you to refer us to the breakdown and the various sources for these figures shown in Column 2.

A. There may be some slight discrepancy between the two sets of figures where matters of judgment entered in, [fol. 5007] but they will be very close.

Q. Perhaps during the noon recess we can have the breakdown of the figures and the sources? A. Yes.

I am glad to learn that you have Mr. Smith's papers, because I was held responsible for them, and I did not know where they were.

Q. Now, the figures in the third column headed "Cumulative Withdrawal M. M. C. F." are simply the cumulative figures for the years shown, are they not?

A. That is correct.

Q. Will you state the source of the data shown in the next column, headed "Pressure Decline, Well Head Gage"?

A. That comes from the data of the Railroad Commission of Texas.

Q. Wouldn't it be more correct to say that the figures shown in the column headed "Pressure Decline" represent the remaining well head pressures for each of the years 1935 to 1939?

A. In all probability, that would be an improvement on the heading which I have.

Q. We just wanted to make certain that we understood these figures.

A. I think it would be clearer that way, yes, sir, Mr. Littman.

[fol. 5008] Q. Now, as of what date or dates are these pressure readings which are shown in Column 4?

A. Those are midyear pressures.

Q. Over what period are they taken?

A. Do you mean how many months does it take to take the pressures in the field?

Q. Yes.

A. It is according to how many engineers they can get from Texas A. and M. and Texas University.

Q. By "they", you mean the Texas Railroad Commission?

A. The Texas Railroad Commission. If they have a good bunch of young engineers available, why, it does not take so long, but last year we had to wait for a long time before we could even start on ours, because there was a shortage on engineers.

I would say that if they had engineers, that it would take about three months to take all of the well head pressures in the field.

Q. And the three-month period might be longer, or might be less for each of the years? A. That is right.

Q. And it might start and end at different dates in each of the years?

A. Yes, it would in all probability be within the vacation period, that being along about the first of July until [fol. 5009] the first of September.

Mr. Culton: I wonder if it would help the record to have the witness say what has to be done in taking those pressures?

The Witness: In the matter of just taking pressures, we are using the dead weight gage now, and all that is required is to make a connection of the dead weight gage on a pressure tap at the well head, and balance the dead weight gage against the well head pressure.

Mr. Culton: Has that always been the practice?

The Witness: No, sir, there were very few dead weight pressures taken prior to 1939.

Mr. Culton: At the time these pressures are taken, are the potentials also taken?

The Witness: They always have been, up until the past year, and the past year they were so late getting started that instead of taking potentials, they merely took well head pressures and declined the 1940 back pressure open flow tests on the basis of the pressure drop.

This is the first year that potentials have not been taken along with the pressures.

Mr. Lee: What do you mean by "potentials"?

The Witness: The open flow, more commonly known.

By Mr. Littman:

Q. You just referred to the "Past year". What year [fol. 5010] did you mean?

A. 1941 is the first year that potentials have not been taken in midyear since the Railroad Commission started to function.

Q. In the next column headed, "Estimated Annual Withdrawal, Condition No. 1, M. M. C. F.", you have certain figures running from 1941 to 1960, inclusive.

Will you please give the source of those figures?

A. Those figures are my own estimate, which was made by talking to various representatives of other companies, by knowing that the carbon black load will, in all probability, remain approximately as it is, and studying the weekly reports which I get, which is a comparison of the amounts of gas taken by each major pipe line company from this field, and the amounts that I have put down here are based upon those things.

Q. Do these weekly reports have a title? A. Yes.

Q. What are they called?

A. Comparison of Deliveries, I believe it is. I might have a copy here. If I don't, I have them at the hotel.

Q. Who publishes the paper?

A. They are published by all of the major pipe line companies producing gas in the Panhandle Field, and they furnish this data to a stenographer in Amarillo each week, who types it and sends copies to the various companies. [fol. 5011] Q. We would like to have the title of that weekly paper, if you can give it to us.

A. I do have a file over at the hotel on it, and I will bring it back after lunch.

Q. Very well. That weekly paper does not make any estimate of the amount of gas expected to be withdrawn in the future, does it?

A. No, sir.

Q. But you have based your estimate for the next 19 or 20 years upon that information, is that correct?

A. Not altogether, no.

Now, in the column of figures that we are referring to at this time, you will note that there is no increase shown from 1941.

That reaches its maximum in that year.

Q. The figure being 610 million M.c.f.?

A. That is right.

Q. Were you going to say something further about that? A. No, sir.

Q. Now, you refer to a "Condition No. 1" at the head of that column. A. That is right.

Q. Will you explain what that condition represents?

A. Condition No. 1 contemplates that the rate of withdrawal from the Panhandle Field will remain static, or [fol. 5012] approximately what it was during the year 1941.

Q. Now, you have a column of figures further on, headed "Estimated Annual Withdrawal, Condition No. 2."

A. Yes.

Q. Will you explain the meaning of Condition No. 2?

A. The annual withdrawal estimated under Condition No. 2 is based on the assumption that all other companies will continue to produce gas in the same quantities as in 1941, but that Panhandle Eastern will increase its rate of withdrawal in accordance with Schedule 5, Exhibit 43.

Q. That is, in accordance with Mr. Morton's estimate of future sales?

A. Yes, sir, adjusted for line loss and pressure base and fuel.

Q. Now, you have another column that contains a somewhat similar set of figures, headed "Estimated Annual Withdrawal, Condition No. 3."

What condition does that represent?

A. That represents the condition which I feel will be the actual condition, and that gives consideration to increased withdrawals by not only Panhandle Eastern, but by some of the other pipe line companies taking gas from the Panhandle Field.

Q. That condition, you say, represents more nearly the condition which you would expect to prevail in the next [fol. 5013] 19 or 20 years?

A. Yes.

Q. And it includes the increased production, not only of Panhandle Eastern, but of other pipe line companies?

A. That is correct.

Q. And what is the source of those figures?

A. Well, of course, ours is based on Mr. Morton's estimate of sales. We know that Texoma is not looping their pipe line into Chicago to carry the same amount of gas, and there has been an estimate made for that purpose.

I might say that the increases shown here are all for pipe line gas, and does not include any increase in the gasoline and carbon black plants in the Panhandle nor of the local market there.

Q. You do not expect any increases in that regard, do you?

A. Well, I am hoping for that, anyway. I believe that is right, because those plants now are operating and have been at fairly full capacity, and I do not think that they are going to be able to get material to build plants very soon, even if they wanted to, but I do not believe they are going to build more carbon black plants in that field.

Q. Mr. Hinton, did you consult with any of the other pipe line companies that operate in the Panhandle Field in arriving at this particular estimate of Condition No. 3, [fol. 5014] or was it your own study?

A. I would say that it was largely my own, because I do not recall going to any individual of any company and asking them how much gas they were going to produce over the next few years, and asking them to furnish the detail of it; but it is one of those things that you just get to know by being around the field.

. . . . . .

[fol. 5015] By Mr. Littman:

Q. Mr. Hinton, just before the noon recess, we were discussing Exhibit No. 134.

A. That is the photostatic sheet.

Q. That is the photostatic copy of your working sheet entitled, "Past Production and Estimated Future Production from Panhandle Field".

Now, you have letters "A", "B", and "C" shown on this chart. Will you please explain what those letters mean?

A. The letter "A" covers the three columns which show the annual withdrawal based on no change in withdrawal from the approximate 1941 rate of production.

The next column merely is a cumulative withdrawal, which is obtained by adding to the total withrawal the annual withdrawal.

The third column is the remaining pressure at the different stages of the total withdrawal from the field.

Q. Well, then, am I correct in understanding that the letter "A" applies to those three columns that you just described?

[fol. 5016] A. That is correct.

Q. And am I correct in understanding that the letter "A" means Condition No. 1? A. That is correct.

Q. And the letter "B" applies to the next three columns, that is, the middle three, and refers to Condition 2?

A. Yes, sir.

Q. And the letter "C" refers to the last three columns on the right-hand side of the page and refers to Condition 3?

A. That is correct.

Q. And you have described those three conditions in your testimony this morning, have you not?

A. Yes, sir.

Q. Now, will you please state the source of the figures which appear in the three columns headed, "Estimated Pressure Decline", Condition No. 1, Condition No. 2 and Condition No. 3?

A. The source of those estimated pressures comes from the result of the application of future estimated withdrawals based upon past field performance.

Q. In other words, these rock pressure figures, which I believe you have already explained, really represent

the rock pressure average for the entire Panhandle Field for each of the years shown, for 1941 through 1960 and are estimated, are they?

A. They are. Naturally, any future figure would have to be an estimated figure.

[fol. 5017] Q. Is the 1940 figure for the three conditions relating to the rock pressure estimated?

A. No, it is not.

Q. That is an actual figure, based upon the reports of the Texas Railroad Commission?

A. That is right, it is data compiled by the Railroad Commission of Texas.

Q. Now, I would like to make certain that I understand these rock pressure figures.

Referring to the column headed, "Estimated Pressure Decline, Condition No. 1", you show 314.10 pounds in 1940. Is that correct?

A. That is correct. That is a weighted average figure, and not an equilibrium figure.

Q. Now, all the figures you show in Exhibit 134 relate to the entire Panhandle Field, do they not, both East and West?

A. Sweet and sour.

Q. And East and West?

A. East and West, yes, sir.

Q. Now, the 314.10 pounds of rock pressure is the Texas Railroad Commission's estimate of the average rock pressure throughout the entire Panhandle Field as of the middle of the year 1940? A. That is correct.

Q. Are you sure that doesn't mean as of the end of the [fol. 5018] year 1940?

A. That is mid-year 1940, because that would be the only time that that figure could be obtained.

Q. But the estimated cumulative withdrawal figure shown in the column to the immediate left represents the figures of withdrawals as of the end of the year 1940. Is that correct?

A. I believe that is correct, yes.

Q. Now, in 1941, under Condition 1, which you also refer to as Condition "A", you show that the rock pressure has declined to 303.07 pounds.

A. That is right.

Q. Now, does that mean that after the 610 million M. c.f. have been taken out in the year 1941, that such with-

drawal will produce a rock pressure decline from 314.10 pounds to 303.7 pounds?

A. Yes, sir, a total decline of 11.03 pounds.

Q. Mr. Hinton, I hand you a copy of the Texas Railroad Commission's annual report for the Panhandle oil and gas field, dated July, 1940, and ask you to please check this report and make certain that your rock pressure figures are as of the middle of the year, rather than as of the end of the year shown.

A. The pressure shown there is as of the end of the year 1940, instead of midyear, as I believed them to be. The weighted average pressure at the middle of the year on the total acres in the Panhandle Field was 318.33, and the de- [fol. 5019] cline from the middle of the year to the last of the year by extrapolation of the pressure curves gives the 314.10 pressure.

Q. And is it a fact that all of the rock pressure figures that you show in Exhibit 134 are as of the end of each of the years shown, instead as of the middle of the years shown, as you have previously testified?

A. Yes, that is right. I recall now that I did do that in order to avoid splitting up the production into midyear periods, which means that we would have to take those from the records month by month instead of in annual figures, so I do remember now that I used the last-of-the-year figures throughout the curves.

Q. And throughout Exhibit 134? A. Yes, sir.

Mr. Culton: You extrapolated to get that figure?

The Witness: That is right. Of course, it is all obtained by extrapolation of past performance, and it was just as easy to go to the end of the year as it was to the middle of the year.

Then I wouldn't have to split my estimated annual withdrawal, because, in order to do that, I would have to go back and obtain the history to find out what percent was produced the first six months, and what percent was produced the last six months of the total year.

By Mr. Littman:

Q. Well, I merely wanted to make certain that we under- [fol. 5020] stood your table.

A. Well, I am grateful to you for straightening me out on that, because we so often work to midyear pressures that

I had in mind that I worked this problem in that manner, but I see that I haven't.

Q. Mr. Hinton, would you mind if we were to number the columns in Exhibit 134 in order to facilitate the cross-examination?

Starting with the column headed, "Year", suppose we call that Column 1, and then go right across from left to right until we reach Column 13?

A. I think it is a very good idea.

Would you mind numbering that last column so we don't have 13 columns on this sheet?

Q. It is all right with me. What do you want to call the last column?

A. We wouldn't have to refer to it, but the number will be on there.

Q. Referring now to Column 7, is my understanding correct that at the end of the year 1942, you estimate that the average rock pressure throughout the Panhandle Field as of December 31, 1942, will be 291.26 pounds, as compared with 303.07 pounds at December 31, 1941?

A. That is correct, keeping in mind that these are all weighted with horizontal acreage.

[fol. 5021] Q. These are weighted?

A. With horizontal measurement of acreage.

Q. And in order to produce that drop in rock pressure, 610 million M. c. f. will have been withdrawn in the calendar year 1942, as shown in Column 5?

A. That is correct.

Q. That same method holds true throughout the balance of Columns 5 and 7, is that correct?

A. That is correct.

Q. And the same general method holds true for Columns 8 and 10?

A. That is correct.

Q. And for Columns 11 and 13?

A. That is correct.

Q. Now, I believe you have testified that the rock pressure decline from December 31, 1940, to December 31, 1941, under Condition "A", for example, would be 11.03 pounds? A. That is correct.

Q. And the drop for the next year, and that is to December 31, 1942, would be 11.81 pounds. Is that right?

A. That is correct.

Q. Let's go further down Column "A". Looking at the figures for 1949, your rock pressure reading as of December 31 of that year is 194.90 pounds, is that right?

A. That is correct.

[fol. 5022] Q. And as of December 31, 1950, the rock pressure reading is 178.95 pounds. Is that right?

A. That is right.

Q. A drop of 15.95 pounds between those two years. Is that right? A. That is correct, yes, sir.

Q. And what production do you estimate will have occurred in the Panhandle Field in that calendar year?

A. 610 million M. c. f.

Q. And that is the same amount under Condition "A" or Condition 1, which you stated would be withdrawn in 1941. Is that correct?

A. That is absolutely correct.

Q. Now, in 1941, according to this table, the production of 610 million M. c. f. produced a pressure drop of 11.03 pounds, as compared with 15.95 pounds for the same production in 1950.

A. That is correct.

Q. All of which indicates that you assumed that there would be less production per pound of drop in rock pressure in the Panhandle Field. Is that right?

A. Yes, sir, it is assumed that the field performance will continue in the same manner as heretofore.

Q. Now, without going through each of the comparable columns and all of the figures in each column under Condi-[fol. 5023] tions "A", "B" and "C", sometimes called Conditions 1, 2 and 3, the same situation generally prevails in Exhibit 134, does it not? A. Yes, sir.

Q. Namely, that you have an accelerated drop in rock pressure per million M. c. f. of gas produced?

A. That is correct. In all cases past field performance has been carried to the future.

Q. Now, you developed a line or curve for purposes of arriving at the future production per drop in rock pressure, did you not? A. Yes, sir.

Q. Do you have that curve, or the chart upon which that chart was plotted in your working papers? A. I do.

Mr. Culton: Which area is that?

The Witness: This is for the field.

Mr. Littman: If your Honor please, I would like to have marked for identification as Exhibit No. 135, a chart called "Panhandle Field Performance-Rate of Pressure Drop from 1935 to 1940".

Trial Examiner: It will be so marked.

(Exhibit No. 135 Was Marked For Identification.)

By Mr. Littman:

Q. Referring to Exhibit No. 135, is that the chart to [fol. 5024] which you just referred as being the chart on which you worked out the rate of production per pound of rock pressure decline? A. That is correct.

Q. Now, if I correctly understand this chart, the vertical readings show the rock pressure decline throughout the entire Panhandle Field in weight, is that correct?

A. Weighted only horizontally. There is no vertical weighting of the area.

Q. And am I correct in stating that the horizontal readings show the withdrawals in trillions of cubic feet?

A. That is right. The total withdrawal from the Panhandle Fields.

Q. Now, looking over at the extreme left hand side of your chart, Exhibit No. 135, the one represents 1 trillion cubic feet, does it not?

A. That is right.

Q. And how many pounds of decline in rock pressure, according to this chart, was required to produce that first billion M. c. f. out of the Panhandle Field?

A. The first trillion?

Q. Yes.

A. Why, according to this chart here, 6.62 pounds were required; but, if you will notice, I have made this a broken line from 1935 back to the beginning of the field, because, in my opinion, the total amount of gas that has been ac- [fol. 5025] cumulated to this date does not represent the total amount of gas that has actually been taken from the field, because I am sure that there has been a great deal of the gas that does not show in those figures that has been produced through oil wells.

Mr. Culton: That is during the early years, prior to 1935?

The Witness: That is right.

By Mr. Littman:

Q. I was asking these questions at this time, Mr. Hinton, primarily for the purpose of ascertaining how this chart, Exhibit No. 135, works.

We can discuss those phases a little later, but what decline in rock pressure was required, according to this chart, to produce the first trillion?

A. 6.82 pounds.

Q. What decline in rock pressure was required to produce the second trillion? A. Approximately 8.2.

Q. Now, you are reading these figures at the point where the dotted line crosses the line designated "2", at the bottom of the chart; is that correct?

A. That is correct.

Q. And according to this chart, what decline in rock pressure was required to produce the third trillion?

A. 9.63 pounds.

[fol. 5026] Q. Will you state the amount of rock pressure decline required to produce the fourth trillion?

A. That is approximately 11.2 pounds.

Q. In other words, each successive trillion cubic feet of gas that is withdrawn from the Panhandle Field, according to this chart, if taken literally, requires a greater amount of rock pressure decline, does it not, or brings about a greater decline in rock pressure?

A. That is so shown by taking the horizontally weighted pressures from 1935 through 1940, and placing a dot on the chart to represent the decline for the amount produced at the stages of total withdrawal from the field.

Now, I said yesterday that I did not feel that there had ever been a true equilibrium pressure reached in the Panhandle Field. If it were the case that there had been a true equilibrium pressure reached in this field each year, then the application of Boyle's Law to this problem would place these dots in a perfectly horizontal line that would be exactly straight across the paper.

Q. If I correctly understand your last answer, if Boyle's Law were to be applied, and if there were no devia-

tion from Boyle's Law, then you would have across this chart a straight, horizontal line, rather than the descending line shown on this chart.

A. That is correct.

[fol. 5027] Q. In other words, if you had a straight, horizontal line across this chart, you would have a uniform drop in rock pressure for each trillion cubic feet produced in the Panhandle Field throughout its life. Is that correct?

A. Yes, sir.

Q. Now, what drop in rock pressure is shown by your chart, Exhibit No. 135, in order to produce the fifth trillion cubic feet?

A. 12.42 pounds.

Q. Now, that brings us pretty close to the year 1935, does it not?

A. That is correct.

Mr. Culton: By the way, could you tell us what the aggregate is, up to that time?

The Witness: Aggregate production, do you mean?

Mr. Culton: The aggregate drop.

The Witness: Yes. That would be approximately 353 pounds.

Mr. Culton: That is down to 350?

The Witness: Yes, that would be the average weighted pressure, weighted only horizontally, for the entire field. The original pressure is generally taken to be 430 pounds.

However, pressures higher than 430 pounds were recorded in the yearly days in portions of the field.

By Mr. Littman:

Q. So the 435-pound figure is the average, is it not?

[fol. 5028] A. No, I think 430 is the accepted pressure, original pressure.

Mr. Culton: You are thinking of Hugoton.

By Mr. Littman:

Q. Now, as of what date did you just give the information requested by Mr. Culton?

A. At the beginning of 1935.

Q. By the way, a moment ago I asked you to describe the vertical readings on this chart and, perhaps, I may have been a little misleading.

Would it be correct to say that the vertical readings on the chart, Exhibit No. 135, really represent the rate of drop in rock pressure?

A. Yes; sir. I think the vertical captions, more properly described, would be the rate of pressure decline in pounds based on the weighted average itself, being based only on the application of the horizontal surface, and not giving consideration in any place to the thickness of pay in the field.

Q. Now, we have reached the portion of your line which is solid. That extends from a point slightly beyond the fifth trillion cubic feet, to a point slightly beyond the eighth trillion cubic feet.

Is that, generally, the production that was taken from the Panhandle Field between 1935 and approximately 1940?

[fol. 5029] A. That is correct. That is the amount of gas produced for that period.

Q Now, let us take 1940 as an example, particularly the eighth trillion cubic feet measurement. Will you state the decline in rock pressure required, according to your chart, to produce the eighth trillion?

A. 16.62 pounds.

Q. Now, let's look at a few of the units into the more distant future. Let us take, for instance, the fifteenth trillion. What decline is required to produce that single fifteenth trillion?

A. That will be about 26.47 pounds.

Mr. Culton: 47 or 37?

The Witness: 26.47 is what I read on the chart.

Mr. Culton: Right.

By Mr. Littman:

Q. Now, the last figure you show is for the 21st trillion cubic feet that will be taken out of the Panhandle Field. Will you give us the rock pressure that you estimate will be required to produce that 21 trillion?

A. If and when it is possible to take 21 trillion cubic feet from this field, the amount of pressure decline that will be experienced at a comparable rate of withdrawal will be 35.2 pounds.

[fol. 5030] Q. In other words, it will require approximately 35 pounds of rock pressure drop to produce the 21st trillion cubic feet in the Panhandle Field, if and when it is produced, as compared with a drop of slightly more than 5 pounds to produce the first trillion cubic feet. Is that correct?

A. That is based on the method by which the field has been developed, the well spacing, taking everything into consideration, that is correct.

Q. Do you expect the figures to extend beyond the 21st trillion? A. No.

Q. Is that why you quit?

A. Well, I might have been able to quit one earlier and, from the standpoint of our company, I think I could probably have quit two earlier.

Q. You mean t-o-o?

A. I mean, t-w-o, because I think there will be considerable gas taken from the Panhandle Field after the time that we cease to produce gas from that field.

Q. Well, we will come back to this chart a little later, but I understand that this chart shows the rate of production per pound of drop in rock pressure decline; or, stated conversely, the rate of drop of rock pressure per trillion cubic feet produced in the Panhandle Field?

A. That is hardly correct, yet. It is the rate of drop [fol. 5031] at various stages of total withdrawal through the field.

Q. At any rate, you utilized, for purposes of your study in Exhibit 42 and Exhibit 43, the rates of rock pressure decline and production reflected in your chart, Exhibit No. 135, did you not?

A. Yes, I believe that is right.

Q. And was it by the application of those rates that you secured the rock pressure readings or estimates as shown in Exhibit 134, in Columns 7, 10 and 13?

A. Yes, sir, and so produced on Exhibit No. 133 with each curve identified by the letters "A", "B" and "C", which are, likewise, shown on Exhibit No. 134 in Columns 7, 10 and 13.

Q. Well, I wanted to make certain that I was correct in understanding that when you wanted to determine the figure to use for the rock pressure reading in 1942, let us say, as shown in Column 7, of 291.26 pounds, you first determined how much gas was going to be withdrawn in that year, and then you applied the rate of drop per unit of production to the rock pressure of the preceding year, in order to secure the reading for 1942, and you used Exhibit No. 135 for that purpose. Is that right?

A. That is correct. When I found that there was a constant in the acceleration, then it became apparent that this could be applied to the remaining years of the field [fol. 5032] and the rate of withdrawal and the total withdrawal would govern the weighted average pressure.

Again, when I speak of weighted, I am referring to only the horizontal weighting of the field.

Q. Now, Mr. Hinton, in order that we may better understand your Exhibit No. 134, what result would you have obtained in Columns 7, 10 and 13, if you had used a constant rate of drop per trillion cubic feet withdrawn?

A. I would have obtained a result which would have had a high percentage of error in it.

Q. Mr. Hinton, I am asking what the mathematical effect would be upon the figures shown in those columns.

A. That would be all in accordance with what number of pounds was used per trillion. If you would use one pound per trillion, of course the drop would be very slight. If you used 50 pounds per trillion, why, then it would show a comparatively short life for the field.

You see that you would have to know what to apply before it would be possible to arrive at any answer at all that would be worth consideration.

Q. Let me put what I had in mind this way, Mr. Hinton:

Looking at Column 7 of Exhibit 134, you have in 1949 a rock pressure reading of 314.10 pounds, whereas in 1959, you have a rock pressure reading of 18.31 pounds, estimated.

Now, if you had used a constant rate of drop, the effect [fol. 5033] would have been to give you a much larger remaining rock pressure at 1959, would it not?

A. I want to make one calculation before I answer that, please. In answering your question just asked, I would say that this calculation indicates that if you would have taken a drop of 15.57 pounds per trillion, that we would have ended at the same point on the curve, except the curve would have been a straight line, instead of a curve parabola.

Mr. Littman: Will you read the answer, please?

(Whereupon, the last answer was read by the porter.)

By Mr. Littman:

Q. Which point are you talking about, and which curve are you talking about?

A. I am talking about the Exhibit 133. The time element is the point considered, which would be the same year for each of the Curves "A", "B" and "C".

Q. And, of course, if 10 pounds were used instead of 15, that you just mentioned, Columns 7, 10 and 13 would have extended beyond 1960, would they not?

A. Yes; or if we would use 5, it would extend twice as long as that, but we know now that it takes more than 10 pounds to produce a trillion, because we have already passed that point in the rate of pressure decline per trillion feet produced.

Even now, with the feeding in of the marginal acreage, [fol. 5034] and the fact that the area of thin pay in this weighted average carries the same value as the areas of much thicker pay, we have already arrived at a point where it takes more than 10 pounds.

Of course, we know that 10 pounds would not get the right answer.

Q. We will discuss those matters a little further later.

At this stage, I was endeavoring to ascertain if we understood the various methods and assumptions which would have an effect upon the answer.

A. If there is any other question that isn't clear, I would appreciate your asking it, because I would like for everybody to understand this.

Q. All right.

Now, did you develop a formula from Exhibit 135, from which you could compute the production per pound drop in rock pressure decline through the years, or did you work directly from the chart, Exhibit 135?

A. No, I did neither. I arrived at a constant, and I applied the constant all the way through. There is no formula involved.

Q. What was the constant?

A. I believe it was 1.141.

Q. What do you mean by that?

A. I mean that for each additional trillion, that the [fol. 5035] number of pounds of pressure decline required was increased at the rate of 1.41 pounds per trillion.

Q. Beginning at what point?

A. That is based from 1935 on, that being the first time in the history of the field that there is data of sufficient accuracy to rely upon.

Q. Well, now, am I correct in understanding that there are two factors, as shown by Exhibit 134, which hasten the end of the life of the field, namely, the estimated annual withdrawals shown in Columns 5, 8 and 11, and the estimated drop in rock pressure shown in Columns 7, 10 and 13?

In other words, am I correct in stating that the greater the amount of annual withdrawals each year, the sooner you will arrive at the end-point of life of the field?

A. That is an indisputable law.

Q. And the faster your decline in rock pressure, the faster, of course, you will reach the end of the life of the field, too?

A. That is correct, but the rate of decline in rock pressure in this particular field is not entirely dependent upon the annual rate of withdrawal.

Q. What is it dependent upon?

A. The acceleration of the rock pressure decline in the field is due to several things.

I think the principle one is that, when working with the [fol. 5036] weighting of this field, that the fourth dimension is left out.

Q. What is that fourth dimension?

A. The length and breadth of the field are taken into consideration, and the pressure is taken into consideration, but no consideration is given to the depth of the reservoir.

Therefore, the weighting of the field, using the data and the factors that are used, would be a great deal like trying to tell how many thousands of gallons of water were in a lake, without knowing how deep it is.

Q. And that is what you mean by the fourth dimension?

A. That is right. You have to have length, breadth, thickness and pressure in the computation of the amount of gas in a reservoir.

Q. Now, without going into detail at this time, am I correct in understanding that the solid line shown in Exhibit 135, and which represents a comparatively short section of the entire line, was plotted from five points? Is that correct?

A. That is correct.

Q. And each point represents a year, does it not?

A. No, there are two years between the last two points or between 1938 and 1940.

Q. Now, will you refer to Page 10 of Exhibit 42, and, without going into detail at this time, will you state whether or not the five points from which you plotted the solid line in Exhibit 135 were taken from the data shown in the table [fol. 5037] on that page?

A. The pressure, as I have testified yesterday, is taken from the data of the records of the Railroad Commission of Texas, and it has been so long since I have worked on this that I would have to go back and see whether this is just exactly the take, or whether there is an amount in there that is added for lease use.

* * * * * * * * *

Q. Mr. Hinton, I believe you were going to check some figures during the recess, and tell us how you arrived at the

five points from which you drew the solid line in the chart, designated for identification as Exhibit No. 135.

A. That is right. On Page 10 of Exhibit 42, at the lower part of the page, is a table showing the amount of gas which was withdrawn from the reservoir of the Panhandle Field of Texas for periods of time shown under the first column, the amount of production in M.c.f. under the second, the pressure loss in pounds under the third, and the production per pound loss in M.c.f. under the fourth, [fol. 5038] showing in the fifth column what the indicated content of the field is at various stages, and how the application of anyone of those pressure-loss pounds could obtain an indicated reserve which would be erroneous.

Mr. Culton: By that you mean that no two of them would be the same?

The Witness: That is right.

By Mr. Littman:

Q. Now, the method used there was merely to divide the pressure loss in pounds into the production for that period? You mean to divide the pressure-loss in pounds by the production per M.c.f., do you not?

A. Into it, yes.

Q. Well, now, which do you mean, Mr. Hinton?

A. To give the production per pound loss, you divide the pressure loss in pounds into the production to arrive at the production per pound.

Q. Mr. Hinton, it is my understanding that the division is the other way around.

Will you read the last answer back, please? Maybe I misunderstood.

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. I see. I am sorry.

A. Does that answer your question all right, Mr. Littman?

[fol. 5039] Q. Well, that doesn't give you the points from which you plotted your line in Exhibit 135, does it, Mr. Hinton?

A. Yes, it does.

Q. Well, suppose you tell us how you arrived at one of the five points by that method.

A. All right.

By dividing 67.49 into 5,197,693,413, the amount of pressure decline per trillion feet was obtained and that point was plotted on Exhibit No. 135 at a point above the horizontal scale or caption, at a point where the total withdrawal had been 5,197,693,413 M.c.f. and, thus, the first point was obtained.

Now, in order to find out what the rate of decline was per trillion, we found the total withdrawal had been that from the beginning of the field to 8-1-35, plus from 8-1-35 to 7-1-36.

Then that rate was plotted on said Exhibit 135.

Do you understand that?

Q. I think I understand what you are saying.

A. I think maybe where you are slightly misled is that the pressure loss in pounds shown here stands for the fractional part of a trillion feet produced.

In other words, that 7.51 actually stands for a withdrawal of 556 billion cubic feet; and for a trillion cubic feet that would be increased by 444 billion.

[fol. 5040] Q. Suppose you make the actual division of those figures on your calculator, Mr. Hinton, and tell us what answer you get by making the calculation. Please tell us what you are doing as you go along, so that we may follow you.

A. That first calculation was merely a check to be sure that my production-per-pound loss was 74,014,270 M.c.f.

I am now placing 67.49 in the calculator. I am dividing that by 5,197,693,413. I find that the average pressure drop per trillion cubic feet at that point is, 12.98 pounds, as shown on the chart.

Q. Now, that is our understanding, and the reason we were confused is because we understood you to say that you were dividing 5,197,693,413 M.c.f. by 67.49 pounds of pressure-loss.

A. Then, I misunderstood your question, because I understood you to ask what the production-per-pound loss was.

Mr. Culton: That was correct for that, was it not?

The Witness: Yes, and that would be the answer for that.

I guess I misunderstood your question.

By Mr. Littman:

Q. Well, we are agreed now that the first point that is plotted on your chart, Exhibit 135, is 12.98 pounds.

A. Yes.

Q. Representing the average pressure-drop per billion M.c.f. withdrawn.

[fol. 5041] A. And very little consideration has been given to that point, due to the fact that the total production to that date in a large part has been estimated, and it would be well not to place too much confidence in that pressure decline up to that point.

Q. Now, your pressure decline up to—

Mr. Culton: (Interposing.) Just a minute. Did you use that in your curve?

The Witness: No, sir, it falls above the curve, and the line is not drawn through it.

Mr. Culton: All right.

By Mr. Littman:

Q. But the line is drawn very close to it?

A. Yes, it so happens that it falls very close to the line; but if it were even further away than it is, I would not place too much confidence in it, or if it fell exactly on the line, I would not place too much confidence in it.

Q. Why?

A. Because the history of the withdrawal is incomplete up to that date.

Q. That is from the beginning of drilling in the field to August 1, 1935?

A. Yes, sir.

Mr. Wheat: Mr. Littman, I believe that you mis-spoke yourself a minute ago. Is that figure and the figure which

[fol. 5042] you will get for the succeeding years in this new column that you are preparing, not pounds of average pressure drop per trillion cubic feet? You said, "billion".

Mr. Littman: I said, "billion M.c.f."

By Mr. Littman:

Q. Well, now, will you calculate the second point from which you plotted your line on Exhibit 135?

A. Yes.

Q. And tell us how you are arriving at it?

A. I am placing 7.51 on the calculator, dividing by 556,485,654, obtaining an answer of 13.495, and I am calling it 13½ pounds.

Q. Where did you put that point in your chart, Exhibit No. 135?

A. I placed that 13½ at a point on the chart where the total withdrawal had been, in round numbers, 5 trillion 700 billion.

Q. Now, is that the point that appears somewhat indistinctly on the chart opposite the year 1936?

A. That is correct.

Q. And the previous point to which you referred is designated "1935"?

A. That is right.

Q. Now, what point did you use for 1937?

I assume that the third point, designated on the chart [fol. 5043] as 1937, was computed in the same way from the third row of figures, shown on Page 10 of Exhibit 42, was it not?

A. That is right.

Q. Can you give us the exact figures?

A. Yes. I have this all worked out somewhere. It might save time to calculate it rather than look for it.

The total withdrawal for the period ending 7-1-36 to 7-1-37 was 552,281,402, which, divided into 7.95 pounds, gave an average drop of 14.39 per trillion, at such time as the total withdrawal from the field had been 6 trillion, 300 million, approximately.

Mr. Wheat: May I ask a question, Mr. Littman?

Mr Hinton, this calculation that you are making now could readily be expressed proportionately, couldn't it, by

saying that the pressure-loss in pounds is to the production in M.c.f. as X is to one trillion?

The Witness: I see no reason why that wouldn't apply.

Mr. Wheat: Giving you the figure by that particular calculation?

The Witness: Yes.

Mr. Culton: That is really what you do in the computation, isn't it, because you add certain ciphers to your answer?

The Witness: Yes.

By Mr. Littman:

Q. Now, you have arrived at the 14.39 pounds have you [fol. 5044] not, which you gave a moment ago?

A. Yes.

Q. Now, will you give the next point that you used in drawing your line?

A. The next period is from 7-1-37 to 8-1-38, and the total production was 622,925,161, which, when divided into a pressure-loss of 9.39 pounds, showed that the rate of pressure decline per trillion was 15.07 pounds when the total withdrawal had been 6 trillion 900 million plus.

Q. And that is the point which is designated in the chart, Exhibit 135, as "1938"?

A. That is correct.

Q. And that point was calculated by you from the data appearing in the table at the bottom of Page 10 of Exhibit 42, covering the 13-months' period from July 1, 1937, to August 1, 1938?

A. That is correct.

Q. I don't believe we have spoken about the previous intervals with respect to dates.

Mr. Wheat: The witness gave the dates.

The Witness: Yes.

By Mr. Littman:

Q. Did you give the dates?

A. I gave the date in each case before the amount of production was read.

[fol. 5045] Q. Now, will you give the information with respect to the fifth point on Exhibit 135?

A. That is a 24-month period extending from 8-1-38 to 8-1-40, during which time the production was 1,152,418,747 M.c.f. with a pressure decline of 19.35 pounds, and the pressure-drop per trillion at that point was 16.79 pounds per trillion, which is shown on Exhibit 135, by an indistinct circle with an arrow pointing out to a 1940 date, at which time the total withdrawal from the field had been about 8 trillion 70 billion cubic feet.

Q. And that covered a 24-months' period from August 1, 1938, to August 1, 1940?

A. Yes, sir.

Q. Now, if I correctly understand your testimony, you used the latter four points and disregarded the first of the five points?

A. That is right. That is, the one which is dated 1935 did not carry any weight in the placing of the line on this chart.

Q. And is it your testimony that if the first point had been considerably above, or considerably below, the dotted line shown, you would have disregarded it in any event?

A. That is correct, because through the history of the field, where there has been available good data, you will notice that the line passes directly through or touches each [fol. 5046] of these points, which could not be possible if there could not be a constant applied to this ever-accelerating rate of pressure decline per billion feet produced.

Q. So that in reality your line, shown on the map as a solid line, and the extension therefore, going from left to right in the dotted line form clear to the right-hand end of the chart, was all predicated upon four points developed from data covering approximately a five-year period from August 1, 1935, to August 1, 1940?

A. That is correct. If more data were available at this time for the next ten years, in all probability this line would take a higher, ascending position than as it is shown on this chart.

That is due to the fact that all gas in the Panhandle Field is saturated with moisture, and as the pressure is lowered, this moisture is dropped in the formation, and as the moisture is deposited in the channels of the field which are permeable, it is ever more difficult for the gas to pass through the formation, so during such time as pressures

are taken with a 72-hour shut-in, it will not be possible for this amount of gas to travel into the well bore and maintain the pressure.

Q. Well, the fact remains that the dotted lines, as well as the solid lines, shown in Exhibit 135, for the present and the future production, and for the past five years' pro-[fol. 5047] duction, are all predicated upon actual data covering but a five-year period?

A. That is right, estimated data for the period up to 8-1-35.

Q. Now, coming back to Exhibit No. 133, which is the pressure-trend chart for the Panhandle Field, it is a fact, is it not, that your three curves on this chart merely reflect in graphic form the data shown in Exhibit 134 in table form?

A. Yes. In addition to that, the performance curve of the Panhandle Field is also shown. It is very indistinct on here, but you will notice that the weighted average pressure of the Railroad Commission data is shown, and I call your attention to the fact that, with the exception of the year 1939, it follows this line of pressure-trend very closely.

Q. Lines "A", "B" and "C" on chart, Exhibit 133, reflect Conditions "A", "B" and "C" which are shown in Exhibit 134, do they not?

A. That is correct.

Q. And it shows that, under Condition "A", the Panhandle Field will have reached 50 pounds of rock pressure in 1958?

A. Yes, that will be 50 pounds well head pressure, and not 50 pounds formation pressure.

Q. That is the same data that is shown in Exhibit No. 134, is it not?

[fol. 5048] A. Yes, sir. I merely mention that to be sure that we were referring to the proper point of pressure observation.

Q. And the same is true of Lines "B" and "C" on chart, Exhibit 133 for identification?

A That is right. It is merely the data from Exhibit 134, plotted over in graphic form on Exhibit 133.

Q. Well, now, if you had found, from your study, that the life of the Panhandle Field was going to extend beyond 1958, your three curves, shown in Exhibit 133 for identifica-

tion, would not have sloped so abruptly, but would have fallen out further to the right, into the future years. Is that right?

A. That is right, and would have made a number of people very happy.

Q. Including yourself? A. Yes.

Q. And we may agree, may we not, that one of the factors that causes these three curves, shown in Exhibit 133, to fall so rapidly, is the rate of withdrawals from the field? Is that one? A. That is one.

Q. An another is the decelerating rate of production per pound of rock pressure decline?

A. Now, that is true, except when we speak of that decelerating or the acceleration of the pressure decline, we do not want to be confused and apply that to an equilibrium [fol. 5049] pressure.

It must be known that if we had reached an equilibrium pressure each year, and if we did know that that data was actually correct, that an equilibrium pressure had been reached, then there would be no curvature in that line, it would be a straight line because the application of Boyle's Law to that data could only produce a straight line, except for the slight deviation from the pressure there, accounted for by the fact that the gas is not a perfect gas.

Q. You are speaking of the curve shown in Exhibit 133?
A. Yes.
Q. Or the three curves shown in Exhibit 133?
A. Yes.

Mr. Culton: For clarification, you refer to the fact that that 50 pounds would be a well head pressure.

There would result a higher pressure at the sand face?

The Witness: Yes, slightly.

Mr. Culton: And it would, also, be recognition of the fact that there would be pressure gradients existing all over the reservoir?

The Witness: Yes.

Mr. Culton: From the well through the areas in between other wells?

The Witness: The curves produced on Exhibit 133 are [fol. 5050] based on the same type of weighted average pressures as we have referred to heretofore, and they are the ones that do not take into consideration the vertical thickness of pay.

By Mr. Littman:

Q. Now, I have endeavored, Mr. Hinton, to take you through your method, step by step, of arriving at the three curves shown in Exhibit 133.

Now, if I have omitted any steps up to this point whereby you arrived at the curves, I would like to have you give any further explanation, as you may wish to make certain that we have covered the major steps, at least.

A. I believe that it has been pretty well covered.

There is one thing, if I might, I would like to call your attention to, at this time.

Q. Very well.

A. And that is the fact that this year is the first year that actual potential or open flow tests have not been made and the potentials were obtained on back pressure open flow curves of tests made in 1940, and the decline in open flow is wholly dependent upon decline in the well head pressure.

Therefore, everyone, in an effort to keep their open flow or potential as high as possible, has closed their wells in for as long a period as possible before those pressure readings were taken.

I am of the belief that we are going to get a rock [fol. 5051] pressure on the entire field this year that will be somewhat higher than it would have been if tests would have been taken in the same manner as in previous years.

Mr. Wheat: When you say "this year", you mean in July, 1941?

The Witness: July, 1941.

Mr. Culton: In other words, tests this year were not made under the same conditions as tests in previous years?

The Witness: Yes. I just mention that, but, of course, that will right itself down through the years, because when

the back pressure open flows are taken in the future, why, in all probability the Railroad Commission will require that the shut-in pressure at the well head will be taken after the back pressure test has been taken, which means that there will have been a sizeable amount of gas produced before the well was closed in.

That pressure will be taken, probably, between 72 hours and 96 hours after the completion of the test.

By Mr. Littman:

Q. In other words, you are fearful that the next report of the Texas Railroad Commission will not bear out your rock pressure drop?

A. Not fearful, hopeful that it will not; but I just mention that it is not a comparative test with previous years.

Q. In other words, by "hopeful", you mean that you [fol. 5052] would be glad to learn that the life of the Panhandle Field would be in excess of the 15 years that you estimate?

A. Yes, sir, unless they lowered our retirement age.

* * * * * * * * * *

Q. Now, the next step, as I understand it, was that you prepared certain pressure trend charts for your operating areas, "A" to "G", inclusive? Is that correct?

A. Yes, sir, that is correct.

Mr. Littman: I would like to have marked for identification as Exhibit No. 136-(1) a chart entitled, "Panhandle Eastern Pipe Line Company Wells, Pressure Trends Group Area 'A'."

Trial Examiner: This chart may be so marked for identification.

(Exhibit No. 136-(1) Was Marked For Identification.)

Mr. Littman: I would, also, like to have marked for identification as Exhibits Nos. 136-(2) to 136-(10), inclusive, certain other charts of similar character and description as that which I read for Areas "A", "B", "C", "D", "E", "F" and "G".

Trial Examiner: Very well. We will mark the series for identification as Exhibit 136 with the sub-numbers, in parentheses, 1 to 10, both inclusive.

(Exhibits Nos. 136-(2) to 136-(10), Inclusive, Were Marked For Identification.)

[fol. 5053] By Mr. Littman:

Q. Are the charts, which have been marked for identification as Exhibits Nos. 136-(1) to 136-(10), inclusive, the pressure-trend charts for Areas "A" to "G", inclusive, to which you just referred?

A. With the exception of No. 5, which is a duplicate of Area "C", and it rightfully could be included. Yes, they are my idea of what the pressure will be, by years, as an average in each of the group areas in which we operate.

Q. Did you use all of these charts in arriving at your estimate of production in the Panhandle Field, which is shown in Exhibit 131 and, also, in Schedule 5 of Exhibit 43?

A. I used them as a basis for my estimate, and did not stick to them entirely, mathematically, because I went to round numbers and I also used some degree of judgment, based on experience, and did not show, as it was not possible to show, that there would be necessary additional horsepower required at certain times to maintain the level of production shown in Exhibit 131, as there were no capital expenditures shown after the 1946 year.

Mr. Littman: Will you please read back that answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. You stated a few moments ago that Exhibit 136-(5) was an exception of some sort. Will you please amplify [fol. 5054] that statement?

A. Yes. It is all right. I saw this "revised" on here, and I thought it meant that the revised copy had been put in, in addition to the copy of the original, which was an error.

There was an error on the Group Area "D", due to the fact that a draftsman put "C" instead of "D" on it. I sent a replacement, and I thought you had not taken the originals out, so they are all right as is.

Q. And there are no exceptions? A. No.

I would like to call your attention to the fact that for Areas "A", "B", and "C", there are two pressure-trend

charts, one for the company wells and one for the purchase wells, but there are no purchase-well pressure trends for Areas "D", "E", "F" and "G".

That is due to the fact that "D", "E", "F" and "G" are areas of high permeability, and it is assumed that the pressure on the purchase wells will be the same as that on the company wells in these three highly permeable areas.

Q. Suppose we look at Exhibit 136-(1) for a moment.

Now, this exhibit, which is a chart, shows the pressure trends for the company wells in Group Area "A", which area is shown in your Exhibit 46. Is that correct?

A. Yes, sir, that is correct.

[fol. 5055] Q. Now, am I correct in understanding that each of the lines drawn on the chart prior to 1941 represents an individual well? A. That is correct.

Q. Now, will you explain what those lines mean?

A. Those lines stand for the observed well head pressure at those wells during the midyear tests for each year, commencing in 1931 and ending in 1941.

Q. You are now referring to tests made by the company on its own wells?

A. Up to the 1935 test, and during that year all tests were made under the supervision of the Railroad Commission of Texas and have been, from that time to date.

Q. And those tests were made along about the middle of each year? A. Yes, sir.

Q. In other words, you plotted a point in each year for each test on each well, and then drew a line for each well?

A. Yes, sir, from pressure point to pressure point.

Q. Now, I note that some of these lines are rather inconsistent, in that they go down and then up and then down again from year to year, and look a little bit zig-zag.

Will you please explain that?

A. That curve in the year 1937, the only reason that I could advance for that extreme dip in pressure on the two [fol. 5056] wells which are shown, is the fact that the wells had not been closed in before the tests were taken and were probably producing on the line, and instead of waiting until there had been a 72-hour shut-in pressure, that the pressures were recorded immediately after the wells were taken off the line.

Q. Now, for those wells to which you have just pointed, the rock pressure in reading in 1938 was considerably higher than in 1937?

A. That is right. It would indicate that the pressure was observed immediately after they had been produced on the line, and that they were closed-in a normal length of time in 1938.

Mr. Culton: Do you recall which those two wells are?

The Witness: I was trying to make out the number, but it is so dim on here that I am unable to do so, but I can tell which two wells they were by looking at my pressure data, if you want me to.

By Mr. Littman:

Q. Well, I wasn't particularly interested in any two wells, Mr. Hinton.

A. There are two of the Burnett wells.

Q. Well, how long are these wells ordinarily shut-in before the rock pressure readings are taken?

A. The requirements in the Panhandle Field are now a minimum of 72 hours, with no maximum shut-in time. [fol. 5057] For the Hugoton Field, I took it upon myself this year to write the rules for testing, because I was Chairman of a Subcommittee on some tests being made in the fields, and they were accepted by some other producers.

We have a minimum of 72 hours in that field, and a maximum of 96, which gives us a 24-hour period to take pressures after they have been producing on the line at a normal rate for not less than six days previous to being shut-in.

Q. Now, what are the vertical calibrations on these charts?

A. They are merely the observed closed-in pressures of the wells, and are in pounds per square [in,] gage pressure.

Q. Now, the lines prior to 1941 that are shown in each of these charts in Exhibits 136-(1) to (10), inclusive, represent actual rock pressure readings, do they not?

A. Yes, sir.

Q. And what do the lines shown on and after 1941 represent?

A. That is my idea of what the probable average closed-in well head pressure will be for the wells located in Group Area "A".

Q. In other words, that line represents your estimate of the average for all wells? A. That is correct.

Q. In that area? Is that right?

[fol. 5058] A. Yes, sir.

Q. Now, in each of these charts you have a single line running on and after 1941, and I believe you have already stated that that represents the average of all of the individual wells in that area?

A. It is an estimate of what the average pressure to be expected is.

Q. In other words, by looking at the chart, Exhibit No. 136-(1), for instance, in the year 1952, for example, you merely ascertain the point at which the estimated line crosses that year, and you take the reading shown on the chart by vertical calibrations, and that gives you the rock pressure which you will expect to be found in the area at that time?

A. That is correct.

Q. And what is the average on this particular chart?

A. 174.5 pounds.

Q. For 1952? A. Yes.

Q. Now, how did you draw this extrapolated line in Exhibit 136-(1), for instance, which covers the years from 1941 down through 1958?

A. You mean by "how did I draw it", what things did I give consideration to in the placing of this line upon the chart?

Q. I would like to have the steps used by you in plot-

[fol. 5059] ting it.

First, Mr. Hinton, you might tell us why you started at the particular point that you did, which appears to be at 340 pounds rock pressure.

A. That happened to be the approximate average of the wells in that area at the midyear pressure observation for the year 1941.

In placing this estimated pressure-trend upon this chart, I first found out what was happening in the field by going back through the steps which we have gone through on Exhibits 133 and 135.

Q. Exhibit 133 reflects the data shown in Exhibit 135, does it not? A. Yes, that is right.

Q. So that, if you looked at Exhibit 133, that would give you the information that you desire? A. Yes.

Then, I made myself acquainted, as nearly as possible, with the type of wells which are prevalent in Group Area "A". I then made myself acquainted with the rate of withdrawal from that group area.

I next found out, as nearly as possible, how many remaining well locations there were in the group, and the next thing I did was to find out what the—not find out, because I knew, but I studied more closely the pressure [fol. 5060] condition in that area, and in the areas surrounding it.

By combining all of this information with the build-up pressure records of that area and the pull-down pressure records, I placed this pressure-trend decline curve upon the chart.

* * * * * * * *

[fol. 5063] C. H. HINTON, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued).

By Mr. Littman:

Q. At the close of yesterday's session, we were discussing the pressure-trend charts designated for identification as Exhibits Nos. 136-(1) to 136-(10), inclusive.

Trial Examiner: Do you have the pending question in mind, Mr. Hinton?

The Witness: No, sir.

Trial Examiner: There was an unanswered question.

By Mr. Littman:

Q. At the close of yesterday's hearing, I asked you to explain, step by step, the method used by you in drawing the curve on each of these charts which is projected beyond the 1940 and from the year 1941.

A. I believe that we have gone through the method used in placing the pressure line, the individual pressure line for each well from the date the well was drilled to the [fol. 5064] midyear test for 1941.

Now then, as to the matter of extending the pressure-trend curve on each group, there were many things that were taken into consideration.

The basic and perhaps the main thing, is the field performance, that is, of the total field. The past performance of the field has been extended as shown on Exhibit 133.

Q. May I interrupt to ask you whether you mean that you used the same general curve as that which is shown on Exhibit 133?

A. Not exactly the same curve, no, but the curve shown on Exhibit No. 133 is the controlling factor for the placing of the pressure curve of each of the group areas because, as the whole field goes, to a certain extent so must each group area follow.

In addition, it was necessary to weight carefully the amount of gas that is being withdrawn from each group area to take the formation into consideration from the standpoint of how fast it is indicated that gas flows through the formation in each of the group areas, and also what the probable effect of the withdrawal will be from areas adjoining each group area.

For example, in Group Area "A", you will note that the pressure line on Group Area "A" extends to about the middle of 1958.

Now, in placing that pressure line at that point, it was [fol. 5065] necessary to know that the general characteristic of the formation in Group Area "A" is what would be termed "tight" in comparison to the formation over in the Moore County area of the field.

Mr. Culton: Moore County would be, for instance, "E", "F" and "G"?

The Witness: Yes, principally "F" and "G".

Now, in the studying of the action of the gas through the formation and the flow, it was necessary to carry on

a long series of observations to determine just how long it takes to build up the pressure once a well has been blown to atmosphere, and we find that in Group Area "A", the length of time required for a well to regain its normal closed-in pressure is considerably longer than it is over in the Areas "F" and "G" and "E" and the west part of "B".

Therefore, there was consideration given to the things mentioned before the pressure line was extended, and it is not based on any pure mathematical calculation.

Trial Examiner: Mr. Hinton, in Group Area "A", you have embraced a part of the sour gas field, I believe?

The Witness: Just a little bit there to the northeast, because that actually governs the rate of withdrawal for the area northeast of our development.

Trial Examiner: The sour gas, I understand, is withdrawn without control.

[fol. 5066] The Witness: Sour gas is prorated, but the amount that is withdrawn, as a whole, is not controlled. It merely means that the total amount is divided between the wells which have been drilled in the sour gas area.

Mr. Culton: What the Examiner is getting at, I think, Mr. Hinton, is that the production from those sour gas wells is not limited to the volume of production that is actually taken ordinarily from the nearby sweet gas wells.

The Witness: That is correct.

Mr. Culton: They are limited in their production, but not to the small volumes that are really being taken from the sweet gas, is that right?

The Witness: That is right.

However, the rate of withdrawal from the wells located in the northeast part of Group Area "A" are not producing at the rate that the sour gas wells are producing in the northern part of Moore County.

Trial Examiner: That was the information I was about to ask, having noted that the sour gas area in your Group "A" is rather near the Town of Borger and quite close

to an extensive petroleum development, and I was about [the] ask whether or not they had carbon black plants in the Borger territory which were drawing heavily from this corner of your Group "A".

The Witness: There are several large carbon black plants at Borger, but they are not supplied entirely by [fol. 5067] the production in that area, because some of that gas is piped in from other portions of the sour gas area of the field.

Trial Examiner: The pressure map does show a pressure zone in the extreme northeast corner of your Group "A" running as low as 150 pounds.

The Witness: That is correct, sir, and if the formation in Group Area "A" had the same characteristic as the formation in "G" and "F", the estimated life of the Group Area "A" that would be placed upon it by me would be much shorter than it is.

Trial Examiner: You refer now to some difference in the permeability, or the ability of the gas to migrate in that area?

The Witness: Yes, permeability is the major factor.

However, I believe that the average total pay thickness in the Moore County section of the field, "E", "F" and "G", will average a greater thickness than the pay thickness in Group Area "A", but permeability is the controlling factor.

Trial Examiner: And that is greater than in some of the other areas?

The Witness: Yes, sir.

By Mr. Littman:

Q. Mr. Hinton, the curve that we have been discussing, which appears on each of the charts, Exhibit 136-(1) to Exhibit 136-(10), which we will hereafter refer to as the [fol. 5068] pressure trend charts, is a very important curve and was used by you directly for the purpose of estimating the amount of gas that will be withdrawn from the wells owned and controlled by Panhandle Eastern, is that right?

A. Yes, the pressure is the governing factor for the life of the fields for long-distance pipe lines.

Q. And you used these curves on the pressure-trend charts literally in determining the expected rock pressure in the future years, is that correct?

A. Yes, sir, that is correct.

Q. Now, do I understand [you] testimony to be that this important curve drawn on each of these pressure trends was not drawn from any mathematical formula?

A. That is correct.

Q. It is purely a judgment line?

A. A judgment that is weighted by every factor which should enter into the pressure-trend of each group area as nearly as it is possible for me to place that in the proper weight upon the curve.

Q. You stated a moment ago you gave great weight, in drawing these curves on the pressure-trend charts, to the curves appearing in Exhibit 133 which are designated as Curves "A", "B" and "C"?

A. That is correct.

Q. As a matter of fact, those curves very closely re- [fol. 5069] semble each other, do they not?

A. Yes, they do.

Q. The curves shown in each of the pressure-trend charts?

A. That is right. We might say that that is the father and these are the children of the curve shown on 133.

Q. By "that is the father", you mean the curves shown in Exhibit 133 and the children you refer to as Exhibits 136-(1) to 136-(10), is that right?

A. That is right. In other words, as the average for the entire field goes, so will every portion of that field follow the average to a large extent.

Only the things which I have talked about will govern, in my opinion, how the trend will differ in each of the areas from the average of the total field.

Q. Well, do I understand that if you had applied the curves appearing on Exhibit No. 133 literally to each of the pressure-trend charts, Exhibits 136-(1) to 136-(10), you would have obtained, substantially, the same result as that obtained by using the curves which you did use on the latter charts?

A. No, there would have been quite a little difference there because, if I would have used the curve on Exhibit No. 133 without giving consideration to the other things, each group area would have been identical, and the purpose of laying out the group areas would have become useless because, if we were going to use the one curve, [fol. 5070] it would not make a great deal of difference if we were just going to apply the average of the field to this problem, rather than giving consideration to what is believed will actually happen in each of the group areas.

Q. Well, your starting point of the curve in 1941 would have been different for each of the areas, would it not?

A. Yes, that is correct. The arithmetical average of each of the group areas would have been different.

Q. Well, looking at Group Area "A", Exhibit No. 136-(1), will you point out how far you deviated from the curve used in Exhibit 133?

A. I have already said that I believe that the curve "C" on Exhibit 133 is based on withdrawal figures that are more likely to happen than the other two, "A" or "B".

Q. Now, "C" refers to Condition "C", sometime Condition 1, which reflects the increased production in the Panhandle Field by all operators therein?

A. No, sir, that is Condition No. 3, and is Lines 11, 12 and 13 on Exhibit 134.

Q. I thought that you testified that Condition "C" and Condition 3 were the same?

A. Yes, but you said Condition 1. I was referring to "C".

Q. I am sorry, I meant that Condition 3 and Condition [fol. 5071] C are synonymous. A. That is correct.

Q. And what is the Condition to which you refer when you use the letter "C"?

A. Do you mean that you want me to tell you what is going to happen under that Condition, or just merely identify it on the exhibit?

Q. Well, I mean to repeat what it means, generally.

A. Condition "C" gives consideration to an increased withdrawal by pipe line companies from the Panhandle Field, not only Panhandle Eastern's, but other major pipe lines taking gas from that field.

Q. And the line designated by the letter "C" on chart, Exhibit No. 133, reflects that condition, does it not?

A. Yes.

Q. Now, will you proceed?

A. The average for the field in 1941, as shown in this graph, is 314 pounds, approximately.

Mr. Culton: 314.10 is what Exhibit 134 shows, is that approximately right?

The Witness: Yes.

Now, if this same line would have been extended from the average of Group Area "A" at the point where the pressure was extended from 1941, there would have been a difference of 28 pounds, and if the same curve would have been placed upon Group Area "A" as the curve [fol. 5072] for "C", the length of life would have been extended beyond the point which is shown on Group Area "A".

By Mr. Littman:

Q. In other words, you would have had—

A. (Interposing) In other words, instead of coming down to 50 pounds well head pressure at approximately midyear, 1958, that would probably have run out in 1960, but now then, if I might show you, I will try to explain why I do not think that that will happen.

You will notice that in the—

Mr. Culton: (Interposing) You are now pointing on Exhibit 26, the rock pressure map?

The Witness: Yes, sir.

Mr. Culton: All right.

The Witness: Now, you will notice that group areas have been superimposed upon this rock pressure map.

Mr. Culton: That is on the Examiner's copy that you are pointing to?

The Witness: Yes, sir, in red pencil; and in the northeastern corner of Group Area "A", you will note that there is an area between 200 and 150 pounds.

Naturally, the gas which is now in place in the portion of Group "A" in which we operate is going to flow to the [fol. 5073] area of lower pressure.

The type of market for which the gas is used to the northeast of Group Area "A" means that this pressure will continue to be pulled down lower than it is.

Therefore, there is going to be a migration of gas out of Group Area "A", just as there will be in any area where there is an area of low pressure adjoining the group area.

In addition to the rate of withdrawal per acre from Group Area "A", consideration has been given to this portion (indicating).

By Mr. Littman:

Q. And how much consideration, and how did you arrive at that amount?

A. The amount of consideration which has been given to the conditions mentioned is reflected on Exhibit 136-(1), and it would not be possible for me to say as to what percent or any certain amount that has been placed upon that.

I have just placed that upon there to the best of my ability, feeling that I have given proper consideration to the things which are involved in determining the future pressure of these group areas.

Q. In each of the Areas, did you shorten the life as you did in Group Area "A" from that which is indicated by the Curve "C" on Exhibit 133? A. No.

Turning over to the pressure-trend curve for Group [fol. 5074] Area "B" you will notice that the estimated time that the pressure will decline at the well head to 50 pounds is about midyear, 1960.

Q. Well, Mr. Hinton, isn't that clearly the result of your starting point in 1940, rather than the result of a difference in the curvature of the curve?

A. It absolutely is not.

Q. Looking at your curve in Exhibit No. 136-(3), for Group Area "B"; it certainly appears by eye to be even

a sharper curve and a more sharply ascending curve than that shown in Exhibit No. 133. Am I right?

A. Yes, it is a more sharply ascending curve, because the line to the west of Group Area "B", you will notice—I am sorry, I cannot point it out to you—but Canadian River Gas Company has large holdings of acreage—

Mr. Culton: (Interposing) Can you point out the general location of that acreage on one of the maps?

The Witness: It might be termed as the extreme southern portion of Moore County and the Northern part of Potter County down to the fault line, south fault line.

Now, Canadian River has this tremendous undeveloped portion of acreage and whereas it is shown to have pressure above 400 pounds at this time, it is going to be surprising what will happen when that Canadian River acreage is drilled, because all through the years, as this gas has been taken out, each time that the pressure in the developed portion of the field has been lowered one [fol. 5075] pound or any number of pounds, there has been a migration of this gas and there is a pressure gradient from this undeveloped acreage over to the developed acreage.

Now, just as soon as Canadian River is forced to go in there and develop that acreage, there is going to be one of the sharpest pressure declines that has ever been experienced in that field, and as soon as that pressure goes down, then this pressure which is holding up the pressure in our area "B" at the present time is going to be lowered.

We will no longer receive benefit from migratory gas from the west, and there will be a sharp pressure decline.

Trial Examiner: Before you leave that, would you like to refer to Mr. Smith's cross-section, Exhibit 22, in that connection?

Mr. Littman: No, I would not, if your Honor please.

I understand the testimony to be that that cross-section was not an actual cross-section but—

The Witness: (Interposing) It shows the picture all right, however.

Mr. Littman: That is a little bit beside—

Mr. Culton: (Interposing) I do not think the statement is exactly accurate. It was that the wells are not actual wells, that the wells are only typical wells.

The cross-section, he stated, was correct.

Mr. Littman: My recollection of the testimony is very [fol. 5076] distinct, that that was not an actual cross-section, but was purely a typical cross-section.

Mr. Culton: You are mistaken on that. It was the wells that were typical. He specifically pointed out on the map where that cross-section went.

Mr. Littman: Of course, the record will speak for itself, but at this time I would like to interrogate Mr. Hinton about this curve, and if he wishes to go into further details and data, you can do it on redirect examination.

Mr. Culton: We will do it on redirect examination.

Mr. Littman: And I think that we will save time.

By Mr. Littman:

Q. Now, Mr. Hinton, if my eyes do not deceive me, certainly the curve—now, I am speaking of the curve in Exhibit 136-(3)—is not substantially different from the curve shown in Exhibit 133.

If anything, the curve in Exhibit 136-(3) descends more sharply than that shown in Exhibit No. 133. Am I correct?

A. You are correct, and for the reason just explained.

Q. Now, you start in Exhibit No. 136-(3) in the year 1940, you start your curve at approximately 375 pounds of rock pressure, do you not?

A. About 378.

Q. Yes, whereas the curve in Exhibit No. 133 starts in that year at about what point?

[fol. 5077] A. 308.6 pounds.

Q. And doesn't that account for your having an end point in the year 1960, approximately, of 50 pounds rock pressure in Exhibit 136-(3), as compared with an end point in approximately the year 1956 or 1957 for your curve "C" in Exhibit No. 133?

A. Naturally, the starting pressure governs the ending pressure, but if the same curvature were to be placed upon 136-(3) as is shown on Exhibit 133 by Curve "C", it would extend far beyond 1960.

Q. Well, then, I understand that in this instance, namely, Group Area "B", the effect of your changing and deviating from the line drawn, or curve drawn, in Exhibit No. 133 has the effect of shortening the indicated life, is that right?

A. Of the group area.

Q. Of the groups in Group Area "B".

Mr. Culton: Shortening from what?

Mr. Littman: Well, bringing about a decline to 50 pounds rock pressure sooner than you would have secured it had you used the curve shown in Exhibit No. 133.

The Witness: That is absolutely right, but it would not be placed in the right manner if that would be followed.

By Mr. Littman:

Q. I do not understand that.

A. All right. Suppose that we placed—take the curve shown, Curve "C" on Exhibit 133, and place it right under [fol. 5078] the Exhibit No. 136-(3) and then extend the same curve on Exhibit 136-(3) as shown by Curve "C" on Exhibit 133.

We would end up by having an area out here (indicating) to itself that would be many pounds higher than the average of the field, and regardless of what we would like, it is impossible for any operator to hold the amount of gas which was in place under any lease and the amount of gas that is actually to be taken is governed by the withdrawal of the whole field.

Therefore, it would be impossible to take this area in this high-pressure area and have it standing out there all by itself with low pressure all around it because, as the pressure is lowered in the area surrounding Group Area "B", then the pressure in Group Area "B" is going to come down sharply.

Q. Perhaps we can get at your method this way. You have already testified that the curve "C" shown in Exhibit

No. 133 was the controlling factor in your method of arriving at the curve to be used on the pressure-trend chart, is that right?

A. That is correct.

Q. Now, your deviations from the Curve "C" to which you have just referred, were not very substantial, were they, one way or another?

A. I would say that there was considerable deviation, because if we turn through the Exhibits, from Exhibit [fol. 5079] 136-(1) to (10), we will find that we have a variation.

You will note that on 136-(2), that the estimated length of time, or period when the well head pressure will become 50 pounds on the gas purchase wells located in Group Area "A" is 1953.

Turning to Exhibit 136-(3), you will notice that it is in 1960 that this pressure will be reached, and I would say that seven years was considerable deviation from the average.

Q. Well, was that due to the difference in the starting point of those curves, or was it due to the difference in the curvature of those curves?

A. Both.

Q. Well, now, how did you give effect to the change in the curvature of the curve? How did you arrive at anything like that? Did you do it mathematically?

A. Not only from the application of a constant, which has been established by past field performance, the deviation from the curve that was thus produced is largely a judgment figure with weight given to every controlling factor that could be thought of.

Q. But I cannot understand how you arrived at how much weight was to be given, one way or the other, to these multitudinous considerations that you say you considered.

A. Mr. Littman, I think that a gas field is a lot like law. You have to work with it a long time before you know [fol. 5080] just exactly how to proceed, and it is one of those things that you cannot just exactly lay your finger on, but it is one of those things that you know should be applied.

Q. Mr. Hinton, let me get at what I have in mind this way.

You knew where to begin to draw each of the curves in the group for each group area on each of the pressure-trend charts, did you not?

A. Yes.

Q. By taking the average rock pressure as of 1940 or 1941? A. Yes.

Q. Now, you knew where the end point was going to be, did you, that is, the bottom point of the curve?

A. Not until such time as I had studied all of these factors.

Q. You must have set the end point before you started to draw the curve, is that correct?

A. No, you do not draw a curve like that, Mr. Littman.

Q. How did you draw this curve, kind of free-hand?

A. A free-hand curve, and it is a judgment figure curve.

Q. Let's go back to the beginning point of each of these curves that you drew in the pressure-trend charts.

Now, how did you go about finding the first point through [fol. 5081] which the curve runs?

A. I added up the current well head pressures and divided by the number of wells on which the pressures were observed.

Q. And what was the next point that you selected, and how did you select it?

A. I found out what had been happening in the past and what would probably happen in the future. That is, as to the number of remaining locations that had not been drilled.

I took the total acreage in each group area and found out what number of undeveloped acres remained. I divided that by 640 acres, assuming that there would be one well drilled to each section of land, and I found out that there would be a certain number of remaining locations, and that the rate of withdrawal would probably be increased from that area.

Q. Let's take Group Area "A", which is Exhibit 136-(1).

Now, show us the first point that you plotted to draw the curve?

A. I did not plot.

Q. Well, the first point that you used or established.

A. All right. I took a triangle and I ran it up through the general trend of what had been happening on all of these wells in this group area, and I started the extension of my curve from that point.

Then keeping in mind all the time, as this marginal acre-
[fol. 5082] age is drilled, the so-called weighted average is going to come down quite sharply because as soon as the thin acreage is drilled, the pressure decline on that is going to be much more rapid than it has been on the thick pay portion of the field, and as that comes down, that is going to accelerate, tend to help to accelerate this curve, and from that point on, I kept the other things under consideration.

You will notice down here, along about 1955, '54, that I assumed that there would be a sharp decline in the total amount of gas that would be withdrawn from this area, and for that reason, the curve straightens out down at this point.

Q. Now, when you started to draw this curve, you drew it at a point indicating the average rock pressure in 1941?

A. Yes, sir.

Q. Now, what was that figure?

A. That was approximately 340 pounds.

Q. All right.

Now, in 1942, what rock pressure is indicated?

A. 329, approximately.

Q. How did you arrive at the 329?

A. By following out what had been happening through the years of a comparable withdrawal rate.

In other words, if I could have a straight-edge triangle—you will notice that that line could have taken many differ-
[fol. 5083] ent slopes, that is, it could have been flat, or it could have been very sharp.

Q. You are now referring to the lines prior to 1941, showing the past rock pressure readings of the wells?

A. Yes, for individual wells.

Q. They zig-zag in almost every direction, is that right?

A. Well, no, there is a general trend, and that trend is downward; and if you will go back to 1931, you will find that it is a much greater slope than if we go over to '40, '41, and the '40-'41 is not following the slope that was previously established by that group of wells from 1938 to 1940, and I mentioned that yesterday, that the shut-in pressure for the period observed in 1941 was of considerably greater length than the shut-in period for the previous years.

Therefore, I just used my judgment to give the curvature that I did to this curve.

Q. Now, Mr. Hinton—pardon me, had you finished your answer?

A. Yes, go ahead, I am sorry.

Q. Now, if 100 engineers looked at all of those varying and criss-crossing lines shown in Exhibit No. 155-(1), for instance, and had undertaken to do this job of drawing from those data a free-hand curve down through the chart beyond 1941, in all probability, you would have had 100 different curves, is that right?

[fol. 5084] A. And—

Q. (Interposing) Is that—

A. (Continuing)—and the value—

Q. (Interposing) Is that right?

A. Yes, that is right, and the value of the curve would have to be based upon the knowledge that engineer had of the subject.

Q. Well, 100 engineers would, in all probability, interpret the historical data of the rock pressure of these wells prior to 1941 in 100 different ways; is that right?

A. And if they did, and carried out their calculations in an accurate, normal manner, the result obtained by the 100 engineers would be very close to the same.

There would be variation, I will grant you that, but the total percent of variation would necessarily have to be small if they knew what they were talking about.

Q. Then, in the final analysis, these important curves that you applied literally for the purpose of estimating the rock pressure for each year in the future, and upon which you based and predicated the production of the Pan-

handle Eastern well in the future, was purely a matter of judgment?

A. And knowledge of the subject.

Q. And it was not based at all upon any mathematical formula?

A. No, no straight mathematical formula, a great deal [fol. 5085] of mathematics, but no formula.

Q. And these important curves appearing in each Exhibit 136-(1) to 136-(10), inclusive, from and after 1941, were plotted free-hand by you from your general knowledge and judgment?

A. Knowing—

Q. (Interposing) Is that right?

A. That is right.

Q. You see, when you nod your head, the record does not show it.

A. I will try to cut out nodding.

Q. Your answer was "yes", and you were going to explain further?

A. And I just wanted to mention that these curves are always going to be available for the management to look at and for me to receive criticism from.

Q. Now, am I correct in understanding that you did not plot any points along the field from which you drew the curve, I mean the field of the chart?

A. Your question, I believe, is, were any dots placed upon the chart that had mathematical significance?

Q. Well, either physical points, or mental points, did you plot the curve through certain points on the chart?

A. Mental points, yes, every fractional part of the way; physical, no.

[fol. 5086] Q. How did you get at the precise figure through which you drew your curve in the first instance on Group Area "A", No. 136-(1)?

A. To what precise figure do you refer?

Q. I am referring to 1942. A. 1942—

Q. (Interposing) Was that your second point?

A. That was not a point at all. It was just merely a line.

Q. Well, you say you knew your starting point.

A. Yes, sir.

Q. What was your next point, if any?

A. The curve passes through a point at midyear, 1942, which is at approximately 329 pounds' pressure.

Q. Now, if you had continued that point straight ahead, you would have had a straight line, would you not?

A. Naturally.

Q. All right. Now, how did you determine the curvature of the curve?

A. Well, I first figured the number of square miles in the group area. I obtained a knowledge of the formation by well performance. I gave consideration to the total withdrawal from the field. I gave consideration to the withdrawal from areas surrounding this particular group area.

I studied the acreage situation, found out how many re-
[fol. 5087] maining locations there were to be drilled. All of those things which I have previously mentioned were taken into consideration.

Q. Am I correct in understanding that this is not, strictly speaking, an engineering curve?

A. No, it is not.

Q. You say it is not?

A. No, if you mean by an engineering curve, does it have the same degree of curvature throughout or is it a simple or complex or a compound curve, it is not.

Q. Is it a plotted curve?

A. It is a drawn curve.

Q. But not plotted through various points arrived at by you on the chart?

A. Not physical points, no, sir.

Q. When did you reach the point at which your curve strikes the bottom of the chart? Was that the last step, or was that one of the early steps?

A. That was the last step.

Q. And you reached that point simply because the arc of your curve results in the curve falling at that point?

A. That is right, with due consideration given to the rate of withdrawal.

Mr. Culton: Let me ask a question. Is that a uniform degree in the arc?

[fol. 5088] The Witness: No.

Mr. Culton: So it really is not an arc, is it?

The Witness: Well, probably strictly and technically speaking, it is not.

By Mr. Littman:

Q. I regret, Mr. Hinton, that I am thus far unable to understand how you drew this curve. I wonder whether you would try once more and start with the beginning of the curve on Exhibit No. 136-(1), and trace, step by step, what you did and what you thought about in doing it.

A. The first step in making the curve shown on 136-(1) for Group Area "A", was to plot annual observed pressures of all wells connected to the system of the Panhandle Eastern Pipe Line, and they were plotted up through the year 1941, that being the last data obtainable.

Q. Those are the company wells only, are they not?

A. That is correct. This refers to company wells only.

I then found out that there were certain amounts of acreage held by various companies in that area.

Q. What amounts?

A. I found out that the Panhandle Eastern had 10,200 acres, approximately; that the Cities Service Gas Company had 39,800 acres; Phillips, 1,600 acres; and Canadian River, 10,550; and the rest owned by various others.

Q. How much by the various others, as a group?

[fol. 5089] A. 12,850 acres.

Q. Making a total of how many acres?

A. 75,000, approximately.

I then found out that in 1935 there had been 80 wells drilled on that group area. I found out that there had been 5 [addition] wells drilled by 1936; 10 additional wells drilled by 1937; one in 1938; one in 1939; and 2 in 1940; which indicated that the rate of development was very slow in that particular area.

It can be noted on Exhibit 136-(1) that the pressure line for Well No. 1 and No. 7 fall considerably below the average of the wells in that group area. Naturally, that caused me to give consideration to the lower pressure areas to the northeast; so, after I [find] who owns the wells and what the rate of development has been, what the rate of withdrawal is and what the field performance in that

particular portion of the field had been, it gives me a very, very good idea on how to go ahead and extend this pressure curve, knowing in the back of my mind how the pressure performance for the field, as a whole, is going to be.

Q. All right.

Now, up to that point, you have certain information.

A. Yes.

Q. Then, did you start to draw the curve? A. Yes.

[fol. 5090] Q. And you had a starting point, did you not, in 1941? A. Yes.

Q. Now, will you state that point again?

A. That is 340 pounds, approximately.

Q. 340 pounds? A. Yes.

Q. Of rock pressure which represents the average pressure of the wells in Area "A"? A. 15 wells.

Q. Now, proceed to draw the curve for us from there, and tell us how you drew it, step by step, please.

A. All right.

As I have already mentioned, the basis of the extension of the curve is past performance, and past performance weighted with an estimated future rate of withdrawal really comes right down to the point where you know then, by the next year, that the pressure decline is going to be a little bit greater than it was before and you will notice—

Q. (Interposing) How much greater?

A. Approximately 1.141, I believe, is the figure, but it is not applied—

Q. (Interposing) What is that, 1.141 pounds?

A. Yes.

[fol. 5091] Q. Per year? A. Per trillion.

Q. Per trillion? A. Yes.

Q. That is the rate of decline that you used?

A. No, that is the rate of the decline that should be added to the previous declines and that applies to the whole field.

Now, then, I believe that I have gone into sufficient detail to explain how each of these things are given consideration on the extension of this curve, and I told you two or three times that it is not a mathematical curve, and by

you asking me to go ahead and extend this curve, I again say that I applied my judgment as governed by the performance of the field as a whole.

Q. You have not told us how much weight you applied to each element you say you took into consideration, Mr. Hinton.

A. No, and I could not tell you, Mr. Littman, because it is not that kind of a curve. It is not that I put in so much salt and so much sugar. It is a combination of all those things and it varies as to each group area, or we would not have outlined the group areas on the field.

Q. You stated a while ago that you set your triangle through the past experience, is that right?

A. That is right. It is necessary that the individual performance of each well be studied.

[fol. 5092] Q. What is the definition of the slope that you used in pressure decline, in pressure decline per year?

A. I would say that it is a judgment curve.

Q. How much in pounds per year?

A. It is not a constant in pounds decline per year.

Q. Well, now, if you set your triangle, as you say you did, there was a slope, was there not? A. Right.

Q. What was that slope?

A. Do you have a protractor handy? I will be glad to measure the slope for you.

Q. Well, can't you tell us without a protractor what the measurement is of your slope in pounds decline per year?

A. If you wanted it in pounds decline, yes, sir.

Q. Yes.

A. I thought you meant the angle with the horizontal of this curve, that is what I thought you had in mind.

Now, you want that year by year, do you?

Q. Just at the beginning point of your single curve in 1941.

A. There would be none just at the beginning point, unless you would extend it on to some period.

Q. Well, the slope extends from the beginning point, [fol. 5093] does it not?

A. Yes, sir, for one year. Do you mean for the next year, Mr. Littman?

Q. Well, you were speaking of the slope that you just developed. Now, what rock pressure decline do you show for the first year? A. 11 pounds.

Q. And that would be from 1941 to 1942, wouldn't it?

A. Yes, sir.

Q. What do you show for the next year?

A. Approximately 12 pounds.

Q. Now, what is it for the next year, which would take you to 1944?

A. Midyear pressure, 1944, is estimated to be 310 pounds.

Q. What is the rock pressure decline in that year?

A. Slightly over 12 pounds.

Q. What is it for the next year, that is, to the middle of 1945?

A. Approximately 13 pounds.

Q. Now, let's go back.

How did you determine that there would be an 11-pound drop between 1941 and 1942 in rock pressure?

A. By the application of past field performance and judgment.

[fol. 5094] Q. Did you do that, year by year?

A. Oh, yes.

Q. And, having determined the pressure drop for each year by your judgment, you then drew the curve accordingly? A. Yes, sir.

Q. Now, does that explain the method of drawing the curve, that is, the ascertainment by you of the drop each year in rock pressure decline, according to judgment, for the areas?

A. I believe I so testified, from the beginning, that it was a judgment curve.

Q. Well, Mr. Hinton, we are earnestly endeavoring to understand your method, and this latter testimony may be the touchstone to clearing us up, and I want to make certain we understand you.

You started, as you said a minute ago, with the 340-pound pressure reading for all of the wells in Group Area "A" in 1940. Is that right?

A. That is right. That is the arithmetical average of the 15 wells located in that group area.

Q. And the next thing you did was to determine how much decline there would be in the rock pressure in the succeeding year or throughout the succeeding year?

A. That is correct.

Q. And you arrived at that, not by a mathematical formula or any mathematical calculations, but purely by your judgment of the matters which you have already enumerated?

[fol. 5095] A. With the field performance of the total field as a guiding factor, to some extent, in all cases.

Q. And that guiding star, so to speak, was the curve that was designated as Curve "C" in Exhibit No. 133?

A. Yes, sir. I felt that the relationship of each group area to the whole field would be as is expressed on this series of judgment curves from 136-(1) to 136-(10).

Q. You concluded, with respect to Group Area "A", Exhibit 136-(1), that by the middle of 1942 the wells would have suffered a decline in rock pressure of 11 pounds? A. That is correct.

Q. From the previous year?

A. Yes, sir.

Q. Now, what decline would have resulted had you literally applied the rate of decline developed from your curve designated as Curve "C" in Exhibit No. 133?

Mr. Culton: You are speaking now from 1941 to 1942?

Mr. Littman: Yes, the figure that would be comparable to the 11-pound drop.

The Witness: About 12½ pounds.

By Mr. Littman:

Q. You had the 12½ pounds in mind when you worked on chart, Exhibit No. 136-(1), did you not?

A. That is right.

Q. And you concluded to use 11 pounds of drop in [fol. 5096] pressure for that year, rather than 12½, did you not?

A. In that particular group area, I did.

Q. Now, if you will explain to us why you used 11 instead of 12½, it might further help to clarify your method.

A. The reason the 11 pounds was used was due to the fact that the permeability in the portion of the group

area in which we have our development is low, and the rate of travel through this gas is likewise slow.

Therefore, I did not feel that we would suffer a great deal of drainage to the area to the east because, even though there is a greater pressure gradient from our development to the northeast than there is from our development to the west, the other way, the ratio on the difference of squares on the two areas of pressure indicated to me the flow of gas would be about the same and what went into the lower-pressure area would be compensated by what came in from the higher-pressure area.

Mr. Calton: Point out on the map where those higher-pressure areas that would feed into your wells are located.

The Witness: To the west and southwest and south also.

By Mr. Littman:

Q. Well, now, why didn't you conclude that 11¼ pounds would be the right figure to use, rather than 11 pounds?

A. Well, now, if you are going to get down to quarter-pounds, why, then you are going beyond what I feel would [fol. 5097] be anything that would be close to a judgment figure, because a judgment figure has more deviation than a quarter-pound.

Q. Well, I just wondered how you arrived precisely at 11 pounds from the original 12½-pound figure, and I take it by your answer that it is purely a matter of judgment?

A. That is right, and that could have been 11.3 or 10.64 and it would still be in the realm of what I consider good judgment.

Q. Why, for instance, didn't you arrive at 10 pounds instead of 11 pounds?

A. Because I did not think it would be right.

Q. As a matter of general judgment?

A. As a matter of general judgment, and I ask you to come and observe the past performance of these wells, and you will see why it will not be right.

. . . . . .

[fol. 5098] By Mr. Littman:

Q. Now, for the period representing a year from the middle of 1942 to the middle of 1943, I believe you stated

you estimated that the wells in Group Area "A", belonging to Panhandle Eastern Pipe Line Company, would decline 12 pounds in rock pressure. Is that correct?

A. That is correct.

Q. And having found that to be the fact, according to your judgment, you then projected your curve on through that point on chart, Exhibit 136-(I)?

A. That is right. However, I would say that I did not know that that was going to be 12 pounds until after I had projected that curve.

Q. Well, how did you project the curve from the middle of 1942 to the middle of 1943, without knowing where it was going to fall?

A. I merely observed the past performance of all wells and extended the indicated future performance by placing a triangle on the past performance and extending it, giving consideration to the increased decline that I thought would be felt in that area for that period.

Q. Now, is that all that you can tell us about how you extended the curve?

A. No, sir. I can repeat from all the things that one has to keep in mind as this extension of the pressure [fol. 5089] curve is made.

Q. Well, it looks like we are right back where we started from, Mr. Hinton. I understood you to say just before the recess that you determined, by judgment, the amount of decline to be expected in each year, and then plotted your curve through the point indicated.

A. That is true when the curve reached a point several years in advance of the data which is now on record.

Q. Well, of course, the years that we are speaking of are the future years.

A. That is correct, but it is a simple problem to extend a curve into the future for the next two or three years. It is at the point ten years beyond the present where it is difficult.

Q. Well, suppose you tell us how you projected your curve ten years into the future, which would bring you to 1950?

A. When the 1950 period is reached, the group areas will be acting, each of them, very much like the field as a whole, because at that time there will be but very little undeveloped acreage in the Panhandle Field, and

the withdrawal will, therefore, be spread over the entire field instead of in concentrated areas of the field.

Q. And, on and after 1950 you then applied, literally, the curve designated as Curve "C" in exhibit 133?

[fol. 5100] A. By "literally", you mean with some degree of cut and fill, or do you mean that it is exactly a reproduction of the curve shown on Exhibit 133?

Q. Well, suppose you tell us the extent to which you gave weight to the curve in the chart, Exhibit No. 133, on and after 1950.

A. I couldn't express that in percentage. I would say that considerable weight was given to it, because the whole field at that time is going to be acting about the same, although there will be variations, due to permeability and increased withdrawal from certain portions of the field.

We must remember that in the East Field at the present time there is considerable production obtained, but when we reach the 1950 period, it is quite probable that there will be very little remaining production in the East Field.

Now, the companies which are now obtaining production from the East Field will have moved their withdrawal from the East Field over to the West Field, and the total amount of gas will be coming from a smaller reservoir than it now comes.

Q. Well, how much weight would you say you gave to the Curve "C" in Exhibit 133 on and after 1950? Would you say you gave it approximately 90 percent weight, 75 percent weight, or what?

A. I would say that I gave it considerable weight.

Q. But you can't express, even in percentage, how much weight?

[fol. 5101] A. No, because the percentage varies to a certain extent in each of the group areas.

Q. What is the average pressure decline for the past five years on company wells in Area "A"?

Mr. Culton: Do you mean annually, or on a basis of production?

Mr. Littman: Annually.

The Witness: Approximately 40 pounds.

By Mr. Littman:

Q. Per year?

A. No, for the last five years. That is what your question was, I believe.

Q. Now, that would be an average of about 8 pounds' drop per year?

A. That is right.

Q. Now, will you give us the same figure for each of the charts and areas, designated for identification as Exhibits 136-(1) to 136-(10), inclusive? You have given us 136-(1).

Now, suppose you go to the next chart.

A. All right. I think it only fair to explain to you here that, without giving consideration to the rate of withdrawal for those five years, you might get an ide. that would not be correct, because the rate of withdrawal from most of these areas was much lighter five years ago than it is today.

[fol. 5102] Mr. Culton: What is Page 2? Group "B"?

The Witness: No, Page 2 is the gas purchase wells located in the group areas.

By Mr. Littman:

Q. Exhibit 136-(2)? A. Yes, sir.

Mr. Wheat: That is located in Group Area "A"?

The Witness: Yes.

I don't have those averaged for five years for the period commencing in 1935, but the decline has been, I would say, approximately, 25 pounds, that being from an average pressure of approximately 251 pounds down to an average pressure of 226 pounds.

By Mr. Littman:

Q. All right, will you give us the figure for the next one? Incidentally, is that the figure per year?

A. No, that is for the—.

Q. (Interposing) For the five years?

A. For the five years, and the rate of production has been quite high from those wells, and from that particu-

lar area. I want to call your attention to the fact that there was only a drop of 25 pounds for this same comparative rate of production, due to the fact that these wells have been fed by migratory gas, and as soon as the pressure is lowered in the rest of the field where it [fol. 5103] is no longer possible for this gas to migrate into this area, these wells will decline very sharply, as is beginning to be felt or shown during the past year.

Q. Now, that average is five pounds per year?

A. Five pounds per year.

Mr. Culton: By the way, is it true or not that, in that area, the gas purchase wells have lesser pre sure than the company-owned wells?

The Witness: Yes, sir.

Mr. Culton: And the higher-pressure wells are suffering the greatest decline in pressure per annum in that area?

The Witness: Yes, generally speaking, that is correct. The Chapman Well, which is owned by the Huber Petroleum Corporation, has a pressure which could be compared to the average pressure of our 15 wells in that area.

At the same time, we have two wells, Burnett 1-108 and Burnett 1-119, that are considerably lower than the average.

Mr. Culton: But speaking as a rule, your higher-pressure wells have suffered the greatest decline in pressure?

The Witness: Naturally.

Now, on Exhibit 136-(3), the average pressure in 1935 was 417 pounds; in 1941, the average pressure was 371 pounds.

By Mr. Littman:

Q. You better go back and start from the beginning [fol. 5104] and state the six-year drop and the average for the six years.

A. You asked for five years, and I went back to 1936. The pressures which I have given you for 136-(1) are for the five-year period, starting midyear 1936 to midyear 1941.

Q. Just so that you are consistent throughout with either the five years or the six years.

A. Yes, it is my error.

Q. Now, we have the five-year period for Exhibit 136-(1). Now, what do we have for Exhibit 136-(2)?

A. The pressure drop is approximately the same, because from 1935, the point previously given, to 1936, many of those wells were curtailed in production if the rate at which they had been producing showed a pressure increase, so, although it is not averaged, I don't believe it would be one pound different.

Q. You mean the same as you had given a moment ago, or the same as those on the previous chart?

A. Yes, that being approximately 250 pounds, and that is for the midyear period 1936, down to 226 for the midyear 1941.

Q. What is the total drop for the five years?

A. 24 pounds.

Q. And the average would be 4.8 pounds per year?

A. Yes.

Now, for Exhibit 136-(3)—

[fol. 5105] Mr. Wheat: What area is that?

The Witness: That is the company wells located in Group Area "B".

The pressure, midyear, for 1936 was 411 pounds, and the average at the midyear test, 1941, was 378 pounds, a drop of 33 pounds for the five-year period.

By Mr. Littman:

Q. That is an average of how many per year?

A. 6.6 pounds per year.

Q. Now, will you continue through the exhibit?

A. Yes, sir. I will try to hurry a little more, too.

For Exhibit 136-(4), showing gas purchase wells located in Group Area "B", the midyear pressure, at 1936, average was approximately 402 pounds, and midyear 1941, for the same group of wells, the pressure was 363 pounds, both of those being approximate figures, or an average of 7.8 pounds per year.

Q. And 39 pounds over the five years?

A. Yes, sir.

For Exhibit 136-(5), showing the company wells located in Group Area "C", in 1936 the pressure average for those wells was 347 pounds. In the year 1941 the average pressure was 318, a total of 29 pounds drop, 5.8 pounds average for the five-year period per year.

The gas purchase wells, located in Group Area "C", [fol. 5106] have not been averaged, other than for 1941. I can give you very close to an approximate figure on that. It is from approximately 340 pounds, about 325 pounds for the midyear period 1936, and 289 for the midyear period 1941, being a drop of 36 pounds or 7.2 pounds average per year.

The pressures for Exhibit 136-(7), showing company wells located in Group Area "D", there were no wells drilled in this area in 1935. The first well on which we have a pressure was drilled in the first part of 1936 and came in at a pressure of 397 pounds. The present average pressure for that group of wells is 343 pounds, a total drop of 54 pounds, or 10.4 pounds per year.

Mr. Wheat: 10.8; isn't it?

The Witness: Yes, 10.8.

The exhibits 136-(8), (9) and (10), although they carry the title of the company wells, the extension of the pressure curve will apply to both the company and purchase wells, inasmuch as that is a highly permeable area, and the pressures will have a tendency to equalize on all wells located in those areas.

The average pressure for the company wells located in Group Area "E" for 1936 was 412 pounds. The average pressure for the wells located in Group Area "E" for 1941 was 358 pounds, a total drop of 54 pounds and an average of 10.8 pounds per year.

[fol. 5107] By Mr. Littman:

Q. Did you give the figures for the gas wells of Panhandle Eastern's vendors in Group Area "D"?

A. No, that same situation applies to "D", which is the area located to the west of the Sneed compressor station. In that area there, the wells are located fairly close together and, I think, we can safely apply the pressure-

trend curve shown on "D" for the company wells to gas purchase wells.

Q. You did so apply the data, did you not?

A. Yes.

Mr. Culton: That is true as to "D", "E", "F" and "G"?

The Witness: Yes.

By Mr. Littman:

Q. In other words, you are not going to give us any separate figure for the gas-vendor wells for those areas?

A. No.

Q. Very well.

A. Exhibit 136-(9), the average pressure for the wells in that group—

Mr. Wheat: (Interposing) What is that group?

The Witness: That is for the company wells located in Group Area "F".

The average pressure for those wells in 1936 was 408 pounds. The average pressure of the group of wells located in that area in 1941 was 356 pounds, a drop of 52 [Vol. 5108] pounds, or 10.4 pounds per year.

The wells shown on Exhibit 136-(10), which is the pressure trend for company wells located in Group Area "G", had an average pressure at the mid-year test of 1936 of 405 pounds.

The average for the same wells in 1941 was 354 pounds, a drop of 51 pounds for the five years, or an average of 10.2 pounds per year.

I am glad that you had me go through these, because I believe now that you can see that there is a tendency for a sharper drop in the areas by going through them that you might not have observed without doing so.

By Mr. Littman:

Q. You mean a sharper drop than what?

A. Than you perhaps had in mind, because I have noticed several times that you have talked about extending the same pressure curve that was obtained through the earlier years of the field.

Q. A while ago you referred to two low-pressure wells in Area "A". Will you give us the location of those two wells and their names?

A. Yes, sir.

The first well mentioned is the Burnett 1-108, which is located in the south half of the southwest quarter of Section 108, Block 5, I. G. and N. R. R. Company Survey.

The other well mentioned is located in approximately the [fol. 5109] center of the southwest quarter of Section 119, Block 5, I. G. and N. R. R. Company Survey, both in Carson County, Texas.

Mr. Culton: Those are both near the north line of Area "A"?

The Witness: That is right, although there is a surprisingly small distance between these low-pressure wells and our wells which carry considerably higher pressure which, again, points to the low permeability of that section.

Mr. Culton: There isn't good feeding into those wells, in other words?

The Witness: From areas of higher pressure, that is correct.

By Mr. Littman:

Q. Now, Mr. Hinton, I note that each of the lines in your Exhibits 136-(1) to (10), over at the extreme left corner of each of these charts, is designated by a number. What do those numbers represent?

A. Those are identification numbers which were placed upon there so a reference could be made to the observed pressures for any year for any well.

Q. How could we identify any of these wells from those numbers, for instance?

A. By stating the summary of the group areas and—

Q. (Interposing) In your working papers?

[fol. 5110] A. In my working papers.

Mr. Culton: That is the key to your working papers, in other words?

The Witness: Oh, yes.

By Mr. Littman:

Q. It is not the key to the map, Exhibit No. 46, is it?

A. When you say "key", yes, I would say that it would be possible to obtain the names of the wells and the locations; by referring to the list from which this pressure-trend chart was made, it would be possible to locate any well that was desired.

Q. And that list is contained in your working papers?

A. That is correct.

Q. I hand you your working paper, File No. 11, and ask you whether the pages which I show you are the ones that you just referred to.

A. Yes, said pages carrying the title of "Group Areas West Panhandle Field, Rock Pressures" and the wells for each group placed thereon and the observed pressures listed, commencing with 1931 or before and carrying through the midyear pressure of 1941.

Mr. Culton: Mr. Littman, in order that data shown on Exhibit 136 may be verified in that respect, we will be glad to reproduce that working paper so that it may go in evidence.

Mr. Littman: I appreciate your suggestion and concur [fol. 5111] that it would be very helpful.

Mr. Wheat: How many of those sheets are there?

The Witness: Not very many.

By Mr. Littman:

Q. Now, Mr. Hinton, you assembled data which showed the withdrawals from all of the wells shown on your Exhibit 136-(1)?

A. Yes.

Q. Exhibits 136-(1) to 136-(10)?

A. Yes, sir.

Q. By years?

A. By years.

Q. And you, also, had to assume certain withdrawals for each of those wells for each of the years in the future? Did you not?

A. That is correct.

Q. Are those data in your working papers?

A. Not future anticipated withdrawals by wells, no.

Q. Do your working papers show the withdrawals in the future years?

A. No, sir.

Q. By group areas?

A. No, sir.

Q. But you made a determination of them, did you not?

[fol. 5112] A. Yes, it could be assumed by group areas the withdrawal. The deliverability was worked out by group areas.

Q. Now, I would like to have you furnish us with a statement showing the withdrawals by wells for the past, that is, prior to 1941, and the withdrawals for the future years by group areas.

A. That will mean that I will have to make some further calculations because, as I have said, I worked out the deliverability by group areas and, of course, the only way that we could arrive at a future withdrawal figure by group areas for a particular group of wells is to apply the percent of deliverability that could be obtained.

Q. Well, I thought you said a while ago that one of the factors you considered in making this estimate was the amount of gas that was going to be withdrawn from these wells in the future.

A. I did, but when I said, "from these wells", I was giving consideration to all of the wells in these group areas and those that will probably be drilled in the future because unfortunately, we cannot control the withdrawal from the field by our development, and it is necessary to take everyone's development into consideration to arrive at an answer which would be approximately correct.

Q. Well, were you referring to other people's wells?

A. Oh, yes. I have files which show the amount of gas [fol. 5113] that has been produced from every well located in each of the group areas from "A" to "G".

Q. Over what period?

A. Over the past five-year period.

Q. And did you, or did you not, make any assumptions as to the production from each of those wells for each of the future years?

A. Not by individual wells, but in total.

Q. Beg pardon?

A. Not by individual wells, but in total I did, and it is so shown on Exhibit 134.

Q. By "total", do you mean by group area?

A. No, no specific amounts from any individual well, no, sir.

Q. I am not referring to individual wells now. You just indicated that you do that.

A. Yes.

Q. But you said you made some determination of the total withdrawals in the future. Now, what do you mean by "total"? Do you mean total of the wells in the Panhandle Field, or do you mean total of the wells by group areas?

A. I mean the total of all wells in the Panhandle Field as the guiding factor and the withdrawal from all wells in each group area as a further guiding factor.

Q. You mean you considered the total withdrawals [fol. 5114] expected to be made in each of the group areas in the future years?

A. Yes, sir.

Q. Now, do you have those figures?

A. No, I do not, because much of that was mental. I just projected in my thought and knowing that there would be certain changes in the source of withdrawal.

Q. Well then, in view of the fact that your estimate of withdrawals in the future by areas was purely a mental figure, not reduced to writing, we will ask you for the past history by wells.

A. Do you mean all wells or just the company wells?

Q. All wells.

A. Oh.

Q. What is wrong with that?

A. Well, that will be approximately 100 sheets of 14-column paper.

Q. Well, how did you use those data, Mr. Hinton, if it was so voluminous?

A. I made totals of each group of wells and made summary sheets.

Q. Well, do you have the summary sheets?

A. I do.

Q. Are they in your working papers?

A. Yes, sir.

[fol. 5115] Q. Will you please identify those?

A. I will take it back, sir, those files should be in. They are coming in by express and those heavy ones are the ones that were missing here yesterday, and they are coming by express.

I can identify them as soon as they get here. I will be glad to do anything to save copying all those individual records.

Q. All right, we will pass that for the present.

If the curves shown on Exhibit 133 had been different, would that difference have affected the curves which you drew in Exhibits 136-(1) to [(1),] inclusive?

A. You say, would they have been different, also?

Q. Yes.

A. That would be correct, they would be different.

Q. In other words, you used the curves in Exhibit 133 as the major guide? A. Yes, sir.

Q. In your development of the future rock pressure decline in the various areas, group areas?

A. Yes, sir.

Q. Now, what is the next step in your method? Having determined in Exhibits 136-(1) to (10), inclusive, what the expected rock pressure readings would be in the future years on company owned wells and on wells from which gas is purchased, what did you then do?

[fol. 5116] A. I then applied the estimated pressure to our back-pressure data, which has been placed upon curves, and found out, as nearly as possible, what the open flow and deliverability of those wells would be, year by year.

Mr. Culton: You are referring to the individual wells, the back-pressure curves?

The Witness: No, in order to avoid having so many curves, I placed all of the wells located in each of the group areas on one back-pressure curve.

By Mr. Littman:

Q. What do you mean by "back-pressure data"?

A. That is a method used in the testing of gas wells. The data was obtained from such tests.

Do you mean what is a back-pressure open flow test? Did you want me to tell that?

Q. Yes. That might answer the question.

A. A back-pressure open flow test is a method of testing gas wells which has been developed by the United States Bureau of Mines, and is more completely described in Monograph 7 of the United States Bureau of Mines.

The test of a well is obtained by producing the well, usually through a critical flow prover or orifice meter, at such a rate that arrives at a stabilized flow where there is no change in pressure. That is repeated, usually for four rates of flow for each well.

[fol. 5117] After this data has been obtained it is then necessary to go through and work out the data by formulas which have been furnished by the United States Bureau of Mines and the Railroad Commission of Texas, and the observed pressures are converted to absolute pressures and squared.

The rate of flow is obtained by applying known coefficients for certain orifice plate sizes and are corrected for both temperature and specific gravity.

The difference in the square of the absolute pressures at various points of stabilization plotted against the rate of flow on logarithmic paper, log-log, it being the same scale both ways, will produce a straight line through all points if the test is satisfactory.

Q. Do you have your back-pressure curves here?

A. Yes.

Q. Without going into too much detail, I wish you would take one of them and explain the operation of the curves on the chart.

Mr. Culton: In that connection, on the assumption that, having made your curve, it is really a straight line, is it not?

The Witness: It is on logarithmic paper.

Mr. Culton: You can then determine what the well is capable of delivering at any given pressure, if there is no [fol. 5118] change in the physical condition of the well?

The Witness: Yes, that is correct. I did not complete my explanation there.

(Continuing) Because the absolute open flow is obtained by observing a closed-in well head pressure, converting to absolute and squaring that pressure and then adding the weight of the column of gas to that. The intersection of the lines, which is drawn through the four test points with a horizontal line placed on the graph at the point the pressure places it, gives the absolute open flow of the well.

This particular graph which has been placed on the easel is for the company wells located in Group Area "A".

Mr. Culton: Mr. Examiner, I suggest that that should be marked for identification in some way. I don't know whether counsel expect to offer it in the record or not.

Mr. Littman: There are a number of these and I didn't think, Mr. Culton, that it would be necessary to offer any more charts on this subject. My understanding is that the logarithmic chart is a mathematical method of determining the deliverability of the wells and I thought, perhaps, if Mr. Hinton explained, it might be sufficient.

Mr. Culton: All right.

The Witness: The small circles shown on this graph represent a point of stabilized flow for the well. It can be noticed that in most cases there are four shown for each well, however, some of them have three.

[fol. 5119] The Railroad Commission of Texas requires that we take four points. That is in the event that one point does not show complete stabilization at the completion of the calculation of the test, the other three can be used without going to the field to secure additional data.

Mr. Culton: In other words, the point is a certain rate of flow?

The Witness: That is right.

Mr. Culton: And you have to make a test on these four different rates of flow?

The Witness: That is right.

Now, in order to apply the pressure decline to this graph, we merely take the pressure which is shown, that is, that can be expected, by reading down the graph for any year—

By Mr. Littman:

Q. (Interposing) You are referring to Exhibit 136-(1) to (10), inclusive?

A. (1) to (10); and by squaring that pressure after it has had a barometric pressure added to it, which is whatever barometric pressure should be added for that portion of the country.

That is then squared and multiplied times an Es factor which gives consideration for the weight of the column of gas in a producing string of the well.

[fol. 5120] By taking that square of that well and plotting it on the graph, then the absolute formation open flow of that well can be read. If the open flow is desired to only the top of the well, the application of the Es factor is not applied.

Q. But you do not use the open flow in your estimate, do you?

A. No, not to any extent, other than this, that the State law provides that it is not lawful to produce a well at a greater rate than 25 percent of its absolute open flow. Naturally, we cannot lower our working pressures at any time, so that the amount of gas that we take from those wells will exceed 25 percent of the potential of the well.

Mr. Culton: I believe this fact may come in, after you have determined three points in a line, you then draw your line through those three points, do you?

The Witness: That is correct, yes.

Mr. Culton: Now, is it true that by extending that line to higher pressures or lower pressures, you can determine what that well would deliver at those higher or lower pressures, respectively?

The Witness: You can tell what the absolute open flow will be.

Mr. Culton: That is what I meant.

The Witness: In order to find out what that well will deliver, it is necessary to take the difference in the squares [fol. 5121] between the working pressure of the well, atmospheric pressure, and then read that on the graph here.

If the difference in squares should happen to be 10, then we will read at the bottom of the chart the amount of gas that well will deliver.

By Mr. Littman:

Q. What do you mean by "working pressure"?

A. The pressure at which the well is forced to produce gas.

Mr. Culton: There that would be zero.

The Witness: It is really back-pressure, that is what it is.

By Mr. Littman:

Q. Is that at the top of the well or where?

A. This usually occurs at the top of the well, yes, sir. There could be a partial break in the well, whereas the working pressure, actual pressure, which the formation was forced to produce against, would be different than the working pressure on the system into which it is produced.

Q. Have you completed your explanation of the logarithmic chart?

A. If everyone understands it, I have.

Q. Will you please identify each of the symbols appearing on that logarithmic back-pressure chart?

A. The vertical scale on this log paper is shown as [fol. 5122] thousands P_f squared minus P_s squared, that being the difference between the pressures at the formation and the pressure at which the stabilized flow was obtained.

The horizontal scale reads in Q in M. c. f. per day and this is 100, 1000 and 10,000 M. c. f.

. . . . . .

[fol. 5125] By Mr. Littman:

Q. Mr. Hinton, will you define the meaning of the term "P_f" as it is used in your logarithmic charts which have been here referred to as back-pressure charts?

A. "P_f" stands for the absolute formation pressure in the reservoir.

Q. Did you derive those pressures from the pressure-trend charts which have been identified as Exhibits 136-(1) to 136-(10)?

A. Those pressures are not reflected upon the back-pressure open flow chart.

Q. Where did you secure your P_t values in making your estimate?

A. To what estimate do you refer?

Q. Your estimate of gas that will be recovered, as shown in Schedule 5 of your Exhibit 43.

A. Yes, the—

Q. (Interposing) "Yes" what?

A. I was going to finish.

The application of the pressures shown on Exhibit [fol. 5126] 136-(1) to (10), inclusive, are applied to the back-pressure open flow curves and the P_t is obtained by taking the well head pressure at each point of test, mid-year test, and by—

Q. (Interposing) For each year shown in Exhibit 136-(1) to (10)?

A. Yes.

(Continuing) And making the proper allowance for the weight of the moving column of gas in the producing string of pipe and also adding the barometric pressure to the well head pressure to convert it to absolute pressure.

Q. Now, will you please define the P_s pressures which are shown on your back-pressure charts and which you used?

A. The P_s pressure is obtained by observing a pressure at a stabilized rate of flow, and then making the proper allowance for the weight of the moving column of gas in the producing string and by adding the barometric pressure to the pressure, that is, well head pressure plus the weight of the moving column of gas to convert it into absolute pressure, and that is the sand face pressure at that rate of flow.

Q. Where did you obtain your P_s pressures which you used in making your estimate?

A. I obtained them from the pressure-trend charts, Exhibit 136-(1) to (10), inclusive.

Q. I am now speaking of P_s not P_t.

A. That is right.

[fol. 5127] Q. How did you obtain the P_s pressures from Exhibits 136-(1) to (10)?

A. By taking the capacity of the pipe line system into consideration and finding out what the working pressure at the well head would be at the various years, and by so obtaining the working pressure, I then obtained the P_s data.

Q. Now, the P_s pressures bear a relation to the pressures at the first compressor station which, in this case is Sneed?

A. Yes, that is correct.

Q. And those pressures are higher than those which are at Sneed at various years?

A. That is correct. If they were lower, the flow of gas would be from Sneed station back into the well, rather than from the well to Sneed station.

Mr. Littman: Will you please read back that last answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. Are the P_s pressures which you used in making the calculation set forth in your working papers?

A. They are, but they are not in the best form that could be obtained or produced, due to the fact that there was a very, very short time to solve a problem of this size.

It was necessary to go into some approximations. There-
[fol. 5128] fore, the data that are reflected in working papers are to the degree of accuracy that can be obtained by the application of an average pressure to an average back-pressure open flows of the wells located in each group area.

I might add that since that time I have been working, as time was available, on trying to detail those by taking each well and assuming that the pressure drop on each well would be the same as the average for all wells in the group and trying to get, maybe, a more complete answer by working the problem in that manner.

Regardless of which manner or which method is used, there is going to naturally be some degree of error. It is impossible to make a forecast into the future that will be absolutely accurate.

Q. Within what percentage range would you say that the figures might be off, one way or another?

A. Assuming that the characteristic of the well does not change, I would say that the percentage of error should not be greater than five percent.

However, again, the accurateness of the estimate is changed, because we know from experience that the characteristics of those wells will change, and the change will be a decrease, and we make our future estimate based on the present characteristic of the wells.

We are certain that that is the best possible amount that [fol. 5129] could be expected.

Trial Examiner: The method that you have been describing has to do with the present characteristic of the well, has it not?

The Witness: Yes, sir.

Trial Examiner: Is that the method used by other men engaged in similar problems in that field?

The Witness: Yes, sir.

Trial Examiner: So that the method you have described and which you have now applied, is the customary method to determine the present conditions of the wells?

The Witness: That is correct.

Trial Examiner: That prevails throughout the industry in that area?

The Witness: In the Panhandle Field, yes, sir.

By Mr. Littman:

Q. You stated a while ago that you secured the P pressures from Exhibit 136-(1) to (10), inclusive, is that right?

A. That is the basis for them, yes, sir. They are not taken directly from them.

Q. Will you give us an example, a specific example, of how you developed the P pressures?

Trial Examiner: Before you do that may I ask one more question relating to those I just asked. How long

[fol. 5130] in the past has this method been in common usage?

The Witness: By two of the major companies in the Panhandle, namely, the Texhoma Natural Gas Company and the Canadian River Gas Company, this method has been in common usage since 1931.

As far as our company is concerned, it is only during the past three years that we have adopted this method.

Trial Examiner: Is this the method employed by the Railroad Commission, in so far as they make tests of their oil?

The Witness: No, sir. It is approximately the same. I am not quite sure what method they might be using, but they did use the draw-down method, which is, in oil, similar to the pull-down in the gas industry?

Pull down the pressure from the closed-in pressure for a certain rate of flow and in the oil, they pump so many barrels per day and they find out what the pull-down has been on that well.

I am not too familiar with the testing of oil wells, however.

Your question, Mr. Littman, was to give a specific example of how the P_s pressure is obtained.

By Mr. Littman:

Q. That is right, and make reference to your working papers as you go along, identifying the exhibit and the working paper from which you derive your figures.

[fol. 5131] A. From the working paper, File No. 11, titled "Group Area Rock Pressure Summary for Texas", we will turn to the sheet for Group "A".

Now, in 1942, we hope to be able to furnish an intake-suction pressure to the Sneed station of 293 pounds. The working pressure average for Group Area "A" [hwith] that pressure will be 317 pounds gage, which, converted to absolute, will be 330.2.

The 330.2 is then squared and the square of 330.2 pounds is then multiplied by the Es factor which provides a proper consideration for the weight of the moving column of gas

in the producing string, and thus the P_s pressure is obtained.

Q. The result which you obtain by the method which you just described gives you P_s squared, rather than the P_s pressure, does it not?

A. Yes, it does. The P_s can be obtained by taking the working pressure at the well head absolute and adding the weight of the moving column of gas to it.

I am sorry that I did not describe that properly at first.

Q. Now, you showed us how you arrived at the P_s pressure from the Sneed station.

A. Yes, the difference in the pressure at the intake side of Sneed station and the working pressure at the well head is governed by volume and capacity of the pipe line system.

Q. But you did not show us how you arrived at the P_s [fol. 5132] pressure from the pressure-trend chart, Exhibits 136-(1) to (10).

A. All right. The pressure-trend charts show what pressure can be expected in each of these group areas. Then, by experience, we know, by observing the pressure drop in the pipe line system, what pressure drop there will be between the intake side of Sneed and the well head.

Therefore, the intake pressure of Sneed is governed entirely by the pressure-trend of the well.

Q. Isn't it a fact that you set the pressure at Sneed station by basing it upon the pressures at the wells?

A. That is right, the pressures at the wells govern the intake pressure at Sneed.

Q. And you have agreed to supply us with the working pressures that you used? A. Yes, sir.

* * * * * * * *

[fol. 5133] By Mr. Littman:

Q. Now, Mr. Hinton, it appears that we are near the end of the step-by-step description of your method.

A. May I make an addition to the answer to your last question; when we agreed that the pressure at Sneed is governed by the well head pressures, I would like to say that it is going to be necessary to install some individual compressor units to hold the Sneed suction pressures that have been set out here.

That is, all wells are not going to be able to produce gas with a working pressure at the Sneed station set out here.

I just wanted to make that clear here, that it will be necessary to install some individual well compressors.

Trial Examiner: Is that partly due to the lack of uniform pressures as between different wells feeding into the laterals?

The Witness: Yes, that is right; and there are some wells that are entirely different from the wells surrounding it and I give, for example, our well located on the Sneed Ranch in Section 28.

That well has never been able to produce a quantity of gas that compares with the quantity at this time that can be produced by the wells surrounding it.

By Mr. Littman:

Q. Now, Mr. Hinton, if I correctly understand your tes- [fol. 5434] timony with respect to the last step which you described, you used the curves shown in Exhibit 136 (1) to (10), inclusive, for the purpose of determining the rock pressure of the wells of Panhandle Eastern and its vendors in each of the areas in the future years, is that right?

A. That is correct.

Q. And using that information and those data, you then applied these various pressures that you described and applied the logarithmic charts, called the back pressure charts and from those charts worked out the amount of gas that will be expected to be derived from the wells in each of the areas, Groups "A" to "G". Is that correct?

A. Yes, that is substantially correct, other than it has been assumed, in all cases, that wells owned by other than Panhandle Eastern, the gas purchase contract wells, will supply horsepower as required to enable them to put gas into our system or they will be forced to install some individual well compressors, the same as we will, and I assumed all the way through that both Panhandle Eastern and the other [owners] of the wells connected to our system will install additional horsepower whenever necessary.

Q. Will you state how you then secured the figures of production in the West Panhandle Field which appear in Schedule 5 of your Exhibit 43, and in Exhibit 131?

A. That being the total amount of gas which is expected [fol. 5135] to be produced from the Panhandle Field, both under the basic load or present volumes and future anticipated volumes.

Q. We were referring to the future load.

A. The future load, yes, that is substantially correct, other than you will note that they are all round numbers, which indicate I do not mean that that is exactly the amount that we will be able to take, but I feel that it will be very close to it.

Q. I wanted you to complete the last step of your method by which you secured the figures shown in Exhibit 131 and in Schedule 5 of your Exhibit 43.

A. In order to determine what amount of gas a well will deliver, it is necessary that the working pressure at the well head be obtained and made into an absolute pressure and squared, multiplied times an Es factor or the weight of the moving column of gas added to that pressure to get the sand face pressure at the rate of flow at which that well will work.

It is then necessary to take the closed-in pressure by gaging the well and converting that into an absolute pressure and squaring it, then multiplying it also by the Es factor, which obtains the closed-in formation sand face pressure.

The difference in the squares of those two numbers is then placed upon the back-pressure open flow chart and the result is read from the horizontal scale, which will rea- [fol. 5136] sonably closely tell the amount of gas that can be expected to be produced at that working pressure from that well.

Q. And you did that for each well?

A. No, I told you a while ago I did not have time to do it for each well, and it is not in my working papers. I used an average all the way through, but I have been working it out by wells since. I do not have it complete.

Q. You secured the production figures for each area?

A. Yes.

Q. By the method that you have described and separately as between Panhandle Eastern's own wells in each area and as to the purchase wells in each area, is that right?

A. Yes, I believe that is right, except that the amount of gas that is going to be taken from purchase wells and company wells is not governed by deliverability alone, because we prorate our gas on a formula which allocates 50 percent of the total amount on the basis of acreage alone.

Therefore, the acreage, unless that formula is changed, will always remain constant and, in the division of that gas, it was assumed that the open flows of the purchase wells and the company wells would decline at a parallel rate, and the division of the gas was obtained by allocating half of that production on the basis of acreage and half on the basis of open flow.

Therefore, the result was not obtained by deliverability [fol. 5137] alone.

Q. And then you added the total production thus indicated to each area to secure the total amount of gas which you estimate will be produced in the West Panhandle Field in each of the future years from 1942 through 1960 shown in Exhibit 131?

A. I do not believe that is reflected in my working papers, but that is true, that is what was done.

Q. What I was endeavoring to establish was simply this, Mr. Hinton, that you made the estimate for each of the areas for each year, and then totaled the estimate production for each year and included them in the columns as shown in Exhibit 131 for the West Panhandle Field, isn't that right?

A. They were made on that basis, but they do not exactly check, due to the fact that, as I have explained, proration enters into the problem as well as deliverability.

There is also another thing that I might call your attention to there, and that is that the quantities of gas that could be taken each year could deviate from those set out, and they could, in some cases, be doubled if we had the system capacity to take the gas out.

For instance, right now, we could produce from our present development probably almost twice as much gas from the Panhandle Field as we are now, but, in order to do that, the capital expenditure required will be greater than good [fol. 5138] business practice would justify.

Trial Examiner: What would be the nature of that additional expenditure?

The Witness: That would mean at least one more 26-inch line. Well, roughly, it would mean an additional 6,000 horsepower.

Trial Examiner: What is your average unit?

The Witness: The Cost of an average—

Trial Examiner (Interposing) No, the horsepower: How many units would that mean, 6,000-horsepower?

The Witness: That would mean about five. Those are 1,300 horsepower units in the Sneed station.

Trial Examiner: That is to serve the present holdings?

The Witness: That is right. We are adding two more this year unless we cannot get them.

Mr. Culton: What would be the length of that 26-inch pipe line; how many miles?

The Witness: That would be about 109 miles, and if we would increase our rate of withdrawal from that field, it would mean that the number of years we could operate in the field would be shortened by the increased withdrawal.

By Mr. Littman:

Q. Now, Mr. Hinton, am I correct in understanding that your estimate of the production by Panhandle Eastern in the West Panhandle Field for the future years as reflected [fol. 5139] in Exhibit 131 and in Schedule 5 of Exhibit 43 is based primarily upon the data shown in Exhibit 134 and which is graphically shown by curves in Exhibit 133?

A. Primarily, that is correct.

Q. Am I correct in also stating that you have based your estimate, in large part, upon the belief that production in the Panhandle Field will proceed in the future at a decelerating rate per pound of rock pressure decline?

A. I agree with that, and say that you are correct, other than when we speak of a decelerating amount of gas for the same pressure drop, I would like to say that that does not apply to a true pressure, but applies to the pressures which are obtained from observing well head pressures.

Mr. Culton: You mean it does not apply for equilibrium pressure?

The Witness: That is what I was going to say. It does not mean that these pressures we are speaking of are true equilibrium pressures.

Therefore, there will not be a greater amount of pressure drop for the same amount of production based on true and accurate pressures, but the pressure which we will observe at the well head will indicate that that is what is happening.

By Mr. Littman:

Q. And the rate of pressure drop which you applied, substantially, is that which is reflected in the chart which [fol. 5140] has been identified as Exhibit 135?

A. Yes, sir. I do not see how we could use or disregard the use of anything that establishes a constant in this field that is proven by actual field performance.

Q. So that your answer to my question is, "yes"?

A. In short form, that is it, yes.

Q. Now, if the rate of pressure drop shown in Exhibit 135 is incorrect and if the curves which appear in Exhibit 133 are incorrect and in error, then, to that extent, your total estimate would be in error. Is that correct?

A. No chain is stronger that the weakest link.

Q. And that is another way of saying that you would have to revise your entire estimate of gas produced as shown in Exhibit 131 and in Schedule 5 of Exhibit 43 if the conclusions which are reflected in Exhibits 135, 133 and 134 are found to be substantially in error?

A. Yes, and I would be most happy if they are found to be in error and that can be lengthened.

Q. And that can be what?

A. And the life of the field can be lengthened.

Q. And does the same answer go with respect to your estimate of capital additions?

A. No, that does not go for capital additions.

* * * * * * * * *

[fol. 5141] Mr. Littman: Well, I will confine my question purely to the five years, and I mean nothing more than the five-year estimate of capital additions which you have submitted in Exhibit 42.

The Witness: There would have to be an extremely high percentage or error to change the required capital expenditure in any great amount.

Q. Now, let's go back to Exhibit No. 134, Mr. Hinton. Do you have copies before you of it?

A. I have it now.

Q. According to your Exhibit No. 134, what remaining life is indicated for the Panhandle Field?

A. The remaining life of the Panhandle Field is not indicated.

Q. What conclusions with respect to the remaining life of the Panhandle Field would you draw from Exhibit 134?

A. I would draw the conclusion that, as indicated, there will be a drop-off in the total amount of gas that [fol. 5142] will be withdrawn from the field, and many of the major pipe lines will probably cease to take gas from that field when the pressure gets low enough that it is no longer economical to install the required horsepower to take loads out in sufficient volumes to meet their market requirements, but after that period, gas will be produced from the Panhandle Field for a period of many years for local markets and local consumption.

Q. I take it that you include Panhandle Eastern in the category of the pipe line companies which will have to cease operations, along about the period which you have described?

A. I do.

Q. That is, earlier than for those who serve the local markets? A. Yes, sir.

Q. Well, to be more specific, let's look at Condition "C" which is reflected in the last three columns on the right-hand side of Exhibit No. 134.

I note that in 1955, according to this exhibit, 18,165,000,000 M.c.f. will have been withdrawn under the Condition which you have described as Condition "C". Is that correct? A. That is correct.

Q. And the remaining rock pressure in the Panhandle Field will be 70.17 pounds, is that correct?

A. The same type of rock pressure as we have been [fol. 5143] referring to, throughout.

Q. And, in 1956, the total estimated cumulative withdrawal for the Panhandle Field is 18,786,000,000 odd M.c.f., and the remaining rock pressure, according to this exhibit, is 50.15 pounds. Is that right?

A. That is correct.

Q. Now, would you expect any of the major pipe line companies to operate in the Panhandle Field under Condition "C" after 1957?

A. If there is some manufacturer who can produce a type of compressor that can be operated for substantially less money than is required to operate the common type of compressor now used, it is possible that they might go slightly below that pressure, but it is not probable.

Q. In other words, in all probabilities, according to your testimony, the major pipe line companies, including the Panhandle Eastern Company, operating in the Panhandle Field, will have to pull up stakes and go out of the business of producing gas in the Panhandle Field at the end of 1956?

A. That would be my idea of being very close to the time that that will occur.

Q. You do not think that Panhandle Eastern is going to stay in the field any longer than any of the other natural gas pipe line companies?

A. No, I think Panhandle Eastern will probably leave [fol. 5144] the field before even some of the other major pipe line companies, due to the fact that this company has had foresight to create for themselves a reserve in fields where the withdrawal has been very slight to date and, for that reason, they can move their production from the Panhandle Field and go to the Hugoton Field located in Kansas, Texas and Oklahoma, and develop acreage and produce gas for less money than would be required to produce gas in the Panhandle Field at the pressures which will be encountered in the year 1956.

Q. Now, you would expect the life of Panhandle Eastern's reserves to be as long as those of the reserves of the field, would you not?

Mr. Culton: You mean the average reserves, or the average of everybody in the field?

Mr. Littman: Do you understand my question?

The Witness: I do not believe I understand. I was a little confused in thought. Do you mean the average reserve of the entire field, or the average reserve of the companies operating in the vicinity in which we operate?

By Mr. Littman:

Q. You do not expect Panhandle Eastern to exhaust its reserves in the Panhandle Field ahead of any of the other pipe line companies, do you?

A. No, I do not.

Q. Now, will you name the figure which you consider to [fol. 5145] be the recoverable gas reserves in the Panhandle Field?

A. To name that figure, it would be necessary to take each individual well because I think that the pressure at which it will be no longer be profitable to produce gas from the well is governed by individual wells, and any figure that would be named would not apply to the field.

In other words, there are going to be some wells that will be abandoned at extremely high pressures. I look for that to occur in Area "D", and I also expect some wells to produce at a profitable rate down to very low pressures, even some below 50 pounds.

Q. Well, looking at Column 12 in Exhibit 134, what would you say would be the maximum amount of gas that would be recovered from the Panhandle Field from the beginning down to the end?

A. Somewhere between 20 and 21 trillion feet of gas but that is without time limit.

Q. Now, the 20 billion M.c.f. figure appears in Column 12 in the year 1958, and indicates a remaining rock pressure of 8.83 pounds.

A. And again, we are considering the same type of pressures that have been considered all the way through.

Mr. Culton: That is, average pressure?

The Witness: That is average pressures, without consideration to the vertical thickness of pay.

[fol. 5146] Here is what happens when the pressure gets that low, Mr. Littman, and that is, the rate of travel of that gas through the formation is very slow, just applying the ratio of the difference of squares, but it is also

slowed again by the fact that it has deposited a great deal of moisture within that formation.

Now, we know that is going to happen, and the permeability channels have been cut down and, therefore, there will be areas of a great deal higher pressure than the 8.83 which will be observed at the well head, but the time element must be taken into consideration for that gas to flow into the well bore.

By Mr. Littman:

Q. Do you say that the average abandonment pressure in the Panhandle Field will be in the vicinity of 8 pounds? A. No.

Q. It would have to be, for you to get out more than 20 billion M.c.f., would it not?

A. You are not keeping in mind we are speaking of pressures at the well bore and not the pressure which would be encountered between well bores if a new well would be drilled when the actual observed pressure of 8 pounds is observed.

Mr. Culton: In other words, there will be a gradient all over the field, is that correct?

The Witness: That is correct.

[fol. 5147] By Mr. Littman:

Q. But the column is headed, "Estimated pressure decline, pounds, Condition No. 3, well head gage."

A. Yes.

Q. I thought that meant at the well head.

A. It is correctly titled, and the pressures of which I am speaking are well head pressures.

Q. Then you put the total recoverable reserves of the Panhandle Field from the beginning to the end at approximately 20 billion M.c.f.?

A. I would say that it will probably run between 20 and 21 billion M.c.f., and it will never exactly be known because we do not know how much gas was produced prior to 1935 from the sweet gas formation.

Mr. Culton: In other words, nobody ever will know what the answer ought to be?

The Witness: No, sir.

Mr. Culton: After it is all over?

The Witness: No, sir.

By Mr. Littman:

Q. However, the best estimates of the amount of gas withdrawn from the beginning of production in the Panhandle Field through the year 1940 is the figure which you show in Exhibit No. 134, Column 12, of 8,325,985,000 M. c.f. Is that right?

[fol. 5148] A. That is right, except you said, "—985,000 M.c.f.," and that should be "—985,000 M.c.f." I mean, that would be three too many zeroes on to that figure.

Q. Well, is it a figure of 8 billion M.c.f., isn't it?

A. Yes.

Q. I was right, in the first place, wasn't it?

A. No, you said 985,000 M.c.f.

Q. I still think I am right. Your figure—

A. (Interposing) I just want to be sure.

Mr. Culton: There is no question about what the correct interpretation of it is.

The Witness: I was just trying to keep the three zeroes out of the record, that is what I was trying to do.

Mr. Wheat: May we have the precise amount of the figure in the record. Let's state it another way to be sure the record is correct.

The figure is 8,325,985,000,000 cubic feet, is that correct?

The Witness: That is correct.

Mr. Littman, you were correct in the first, because I neglected to note that there were two "M's" heading that column.

Mr. Littman: I thought that was the trouble.

By Mr. Littman:

Q. Now, what would be, according to Exhibit No. 134, the remaining probable gas reserves as of December 31, [fol. 5149] 1940, according to your Condition "C"?

A. If the total recoverable reserve from the Panhandle Field should be 20 trillion cubic feet, the remaining re-

serve would be 11 trillion 674 billion 15 million cubic feet, and if the recoverable reserve from the Panhandle Field should be 24 trillion cubic feet, the remaining reserve would be 12 trillion 674 billion 15 million cubic feet.

Q. So that, according to your Exhibit No. 134, the recoverable gas reserves remaining in the Panhandle Field, as of the end of the year 1940, is between 11 and 12 trillion cubic feet?

A. That would be my idea, yes, sir.

Q. Have you heard of an engineer by the name of Ralph E. Davis? A. Yes.

Q. Do you consider him an eminent authority on the subject of estimated gas reserves?

A. I think Mr. Davis enjoys a very nice reputation as a geologist and engineer.

Q. Did you hear him testify in these proceedings?

A. No, sir, I did not.

Q. Now, Mr. Davis, in Exhibit No. 76, Page 1, in this proceeding, makes the following statement in a letter dated November 12, 1940, addressed to the Board of Directors of the Panhandle Eastern Pipe Line Company:

[fol. 5150] "Our most recent study of the Amarillo Field indicates that the proven gas acreage covers an area of approximately 1,478,000 acres and that the recoverable gas reserves, as of September 30, 1940, are not less than 17 trillion cubic feet."

Bearing in mind that the 17 trillion cubic feet estimate of Mr. Davis was made within three months of the December 31, 1940, figure which you have just given, I will ask you whether it is your testimony that Mr. Davis is right or wrong in making that statement?

. . . . . .

[fol. 5154] A. I think that Mr. Davis probably used the best knowledge he had of the field, but I do not think he knows as much about the Panhandle Field as I do.

Q. How much higher is Mr. Davis than you in the estimate?

A. I do not know what his estimate is. I have seen it in reports on the acreage owned by Panhandle Eastern.

. . . . . .

[fol. 5153] Q. Assuming that Mr. Davis' estimate of remaining recoverable reserves of 17 trillion cubic feet, as of September 30, 1940, is correct, what would be the remaining recoverable gas reserves in the Panhandle Field as of December 31, 1956, if there were withdrawn the amount of gas estimated by you under Condition "C", Column 12 in Exhibit 134?

A. There would be a remaining reserve, if it is assumed that Mr. Davis's 17 trillion cubic feet of remaining reserve as of September 30, 1940, is correct, of 6 trillion, 539 billion cubic feet.

Q. Remaining as of December 31, 1956? Is that right?

A. That is correct.

Q. And what would be the remaining reserves according to your estimate?

A. There would be a remaining reserve of 2 trillion, 213 billion, 15 million cubic feet.

Q. Now, is the last figure based on—

A. (Interposing) That is based on a total of 21 trillion cubic feet. If that would be based on 20 trillion cubic feet, it would be 1 trillion, 213 billion, 15 million cubic feet.

Q. And it has been your testimony that the total recoverable figure would be between 20 trillion and 21 trillion cubic feet, is that correct?

[fol. 5154] A. That is correct.

Q. Now Mr. Hinton, I would like to have you refer to the table on Page 10 of your Exhibit 42.

Mr. Culton: Before you get off of that Davis matter, Mr. Davis estimated how much in the Panhandle Field reserves belonged to Panhandle Eastern?

. . . . . .

The Witness: Not less than 750 billion cubic feet.

Mr. Culton: And how much do you anticipate from your study that Panhandle Eastern will be able to produce from its reserves by the time you think that they will probably have to abandon Panhandle Field? Do you recall what that is?

The Witness: No, but I think it is in excess of the amount that Mr. Davis has set out.

Mr. Culton: If it is below that, it is not very substantially below it, is it?

The Witness: No, it is that much.

Mr. Littman: I think it is below.

Mr. Culton: You think it is slightly below? Let's get the figure.

* * * * * * * *

The Witness: Yes, it is below that.

[fol. 5155] Mr. Culton: What is your total?

The Witness: My total is 718 billion cubic feet.

By Mr. Littman:

Q. How do you secure that total, Mr. Hinton? Would you mind telling us the breakdown of the figure?

A. By just merely adding the amounts that we expect to produce from the field through the years 1941 to 1960.

Q. And what is the figure that you just gave?

A. 718 billion cubic feet.

Mr. Culton: And what is the production for the preceding calendar year, say, from August to August in Texas?

The Witness: From our reserves?

Mr. Culton: Yes, approximately.

The Witness: You say, from August?

Mr. Culton: Starting with September the 1st, and ending with July 1st, September 1940 to July 1, 1941.

The Witness: You couldn't make that October, could you?

Mr. Culton: That would be close enough.

The Witness: I have the October report here, handy.

Mr. Culton: All right.

The Witness: That was 40,013,670,000 M. c. f.

Mr. Culton: And that added to 718 billion, as of a year ago? In other words, Panhandle Eastern has been

producing approximately 40 billion a year for the last year or so from the Panhandle Field?

[fol. 5156] The Witness: Just for the last year, yes.

By Mr. Littman:

Q. Just a minute, Mr. Hinton. You have been going through the year 1960 for Panhandle Eastern figures, haven't you?

A. Yes, because I had them added. There would be a deduction of 14 billion from that, making a total of 704 billion cubic feet that we would expect to produce through the year 1956.

Mr. Culton: Then, to get it back to last year, you would add another 40 on, approximately? You would start from October of last year?

The Witness: Yes, that is right, because this letter was written in 1940. I thought it was 1941. I didn't notice the date there very closely.

That is correct. That would be a total of 744 billion cubic feet.

By Mr. Littman:

Q. From when to when?

A. From November 1940 to December 31, 1956.

Trial Examiner: Before you reply to Mr. Littman's question concerning the table on Page 10 of Exhibit 42, please supply a bit of additional information concerning your factors which have resulted in the conclusions you have stated in the testimony today and yesterday.

[fol. 5157] I believe on the letter of Mr. Davis, to which you have just referred and which is shown in the document marked for identification as "Exhibit 107"; the present Panhandle acreage, including leases, comprises 4.43 per cent of the total proven area of the Amarillo Field.

I have just read that phrase from that letter of Mr. Davis.

The Witness: Yes, I check it here on this letter.

Trial Examiner: May I ask whether, in your studies, you have confined your estimates entirely to the produc-

tion of the acreage which is now owned or under lease from the company?

I should say, now producing for the company, either under gas purchase contracts or under royalties.

The Witness: Yes, just on the acreage now held by either development, delay rental or gas purchase contracts.

Trial Examiner: And you have measured the predictions of consumption by your company in the expanding market by the present estimated rate of increase, have you not?

Your predictions of future years are based on your expectations?

The Witness: Yes.

Trial Examiner: And those expectations are based on your experience since the company began to operate?

The Witness: That is correct, yes, sir, and Mr. Morton's forecasts.

Trial Examiner: And in making that estimate you have [fol. 5158] had, of course, close access to all of the company's records showing its growth?

The Witness: Yes.

Trial Examiner: Have you had similar access to the records showing the growth of the other companies taking from this same area?

The Witness: Yes, I have.

Trial Examiner: And have you made similar calculations with reference to their future expectations?

The Witness: Yes, I have.

Trial Examiner: Have you taken into account the factors which will result in an ultimate saturated market in the territories they now serve?

The Witness: All with the exception of Cities Service, which seems to stay along at about the same rate of withdrawal year after year for the markets which they serve from the Panhandle Field.

The increase in withdrawal from that field will be principally by Panhandle Eastern Company, the Texhoma Natural Gas Company, which produces for the Natural Gas Pipe Line Company of America, and the Northern Natural Gas Company serving Nebraska and Minnesota.

Trial Examiner: Are the markets which are served by the companies serving the other 95 percent, or taking the other 95 percent, in your judgment, as stable as the market [fol. 5159] which your company serves?

The Witness: Yes, probably more stable, because we serve an industrial area and much of the gas which is taken into Kansas City, through the Cities Service line, is house heating and firm load gas.

The gas which is taken by the Northern Natural will not serve as large a percent or as high a number of industrial customers as the Panhandle Eastern will probably serve in the area which they serve.

Mr. Culton: You haven't mentioned Canadian River. What recognition do you give to Canadian River and the Denver Line?

The Witness: The Denver Line contemplates a pick up in their load, but not in the proportions that the companies already mentioned contemplate.

However, the Canadian River acreage furnishes one-fourth of the load for the Natural Gas Pipe Line Company of America and, therefore, that acreage will participate in the market increase for the Natural Gas Pipe Line Company of America.

Trial Examiner: In making these compilations, has it been necessary for you to consider the future of the carbon black industry?

The Witness: Yes.

Trial Examiner: And the casing head-gasoline process?

The Witness: That is right. By studying the monthly [fol. 5160] report. We get a monthly gasoline plant report from the Railroad Commission.

Trial Examiner: And your present estimates of the future are based on the continuance of present practice?

The Witness: That is correct. I do not look for any large expansion in the carbon black industry in the Panhandle Field.

By Mr. Littman:

Q. And your Condition "C", as reflected in Columns 11, 12 and 13 in Exhibit 134, reflects the increased take by all parties, including Panhandle Eastern, from the Panhandle Field in the future years, does it not?

A. That is correct, yes.

Q. Now, if you had adopted and used Mr. Davis' 17 trillion recoverable reserves as of September 30, 1940, you would show a field with a longer life, would you not?

A. Yes, if I would adopt them.

Q. And you would have to revise your own estimate of the recovery to be secured by Panhandle Eastern in the light of that longer life and in the light of those total overall reserves, is that correct?

A. That is right. Or, if we would assume there was a remaining reserve of 50 trillion instead of Mr. Davis' 17 trillion, why, the life of our company could be extended a great many more years.

[fol. 5161] Q. So that you and Mr. Davis cannot both be right, is that right? A. That is right.

Mr. Lee: What is right, you are right, or he is right?

The Witness: No, that both of us cannot be right.

By Mr. Littman:

Q. Now, in other words, you fully expect that Panhandle Eastern will be operating in this field as long as the other pipe line companies operate?

A. That is right, and I hope Mr. Davis is right and I am absolutely wrong, but I don't think he is, because every time that he makes an additional reserve estimate for our company he obtains more information.

If you will trace those down, I think you will find that they are at a declining rate, that the original amount that he set up for this field was greater than the amount which he estimated in his last reserve figure.

That is because he is finding out more about the field. He has been sending a man out on these reports who has been obtaining a great deal of the detail that makes up the

information necessary to make an accurate reserve estimate of this field.

Q. Well, you know, do you not, Mr. Hinton, that Panhandle Eastern has used Mr. Davis' estimate as recently as in 1941 for the purpose of proceedings before the Securi-[fol. 5162] ties and Exchange Commission for the purpose of floating security issues, do you not?

A. I don't know what they were floating, but I do know that he has made this reserve estimate for our company because I am called on to check the number of acres in most cases when that reserve report is made, to see that he has taken into consideration the correct number of acres.

Q. Were you called upon [the] check Mr. Davis' estimate which was used before the Securities and Exchange Commission, which is the same one which I just read to you a minute ago?

Mr. Culton: Just a minute. I think counsel is wrong on that. I don't think he has offered it. You said that you just read it to him. You didn't offer him this year's report.

The Witness: That was 1940, the one that you handed me.

Mr. Culton: We tender to you Mr. Davis' last one, if you wish to put it in evidence and inquire about it. I think a copy of it has already been handed to counsel early this week.

Mr. Chamberlain: Isn't that Exhibit 107?

Mr. Littman: No, this is not an exhibit in this case.

Mr. Culton: Part of it was offered as an exhibit the other day by counsel.

Trial Examiner: A reference was made to it.

Mr. Littman: Not by me. I think it was by other counsel.

At any rate, I have not read it, but I shall read it at the [fol. 5163] first opportunity.

Trial Examiner: Just one further question, if I may ask it. What consideration did you give to waste and conservation in connection with your predictions?

The Witness: That is a pretty hard figure to make an accurate estimate of. In order to try to obtain a better knowledge of the amount of gas that is being wasted, we have adopted the policy of keeping a well-blowing record and we know how long each well is open to the atmosphere each year and we know how much gas has been tested, and we have talked to the other companies, I have, their operators in the field.

I know about what their policies are about blowing wells and we have included a figure in this amount given for gas wasted to the air.

Trial Examiner: That is a large factor, is it not, in your predictions?

The Witness: No, it is quite small. That runs only from 12 billion to 15 billion a year.

Trial Examiner: When you say that that is quite small, you mean you estimate the loss of gas from field operations and waste to equal 18 billion or 20 billion cubic feet a year?

The Witness: Twelve billion to 15 billion cubic feet a year. That includes gas that is blown to the air during the time that the wells are being drilled into the producing formation.

[fol. 5164] Trial Examiner: You have no very satisfactory data, have you, as a basis for such an estimate?

The Witness: No, sir.

Trial Examiner: So that that is purely a judgment estimate?

The Witness: Yes. The application of judgment to what data we can gather.

By Mr. Littman:

Q. A moment ago I asked [to] to turn to the table on Page 10 of Exhibit 42. Am I correct in understanding that the rate of rock pressure decline utilized by you in making your estimate was derived from the figures in this table?

A. Yes.

Q. And I believe yesterday you explained how the five points were plotted on the chart, Exhibit No. 135, from the five lines of data shown in this table?

A. Yes, I think we went through that quite thoroughly.

Q. Did you make any personal investigation with respect to any of the figures shown in this table?

A. What do you mean by "a personal investigation"?

Q. Well, did you work these figures up yourself, or did you secure them from certain sources?

A. Why, naturally, I secured them from certain sources and they were worked previous to the time that I worked them, and I checked them.

Q. Now, will you give us the source of the figures [fol. 5165] shown in this table, column by column?

A. The periods shown cover production figures which were compiled by various producers in the Panhandle Field and were taken from the records of the Railroad Commission and converted from 14.65 to 16.4.

Q. What part of these figures, shown in the column headed "Production, M. c. f.", was taken from the reports of the Texas Commission and what part of them from other sources that you generally described?

A. I was looking for that set of figures yesterday, and I thought they would be on Mr. Smith's working papers, but they were not. I haven't located them yet, but they include an amount of gas blown to air by drilling-in, well maintenance, and the set of figures were typed and in the office of the Texhoma Natural Gas Company, I believe.

It might have been in the offices of the Columbia Fuel. They were secured by our representative, who lives in Amarillo, for me.

Q. Well, can you give us the breakdown of these figures in Column "Production, M. c. f."?

A. You mean as to what portion of that gas was used for light and fuel and what portion for carbon black and what portion went to gasoline plants?

Q. No, I mean what portion of these figures were taken from the Railroad Commission of Texas reports.

[fol. 5166] A. The metered gas?

Q. Well, can you give us the amount?

A. To give you the amount, why, we would have to divide it up into light and fuel, casing head, gasoline plant use, and then the estimate of gas blown to air in lease use.

Q. Well, perhaps we can get at it in that way, then. If you can supply the breakdown, perhaps it would clear up my question.

A. Do you question the accuracy of those figures?

Q. I am merely asking about the source, Mr. Hinton. You see, these figures do not coincide in total with the figures shown in the Texas Commission reports.

A. And they will not.

Q. And I wanted to know why and I wanted you to explain for purposes of the record how you arrived at it.

A. They are on a different pressure base, which accounts for one of the reasons that they will not check with the Railroad Commission records.

The second is that the operators in the Panhandle Field have compiled a set of data showing the amount of gas estimated to be blown to the air.

Mr. Peterson, of the Texhoma Natural Gas Company, has furnished that figure that is included in those figures there on Page 10 of Exhibit 42.

[fol. 5167] Q. Suppose you read the breakdown into the record.

A. I am still looking. I don't seem to be able to locate them, however, it will be a pleasure to furnish the breakdown to you at a later date, if you think it would save time, rather than my looking right now.

That was one of the early things that was done in the working of this problem.

Q. Do you suspect that you have the breakdown of these figures in your working papers before you?

A. I suspect that I do.

Q. Well, let's pass that for the moment and see if you can find them a little later. While you are looking for those papers, can you state whether they include casing head gas?

A. They do include casing head gas.

Q. For the entire period?

A. Yes. Of course, you understand that they probably don't include all of the gas from the sweet field because, as I have said before, in the early days the amounts of gas that were produced could only be estimated and the amount shown in total may be in error.

Mr. Culton: That is the August 1, 1935, item, from the beginning, August 1, 1935?

The Witness: Yes.

By Mr. Littman:

Q. Do these figures include all of the dry gas and all [fol. 5168] of the casing head gas reported by the Railroad Commission?

A. Yes, and an estimate for all gas other than lease use previous to August 1, 1935.

A copy of Mr. Peterson's figures is on an 8½ by 11 photostat and the breakdown is shown on that. I copied it from that to my records after talking to Mr. Peterson and Mr. Cotner, and I feel that the amounts of gas shown there are as nearly correct as it is possible to get them.

Q. Did you also talk to Mr. Massa, who was formerly employed by the Railroad Commission, about that figure?

A. Yes, I did. Mr. Massa has helped me considerably in obtaining data from the records of the Railroad Commission concerning withdrawals.

Q. Well, a good part of these figures is estimated, is that right? A. No, not a good part.

Q. Well, how much of it is estimate rather than metered?

A. Oh, I would say that there is probably somewhere around from 15 to 25 percent estimated in that amount.

Mr. Culton: Is that just in the first amount?

The Witness: Yes, that is just in the amount up to August 1, 1935.

By Mr. Littman:

Q. Is it your testimony that only 15 percent, approximately 15 percent of the 5,197,000,000 figure shown in the [fol. 5169] first line, is estimated?

A. I said from 15 to 25 percent. I am basing that from memory, because I compiled a great many figures during the time that the Committee for Conservation of Natural Gas was [function] in the Panhandle Field.

That was in 1933 and 1934. I am just trying to remember just what amount it was, but I believe somewhere between 15 and 25 percent would be correct.

It is not true that the gas was not metered before the Railroad Commission started keeping records. It was measured, naturally, because royalty had to be paid upon that gas. It was only the gas that was used for gasoline plant use that was not accurately metered.

The production to pipe lines and a great deal of the gasoline plant production was metered, but they sprang up so fast and without jurisdiction that, naturally, there were errors in the amounts estimated.

At the present time there is somewhere around one to two percent of the total withdrawal that is estimated.

Q. Well, can you tell us approximately what percentage of these production figures was obtained from sources other than the Texas Railroad Commission reports?

A. I believe that it would be safe to say that, at least, 95 percent of all figures that are shown in Column 2, Page 10, Exhibit 42, will check with the records of the Railroad [fol. 5179] Commission if they are converted to the same pressure base.

Mr. Culton: That is following August 1, 1935?

The Witness: Yes, that is right.

By Mr. Littman:

Q. Now, you refer in your first column to beginning at August 1, 1935. What is the date of beginning?

A. The first gas produced in commercial quantities was somewhat prior to 1926. That was in small amounts.

Q. So that you have approximately a ten-year period in your first line? A. Yes.

Q. Now, in the second line you have a period of 11 months, do you not? A. That is right.

Q. In the third line you have a period of 12 months?

A. That is right.

Q. In the fourth line, a period of 13 months? A. 13.

Q. And in the last line, a period of 24 months?

A. That is correct.

Q. Now, why do you split these data into such different and varying time periods?

A. By trying to arrive at a time that more nearly represents the middle of the period during which the pressures were observed.

[fol. 5171] The reason that the production through 1939 is included in that shown from 8-1-38 to 8-1-40, is due to the fact that the Railroad Commission in that year had included a number of acres which turned out to be in error.

They had weighted their pressure with that acreage and it gave a very decidedly erroneous picture, and for that reason it could not be used in here, because it would give us a result which would be in error, naturally.

Q. How did you eliminate that error?

A. By taking out that acreage the next year. The Railroad Commission found out what they had done. It was merely done by placing the isobar line on the pressure map prepared by the Railroad Commission.

After the adjustment was made, the pressures came back to their naturaf trend.

Mr. Culton: The Commission itself recognized that error in its next pressure map?

The Witness: That is right.

By Mr. Littman:

Q. Well, what pressure loss in pounds did the Texas Railroad Commission find for the period August 1938 to August 1939? A. May I see your 1939 report?

Trial Examiner: It is right here, if you would like to use this.

[fol. 5172] The Witness: Thank you.

Now, you want to know what the pressure was for the year 1939?

Mr. Littman: Yes.

The Witness: I am reading from the 1939 report published by the Railroad Commission, Page 2, under the paragraph headed, "Total Field."

The weighted average pressure of the entire field in July 1939 was 323.72 pounds per square inch as compared with an average pressure of 337.66 pounds in July 1938.

By Mr. Littman:

Q. Now, what pressure loss is indicated?

A. 13.94 pounds.

Q. Now, you didn't use that figure? A. No, sir.

Q. All right. If you had shown the year, 1938 to 1939, separately, in one of the lines on Page 10 in Exhibit 42, you would have had in Column 3, "Pressure Loss Pounds" the figure of 13.94, would you not? A. Yes.

Q. And what comparable figure would you have had for the year 1939 to 1940?

A. I am reading from Page No. 5 of the 1940 Report published by the Railroad Commission of Texas:

"The weighted average pressure of the entire Panhandle [fol. 5173] Field in July, 1940 was 318.33 pounds per square inch as compared with an average pressure of 323.72 pounds in July 1939, during which period a total of 564,285,297 M.c.f. of dry gas was produced with a corresponding pressure drop of 5.39 pounds per square inch."

Q. The corresponding figure in Column 3, "Pressure Loss, Pounds" for the period 1939 to 1940 would have been 5.39 pounds, is that right?

A. That is right. The total of the two years add up to 19.33 pounds, instead of the 19.35 shown for the same two-year period in Column 3, Page 10, Exhibit 42.

Mr. Culton: While you are on it, will you see if there is any difference in the increase in acreage used in 1940 from that used in 1939? You will probably find that in connection with the East Field in 1940.

The Witness: It will show on the total field, also.

Trial Examiner: A 10,000-acre increase?

The Witness: Yes, they added 10,000 acres of high pressure in 1940, which changed the picture.

By Mr. Littman:

Q. Well now, were these two figures which you just mentioned of 13.94 pounds of pressure loss for the year 1938 to 1939, and 5.39 pounds for the year 1939 to 1940, both erroneous, or what? A. No.

[fol. 5174] Q. They were both all right?

A. No, it is, as I said, the 1939 figure which was in error, and it was straightened out in the year of 1940.

Q. Now, you say the 5.39-pound figure is wrong?

A. Yes, sir. It is wrong. So is the 13.94-pound figure. Added together, they will be correct.

Q. Well, isn't this situation typical of the inaccuracies which are bound to creep into these determinations of pressures, rock pressures, for the various years?

A. You say are they not what?

Q. Are typical.

Will you read the question back, please?

(Whereupon, the question indicated was read by the reporter.)

The Witness: No, I would say they are far from typical. The Railroad Commission of Texas has a tremendous job upon their hands and they do it in very good shape.

It just so happened that this one year they did draw the pressure isobar at the wrong place and after they found out that they had made this error, they came back and corrected it the next year.

By Mr. Littman:

Q. Now, will you read from any report of the Railroad Commission of Texas where the Commission has stated that it had been in error in computing the rock pressures [fol. 5175] for that year, for 1940? A. They weren't in error in 1940.

Q. Well, 1939 to 1940.

A. I doubt if they published it, but if you want to have me show the different number of acres weighted with the various pressures, it can readily be shown.

Q. Well, has the Texas Commission ever stated that they have made an error in the determination of their 1939 to 1940 rock pressures?

A. No, here is what happened: Somebody got the idea that there was a group of unproven acreage that belonged in one pressure class and so they placed it in that pressure class.

Then, a well was drilled and the pressure proved that the man who thought that bunch of acreage should have been in that class was wrong, so the next year it was placed back in between the pressure bands, where it should have been. The drilling is what straightened it out.

Q. I hand you a copy of the 1940 Report of the Railroad Commission of Texas and ask you to read where marked in the first paragraph of Page 5, and I ask you whether that statement will refresh your recollection of the situation.

Mr. Culton: You are talking about something entirely different from that.

Mr. Littman: That is what we want to find out. We want to be straightened out if we misunderstand, and I am sure this witness wants to be straightened out, if he mis-
[fol. 5176] understands.

The Witness: Yes, I think that describes it. Would you like me to read it?

By Mr. Littman:

Q. I wish you would, please.

A. (Reading) "The weighted average pressure of the East Field in July 1940 was 247.68 pounds per square inch as compared with an average pressure of 242.34 pounds in July 1939. The reason for this pressure increase of 5.34 pounds was two-fold: First, the area of the East Field was increased by approximately 10,000 acres including a new well, the McLean Gas Company's C. H. Biegel No. 1 in Section 63, Block 23, H. & G. N. Survey, Gray County, which has a rock pressure over 400 pounds; second, an area of approximately 20,000 acres which, heretofore, had no control, was carried in the 250 to 300 pound contour, was proven to have a pressure over 300 pounds by the drilling in by Lone Star Gas of their J. A. Fowler wells No. 1 and 2 in Section 118, Block 23, H. & G. N. Survey, Gray County.

"From July 1939 to July 1940 a total of 39,567,071 M.c.f. of sweet gas was produced and a total of 24,476,412 M.c.f. of casing head gas.

"The daily average production for the East Field during this period was 18,380 M.c.f. of sweet and 66,875 M.c.f. of casing head gas.

[fol. 5177] "At the time of this survey there were 397 wells in the East Field having a total potential of 4,582,458 M.c.f., daily, and producing from a total area of 281,588 acres."

Q. That paragraph refers to the East Field, does it not? A. Yes.

Now, then, if you want to see what actually happened, I suggest that we get the 1941 rock pressure.

Mr. Culton: 1940.

The Witness: 1941 data; and see what the pressure on these wells, the one that came in at over 400 pounds, is at this time.

By Mr. Littman:

Q. I wouldn't care to go into that at this time.

Mr. Culton: May I call attention to the fact that this shows, does it not, that the pressure in the East Field in July 1940 was 247 pounds, or over 5 pounds more than it was the year before, and yet during that period 39 million M.c.f. or 39 billion feet of sweet gas was produced and 24 billion feet of casing head gas produced and yet the pressure is up 5½ pounds.

Is that correct? From the statement you just read?

The Witness: 5.34 pounds.

Mr. Culton: Yes.

By Mr. Littman:

[fol. 3178] Q. Now, you consider these figures of pressure loss in pounds shown in the table on Page 10, to be as you testified yesterday, accurate within one pound, up or down, is that correct?

A. That would cover the situation, yes, sir.

Q. And that applies to all of the figures shown on Page 10 in the column headed, "Pressure Loss, Pounds"?

A. Yes; and by giving one pound, I think that we are giving plenty of leeway.

Q. Now, Mr. Hinton, am I correct in understanding that you disregarded the first line embracing the period from beginning to August 1, 1935, for purposes of determining the rate of pressure drop as shown in Exhibit 135?

A. Yes, I did.

Q. And did use the data shown in the table on Page 10 in the lower four lines embraced in the period from August 1, 1935, to August 1, 1940?

A. Yes, sir, that is correct.

Q. And you plotted your line in the chart, Exhibit 135, then, from four points, each one of which was derived from each of the four bottom lines, is that right, as you explained yesterday?

A. Yes, but I didn't quite get what you meant when you said, the bottom line.

Q. I meant the bottom four lines on Page 10.

[fol. 5179] A. Yes.

Q. Mr. Hinton, assuming that the production per pound of rock pressure decline had remained constant from August 1, 1935, to August 1, 1940, what would be the average rock pressure loss in pounds per trillion cubic feet, and the corresponding rock pressure loss in pounds for each of the four periods shown in your table on Page 10?

I understand that will require a calculation of approximately five minutes. I would like very much to have that calculation made.

A. I think I have already made it. I will check it. I believe it is 15.54. The total amount of production from 8-1.

Q. August 1?

A. No, I left out the estimated production there because that point was not used. It is from 7-1—from 8-1-35 to 8-1-40. It was 2,884,110,974. The total pressure drop for that period was 44.20 pounds. That gave an average of 15.33 pounds drop per trillion.

Q. Now, I also called for another set of figures which you apparently have not yet calculated.

I would like now to have the corresponding rock pressure loss in pounds for each of the four periods shown in this table. In other words, I would like to know what comparable "pressure loss, pounds" figure you would have [fol. 5186] in the third column for each of those four periods, assuming that the production per pound of rock pressure decline remained constant from August 1, 1935, to August 1, 1940.

Mr. Culton: At what point? I can't understand it.

The Witness: I don't understand your question.

Mr. Culton: Constant at what point the point shown on August 1, 1935?

By Mr. Littman:

Q. Assuming that there has been uniform production per pound drop of rock pressure throughout this period, this entire period August 1, 1935, to August 1, 1940.

A. If I get your question right, you want me to apply the rate of withdrawals for the year from July 1, 1936, to July 1, 1937, and for the year commencing July 1, 1937, to August 1, 1938.

Q. That is right, for each of the periods.

A. All right.

The pressure loss for the following periods based on the rate of loss for the per trillion produced for the period commencing 8-1-35 to 7-1-36, and carried on down through the following years would give the following results:

For the period commencing 7-1-36 and extending to 7-1-37 and using a rate of decline that occurred during the previous year, the pressure loss in pounds would have been 7.46 instead of 7.95.

[fol. 5184] For the year commencing 7-1-37 to 8-1-38, and applying the same rate of decline as occurred during the year 8-1-35 to 7-1-36, the pressure loss would have been 8.41 instead of 9.39.

The application of the rate of decline which occurred from 8-1-35 to 7-1-36 to the year commencing 8-1-38 to 8-1-40 would have been 15.56 instead of 19.35.

Inasmuch as the figures originally on this page are Railroad Commission figures, I think that that readily proves that it would not be possible to carry on a constant rate of decline.

Q. Mr. Hinton, either you misunderstood me or I misunderstood you, but the figures that you have just given me are not the ones that I wanted you to calculate.

What I would like to have you calculate, as my previous question, I think, indicates it, is to apply the 15.33 rate to the production in each of the periods and give me the resultant pressure loss in pounds.

A. Yes, all right.

Q. Will you give me the first figure, so that we may make certain that you are getting what we want before you proceed with the rest of them?

A. Yes. If the average were applied over the entire period, there would have been a pressure decline for the year commencing 8-1-35 through 7-1-36 of 8.53 pounds instead of 7.51.

[fol. 5182] Q. You are getting the figures that we want. Now, will you proceed with the balance of the figures?

A. Yes, I will be glad to, because it is going to convince you, I believe, that you couldn't anyways near apply an average pressure throughout the life of this field.

Q. I rather doubt it, Mr. Hinton, but I appreciate your zeal.

A. For the year commencing 7-1-36 to 7-1-37, the pressure drop, applying the average of 15.33 to the amount of gas produced, would have been 8.45 pounds instead of the 7.98 which was obtained from the Railroad Commission pressure reports.

Applying the 15.33 to the production which was taken from the year commencing 7-1-37 through 8-1-38, the pressure drop would have been 9.55 instead of the 9.39 reflected in the data of the Railroad Commission report.

If the rate of 15.33 pounds is applied to the production which occurred for the period commencing 8-1-38 to 8-1-40, the pressure drop would have been 17.67 pounds instead of the 19.35 pounds which actually occurred.

Q. In other words, Mr. Hinton, if the production per pound of rock pressure decline had remained constant from August 1, 1935, to August 1, 1940, the corresponding loss in rock pressure would have been the pound figures which you just read into the record instead of those shown for [fol. 5183] each of the four periods shown in the bottom four lines, Column 3 of Page 10 of Exhibit 42, is that right?

A. If that would have been what the data indicated, those would have been the figures that would appear on this sheet in place of the typed figures which do appear.

Q. Now, in order to produce this constant rate of production per pound of drop in rock pressure decline, the figure of 7.51 pounds would have had to be varied slightly more than one pound upward, is that right?

A. That is correct.

Q. For the period August 1, 1935, to July 1, 1936?

A. That is right.

Q. And it would have required a variation upward from 7.95 pounds to 8.47 pounds to produce that same result for the period of July 1, 1936, to July 1, 1937, is that right?

A. That is correct.

Q. And it would have required a slight change from 9.39 pounds to 9.55 pounds to produce that result for the 13-month period, July 1, 1937, to August 1, 1938, is that correct?

A. That is correct.

Q. Now, for the last period, which embraces two whole years, from August 1, 1938, to August 1, 1940, it would have required a change downward from 19.35 pounds to 17.66 pounds, is that right?

[fol. 5184] A. That is correct.

Q. And is it not, also, correct that these new figures that you have read into the record are within the range of possibility of error and tolerance to which you alluded in your testimony today and yesterday, is that correct?

A. That is correct. However, there is always this to keep in mind, that the errors which occur in this type of work are largely compensating errors and are not errors that are multiplied.

Therefore, the type of error that will creep in one way will be counteracted by an error that will creep in the other way.

Q. But you can readily understand, can you not, Mr. Hinton, that the slightest deflection in these pressure-loss figures reported by you in the table on Page 10 might very, very well have produced and would produce a uniform production per pound drop of rock pressure in the Panhandle Field, is that right?

A. I would say that errors would influence it. They would have to be errors of greater magnitude than slight.

Q. Well, errors as slight as one pound per year, up or down, within the range of tolerance suggested by you, would produce a uniform production per pound drop of rock pressure in the Panhandle Field, is that not correct?

A. Yes, but I am not conceding, and I have not con- [fol. 5185] ceded, that there would be errors in a magnitude of greater than 5 percent.

Mr. Culton: And would you expect them all to be one way?

The Witness: No, sir.

By Mr. Littman:

Q. Well, these new figures that you read into the record are not all one way, either, are they, Mr. Hinton? Some of them vary upward from the figures that you used and one, at least one of them for the two-year period varies downward, does it not?

A. Anytime that a series of figures of that nature is taken, beginning with a low number and ending with a high and then an average is struck, naturally, when the average is applied, the commencing will be higher than the low and the ending will be lower than the high. That is very simple arithmetic.

Q. Well, regardless of the fact that, according to your testimony, there is a tolerance for error and a possibility of error, one pound either way, up or down, in these pressure-loss figures in the table on Page 10, and yet you applied those data literally in arriving at the rate of production per pound of rock pressure decline, did you not? Can you answer that yes or no?

A. Yes, I did. I will tell you why, it is because it came so close to checking.

[fol. 5186] Now, if these errors were creeping in, these points would not fall in nearly as straight a line, because the error would take it out of the realm of the straight line. That is on the curve produced on Exhibit 135.

Q. How do you know, Mr. Hinton, that the production per pound of rock pressure decline in the future in the Panhandle Field will proceed at a decelerating rate?

A. I don't know it, but past performance leads me to believe that it will.

Q. But you cannot vouch for any such thing, can you?

A. I couldn't vouch for anything in the gas field or around the gas wells, because we might have an earthquake down in that region that would shift the formation that would ruin the field overnight.

Q. But, Mr. Hinton, am I correct in stating that the experience upon which you are basing this deceleration of production for each successive pound drop of rock pressure in the Panhandle Field was taken from the literal application of the figures shown in the bottom four lines of the table on Page 10, covering a period from August 1, 1935, to August 1, 1940?

A. Yes, that data was used, and if you or anyone else can direct me to a better source of data, I would be highly appreciative.

Q. Well, if the data were accurate to the nth degree, [fol. 5187] both as to production and as to pressure loss in pounds, there is a great possibility, is there not, Mr. Hinton, that the indicated production per pound drop of rock pressure in the Panhandle Field would proceed at a uniform rate in accordance with the application of Boyle's Law? Is that not correct?

A. That is correct, but inasmuch as Boyle's Law cannot be applied, we still find that we have a uniform rate, due to the fact that the pressure points fall on a straight line.

Q. Now, assuming that the Panhandle Field is a tight container and assuming that the production and rock pressures in that field have been accurately determined from the beginning, should there be any substantial deviation from Boyle's Law of gases?

A. No.

Q. What is your answer?

A. No.

Q. And under these circumstances, the production per pound of rock pressure decline would be constant from the beginning?

In other words, there would be no acceleration or deceleration?

A. That is absolutely correct.

. . . . . .

[fol. 5188] Q. Now, what reasons, in view of your answer to my last question, do you ascribe for the purported decelerating production per pound of drop in rock pressure in the Panhandle Field as indicated by you on Page 10?

A. Two things, principally the absence of the fourth dimension in the weighting of the field and the length of

time that is required for gas to flow from areas of higher pressure to areas of lower pressure.

Q. Well, how does that affect the over-all picture? Didn't you consider the Panhandle Field as a single reservoir?

A. Yes, but not a reservoir that is entirely alike throughout its area. There are great differences in the thickness of pay in the Panhandle reservoir, and if all of the wells that have been drilled in the Panhandle Field now had been drilled on the marginal acreage and on producing formation of thin pay, the remaining amount of pressure that would be observed would be far less than the average which we do observe.

Now, it is a fact that the weighting of this acreage does not give consideration to the total thickness of pay, but gives the same value to the marginal acreage that has only a very thin pay section as that of the pay section which is many times that thickness.

Therefore, when it is just weighted with the horizontal weighting only, the picture is not correct.

[fol. 5189] Q. Well, the variation of the thickness would affect the pressure reading, would it not?

A. That is correct, and as I have said, if you would move the rate of withdrawal over to the areas of thin pay, most of them would long ago have been abandoned if they were separated from the main field.

Q. But, the variation in the pay thickness does not affect the application of Boyle's law, if the data is correct?

A. Then, I am telling you that there is a length of time required for this gas to flow from an area of one higher pressure to an area of lower pressure.

Q. But, Mr. Hinton, the data that you used, to wit, rock pressure readings, is subject to the same fallacy to which you have just alluded a moment ago, is it not?

A. That is correct. If it were not, why, then, the average pressure decline for trillion feet of gas would remain constant, but it is proven that there is a constancy existing.

Q. You mean a constancy in the error? A. Yes.

Q. And you are, in reality, banking upon the consistency of the error in these readings through the years?

A. Yes.

Q. And your estimate of a decelerating rate of production for each successive pound drop of rock pressure decline is bottomed greatly upon your banking that the errors [fol. 5190] in these rock pressure readings will continue in the future as consistently as you claim they have occurred in the past?

A. Yes. I feel that is what is going to happen, Mr. Littman, and I believe that right now that is the only one thing that you can find that will check as closely in the Panhandle Field as that data which has been plotted upon Exhibit 135.

When I make that statement, I believe that I can say that I have put in probably as many hours on this problem as anyone else that worked on the production end of a natural gas company operating in the Panhandle Field.

Q. By the way, you have what appears to be a mathematical error in your table on Page 10? Will you ascertain whether the figure which appears on the bottom line under the heading "Indicated Virgin Content (Trillion) of 24.609" is correct?

A. Yes, sir, I am .07 of one million cubic feet of gas off.

Q. What is the correct figure?

A. 59,556,524.3.

Mr. Culton: He means the 24.609. To me it looks like it is too low.

The Witness: I thought you said the production.

By Mr. Littman:

Q. I wouldn't be that technical. I was referring to the column at the extreme right-hand side. What is the correct [fol. 5191] figure? A. 25.609.

Q. Instead of 24.609? A. That is right.

Mr. Culton: That doesn't affect any of the other computations, though, does it?

The Witness: No, sir.

By Mr. Littman:

Q. Now, as you have already explained, you did not utilize any of the data for the ten-year period from 1925 or 1926 to August 1, 1935, which is shown in the first line of your table, isn't that correct? A. That is right.

Q. You threw away the ten years and used the remaining 5 years?

A. I would rather have five good years than ten bad ones, yes, sir.

Q. What is bad about it?

A. Unknown quantities.

Q. Estimates? A. Estimates.

Q. Well, weren't those estimates checked by you and investigated by you as to accuracy?

A. Right, and to the point I neglected to use them in my work there because, while I feel that they are very good [fol. 5192] estimates, they are not of sufficient accuracy to use in this type of mathematical calculation for the purpose that this has been used.

Q. Well, they are the most accurate figures that could be obtained for the ten years, are they not?

A. That is right.

Q. Well, suppose you tell us how inaccurate these figures that you show in the first line are?

A. I don't know how I could show you that.

Q. You can't possibly know how inaccurate they are, can you? A. No, sir.

Q. If at all? A. No, sir.

Q. Well, now, if you had used the data shown in the first line on the Table on Page 10, Exhibit 42, what effect would it have had upon your line on the chart, Exhibit No. 135, showing the rate of pressure drop from 1935 to 1940?

A. It would have lowered the rate of decline slightly, that is, the increasing rate of decline.

Q. In other words, this line shown in the chart, Exhibit No. 135, would have declined less and would have more closely approximated a straight line, straight horizontal line, is that right?

A. Yes, and the line would not have passed through the [fol. 5193] points of better-known data as closely as they do.

Q. Now, I note that you have plotted that point representing the end of the ten-year period on this chart, which has been designated as Exhibit 135, have you not?

A. Yes, sir.

Q. Why did you put that point at the end of the ten-year period?

A. Because that is where it belonged in reference to the total withdrawal of the field.

Q. Mr. Hinton, isn't it a fact that it would more properly belong along toward the center of the ten-year period?

A. No, I should say not. Then there would be a great error.

Q. The point that you plot here is at the end of the ten-year period, is it not? A. Yes.

Q. And your graduations along the bottom of the chart are in trillions of cubic feet, are they not?

A. That is right. That is used to express the total accumulated withdrawal from the field in trillions of cubic feet.

Q. Then, you are certain that it would not have been more proper to plot that point at the mid-point in order to give a proper weighting to the time element involved in producing the slightly in excess of 5 billion M. c. f. in the ten-year period?

[fol. 5194] A. I believe that the best way to answer that would be to call your attention to the calculation which you had me make in Column 3, Page 10 of Exhibit 42.

You will notice that by the application of an average figure that there is an error which creeps in on both ends of this series of calculations.

Q. Mr. Hinton, don't these points that you have plotted on this chart, Exhibit No. 135, represent the average pressure drop per trillion cubic feet withdrawn from the Panhandle Field?

A. The average pressure drop?

Q. Yes.

A. Yes, at the various stages of withdrawal from the entire field.

Q. And that average is calculated over a period of time, is it not?

A. Yes.

Q. And represents an average of the period of time covered by the production, is that right?

A. That is right. Each year as the weighted averages are established, the amount of pressure drop is then obtained and that, along with the total amount of gas pro-

duced will show the number of pounds required to produce a trillion feet of gas, if that rate were to continue throughout the time that a trillion feet would be produced. [fol. 5195] Q. Now, this average drop in pressure was computed by taking the average pressure over the ten-year period, was it not, for your first point shown in the chart?

A. No, sir, the first point shown on the chart that was used was the number of pounds that was required to produce a trillion feet of gas when the total withdrawal from the field had been the amount shown, of, I believe it is, 5 trillion 800 billion cubic feet of gas.

Q. I am not talking about that one, I was talking about the first one which covers the ten-year period from 1925 to 1935.

Now, doesn't that one represent the average of the data over that ten-year period?

A. Yes.

Q. And the other points, also, represent the average of the data over subsequent periods?

A. I see what you are getting at.

Q. Now, do you see what I mean?

A. And if we would place it out here, then it would become most convincing that it could not be used in the making up of this graph.

Q. Well, Mr. Hinton, do you now say that the proper place at which to plot these points is somewhere in the center of the period, rather than clear at the end of each period?

A. It really doesn't matter. I cannot see that it would [fol. 5196] make any difference whether you would put them in at the middle or at the end.

Q. Well, suppose you plot the first point, which represents the first line on Page 10, at a point which represents the average production rather than at the end of the ten-year period.

A. Well, could we do this roughly, or do you want me to do it most accurately?

Q. Well, suppose you do it approximately for all practical purposes.

A. I think I can show you here what will happen. This dot (indicating) will be moved up to here (indicating) and

this dot (indicating) will be moved up to here (indicating), and this one up to here (indicating) or, in other words, the dots will slip up or down and the line will pass through them.

The slope of the curve will not be altered by the changing of the plotting of the points.

Q. Suppose you give us the point at which these various points would be plotted upon the basis that I suggested, and I think you had better do it accurately.

Now, I would like to have you do it for the five points, all five.

A. O. K.

Trial Examiner: This must be charted, or it will be as meaningless as the last questions and answers.

[fol. 5197] Mr. Littman: I have just that in mind and we want the witness, therefore, to put the points on here in ink so that they may show in the exhibit.

The Witness: Now, will you tell me at what points you want these plotted? I am not sure that I understand just exactly how you want them.

Mr. Culton: For how many years do you want it plotted?

Mr. Littman: I want them plotted at the proper points on Exhibit 135.

Mr. Culton: The field was brought in in 1918.

By Mr. Littman:

Q. I want these points to bear some relation to the time element which was required to produce the gas, and not way down at the end of the periods.

I would like to have you weight the time element into the plotting of these points.

A. The time element is in here, Mr. Littman. It is in here by the fact that each of these points are plotted when the total withdrawal at a given date was that amount.

. . . . . .

[fol. 5198] Q. Mr. Hinton, have you completed your plotting of the points?

A. Yes, not any too workmanship-like manner, but they are down there in sufficient accuracy to serve the purpose, I think.

Q. And you plotted the points close to the center of each of the periods, each of the five periods shown on Page 10 of Exhibit 42?

A. Yes, as requested by you. However, that is still not exactly accurate.

Q. Well, I understand you are not adhering to your original points, but you will agree, will you not, that a line drawn from the five new points that you have plotted here at my request would have the effect of making the line a more nearly horizontal line than the sharply ascending line which you now have on Exhibit No. 135. Is that right?

A. On the contrary, plotting the points in the middle of the period as requested by you, shows that the acceleration is somewhat accented.

Q. Now, I am talking about five points, giving effect to the first point as well as to the other four.

A. Well, I have placed those points on there exactly as you requested. However, if they were to be placed pro- [fol. 5199] perly, it would have to be done by interpolation.

That is, we would have to find out what percent of this gas was produced at a certain rate, each certain rate, see, and the point would be governed by the percentage that the amounts were produced at those rates.

Q. Mr. Hinton, will you please state the rate of rock pressure decline for the first M. c. f. of the production figures shown on your table on Page 10?

Mr. Culton: The first M. c. f.?

By Mr. Littman:

Q. The first M. c. f. out of the 1,152,514,747 M. c. f. figures shown at the bottom of Page 10 in the column headed, "Production, M. c. f.", and the rate for the last M. c. f. of that figure.

A. No, I cannot and I don't think anybody else can.

Q. Well, it would be different for each, would it not?

A. That is right.

Q. What does your chart show, Exhibit 135?

A. It shows that there is a difference and the amount of pressure required to produce the first M. c. f. of the amount of 1,152,418,747 M. c. f. would be different for the production of the first M. c. f. than it would the last of that amount.

Q. And yet you plot your point at the end of that period, do you not, rather than in the center of the period?

A. I did do that, and I think that it gives an answer [fol. 5200] that is just as accurate as plotting it in the middle, because in order to plot that figure in the middle, it would be necessary to know what the value of each pound of pressure was for each million feet that was produced during the time that that total amount was produced.

Therefore, it would be next to an impossibility to place that point right. If you placed it in the middle of the period, you would be just as much in error, in all probability, as by placing it at the end.

Q. Well, you know you are in error when you place it at the end, don't you?

A. And I would also—

Q. (Interposing). Is that right? You know you are in error when you plot your point at the end of the entire period?

A. Not for the purpose for which it was plotted.

Q. Isn't it a fact that the rate of drop at the beginning of the period, which I just mentioned, for the 1,152,000,000 odd M. c. f. at August 1, 1938, was 15.1 pounds, as shown by your chart, Exhibit No. 135?

A. For what period?

Q. Well, for August 1, 1938.

A. No, I do not know that. That is the point which you asked me to place upon this chart by dividing the production for that period.

[fol. 5201] Q. I am asking you whether or not the rate at the point at which you begin the period for the production of the 1,152,000,000 M. c. f. is the rate of 15.1 pounds.

A. No, I don't think it is.

Q. Isn't the rate of 15.1 pounds, which I just gave you, the rate which applies to, and which is plotted for, the 6 trillion 929 million 385 thousand 631 M. c. f. that is produced in the Panhandle Field, according to your chart, Exhibit 135?

A. Will you point to the point on the chart which you have in mind? You asked me to divide those periods of production and I did so and in so doing, I got a different total accumulated withdrawal.

The total accumulated withdrawal at that time, instead of being 6,929,385,631, is, actually, 6,617,923,050 M. c. f.

Q. Where did you secure that last number?

A. By taking the total accumulated production and dividing the gas that was produced for the period 7-1-37 to 8-1-38 by two, and then adding that half to the previous accumulated withdrawal.

Q. Suppose you tell me what pound decline rate is indicated when the 6 billion 929 million 385 thousand 631st M. c. f. is withdrawn from the Panhandle Field, according to your chart, Exhibit No. 135?

A. The rate of pressure required to produce one tril- [fol. 5202] lion feet of gas from the total cumulative withdrawal of 6,929,385,631 M. c. f. is, as close as I can read it, 15.08 pounds.

Q. Now, will you state the rate which will be required to produce the 8,081,804,379 M. c. f., as indicated by the line on your chart, Exhibit No. 135?

A. That is 16.79 pounds.

* * * * * * * *

[fol. 5207] Cross-Examination

By Mr. Littman:

Q. Mr. Hinton, you have, no doubt, had an opportunity, over the week-end, to reflect a little about the five original [fol. 5208] points designated, "1935, 1936, 1937, 1938 and 1940", respectively, which you plotted on the chart identified as Exhibit No. 135?

A. Yes, among other things, I have given that some consideration.

Q. And perhaps you have given some consideration to the line originally drawn by you on this chart through these five original points?

A. Yes, sir. I gave a great deal of consideration to it before I originally drew it.

Q. Now, what do your say with respect to the original five points plotted on this chart? Do you still feel that

those five points correctly represent the plotting of the data shown in Exhibit 42, Page 10, in the table?

A. I certainly do. However, there might be something misleading about the way that I had the headings or the titles shown on Exhibit No. 135.

Q. What is misleading about them?

A. The pound decline, weighted average pressure, reflects the apparent number of pounds that were needed at the ending of each withdrawal period, and I believe that I have somewhere on here the word, "average," yes.

The average might be misleading, in that it would probably lead anyone who had not gone through the problem, to believe that the points should be plotted midway between the withdrawal points instead of at the end of the [fol. 5209] withdrawal points.

Q. Well, there is only one correct way, mathematically, to plot these points and to draw the line. Is that right?

A. That is right.

Q. And the calibrations, reading up and those reading across, should meet at the proper place, should they not?

A. That is right. And I—

. . . . . .

Q. Now, inasmuch as there is only one correct way, mathematically, to plot these points and draw this line, I would like to have you state whether or not the way that you have done it in Chart Exhibit 135 is correct, mathematically, or not?

A. In the solving of my problem, it is correct.

Q. Mathematically correct?

A. Yes.

Q. Now, you testified—

Trial Examiner: (Interposing) Mr. Littman, if you are going to another line of inquiry, Mr. Hinton should have an opportunity to make the explanation he started to make.

Mr. Littman: Very well.

By Mr. Littman:

Q. Do you have an explanation to make of what you [fol. 5210] have said so far?

A. I just thought it might lend some clarity to the situation.

The amount of gas that is shown between the points plotted for the year 1938 and 1940—

Mr. Culton: (Interposing) You mean the years between the period?

Mr. Wheat: Between which years, so we can be sure?

The Witness: That commences with a period which starts the last five months of 1938 and includes the first seven months of the year 1940.

That represents a total amount of gas between those dates of 1,152,418,747,000 cubic feet, and the rate of pressure decline for that amount of gas was that which is shown at the end of the period.

It might be shown by extending a vertical line through the year 1938 and showing a horizontal line between those two points, more clearly the number of pounds required to produce a trillion feet of gas for the rate required for that period.

Mr. Littman: Will you read the last answer?

(Whereupon the last answer was read by the reporter.)

By Mr. Littman:

Q. And what is the average rate for the period which you just mentioned?

A. I believe it is 16.78, as I remember. It will be shown—

[fol. 5211] Q. (Interposing) We get 16.79, but there isn't enough difference there to quibble about.

A. No, I don't believe we could plot that close on that size paper.

Q. And, am I correct in stating that the center of that segment of the line which represents the production for the period which you just named does not pass through the average figure which you just gave?

A. Yes.

Q. On your chart?

A. It will, Mr. Littman, because, — keep in mind — the pressure decline is governed by the total cumulative withdrawal from the field.

At any point that you wish me to place on that chart, I will do so by applying the average rate of decline for that

five-year period and by interpolating and applying that factor to any given cumulative withdrawal during that period, it will fall on the line or very, very close to it.

Q. Well, the end of your line falls at the average point on this chart of 16.79 pounds, does it not?

A. Yes.

Q. Therefore, your midpoint of the segment for that period does not fall on the average, is that correct?

A. That is correct, that it would not be on the same [fol. 5212] vertical elevation as that point, because the total cumulative withdrawal at that time would have been lower.

As the withdrawal has been lower all the way through this field, we find that a smaller number of pounds has been required to produce the same amount of gas.

Q. Well, Mr. Hinton, I am afraid we will have to go through this step by step to show you that this line is not plotted mathematically correctly on this chart.

Now, you have testified—

A. (Interposing) Just a moment, Mr. Littman. What do you mean by "mathematically correct"?

Q. I mean there is only one way to draw this line and one way to plot these points, and that is in accordance with strict mathematics; you have not followed those mathematical rules in plotting those points and in drawing the line.

Mr. Wheat: Now, Mr. Littman, I think it is only fair to the witness for you to state what the rules are that you are mentioning before you state, in your opinion, that he has not followed the rules.

If you would state the mathematical rules you have in mind, I think the record would be much clearer.

Mr. Littman: I believe that all of that will be shown by the questions I am going to ask and I think I can explain better as we go along, exactly what I mean.

The Witness: Well, now, the method used in plotting [fol. 5213] this is a mathematical method and there is no question as to whether it is or isn't. The rate of pressure

decline is plotted against the various stages of withdrawal in that field.

By Mr. Littman:

Q. Well, let's go through the steps, Mr. Hinton, and perhaps we can show you definitely what we mean

Now, you have testified that the rate of pressure decline, indicated by your chart, Exhibit No. 135, for the 6,929,385,631st M. c. f.—

A. (Interposing) Wait a minute. Let me check that figure. For what period are you reading?

Q. 6,929,385,631st—

A. (Interposing) That should be 985,000, I believe. That is for the first seven months of 1938 accumulated? That is the total amount withdrawn at the end of the first seven months of 1938?

Q. No. I am sorry, it is the first M. c. f. withdrawn at the beginning of the period August 1, 1938, to August 1, 1940. Do you understand me?

A. Yes, but I believe, if you will check your figure, that you will find that the total accumulated withdrawal at that time was 6,929,985,630 M. c. f.

Q. Just a minute, we will check it.

Mr. Goodman: Would that be the addition of the figures in the second column on Page 10 up to 8-1-38?

[fol. 5214] Mr. Littman: That is right.

The Witness: Yes.

Mr. Culton: What is your figure, 6,929,985,000?

The Witness: There is evidently an error in the figures, because these are my basic figures, right here.

By Mr. Littman:

Q. We have checked our figure, Mr. Hinton, and find that the one which I read was right. If you want to check your figure again, you are at liberty to do it.

A. I am working from my basic figures and not the ones that are printed here. It may be that there is an error in these here.

Q. You mean there may be an error in your Exhibit 42 on Page 10? A. That is right.

Q. Well, we worked from the table on Page 10 of Exhibit 42.

A. I believe I have found it. The period from 7-1-36 to 7-1-37 adds up to 552,288,402. It makes very little difference in the calculation.

Q. Well, Mr. Hinton, that wouldn't make the correction that you just mentioned a moment ago?

Mr. Wheat: What correction do you mean, Mr. Littman?

Mr. Littman: Well, the correction he made represented a change of something like 600,000 M.c.f. and the one to which he has just alluded would only change the figure [fol. 5215] a few thousand.

. . . . . .

By Mr. Littman:

Q. I agree that it will, in all probability, affect the final figure so slightly as to make no difference. May we, then, not accept as correct, for purposes of this line of questions, the figures shown in your table on Page 10 of Exhibit 42? A. Yes.

Q. All right. We will start again.

Mr. Culton: That is the aggregate as of August 1, 1938, the total?

Mr. Littman: I was just going to repeat the question again, Mr. Culton, to get back to our original trend of thought.

By Mr. Littman:

Q. You have indicated that the rate of pressure decline, indicated by your chart, Exhibit 135, for the 6,929,385,631st M.c.f. is 15.08 pounds.

A. I have .07, but again, that is a matter of a small difference?

Q. I was referring to your testimony of Friday, which appears at Page—

A. (Interposing) I worked those out and I wrote 15.07 [fol. 5216] down here.

Q. The transcript shows 15.08, but 15.07 is close enough.

Mr. Wheat: It doesn't make any difference at all.

By Mr. Littman:

Q. Pounds, of course? A. Yes.

Q. Now, you also testified that the rate of pressure decline, indicated by your chart, Exhibit 135, for the 8,081,804,377th M.c.f. is 16.79 pounds?

A. That is correct.

Q. Now, we have read the figure which represents the first M.c.f. produced in the period August 1, 1938, to August 1, 1940, and the last M.c.f. produced in that period.

A. No, you have not. You have read an average of those so indicated.

Q. Well, I am talking about the M.c.f. figures.

A. And the decline of the M.c.f. at that period is less than it is at the last, because the total cumulative withdrawal is different at that time.

Q. Mr. Hinton, I was simply trying to give a little resume of what is so apparent to us, that I thought it might be made even more apparent on the record, and I see that we are in trouble again.

Isn't it a fact that the 6,929,385,631st M.c.f. is the first [fol. 5217] M.c.f. that was produced in the period August 1, 1938 to August 1, 1940, which is shown in the bottom line of your Page 10 of Exhibit 42?

A. Yes.

And is it not a fact that the figure which I gave of 8,081,804,377th M.c.f. is the last M.c.f. produced in that period? A. Yes.

Q. That was all that I was getting at, merely summarizing that we have the first and last M.c.f.'s of that period.

A. I understood you to say that the pressure decline was the same in both cases.

Q. Very well. Now, the rate which your chart shows —now, we are speaking of your chart and the line and point on your chart—

Trial Examiner: (Interposing) Chart exhibit what?

Mr. Littman: 135.

By Mr. Littman:

Q. The rate of pressure decline which produced the first M.c.f. in that period was 15.07 pounds?

A. That is right. No, now just a moment there. You almost have me confused. That is not the rate at the first M.c.f., that is the rate that was indicated for the withdrawal of 622,925,161 M.c.f. that was withdrawn from 7-1-37 to 8-1-38 when the total withdrawal had been—

[fol. 5218] Q. (Interposing) Mr. Hinton, I am now endeavoring to ascertain the figure which your chart indicates.

A. (Continuing)—and, as I explained, probably the title on that chart could have been put on there to explain the result more clearly.

Q. Mr. Hinton, you have testified, have you not, that the rate of pressure decline, indicated by your chart, Exhibit 135, for the first M.c.f. produced in that period is 15.07 pounds. Is that not correct?

A. Yes, but I was in error, and I went on [the] explain why I was in error.

Q. You mean your chart is in error?

A. No, I mean that at the end of that period the amount of pressure required was [greatern] than the 15.07 pounds, because that is a requirement for that total period and it would be lower at the beginning and higher at the end.

Q. That is exactly what we are trying to prove, that your points are not plotted where they should be, to-wit, at the midpoint of that production for the period, but I merely, at this stage of the proceeding, am asking you to tell me whether your chart, Exhibit 135, shows that the rate for the production of the first M.c.f. in the period 8-1-38 to August 1, 1940, is 15.07 pounds.

What is the total withdrawal at that point?

A. You mean for the beginning of the period?

[fol. 5219] Q. Yes.

A. The total withdrawal up to that point, up to that period, is 6,929,385,630 M.c.f. Now, the 31st M.c.f. would be the first M.c.f. produced in the next succeeding period commencing 8-1-38.

Q. I want you to tell me what your chart indicates is the rate of pressure decline for that first M.c.f.

A. The rate required to produce a trillion feet of gas, at a cumulative withdrawal total in the field of 6,929,385,631 M.c.f.—that is plotted on there as "9", too, I believe, isn't it?

Well, anyway, the amount of energy required will be about .1410 of one pound beyond the figures shown for the preceding M.c.f. withdrawal.

Mr. Culton: Your figures are all based on decline for million cubic feet and not based on decline for cubic foot or per thousand cubic feet?

The Witness: It is very difficult to figure those on the M.c.f. basis, it would run into many, many decimal places.

Mr. Littman: Will you please read back his previous answer?

(Whereupon, the answer indicated was read by the reporter.)

By Mr. Littman:

Q. Mr. Hinton, didn't you just state a few moments ago that the rate would be 15.07 pounds?

[fol. 5220] Mr. Culton: He said that was per million, counsel, not per pound.

By Mr. Littman:

Q. Mr. Hinton, you did not give me the figure I wanted. I want the rate per trillion cubic feet for the time that the named M.c.f., which I gave you, is produced.

A. And that was 6,929,385,630.

Q. 6,929,385,631st M.c.f.—

A. (Interposing) The apparent rate required to produce the next trillion feet after the point just mentioned by you will be an increase of .141, 308 over the amount of pressure required to produce the previous trillion feet of gas before that point.

Mr. Littman: Will you please read the question to this witness?

(Whereupon, the previous question and answer were read by the reporter.)

By Mr. Littman:

Q. You understand I want the figure in terms of trillion cubic feet, which is the term that you use in this chart.

A. All right. The average pressure required to produce the trillion feet previous to the point referred to on the chart was 15.07 pounds. The average amount of pres-

sure required to produce the next trillion feet will be 16.48308 pounds.

Q. Now, did I ask you anything about the next trillion, [fol. 5221] Mr. Hinton? Can't you confine your answers to my questions? A. No, sir.

. . . . . .

Q. Tell me at which point the M.c.f. that I gave you will show on the left of your chart, the calibrations, vertically.

What rate, calibrated on your chart, is shown for that M.c.f.?

. . . . . .

Trial Examiner: Your remark was inappropriate, clearly.

The Witness: The amount of gas shown at this point, better referred to on the graph as the year 1938, Exhibit 135, expresses in pounds the amount of gas which is required to produce one trillion feet of gas when the total rate of withdrawal had been 6,929,385,000,000 cubic feet and the amount of energy which will be required to produce the next trillion is increased in proportion to the amount that has been required over the past years of field performance.

[fol. 5222] The curve shows quite clearly that the amount of pressure that will be required to produce the next trillion feet of gas will be increased by the amount of 1.141 pounds for the average amount withdrawn.

By Mr. Littman:

Q. Mr. Hinton, did I ask you to give me any figure of increase?

A. Well, Mr. Littman—

Q. (Interposing) Did I or did I not? You are not paying attention to the question, Mr. Hinton.

Mr. Wheat: Mr. Examiner, I would like to have the record show that it is our opinion that a remark of that nature is one for the Presiding Officer to make, rather than for counsel.

Mr. Littman: I am going to ask that that answer be stricken as not responsive.

Trial Examiner: Let me ask you a question here, Mr. Littman.

We are dealing with a very intricate and difficult record, Mr. Littman and counsel for the company. It is important, if the record is to be of any serviceable use when it is completed, that we avoid all possible confusion and unclarities.

I wish, therefore, to ask you at this point, Mr. Littman, what you think would be the smallest unit of production which can be related to a given pressure diminution.

This question is asked purely in my desire to have some [fol. 5223] agreement between us, if possible, as to units, so that we may not be talking about different things or misunderstanding each other.

Mr. Littman: A few moments ago this witness answered my question when he said that the rate of pressure decline indicated by his chart, Exhibit 135, for the first M.c.f. produced in the period August 1, 1938, to August 1, 1940, was 15.07 pounds. That was a correct answer and a satisfactory answer.

I later repeated the same question as a preliminary matter, to go on from there; that was a half-hour ago, and I have been getting all kinds of different answers for the [vary] same question.

Now, what I want to do is, pur ly, to get this witness to tell me, as he did about a half-hour ago, what the rate is in pounds stated down to one-hundredths of a pound and no further, which figures would be useful and appropriate for purposes of this proceeding.

It is only in that way, if your Honor please, that we can leave the first step that I am undertaking to establish.

Trial Examiner: Mr. Littman, this is not at all clear to the Trial Examiner. It probably is to you and your experts, but we have been talking about the production in pressure and the results from the production of a trillion feet of gas.

Now, as the Trial Examiner understands the question you have just posed, you asked for the decline which would result from the production of 1,000 cubic feet.

[fol. 5224] Mr. Littman: No, if your Honor please, I asked for the rate.

Trial Examiner: Let us go back then, to the question that I asked you a moment ago. What, in your judgment, is the smallest unit of production in thousandths of cubic feet which will permit an accurate computation of pressure reduction?

Can we get a starting point, so that we will be talking about the same thing from here on?

Mr. Littman: The rate, if your Honor please, applies to an instant.

Trial Examiner: Well, must we not approach that through a computation based on a given unit?

Mr. Littman: The unit which we are using is M.c.f.

Trial Examiner: A single thousand cubic feet?

Mr. Littman: That is right.

Trial Examiner: And it is your contention that an accurate computation can be made on so small a unit of production?

Mr. Littman: This witness, I believe, can make an accurate reading of his chart at the point at which any given M.c.f. is reached.

Trial Examiner: Is that true, Mr. Hinton?

The Witness: No, sir, Mr. Examiner. The points reflected on Exhibit 135 show the average number of pounds required to produce a trillion cubic feet when the total withdrawal from the field amounts to what is shown on [fol. 5225] the bottom horizontal chart, and in order to arrive at the pressure required for one M.c.f. it would be necessary to apply the fractional part that one M.c.f. is of one trillion to that pressure decline.

Mr. Goodman: I have the feeling that we are getting even more confused. I think that all that Mr. Littman is attempting to do is simply locate points of reference.

In other words, he has asked, "at a certain point, namely, of production, what is the pressure decline used?"

Now, that question, I take it, is impossible of answer, because it must be related to a certain quantity. In other words, you have to have two points of reference in order to get at the element of pressure decline, and I think that the witness and Mr. Littman are at cross purposes between these things.

Trial Examiner: Well, just picking up where you left off, Mr. Goodman, it was the Trial Examiner's understanding of the testimony that there would be an increase of one-and-a-fraction pounds in the pressure reduction to produce the next trillion feet.

Mr. Wheat: Is that correct, Mr. Hinton?

The Witness: Yes, that is correct.

I am truly sorry if I have not been understanding this question correctly, but it is necessary to bring in the previous and the following trillion feet of gas, to be able to answer the question which you asked, Mr. Littman.

[fol. 5226] By Mr. Littman:

Q. I am not asking you, Mr. Hinton, about the rate of change, or the change in rate, you see. I am asking you about a static thing, to-wit, the point on your chart where the calibration in rate of pounds running horizontally across your chart meets the vertical calibration of production.

Now, those two points meet, and all I am asking you is to state the spot on your chart where those two points meet for the production that I am giving you.

Now, do you understand me?

A. Yes, sir, and if I may refer you to Page 10 of Exhibit 42, from the pencil calculations which have been made to the right of that sheet, I feel sure that you understand that those are expressed in pounds decline per trillion cubic feet at the various stages of cumulative withdrawal from this field, and those are the points that are shown on Exhibit 135.

Q. In other words, the points which you show represent the average for each period, do they not?

A. They show the number of pounds required to produce a trillion cubic feet of gas when the total cumulative withdrawal from the field is that expressed on the bottom of Exhibit 135.

. . . . . .

[fol. 5228] By Mr. Littman:

Q. Mr. Hinton, I believe you stated earlier today that the title of your chart was misleading, did you not?

A. Yes, sir.

Q. What title would you suggest for this chart, namely, the chart, Exhibit No. 135?

A. The title I would suggest would be as follows:

"The Rate in Pounds Per Trillion Cubic Feet Required to Produce the Previous Period's Production which are Plotted at the End of the Total Cumulative Withdrawals, at the end of Each Respective Period."

Q. Now, do you have anything further to say with respect to any other data that you have shown on this chart, particularly with reference to the five points which you plotted and the line which is shown thereon?

A. Yes, I think that the title of the vertical scale should not show to be an average.

Mr. Goodman: May I ask a question here.

Mr. Hinton, there has been a discussion off the record between you and Mr. Shattuck, in which you exchanged view concerning the correctness of Exhibit 135, is that so?

The Witness: Yes, sir, that is correct.

Mr. Goodman: And it has seemed to you that there was merit in the comments and suggestions of Mr. Shattuck, hasn't there?

[fol. 5229] The Witness: That is correct.

Mr. Goodman: And you have some corrections, then, that you want to make in that exhibit, isn't that right?

The Witness: Well, I expect that the way to clarify this matter, as a whole, would be to re-make this graph in conjunction with Mr. Shattuck, so that we could be sure that we

understand exactly what we are talking about so, as it is passed on to others to work upon, there will not be anything that is unclear about it.

Mr. Goodman: Now, we understand that this Exhibit 135 does not accurately represent what it purports to represent?

The Witness: It represents—

Mr. Goodman: (Interposing) Just answer my question. It does not represent what it purports to represent?

The Witness: Under strict interpretation, I would say that it does not.

Mr. Goodman: All right.

The Witness: The answer derived represents what I feel will happen.

Mr. Goodman: Do you think that you ought to make some correction in the exhibit to make it clear to everybody concerned?

The Witness: I would say additions, rather than corrections.

[fol. 5230] Mr. Goodman: Very well, but at the same time, the exhibit, in itself, you admit is not clear, and it should be clarified, is that right?

The Witness: From a strict engineering standpoint, I would say that is correct.

Mr. Goodman: All right.

Mr. Culton: May I ask a question here.

You had not prepared that as an exhibit in this case?

The Witness: No, sir, that was prepared for my own reference and, at the end of the preparation of this chart, I checked it by all of the other known data on the Panhandle Field, namely: Did it fit field performance?

I found that it did.

Did it fit the known geological data? I found that it did.

Therefore, I felt that the idea represented on this chart was of sufficient accuracy to be applied to the future of the field.

Trial Examiner: Is it your contemplation, may I ask of Mr. Hinton and Mr. Shattuck, that some modification or supplementation of this exhibit will be produced?

The Witness: I am most willing, for my part, to work with Mr. Shattuck to the end that it is perfectly understood.

Trial Examiner: Would it be practicable, if some re-drafting of this curve is made, to put the re-draft on the [fol. 5231] original sheet, using a different colored ink, perhaps?

Mr. Littman: It will be perfectly satisfactory to us if Mr. Hinton and the engineer of our staff, Mr. Shattuck, were to confer and prepare a new chart or to superimpose upon the chart, Exhibit No. 135, the correct reflection of the data shown in the bottom four lines of Page 10 of Exhibit 42. That would be perfectly satisfactory with us and may save considerable time.

Trial Examiner: It occurred to the Trial Examiner that the whole of the testimony would be perhaps more thoroughly understood if you do use the original and differentiate by variance of colors in connection with any revision which is made.

Mr. Littman: That will be satisfactory.

However, we want it distinctly understood that our collaboration with Mr. Hinton in this regard will simply be to the extent that we will undertake to work on a chart which will represent the data shown on Page 10 of Exhibit 42, and that we will not be bound by that table and the conclusions drawn therefrom.

Trial Examiner: You, of course, do not agree to accept Mr. Hinton's conclusions.

Mr. Littman: That is correct, and we do not agree to accept Mr. Hinton's basic data which appears in the table on Page 10 of Exhibit 42.

[fol. 5232] However, we are anxious that the chart, if it be used at all in this proceeding, reflect the data shown on

Page 10 of Exhibit 42 from which Mr. Hinton has drawn certain conclusions.

I do have one of two questions before leaving this chart, however, which I think would clarify the record on this point.

By Mr. Littman:

Q. Mr. Hinton, looking at the bottom line on Page 10 of Exhibit 42, am I correct in understanding that the average rate of pressure decline per trillion cubic feet for the production of 1,152,418,747 M.c.f. produced during the period 8-1-38 to 8-1-40 was 16.79 pounds?

A. The last trillion of the amount mentioned was.

Q. Your answer to my question is, then, "no?"

A. Yes, it is "no".

Q. That is what you testified to yesterday?

A. No, sir. The 16.79 shows what the pound loss was for the last trillion produced and not for the 1,152,000,000,000.

Q. How did you arrive at the 16.79-pound figure?

A. By finding out what the—

Q. (Interposing) I mean the arithmetical method of getting at it. What did you divide into what, to get this 16.79 pounds? I think the figures are shown in the table on Page 10 of Exhibit 42.

A. I took the 19.35 weighted average pressure loss, in pounds, and divided into that amount 1,152,418,747,000 cubic feet.

[fol. 5233] Q. And you say that the resultant figure of 16.79 pounds does not represent the average pressure drop per billion M.c.f. withdrawn in that period?

A. No, sir, that is for a trillion.

Q. I said, billion M.c.f. If you want to say a trillion cubic feet, that is all right with me, but tell me whether or not, in view of what you have just said, the 16.79 pounds represents the average pressure decline per trillion cubic feet withdrawn during the period 8-1-38 to 8-1-40?

A. Yes, sir, it does.

Q. Now, going to the fourth line of your table on Page 10 of Exhibit 42, will you give us the comparable figure, to-wit, the average pressure decline per trillion cubic feet withdrawn during the period July 1, 1937, to August 1,

1938, in which period there was produced, as shown on this table, the amount of 622,925,161 M.c.f.?

A. Yes, that is the rate per trillion.

Q. What is the rate per trillion?

A. 15.07. I thought you mentioned the figure.

Q. The 15.07 figure you gave represents 15.07 pounds, does it not? A. Yes.

Q. Now, will you give us the comparable figure, to-wit, the average pressure decline per trillion of M.c.f. withdrawn in the preceding period as shown in Line 3 of Page [fol. 5234] 10 of Exhibit 42, to-wit, the period from July 1, 1936, to July 1, 1937, in which period there was produced the total of 552,281,402 M.c.f.

A. Yes. The pressure loss per trillion at that point was 14.39 pounds, and is applied back to that proportionate amount of a trillion produced.

Q. By "at that point", you mean the average for the period? A. Yes.

Q. Now, looking at the preceding period shown in Line 2 of the table on Page 10 of Exhibit 42, will you please give us the average pressure decline per trillion cubic feet withdrawn in the period August 1, 1935, to July 1, 1936, during which period there was produced 556,485,654 M.c.f.?

A. The indicated pressure loss per trillion for that period is 13.50 pounds, and applies to that portion of the trillion produced.

Q. Now, will you give us the average pressure decline, in pounds, per trillion cubic feet withdrawn during the preceding period shown in Line 1 of your Table on Page 10 of Exhibit 42, from the beginning of the Panhandle Field to August 1, 1935, during which period there was produced, according to this table, the amount of 5,197,693,413 M.c.f.?

A. The indicated pressure loss per trillion for that period, as shown in this table, is 42.98 pounds.

[fol. 5235] Q. Thank you.

Now, looking at the most recent period, to-wit, the period August 1, 1938, to August 1, 1940, which is shown in the bottom line on Page 10 of Exhibit 42, and bearing in mind that you stated the average rate for that period was 16.79 pounds, is it not a fact that the rate per trillion cubic feet withdrawn applicable to the first M.c.f. withdrawn in that period was below the 16.79-pound figure which you gave as the average, and is it also not a fact that the rate for the

last M.c.f. withdrawn in that period was somewhat higher than the average rate of 16.79 pounds which you gave us?

A. I agree with you that that would be the case, because that is an average figure.

Q. Now, Mr. Hinton, am I correct in understanding that in drawing your line shown in Exhibit 135, you gave no weight whatever to the production from the Panhandle Field during the period from the beginning of production in that field to August 1, 1935, totaling 5,197,693,413 M.c.f., which is shown in the first line of your table on Page 10 of Exhibit 42? A. That is correct.

Q. Now, the amount of production which I just named for the period embraced by the beginning of production in the Panhandle Field to August 1, 1935, represents approximately what percentage of the total production from the entire field shown on your table on Page 10 of Exhibit 42? [fol. 5236] A. Approximately 60 percent.

Mr. Littman: If your Honor please, I would like to have marked for identification with the next exhibit number, a table which we have prepared entitled, "Acres Used in Determining Weighted Average Pressures of Texas Panhandle Field."

I might state that the source of these figures, as shown in the table, is the Annual Reports of the Panhandle Oil and Gas Field of the Railroad Commission of Texas for the years shown.

Trial Examiner: This table will be marked for identification as Exhibit No. 137.

(Exhibit No. 137 was marked for identification.)

By Mr. Littman:

Q. Mr. Hinton, are you familiar with the figures shown in the table which has just been identified as Exhibit No. 137? A. I am.

Q. Have you had an opportunity to check these figures?

A. Yes, sir. I have checked them and found them to be correct, as shown in the 1940 Report of the Annual Report on the Panhandle Oil and Gas Field, Railroad Commission of Texas.

Q. Now, am I correct in stating that the acreage figures shown in table for identification, Exhibit No. 137, represent

the acreage which was utilized by the Texas Railroad Commission in arriving at the pressure loss, in pounds, figures which you show in your Exhibit 42 at Page 10?

[fol. 5237] A. Yes. Those are the figures upon which the weighted average pressures are determined for the field in the annual reports.

Mr. Culton: Do you know whether those changes in acreage were in high-pressure or in low-pressure areas?

The Witness: No, sir. I have not checked the source of the acreage changes for this exhibit.

Mr. Littman: Could you do that from the reports?

The Witness: Yes.

Mr. Culton: You could not do it, though, to determine which pressure bands they were in could you?

The Witness: You could tell the number of acres that were determined to fall in each pressure classification.

Mr. Culton: Well, without knowing that, this table does not mean anything, does it, from a weighted average proposition?

The Witness: Yes, I think this table means something without that, because it does show the number of acres that have been included in the total field each year, and how they have been segregated into what is known as the East Field, the West Field, for both the sweet and sour areas.

Mr. Culton: I meant, in determining the weighted average, these figures would mean nothing unless you knew how much of it was in each of the pressure bands?

[fol. 5238] The Witness: No acreage figures mean anything until it can be determined into which pressure classification they fall.

. . . . . .

[fol. 5240] By Mr. Littman:

Q. Will you please refer to Exhibit 134, which is one of your working papers, and which is entitled, "Past Production and Estimated Future Production from Panhandle Field, Texas".

You have Exhibit 134 before you?

A. Yes, I have the original of that exhibit.

Q. In Columns 5, 8 and 11, you show the total estimated future annual withdrawals from the Panhandle Field under what you have described as Conditions 1, 2 and 3, respectively. A. That is correct.

Q. And I believe you have identified that these figures shown in Columns 5, 8 and 11 control the slope of the curves designated, "A", "B" and "C" in your chart entitled, "Panhandle Field, Texas, Pressure Trend", Exhibit 133 for identification. A. Yes, sir, that is correct.

Trial Examiner: Your references to Exhibit 134 for identification, Mr. Littman, call for the cumulative columns. [fol. 5241] You say, "5", "8" and "11".

Mr. Littman: No.

Trial Examiner: They call for the annual—

Mr. Littman: (Interposing) For the estimated annual withdrawal column.

I might state that earlier in the record I requested that all copies of this exhibit should bear the numbers 1 to 13, inclusive, for each of the columns shown, reading from left to right, in order to facilitate the case.

Trial Examiner: The reason for the inquiry was that I wanted to know if each date had been numbered as Column 1.

Mr. Littman: That is right.

By Mr. Littman:

Q. Now, am I correct in understanding that Condition 1, which you sometimes refer to as Condition "A", shown in Column 5 of Exhibit 134, assumes that the rate of withdrawals from the Panhandle Field in the future will remain at approximately the 1941 rate?

A. That is correct, down to the year 1953, where there will, in all probability, be a drop-off in the annual rate of withdrawal. For the years following 1956, namely, 1957, 1958, 1959 and 1960, shown on here, are rates of withdrawal which will probably not be experienced but which were used to see what the pressure drop would be at those rates.

Up to 1956, I feel that that is approximately what the [fol. 5242] total withdrawal will be.

Q. Well, now, the curve designated as Curve "A" in Exhibit 133 reflects the figures to which you have just referred and which are shown in Column 5 of Exhibit 134 as "Estimated Annual Withdrawals" under Condition 1. Is that correct? A. Yes, sir, that is correct.

Q. And I note from your chart, Exhibit 133, which was a part of your working papers, the Curve "A" reaches 50 pounds of well head pressure for the entire Panhandle Field in the year 1958. A. That is correct.

Q. Now, am I also correct in understanding that if the annual rate of withdrawals, shown in the column to which I have referred, will be less than you estimated in each year, the effect would be to prolong the indicated life of the field and to extend Curve "A" beyond 1958 to the extent of the reduction of the annual withdrawal figure?

A. Yes, sir. The life of any gas field is governed by the rate of withdrawal.

Q. Now, Condition 2, which you sometimes refer to as Condition "B," and which is shown in Column 8 of Exhibit 134, assumes the same conditions as Condition "A" except that Panhandle Eastern will increase its rate of withdrawals in the future in accordance with the withdrawals shown in Schedule 5 of Exhibit 43 and in Exhibit 131, which [fol. 5243] reflects Mr. Morton's estimate of future sales for Panhandle Eastern. Is that correct?

A. That is a correct statement.

Q. Under this condition, the 50 pounds average well head pressure is reached, as shown by your Curve "B" in Exhibit 133, in what year? A. 1958.

Q. And is it a fact that the curve reaches a point slightly ahead of that reached by your Curve "A" in that chart?

A. Yes. By the term "ahead", it shows that the point of 50 pounds well head pressure will be reached in an earlier part of 1958 than will Curve "A".

Q. As a matter of fact, it would be only slightly earlier than Condition "A", is that correct?

A. That is correct, yes, sir.

Q. Now, Condition 3, sometimes referred to by you as Condition "C", represents the increased withdrawals of all companies in the field, including Panhandle Eastern and as estimated by you. Is that correct? A. That is correct.

Q. And the figures showing the annual withdrawals for that condition are shown in Column 11 of Exhibit 134?

A. Yes.

Q. And is it this latter condition which represents what you believe to be the actual condition to be expected in the field in the future?

[fol. 5244] A. That is correct. In all cases, in all columns mentioned the amounts shown after 1956 are for experimental purposes only, as I do not believe that our company will continue to take gas from that field after the well head pressure has reached the point shown.

Q. And in your opinion, is that, also, true of the other pipe line companies that operate in the Panhandle Field?

A. No, it is not, because the other pipe line companies have not, with the exception of the Northern Natural Gas Company, provided themselves with further reserves.

Therefore, in all probability, it will be necessary for the other major pipe lines to continue to take gas from the Panhandle Field long after the economical point has been reached by the Panhandle Eastern Pipe Line.

Q. Well, how long after that point, would you say?

A. That would be largely dependent upon the price that they receive for their gas.

Q. Well, we will probably go into that phase of the matter a little later. At this time I wanted to make certain that I understood your figures in Exhibit 134.

Now, under Condition 3, sometimes called Condition "C", when is the average well head of 50 pounds reached, as shown by your Exhibit 134 and as shown by the curve designated "C" in Exhibit 133?

[fol. 5245] A. At approximately the end of the year 1956.

Q. In other words, earlier than under Conditions "A" or "B"? A. Yes, sir.

Q. And the reason for that is simply because you are showing a greater withdrawal per year under Condition "C" than under Conditions "A", and "B"?

A. That is correct, yes, sir.

Q. Do I correctly understand your testimony to be that Panhandle Eastern will not be justified in further producing gas in the Panhandle Field after 1956?

A. As we see our problem today, we will not. However, we do not know too much about the Hugoton Field, and it may happen that it will be profitable for us to produce gas in the Panhandle at a well head pressure of 50 pounds

more cheaply than we will be able to produce gas in the Hugoton Field at the pressures which we will experience from that field.

Q. Well, my question, Mr. Hinton, was primarily related to your written testimony which appears about the middle of Page 40 of your Exhibit 42, which reads as follows:

"Therefore, it is my judgment that Panhandle Eastern will not be justified in further producing gas from its reserves in the Panhandle Field longer than 15 years from the present."

A. That is as I see the problem today, yes, sir.

Q. And under Condition "C", you fully expect the [fol. 5246] weighted average well head pressure in the Panhandle Field to reach 50 pounds in 1956. Is that right?

A. The data which has been established leads me to believe that that is very close to correct, yes, sir.

Q. Now, is this true of all of the other natural gas pipe line companies which operate in this field?

A. No, it is not.

Q. In other words, you think that the other natural gas pipe line companies—and by that I mean companies other than Panhandle Eastern—will continue to operate and produce gas in the Panhandle Field after 1956?

A. Yes, but at a far greater cost than their cost of production is as of today.

Q. How long after the year 1956 do you expect the other pipe line companies to operate?

A. That would be a matter that would be entirely dependent upon the management of those companies and their chances of obtaining reserves to carry on their business, elsewhere that were under investigation at the period when they approached that pressure.

There are many things that enter in, but without additional supplies from elsewhere, it will not be a great length of time for the major companies.

The local companies and the gasoline plants can probably continue to operate several years after the major pipe lines [fol. 5247] no longer take gas from this field.

Q. Well, looking at your Exhibit 134, in the last line you show that there will be no remaining rock pressure in

the year 1960 under any of the three conditions. Is that correct?

A. That is right, because if the rate of withdrawals were experienced that are put down here, that would be the case; however, I don't anticipate that these rates of withdrawal from 1956 to the period 1960, shown on Exhibit 134, will be experienced.

They were merely put down there to see where the problem carried us and see what might happen at those rates of withdrawal.

Q. Well, is it your testimony that the annual withdrawals shown in Exhibit 134 are correct under each of the conditions that you have described through the year 1956? A. Yes.

Q. Then, you are now stating that the figures that appear for the remaining years, namely, 1957 through 1960, are not the annual withdrawals which will be made under those conditions?

A. That is right. They were placed upon this set of calculations to see what would happen, what we could expect if those rates of withdrawal were experienced.

Q. Now, do I understand your testimony to be that the [fol. 5248] amounts of annual withdrawals shown in Columns 5, 8 and 11 of Exhibit 134 are the withdrawals which can be made from the field through the year 1956?

A. Yes, that is correct.

Q. Mr. Hinton, we were referring a moment ago to natural gas line companies other than Panhandle Eastern.

A. Yes.

Q. Suppose I name a number of companies that operated in the field and you tell me whether your definition of natural gas pipe line companies includes at least the following companies:

Texhoma Natural Gas Company.

A. Yes, producing for the Natural Gas Pipe Line Company of America.

Q. Northern Natural Gas Company? A. Yes.

Q. Canadian River Gas Company? A. Yes.

Q. Lone Star Gas Company?

A. Yes, but I don't give as much weight to that as I do to the other companies, because it furnishes markets closer to the field than the other companies.

Q. Well, markets supplied by Lone Star in any substantial quantities are a considerable distance from the Panhandle Field, are they not, at least a hundred miles? [fol. 5249] A. That is right.

Mr. Culton: That isn't very far, though, as compared with the others?

Mr. Littman: Well, Mr. Culton, perhaps you can tell me the distance from the east Panhandle Field to Dallas?

Mr. Culton: About 300 miles. Something over 300 miles.

By Mr. Littman:

Q. Would I be correct if I had stated 300 miles rather than 100 miles?

A. I don't think that Lone Star takes any great quantity of gas from the Panhandle Field for their Dallas market.

Q. I see.

A. It goes to Wichita Falls. That is their principal market.

Q. How far is Wichita Falls from the Panhandle Field?

Mr. Culton: Something over 200 miles.

By Mr. Littman:

Q. Is that correct?

A. I would imagine. I don't know exactly that. It is a little off my beat.

Q. You expect the Lone Star Gas Company to continue to operate in the Panhandle Field for some short time after the other large pipe line companies will have abandoned their properties? Is that right? A. Yes.

[fol. 5250] Q. Well, let's go on with my list.

Cities Service Gas Company?

A. Yes. Cities Service can also move from the Panhandle Field if [their] so desire, as they maintain a substantial reserve in the Hugoton Field.

Q. And Cities Service Gas Company is included within your category of natural gas companies, as you have described it in your testimony a moment ago?

A. That is correct.

Q. Consolidated Gas Company? A. Yes.

Q. United Gas Pipe Line Company?

A. I will have to check that one. I have a list of all of them. Well, go ahead. I will say yes.

Q. If you want to change that later, you are at liberty to do so. A. Yes.

Q. Do you have any others in mind or have I named the major pipe line companies that operate in the field?

A. It seems to me as though there is one that takes a sizeable amount of gas that has been left out, but I can't think what it is.

Mr. Culton: He hasn't mentioned the Denver Line, has he?

The Witness: Yes, Canadian River.

Mr. Culton: How about Consolidated?

[fol. 5251] Mr. Littman: I mentioned Consolidated.

Mr. Culton: You have covered them all, I think.

The Witness: The Panhandle Power and Light take a considerable amount of gas, too. It goes to Borger. In fact, there are 23 pipe lines taking gas from the Panhandle Field at this time.

By Mr. Littman:

Q. Now, the annual withdrawal figures which you have shown in Exhibit 134, under all three conditions, of course, include figures for these natural gas pipe line companies which I have named? A. Yes.

Q. As well as other withdrawals?

A. That is correct, yes, sir.

Q. Now, in 1956—and I presume your figures here speak as of the end of the year, do they not? A. Yes, sir.

Q. In 1956 you show under Condition "A", the rock pressure in the field will be 74.52 pounds.

A. The observed well head pressure.

Q. I meant the well head pressure rather than the rock pressure. Is that right? A. Yes, sir.

Q. And under Condition "B", the well head pressure, as of the end of 1956, will be 72.74 pounds?

[fol. 5252] A. That is correct, 72.74 pounds.

Q. And under Condition "C", 50.15 pounds?

A. That is correct, in all cases.

Q. And, of course, those well head pressures are predicated upon the amounts of annual withdrawals which you have set forth in your Columns 5, 8 and 11, respectively? Is that right? A. Yes, sir, that is right.

Q. And which amounts are those which you say can and will be withdrawn under the three conditions which you have described, through the year 1956?

A. Of course, I say that is right, with the qualification, instead of saying it will, I would again like to say it is an estimate and it won't be exactly this, but it is the best estimated figure that I can produce.

Q. It is your best judgment? A. Right.

Q. Now, let's confine ourselves, for the moment, to Condition 2, sometimes called by you Condition "B"; the annual withdrawal figures for that condition are shown in Column 8. Is that right? A. Yes, sir.

Q. Will you state how you arrived at the figures in Column 8 which are called, "Estimated Annual Withdrawal, Condition No. 2, in M.c.f."?

[fol. 5253] A. Yes, I merely took the market, which was assumed to be approximately correct, for the year 1941 for the total withdrawal from the fields, and I kept all other markets approximately as they were, or as they were, and added the amount which Panhandle would expect to take in addition to that amount under the anticipated load schedule.

Q. And the amount which was taken in the year 1940 from the Panhandle Field by all producers other than Panhandle Eastern, was 566 million M.c.f. Is that correct?

A. No, sir.

Q. Will you give me the correct figures?

A. 597,467 M.M.c.f.

Q. What was the figure for the year 1941?

A. It was partially an estimated figure based upon what was happening at the midyear, and taking into consideration the probable withdrawal for the next year and was estimated to be 610,000 M. M.c.f.

Q. Now, you haven't given me the figure I wanted, Mr. Hinton. I want the figure in the year 1941 which represents the withdrawals by all producers other than Panhandle Eastern Pipe Line Company in the Panhandle Field.

A. 1941 was estimated to be approximately 44 million M.c.f. by the Panhandle Eastern.

Q. Well now, will you give me the figures for all others than the Panhandle Eastern?

[fol. 5254] A. 566,000 M. M.c.f.

Q. Now, to that amount of 566,000 M. M.c.f. you have added the amount of production which you estimate will have been taken from the field by Panhandle Eastern for the year 1941. A. 44,000 M.M.c.f.

Q. Which gives you the amount of 610,000 M.M.c.f., shown for the year 1941 in Column 8 of Exhibit 143?

A. Yes, sir, that is correct.

Q. Now, am I correct in understanding that you followed the same procedure for all of the subsequent years, that is, the years subsequent to 1941 shown in Column 8?

A. That is correct.

Q. In other words, you assume throughout this column that all producers other than Panhandle Eastern Pipe Line Company will take out 566,000 M.M.c.f.?

A. That is correct.

Q. And to that annual sum you have simply added the amount which Panhandle Eastern will produce from the Panhandle Field, the total of which is shown for each year in Exhibit 131 in the third column. Is that right?

A. Yes, that is correct.

Q. Now, stating it another way, if we were to take the total of the figures shown in your Schedule 5 of Exhibit 43 and add those amounts each year to the 566,000 M.M.c.f. [fol. 5255] produced by others in each of the years subsequent to 1941, we would secure the same total which you show in Column 8 of Exhibit 134?

A. No, not exactly, because the amount of gas which is estimated to be used on the lease for the drilling-in of wells and maintaining wells varies through the latter years of that schedule.

Q. Mr. Hinton, that is not our understanding of the figures which you show in Column 8 of Exhibit 134.

According to our arithmetic, if you take 566,000 M.M.c.f. in each year shown in Column 8, and merely add to it the amount which you estimate will be withdrawn by Panhandle Eastern in increasing amounts through the years, as shown in the third column of Exhibit 131 and as shown in Schedule 5 of Exhibit 43, you will secure the total shown in Column 8 of Exhibit 134 for each of the years.

A. That could be correct, although I feel quite certain that the amount of gas that was estimated for lease use dropped slightly during the last few years.

Q. Do you want to test some of these figures and make certain about that before we proceed?

A. Mr. Littman, I believe that the total shown here would not be affected by that, inasmuch as it would be a total drop-off in any case, regardless of the purpose for which it was used.

[fol. 5256] Q. In other words, you are saying it wouldn't make any substantial difference, one way or another?

A. That is correct.

Q. Then, may we, for all practical purposes, state that your column 8 holds constant an annual figure of 566,090 M. M. c. f. through the years for all producers other than Panhandle Eastern in the Panhandle Field?

A. I think that we could, yes, sir.

Q. And by adding to that the annual amounts which you have estimated can and will be withdrawn under Mr. Morton's increased load estimate, we will then have the same total substantially as that in Column 8 of Exhibit 134?

A. That will be correct, yes.

Q. For each of the years?

A. Yes.

Q. Now, Mr. Hinton, another way of stating that situation is to say that all other producers in the Panhandle Field, other than Panhandle Eastern, will produce from the years 1941 through 1956, 100 percent of the amounts which were produced by those companies in the year 1941?

A. Yes. I believe the term "withdrawn" would probably be better than "produced," because we think of produced gas as metered gas and this is all non-metered gas, not all metered.

Q. That is perfectly all right for you, so far as I am concerned, to use the term "withdrawn." Perhaps it is more accurate.

[fol. 5257] Well, at any rate, we understand each other to the extent that Column 8 shows or reflects a condition under which, through the years 1942 through 1956 and in each annual period, all companies other than Panhandle

Eastern, are going to be able to secure 100 percent of the amount of gas which they were able to secure in 1949? Is that right?

A. That is correct.

Q. Now, looking at your Exhibit 131, which shows the same figures, substantially, as those shown in your Schedule 5 of Exhibit 42, I am going to ask you to give us the percentage of production by Panhandle Eastern in the Panhandle Field for each of the years 1949 through 1956, as related to the years in which Panhandle Eastern, according to your testimony, will be able to withdraw the annual maximum amounts, to-wit, the years 1945 through 1948.

A. May I see that exhibit?

Q. Now, before you do that, Mr. Hinton, let me get clear on the record that in 1945, according to your Exhibit 131, Panhandle Eastern will reach its peak of annual withdrawals.

A. That is correct.

Q. And that peak is 60 million M. c. f., is it not?

A. Yes, sir, that is right.

Q. And in 1946, the same amount will be withdrawn?

[fol. 5258] A. That is correct.

Q. And the same is true in 1947 and in 1948?

A. That is right.

Q. Now, taking those annual production figures as 100 percent, I want you to relate to that maximum annual withdrawal the withdrawals which you expect Panhandle Eastern to take from the Panhandle Field, both produced and purchased gas, for each of the annual periods subsequent thereto.

Mr. Culton: Doesn t that all show on Exhibit 131 in the record now?

Mr. Littman: No, Mr. Culton, those percentage figures are related to the total take by Panhandle Eastern.

Now, I want him to relate the annual production in 1949, for example, to the annual production in the peak years 1948, 1947, 1946 and 1945, using the latter peak years as 100 percent.

The Witness: You mean, using the 60—

By Mr. Littman:

Q. (Interposing) Using the 60 million M. c. f. as 100%.

Do you have the figures for one year? In other words, I want to make sure that you are answering my specific question rather than have you go all the way through and then have to go back again.

A. Yes, I do. I will try to stick to specific questions. This is the percent of gas which it is estimated will be [fol. 5259] withdrawn for the year 1949, 91.67 percent of that which will be withdrawn in 1948.

Q. And 1948 is the peak year which you are using as 100 percent?

A. That is correct.

Q. That is, it is one of the peak years, I should say?

A. Yes.

Q. Now, will you go on down, and give us the percentage for 1950?

A. For the year 1950, we estimate that we will withdraw from the Panhandle Field 83.33 percent as much as during the peak years 1945 to 1948, that amount being 60 billion cubic feet.

Q. That is the latter amount, being 60 billion.

Mr. Wheat: What was the 1950 percentage?

The Witness: 83.33.

Do you want me to continue.

By Mr. Littman:

Q. Yes, sir.

A. For the year 1951, the amount estimated to be withdrawn from the company and purchased wells will be 75 percent as much as in 1948.

Q. Yes. This is for Panhandle Eastern?

A. Yes. For the year 1952, it is estimated that 66.67 percent of the amount produced during the peak years will [fol. 5260] be produced.

Q. Very well.

A. For the year 1953, it is estimated that there will be 53.33 percent of the gas withdrawn that we estimated could be produced in the year 1948.

For the year 1954, it is estimated that we will withdraw 36.67 percent of the total withdrawn in 1948.

In 1955, it is estimated that we will withdraw 16.67 percent as much as we did during the peak years 1945 to 1948.

In 1956 it is estimated that we will withdraw 11.67 percent of the total of 60 billion for the years 1945-1948.

Q. In other words, Mr. Hinton, it is your judgment that, from 1948 through 1956, Panhandle Eastern will be able to produce in the Panhandle Field less and less gas in each successive year, down to as little as 11 percent of the amount which it produced in 1948, one of its peak years?

A. Without making additional capital expenditures, that is correct.

Q. The capital expenditures which are contemplated to be made in order to produce the amounts of gas which you estimated will be withdrawn in the future years, as shown in Schedule 5 of your Exhibit 42 and as shown in Exhibit 132, are detailed in your Exhibit 42 from Pages 26 to 32, inclusive, for the five and a half-year period beginning in the middle of 1941 and extending through 1946 and in the total amount of $7,147,219. Is that correct?

[fol. 5261] A. That is correct.

Mr. Culton: Just a minute. That figure is hardly accurate. You are referring to the capital expenditures in both fields, are you not, $7,000,000?

Mr. Littman: Yes, but, of course, the details of the Panhandle Field are shown on the pages that I just referred to, are they not?

The Witness: Yes, and they do cover a 5½ year span, but no capital expenditures are shown beyond that date and we certainly are not assuming that we can continue to take the amounts of gas that are set out here without making additional capital expenditures in addition to those shown.

By Mr. Littman:

Q. In other words, you fully expect that Panhandle Eastern will expend additional sums after the 5½ year period, to-wit, after 1946, in order to obtain the quantities of gas which are shown in Exhibit 132. Is that correct?

A. Yes, there will be some. There will be no major items, however, as it would be very difficult to justify a

large capital expenditure at that period of the life of the field.

Q. In other words, Panhandle Eastern expects to spend for capital additions such sums and all such sums as may be economically expended in order to produce the amount of gas which you estimate in Exhibit 132?

[fol. 5262] A. Yes, sir.

Q. And which figures are reflected in Column 8 of Exhibit 134?

A. That is correct.

Q. In other words, your estimate so far as the Panhandle Eastern take is concerned is predicated upon all that can and will be economically spent in order to produce the amounts of gas which you have estimated?

A. That is correct.

Q. And the best that Panhandle Eastern can do in 1956 is to produce under those conditions only 11 percent of the quantities of gas which it has produced in 1948, one of its peak years. Is that correct? Can you answer that yes or no?

A. No, I can't answer it yes or no.

Q. Well, what do you say about my question?

A. I would say that it would be largely dependent upon what the Hugoton Field turns out to be.

Q. Well, if the Hugoton Field turns out to be something other than you have assumed it to be, that wouldn't have any effect upon your taking any more gas out of the Panhandle Field, would it?

A. It certainly would.

Q. Now, in 1956, according to your best judgment, under Condition "B" all the other producers in the Panhandle Field except Panhandle Eastern, will be able to [fol. 5263] withdraw 100 percent of the amount that they withdrew in 1948 and years prior thereto?

A. I would say that that would be substantially correct.

Q. And under Condition "C", it is your testimony that the other producers will be able to take even larger amounts than those shown under Condition "B." Is that right?

A. That is correct.

Q. Whereas, Panhandle Eastern, in 1956, according to your testimony, will be able to economically produce only 11 percent of the production which it secured in the peak year 1948?

A. Taking the acreage division in the field, and taking the operating cost, that is what we anticipate it will be in the Hugoton Field at that time.

I would then say it would be uneconomical for us to take larger amounts from that field if my estimates prove to be correct.

Q. Well, if it is uneconomical for Panhandle Eastern to produce more than 11 percent in 1956 of the amounts which it produced in its peak years, by what process of reasoning do you come to the conclusion that it will be economical for all the others to keep going at full blast right down through the year 1956?

[fol. 5264] A. It will be, for this reason, that the other major pipe line companies in that field now hold a far greater amount of acreage than does Panhandle Eastern, therefore, it will be possible for them to drill more wells, to take less gas out of each well, but on a whole, to operate at a higher pressure than we would be able to do in that field.

The companies that have not provided themselves with reserve acreage in other fields have designed their systems in such a manner that by cylinder changes they can lower the pressure on their system more than can Panhandle Eastern, and they have been operating at a lower pressure for some time.

Does that answer your question, sir?

Q. I believe in one part of your answer you said, "higher" rather than "lower" pressure.

Didn't you mean lower pressure? I believe you misspoke yourself.

A. I was thinking in terms of a compressor station and not the well head.

Q. I see. Then, it is your testimony, Mr. Hinton, that in 1956 these other producers, all of them other than Panhandle Eastern, will be able to economically produce at 100 percent of their 1948 production?

A. The question of economics is dependent upon the ceiling price of the gas. If we are able to carry on our development in such a manner that we are able to produce

[fol. 5265] gas at a lower cost than the other companies, that is our good fortune, and we have made provision for that very thing by obtaining a reserve in a field where we can expect to operate at higher pressures and on a more economical basis.

Q. Now, have you made any investigation of the economies of the operation of all the other natural gas pipe line companies in the Panhandle Field to ascertain whether they could economically withdraw any such amounts as 100 percent in 1956 of that which they withdrew in their peak years?

A. Not in detail, but I can tell you this, that the drilling programs of the other companies indicate, and if you would care to talk to them about it, they will substantiate it, that the number of wells that they are drilling now is with an eye to the future.

By that I mean that they are going to be forced to take a smaller amount of gas from each well, as years go on, and you can see what an orderly program is in my exhibit for the Panhandle Field.

In other words, when we have completed 15 more wells in the Panhandle Field, then we have drilled up all of our acreage held by delayed rentals.

The Canadian River, the Texhoma Natural Gas, have innumerable locations yet to drill.

Q. Well, have you made a study of how many wells these other companies would have to drill to get any such [fol. 5266] quantity of gas out of the Panhandle Field as those quantities which you show for the year 1956 in Exhibit 124?

A. No, not in any detail, but I do know this, they are going to be forced to produce gas under very undesirable conditions at great cost.

* * * * * * * * *

[fol. 5267] By Mr. Littman:

Q. Mr. Hinton, in the year 1956, under your Condition "B" in which year all other producers than Panhandle Eastern will be withdrawing gas at full blast, 100 percent of their peak years, what will be the rock pressure at that time, according to your Exhibit No. 134?

I mean, the well head pressure?

A. 72.47 pounds.

Q. And that is under Condition "B"?

A. Yes.

Q. And under Condition "C", under which condition, according to your testimony and this Exhibit 134, the producers in the field, all of them other than Panhandle Eastern will be producing even more gas than under Condition "B". Is that right?

A. Yes, that is right. That is, I assume that they will, and these figures are based upon that assumption.

Q. Well, is the assumption a correct one?

A. As nearly as I am able to forecast, it is.

Q. What is the well head pressure average throughout the Panhandle Field in 1956, under Condition "C"?

A. 50.15 at the places where the average rate of withdrawal has been experienced through the years.

Q. And not withstanding the average well head pressure of only 50 pounds in 1956, you still expect all produc-
[fol. 5268] ers, other than poor Panhandle Eastern, to be able to get as much gas out of the field as they did back in the flush year of 1948, is that right?

Mr. Culton: Do you mean "poor Panhandle Eastern" or "fortunate Panhandle Eastern"?

The Witness: That is what I was going to say. I would say, "poor other producers and fortunate Panhandle Eastern," because they are not going to be forced to produce gas at that pressure to stay in business, while the other companies are.

Now, if the other companies decide it is no longer economical to produce gas at these low pressures and they go out of business previous to this date, naturally, the life of our reserves will be extended.

However, if they build the Milwaukee line and that gas is taken from the Panhandle Field, our life will be shortened.

By Mr. Littman:

Q. All of that depends, does it not, upon the economics of the situation down around the year 1956 and along about that time. Is that right?

A. I would say, commencing in 1954.

Q. And if it is not economical for the producers other than Panhandle in the year about 1954 to spend the money which is required to produce the same amounts of gas in those years as they had back in 1948, why, then they, the other producers, would cease operations and the life of the field would be extended?

[fol. 5269] A. That is correct.

Q. And might they not, in the year 1954, for example, rather than spend these huge amounts for capital additions in order to take 100 percent of the amounts that they took in flush years, rather go ahead and produce less gas with a lower capital expenditure? Is that right?

A. No, I do not think that could turn out that way, Mr. Littman, because they have a certain area to serve and I do not believe that these gas companies will drop off certain areas and continue to serve others, major areas, I am speaking of.

Q. What is there to prevent these other companies from going into the Hugoton Field and supplementing their supply as Panhandle Eastern expects to?

A. The sad, small supply of available acreage which is now not held by development or delay rentals in blocks of sufficient size to enable any major pipe line company to obtain acreage in the amounts that would be large enough to provide the necessary reserve for them to carry on the same volume of business.

Q. Have you made a detailed investigation of the available acreage in the Hugoton Field?

A. I am, I believe, about as familiar with it as anyone that goes down around the Hugoton Field.

[fol. 5270] Q. Are you the only company that operates in the Hugoton Field?

A. No.

Q. Name the other pipe line companies, natural gas pipe line companies that operate in the Hugoton Field that also operate in the Panhandle Field.

A. The Northern Natural Gas Company.

Q. Any others?

A. No, not that operate in the Panhandle Field.

Q. Northern Natural?

A. That is right.

Q. Well, the Northern Natural stands in very much the same position as Panhandle Eastern, does it not, in that it operates in both fields?

A. Well, they do not have as large a reserve in the Panhandle Field as we do.

I believe that your question would better be answered by saying that I would say that they were in the same category.

Q. Have you endeavored to ascertain how much horsepower would be required to produce anything like 618 million M. c. f. in the year—I beg your pardon—621 million M. c. f. in the year 1956?

A. No, I have not, because it would be a tremendous job and I know that it would run into many, many, many thousands of horsepower.

[fol. 5271] Q. And many, many, many millions of dollars?

A. Right.

Mr. Culton: Are you expecting that 600 million to all be carried out of the field?

Mr. Littman: Out of the Panhandle Field.

The Witness: No, but we know that the gasoline plants are going to continue to operate at probably the same volume as they are.

We know that it is going to take considerable gas to maintain the number of wells which will be then drilled in the Panhandle Field and the amount of gas which will be taken by pipe line companies at that time will have dropped off some, and I believe that of the total amount of 621 million M. c. f., of that amount 258,700 will be used by pipe lines.

By Mr. Littman:

Q. How did you arrive at that figure?

A. Because that is the amount of gas that I estimate to be utilized by pipe lines in the year 1956.

Q. What percent of gas is taken out of the Panhandle Field now by the major pipe line companies?

Mr. Culton: That calculation is all available now, Mr. Littman, if you want to put it in evidence. That is the tabulation you requested the other day, the breakdown.

Mr. Littman: Well, we will probably do so after examining it. I have not seen it yet, but I will be grateful if [fol. 5272] those figures are made available.

Mr. Wheat: It just came in.

The Witness: For the year 1940, the percent of the total withdrawal from the Hugoton Field which was used—

Mr. Culton: (Interposing) You mean the Panhandle Field?

The Witness: Or the Panhandle Field, which was used by pipe lines was 39.48 percent of the total.

By Mr. Littman:

Q. What year was that?

A. That was in 1940.

Trial Examiner: Is that all sweet gas, Mr. Hinton?

The Witness: No.

Trial Examiner: That includes the sour gas used for carbon black processing as well as the casing head production?

The Witness: It also includes casing head gas not treated, blown to air, which is an estimated figures, and the gas blown to air that is used in the drilling-in of wells and the maintenance of wells and testing of wells.

By Mr. Littman:

Q. Do you know what the percentage was for the first six months of 1940 as shown by the 1940 Report of the Texas Railroad Commission?

A. No, I do not. That will show on the 1940 Report, but will not give any allowance for the amount of gas which was estimated to be blown in the air.

[fol. 5273] Q. Now, you would have to know a number of things, would you not, to be able to tell whether or not it would be economical for the producers in the Panhandle Field, other than Panhandle Eastern Pipe Line Company, to produce the amounts of gas which you show under each of these Conditions "A", "B" and "C" in Exhibit 134 for the year 1956?

A. Yes, that is correct.

Q. And will you just enumerate the things you have to know to be able to tell whether or not it will be economical to produce that amount of gas?

A. I would have to know every item of expense that would be incurred by that company to operate so that I could determine whether the total cost of producing that gas added to the other operating costs would enable it to sell the gas at a profit.

Q. Now, did you do that?

A. No.

Q. And you would have—

Mr. Goodman: (Interposing) Can I ask a question?

Mr. Littman: Yes.

Mr. Goodman: Did you do that in respect to your own company?

The Witness: No. That is not possible to do at this time, because we do not know what it is going to cost us to produce gas at the pressures which will be experienced in those years.

[fol. 5274] Mr. Goodman. And to what extent, within your knowledge, was that done with your own company?

The Witness: Probably not in any great detail, because we have a safety valve, you might say, and that is due to the fact that when we get down to the point where our Accounting Department figures show it is no longer profitable to produce gas, we can remove our source of withdrawal.

Mr. Goodman: You indicate the Accounting Department has figures on this subject?

The Witness: I assume that there could be figures compiled to show what the operating costs would be through the years.

Mr. Goodman: Well, you spoke about how you would find out whether it was economical for the other companies to produce, and I asked you whether you could ascertain the economics of production or the economy of production for your own company, and you said "no",

and I asked you to what extent that had been done, if you knew, and you referred to the Accounting Department.

Now, does the Accounting Department, within your knowledge, have figures as to the extent to which it is economical to produce in the future from the Panhandle Field?

The Witness: No, because we do not know what the future price will be.

[fol. 5275] Mr. Goodman: That is all.

By Mr. Littman:

Q. You would have to know all of those things in order to make an accurate determination of the amount of production which would be expected from the Panhandle Field in, for example, the year 1956?

A. I feel that that is a statement that covers my idea.

Q. Have you ascertained how many wells would be required to be drilled in order to produce anything like 621 million M. c. f. from the Panhandle Field in the year 1956, at which time the well head pressure average throughout the field will be, according to your testimony, only 50 pounds?

A. No, I have not made a detailed estimate of that, and I think it will be rather difficult to make, inasmuch as a great deal of the undeveloped acreage is marginal acreage which will probably prove to have little value, and it will probably require a greater number of wells, than if we would base it upon the present portion of the field development.

Q. Do you have any idea as to how many times as many wells that are now in the field will be required to produce that amount of gas which you indicate in the year 1956?

A. No, I have not made that study. It could be estimated from known data very closely. I would say that it would be in the neighborhood of some 3,000 wells.

[fol. 5276] Q. 3,000 additional wells?

A. Yes. That is a very rough estimate.

Q. How many wells are there now in the Panhandle Field?

A. I will have to refer to the last Annual Report of the Railroad Commission.

Mr. Culton: Some portions of that casing head gas are produced from oil wells, are they not?

The Witness: Yes, but I do not believe there will be any great amount at that time.

The number of wells located in the Panhandle Field as of July, 1940, was 1,654 wells.

By Mr. Littman:

Q. It is your testimony at this time, by way of rough calculation, that you would have to have an additional 3,000 wells drilled in the Panhandle Field in order to produce the volumes of gas which you show in your Exhibit 134 for the year 1956?

A. Yes, and the working pressures that would be required to produce that would be considerably below the observed well head pressure.

Q. Do you know how much additional horsepower will be required to produce the amounts of gas which you show in 1956?

A. No, I do not know offhand. I could probably calculate it if you wanted to go into it in that detail, but after we made all of our calculations and got all through, we would still be basing it on an estimate, and the accuracy [fol. 5277] of the result would be no closer than the accuracy of my estimation.

Q. These questions I am asking you relate to ascertaining the economic feasibility of doing what you estimate will be done. Is that correct?

A. Yes, I would say that they do relate to it.

Q. And yet, you did not, up to this time, make any estimate of these matters which we are discussing, to-wit, the number of additional wells that would be drilled and the cost of those wells, and the amount of additional horsepower which will be required, and the cost of that additional horsepower?

You did not make any investigation of that, did you?

A. Not detailed. I made an estimate of it just from observation of the field, knowing in the background at all times, that if it was possible for Panhandle Eastern to

produce greater quantities of gas than those shown in Exhibit 131, that it would not wait until such time as the pressure had gotten down to 50 pounds to produce it, that the total takes by Panhandle Eastern will be taken at a time when they can be taken for the least amount of operating expense.

Q. But, Mr. Hinton, my question related to the estimated takes by producers other than Panhandle Eastern.

A. That is right.

Q. Now, what is your answer to my question? You made no investigation—

[fol. 5278] A. (Interposing) No detailed investigation, no. It is just a knowledge of the situation as it exists and what it will probably be.

Q. And you did not make any investigation either of the amount of gathering lines and well lines and looping of lines that would be required to extract from the Panhandle Field in 1956, the total amount of gas which you show in 1934. Is that correct?

A. That is correct. You cannot, in a five-weeks' period, make that study in conjunction with other material that had to be prepared.

There would have been little time to have devoted to a detailed study of that nature.

Q. As a matter of fact, if you wanted to be anywhere near accurate about it, you would have to make the same kind of detailed study for all of the other companies and for each of the remaining years, that you made for Panhandle Eastern for the 51½ year period beginning June 30, 1941, as shown in Exhibit 42?

A. That is right, but the total result, whether they quit one or two years earlier than I have estimated that they will stop taking gas, does not influence our problem a great deal because, by that time, we will have withdrawn greater amounts from that acreage and, at that time, we would have to apply the time element to the four dimen-
[fol. 5279] sions which we have previously spoken of, that is, length, width, depth and pressure.

We would have to apply the time element for the flow of gas to get into the well head and that would govern the amounts of gas which we would be able to take.

It is my idea that when the load becomes as low as shown here—

Q. (Interposing) As shown here, will you refer, please, to what you have before you?

A. For the year 1956, shown in Exhibit 131—that that will not be used every day. It will merely be allowed to migrate into the well bore as much as it is possible for it to do and it will be used to augment peak demands.

Q. Mr. Hinton, did you consider the peak demands of these other companies in the year 1956 and thereabouts, in making this study?

A. The peak demands of the other companies are not of the nature that our peak demand is, other than the Northern Natural Gas Company.

Q. Well, will Northern Natural Gas Company be able to supply its peaks in 1956?

A. Yes, because it maintains a reserve in the Hugoton Field.

Q. Mr. Hinton, at what abandonment pressure do you [fol. 5280] expect Panhandle Eastern's wells, on the average, to be abandoned?

A. From 300 pounds to 25 pounds.

Q. Well, I asked you for the average?

A. I would not want to make an average figure, because we do not know.

Q. At what pressure do you think most of the Panhandle wells will be abandoned?

A. I hope it will be extremely low, but the indication is, and past records lead me to believe there will be a great number of wells that will be plugged at a comparatively high pressure.

Q. What is that pressure?

A. I refer now to a list of wells which have been plugged in the Panhandle Field that was obtained from the records of the Railroad Commission for me by Jimmie Massa, and these wells have been plugged and abandoned since January 1, 1939, up to the middle of this year.

There is a total of 38 wells, and the abandonment pressures range from 304 pounds down to 7 pounds.

Q. Well, what is the average to which you referred a moment ago?

A. Just looking this over, I would say that it would probably be between 135 and 150 pounds.

Q. Average abandonment?

[fol. 5281] A. Basing it upon the list that I am looking at, and not on my idea.

Q. And yet, you say that all the other producers in the field will pass that abandonment pressure average and go on producing at 100 percent?

A. No.

Q. In the year 1956?

A. I am saying that that is what the Panhandle Eastern will encounter if they do continue to produce at that rate and it would be my judgment, with the acreage which they hold, that they are going to be able to produce a large amount of that gas that I have shown.

Q. Have you made any investigation of the operating costs that would be required to be expended to produce the amounts of gas in the year 1956 which you show in Exhibit 134?

A. No, but I did assume that the selling price of that gas would be adjusted to take care of the increased operating costs.

Q. That is a kind of a general statement. Do you know what the selling price is going to be, down in the year 1956?

A. No, but if the companies continue to make money, it will be substantially higher than it is today.

Q. Can you give us the unit cost figure of producing gas for pipe line purposes in the year 1956?

[fol. 5282] A. No, sir.

Q. You are nodding your head. Would you mind answering so the record will show?

Mr. Culton: He is shaking his head.

The Witness: I did say, so I thought the reporter understood, "no, sir."

By Mr. Littman:

Q. I am sorry, I did not hear you.

You do not know that?

A. No, and if anybody did, he does not have to worry about the future because he can set up a tent and really make a good living.

Q. But that is one of the things that it would be important to know in order to make an accurate estimate, an accurate forecast, of the production of this field. Is that right?

A. That is correct.

Q. And the effect of your having included a rate of production from this field, or a rate of withdrawal from this field, for all producers other than Panhandle Eastern, at 100 percent full-blast right straight down through the years and through the year 1956, has the effect of shortening the life of the Panhandle Field, according to your estimate, and giving you the remaining 15-year life of Panhandle Eastern, in the Panhandle field does it not? [fol. 5283] A. It would not greatly affect the 15-year period or whatever it is, I do not know whether it is 15 or 17, without counting on here, but what I am saying is that if the other companies discontinue their estimated rate of withdrawal as shown on Exhibit 134, that we will immediately take advantage of it and withdraw at a greater rate just as long as we can continue to take gas at pressures which will be about the same as those shown.

Q. If the takes of all companies decrease at the same rate as Panhandle Eastern's takes, the amount Panhandle Eastern Pipe Line Company would get would be increased over that shown in Schedule 5 and in Exhibit 131, and the economic length of life increased, is that right?

A. Yes, that would suit us very well, too.

Q. Now, this so-called inability of Panhandle Eastern to produce any more than 11 percent of its peak-year production down in 1956 is not because of any inferiority on the part of Panhandle Eastern's acreage, is it?

A. No, it is due to two things: One is that we will have been taking, we hope, at a greater than the average rate of withdrawal for the entire field; and the other is that we will not be forced to operate under those conditions.

We can move up where we will be able to produce gas for less money.

Q. As a matter of fact, you agree with the testimony of [fol. 5284] other company witnesses, do you not, that Panhandle Eastern's acreage is located in the better portions of the Panhandle Field?

A. I agree with whom?

Q. With Mr. Smith, I believe he testified to that.

A. I thought you said other companies—

Q. (Interposing) Other company witnesses. I meant other witnesses of Panhandle Eastern.

A. Yes, I think our acreage is better than the average of the field.

Q. And the open flow of Panhandle Eastern's wells, on the average, is considerably higher than the wells of other companies operating in the field, is that right?

A. Yes. I do not go a great deal on open flow, because there have been a number of our wells acidized which have not been acidized by the other companies, but the ability of our wells to produce gas, I think, is better than the average.

Q. You testified that the Panhandle Field would not be "like a one-horse shay." That is to say, it would not meet with sudden death, is that right?

A. That is right.

Q. Now, that is only, however, as far as Panhandle Eastern Pipe Line Company is concerned, is that right, Mr. Hinton?

[fol. 5285] A. No, I do not believe you could say that is right. I believe I have testified that I think there is going to be a number of companies continue to take gas for years after the major pipe line companies cease to take gas from that field.

Q. Let me read you something you wrote in Exhibit 42, and ask you whether you still are of the same opinion.

A. What page?

Q. Starting at the bottom of Page 6 of Exhibit 42:

"Looking forward to the time when it will not be economical to supply a very large percentage of its market requirements from its reserves in the Panhandle Field, the Company must be pursuing a policy of developing its reserves in the Hugoton Field so that adequate production will be at all times available to supply the market. The Panhandle Field will not be a 'one-horse shay'. It will not suddenly cease producing but, in my opinion, its decline in productivity will be at an ever-increasing rate."

Is that a correct statement?

A. That is a correct statement.

Q. Well, you have not indicated in your Exhibit 134 a "decline in productivity at an ever-increasing rate" with respect to any of the other companies that are operating in the Panhandle Field beside Panhandle Eastern?

A. Yes, I have.

Q. Where?

[fol. 5286] A. Because if it were not for the fact that they are carrying on intensive drilling campaigns at this time and will continue to do so, I would have dropped off their deliverability much sharper than I did, just about the same as I would a company like our own which is practically fully developed at the present time.

Q. Mr. Hinton, you did not drop anybody's deliverability anywhere in Exhibit 134, did you?

A. That is what I was saying.

Q. Did you or did you not?

A. I dropped off Panhandle Eastern's.

Q. That is what I mean. In other words, you did not drop anybody's deliverability in the Panhandle Field through any of the years, other than Panhandle Eastern, did you?

A. That is right, but I would, if I would happen to know that they were fully developed at this time, because I would know that it would no longer be possible for them to drill additional wells.

Q. You kept everybody else going on producing in this field through the years way down to 50 pounds rock pressure, and lower, at 100 percent, substantially, of their peak year's production, did you not?

A. Yes, and I think that can happen.

Q. But you do not think it is within the realm of reasonable probability that anything like that will happen, do [fol. 5287] you, Mr. Hinton, really?

A. I believe it will be pretty close, and I can tell you why, if you want me to.

* * * * * * * * *

[fol. 5295] Q. Mr. Hinton, do you recognize, and are you familiar with, the figures shown in Exhibit No. 138 for identification?

A. I recognize, and I am familiar with, the source. As to the accuracy of the figures, I have not checked them.

Q. You can say, subject to check, that these figures have their origin in the Annual Reports of the Texas Railroad Commission for the Panhandle Oil and Gas Field, is that correct?

A. Yes.

Q. Now, you will observe that in the first two columns on the left side of this exhibit, No. 138, we have five periods.

Now, do you recognize these periods as embracing certain of the periods included in your table on Page 10 of Exhibit 42?

A. I do.

Q. And am I correct in stating that Exhibit No. 138 shows the periods beginning August 1, 1938, and ending August 1, 1940?

[fol. 5296] A. Yes.

Q. In other words, this table does not show the first period that you show in Exhibit 42 on Page 10, does it?

A. That is right.

Q. That is the period you did not use in your study?

A. Yes.

Q. Now, you will observe that we have taken your two-year period which is shown in the last line of the table on Page 10 of your Exhibit 42, and we show that 24-month period in two separate yearly figures, do we not?

A. Yes, you include the pressure data which was obtained midyear, 1939, which I neglected to use, due to the explanation which was read from the record of the Railroad Commission Report.

Q. In yesterday's session, you read from the Texas Commission's 1940 Report the explanation of the reasons why you did not use the 1939 pressure data?

A. As requested to do so by you.

Q. Well, does that statement which you read into the record fully describe the condition, and give the reasons for your failure to use the 1939 pressure data?

A. Yes, but without that, I would have been inclined to have discarded it after the 1940 data was available, due to the fact that it was so far out of line from the field trend.

Q. Do you mean you would not have used the 1939 data [fol. 5297] even if you had not known of the details which you read from the Commission's Report yesterday?

A. I would have shown it, but I would have questioned it just the same as I do question it.

Q. Have you ever made any calculations to ascertain whether the effect of the situation which you read from the Commission's Report would produce any such result as that shown in here for the pressure decline in pounds for the total field for the last period?

Now, that is the figure shown on the extreme right-hand side, on the bottom line.

Mr. Culton: Before you go any further, I wonder if you really appreciate the fact that you do not show any of the so-called "casing head gas" at all on here, which enters into the pressure decline just as much as the other, particularly in view of the fact that the Railroad Commission in its Reports has referred to the fact that in 1934 and 1935 particularly tremendous volumes of gas were popped into the air as so-called casing head gas?

Mr. Littman: The Texas Railroad Commission does not include casing head gas, does it?

The Witness: No—

Mr. Culton: (Interposing) It does in computing the pressure decline. In your Report, you will notice in 1939 and 1940 they give you the amount of casing head gas pro- [fol. 5298] duced after they started measuring it.

Mr. Littman: The witness says what to that?

The Witness: I do not believe that is correct, because the casing head gas that they refer to is the processed casing head gas.

Mr. Culton: I say that that is measured.

The Witness: Yes, and I know no Commission that functions that gives consideration in their reports to any other than metered gas.

Mr. Culton: That is what I was getting at. There is metered casing head gas, because this says, "dry gas production."

By Mr. Littman:

Q. Do you know, Mr. Hinton, whether what Mr. Culton says is a fact?

Mr. Culton: Let's get the records. We do not want to be starting here on something that has an erroneous idea.

I think, if you will get the 1939 and 1940 Reports, you will see, as to each of those fields, they say how much casing head gas was produced.

* * * * * * * * *

[fol. 5299] By Mr. Littman:

Q. And the pressure decline pounds, subject to check, for each of the three fields shown, to-wit, each field, west sweet field and west sour field, and total field, are the figures which were used by the Texas Commission, are [fol. 5300] they not?

A. Subject to check, I think they are.

Q. Now, am I correct in understanding that the figures shown in the column headed, "Pressure Decline Pounds" in each of the four columns thus headed, are the figures for each of the fields and for each of the years which you used in your table shown on Page 10 of Exhibit 42, is that correct?

A. No, I used the pressure decline figures for the total field and did not apply the east or the west sweet or the west sour pressure averages.

Q. Well, am I correct in stating that the pressure decline figures shown at the extreme right-hand column of Exhibit 138 are the same ones that you used in your table on Page 10 of Exhibit 42?

A. If they are found to be in agreement with the Railroad Commission Report, when checked, they are.

Q. Well, you can see for yourself, can you not, from Page 10 of Exhibit 42, that they are the same figures, except that we show, in Exhibit 138, a separation of the final two-year period in the two one-year periods?

A. They agree in all cases except for the two-year period, during which period your figures show a total pressure drop of 19.33 pounds, while those on Page 10 of Exhibit 42 show 1935.

Q. Well, with that exception, they are the same as [fol. 5301] those which you used in Exhibit 42, Page 10?

A. Yes, that is correct.

Q. Now, we have shown in this table, with respect to pressure decline pounds, the build-up of those total figures

as between the east field, the west sweet field and the west sour field, have we not? A. That is right.

Q. Now, with respect to the production, the total production shown for each of the three fields does not equal the total of your production from the entire field, is that correct? A. No, it does not.

Q. And the reason is simply because, as Mr. Culton has indicated, you added certain estimated figures to those of the Railroad Commission, is that correct?

A. That is correct.

. . . . . .

[fol. 5305]

C. H. HINTON, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Hinton, have you had an opportunity to check Exhibit No. 138 for identification with the annual reports of the Railroad Commission of Texas? A. I have.

Q. Are the pressure decline figures shown in this exhibit for each of the three fields, to-wit, east field, west sweet field, west sour field, and for the total field, correctly recorded on Exhibit No. 138?

A. I believe they are substantially correct, yes.

Q. And am I correct in stating that the pressure decline figures over on the extreme right-hand column of Exhibit No. 138 for the total field are the result of the weighting of the pressure decline figures separately shown on this exhibit for the three fields?

A. Well, I did not calculate those across by percents. Just checking the amounts shown in the Railroad Commission reports, I find them to be correct for the total field. [fol. 5306] Q. Now, am I correct in stating that this exhibit shows the production of dry gas for each of the periods shown and in the amounts shown as recorded by the Texas Railroad Commission?

A. The amounts shown for dry gas only are substantially correct.

Q. In other words, this Exhibit No. 13 does, in your opinion, and from your check, represent that which it purports to represent?

A. Yes, I would say that it does. It shows the weighted average pressures and the total dry gas withdrawal.

Mr. Culton: Is the dry gas what causes the reduction in pressure altogether?

The Witness: No.

By Mr. Littman:

Q. Mr. Hinton, will you please refer to your Exhibit No. 43. Your Schedule No. 3 in that exhibit contains your estimate of operation and maintenance costs west of Liberal for the Panhandle Field under the basic load and for the Hugoton Field under the basic load, does it not?

A. That is correct.

Q. And Schedule 4 of that exhibit shows your estimate of operation and maintenance costs west of Liberal in the Panhandle Field, predicated upon the estimated future load, which load was estimated by Mr. Morton and also contains similar figures for the Hugoton Field, does it not? [fol. 5307] A. That is correct.

Q. What is the source of the figures shown in Schedules 3 and 4?

A. The accounting records for the year 1940; accounting records for the first six months of 1941, with an estimate for the last six months of 1941; and from '42 through the year '46, they are estimated operating and maintenance costs.

Q. Were the estimated amounts determined by you?

A. Yes, in conjunction with the various superintendents employed in the different departments shown here and the addition of man hours was determined by using that method; that is, I spend during the year a good deal of my time in the field, and several days a year, I will take days and ride with the operating men in each of these departments and I am, I believe, quite familiar with what is going on in the field but not depending entirely upon my own judgment without going to the men who are operators of these various departments to establish the amounts used.

Q. Do these figures show all of the costs incurred by Panhandle Eastern in connection with the production and transmission of these amounts of gas, as far as Liberal compressor station? A. No, they do not.

Q. What costs do they not include?

[fol. 5308] A. Executives' salaries and Kansas City office expense, which might be properly allocated to this portion of the system.

Q. Well, it does not include anything for depreciation, does it? A. No.

Q. In other words, you exclude depreciation from these tables and you also exclude another form of depreciation which is commonly called depletion, do you not?

A. Yes, that is right.

Q. And am I correct in understanding that you do not include in these figures the expense of gas purchased from vendors? A. That is correct.

Q. So that is also excluded?

Mr. Culton: But you do include royalties?

The Witness: Yes, royalties are included, but the gas purchase expense is not included.

By Mr. Littman:

Q. And, of course, you do not show anything in these exhibits reflecting the return on investment, do you?

A. No, sir. There is one purchase cost that is included, and that is the cost of measuring the gas which is purchased. That is the only one.

Q. That is, the expense of measuring the purchase gas [fol. 5309] is included in the figures in Schedules 3 and 4?

A. Yes, sir, but the purchase price is not included.

Q. Now, have I named all of the exclusions? In other words, what I am undertaking here to do, Mr. Hinton, is to make certain that I know precisely what you have included in your Schedules 3 and 4.

If I have omitted anything, I wish you would tell us about it.

A. Perhaps it would be better to enumerate what is included, and then we would have a double check on any possible omissions.

Q. Very well.

A. The information included on Schedules 3 and 4 of Exhibit 43 includes the expense required to maintain and operate the necessary activities of the portion of the system south and west of Liberal compressor station.

Q. What is the purpose of these schedules?

A. The purpose of them is to give us an idea of what it is going to cost to operate through these years.

Q. In total? A. In total, for this portion.

Q. That is, for the periods shown in Exhibit 43?

A. Yes, that is right.

Q. To be more exact, for the periods shown in Schedule 3 and 4 of Exhibit 43? A. That is right.

[fol. 5310] Mr. Hinton, I refer you to Exhibit No. 57, which was presented in this proceeding by Panhandle Eastern Pipe Line Company witness, Mr. Watkins.

Do you have a copy of that exhibit?

A. No, sir, I have never seen it.

Trial Examiner: You may use mine.

The Witness: Thank you.

(A document was handed the witness.)

By Mr. Littman:

Q. This exhibit is entitled, "Panhandle Eastern Pipe Line Company and Subsidiary Companies—Statement of Gas Purchased Period from April 1, 1932 to June 30, 1941." I note that in Column C is shown the average cost per M.c.f. of gas purchased by Panhandle Eastern in the Amarillo Field, is that right? A. Yes, sir.

Q. Do these figures look right to you?

A. Yes, I would say that from 1937 on, I am quite positive that they are within one-tenth of one cent of being correct per M.c.f.

Going back beyond that, I would have to do a little checking, because I cannot remember much further than that.

Q. Well, we are not interested at this time in going back that early, but I would like to call your attention to [fol. 5311] the figure in Column C showing the average cost in the Amarillo Field for the year 1941, that is, the first six months of 1941, and which is shown in Line 14 to be 3.47 cents per M.c.f. A. Yes.

Q. Is that the amount which you understand to be the average cost per M.c.f. of gas purchased in the Amarillo Field by Panhandle Eastern?

A. Yes, it might be a little closer to 3.48, just offhand, but I know it is one or the other.

Q. Now, is that the amount which you expect Panhandle Eastern Pipe Line Company to pay for its gas which it expects to purchase from its vendors in the Panhandle Field, throughout the periods shown in your Schedules 3 and 4, to-wit, 1941 through 1946? A. I am sorry—

Trial Examiner: Read the question.

(Whereupon, the pending question was read by the reporter.)

The Witness: Yes, I believe that will be correct.

However, our gas purchase contract with the Shamrock Oil and Gas Company provides that we will pay them any amount for royalty that is in excess of four cents per M.c.f. providing the weighted average purchase price of the field is increased above the average of 4½ cents, but I believe that that does not take effect the next time until 1946. It will be in the year 1947.

[fol. 5312] By Mr. Littman:

Q. Well, inasmuch as the Shamrock contract won't be affected by the provision to which you have referred until it is effective in 1947, the answer to my original question would be that the amount which Panhandle Eastern expects to pay for its gas purchased in the Panhandle Field from 1942 through 1946, both inclusive, is the 3.47 cent figure per M.c.f. to which we have referred a moment ago?

A. I believe that is correct.

Q. Now, in Column F of Exhibit 57 is shown the average cost per M.c.f. of gas purchased by Panhandle Eastern in the Hugoton Field for the years 1932 through the first half of 1941, is that correct?

A. They look to be approximately correct to me. I would have to have those files that I handed to Mr. Goodman the other day to be able to check these last few years.

Q. Well, they look substantially correct, do they not?

A. Yes, they do.

Q. Now, I see that Line 14 of Column F shows Panhandle Eastern has paid an average of 4.26 cents per M.c.f. for gas purchased in the Hugoton Field during the first six months of 1941; is that correct?

A. That is substantially correct.

[fol. 5313] Q. And is that the amount which you expect Panhandle Eastern to pay for gas expected to be purchas-

ed in the Hugoton Field from June 30, 1941, through the year 1946?

A. I assume that that will be approximately the price, although the trend of this proration problem which we have on hand might have some effect on that price.

Q. There might be some variation. In your opinion, based on your judgment at this time, you would expect the price to remain the same throughout the period which I just mentioned?

A. Yes, substantially the same.

Q. Mr. Hinton, how many operating men were employed in 1939 in connection with the part of the system west of Liberal station?

A. Do you mean regular employes, or both regular and casual employes?

Q. Well, suppose you give us both.

A. I am not sure I can give you the casual.

Q. The regular employee is more important for purposes of our discussion, but if you have the casual-employee list, I will appreciate it.

A. I do not think I do, and I am not sure I have the regular, because I took that from the records and I do not think I put it down in all cases.

I took the number of men as a base and estimated the [fol. 5314] number required in addition to what we were using, and I am not sure that I have that, but that can readily be furnished because it is available on the accounting records.

Q. I might state that, while you are looking through your work papers, I would also like to have the same information for the year 1940 and for the year 1941.

A. I am going to have to get that from the records at the office. As I thought, as I went through these various operations and talked to the different superintendents, we talked in terms of the number that would be required to be added, and I did not put down the number in each case that we were using at that time, just thinking that we had our base figure and we would probably not need to refer back to that, and we added man-hours to the base rather than detailing the base as to the number of men employed at that time, but that information can be readily gotten from our records.

Q. Well, perhaps it won't be necessary to get it if you do not have it available at the moment. Will you state what was the base year that you used for the purposes of this study?

A. 1941, the first six months, and that weighed back against the year 1940.

Q. How many additional men do you propose to hire in each of the years subsequent to your base period?

A. In the Transmission Department, which takes care [fol. 5315] of the pipe line, in the year 1942, we will add three men; in the year 1944, we will add two men.

In the measurement and gas purchase operations, in the year—

Q. (Interposing) Just a minute. You just gave us 1942 and 1944. How about the other years?

A. We do not anticipate adding men in those years.

Q. In other words, where you are silent with respect to any particular year, you mean that you are not going to add any additional men?

A. That is correct.

Mr. Culton: That is, over the preceding year, no additional men over the preceding year?

The Witness: That is right.

By Mr. Littman:

Q. Let me ask you one thing further, to make certain we understand your testimony as you go along.

You just stated you are going to add two men in 1944 and three men in 1942. Does that make five additional men in all, that is, additional over the base period?

A. That is correct.

Q. Very well.

Now, you were going to tell us about the maintenance department.

A. No, the measurement department.

[fol. 5316] Q. I am sorry, the measurement department.

A. In the year 1942, it will be necessary to use an additional meter man who will work part-time in the Oklahoma Field and part-time in the Kansas Field.

Mr. Culton: Pardon me, are you talking now just about the Texas end or the entire field? I was not certain whether I got his question.

Mr. Littman: Well, I think we ought to know that from this witness, and I also think we ought to know whether he is giving us the figures under the basic load or under the future load.

Mr. Culton: I was just trying to clarify the thing, so we will know exactly what inquiry you are making.

The Witness: I am taking them in the same sequence as you started out, that being the basic load.

By Mr. Littman:

Q. You are giving us the additional men that will be hired under the basic load for which field?

A. For the Hugoton Field is what I am starting on. I believe that is the first schedule that shows, is it not?

Q. The first schedule is the Panhandle Field.

A. I am sorry.

Q. Suppose we do this, suppose we take these matters up in this way:

Start with the Panhandle Field basic load, which is the [fol. 5317] first part of Schedule 3.

A. All right.

We are now going into the basic load for the Panhandle Field. The number of men that will be required over and beyond those working during the first six months of 1941 will be, for the year 1942 in the transmission department, two men, and that is all we expect to increase the transmission operating force in that field under the basic load through the year 1946.

The year 19—

Q. (Interposing) Suppose you give us the department first.

A. All right. The measurement and gas purchase operations for the Panhandle Field will show that an additional man will be added during the year 1943, and that is all that will be required in the measurement department through 1946.

In the compressor station operations—

Mr. Culton: (Interposing) This covers Hansford and Sneed only?

The Witness: This covers Sneed station, and it will take another operating crew of three men, which will be required as soon as the additional units are installed which are estimated to be installed during the year 1942, and that will be the only addition through the year 1946.

By Mr. Littman:

[fol. 5318] Q. May I ask you this question: When did you commence including the salary of these three men in your Schedule 3 for the Panhandle Field basic load?

A. I am in error on that, I believe—basic load—that should be 1945, instead of 1942, under the basic load.

I was thinking in terms of the future estimated load, and that will be reflected in the increase between 1944 and 1945, during which year the labor increases from $28,207 in 1944 to $35,707 in 1945.

Q. Just a minute, are you now speaking of the basic load in the Panhandle Field?

A. Yes, sir.

. . . . . .

By Mr. Littman:

Q. I cannot find those figures in Schedule 3, Page 1.

A. No, they are not in there. That is a total of all operating costs.

Mr. Culton: The figures are in the working papers, though?

The Witness: Yes, they are.

Mr. Wheat: And they are in the exhibit, are they not?

[fol. 5319] The Witness: Yes.

Mr. Wheat: But not separately stated?

The Witness: Yes. This is a total, shown in the exhibit, but I am reading from the detailed figures.

By Mr. Littman:

Q. The increase is reflected in the total figure shown in your exhibit?

A. Yes, that is correct.

Q. As of what day in 1945 do you commence to include the salaries of these three additional men in the compressor department?

A. When one is making an estimate of this sort, he does not think in terms of any certain day. He thinks in terms of a year.

Q. Well, Mr. Hinton, I assume that you have salaries in here for various periods, and I merely ask you what periods are shown in this schedule?

A. That will be for the calendar year 1945, because we do not know exactly upon what day the addition will be completed, but the amounts reflected in here which are, of course, estimated, are based on starting for the calendar year 1945.

Q. I see.

A. The reason I answered it that way, I did not want to tie myself down to any day, although the figure is shown [fol. 5320] here for the calendar year.

Q. I want to know what your figures in Schedule 3 show, and you have answered that by saying that the salaries for these additional men are included as of the first of the year in which you mention they are to be employed. Is that right?

A. Yes, if that is satisfactory with you, the way I have answered it. I just wanted to be sure that I was not committing myself to say that I make an estimate five years hence and base it upon any certain day.

Q. Your figures reflect just that, though, don't they?

A. Yes, but I thought it might be a good time to explain that I could be wrong a little bit about what they do reflect.

Q. Well, I wanted to make certain I understood what your figures reflected.

Now, for instance, the transmission department, in which you stated a moment ago that three additional men were to be hired in the year 1942—you have included the sal-

aries of those three men for the entire calendar year 1942, have you not?

A. That is right.

Q. And the same is true of all of the figures which you are about to give me?

A. Yes, they are.

[fol. 5321] Q. Unless you state otherwise?

A. They are so shown, but estimated.

Q. You are not at all certain, however, that the additional compressor station equipment will be installed in the first of the year 1945, are you?

A. No, it may be installed by the middle of 1944, and it may be the middle of 1945; but, over the entire 5½ year period, the answer will be pretty close to the same, I believe, because some will be ahead and some will be late.

Q. Well, have you included the additional compressor station equipment in your itemization of capital additions required for the basic load in Exhibit 42, Mr. Hinton?

A. I should have.

Q. Where does it appear and under what year?

A. It appears at the top of Page 25 under Item D, "Install Two Additional 1300 Horsepower Units at Sneed Station with Additional Scrubber, Cooling Tower and Auxiliary Engine."

Q. And under what year have you listed that?

A. 1945.

Q. Now, will you proceed, Mr. Hinton, with the number of additional men that will be hired in each department in the Panhandle Field under the basic load?

A. In the Hansford Station, we are now operating six units and it is contemplated that two additional units will [fol. 5322] be installed during the year that the two additional units will be installed at Sneed, I believe.

I get those two, the estimated and the future, confused—no, we do not. We show no labor increase at all for the Hansford compressor station.

Q. Now, that completes the additional men for the compressor stations?

A. Yes.

Q. Under the Panhandle Field basic load and the total increase is, three men will be hired in 1945?

A. That is right.

Q. Very well. What is the next one?

A. The production department. Now, in the production department, we show that we will need extra casual labor, but do not expect to add but one additional man in the field.

Mr. Culton: That is, regular employee?

The Witness: Regular employee, and he will be added during the year 1944. There will be considerable of the casual labor which will be used during the years 1942, '43 and '44, which will be capitalized because it will be in conjunction with the drilling of new wells.

By Mr. Littman:

Q. Well, then, you have not included the casual employees in this study?

A. There is some reflection in the increased cost there [fol. 5323] that you will note under operations labor and under maintenance labor. You will notice that we do have an increase, but that we only anticipate the addition of one regular employee.

Q. I do not know that I am clear on what you are attempting to convey. Tell me whether your figures for the production department reflect anything more by way of labor than the salary of the one man that you mentioned to be added in 1944?

A. Yes, they do. There is some slight increase. It is very slight.

Q. How much does it amount to?

A. I do not recall day by day, because it is prorated between the different operations labor and maintenance labor here, but it does not amount to a great deal because these men will probably only be used for two or three months out of the year.

Q. Now, you are referring to casual labor?

A. Yes.

Q. Is that the labor which cost is expected to be capitalized?

A. Nothing will be capitalized that is reflected on this sheet of the casual roustabouts.

Q. Well, you just stated the amount of casual labor increase would be slight.

[fol. 5324] A. That is right.

Q. I would like to have a general idea of the amount in dollars, because your definition of "slight" may not be the same as mine or someone else's.

A. Well, by "slight", I mean somewhere between $500 and $1,000, and that is not slight to me.

Q. Well, then, it is not slight?

A. But to the company, I feel that it would be.

Q. Now, do you mean $500 to $1,000 a year?

A. Yes.

Q. On and after what year?

A. That will be reflected through all of the years. I mean, you go out and you hire a man to work for a month or two months, and it is reflected in these figures here (indicating). Do you understand what I mean?

Q. Can't you tell me how many dollars is reflected in the figures shown in Schedule 3, Page 1, for casual labor, so we won't have to guess about it?

A. I can, by going back to a stack of detailed sheets which were worked on about that thing (indicating), and getting it out, but it didn't amount to enough that I felt it was necessary to bring those here.

The basis for these figures—

Mr. Culton: (Interposing) Your pointing indicated about six or eight inches when you said that the sheets [fol. 5325] were "that" thick.

The Witness: I do not believe they are over 2½ or three inches, but they are 14-column paper. There was a tremendous amount of work to get those figures, and I did not include all of them in my working papers.

I just tried to explain that we would have some slight additional expense. The total increase that we have estimated for this period is very, very little.

By Mr. Littman:

Q. That is for the production department?

A. Yes, for the production department.

Q. The $500 to $1,000 per year which you just mentioned for casual labor represents an increase in each year over the basic year, is that right?

A. Yes, and not over the previous year.

Q. And that will start in what year?

A. That will start, in all probability, next year, and again the conditions have changed somewhat since we made up this estimate because we have been revamping our well heads under our maintenance accounts; and we have redesigned our well heads, and if it is possible to get material, we will need more casual labor than if it is not possible and, therefore, the casual labor will be governed somewhat by the material situation.

Q. Well, does that complete the production depart-
[fol. 5326] ment additional labor?

A. Yes, that does complete the production department.

Q. Will you please continue?

A. The next department is the land and lease department. It is carried on our books as the land department, and the amounts for labor remain the same through the year 1946.

Our royalties show an increase—

Q. (Interposing) Let's just confine ourselves to the lands for the present, Mr. Hinton.

A. All right.

Q. I think it will be less confusing when we read the record.

A. That is all on the labor for the land department which will be used in the Panhandle Field.

Q. Under the basic load?

A. Under the basic load.

The dehydration plant located at the Sneed station shows no substantial increase for the period ending with 1946.

Q. Just a few dollars?

A. Just a few dollars.

Q. And, of course, that does not contemplate the hiring of additional labor?

A. That is correct.

Q. Now, does that complete the additional labor re-
quirements under the basic load?

[fol. 5327] A. For the Panhandle Field?

Q. For the Panhandle Field.

A. Yes, it does.

Q. Now, will you give us the comparable figures for the Hugeton Field under the basic load which are reflected in Page 3 of Schedule 3 of your Exhibit No. 43?

The Witness: The estimated increase in the operating personnel for the transmission department, Hugoton Field, under the present load, would show that we will need three additional men in 1942 and two additional men in 1944.

Mr. Littman: Will you please read that answer?

(Whereupon, the last answer was read by the reporter.)

The Witness: For the measurement and gas purchase operations for the year 1942, we will add one man in the Hugoton Field, Oklahoma, and that will be all, in the main-
[fol. 5328] tenance department, for the years to 1946, I believe.

For the production department in the Hugoton Field—

By Mr. Littman:

Q. Just a minute. Would you mind giving us the compressor department, which appears to be next on your list?

A. There being none in the Hugoton Field under the basic load, it will not have any.

Q. Yes, you have blanks going all the way across, haven't you?

A. That is right.

Q. Now, the next, you say, is the production department?

A. Yes, that is right, and other than casual labor, we do not expect to add more men for the operation.

However, we have cut that pretty thin because, under the basic load, we are attempting to use a combination meter man, that is, a meter engineer, and use that man for a chart changer, in order to operate that as cheaply as possible.

Q. How much of an increase do you expect in casual labor over the base year?

A. There will be some increase in casual labor amounting to approximately $250 a year.

Q. All right. What about the land and lease department?

[fol. 5329] A. For the land and lease department, we are contemplating that there will be some required labor cost, and that is reflected by the figures shown, an increase

of from an estimated $5,000 in 1942 to an estimated $6,000 in 1946.

That way that will probably be carried on will be that there will be a lease man that will be sent in to this territory, part-time, whenever the regular lease employees are not able to take care of all of the necessary details.

. . . . . .

By Mr. Littman:

Q. Am I to understand the increase over the basic load in the lease and land department is represented by the salary of a part-time employee in the years 1945 and 1946?

A. That will be in all years. In 1943, we believe that it will not be necessary, probably, to spend so much time.

The figure of $6,000 not only reflects the amount of time that would be used, but there was some allowance made in there for a salary increase, after talking to the head of this department.

Q. Now, that completes the increased labor under the basic load for the Hugoton Field, does it not?

A. Yes, sir.

[Fol. 5330] Q. Will you state the increase for the Panhandle Field under the estimated future load, which is reflected in your Schedule 4, Pages 1 and 2?

A. The estimated labor cost, operations and maintenance, for the transmission department, will show there will be a requirement of three additional men for the year 1942, and it is believed that those three men will be all that will be necessary through the year 1946.

The estimated labor requirement increase for the measurement and gas purchase operations will show that, in 1943, there will be a combination meter man and chart changer added, which will be charged to measurement.

Q. That will be one man?

A. That will be one man, and that will be all that will be added through 1946, as we will only have an additional fifteen wells to look after.

Q. And that addition is true, under both basic and anticipated loads, is it not?

A. Yes, but there is a difference in the operations to some extent, which I do not believe that I gave much consideration to, but it would be justifiable to increase the measurement labor operations for the estimated load slightly over the basic load.

Q. Does that complete the measurement department?

A. Yes, sir, for the Panhandle Field, under the esti- [fol. 5331] mated load.

Q. Estimated future load?

A. All right, estimated future load.

Now, we will go to the compressor station located at Sneed and find that we add the new operating crew in the year 1942, which will be required to operate the additional 2600 horsepower added.

Q. That crew consists of how many men?

A. Three, and an auxiliary engineer.

Q. That makes four men? A. Yes.

For the compressor station at Hansford Station, the operating labor remains about the same, because it is possible for the present crew to operate the additional units.

The labor for the production department in Texas shows that one field man will be added in 1944, and that will be the only regular employee. Some casual labor is reflected.

Q. But not very much? A. Not very much.

For the land department under the future estimate load, we show a constant figure throughout the years, no increase in the labor.

The dehydration plant shows an increase of approximately $2,000, which is accounted for by the number of —wait a minute—we are just talking about the labor, and the labor will remain constant for the dehydration [fol. 5332] plant.

That completes the Panhandle Field under the estimated future load.

Q. Now, will you give us the comparable figures for the Hugoton Field under the estimated future load?

A. Under the estimated future load, the transmission department will require one subforeman and four men in the year 1942. In the year 1943, we will add one-half man and, in 1944, one-half man; in 1945, one and one-half man and, in 1946, we add another half-man.

Q. What do you mean by "half man", a part-time man?

A. No, I mean a man who will probably start to work about the middle of the year, at the time of the year that we are trying to catch up on our painting of the meter runs and our buildings, and he will be there for the winter operation.

The next year, why, there will be another man that will be taken on during the summer time; I mean for a half-year period rather than a half man.

Q. What is the number of men for 1942?

A. There will be one subforeman.

Q. One subforeman? A. Yes.

Q. Any others? A. Four men.

Now, for the measurement and gas purchase operations [fol. 5383] in the Hugoton Field, 1942, we put on a combination meter man-chart man, and he will be on the measurement payroll altogether. Sometime during the year 1945 or '46, there will be a man put on.

The way we made this estimate was to go back and determine how many meters it was possible for one man to take care of, and then we showed that the increase in labor was governed by the number of meters, so the exact time that this will happen will be pretty well substantiated by the number of meters which will be installed upon those dates.

Q. Are you adding a man in 1945 for that purpose?

A. Well, I would say that between 1944 and 1946, we will have added a full-time man and it may be necessary that he will be another combination man.

Q. Does that complete the measurement department?

A. Yes.

Now, for the Hugoton station, commencing operations in 1946, it was necessary that we make a pretty far-fetched estimate on this, because we do not know what the conditions will be out there, but we just based it on what the

other stations were costing as nearly as we could and used common judgment and put a figure of $10,000 down for labor. That is a very round figure.

Q. How many men does that provide for?

A. That will be one chief engineer and four men.

[fol. 5334] Q. How about the production department?

A. The production department contemplates the addition of one man in 1942; one man in 1944, and one man in 1946.

The land department will carry on operations under the future estimated load in about the same manner as they will under the basic for present load.

Q. In other words, there will be no additional labor hired under either load?

A. No, it will be just some help-out men coming in at various times.

Q. Do you know what the average salary was for the employees in the base year?

A. No, I do not, because the labor costs were taken from the records as a base. Now, if I had the number of men that we used in each of those departments, if I had that detail data here, why, it would be a simple matter to divide it into this labor cost and tell you, but I am not able to tell you the average salary of the men at that time.

Q. Can you tell us the average salary of the men that you added in the years subsequent to your basic year, 1941? A. Yes.

Q. All right. Will you give that to us?

A. I thought I could do it by merely subtracting here. [fol. 5335] In the production department, I see that I am not able to because we have estimated, in all cases, the amount of our regular employees that will be used in the drilling of wells and that amount will be capitalized and not shown as an operating expense.

* * * * * * * * *

[fol. 5337] By Mr. Littman:

Q. Mr. Hinton, you show throughout Schedules 3 and 4 certain items of maintenance under the transmission department, the measurement department, the compres-

sor station department and production department, do you not? A. Yes.

Q. Now, that item of maintenance for each of the departments named includes materials as well as labor, does it not? A. That is right.

[fol. 5338] Q. Will you state how you arrived at the amounts included in your schedule for materials which are included within the meaning of the term "maintenance"?

A. Yes. We took the previous costs and after giving everything that we felt was due consideration, we adjusted those costs for each year which could be expected that would cover the same items as were included in the base figure which we used.

Q. You did not use any particular ratio——

A. (Interposing) No.

Q. (Continuing)—in arriving at the materials cost for maintenance?

A. No, sir. By talking with the field men, the superintendents, we knew that there would be certain old wooden gate valves boxes that would have to be replaced and there are innumerable items that go in to make this estimate.

Q. Now, what did you include within the meaning of the term "maintenance"? Give us a number of items which you have included as maintenance under the transmission department, for example.

A. Well, I would say that one of the maintenance costs is incurred in the maintenance of the property which shows above the ground, although that is a very small portion of the system.

Now, that is in the gathering system. We have a meter [fol. 5339] at each well. It is necessary that this meter be housed. We have the meter run to keep looking in first-class shape and they all do look just that way.

We are forced at various times to do considerable work on our meter houses, due to the fact that that is a cattle country, and they rub against the houses, and during the past two or three years, it has been necessary to build fences around a great many of these meter houses, and that has been a maintenance cost.

Then, on a gathering system, it is necessary that the pipe line system be fully equipped with drips and syphons to enable the blowing out of water and gasoline which collects in the line, and each of those drips have two gate valves and it is necessary that the crew go around and see that those gate valves are properly cleaned and lubricated before the winter operation starts.

We have found in several cases in the Hugoton Field, that it has been necessary to replace pipe between the well head and the meter run, and we have done considerable work on the grading of the ditch in which the pipe is located so that it will drain to a drip.

Now, that is all termed "maintenance labor," and that is only a small part of the items which could be named.

Q. You considered the replacement of the pipe between the well and the meter as an item of maintenance? [fol. 5340] A. Yes.

Q. What is the distance of that pipe?

A. From 50 to 70 feet, usually.

It does not all have to be replaced. It develops leaks and it is stripped and examined, inspected, and the part is replaced that appears to be faulty.

Q. Well, in determining your item of maintenance, both as to materials and labor, did you follow the Federal Power Commission's Uniform System of Accounts?

A. Precisely.

. . . . . .

[fol. 5341] By Mr. Littman:

Q. Will you please refer to Page 1 of Schedule 3 of Exhibit 43? I note that in Line 23, which shows the expense for royalties, that the amount sharply increases from 1940 to 1941, from $101,182 to $132,828, respectively, and that there is a rather substantial increase in each succeeding year through 1946.

Will you explain the reasons for those increases?

A. Those royalties are in proportion to the amounts of gas which were taken during the year 1940 and 1941, and those that we estimate for the years 1942, 1943, 1944,

1945 and 1946, and the price is governed by the proportion of each priced gas that we expect to produce to make up that total amount.

The sharp increase from 1940 to 1941 reflects not only an increase in gas but a change in the royalty rate in the Panhandle Field from four cents per M. c. f. to 4½ cents.

Q. In other words, there is an increase of one-half of one cent per M. c. f. for gas produced by Panhandle Eastern in the Panhandle Field?

A. The royalty portion of that gas, yes, sir.

Q. That is from 1940 to 1941?

A. That is correct.

Q. Now, the 1941 figures reflect the increased royalty rate?

[fol. 5342] A. Yes.

Q. And that is true, in so far as the books of the company are concerned, too?

A. That is correct.

Q. And all increases from January 1, 1941, to the end of 1946 are the result, not of increases in the rate of royalty, but in increased amounts produced by Panhandle Eastern in the Panhandle Field. Is that correct?

A. That is correct.

Mr. Culton: In other words, it reflects the changes in percentage between your purchased gas and your produced gas?

The Witness: That is right.

By Mr. Littman:

Q. Another way of saying it is that the unit cost per M. c. f. of royalties does not change from January 1, 1941, through 1946?

A. I am not so sure [than] January, 1941, is the correct date for that. I don't believe that that increase in royalty became effective until sometime during the latter part of January rather than the first of January.

Q. 1941? A. 1941.

Q. While on the subject of royalties, the increase in royalties reflected for the Panhandle Field under the esti-[fol. 5343] mated future load for the years 1941 to 1946, inclusive, is occasioned by reason of the increased amount of production in each year?

A. You are referring to Page 1 of Schedule 4?

Q. That is right.

A. Yes, that is correct.

Q. Now, what about the Hugoton Field figures that are shown in Schedules 3 and 4? Do your figures show or reflect any increased rate of royalties throughout the periods shown from 1940 to 1946, inclusive?

A. No, not on royalty. That is based entirely upon the amounts of gas which we expect to produce from our wells during those years.

Q. In other words, no increase in unit cost, in so far as royalties are concerned, throughout the periods shown for the Hugoton Field?

A. That is correct.

Trial Examiner: Mr. Hinton, may I ask whether, at some point in these exhibits, the average cost of production at the well head is shown?

The Witness: It is not shown in these exhibits.

Trial Examiner: It has not been computated at any point, and you have not covered that in your testimony, I believe?

The Witness: No, sir, I have not.

By Mr. Littman:

[fol. 5344] Q. These figures shown in Schedules 3 and 4 cover the costs which you enumerated earlier today, west and south of the Liberal compressor station?

A. That is correct. That portion of our system.

. . . . . .

[fol. 5350] By Mr. Littman:

Q. I call your attention, Mr. Hinton, to the item of gross production tax which appears in each of your Schedules 3 and 4 and which appears for the basic load on Page 2 of Schedule 3, in Line 8.

A. Yes.

Q. Will you explain why the gross production taxes in-

[fol. 5351] crease under the basic load in the Panhandle Field? A. Yes, just a moment.

Mr. Culton: It is, also, due to the change in the apportionment of the purchased gas and the produced gas, isn't it?

The Witness: We have a different gross production tax in each State, and I want to be sure that I am right before I go ahead. I mean a different type of a gross production tax.

The figure for the gross production tax, shown in Line 8 of Page 2 of Schedule 3, is increased in the amounts shown, due to the fact that the gross production tax in that State is based upon 5.2 percent of the value of the gas.

As we increase the amount produced, the gross production tax is, likewise, increased.

Mr. Littman: Will you please read the last answer back?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. Are you referring to the State of Texas?

A. Yes, that is the Panhandle Field, basic load, Page 2, Schedule 3.

Q. Well, that isn't the only reason for the increase in total for each succeeding year, is it?

A. Yes. That rule applied to the amounts which we expect to produce through those years will get us the figure that is shown under Line 8 of this Page 2, Schedule 3.

[fol. 5352] Q. Oh, well, then the increase is occasioned by reason of the increase in production from your own wells in each successive year?

A. That is correct.

Q. And the increase does not, then, represent an increase in unit cost but an increase in over-all cost by reason of your production of a greater number of units in each succeeding year shown?

A. That is correct.

Q. Now, is that same condition true of your other schedules and your other bases, to-wit, Schedules 3 and 4?

A. For the gross production tax?

Q. Yes.

A. Yes, that is true.

Mr. Culton: There is another reason for the increase on the anticipated load, though, isn't there?

The Witness: Well, I believe his question was that it did not affect the unit cost of gas.

By Mr. Littman:

Q. That was my question. In other words, under the anticipated load, if I correctly understand what you are driving at, Mr. Culton, there will be still greater amounts of gas produced and, therefore, more units and, therefore, more total dollars?

A. That is correct.

[fol. 5353] Q. Now, I note that the item of delayed rentals decreases under both leads in the Panhandle Field and increases in the Hugoton Field.

Will you please explain that situation?

A. I would like to refer to this just a moment.

Yes, I will be glad to explain that. The delayed rentals are on the decline in the Panhandle Field, due to the fact that we are drilling,—we anticipate the drilling of acreage which is now held by delayed rentals.

As soon as the well is drilled, it is no longer necessary to pay that delayed rental, therefore, the total amount is reduced.

Q. And in what year do you expect to drill your last well in the Panhandle Field? A. 1944.

Q. No drilling after 1944? A. No.

Q. Why are you still paying delayed rentals in 1945 and 1946 in the Panhandle Field, Mr. Hinton?

A. Because we have under lease some State land on which it is necessary to pay a delayed rental after it has been drilled.

Mr. Culton: It is really a lease rental, rather than a delayed rental.

The Witness: That is right.

[fol. 5354] Mr. Culton: You have to pay a certain rental in addition to royalties?

The Witness: Yes.

By Mr. Littman:

Q. And is that entire amount represented by the $3,097 figure shown in Columns "G" and "H" of Schedule 3, Page 1?

A. If is not. That is the total cost of the lease rental which is required in addition to the drilling of the well, it is not as great as $3,097.

Q. Well, how much is it?

A. That is 25 cents an acre.

Q. Can you give us the total?

A. There are 1,921 acres in that lease. Do you want me to explain the rest of it?

Q. Yes.

A. The rest of the amount is due to the fact that we have some scattered acreage in the Panhandle Field which is not of large enough size to drill, but which we feel is of sufficient value to continue to pay those rents, because it has good trading possibilities.

By "good trading possibilities", I mean that that acreage may be exchanged to Northern Natural or Cities Service or Hagy, Harrington and Marsh, or some company that carries leases in both fields, whereby they would ex-[fol. 5355] change some acreage located in the Hugoton Field for the scattered acreage which we have in Texas which might be adjacent to a lease that they would develop.

Q. I believe you have not yet touched upon the subject of the increase in delayed rentals expense for the Hugoton Field.

A. I am sorry, I had forgotten that part of your question.

The increase in the delayed rentals in the Hugoton Field is accounted for by the fact that on the primary term of a number of a lease which covered a sizeable quantity of acreage, the rental was 25 cents per acre.

It is no longer possible, we find, to renew leases in the Hugoton Field for a delayed rental consideration of 25 cents per acre, therefore, the increase of these rentals reflects an increase from 25 cents to 50 cents an acre and, also, reflects a renewal benus which is becoming prevalent in that field.

Mr. Culton: In other words, you expect to be able to extend expiring leases by payment of those sums?

The Witness: Yes.

By Mr. Littman:

Q. Will you explain why your delayed rentals expense for the Hugoton Field is greater under the basic load than it is under the anticipated load for the years 1943 to [fol. 5356] 1946, inclusive?

A. Referring back to the capital expenditures shown under the basic load in Exhibit 42 for the years mentioned, you will find that we do not anticipate drilling the same number of wells.

The smaller number of wells which we anticipate drilling under the basic load means that we will be required to hold a larger number of acres by delayed rentals, thus holding up the amount shown under the basic load.

Mr. Culton: In other words, every time you drill a well, you stop delayed rental on 640 acres?

The Witness: That is right, unless it is State land.

By Mr. Littman:

Q. Mr. Hinton, there is an item on Page 3 of Schedule 3 in Column "E", Line 26, renewal bonus for the year 1943, in the amount of $49,111, a very great increase over the amount for the preceding year, 1942, which was $15,075.

Will you explain the reason for that sudden increase?

A. That is due to the fact that during the year 1933, we acquired a large amount of acreage, and this same amount of acreage expires in 1943.

Based upon the renewal bonuses that have been [being] paid in that field, that amount of expense was estimated to cover the number of acres that would have to be renewed during the year 1943.

[fol. 5357] Q. You wouldn't have such a large and sudden increase again for another ten years, would you?

A. That is right. Well, now, wait a minute. I can't say exactly because I don't remember whether through the years after 1933, we acquired any great amounts of

acreage in any of the years that might expire during any of those years after 1946.

Q. So that, if you reflected that sudden increase for the Hugoton Field for the year 1943 by reason of the renewal bonuses you would be, in a measure, distorting the unit cost for that particular year, would you not, because the amounts expended apply over the ten years, do they not?

. . . . . .

[fol. 5359] By Mr. Littman:

Q. Do you understand my question, Mr. Hinton?

A. I believe I do, and I would say that the only way to determine whether that should be applied that year would be to find out what the cost for the next ten years is going to be, and see if that was an approximate share; I mean, that you would have to prorate it over the ten years' period.

Trial Examiner: I was going to ask whether or not that would be governed to any extent by the Commission Rules.

Do you know, Mr. Littman?

Mr. Culton: I think it would, Mr. Examiner, and my understanding is that nobody has yet determined, as far as the Commission is concerned, whether that is a capital expenditure or an operating expense.

Trial Examiner: Well, is it not, from the testimony of the witness, largely an accounting proposition?

Mr. Culton: I think it is.

By Mr. Littman:

Q. Well, you haven't ascertained what the fact would [fol. 5360] be over the next ten years, have you, Mr. Hinton?

A. No, I haven't ascertained that. You would have to find out whether the life of the field would extend beyond the next ten-year required payments and it might be necessary to prorate that cost backward as well as forward.

Q. Mr. Hinton, is it a fact that the amounts shown in Line 26 of Page 3 of Schedule 3 for renewal bonuses in each year include one year of delayed rentals?

A. No, it is not.

Q. Now, does your answer apply as to both the Hugoton and Panhandle fields?

A. That applies to the Hugoton Field only.

Q. And what is the fact as to the Panhandle Field?

A. The same thing in the Panhandle Field will run from $5 to $15 per acre.

Trial Examiner: I don't quite understand that answer.

Mr. Littman: I don't understand that answer.

The Witness: As I understood the question, he asked me whether that renewal bonus, as shown on Page 3, of Schedule 3, applied to the Panhandle Field as well as the Hugoton Field. Am I right?

Mr. Littman: Yes.

The Witness: And my answer was, no, that it did not, because in the Panhandle Field that same renewal bonus would run from somewhere around $5 to $15 per acre, [fol. 5361] excluding the extreme marginal acreage.

In other words, it requires considerably more money to renew a lease in the Panhandle Field at this time than it does in the Hugoton Field.

By Mr. Littman:

Q. What I was driving at was this: Whether or not the renewal bonus in the Panhandle Field includes one year's delayed rentals?

A. No, it does not.

Q. And if does not include one year's delayed rentals in the Hugoton Field, either?

A. No, sir, it does not.

Q. Now, the reason for the increased cost of operating the compressor stations under both the basic and anticipated load is because of the increased cost of labor and the increased cost of fuel? Is that right?

A. That is true under the—yes, that would answer the question, because your pressure decline increases your fuel cost. I think that could be answered very simply.

Q. And your figures, your dollar figures throughout Schedules 3 and 4 include the cost of fuel required to operate the compressor stations? A. They do.

Q. Well, will you look at your work papers and give us an example in one or two or three years, to show approxi-
[fol. 5362] mately how much that runs?

A. Do you mean how much it runs for a year, the fuel?

Q. Yes.

A. The cost of fuel under the present load base for the Sneed station was $44,306 in 1940; $54,223 in 1941. It is estimated that it will be $67,457 in 1942; and $72,417 for 1943; $76,385 for 1944 and $82,337 for 1945, and $87,297 for 1946.

Q. Now, those amounts are included and reflected in the amounts shown in Schedule 3, Page 1, Line 14, is that correct? A. Yes, that is correct.

Q. Did you give the amount included in 1940? A. Yes.

Q. What was the amount? A. $44,306.

Q. And that amount was taken from the company's accounting records? A. That is correct.

Q. Now, would you be so kind as to read the same comparable figure for the Hansford station, which is shown on the same page?

A. The Hansford station did not operate in 1940.

Q. Yes, I note you don't start until 1941.

A. Do you want those for the years?

[fol. 5363] Q. Yes, for each of the years, the amount of fuel cost included in your figures shown in the Schedule.

A. For the year 1941 it was $31,560; for the years 1942 through 1946, the amount was $25,800.

Q. And is that included and reflected in the figures shown in Line 12 of Schedule 3, Page 1?

A. Yes, you will note that that is a decline over the 1941 cost.

Q. Will you state the fuel costs that are included for the Hugoton Field, basic load, on Schedule 3?

A. None.

(Discussion off the record.)

By Mr. Littman:

Q. Will you give us the comparable figure, that is, the fuel cost that is included for the Panhandle Field under the estimated future load as between Hansford and Sneed shown in Schedule 4, Page 1?

A. You mean "as between" or "for each"?

Q. I meant, for each.

A. The fuel figure for the Sneed compressor station for the year 1940 is $44,306; for 1941 it is $54,223; for 1942 it is $73,850; for 1943 it is $85,710; for 1944 it is $92,147, and for 1945 it is $108,469; for 1946 it is $115,074.

Q. And the figures which you just read are reflected [fol. 5364] in, and included in, the figures shown in Line 14 of Page 1 of Schedule 4 of Exhibit 43?

A. Yes, that is correct, they are so reflected.

Q. Now, will you proceed to give us the Hansford station figures which are shown in Line 12 of that page?

A. For the year 1941, $31,560; for 1942 it is $49,500; for 1943 it is $54,450; for the year 1944 it is $55,200; for the year 1945 it is $60,600; and for the year 1946 it is $60,600.

Q. Now, Hansford and Sneed compressor stations used natural gas exclusively for fuel, did they not? A. Yes.

Q. And all of the fuel figures that you have given us thus far are natural gas cost, exclusively.

A. That is correct.

Q. Now, will you please give us the comparable fuel cost figures reflected in Schedule 4, Page 3 of Exhibit 43?

A. Which schedule, please?

Q. Schedule 4, Page 3, for the Hugoton Field estimated future load.

A. I believe you will have but one figure for the year 1946.

Q. That is correct.

A. And that figure will be $9,632.

Q. Mr. Hinton, doesn't your estimate of increased pro- [fol. 5365] duction include the quantities of gas used by Panhandle Eastern as fuel in its own operations?

A. It does.

Q. Page 15 of Exhibit 42, I believe, states that very clearly, does it not?

A. It should if it doesn't.

Q. At that point you say, "this estimate was the same as that contained in Exhibit 40, which is in connection with his testimony, and we so adjusted the gas at 16.4 pound base with an addition for the gas required for power and loss due to line leakage. The estimated requirements are as follows:"

Then follows the amount of gas which includes the amount used in your own operations.

A. That is the way it should read.

Q. And that, of course, includes the amount of fuel used in the compressor stations?

A. That is correct.

Q. Inasmuch as the increased royalties, production, operation and maintenance, which you estimate and show in Schedules 3 and 4, include the cost of producing gas, the increase for fuel is a duplication, is it not?

A. No, sir.

Q. Why?

A. Not if I understood your question correctly. Would [fol. 5366] you state that question again, please?

Q. Since the increased royalties, production, operation and maintenance include all the costs of producing gas, the increase for fuel is a duplication, is it not?

A. No, sir, it is not.

Q. Well, who does Panhandle Eastern Company pay for this fuel?

That is, to whom do they pay these amounts that you have read into the record as the cost of fuel?

A. They deduct that. It has to be deducted from their potential amount of money that would be obtainable for that gas.

Mr. Culton: In other words, it is reflected in the sales on the other side of the ledger?

The Witness: That is right. If it were not for the fact that we had to have the fuel, the sales would be far beyond what they are.

They are influenced by the percent required for fuel.

By Mr. Littman:

Q. And to whom do they sell this gas that Mr. Culton suggested to you a minute ago?

A. They don't sell it.

Q. Well, Mr. Hinton, there certainly is a duplication in your exhibit.

Mr. Culton: We think you should examine the ac-
[fol. 5367] countant about that. I think you will find you are under a misapprehension, yourself.

By Mr. Littman:

Q. Well, do you know of your own knowledge whether you have actually duplicated the fuel cost in your Exhibit 43?

A. I would say that it has not been duplicated, but that only proper allowance has been made for it.

Q. But you are not sure about it?

A. As far as I am concerned, it has not been duplicated. It is a justifiable allowance.

Mr. Goodman: How do you derive it, Mr. Hinton? What figures do you pull out to get this fuel cost?

The Witness: The worth of the gas to Panhandle Eastern Pipe Line Company, that is established by the Accounting Department.

Mr. Goodman: Then, it is not a cost figure, it is a valuation?

The Witness: I expect that would be a better way of saying it.

Mr. Goodman: But all cost figures for the quantities of gas produced, both sold, lost and used, have been excluded?

The Witness: Yes.

Mr. Goodman: But on top of that you add a certain valuation figure, representing additional value over and above cost for the gas which was used as fuel?

[fol. 5368] The Witness: No, we include—

Mr. Goodman: (Interposing) You say "no", but there is no question but what you have done it, on the basis of your answers, Mr. Hinton. Wouldn't you like some time to think it over?

The Witness: No, I don't need time.

By Mr. Littman:

Q. Mr. Hinton, let's get at it this way:

You include,—and this will take just a minute, if your Honor please—in your tables, Schedules 3 and 4, every dollar of expense required to produce every M. c. f. which the company is going to use as fuel to operate its compressor stations. Is that right?

A. That is right.

Q. On top of that, you have added the amounts which you have just read into the record, which the Accounting Department says it has evaluated as the cost of the gas used as fuel for compressor stations, have you not?

A. Yes.

Q. So you have duplicated by that procedure every dollar which you include in your exhibit for the cost and expense of producing the gas which will be used as fuel in your own operations, inasmuch as you have already stated that your total amounts of gas produced include the [fol. 5369] amounts to be used as fuel. Is that not right?

A. Yes, and if it was not done that way, there would be a different value of that gas at the sales end of the line.

Q. Well, how is this value of gas determined?

A. It is determined by averaging the worth of the gas into the line, that is in the line owned by the company.

Q. But all of that is added on top of all those other expenses for each and every M.c.f. that you have included in your exhibit. Is that not right?

A. In answering that question, I would say that you would have to make allowances elsewhere if it was not carried on in the manner in which it is.

Mr. Goodman: Where would you make those allowances?

The Witness: You would make it in the price of gas. In other words, this gas down in the field would have very little value if we did not use gas to compress it and get it to the market.

Mr. Goodman: All right, but you have already indicated the costs of producing the total gas which you have produced?

The Witness: That is right.

Mr. Goodman: Now, you use up some of that gas?

The Witness: That is right.

Mr. Goodman: Your cost has not increased any, you haven't spent any more money, is that right?

The Witness: Why, we certainly have, Mr. Goodman, because if we could transport the same amount of gas to [fol. 5370] the sales end of our line as we put into Liberal without any deduction for fuel, we could afford to sell our gas at a lower price.

There must be some allowance made there. Whether I am talking about it in the strict, proper accounting method or not, I do not know. I am not an accountant, but I do feel that the method in which it has been handled is justifiable.

Mr. Goodman: You mean you are just out, then, that quantity of gas which you have produced?

The Witness: That is right. We pay for it and if we did not have an allowance to get that back, why, it would show that we had taken a decided loss in dollars.

Mr. Goodman: Well now, shouldn't you, then, deduct from the value of the gas consumed what you have already paid for it?

The Witness: I don't know, Mr. Goodman, I believe that is an accounting problem and would have to be decided by the Accounting Department.

As I see it, there are several ways in which it might be handled.

By Mr. Littman:

Q. Let me ask you this: If there is an offsetting figure entry in the books to offset the amount which you used and took from the books as the actual cost of gas used in fuel, then, would you admit that you have made a duplica- [fol. 5371] tion in Exhibit 43 for the cost of fuel?

. . . . . .

[fol. 5372] C. H. Hinton a witness, having been previously sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Hinton, have you had an opportunity, over the noon recess, to reflect a little about these fuel costs which are included in your Schedules 3 and 4 of Exhibit 42?

A. Yes, sir, I have.

Q. And do you now say that you have duplicated in these schedules the cost of fuel used in compressor station operation?

A. I believe the answer that I first gave was correct, that whatever it is, the application of the amount of the fuel for the compressor station is reflected in the selling price of the gas.

Q. I am afraid I do not understand that answer.

A. That is, it is merely an accounting matter, and there is a credit shown which is reflected in the accounting records and the amount of the power cost is shown as a credit upon the company books.

[fol. 5273] Q. And should be credited against your Schedules 3 and 4 as well?

A. Yes, I would say that a proportionate part of it should.

Q. In other words, there is a duplicattion, you say now, to the extent of at least a proportionate part of it?

A. Yes.

Mr. Culton: By that you mean if you pay no attention to the receipt records on the account, there would be a duplication?

The Witness: Yes.

Mr. Culton: But by considering that circumstance, there is no duplication at all?

The Witness: The duplication will be erased as soon as the credit which will appear on the accounting records is applied to this proportionate part of it with the exception of the cost of purchased gas which is not shown in Exhibit 43.

By Mr. Littman:

Q. In other words, if I correctly understand you, the Federal Power Commission cannot use these figures shown in Schedules 3 and 4 of Exhibit 43 for purposes of com-

putting the effect of these figures upon the rates for the periods shown until and unless a credit is made against the totals for the cost of fuel used in operations?

[fol. 5374] A. I believe that that would be correct.

Q. Now, in order that we may have no misunderstanding about it, your operation and maintenance costs shown and totaled in Schedules 3 and 4 of Exhibit 43, include all of the operation and maintenance costs for every M. c. f. gas contemplated to be used and used, in fact, by Panhandle Eastern as fuel?

A. No, it does not include the purchased gas. By that I mean the gas which is purchased from other vendors than Panhandle Eastern.

Q. Would you say my question was correct if I were to confine it to the number of M. c. f.'s which are shown in Schedule 5 of Exhibit 43?

A. Yes, I believe that would be approximately correct.

Q. Well, it would be wholly correct, wouldn't it,

A. I say approximately, because those figures shown in Schedule 5 are estimated figures. If we assume that my estimate is 100 percent, then I will say that your conclusion is wholly correct.

Q. Well, your cost of operation figures shown in Schedules 3 and 4 are the estimated costs to produce the estimated amounts of M. c. f.'s shown in Schedule 5 of Exhibit 43, is that correct?

A. Yes, that is correct.

Q. Now, may we then not agree that in so far as the gas [fol. 5375] expected to be produced by Panhandle Eastern, in so far as that gas is concerned, that you have included in your Schedules 3 and 4 the cost of operation and maintenance for all of that gas which will be used as fuel, is that right?

A. Yes, speaking as of a point of location at the intake side of the compressor station, that would be correct.

Q. What compressor station?

A. Any compressor station that uses fuel.

In this case, it would be Sneed and Liberal, meaning Sneed for the Panhandle gas and Liberal for the Hugoton gas, up to the year 1946, on the estimated schedule where that portion of the gas that goes through the Hugoton system is again compressed, that is, I refer to the proposed station which will be located near Hugoton, Kansas.

At that time, we would have to apply that to the intake side of that proposed station.

Q. Well, we have all the costs of operation and maintenance included in Schedules 3 and 4 in order to produce the total number of M. c. f.'s which are shown in Schedule 5 of Exhibit 43 and which include the M. c. f's out of that total that will be used as fuel, is that correct?

A. I believe that is correct, but I had better check that back to be sure.

Will you repeat that question, please?

(Whereupon, the pending question was read by the reporter.)

[fol. 5376] The Witness: Yes, that is correct.

By Mr. Littman:

Q. Now, in addition to those maintenance and operation costs, you have included an additional and separate amount in each of the years for fuel and in the amounts which you read into the record late this morning?

A. That is correct.

Q. Over and above the costs to which I have just referred?

A. No. Are you referring to Schedules 3 and 4?

Q. Yes.

A. No, they are reflected in the schedule, those fuel costs are reflected in those schedules.

Q. I mean, over and above the operations and maintenance costs?

A. Yes. As I have said, that is with the exception of the gas purchased from others.

Q. Well, I am coming to that now.

Assuming that the Commission were to accept the totals for these schedules as the operation and maintenance costs west of Liberal, and assuming that the Commission were, in addition thereto, to include in determining the rates for the future the cost of gas purchased, is it not a fact that under those circumstances the entire amounts which you read this morning into the record of fuel costs which are [fol. 5377] included in Schedules 3 and 4 would have to be credited against the total which I just stated?

A. Yes, they would have to be credited by the amount of the gas purchase contracts. Also, there would have to be an allowance made for the depletion and amortization required in the system to produce the amounts of gas which would come from company wells.

Q. And the real credit would be the same rate per M. c. f. as that which you charged in these schedules for fuel?

A. The credit would have to be the same rate, yes, sir, and I believe that that is compulsory under the Federal Power Commission System of Accounting.

Q. Now, Mr. Hinton, on that particular subject, am I correct in understanding that the books of Panhandle Eastern show separately as an item of expense the cost of fuel used in the company's operations, is that right?

A. That is correct.

Q. Now, further on down the expense side of the books, there is a credit in an equal amount made, is that not correct? A. That is correct.

Q. In other words, it is put in to expense and then taken out?

A. Yes, and the reason that it is put in, it is an arbitrary figure selected for the purpose of comparing the cost of operations at the various compressor stations located along [fol. 5378] the system.

Q. In other words, if you did not make a credit and take it out later on, you would have a duplication in the expenses shown on your books to that extent, would you not? A. Yes, that is true.

Q. And, as you state, it is shown that way on the books of the company in order to merely show, as a separate item, how much it costs each year to supply fuel for operations, is that right?

A. That is as I understand it, yes, sir.

Q. Now, what you did, if I understand you correctly, was to take the fuel-cost figure for your base year, 1941, from the books of the company and include it in Schedules 3 and 4 of Exhibit 43, under the title of "Operation for the Compressor Stations?"

A. I applied the unit cost which was furnished by the Accounting Department to the M. c. f. that would be required for fuel.

Q. And you did not make any credit for deduction from that amount?

A. No, that is done in the Accounting Department.

Mr. Culton: Mr. Littman, you have been questioning quite a while about a matter on which we are fully agreed, that if expenditures are not related to receipts and are considered only from the standpoint of expenditures, then the [fol. 5379] item for cost of gas used for fuel would come out.

Mr. Littman: Would come out?

Mr. Culton: As an expense item. There is no question about that between us, but if you apply it to receipts, that is, to our book records showing we have received from our sales this sum of money for this gas, then it would have to be considered.

It would have to appear on both sides, both as a charge and as a credit.

By Mr. Littman:

Q. Now, I believe you have stated, Mr. Hintop, that the figures shown in Schedules 3 and 4 of Exhibit 43 do not include the cost of gas purchased by Panhandle Eastern from its vendors? A. That is correct.

Q. I would like to have you estimate for us the amount of the cost of gas purchased under the basic load in the Panhandle Field for the year 1941, using as the unit cost the figure of 4.47 cents.

A. For Hugoton Field, you say?

Q. I said, for Panhandle Field.

A. Well, then, that unit cost would be wrong for the Panhandle Field.

Q. What is the correct amount for the Panhandle Field?

A. 3.47 or 3.48.

[fol. 5380] Q. I thought I just mentioned that—

Mr. Culton: You said 4.47.

The Witness: For the Panhandle Field.

Mr. Littman: I mis-spoke myself. I thought I read 3.47. That is the figure I meant to say.

The Witness: I just called your attention to it because we will have to make a calculation—

By Mr. Littman:

Q. (Interposing) Using the average cost per M.c.f. of gas purchased in the Panhandle Field of 3.47 cents per M.c.f., I would like to have you give us the cost of purchasing the amounts of gas which you anticipate will be purchased under your assumption of the basic load.

Mr. Culton: Do you mean that for each of the five years or 15 years?

Mr. Littman: I asked him for the year 1941.

Mr. Culton: I did not catch that.

Mr. Littman: Yes, for the year 1941.

By Mr. Littman:

Q. Mr. Hinton, I am quite sure you will find the amount of gas purchased under the basic load in Exhibit 132, which is a copy of one of your working papers.

Mr. Culton: There is no difference that year between the basic and the anticipated, is there?

Mr. Littman: That is right.

[fol. 5381] The Witness: That is for the year 1941?

Mr. Littman: Yes, sir.

The Witness: That amount would be $707,061.08.

Mr. Littman: For our present purposes, let us not consider the pennies.

The Witness: All right.

By Mr. Littman:

Q. Now, when that amount is added to the total of Column "C" for the year 1941 for operation and maintenance costs west of Liberal shown in Schedule 3, Page 2, Line 10, you secure the total—

A. (Interposing) Wait a minute. You say, Schedule 3, Page 2?

Q. Yes.

A. For the Panhandle Field?

Q. For the Panhandle Field basic load.

A. My Exhibit 43, Schedule 3, Page 2, is a grand total.

Q. Yes, that is what I mean.

A. I see.

Q. I want you to add to the grand total of your maintenance and operation costs west of Liberal under the basic load in the Panhandle Field, the cost of gas purchased in that year in that field, to give us the total cost of gas purchased and operation and maintenance.

A. That amount is $1,165,515.

[fol. 5382] Q. Now, I would like to have you state the unit cost per M.c.f. produced and purchased—

Mr. Culton: (Interposing) On your computation?

Mr. Littman: (Continuing) Just a minute. In the Panhandle Field under the basic load for the year 1941, which is simply the total which you just gave, divided by the number of M.c.f.'s produced and purchased in that year.

Mr. Culton: Without making another computation, you want the gas used for power deducted before you make that computation, don't you?

Mr. Littman: Mr. Culton, I am going to suggest that we not make the credit for fuel.

Mr. Culton: All right. It would be a very small amount anyway.

Mr. Littman: It probably would, when reduced to unit cost, but we do not want to get to that fine a point for purposes of this line of inquiry.

Mr. Wheat: What was your figure of M.c.f.'s?

The Witness: 44 billion cubic feet.

By Mr. Littman:

Q. In other words, you are now referring to total M.c.f.'s shown in Exhibit No. 132 for the west Panhandle Field, aren't you?

A. Yes.

Q. Of 44 million M.c.f.?

[fol. 5383] A. I do not have Exhibit 132 right at hand, but it is shown on 131, and that is what I am using.

Q. Yes; it is the same figure, but pretty soon you may have to use Exhibit No. 132.

A. You want the basic load, and that is probably on Exhibit 132. What is it?

Q. 44 million. It is the same figure under both.

A. Yes, but if you want me to continue on the basic load, I will have to have—

Mr. Culton: (Interposing) The next one is 45 million for a good many years, I think.

The Witness: Yes, but the amount purchased—now, then, I have the answer to your question.

By Mr. Littman:

Q. Very well, what is it?

A. The cost of gas per M.c.f., including maintenance and operation, as shown throughout this schedule and in addition to that, the purchase cost but without allowance for depletion and amortization is .0265 cents per M.c.f.

Q. I think your decimal point is off. You mean, $.0265 or 2.65 cents, do you not?

A. Yes, I stand corrected.

Q. Suppose we be consistent throughout, and read these unit costs in terms of cents.

A. All right.

[fol. 5384] Q. 2.65 cents is correct?

A. Yes.

Q. Now, I would like to have you compute the unit cost of the items which you just named on the same basis for the year 1942 under the basic load.

A. Yes. The answer for 1942 shows a unit cost of 2.66 cents per M.c.f.

Q. That is the figure we have.

Now, I shall read the comparable unit costs which we calculate from your exhibit, Mr. Hinton, and we will ask you to check these figures and correct them if they are wrong, in order to save time on the record now.

A. Yes, sir.

Q. Now, for the Panhandle Field under the basic load, reflected in Schedule 3, Pages 1 and 2, the unit cost figures are as follows:

For 1941 — 2.65 cents.

For 1942 — 2.66 cents.

For 1943 — 2.64 cents.

For 1944 — 2.61 cents.

For 1945 — 2.63 cents.

For 1946 — 2.41 cents.

Now, Mr. Hinton, assuming the mathematical correctness of those figures which I have just read into the record, they show, do they not, that the unit cost of operation [fol. 5385] and maintenance and cost of gas purchased through the years 1941 through 1946 do not vary to any appreciable extent?

A. No. These do not vary to any appreciable extent, but if amortization and depletion were included on the additions which will be required to bring the gas purchased volumes down to what they are, they would show an increase.

Trial Examiner. May we have the comparable figure for 1940, without too much trouble, at this point?

Mr. Littman: I do not have the comparable figure for 1940.

Trial Examiner: Can you give us that, Mr. Hinton?

The Witness: Yes, I can.

Mr. Littman: Nor do I have it for the five-year period.

Mr. Wheat: You mean the total?

Trial Examiner: Average.

Mr. Littman: The average for the five-year period.

The Witness: During the year 1940, we purchased 16,427,962 M.c.f. and by applying the same unit price of 3.47 cents per M.c.f., we arrive at a cost of $570,050. The cost per M.c.f. to Panhandle Eastern was 2.37 cents per M.c.f.

By Mr. Littman:

Q. For the year 1940?

A. Yes.

Mr. Culton: Those figures will all vary greatly by the amount of purchased gas and by the amount of produced gas?

[fol. 5386] The Witness: That is correct.

Mr. Culton: And these prices are all higher than the prices if you had just used the produced gas?

The Witness: Yes, because without taking into consideration amortization and depletion, our purchased gas comes to us at a higher cash out-of-pocket cost.

By Mr. Littman:

Q. Yes, and we have been using, for purposes of our calculation, of course, the ratio of purchased and produced gas which you used in your estimate as shown in Exhibit 132 for the basic load and as you will soon see, as shown in Exhibit 131, for your future load.

A. That is correct.

Q. In other words, the unit cost, the over-all unit cost of producing your own gas goes down as you produce more?

A. That is right. Unless—

Q. (Interposing) And your total cost of gas purchased also goes down as you produce more from your own wells?

A. If you will confine that to the proper period of time, I will agree. If we carry that on beyond the period considered in these schedules, it will not apply.

Q. Well, you have shown, in your schedules, the data for the years through 1946, have you not?

A. Yes.

Q. Now, Mr. Hinton, you just alluded a moment ago to [fol. 5387] the fact that my unit cost figures do not include the cost of amortization and depletion, did you not?

A. That is right.

Q. Neither do yours?

A. That is correct.

Q. Now, the unit cost of depletion is the same, is it not, throughout? Are you familiar with Mr. Biddison's exhibit showing the unit cost?

A. No, I am not, and I might not agree with Mr. Biddison's depletion costs if I did see them.

* * * * * * * * *

Q. At any rate, for your information, Mr. Biddison shows a uniform unit cost of depletion for the gas produced in the Panhandle Field through the future years, and likewise in a uniform cost for the gas produced in the Hugoton Field.

Now, the figures which I have read to you show, do they not, that the unit cost of these items, of which we are talking now, to-wit, operations and maintenance and gas purchase expense will, under your assumptions under the basic load, be lower in 1946 than in 1941, is that correct?

A. No, if—

Q. (Interposing) Isn't 2.41 cents lower than 2.65 cents?

A. Yes, but we are only considering part of our prob-
[fol. 5388] lem when we refer to this as a comparison.

Q. And, Mr. Hinton, we are using that part of the problem which you have presented?

A. Yes.

Mr. Culton: You mention only part of it. He presented several million dollars capital expenditures that you paid no attendance to.

Mr. Littman: We are, at this writing, discussing the effect per unit of production of these so-called increased expenses.

Mr. Culton: That is, that part of the increased expenses.

By Mr. Littman:

Q. Well, may we agree, Mr. Hinton, that these increased totals which you show in Schedules 3 and 4 throughout for the various years do not necessarily reflect increased unit costs?

A. Yes, we may agree to that.

Q. And you do not mean to infer by these Schedules 3 and 4, do you, that simply because we have a larger total amount in 1946 over that in the previous years, that your unit costs are going to be higher in that year, do you?

A. Will you read that question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: Looking at it from a straight operating
[fol. 5389] and maintenance standpoint, reflecting the items shown in Schedule 3, they will undoubtedly show a decrease in cost per M.c.f., but when we take into consideration the amount of capital expenditure and the short-

end length of life of our reserve, why, naturally, they are going to show an increase.

By Mr. Littman:

Q. Well, you mean after 1946?

A. After 1946, the operating expenditures themselves will probably do much to hold the price level or slightly higher without consideration to the capital expenditures and the amortization and the depletion of reserves.

Trial Examiner: May I ask whether all of these figures that you read, Mr. Littman, are at the intake at the Liberal compressor station, the units costs?

Mr. Littman: They are at the points where this witness considered these costs shown in Schedules 3 and 4 to be, wherever that is, and I presume that is at Liberal compressor station and south, south of Liberal.

Trial Examiner: Well, at the intake at the compressor station?

The Witness: That is correct. That is the point of delivery covered by these figures.

By Mr. Littman:

Q. Now, what we are doing by these calculations, Mr. Hinton, is simply trying to ascertain what effect the fig- [fol. 5390] ures shown in your Schedules 3 and 4 plus the cost of purchased gas, will have upon the unit cost over-all of the gas produced, is that correct?

A. Yes. I think I understand entirely what you are doing, which is just to arrive at the unit cost per year.

Q. For the sums which you have shown in Schedules 3 and 4.

A. That is right.

Q. Plus the cost of gas purchased.

Now, you did not show anywhere in your Exhibit 43 the breakdown under the basic load in the Panhandle Field as between gas produced and gas purchased, did you?

A. I cannot be sure about that. You mean, whether it shows in my working papers?

Q. No, whether it shows in your original Exhibits 42 or 43?

A. I doubt seriously if it is in there. I do not recall putting it in.

Q. I am quite sure it is not.

Now, we have those figures in the record under the basic load in Exhibit No. 132, which were furnished from your working papers at my request, is that correct?

A. Yes.

Q. And we have the figures for the anticipated load as to both the west Panhandle Field and the Hugoton Field in [fol. 5391] Exhibit No. 131, which is a part of your working papers and which was also furnished at my request, is that right?

A. Yes, that is correct.

Q. Now, let's go to the next schedule, to-wit, Schedule 3, Page 3, which shows the maintenance and operation costs west of Liberal for the Hugoton Field under the basic load, and I shall read into the record the unit costs which we have calculated per M.c.f. for each of the years 1941 through 1946, including the cost of gas purchased in the amounts shown in Exhibit No. 132, at the price of 4.26 cents per M.c.f., which is the unit cost of gas purchased in the Hugoton Field as testified to by you in this morning's session.

I am going to read these, and I am going to ask you also to check the accuracy of my calculations.

A. That is Page 3, Schedule 3?

Q. Yes.

For 1941 — 4.32 cents.

A. Yes, it is thoroughly understood that these are subject to check.

Q. Yes. As a matter of fact, I am going to insist that you check them, because—

Mr. Culton: (Interposing) I will say these others look about like I have always understood them in the Panhandle Field.

Mr. Littman: Very well.

[fol. 5392] Mr. Culton: I am satisfied you have them about correct.

By Mr. Littman:

Q. The figures are as follows:

1941	—	4.32 cents
1942	—	4.42 cents
1943	—	4.72 cents
1944	—	4.48 cents
1945	—	4.44 cents
1946	—	4.44 cents

Now, assuming the correctness of the figures which I read, Mr. Hinton, they show an increase per unit from 1941 to 1943, and then a slight decrease for the remaining three years. Is that right?

A. They are constant for the last two years, which is a slight decrease over the previous years.

Q. Now, we have also made a total for both fields under the basic load, and we have calculated the unit cost per M.c.f. for the two fields under the basic load condition, and I shall read those into the record.

Trial Examiner: Pardon me, was not this last that you read based on Schedule 3, Page 3?

Mr. Littman: Schedule 3, Page 3, that is right, for the Hugoton Field.

Trial Examiner: That is captioned, "Basic Load, Hugoton Field?"

[fol. 5393] Mr. Littman: Yes. The figures that I propose to read into the record at this point are for both fields combined under the basic condition.

Trial Examiner: Still basic load?

Mr. Littman: Yes.

By Mr. Littman:

Q. The figures are as follows:

1941	—	3.09 cents
1942	—	3.12 cents
1943	—	3.18 cents
1944	—	3.10 cents
1945	—	3.10 cents
1946	—	2.94 cents

For the five-year average, 1942 to 1946, inclusive, 3.09 cents.

I shall now read into the record the unit costs comparable to those which I have read heretofore for the Panhandle Field under the estimated future load which is detailed on Pages 1 and 2 of Schedule 4. This is for the Panhandle Field alone.

1941	—	2.65 cents
1942	—	2.65 cents
1943	—	2.59 cents
1944	—	2.55 cents
1945	—	2.52 cents
1946	—	2.30 cents

[fol. 5394] The comparable figures for the Hugoton Field under the estimated future load are as follows:

1941	—	4.32 cents
1942	—	3.72 cents
1943	—	4.22 cents
1944	—	3.96 cents
1945	—	4.16 cents
1946	—	2.54 cents

Now, I shall read the unit costs for the Panhandle Field and Hugoton Field combined, and this is under the estimated future load:

1941	—	3.09 cents
1942	—	2.93 cents
1943	—	3.01 cents
1944	—	2.96 cents
1945	—	2.96 cents
1946	—	2.93 cents

For the five-year average, 1942 to 1946, both inclusive, 2.96 cents.

Mr. Culton: Mr. Littman, I must have misunderstood you or the averaging works out kind of funny. I understand you to say the estimated cost in the Panhandle Field, 1946, was 2.30.

Mr. Littman: Under which basis, Mr. Culton?

Mr. Culton: Under the estimated load and, in the Hugo-
[fol. 5395] ton Field, 2.54.

Mr. Wheat: I think you must have been mistaken in the last figure.

Mr. Culton: I do not see how that could be true and have an average of 2.93.

* * * * * * * *

The Witness: That unit cost which we used was 4.26, was it not?

Mr. Littman: Yes, 4.26 cents, and the amount of gas purchased in that year was 815,248 M.c.f. under the estimated future load—I am sorry, that is the total dollars.

The Witness: It is 12,897,000,000 cubic feet.

I do not get either one. I get 3.29.

By Mr. Littman:

Q. Let me ask you this, Mr. Hinton, what is the amount of dollars that you get for gas purchased in 1946 in the Hugoton Field under the estimate future load?

A. $549,412.

Q. Well, we have $815,248, so that would account for the difference in our figures.

A. I get the same answer that I got the first time, so instead of that being 3.54 as we suspected, it is 3.29.

[fol. 5396] Q. You get 3.29 cents per M.c.f.?

A. Instead of the—

Q. (Interposing) 2.54 per M.c.f. for the Hugoton Field under the estimated future load for the year 1946?

A. Yes.

Q. That is probably where the error lies.

A. Well, we can tell what percent each of these participates in the total market and check your figure in that manner.

By weighting those figures which we obtained by the same method of calculation which we have followed, namely, that of adding the cost of the purchased gas to the operating costs shown on these schedules, I arrive at a price of 2.65 cents per M.c.f.

Q. For what?

A. For both fields.

Q. What is that amount again?
A. 2.65 cents.

Mr. Culton: For both fields?

The Witness: Yes.

Trial Examiner: That is in place of Mr. Littman's figure of 2.93?

The Witness: Yes.

Trial Examiner: That, of course, would affect any average.

[fol. 5397] The Witness: Yes. In fact, to obtain an average, each year would have to be weighted with the amount that it participated in the total for the five years, to arrive at the proper average.

It would not be a pure arithmetical calculation.

By Mr. Littman:

Q. Well, you are going to check all of these figures, at any rate, Mr. Hinton, are you not?
A. Yes, I believe I had better.
Q. And if there are any errors in our calculations, you can then correct them tomorrow.
A. They look reasonably close to me and are taking the proper trend.
Q. And the trend is generally downward?
A. It must be, on this portion of the expense item.

. . . . . .

[fol. 5398] Q. Mr. Hinton, in arriving at the conclusion that Panhandle Eastern is going to abandon production in the Panhandle Field in the year 1956, you found it necessary to calculate the rock pressures and the open flows of the wells in the year of abandonment, did you not?

A. No, I found it necessary to estimate them, not calculate them.

[fol. 5399] In other words, I made a great many calculations that I did use as a guiding factor, but the answer is an estimate.

Q. Now, I would like to have you state the rock pressures of the Company's wells and gas purchase wells in Area "A" in the year of abandonment.

A. Now, then, your question, I believe, was that you wanted me to give you the abandonment pressure of the wells located in Group Area "A". Is that right?

Q. Yes, for the Company's wells and the gas purchase wells.

A. The abandonment pressure of the wells located in Group Area "A" will vary at the time of abandonment. I cannot give it to you in exact pounds, because it will vary probably with each well.

Q. Well, you mean you cannot supply the figures by individual wells?

A. No, I can't supply you with an estimated figure for each well. I do not have that. I assume that the average for all wells would be in the vicinity of 50 pounds.

Q. Mr. Hinton, the figures that I am endeavoring to elicit are those which appear in your working papers, File No. 11.

A. Yes, they are. There is a list of figures in File No. 11 that shows the average working pressures at the well head for various years and applies to the average of the [fol. 5400] total number of wells and does not apply to individual wells.

Q. Now, in your working papers, File No. 11, you have a sheet which shows Texas Company wells; Group "A", and shows the rock pressures and open flows for the wells in that group from the years 1942 through 1957. Is that correct?

A. It shows estimated rock pressures for the average of all wells in that group.

Q. Now, by "average of all wells," do you mean the average of the company-owned wells and the wells of vendors who sell to Panhandle Eastern?

A. No, because there are many of the wells from which gas is purchased from other vendors that now have rock pressures which are considerably below those shown in this working paper for the year 1948.

Q. Well now, what wells have you included in your working papers for Area "A"?

A. I have included 15 wells owned by the Panhandle Eastern Pipe Line Company, and 19 wells which are owned by the Huber Petroleum Company.

Q. And you have estimated the average rock pressure in the year of abandonment, have you not, for those wells?

A. Yes.

Q. What is the rock pressure in the year of abandonment for those wells?

A. The average rock pressure for all Company wells [fol. 5401] located in that area will be somewhere around 90 pounds, average.

Q. You are now speaking of the Company wells?

A. I am speaking of the Company wells located in Group Area "A".

Q. Isn't it closer to 93 pounds?

A. As shown on this working paper, it is 92.5, but it doesn't necessarily mean that they will be abandoned at 92.5.

The reason that I have picked that pressure for those wells is because the back pressure, open-flow curves indicate that the average potential on those wells at that date will be down to a point where it will be impossible to take gas in commercial quantities from them for a long-distance pipe line.

Q. And what is that average open flow in M.c.f. for 24 hours as of the year of abandonment?

A. As read from the back pressure, open-flow curves, it is 1,700,000 cubic feet.

Q. And the figure which you just gave of 1,700,000 cubic feet of open flow and of 92.5 pounds abandonment rock pressure is as of what year? A. 1956.

Q. Now, when you use the term "rock pressure", to what are you referring?

[fol. 5402] A. The shut-in well-head pressure.

Q. And not the pressure at the sand face? A. No.

Q. Very well.

Now, will you give us the comparable rock pressure and open flow estimates for the Company wells in Group Area "B" in the year of abandonment?

A. That is somewhat difficult to do, because Group Area "B", in my opinion, will have a closed-in well-head pressure which will be above the time or above the pressure required to make that a commercial-producing well.

Q. Well, suppose you read the figures from your working papers which are the ones you used in making this estimate, Mr. Hinton.

A. Just as soon as I finished what I was going to say.

It is not yet determined whether it will be profitable for us to keep our pipe line system operating for the small total amount of gas that was could obtain, therefore, the abandonment pressure will be dependent upon the time that we abandon the pipe-line system as a whole.

Q. Now, will you give me the figures that are shown in your working papers which represent your estimate?

A. I believe I have just explained that I do not know what they will be. I can give them to you for various years, as I have them on this working paper, or I can give [fol. 5403] them for any specific year which you ask.

Q. Are you speaking of Area "B"? A. Yes.

Q. Well, let's have the year of abandonment.

Mr. Culton: He has explained that he hasn't selected a year of abandonment in that area.

By Mr. Littman:

Q. Well, let me have those figures for the year 1956, which is the date on which you testified Panhandle Eastern is going to abandon them.

Mr. Culton: We ask that counsel read what the witness testified.

By Mr Littman:

Q. Is it your testimony that Panhandle Eastern is going to cease operations in the Panhandle Field in 1956?

Mr. Culton: Just read that and see what he said about 1956

"Whether it will be economical for this company to continue to produce gas after deliverability declines to 7 billion cubic feet in 1956 is problematical."

Then, he says: "Therefore, it is my judgment that Panhandle Eastern will not be justified in further producing gas from its reserves in the Panhandle Field longer than 15 years from the present."

I was reading from Page 40, Exhibit 42, showing that he [fol. 5404] was talking about the economics of the situation.

By Mr. Littman:

Q. And Mr. Biddison then comes along and accepts Mr. Hinton very literally and abandons the project on December 31, 1956, in the Panhandle Field.

Well, just give us the figures for 1956. We will argue these matters later in a brief, probably.

A. All right. The rock pressure, the closed-in well-head pressure for the year 1956 will be approximately 145.5 pounds, as shown in working papers from File No. 11.

Q. Your working papers?

A. Yes, my working papers.

Trial Examiner: Is that an average of a large number of wells?

The Witness: No, there are not so very many wells in that group area. There are five wells located in Group Area "B" at the present time, with two potential locations.

By Mr. Littman:

Q. And what is the open flow of those wells?

A. The average open flow for the wells in Group Area "B" in 1956 is estimated to be 3,160,000 cubic feet.

Trial Examiner: At the present time, as appears from your pressure map, there is no part of your Area "B" in which the indicated rock pressure is less than 350 pounds?

The Witness: That is the band between the 400 and [fol. 5405] 350 pound pressure isobar.

You will, also, note, Mr. Examiner, that there still remains a high-pressure area to the west of Group "B" in which there is very little development to date.

By Mr. Littman:

Q. Now, will you give us the comparable figures for Area "B" in the year 1959, which are shown in your working papers?

A. The pressure shown for 1959 is 96 pounds

Q. And what is the open flow for that year?

A. 1,590,000, assuming that the characteristic of the well does not change.

All open flows which I have down here are based on the assumption that the characteristic of these wells will not change.

Q. Now, will you give us the comparable figures for the wells in Group Area "C" as of 1956?

A. The pressure in 1956, closed-in pressure, will be approximately 98 pounds.

Q. And the open flow?

A. 2,240,000 cubic feet.

Q. Now, what are the figures for the year 1958?

A. 60 pounds closed-in well-head pressure.

Q. And the open flow for 1958?

A. 1,880,000.

[fol. 5406] Q. Cubic feet. A. Cubic feet.

Q. Now, will you state the estimate for Group Area "D"?

A. For Group Area "D", it is estimated that the closed-in well-head pressure will be 54.5 pounds.

Q. In the year 1956? A. Yes.

Q. And what about the open flow?

A. It was too small to take into consideration.

Q. You didn't calculate it? A. No.

Q. Will you state the 1956 estimate of rock pressure and open flow for the wells in Group Area "E"?

A. 88.5 pounds and the open flow will be 2,200,000 cubic feet.

Q. And what is the estimate in the last year shown in your working papers, to-wit, the year 1957?

A. 66 pounds closed-in well-head pressure, and the open flow is 1,525,000 cubic feet.

Q. Will you state your estimate, as shown in your working papers, for the wells in Group Area "F" for the year 1956?

A. Yes. I think it will be around 83.5 pounds and the open flow based on the average will be 5,238,000 cubic [fol. 5407] based on the present characteristic of the well.

Q. You have also estimated in your working papers the closed-in well-head pressure and open flow for the

wells in Group Area "F" down to as late as 1960, have you not?

A. No, sir, 1957 is the last year.

Q. For Group Area "F"? A. Yes, "F".

Q. Now, will you give us the figures for that year?

A. The closed-in well-head pressure for the year 1957 will be approximately 60 pounds.

Q. And the open flow in the year 1957?

A. It will be 3,285,000 based on present well characteristics.

Q. Now, will you give us your estimate for the year 1956 for the wells in Group Area "G"?

A. I think they will be approximately the same as "F", being a closed-in pressure of 86.5 pounds for 1956, with an open flow of 2,175,000 cubic feet per well.

Q. What estimate do you have for the year 1957, for the wells in Group Area "G"?

A. A closed in well-head pressure of 63 pounds with an open flow of 1,125,000 cubic feet.

Q. Mr. Hinton, you were going to supply certain information with respect to capital additions which you anticipated were going to be installed in the year 1944; [fol. 5408] which are itemized in your Exhibit 42 under the anticipated load.

A. Yes, also for the year 1942, because the amounts which were read into the record previous to this date were from memory and subject to correct.

I believe at that time we agreed that they could be corrected at a later date if they were found to be in error.

Q. Yes, would you mind proceeding with the year 1944, which is detailed beginning on Page 29 of Exhibit 42?

Now, I would first like to have your description of Item "J" on Page 30, "Construct Well Lines Connecting Five Oklahoma Wells and Five Kansas Wells, Costing $16,820."

A. The lines included under Item "J", Page 30, Exhibit 42, are described in more detail as follows:

The Gloden, commencing near the center of Section 36, Township 5, Range 13 and extending to a point near the center of Section 36, Township 5, Range 13, Texas County, Oklahoma, a 4-inch line 1 of one mile in length.

The Interstate Cattle Company, the line will start at a point near the center of the west half of Section 11, Township 4, Range 13, and extend to a point near the center of the south half, Section 11, Township 4, Range 13, Texas County, Oklahoma, a 4-inch I. D. line, .27 of one mile in length.

Another Interstate Cattle Company line will commence near the center of Section 14, Township 4, Range 13; and [fol. 5409] will extend to the northwest quarter of Section 14, Township 4, Range 13, Texas County, Oklahoma, a 4-inch I. D. line, .46 of one mile in length.

The Interstate Cattle Company line starting near the center of Section 16, Township 4, Range 13, and extending to a point in the southwest quarter of Section 16, Township 4, Range 13, Texas County, Oklahoma, a 4-inch I. D. line, .30 of one mile in length.

The Tudor, that line will start near the center of the east half of Section 6, Township 4, Range 15, and extend to a point near the center of Section 6, Township 4, Range 15, Texas County, Oklahoma, a 4-inch I. D. line, .28 of one mile in length.

The lines which will be constructed in the State of Kansas during the year 1944 are described as follows:

The Cottrell, commencing at a point near the center of Section 27, Township 30, Range 38, and extending to a point in the southwest quarter of Section 26, Township 30, Range 38, Grant County, Kansas, a 4-inch I. D. line, .60 of one mile in length.

The Morgan, starting near the center of the northeast quarter of Section 22, Township 33, Range 39, and extending to a point in the southwest-one quarter of Section 23, Township 33, Range 39, Stevens County, Kansas, a 4-inch I. D. line, .80 of one mile in length.

[fol. 5410] The Moser, starting near the center of the south half of Section 34, Township 33, Range 38 and extending to a point near the center of the south line of Section 28, Township 33, Range 38, Stevens County, Kansas, a 4-inch I. D. line, 1.23 miles in length.

The Reynolds, starting near the center of Section 20, Township 31, Range 36, and extending to a point on the west line or near the west line of Section 20, Township 31, Range 36, Stevens County, Kansas, a 4-inch I. D. line, .50 of one mile in length.

The Witt, starts near the center of the north half of Section 26, Township 30, Range 38, and extends to a point in the southwest quarter of Section 26, Township 30, Range 38, Grant County, Kansas, a 4-inch I. D. line, .65 of one mile in length.

Q. Does that complete the description of the well lines in Oklahoma and Kansas expected to be installed in the year 1944? A. Yes, it does.

Q. Now, will you please give us a detailed description of Item "L" appearing on Page 30 of Exhibit 42, "Construct additional gathering lines serving new wells in Hugoton Field, costing $207,951"?

A. Yes. The additional gathering lines required in Oklahoma to extend the general gathering system to enable [fol. 5411] the connection of wells drilled during that year will be as follows:

The Interstate Cattle gathering line will start near the center of Section 22, Township 4, Range 13, Texas County, Oklahoma, and extend to a point in the southwest quarter of Section 16, Township 4, Range 13, Texas County, Oklahoma. That will be a 6-inch I. D. line, 1.3 miles in length. Tracey S. W., that will start near the center of Section 36, Township 5, Range 13, Texas County, Oklahoma, and will extend to a point near the center of Section 22, Township 4, Range 13, Texas County, Oklahoma, a 10-inch I. D. line, 4.5 miles in length.

The Kansas gathering lines required, that is, to extend the gathering system in the Kansas portion of the Hugoton Field to enable the connection of wells drilled during 1944 or proposed to be drilled, will be as follows:

The Cottrell, it starts in the northeast one-quarter of Section 4, Township 31, Range 38, Grant County, Kansas, and extends to a point in the southwest quarter of Section 26, Township 30, Range 38, Grant County, Kansas. It is an 8-inch, I. D. line, approximately 1.5 miles in length.

Of course, all of the distances given are approximate, because, without scouting the ground, it is impossible to make the exact proper allowance for surface measurement.

The Reynolds will start near the northeast corner of [fol. 5412] Section 6, Township 31, Range 36, Stevens County, Kansas, and extend to a point near the one-half west line of Section 20, Township 31, Range 36, Stevens County, Kansas, an 8-inch I. D. line, 3.3 miles in length.

The Witt starts at a point located in the northeast [quester] of Section 5, Township 31, Range 37, Stevens County, Kansas, and extends to a point in the northeast quarter of Section 4, Township 31, Range 38, Stevens County, Kansas. It is a 12-inch, I. D. line, which will be approximately 4.7 miles in length.

The Rickart Block is a loop line which loops part of the present gathering system, and that will start at a point in the southwest quarter of Section 5, Township 34, Range 38, Stevens County, Kansas, and extend to a point in the northeast quarter of Section 23, Township 34, Range 39, Stevens County, Kansas. It will be a 6-inch, I. D. line, 3.6 miles in length.

The Buddenburg, that is, also, a loop to the present pipe-line system, and will commence at a point near the northeast corner of Section 22, Township 33, Range 38, Stevens County, Kansas, and extend to a point near the center of the north half of Section 19, Township 33, Range 38, Stevens County, Kansas, a 10-inch, I. D. line, 3.3 miles in length.

The Morgan—that is a new line, and the first three mentioned at also new lines—will start at a point in the [fol. 5413] northeast quarter of Section 19, Township 33, Range 38, Stevens County, Kansas, and extend to a point in the southwest quarter of Section 23, Township 33, Range 39, Stevens County, Kansas. It is an 8-inch, I. D. line which will be 2.4 miles in length, approximately.

Q. Mr. Hinton, you show for the anticipated load that you expect to drill 72 wells in the Hugoton Field between the middle of 1941 to the end of 1946. Is that correct?

A. I don't remember the total, but if it is written in the testimony there, that is correct.

Q. That is the result of my addition of the number of wells shown for each period in the Hugoton Field.

Now, can you state how many of those wells are required to be drilled by reason of leasehold requirements?

A. Yes.
Q. All right.
A. None.
Q. Why are these wells required to be drilled?
A. Not as a present leasehold requirement, but as a requirement that has been put upon us by the fact that our leases have been top-leased by other companies.

Mr. Lee: Pardon me. What do you mean by "top-leased"?

The Witness: I mean that other companies have taken leases on acreage which we now hold by delayed rentals, which will become effective upon the date our lease ex-
[fol. 5414] pires and the only way that it is possible for us to hold that acreage as a part of our reserve is to drill before the expiration date of our lease.

Mr. Lee: Then, what happens to their top lease if you drill?

The Witness: They have spent some money for which they will receive no benefit, the company that has done the top-leasing.

By Mr. Littman:
Q. Now, is it this so-called top-lease condition that will cause you to drill these 72 wells?
A. No, not altogether, because there are only 14 of those wells included in the 72.
Q. 14 of which kind included?
A. Of the 72 that you mentioned to be drilled in the Hugoton Field.
Q. Well, you mean 14 of the 72?
A. Have been top-leased to date.
Q. Have been top-leased to date? A. Yes.
Q. What about the rest of them?
A. From time to time, of course, it is going to be necessary to drill wells to augment our supply and to furnish anticipated requirements.

We have in all cases, where possible, tried to pick leases [fol. 5415] which would expire, because by drilling before expiration date, we would not be forced to pay a renewal bonus which is prevalent, become more prevalent, in the Hugoton Field at this time.

Q. Now, in 1942, you expect to drill 20 wells in the Hugoton Field, do you not? A. Yes.

Q. Now, will you give us a breakdown of leases as between those which are required to be drilled to top-leasing, and how many are required to be drilled by reason of the fact that you do not wish to pay a renewal bonus, and any other classes that may exist?

A. The list that shows the leases which have been top-leased is now over at the hotel. I laid it out while trying to get my files in better order over the weekend, because I did not anticipate needing it and—just a moment, I believe I can give you that.

Of the 20 wells which are proposed to be drilled during the year 1942, the following 14 have been top-leased at this time—

Q. (Interposing) You don't have to name them. I just wanted you to tell me how many of the 20 wells which you propose to drill within the next year, are wells which are required to be drilled by reason of the top-leasing condition. A. 14.

[fol. 5416] Q. And what about the remaining six?

A. Well, it so happens that to supply our peak day requirement, we would have to take more gas than would be possible for us to get from our present system, even after the capital expenditures have been made that are set out in Exhibit 42 for the future estimated load.

In order to get the amount of gas required to supplement what we could get with the capital additions outlined for the Panhandle Field—I should confine that to the Panhandle Field—

Q. (Interposing) I am asking you about the Hugoton Field.

Mr. Wheat: He hasn't quite finished.

The Witness: Yes, but a while ago, I said, after the capital expenditures shown in Exhibit 42 had been made.

and part of this Oklahoma pipe line system in the Hugoton Field is included in that capital expenditure.

Do you see what I am getting at?

By Mr. Littman:

Q. I think I understand what you mean.

A. Of course, we can't tell exactly what size wells we are going to get there, but in order to give us the amount of gas that we want at Liberal station, it will be necessary that we are able to take from each well approximately 1,500,000 cubic feet per day.

[fol. 5417] Q. Now, Mr. Hinton, do I understand, then, that you are drilling 14 out of the next 20 wells in 1942 primarily because you are confronted with a top-leasing situation and, in addition thereto, you are drilling another six wells because you need additional gas over and beyond that which you will secure from the first 14 that I mentioned?

A. Yes, this is right.

Q. Now, there are 12 wells that are contemplated to be drilled in 1943 in the Hugoton Field. Will you give us the breakdown for those?

A. You are speaking now about the future load?

Q. Yes.

A. Ten of those wells are for main-line supply, and are located in the Hugoton Field or the portion of the Hugoton Field located in the State of Oklahoma.

These wells will be drilled in order to help supply the peak-day requirement and, inasmuch as the gathering system laid out in 1942 was designed so that we could take more gas as required at a future date, that is the logical place for us to augment our peak-day requirement at the least cost.

The other two wells mentioned are to help supply the Argus Natural Gas Company market, and they will be drilled in the Kansas portion of the Hugoton Field.

There are none of these wells top-leased to date.

Q. In other words, all of these twelve wells in 1943 [fol. 5418] are required to be drilled in the Hugoton Field, in your opinion, in order to meet the anticipated load requirements?

A. That is correct, and the locations were chosen from the standpoint of the greatest deliverability, rather than from the standpoint of the expiring leases in this year.

Q. What about the eleven wells that you propose to drill in the Hugoton Field in 1944?

A. Five of those wells will be located in Oklahoma, none top-leased, and five will be drilled in the Kansas portion of the Hugoton Field, and one will be drilled to help supply the demand of the Argus Natural Gas Company.

Q. So that none of these are to be drilled in 1944 by reason of a top-leasing situation?

A. That is correct.

Q. But because you feel it is necessary to drill those wells in order to meet the anticipated load requirements?

A. That is right.

Now, of course, the Texas wells are a different proposition all the way through.

Q. Yes. Well, all of the 15 wells contemplated to be drilled in the Panhandle Field are going to be drilled because of the top-leasing situation that you have described?

A. No.

Q. Or because of lease requirements?

A. Because of expiring leases and the renewal bonus [fol. 5419] being what it is in the Panhandle Field today, it is cheaper for the company to drill those wells than to take a chance of losing the leases or to be confronted with a stiff renewal bonus.

That applies to 13 of the wells and, as I have mentioned before, the two wells which are to be located on the State land are not included in this classification.

Mr. Culton: It gives you a longer amortization on the expense of drilling those particular wells, does it not, rather than to have waited to the last field to drill?

The Witness: Not only that, it helps to reduce our operating expense somewhat.

. . . . . .

[fol. 5420] By Mr. Littman:

Q. Suppose you give us the details of Item "E" for the year 1944, on Page 29 of Exhibit 42, before we go to the capital additions for the year 1942.

A. The well lines which will be required to connect wells proposed to be drilled in 1944 I described as folows:

The Hendrix starts near the center of the north half of Section 4, Block PMc, E. L. and R. R. R. R. Survey, and extends to a point near the center of Section 10, the same block and the same survey, Moore County, Texas. It is a 4-inch, I. D. line, 2.10 miles in length.

The Kilgore starts near the center of Section 8, Block [fol. 5421] PMc, Survey E. L. and R. R. R. R. and extends to a point near the center of Section 10, the same block and survey, Moore County, Texas. It is a 4-inch line, 1.10 miles in length.

Another Kilgore line will start near the center of Section 10, PMc, Survey E. L. and R. R. R. R., and extends to a point near the center of Section 10, the same block and survey, Moore County, Texas. It is a 4-inch line and will be .05 of one mile in length.

The State C. R., that line will start at a point in Section 101 of Block 47, H. and T. C. Survey, and extend to a point near the center of Section 100, Block 47, H. and T. C. Survey, Potter County, Texas. It will be .50 of one mile in length.

Another State well, C. R.—that is Canadian River—that starts at Section 105, Block 46, H. and T. C., and extends to a point in the north part of Section 106, Survey 47, H. and T. C. Survey, Potter County, Texas. It is a 4-inch, I. D. line, .90 of one mile in length.

Q. Now, going to the capital additions for the year 1942, under the anticipated load, I refer to Item "E" on Page 27, "Lay well lines for five new wells in Panhandle Field, costing $13,395."

Will you give the description of those lines?

A. The five lines which will be required to connect [fol. 5422] lines which the Company proposes to drill during the year 1944 are described as follows:

The Brown will start at a point near the center of Section 104, Block 44, H. and T. C. Survey, and extend to a point near the center of Section 64, Block 44, H. and T. C. Moore County, Texas. It is a 4-inch line, which will be approximately 1.50 miles in length.

The Jestur will start near the center of Section 18, Block 6-T, T. and N. O. Survey, and will extend to a point near the center of Section 64, Block 44, H. and T. C. Survey, Moore County, Texas, a 4-inch I. D. line, approximately 1.50 miles in length.

The Kilgore will start at a point near the center of the southeast quarter of Section 28, Block 44, H. and T. C. Survey, and will extend to a point near the center of the south half of Section 28, Block 44, H. and T. C. Survey, Moore County, Texas, a 4-inch, I. D. line, .30 of one mile in length.

The Kilgore, again, will start near the center of Section 29, Block 44, H. and T. C. Survey, and extend to a point near the center of the south line of Section 57, Block 44, H. and T. C. Survey, Moore County, Texas. It will be a 4-inch I. D. line that will be .20 of one mile in length.

The Walker-Allen, this line will start near the center of Section 6, Survey M-1, and will extend to the north half [fol. 5423] of the northeast of Section 5, M-1, Moore County, Texas. It will be a 4-inch line, 1.25 miles in length.

Q. Mr. Hinton, you gave us a description the other day of Item "G", shown on Page 27 in Exhibit 42, did you not? A. Yes, I did.

Q. Was there anything you wanted to add to that description?

A. I couldn't say, until I check back and found out what I had already given.

Q. In Item "G" on Page 28 for the year 1942, you have the construction of 20 new well lines costing $47,610. Would you please state the total length of those well lines and the sizes of pipe, without going into the details of the individual wells in this instance?

A. Yes. All wells, well lines shown to be constructed to connect those 20 wells will be 4-inch, I. D., and the

total length of the connecting lines of the 20 wells is estimated to be 14.69 miles.

Q. Will you please state the sizes of pipe for Item "G", the trunk gathering line looping the present line from Hansford station south a distance of 31.1 miles?

A. Yes, that will be 22-inch, O. D. pipe.

Q. Now, will you state the size of pipe and the length of the pipe for Item "G" on Page 27 for the year 1942 which relates to the looping of existing lines and addi [fol. 5424] tional gathering lines?

A. I was under the impression that that was the one which you just asked me about, the 31.1 miles.

Q. Well, I asked you about Item "G" a moment ago. Now, I am asking you about Item "H".

A. I understood you to say "G".

The loop line from Sneed, the intake side of Sneed compressor station to Windmill Junction will be 26-inch, O. D. pipe.

Q. And what is the distance? A. 2.7 miles.

From Windmill Junction to Zofness Junction, also a loop line, will be a 24-inch, O. D. pipe, a distance of 8 miles.

From Zofness Junction west along our present system will be a loop line that will be 20-inch, O. D. pipe, 6.33 miles in length.

The further extension of this line, looping our present system to the west, will be a 16-inch, O. D. pipe, 3 miles in length. There will be a gathering line which will start near the center of the south line of Section 57, Block 44, H. and T. C. Survey, and extend to a point near the center of Section 29, Block 44, H. and T. C. Survey, both in Moore County, which will be an 8-inch, O. D. line, which will be 1.2 miles in length.

[fol. 5428] C. H. Hixton a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Mr. Littman: If your Honor please, I would like to have marked for identification with the next exhibit num-

ber, a table entitled, "Estimated Intake Pressures at Sneed Compressor Station."

I might state that this table contains certain data and information requested by me to be furnished by this witness during the course of his cross-examination.

Trial Examiner: This table will be marked for identification as Exhibit No. 139.

(Exhibit No. 139 Was Marked For Identification.)

Mr. Littman: I would like to have marked for identification with the next exhibit number a table entitled, "Estimated Average Working Pressures at Well Head (Gauge), for 'Group Areas', shown on Exhibit 46, Panhandle Field, Texas", which table was furnished by this witness at my request, which request was made during the course of cross-examination.

Trial Examiner: This will be marked for identification as Exhibit No. 140.

[fol. 5429] (Exhibit No. 140 Was Marked For Identification.)

Mr. Littman: I would like to have marked for identification as Exhibit No. 141, a table entitled, "Annual & Cumulative Production from Panhandle Field, Texas", which has been furnished by this witness pursuant to a request made by me during the course of cross-examination of this witness.

Mr. Wheat: This consists of two pages, does it not?

Mr. Littman: Yes.

Trial Examiner: The exhibit will be marked for identification as Exhibit No. 141.

(Exhibit No. 141 Was Marked For Identification.)

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Hinton, I would like to have you refer to Exhibit No. 140 for identification.

Now, this exhibit shows your estimate of the average working pressures at the well head for the Company wells

and gas purchase wells for the years 1942 to 1960, inclusive, is that right?

A. That is correct.

Q. And this is under the anticipated load basis?

A. Yes.

Q. Now, it is possible for the company to so operate its production system as to raise or lower these estimated working pressures, is that correct?

[fol. 5430] A. By the addition of equipment, that is is correct. Without the addition of equipment, we are limited to certain limitations.

Q. In other words, these working pressures are predicated upon certain estimates which you made of capital additions and equipment required to mainttain these pressures?

A. Through the year 1946, that is correct.

Q. How did you arrive at them after the year 1946?

A. I carried the same idea down, generally speaking, but assumed that in the event that certain wells were unable to produce their proportionate share of the total production, that additional horsepower would be installed or the situation would be taken care of by revamping the pipe line system which would directly affect the type of well mentioned.

Q. Well, do I understand you to say that you expect additional facilities to be installed after 1946 in order to maintain the working pressures shown in Exhibit No. 140?

A. I expect additional equipment to be installed to enable certain wells to meet these working pressures as set out in Exhibit 140.

Q. Do you have the amounts of additional capital expenditures for those years?

A. No, I do not, because it would be impossible to lay your finger directly on where this additional horsepower will be required.

[fol. 5431] The only way that that could be worked would be to assume that every well in the field in each group area would have the same pressure drop year after year, and that will not happen.

Q. Then you did not make any estimate, in dollars, of the amount of capital additions that will be installed in order to secure these average working pressures shown in Exhibit No. 140, after 1946?

A. I did not make any dollar estimate, but I know that it is going to require considerable additional money.

Q. Well, can you give us some general idea, in dollars, of how much money it is going to require?

A. No, sir, that is another one of those "crystal ball" estimates.

Q. That you made?

A. Yes.

Mr. Culton: You made no attempt to determine capital expenditures after five years?

The Witness: No, because when you go beyond the five-year period, then you are going to encounter ever-changing characteristics of these wells.

The pressure drop on the wells is not going to be the same for each well in the field at all and, therefore, it would be impossible to go years into the future past 1946 and be able to make any accurate estimate of capital ex- [fol. 5432] penditures that will be required.

By Mr. Littman:

Q. How about a general estimate, in dollars, of how much will be required by way of capital additions for each of the years subsequent to 1946?

A. Well, that is a pretty tough question because, in order to answer that, I would have to figure out the cost of tubing for most of the wells. I would have to figure out the cost of installing many individual well-compressors and we do not know yet how much it is going to cost us to maintain wells as the pressure goes down.

We do know that we are going to have a great deal more water trouble as this pressure declines. That is evidenced by what is happening in the low-pressure wells in the field at this time.

What years that is actually going to happen, I cannot say. If I was going to lay aside money to make the necessary capital expenditures which I believe necessary, just offhand thinking about well after well, it would not be less than a quarter of a million dollars.

Q. Per year?

A. No.

Q. Do you mean after 1946?

A. Yes.

Q. In addition to the five years of capital expendi-
[fol. 5433] tures for the anticipated load which you have set forth in Exhibit 42?

A. Yes, and the sum that I mentioned does not take care of the change of the cylinders on the compressors at the Sneed compressor station.

I feel sure that that change will have to be made sometime after the year 1946.

Q. Well, how much more than a quarter-million dollars of capital additions would be required after 1946 to maintain these working pressures shown on Exhibit No. 140?

A. I cannot say. I do not know the cost of the changing of the cylinders.

Q. And you cannot give us any idea of the cost, above a quarter of a million dollars?

A. No, but that is just a very, very rough estimate, subject to a more detailed study.

Q. Now, I am correct in stating that these average working pressures which you assumed for purposes of your study and which are shown in Exhibit No. 140, could be lowered by the installation of additional capital facilities, is that right?

A. Yes, if we wanted to spend the money, why, we could probably work against as low as 70 pounds.

Q. (Interposing) In what year, Mr. Hinton?

A. Any year.

[fol. 5434] Q. Any year?

A. Yes. If we wanted to spend the money, but it certainly would be just like throwing it out the door to develop in that manner.

Q. Well, I was not talking particularly about a figure of 70 pounds. I was speaking about lowering these pressures beyond the figures shown in Exhibit 140.

It could be done by the expenditure of additional money for capital additions, is that right?

A. Yes, that is right; but going back, we anticipate or estimate that we have so much gas in our reserves in that

field, and it is not the intention of Panhandle Eastern to try to obtain a greater amount of gas than is actually contained or was originally contained in the reserves.

If we would go to pressure like that, it would mean that we would be taking amounts of gas per year that would be far in excess of what we should be taking for the reserve which we hold in that field.

Q. Well, Mr. Hinton, it is an engineering fact, is it not, that the reduction of these pressures through the years shown in Exhibit No. 140 would have the effect of increasing Panhandle Eastern's production through those years. Is that correct?

A. You say the reduction of these pressures?

Q. Yes.

[fol. 5435] A. Shown on Exhibit No. 140—

Trial Examiner: Read the question, please.

(Whereupon, the pending question was read by the reporter.)

The Witness: Yes, anytime that a well is enabled to work against a lower working pressure, it will have the ability to deliver a greater quantity of gas.

By Mr. Littman:

Q. And the quantities of gas which you, in fact, have estimated to be recovered under your anticipated load are predicated upon the average working pressures shown in Exhibit No. 140. Is that correct?

A. Yes, which is all tied back into the geological data.

Q. Didn't you testify earlier on your cross-examination that one of the major reasons why you were not interested in securing more gas from the Panhandles Field was because you did not have the market?

A. That is right.

Q. And not because you could not get additional gas out of the Panhandle Field if you wanted to?

A. No, but you cannot take any one of those things and set it out by itself. It has to be a coordinated plan of development and operation throughout.

Any time you take any one part of this problem and set it [fol. 5436] out to itself without coordinating with the other things involved, you lose track of the answer.

Q. Well, Mr. Hinton, I take it from the answers that you have given this morning that you are unable to give us the unit cost of producing gas in the Panhandle Field by Panhandle Eastern after 1946?

A. Without making further study that is right, and that could not be carried on far beyond 1946 at this time accurately, but an estimate could be made that would follow the path rather closely which we will be forced to follow.

Q. And the same answer, of course, would apply for any unit cost which would reflect the unit cost at the well head?

A. Yes, that is right. They are all estimated costs.

Trial Examiner: Mr. Hinton, I think perhaps Mr. Littman may have some questions that will bring this out, but let me ask at this point whether you have studied the production of natural gas in other older fields in the United States.

The Witness: Yes, I have, in two of the older fields.

Trial Examiner: What are those?

The Witness: One being the East Kansas-West Missouri Field, more commonly referred to around Kansas City as the Mo-Kan area and the Louisiana Field, I have given some study.

I was formerly in the Louisiana Field, several years ago and, of course, I have somewhat of an interest in it and I [fol. 5437] have watched it somewhat.

Trial Examiner: That is specifically the Monroe territory?

The Witness: Yes.

Trial Examiner: Is the Missouri-Kansas area still producing?

The Witness: Yes, it is.

Trial Examiner: That is part of your Local Area?

The Witness: That is correct. At this time, we have approximately 550 wells connected to our pipe-line system from that area.

Trial Examiner: Have you abandoned any wells in that area?

The Witness: Well, I would say that we have probably abandoned a thousand wells in the last ten years.

Trial Examiner: In what area?

The Witness: In the Mo-Kan area. That is scattered pretty well all over. The major part of the gas in Missouri comes from Cass County and Jackson County.

We only have one well in—I cannot remember whether it is the Ray Well in White County or the White Well in Ray County—and the Kansas production comes from Anderson, Linn, Franklin, Miami, and I believe we have just a little bit in the corner of Wyandotte County.

Trial Examiner: What is your initial pressure in this [fol. 543] Local Area field?

The Witness: The initial pressure in the Local Area field varies. The top production in that field, the pay section, is commonly called the Squirrel Sand. I think that is more or less a local name.

The deeper gas comes from what is termed the Bartlesville Sand, but there is considerable doubt whether it is the true Bartlesville Sand or not. It seems to be a scattered type of production and the pressure is, I would say, or the range of pressures encountered in the drilling-in of these wells, has varied from 30 pounds and, as I can remember, the highest pressure that I have observed was in the Rantoul district of 260 pounds.

As the wells are drilled, if two or three pays are encountered, there will oftentimes be a variation of several pounds between the top pay that is encountered and the bottom pay.

Trial Examiner: And what has been the usual abandonment pressure?

The Witness: That again varies. We have wells in the Blue Springs area that now produce against a pressure as low as 5 pounds.

The total monthly production from those wells hardly ever gets up to 100 M. c. f. for the month. Some of them are down as low as one M. c. f.

[fol. 5439] Trial Examiner: Is the problem of delivering from a gathering system into the transmission system, having in mind the pressures back of the intake, affected by the structural factors of the field or the geographical location of the field?

In other words, is the problem different in one field [what] what it is in another as to the deliverability of the gas from gathering systems into a transmission system?

The Witness: Yes, I would say that it is quite different in this respect.

As an example, the Town of Blue Springs is furnished by wells during the summer months which do not have to produce against a pipe-line pressure greater than five pounds.

Of course, a great deal of gas is used around Kansas City for house heating and in Blue Springs and in the winter time, as the demand becomes larger, then the pipe-line pressure has to go up in order to be able to furnish that town its supply and the wells are turned off for the winter months.

Of course, if wells of that nature were forced to feed or if the market terminus required high pressure, why, then they would no longer be used at all.

Trial Examiner: Well, the factors that you have mentioned relate rather to the market and the requirements of the market rather than to limitations in the characteristics of the source, do they not, the source of the gas, I mean?

[fol. 5440] The Witness: I am not sure that I followed that correctly, but I believe that it is the terms of the relationship of the source to the pipe-line system, am I right?

Trial Examiner: Yes, the thought I had in mind was to inquire whether, if you desired to deliver gas into a transmission system at any given pressure, the source of the gas behind the intake serving that transmission system would be affected by the nature of the field from which the gas originates, or by geographical location; and if so, in what manner?

The Witness: By the ability of the gas to flow through the porous media. In other words, if the gas had to be

taken and furnished to a transmission system at a high pressure in order to make that pay, of course, [horsepower] would have to be installed and the rate of flow from that well would be, in all probability, so great that in tight areas, it would not have the ability to migrate through the formation into the well bore in sufficient quantities to maintain a usable intake pressure for the well compressor units where it would be a first stage boost from the compressor up to the main transmission line.

Trial Examiner: So that when you are discussing the closed well pressure, that can have no great significance unless you know the character of the formation?

The Witness: That is absolutely correct.

[fol. 5441] Trial Examiner: And relate it to the quantity withdrawn?

The Witness: Yes, sir, because the closed-in well pressure is a pressure that is observed after the gas has had a considerable length of time to migrate into the well bore and as the rate of pull from that well exceeds the ability of the gas to flow into the well bore which is governed almost entirely by its permeability times the thickness of the pay, why, then the well falls off in its deliberability because, instead of working at an observed well-head pressure, it is going to work against a stabilized flow pressure which can only be determined when the pressure gets to the point where we can tell how fast it is going to flow through the formation.

The ability of gas to flow through formation is governed by, I believe, the same as pipe-line formulas. That is, the fundamental part of it being the difference in the square of the pressures and the difference in the square of 400 pounds and 300 pounds is a great deal more than the square between 200 pounds and 100 pounds, and I think that we are going to find that the ratio of flow through these formations in the Panhandle Field and in the Hugoton Field are going to be in about the same proportion as the difference, in squares, at these two pressures named.

Trial Examiner: And when you are serving a high pressure transmission line, you are working under sharp [fol. 5442] limitations of the withdrawal factor?

The Witness: That is correct.

Trial Examiner: As compared with a condition where you are serving a low-pressure transmission system?

The Witness: Where the rate of flow is comparatively low. Does that answer your question, sir?

Trial Examiner: Well, it indicates clearly that the withdrawal pressure is a factor that, in your judgment, is related strictly to the conditions, both geological and as to transmission requirements and market requirements, and would not necessarily be the same, nor the factors governing it, the same in fields in which there has been longer experience.

The Witness: I would say the fields where we have had longer experience would be no criteria for these two fields, because the Missouri-Kansas field is a sand producing formation, whereas the greater portion of our gas comes from Lime-stone, Dolomite and Granite Wash and in the Panhandle Field, and Limestone, largely, in the Hugoton Field.

Trial Examiner: And from the conservation standpoint, it would necessarily follow that the rapid removal of the reserves of the Panhandle Field, at least, would be wasteful?

The Witness: Yes, I feel that if the rate of withdrawal in fields of this nature is large enough that it pulls a low-pressure area within the field, the same as can be observed [fol. 5443] on the rock pressure map, Exhibit 26, to the Northeast side of the field there, I think that as the moisture is dropped out of this gas at these lower pressures, that portions of the permeability are clogged.

I have in mind that that is somewhat of a capillary attraction through the formation, and from a conservation standpoint, I believe that the greatest amount of gas could be obtained from a field of this nature if it were possible to operate that field so that there could be no low-pressure areas pulled within the field at any place.

By Mr. Littman:

Q. Mr. Hinton, on Page 40 of Exhibit 42, you make the statement:

"Therefore, it is my judgment that Panhandle Eastern will not be justified in further producing gas from its

reserves in the Panhandle Field longer than 15 years from present."

Are you sure about that?

A. I am sure that that is my judgment.

Q. Are you certain about your judgment?

A. If my judgment did not lead me to believe that that was not approximately correct, I certainly would not say it.

Q. You are positive about the fact that Panhandle Eastern will not be justified in further producing gas from [fol. 5444] its reserves in the Panhandle Field longer than 15 years from the present, are you?

A. I am positive that that is my judgment of the time when the pressures will get down to the point indicated. The time element does not mean so much to me as the pressures.

Q. Are you sure about the time, 15 years?

A. Undoubtedly, that fifteen years is correct if it is in here, because that is the result of my judgment.

Mr. Goodman: By your judgment, do you mean according to your best knowledge and belief?

The Witness: Yes, sir.

Mr. Goodman: That is what you mean?

The Witness: Yes, sir.

Mr. Goodman: You think that it will not pay to extract gas from the Panhandle Field, according to your best knowledge and belief, beyond 15 years from the present?

The Witness: That is correct.

Mr. Goodman: And do you have in mind, also, certain conditions which would extend that time?

The Witness: Yes, there are many conditions which could arise which would extend that time. Any condition that would tend to curtail the amount of gas withdrawn would affect the total life of the field.

Mr. Littman: Would extend the life of the field?

The Witness: Any curtailment of withdrawal would [fol. 5445] extend the life, yes sir.

Mr. Goodman: Do you have in mind any conditions that would permit further withdrawal of gas beyond the quantities which you have estimated and beyond the 15-year period?

The Witness: Yes. If the manufacturer of carbon black was outlawed in the State, why, it would have a very strong influence on the field. Likewise—

Mr. Culton: (Interposing) By extending or shortening the life of the field?

The Witness: Extending, if it is curtailed. Likewise, if the line to Milwaukee, Wisconsin, now proposed and I believe awarded to the Phillips Petroleum Company, which was not considered in this study, was built and that gas was taken largely from the Panhandle reserve which, in all probability, it will be, why, then my calculations would be in error in the amount of the gas that Phillips takes.

Mr. Culton: Would that lengthen or shorten the life?

The Witness: That would shorten the life of the field.

Cross-Examination

By Mr. Goodman:

Q. Are there any other factors that would increase your ability to take gas beyond what you have estimated, either as to amount or as to time?

A. No, I cannot think of any that would affect it in that manner. If there should be placed upon the west sweet [fol. 5446] field a proration order, it would, in all probability, mean that the total amount of gas which we expect to get from that field would be decreased.

Q. Could you conceive that your rate of pressure decline might change?

A. Yes, I think it can go off more sharply than I have shown, because we have based that on present formation characteristics and, as this becomes lower, I feel that there is going to be considerable stoppage of the channels through the formation, better known as permeability, and the reason that I say that is that a very complete study of this water situation has been made in the Panhandle

Field by Mr. Hammerschmidt of the Texoma Natural Gas Company, and his conclusions lead me to believe that that is what is going to happen and, keeping in mind that we are speaking about the observed well-head pressure and not the equilibrium pressure, I would like to point out that at the time when we experience fairly low pressures at the well head; that there will be areas of much higher pressure which are located between the well bores.

Q. I am not sure that I understand your answer because, first you indicated that the pressure decline, or you indicated you could conceive that the pressure decline would accelerate more rapidly than you indicate.

A. Yes.

[fol. 5447] Q. And toward the end, you mentioned factors which I interpreted as limiting the rate of pressure decline.

A. No, that would hasten it; because, there will, without doubt, be great quantities of gas trapped in the Panhandle Field which will never be recovered, and to complete the answer to your question, the result of the lowering of the pressure in this field may produce a condition whereby the flow of gas through the formation will be decidedly retarded, thus giving a lower observed well-head pressure for the same rate of withdrawal.

Q. Are there any known processes to overcome this factor of impermeability at low pressures?

A. Yes, there are, but they are not far-reaching enough from the well bore to produce the result that would entirely do away with that situation.

Q. What are those processes?

A. The treatment of Limestone with hydrochloric acid.

Q. And you have resorted to that, have you not?

A. Yes.

Q. To what effect?

A. With an increase in the deliverability of the wells at the present pressures.

Q. And to what extend have you applied that treatment to existing wells in the Panhandle formation or in the Panhandle Field?

[fol. 5448] A. I believe that there is somewhere between 50 and 60 of the wells connected to our system that have been treated with acid.

Q. And to what extent does it pay to repeat or keep on that treatment?

A. From the only experience that I have had, I am [afrain] that we are not going to get good results by the repeating of acid treatment.

I refer to a treatment which was made on our Masterson 1-38 well in 1937, and the treatment was made by following the acid into the formation with a gas load. That is, a compressor was set up at the well head and the weight [and the weight] which forced the acid back into the formation was a straight gas load and that well never did clean up as we felt that it should have.

In other words, you can go out and open the well and still smell the spent or partially spent hydrochloric acid, so this year I put a treatment in that well of 2,000 gallons of 7½ percent acid and followed it with 6,000 gallons of water in an effort to clean out the area which had been acidized before and the result was that, to date, we have not received any gain in deliverability or open flow of that well.

Q. Is acidization the only known process of overcoming the factor of impermeability?

A. Well, that question would have to be answered in [fol. 5449] this respect or in this manner: There is another method of opening up the formation around the well bore, but that method is not as far-reaching as acid treating.

Q. In other words, acidization is the best known method?

A. Yes. The other method I referred to is the shooting of the well with nitroglycerin.

Mr. Culton: That is rather dangerous to the well in some formations, is it not?

The Witness: Yes, a well that has been shot with nitroglycerin will have a maintenance cost that is much higher than a well that has not been shot at all, and a well that has been treated with acid will show a lower maintenance cost than a well that has not been treated at all.

Mr. Culton: That difference is largely due to cavings?

The Witness: That is true, the cracking of the formation around the well bore, and particles falling off into the well bore.

By Mr. Goodman:

Q. You have mentioned your experience with old and exhausted and abandoned wells, is that right?

A. What is it?

Q. You have mentioned some experience in old, exhausted and abandoned wells, is that right?

A. Yes, in our Mo-Kan area.

[fol. 5450] Q. What type of area is that, that is, as to general capacity, small or large? A. Small.

Q. It is a small area?

A. Yes, not comparable with the Panhandle or Hugoton areas at all.

Q. In other words, it is quite a limited area and the conditions are not those found pertaining to the Panhandle area?

A. That is correct.

Q. Now, is the Louisiana area comparable?

A. In some respect, it is, but the size of the reservoir, the number of acres above the reservoir, is only a fractional part of the Panhandle Field.

Q. In other words, then, Panhandle is an individual case and its probable future is really speculative, isn't that so?

A. Yes, I would say that it is speculative, and giving the field the best of its possibilities, the greater part of the speculation lies on the under side.

Q. Is there such a thing affecting the migration of gas as a rate of permeability? A. Certainly.

Q. And have you considered such a factor in determining your judgment that the field will, in all probability, [fol. 5451] be abandoned in 15 years?

A. I have not said the field in all probability would be abandoned in 15 years.

Q. You have said that Panhandle Eastern would cease producing?

A. Yes, I feel that we can do better to produce our gas elsewhere at the end of 15 years, rather than make a capital expenditure that could be used for such a short time.

Q. Now, within 15 years, Mr. Hinton, there is a chance of the factor of rate of permeability helping conditions, isn't that so?

A. That has been given very thorough consideration.

Q. By whom?

A. By me, in my studies.

Q. To what extent?

A. To placing my idea of what the pressures will be through the various years.

Q. Where do you show that?

A. In my pressure curve.

Q. Well, in an exhibit that is—

A. (Interposing) I do not remember whether they were put in as an exhibit or not.

Q. Just a minute. Does that show in connection with your curve of rate of pressure decline? Is that factor evaluated in any way?

[fol. 5452] A. Yes, it is.

Q. In what way?

A. I refer you to Group Area "A" of Exhibit 46. The pressure drop in this group area would have been shown to be much sharper if it were not for the fact that there is comparatively low permeability in this particular area.

I give, for example, our Burnett wells located in Section 1-86 and Section 108 of Block 5, I & G. N. Survey, Carson County, Texas. There exists at this time a gradient of pressure from Burnett 1-86 to Burnett 108, a distance of approximately two miles, that is over 100 pounds.

Mr. Culton: Does that mean it is tight in there?

The Witness: That means it is very tight in there. The fact that when these wells are blown to atmosphere for testing or conditioning that we oftentimes take a pressure gage and put on as soon as the well is closed and then record the pressures at various intervals, usually 5, 10, 15, 20, and then we may skip and go on to an hour or two hours or three hours, and we find that the wells, in general, in this area, are slow to regain their closed-in wellhead pressure, whereas the wells located over in this section of the field, referring to Group Areas "G" and "F", show that there is, in general, high permeability in that portion of the field.

Trial Examiner: That is, you mean an equalized pressure is more quickly reached?

[fol. 5453] The Witness: That is correct, yes, sir.

Does that answer your question, Mr. Goodman?

By Mr. Goodman:

Q. Yes.

Now, in considering tendencies toward pressure equalization, how much of a time interval have you taken into consideration?

A. It is my opinion that when well-head pressures get down to 100 pounds or below, that it is not going to be very successfully carried on to produce a well greater than one-third of its total well hours, or, in other words, one-third of each month.

Q. Now, Mr. Hinton, you have distinguished between abandoning a field and seeking to produce gas. I presume you mean that you will maintain the power to produce some gas after the 15-year period?

A. That remains to be seen.

Q. In other words, you do not rule out the field for purposes of some ultimate production or use even at the end of 15 years, do you?

A. No, I think that it is possible that we could get some gas from a few of our wells, but by the time we paid the operating expense and the taxes on that property, why, I think the cost per M.c.f. would be far greater than that which we hope to receive for it at the purchase end of the line.

[fol. 5454] Q. Do you have in mind any particular use for the field after the 15-year period?

A. Yes. I think it will be used for short-distance pipe lines up to the time that the gasoline plants in the sour field have taken the greater portion of it and then the medium-distance lines will be abandoned and there will still be a great deal of gas left there for local consumption where the time element will not be important in the migration of that gas in areas away from the well bore into the well bore.

Q. In other words, there will be considerable productivity of the field but at a relatively low rate of output?

A. That is correct.

Q. So that at the end of the 15-year period, the field itself and your leases on the field might conceivably have substantial salvage value?

A. Yes, I think there will be some salvage value there.

Q. In other words, you could sell your rights, is that right?

A. No, I think you could probably turn the pulling of the pipe over to somebody for half of the value of the pipe.

Q. Well, the wells themselves would be capable of some production?

A. Yes, but here is the thing: At that stage of the [fol. 5455] depletion of the field, the companies that are connected to short-distance pipe lines will still be connected to their own development and as we cease to take gas from our acreage, there is certainly no reason why they should pay us any money for it, because as they take their gas away, what little we have left is going to eventually migrate over there to the extent it would not be a paying proposition for them to make a cash outlay for our acreage holdings.

Mr. Culton: They would also have to operate the pipe lines from our acreage over—

The Witness: (Interposing) Yes, and pay the taxes on it.

By Mr. Goodman:

Q. Now, in the figuring that you have done, and to the extent that you have done, have you given any consideration to all of the salvages realizable when you stop production in the Panhandle Field?

A. No, sir, that problem has not been given to me.

Mr. Goodman: That is all.

Cross-Examination.

By Mr. Lee:

Q. You said something about at the termination of the 15-year period, you would have to take your gas from elsewhere. What did you mean by that?

A. I mean that I believe that we can produce gas more cheaply and protect our reserve in the proper manner by [fol. 5456] switching production to the Hugoton Field

rather than continuing to produce that same amount of gas at a much higher cost which would have to be passed on to the public if we continued to operate in the Panhandle Field.

Q. Then do I understand that the idea that you have is that—at the present time you are working both of the fields?

A. That is correct.

Q. But you give a far greater life to the Hugoton Field?

A. Yes, sir.

Q. And do you give that greater life to the Hugoton Field considering you are working both fields now?

A. Yes, the total withdrawal from the Hugoton Field is less than 300 billion cubic feet right now, whereas the annual withdrawal from the Panhandle Field is more than twice the total withdrawal from the Hugoton Field to date.

Q. How much longer after the 15-year period would the life of the gas available go on?

A. Considering the number of acres which we have in this study, it is my opinion that we would not be safe in estimating a life longer than 25 years for that field.

Q. Is that 25 years beyond the 45 years or 25 years from the present?

A. 25 years in total.

[fol. 5457] Q. Now, of course, this estimate does not take into consideration any possibility of added acreage, does it?

A. No, sir, it does not.

Q. And is there a possibility of acquiring additional acreage that would tie into the Hugoton Field?

A. We are endeavoring to do that now as a safety factor.

Q. Then that 10-year period of life that you ascribe to the Hugoton Field beyond the 15 years you have ascribed, or it is vice versa, isn't it—yes, that is right—the 10-year period of life you have ascribed to the Hugoton Field beyond the 15-year life you ascribed to the Panhandle Field is subject to to an increase, to-wit, the 10-year period referred to by reason of the acquisition of additional acreage, isn't it?

A. That is correct, and I based by 10-year opinion on observations made in that field by me.

Q. Well now, in view of the fact that you think the reserves, so far as obtaining them in an economical manner in the Panhandle Field is concerned, will be limited to a 15-year period. Is that why your company is not seeking any further acreage in the Panhandle Field?

A. No, not exactly, Mr. Lee. It is a complicated problem to fit all of these different moves in, in such a manner that will enable the company to obtain the greatest amount [fol. 5458] of gas for the least cost.

Q. Now, generally speaking, without too much detail, I understand that you have limited the life of the Panhandle Field but you have great faith in an additional life for the Hugoton Field.

Therefore, is your company negotiating to acquire any more of the Panhandle Field now?

A. No.

Q. And that is the underlying reason for it, isn't it?

A. Yes, because the time that we would operate in that field would not be greatly affected by the addition of more acreage.

Q. And in addition to that, you are negotiating to enlarge your Hugoton Field because of the longer expectancy of life?

A. Life, that is correct, and certain facts that have come to light the past year on testing, makes us feel at this time that it is probably a good idea to add more acreage just as a matter of having a safety factor.

Q. Now, let's assume that you did add that acreage in Hugoton Field, and let's assume that the Panhandle Field has been abandoned.

The 15 years has rolled around. Are you going to have a source of supply equal to what you have now?

A. Yes, we will have if the acreage is as we hope it is.

[fol. 5459] Mr. Lee: That is all.

Cross-Examination (Continued).

By Mr. Littman:

Q. Mr. Hinton, is it your testimony that Panhandle Eastern Pipe Line Company will abandon its facilities in the Panhandle Field in the year 1956?

A. That would be my idea, that we would do away with our present system and utilize the pipe which now carries gas out of the Panhandle Field to other portions of the Hugoton Field where it will be needed.

Q. In 1956? A. Yes.

Q. And it is your testimony that Panhandle Eastern will not operate in the Panhandle Field after 1956?

A. Not as a long-distance pipe line.

Q. How will they operate in the Panhandle Field?

A. I do not know, that is something that would have to come which we do not know, and the reason I say that, they may be making silk stockings out of gas by 1956, and we might use it for that purpose.

What I mean is, there are a lot of things that can happen in the use of natural gas that we do not know about today and they undoubtedly will happen.

Q. Then you cannot testify that Panhandle Eastern will, in fact, abandon its facilities and operations in the [fol. 5460] Panhandle Field in the year 1956, can you?

A. As a long-distance pipe line company, I can say that that is going to be very close to the time.

Q. But you cannot say that as to their operations as a natural gas company?

A. Yes, I could say that as to their operations as a natural gas company. Any other use that is made of our natural gas, I feel would have to be in another category other than long-distance pipe line light and fuel sales.

Q. You are not saying that Panhandle Eastern could not continue to operate in that field after 1956 as a long-distance pipe-line company?

A. Not if they would choose to make disadvantageous expenditures.

Q. Now, you have stated the primaary reason for your 1956 abandonment, to-wit, is the economics in that year, am I correct?

A. Yes, that is correct.

Q. And the economics of the year 1956 is, of course, dependent upon the capital expenditures required to produce gas in that year, is that right, in large part?

A. Yes, I believe that you said that correctly.

Q. And you have made no study of that, have you?

A. As to the amount of capital expenditure required to produce gas after the year 1956?

[fol. 5461] Q. Yes.

A. Not in a detailed manner. It has been given considerable study.

Q. By whom?

A. By me.

Q. And what is the unit cost of the gas in 1956, according to your considerable study?

A. I am not able to name a probable unit cost of gas in 1956 after considerable study.

Q. Now, will you tell me how you can determine the economics of operation in 1956—

A. (Interposing) Common sense.

Q. (Continuing) —and after 1956, without knowing the unit cost in that year. You say, "common sense"?

A. Yes.

Q. How about the "crystal ball" you referred to a minute ago? Does that help you to get the answer too, Mr. Hinton?

A. I do not have to refer to the crystal ball in this instance.

Q. Not in this instance.

Now, you can say that you can tell without knowing the unit costs of operations in 1956, you can tell whether it is economical to operate?

A. Yes.

[fol. 5462] Q. You can. Now, how?

A. By just taking the operating expense and going back to the amount of gas that we would be able to take from these wells, assuming that the characteristics did not change on the wells, and they are not going to remain the same, and just putting those few things together, the amount of fuel required, the number of engine hours required to transport that amount of gas will—I just do not feel that I would even give it the consideration to go to a unit cost, because it is beyond the realm of good economics.

Q. Well, your idea of good economics and my idea of good economics and other people's idea of good economics may differ, Mr. Hinton.

Now, I want to know specifically what you considered, in dollars and cents, to arrive at your economics? I want you to tell me what you economics consist of.

A. I cannot give it to you in dollars and cents. My economics consist of going through the operations required and the amount of capital expenditure that would have to be installed to raise the volume that we could take from that field to a point where it would prove that we could not take gas cheaper from the Hugoton Field than there.

Q. That kind of general statement may satisfy you, Mr. Hinton, and may satisfy others, but it does not satisfy me.

Is that all the specific information that you can give us [fol. 5463] at this time with respect to the method and manner by which you arrived at your economics of abandonment in 1956?

A. I believe that is sufficient.

Q. That is the best you can do?

A. Well, as far as I am concerned, that is sufficient, and until proved otherwise by somebody else, I am going to stand on it.

. . . . . .

By Mr. Littman:

Q. Now, you had no trouble in arriving at this kind of general conclusion.

A. What do you mean I had no trouble?

Q. That you had no difficulty in arriving at the conclusion that Panhandle Eastern will not economically be able to produce gas in the Panhandle Field after 1956, did you?

A. Not a great deal.

Q. All right. And you also had not a great deal of difficulty in arriving at the very opposite conclusion, to-wit, that every other operator and every other pipe-line company in the field will be able to operate at full blast and at 100 percent of its 1948 capacity in 1956?

[fol. 5464] A. No, I think that is reasonably what will happen, as I have explained. The type of market for the use of the gas other than Panhandle Eastern is decidedly different than our picture in that field.

Q. You made no study in dollars and cents with respect to the economics of the operation of the other companies, did you, in the Panhandle Field?

A. Yes, I gave consideration to that and knowing it is just a choice with those companies, whether they want to continue to operate for another two or three years at a high cost of operation and make a little money, or our decision whether we want to continue to operate and try to make a reasonable profit as we are today, by moving into the Hugoton Field.

They have no reserve in Hugoton Field and their choice has to be whether they choose to make a little money or go out of business.

Q. All right. What is the unit cost of operation in the Hugoton Field in 1956 for Panhandle Eastern?

A. Considerably lower than it is in the Panhandle Field.

Q. In dollars and cents, please.

A. I cannot give it to you in dollars and cents.

Q. Can you come within 100 percent up or down, within the correct figure in dollars and cents?

[fol. 5465] A. Yes, I imagine I could.

Q. Have you made the calculation? A. I have not.

Q. Well, if you have made no calculations, what is it, a kind of loose estimate?

A. Any estimate has a certain degree of looseness, and especially long-distance estimates can be off.

Q. Now, in order to determine whether or not it is going to be economical for Panhandle Eastern to abandon its facilities in the Panhandle Field in 1956 and produce all of its gas out of the Hugoton Field, you must necessarily arrive at the conclusion that it is going to be more expensive to operate per M.c.f. in the Panhandle Field than in the Hugoton Field in 1956. Is that correct?

A. You say it is going to be more expensive to operate in the Panhandle Field than in the Hugoton Field?

Q. I am speaking of unit costs. Will it cost more per unit?

A. Yes, I think that has been definitely stated many times.

Q. All right. Let's have the unit cost of operation in the Panhandle Field in 1956 and let's have the unit cost of operation in the Hugoton Field in 1956. Do you know those?

A. No, I do not know them in cents, and I do not believe that anybody can give them exactly.

[fol. 5466] Q. Now, you made no study, in dollars and cents, of the economics of all other pipe line companies who, according to your judgment, will be able to blithely go along producing 100 percent of their peak requirements right down through the year 1956. Is that correct?

A. No, I did not, because I know more what type of markets that type of gas is going to be used for. I know those companies are going to be forced to make tremendous additional capital expenditures before 1956 occurs, and by making those additional capital expenditures, they will have them there available.

We are making our capital expenditures, outside of the minor expenditures, on the basis of trying to obtain from our reserve the probable amount of gas underlying them.

Q. Now, if these companies, these other pipe-line companies, did not make these tremendous capital expenditures through the future years, they would not be able to get the quantities of gas that you have estimated will be withdrawn by them in the future years?

A. That is right. Texoma would not be building their new station over just west of our Sneed station at this time.

Q. And the life of the Panhandle Field would be extended beyond the 15-year period, would it not?

A. As far as the life of the Panhandle Field, it would extend it. As far as the life of the Panhandle Eastern [fol. 5467] Field, it would not greatly influence it, because as soon as they stopped, we would take advantage and get that part of the gas that we could.

Q. That is your idea.

Mr. Wheat: When you said Panhandle Eastern Field, you meant the portions of the field in which Panhandle Eastern obtains its gas?

The Witness: Yes.

By Mr. Littman:

Q. You mean it would not affect Panhandle Eastern's picking up its stakes in 1956?

A. Not noticeably, no.

Q. If the field continued to operate for an additional ten years beyond 1956, you are still of the opinion that Panhandle Eastern would abandon its operations in the Panhandle Field in 1956?

A. Yes, because we will be producing gas at a lower cost in the Hugoton Field at that date.

Q. And in arriving at that conclusion, you made no—

A. (Interposing) Dollars and cents—

Q. (Continuing)—calculations of dollars and cents, did you?

A. Not per M.c.f., I did not.

Q. And you have no working papers to show how you arrived at it, do you?

[fol. 5468] A. No, I do not believe I need them.

Q. It is just a kind of a general idea, is it, of yours?

A. No, it is just something that anybody with any knowledge of the gas business knows is going to happen.

Q. Mr. Davis does not know it, does he? At least, he has not testified to it.

Mr. Culton: He said 15 years.

Mr. Littman: He did not.

Mr. Culton: In the last letter he filed, he did.

The Witness: I do not know.

Mr. Culton: He said he thought we had enough for 15 years and counsel knows it.

Mr. Littman: There is no such testimony in this proceeding, Mr. Culton, and that is the thing to which I am referring, is this record.

I am not talking about red herring prospectuses, to use the term which your own witness used.

Mr. Culton: Go ahead, go ahead.

By Mr. Littman:

Q. And Mr. Davis, in estimating approximately 70 percent greater reserves in the Panhandle Field, is wrong, and you are right, is that a correct statement?

A. In my opinion, my estimate is more nearly correct than Mr. Davis', but that is no reflection on Mr. Davis be-

[fol. 5469] cause without any doubt, he is one of the best

geologists and engineers throughout the United States as far as a general knowledge of every gas field in the United States is concerned.

Q. And his estimate of the remaining reserves in the Panhandle Field is 70 percent greater than yours, is that correct?

A. Did you take time to sit down and figure out the reservoir content required to hold that much gas?

Q. Mr. Hinton, I am asking you the questions. I am not being cross-examined.

Did Mr. Davis find the remaining reserves of the Panhandle Field as of the end of 1940 over 70 percent greater than your estimate?

A. I believe that is what you said the other day. I had not seen that estimate before, as I remember.

. . . . . .

[fol. 5470] By Mr. Littman:

Q. Mr. Hinton, in response to one of Mr. Lee's questions, you undertook to give an estimate of the life of the Hugoton Field, did you not?

A. Yes, I believe I gave it for a number of years.

Q. Now, I would like you to furnish us, since this is an entirely new subject for you in this proceeding, with all of your working papers showing the methods, manners and figures used by you in arriving at this estimate for the life of the Hugoton Field.

Do you have them with you?

A. I do not.

Q. Where are they now located?

A. I do not have working papers. That was an estimated figure.

Q. Now, I want you to tell us how you arrived at it, giving us the figures and the bases of your estimate, that is, if you propose to undertake to testify in this proceeding with respect to the life of the Hugoton Field.

. . . . . .

[fol. 5472] The Witness: I believe that I have told you several times that I have made no detailed estimate, but by observing the characteristics of the field based on the data which we have gathered, and knowing, in general,

what we could probably expect to happen in that field, I would say that in order to protect the interests of the Company, that capital expenditures at this time should be made on the basis of expecting to take gas from the Hugoton Field for a period of not longer than 25 years.

By Mr. Littman:

Q. Are you a geologist, Mr. Hinton?

A. No, sir.

Q. Now, will you give us the annual withdrawals that are expected to be made from the Hugoton Field from now to the day of death of its life, 25 years hence?

A. I will be happy to give them to you if it is possible for me to obtain them.

Q. Don't you have them among your working papers?

A. No, sir, I have them for no longer than a period of the next five years.

Q. You have no figures beyond the next five years?

A. No. That is all I could get from the Committee for Conservation, five years.

Q. Well, what figures with respect to annual with- [fol. 5473] drawals beyond the next five years did you use in arriving at this estimate of 25 years?

A. I used the amount of gas that Panhandle expects to withdraw from that field, and I can tell you in very short order that the problem in the Hugoton Field is going to be different than it was in the Panhandle Field, because we are not going to have the great benefit of migratory gas in that field.

We are going to be governed much more closely by the amount of gas in place.

Q. Well, let's have your withdrawal figures for Panhandle Eastern.

* * * * * * * * *

[fol. 5474] A. I believe there is an exhibit here, somewhere.

Mr. Culton: Mr. Morton's exhibits are the ones you are talking about, and they are for 15 years.

The Witness: It will be very easy to give because we have arrived at a constant load at the end of the 15-year

period, and that entire amount will be withdrawn from the Hugoton Field for the next 10 years, estimated.

By Mr. Littman:

Q. Now, where is this load for the next 15 years? Where does that appear in evidence? In one of the exhibits?

A. I believe so.

Mr. Culton: Exhibit 132.

The Witness: Those fields were divided in one of those exhibits and showed the percent that we expected—yes, that is shown in Exhibit 131, and for the next 10 years the amount of gas which Panhandle Eastern will expect to take from the Hugoton Field will be 117,031,551 M.c.f. per year.

By Mr. Littman:

Q. 117 million or 115 million? A. 117 million

Q. Where does that figure appear in Exhibit 131?

A. That is the total and we do not anticipate taking any more gas from the Panhandle Field after this period [fol. 5475] has been reached for the main line and, therefore, the total Hugoton Field withdrawal will be that amount.

Mr. Goodman: What paper are you reading from?

The Witness: Exhibit 131.

Mr. Goodman: I see. All right.

The Witness: From the column shown as "Total" under the "Total Main Line".

By Mr. Littman:

Q. Now, Mr. Hinton, the figures which you have read are not your estimates of withdrawals, are they?

A. No, those are Mr. Morton's estimates.

Q. And Mr. Morton hasn't testified to any such figure as 117 million M.c.f. in this proceeding, has he?

A. No, but he has furnished me with that estimate and it is in my working papers.

Mr. Culton: And that was put in evidence by Mr. Littman, wasn't it?

Mr. Littman: Oh, yes, as a part of your working papers?

The Witness: Yes.

By Mr. Littman:

Q. For the purpose of showing how you arrived at certain figures long prior to 1960? A. Yes, sir.

Q. Now, Mr. Morton did testify in these proceedings as to the amounts of sales for Panhandle Eastern for the [fol. 5476] next five years or 5½ years through 1946, I believe, did he not?

A. Yes, at least that far.

Q. And this so-called 25-year life is based upon a stepping up of the annual production beyond 1946 to as high as 117 million M.c.f. Is that right?

A. Yes, shown in the figures just requested by you.

* * * * * * * *

[fol. 5477] By Mr. Littman:

Q. At any rate, the 25-year so-called estimate of yours is predicated upon the annual total main line sales shown in the extreme right-hand column of Exhibit 131?

A. Yes, under the total, which is the last column of the group of three, shown as the "Total Main Line."

Q. And what reserves are you using in arriving at this 25-year estimate?

A. I am not using anybody's reserves because there is no reserve figure that has been established that will show that we can take that amount of gas from our acreage.

Q. And you made no such study, did you? A. Yes.

[fol. 5478] Q. What? You did make a study showing how much gas you can take from your reserves?

A. I know how much we can take down until the end of 1960 from an estimated reserve.

Q. Where are your working papers for that?

A. I shall try to find them in my intricate filing system.

Q. Don't bother to do it now.

A. I have it all worked out by percent, total estimated amount of reserve withdrawn by years. I think that is in the miscellaneous working papers.

If you would rather go on, I would be glad to look that up,—I know I have it—and show you the percent figures.

Q. Did you make the calculation after 1960 to get to the end of the 25 years?

A. No, I went and talked to the management about acquiring some more acreage, and that is what we are doing at this time.

Q. In arriving at this so-called estimate with respect to the life of the Hugoton Field, did you assume a decelerating rate of production per pound drop of decline in rock pressure?

A. No, I don't think that we will experience the same type of [decleration] as we are experiencing in the Panhandle Field at this time.

[fol. 5479] Q. You are going to have a new kind of variation from the application of Boyle's Law in the Hugoton Field?

A. I have never testified that there was any variation from Boyle's Law in any respect, and I would like it now to be understood that I am not questioning Boyle's Law in any manner whatsoever.

Q. Mr. Hinton, you didn't listen closely to my question. I said from the application of Boyle's Law.

A. I thought you said, "deviation," I am sorry.

Q. Deviation from the application of Boyle's Law to the data at hand?

A. No. Again, the pressure decline problem in the Hugoton Field for the Panhandle acreage will show a decidedly different trend than it does in the Panhandle Field of Texas, in my judgment.

Q. Well, maybe I can get at it in another way.

You were not requested by the company to make any estimate of the life of the Hugoton Field, were you, for purposes of this proceeding?

A. I don't recall. I am always making estimates of the probable life of the field and I am telling you that I just can't remember whether anybody asked me to or not, but I did a tremendous amount of work on the Hugoton Field and tried to apply the proper judgment on what the trend will be, based on the present data which has been obtained.

[fol. 5480] Q. Well, you didn't make any such study for the Hugoton Field as that which you have presented in this proceeding for the Panhandle Field, did you?

A. No, it would not be possible to make that type of estimate for the Hugoton Field at this time. The total amount of gas that has been withdrawn from that field to date is only about two percent of the total estimated reserve for that field.

Q. Mr. Ralph E. Davis has stated in a letter, addressed to the Panhandle Eastern Pipe Line Company, which is in evidence in this proceeding, that the life of the Hugoton Field was more than 25 years. Do you agree with that statement? A. Oh, absolutely.

Q. You do?

A. Yes. The life of the Hugoton Field will, in all probability, be far beyond 25 years, but the amount of gas which Panhandle Eastern has under lease and developed at this time will not last more than 25 years for the rate of withdrawals which we expect to have.

Q. I think I now understand your testimony, Mr. Hinton, that you are confining your 25-year estimate for Panhandle Eastern to the present reserves, to-wit, the gas acreage under lease presently by Panhandle Eastern and the leases subject to present gas purchase contracts?

[fol. 5481] A. Yes, the length could be governed by State regulation.

Q. I am afraid I don't understand the latter part of your answer.

A. I say, the time element could be governed by State regulation.

Q. And Panhandle Eastern, as you have already suggested, is going to go out and secure more reserves, are they not?

A. Yes, but in the even that we did have a proration order placed upon that field, which we would be forced to operate under, it would in all probability require that we connect a large number of wells which would be drilled by other vendors in order to furnish the amount of gas which we would require to supply our market demand.

Q. And, of course, the acquisition of more acreage and the acquisition of more reserves in the Hugoton Field would extend the 25-year period which you gave?

A. Yes, I hope so.

Q. And the reasonable expectation is that it would extend the 25 years?

A. Yes, the acquisition of additional acreage would have a more far-reaching influence in extending life than would the acquisition of acreage in the Panhandle Field of Texas.

* * * * * * * *

[fol. 5482] By Mr. Lee:

Q. Well, if you are so certain that the Panhandle Field, that is the company-owned acreage in the Panhandle Field, will be abandoned in ten years, and if you are so certain of the life of the Hugoton Field of not less than 25 years with your present acreage and considerably beyond 25 years with your present plus acquired acreage, then isn't it only the part of common sense, in order to continue to have the gas for this pipe line, that you should and will greatly increase your Hugoton acreage holdings?

A. That would be my idea, Mr. Lee.

Q. Sure. And that means that the investment in the pipe line—I am not talking about any Local Area pipe line, I am talking about the long-distance pipe line which is going to have a source of supply for a great many years beyond 25 years from now under your own ideas, isn't it?

A. If we are able to acquire the acreage, which is becoming very scarce in the Hugoton Field at this time.

Q. Yes, but even if you do not acquire the acreage, as I understand it, you do say that the reserves are sufficient [fol. 5483] for more than 25 years that you have now?

A. I would say that 25 years would cut it to a pretty fine point, because that is the reason that it was my recommendation that we acquire additional acreage, to be sure that we could have gas for 25 years.

Q. Well, there is just one more question that I would like to ask you.

Has the Panhandle Eastern Pipe Line Company actually been engaged, within recent years, in extending its acreage in the Hugoton Field?

A. No, we have not, because it is only the past two or three years that the market trend has been as it is, and if we were to remain upon the basic market, I would say that we had a very nice acreage picture to assure a 25-year supply of gas for main transmission line.

Mr. Culton: That is, you mean the market up to a year or two ago?

The Witness: Referring back to the exhibit, I believe it is 141, which shows the amounts of gas which we expect to take under the basic load condition.

By Mr. Lee:

Q. But just recently, at least within the last six months, perhaps nine months, you have entered into contracts that greatly enhance your market, to-wit, the contract with the Consumers Power in Michigan, haven't you?

[fol. 5484] A. Well, I don't know much about the detail of where the gas goes, Mr. Lee.

Q. Oh, but you do know this: As production manager, you know that there has been something done that is going to greatly increase the required production?

A. I certainly do.

Q. Sure.

A. But I don't know what percent goes to Consumers or any certain contract.

Q. No, but you do know that what has happened in the last nine months is that a contract has been entered into between your company and Consumers Power Company that results in a tremendous addition to your total output of gas? A. Oh, yes; yes, sir.

Q. Now, what I would like to ask you is this, just again, in view of that fact has the company been engaged, in recent months, in efforts to increase its acreage in either Panhandle or Hugoton or both?

A. We have made an effort to secure additional acreage in the Hugoton Field within that length of time stated, but no effort to increase the acreage in the Panhandle Field.

Mr. Culton: Have you actually succeeded in getting acreage?

The Witness: Yes, we have and the cost of securing that acreage is not reflected in the capital expenditure or [fol. 5485] operating cost in these studies.

By Mr. Lee:

Q. And how much was that additional acreage that you recently secured?

A. Well, I can't tell you just—

Q. (Interposing) Well, approximately.

A. Well, the acreage held by the Panhandle Eastern as of December 31, 1940, in the Texas and Hugoton fields for main line purposes was 227,845.95 acres; as of November 30, 1941, the total amount of acreage held by the Panhandle Eastern both operated and unoperated, in both the Panhandle Field and the Hugoton Field, was 254,802.69 acres.

Mr. Culton: That is an increase of how much?

The Witness: About 27,000 acres. I was going to say 30,000. That is the amount that I had in mind, but I thought I had better check it.

By Mr. Lee:

Q. Well, wait a minute. If you will pardon me, you said 227,845.95, December 31, 1940? A. Yes.

Q. And 254— A. (Interposing)—802.69.

Q. November 30, 1941? A. Yes.

Q. And what was the increase there?

[fol. 5486] A. About 27,000 acres.

Q. That is close enough. Now then, it will be the settled policy of the company, in view of the philosophy you have given us here about termination of uses in the two fields, to go on enlarging their holdings, won't it, in the Hugoton area?

A. By a few more thousand acres, but not in any substantial increases as is reflected in the figures which I just gave you.

Q. But that will be because you will feel that when you have taken a few more thousand acres, perhaps, at the outside 35, you have got such a reserve there for so many years that you feel you can rest a while on acquisition of new reserves?

A. Yes, and we will constantly be improving our acreage picture. By that I mean, whenever possible to obtain a lease on acreage which is conveniently located to our pipe-line system, that we will take that and in the event that we feel, as time goes along, that we can safely drop some acreage to cut down expenses, we will drop less desirable acreage and keep the more desirable acreage.

Q. All of which adds up to one thing, that your continuation in business is going to be, in your judgment, under that program, for far beyond the 25-year period from the present time?

[fol. 5487] A. I don't believe that we could justify any estimate in any gas field that has ever been discovered for a period longer than 25 years.

Q. No, but now wait a minute. You have given us 25 years to start with. Now, this enlargement of your holdings and the policy that you pursue is bound to result in the continuation of business at the present rate in excess of 25 years.

A. It was taken primarily as a safety factor and it should result in a longer life of the field in the event that in making a long-distance estimate of that nature we had not placed the proper value upon this reserve and it is much better to have a little too much than to be on the short end of the deal.

Q. I know.

Mr. Littman: You mean to have—

The Witness: (Interposing) Excess acreage.

Mr. Littman: To have a little excess acreage?

The Witness: Yes, sir.

By Mr. Lee:

Q. And it might be 30 years and if might 35 years?

A. It could be, but the data does not indicate that.

Q. What does it indicate to you, in your best judgment?

A. It indicates to me that the amount of gas that we are going to be able to take from the Hugoton Field is going [fol. 5488] to be much less than that which we are going to be able to take from the Panhandle Field, and, therefore, in order to obtain the Hugoton gas at the best conditions, it is going to be necessary to shift operations to that field at a fairly early date.

Mr. Lee: That is all.

Trial Examiner: Mr. McRee, have you questions?

Cross-Examination.

By Mr. McRee:

Q. Mr. Hinton, do you have a copy of Exhibit No. 134 there? A. Yes, I have it Mr. McRee.

Q. In arriving at your estimate for Condition "C", what factor did you take into consideration for the increase in withdrawals from 1941 during the subsequent years?

A. Estimated increases by the pipe line companies, only, and no increase in gasoline plant consumption or in the carbon black industry.

Q. I believe that Condition "C" anticipated that not only Panhandle Eastern but the other major producers in the field would experience a reasonable addition to their loads from time to time.

A. Yes, that is correct.

Q. By "reasonable additions to the load" just what did you mean?

A. Well, at the present time, it is my understanding [fol. 5489] that I am supposed to prepare at Mr. Littman's request a detail of the amounts taken by the various pipe line companies.

I believe that that came in in a package which I have not opened yet, my working papers I meant. I can hand you, or you can be furnished, a copy of that which, I believe, would answer your question.

In other words, I can't recall those figures offhand.

Q. Well, in the case of your own company, you anticipated, I assume, in Condition "A" that there would be some customers added to your line from time to time, did you not?

A. No, we just assumed that that was—

Q. (Interposing) I beg your pardon, I mean Conditions "B" and "C"?

A. Yes, in "B" and "C" that was considered.

Mr. Littman: Pardon. May I interrupt to just clear up one point?

Mr. McRee: Yes.

Mr. Littman: Am I correct in stating that your Exhibit 141 shows the breakdown of your withdrawal figures under Condition "C", which are shown in Exhibit 134 in Column 11?

The Witness: Yes, they do.

Mr. Littman: That is under Condition "C" only?

The Witness: That is correct. I thought about making those for all three, but you had talked about "C" and we had agreed that we thought that that was what was going [fol. 5490] to happen, so I did not make three separate exhibits.

Mr. Littman: Well, I believe that my interrogation on cross-examination showed pretty clearly how you arrived at your annual withdrawals for Condition "B".

The Witness: Yes.

Mr. Littman: Pardon the interruption, Mr. McRee.

By Mr. McRee:

Q. Did your anticipated withdrawals under Condition "C" take into consideration that the other companies might also add customers from time to time?

A. Under Condition "C"?

Q. Yes.

A. Yes. It shows an increase for those companies for the first five years. Thereafter no increase. You will note that the amounts from 1945 through the year 1948 are constant, a total of 679,000 M. M. c. f. per year and after that date they drop off in the proportion that the Panhandle Eastern expects to retard their withdrawal.

Q. That is true, but the difference between Columns "B" and "C" would reflect the increase in load of the companies other than Panhandle, wouldn't it?

A. Yes, that is correct.

Q. So that from 1946 the other companies in the field would experience, under this estimate, an additional load of 53 billion cubic feet?

[fol. 5491] A. That is right, 53 billion cubic feet.

Q. And a similar amount during the following year?

A. You refer to the year 1947?

Q. Yes.

A. Yes, that is correct. I believe those figures are correct.

. . . . . .

[fol. 5511] By Mr. Culton:

. . . . . .

[fol. 5515] Q. You have named the principal pipe-line companies taking gas out of that field, have you not, out of the west field?

A. Yes, the principal ones.

. . . . . .

Q. Now, will [just] just outline in general—this question may be a little repetitious, but I am going to ask the same question with respect to the other companies—outline, in general, the area from which the Canadian River [fol. 5516] and the affiliated companies supplying gas to Denver or to the South Plains obtain their gas from that field?

A. The major part of the gas used by that company is obtained from an area including the southern part of Group Area "F" and to the area immediately south of there.

Q. You are referring to the group areas marked on Exhibit 46, as well as outlined on that copy of 26 which refer to group areas?

A. That is true. Canadian River also has some development over in the west edge of Carson County.

Q. Is that along the south side of the field?

. . . . . .

A. North of the fault line.

Q. Is some of it in Area "A" or is it all—

A. (Interposing) No, I do not believe that Canadian River has any development over as far as the west edge of Area "A".

Q. It would be south of "B", then?

A. And in "B", also.

Q. They have some in "B" and some in "F". They have some in "E"?

A. Yes.

Q. And the rest of theirs, in general, is south and west of those areas which we have just described?

[fol. 5517] A. That is correct.

Q. Now, where are the areas from which Texoma takes most of its gas? You have already referred us as to where a fourth of it comes from, the Canadian River properties. Where does the remaining three-fourths of Texoma's gas come from?

A. From acreage which is located in Carson County and in pretty well all over Moore County in the sweet gas area and they have, I believe, some scattering acreage right the county line, that being the county line between Moore County and Potter County.

Q. With respect to Area "G", do they have substantial acreage in that area?

A. They do. They have substantial acreage in that area and in all areas surrounding Group Area "G".

Q. How about "C"? Do they have some acres in "C"?

A. Yes, they have some small amount, but it is not in any great amount.

Q. How about "A"?

A. They have considerable acreage in Group Area "A" and also acreage to the east of Group Area "A".

Q. And from what points does Cities Service produce most of its gas?

A. From Group Area "A" and areas surrounding Group Area "A".

[fol. 5518] Q. Where does Panhandle Eastern get its supply?

A. Well, I believe the best way to term it would be to say the heart of the west sweet field.

That is, by the heart I mean the center, in general, from an area extending over to a point on the east side in about the central northern part of Carson County and extending west into Potter County and in Moore County.

Q. Well, it is in various portions of the areas "A" to "G" shown on Exhibit 46, is it not?

A. Exhibit 26, I believe.

Q. Also on 46, is it not? A. Yes.

Q. Now, are its wells very numerous in Area "A"?

A. No, I would not call that an intensive development at all.

Q. How about "B"?

A. No, we are sparsely developed in Area "B".

Q. Where is your densest production? That is, where is your greatest number of wells for the acres involved?

A. I believe, in Group Area "G".

Q. And your principal competition in Group Area "G" is with Texoma Natural Gas Company, is that correct, so far as the area itself is concerned?

A. Yes, the Texoma Natural Gas Company, and the Shamrock Oil and Gas Company.

[fol. 5519] Q. You have some of the Shamrock wells yourself, do you not?

A. Yes, we do, some very nice wells.

Q. I notice that on that pressure map, Exhibit 26, the pressures have commenced to drop substantially in the north part of the field, up in the north central and northeastern Moore County and northwestern Hutchinson County.

What has been the cause of that pressure drop which has taken place up there?

A. The heavy withdrawal from that area—

Q. (Interposing) For what use?

A. For the carbon black industry.

Q. The change in pressure, then, is largely the result of production of sour gas, rather than the production of sweet gas?

A. Yes, there are a number of locations to the south of the sour gas field which have not been drilled to date, thus making the withdrawal comparatively light in the sweet field immediately south of the sour gas line.

Q. What competitive companies exist in Area "F" with which Panhandle Eastern's acreage has to compete on withdrawals?

A. The Texoma Natural Gas Company and the Canadian River Gas Company.

Q. And in Area "E"?

A. Principally the Canadian River and some Texoma.

[fol. 5520] Q. In Area "D"?

A. In Area "D", the Texoma and there are some wells that have been drilled in Area "D" especially just to the east of it, which were used for gasoline plant extraction in the early days of the field.

Q. What is the cause of the pressure reduction situation which now exists in Area D? There seems to have been a substantial pressure reduction in Area "D".

* * * * * * * *

A. (Continuing) That is due to the heavy withdrawal to the east and southeast and also to the north and northwest.

Q. Has the gas withdrawal from wells within Area "D", in your opinion, been sufficient to cause the pressure reduction which is shown for that area?

A. No, I do not think that the pressure reduction is entirely due to the withdrawal from the Group Area "D" proper.

Q. You think it has been influenced some by the withdrawals to the east?

A. Yes. However, Group Area "D" is not a highly productive area.

Q. What size wells are ordinarily found in that area, do you recall?

A. It is a very rare thing if a well has a natural open flow greater than 10 million cubic feet per 24 hours.

[fol. 5521] Q. Are those wells' open flows frequently increased by acidization?

A. Yes, they are. However, in this particular area, Group Area "D", we are having considerable trouble with four of our wells at this time.

It is almost impossible to get those wells free enough from water to take a back-pressure open flow test.

* * * * * * * * *

Q. Now, the Area "E", what competitive conditions exist in that area?

A. Canadian River is the other company that takes gas in great quantities.

Q. So the principal competition in that area is with Canadian River Gas Company, is that right? A. Yes.

Now, in the north edge of "E", Texoma has a development but, in the south edge, it is only Canadian River.

Q. I see. You said something a while ago to the effect that the wells in the north part of the Canadian River acreage are more closely drilled than the wells in the south part of the acreage.

A. Yes, that is true.

* * * * * * * * *

[fol. 5522] Q. Now, I believe you stated that in the first portion of the study which you made—first, I failed to inquire about the competitive conditions in Area "C". What other companies do you find yourself in competition with in that area?

[fol. 5523] A. Well, the Cities Service and the Shamrock, the Texoma, the Huber Petroleum Company, all have wells located in that area, but the principal competition is from the migration of gas to the lower-pressure area lying to the east.

Q. And what is the cause of that migration? What is the fundamental cause for it?

A. Because gas always flows from an area of high pressure to an area of low pressure.

Q. What has caused the low-pressure area lying to the east?

A. Well, my opinion is that the amount of low-pressure acreage shown there has been caused by the production of the gas from the Panhandle gas fields in conjunction with the oil from the Panhandle gas field.

I think there, in all probability, has been great quantities of gas produced in that manner to the area east.

Q. And what has been done with that gas?

A. It has principally been blown to the air.

* * * * * * * *

[fol. 5525] Q. Now, Area "A".

Will you tell us what the competitive conditions are in that area?

A. Area "A" supplies a great deal of gas to Cities Service and to Texoma Natural Gas Company for the Natural Gas Pipe Line Company of America and, again, in Area "A", there is a migration of gas to the north and northeast which has, in my opinion, been retarded greatly by the fact that the data indicates that the permeability in Group Area "A" is quite low.

* * * * * * * *

[fol. 5530] Q. Mr. Hinton, along the northeast line of Exhibit 26, I see an uncolored area that has a good many dots on it. A. Yes.

Q. What is that area?

A. That is the northern part of the oil area which extends from the Town of Pampa, Texas, in a northwesterly direction to a point in central northwestern Hutchinson County.

Q. Is all of the oil area shown along that uncolored portion? A. No, it is not.

Q. What is the distinction between the oil area shown along that uncolored portion and the oil area which is within the colored boundaries?

A. That is the oil area of the Panhandle Field where no gas is encountered in the upper formation.

Q. In other words, in drilling down, they go through no gas and just hit oil, first? A. That is right.

Q. Is that a substantial acreage? A. Yes, that is.

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[fol. 5569] C. H. Hixton, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Redirect Examination.

By Mr. Culton:

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[fol. 5695] Q. I see. Now, we have been discussing the question of horsepower just a little bit. I want to go into that in a little more detail. Of course, it is a kindergarten expression that gas flows from an area of high pressure to an area of low pressure and will not flow unless there is a difference in the two pressures?

A. That is right, the same as water.

Q. Is it necessary to use methods for changing pressures so as to bring about better flow conditions?

A. You mean to create a pressure gradient?

Q. That is right, so flow will take place.

A. It is necessary.

[fol. 5696] Q. And how is that done in the operation of a pipe line?

A. By taking gas into a cylinder at a lower pressure than the pressure at which it is stored in a pipe line or tank and by moving that cylinder into an area of less cubic inches, to force the gas out at a higher pressure and thus, repeating the operation, create a pressure hole in the storage tank or pipe line and allow gas from other parts of that storage tank or pipe line to flow into the area of lower pressure.

Q. Into the area of lower pressure? A. Yes.

Q. And what methods can be used for the purpose of stepping up those pressures, that is, do you have to do it all at the end of the line or can you do part of it—I mean at the intake of the compressor station, or can you do it at the wellhead?

A. It can be done at any place.

Q. Or at any place along the line, is that right?

A. Yes, sir, that is right. The determination of the proper place is the important thing.

Q. Now, how is that determination made?

A. By obtaining the pressure drop which will occur in the pipe line system by the transportation of the required volume of gas.

[fol. 5697] Q. Is that another place where you take into consideration the economics of different methods of providing your change in pressures?

A Yes, sir, that is. It is necessary that the development of the system be [studies] in such a manner as will permit probably the installation of one compressor station to handle several wells instead of the requiring of the installation of a compressor station at each well.

Q. In other words, it is sometimes more economical to have a compressor at the well or at a group of wells to take that gas and put it into the pipe line at higher pressures, and in other instances it may be more convenient to have a compressor station along the gathering lines, and in other instances it might be more convenient to install your additional power at the general compressor station in which the gathering lines converge. Is that correct?

A. That is right, and unless the problem has been thoroughly studied, it will often result in the requirement that horsepower be installed under each of the plans which you mentioned, that is, namely, at the well or to handle a group of wells along the line at some point and also in at the main station.

Q. Now, of course, it is also kindergarten knowledge that, as the pressures are lowered, less volumes of gas will be in the pipe line than the volumes at the higher pressure.

[fol. 5698] What I mean is, that greater volumes of gas will cause higher pressures in the pipe line?

A. That is right.

Q. And does that principle have anything to do with the economics of operating a pipe line system as the field pressures go down?

A. Yes, it does, because, of course, as the pipe line is designed, so is the pressure drop in proportion to the size of the pipe line in relation to the volumes transported, and if the pipe line was under-designed to begin with, it means that the capacity of that line will have to be increased to carry additional volumes of gas.

Q. Now, you have testified that one method of increasing the pipe line is the addition of power. Is it sometimes necessary to increase the capacity by other methods?

A. That is right.

Q. What other methods? A. By looping.

Q. In other words, putting in more pipe?

A. By putting in more pipe.

Trial Examiner: Let me ask how many cubic feet of 14.65 gas is required to make a cubic foot of 500-pound gas?

The Witness: Do you mean how many atmospheres?

Trial Examiner: Yes.

Trial Examiner: We talk in terms of 16.4 and usually [fol. 3699] consider 30 atmospheres. It is 34.13 atmospheres.

Trial Examiner: So that approximately 35 cubic feet of gas at atmospheric pressure is compressed to one cubic foot?

The Witness: That is right.

Mr. Culton: At a 500 pound pipe line?

The Witness: Yes.

Mr. Culton: At any 500-pound pressure; where compressed to higher pressures, it would be far in excess of that?

The Witness: Yes. As that 500 would be increased by the amount of 14.65, it would mean that an additional cubic foot of gas would be stored in the same space.

Trial Examiner: So that your whole problem in filling your pipe line at Liberal is to provide a volume of gas that will produce that result and keep a continuous flow?

The Witness: Not on the intake side of the station. That is so that there will be enough gas come in that will provide that condition at the discharge side of the Liberal station, the 500 pounds.

Mr. Culton: In other words, the Examiner means you have got to get it in from your different lines in enough volume so that when it goes out, there will be enough for 500 pounds. That is the point.

Trial Examiner: That is right, and at the rate of flow the 500 pounds would produce in the pipe line.

The Witness: That is right.

[fol. 5700] By Mr. Culton:

Q. Now, are all of these questions that you have been [discussion] concerning the different methods of providing power and so forth, methods that were taken into consideration by you in determining the necessary expenses that the company would be required to incur and the necessary additional capital expenditures which the company would be required to make over the period of the next five years even to produce and transport the same volumes of gas which it now produces and transports?

A. Under the basic—

Q. (Interposing) Under the basic load.

A. That is correct, with the exception of the wells which are to be drilled in the Panhandle Field and that will lower our operating cost, in all probability, and we will make a considerable saving in the cutting out of a renewal bonus on that acreage, so I feel that the saving which the company will accomplish by drilling those will pay a nice return on the investment required.

Q. In other words, in all of these computations, you have had in mind the different things you have been discussing and have attempted to determine the most economical method under which the company should operate its properties down there, first, if it were not going to have an increase in production in markets and, second, taking into account the increases in its markets which the

[fol. 5701] company expects, as evidenced by Mr. Morton's estimate?

A. Yes, I would say that everything had been given careful consideration.

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Mr. Lee: Is your company the largest holder of acreage in the Panhandle Field?

The Witness: No. We are second to the smallest of the major pipe line companies.

Mr. Lee: And how many of the major companies hold acreage in the Panhandle Field?

* * * * * * * *

Mr. Culton: (Interposing) Name them off in the order of their ownership and acreage. That is probably what Mr. Lee would like.

Mr. Lee: I just wanted to get generally understood what your position was in that field.

Mr. Culton: I think it would improve the record if that were to be done. I suggest you name the companies in the order of acreage as near as you can.

The Witness: I do not have those acreages here in [fol. 5702] shape that I can read them readily off, but I know them.

* * * * * * * *

The Witness: In general, Canadian River Gas Company has a holding of between 205 and 210 thousand acres in the Panhandle Field.

* * * * * * * *

The Witness: The Texoma is around 160,000 acres; Cities Service around 120,000 acres and the Panhandle Eastern about 65,000 acres; and Northern Natural is about 1,000 below us, or was, the last time I counted this up, 64,000 acres.

Trial Examiner: And your holdings, as I recall, constitute approximately 4½ percent of the total acreage?

The Witness: Yes, of the total field.

Mr. Littman: Mr. Hinton, there are at least four more major pipe line companies operating in the Panhandle Field, are there not? You named them the other day.

Mr. Culton: He named some in the east field.

The Witness: The Phillips Company in the east field there and Lone Star is out of the east field. I do not believe that I have missed any.

[fol. 5703] Mr. Culton: Consoldiated, but it has only small acreage, hasn't it?

The Witness: It is not in our picture. We throw it the class of "Others." In other words, about two years ago I took all of these acreages and made a study to show how much gas Panhandle Eastern would be able to produce if the then talked of proration order was placed upon the field which was based upon a formula of allocation, dividing the total production into two parts and giving two-thirds of the total production allocation on the basis of acres times pressure, and one-third on the basis of potential, and I believe that those companies that I named are the only ones that I included and all the other acreage was thrown in the classification of "Others."

I probably mentioned Hagy, Harrington & Marsh.

Mr. Littman: No, you mentioned, among others, United Gas Pipe Line Company. Where does that one operate and where is acreage?

Mr. Culton: They only have 18 million a day.

The Witness: It is a small acreage, but I cannot think were United goes.

Mr. Culton: I think you will find that is the one that goes to Wichita Falls.

The Witness: I get United and Lone Star confused.

Mr. Culton: Lone Star goes to points in Oklahoma [fol. 5704] from the Panhandle Field.

Mr. Littman: You mentioned Consolidated Gas Company and also the West Texas Gas Company.

Mr. Culton: Consolidated Gas Company has about 5,000 acres.

. . . . . .

Mr. Culton: (Interposing) West Texas Gas Company is a part of the [Candian] river setup.

The Witness: The Red River holdings and the Canadian River and the Southwest Development—

Mr. Culton: (Interposing) And the Southwest Development Company.

The Witness: (Continuing) Are all one family.

Mr. Culton: In other words, all of those companies operate either as producers or as transporters out of what you have referred to as the Canadian River acreage.

The Witness: Yes.

Mr. Culton: Which is the largest ownership of acreage in the field.

The Witness: Yes, the Canadian River Gas Company owns as much acreage as the Northern Natural and the Panhandle Eastern and the Cities Service put together in that field.

Mr. Littman: Perhaps if you were to tell us what you mean by the term "Canadian River Company", it might clarify the record.

[fol. 5705] Tell us whether you mean Canadian River and certain other subsidiaries that I have named.

The Witness: The Canadian River is the producing company for the Colorado Natural Gas Company.

Mr. Littman: Does it include the acreage of Consoldated Gas Company?

The Witness: No.

Mr. Littman: Or West Texas Gas Company?

The Witness: Yes.

Mr. Littman: It does?

The Witness: That is acreage held under the name of Canadian River and Red River and Southwest Development also falls in that class. That is all.

Mr. Culton: Mr. Littman, the Consolidated Gas Company is just a little company over in the east field that

has a very few wells which takes gas to Wichita, Kansas. It is not connected with Canadian River at all.

Mr. Littman: I see. The reason I have been using these names is simply because the Texas Railroad Commission refers to these as the nine major pipe line companies.

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By Mr. Culton:

Q. For Mr. Lee's information, Mr. Hinton, I will ask [fol. 5706] if this is not correct, that the Canadian River Gas Company has the largest amount of acreage?

A. That is correct.

Q. And by the Canadian River Company you refer to Canadian River and its association companies, the West Texas Gas Company, the Red River Gas Company and Southwest Development Company and you do not undertake to say what the proportion is between those different companies?

A. I believe that the West Texas Gas Company should not be included in there as it is the transportating company and not a producing company.

Q. That is right. Now, the next in ownership of acreage, as you understand it, is the Texoma Natural Gas Company.

A. That is correct.

Q. And the next to that is the Cities Service Gas Company? A. That is correct.

Q. Next to that is Panhandle Eastern?

A. Panhandle Eastern.

Q. And next to that is Northern Natural?

A. Yes, and then there are 19 other small pipe lines running out of there.

Q. With only a few thousand acres each?

A. That has a total acreage which is equivalent to approximately Panhandle Eastern's or, as I remember, [fol. 5707] 74,000 acres, 10,000 more than we have, the other 19 companies.

Q. Now, the United Gas Company and the Lone Star Gas Company mentioned by the Railroad Commission in its report all operate only out of the east field?

A. That is right and I have never had the time to get the east field acreage and make a comparison, but I do have a map that shows the ownership in the east field colored showing the holdings of each company and I had that colored from records that are kept in the gas offices in Texas and referred to it from time to time.

Q. Now, you referred to the Hagy, Harrington & Marsh Company. It has a substantial gas acreage which is tied to the Northern Natural?

A. Yes, and it also has some acreage which is not yet developed.

Q. Then, in addition, there is the Phillips Petroleum Company, which is a large owner of various types of acreage in the field?

A. But sells gas after it is stripped for gasoline to the Northern Natural Gas and does not transport gas from its holdings to any distant market.

Q. That is right, but if you consider major gas companies as meaning major producers of gas in the field and relating it both to sour gas and sweet gas, then the Phillips Petroleum Company is right up close to the top, is it not?

[fol. 5708] A. Yes, they would certainly fall in the class of major companies.

* * * * * * * * *

[fol. 5711] C. H. Hinton, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Redirect Examination (Continued).

By Mr. Culton:

Q. Mr. Hinton, at our adjournment yesterday afternoon, we had just reached the Hugoton Field and we were preparing to talk a little bit about the gas situation in the States of Kansas, Oklahoma and Sherman and Hansford counties, Texas.

* * * * * * * * *

[fol. 5713] Q. Will you point out on Exhibit 26, using language that will be understandable in the record, the areas in Kansas in which Panhandle Eastern is now producing gas?

A. Panhandle Eastern now produces gas from the west half, in general, of Stevens County, the extreme east portion of Morton County and the south central portion of Grant County, with the addition of some wells held by gas purchase contracts which are located in the southwest portion of Haskell County.

By Mr. Culton:

Q. No. 26 is the rock-pressure map, No. 20 the company-ownership map as of June, 1941, and No. 44 is your [fol. 5714] future development map. Is that correct?

A. That is correct, I believe, other than that I don't recall you naming the data, the source of the data or the date of the tests on which Exhibit No. 26 is based.

Q. When was that? A. I think it is 1940.

. . . . . .

By Mr. Culton:

Q. Now, do the colors on those three maps all have the same signification or are they of different meanings?

Q. They are of different meanings.

Q. Therefore, you can't use the color on one map in comparing the color on the other?

A. No, other than the undeveloped acreage shown on Exhibit 44 shown in the same color for the Panhandle acreage, as shown on Exhibit No. 20.

Q. That is a pink color, is it not?

A. That is a pink color.

Q. And by "undeveloped acreage", you mean acreage that will not be developed due to the period covered by your capital-expenditure study?

A. Yes, sir.

Q. The pink color on Exhibit No. 20 represents all of the company acreage at this time?

[fol. 5715] A. Yes. Also, all the acreage held under gas purchase contracts. It can be noted that there is a considerable group of acreage which is shown in yellow and red with a diagonal line running through each piece.

That acreage is owned 50 percent by the Panhandle Eastern Pipe Line Company and 50 percent by the Saturn Oil and Gas Company or the Southwest Oil and Gas Company.

Q. And gas purchased is in green, is it not?

A. Yes, sir.

Q. By that diagonal line that you speak of, that is where there is a 50-percent ownership by Panhandle Eastern and 50-percent ownership by these other companies?

A. Yes, sir.

Q. Now, will you point out on Exhibit No. 26 the first area which Panhandle Eastern developed in the Hugoton Field?

A. Yes. The first, or the discovery well, was drilled in Section 31 of Township 33, Range 37, Stevens County, Kansas, by W. L. Sidwell, and I believe that he was assisted in that by Mr. H. W. McNabb.

Q. When was that, do you recall? A. 1927.

Q. And Panhandle Eastern subsequently [acquire] some of that acreage?

A. Yes, after a considerable time spent in securing markets, Panhandle Eastern obtained a one-half interest [fol. 5716] in that well and has an ownership of one-half interest in that well at the present time.

Q. Was there some other acreage of that same classification at that time?

A. Yes, there were two general groups of acreage which were included in the contract known as the Argus contract, and they were not definitely outlined, but a list of acreage was furnished at that time to show which acreage should be dedicated to the supply required by the Argus Company.

Q. And is that block of acreage largely in the same general territory in the Hugoton Field?

A. Yes, sir, that is in the southern-southwest Stevens County.

Q. Does that area represent the area of the greatest activity on the part of Panhandle Eastern?

A. Not only Panhandle Eastern but other companies which are withdrawing gas from the Hugoton Field at this time.

Q. What other companies?

A. There are located in this general area 91 wells which are owned by the Republic Natural Gas Company.

Q. And where does it sell its gas?

A. To the Northern Natural Gas Company.

Q. All right.

A. And the wells owned by Panhandle Eastern, which supply the main line, and the wells owned by Panhandle

[fol. 5717] Eastern and jointly with the Stevens County Oil and Gas Company and the Southwest Kansas Oil and Gas Company, which furnish gas to the Argus Natural Gas Company.

Q. Where does the Argus market its gas?

A. Well, the principal market is Dodge City, Kansas. One of the big industrial markets is the sugar-beet plants located at Garden City, Kansas.

Q. Is that company connected with any other natural gas pipe line company?

A. Yes, that is a subsidiary company of the Northern Natural Gas Company.

Q. And during the period Panhandle Eastern has been taking gas from the area which you have just described, what has been the nature of the production, that is, has it been a heavy production or a light production?

A. No, sir, it has not been a heavy production. The withdrawal has yet to reach an average of 100 million cubic feet [a day] of gas per day, unless that happened the last six months of 1941.

Q. In other words, it has been area of low withdrawals from the beginning, is that correct, from an acreage standpoint?

. . . . . .

[fol. 5720] Q. Now, in your judgment, will the pressure declines resulting from production be felt further away in the Panhandle reservoir than in the Hugoton reservoir?

Mr. Littman: Just a minute. I object to that. I don't think this witness is qualified to answer that question.

By Mr. Culton:

Q. Well, is there any difference in the indicated permeability of the formation?

A. Yes, there is a decided difference.

Q. What effect does that difference have?

A. In order to answer that question, it would be nec-
[fol. 5721] essary to compare the fields on the basis of the same rate of withdrawal.

Q. All right.

A. If we had the same rate of withdrawal in the Hugoton Field as we do in the Texas field, it would be necessary to have a great many more wells in the Hugoton

Field than would be necessary in the Panhandle Field of Texas, therefore, the development would be spread over a greater number of acres and the withdrawal would probably cover a much greater territory with reference to pressure decline.

Q. Will it take longer for the wells to build up in the Hugoton Field than in the Panhandle Field?

A. As an average, it takes a great deal longer for the Hugoton wells to build up than it does for the Panhandle wells to build up.

Q. Now, what do you mean by the words "build up"?

A. The term "build up" denotes the length of time that is required for a well to regain its official closed-in pressure.

Mr. Littman: Why is that the fact, Mr. Hinton? Do you mind if he explains that?

* * * * * * * * *

The Witness: That is due to the tightness of the formation and the low permeability which restricts the rate of flow in the Hugoton Field, whereas in the Texas field, why [fol. 5722] there is higher permeability, especially in the Moore and Potter county portion of the field.

Mr. Littman: In other words, you mean that the permeability of the pay sands is greater in the Panhandle Field than in the Hugoton Field on the average?

The Witness: Yes, as so indicated by the build-up pressure data.

By Mr. Culton:

Q. You are referring to the fact that out of this Stevens County area, Panhandle Eastern has two markets, one, its market to the Argus Pipe Line Company furnishing gas for use for the Northern Natural subsidiary, and the other to Panhandle Eastern's main line. Where does Panhandle Eastern deliver the Argus gas?

A. At the wellhead.

Q. In other words, the Argus has its own pipe line and picks up the gas at the well?

A. When I say the "wellhead", I mean that it is a distance of some 50 to 70 feet from the wellhead as it is measured at that point and the exchange, of course, is made on the metered quantities.

Q. And how does Panhandle Eastern transport the gas which is used for its main line, that is, the gas which is produced in the Stevens County area which you have just described?

A. The major portion of the gas produced in the Ste-
[fol. 5723] vens County area travels in almost a due easterly course from a point in the gathering system, which is about four miles west of the southwest corner of the Town of Hugoton, Kansas.

Q. Does the Panhandle Eastern own all of its gathering system there? A. Yes, sir, it does.

* * * * * * * *

But there is, also, at certain times an amount of gas that travels up through a 10-inch line which commences in Section 24, Township 33, Range 39 and is laid in a northeasterly direction to a point in Section 4, Township 33, Range 37, both in Stevens County, and thence in an easterly direction through a looped 12-inch line over to a point in Section 4, Township 31, Range 36, where the looped 12-inch line changes in size to a single 16-inch line.

It then travels up to a point in the northwest quarter of Section 28, Township 30, Range 34, located in Haskell County and at that point it is connected to an 18-inch line which goes in a southeasterly direction down to the Liberal compressor station.

Q. In other words, Panhandle Eastern has a block of acreage there in Stevens County, Kansas, as shown on Exhibit No. 20, and a considerable portion of that has been developed by the drilling of wells. Is that correct?

A. That is correct.

[fol. 5724] Q. And part of the gas from those wells goes in an easterly direction and ties into the main line at Liberal?

A. It goes into the intake side of the Liberal compressor station.

Q. And the rest of the gas goes in a northeasterly direction and makes a connection with another gathering line of Panhandle Eastern's and then goes in a southeasterly direction to Liberal. Is that correct?

A. That is right. The 18-inch line was built to take care of the production which has been developed in the

Grant County portion of our acreage and, also, takes care of two gas purchase wells which are located in the extreme western edge of Haskell County.

The system is an entirely looped system, that is, it is possible for gas produced in the north part of the field to travel around by the way of Hugoton, or gas produced in the Stevens County area of the field to travel clear around, as was described.

Q. Does that constitute an additional guarantee of service in the event one of the lines goes out?

A. Yes, it does. It also has some impractical features from an operating standpoint.

Q. What are those?

A. In the winter time as the higher pressures are required to supply our market requirements at the proper [fol. 5725] intake pressures at Liberal, the pressure out on this small line is raised to the point where the gas will freeze. There is very little flow and in the winter time we often close one gate on that line which could be opened in case of line failure, but we govern the flow by closing a gate valve there.

. . . . . .

That is on the 10-inch line located in the northwestern part of Stevens County.

Q. Was the upper gathering line constructed at the same time the lower gathering line was constructed?

A. No, sir, the lower gathering line was constructed in the latter part of 1930 or the first part of 1931 and the 18-inch portion of the system was constructed in the latter part of 1937.

. . . . . .

Q. And was that the time that Panhandle Eastern opened up its production in the Grant County area?

A. Yes. We took no production from Grant County until the latter part of 1937.

. . . . . .

[fol. 5726] Q. Does Panhandle Eastern have any competitive production out of that area in Grant County?

A. Yes, there are three markets out of that area, namely, the Tri-County Gas Company and the Peerless Carbon Black Company and the United Carbon Company.

Q. What use do the carbon companies make of their gas?

A. Why, the carbon companies make what they term an extremely high grade of carbon black.

Q. For printers' ink and things of that kind? A. Yes.

Q. And is there another pipe-line company operating out of there?

A. Yes, that is the Tri-County and it produces gas that serves portions of the extreme eastern side of Colorado and some extreme western Kansas towns and, also, produces some gas for the Northern Natural Gas Company.

Q. Is it, so far as you know, affiliated in any way with any of the other gas companies?

A. No, sir, I do not know what the background of that company is.

Q. Now, what about the present situation from a gross-production standpoint as to acreage in the north of that lowered pressure area in Grant County?

A. That is yet to be determined. It is assumed that [fol. 5727] it will be, in general, the same as that which has been developed in Grant County to date, but the variation in the wells which have been drilled in Grant County to date indicates that there will be some very good spots and some very lean spots in that area.

Q. Is there any other pipe line operating in the area north of that which you have been describing, north of the lowered-pressure area in Grant County?

A. Yes. There is production in that area from some Tri-County wells and from some wells which are owned by the Northern Natural Gas Company.

Q. Now, with respect to the area in Stevens and Seward counties, which lies immediately east of the area from which Panhandle Eastern has taken the greater portion of its production, what is the production situation in that area?

A. You refer to the low-pressure area—

Q. (Interposing) Well, everything from the lowered pressure area in which Panhandle Eastern has produced gas, going easterly?

A. There has been only slight development in the area to the east. The discovery well of the entire field, not the Hugoton Area, was encountered on the Bole Farm in 1924, I believe.

Q. Where is that located on the map?

A. That is about four miles to the west of the Town of [fol. 5728] Liberal, Kansas.

Q. All right.

A. And between the eastern development of the Hugoton area and the development shown just west of Liberal there on Exhibit 26; where the lower pressure area appears there have been no wells drilled. There was a well drilled immediately north of Liberal here in Section 29, Township 33, Range 33, Seward County. That well is known as the Seeley wells and at the present time has an open flow which is below 750 thousand cubic feet per day. It has never been connected to any market.

Q. Would you consider such a well as that really a commercial well?

A. With acid treatment, I think it is quite possible that it can be made into a commercial well, as there are many wells in Grant County, in the portion of the field which has been developed in Grant County, that have had natural open flows that have been less than one million cubic feet per 24 hours.

Mr. Littman: How did they respond to the acid treatment?

The Witness: Very good.

Mr. Littman: What open flow was secured after the acid treatment?

The Witness: Well, when we speak of open flow on an acidized well, it is necessary to name the type of open flow method used in testing.

[fol. 5729] Mr. Littman: Well, I am referring to the same method by which you arrived at the one million figure that you just mentioned.

The Witness: By the same method the test of some of those wells will go up to 16 million [to] 17 million. In fact, we had one well which had a natural open flow of slightly

under one million cubic feet and when acidized it went to 28 million cubic feet per day.

Most of the wells in the Hugoton Field respond to acid treatment better than the wells in the Panhandle Field when the tests are made by the pitot tube method, but when those wells are back-pressured, they do not show any greater increase than the Panhandle wells.

In other words, a well will have a natural open flow of one or two million cubic feet and when acidized will go up to 20 million or more.

When tested by the back-pressure method, the open flow on those wells will usually be about 4 to 5 million greater than the natural. In other words, they fall into the 6 million or 7 million classification.

Mr. Littman: And then they are commerical wells?

The Witness: Oh, yes; yes, sir.

By Mr. Culton:

. . . . . .

[fol. 5730] Q. Now, you referred to the well on the Boles Farm down there by Liberal. What company has been taking gas from that well?

A. The Liberal Gas Company.

. . . . . .

Q. Then, there is an area north of the Boles well and, also, south of the Boles well several miles in extent, from which no production has been taken?

A. Yes, sir. The total development of the Kansas portion of the Hugoton Field is about 11 percent of the acres [fol. 5731] outlined on this map.

Q. Now, tell us the production situation with respect to the wells in Texas County, Oklahoma. What production has been taken from that area?

A. The total amount of production that has been taken from Texas County, Oklahoma, has been very light indeed. The principal markets for wells drilled in Texas County are the Cimarron Utilities Company which furnishes gas to some of the small towns in Oklahoma, the Guymon Gas Company and the Cabot Carbon Company.

Q. The Cabot production is used for what purpose?

A. For the manufacture of carbon black.

Q. Has the manufacture of carbon black proceeded in the Hugoton Field anything like the extent that it has proceeded in the Panhandle Field?

A. No, and I don't think that it ever will.

Q. Why not?

A. Because there is not enough gas there to supply the same quantity that is supplied in Texas without building very extensive gathering systems.

Q. In other words, the wells will not deliver anything like the same volumes of gas? A. No, sir.

. . . . . .

[fol. 5732] Q. Now, what other companies, if any, other than those small companies which are now producing gas from the Texas County, Oklahoma, area?

A. Yes, the Republic Natural Gas Company has, as I remember, 23 wells now connected in the northern portion of Texas County, Oklahoma, and that gas is sold to the Northern Natural Gas Company.

Q. The Northern Natural goes to Minneapolis and St. Paul? A. Yes, sir.

Q. And, also, serves other points in between?

A. That is right. The Omaha District of Nebraska, and that contract has clauses which concern the Omaha and vicinity market.

Q. Now, has the Republic acreage in Texas County, Oklahoma, been producing very long?

A. They have had some wells down there for, I believe, [fol. 5733] six or seven years. However, they have drilled some 20 wells down in that area during the past three years.

. . . . . .

Q. That area in Texas County, Oklahoma, about which you have been talking is really a portion of the same general area as the Stevens County area which you first discussed, is it not?

A. Yes. If we had no knowledge of a state line existing there, we would not know when we crossed from one State to the other.

[fol. 5734] Q. And that is just part of the same general pressure area and the same production area?

A. That is correct.

Q. Now, passing below that portion of the Texas County, Oklahoma, area, which is really a part of the Stevens County area, what has been the production situation to the south?

A. You refer to the central part of Texas County, Oklahoma?

Q. Central southern part.

A In the central part the withdrawal has been extremely light and the only reduction in pressure shown is that the decline has been below 430 and the pressures are still above 420.

Q. Where is that point located?

A. Referring to Exhibit 26, it crosses the "X" in Texas County, Oklahoma, which is located about four miles north of the Town of Guymon, Oklahoma.

. . . . . .

[fol. 5735] Q. That is the small, orange-colored portion?

A. Yes, the only portion of Hugoton Field outside of the extension of the Kansas development at the northern edge of Texas County, Oklahoma, that shows any pressure decline at this time.

Q. Is there a development in the southern part of Texas County, Oklahoma?

A. No extensive development. There have been some wells drilled and I don't have the locations. It is just a matter of a very few wells.

Q. What is the production situation with respect to the acreage of Hansford and Sherman counties, Texas, that is thought to be a part of the Hugoton Field?

A. There have been wells drilled in Hansford and Sherman counties which govern the outline of the dotted line shown on Exhibit 26. The best wells were drilled in Sherman County by the I. T. I. O. Company and Hagy, Harrington & Marsh, and they were wells of considerable size. As I remember they had natural open flows of some 40 million cubic feet for 24 hours.

. . . . . .

[fol. 5736] Trial Examiner: They were not used?

The Witness: They have never been connected to any market yet.

Trial Examiner: What happened to them?

The Witness: They are there, ready to be connected.

Trial Examiner: Simply closed off, finished but closed?

The Witness: Yes, sir, that is true.

* * * * * * * *

Mr. Littman: According to Dr. Bartle, the Hugoton Field, as outlined by him on Exhibit 26, designated by the area within the dotted lines covers an area of 2,540,000 acres.

[fol. 5737] Now, can you state how much of this territory is under lease by all companies at the present time?

The Witness: No, sir.

* * * * * * * *

The Witness: No, sir, because there is so much of that marginal acreage that is not leased and probably will never be leased that I could not say. I can say this, that I would estimate that 90 percent of the acreage lying within a distance of some two or three miles from the outer limits of development is now under lease; but bringing in the marginal acreage in the Hugoton Field, the same as any gas field of this type, there will be many thousands of acres of marginal acreage, I mean the acreage located near the extreme outer edge of the field, that will in all probability never be leased.

* * * * * * * *

[fol. 5738] Mr. Littman: Well, would you say that approximately a half of this amount of acreage embraced by the outline of the Hugoton Field shown in Exhibit 26 is under lease, roughly?

The Witness: Roughly, I would say yes.

Mr. Littman: And about a half, of course, is not under lease?

The Witness: That is correct. I am doubtful whether it will be leased until such time as development proves that there may be sweet spots or areas of better produc-

tivity lying closer to the boundary of the field shown on Exhibit 26.

Mr. Littman: Now, while we are on this subject, at this point, am I correct in understanding that Panhandle Eastern at the present time controls approximately 10 percent of the acreage embraced in Dr. Bartle's outline of the field, to-with, 245,282 acres?

The Witness: Yes, I would say that the Panhandle Eastern Pipe Line Company controls approximately 10 percent of the areas included in the outline of the field shown on Exhibit 26, if the calculations of 2½ million are correct.

. . . . . .

[fol. 5742] By Mr. Culton:

Q. I believe you have testified that the Cities Service Gas Company, or the Empire organization owns substantial reserves in the Hugoton Field which have not yet been developed at all. Where are those reserves located?

A. Well, they are located in Township 3, Range 13, portions of each Township mentioned; Township 3, Range [fol. 5743] 14, and Township 2, Range 13 and Township 2, Range 14 and take in portions, also, of Township 1, Range 13 and Township 1, Range 14, all in Texas County, Oklahoma. That is known as the Stonebreaker Ranch.

. . . . . .

Q. And in solid blocks, practically?

A. Practically in solid block, except for acreage held at the north edge. It is not adjacent to and contiguous with the Stonebreaker Ranch, but still it is checkerboarded in close to that general area.

Q. Do you know if the Cities Service, also, owns leases in the Texas portion of the field through the I. T. I. O.?

A. Well, I don't believe that the I. T. I. O. is in existence any more. I think it is just straight Cities Service Gas Company at this time. They do hold acreage in the Sherman County portion of the State of Texas portion of the Hugoton Field.

Q. And their former affiliate or subsidiary, the I. T. I. O., was the company which you testified had done some discovery drilling in that area?

A. Yes, that is correct.

Q. Now, is there any other company which holds substantial portions of undrilled acreage in the field?

A. Yes. The Northern Natural Gas Company has con-
[fol. 5744] siderable holdings.

. . . . . .

They have considerable acreage in the central part of Stevens County and the greater part of it being located up in the Grant County, central Grant and central Stevens counties.

Q. How about the Republic Natural Gas Company? Does it have a substantial amount of undrilled acreage?

A. Yes, the Republic Natural Gas Company, for the size market it has, carries more acreage by delay rentals than any company I have ever known.

Q. Where is its acreage located?

A. Its acreage is located in both Texas County, Oklahoma, Stevens County, Kansas, and some, I believe, is in the southern part of Grant County, Kansas.

Mr. Littman: Mr. Culton, from time to time the witness has referred to substantial acreage. Can he supply the figures for us?

By Mr. Culton:

. . . . . .

[fol. 5745] Q. Can you give us a rough estimate now, recognizing the fact that it would be only rough? For instance, the acreage held by Republic?

A. Republic at the present time holds approximately 220,000 acres located in the Tri-State field. That is subject to check, because the acreage picture changes so fast. They have acquired a great deal of acreage during the past year. They have taken over the acreage which was formerly held by Hagy, Harrington & Marsh in the Kansas portion of the Tri-State Hugoton Field and have, also, acquired considerable quantities of acreage in Texas County, Oklahoma, both by leasing scattered blocks and by exchanging acreage with other companies.

Q. Now, Hagy, Harrington & Marsh sold all of their Kansas acreage, you say, to Phillips. Do you know how much was left for them in Texas County, Oklahoma, and

Sherman and Hansford counties in Texas, including the Bivins Cold Water Ranch?

A. Before they got the Bivins Cold Water Ranch, as I remember, they had 54,000 acres and the ranch in total is some 40,000 to 45,000 acres.

Mr. Littman: What is the total of that?

The Witness: 90,000 approximately.

By Mr. Culton:

Q. Can you give us the approximation of the Northern [fol. 5746] Natural acreage?

A. No, because their acreage picture changed just during the past few months and I don't remember what it is, but it is in excess, I am quite sure, of 100,000 acres.

Q. And the Cities Service?

A. I don't know what the acreage in the Stonebreaker Ranch is, but it can't help but be around 100,000 acres.

Q. Is there any other company with very large acreage except those that we have mentioned?

A. Well, the Peerless Carbon Company have a great deal of scattered acreage and considerable quantities of acreage are held by the Columbian Fuel Corporation. When I say, "considerable", I mean around 15,000 acres.

I would say there is considerable acreage.

Mr. Littman: There isn't any question about the fact that Panhandle Eastern is, by far, the largest individual holder of acreage in the Hugoton Field?

The Witness: I believe that is right. I had a figure in my mind the other night that Republic had acquired a greater number of acres than we held, but since I have been thinking it over, I am qute sure that I was wrong and I was thinking on the basis of the number of acres in proportion to the market rather than in total.

By Mr. Culton:

Q. The Republic is next to the Panhandle Eastern in [fol. 5747] acreage?

A. Yes, I am quite sure it is.

Trial Examiner: So far as Panhandle is concerned, that statement refers to acreage under purchase contracts, or only to royalty acreage?

The Witness: That includes both the acreage held by development and delay rentals.

By Mr. Culton:

Q. In other words, in addition to the acreage owned by Panhandle Eastern in that field, Panhandle Eastern is connected to a substantial gas purchase?

A. Yes. We buy gas from more wells in the Hugoton Field than any other company except the Northern Natural Gas Company, which buys from Republic and the Kuhn Brothers, also, the Derby Trees Oil Company and are interconnected with wells owned by the Tri-County Gas Company, these wells being able to produce into the system of the Tri-County Gas Company or the Northern Natural Gas Company.

Q. From the standpoint of Panhandle Eastern Pipe Line Company, what is the necessity for owning this undrilled acreage?

A. As a matter of reserve and having a place to carry on future development that will enable the company to supply its market requirements.

Q. Being in control of the acreage, does that permit [fol. 5748] you more safety to plan in the future with respect to your gathering lines on a general program of development that if you just had to connect to such operators as desired to sell?

A. Yes. It does help us with our development planning, but at the same time, this same thing applies in the Hugoton Field, maybe not to as great a degree, but it does apply, that withdrawal is the index to the total recovery from either of these fields. If we are subjected to a heavy rate of withdrawal which is contiguous or adjoining our acreage, why, then the amount of gas which we will recover will either be decreased or we will have to take it at a greater rate.

Q. Owning and controlling the acreage yourself permits you to more economically operate your gathering lines and determine pressures at which they will be operated, and things of that kind?

A. When you say "owning acreage", you mean that the acreage is only held by royalty?

Q. That is right.

A. As we own no land in fee at all.

Q. That is right. I mean, you own and control your leases. A. Yes.

Q. Giving you the right to operate your leases?

A. That is right. It does give us a much better opportunity to plan from an operating standpoint.

[fol. 5749] Q. In other words, it gives greater elasticity to the system so that you can control the expansion at such time as you think it most economical to spend?

A. Yes, that is right.

. . . . . .

[fol. 5752] Q. The acreage which Panhandle Eastern now holds in that field is held largely as a matter of protection for the future, is it not, so as to give adequate reserves in the future?

A. You refer to the Hugoton?

Q. Yes.

A. Yes, that is correct. We have always thought of the Hugoton Field as the source of our future reserves.

Q. It furnishes insurance to Panhandle Eastern and its customers and the people served by it of a supply of gas as long as that field reasonably lasts?

A. That is correct.

Q. Is Panhandle Eastern's acreage confined to one particular portion of that field, or is it pretty well dis-

[fol. 5753] tributed over the entire field?

A. It is very well distributed over the entire central portion of the field.

. . . . . .

Q. And a comparison of the acreage picture on Exhibit 20 with the general field outline on Exhibit 26 will show that Panhandle's acreage is well distributed over the entire field so as to take advantage of any situations which may arise in [difference] portions of the field?

A. That is correct and, also, it would, in my opinion, not be good policy to put all your eggs in one basket, take all the acres in one portion of the field when the

percent of the field that has been developed is as low as it is at the present time.

* * * * * * * * * *

[fol. 5754] By Mr. Culton:

Q. Mr. Hinton, at the recess, you reminded me that the Panhandle Eastern had acquired substantial acreage in the last few months. A. Yes.

Q. About how much acreage has been recently acquired in the Hugoton Field?

A. Yesterday, in answer to Mr. Lee's inquiry, I read into the record the amount of acreage which was now held by Panhandle Eastern as of November 30, 1941. In last night's mail, I got my acreage report for the next month and, if you would like, I can read that total in, as of December 31, 1941.

Q. All right.

A. 256,962.69 acres. That shows a total increase of somewhere around 29,000 acres, and I cannot be sure because I do not know just exactly what it was as of June 30, but, in round numbers, we would say 30,000 acres.

The greater amount of the acreage which has been leased during the period mentioned is located along the north side of our present development in Grant County, Kansas; also, some to the west and to the south of our present pipe line, which extends in a diagonal line across the Grant County map, as shown on Exhibit 20.

We have also secured additional acreage in a portion of Texas County, Oklahoma, which is principally located in [fol. 5755] Township 5, Range 13; Township 5, Range 14, and Township 4, Range 14, all in Texas County, Oklahoma.

Q. Does that help to block in the company's acreage in those two areas?

A. Yes, it does. It gives us a very nice area to develop in Texas County, Oklahoma, and that area is in very nice relationship, as to location, to our proposed gathering system and the acreage which has been secured in Grant County, Kansas, is located so that it may be connected to our present system without incurring great costs for additional pipe lines.

Q. In your original testimony, you assumed that Panhandle Eastern would, so long as it is economically ad-

visable, apportion its takes between the Panhandle Field and the Hugoton Field on approximately the present basis. What is that present basis of apportionment?

A. It is, in percent, around 27-½ percent from the Hugoton Field and about 72-½ percent from the Panhandle Field of Texas.

Q. What principles have guided you in selecting that present apportionment?

A. The total rate of withdrawal from each field and the protection of reserve to the greatest possible extent in each field.

Q. What do you mean by "protection of reserves"?

A. By that, I mean that our rate of withdrawal from [fol. 5756] each field is governed by the total withdrawal from each field and, more particularly, around the areas in which we operate.

Q. In other words, you have reached the conclusion that as long as the present production from the two fields is approximately what it now is, that you will be able to protect your reserves in both fields from extraordinary drainage by apportioning on that basis?

A. That is correct, and it must be given much consideration in the problem of obtaining the greatest possible amounts of gas from our reserves, especially in this type of field.

Q. Which field do you refer to, when you say, "this type of field", both?

A. Both fields, but more particularly in the Texas fields, where the rate of flow through the formation is greater.

Q. You also stated in your original testimony that you assumed that the Panhandle Eastern would continue to apportion its production between its own leaseholds and its gas purchase contract acreage on the basis now existing? A. That is correct.

Q. What is that basis?

A. That concerns the method of proration used by this company in each field.

Q. And what elements are taken into consideration, in that proration?

[fol. 5757] A. The proration formula used in the allocation allowables to wells located in the Panhandle Field is 50 percent of the total production divided on the basis

of the total acreage and 50 percent of the total production divided on the basis of total open flow and the percent which each well participates in the total development, governs the percent participation which that well will have in the total withdrawal by this company.

Q. What is Panhandle Eastern's practice with respect to the acreage which will be considered in connection with any well from which it takes gas? Do you have a maximum acreage?

A. Yes, there is a maximum acreage unit of 640 acres per well.

If you meant for me to also describe the method in the Hugoton Field, I did not complete that.

Q. Yes.

A. In the Hugoton Field, the formula used by Panhandle Eastern Pipe Line Company is that of determining allowables by dividing the total market into two parts, one part being 75 percent, which part is divided on the basis of acreage times wellhead pressure; the other 25 percent is divided on the basis of open flow and, of course, the same applies as in the Texas Field, that is, that the percent that each well participates in the total development governs the percent which that well will participate in the total market.

[fol. 5758] Q. How long has Panhandle Eastern adopted the practice of using 640 acres as a drilling unit?

A. We have never used a unit greater than 640 acres in proration during the entire history of the company.

Q. I think you said something about your plan, at least for sometime in the future to meet peak requirements from the Hugoton Field. Just what did you mean by that?

A. If we would design our lines so that we would meet our peak requirements by applying the percent of division between fields, it would mean that we would have to make many thousands of dollars of capital expenditure for increasing the capacity from Texas.

Therefore, the load has to be handled in such a manner that the monthly divisions have the tendency of curtailing Hugoton production during the summer months when the load demand is light and then taking far more than the 27-1/2 percent during the four winter months.

Q. In other words, what you have in mind, as nearly as possible, is keeping the Panhandle area on a fairly constant load factor?

A. Yes, that is right. In other words, during the summer months, the percent of the total market from the Panhandle Field exceeds the percent which we set for that field of 72-½ percent.

In fact, it will run up into the high eighty percents [fol. 5759] during the low-pull months in order to meet the percentages which I believe will be most advantageous for the company acreage.

Q. You have testified that commencing in 1942, you expect to have a substantial program of expansion of your facilities in the Hugoton Field by reason of operations in Texas County, Oklahoma.

Will those operations in that field result in any immediate change in the volumes of gas taken from the Panhandle Field?

A. No, sir, but they will result in some curtailment of take from the developed portion in the Kansas Field.

Q. I believe you stated that, from the standpoint of physical operation, you could, for a while, continue to take the necessary volumes of gas from the existing producing properties in the Hugoton Field?

A. That is correct. We have been forced into the development program which we expect to carry out during 1942.

Q. That is due to the circumstance that you had some expiring leases in Texas County, Oklahoma, which were top-leased by other operators?

A. Yes, and it so happens that those leases are located in what should be a very nice part of the Texas County portion of the Hugoton Field.

Q. Would you be able to protect yourself merely by the [fol. 5760] drilling of wells on those leases which are expiring?

. . . . . .

A. The lease form requires that a developed lease be producing gas in commercial quantities.

Q. And the mere discovery of gas is not sufficient to hold your lease?

A. Just the drilling-in of a well does not completely develop a lease.

Q. You have already, I believe, started, and are down about the producing horizon, the first well in that field to be drilled under that plan? A. Yes.

Q. And will you point out on Exhibit 44 the location of that well?

A. That well is located in the—it is shown here to be located in the west half of Section 25, Township 3, Range 15, but we have shifted the location of that well over to the center of the north half of that section so that we will have another location on that lease which consists of 800 acres that will be a greater distance from the well than it would be if we would have gone ahead and drilled in the center of the west half of that section.

* * * * * * * *

[fol. 5761] A. Yes.

Q. Now, do you have any other leases in that field which have been top-leased and which would have to be drilled pretty soon if they were held?

A. Yes. Of the wells shown in brown which indicate the development which will be carried on during the year 1942, there are 20 wells shown and of this 20, 14 have been top-leased.

Q. Now, you have stated that it would not be enough to hold the leases merely to drill the wells. How far are those wells located from the present trunk line, roughly speaking?

A. About 12 to 15 miles average, I would say.

Q. Is there any existing gathering line which could serve those wells?

A. No, there are no existing gathering lines.

Q. In the construction of the gathering line system shown on Exhibit 44 in brown, have you limited that gathering line to a size sufficient to serve the wells which you expect to drill during 1942? A. No, we have not.

Q. Why is that true?

A. Because we are looking at the over-all cost of a development required to carry the amount of gas which we anticipate taking from this portion of the Hugoton Field, [fol. 5762] and if we would build a line that would take care of the production of the wells drilled in 1942, it would

mean that that line would have to be looped or the capacity increased by building an additional line in the next year or two, and it is much cheaper to provide for future capacity by the looping of one line of larger diameter than it is to build several lines of smaller diameter pipe.

Q. Therefore, in your construction program, you have taken into consideration the over-all economic picture of the company now and in the future, is that correct?

A. That is correct. However, the present 22-inch line will probably not be adequate to carry the total amounts of gas which we will have to take from this field in future years.

Q. That is, after the 1946 period?

A. Yes. I think it will be quite a while before we have to loop this line, but then the 16-inch line which carried the gas from the Hugoton Field at the time it was built was of large enough diameter to carry the gas to fulfill market requirements.

We have now built the 18-inch line, known as the Grant County, 18-inch Line, and sometime after 1946, and probably not too long after that, it is going to be necessary to further increase the capacity of the pipe line from Hugoton Field.

Q. After the Texas County, Oklahoma, gathering line is completed, then you will have three major gathering line [fol. 5763] systems in the Hugoton Field. Is that correct?

A. That is correct.

Q. Two in Kansas and one in Oklahoma?

A. Yes, sir, that is correct.

Q. You will still have none in Texas?

A. Maybe for clarification, we would say, instead of two major gathering systems, we would say that we have two major trunk lines connecting to our gathering system in that field.

Q. That is right, but you have one gathering line serving the Texas County, Oklahoma, area, another serving the Stevens County, Kansas, and another the Grant County, Kansas, with a connection from the one serving the Grant County, Kansas, to the one serving the one serving the Stevens County, Kansas?

A. Yes, that is correct.

Q. You do not, during this five-year period, expect to develop any of the acreage held in Hansford County, Hansford or Sherman counties?

A. No, that acreage is held for the purpose of trying to make up what we will not be able to produce from the Panhandle Field, and thus longer utilize the facilities which will be installed and are now installed at the Hansford compressor station.

Q. In other words, after the time arrives when it will [fol. 5764] become necessary for Panhandle Eastern to cease producing gas in the Panhandle Field, you expect it to develop its properties in Hansford and Sherman counties, Texas, so as to use as much of the trunk gathering line which now extends down into the Panhandle Field as is possible?

A. That is correct, and also the compressor station facilities.

Q. At Hansford? A. At Hansford.

Q. In other words, you assume that you will probably have a gathering line running from Sherman and Hansford counties into the Hansford station?

A. Yes. I have projected that and tried to relate it into the problem as a whole on a ten-year plan, and that line shows it is to be built in that ten-year period.

Q. You have, I believe, referred to the circumstance that efforts are now being made, and have been made for some time, to enforce statutory proration in Kansas?

A. That is right.

Q. And have stated that if that movement succeeds, there is a probability that it will increase Panhandle Eastern's capital expenditures over those shown in your exhibit?

A. If the same type of order is placed on the field or, I would say, the same order that is now, I believe your attorneys call it "stayed", then I think that it will be nec- [fol. 5765] essary to make additional capital expenditures in that field over those which we show, and that the cost of gas may also be increased by the fact that the unconnected wells may be connected to our line by an order of law.

Q. Is that due to the circumstance that you will probably be permitted to produce less gas from individual wells than you can produce now, thus requiring you to

take your entire requirements from a greater number of wells?

A. Well, that is largely dependent, as the system exists today, upon the Republic Natural Gas Company and the State of Oklahoma.

Q. Will you explain that?

A. Republic Natural Gas Company has been facing this order the same as all companies operating in the Kansas portion of the Hugoton Field, and it looked to them as though they might be forced to operate under such an order.

In order to meet their market requirements and to be able to supply their contractual amount for the Northern Natural Gas Company, it would have been necessary for them to have drilled a number of wells in the Hugoton Field in the neighborhood of 50 additional wells but, in place of doing that, they merely went across the State line into Oklahoma and drilled about 20 wells, from which they are able to take a great amount of gas.

If the State of Oklahoma would come out with a pro- [fol. 5766] ration order, why, that would, maybe help to protect us somewhat, but if it does not, Republic Natural [Gas] Company, by drilling just a few additional wells, can take the major part of their entire demand from the State of Oklahoma and cut down on the amounts which they will take from the Kansas wells, and that will set the pattern for Panhandle Eastern and it will mean—

Q. (Interposing) By "setting the pattern", you mean the amount of production per well?

A. I mean the amount of gas that can be produced for each M.c.f. open flow and each acre-pound which, when developed, will be necessarily the same as that taken by the Republic Natural Gas Company or by any market that sets the pattern, and by setting the pattern, I mean the company that has the lowest ratio between their market demand and development.

Q. And in the event that caused the pattern to change and lowered the amount of production per well, how would you obtain your additional production?

A. By drilling additional wells or by moving to Oklahoma unless we had a proration order in Oklahoma. If

we had no order in Oklahoma, it would mean that we would certainly develop in that State rather than to drill wells where the amounts of gas which would be taken would be lower than would be good for economical operation.

[fol. 5767] Q. Mr. Hinton, in the event your present plan is fully carried out, you will drill these wells you have referred to in Texas County, Oklahoma, and are permitted to prorate among all your wells in the Hugoton Field on your present basis, would your production have a tendency to cause the pressures of the field to go down more uniformly than if all of the production were being taken from one individual area?

A. No. As long as we have the two-state situation there any proration order.

Q. (Interposing) I mean, disregarding proration, if you are permitted to go ahead and use your own judgment of prorating among the wells, would the pressure go down more uniformly over the field, as a whole, than if you were taking your production from, say, Stevens County?

A. It would certainly be more uniform. Anytime the rate of production is properly distributed, the decline in pressure will be more uniform over the field.

Q. What effect does decline in pressure have on the deliverability of gas from wells and the ability to carry uniform pressures in gathering lines, and so forth?

A. It creates a much better operating condition, because a common pressure will be experienced at almost all wells, and by lowering the working pressure down to a certain point, it would still mean that all wells will be [fol. 5768] able to produce gas into the system, whereas if the wellhead pressures are not uniform, such as those we have in the Panhandle Field in Texas at this time, why it is then necessary to revise and revamp the gathering system by the addition of horsepower in the low-pressure areas.

Q. I believe that you have testified that you have in mind taking a maximum of approximately 60 billion per [fol. 5769] year from the Texas Field. Is that correct, 60 billion or 61 billion, something like that?

A. Yes, as long as I have estimated that we would be able to take that amount.

Q. And I think in response to questions asked by Commission counsel, you stated that, of course, by addition of capital expenditures, you could take, for a while, greater amounts than that from the Panhandle Field?

A. That is right.

Q. Why is it not economical, in your judgment, to do that?

A. Because, if we spent all of our money for capital expenditures in Texas, it would mean that at the time when we would move from Texas to the Hugoton Field as a source of production, that our over-all money picture of capital expenditures would be much greater than it would be if we carry out the development plan which we have outlined.

* * * * * * * *

[fol. 5777] Mr. Littman: (Interposing) May I interrupt to inquire whether you mean by that if the capital expenditures, which are shown in Exhibit 42 for the years through 1946, are made to some extent in advance and in anticipation of future needs, is that what you mean?

The Witness: Yes, and at the same time to cut down on the amounts that will be required in years after that period.

By Mr. Culton:

Q. In other words, in determining your expenditures during the period 1941 to 1946, you had in mind taking care of some of the situations which would develop during the years 1946 to 1951?

A. Yes, it would not be wise planning not to do so.

Q. And in some instances, possibly later than that?

A. Yes, that is correct.

Q. Do you think that all of these expenditures which you have shown in Exhibit 43, Schedule 1, being a list of additional capital expenditures required to produce and [fol. 5778] gather basic load during the years 1941 to 1946, will be required?

A. Yes, unless, of course, we are forced to cut back some of our load due to the fact that we will not be able to obtain the necessary steel to make these additions.

Q. Aside from the possibility of getting the steel, and looking at it from the standpoint of the company's economics, do you think it is advisable for all those expenditures to be made, for the most economic production of gas?

A. Yes, and I might say that the major items are now on order.

Q. That is to obtain the basic load. Do you think that these items separately set out in Exhibit 42 under the basic load are priced at reasonable prices for such labor and materials?

A. Well, reasonable, but I think perhaps that we should not mention the uncertainty of labor prices, because they are not reflected in those prices, and what now appears to be a reasonable price may become an unreasonable price with the rising conditions.

Q. But the prices, you think, are fair and reasonable as of the time the exhibit was prepared?

A. Yes, sir.

Q. But you refer to the present reasonableness of those prices. Do you mean there will be increases of those [fol. 5779] prices or decreases of those prices?

A. We know prices are increasing on practically everything at this time, and I think our last pipe prices show that carload lots of pipe are increasing on a tonnage basis, and we did not use carload lots of pipe in the pipe to be used for the major portion of the gathering system.

Q. Do you think that the items shown in Schedule 2 of Exhibit 43, being additional capital expenditures required to produce and gather anticipated increased loads, will be reasonably required in order economically to handle the increased loads under Mr. Morton's estimate?

A. Yes, I think they are quite reasonable.

Q. Do you think that the prices shown for those items in Exhibit 42 represent fair and reasonable prices for those items as of the date of that exhibit was prepared?

A. I think the prices used are as nearly correct as it would be possible to place a price upon that type of work and equipment.

Mr. Littman: As of what date?

The Witness: As of June 30.

Mr. Littman: 1941?

The Witness: 1941.

By Mr. Culton:

Q. And if you were revaluing those various items at this time, or determining the present cost, would the cost be higher or lower than the cost shown at the present [fol. 5780] time?

. . . . . .

Trial Examiner: I think the record at the present moment is the witness has given no effect to the price increases or the causes for the price increases since the computation was made as of June 30, 1941.

Mr. Culton: The statement of the Examiner is correct, is it, Mr. Hinton?

The Witness: That is correct, or that is what I attempted to convey, at least.

. . . . . .

[fol. 5782] Q. Mr. Hinton, in your original testimony on Page 33 of Exhibit 42, you made this statement:

"Panhandle Eastern will, in the future, be required to increase its operation and maintenance expenses, even to produce the same volumes of gas which [which] it now produces."

On Page 729 of the record, in response to a suggestion from the Examiner that it would be appropriate for me to explain why we were offering evidence as to the cost of future capital expenditures during the next five-year [fol. 5783] period, I made this statement:

"Another circumstance which makes this evidence very pertinent is that as the years go by the evidence will show the over-all unit cost of producing gas is increased. It is increased because of the necessary carrying charges on the additional capital expenditures which will be required and increased by the necessary amortization of those capital expenditures and the depreciation of the items, and increased by the additional operating expenses which would be necessitated by reason of the increased expenditures."

In your Schedules presented in connection with Exhibit 42, that is, Schedules 3 and 4, in which you estimate operation and maintenance expense, both on the basic load and on the anticipated load, did you include anything as representing depreciation for any of the company's property?

A. No, sir, depreciation was not included. Schedules 3 and 4 refer only to operating and maintenance costs.

Q. By that you mean actual out-of-pocket money?

A. Yes, out-of-pocket money with the exception of the power item which has been brought up, which is an accounting problem.

Q. Yes. Then your schedules do not reflect anything for amortization? A. They do not.

Q. Nor do they reflect anything for interest incurred [fol. 5784] or returned on the investment?

A. No, sir.

Q. Do you purport to know what the appropriate amortization figures would be?

A. Not at this time, no, sir.

Q. Or depreciation? A. I do not.

Q. Or depletion of the reserves? You have made no computation in this exhibit for those items at all?

A. No, sir. I have given it a lot of thought but have not arrived at any figure to use for the depletion of reserves.

Q. Now, you have explained heretofore that even to transport the same volumes of gas as pressures in the field become lowered there will be additional compressor expense, I believe.

A. Yes, sir, there will be.

Q. And you have stated that you recognize that in so far as the actual out of pocket cost for gas used as fuel is concerned, there would be no appropriate charge for fuel in connection with the compressor station.

A. Yes, there would be an appropriate charge; but what that amount would be would have to be determined. The 15 cent per M. c. f. figure which was used is an arbitrary figure and there would be, naturally, the cost of the royalty [fol. 5785] on the gas and the cost paid to the vendors of the gas which would be a natural out-of-pocket cash item along with the operating expense required to transport the gas from the wellhead to the intake side of the compressor station.

Q. But, if these items are all included as expenditures and there is no charge against the company by way of a set charge on the other side of the ledger, then, it would not be appropriate to consider the 15 cents as an expense charge.

A. That would have to be determined. Whether 15 cents would, I don't know.

Q. Whatever the appropriate charge—

A. (Interposing) Whatever the appropriate charge might be.

Q. Now, in the operation of the compressor stations you state that you have additional gas required and, also, have some additional labor required.

A. That is correct.

Q. And that additional labor, both for maintenance and operations, is reflected in your schedules presented in connection with Exhibit 43? A. Yes, sir.

Q. Why is it that, as your compressors get old, the maintenance cost increases?

A. It might be compared to the cost of the operation [fol. 5786] of the family car. As the car becomes older it costs more to run that car the same number of miles.

Q. Does that same situation apply with respect to all of the other expense items in connection with production of gas, transportation of gas?

A. Yes, any of the—

Q. (Interposing) Any of the maintenance items?

A. Any of the physical plant is subject to a certain amount of depreciation year by year.

Q. I notice that in the year 1940—do you have your exhibit before you—Line 19, there is a very substantial decrease in 1941 over the 1940 cost for maintenance of the production system.

Q. You are referring to Page 1 of Schedule 3?

Q. That is right. A. Yes, there is.

Q. Explain what principle represents that difference between 11,000 in 1940 and only 7,990 in 1941.

A. The difference between the $11,821 for 1940 and the $7,990 in 1941 is largely accounted for by the clean-out work which was required on the Nield 1-18 well and that

operation was rather fully described in yesterday's testimony.

Q. Have you made allowance for a similar expense in the future years under either the basic load or the antici- [fol. 5787] pated load?

A. No, sir, because one never knows when that condition is going to occur and it is, therefore, impossible to set out a large amount of money in the budget for that purpose.

Q. Do you anticipate that some of your wells in the future will give you water trouble?

A. Oh, without any doubt that will happen to us. For instance, in 1940 our Gregory 18 well had this happen, the production string of casing parted down a distance from the top of the ground. Of course, that allowed the surface water to come in and the formation around the well was completely flooded.

It was necessary to run a new string of pipe into that well.

Mr. Littman: Pardon me, Mr. Culton. I would like to have the witness state, if he knows, the amount of money included in the year 1940 figure for production maintenance in Line 19 of Page 1 of Schedule 3 for the cleaning out of wells.

The Witness: As I remember that amount, Mr. Littman, it was approximately $6,000. The reason it sort of stayed in my mind is that I think that we estimated that that operation would cost $4,000 and it overran by that amount.

Mr. Littman: Have you included any sum in the year 1941 for cleaning out of wells? I refer to the $7,990 figure [fol. 5788] in Column "C".

The Witness: No, that figure is based on the first six months' actual cost and we did not clean out but one well after that time. That amount—I just can't recall what it was—was under $1,000.

Mr. Littman: Do you have amounts included in that line for the subsequent years to cover cleaning of wells?

The Witness: Yes, normal cleaning operations.

By Mr. Culton:

Q. What you had reference to was unusual conditions?

A. That is correct. Where, if I may refer to it again, the tools are lost and it is necessary to spend several additional days in trying to recover them.

We think of a normal cleaning-out operation as requiring about seven days besides the moving in and tearing down time.

Q. What has been the nature of your allowance in the subsequent years, 1942 to 1946, for clean-out expenses?

A. I don't remember just how many wells we estimated that we would clean out, but I can tell you this, we estimated that two wells would be cleaned out during the year 1942.

Those wells are in the 1942 budget at this time.

Q. Do you know what the wells are that you expect to clean out at this time?

Q. One of the wells is the Zofness No. 255 and the [fol. 5789] other well is—I just can't remember without going back.

Q. At any rate, you have a definite well in mind?

A. Yes, and a definite well is shown on the budget for our actual operating and maintenance budget for this year.

Q. Now, is that on the normal clean-out job that you have in mind for it?

A. Yes, sir.

Q. All right.

A. For the year 1943 we estimate that there will be three; there will be four in 1944; there will be five in 1945 and six in 1946 that are included in this schedule.

Q. And you have allowed only the usual and ordinary clean-out expense for those wells?

A. Yes, that is right.

Q. Have you, as yet, had any experience with wells salting up?

A. Yes, we have had, some slight experience.

Q. Explain just what is meant by the "well salting up."

A. By the term "well salting up or off", it means that salt in the formation begins to clog the permeability channels.

Q. With what effect?

A. With the forming of a restriction in the formation which will not allow gas to pass through the formation. In

[fol. 5790] other words, it merely blocks off the production from the well bore.

Q. Does it sometimes result in a restriction in the well bore, itself?

A. Yes, it does.

Q. And it sometimes results in restrictions out away from the well bore. Is that correct?

A. Yes. Sometimes the bridge is formed in the well bore, and I believe, that the type of salt that forms the bridge in the well bore is the easiest type to be dealt with because it still shows that there is sufficient permeability left to enable the salt to travel through the formation, but when that bridging starts back in the formation from the well bore it is a very difficult problem.

Q. What method is used for eliminating that bridge when a bridge of salt forms in the well bore?

A. If the bridge is a partial bridge, it can sometimes be removed by pumping water down on top of it and then opening the well to atmosphere.

Q. By that you mean blowing the well?

A. Yes, sir, sometimes it is necessary to run a string of tools in the hole to knock the bridge out.

Q. Is that a more expensive proposition?

A. Yes, that is a more expensive proposition.

We have been fortunate enough to be able to bring the [fol. 5791] wells back, where salting has occurred, by the use of just plain water.

Q. And what is the situation if the salt works into the formation back away from the well bore where the salt is deposited and clogs the channel?

A. Unless it is taken care of promptly, it will usually result in the loss of the well, because as the salt starts to form in the permeability channels away from the well bore it gathers the salt which comes in back of it and forms a very tight bridge.

Q. Have any of the other gas companies producing in that area had greater salt difficulties, so far, than Panhandle Eastern has had?

A. Yes, especially those companies which operate to the east of our general area.

Q. In the Panhandle Field?

A. In the Panhandle Field.

Q. What has been the situation there?

A. Well, Texoma has had to plug several of their wells. By "several" I mean seven or eight. They have lost those wells entirely.

* * * * * * * * *

[fol. 5792] Mr. Littman: Were those salted wells located in the east Panhandle Field?

The Witness: Yes, in the LeFors area.

Mr. Littman: How many miles is that from your production?

The Witness: I would say between 25 and 30 miles.

By Mr. Culton:

Q. The pressures over there are lower than they have now reached in your area?

A. Yes, that is true and that is where the real salt danger comes, especially in an area like our Group Area "D" where the water is showing now and it is necessary to have a certain amount of water to dissolve the salt in the formation to carry it into the well bore.

If we encounter serious trouble in the Panhandle Field, I believe it will be in our Group Area "D", although the three wells that have shown the greatest amount of salt are the State Permit well, 1-106, the Rockwell 1-102 and the Sneed 1-23.

Q. Where are they located?

A. Two of them are located in—

[fol. 5793] Q. (Interposing) I don't believe the map is there. Which group area?

A. Two in "B" and one in "F". The wells were checked for salting again late this fall.

Q. That is the wells you have just referred to?

A. Yes, the Sneed 1-23 was not checked for other than a water sample, but the State Permit 1-106 and Rockwell 1-102 were checked for salt by placing a critical flow prover on the well and allowing it to flow and then the amount of salt that was caught on the prover was noted.

I was happy to find that the condition was not as bad as it was two years ago on those wells.

Q. In other words, so far you have been able to control the salt situation all right on the Panhandle Eastern wells?

A. Yes. In the Hugoton Field we have had salting trouble on two wells and those are the ones that were brought back by the injection of just clear water.

Q. And where are those wells located?

A. One is the Light well located—

Q. (Interposing) Can you point out on the pressure map approximately where it is?

A. It is in Section 23, Township 33, Range 39.

Q. It is right below the letter "S" of the word "Stevens", is it, a little to the left?

[fol. 5794] A. It doesn't show on there. We have two light wells. Maybe I better check the location.

Q. Are they close together?

A. Yes.

Q. Just the general area was what I had in mind.

A. It was the area to the west, I might say northwest, of Stevens County. The other well is the Greening well which is located in Section 6, Township 35, Range 39, Morton County, Kansas.

Q. Are those wells in high pressure areas?

A. Yes, they are in what would be termed high pressure areas.

Q. To what extent had the salt affected those wells when you went to work on them?

A. The light well had an original natural open flow of approximately 8 million cubic feet for 24 hours and this had fallen off to an amount which, as I recall it, was slightly below 2 million cubic feet for 24 hours.

After the clear water was pumped into the well and left to stand for several hours and then blown back out, the well again came back to approximately its natural open flow.

Q. How about the other well?

A. The other well was a well which was cleaned out by putting a rig over the well and it was plugged back at the time the clean-out was made and acidized, so we don't [fol. 5795] know exactly what it might have done to come back to its natural open flow, but it did show a nice increase in open flow by the use of acid.

Q. Do you anticipate greater trouble or less trouble from the standpoint of salt difficulties as the pressures become lower in the Panhandle Field?

A. Well, naturally, the difficulties will increase, if they are going to occur, as the pressures become lower.

Q. Have you made any allowance for that possibility?

A. No, sir, I don't think one could reasonably make any set sum allowance for that possibility?

Q. Therefore, in your estimate of operation and maintenance cost, both on the basic load and on the anticipated load, that element has not been taken into consideration?

A. No, sir, because I don't believe that we will have any great trouble until after the year 1946.

Q. It is in subsequent years where you think the greatest difficulty will be?

A. That is right.

Q. Is there any way by which you can tell when that would be or what the cost of it would amount to?

A. No, sir.

* * * * * * * *

[fol. 5812] Q. You stated, I believe, in response to one of Mr. Littman's questions or maybe some other counsel's, that it was possible, physically, to so operate your system as to raise or lower the working pressures required in the [fol. 5813] gathering lines?

A. Yes, that is correct, it is possible.

Q. How is that done, if you want to lower the working pressure?

A. To take more gas away at the other end of the pipeline.

Q. And what does that require?

A. That requires the delivery rate to be increased.

Q. And how is that increased?

A. That is increased by the application of horsepower to the flow.

Q. In other words, you have to build more compressors, is that it?

A. Yes, sir.

Mr. Littman: Couldn't you loop lines, also, and get a similar result?

The Witness: Yes, that is true, Mr. Littman. Much can be accomplished by the looping of pipe line systems and if you will note the expenditures which are shown in Exhibit 42, it does anticipate the looping of a considerable portion of our system as well as the installation of additional horsepower and, again, that is where the economics of development come in,—which is cheaper, horsepower or the looping of lines.

Mr. Littman: That is what prompted my question.

[fol. 5814] The Witness: Yes, sir.

By Mr. Culton:

Q. Then, irrespective of how it is done, the expenditure of additional money for capital investment is required?

A. That is right.

Q. And the economics of the situation will have to be carefully studied to determine whether or not it is economically advisable to operate so as to lower the working pressures at any given time?

A. Yes, that is right.

. . . . . .

[fol. 5843] C. H. Hinton a witness, having been previously duly sworn, resumed the stand and testified further as follows:

[fol. 5844] By Mr. Culton:

Q. Mr. Hinton, several days ago you were requested to prepare certain schedules with respect to cost of gas, giving no consideration to the carrying charges on the reserves, on the existing facilities or on the facilities to be hereafter added, and giving no consideration to amortization, depletion, depreciation and replacements with respect to those properties.

Have you now caused that study to be made?

A. Yes, and the results of this study are reflected in Exhibits 142 and 143.

Q. You have been on the stand continuously, but you did give instructions to a representative of the Panhandle Eastern Pipe Line Company, showing him what figures to use in making these studies, is that correct?

A. Yes, that is correct.

Q. And have you now checked over these results, however, to see whether or not he has followed your instructions?

[fol. 5845] A. I have, and found that he has followed my instructions.

Q. In this group of studies, you have divided your study between the two fields and then shown the aggregate for the two fields, is that correct?

A. Yes, that is correct.

Q. And have also shown the total cost of gas produced, and the total cost of gas purchased, is that correct? A. Yes, that is correct.

Q. Calling your attention first to Schedule 2 of Exhibit No. 142, this being the cost of gas purchased per M.c.f. by field on basic load, where did you get the amount paid per M.c.f. of gas?

A. That is the price within 1/100 of one cent. That is established by gas purchase contracts in the two fields.

Q. And the M.c.f. purchased for years shown on Line 21 comes from what point?

A. That comes from an exhibit that was prepared at Mr. Littman's request which bears the number of 132.

Mr. Littman: That is a copy of one of your working papers, is it not?

The Witness: That is right. The exhibit was prepared from working papers.

. . . . . .

[fol. 5846] By Mr. Culton:

Q. That is on the basic load?

A. That is on the basic load. That is the only one used in this schedule.

Trial Examiner: You had Exhibit No. 131, which was future production with the anticipated load increase, and No. 132, which was without the load increase, both prepared from your working papers, as I recall it and as the record seems to indicate?

The Witness: That is correct, and 131 will tie in with Exhibit 143.

Trial Examiner: Will 132 tie in to Exhibit 142?

The Witness: That is correct, yes, sir.

By Mr. Culton:

Q. Now, where did you get the transportation costs shown on Lines 4 to 19?

A. Those were obtained from Exhibit 43.

Mr. Littman: From what schedules in Exhibit 43, Mr. Hinton?

The Witness: From Schedule 3, Pages 1 to 3, inclusive.

Mr. Littman: You mean Pages 1 to 2, inclusive, for the particular figures which you have referred to?

The Witness: Yes, for the Panhandle Field that is correct. I was thinking in terms of the entire schedule 2.

. . . . . .

[fol. 5848] By Mr. Culton:

Q. Now, do you find the exact figures in Exhibit 43 that appear on Schedule 2 of Exhibit 142, or have you had to do some apportioning to get these figures?

A. The total is the same but the cost of transporting gas has been apportioned in the percent that the gas which is produced by the company and gas which is purchased by the company is divided.

Q. In other words, the transportation cost which appears on Schedule 2 must be added to the transportation costs shown on Schedule 3 in order to get the total for those various items?

A. Yes, that is correct.

Q. And you have apportioned all of the transportation cost between the produced gas and the purchased gas in proportion to the amount produced and the amount purchased? A. That is correct.

Q. That is true as to all instances where both the purchased gas and the produced gas use the same facilities?

A. Yes, where they use the same facilities, that is true.

Q. Now, for the year 1941, you get a total on Schedule 2 of 817,000 and then how is that applied to determine the cost of the purchased gas?

[fol. 5849] A. The amount which the company estimates that it will purchase for the year 1941 is divided into the amount of $817,635.

Q. And the resulting figure shown below represents the cost of gas purchased from the Panhandle Field for each of the years shown, taking into consideration only the elements to which you have referred?

A. That is correct.

Q. Then was the same plan followed in Lines 23 to 36 with respect to the Hugoton Field?

A. Yes, the same procedure was applied.

Q. Then in determining the weighted average cost of the gas for both fields, was that same method applied in Lines 37 to 40?

A. Yes, the same method applies.

Q. Passing now to Schedule 3 of Exhibit 142, purporting to show the production cost per M.c.f. by fields, basic load, what do Items 3 to 13 represent?

A. They include all of the production, operation and maintenance, including the land and lease operation, the royalties, rents, delay rentals, renewal bonus and taxes.

Q. How were the ad valorem taxes apportioned, I mean as between transportation and production?

A. The ad valorem taxes were all applied to the transmission, because it would not have been possible to have [fol. 5850] separated those in the time that was available to prepare this schedule.

Q. Well, I have not checked over this, but I notice that ad valorem taxes appear on the production schedule also.

A. That is gross production.

Q. It should be gross production instead of ad valorem—

* * * * * * * *

In other words, the taxes, so far as the produced gas is concerned, were applied to the production rather than to the transportation?

A. Yes, that is correct. Of course, it makes very little difference in which class they are thrown because the result obtained is the same.

Q. When it gets down to the total cost of the pro- [fol. 5851] ducing gas?

That is right.

Q. This item per M.c.f. produced for the years shown on Line 15, where do you get that figure, on Schedule 3 of Exhibit No. 142?

A. On line 15 the M.c.f. produced for the year?

Q. Yes, sir.

A. That is taken from Exhibit No. 132 which was prepared—

Q. (Interposing) From your working papers?

A. From my working papers.

. . . . . .

Q. Now, was that portion of Schedule 3 relating to the [Huguton] Field prepared in the same manner which that portion of the schedule relating to the Panhandle Field was prepared? A. Yes, it was.

Q. And Lines 35 to 39 representing a weighting of the prices for the various years?

A. Yes, that is a combination of both fields.

Q. Now, passing to Schedule 4, being the transportation costs per M.c.f. produced by fields, is that the cost as applied to the produced gas? A. Yes.

[fol. 5852] Q. And how were the transportation costs shown on that schedule obtained?

A. They were taken from Schedule 3 of Exhibit 43 and they were divided on the basis of the percents which were produced and purchased.

Q. The same way as the transportation cost on the purchased gas?

A. That it correct.

Q. Now, passing to Schedule 7 of Exhibit No. 142, a summary of the production and transportation costs by field, I am not certain myself as I have just [look] at that, whether those figures are weighted.

If not, they should be weighted, on Schedule 5.

A. Yes.

Q. Do you know whether that is an arithmetical total or a weighted total?

A. That is a weighted total which was obtained from the previous pages of this exhibit. They have already been weighted before being carried over.

Q. Then these figures show what the total costs of producing would be, the total transportation cost and the total from both fields, is that correct?

A. That is correct.

Q. Then was Exhibit 143 prepared in the same way that Exhibit 142 has been prepared?

[fol. 5853] A. Yes, sir, the same procedure was followed.

Q. And schedule 1 on each of those exhibits is a summary of those sheets which follow?

A. That is correct.

Mr. Culton: Mr. Examiner, may I suggest at this time that it might be advisable for Commission counsel, if he liked, to hold a round-table discussion about this.

There has not been time, frankly, for us to check it nor for them to check it either, and it might be, by taking a little while and holding what we, in some court cases, call a pre-trial conference, that the minds of all parties might get together more quickly on just exactly what this represents.

Trial Examiner: Mr. Littman, do you welcome this suggestion?

Mr. Littman: I do not believe that we are yet in a position where we can intelligently discuss these two exhibits without having first an opportunity to check the exhibit and to study the exhibit.

This exhibit involves a number of allocations and I might state, at first blush, it appears to be subject to some very serious mathematical infirmities. I say that, of course, subject to further study and check.

I do not think that we can be in a position to discuss this exhibit, cross-examine on it or to confer on it without having an opportunity to study both of these exhibits. I think perhaps we may be able to complete our study and check over the weekend. I want to facilitate the matter as much as possible, but I certainly would not want to go on record at this writing without [have] had an opportunity to further study the details of these exhibits.

Mr. Culton: I want to frankly say to counsel and to the Commission that this has been hurriedly thrown together and I have my serious doubts whether the items shown on Schedule 1 are correctly weighted.

I have my doubts whether the young man has weighted those figures.

Mr. Littman: That is what was disturbing us.

Trial Examiner: In view of the statement just made, the Trial Examiner will declare a ten-minute recess to permit Mr. Hinton to discuss and explain to the staff of the Commission and Mr. Littman the method of approach and the source of data which are involved at this point in consideration of these proposed exhibits.

(Whereupon, a short recess was taken, after which the hearing was resumed.)

Trial Examiner: Gentlemen, as a result of the conference which you have just concluded, have counsel some statement to make?

Mr. Culton: Mr. Examiner, as I suspected and as coun-[fol. 5855]-sel for the Commission had also immediately discovered when he looked at this exhibit, the young man who prepared it did not weight the costs shown on Schedule 1.

Therefore, Mr. Hinton desires to prepare a new Schedule 1 on each of those exhibits showing a weighted cost.

Trial Examiner: That Schedule 1 to which you refer is, in effect, the summary of the succeeding pages?

Mr. Culton: That is right. That is true as to both Exhibit No. 142 and Exhibit No. 143.

Now, we have also thought it might be of some advantage for Mr. Hinton and Mr. Dunn, representing the Commission, to get across the table this afternoon and check their figures and they might save the Examiner and the rest of us who are engaged in this case some time so as to be able to report Monday where there are any differences.

In doing this, we will be checking not only the figures which Mr. Hinton has caused to be made, but we will also be checking the figures which the Commission, in a hurried calculation, used several days ago, and I think we will arrive at what is unquestionably the arithmetic answer as to these particular matters.

There is no difference between Mr. Hinton and the Commission's staff as to the proper method to be used in

doing this. It is just purely a matter of arithmetic and using a comptometer machine.

* * * * * * * * *

[fol. 5856] Mr. Littman: I might state in connection with your statement, Mr. Culton, that a member of our staff is now checking Mr. Hinton's exhibits Nos. 142 and 143, and will be glad to meet with Mr. Hinton at the conclusion of this morning's session with a view to agreeing upon the mathematics of the exhibit.

I might state that we believe that our total unit cost figures which I read into the record a day or so ago are correct.

I cannot say at this time whether we will subscribe to any allocation of that total as between gas purchased and gas produced without first having an opportunity to examine carefully the method of allocation. I might say that personally, I cannot see that any allocation of transportation costs or any allocation of costs of operation and maintenance, as between purchased gas and gas produced, would make any difference in the over-all picture.

Mr. Culton: It should not, so far as the weighted totals are concerned.

Trial Examiner: You have in mind, when you say that it should not produce any difference, you have in mind [fol. 5857] the weighted average cost at Liberal?

Mr. Littman: The weighted average over-all cost at Liberal compressor station.

Trial Examiner: Yes.

Mr. Littman: Because this witness has testified to the precise amounts of gas that will be produced and purchased and delivered to Liberal for the next five years under the basic load theory and under the anticipated load theory.

Therefore, when we get the unit cost for the weighted average total at Liberal, in my judgment, then we have all that this Commission would need. However, if counsel for Panhandle Eastern wish to make a point of showing an allocated breakdown as between the two types of gas

which I mentioned, of course they are at perfect liberty to do so.

I wanted to make it clear, though, that we personally fail to see at this moment the necessity for the allocation. However, our staff will be glad to meet with Mr. Hinton and work together to the end that there will be no disagreement upon the mathematics of the figures.

By Mr. Culton:

Q. Mr. Hinton, these exhibits, No. 142 and No. 143, with respect to cost of production and cost of transportation include those costs south and west of the intake at Liberal station, is that correct?

A. That is correct.

[fol. 5858] Q. And include no costs for Liberal station and no costs from Liberal station east?

A. That is correct.

Q. In other words, your study has been related wholly to the question of delivering gas into the station at Liberal?

A. And to what might be better described at the field end of the main transmission line.

May I make some explanation there. Mr. Littman said that he could see no reason for separating these, and I might explain that they were handled in the manner that they were [was] to show that the cost of handling this gas is ever increasing and the cost of producing is increasing and, naturally, the purchase price remains the same because that is a contractual price.

Q. Is there any difference in the cost of producing and purchase, in your judgment, after 1946? Will there be any change in those respective costs?

A. Yes, there will be. You refer now to the handling and producing of gas?

Q. Yes.

A. Yes, they will, without any doubt, be ever increasing after that year.

Q. For the same volumes of gas?

A. For the same volumes of gas.

Trial Examiner: Why do you expect that, Mr. Hinton?

[fol. 5859] The Witness: Because as the pressures become lower in the wells, it is going to require a greater number of wells to furnish the same amounts of gas and the pressure, as it declines, will require that we install additional power in the field and additional fuel and help will be required.

Mr. Lee: Would that be true if you took your gas from newly-acquired fields?

The Witness: No, not at first. If we went to a field that had a higher pressure than these fields, it would not but, of course, this is limited to the Panhandle Field and the Hugoton Field.

Mr. Lee: Yes, but does your statement take cognizance of new acreage acquired in the Hugoton Field that might have a higher pressure?

The Witness: Yes, it does.

Mr. Lee: Do I understand, then, that that possible additional acquired acreage, of which you have already acquired about 30,000 additional acres, as I recall it, and which you may increase greatly in the Hugoton Field, will have a lower pressure at that time than it would if it were taken out?

The Witness: Wells that are drilled in the developed area, usually the pressure on these wells is found to be about the same as the pressure that is observed on the other wells in that area; and the fact that a well is drilled ten years from now does not mean that we will obtain [fol. 5860] near-virgin pressures on that well, but the pressure which we will obtain will be about the same as those on surrounding wells.

Mr. Lee: But nevertheless, is there a possibility that, if you drill this additional acreage ten years from now, it may have virgin pressure. Is that a possibility?

The Witness: That is a very rare possibility.

Mr. Lee: But, regardless of whether it is possible or not, you have treated it at what the pressure of the now-drilled wells will be at that time?

The Witness: Yes, sir.

[fol. 5864] Recross-Examination

By Mr. Littman:

Q. Now, I do not understand your answers to your counsel with respect to the differences between Mr. Davis' estimate of recoverable reserves for the Panhandle Field and yours.

You have stated heretofore in cross-examination that, as of the end of the year 1940, Mr. Davis' reserves in the Panhandle Field of 17 trillion cubic feet were approximately 70 percent in excess of your estimate. Is that correct? Haven't you so testified?

A. I believe that I have on the 17-trillion figure, but the 17-trillion figure is based upon an assumption that the [fol. 5865] field would be produced down to a pressure of 30 pounds equilibrium pressure.

Q. In other words, Mr. Davis assumed that 17 trillion cubic feet could be recovered down to 30 pounds abandonment pressure? A. Yes, sir.

Q. After September 30, 1940, is that correct?

A. I do not remember whether that figure was after September 30 or November.

Q. Well, it was as of September 30, 1940, but it would not make much difference whether it was September or November, would it?

A. No, it is not worth considering in this size reservoir.

Q. Now, you have heretofore in your cross-examination stated the amount of gas recoverable in the Panhandle Field as of the end of 1940, have you not? A. Yes.

Q. And what was that amount?

A. The cumulative withdrawals to the end of 1940 are shown on Exhibit 134 to be 8,325,985 M. M.c.f.

Mr. Wheat: That is a sum in excess of 8 trillion cubic feet, is it not?

The Witness: Yes, that is correct.

By Mr. Littman:

[fol. 5866] Q. You see, I am not asking for withdrawals. I am asking for your estimate of reserves, Mr. Hinton.

A. I thought you asked for the amount shown on this exhibit as of 1940.

Q. I am asking you to repeat your estimate of recoverable reserves in the Panhandle Field as of the end of the year 1940 as indicated by your Exhibit 134.

A. If we take the 21 trillion which I referred to, that being the largest amount, my testimony is that it is my belief that the amount of gas originally in place was between 20 and 21 trillion cubic feet.

Mr. Culton: That is the recoverable gas?

The Witness: Recoverable gas.

Mr. Littman: Will you read that answer back?

(Whereupon, the last answer was read by the reporter.)

The Witness: Now then, by deducting the total with-
[fol. 5867] drawal through 1940, we find an estimated remaining reserve of 12,675,015 M. M.c.f.

By Mr. Littman:

And that is your estimate of the remaining recoverable reserves in the Panhandle Field as of December 31, 1940?

A. At the rate of withdrawals shown on Exhibit 134.

Q. What does the rate of withdrawals have to do with it? You are going to recover that much gas whether it is recovered in the next 15 years or in the next 25 years, is that not correct?

A. That is not correct. The rate of withdrawal is the governing factor on the total amount of gas that will be recovered from this field.

Q. How does that affect the total recovery?

A. By the fact that if this rate of withdrawal continues, it is going to not give the gas time to migrate through the formation and the wellhead pressures will be considerably lower than if the rate of withdrawal was one-tenth of that shown on Exhibit 134.

You can see that there is a very definite thing to be kept in mind there on the rate of withdrawal when the total recoverable gas is considered.

Trial Examiner: Do you mean necessarily one-tenth less?

The Witness: I just mean that it would have to be much lower than this to enable the gas to flow from the [fol. 5868] areas of higher pressure to the well bores when the pressure in the field has been reduced to the point that it will be in the few remaining years and one-tenth was just a figure that I had in mind.

It might be produced at a somewhat greater rate than that and still obtain much higher pressure at the wellhead.

By Mr. Littman:

Q. Well, what abandonment pressure are you using in arriving at this 12,675,015 M.M.c.f. recoverable reserves as compared with Mr. Davis' 17 million M.M.c.f.?

A. That is zero pounds.

Q. Now, what would your figure be if you used Mr. Davis' 30 pounds of abandonment pressure? Your recoverable reserves would be lower, would they not?

A. Again, there comes in the rate of withdrawal to be considered.

Q. Well, suppose you state now your estimated recoverable reserves, using the 30-pound abandonment pressure, rather than zero which you used in computing the 12,675,015 M.M.c.f. figure.

A. You asked for the total recoverable reserves, did you not?

Q. Yes, indicated by your Exhibit 134.

A. At 29.65 pound wellhead pressure, my exhibit shows that the estimated amount will be 19,405,985 M.M.c.f.

[fol. 5869] Mr. Culton: That is well head pressure?

The Witness: Yes, sir.

By Mr. Littman:

Q How about deducting the withdrawals to the end of 1940 from that figure to get your estimated recovery? It is the estimated recoverable reserves that I want.

A. That would be 11,080,000 M.M.c.f.

Q. Now, Mr. Davis has estimated that the recoverable reserves in the Panhandle Field, as of very close to the end of the year 1940, is 17 million M.M.c.f., is that correct? A. That is correct.

Q. Using 30 pounds as the abandonment pressure, is that right?

A. That is right.

Q. And your figure, using 30 pounds as the abandonment figure for the recoverable reserves as of the end of 1940, is 11,080,000 M.M.c.f.?

A. That is correct.

Q. Now, will you tell me the process of reasoning by which you now claim that Mr. Davis' estimate, which appears to be approximately 6 million M.M.c.f. higher than yours, is the same as yours or even less than your estimate?

A. Mr. Davis estimated that there would be approximately 300,000 acres in the field that would have a gas content that would be only 60 percent of the average.

[fol. 5870] Mr. Culton: That is the average in the better part of the field, he said?

The Witness: Yes.

Mr. Littman: Just a minute. Where do you find that?

Mr. Culton: Page 6, Exhibit 75.

Mr. Culton: You had started on a statement when he broke in.

The Witness: Excuse me. I have to have it read back again.

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. Now, you can continue.

Mr. Culton: Exhibit 75, Page 6.

Mr. Wheat: Mr. Littman, you didn't finish your sentence.

By Mr. Littman:

Q. Will you continue your statement of the reasons why you now state that Mr. Davis and yourself have arrived at approximately the same recovery?

Mr. Culton: You understand, he never has made that statement.

The Witness. No, I have not.

Mr. Littman: What he said sounded very much like that to me.

Mr. Culton: He said if you apply Mr. Davis' computations, the differences on those two elements wherein he [fol 5871] differs from Mr. Davis, that his estimate will be in excess of what Mr. Davis' estimate is.

By Mr. Littman:

Q. Is Mr. Culton's statement a correct statement of your testimony? A. Yes.

Mr. Culton: Read it. In other words, that is what it is.

By Mr. Littman:

Q. In other words, if Mr. Davis had done certain things which you think he should have done in arriving at his estimate, it is your testimony that he would have arrived at approximately the same figure as that which you reached?

A. Yes. If Mr. Davis would have made the same interpretation of the reservoir size, as governed by the thickness of pay over the same number of acres, my estimate would have been in excess of Mr. Davis'.

Q. That is merely your way of pointing out wherein you and Mr. Davis didn't agree?

A. That is correct. I just wanted to show that on the general picture we are in agreement. It is just the interpretation of the data; and he is working with equilibrium pressures and I am working with wellhead pressures.

Q. Now—

Mr. Culton: (Interposing) Had you finished your explanation that you started to make?

[fol. 5872] The Witness: No, I was just—

Mr. Culton: (Interposing) Just show exactly what the difference is between your judgment and Mr. Davis' judgment.

The Witness: Well, in just round numbers, Mr. Davis has given 300,000 acres of the total field 60 percent as much gas as the acreage in the better part of the field; "better than average", he says.

Now then, my interpretation is—

Mr. Wheat: (Interposing) You mean better than average part of the field?

The Witness: Yes. My idea of that acreage in round numbers is that there will be about 400,000 which will have

approximate 50 percent as much gas as the better part of the field and there will be another additional 400,000 acres that will have considerably less, so by placing--

Mr. Culton: (Interposing) Less than 50 percent, you mean?

The Witness: Yes, less than 50 percent and that places my estimate on the portion of the field which Panhandle Eastern operates in excess of Mr. Davis' figure which he would apply there, working on average figures.

By Mr. Littman:

Q. Mr. Hinton, that isn't the way in which you arrived at the estimate of remaining gas in Exhibit 134?

A. No, I checked it by that method, the reservoir content required.

[fol. 5873] Q. Your estimate reflected in Exhibited 134 is predicated upon the rate of rock-pressure decline per M.c.f. produced, which rate is shown in the chart, Exhibit No. 135. Is that correct?

A. Yes, but I have also testified that if it would not have checked with known geological data rather closely, that I would not have used it.

Q. But in arriving at the figures shown in Exhibit 134 of the amount of M.c.f. which will be ultimately recovered from the Panhandle Field, you applied mathematically the rates of pressure decline per trillion M.c.f. produced in the field, literally, did you not?

A. Yes, as governed by rates of withdrawal.

Q. And the question of acreage and size and extent of the reservoir was just so much background rather than anything that actually entered into the calculation whereby you arrived at the figures in Exhibit 134?

A. Yes, that is right. It was a check on that method.

Q. Now, Mr. Hinton, in your redirect examination you gave some testimony with respect to an alleged connection between the Panhandle and the Hugoton Fields.

Did I understand you to say that in your opinion there was a connection between these fields in so far as the pay stratas are concerned?

A. Yes, I did say that was my belief, although it is [fol. 5874] yet to be proven by the drill.

Q. Is it simply your guess about the matter or is your belief based upon certain definite physical data?

A. My belief is based on certain definite physical data.

Q. And I presume that those data were derived from certain wells drilled in that vicinity?

A. Yes, the wells drilled in the two fields.

Q. Now, have any wells been drilled in this so-called narrow neck that lies between the two fields?

A. No, sir.

Q. I would like to have you state the physical facts upon which you base your conclusion with respect to the joining of the pay strata of these two fields, namely, the wells and showing the locations of the wells on one of the maps on the wall.

Suppose you refer to map, Exhibit 26.

A. Well, Mr. Littman, my belief is not based on any certain wells. It is based on all wells drilled in the two fields.

Q. Well, suppose you state the basis of your belief.

A. The basis of my belief is the virgin rock pressure in the two fields, the depth at which the pay lies in the two fields above sea level, the type of formation encountered in each of the two fields.

[fol. 5875] Q. Suppose you state the factors which caused you to believe that the two fields are physically joined.

A. The observed virgin rock pressure in the two fields is somewhere between 430 and 435 pounds on the wells that were originally drilled closest to the extension or outline boundary shown on Exhibit 26.

Q. How would that fact lead you to conclude that the two fields are joined?

A. Because it would certainly lead me to believe that in a gas field of this nature where the formation pressures are not normal that there must be some connection of the drive that built the pressure up to the point to which it was built, because I don't think that it could happen that there would be two separate fields that would have the same water drive that would produce the same abnormal pressure condition.

Mr. Wheat: The abnormal low pressure?

The Witness: Yes.

By Mr. Littman:

Q. Mr. Hinton, if there was a connection between these two fields, isn't it a fact that the extensive production from the Panhandle Field would have had its effect upon the rock pressures of the wells in the Hugoton Field, particularly those wells which are located close to the Panhandle Field?

A. That would be a reasonable assumption, Mr. Littman, but at the same time I refer you to the condition that [fol. 5876] exists between our Burnett 1-108 and our Burnett well 86. Within a space of approximately two miles there is a difference of over 100 pounds in the pressure.

I can readily see that that condition might exist there because there might be a tight area of extremely low permeability existing between the two fields which would still be the same general pay formation.

Q. Well, it would have to be very tight in order for the production in the Panhandle Field to have not reduced the pressure in the Hugoton Field in that vicinity.

A. That is true, but I still don't believe that we have the best information on that pressure condition at this time, and I think that there will be wells drilled which will definitely prove that.

Thinking in terms of geological data, it seems to certainly indicate that the two general series of lime were laid down during the same geological age.

Q. Maybe they were, but the point I am driving at is whether the pay strata of the two fields actually join.

A. That is my opinion, that they do, and it is based on the data which I have just given.

Q. Well, that was one of them, that was one of the reasons that you gave, to-wit, the fact that the virgin pressure in both fields was the same, approximately.

A. Yes.

[fol. 5877] Q. And you adhere to that, notwithstanding the fact that the virgin pressure in the Hugoton Field has remained the same, notwithstanding the production from the Panhandle Field. Is that correct?

A. Well, if you will notice, it is only very recently that the pressure in the Panhandle Field has been pulled

down lower than 50 pounds of virgin pressure in that field and if that is a tight neck in there, with that gradient in pressure coming from thousands of acres as slowly as it would be, it would be migrating from a considerable distance to fill that space up.

I don't believe that we are going to be able to tell definitely whether they are connected, only by drilling wells throughout the area where they might be connected.

Mr. Wheat: You mean "except" rather than "only"?

The Witness: Yes, except by drilling.

By Mr. Littman:

Q. In other words, you are not going to be altogether certain about your opinion with respect to the joining of these two fields until such time as the drill proves your theory?

A. That is correct. If we would have had proof, those two fields would have shown to be connected on Exhibit 26 instead of the space which is shown between the two fields on the map.

Q. Yes. Exhibit 26 clearly shows that the author of [fol. 5878] that exhibit did not join the two fields and shows a separate color for each field and white space between the two, does it not?

A. It also shows the south boundary in a dotted line which shows that in his mind he was not sure whether that was the southernmost possible extension of that field.

Q. And who was the author of Exhibit 26?

A. I don't know whether Dr. Bartle or Rufus Smith is the author of that.

Q. I believe I am correct in stating that Mr. Smith was the author of the lower part of the map which shows the Panhandle Field and that Dr. Bartle was the author of the upper part of the map showing the Hugoton Field and that they did, to some extent, collaborate with each other on both. Is that a correct statement, Mr. Culton?

Mr. Culton: It is intended to be correct but there is this inaccuracy, Mr. Smith said he adopted the Railroad Commission's map for the Panhandle Field. He drew the outlines for the Panhandle Field from that shown on the official Railroad Commission map.

He and Dr. Bartle worked together in preparing the map of the Hugoton Field.

By Mr. Littman:

Q. What other physical facts, if any, do you have which lead you to the conclusion that the two fields join? [fol. 5879] A. The fact that both fields produce gas from limestone which lies approximately the same elevation above sea level, indicating that the limestone was laid down during the same geological age.

Q. Well, now, you have named two physical facts, so-called by you, that led you to believe these two fields are joined. A. Yes.

Q. Now, both of those physical conditions could exist if there were a fault between the two fields, couldn't they?

A. No, they couldn't, because if there was a fault your lime would be encountered at different elevations.

Q. Both of those conditions could exist even though there were no connection between the two fields, could they not?

A. That is most certainly correct.

Q. Now, will you give us a third reason, if you have any, for believing that the two fields join?

A. I believe that I have given the principal reasons upon which my belief is placed.

Q. That is, you gave two.

A. Or two, rather.

Q. Two reasons. Now, would I not be correct in characterizing your ideas on this subject as simply a hunch that the two fields join, rather than a scientific conclusion [fol. 5880] from basic physical data?

A. No, I don't base my hunches on like facts. A hunch to me is something that you project in the future, but my belief is based on the pressure and the pay and I think that it is fairly safe to assume that the two fields are connected, but I am not going to bet any money on it.

Q. You wouldn't want to bet any money on it?

A. Yes, I would like to bet a little but I don't think I shall.

Mr. Culton: Whether they are connected or not doesn't affect any of your exhibits or any of your studies. You didn't take that, whether it is connected or whether it isn't connected, into account in any of your studies?

The Witness: No, I gave no,—that is, it bears no relationship to the problem.

Mr. Culton: Your expression of your judgment as to whether or not it was connected was in response to the questions by the Examiner inquiring as to the amount of drilling which has taken place in the two fields?

The Witness: There is one other thing which I neglected to tell Mr. Littman, and it is necessarily hearsay, because I am not a geologist, but I think that the geologists will tell you that the same fossils appear in that formation which, again, would indicate the same geological age.

By Mr. Littman:

[fol. 5881] Q. All these matters that you state you consider I might very well exist even if there were no joining of the two fields. Is that correct?

A. It is possible that they could exist, but not probable.

Q. At any rate, there is no present proof of the joining of the two fields, is there?

A. That is correct, there is no present proof.

Trial Examiner: May I ask further, following that up, whether the fact which is known would in any way affect data concerning which you have testified, indicating that in the south end of the field, if they are adjoining, in what is now known as the Panhandle Field, the migration of gas is much more rapid than in the upper part of the field which is known as the Hugoton Field?

The Witness: There is nothing involved in the connection of those fields that would change any of my testimony, costs, or capital additions, in any manner for the period considered.

Trial Examiner: In other words, a high degree of permeability of the producing strata may exist in the south end of the field as compared with the northern end of the field, irrespective of whether or not the fields are, in fact, connected?

The Witness: That is true.

Trial Examiner: And if they are connected together by [fol. 5882] ultimate exploration, the single field will then

have a north and south length of approximately 200 miles, will it not, more than 200 miles?

The Witness: Yes, it will be in excess of 200 miles.

By Mr. Littman:

Q. Mr. Hinton, in your redirect examination you discussed the subject of carbon black production in the Panhandle Field. Am I correct in understanding that at the present time carbon black is produced exclusively from sour gas in the Panhandle Field?

A. No, not exactly, because there are some sweet wells in one portion of the field there that I believe there is a special permit to use for the manufacture of high-grade carbon black.

They reclassified several wells down there during the early part of last year and it is in very few that that condition exists.

Q. In other words, substantially all of the carbon black produced in the Panhandle Field is produced from the sour gas, is that right? A. Yes, sir.

Mr. Culton: Well, sweet casing-head gas is used for that purpose, isn't it?

The Witness: Oh, yes, it is. That is the gas that comes from the oil wells.

[fol. 5883] By Mr. Littman:

Q. But most of it is produced from—

A. (Interposing) The majority of it is manufactured from gas bearing wells with sulphur content.

Q. What is the average field price of the sour gas in the Panhandle Field which is being used for carbon black purposes?

A. As far as I know, and I believe it is correct, .6 of one cent per M.c.f.

Q. Now, I believe you testified that the cost of treatment of sour gas, in order to sweeten that gas and make it usable for pipe line purposes, is one-half a cent to ¾ of a cent per M.c.f.?

A. Yes. I am speaking of just the operating cost without giving consideration to the expenditures required.

Q. I thought operating costs included expenditures. What expenditures are you referring to?

A. I am speaking of the money that will be required to build a sweetening plant?

Q. Oh, you are speaking of the capital expenditures?

A. Yes, sir.

Q. In other words, the one-half cent to ¾-cent figure represents all costs of processing, exclusive of the capital costs? A. Yes.

[fol. 5884] Q. Have you any idea of what the capital costs would be, approximately?

A. No, I don't know what a sweetening plant would cost, because there is no sour gas acreage available there and we have not gone into that.

Mr. Culton: It would depend, on the volume processed, what your plant would cost?

The Witness: Yes.

I neglected to say that that cost per M.c.f. would be on a large volume basis.

By Mr. Littman:

Q. Well, a pipe line company would naturally go into volume production; would it not?

A. Yes, I feel sure it would.

(Discussion off the record.)

By Mr. Littman:

Q. Don't you consider it a distinct possibility that pipe line companies will more and more turn to the sour gas fields for their supply, as the years go on, in the future?

A. Not unless it is done under a law. I am afraid it will never happen unless there is somebody that causes it to come about. I have a fear that it will never happen under the present laws.

Q. Well, as gas becomes more valuable and as the field becomes more and more depleted, isn't it a distinct possi-[fol. 5885] bility that pipe line companies will turn to the sour gas, being able to pay more at the wellhead for that gas than carbon black people are able to pay?

A. Yes, but it is under contract to the carbon black people and unless it would be purchased from the carbon black people, I don't know how that could be achieved.

Then, again, as the supply becomes depleted, why, then operating costs will go up to the extent that it will just

have to be worked out, whether it would be a paying proposition at that stage of the withdrawal from the field.

Q. Well, you don't think the carbon black people would turn down an offer, if it were attractive enough, to sell out to the pipe line people under the conditions that I suggested?

A. The carbon black plants are not operating without profit. Just because they pay .6 of a cent for the gas is no sign that that is all they make out of it.

Q. Do you know what the history of the Appalachian Field was in that regard? A. No, I do not.

Q. Don't you know that in the Appalachian Field the carbon black people have sold out to the pipe line companies and have virtually ceased production in West Virginia, for instance? Don't you know that?

A. Could you tell me—ar[illegible] am not trying to ask the attorney a question—what the price of gas is in the Appa-
[fol. 5886] lachian Field?

Q. Yes, I think I can tell you. I know that in West Virginia it probably ranges anywhere from 10 cents to as high as 20 cents per M.c.f. I know that the average field price of gas at the wellhead in the vicinity of Akron is 18 cents per M.c.f.

. . . . . .

The Witness: The reason I asked that question was because I just wondered what the price of gas would have to become before it would be possible to get the carbon black plants to stop using it for the manufacture of carbon black and sell it to pipe line companies.

By Mr. Littman:

Q. Well, I cannot supply you the figure that was reached when the carbon black people sold out. I am sorry I don't have that information for you.

A. I think you have a very good idea there, if it could be carried out, and it is one that I have given much thought to the past years, wondering how it could be brought about that sour gas would be processed and used for light and fuel purposes.

. . . . . .

[fol. 5887] By Mr. Littman:

Q. If the true weighted average rock pressures could be determined at intervals from the beginning of the field

and the volumes of gas withdrawn from the beginning during those intervals could be determined accurately, would you say that the production per pound drop of rock pressure in the Panhandle Field would be constant from the beginning?

A. It is probable that it would not be exactly constant because it is not a perfect resevoir.

Q. What do you mean by that?

A. I mean that if there is a resistance to flow through the formation and if the rate of withdrawal is in excess of the ability of the formation to prevent the passage of gas at the same rate without dropping the pressure, then in all probability it would not be the same throughout the life of the field because the pressures which would be obtained would not be taken at intervals after the wellhead had been closed that would be sufficient to enable the pressure to equalize throughout the field.

Q. Mr. Hinton, you are assuming something that I didn't assume in my question. I am assuming that you have the true weighted average rock pressures.

[fol. 5888] Mr. Culton: You mean by that the equilibrium pressure? If not, I would like to have true weighted rock pressure defined, myself.

Mr. Littman: It connotes more than equilibrium pressure. It means the exact, precise weighted average rock pressures.

Mr. Culton: In weighting what elements?

Mr. Littman: Weighting the volumes below the earth.

Mr. Culton: Weighting thickness, permeability and porosity?

Mr. Littman: Yes, that is right.

By Mr. Littman:

Q. You understand, Mr. Hinton, my question is transcending the matter which you just mentioned. I am asking you this:

If the true weighted average rock pressures could be determined at intervals from the beginning and the volumes of gas withdrawn from the beginning during those intervals could be determined accurately, would you say

that the production per pound drop of rock pressure in the Panhandle Field would be constant from the beginning? A. I would say that it would.

Q. Now, the reason why you claimed this result is not obtained from the data published by the Texas Railroad Commission for the five-year period, August 1, 1935, to August 1, 1940, is because the pressure data published by [fol. 5889] the Commission are not, in your opinion, the true weighted average rock pressures of the Panhandle Field?

A. They are not true equilibrium pressures, no, sir.

Q. And that is why you claim that a uniform production per pound of rock pressure decline can not be obtained? A. That is right.

Q. And the figures, the pressure figures that we are now discussing, are those which appear in Column 3 on Page 10 of Exhibit 42, are they not, in the last 4 lines, to be exact? A. Yes.

Q. That is, you didn't use the figure of pressure loss shown in the first line for any purpose, did you?

A. No, just merely to see how it looked.

Q. Now, you have stated certain reasons why, in your opinion, the pressures of the Texas Railroad Commission are not true weighted average pressures, have you not?

A. Yes, I have.

Q. And one of those reasons was that the well observations are not altogether accurate because wells are shut-in for different periods prior to the reading?

A. That is right.

Q. Now, I believe you stated the minimum period required by the Texas Railroad Commission is 72 hours? [fol. 5890] A. That is right.

Q. But no maximum period is required?

A. That is, also, correct.

Q. And, therefore, wells are read anywhere, as you stated yesterday, from 72 hours after the shutting-in of the well to as late as one month after the shutting-in of the well, is that correct?

A. Yes. That is on wells which are producing. There are a number of wells that are closed-in a year before the pressures are obtained.

Q. Now, of course, the longer you shut-in a well before reading, the more likely you are to get the equilibrium pressure. Is that correct?

A. Yes, the stabilization time tends to equalize throughout that area.

Q. In other words, after the well is shut-in, the pressure builds up higher and higher until it finally reaches the highest point that it can reach and then you have what is known as equilibrium pressure?

Mr. Culton: That would depend on whether or not other wells were producing out of—

The Witness: (Interposing) I thought you meant around the well bore.

By Mr. Littman:

Q. I meant around the well bore, any certain well.

[fol. 5891] A. I just wanted to add that some wells will build up in a few hours and others will still show a build-up at the end of several weeks.

At any rate, one of the reasons for inaccuracies creeping into these pressures published by the Texas Railroad Commission is the fact that wells are shut in for varying periods?

A. Yes, that is one of the factors.

Q. And, of course, one well may be shut-in 72 hours in one year and then be shut-in a month in the next year.

A. That is right.

Q. And, in your opinion, you would like to have the Railroad Commission specify a definite period before the reading is taken, would you not?

A. I think that is necessary in any field to obtain data that could be used for a straight pressure decline calculation.

Mr. Culton: Meanwhile what would the public do for gas if those fields were shut-in for a period of time?

The Witness: That is not what I meant.

Mr. Culton: I was speaking from the practical standpoint.

The Witness: Again, that is not what I meant. I mean that there should be a minimum and a maximum time for observing pressures.

By Mr. Littman:

[fol. 5892] Q. Now, as you stated a moment ago, all wells do not build up at the same rate; do they?

A. That is right.

Q. A highly permeable well will reach its equilibrium pressure much sooner than a less-permeable well, is that right? A. That is right.

Q. And so you have those differences, too, that enter into the figures of the Railroad Commission. Is that right? A. Yes, sir.

Q. Now, in that connection is it correct to state that the differences in the production or pull on the well immediately prior to the shutting-in and reading will have an effect upon the correctness of the observation? Is that correct?

A. Yes. It will have an effect on the correctness of the observation.

Q. Will you tell us why that is, briefly?

A. Because if a greater amount of gas has been pulled from the area immediately around the well bore it will, likewise, take a greater period of time for that gas to flow back into that same area to build the pressure up.

Q. Will you tell why, in taking the rock-pressure readings of your wells from year to year you will sometimes have a higher wellhead pressure in 1941 than, for instance, [fol. 5893] in 1940, notwithstanding the fact that considerable gas had been withdrawn during that period?

A. Yes, and another thing that sometimes happens it that the rate of withdrawal is retarded and the gas flows in faster than it has originally been [being] taken and there will be a pressure built up.

Q. Now, another reason that you gave why the pressures of the Texas Railroad Commission are not the true weighted average pressures, in your opinion, was the fact that the Railroad Commission does not weight the pressure readings against the pay thickness. A. That is right.

Q. This is the reason that you have referred to as the failure to take into account the fourth dimension?

A. That is right.

Q. Now, even if you weighted the pressures against the pay thickness, you still wouldn't have an altogether accurate result, would you, because of the differences in porosity of the pay sand throughout the field?

A. That is correct.

Q. You agree with Mr. Rufus Smith, who has previously testified in this proceeding, that the porosity varies greatly throughout the Panhandle Field?

A. Yes, sir, I do.

Q. So if you wanted to be 100-percent accurate about [fol. 5894] this fourth dimension, so-called, you would have to know the porosity and weight the pressures against the porosity as well as the pay thickness, would you not?

A. That is correct.

Q. And then you, also, gave some further reasons why the pressures of the Texas Railroad Commission are not the true weighted average pressures, namely, reasons such as the inability to precisely determine the exact location and proper location of the isobars on the pressure maps. Is that right?

A. Yes, that goes right back to the fault of the same class of porosity.

Q. So that these pressure figures of the Texas Railroad Commission are subject to all of these infirmities which you have enumerated and which I have recapitulated, is that right? A. Yes.

Q. And you have used those pressures, to-wit, the pressures published by the Texas Railroad Commission, in this study which you have submitted in Exhibit 42 and Exhibit 43. Is that right?

A. Yes, I know of no other source of information that is better.

Q. Now, I ask you to refer to Exhibits 136-(1) to (10), inclusive, showing the pressure-trends of the wells in the [fol. 5895] various areas. Now, are the wellhead pressures shown on these charts for the years 1941 and prior thereto those which have been reported by Panhandle Eastern and its vendors to the Texas Railroad Commission?

A. Only after the year 1935, and those are not reported to the Railroad Commission. Their representative actually conducts the taking of these tests and gives us the reading. We don't give it to them.

Q. Well, so much the better. They are, then, the actual readings which are used by and published by the Texas Railroad Commission, the Railroad Reports?

A. Yes, sir, that is right.

Q. And, of course, those wellhead pressures shown for the years 1935 to 1941 on Exhibits 136-(1) to (10), inclusive, are subject to all of the infirmities which you and I have discussed a moment ago, are they not?

A. Yes, one is quite likely to be one way and one another, so they are probably getting pretty close to the right answer by compensating errors.

Q. But never the true weighted average rock pressures? A. Unless by accident.

Q. Did you determine the rate of rock-pressure decline for the production in wells in Areas "A" to "G", inclusive?

A. You mean by individual wells?

Q. Well, by individual wells or by the average.

[fol. 5896] A. No, I did not.

Q. You had sufficient data, did you not, with which to make a separate determination of the average rate of rock pressure decline per unit of production which actually took place in the five years for each of these areas?

A. Yes, but I didn't have the time for this particular problem.

Q. You would have felt it advisable to do it, if you had had the time?

A. Oh, it would have been a nice check to see how the areas were comparing with the general trend of the field and to see where we might start encountering the sharper decline in these group areas. It would be a check figure.

I would like to have it on all the wells and I hope to be able to make it a part of the well record at some future date.

Q. You could have made a curve from the actual data in the Areas "A" to "G", inclusive, such as that curve which appears in your Exhibit 133, could you not?

A. Yes, that could have been done.

Q. The curves in Exhibit 133 show the story for the entire fields, sweet, sour, east, west and whatever else is included within the meaning of the entire and broad term "Panhandle Field." Is that correct?

A. That is correct.

[fol. 5897] Q. And you could have had that same information in chart form for each of the areas within which

Panhandle Eastern operates, to-wit, Group Areas "A" to "G", inclusive?

A. I do have such information, except that it is related to years and the withdrawal is shown on an accompanying exhibit rather than having the horizontal scale in M.c.f. to plot the total withdrawal.

Q. Well, but you haven't plotted the five years, 1935 to 1940, from your group areas on any chart so as to determine the rate of production per pound drop in rock pressure, have you?

A. No, I haven't, but I have checked many of them back and found them to run from an indicated content of about 9 million to 126 million per acre and I discarded them because they showed too many fluctuations to be of any value in projecting a line.

Q. Now, I would like to clear up a matter that you and I discussed during cross-examination and that is the manner in which you drew your curve on these pressure-trend charts, Exhibit 136-(1) to (10), inclusive.

Now, if I correctly understand, you are now referring to Group Area "A". You stated that you drew the curve extending beyond the year 1941 in accordance with your judgment. A. That is correct.

Q. And you enumerated the matters that you took into [fol. 5898] consideration. Now, will you state, again, the elements that you considered in drawing that curve, the items that caused you to assume the curve which is shown in Exhibit 136-(1)?

A. I am referring to Group Area "A" and the items which were taken into consideration in the placing of this judgment curve with the type of formation, the number of wells located in the area, the number of remaining locations to be developed by drilling, the rate of withdrawal, the trend of withdrawal and gave an over-all value to the general pressure-trend which I believe will be prevalent in the field.

Q. Now, the first element you mentioned was the "type of formation."

A. That is right.

Q. How did that affect the drawing of this curve?

A. By knowing what the probable migration of gas would be to the formation and that is based upon ob-

serving the number of hours required for the pressure build-up after the well has produced like amounts of gas.

Q. How did that element affect the drawing of the curve shown in Exhibit 136-(1)? Did it extend the curve or tend to steepen the curve?

A. It extended it.

Q. Extended it. How far?

A. Well now, I just haven't made any estimate of how far back it would be if we had the same general formation [fol. 5899] condition existing in "A" as we have in "E" and "F", but I would say that it would probably put that back there around 2½ years. That would be my estimate, knowing the withdrawal conditions around that area.

Of course, if we would have had those conditions over in Area "A", then the pressures which are shown on Exhibit 136-(1) would, in all probability, have been some 75 to 100 pounds lower than they are.

Q. Well, if I ask you to draw a curve on that chart, Exhibit 136-(1), taking into account all the elements that you state you considered except the one, namely, the first one that you mentioned, "type of formation," could you do it? A. Yes.

Q. And be exact about it?

A. No, because no judgment curve is exact. Something exact must be governed by mathematics and I don't think anybody else can put it on [their] exact.

Q. You wouldn't want to undertake to do it and say that it was an exact curve when you got through?

A. I would not.

Q. Let's take the second element, "number of wells." How many wells are shown in the chart, Exhibit No. 136?

A. There are 15 owned by the Panhandle Eastern and a total of 98 which are included in Group Area "A".

Q. A total of 98 in Group Area "A"?

[fol. 5900] A. Yes, sir.

Q. All right. How would you have drawn this curve if there had been half as many wells, let us say?

A. I would have tried to determine at about what years the undrilled wells would have been drilled before I would have placed a curve.

Q. Well, if I ask you to draw a curve on there that would reflect all of the elements of judgment that you

stated you considered, except the element of "number of wells," could you do it accurately?

A. No.

Q. You say you considered the number of remaining locations? A. That is right.

Q. How many remaining locations are there in Area "A"? A. Not very many.

Q. Well, just approximately? A. 33.

Q. Now, could you draw a curve on that chart, Exhibit 136-(1), which would represent all of the elements that you state you considered, excluding, however, the consideration of the number of remaining locations?

A. No, because I would have to go back and determine how much gas was to be taken from the wells drilled, approximately. I would have to get the withdrawal [fol. 5901] trend, is what I mean.

Q. You can't tell us, either quantitatively or qualitatively, the exact amount of weight that you gave to that element, can you? A. No.

Q. You say another element you considered was "rate of withdrawal." Could you draw a new curve on Exhibit 136-(1) that would reflect all the elements except the element of "rate of withdrawal"?

A. Well, if there was no rate of withdrawal and then that curve would just be the number of years behind, the way the field in all probability would go, that it takes the gas to migrate out into areas of withdrawal.

Q. Well, perhaps I should have said if you have varied the rate of withdrawal up or down, 15 or 20 percent, how would that affect your curve?

A. That would affect it in cumulative withdrawal, it would shorten the life if the trend was up, and if it was down it would lengthen the life.

Q. How much would it shorten the life and how much would it lengthen the life?

A. Well, I would say that if the withdrawal in Group Area "A" was half of what it is today in that type formation, it would probably lengthen the life of the field by some three or four years.

[fol. 5902 Mr. Galton: That is what area?

The Witness: The Group Area "A".

By Mr. Littman:

Q. But you can't be exact about that either, can you?

A. No, sir.

Q. And you cannot tell us exactly how much weight you accorded that element, can you?

A. No, sir, it is a combination.

Q. In the drawing of your curve—

Mr. Wheat: (Interposing) He hadn't quite finished his explanation.

You said it was a combination, of what?

The Witness: It is a combination of all things. If you try to project a curve without putting these all together, why, then you are going to have to be coming back and revising, which you do anyway, in the placing of this kind of a curve.

You think in terms of, now just what weight will that have, and that must be based on judgment.

By Mr. Littman:

Q. Now, you had an element that you call "over-all value to the general trend in the field." What is that?

A. Well, if we would lose sight of the fact that their total withdrawal from the east field is what it has been, why, then we would have an idea that there are areas in the west field that are of less value than they are. [fol. 5903] We know what the extreme trend in the east field is today. The curavture, the sharper trend of the curve was first noticed in the east field of the Panhandle Field and it was not noticed until after a great amount of gas had been withdrawn from the east field.

Then, the curve started to drop off requiring more pounds pressure to produce the same amount of gas each successive year.

Now, it is starting in the sour field. We know that if it is started in those two fields, that it is going to govern the west sweet field, therefore, as those pressures go down more gas will migrate from the west field into the east field and the west sour field and considerable weight must be given to the over-all picture in the field.

Q. Now, you say "considerable weight must be given" but you can't tell us how much weight you actually accorded the "over-all value" to the general trend in drawing these curves, can you?

A. No, I can't tell you in so many percents, because the weight of the whole field that is given in each of these group areas differs.

Q. Now, as you have stated in your direct examination, the drawing of these very vital and crucial curves,—and when I say "vital and crucial curves" I mean they are vital and crucial in your study, are they not?

[fol. 5904] A. Yes, they are vital and crucial to the life of the Panhandle Eastern Pipe Line Company.

Q. And they were drawn by you, as you have stated in direct examination, by free-hand? A. That is right.

Q. You have no working papers that show us precisely how you arrived at the curvature or course of these curves, have you? A. No.

Q. It is all a matter of what you have termed your "judgment," is it not? A. That is right.

Q. And we have no way to check the precise accuracy of these curves, have we?

A. There is nothing in the testimony about the precise accuracy of these curves.

Q. How accurate are they?

Mr. Wheat: What were you going to say?

The Witness: I say I do not contend that they are precise accurate, but I think that the end of the life of this field is going to find that they are going to approach being fairly accurate curves.

By Mr. Littman:

Q. And neither we nor anybody else has any way of checking your over-all judgment in that regard, have we?

[fol. 5905] A. Yes, you do.

Q. Following your methods step by step?

A. No? All you have to do is to figure out the reservoir required in that field.

Q. But we have no way of tracing your method step by step and determining whether you have accorded the proper weight for all of these component elements that

enter into the drawing of these curves, have we, Mr. Hinton?

A. No. I believe that if you would try to do this problem by straight mathematics, that you could turn over the data in its entirety to a man who did not know the Panhandle Field and the answer that he would get would not even approximate being accurate.

(Discussion off the record.)

By Mr. Littman:

Q. You have used the term "casing head gas" throughout your testimony. What do you mean by casing head gas?

A. The wet gas that is produced with oil.

Q. What do you mean by "produced with oil"? From the same strata or from different strata?

A. Well, the true casing head gas comes from the same strata; so-called casing head gas is the gas which is produced with oil that comes from the true gas-bearing formation which does not produce oil.

Q. Well now, certain casing head gas is dissolved in [fol. 5906] oil in its natural state, is it not?

A. Yes.

Q. And you recover it through the casing head along with the oil, do you not?

A. That is right.

Q. Now, there is another kind of gas that is produced by an oil well that is sometimes called casing head gas and that is gas which is produced from a separate strata as dry gas but is produced along with oil which comes from another strata. Is that correct? A. That is correct.

Q. Now, which of these two types of gas have you been talking about when you have used the term "casing head gas"?

A. Only the gas that came from the Panhandle oil and gas bearing formations.

Q. That is the first type which I have described, namely, the type of gas which is dissolved in the oil in its natural state?

A. Yes. After the formations are interconnected by drilling, if the other gas is not shut off, the gas pressure in the oil reservoir will be approximately the same as that in the gas. If I got your question right—

Mr. Culton: (Interposing) He is asking what you included in your withdrawals, I think. Isn't that right?

Mr. Littman: That is right.

[fol. 5907] The Witness: In the withdrawals it is only the metered casing head gas and that amount estimated to be blown into the air and the estimated amount came, supposedly, from oil bearing formation and the other amounts of casing head gas estimated in the early days was given consideration as the total withdrawal from the Panhandle Field.

By Mr. Littman:

Q. Well now, I am referring particularly to the table on Page 10 of Exhibit 42. In that table you show withdrawals from the beginning of the field down to August 1, 1940; do you not?

A. Yes, I am sorry. I misunderstood your question. That is all gas produced from the Panhandle Field. It is not any consideration for the gas that was originally stored in the oil reservoir.

Q. In other words, you have not included in those production figures any gas that in its original state was dissolved in the oil and recovered at the casing head?

A. Not unless it was in the same gas bearing formation as the Panhandle Field, the gas field proper.

Mr. Culton: In other words, you have included all types of casing head gas, true casing head gas and so-called casing head gas from the Panhandle Field?

The Witness: Yes.

By Mr. Littman:

[fol. 5908] Q. In other words, the figures do include all gas recovered through the casing head whether it was dissolved in its original state in the oil or not. Is that a correct interpretation of the answer?

Mr. Culton: I don't know whether he understands your question like I understand it or not.

By Mr. Littman:

Q. Suppose you tell us what kinds of casing head gas are included.

A. All kinds.

Q. All kinds of casing head gas are included in your production figures?

A. That come from the Panhandle gas field proper.

Q. In other words, you have included that kind which comes through the casing head from a different stratum than that from which the oil comes?

A. Yes.

Q. And, also, you have included the gas which originally came from the same stratum as the oil came from?

A. That is right.

Q. Even though it was originally dissolved in the oil in its original state, is that right?

A. Yes, that is right. I was thinking about so many different oil pools on the outside of the Panhandle Field proper.

[fol. 5909] Q. I just wanted to make certain as to what you meant when you said that you included all kinds and types of casing head gas.

A. In the Panhandle Field proper.

Q. In the Panhandle Field?

A. Yes.

Q. Well, that is the only field you are talking about or referring to in your table of Page 10 of Exhibit 42?

A. I guess that is correct.

Q. And in your opinion is it proper to include this kind of gas, to-wit, the kind that is dissolved in oil in its original state, for purposes of this study?

A. Yes, I think it is.

Q. Do you know whether or not the Railroad Commission of Texas includes that kind of gas in its production figures?

A. Yes, it does.

Q. In its production figures?

A. Yes, the casing head gas is included in the Railroad Commission of Texas, if you will look on the proper page of the Report.

Q. Well, but they talk about it in a separate text, don't they?

Mr. Culton: It is the same paragraph?

The Witness: No, it is just another column of figures to form the total.

[fol. 5910] By Mr. Littman:

Q. And in your opinion is all casing head gas classed as such by the Railroad Commission? By that I mean all types of casing head gas.

A. Far more so now than previously.

Q. They don't classify certain types or kinds of casing head gas as dry gas or other kinds of gas, do they?

A. Casing head gas is not a dry gas.

Q. I am asking you how the Railroad Commission classifies it?

A. And I answered that they do not classify it as dry gas. That casing head gas comes under one column.

Q. All types and types of casing head gas are referred to by the Texas Railroad Commission as "casing head gas"?

A. Yes, it being divided into two columns, one not treated, blown to air, for the figures used in Exhibit 42.

Q. Now, just one or two questions about capital additions which are set forth in Exhibit 42.

Do you have any authority, Mr. Hinton, to authorize the capital expenditures shown in Exhibit 42 from Pages 21 through 32?

A. No, sir, I do not have the authority to go ahead with those capital expenditures set out on those pages.

Q. In other words, before work can proceed, there must be, first, secured the approval of others in the Panhandle [fol. 5911] Eastern Pipe Line Company?

A. Yes.

Q. Who would have to approve all of these expenditures before they finally are made?

A. A gentleman by the name of Mr. J. D. Creveling.

Q. Anyone else?

A. No. If he approves them, it is all right.

Q. You don't know whether or not it is the practice of the company to have the Board of Directors approve expenditures of this type and character?

A. Well, they are probably submitted to the Board for approval, but the final approval to me comes from Mr. Creveling.

Q. Well, you are not certain whether, as a matter of practice the Board of Directors' consent is required or not, are you? A. No, sir.

Q. What is your authority in the matter?

A. After they have been approved, it is then turned over to me and Mr. Pope, and Mr. Pipe on the matters of production tells me when to proceed with the work.

Q. Mr. Pope is your immediate superior, is he not?

A. Yes.

Q. Well now, you stated, I believe, that all of the capital additions set forth for the first six months of 1941 on [fol. 5912] Page 21 have already been completed.

A. There are a few parts on the liquid separator that have not been installed yet.

Q. But the answer to my question is "yes" with some minor exceptions?

A. Right.

Q. Now, looking at the capital additions which you have set forth on Pages 21 and 22 and 23 for the basic load for the year 1942 and at Pages 27 and 28 for the anticipated load of the year 1942, will you state how much of that work has been actually authorized by the management of Panhandle Eastern?

A. All of it.

Q. Now, you say each and every item has been authorized?

A. There has been no one who told me to take off anything that is included on either of these lists and until they do there is no alteration of these capital expenditures.

Q. What do you mean by authorized? I have been asking you whether they have been authorized and you have been saying yes.

Mr. Culton: You haven't asked him whether he checked it with the management.

By Mr. Littman:

Q. Perhaps we better define what we mean by authorize. Have you been ordered by Panhandle Eastern to go ahead [fol. 5913] with the construction in 1942 which is set forth on these pages?

A. No. It is only about two weeks since the first of the year.

* * * * * * * *

Q. Let's be more specific then. Are there any work orders that have been signed authorizing this work?

A. Yes, the two compressors for Sneed station and the two engines for Hansford.

Q. Just a minute, let's get the items. You are now giving us the items which are subject to existing, signed, executed work orders, are you?

A. I don't know just exactly how many of those orders. I was going to tell you how much material has been ordered to show you about,—I thought you said you wanted to be very specific,—what had been done and I was just going to enumerate the items of material that had been ordered or received to date.

Q. Well, first let me ask you how many of these jobs for 1942 are now subject to existing, executed work words?

A. A work order is not—by "executed" you mean signed?

Q. Signed by the President of your company. He is the man who usually signs your work orders, isn't he?

[fol. 5914] A. No.

Q. Who signs them?

A. The superintendent of each department.

Q. Are you sure about that?

A. Yes. I have never seen one signed by the President of the company.

Q. There is a place on your work orders for the President's signature, is there not?

A. Maybe the copy I get is not the official one, because I don't recall anyone signing anything but a completion work order in our department at all.

Q. Well, at any rate, have you seen any work orders that have been signed by your superintendent,—I will put it that way,—for any of the work shown for the year 1942 under either the basic or anticipated load?

A. No, I have seen nothing more than the signature of Mr. Pope on items to be bought for this work. I have not seen any signed work orders.

* * * * * * * * *

By Mr. Littman:

Q. Now, looking at Item "G" on Page 21, which refers [fol. 5915] to the increasing of the capacity of the gathering line from Zofness to Sneed by looping the existing line between those points and the construction of an addi-

tional gathering lines to serve new wells, has the pipe for that job been ordered?

A. The number of tons of pipe required for that has been given a preference rating with the Priority Board, as I understand.

Q. Well, have you received any of it yet?

A. No, we probably won't receive it until,—we could lay it during the summer months at a much lower cost. If we had received it down there now it would cost us a considerable amount to store it until such time as we got ready to lay it.

Q. Are you sure that your are going to be able to get it?

A. I feel that we are going to because if has a very definite place in the defense industry, the field supply.

Q. Well, you can't be altogether certain about whether you are going to receive it or not.

A. Nobody can be altogether certain about anything this year.

Q. In the way of new construction?

A. That is right.

Q. And so you can't be altogether certain about whether all or any part of these items set forth in your [fol. 5916] list of capital additions in Exhibit 42 will be constructed, can you?

A. No, but I can assure you that Mr. Creveling has had this tonnage figured. I have even done some work on figuring tonnage since I have been here in Washington in order to try to see if we could reasonably expect to get the amount of steel required or if there was any manner in which we would be able to furnish additional gas to the industrial factories making defense products whereby we might use a smaller amount of gas, even though it did not exactly fit in with our contemplated development plans.

Mr. Littman: I think it would be well for this witness to state how far the plans or work has progressed with respect to the items shown for the year 1942, at least.

Mr. Culton: Ask him.

Mr. Littman: And I was going to suggest that perhaps we better do that on Monday. It is one o'clock. It may

give this witness a little opportunity to be better prepared to go right down through the list.

Mr. Culton: Can you do it right now, Mr. Hinton?

The Witness: Yes.

Mr. Culton: Do you need any further preparation?

The Witness: No.

. . . . . .

[fol. 5923] Mr. Culton: Mr. Examiner, Saturday afternoon the Examiner suggested that we might be able to get together on Exhibits 142 and 143.

Following out that suggestion Mr. Hinton for Panhandle Eastern and Mr. Dunn of the Commission's staff spent several hours checking all of their computations and late Saturday afternoon reached a full agreement as to the arithmetic of all the figures.

Yesterday Mr. Littman was kind enough to come to his office and go over all of these figures with Mr. Dunn and we are now in full accord with respect to the arithmetic of Exhibits 142 and 143.

I will say that substantially there is practically no change in the figures in which Mr. Littman was interested, between these figures and the figures reflected in his cross-examination of Mr. Hinton earlier in the week and there is practically no difference in this exhibit between Mr. Hinton's figures and those shown in the exhibit, aside from the fact that a weighting was not given to Page 2, on Schedule I of each exhibit as we suggested to the Examiner last Saturday.

In order that it may be more easily understood, we desire to remimeograph one or two pages of each exhibit and during the weekend it wasn't possible to get this done. We will turn it over to be mimeographed today and [fol. 5924] will get Exhibits 142 and 143 in final form.

We will desire to substitute those new sheets in Exhibits 142 and 143 so as not to have a lot of duplication.

. . . . . .

Trial Examiner: The conference, to which you referred, yesterday obviated the necessity of further cross-examination of Mr. Hinton, am I to understand, Mr. Littman?

Mr. Culton: There is this further explanation I might make, we are to get, Mr. Littman, some information from the Kansas City office. Mr. Hinton is to prepare that in the form of a letter and send it back to him. I think that should be stated.

Mr. Littman: In answer to your Honor's inquiry, if Mr. Hinton's figures in Schedules 1 in Exhibit 142 and Exhibit 143 had been correct in the first instance, I doubt very much whether we would have had any cross-exam-
[fol. 5925] ination of Mr. Hinton on these schedules.

Mr. Culton: You mean, had the average been shown rather than the totals as was suggested at the hearing Saturday.

Mr. Littman: Yes, If the weighted average had been shown.

Mr. Culton: That is right.

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I think a statement by me might be in order at this time in order that there will be no misunderstanding at any time with respect to Commission counsel's position on this matter of Exhibits 142 and 143.

I trust that your Honor will grant me the indulgence of making a brief statement and review of the situation.

When Mr. Hinton presented Exhibit 43, particularly the Schedules 3 and 4 of that exhibit which contain his estimate of operation and maintenance costs west of Libral compressor station for each of the two gas fields, to-wit, Panhandle Field and the Hugoton Field, under both the basic-load theory and under the anticipated-load theory, it was obvious to us that unless these total dollar figures were related to the amounts of gas produced and purchased in each of these fields under each of these two theories, they would be without any real significance in this proceeding. In brief, Schedules 3 and 4 merely show Mr. Hinton's estimate in total dollars for each year, for each of the years 1940 to 1946, both inclusive.

As your Honor will observe, there is a steady increase [fol. 5926] in total dollars for each of those years shown in Mr. Hinton's estimate of operation and maintenance costs west of Liberal compressor station in Exhibit 43, schedules 3 and 4.

Now, nowhere in Mr. Hinton's exhibit 43 was there shown the amounts of gas purchased and the amounts of gas produced under each of these bases nor did Mr. Hinton's exhibit or testimony show the amount of money he contemplated would be expended by the company for gas purchased.

In view of that situation I thought it would be well, in fact necessary, to have Mr. Hinton prepare a copy of his working papers showing the breakdown of the amounts of gas purchased and produced. That has been submitted by Mr. Hinton at my request as Exhibits 131 and 132.

I felt it was necessary to interrogate Mr. Hinton with respect to the cost per M.c.f. expected to be paid by Panhandle Eastern for gas purchased in each of the years 1941 to 1946, inclusive.

Now, with that data at hand, it then became very simple to combine the total cost of gas purchased, as contemplated by Mr. Hinton's estimate in each of the future years under each of the two bases with his total estimate of operations and maintenance costs and to take the total of those costs and divide by the number of M.c.f.'s proposed under both bases to be delivered to the Liberal compressor station for each of those years.

[fol. 5927] It then became purely a matter of mathematics to divide the dollars by the total number of M.c.f.'s and secure what we have referred to as a unit cost but which might be more accurately referred to as an average cost per M.c.f. of all gas delivered at the intake side of the Liberal compressor station for each of the years 1941 to 1946, inclusive, showing the average cost per M.c.f. of both gas purchased and gas produced, combined, from both fields under both the base-load theory and the anticipated-load theory.

Now, I read into the record, in order to save time, certain average M.c.f. figures for that purpose, which I asked Mr. Hinton to check. In making that check Mr.

Hinton undertook to make a separation of the average cost as between the cost of gas produced and the cost of gas purchased.

This separation required certain allocations. He, also, produced a breakdown which, to our mind, is wholly immaterial and irrelevant for the simple reason that when we have the total amount of gas produced, purchased and delivered to Liberal under both theories, to-wit, under the basic-load and under the anticipated load, that is all we are interested in.

We are, of course, interested in the average cost of both types of gas, that is the gas produced and the gas purchased, combined.

Now, Mr. Hinton, in presenting Exhibits 142 and 143, showed this breakdown or allocation which was done not [fol. 5928] at our request. As I stated, we were interested wholly in the average total figure for all gas delivered at Liberal.

Now, as your Honor knows, Exhibits 142 and 143 showed in Schedules 1 of each of those exhibits a so-called total average cost for the Panhandle Field and for the Hugoton Field and for the main line.

The record already shows that in order to secure a proper total it would be necessary to weight the amounts against the number of M.c.f.'s produced and purchased in total.

Now, when your Honor suggested that we have a conference in order to determine the mathematical correctness of the average figure, we did just that over the week-end and a member of our staff worked with Mr. Hinton to the end that the correct mathematical average total for the Panhandle, Hugoton, and for both fields combined be introduced into the record and that is the figure in which we are interested.

Now, I simply want it understood beyond any question that our participation in this conference was solely for the purpose of saving time on the record and in order to secure a correct mathematical total average figure.

We do not feel that any allocation as between gas produced and gas purchased is material to the issues in this proceeding. When I say that we worked with Mr. Hinton toward the end that the correct mathematical figure be shown, I would also like to have it distinctly under- [fol. 5929] stood, Mr. Examiner, that we do not agree, necessarily, that these are the true average costs. These average costs are all, of course, bottomed upon the validity and accuracy of all of the various assumptions and estimates that Mr. Hinton made.

In other words, they are, in reality, a rearrangement of certain of Mr. Hinton's own basic figures. For example, cross-examination revealed that Mr. Hinton's Schedules 3 and 4 included certain costs taken from the books of the company as the purported cost of fuel.

It is clear on this record that a credit must be allowed for such amounts in order to get at the exact cost.

Mr. Culton: Mr. Littman, don't you think it fair to state that I called your attention to that in connection with your figures and you said that there was no occasion to take that into consideration, because you only wanted to show the general trend and I told you at that time that to get it to a fair basis, that is, to an absolutely accurate basis, we would have to deduct the fuel cost, and, also, we would have to divide the M.c.f.'s actually delivered into Liberal rather than the M.c.f. produced and the M.c.f. purchased.

I don't think there is any difference between us.

Mr. Littman: I don't think there is any difference between us. That is why I said that it is clear on the record that everyone is agreed that these totals that we are interested in do show and I am sure they will show this [fol. 5930] when the corrected Schedules 1 are offered for Exhibits 142 and 143 and that is that there is a definite trend downward through the years under both the basic and anticipated load.

I trust that I have made myself clear.

Now, in connection with Mr. Hinton's testimony of capital expenditures, your Honor will recall that I was en

gaged at the close of Saturday's hearing in cross-examining Mr. Hinton on that subject.

Inasmuch as Mr. Hinton's presence was required on the system, we believed that the necessity for recalling him for cross-examination today could be obviated by Mr. Hinton furnishing us a statement for the record which would bring out the things that I had proposed to cross-examined him about this morning.

Mr. Culton was requested by me to have the witness furnish the following data and information with respect to the capital expenditures under the anticipated load which are shown by items in Exhibit 42 from Pages 26 to 32, inclusive.

Here is the information that we would like to have furnished to us in statement form.

Mr. Culton: I am getting more than you requested if counsel want it, I am going into much more detail on that statement than you requested of me.

Mr. Littman: Don't you think it is well to put on the record what Mr. Hinton is to get?

. . . . . .

[fol. 5931] Mr. Culton: Go ahead. I will say "yes" when you get through.

Mr. Littman: We requested the following information by items, that is, by the same items that are listed in "A" to "N", inclusive, on Pages 26 to 32 of Exhibit 42.

First, which of these items are actually in the process of construction? As to those items which are now in process of construction, the progress which has been made to date in that construction.

Secondly, as to those items which are not now in the process of actual construction, we would like to have the following information:

"A" Has a work order been approved and signed by the management authorizing the work to be done?

"B" What materials, if any, are on hand?

"C" What materials, if any, have been ordered and the delivery date on which delivery is expected.

Mr. Culton: Well, now, wait. You didn't give me that. We have ordered it. We can't tell you when we are going to get deliveries under present conditions. You didn't give me the delivery date.

[fol. 5932] Mr. Littman: I was reading from this paper. You see the reason why it is well to put these matters on the records

Mr. Culton: You didn't say anything about delivery date. I can't tell you when. All our deliveries are for shipment as soon as possible.

Mr. Littman: All I request is, if the delivery date cannot be stated due to the uncertainty of conditions, Mr. Hinton may so state.

Mr. Culton: We will just make that general statement as to all of it, then, when we get through, because you know conditions in the industry now are such that nobody can promise you delivery.

* * * * * * * *

Mr. Culton: The only thing we can say is that we will have ordered all of this for delivery as soon as they can deliver it. That is as far as we can go under the priority situation.

One of the things we are going to give you is the priority orders that we now have. You didn't request it.

* * * * * * * *

Mr. Littman: Suppose you do the best you can, and that is all we can expect anyone to do, with respect to giving us your delivery situation.

[fol. 5933] Fourth, as to any items that deal with pipeline construction we would like to know whether or not the rights-of-way have been acquired.

As you indicated to me yesterday, Mr. Culton, no rights-of-way are required for well lines, of course.

Mr. Culton: You have that in the lease.

Mr. Littman: Yes, but as to the gathering lines.

Mr. Culton: Mr. Hinton is getting that information.

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[fol. 5939] C. H. M. BURNHAM a witness, having been previously sworn, resumed the stand and testified further as follows:

* * * * * * * *

[fol. 5940] Cross-Examination (Continued).

By Mr. Littman:

Q. Mr. Burnham, you have heretofore testified on direct examination with respect to Exhibit 47, entitled "Panhandle Eastern Pipe Line Company and Subsidiary Companies—Future Capital Requirements, Gas Transmission Facilities—Liberal Station and Eastward", have you not?

A. I have.

Q. Will you please state, step by step, the procedure followed by Panhandle Eastern Pipe Line Company in undertaking to make new capital additions?

That is to say, what is the first step, and go on through the various steps until the time when the work is actually done.

A. Well, I should say the first step consists of close observation of our load as experienced each winter. That is, the operating organization, knowing the capacity of the system, that is, the calculated capacity, will watch each winter's performance of the then-installed facilities.

Such observation will indicate how much of the installed capacity is being used. Then, by observing the estimate for the following winter—

Mr. Culton: (Interposing) What estimate do you refer to there?

[fol. 5941] The Witness: The estimate of the load to be carried the following winter.

- - - it is a simple matter to deduce the fact that you are either going to be short or long on capacity.

Now, during the winter of '40-'41, the peak load was in excess of 240 million. The installed capacity at that

time was approximately 250 million but, by observing the weather conditions during that winter, it was apparent that the temperatures were above normal on our system so, by applying a correction factor, we could readily see that had it been a normal winter, we would have used up or needed the 250 million then-installed capacity.

As I stated before, the estimate for the winter of '41-'42 was then given close scrutiny and it was deduced from that observation that in order to protect our customers, more capacity must be installed previous to the coming winter.

That is the winter of '41-'42 I am talking about now.

By Mr. Littman:

Q. Once having decided that, it was necessary to increase the installed capacity of your pipe line system east of Liberal station. What is the next step taken?

A. The next step then consists of making what we call the "flow studies". Those studies are made in the engineering department.

Q. Of which you are the head?

[fol. 5942] A. That is correct, and the load is carried, as I described here in my previous testimony, through a series of computations which will develop the looping required as well as the additional horsepower required in each station, if each station, in that case, is short of power.

Having completed the study, these are then turned over to the management.

Q. When you speak of the management, to whom do you refer, the Board of Directors or certain officers, or both?

A. I refer to Mr. Neuner, Vice President in charge of operations.

Mr. Goodwin: One question, you made reference to having completed the study.

Now, precisely what is meant by the study?

The Witness: The study consists of complete computations showing what pipe and power are required to meet the estimated peak to be experienced during the coming winter.

That is summarized and only the summary is handed over to the management.

Mr. Goodman: Now, that is a routine study?

The Witness: You might call it routine or you might not. It is a very involved and complicated computation.

Mr. Goodman: By "routine", I mean something you do every year.

The Witness: Yes, it is.

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[fol. 5943] By Mr. Littman:

Q. Is such a study made for one year in advance or is it made usually for a number of years in advance?

A. It is usually made only for one year in advance, but, in the case of the group of studies that I handed you some weeks ago, it was made, of course, for a number of years in advance.

Q. That is in connection with Exhibit 47?

A. Correct.

Q. And what loads did you use as the basis for the study summarized in Exhibit 47?

A. The loads estimated by Mr. Morton.

Q. And that estimate of Mr. Morton's is contained in Exhibit No. 40, is it not?

A. That is correct.

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Mr. Goodman: Does that particular study assume that [fol. 5944] the loads, as indicated by Mr. Morton, will be carried?

The Witness: With certain corrections, yes. We have taken Mr. Morton's load and deducted from it what we call the readily interruptible gas. Then we assume that the balance must be carried.

Mr. Goodman: Now, at what stage in the process and progress of expansion is it determined whether or not the loads as determined by Mr. Morton, will be carried, in other words, whether it is desirable business?

The Witness: Well, I don't know whether I can answer that question or not. Mr. Morton has had in the past a

very uncanny ability to predict the load for the coming winter.

Now, at what stage during this process the management accepts his estimate for the next winter, I do not know.

Mr. Goodman: I do not think you get my question. You are increasing, fairly constantly, the number of your customers. Now, are the arrangements made to increase the number of customers and thus sell more gas prior to Mr. Morton's estimate or subsequent thereto?

Mr. Culton: You mean for new markets, don't you, Mr. Goodman?

Mr. Goodman: Yes.

Mr. Culton: Not additions to existing markets but for new markets?

Mr. Goodman: For new markets, that is correct.

[fol. 5945] The Witness: Well, I should say that, in so far as I know, the contracts for new markets are negotiated and if they are consummated, then Mr. Morton takes them into account in making his estimates of peak loads.

Mr. Goodman: In other words, Mr. Morton does not take in new markets until subsequent to the making of a contract.

The Witness: That is true in cases of large contracts, but Mr. Morton does reflect in his estimate, I happen to know, the normal growth which the property will experience.

Mr. Goodman: Yes, I see.

Now, in connection with large contracts, as you have distinguished it, as distinguished from normal growth, does your department determine the justification for making those contracts?

The Witness: We make no computation in respect to that.

Mr. Goodman: Who does, do you know?

The Witness: I do not know whether any computations are made.

Mr. Goodman: In other words, then, you, as Chief Engineer, tell us now that you do no work in advising the management concerning whether or not it is good business to supply a new market?

The Witness: Well, there are several instances where I have. I will have to retract somewhat on that.

Mr. Culton: You did do it on the Consumers Power deal?

The Witness: Yes, that is the one instance where I did [fol. 5946] advise them and Mr. Morton, I happen to know, made economic studies for these contracts recently entered into in Illinois, Indiana and Missouri.

Mr. Goodman: So, in other words, we are down to the fact that unless you are specifically requested, Mr. Morton's economic studies concerning plant extensions for new markets are the only ones which advise the management on the propriety and profits of supplying the markets?

The Witness: In so far as I know, that is correct.

Mr. Goodman: But Mr. Morton's economic studies are transmitted to you, are they not?

The Witness: For capacity purposes only.

Mr. Goodman: Only for capacity purposes, and the result is that you do not modify those studies or participate in them but pass them on to the management in the form as supplied by Mr. Morton?

The Witness: That is correct.

Mr. Goodman: All right.

By Mr. Littman:

Q. You are the Chief Engineer of Panhandle Eastern Pipe Line Company, are you not? A. Yes, sir.

Q. Now, Mr. Burnham, will you please continue with your step by step description of what transpires when Panhandle Eastern undertakes to determine whether it [fol. 5947] shall install additional pipe line or horsepower capacity.

A. As I stated before—

Mr. Goodman: (Interposing) Can I interrupt once again, at this time, because I think it is right along the line.

Mr. Morton has supplied his counsel and his counsel, in turn, has supplied me, with a certain number of estimates, being the total summaries of his economic studies made over the past two years.

Now, subject to the hope that I have them all here, as I think I have, I will hand those studies to you and I will ask you to verify, if you can, whether these comprise all of the economic studies made and transmitted to you by Mr. Morton during the past two years.

Perhaps I had better mark these sheets for identification.

Trial Examiner: Do you care to limit that inquiry to the territory in which you are definitely interested, the Michigan territory?

Mr. Goodman: No.

Trial Examiner: The material, as offered, is, of course, all-inclusive.

Mr. Culton: He has furnished all-inclusive data, I think.

Mr. Goodman: Yes, purported to be all-inclusive, your Honor.

Trial Examiner: These tables consist of how many pages? Do you want to designate the number of pages?

. . . . . .

[fol. 5948] Mr. Goodman: I would like to assign a number to the total pages and use a subnumber for each page.

There are 23 pages.

Trial Examiner: This will be marked for identification as Exhibit No. 144, with the component 23 pages being separately marked serially, 1 to 23, both inclusive.

. . . . . .

[fol. 5950] (Exhibits Nos. 144-1 To 144-23, Inclusive, Were Received in Evidence.)

. . . . . .

[fol. 5951] Mr. Goodman: Yes, I will, your Honor. It will take me a little time, though.

Mr. Burnham, these, consisting of the sheets of Exhibit 144 represent the economic studies which were made by Mr. Morton and furnished you, is that right?

The Witness: I would not say that all of these had been furnished to me. For instance, the letter addressed to Mr. Creveling, I do not believe I ever saw it before. However, in the majority of cases, that is true.

Mr. Goodman: And there is no other work in the nature of economic studies which Mr. Morton has done in the past two years which has been furnished to you, is that right?

The Witness: These consist of all the studies I have knowledge of that he made.

Mr. Goodman: And do these studies originate any of your planning work?

The Witness: I referred to the matter a while ago, that we use these studies for capacity purposes. Now, what I meant by that was that we furnished Mr. Morton the size of the lateral line required to serve these markets as well [fol. 5952] as the estimated cost of such lateral.

Mr. Goodman: And after Mr. Morton makes this study, you proceed to follow [out] your plans for the installation of these laterals?

The Witness: After Mr. Morton has made his study in which he has incorporated estimates furnished him by my department, the study, as I understand it, is then turned over to the management for its decision.

If the decision is favorable, a budget is prepared. The budget is prepared in my department and, after the budget is approved, then we take steps to complete the construction of the facilities required for these particular markets.

Mr. Goodman: Now, is that something independent of your main-line capacity studies?

The Witness: I would say it is independent.

Mr. Goodman: I see, so that at the same time, you are taking care of two types of capacity development or rather of pipe-line development; one having relation to making your mainline capacity applicable to serve the market for the ensuing year, and another dealing with the actual installation of laterals to serve additional markets, is that correct?

The Witness: That is correct.

Mr. Goodman: And are they kept separate?

The Witness: Yes.

Mr. Goodman: Did you ever add them together?

[fol. 5953] The Witness: Mr. Morton adds them when he makes his estimate for the following winter load.

Mr. Goodman: I see.

* * * * * * * *

By Mr. Littman:

Q. Now, Mr. Burnham, will you please continue with your step by step description of the procedure in connection with the installation of capital additions?

A. Concerning the main line?

Q. Of course, your exhibit relates to main lines and compressor stations, does it not?

A. That is correct.

Q. Suppose you give us the details with respect to that and then, if there is any variation from that procedure in respect to other capital additions, you might state what variation there is when you get through.

Mr. Wheat: When you said, "your exhibit", you refer to Exhibit 47, do your not?

Mr. Littman: Yes.

The Witness: Well, as I was about to state, the flow study, summarized with an estimate of the costs involved, is handed the management and it shows the approximate dollars required to expand the plant sufficiently in order [fol. 5954] to carry the load, which load is taken from the estimate furnished by Mr. Morton.

* * * * * * * *

Q. I see. You may proceed with your description.

A. We may not hear from this summary or this flow study for some weeks but, in any event, when the decision does come through, the engineering department is advised to draw up the budget.

Q. Can you tell us what transpires during those two or three weeks? Do you know who looks at these estimates and what action, if any, is taken?

A. In so far as I know, Mr. Neuner takes them up with the New York Office and what goes on in New York, I have no definite knowledge about but, in any event, my department is primarily interested in the answer, whether it is favorable or unfavorable and upon the receipt of the answer, we immediately start the preparation of the budget.

Q. Now, what form does that answer take? Is it in [fol. 5955] writing?

A. Not to my knowledge. Usually Mr. Neuner will advise me by word of mouth to prepare the budgets.

Q. And he returns your estimates?

A. I have a copy of the estimate.

Q. I see.

A. He has, on some occasions, written me with respect to some small projects such as small lateral lines, in order that everyone be advised of the favorable action of the management.

Q. Then what is done?

A. The budgets are prepared.

Q. By you?

A. By my department, under my direction.

Q. Then what do you do with those budgets?

A. The budgets are turned over to Mr. Neuner after they have been properly signed. They are signed by quite a number of the officials of the company in the Kansas City Office before they are turned back to Mr. Neuner.

Q. Then what is done with them?

A. They are sent to New York and Board action is then taken on them.

Q. Then what occurs after the Board of Directors votes favorably upon the particular matter?

A. We are advised of favorable action by the Board and [fol. 5956] if it calls for immediate construction of the project involved, the materials are purchased and steps are taken to let the contracts for the work.

Q. Now, at what stage of this procedure does a work order issue?

A. After the budget has been approved and as soon as some expenditures are about to be made with respect to the budgeted amounts or items, a work order is issued.

Q. Who signs the work order?

A. The work order is issued in the Accounting Department and I do not believe it requires a signature. I say that because I have copies of some and I do not remember that any signatures occurred on them, other than the Accounting officers.

. . . . . .

Q. But, at any rate, no work is done until such time as a work order is actually issued, is that correct?

A. Well, in some instances where we know that certain work has to be done where the management has given us informal approval, as you might say, to pursue the engineering work, in that case a work order is issued to cover just preliminary expenses such as drafting and engineering studies.

Q. But I was asking about the actual construction. No actual construction is embarked upon until you first receive the work order?

. . . . . .

[fol. 5957] A. (interposing) No actual work is embarked upon until we receive the work order.

Q. Now, I refer you to your Exhibit No. 47 and particularly to Line 2, which has an item of "Additions to Main Lines" for the year 1941 in the amount of $4,292,500.

Are all of those lines shown in your map, Exhibit 15, by purple dotted lines?

A. Yes, sir.

Q. Am I correct in stating that all of the work embraced by that item is the looping of the main transmission line?

A. Yes, that is what the title infers, additions to main lines, referring to main-line loops.

Q. And this work was to be done in the States of Illinois, Missouri and Kansas, is that correct?

A. That is correct.

Q. Now, I wish you would please describe for us these lines in greater detail than you have heretofore given. I would like to know, for instance, the size of pipe and the points from which and to which these lines are to run and, also, I would like to know how far along the construction has gone for each of these looped lines.

A. All right.

* * * * * * *

[fol. 5959] Q. Mr. Burnham, there is a pending question with respect to the item shown in Line 2 of Exhibit 47, "Additions to Main Lines" in the year 1941.

That question asked you to give a description of the various additions included within that description.

A. Do you wish for me to refer to the map in making that description?

Q. Yes, please refer to map, Exhibit No. 15.

A. I believe it is already in the record that the minute that the budgets were approved covering the additions to main line last summer, immediate steps were taken in the way of ordering pipe and preparations were made to let contracts.

Notwithstanding the fact that the orders for pipe were placed rather early in the year, considerable difficulty was encountered in the way of obtaining delivery and, at last, application for a priority number was made to the O. P. M. [fol. 5960] It was granted early in the fall but too late to permit the completion of these loops which were contemplated.

The work is now in progress and to review briefly I will describe the work as it was originally contemplated and then follow with the description of the status, its present status.

Q. Very well, you may proceed with that description.

A. The only main line loop work which we proposed to do in Kansas was the construction of 10.47 miles of loop line between Haven and Olpe compressor stations.

Q. Now, you are speaking of the 1941 additions to main lines? A. Correct.

Q. What is the size of pipe on that particular loop? A. This pipe is 26-inch O. D. by 9/32 wall, manufactured by the A. O. Smith Corporation and comes in 40-foot lengths.

The work we proposed to do in Missouri was the construction of a loop line between Louisburg and Houstonia compressor stations and it consisted of 10.25 miles of 26-inch pipe of the same specifications as the loop to be built in Kansas.

Upon completion of this loop between Louisburg and Houstonia compressor stations, that would mean the completion of two lines between those two stations. In other words, it fills in the gap between the end of the present loop and Houstonia compressor station.

[fol. 5961] Between the Houstonia and Centralia compressor stations we, also, contemplated filling in that gap and it required 15.29 miles of 26-inch pipe to do that work. This, also, is A. O. Smith pipe of the same specifications as the pipe ordered for Kansas.

On the east side of the Mississippi River between Centralia compressor station and Pleasant Hill compressor station in Illinois, there are two gaps that have to be filled, one consisting of 16.37 miles between the two existing loops on the main line between these two stations and the other of 6.7 miles on the east side of the Mississippi River.

These two loops are to be constructed of 24-inch O. D. by 9/32 wall seamless pipe, which will average in length approximately 40 feet.

Between Pleasant Hill and Glenarm compressor stations there is a gap of 24.07 miles yet to be filled which we propose to fill or to construct of 24-inch by 9/32 wall seamless pipe.

Between Glenarm and Tuscola compressor stations we propose to construct 36.03 miles of 24-inch pipe which, when completed, will complete the loops between these two compressor stations.

Between Tuscola compressor station and Dana measuring station, the terminus of the line, there is a gap of 20.21 miles of line which has not yet been looped. It was [fol. 5962] proposed to complete this looping in the year 1941 under this program.

Q. What is the size of the pipe on the latter loop?
A. It is of 20-inch by .32 wall seamless pipe.

In addition to the loop lines to be constructed there is one river crossing to be reinforced and a second one to be built.

The Mississippi River crossing, as you know, now consists of a line on the Champ Clark Bridge in addition to two 12-inch submerged lines.

We propose to build two more 12-inch submerged lines in order to increase the capacity of this submerged crossing so that in the event that bridge line is lost we will have ample capacity across underneath the river.

This pipe was to be 12-3/4-inch O. D. by 3/8 wall seamless pipe.

At the Illinois River we have only one submerged crossing today and with the completion of the loops between Pleasant Hill and Glenarm station the need for a second river crossing at the Illinois River is obvious.

It will be constructed of four 12-3/4-inch O. D. by 3/8 wall seamless pipe line submerged under the river and thoroughly reinforced and weighted for that purpose.

That, in general, constitutes a description of the work as we originally proposed to do it.

Now, the status of the work I can outline briefly as follows—

[5963] Q. (Interposing) Before you give us the status of the work, will you please state whether or not all of these 1941 main-line additions which you have described are shown on the map, Exhibit No. 15, by a dotted purple line?

A. Yes, they are shown by the dotted purple line paralleling the present main line, except in the case of the Mississippi River crossing where it was impossible to

indicate the two submerged lines which we propose to build there.

Q. Is that line shown on the map? I am referring to the looping in Kansas. A. Yes.

Q. Now, will you please give us the status of the work and I would, also, like to have a breakdown in dollars for each of the items which you have named which go to make up the total of $4,292,500, as you go along.

A. The loop line in Kansas is commonly referred to as our Haven loop. It is at present under construction. The labor contract was let some weeks ago to the C. F. Foreman Construction Company, a very reliable firm in Kansas City which has been building lines for other pipe-line companies for a number of years.

The pipe has been received and has been strung. The ditching is progressing slowly and, as a result, only two or three miles of pipe have been laid to date.

Mr. Culton: The weather has been cold out there this [fol. 5964] month, has it not?

The Witness: Yes, and I might add, further to complicate the situation the contractor has found the ground underlaid with rock and he is having to shoot practically every foot of the ditch.

The work was further delayed due to the holidays coming in there, it being very difficult to get men to come out over Christmas and New Year's.

With good luck this line should be completed within the next two weeks, in which event our own forces, that is forces of Panhandle Eastern Pipe Line Company, will proceed to tie in the end of this loop to the connections on the cross-over valve at its terminus, in which event we can put it into immediate operation.

The need for that construction was apparent last week during our heavy load and we are extremely anxious to get that loop tied in before the next cold weather arrives.

The total amount of dollars involved in the constructing of this loop is $338,472.

Mr. Culton: Is that the original estimate?

The Witness: That was the revised estimate.

Mr. Culton: How does that compare with the estimate which was used in arriving at the total of $4,292,500 in Exhibit 47?

The Witness: That is the amount used in arriving at $4,292,546.

[fol. 5965] By Mr. Littman:

Q. May I have that figure, $338,000—

A. (Interposing)—472.

Q. 472. Thank you.

Now, will you please proceed with your statement of the status of the work on the loops in Missouri that had originally been intended to be completed in 1941?

I am taking them in the same order that you gave them a moment ago, Mr. Burnham.

A. I hadn't quite finished with the testimony in regard to the last loop.

There has been a further revision of that estimate and it is somewhat in the other direction, you might say, that is, our last revision of that estimate of that cost is $326,740.

Are you interested, Mr. Littman, in the revisions that we only recently have made, or do you want me to adhere to the column that adds up to the $4,292,000 figure?

Q. I would like to have both figures wherever there has been a deviation or revision of the orjginal figure submitted. I think it would be well for you to give the new estimate. Now, the new estimate here is $326,000—

A. (Interposing)—740.

Q. 740.

A. The next loop, proceeding eastward, is the loop [fol. 5966] which we commonly refer to as the Louisburg loop. It lies near the Houstonia compressor station. The pipe has been received and has been strung. The contractor is the C. F. Foreman Construction Company. There has been no work done other than stringing the pipe on this loop.

Of course, involved in that is the cutting of fences and doing of certain right-of-way work which permits the

trucks to enter the far as and so forth in order to unload the pipe.

The cost of this item was—may I go back to the Haven loop and give the original budgeted amount reflected there?

Q. Yes.

A. The original budgeted amounted amount was $284,000.

Mr. Wheat: I wish you would give both the other figures, too, right at this time.

The Witness: The first revision of the original budgeted amount was $338,472. I am talking now with respect to the Haven loop.

The second is $326,740.

By Mr. Littman:

Q. And it is the $338,472 figure which is reflected in Exhibit 47? A. That is correct.

In the case of the Louisburg loop the original budgeted amount was $278,000. The first revision which is incor- [fol. 5967] porated in Exhibit 47 or the effect of which is incorporated in Exhibit 47 is $316,047 and our latest revision of $301,900.

The status of the Houstonia loop, I think, is what you are interested in now.

Q. Yes, that is the 10-¼ miles of pipe?

A. That is correct. The pipe is now arriving on the job for that loop. Incidentally, it would be of interest to you to know that it comes in in quantities of as much as 70 or 80 carloads at a time making it very difficult for the contractor to unload and string it and release the freight cars as promptly as the railroads might wish it to be done, but they are making very good progress in getting this pipe unloaded and I hope they will be able to keep the railroad satisfied as to our efforts to release these cars as soon as possible.

The original budgeted amount on the Houstonia loop was $453,000. The first revision, the effect of which was reflected in Exhibit 47, was $440,563.

The second revision is $453,810.

Mr. Culton: There is an increase in that?

The Witness: Of $810.

Mr. Culton: I have $440,000 as against $453,000.

The Witness: That is correct, but I mean over the original budget.

Mr. Culton: I am talking about those reflected in the [fol. 5968] exhibit. There is an increase of about $13,000.

The Witness: In that case, yes.

In the Centralia loop, pipe has been shipped and, no doubt, by today some of it has been received.

You understand that all of this pipe has been made. We had word of that last week, that all of it had been turned out the mill.

The original budgeted amount for the Centralia loop was $609,000. The first revision, the effect of which was reflected in Exhibit 47, was $632,039 and the second revision is $626,150.

By Mr. Littman:

Q. Now before you proceed to the next loop line, I wish you would state when you expect these loops to be completed. You gave the date for the first loop which was the Haven loop in Kansas; but you have not stated that fact for the other loops.

A. Well, it entirely depends upon the elements. With good luck, as I said before, the contractor should be able to finish the Haven loop within the next two weeks.

Now, his contract requires that he finish that loop this winter because, as I stated before, we need it badly. If the weather is bad, if the going is too rough he does not have to complete the other loops in Missouri until in the summer.

These contractors can build these loops much cheaper in [fol. 5969] good weather, naturally, than they can in bad weather. For that reason I wouldn't be able to give a very accurate date as to when the other loops will be completed, but I should say that by early summer the other loops will be completed.

Q. And in service?

A. And in service. We will put them in service immediately upon completion.

Q. Now, does that complete your description of the loops in Missouri? A. Yes, it does.

Q. And now you are going to the loops in Illinois?

A. I wanted to make this one remark, though, in connection with this work, that the contractor has assured us that he proposes to work all winter on the Louisburg loop, assuming, of course, that he finishes the Haven loop within the next few weeks.

With that in mind he has placed this pipe in the Louisburg loop on skids to keep it up out of the mud. For that operation we had to pay him a little extra reimbursement.

The first work that we proposed to do in Illinois, that is proceeding eastward from Missouri, is the two 12-inch lines under the Mississippi River. If you don't mind I will talk about them first.

Q. Very well.

[fol. 5970] A. That pipe has been received and is stacked at the nearest railroad siding. The labor contract was let, I believe, last week; if not last week, it was the week before.

The contractor is arranging for dredges to be moved in there immediately and it is proposed to do this work during the winter when dredges are available.

There is evidence that dredges will be at a considerable premium during this coming spring and summer and we thought it wise and agreed with the contractor that he could probably secure the services of a dredging company cheaper during this weather or during the winter than he could later in the year.

It will also interest you to know that the first set of bids on this work were rejected. Some three or four weeks ago they were received and we felt that the proposed prices were much too high.

We rejected all the bids and advertised the work again and these later bids were seemingly the best prices that

we could get and they did reflect some reduction over the first set.

The original budgeted amount of the work to be done on the Mississippi River was $99,000. The first revision, the effect of which was incorporated in Exhibit 47, was $141,477.

The second revision which incorporates the new prices at which this contract has been let is $170,870.

Mr. Culton: In other words, you had to pay nearly twice [fol. 5971] as much for it as the conditions which you had in mind when your original estimate was made would have necessitated?

The Witness: That is true.

By Mr. Littman:

Q. It amounts to $31,000 more, approximately, than the amount reflected in Exhibit 47?

A. That is correct.

Mr. Culton: I had reference to when they were originally contemplated it was only $99,000 and that had to be increased nearly $80,000.

The Witness: The pipe for the Pleasant Hill loop, I believe, has been shipped. This pipe has to be stored along the right-of-way—

Mr. Culton: That is along the general area where the line is going to run?

The Witness: Correct.

(Continuing)—For the reason that our contractor who is building the lines in Illinois has his hands full over here with a long loop between Glenarm and Tuscola and he has indicated to us that he does not propose to work through the winter on account of extremely high costs involved in conducting this work in the winter, so we have agreed that he can store the pipe for the Pleasant Hill loop.

However, we are insisting, though, that he complete a certain section of the Glenarm group which I shall refer to [fol. 5972] later.

By Mr. Littman:

Q. By the way, will you please state when you expect the Mississippi River work to be done?

A. The Mississippi River work will be completed in 60 days.

Q. All right, will you proceed with your description of the Pleasant Hill station?

A. The originally budgeted amount on the Pleasant Hill loop was $725,000. The first revision, the effect of which was incorporated in Exhibit 47, was $808,695 and the last revision is $775,420.

Q. Here is one instance where your latest estimate is approximately $33,000 below the amount reflected in Exhibit 47?

A. That is correct. We expect the Pleasant Hill loop to be completed sometime in the early summer.

Now, the Illinois River crossing to be constructed lies between Pleasant Hill and Glenarm compressor stations and I shall refer to it now with your permission

Q. Yes, sir.

A. This consists of a completely new river crossing, as I said before four 12-inch lines are to be built across this river?

Q. Four 12-inch lines?

A. That is correct.

[fol. 5973] Q. Will they all be submerged river crossings?

A. Correct, so that in the event that our original crossing should either be lost or require some maintenance work on it, we will be able to utilize this new crossing to full advantage and maintain service to the east.

The original budgeted amount for the Illinois River crossing was $101,000. The revised amount, the effect of which was reflected in Exhibit 47, is $140,863 and the last revision which was made after the contract was let is $167,160.

Q. That is approximately $27,000 in excess of the amount reflected in Exhibit 47 for that particular item?

A. That is correct.

Q. When do you expect to complete the work on the Illinois River crossing?

A. That work on the Illinois River will not be finished until some time after the Mississippi River crossing has been completed. I should say that within 90 days from date the Illinois River crossing will be completed.

Q. You have purchased all of the materials required?

A. I forgot to add the pipe is on hand and the situation is similar to that at the Mississippi River crossing with respect to materials.

The next loop is the Glenarm loop which lies between Glenarm and Tuscola compressor stations and where our [fol. 5974] contractor is now engaged.

This contractor is the J. C. Truman Company and has the contract for doing all the work in Illinois with the exception of the river crossings.

The contractor moved into this job shortly before Christmas and was busily engaged in getting started from the Tuscola end of the loop toward the Glenarm end when this extremely cold weather of the recent few weeks set in.

Last week I was informed that the ditch that he had dug was filled with ice and that it would be impossible for him to work until the weather had moderated to the extent that he could get the ice out of the ditch.

This land, as I have stated before, is rather flat land and heavily tiled and the tiles were running with water at the advent of the cold weather. The result was that the ditch froze full of ice from the bottom up as the water came into the ditch, so it is a solid block of ice.

Mr. Culton: How deep is that ditch?

The Witness: About 4 feet.

He had a force of some 175 to 200 men on the job when the bad weather set in and, of course, he has been forced to lay off a majority of these men for the time being.

With good weather he will get started this week and while we are not required to complete the loop this winter we are requiring and specifying in his contract, insisting [fol. 5975] that he build not less than 12 miles of line as soon as possible.

By Mr. Littman:

Q. This is the 24-mile loop or is it the 36-mile loop?

A. The 36-mile loop between Glenarm and Tuscola.

We have insisted that the 12-mile loop be constructed as early as possible because we need that capacity this winter or we believe we will need it this winter.

The evidence to that end was quite apparent last week when Tuscola station was handling all of the gas that it could possibly handle under the circumstances that then existed.

When the contractor has finished the twelve miles, he can either proceed with his construction on westward or he can sit down until the advent of good weather in the spring. We are leaving that more or less up to him, however; all of the pipe in the Glenarm loop has been placed on skids to keep it up out of the mud in the event that he wants to proceed on westward when he has completed the 12 miles.

I would say that with good weather he will complete the Glenarm loop within 60 days from now. With bad weather he will not complete it until sometime in the early summer.

The J. C. Truman Company has, also, the contract for the Tuscola loop.

Mr. Culton: Will you give us the two prices on that section?

The Witness: I beg your pardon. The original budgeted [fol. 5976] amount for the Glenarm loop is $951,000. The first revision was $990,987, the effect of which was reflected in Exhibit 47.

Our latest revision is $1,980,000.

Mr. Culton: $1,980,000.

The Witness: That is right—no, $1,000,980.

The next loop is the Tuscola loop and I started to describe the status of that work.

By Mr. Littman:

Q. Now, this one is the 20.21 miles of 20-inch pipe, is it not?

A. That is correct. As I stated before, the pipe is strung, is on the ground and when the contractor can get to it he will move back to Tuscola and complete that, probably not until the early part of the summer.

The original budget for Tuscola loop is $443,000, the first revision, which is reflected in Exhibit 47, was $483,433 and our most recent revision is $489,780.

The total amount which corresponds to the most recent revision as compared to the $4,292,500 is $4,312,800.

Mr. Culton: In other words, you are only about $20,000 more than your estimate which you testified to in connection with '47?

The Witness: That is correct.

Mr. Culton: On a 4-¼-million dollar expenditure?

[fol. 5977] The Witness: That is correct.

By Mr. Littman:

Q. Have you completed your description of the additions to main lines for the year 1941, Mr. Burnham?

A. Well, that is the description of the work that we proposed to do in 1941, those additions. Of course, as I have indicated, it now carries over into '42.

Q. Of course none of this work was actually completed in the year 1941 but all of it is now in process of construction, is it not?

A. There were some small items which were completed. I refer to them as small. They cost, maybe, $10,000 or $15,000 and it involved preparing each of the compressor stations at Olpe, Houstonia and Centralia to receive these loops as they came into those stations.

Q. But none of that was in service?

A. No, we could not put it in service until the loop was completed, but that was a rather important piece of work. Incidentally, I forgot to tell you that it was executed by another contractor and under the same budget.

Q. Now, will you please explain how much additional capacity will be available by reason of the installation of the loop lines which you have described and which are included in the item on Line 2 of Exhibit 47?

A. That involves the use of storage, supplying gas in [fol. 5978] storage for the capacity increase.

Mr. Goodman: What storage?

The Witness: Line storage. As you can readily see, on a continuous-flow basis we have not affected the capacity between Liberal and Greensburg, nor have we affected the capacity between Greensburg and Haven nor between Olpe and Louisburg.

By Mr. Littman:

Q. Those are contemplated to be installed in years subsequent to 1941?

A. That is correct. So on a continuous-flow basis I think it can be stated that we would not have increased the capacity of the system by the construction of the loops which I have just described, however, by taking advantage of the additional storage capacity of these loops and by packing our system during off-peak periods, particularly the east end of our system, the capacity over short periods of time could be and can be materially increased.

Q. Can you give us the figures?

A. We have various estimates, but I should say that we can pack in there some 75 million to 90 million cubic feet of gas which can be made available in not less than three days.

In other words, we don't have compressor capacity to pump it out in any quicker time than three days. For [fol. 5979] instance, if there were 75 million feet of extra storage provided there, for three days' time we could pump an extra 25 million cubic feet per day.

Then we would level off at our continuous-flow capacity.

Mr. Goodman: What was that total figure, again, please?

The Witness: From 75 million to 90 million.

Mr. Cultor. In other words, you could furnish for three days additional peak capacity of 25 million a day?

The Witness: That is correct.

Now, if the peak period extended over a number of days exceeding three, why, you would be out of luck. Our experience last week indicated that these peak periods can extend over a period of time greater than three days.

We had a very heavy drag for six days.

By Mr. Littman:

Q. If you will, state why these particular points were selected by you for looping rather than other places that are available for looping?

A. As a matter of fact, east of Louisburg station there are no other places that are desirable for looping.

Q. I am referring particularly to Illinois and Missouri.

Q. I don't need to tell you the advantage of having two lines to any market. That is the reason we selected these points because they complete these loops and give us two excellent lines from Louisburg station to Dana.

[fol. 5980] That is the primary reason. At the same time we will gain capacity which, upon the completion of the loops in Kansas, will be available even on a continuous basis.

Q. I am sorry, I misspoke myself. I had the situation turned around. I meant to say when you will have completed all of your so-called 1941 construction early in the year 1942, you will then have a completely looped system through the States of Missouri and Illinois. Is that correct?

A. That is correct.

Q. But not in so far as Kansas is concerned?

A. That is correct.

Q. Now, I am wondering why you had selected that particular point in Kansas for looping that short loop that you contemplate completing this year.

A. I believe, as I stated this morning, during peak periods on our system, we observe carefully the operating characteristics of the various parts of our facilities and our observations have been that the Olpe compressor station has had a greater load to carry, that is, its suction pressure was lower than other stations in Kansas.

If you will note, too, the gap between the end of the last completed loop in Kansas and Olpe station is much greater than the gap between our last completed loops in other sections of our transmission system, for instance between Liberal and Greensburg, between Greensburg and Haven [fol. 5981] and between Olpe and Louisburg.

As I was saying, the gap between the end of the loop of the last-built Haven loop and Olpe station is much greater and that would explain the fact that Olpe was starving, you might say, for gas or for suction you might call it more accurately.

Mr. Culton: You have a bottleneck I think you said on direct examination.

The Witness: We have a very slight bottleneck. We knew that we would eventually fill these loops. We knew, too, that we could get some relief for the winter of '41-'42 if we could get that 10 miles completed before the advent of cold weather.

Incidentally, we guessed wrong because cold weather overtook us before we could get it built, but, nevertheless, we may have it completed before the next cold spell this winter, in which event we will be in somewhat better shape at Olpe station to carry our peak load.

By Mr. Littman:

Q. Now, the next item on your 1941 list of capital additions in Exhibit 47 is shown in Line 3 as "Additions to Compressor Stations" in the amount of $344,100. Is that correct?

A. That is correct.

Q. Now, when you testified here last October I believe [fol. 5982] you stated that this covers the addition of a compressor unit in each of the Illinois compressor stations, namely, Tuscola, Glenarm and Pleasant Hill. Is that correct?

A. That is correct.

Q. And you, also, testified that the work at Tuscola and Glenarm is 80 percent completed and that the work at Pleasant Hill was 60 percent completed. Is that correct?

A. That is correct.

Q. Now, will you bring us up to date on the construction in those compressor stations?

A. The work on all three stations is for all practical purposes completed.

Q. And is it in service?

A. It is in service.

Q. When did it go into service?

A. The Tuscola engine has been in service, I should say, about 30 days. That is the new engine at Tuscola.

The new engine at Glenarm was first put in service approximately two weeks ago and during the extremely cold spell last week we put the new engine at Pleasant Hill in service.

It was indeed fortunate that we had those three engines to place in service.

Q. You had them installed just in time?

A. Just in time.

Q. Now, will you state the additional horsepower at [fol. 5983] each station?

A. The horsepower of the engine at Tuscola is 600, the new engine.

At Glenarm it is 1,000 and at Pleasant Hill it is 1300.

Mr. Culton: How does $344,100 compare on the final estimate?

The Witness: We have attempted to make no revision, but we feel it is approximately the right figure to use.

Mr. Culton: In other words, work was pretty well along when you made your Exhibit 47?

The Witness: That is correct.

By Mr. Littman:

Q. Now, on the next item which you show in Exhibit 47 for the year 1941, Line 4, "South Michigan North Line" in the amount of $3,893,300, will you please state what progress has been made in the construction of that Line?

Now, before you do that, will you please give us a brief description of that line and state how it is shown in the map, Exhibit 15?

A. It is shown in purple dots on Exhibit 15 as originating here on the Michigan Gas Transmission system just inside the Michigan State line.

It is to be built from that point to the point of junction just west of Ann Arbor. It is to be built of 20-inch seamless pipe. From this point of junction—

Q. (Interposing) Will you give us the mileage of the [fol. 5984] 20-inch pipe?

A. Inasmuch as the surveys on this line were completed since I last testified here, I can give you the revised mileages involved.

Q. Yes, that would be best, to have the latest figures.

A. As I stated before, the system originates on the Michigan Gas Transmission system just inside the Michigan State line and the first section is to be built of 20-inch seamless pipe for a distance of 31.1 miles to a point of junction east of Ann Arbor, Michigan.

Q. Now, that section runs due north, does it not?

A. Not quite due north, slightly to the west, northwest.

Mr. Culton: It so shows on the map, does it not?

The Witness: Yes, as the map indicates.

From the point of junction the north line, as we refer to it, proceeds in a northeasterly direction for a distance of 30.25 miles to a point southwest of Pontiac.

This section is to be built of 18-inch seamless pipe. The north line then proceeds almost due north for a distance of 33¾ miles to a point northeast of Flint, Michigan.

By Mr. Littman:

Q. What is the size of the pipe in that section?

A. Which section is to be built of 16-inch seamless [fol. 5985] pipe.

From this point the north line proceeds in a northwesterly direction to its terminus west of Zilwaukee. This latter section is to be built of 12-inch seamless pipe. There is a branch line to be built—

Q. (Interposing) What is the mileage on that last section?

A. I beg your pardon. 41 miles.

Q. That is 41 miles from the terminus to the junction southwest of Pontiac?

A. No, it is 41 miles from the terminus of the 16-inch line at a point northeast of Flint to the terminus of the system.

Q. Are you going to talk about the lateral line?

A. Yes.

Q. We will pick that up later.

A. It is still considered part of the north line, I am pretty sure.

Q. I wanted to state that we are going to speak about the Adrian lateral later, but if you have another section of the north line in mind, why, you better go ahead with it.

A. Another section of the north line is that part which runs over to a point south of Pontiac. It consists of 20.73 miles of 12-inch seamless pipe.

Mr. Littman: May I have the last answer, please?

[fol. 5986] (Whereupon, the last answer was read by the reporter.)

The Witness: I believe that completes the description of the north line.

Mr. Culton: Why not endeavor to define the north line to us? Just tell us what point it runs from and the terminus so there will be no question in the record about it. That is later referred to as the "west line".

Mr. Wheat: You say the south Michigan north line and south Michigan west line. I think that is what Mr. Culton referred to.

Mr. Littman: He is going into the south Michigan west line a little later.

Mr. Culton: We just thought that whoever reads the record might, at this time, get the distinction between the west line and the north line.

The Witness: The north line originates on the Michigan Gas Transmission Corporation system and terminates at a point 8 miles west of Zilwaukee. It, also, has another terminus at Clawson which is a point south of Pontiac.

Mr. Culton: And what is the west line?

The Witness: The west line originates at the junction between the 20-inch and 18-inch pipe.

Mr. Culton: On the north line and proceeds westerly to Battle Creek and Kalamazoo. That clears it up, I hope.

By Mr. Littman:

[fol. 5987] Q. Now, will you please state what progress has been made in connection with the construction of the south Michigan north line to date?

A. All pipe, with the exception of a 16- and 18-inch, has been received. The 20-inch has been stacked at points near the right-of-way.

I forgot to add that the right-of-way has been purchased complete. The 12-inch which extends from Flint to the terminus, to the northern terminus of the line has been received and strung and the contractor is now engaged in laying it.

He is working from the northern terminus south. He has laid some 5 or 6 miles completed. He has welded some 20 to 25 miles. This contractor is, by name, I. C. Little and Company. I. C. Little and Company has also been delayed by the advent of the extremely cold weather, however, he is making every effort to complete this some 40 miles of 12-inch into Flint at the earliest possible date, at which time he may elect to continue construction of other lines in the general area.

Q. What seems to be the difficulty with the 16- and 18-inch pipe?

A. There is no difficulty, it is merely a matter of routine operations in so far as the mill is concerned until we will begin to get the 16-and 18-inch pipe.

Q. It has been ordered, of course?

[fol. 5988] A. Oh, yes.

Q. And when do you expect delivery?

A. We expect delivery on the 16- and 18-inch pipe to commence not later than the first of February. The situation is something like this:

The same mill rolled 12-inch that rolled 20-inch. It also rolled 20-inch for the Tuscola loop. It also rolled 24-inch for the other loops in Illinois.

Q. What is the name of that company?

A. National Tube Company. They scheduled their operations in such a way as to take care of our requirements for this coming winter's load.

In other words, we were very eager to get some 24-inch between Glenarm and Tuscola stations, therefore, we told them to roll a 24-inch early in their program. Also, we wanted this 20-inch. This 20-inch here, referring particularly to the 20-inch in Michigan.

The mill said, "Very well, after we finish your 12-inch"—of course we elected to take it first—"We will roll the 20-inch, then the 24 and, having completed all of that, we will then go back and roll the 16 and 18."

Now, they have, according to the latest word we have received from them, completed the 24-inch which was the last to be rolled previous to the 16 and 18, but they advised us that due to certain priorities that had come in, [fol. 5989] the 16- and 18-inch would not be forthcoming for some two weeks.

Q. Am I correct in understanding that all of your rights-of-way had been secured for this south Michigan north line?

A. Well, maybe I was a little optimistic when I stated that. There are, possibly, a few pieces on the lateral line running over to Pontiac not yet in, but everything is completed except that possibility.

Q. And the contracts have all been placed?

A. The contract for all the lines in Michigan, I mean all the lines involved in the north line have been let.

Q. And when do you expect in the ordinary course of events to have completed this south Michigan north line and have it in service?

A. We expect to have it in service, I should say, not later than the first of June.

Q. Now, this line is being built to serve the Consumers Power Company under the Consumers Power contract, is it not?

A. That, in addition to other distribution centers. Adrian, as you mentioned a while ago, was involved, Battle Creek, also, will be served indirectly through this north line.

Q. Has Panhandle Eastern entered into contracts for the serving of those communities that you just named?

A. Yes.

Q. Now, the next item—

[fol. 5990] Mr. Culton: (Interposing) Suppose we check the last estimate on the cost of that line.

The Witness: The revised estimate for the southern Michigan north line, the effect of which was incorporated in Exhibit 47, was $3,893,300 and our last revision is $3,424,900.

[fol. 5991] By Mr. Littman:

Q. Mr. Burnham, suppose we take up the next item, which is shown in Line 5 of Exhibit 47 for the year 1941, "Lateral Lines" in the total amount of $463,800.

Now, if I correctly recall your direct testimony, you stated that the first of these lateral lines was a lateral running to Galesburg, Illinois, which was estimated to cost $291,500.

Will you please give us the length of that lateral line and the size of the pipe used?

A. The Galesburg line consists of 42 miles of 8-inch pipe extending from a point near Bartonville, Illinois, to the south city limits of Galesburg.

Q. Now, is that line shown on the map, Exhibit No. 15?

A. Yes, in purple dots. In addition to this lateral line to Galesburg proper, is the branch line to Abingdon.

Q. Before going to the Abingdon lateral, Mr. Burnham, am I correct in understanding that the Galesburg lateral involves the lifting of the Mildred, Kansas, lateral to which you referred in your direct testimony and involved the purchase of sufficient additional 8-inch pipe to complete the 42 miles involved?

A. That is correct.

Q. Now, will you state what progress has been made in [fol. 5992] connection with that work?

A. The Mildred line has been lifted and the majority of the pipe lifted from the Mildred line has been received and strung on the Galesburg line.

The balance of the Mildred pipe will be shipped this week.

Q. How much will be shipped?

A. I think there remains about 8 miles to be shipped of the Mildred pipe. The new pipe required to complete the line to Galesburg has been received and is strung on the Galesburg lateral.

Q. What do you say about the original estimate reflected in Exhibit 47 on account of that lateral in the amount of $291,500?

A. That estimate involved cash expenditures only, that is, I took the cash required to lift the Mildred lateral, added to it the cash required in the purchase of new pipe and added to those two items the cash involved in the labor contract to lay the line to Galesburg.

Q. Have you made any revision of that original estimate?

A. I have not available the revision that has been made but my papers here indicate that a revision has been made which is reflected in my total only on Line 5.

If the Commission would require it, I shall be glad to furnish the details at a later date.

Q. You expect to give us the revised estimate for the [fol. 5993] total shown in Line 5 of Exhibit 47, do you?

A. That is correct.

. . . . . .

Q. Now, when do you expect to complete the Galesburg lateral?

A. The contractor is working there when weather permits. He is encountering unusual difficulties due to the extremely cold weather and the depth of the frost.

Like the other two contractors now engaged on our main-line system, he too had to shut down over the holidays and particularly during this very bitter weather that we experienced last week. However, he has assured us and we are working on the assumption that his assurance is worth something that the minute that the weather permits, he will proceed with the work.

He is, nevertheless, proceeding with the stringing of the balance of the pipe to be shipped from Mildred, Kansas. The weather permitting, the Galesburg lateral should be completed by late spring.

That does not involve the line down to Abingdon, which line is to be built by the same contractor, nor the line to Knoxville.

[fol. 5994] Q. I was going to take those up one at a time.

Let's go to the second lateral included in these 1941 lateral lines, to wit, the Abingdon, Illinois, lateral. Will you give us a description of that line?

A. The Abingdon lateral originates on the Galesburg lateral and proceeds in the direction as shown on the map southwest for a distance of about 8 miles and consists of a 4-inch line.

It is being built principally to serve the Abingdon pottery or ceramic works there, which is engaged in making products used in the Army camps and has a direct connection to the war program, as I understand it.

The 4-inch line down to Abingdon will be built after the completion of the 8-inch line to Galesburg. The pipe is on hand, I am glad to state, and will be ready whenever the line is completed into Galesburg.

Q. Now, have you purchased all of your rights-of-way?

A. Yes, all rights-of-way on the Galesburg-Abingdon-Knoxville system are complete.

Q. And the contracts have all been let?

A. The contract has been let. It is one contract.

Q. When do you anticipate putting the Abingdon line in service?

A. It will be put in service immediately upon the completion of the construction, which construction, as I stated [fol. 5995] before, will follow the completion of the Galesburg lateral, so that would probably make it early summer before the service is rendered in Abingdon.

* * * * * * * *

Q. Your estimate of the Abingdon line was $38,500. Can you state the amount of the revision, if any, since you gave that testimony, or is that also going to be included in your total?

A. That will be included in the total.

Q. But the figure of $38,500 is correct, is it not?

A. That is correct.

Q. Now, your third lateral is called the Knoxville, Illinois, lateral, which entails a small amount, to-wit, $2,600; does it not?

A. That lateral consists of only one-half mile of 2-inch pipe and similar to the Abingdon lateral, it originates on the Galesburg line.

It is not shown on the map, being such a short line, but Knoxville is due east of Galesburg and a small community which we propose to serve with natural gas at the same time that that service is rendered in Galesburg.

The construction of that half-mile of 2-inch line does not involve a great amount of work and will be completed [fol. 5996] shortly after the line is completed into Galesburg, which will be late spring or early summer.

Q. Now, the fourth lateral included in the year 1941 is the Greenfield, Indiana, lateral which you estimated to cost $83,300.

Can you give us the details on that?

A. The Greenfield, Indiana, lateral has been completed and was put in service on January 2. Incidentally, it was placed in service at a time which was most fortunate for the residents of Greenfield.

Greenfield, as you know, has been dependent upon a rather inadequate supply of gas for some considerable time and on the night of January 1 when the cold weather descended upon that area, the boiler at Greenfield gas plant blew up and while we had not put the last finishing touches on the Greenfield lateral line, nevertheless, we were able to turn the gas into the gas holder the following morning and by that means we were able to keep the people in Greenfield, Indiana, in service.

. . . . . .

Mr. Goodman: May I ask a question there. Was Greenfield served by manufactured gas?

The Witness: I think I testified here in the previous [fol. 5997] testimony that it was served with manufactured gas and I was wrong in that respect.

It was a local supply of natural gas. I would like to correct my testimony in that respect.

By Mr. Littman:

Q. Will you give us a brief description of that line, to-wit, the Greenfield, Indiana, lateral?

A. The Greenfield, Indiana, lateral originates on the Michigan Gas Transmission system at a point east of Indianapolis and consists of approximately 17 miles of 4-inch pipe which was solid-welded and was laid during the months of November and December.

Q. 1941? A. 1941.

Q. Now, that leaves the last of the lateral lines for the year 1941, namely, the Adrian, Michigan, lateral. Will you give us a description of that lateral line and the status of its construction?

A. The Adrian, Michigan, lateral line is not shown on Exhibit 15 but originates on the 20-inch Southern Michigan north line at a point about midway between the June-[fol. 5998] tion with the Michigan Gas Transmission Corporation's line and the junction of the 16- and 18-inch line near Ann Arbor.

The Adrian lateral consists of 7 miles of 4-inch pipe and will be solid-welded. The pipe is at present in stock. That is, it has been received and is stacked near the right-of-way.

The right-of-way has been secured and while the contract has not been let, it is expected that before the 20-inch line is completed, we will let a contract for the construction of the later line to Adrian and work will be commenced on it forthwith.

We anticipate that it will probably be early summer before the Adrian lateral is completed.

Q. Now, you testified in direct examination that the estimated cost of the Adrian, Michigan, lateral, would be $47,914; did you not?

A. That is correct.

Q. Are you prepared to state whether there have been any changes in the estimate for the lateral lines for 1941

which are included in your Exhibit 47 as shown in Line 5 as $463,800?

A. Yes, I am prepared to state that while the original budget called for $463,800 for these lateral lines and the estimate which was incorporated in Exhibit 47 was in the same amount, we have now revised that figure to $522,700.

. . . . . .

[fol. 5999] Mr. Goodman: Does that revision consist simply of cost changes or does it include any figure for additional laterals?

The Witness: It consists entirely of cost changes.

. . . . . .

Q. Now, Mr. Burnham, would you please give us your revised estimates for the year 1941 which are shown in items from Lines 2 to 5, inclusive, of Exhibit 47?

Perhaps it would be well to recapitulate the five items shown there.

A. All right. For Line 2 on Exhibit 47, my revised total now is $4,312,810;

For Line 3, there is no change, that being $344,100;

Line 4, $3,424,900;

Line 5, $522,700 and if I have added them correctly, the total for Line 6 will be $8,604,510.

. . . . . .

[fol. 6000] The Witness: My first revision was involved in a substantial increase in the cost of all pipe and that was reflected in Exhibit 47.

This last revision has to do with labor costs, primarily.

Mr. Mc Ree. May I ask, Mr. Burnham, did the fact that a larger portion of this work is being done in cold weather affect the costs there?

The Witness: It did, to this extent, for instance, the "skidding" of the pipe to keep it out of the mud and other items like that.

Early in the fall when we originally negotiated these contracts, the contractors did tell us that they would

have to have more money if the work was pursued through the winter. We finally said to them: "Well now, if you will build just a limited number of miles of pipe here and then let it go until spring or until good weather returns, we do not believe you re warranted in asking these increased prices" and we negotiated the contracts on that basis, that is, no increase due to winter construction but we were to keep down our requirements as to the minimum amount of pipe they would lay before the shut-down period.

Now, that pertains to the main-line contractors and to the contractor in Michigan. On the Galesburg line, we [fol. 6001] did reimburse the contractor some extra for working all winter long up there on that lateral and that is probably reflected in the revision that I just gave.

Mr. Mc Ree: You have pressed the contractors a bit more to get the work finished than you anticipated, haven't you?

The Witness: Those particular sections that I mentioned a while ago that were critical in respect to our main lines.

Mr. Mc Ree: Where the defense industries were involved?

The Witness: That is correct.

By Mr. Littman:

Q. Before leaving the 1941 capital additions, I would like to inquire how much additional capacity will have been installed on the system when all of these additions will have been made?

A. I thought I answered that this morning by stating that, in so far as continuous capacity is concerned, we have not built any additional capacity.

Q. I thought my question at that time was confined to the additions to main lines. I am now speaking of the additions to compressor stations as well.

A. The additions to those three compressor stations, by the same token, did not increase the capacity of the system on a continuous basis.

It merely meant that had we had the loops completed which we fully anticipated that we would have, those three

[fol. 6002] additional engines would have made it possible to deliver that storage out of those newly-constructed loops over a reasonable short period of time.

Q. Of about three days?

A. Of about three days as a minimum.

Q. Will you state the capacity of the system?

A. The capacity of the system before we began this work was approximately 250 million cubic feet on a sales basis.

Q. Per 24 hours?

A. Per day, that is correct. It so happened that we did serve, on the coldest day last week, 256 million cubic feet in round numbers.

Q. But you could not keep that up very long, could you?

A. The indications were that we could not keep that up day after day but, for six days, we did deliver through Dana, the estimated capacity of our system, namely, 175 million for 24 hours, which indicated that our calculations on capacity were fairly accurate and, incidentally, on those days, had we been able to carry our entire load, we would have sold very nearly Mr. Moyson's estimate for the peak day of this winter.

As I stated before, he has demonstrated an uncanny ability to estimate these peak days accurately.

Q. His estimate for the peak day in 1941 is 240,394 M.c.f., is that correct?

[fol. 6003] A. That was for the winter '40-'41. We have already experienced that peak day.

Q. Then his estimate, as shown in Exhibit 40 for the peak day of 1942, which you say is in reality the peak day for the winter of 1941-1942, is 305,200 M.c.f.?

A. Yes.

Q. Is that the figure to which you just referred?

A. That is the figure to which I just referred, and had we not interrupted our customers which we had to do in several instances and had Detroit, which is shown in that estimate as requiring 143 million—is that correct?

Q. 142 million for Detroit.

A. (Continuing) Had Detroit taken 142 million on that day which it did not due to the operation of its manufactured gas plant, had those things occurred and had we

completed our loops, we would have delivered on that day very nearly 300 million cubic feet.

Mr. Wheat: That was an exceptionally cold spell, was it not, that you had?

The Witness: That was right near the condition that Mr. Morton uses in making his estimates, a zero day, a mean temperature of zero up and down the entire system.

It was indeed fortunate, as I stated before, that we were able to shut off the few industrials that we did. However, it did have repercussions even here in Washington, as I [fol. 6004] understand.

Some of the industries were engaged in work which involved directly or indirectly materials for the Government. However, we attempted to curtail the operations of plants which affected the defense effort to the least extent.

Those plants that were capable of burning other fuels were put on to other fuels. We interrupted on our own system or curtailed on our own system something like 18 million cubic feet per 24 hours.

There were interruptions made in Indiana to the extent of 10 or 12 million cubic feet.

The situation, as I stated before, worked out very fortunately because, at the end of an eight-day period, we were able to resume operations on a 100 percent basis and, to my knowledge, no material was damaged although operations were, in some plants, slowed up to some extent.

By Mr. Littman:

Q. Now, we will go to the 1942 additions. The first item shown is in Line 8, "Additions to Main Lines—$2,526,900".

You did not, in your direct testimony, state any details with respect to that item. Will you please, therefore, give us a description of the lines that enter into that $2,526,900 total?

A. This total involves the expenditures required to complete the loops on this system and the need for which

[fol. 6005] has been demonstrated by the experience of last week's cold spell.

The loops to be built are all in Kansas and are shown on Exhibits 15 in these gaps, that is, the gap will show the loops to be built.

Mr. Culton: What color are they?

The Witness: No color. It is merely a gap in our looped system which indicates a loop to be built in our system.

By Mr. Littman:

Q. The white space will indicate the gaps on the map?

A. That is correct. The proposed Olpe loop which will lie between Olpe and Louisburg compressor station is 26.64 miles long and will be built of 26-inch pipe of the same specifications as the 10-mile loop that is under construction now west of Olpe.

The construction will be of similar nature although we do not expect to find as much rock in the construction on the Olpe loop as we do in the construction of the line west of Olpe compressor station.

The Haven loop will complete the gap between Haven and Olpe stations. Had we known that we would be delayed in getting this pipe until just recently that is now being installed in this section of our line, we would probably have pursued this construction all in one piece.

However, the pipe is not available and we will have to wait until later in the summer to get additional pipe to fill [fol. 6006] the gap.

The length to be filled, after the construction of the lines now being built, will be 15.53 miles and it will consist of 26-inch O D, 9/32 wall, A. O. Smith electric weld pipe.

The Greensburg loop to be built in this year will fill the gap between the end of the existing loop and Haven compressor station.

Q. What is the distance?

A. It is 20.19 miles long and will be built of 26-inch O D, 9/32 wall, A. O. Smith electric weld pipe.

The Liberal loop, which is the last on the list, will consist of 23.37 miles of 26-inch O-D, 9/32 wall, A. O. Smith electric weld pipe, and will complete the looping of the entire system.

In addition to the looped lines that I have just described, it will be necessary for the company to make certain changes on the suction side of each of the compressor stations in Kansas with the exception of Olpe compressor station to accommodate this new construction.

In other words, at Louisburg, Haven and Greensburg compressor stations, the company will be required to build connections and install certain necessary valves, and so forth, to make the system adaptable to these new loops.

Q. Does that complete the description of the looped [fol. 6007] lines?

A. Yes. I might say that this totals up to 85.73 miles of 26-inch pipe and, in tons, it is roughly 17,500 tons of steel.

Q. What, if anything, has been done toward constructing those lines?

A. These lines have been surveyed. The rights-of-way have been acquired, practically. In other words, quite a bit of this right-of-way work was done when the original line was built through there.

The agreements, most generally, call for a double line so the right-of-way work merely involves the computation of the reddages and so forth and the mailing of checks in payment for the right-of-way.

The drafting or engineering work has been done.

Q. Has any pipe been ordered?

A. No, no pipe has been ordered.

Q. Will you state what steps have been taken in connection with the securing of the management's approval of this work?

A. We have prepared the budgets and they are in the hands of the Budget Director.

Q. The Board of Directors has not yet approved the work?

A. No, the Board of Directors has not passed upon it.

Q. And no work orders have yet been issued, of course? [fol. 6008] A. Unless there has been a work order to cover the preliminary work, there have been no work orders issued.

Mr. Culton: By the way, have any of the 1942 budgets been finalized as yet?

The Witness: None of the 1942 budgets has been approved or examined.

If you will pardon me, there have been some slight revisions in the amounts I testified to in the last hearing.

By Mr. Littman:

Q. All right. Let's have your last revision.

A. My first estimate on the Olpe loop was $764,856.

Q. You did not read those into the record in your direct examination, did you?

A. Line 8, I will testify in regard to Line 8, then. I have revised Line 8 in the amount of $2,526,900 to $2,581,160.

Q. $2,581,160? A. Yes.

Q. Mr. Burnham, I believe when you testified on direct examination you stated that the figures shown in Column B of Exhibit 47 did not reflect increases in material and labor costs subsequent to June 30, 1941, but that they reflected materials and labor costs as of June 30, 1941, is that correct?

A. That is correct.

Q. Now, this new figure that you gave me, what does [fol. 6009] that reflect? What brings about the increase?

A. That increase was brought about by this work which I mentioned a while ago involved on the suction side of these compressor stations to accommodate these loops.

Our experience in building them this year indicates to us that these changes at the compressor stations are much more expensive than we had anticipated.

Q. Does this new amount you just gave reflect any increases in labor costs or materials?

A. Some increase in labor costs but not in materials.

Q. Well, as of what date does this estimate speak, this new estimate of $2,581,160?

Maybe that would give me the precise answer I want.

A. That is as of December 15.

Q. 1941? A. 1941.

Mr. Culton: That was about the date you prepared your budget estimate for the next year?

The Witness. We are all the time working on this, but that is the date of our last revision or very nearly the date of our last revision.

By Mr. Littman:

Q. And, of course, this sum is subject to revision, that is, either up or down, is it?

A. Indeed it is. However, unless we know that we are [fol. 6010] going to encounter expenditures greatly in excess or quite a bit under the estimated figure, why, we do not change the budget amount.

Q. Now, the next item is shown on Line 9, "Additions to Compressor Stations".

Will you briefly describe those additions in the total amount of $1,593,900?

A. The experience that we have had of building compressor station additions this summer and the experience we have had during the winter have indicated there should be a slight revision made in the total on Line 9, from $1,593,900 to $1,686,990.

That revision reflects increased cost of materials, principally. We, as you know, bought some engines last fall and we learned at that time that prices on engines had materially increased.

In fact, they had increased over any figure that we might have used on June 30, and, as a result, we are revising the estimated costs of building the additions to the compressor stations involved in Line 9.

Q. Now, will you state where these new compressor engines are to be installed and the amount of horsepower involved at each point of installation; and also please state the type and character of machines installed?

A. The total item or total amount involves the cost [fol. 6011] of installing one new 1,000 horsepower Cooper-

Bessemer direct acting gas-engine driven compressor at Glenarm compressor station;

One 1,300 horsepower Worthington unit of similar type at Pleasant Hill compressor station;

Two 1,300 horsepower units, in this case Worthington units of similar type as Centralia compressor station;

One 1,300 horsepower Cooper-Bessemer unit at Houstonia station;

Two 1,000 Cooper-Bessemer compressor units at Louisburg;

One 1,300 horsepower unit at Olpe compressor station, which is a Worthington unit;

One 1,300 horsepower unit at Haven compressor station; and

One 1,300 horsepower unit at Greensburg compressor station, a Cooper Bessemer unit.

Q. Now, will you state the amounts which go to make up the totals shown in Line 9 and which go to make up your latest revised estimate?

A. To install the 1,000 horsepower unit at Glenarm, we originally estimated it would cost $140,000. We now estimate the cost of this addition at $175,300.

To install the 1,300 horsepower unit at Pleasant Hill, we originally estimated $179,400, which estimate has been revised to date downward to $169,700.

To install the two 1,300 horsepower units at Centralia [fol. 6012] compressor station, we originally estimated $351,000, which estimate has also been revised downward to $322,650.

We originally estimated the cost of installing the unit at Houstonia at $175,500 and we now estimate it to cost $151,340.

The two units to be installed at Louisburg compressor station were originally estimated to cost $280,000 and are now estimated to cost $267,400.

The unit at Olpe compressor station was originally estimated to cost $156,000 and will now cost, according to our estimate, $171,810.

We originally estimated the cost of the unit at Haven compressor station at $156,000 and we now estimate it will cost $190,000.

We originally estimated the cost to install a unit at Greensburg compressor station at $156,000 and we now estimate it will cost $175,290.

The Liberal station, we originally estimated that we would not make any capital additions. However, we find that we are short of cooling tower capacity at this station, and we now estimate that it will require $63,500 to enlarge our cooling capacity at this station.

Q. Now, am I correct in stating that that latter item for the cooling tower was not originally included in Column B of Exhibit 47, Line 9?

[fol. 6013] A. That is correct, but it is a compressor station investment or capital requirement, the need of which has made itself evident.

Q. Now, am I correct in stating that each of the first figures that you just read into the record go to make up the total of $1,593,900 shown in Column B, Line 9 of Exhibit 47?

A. That is correct, and if I may add, the total of the last figures or the revisions, add to $1,686,990 which I gave you a little while ago.

Q. Will this cooling tower replace an old cooling tower?

A. No, it is an addition to the existing tower.

Q. Now, Mr. Burnham, has all of this equipment been ordered? A. It has not.

Q. Has any of it been ordered by the company?

A. None of it has been ordered.

Q. Do you know if any of it has been approved by the Board of Directors or the management?

A. The Board has not passed on any of these budgets.

Q. And, ordinarily, it is the practice for the Board to pass upon items such as these before any final order is placed for them, is that right?

A. That is correct.

Q. Can you state what the probabilities are that such [fol. 6014] equipment could be obtained if ordered this year, considering and having in mind the present conditions of manufacturing materials?

A. The situation is something like this:

There is no question that Panhandle Eastern must have additional capacity built this summer before it can even hope to carry next winter's peak load.

There is no question but what Panhandle Eastern Pipe Line Company serves the defense effort or, if you will, the war effort now that war is here.

We have been fortunate in the past to secure from the O. P. M. priority ratings which permit us to make extensions to our system and we have every reason to believe that priorities will be granted in the future to permit us to build the needed capacity.

The manufacturers of these engines are, it is true, involved in the production of other materials used in the war effort but, fortunately, the type of engine that we use for gas compressor work is very dissimilar to anything which might be produced for the Navy or the Army or for other industrial applications.

That would mean that we do not necessarily displace other work in the shops of these big plants and men trained and skilled in the making of these large compressor units continue the work in which they have been engaged in [fol. 6015] producing these big units.

As I stated before, we were very fortunate to get through last week's unusual cold spell as well as we did. However, it did vindicate our judgment and our computations that we have made in connection with the Panhandle Eastern Pipe Line Company's system.

In the first place, it proved that we know how to compute the capacity of our system. We have always felt that we knew how to do that anyway, but the proof like last week's experience is encouraging, nevertheless.

It also shows that our organization is able to predict very accurately the peak days, or peak demands, if you will, that will be placed on our system from time to time.

With those two things behind us, we feel certain that when we propose to the O. P. M. that certain priorities be granted to us, that we can talk with authority and with knowledge in regard to those requests.

Does that answer your question?

Q. What do you say about securing the pipe for the main lines for 1942?

A. As I testified a moment ago, there are about 17,500 tons of pipe involved. That will permit us to complete these loops through Kansas and will increase the capacity of this system more than 50 million per day on a continuous basis.

Q. You mean the installation of 1942 loops?

[fol. 6016] A. Correct.

Q. Plus the additions to compressor stations which you just described will produce that?

A. No, the addition of the loops alone. To show you how important those loops are to this system, the addition of the loops alone would increase our capacity better than 50 million cubic feet per day.

Q. And what do you say about the installation of the compressor stations?

A. The installation of the compressor station additions in conjunction with the completion of the loops will increase our capacity better than 80 million cubic feet per day.

Our figures indicate that the capacity, sales capacity, of the system will be 331 million cubic feet per day after the completion of the loops in Kansas plus the additions to compressor stations as shown on Line 9, Exhibit 47.

Q. Now, you have 250,000 M.c.f. capacity?

A. Right.

Q. And this additional 130,000 M.c.f. would give you a total capacity of 380,000 M.c.f.?

A. I am sorry, but I do not recall mentioning 130,000.

Q. I probably wrote down the wrong figure.

A. Here is what it amounts to: You will get 50 million with loops alone. You will get 81 million with loops and [fol. 6017] power. That is where the difference was.

Q. I see. The 80,000 M.c.f. is cumulative?

A. That is right.

Q. And that will give you a total of 330,000 M.c.f. capacity?

A. Correct.

Q. As of the date on which these additions that you have described have been installed?

A. Yes, more nearly 331 million.

Mr. Goodman: That is constant capacity.

The Witness: That is constant capacity.

Mr. Goodman: And that takes no account of the increase made on the 1941 or contemplated for 1941 of 75 to 90 million, three-day capacity?

The Witness: That takes no account of line storage. Now, as I have indicated before, line storage is an uncertain thing to rely upon so we much prefer and have always, in the past, based our computations and our studies on continuous capacity.

. . . . . .

[fol. 6020] C. H. M. Burnham a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued).

By Mr. Littman:

Q. Mr. Burnham, yesterday we completed our discussion of the additions to main lines and additions to compressor stations shown in Lines 8 and 9 of Exhibit 47, which additions are shown in that exhibit for the year 1942.

We will now pass on to the next item shown in Line 10, namely, "Additions to Gasoline and Dehydration Equipment", in the amount of $120,000.

Will you give us a description of that equipment?

A. Before going on to that statement concerning Line 10, additions to gasoline and dehydration equipment, I would like to say something in respect to the main line additions that I testified to yesterday.

Q. You mean for the year 1942?

A. Yes, and for 1941. I wanted it distinctly understood that those expenditures concern only the main line

east of Liberal and I think the record will show that to be the case.

Q. Yes.

[fol. 6021] A. I mentioned certain tonnages of pipe involved. I do not include in those tonnages any pipe required for field operation.

As you can readily understand, in so far as this hearing is concerned, this witness is not trying to cover pipe and compressors required other than between Liberal and Dana, Indiana.

Q. And you do include Liberal in your estimates?

A. I do include Liberal compressor station itself.

Q. Mr. Hinton has testified with respect to the capital additions west of Liberal?

A. That is correct.

Q. And that would take in all of the gathering lines and other line additions which you state you are excluding from your testimony?

A. That is correct.

The $120,000 item shown on Line 10 as being required in the year 1942 for additions to the gasoline and dehydration equipment involves the purchase and installation of two complete absorption towers and dehydration contactors, one new boiler, the necessary pipe, valves and fittings to install this equipment, certain buildings and miscellaneous expenditures totaling $120,000.

This investment, as you know, is at our Liberal gasoline and dehydration plant.

[fol. 6022] We have not revised the estimate so it stands as I originally testified earlier this winter.

Q. What do you propose to accomplish by these additions to the gasoline and dehydration equipment?

A. As more gas is carried through the main line system, it follows that more gas is brought into Liberal compressor station. It is necessary, therefore, to increase the capacity of our gas treating plant.

This plant removes natural gasoline which would otherwise condense in the line and at the same time removes water vapor, which, if left in the gas, would give us no end of trouble, particularly during cold weather.

Q. What will be the capacity of your gasoline and dehydration plant at Liberal compressor station after the installation of these capital additions in the amount of $120,000?

A. The capacity of each absorber-contactor is approximately 40 million cubic feet per 24 hours at 500 pounds working pressure.

Therefore, the addition of two new ones will increase the capacity of this plant by some 80 million cubic feet per day. The present capacity is in the order of 273 million per day.

Q. That would bring your total capacity to 355 million cubic feet per day?

A. That is approximately correct.

Mr. Culton: That would be a peak?

* * * * * * * * *

[fol. 6023] The Witness: For peak-day operation. Yes.

By Mr. Littman:

Q. What is the type and character of this equipment?

A. It is the usual type of equipment that is used by all natural gasoline plant operators.

Q. Who manufactures this new equipment?

A. The equipment itself is made by various manufacturers. The absorber-contactor towers are built, in this case, by the Stearns-Roger Manufacturing Company of Denver, Colorado, but this type is also available from other manufacturers inasmuch as it is not a patented device.

The boiler, of course, is a water tube type boiler with brick setting. The pipe, valves and fittings are similar to those already installed in this plant.

I did not mention the fact that a great part of the equipment needs to be insulated after it is installed.

Q. Has this new equipment been ordered?

A. No, it has not.

Q. What stage has been reached in connection with this estimate?

A. We have done very little work in connection with this installation inasmuch as the engineering work, to a

[fol. 6024] great extent, involved in making this addition will be done by the contractor. It is, in fact, a more or less specialized piece of work which various contractors skilled in the art are engaged to conduct.

I will mention three firms that we do have on our list that are engaged in this kind of work. The first is the Fluor Corporation of Los Angeles, California; the second is the Stearns-Roger Manufacturing Company, Denver, Colorado; and the third is J. F. Pritchard of Kansas City, Missouri.

Q. Has any action been taken by the management or Board of Directors of Panhandle Eastern with respect to this proposed addition to the gasoline and dehydration equipment?

A. No action that I have knowledge of.

Mr. Culton: Is this a necessity, though, if additional lines are constructed so as to handle the additional gas?

The Witness: That is correct. I might add that while I have not had time to revise this estimate, our experience in the early part of this month indicated that not only is the absorber-contactor capacity going to be deficient for next winter's load but we are also faced with the necessity of increasing our distillation capacity at the same time.

As I stated before, I have not had time to go into that and no doubt certain recommendations will be made by the engineering department to the management too, at the same time, increase the distillation capacity of this plant.

[fol. 6025] As you can readily understand, we have learned a lot about our entire transmission system in the last ten or 12 days.

Q. Going to the next item, which is shown in Line 11 as "South Michigan West Line", in the amount of $1,766,000, will you give us a brief description of that line and please refer to the map, Exhibit No. 15.

A. The west line as shown on Exhibit 15 originates at the junction of the 20-inch and 18-inch north line pipes.

Mr. Wheat: You mean the south Michigan north line that you described?

The Witness: Yes, sir, and proceeds in a westerly direction to the City of Kalamazoo. For a distance of 64.5 miles, the line is to be constructed of 16-inch pipe.

This pipe will be seamless pipe and will be solid welded.

By Mr. Littman:

Q. That 16-inch pipe will run from the junction with the south Michigan north line as far as—

A. (Interposing) Battle Creek.

Q. Battle Creek, Michigan, is that correct?

A. Correct. From Battle Creek to Kalamazoo, the line is to be built of 12-inch seamless pipe, solid welded and, according to our latest survey, the distance is 19.5 miles.

We are now engaged actively in securing the rights-of-way for this line, as well as for the lateral lines connecting [fol. 6026] to the towns of Jackson, Marshall and Battle Creek.

I would estimate that about 20 to 30 percent of the rights-of-way have already been secured. The pipe is on order. None has been received and, as I testified yesterday, we anticipate that it will be rolling in in the next two or three weeks.

Mr. Wheat: What do you mean "rolling in"?

The Witness: Coming in on the railroad.

By Mr. Littman:

Q. Has the contract been let for that line?

A. No, the contract has not been let for that line.

Q. I assume from what you have said that the Board of Directors of Panhandle Eastern has formally approved the building of this so-called south Michigan west line?

A. Yes, the budget has been approved.

Q. Work orders have been issued?

A. Yes, work orders have been issued.

Q. Now, this line will serve new markets, that is, markets heretofore not served by Panhandle Eastern?

A. That is correct.

Q. And generally, those markets include the cities of Jackson, Michigan; Marshall, Michigan; Battle Creek, Michigan, and Kalamazoo, Michigan?

A. That is correct.

Q. Are there any others?

[fol. 6027] A. The outlying villages and towns already connected to the distribution systems originating in those towns that you just named.

Q. Which of these cities are now served by Consumers Power Company?

A. Jackson and the outlying towns; Marshall and the outlying towns, and Kalamazoo and outlying towns.

Q. What arrangements have been made with the distribution company serving Battle Creek?

A. The contract has been entered into covering service to Battle Creek, Michigan.

Q. What is the name of the distributing company there, do you know?

A. Battle Creek Gas Company, I believe it is.

* * * * * * * * *

Q. What revision, if any, have you made in your estimate of that line since you last testified in this proceeding?

A. The original budget called for an expenditure of $1,564,000. The figure I testified to here in the fall was [fol. 6028] $1,766,000. That has been revised to $1,719,480.

Mr. Culton: The contracts have not yet been let?

The Witness: No.

Mr. Culton: Therefore, it is subject to revision either way as the contract price may require?

The Witness: That is correct.

By Mr. Littman:

Q. Are there any further details that you can give us with respect to the South Michigan West Line that would be enlightening?

A. Yes. The 12-inch pipe required to build the section between Battle Creek and Kalamazoo has already been delivered and is stacked along the right-of-way at strategic points.

Q. When do you expect to have this new South Michigan West Line in service?

A. The South Michigan West Line should be completed by the late summer of 1942.

Q. Now, the next item shown in Exhibit 47 is "Telephone Line East" in the amount of $522,800, which appears in Line 12. What is the status of that proposed capital addition?

A. There has been no further work done on that estimate.

Q. Has there been any work done on it?

A. None other than the estimate that was reflected in my working papers. Of course, you understand that at the [fol. 6029] moment it is difficult to get copper and this line will require copper so it follows that if that work is done this year, it is quite possible that the cost will be revised, probably primarily due to the increased cost of copper and to increased cost of labor and so forth which we are feeling the effect of now in connection with other work.

Q. But at the present, you have made no revision of your original estimate which appears in Column B of Exhibit 47 in the amount of $522,800?

A. No, I have not.

Q. Now, you testified in your direct examination that you contemplated extending the present telephone system across the States of Missouri and Illinois in connection with the looping program, is that right?

A. I stated the fact that when the loops are complete from Louisburg station eastward to Dana, that it will be necessary to establish a better communication system than is now existing between our eastern stations and the main office at Kansas City.

Q. You have a complete telephone system, do you not, in Kansas? A. Yes.

Q. And in Texas?

A. That is correct and it connects with each and every station, each and every warehouse at various strategic [fol. 6030] points in the field and to the Kansas City office.

We are in complete communication at all hours of the day with the system from Louisburg station west, including both fields.

Q. Both gas fields? A. Correct.

Q. But you do not have a telephone system in the States of Missouri and Illinois, is that correct?

A. That is correct.

Q. And this capital addition comprehends the completion of that telephone system, is that correct?

A. That is correct.

Q. Are you depending now on commercial telephone and telegraph lines for your service in the States of Missouri and Illinois?

A. Yes, we are.

Q. Now, with respect to this item for "Telephone Line East", has the management approved the estimate?

A. The estimate has been discussed with the management. I cannot say that it has been approved because it has not been presented to the Board. We look to the Board for approval of the budgets, you might say.

Q. And that approval has not yet been given?

A. No, it has not.

Q. Will it be necessary to acquire certain rights-of- [fol. 6031] way in connection with the building of this line?

A. Yes, indeed.

Q. And those have not been undertaken?

A. No, sir.

Mr. Culton: Just a moment. In that connection, your rights-of-way for the pipe line give you the right to use a telephone line right along the pipe-line right-of-way?

The Witness: In many instances, but there are cases in Missouri and Illinois where that provision was not written into the pipe line right-of-way contracts.

We also probably will be able to lease pin space on other telephone lines.

Mr. Wheat: You mean the usual joint-pole operation with other companies operating pole lines in the vicinity?

The Witness: That is correct.

Mr. Culton: Pardon me, Mr. Littman, one further question. In the event Panhandle Eastern succeeds in obtaining the Michigan Gas Transmission Company, will that resulting situation be of any importance in connection with this telephone line matter?

The Witness: Indeed it will, because if we attempt to operate that line from our present headquarters, it will be necessary that we build the telephone line on through

the States of Indiana, Ohio and Michigan to the city gate of Detroit.

On the other hand, if an office is maintained in Detroit [fol. 6032] or at some other point on the Michigan Gas Transmission system, that office, in turn, will have to be in close contact with our Kansas City office and with the field operations.

Mr. Culton: Is that for the purpose of keeping proper pressures along the entire line?

The Witness: That is true.

I do not care to make any statement in connection with the way these two properties now are being operated, and I do not want that to be construed as being the way they should be operated if separate.

Mr. Culton: Suppose, if there is no objection, that you tell us what has to be done in order to maintain the pressures from one end to the other, just what the problem is and how the problem is to be handled?

The Witness: We have what you call a gas dispatching office at Kansas City. The chief dispatcher makes certain observations on the then existing load on our system.

The weather predictions he has telegraphed to him and various information concerning the estimates of requirements of customers on the system and through his experience, he is able to determine if there is need for more gas to be turned on in the field and if pressures should be raised over the system or at certain points on the system.

The dispatcher then issues certain instructions to the various compressor stations and to the field headquarters.

[fol. 6033] These instructions are to indicate whether or not more gas is to be turned on or off, or whether or not the pressures are to be raised or lowered.

Mr. Culton: Right there, does he have a chart showing what the pressures are at all the various points on the system during the day?

The Witness: He has a complete tabulation of the pressures which have been reported to him, not only during that day but all of the days previous on the western end of our system.

Those pressures are called in over our company-owned telephone system every hour and on the east end of the system, including some points on the Michigan Gas Transmission system, the pressures have been telegraphed in in a staggered form so that we have information every hour but not every hour for each and every station.

The effect of his order is watched carefully to see that the pressures do respond in the manner that he has contemplated and the deliveries through various points of measurement are also observed.

Mr. Culton: One more question. Suppose those pressures do not respond regularly.

The Witness. Then he takes what he considers the necessary additional steps—

Mr. Culton: (Interposing) To find out what is wrong?

The Witness: To find out first what is wrong and to cor- [fol. 6034] rect the same.

Early this month, we had the unusual experience of interrupting certain industrial customers that had never previously been interrupted or curtailed.

Mr. Littman: You are referring to industrial customers?

The Witness: That is correct, and the dispatcher and his staff were busy day and night keeping track of the load and its response to increased pressures, decreased deliveries to certain indutrial customers and to like matters.

By Mr. Littman:

Q. The next item is shown in Line 13, "Lateral Lines", in the amount of $254,200.

Now, that line is the lateral which you contemplate building to Bloomington, Illinois?

A. That is correct.

Q. Does it include any other lateral?

A. No, sir.

Q. Where is it proposed that this lateral line shall connect with the main line?

A. The proposed Bloomington lateral line originates on the Peoria lateral and at a point on the Peoria lateral due west of Bloomington, Illinois.

The line proceeds eastward for a distance of some 29 miles to the city gate and it is to be built of 8 inch pipe.

[fol. 6035] Q. What stage has been reached in the construction of this line?

A. In so far as I know, we have done no further work or had no further negotiations involving the construction of this line.

Q. In other words, you have not yet passed the estimate stage?

A. No, we have not.

Q. Now, this proposed lateral line will serve a new market of Panhandle Eastern after it is built?

A. That is correct.

Q. Namely, Bloomington, Illinois?

A. That is correct.

Q. Does Panhandle Eastern Pipe Line Company have a contract with the distributing company at Bloomington, Illinois?

A. A contract has been under negotiation and, to my knowledge, has not been consummated.

* * * * * * * * *

Q. Have you any revised estimate for this lateral line?

A. No, I have not.

Q. Strictly speaking, the item should be "lateral line" rather than "lateral lines", should it not?

A. That is correct.

Q. The next item is the warehouse shown in Line 14 as [fol. 6036] "Warehouse Paola", in the amount of $7,500. Will you give us a brief description of this item?

A. The present warehouse has become inadequate for our purposes and it is contemplated that during this year we shall not only remodel the present warehouse but shall extend it to some extent.

We propose to use the old foundation and to provide ourselves with more convenient quarters by the expenditure of some $7,500.

There has been some drafting work done in connection with this, although the budget covering this item has not been yet approved.

Q. Has not yet been approved by the management?

A. That is correct.

Q. Now, this warehouse is located in Miami County, Kansas, near the Louisburg compressor station?

A. Yes, sir.

Q. I take it from your testimony that the plans and specifications for the improvement of the Paola warehouse have not yet been fully completed?

A. They are fairly well completed but, as you say, not fully completed.

Q. Before leaving the items shown for the year 1942, I would like to go back to one or two of the items in that year. What do you think the probabilities are that you [fol. 6037] will be able to secure the necessary copper wire for the building of this "telephone line east"?

A. I have no definite knowledge as to the availability of copper wire. I have read in the newspapers where certain restrictions are being placed on the purchase and sale of copper, but other than that, as I stated before, I have no exact information.

Of course, in an emergency or in an unusual situation, the line might be built of steel wire. However, copper is much preferred.

Q. Now, referring again to the proposed additions to gasoline and dehydration equipment as you have already indicated, the expenditure of the sum of $120,000 for the year 1942 will substantially increase the capacity of the gasoline plant at Liberal station, is that correct?

A. That is correct.

Q. Now, that will enable you to produce more gasoline?

A. Yes, we will produce an increased quantity of gasoline, provided we make this addition to our distillation unit; which, as I testified a while ago, was badly needed, corresponding to the increased quantities of gas which we

anticipate may come into the Liberal station due to the increased load.

Q. And that will substantially increase the revenues derived from the sale of that gasoline?

A. Depending on the price of gasoline at that time, [fol. 6038] there will be an increase in revenue.

Q. Well, you naturally would expect an increase in those revenues, would you not?

A. Yes, I believe that is a reasonable assumption.

Q. But you cannot state how much?

A. No, I cannot.

Mr. Goodman: Have you made any estimate, either you or in your department, as to the expected revenues from your gasoline plant operations?

* * * * * * * *

The Witness: We have made no studies nor estimates as to the revenue, to my knowledge.

Mr. Goodman: Have you made an estimate of the quantities of gasoline which will be derived?

The Witness: We know, roughly how much gasoline we can extract from gas produced in the Hugoton Field and gas produced in the Texas Panhandle Field.

Mr. Goodman: What are those quantities?

The Witness: The Texas Panhandle runs in the order from 350 to 400 gallons per million cubic feet. The gas in the Hugoton Field, as I remember, runs in the order of [fol. 6039] 300 gallons per million cubic feet.

By Mr. Littman:

Q. Now, Mr. Burnham, do you expect all of these capital additions which you have set forth under the heading for the year 1942 to be installed in that year in the light of present conditions and bearing in mind that when you first submitted this estimate; you did so some months ago?

A. Yes, I do.

Q. You still expect each and every one of these items to be installed this year? A. Yes, I do.

Q. Now, is that a reasonable expectation or is it a hope on your part that they will be installed?

A. As you just previously stated, bearing in mind that there may be some difficulties getting materials; bearing in mind that some of these contracts, particularly the contract for the Bloomington line may not be consummated, I believe that it is a very reasonable assumption that we shall do all this work in the year 1942.

That is all based on the fact that during the past few weeks, it was demonstrated in no uncertain way that we do need these main line additions and we do need the additions to our gasoline and dehydration plant; that we do need the telephone line east or will need it.

It is also to be remembered, too, that a great deal of this [fol. 6040] work is already under construction. That particularly concerns the items shown under the year 1941.

Q. But does not refer to the items shown in the year 1942 with the exception of the South Michigan West Line?

A. That is correct.

Q. That is the only item for 1942 involving actual construction at this time?

A. That is correct.

Q. Now, passing to the items shown for the year 1943, the first which is shown in Line 17 is "Additions to Compressor Stations" in the amount of $3,482,800, will you state the nature and description of these contemplated additions, their locations and amounts for each?

A. The looped lines will have been completed by the fall of 1942 and, therefore, additional capacity can be made available in 1943 by the installation of more compressor units in various compressor stations up and down the system.

The expenditures in 1943 as shown in Line 17, involve the installation of two 1,300 horsepower Worthington gas engine driven compressors at Tuscola compressor station;

Two 1,300 horsepower similar units—

Q. (Interposing) Will you please give us the amounts as you go along, or would it be more convenient for you to give those later?

A. The total amount has not been revised, so I would [fol. 6041] much prefer to refer to the total. However,

I do have the details of each one here if you wish to have them read to you.

Q. Yes, I think we ought to have the amounts for each if you are able to give them to us.

A. They are in my working papers that you handed me yesterday, so I will have to refer to them.

The estimated cost of the addition to Tusola compressor station is $364,000.

Q. Now, that includes the cost of the equipment plus the cost of installation?

A. Including also the cost of extending the building; extending the cooling tower; installing the necessary pipe, valves and fittings to accommodate these two new units.

Q. Wherever the work involves the extension of the building and so forth, I wish you would please state it as you go along.

A. Very well.

As I was about to state, the work to be conducted in 1943 involves the installation of two similar units as those to be installed at Tuscola at Pleasant Hill compressor station.

In addition to the installation of the two 1300 horsepower compressor units at that station, the building must be extended; the cooling tower enlarged; the necessary pipe; valves and fitting installed.

[fol. 6042]. The total cost of the addition to Pleasant Hill station is estimated at $358,800.

Centralia station is the next station on the system that must be enlarged to take care of the increased requirements for the winter of '43 '44.

Three 1300 horsepower units will be required at this compressor station involving, among other things, an extension to the building; the enlargement of the cooling tower; the total cost of which is estimated at $526,500.

Q. Did you state that these compressor engines were Worthington engines? A. That is correct.

Q. What type of engines are these?

A. The engines are twin tandem horizontal engines direct connected to the compressor cylinders.

Q. That is true of all the engines involved in the 1943 construction? A. That is true.

Q. Will you please proceed with your description?

A. At Houstonia station, we shall require the installation of two 1300 horsepower Cooper-Bessemer gas compressor units of similar type to those mentioned in connection with the three eastern stations.

The installation of these two units at Houstonia will involve, of course, the extension of the main building; the [fol. 6043] extension of the cooling tower; the installation of various valves, fittings and certain pipes. The cost is estimated at $351,000.

At Louisburg station, the increased load to be experienced will require the installation of two 1000 horsepower Cooper-Bessemer units and will involve also the extension of the main building; certain additions to the cooling tower equipment as well as changes in the pipe, valves and fittings.

We estimate this cost at $280,000.

At Olpe compressor station, we shall have to install three 1300 horsepower Worthington units.

Q. What horsepower?

A. Three 1300 horsepower, making a total of 3900 horsepower and which will involve an addition to the main building; an addition to our cooling tower equipment; and changes in the yard piping, involving the installation of a considerable quantity of new pipe, including valves and fittings.

Q. What is the amount?

A. I beg your pardon, the total amount which we estimate will be required at Olpe compressor station is $487,500.

At Haven compressor station, we shall require the installation of three 1300 horsepower Cooper-Bessemer units which will also involve a substantial addition to the main building; an increase in our cooling tower capacity, as well [fol. 6044] as the installation of certain valves, pipe and fittings to accommodate these three new units.

The total cost of this addition is estimated at $487,500.

At Greensburg compressor station, there will be installed three 1300 horsepower Cooper-Bessemer units involving a substantial addition to the main building, to the cooling tower, and to the existing yard piping. The total cost of this addition is also estimated at $487,500.

At Liberal compressor station, one new 1000 horsepower Cooper-Bessemer unit will be required. The main building will be extended and certain additions will be made to the cooling tower equipment as well as to the piping and valves in the yard. The total cost of this addition is estimated at $140,000.

I believe that the sum of the figures that I have just testified to give us the total on Line 17, namely, $3,482,-80).

Q. Yes. These are the only additions for the year 1943 which would affect the capacity of the system, is that correct?

A. Assuming that the gas will be made available at Liberal compressor station, that is correct.

Q. Now, what do you expect to be the capacity for 24 hours of your system after these 1943 capital additions are installed?

[fol. 6045] A. We shall have a peak day sales or delivery capacity of 355,800,000 on a 24-hour basis.

Mr. Culton: That would give a little leeway on Mr. Morton's estimate of 343 million. In other words, you will be on the safe side for his 343 million peak in 1943?

The Witness: I think you should refer to his 1944 peak. The 1943 peak that he has estimated will occur during the winter of '42-'43.

Mr. Culton: Would you still be able then to take care of his peak in 1944 of 367 million?

The Witness: We designed for Mr. Morton's peak after having deducted certain readily interruptible gas.

Mr. Culton: After taking care of the interruptible, you will be able to take care of the 367 million?

The Witness: That is correct.

By Mr. Littman:

Q. You testified yesterday, Mr. Burnham, that the installation of the capital additions set forth in Exhibit 47 for the year 1942 will bring your total 24-hour capacity to 330,000 M.c.f.

Now, do I understand that the addition of all of this compressor station equipment and additions for the year 1943 will only raise that an additional 24,800 M.c.f. per 24 hours?

A. That is correct, with the possible exception that the record shows that we will have, at the end of 1942, a ca- [fol. 6046] pacity of 331 million rather than 330 million.

Q. In other words, the expenditure of $3,482,800 for additional compressor station equipment and facilities for the year 1943 will raise or increase the 24-hour capacity of the system by 24,800 M.c.f.?

A. That is correct.

Q. What stage has been reached in the construction of the additions to the compressor stations set forth in your Exhibit 47 for the year 1943?

A. They are only in the estimate stage.

Q. Have those estimates yet been submitted to the management?

A. Only in so far as the papers and estimates in connection with this rate case have, of course, been available to the management.

Q. The next item for the year 1943 is, "Additions to Gasoline and Dehydration Equipment". Will you give us a description of that item?

A. That item involves the new distillation unit in regard to which I was testifying a moment ago.

We are debating whether or not that distillation unit should be installed in the year 1942 rather than in the year 1943 so the money there involves the distillation unit referred to previously as well as the necessary additional contractors and the increasing of our pumping equipment at [fol. 6047] the gasoline and dehydration plant, as well as other necessary changes involved in taking care of the increased quantities of gas which must necessarily be treated in this plant.

Q. Has this item passed the estimate stage?

A. No, it has not.

Q. And the estimates have not yet been submitted to the management except for rate-making purposes?

A. No, I would say that it has gone a little farther than that. We have discussed the matter very seriously with Mr. Neuner, Vice President in charge of operations.

Q. But it has not yet been submitted to the Board of Directors for approval?

[fol. 6048] A. No, it has not.

Q. Now, going to the year 1944, you show in Line 24 of your exhibit 47, an item entitled, "Additions to Main Lines" in the amount of $6,228,600. Will you give a description of those main lines?

A. This item reflects the beginning of the construction of the third line or loops which will ultimately constitute a third line.

Our flow studies indicate that, starting at the east end of our system, we shall not need to do any looping east of Glenarm compressor station.

However, between Pleasant Hill and Glenarm stations, we shall be required to install 10.85 miles of 26-inch O. D. by 9/32 wall pipe at a cost of $30,000 a mile, amounting to $325,500.

Between Centralia and Pleasant Hill compressor stations, we shall be required to install 22.64 miles of 26-inch pipe at an estimated cost of $679,200.

Q. Are these distances which you are stating the total distances between the two compressor stations?

A. No, they are only the lengths of the new loops which will be built alongside the then-existing two lines which new loops will give us an increase in capacity sufficient to carry the anticipated loads of the winter of '44-'45.

Q. Will you designate on the map the point at which [fol. 6049] each of these loops will start and terminate?

A. As I just stated, we shall require no looping east of Glenarm compressor station to carry the estimated load. However, the load does require certain additions between Pleasant Hill and Glenarm stations and the new loop will start at Pleasant Hill compressor station.

That is the Pleasant Hill loop that I referred to a moment ago and will proceed eastwardly for a distance of 10.85 miles where we now have a main line gate valve installed with the proper interconnections which will make it possible to tie in the end of this new loop and to put it into operation immediately upon the completion of that construction.

That new loop, as I have just stated, will permit the transportation of additional quantities of gas between Pleasant Hill and Glenarm station which additional quantities will be required, according to our studies.

Q. How much additional gas will you be enabled to transport between Pleasant Hill compressor station and Glenarm compressor station by the addition of this 10.85 miles of 26-inch pipe?

A. In round numbers and giving consideration to the fact that we are going to put in another 1000 horsepower unit here at Glenarm compressor station during that same year, approximately 20 million cubic feet per day.

Q. Now, will you give us the same information for the [fol. 6050] Centralia loop?

A. The Centralia loop will originate at Centralia compressor station. It will proceed eastward for a distance of 22.64 miles, paralleling the existing double line out of that station and will be tied in at its eastern terminus to a now-existing main line gate valve and upon completion of that construction will be put into operation immediately.

The effect of building that loop between Centralia and Pleasant Hill will increase our capacity in round numbers, as I stated before, some 20 million cubic feet per day.

Q. And the estimated cost of this particular loop is $679,200? A. That is correct.

The next loop that will be required will be between Houstonia and Central compressor station and will originate at Houstonia compressor station and will proceed eastward for a distance of 27.25 miles where it will be tied in to the existing double line and will thereby increase our capacity, in round numbers, between 20 and 25 million cubic feet per day.

Q. What is the estimated cost of that line?

A. The estimated cost of that line is $785,182.

Q. Will you give us the next one?

A. The next loop which we will require will be a rela-
[fol. 6051] tively short one and will lie between Louisburg and Houstonia compressor stations.

* * * * * * * * *

Q. What is the estimated cost of that line?

A. The estimated cost of that line is $261,139

Q. What is the estimated increase in capacity between Louisburg and Houstonia compressor stations by reason of the building of that loop?

A. The capacity will be increased, considering the fact that we will install some additional power at Houstonia compressor station during the same period, in round numbers, between 20 and 25 million cubic feet per day.

* * * * * * * * *

[fol. 6052] Q. Will you proceed with your description of the additions to main lines for the year 1944?

* * * * * * * * *

A. The next loop required lies between Olpe and Louisburg compressor stations. It involves the construction of 23.7 miles of 26-inch pipe at an estimated cost of $680,451.

* * * * * * * * *

Q. What additional amounts of gas will the installation of this loop enable you to carry?

A. In round numbers, approximately 25 million cubic feet.

In this loop there is involved a new river crossing at the Neosho River some ten miles east of Olpe compressor station. We propose to build in this new river crossing four 16-inch submerged lines.

The total length of the river crossing is 3.42 miles and its cost is estimated at $209,988.

[fol. 6053] The next loop to be built lies between Haven and Olpe compressor stations and involves the construction of 41.02 miles of 26-inch pipe line.

This loop will originate at Haven compressor station. We will cross the Arkansas River a short distance from the station and it will be tied into the existing double-line system at a terminus some 41 miles east of the station.

The total cost of this loop is estimated at $1,263,621.

Involved, also, in this loop is a new river crossing at the Arkansas River. It will be constructed of four 16-inch submerged lines, the distance from header to header being 1.13 miles.

The total cost of this river crossing will be $69,382.

The next loop lies between Greensburg and Haven compressor stations.

Q. Before going to the next loop, will you please state the amount of additional gas that will be enabled to be transported between Haven and Olpe stations by reason of the new loop?

A. The additional gas will be in the order of 30 million cubic feet per day.

The next loop to be constructed will lie between Greensburg and Haven compressor stations and will consist of 34.36 miles of 26-inch pipe.

It will originate at the Greensburg station and will pro- [fol. 6054] ceed westward and will be tied in at its terminus into the existing double-line system.

The total cost of this loop is estimated at $1,013,606.

Q. And what is the additional amount of capacity by reason of this loop?

A. Roughly the capacity will be increased by approximately 30 million cubic feet.

The next loop to be constructed will lie between Liberal and Greensburg compressor stations and will involve the construction of 31.82 miles of 26-inch pipe line at a cost of approximately $940,535.

This line will originate at Liberal compressor station and will proceed eastward for the distance mentioned where it will be tied into the existing double-line system. The increase in capacity which will result from the con-

struction of this loop will be approximately 30 million cubic feet per day.

Q. Does that complete your item shown in Line 21 of Exhibit 47? A. It does.

Q. Will you go to the next item which is shown in Line 22, "Additions to Compressor Stations" for the year 1944?

A. During this year it is possible to take advantage of some of the power that we estimate will be installed the previous year.

[fol. 6055] In other words, we are balancing the pipe on these loops against the power previously installed and it will be necessary to build only three compressor station additions during the year 1944.

Q. Now, where will those be built? Please give us a description of the additions.

A. Starting at the east end of the main line system, we shall install at Glenarm compressor station one 1000 horsepower Cooper-Bessemer gas compressor unit involving an addition to the main building, the extension of our present cooling tower equipment and the addition to certain piping in the year.

The total cost of such addition we estimate will amount to $140,000.

At Houstonia compressor station we shall install one 1300 horsepower Cooper-Bessemer gas compressor unit.

Q. And what is the estimate for that item?

A. We estimate the total cost will be $175,500. It involves in addition to the installation of the 1300 horsepower unit an extension to the main building and certain additions to our cooling tower and to the piping in the yard.

The next compressor station addition proceeding westward is that of a 1000 horsepower Cooper-Bessemer unit at Liberal compressor station involving, among other things, the extension to the main building, the extension [fol. 6056] of the present cooling tower and certain additions to piping in the yard. The total cost of these additions is estimated at $140,000.

Q. Now, that completes the estimated additions for the year 1944. I presume that none of this has passed the estimating stage, has it? A. That is correct.

Q. And none of it has been submitted to the management? A. That is correct.

Q. Who requested you to make the estimates for the year 1944 which are shown in your Exhibit 47 in Lines 21 and 22?

A. I don't recall what individual requested me to do that, but I do remember that it was my assignment when the studies were undertaken.

Q. When did you first undertake to make your estimate for the year 1944, approximately?

A. In the month of September.

Q. Of 1941? A. Correct.

Q. Had you ever previously made an estimate of capital additions for the year 1944? A. No, sir.

Q. Is it customary for you or your department to make estimates that far into the future? A. No, sir.

[fol. 6057] Q. What is your customary practice in that regard?

A. The customary practice is to make these estimates one year in advance of the required construction.

Q. That is, in the normal course of events, you, as chief engineer of the company, make estimates of capital additions for approximately one year in advance?

A. That is correct.

Q. Were you advised of the purpose of these estimates, which extended beyond the year in advance?

A. I beg your pardon?

Q. Were you advised of the purpose for which this estimate shown in Exhibit 47 was to be prepared?

A. Yes, I think I knew the purpose.

Q. What was the purpose?

A. The purpose was in order to present the data to this Commission during this rate hearing.

Q. And for this rate proceeding? A. Yes, sir.

Q. Now, am I correct in understanding that none of the estimates of capital additions for the year 1944, which are shown in your Exhibit 47, have been submitted to the management of Panhandle Eastern for construction purposes? A. That is correct.

Q. And it is, also, true of the amounts shown for the [fol. 6058] year 1943? A. That is correct.

Mr. Culton: Those have all been discussed with the President and Vice President, have they not?

The Witness: Yes. As I mentioned a moment ago, the management is familiar with our requirements through the future years due to their having examined these papers and so forth.

By Mr. Littman:

Q. And your statement to the effect that the estimates of additions have not been submitted as yet to the management of the company for construction purposes would apply to those set forth for the remaining years, to-wit, 1945 and 1946? A. That is correct.

Q. Before going to the year 1945, I wish you would state the amount of additional capacity which will result from the installation of the capital additions shown for the year 1944 in Lines 21 and 22 of Exhibit 47.

A. The capacity will be increased by approximately 25 million cubic feet per day. When I say "capacity" that means the sales or delivery capacity.

Q. Inasmuch as you have previously testified that as of the end of the year 1943 you would have a 24-hour capacity of 355,800 M.c.f., the increase resulting from the installation of the 1944 additions would result in a total [fol. 6059] capacity as of the end of 1944 of 380,800 M.c.f.?

A. That is approximately correct. The figure that I have used is 380,450 M. c. f. I am referring to the study that was made when it was determined that these loops and compressor station additions would be required in the year 1944.

Q. Now, in Line 25 you show an item for the year 1945 of "Additions to Main Lines" in the amount of $6,329,600. Will you please describe the additions embraced by that item?

* * * * * * * * *

[fol. 6060] A. Starting at the east end of the system, the first loop to be constructed will be between Tuscola station and the terminus of the line at Dana, Indiana.

It will originate at the discharge side of the Tuscola compressor station and will extend eastward for a distance of 14.72 miles and will be constructed of 26 O. D. by 9/32 wall, electric weld pipe.

Q. What is the estimated amount of that section?

A. $441,600.

Q. What is the estimated increase in capacity between Tuscola and Dana by reason of the installation of this third loop?

A. Between 40 million and 50 million cubic feet of gas per day.

Q. What is the next one?

A. The next loop to be constructed in the year 1945 lies between Glenarm and Tuscola compressor stations and will consist of 17.08 miles of 26 inch 9/32 wall, electric weld [fol. 6061] pipe and will extend from the discharge side of Glenarm station eastward for the distance mentioned where, at its terminus, it will be tied into the existing double line system.

The total cost of this loop will be $512,400. The additional capacity, considering power to be installed in both Glenarm and Tuscola stations, will be in the order of from 40 million to 50 million cubic feet per day.

The next loop will be constructed between Pleasant Hill and Glenarm compressor stations and will consist of 25.61 miles of 26 inch pipe line involving a total cost of $768,300 and will result in an increase of capacity in the order of 40 million to 50 million cubic feet of gas per day.

Q. Where does this line begin and where does it terminate?

A. The Pleasant Hill loop to be built in the year 1945 will originate at the eastern terminus of the Pleasant Hill loop constructed the previous year.

Q. Which is a point 10.3 miles east of Pleasant Hill?

A. That is correct.

Q. And where will it terminate?

A. 25.61 miles east of the eastern terminus of the loop constructed the previous year.

I think I was wrong in saying that it began—did I mention the fact that it had begun at Pleasant Hill compressor station?

[fol. 6062] Q. Will you please go to the next loop for the year 1945?

A. The next loop will be between Centralia and Pleasant Hill and will consist of 22.51 miles of 26-inch pipe line construction and will cost $675,300.

It will begin at the eastern terminus of the loop line constructed the previous year and will extend eastward for the distance just mentioned where it will be tied into the existing double-line, main line system.

The increase in capacity will be in the order of 50 million cubic feet per day.

The next loop to be constructed will lie between Houstonia and Centralia compressor stations and will involve the building of 12.16 miles of 26-inch by 9/32 wall pipe line at an estimated cost of $350,378.

Involved in this loop will be a new river crossing at the La Mine River, consisting of four 16-inch solid-welded submerged lines, extending for a distance of 1.15 miles from bank to bank or, rather, from header to header, costing $70,610. The increase in capacity involved or resulting [fol. 6063] from the construction of the Houstonia loop in connection with other loops and power to be installed will amount to approximately 50 million cubic feet per day.

The next loop to be constructed in the year 1945 will lie between Louisburg and Houstonia compressor stations and will involve the installation of 22.57 miles of 26-inch pipe at an estimated cost of $695,856.

It will commence or begin at the eastern terminus of the Louisburg loop built the previous year and extend eastward for the distance just mentioned, where it will be tied into the existing double-line system.

The increase in capacity resulting from construction of this loop in combination with the other loops to be constructed and power to be installed during the same year will be in the order of 50 million cubic feet per day.

The next loop to be installed will lie between Olpe and Louisburg compressor stations and will consist of 23.69 miles of 26-inch pipe line.

Its cost is estimated at $680,164. The construction on this loop will commence at the eastern terminus of the 26-inch loop built the previous year and will extend eastward for the distance just mentioned at which point it will be tied into the existing double-line system.

The increase in capacity resulting from the construction of this loop in combination with other loops and compressor [fol. 6064] station additions will approximate 55 million cubic feet per day.

The next loop to be constructed will be between Haven and Olpe compressor stations. It involves the construction of 24.24 miles of 26-inch by 9/32 wall pipe from the eastern end of the loop built the previous year and extending for the distance just mentioned to a point on the existing double-line system where it will be tied in and in combination with the other loop built during the same year and compressor station additions installed will result in an increase in capacity approximating 55 million cubic feet per day.

Q. What is the estimated cost of that line?

A. The estimated cost of the loop just referred to is $746,713.

The next loop involved in the 1945 construction program lies between Greensburg and Haven compressor stations and will consist of 23.15 miles of 26-inch pipe line extending from the eastern end of the loop built the previous year.

At its terminus it will be tied into the existing double-line system and the capacity of the system resulting from the installation of this loop in combination with other loops and compressor station additions will amount to approximately 55 million cubic feet per day.

It is estimated that this loop will cost $680,934.

The next loop lies between Liberal and Greensburg sta- [fol. 6065] tions and will be 23.93 miles long. It will, also, be constructed of 26-inch by 9/32 wall pipe at a cost of $707,323. The capacity increase resulting from the construction of this loop in combination with other loops built the same year, as well as compressor station addi-

tions added, will result in an increase of capacity of approximately 55 million cubic feet per day.

Q. Now, the 55 million cubic feet figure which you have just given applies to the additional capacity which will result from the installation of the main lines and compressor stations shown in Lines 25 and 26 of Exhibit 47 under the year 1945? A. That is correct.

Q. And that would bring your total capacity as of the end of 1945 to 435,450 M.c.f.?

A. Well, I am sorry, but in working this increase in sales capacity back toward the west end of our system I have mentally added a small amount to cover compressor station fuel.

If you will note, I started off stating that our capacity on the east end of the system will be increased in the order of 50 million and, as I worked backwards down the system I added a small amount for fuel.

I might give you the total figure which represents the sales capacity which will result from the building of all [fol. 6066] these loops and the compressor station additions in regard to which I am about to testify.

The total sales capacity or delivery capacity in the year 1945 at the completion of the construction program for that year will be 429,900 M.c.f.

Q. That is an increase of 49,450,000 cubic feet over the previous year's capacity?

A. That is correct.

Q. Now, the next item shown for the year 1945 is "Additions to Compressor Stations", in the amount of $627,500. Will you describe those capital additions?

Mr. Goodman: Before you answer that question, if I may interrupt, I require some clarification here as to what you mean by your figures for total sales capacity.

I wonder if you don't mean the maximum day?

The Witness: The sales capacity, of course, is involved with maximum day.

Mr. Goodman: In other words, that is the figure for your maximum day delivery capacity. That is what you mean, isn't it?

The Witness: That is correct, on a continuous basis.

Mr. Goodman: I understand. That is all.

By Mr. Littman:

Q. Well, Mr. Burnham, Mr. Morton estimated in Exhibit 40 that the peak day requirement for the year 1945, [fol. 6067] which means the winter of 1944, is 392,450 M.c.f.

Now, you will have installed, as of the year 1945, 429,000 M.c.f. Is that correct?

A. No, I cannot agree with you. Mr. Morton's peak day estimate of some 392,450 cubic feet is his estimate under the year 1944 and that is the peak day which will be experienced in the winter of 1943.

Wait a minute. It occurs under the column "1945" and that will be the peak day experienced during the winter of 1944-1945.

Q. That is shown in column "G" of Exhibit 40, is it not?

. . . . . .

Mr. Wheat: Isn't it a fact that during the year 1945 you have to prepare for the peak of the winter 1945-1946?

The Witness: That is the correct answer, you might say.

. . . . . .

Mr. Wheat: And that is why you would necessarily during the calendar year 1945 raise your capacity to a greater amount than is shown on Exhibit 40 of the Witness Morton in Column "G" under the heading "1945" which means the winter of 1944-1945. Is that true?

[fol. 6068] The Witness: That is correct.

By Mr. Littman:

Q. In other words, if I correctly understand your testimony, you are installing capacity by way of additions to main lines, compressor stations and so forth in the year 1945 in order to meet Mr. Morton's estimate shown in Column "H" of Exhibit 40 for the year 1946, to-wit, 441,900 M.c.f.?

A. That is correct.

Q. It doesn't look like you are going to meet it, does it, according to this estimate of 429,900 M.c.f. which you stated was going to be the total sales capacity installed by your capital additions through the year 1945?

A. Mr. Morton's estimate of the peak day is high in the sum of 12 million cubic feet of gas which we consider as readily interruptible.

In other words, it is being sold to industrial plants that can use other fuel and for that reason we do not design capacity to carry such a load as that over the peak day periods.

You will find that true for each of the winter periods that I have just been testifying to.

Q. In other words, your capital additions are installed with a view to meeting the non-interruptible gas, that is, the household gas, industrial and domestic requirements of the system and not the interruptible industrial load?

A. More properly it might be defined as not the highly [fol. 6069] or readily interruptible industrial load. We have industrial contracts with industries which are now engaged in the manufacture of material made for war purposes and we do not consider them highly interruptible although the contract does permit the interruption or curtailment of supplies of gas to these industries.

Now, therefore, we have in these studies reflected the effect of interrupting only those industries which can readily change over to some other form of fuel.

* * * * * * * * *

[fol. 6070] Q. Mr. Burnham, you have not given us the description of the additions to compressor stations for the year 1945 shown in your Exhibit 47 in Line 26 in the amount of $637,500.

Will you please proceed to give us a description of those additions?

A. In addition to the looped lines which we will be required to build in 1945 in order to carry the increased demands we expect to have made on this system, we shall install at Tuscola compressor station one 1300 horsepower

Worthington gas engine driven compressor at a cost of $182,000.

This cost will include an extension to the main building in addition to the cooling tower and certain additions to the year piping.

At Glenarm compressor station—

Q. (Interposing) What is the additional capacity contemplated to be brought out by the installation of that one [fol. 6071] 1300 horsepower Worthington compressor engine?

A. As I testified this morning, in combination with the loops to be built the same year and in combination with additional units to be installed in three other compressor stations, our capacity will be increased, that is, sales capacity will be increased approximately 50 million cubic feet per day.

Q. Will you proceed with the next item of compressor station additions for the year 1945?

A. At Glenarm compressor station, we shall install one 1000 horsepower Cooper-Bessemer unit and, at the same time, extend the main building and make certain additions to the cooling tower and yard piping.

The total cost of this addition is estimated at $140,000. In combination with loops built the same year and certain additions made to other compressor stations, the increase in capacity will be in the order of 50 million cubic feet per day.

At Houstonia compressor station, we will be required to install in 1945 one 1300 horsepower Cooper-Bessemer compressor unit at an estimated cost of $175,500 which figure includes the cost of extending the main building, extending the present cooling tower and building certain additions to the existing piping system in and about the compressor station. The capacity increase—

Q. (Interposing) You do not need to repeat that each [fol. 6072] time. What you have heretofore said would apply to each of these, would it not?

A. That is correct.

Q. With respect to the increase in capacity?

A. That is correct.

At Louisburg compressor station, we will install one 1000 horsepower Cooper-Bessemer compressor unit at an estimated cost of $140,000.

This cost included the investment involved in extending the main building to accommodate this new unit and making certain additions to the cooling tower and yard piping.

Q. Proceed with your description of these compressor stations.

A. That is the extent of the compressor station additions which we estimate will be required in the year 1945. I am now referring, of course, to compressor stations east of Liberal station, including Liberal station itself.

Q. Are there to be any additions to the Liberal station in this year of 1945?

A. No.

Q. Now, I note, Mr. Burnham, that in the preceding year 1944, you expect to install one 1300 horsepower Cooper-Bessemer engine at Houstonia and that you plan to do the same thing in the next year, that is, in 1945. Is that correct?

[fol. 6073] A. That is correct.

Q. And in each of those years, you extend the building and rearrange the piping and so forth in order to accommodate the installation of one additional engine, is that correct?

A. That is correct except I do not like your choice of words when you say, "rearrange the piping". It merely means to extend the piping.

Q. Well, in the preceding year, that is, in 1943, you install two 1300 horsepower Cooper Bessemer engines, do you not?

A. That is correct.

Q. Now, why wouldn't it be more economical to do all of that work in one year than to go in each successive year and extend the building each time?

A. Well, there is considerable expenditure involved in each of these additions and while it is true that possibly the contractor could execute this work all at one time a little more efficiently than in steps such as I have indicated, nevertheless, the labor involved in installing these units is not the greater part of the costs of making the additions.

The cost of the unit itself and accessory equipment represents the greater part of the cost of making the addition.

We feel that it is economy for the company to proceed in [fol. 6074] the manner that I have indicated, spending its money and making its capital expenditures in the summer of the year preceding the winter for which we need this additional capacity.

Q. You mean to say, then, that if you knew for a certainty in 1943 when you went about increasing the capacity of the Houstonia station, that you were going to have to have four 4300 horsepower Cooper-Bessemer engines in order to meet the load which you knew you were going to have to meet in 1945, that you would not install all four of them at one time in 1943 but would proceed to install two in 1943 and then extend the building in 1944 and install one more and then extend the building in 1945 and install the fourth one?

Is that a correct interpretation of your testimony?

A. Yes, sir, but I did not finish a while ago. We have such things as that in mind when we are making these present additions today.

We install a temporary wall in the end of these buildings, that is in the end of the basement, which makes the extension of the building a rather simple matter and the retirements which necessarily follow the destruction of the temporary wall are only nominal amounts.

Q. Do any of your costs in Exhibit 47 include the retirements? A. Yes, sir.

[fol. 6075] Q. Do you have those amounts separately shown?

A. I do not. They are, as I said before, only nominal. I have retirements as shown in my working papers covering the additions to Tuscola, Glenarm and Pleasant Hill compressor stations which have only recently been completed but due weight was given to the retirements which take place in subsequent additions to compressor stations.

Q. What other retirements have you included in your amounts shown in Exhibit 47?

A. The only retirements I have given weight to are the retirements of these temporary walls that we now install in the end of these compressor stations which compressor stations will be extended from year to year.

Q. Now, the situation which I have described with respect to Houstonia compressor station is also true of other compressor stations, is it not?

A. Yes, but it is not quite so apparent on the other compressor stations.

Q. How about Glenarm? You install one 1000 horsepower Cooper-Bessemer engine in 1944 and then you install another 1000 horsepower Cooper-Bessemer engine in 1945, do you not?

A. Yes, that is true. But take, for instance, Pleasant Hill compressor station. We install one 1300 horsepower unit in 1942; two 1300 horsepower units in 1943 and that [fol. 6076] completes the story for Pleasant Hill compressor station.

The same is true of Centralia compressor station, in which we install two 1300 horsepower units in 1942 and three in 1943 and no further additions are made to that station.

It just happens that in the case of Houstonia compressor, the size of the pipe is such and other matters relating to the load that we do not feel warranted in installing this extra unit prior to the time when it would actually be in use.

We thereby save the interest on the money which is involved and possibly the little extra operating expense that might be required in keeping the unit in ship-shape condition.

Q. Now, the next item you have for 1945 is shown in Line 27, Exhibit 47, "Additions to Gasoline and Dehydration Equipment."

Are those additions to be installed at the Liberal station, according to your estimate?

A. They are.

Q. Will you give a description of those additions?

A. Those additions shown in the year 1945, amounting to $120,000, are practically a duplication of the additions made in the year 1942 as shown on my Exhibit 47.

It consists of two new absorber-contactors; one new boiler; the necessary piping, valves and fittings; insulation and so forth, as well as an extension to the boiler [fol. 6077] house building.

To arrive at the $120,000, I used the same estimate that I used for the year 1942, inasmuch as the increase in the quantity of gas handled through Liberal station indicated that approximately the same increase in gas treating capacity would be required.

Q. And undoubtedly the additions to the gasoline and dehydration equipment in the year 1945 would result in additional revenues derived from the sale of gasoline from the Liberal gasoline plant, is that correct?

A. It would result in additional gross revenue, no doubt.

Q. And it might very well result in additional net revenue, might it not?

A. Depending upon operating expenses.

Q. Now, that completes the capital additions comprehended by your Exhibit 47 through the year 1945. Am I correct in understanding, Mr. Burnham, that at that time, to-wit, at the end of 1945, you will have met the peak day requirements contemplated by Mr. Morton's Exhibit 40 for the year 1946 in the amount of 441,900 M.c.f. except for the readily interruptible industrial load to which you alluded in your testimony late in this morning's session?

A. That is correct.

Q. Going now to the capital additions set forth in Ex- [fol. 6078] hibit 47 for the year 1946, I note that the first item is shown in Line 30 as "Additions to Main Lines" in the total amount of $2,388,100. Is that correct?

A. That is correct.

Q. And also I notice that you have some additions to compressor stations in that year in the amount of $1,229,500, is that correct?

A. That is correct.

Q. What peak are you undertaking to meet now by the installation of these additional facilities?

A. We are undertaking to meet the peak of the winter of '46-'47. The estimate for that winter's peak does not appear—

Q. (Interposing) Does not appear in Exhibit 40, does it? A. That is correct.

Q. Nor does it appear anywhere else in this record, so far as I know, Mr. Burnham. I say that for your information.

A. It is incorporated in my working papers but possibly not on the record.

Q. Well, it is not in your testimony at any rate, is it, that is, any estimate of peak—

Mr. Wheat: (Interposing) Why don't we ask him what it is, if he has got it?

[fol.6079] Mr. Littman: I am not going to ask him what it is unless it is his estimate.

By Mr. Littman:

Q. Is it your estimate?

A. No, it is not.

Q. Of course, you cannot vouch for it, can you?

A. Except I have confidence in Mr. Morton's ability to make these estimates.

Q. I understand that. You have already expressed yourself on that subject.

At any rate, am I correct in understanding that the additions to the main lines in 1946 which are shown in Line 30 of your Exhibit 47 will complete the third loop of the main line east of Liberal station to Dana?

A. I am sorry that, off the record this morning, I indicated to you I would do so but I find now by referring to my working papers that at the conclusion of our construction program in 1946, the third line will be 66 percent completed or the loop constituting the third line will extend over 66 percent of our total distance from Liberal to Dana.

Q. At the end of 1946?

A. That is correct.

Q. Suppose you give us a description of the items comprehended by—

Mr. Culton: (Interposing) Mr. Littman, may I correct [fol. 6080] a statement which you made a while back.

You offered in evidence Exhibit 132 which was Mr. Hinton's estimate of the total amount of production which was required. That is, Mr. Hinton furnished it as having come from Mr. Morton and that carries the totals down through 1946, I believe.

You stated that the estimates were not in the record subsequent to 1946 and evidently you had forgotten that exhibit.

Mr. Littman: Well, Mr. Culton, there is no dispute about what is in the record. The only fault I find with your statement is, in the first place, I did not offer that in evidence.

I had it identified and you offered it in evidence, but that is of small moment.

In the second place, Mr. Hinton stands in no different position in regard to that purported estimate than does Mr. Burnham because it is not his estimate nor is it Mr. Burnham's estimate. I think the record is clear.

Mr. Culton: At any rate, while Mr. Hinton was on the stand you told him the record now contains Exhibit No. 132 and Exhibit No. 131 and it does.

Mr. Littman: Of course it contains it.

Mr. Culton: If the record contains it, it is in.

Mr. Littman: There are some figures in there that have not been vouched for by the estimator thereof. Now, if you will call that probative testimony, you are, of course, [fol. 6081] entitled to your opinion on that subject. I would not call it probative testimony because the man who estimated it has not testified with respect to it.

By Mr. Littman:

Q. Well, Mr. Burnham, will you please proceed with your description of the additions to the main lines in the year 1946?

A. By the year 1946, the system has become pretty well balanced in the way of power as compared to pipe and

the loops required to carry the extra quantities of gas will be more or less of the same length.

In fact, they extend only the distance from the last gate valve into which the third line loop was tied the year before to the next interconnecting gate valve.

Another reason that relatively short loops are required during the year 1946 is the fact that we have looped a sufficient quantity of the then-existing system to a point where a considerable amount of capacity is gained by further looping, that is, per mile of further looping.

I think it has been placed in the record here the fact or statement to the effect that when a new loop is started, relatively little additional capacity results from the first few miles of new loops but, as one proceeds to complete that [fol. 6082] loop, particularly after it has extended for half of the distance from one compressor station to another, the gain in capacity becomes accelerated to a great extent.

Therefore, I thus stated the loops required between our various compressor stations to carry this extra quantity of gas which amounts to some 27 million cubic feet per day are relatively short.

Beginning at Tuscola station; or rather beginning at the end of the Tuscola loop, we shall be required to build 9.08 miles of 26-inch pipe line at a cost of $272,400.

Q. Now, all of the 1946 loops, I presume, will be 26-inch pipe?

A. That is correct.

Q. Then we don't need to repeat that again.

A. All right.

Q. Now, we have the 9 miles running east of Tuscola station.

A. That is right.

Q. What is the next one?

A. The Glenarm loop will be extended 8.14 miles at an estimated cost of $244,200.

Q. What is the mileage on that?

A. 8.14. You understand these mileages bring us to the next gate valve.

Q. Yes.

[fol. 6083] A. That is the reason for the fractions indicated in my figures.

The Pleasant Hill loop will be extended 6.34 miles at an estimated cost of $190,200.

The Centralia loop will be extended for a distance of 8.18 miles at an estimated cost of $245,400.

The Houstonia loop will be extended 8.1 miles at an estimated cost of $233,393.

The Louisburg loop will be extended 8.5 miles at an estimated cost of $262,064.

The Olpe loop will be extended 8.27 miles at an estimated cost of $237,440.

The Haven loop will be extended for a distance of 7.88 miles at an estimated cost of $242,743.

The Greensburg loop will be extended 8.05 miles at an estimated cost of $236,783.

The Liberal loop will be extended 7.56 miles at an estimated cost of $223,458.

In totaling the estimated costs of those loops, I have rounded the figure off to the nearest hundred, giving a total of $2,388,400.

Q. Now, will you describe the additions to compressor stations for the year 1946 in the total amount of $1,229,500?

A. A new unit will be installed at Tuscola compressor station consisting of one 1300 horsepower Worthington [fol. 6084] gas engine driven compressor.

The building will be extended, the cooling tower will be increased in capacity and certain additions will be made to the piping in the yard.

The total estimated cost is $182,000 for that work.

At Glenarm compressor station, a new 1000 horsepower Cooper-Bessemer unit will be installed at a cost of $140,000 which figure includes the cost of extending the main building, making certain additions to the cooling tower and yard piping.

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TRANSCRIPT OF RECORD

(Pages 2017 to 2512)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. V.

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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At Louisburg compressor station, a new 1000 horsepower Cooper-Bessemer unit will be installed at an estimated cost of $140,000, including the cost of extending the main building, cooling tower and making certain additions to the yard piping.

At Olpe compressor station, a 1300 horsepower Worthington unit will be installed at an estimated cost of $162,500, which cost includes the necessaary additions to the main building, cooling tower and yard piping.

At Haven compressor station, a new 1300 horsepower Cooper-Bessemer unit will be installed at an estimated cost of $162,500, which figure includes the cost of building certain additions to the main building, the cooling tower and to the piping in the yard.

At Greensburg compressor station, a like unit will be installed and it is estimated that this work will also cost $162,500, which figure, as I have mentioned before, in- [fol. 6085] cludes extending the main building and building certain additions to the cooling tower and yard piping.

At Liberal compressor station two 1000 horsepower Cooper-Bessemer units will be installed at a cost of $280,000, which figure includes extending the main building, enlarging the cooling tower and the making of certain additions to the yard piping.

That constitutes all of the additions to compressor stations to be made in the year 1946. A resume of our additions at the end of that period may be of interest for the purposes of the record.

According to my figures, at the end of 1946 the total horsepower installed in our various compressor stations, beginning at Tuscola station and proceeding westward, will be as follows:

Tuscola—10,900 horsepower

Glenarm—11,000 horsepower

Pleasant Hill—11,700 horsepower

Centralia—13,000 horsepower

Houstonia—13,000 horsepower

Louisburg—13,000 horsepower

Olpe—14,300 horsepower

Haven—14,300 horsepower

Greensburg—14,300 horsepower

Liberal—14,000 horsepower.

[fol. 6086] You will note from these figures that, generally speaking the power increases from the east to the west indicating that considerable quantities of gas are delivered at various points starting at the eastern terminus of our lines and dropping off at various points in Illinois and Missouri.

Q. What will be your total daily capacity as of the end of 1946 after all of the capital additions contemplated by Exhibit 47 will have been installed?

Mr. Culton: You mean peak load?

Mr. Littman: Yes, 24-hour daily capacity which is comparable to those which you have heretofore given.

The Witness: The total sales or delivery capacity will be 457,250 M.c.f. at the conclusion of our construction in the year 1946.

By Mr. Littman:

Q. Mr. Burnham, what studies, if any, did you make to determine that it would be most economical and expedient to install these capital additions in the manner contemplated by Exhibit 47 and as described in your testimony?

A. Do you refer to the size of the pipe and such matters as that?

A. I am referring particularly to your selection of installing loop lines in a given quantity as compared to so much horsepower and, in some years, you install horsepower and no main lines.

[fol. 6087] In other words, what studies did you make to determine the precise manner and method that you have selected for the installation of these capital additions?

A. Well, if I recited all of the studies that we have made in respect to that question, it would take considerable time.

However, I will say this: That it has been our experience and our economic studies made from strictly an academic point of view with no particular designed capacity in mind, indicate that if we maintain a ratio between the suction and discharge of our compressor stations close to 1.6, that the maximum economy will result in the over-all picture of transporting this gas.

That is particularly true of main line stations. I would not say it is true of field stations and, as we make these flow studies which are the basis of my estimates, we determine the amount of looping required in each instance to approximate this ratio that I just mentioned of 1.6.

Mr. Culton: Mr. Burnham, would you tell us just exactly what that ratio means?

The Witness: As I just stated, it is the ratio of the suction to the discharge pressure.

Mr. Culton: How do you determine that?

The Witness: I beg your pardon, that is the ratio of the discharge to the suction.

[fol. 6088] Mr. Culton: Will you get it down so a layman like myself can understand it? How do you determine what that relationship is?

The Witness: I will refer to some of the testimony that I gave last year.

I mentioned the fact that when we set about to make one of these flow studies, we started at Dana, Indiana, with the given quantity of gas to be delivered at that point and with the given pressure to be maintained at that point.

By the application of certain formulae, we worked backwards down the line to the next point of gas delivery.

By Mr. Littman:

Q. Now, just there, you speak of certain formulae. What are those formulae, generally?

A. They are gas flow formulae derived from certain fundamental data which have been used by the industry

for a number of years and to which we have applied certain refinements.

Our experience has shown that the coefficients that we have applied in our calculations come very close to giving the correct answer.

Q. Are these formulae called by a name in the industry?

A. Gas pipe line flow formulae as a group or as a classification.

Now, among them are the formulae developed by T. R. [fol. 6089] Weymouth which, until a few years ago, we used exclusively. The refinement I referred to just a moment ago is an adaptation of Weymouth's Formula to more nearly fit the condition which is experienced when transporting large volumes of gas to large pipe lines and it involves the application of a coefficient developed by a physicist by the name of Nikuradse.

Nikuradse published, a few years ago, a flow formula very similar to Mr. Weymouth's Formula which involved the flow of gas or assumed the flow of gas through a perfectly smooth pipe line under perfect conditions.

By using Nikuradse's Coefficient with a correction factor which compensates for the fact we do not have a perfect line because a perfect line could not be built under any conditions for a long distance, we are able to predict within very close limits the pressure drop along our system, the suction pressures at these various compressor stations in which we are vitally interested and, of course, the pressures at the points of delivery.

Q. Can you determine from the application of those formulae precisely where to install horsepower along your system and precisely whether it is economical to install loop lines rather than compressor stations or vice versa, as a matter of economics?

A. Those formulae constitute tools to determine those things. Of course, the power will be installed at the ex- [fol. 6090] isting compressor stations. The formula gives us the suction pressure at these stations and since our discharge pressures are limited by the maximum working pressure on the line, namely, 300 pounds per square inch gage, we, by means of comparing suction to discharge,

know how closely we are approaching the theoretical ratio of 1.6 which gives us maximum economy.

Mr. Culton: That is what I wanted you to tell us, what 1.6 represents. What two figures do you put together to get your ratio, suction pressure and discharge pressure?

The Witness: Absolute. That means suction pressure expressed in pounds absolute divided into discharge pressure in pounds absolute.

Mr. Culton: That is what I wanted you to give.

The Witness: Now, if we used a ratio or if we let the suction drop so low that a ration of 1.8 might result, the power in each of these stations would increase or the power required at these stations would increase tremendously.

That is, instead of having 14 engines in a row, say, at Liberal station, we might have as many as 25 engines in a row there and the resulting labor, maintenance, cost of fuel and such other items going into the cost of compressing the gas, would amount to a very large figure at that one station.

Well, multiply that by 12 stations and you have a situation which would increase in the transportation of gas in a very uneconomical manner.

[fol. 6091] Mr. Wheat: Do you mean increase the cost?

The Witness: What did I say?

Mr. Wheat: You said increase the transportation of gas.

The Witness: I meant to say, increase the cost of transportation of gas.

Mr. Wheat: Is the converse true, that if you had a pressure situation which resulted in a factor of 1.3 or 1.4, you would have greater cost to get your gas through?

The Witness: Yes. In that event, we would have to have tremendous investments in pipe lines in order that the suction pressure at these stations which would be operating at a ratio of 1.3 would be so high as to result in the ratio between the discharge and the suction of 1.3.

Mr. Wheat: Is this 1.6 figure a theoretical figure or something based on studies of your line which show the most economical point?

The Witness: It is both. It is based on our experience. It is based on academic studies which we have made which indicate that the ratio should be in that order.

Mr. Culton: In other words, pardon me, Mr. Littman, the same principle relates to field lines, does it also, in keeping the pressures on the most economic ratio?

The Witness: The most economic ratio in the field might not be as low as 1.6.

Mr. Culton: Whether it is 1.6 or not, is there a point [fol. 6092] in the field which you find to be the most economic point?

The Witness: There is, and that point is determined by the cost of gas used as fuel in the field and other costs that go into compressing, but principally the cost of fuel.

Mr. Culton: Then in the economical standpoint of pipe lines, it is important to keep the suction pressure at the compressor station high enough so that when it is compared to the outlet pressure, approximately that ratio will result, is that true?

The Witness: Yes, that is true.

By Mr. Littman:

Q. I note in the year 1944 you installed $6,684,100 of additions. In order to secure additional capacity of 24,650 M.c.f. for 24 hours, how do you know that it is economical to spend that much money to take on that additional capacity, or don't you know that?

A. We do know, within certain limits, of course.

Q. While you are at it, please tell me how you go about determining that.

A. I thought I had already told you because we try to stay as closely as possible to this ratio of 1.6. That results in the maximum economy in the over-all picture, according to our studies and our experience.

[fol. 6093] By Mr. Goodman:

Q. Assuming that the work has to be done, is that right?

A. Always.

Q. I see, but isn't that somewhat begging the question? Doesn't whether or not the work is to be done depend upon the economy of doing it?

A. As I understand the way a natural gas pipe line company is operated and I hope I understand it, you have to take care of your markets and, quite naturally, in making these economic studies, I have assumed that there will be no shortage of gas on these cold days.

Q. So that, for the purposes of giving testimony in a rate case, you proceeded to exemplify this taking care of the markets with the exhibit which you have introduced?

A. I would not say that. I say that I was handed certain estimates as to what our maximum requirements would be and I was asked to prepare studies showing the most economical way of serving those markets those quantities of gas indicated in those estimates.

Q. And your testimony is limited to that?

You did not answer.

A. Is that a question?

Q. Yes.

[fol. 6094] A. I assume that this information I have developed would be applicable to any similar situation.

Q. Well, there is nothing in your testimony to the effect that Panhandle Eastern actually contemplates doing this, is there?

A. Well, take the year 1942, we are already doing some of that work.

Q. Yes, but beyond that, you would not make a definite commitment?

A. I have already testified we have not submitted budgets nor have they been approved.

Q. In other words, the situation may arise in which it will not pay you to supply the additional gas as estimated by Mr. Morton?

A. There are a lot of things that can happen. It might come to pass that we may have to supply greater quantities than those shown by Mr. Morton's estimate.

In that event, we will be forced to make greater investments than I have shown here.

Q. Have you prepared estimates in that direction?

A. I have sufficient information so that when I am confronted with one of these estimates of capacity requirements, I can very shortly furnish an estimate of the cost of providing the necessary capacity.

. . . . . .

[fol. 6095] Q. Mr. Burnham, in making your estimates as to the most economical method of adapting your lines to the required capacity, have you taken into consideration any alternative methods of supplying capacity?

A. We have, in the last year or two, given some consideration to developing underground storage and are at the moment engaged in activities which might result in the acquisition of underground storage eventually, but that is more or less an ephemeral sort of matter because underground storage is like oil, it is where we find it. You cannot build it, that is, you cannot build it in any huge [fol. 6096] quantities such as we would require to get any great benefit so if certain gas fields are later acquired by us, assuming they might be acquired, there is a possibility that underground storage might be utilized by this company to get the benefit for its customers.

Q. You have negotiations pending for the acquisition of underground storage, have you not?

A. I understand that we have.

Q. And in what fields do they relate?

A. I think those negotiations involve fields in Michigan.

Q. And what part of Michigan?

. . . . . .

[fol. 6097] The Witness: May I add something. We do know that, as a matter of supplying capacity, Exhibit 47 does reflect, in a positive manner, means by which capacity can be installed without any question about whether the proper kind of a storage field is developed or whether liquified storage can be developed to the extent—

Mr. Goodman: (Interposing) Now, Mr. Burnham—

The Witness: (Continuing) And at the figure that would result in a saving.

. . . . . .

[fol. 6098] By Mr. Goodman:

Q. Now, Mr. Burnham, you mentioned as an alternative means of securing capacity, liquefaction.

To what extent have you considered it?

A. We are following the development of the project at Cleveland, Ohio. That was the first plant ever built in the United States utilizing that principle.

Mr. Littman: That plant is owned by the East Ohio Gas Company, is it not?

The Witness: That is correct.

And should it develop that liquefaction is the answer to this storage problem and should we come to the conclusion that it may result in economies greater than, say, starting our third line, I believe that there is no question but what we may have recourse to liquified storage.

By Mr. Goodman:

Q. Do you have cost figures at your hands here as to the availability of liquefaction?

A. I do not.

Q. But it is something that you have in mind?

A. Yes, sir.

Q. And it looks to you as a distinct possibility worthy of being kept in mind?

A. I would not go as far as to say a distinct possibility. It is a possibility.

[fol. 6099] Q. At any rate, here is one concern which saw fit to liquefy gas in preference to putting in pipe line carrying capacity.

A. I do not know as to that because that same concern is now considering the building of a new pipe line into that area.

I would conclude that possibly their desire to build another pipe line into that area might be prompted by the fact that liquefied storage did not entirely solve their problems.

Q. I presume so, and they may need more capacity.

Mr. Littman: Pardon me for interrupting there, Mr. Goodman, but I should like to inquire from where to where is this proposed line expected to run?

The Witness: The information I have is only hearsay, but I understand it is to originate in the midcontinent, possibly in Louisiana and is to be built to some point in Ohio.

By Mr. Goodman:

Q. Well, you have in mind, Mr. Burnham, that liquefaction is not a means of a constant supply of gas. It is only a means of storing gas for future use, isn't that so?

A. That is so, and the same can be said of underground storage.

Q. Yes, but at the same time, though, while they may at times be used for the same purpose, that purpose coin- [fol. 6100] cides with the fact you were talking about meeting a peak demand, isn't that so?

A. That is correct.

Q. And with a pipe line, you also have the advantage of supplying a constant demand, is that right?

A. That is right.

Q. So that the building of a pipe line or contemplating a pipe line where there is a liquefying plant is pretty poor evidence of the efficiency of the liquefaction plant by itself, isn't it?

A. Well, it is all a matter of load factor. Quite naturally, if a load develops that would require a pipe line to operate in the order of 99 percent of its capacity or better at all times, there would be no gas available to be placed in storage.

However, if there is capacity at or during off-peak periods available for storage, either in the underground reservoirs or as liquefied gas, the application of storage in that event is possible.

Q. Yes. Now, another alternative is above-ground storage, is it not?

A. Yes, but that is very expensive.

Q. In other words, you are definitely of the opinion that the pipe line capacity is a cheaper means even of meeting [fol. 6101] peak loads than above-ground storage?

A. Yes, indeed, it is.

Q. And no doubt you have considered in that connection the cost of above-ground storage?

A. We have.

Q. Do you review that occasionally?

A. It is not necessary, in such periods as this, with steel prices rising, to give a great deal of consideration to storage which requires so much steel as is required in the above-ground storage in gaseous form.

If steel should ever become extremely cheap, we might again examine the figures on above-ground storage.

Q. Does that exhaust the alternatives to pipe line capacity? Is there any other means that you know of that might be available?

A. We have been giving some consideration of late to the storage of gas in the solid form.

Q. That is merely an extension of the liquefaction process, isn't it?

A. It might be considered so. However, it is a different compound entirely. It is a hydrate of natural gas and if the information is true that we have, it might offer possibilities which would indicate it might be preferable to liquefied storage.

Q. And to what extent has your consideration of that [fol. 6102] subject gone?

A. We have only talked to the company which controls the research that is being made in this direction.

* * * * * * * *

[fol. 6103] Q. Mr. Burnham, you have stated a few moments ago that a new line was contemplated to be constructed for the service of Cleveland, Ohio, running from the gas fields in Louisiana over into Ohio.

Isn't it a fact that that line is proposed to be built by the Hope Natural Gas Company? Is that the line to which you refer?

A. It is very possible that is the line.

Q. And isn't it a fact that the terminus of that line [fol. 6104] will be in West Virginia?

A. Well, I inferred that it would go to Ohio markets.

Q. The gas would go to Ohio markets?

A. That is the reason I thought the terminus might be in Ohio.

Q. As a matter of fact, so far as you know, there are no new lines contemplated to be constructed by East Ohio

Gas Company from the Ohio River northward to Cleveland?

A. Not to my knowledge.

Q. Now, as I understand your testimony, this estimate which is set forth in your Exhibit No. 47 is simply an engineering job performed by you and your staff for the purpose of estimating the additions at Liberal station and eastward that would be required to meet the peak loads estimated by Witness Morton in Exhibit 40. Is that correct?

A. Yes, I believe that is a fair statement.

Q. You did not take any part in making any determination as to whether or not it would be economical to construct these capital additions in so far as the revenues to be derived from any new markets or new additional sales are concerned. Is that correct?

A. That is correct.

Q. In other words, to be a little more specific, when you determined, for instance, that it was necessary, in your opinion, to expend the sum of $6,684,100, for example, in [fol. 6105] 1944 for additions to main lines and additions to compressor stations in order to increase the 24-hour capacity of the system from 355,800 M.c.f. in 1943 to 380,450 M.c.f., you were not making any determination that it would be economically sound and feasible and expedient to expend that sum of money in order to increase that capacity in so far as revenues were concerned, is that correct?

A. That is correct.

Q. In other words, you simply determined that this is the amount, as an engineer, you would advise your company that it would have to expend in order to meet this additional load, and that is all?

A. That is correct.

Q. And, of course, before Panhandle Eastern or any other company would expend such sums as are set forth in Exhibit 47, a determination as to the economic advisability and expediency will have to be made by the management itself?

. . . . . .

[fol. 6106] The Witness:—I cannot agree with your conclusion. As I stated before, a natural gas company is duty bound to care for its customers.

In other words, it is devoted to the public service and if, by the expenditure of $6,684,100 in 1944, Panhandle Eastern Pipe Line Company could maintain good service on its system and if the money could be raised, there is no doubt in my mind but what the expenditure would be made.

As to the matter of whether it was economical or not, presume that if a loss was incurred by making the expenditure, the Federal Power Commission could be appealed to and relief might be had from the Federal Power Commission in that event.

By Mr. Littman:

Q. Now, suppose the total increase is due to an ambitious reaching out program on the part of Panhandle [fol. 6107] Eastern in a search for entirely new markets. What would your answer be in that event?

A. Well, the instance that you have picked here for 1944 is not applicable in that case because this is merely main line additions to already connected markets.

Q. Well, a good part of it is new industrial business, isn't it? Of course, Mr. Morton's estimates show what it is.

Mr. Goodman: Maybe I can state this.

You have in mind, no doubt, that Michigan Consolidated Gas Company proposes to cut its peak demand by its acquiring facilities for underground storage and transmission of gas from the point of storage to Detroit.

If that project is completed and in operation, that will substantially modify Mr. Morton's figures of maximum day, will it not?

Mr. Culton: We think that again brings in a matter that is in the hands of the Power Commission at this time and is not related to a particular date.

The Michigan Consolidated Gas Company did not represent they would immediately have that. They recognized that it would be at least two years before they could possibly start the service.

Mr. Goodman: I simply addressed a question to the witness based upon future probabilities which is exactly what his testimony relates to and I asked him if it would

[fol. 6108] have any effect. I do not know whether it would or not.

Mr. Culton: His testimony has not related to future probabilities of that character. His testimony has assumed that these volumes would be required and he said, "Under those circumstances, here is what the capital expenditures would be."

Mr. Morton was examined on that question and Mr. Morton was the appropriate witness to be examined on that question.

This witness has not estimated the volumes required by the people at Detroit or any other purchaser.

Trial Examiner: I think we should try and keep away from the consideration of speculative alternatives except in so far as the witness admits they are under consideration as a part of the program of the Defendant company.

The witness has stated that consideration has been given to underground storage, to the liquefaction of gas for reserves and to the possibility of a chemical process resulting in solid gas for reserves.

Exhibit 47 is to support the inclusion in a rate base of future investments, if so far as it is shown in cross-examination that these investments are problematical, may or may not be made, the cross-examination, it seems to me, is decidedly of importance.

Mr. Wheat: May I add, Mr. Examiner, that at least one of the main purposes of Exhibit 47 is also to disclose that [fol. 6109] this company, this enterprise, must go to the money markets in the future in order to obtain the funds requisite for large additional capital expenditures.

Mr. Culton: Irrespective of whether any of it be included in the rate base.

Mr. Wheat: Yes.

Trial Examiner: The question occurs to the Trial Examiner whether any sums can be properly considered in the rate base which are not of a rather definite certainty.

Your inquiry into the field of a speculative future, it seems to me, is something that we cannot inquire too closely about because it is so clearly a speculative future.

I would like to have counsel express their views on this. I think we are in a rather difficult field.

Mr. Goodman: Well, I am frank to say, your Honor, that I think, in the first instance, we would be obliged to consider the total cost of rendering service for a reasonable period in the future inasmuch as the job of promulgating a rate is prospective in its application. The period must be reasonable and the cost must be shown by persuasive evidence.

Now, that I think is the entire question. Here is an exhibit presented which has only a hypothetical basis. The witness frankly admits that we have no plans afoot to make these expenditures but if we are to meet the estimates of another witness, this is what it is going to cost us.

[fol. 6710] Mr. Wheat: To what years do you refer now in that statement, Mr. Goodman? You certainly don't refer to 1941 or 1942, do you?

Mr. Goodman: I do not want to be cross-questioned on the thing. I think my statement, as I make it, is clear.

Mr. Wheat: I think we have got to be honest with ourselves, for the 1941 and 1942 expenditures are now being made.

Mr. Littman: Certain ones, I think you mean, Mr. Wheat, are now being made.

Trial Examiner: It seems to me we are entitled to a rather frank discussion of what period is involved. I think that is a matter of importance.

The matter was somewhat discussed in the Chicago case that was referred to early in the hearing as to just what future investments might be incorporated in the present rate base. It is clearly not in some remote, speculative future.

The Commission considered a 20-year claim for future investments which was outlined and discussed. The Commission, I believe, allowed, was it, Mr. Littman, 2½ years?

Mr. Culton: Three and one-half years.

Mr. Baldridge: Three and one-half years.

Trial Examiner: But that certainly is a definite factor to consider when we get into that remote period when there is no certainty concerning investments and Commission counsel or Complainants are certainly entitled to show it.

[fol. 6111] Mr. Culton: May I give just one sentence to express our position.

We think that unquestionably the investments which the evidence shows are of sufficient certainty to satisfy the Commission, that is, these investments that this witness has been discussing, should properly go into the rate base. They are immediate.

Now, these subsequent investments which are, to some extent, looking a little into the future and dependent upon certain increases, we do not contend they should go into the rate base as of now, but we do consider that we have a right to show the probability that we will expend those sums and what they will have to be spent for if the present indications are realized.

Trial Examiner: As bearing upon rate of return, a need for large sums of capital?

Mr. Culton: That is right, Mr. Examiner.

Mr. Littman: If your Honor please, I would like to respond to your Honor's request for a statement. I think the law is clear that only property presently used and useful may go into a rate base for rate-making purposes in the absence of any special circumstance.

Now, that is a general rule and I do not believe any special circumstances have been here shown that would warrant the inclusion of capital additions proposed to be [fol. 6112] made after the date as of which this Commission will speak. That is Point No. 1.

The second point I would like to make is that the evidence thus far discloses pretty much to my satisfaction, at least, that assuming for purposes of argument that all of these capital expenditures will be made in the future

as contemplated by Exhibit No. 47, in view of the increased sales as set forth by Mr. Morton in his Exhibit 40, and in view of the increased revenues which Mr. Morton has estimated will be derived from those sales it can be demonstrated and will be demonstrated that even if all of these capital additions were included in [in] a rate base extended theoretically into the future, that it would not justify any increase in rates arrived at without a consideration of those capital additions, increased the sales, and increased the revenues.

In other words, they would not have the effect of causing any upward revision in rates over those determined in the conventional manner.

Trial Examiner: It would not necessarily affect the rate which will constitute a fair return on the total capital.

Mr. Littman: That is what I am quite certain the evidence in this proceeding will show.

[fol. 6113] Now, moreover, I would like to make another point, and that is this:

When this Commission fixes a rate as of, let us say, today, we must, in looking into the future, consider not only if we are going to give future capital expenditures any consideration at all, we must also consider the depreciation that will accrue each year in the future and we must make proper allowance for that.

For example, if depreciation is accruing on the property of Panhandle Eastern in an amount of, let us say, just for purposes of example, $2,000,000 a year, why, of course, we must deduct that amount from the gross to secure the net additions.

I state that notwithstanding all of that, I am certain that the figures in the record thus far will show that the capital additions proposed by Exhibit 47, as well as the capital additions proposed by Mr. Hinton, would not have any adverse effect on the rate if Mr. Morton's estimate of sales and revenues is to be given consideration.

That states our position at this time.

Mr. Goodman: I would like to add a word on this subject as to how far in the future it is permissible to go. Under ideal conditions, that is, the conditions of perfect knowledge, I think it rather evident that that perfect knowledge would propound a unit cost for the total serv- [fol. 6114] ices of an enterprise which would be the lowest possible unit and it is because we do not have that perfect knowledge that we are compelled to limit how far we will enter into speculation.

Now, implicitly, we do give weight to the past and future of a business when, for example, we make an allocation as between an original value and remaining value.

For example, if we say that property has depreciated so much, we implicitly ascribe the proportion of depreciation to expired services and thereby apportion the remaining value to the services of the future. I mean this: That capital value differs only from annual expense in that the capital value is spread over more than one accounting period and the services expire in the course of what we may term a service life but that value with which we started, it is contemplated, will be ultimately used up in terms of annual expenses.

Now, one can never be correct or one can never make an approximation which itself is not an approximation having reference to the past and a simultaneous reference to the future. We think that we are saying the costs of the current year, but, in so far as those figures relate to or have reference to a cost which was incurred for services of several accounting periods, that is to say, capital costs, our thought is largely a delusion or, say, an inaccurate approximation.

Now, when we come to talk about the cost of service for the year 1942, we are compelled to make allocations [fol. 6115] which necessarily regard as much future as it is reasonable to contemplate, and I would say that they do necessarily regard total future and thus a depletion allowance, an allowance for depreciation of existing property necessarily contemplates the services of the future as distinguished from what has already transpired, so that I do not think that the formula as to what is included in

the rate base represents a hard and fast approach to the problem in every instance.

I would say that what Courts have done in applying the rate base standard is simply to pass upon the facts as presented by the parties. If a case lines up that way, the decision will line up in that way but, if one is able to show that our unit costs of service actually are thus and so, even though that involves consideration of future conditions, I see no reason why you should not be permitted to show that, for there is no desire to allow an unreasonable rate.

I would like to give a certain example of that. Let us suppose that I have a machine which is capable of operating without any maintenance expense for a period of 8 years and, at the end of 8 years, it will require a pretty general overhauling and then will last for about two years more.

Now, isn't it clear that the money you are going to spend 8 years hence is part of the cost of today's service? It is to me.

Now, I admit that there may be disputes about that so I [fol. 6116] think that the actual latitude here is large. I am concerned with how adequate the evidence is. I do not think that there is any legal inhibition about searching the future in so far as it is reasonable, but I do think that the limitations are strictly those of a practicality. The one way of approaching the subject is to divide it up into periods or phases of exploitation. For example, one might say if the business is adapted to it, that we will consider the future to be like the present, a repetition of the present in so far as we are compelled to do so for purposes of depreciation or for purposes of getting at what we term present expenses and we will keep on considering it until certain events transpire in which case, there enters into the picture what we may term a new phase of exploitation.

We keep on going then of we contemplate keeping on going until some further new phase of exploitation takes place.

Now, it may well be that that will turn out to be the most convenient approach to this particular problem. That

is, that we should approach it on the basis of an output comparable to 1941 or 1942 and compute all things as on a stabilized basis for that phase of the exploitation. Then when a thing fails of exploitation and large capital expenditures are required, then we admit we have not considered it.

Trial Examiner: I will be glad to hear from the other side of the room. It might help us to "keep on the beam."

[fol. 6117] Mr. Culton: I say "amen" to a great deal of what counsel has just said, Mr. Examiner.

I think the appropriate thing for us to do is to get all of the evidence on all of these phases the best way we can before the Commission and then, when the case is all over, we can approach this from all of the angles possible in determining what the correct answer is.

Unquestionably, all of this evidence is proper for consideration on at least two grounds. Then the weight to be given with respect to rate of return, with respect to rate base, can all be determined when the evidence has all been completed.

Mr. Littman: If your Honor please, I might amplify our position by stating if a company were operating at a 100 percent load factor, for example, and they had no additional markets and did not propose to acquire any or could not acquire any and if it were clear that they had to spend certain capital sums next year and the succeeding year in order to keep their business going and in order to deliver the same quantities of gas that they are now delivering, that is at the 100 percent load factor, then I presume the company would be in a position to demonstrate that its unit cost of service for the next two years will necessarily be increased, and I would say that under those circumstances, certainly the Commission might be very much interested in determining to what extent [fol. 6118] these increased capital additions will affect the cost of service. But here, we have not only capital additions, we have the evidence in the record, as shown by Exhibit 40, of great increases in sales, which I am certain can be demonstrated in this record more than offset the increases in costs occasioned by the capital additions.

To peer into the future, of course, is something that Commissions have been admonished to do in fixing a rate for the future in order that it may determine whether the rate it fixes today may not, in all probability, become confiscatory tomorrow.

* * * * * * * * *

[fol. 6133] Mr. Littman: Let me ask you this, Mr. Burnham.

Assuming that your company is successful in its quest for underground storage, would that require you to revise your estimate shown in Exhibit 47?

The Witness: Certainly.

Mr. Littman: In other words, you would not require all of the pipe line capacity shown in Exhibit 47?

The Witness: No, but it might involve expenditures that might even offset entirely the expenditures we contemplate that might be required in pipe line and compressor station equipment.

* * * * * * * * *

[fol. 6160] (Exhibit No. 47 was received in evidence.)

* * * * * * * * *

[fol. 6163] Leith V. Watkins a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination.

By Mr. Gorman:

* * * * * * * * *

[fol. 6171] Q. Mr. Watkins, will you turn your attention please to Exhibit No. 48? Now, commencing at the top of the first page of this exhibit, Mr. Watkins, line 3, account entitled "Other Investments", can you tell us what these investments represent? As I recall your direct testimony you stated that they were obligations of the Southwest Kansas Oil & Gas Company and the Saturn Oil & Gas Company which were due and payable to the Panhandle Eastern Company. Can you explain the nature of

the transactions which brought about this indebtedness to the Respondent?

I am referring, of course, to the amount shown at June 30, 1941, in column "M", Mr. Watkins.

. . . . . .

[fol. 6172] The Witness: To try to summarize and save as much time as possible, Southwest Kansas Oil & Gas Company and the Saturn Oil & Gas Company were the owners at the time of the inception of Panhandle Eastern of some considerable amount of acreage in southwestern Kansas and may have had some producing wells at that time, with whom Panhandle Eastern entered into certain gas purchase and operating contracts for the exploitation of that acreage and the continuation of the right by Panhandle Eastern to purchase the gas produced from such acreage.

It may have been that the contract had certain drilling provisions in it.

Some time subsequent to the date of the original contract and June 30, 1941, the nature of those contracts was changed. The original contracts provided for Panhandle Eastern or it might have provided for Missouri Kansas Pipe Line Company to act as the operating manager and provided for the repayment to the operating manager of certain operating expenses and certain investment in both [fol. 6173] acreage and in the wells by the Southwest Kansas Oil & Gas and the Saturn Oil & Gas Company, the net result and sum of which was at June 30, 1941, there were balances due Panhandle Eastern on open accounts and notes, aggregating around $210,000.

Q. You mean less than the amount shown on page 1, Exhibit 48, line 3, column "M"?

A. The amount shown on line 3 in column "M" of Exhibit No. 48 is a consolidated figure. You will notice the exhibit is headed "Panhandle Eastern and Subsidiary Companies".

The indebtedness of Southwest Kansas Oil & Gas Company and the Saturn Oil & Gas Company is entirely indebtedness to Panhandle Eastern or the amounts that

make up the difference. If you wish the exact amounts due from those companies at June 30, I am prepared to give it.

Q. The other amount is rather inconsequential, amounting to about $4,000.

Now, is it correct that there is due on open accounts under this title the amount of $165,479.01 and that the balance represents notes payable?

A. Are we still talking about corporate balances or consolidated balances?

Q. Consolidated balances.

[fol. 6174] A. I will have to compute that if you wish it. I can give you the amount due on notes from a corporate standpoint.

Q. Well, I am speaking at the time of the manner in which you have set up this balance sheet, Exhibit No. 48, and the amount shown thereon.

A. Do you wish to take a recess while I compute it?

Q. No, you stated that the amount due from these two companies aggregated approximately $210,000, as I recall it. Is that correct?

A. That is correct and comprises both notes and open accounts.

Q. For the purposes of my questions, Mr. Watkins, suppose we do this: Assuming that there is approximately $165,000 due on open accounts, would that be by reason of the incurrence by the Panhandle Eastern Company of certain expenses in connection with the drilling of the wells which you have referred to previously?

A. If by "expenses" you mean actual operating expenses and construction cost—

. . . . . .

(Continuing)—the answer is yes.

. . . . . .

[fol. 6175] A. You will recall in response to a previous question the witness stated that at some time during the period from the inception of the original contracts and June 30, 1941, the contracts were changed. At that time, the unpaid balance was either represented by notes or the

open accounts took the form of notes. Those notes mature at specific intervals.

Q. Right there, Mr. Watkins, do you mean by that the entire amount was represented by notes?

A. The entire balance at the time the contracts were changed, if my memory is correct, was converted to notes.

The operating expenses charged to these companies by Panhandle Eastern and the amounts advanced for construction purposes subsequent to the conversion of the entire balance to notes is represented by the open account. The open account at June 30, 1941, is being amortized,—I should probably say paid, rather, over the life of the new contract, monthly payments being separated as to interest and principal, so that at the date upon which the contract naturally expires, the account will have been paid in full.

. . . . . .

[fol. 6176] Q. Commencing at page 862, line 17 there on that page you stated as follows, in speaking with reference to this account of "Other Investments" as it stood at June 30, 1941:—

. . . . . .

Q. (Continuing) "This amount represented on June 30, 1941, an amount due Panhandle Eastern Pipe Line Company by Southwest Kansas Oil & Gas Company and Saturn Oil & Gas Company on open account, amounting to [fol. 6177] $48,819.24. I beg your pardon. That represents four notes of equal amount dated January 6, 1936, of which one note is due each year during the years 1943 to 1946 and an open account due from the same companies amounting to $165,479.01."

Now, does that refresh your recollection, Mr. Watkins, the breakdown of this account of which we have been speaking?

A. It does and is the correct breakdown. Unfortunately, when testifying a moment ago as to those balances, I referred to a statement dated September 30, 1941.

Q. So that, if my addition is correct, the total of these two amounts, that is the amount due on notes and the amount due on open account, represents $214,298.25, which

is the total amount you have shown on this account at June 30, 1941. Is that correct?

A. That is correct.

Mr. Wheat: Mr. Gorman, as is shown on line 12 of page 862.

Mr. Gorman: Yes.

The Witness: And, also, as can be shown on line 3, column "M" of Exhibit 48.

. . . . . .

Q. Can you tell us who owns or controls the Southwest [fol. 6178] Kansas and the Saturn Companies, Mr. Watkins?

A. Not specifically, no.

Q. Do you have any information on that subject?

A. My understanding is that these companies are now owned and controlled by some of the officers or directors or individuals, either directly associated with or indirectly with Michigan Consolidated Gas Company, some of its subsidiaries or parents.

Q. And there is no affiliation with the Panhandle Eastern Pipe Line Company insofar as you know?

A. Well, I should hope, sir, that we would have some direct neighborly affiliation with the Michigan Consolidated Gas Company confined in some of these accounts and some information, that is one of our largest customers and surely we must have some working affiliation.

Q. Well, of course, Mr. Watkins, I think you understand when I say "affiliation" I mean common control of ownership or through stock control or something of that nature.

A. There is nothing of that, as far as I know.

Q. Referring now to line 5 of page 1 of Exhibit No. 48, the account "Current Accrued Assets Representing Cash", will you tell us whether there has been any change in company policy in recent years in the handling and [fol. 6179] disposition of revenues?

A. I am afraid I don't understand that question.

Q. Well, I can explain it this way, then: Referring to this account I notice that from and after 1938, specifically during the years 1939 and 1940 and 1941, the com-

pany is carrying much larger cash balances than it had theretofore.

Does that represent any change in the policy of the company?

A. Not so far as I know and, as far as this witness knows, the fact that the balances at December 31, 1939, June 30, 1940, are larger than some prior dates is of no particular significance.

Q. Well, it indicates, does it not, that it was not in conformity with the practice of the company prior to 1939? In other words, they made some disposition of the cash received as revenues other than merely placing it in a cash account and holding it on hand?

A. Well, I shouldn't say that it indicated any change of policy, Mr. Gorman. There may be a set of circumstances or conditions present at these particular dates that explain why the balances are larger. Any organization such as ours must have funds with which to pay its bills, to do its construction work and carry on its business [fol. 6180] generally. It might have just so happened that at these particular times the funds shown by the amounts on line 5 in columns "K", "L" and "M" of Exhibit No. 48, were present and no particular need for them at that moment.

I don't attach any significance to it at all.

Q. Do you, in your official position, have any particular explanation for such large balances in those years?

A. Not at the moment, no. As a matter of fact, the explanation for any such balances would likely not rest with the comptroller. That is probably a question that should be directed to the treasurer.

Q. Yes, but you would have cause to believe that the secretary and comptroller are constantly in touch with the treasurer and Board of Directors and would have any familiarity with the decision of either which would necessitate the retention of such large cash balances, would you not?

A. I would likely have knowledge of it, yes, but having such knowledge I attach no special significance to it literally.

Q. Is it your testimony then that this is just a happenstance and has no relation to any direction of the president or the Board of Directors of your company?

A. I know of no direction of the president or the Board of Directors with respect to these three amounts that put [fol. 6181] them in any different category than the cash balances shown at the end of any other previous period shown by Exhibit No. 48.

Q. Do you know of any particular purpose for which any part of the cash balance shown at June 30, 1941, has been earmarked by the president or the Board of Directors?

A. Mr. Gorman, as my memory runs over the ten years that I have been connected with Panhandle Eastern Pipe Line Company, the Board of Directors have not necessarily earmarked any of dollars the company possessed. Earmarking dollars is a tremendously difficult problem. There may have been in the mind of the president or the treasurer the thought that the balances on hand at the dates we are discussing were to be ultimately used for construction or some other purpose.

If there was such a view in their minds you would have to ask them as to that.

Q. In other words, as I understand, you merely are charged with the responsibility of showing what was on hand in the way of cash during these years and have no responsibility whatsoever as to the disposition to be made of that cash.

A. Well, I would hardly go that far. As comptroller of Panhandle Eastern and its wholly-owned subsidiary, Illinois Natural Gas Company, I have, naturally, a decided in- [fol. 6182] terest in the input and output of cash.

I should not, myself, permit or within my knowledge permit any of my assistants to allow any disbursement to be made from the Company's funds that was not properly authorized. In the performance of the duties associated with my official capacity with the companies, I must, naturally, be responsible to some great extent to the collection of the amounts due it.

[fol. 6183] I have the responsibility of seeing that a proper record, along with the treasurer, is kept of all

matters pertaining to cash and, to that extent, I think, without belaboring the record here with a great deal more explanation of what such duties would be, I do have a decided interest and responsibility in connection with the cash of the company. As to trying to earmark it for this or to provide a certain amount for some particular purpose, that is within the scope of someone else's view.

Q. Well, summing up, then, and overlooking the repetition of this statement, is it correct that in so far as you know the amount of cash on hand at June 30, 1941, represents merely cash balances and in so far as you know was not being held for any particular purpose?

A. Well, it was being held for all the purposes for which is might be required, certainly.

Q. Yes, but I mean it was not being held for any particular construction that you were aware of, or for dividend purposes, or anything of that nature?

A. Well, I certainly do not know of it being held for dividend purposes. I am conscious of the fact that we have had a very large construction program in mind, and very naturally if such a construction program were carried out it would have to be paid for.

Q. Yes, of course, that would be the general operation, wouldn't it?

[fol. 6184]

A. Surely.

Q. And that requires cash, of course, to meet your bills?

A. That is right.

Q. Turning now to line 6, the account designated as "Special Deposits," which is located in Column M of this Exhibit and June 30, 1941, it shows $1,489,127.23 which was an increase of approximately $1,480,000 over the balance remaining at December 31, 1940. Can you explain to us the reason for this considerable increase in this particular account?

A. The amount shown in Column "M" on line 6 of Exhibit No. 48—

Mr. Wheat: (Interposing) Page 1.

The Witness: Page 1 of Exhibit No. 48, represented in June 30 the amount of special deposits that Panhandle Eastern Pipe Line Company had made irrevocably with

either a trustee for the redemption of some bonds that had been previously called or special deposits of various natures with respect to service deposits for public utility service or right of way deposits in connection with the occupancy of certain properties, or deposits in connection with the guarantee of insured premiums, or deposits in connection with the payment of interest and the balance of [fol. 6185] $1,489,127.23 was largely made up of the amounts remaining in the hands of the corporate trustee for the redemption of the company's 4 per cent bonds called for redemption on or about April 1, 1940.

Have you any interest in the standing of the balance at September 30, 1941? It was materially reduced.

Q. Before we get to that, Mr. Watkins, do your papers set forth a breakdown of this amount which is shown at June 30, 1941?

A. No, I am sorry, I don't have such a breakdown.

Q. So that you don't know specifically what amount is represented as being held for the purpose of retiring this debt of which you just spoke?

A. No, but it was a large amount of the total shown at June 30, 1941.

Q. Can you indicate to us, Mr. Watkins, the source of this amount of approximately $1,480,000, which was placed in this account during the first six months of 1941? By the way, I, of course, don't mean revenues of the company, but I mean an indication of what account was credited with this amount when the charge was made to the special deposit account?

A. I believe you mentioned an amount somewhere in excess of $1,400,000.

Q. Well, I am speaking of the difference between the [fol. 6186] figure at December 31, 1940—

A. Actually there were several million dollars placed in the account on or about February 3, 1941. I don't have, at this moment, the exact amount, but it represented the principal amount of the four per cent bonds then outstanding and the accrued interest on them up to a certain date. The funds out of which such a deposit was irrevocably made with the corporate trustee came from the sale of other securities delivered at the same time the funds were deposited with the corporate trustee for the

redemption of the four per cent bonds called for retirement at that time.

Q. This account then at June 30, 1941, represented, as I understand, the balance remaining after certain refinancing operations were consummated during the month of February, 1941?

A. That, plus a small amount of deposits for other purposes, as the witness previously testified to.

Q. Yes. Now, you offered a moment ago, Mr. Watkins, to give us the balance remaining in this account, at September 30, 1941. Will you do so, please?

A. At September 30, 1941, the balance of the special deposits of Panhandle Eastern Pipe Line Company and subsidiary companies was $111,463.66.

Q. Does that indicate to you that there had been a certain amount of bonds or other indebtedness retired [fol. 6187] during the three months following June 30, 1941? A. It does.

Q. Referring now to line 13, page 1, of Exhibit No. 48, the account for "Materials and Supplies," can you tell us whether or not the amounts shown on December 31st of the several years indicated on this page fairly represented the amounts which the company was maintaining in its inventories during the months preceding and following December 31 of these years?

In other words, I will put it this way, does this account remain more or less static, excepting for periods of construction?

A. To an extent, yes. We have to think a bit about periods in answering that question. If you observe Exhibit No. 48 during the years 1930, 1931, and 1932, which was, so to speak, a part of our initial construction period, the Materials and Supplies account was the clearing ground, after a fashion, of the acquisition of materials intended for use for construction which was not delivered directly to construction jobs, so that subsequent to the year 1932, if you will recall, was the period in which the country generally began to feel the pinch of funds and the necessity for economies, conservation of cash, and so forth, quite acutely.

Our Materials and Supplies account began to slide down- [fol. 6188] ward, so that at the end of 1938, as shown by

line 13 in Column "G" or, rather, at the end of the year 1931, as shown by line 13 of Column "K", the balance had been reduced to slightly under $160,000.

Subsequent to that period, and during the entire period, the company felt that its policy with respect to materials and supplies was certainly on the conservative side and perhaps somewhat niggardly. We have never carried as much materials and supplies as we felt were actually needed. It has always been reasonably easy to get materials, and we didn't have, always, too much cash. We had constructions for which we needed our cash. We were growing rapidly. We didn't have as many compressor stations. Our load wasn't as much as it now is, and there were a variety of conditions that caused us to pinch as much as we possibly could with respect to our materials and supplies until the last few years we started somewhat in the other direction.

I believe there has been introduced in these proceedings quite a substantial amount of information with respect to material and supply requirements of the company as they now exist and may hereafter exist.

Q. Yes. Well, of course, we are now speaking of the conditions as they actually existed during the years shown on this exhibit.

A. I don't know whether I have answered your ques-
[fol. 6189] tion or not, sir.

Q. Yes, you have, quite completely.

Is it the practice of the company that when materials or supplies are withdrawn from the warehouse to immediately place an order for the replacement of such articles as are withdrawn?

A. Well, Mr. Gorman, I don't know that I can answer that question as categorically and as fully as I should imagine you would like to have it answered. Off of the top of my head, I would say that, generally speaking, the company is constantly striving toward a certain level of basic materials and supplies needed for ordinary routine or for construction, and that it follows the practice of not being caught asleep when materials and supplies are needed.

Q. Yes. So that in so far as you know, it is the obvious policy of the company to attempt to maintain on hand such inventories as are necessary to enable it to maintain its business properly?

A. With the exception, as I have previously testified, in the period during which we were encountering the same business and economic conditions that confronted all other business enterprises, we couldn't always follow our inclination in that direction.

Q. Yes. You mean by reason of the lack of adequate funds you cut your inventories as much as it was possible [fol. 6190] to do so?

A. Not only that, there has been a time when the ability to obtain materials was much freer than if is at the moment or has been in the last few years. A wide variety of things governed exactly what we did or did not do with respect to our materials and supplies besides actual cash conditions.

Q. Yes. Well, of course, you did not at any time cut these inventories to a point below that which was necessary to maintain the system property, did you?

A. Well, Mr. Gorman, we have always preeminently in mind the requirement of an organization such as ours, regardless of what happens in other directions, to keep our properties in such condition that they can perform most satisfactorily from the standpoint of the customer.

There have been intervals over the ten years that I have been connected with the company that I have heard a good deal of griping from our operating departments and our construction forces that our materials and supplies were entirely inadequate. I do definitely know that over the period of my connection with Panhandle Eastern we have not had a sufficient amount of spare parts, for instance, at our compressor stations.

Not being an operating man, I can only tell you what I believe was responsible for such a condition. The man- [fol. 6191] agement, naturally, would not have permitted a situation of this sort to exist if it interfered with operating conditions, but we had at times a bit more capacity than we needed, perhaps, a bit more power than we actually needed, so that if we suffered a breakdown at some particular point we could pick up somewhere else and not

interfere with our ability to deliver or to meet our customers' requirements.

One couldn't just categorically put their finger on one particular thing in materials and supplies and say, "That is the reason we did this particular thing at that particular time."

Q. Yes. Well, to get back to my original question, Mr. Watkins, do you know of any instance where your inventories were too small to permit the company to adequately maintain its properties?

A. Personally, I do not.

Q. Mr. Sperry has testified in this proceeding, Mr. Watkins, that during recent months the company has undertaken to acquire a much greater inventory of materials and supplies and Mr. Sperry broke this down into different categories, one of which, I believe, was the materials and supplies actually on hand, secondly, were those which were on order, and thirdly, were those which the company anticipated ordering. Is that your understanding of that situation with respect to this account?

[fol. 6192] A. Well, I don't have any understanding whatever with respect to the account and Mr. Sperry's testimony that you speak of. I don't know that there is any direct connection between the account and his testimony. My understanding is that he did prepare and has introduced in these proceedings such information.

Q. Yes.

A. When the things concerning which he testified become actualities they will be interpreted by the account and not until then.

Q. But during the course of Mr. Sperry's testimony there was given the total which was in this account as of September 30, 1941. Can you give us the amount which was in this account at December 31, 1941?

A. At what?

Q. December 31.

A. No, I am sorry I don't have that. I could get it for you.

Q. Would you undertake to do so, please, and supply that for the record?

A. I may say, Mr. Gorman, that I don't know that our materials and supplies account is entirely closed for the year ended December 31. As you know, at the end of the year there is quite a considerable amount of work to be done to close the books of a corporation, and so forth, [fol. 6193] so that I might not be able to give you the actual final amount that will be shown per the books of December 31, 1941, but I will attempt to get it.

Q. Well, the answer which you would be able to give would very closely approximate the actual total, would it not?

A. I hope that will be the case.

Q. Yes.

In furnishing this information which I have requested, Mr. Watkins, could you break that down to show the amount of materials and supplies which are on hand due to the construction work which is presently in progress on your system and that which is now on hand to maintain the operating efficiency of the system as it now stands?

A. I am afraid not, Mr. Gorman, because generally this is the procedure that we follow: When materials and supplies are purchased directly for construction, they are forthwith charged to work orders covering such construction. We do not keep a balance of such amounts; as the construction work progresses, there is no reason to. If at the end of the construction period some of the materials are not used, they are then returned to the warehouse and the warehouse materials and supplies balance would reflect those amounts at that time.

I shall try to ascertain what were in the Materials [fol. 6194] and Supplies account at December 31, 1940, for construction purposes, and if the amount is significant we will give it to you, if we can obtain it.

Q. Well, do I understand correctly that the amount of materials on hand for construction purposes would have no relation to this account for materials and supplies, or would be charged directly, as you seem to indicate, by vouchers to Gas Plant account?

A. No, they are not charged to Gas Plant account. Perhaps if I restated it I could give you the picture a little more clearly.

Q. I might indicate to you, Mr. Watkins, my reasons for desiring an explanation of this item. You referred previously that during the years 1931 and 1932, when the company was engaged in a large construction program, that the large amounts shown for these items in those years was attributable in part to this construction. I am trying to find out whether that situation still obtains during the present time of construction.

A. There is a difference between the years 1930, 1931, and 1932, by the way. The witness wouldn't consider those amounts very large.

Q. They are large by comparison with the others?

A. Perhaps that is correct. The difference is this: In 1930, 1931 and 1932, there were materials purchased for con- [fol. 6195] struction, not in all cases used for construction for those particular periods, so that some of the materials and supplies balance in the years 1930, 1931, and 1932 represented the purchase of materials not actually used in construction in those years. That is the figure which I shall attempt to get for you at December 31, 1941, as being part of the materials and supplies.

Now, likewise, in the early construction period during the years 1930, 1931, and 1932, there were a great number of work orders and construction projects to which material was charged and which in our accounting procedure did not go through the warehouse at all. It was ordered specifically for and delivered directly to the job and never saw its way into the Materials and Supplies account.

Does that help you?

Q. Yes, it does.

Is it a correct statement to say that following construction and possibly during the period of construction that the amounts shown in the account for Materials and Supplies do not represent merely those items which have been ordered for maintenance and small extension work, but, also, represents left-overs, so to speak, of materials and supplies which were not used in the construction work, that is, the new construction work?

A. Yes, that is correct. I don't think our situation [fol. 6196] differs there from any other organization such as ours.

Q. Yes. Do you know whether or not the amounts which were shown in the balance sheet of September 30, 1941, for this account represented any items which had been returned or which had been charged, rather, to Materials and Supplies from construction work in progress?

A. Well, I am sure, Mr. Gorman, that at the end of any period shown by Exhibit No. 48 there were certain amounts in the Materials and Supplies account that had actually at some time been charged to construction work, because the very nature of the account would indicate that you just couldn't perform construction work and use up every specific piece of material that you purchase for it.

By the same token, you don't specifically purchase every piece of material or equipment for a construction job that is used on it. Some of it you withdraw from the warehouse. Furthermore, we have retirements in progress more or less all the time, and some of that material finds its way into the Materials and Supplies account, and to that extent we even have at all these periods some value or cost in the Materials and Supplies account that at one time or another was in Fixed Capital Gas Plant, as we call it under the Federal Power classification.

[fol. 6197] Q. Yes, so that it is a correct statement then to say that at no time and probably necessarily so, does the amount charged to this account represent only those items which are necessary to maintain the operating efficiency of the company?

A. Well, I don't believe I can agree with your statement, because the operating efficiency of the company does not, in my judgment, go entirely to the things necessary to turn the wheels day by day. There must be and should be a certain amount of materials available always to take care of unusual conditions as they arise, whatever their nature may be. We might have a river crossing that would go haywire on us or we might have some difficulty in a compressor station or there might be a great number of things that would involve the immediate use of materials to maintain our ability constantly to deliver the requirements of gas imposed upon us.

Q. Yes, well I think that more or less agrees with my statement too which I put the question. The primary purpose of this account, I think we will both agree, is for pro-

viding materials and supplies for maintenance and replacements, is it not?

A. I won't agree with that at all, sir.

Q. Well, with the exception of possibly small extensions, it does not undertake to provide materials and sup-
[fol. 6198] plies for the extensive construction, does it?

* * * * * * * *

The Witness: Well, I must frankly admit that my interpretation of the use of the materials and supplies account of Panhandle Eastern, and its subsidiary companies, maintained as provided by the Federal Power classification of accounts, lends it to the customary and ordinary needs of the company with respect to their recordation of the debits and credits for the materials, the purchases, and uses in any manner whatever in its operations in the maintenance of its properties and the construction of its properties.

I don't know that I can narrow it down, Mr. Gorman, to the specific purpose more than that. I am not trying to confuse this thing.

* * * * * * * *

[fol. 6199] By Mr. Gorman:

Q. I assume, Mr. Watkins, that you are aware, as Mr. Sperry testified, that at the present time there is a considerable amount of unfilled orders for materials and supplies, are you not?

A. Yes, I am familiar with that condition.

Q. Are you familiar with the conditions which brought about the placement of these orders?

A. By that do you mean do I have knowledge of the construction authorized that gave rise to those orders?

Q. Yes.

A. Oh, surely, I know whenever any piece of construction is authorized—

Q. (Interposing) Well, of course, now maybe we are deviating a little bit, Mr. Watkins. I am speaking of those materials and supplies which are to be inventoried and placed in the warehouses.

A. I have some general knowledge of the things that
[fol. 6200] brought it about, yes, sir.

Q. But do you know whether or not the aggregate amount of these orders is affected in any degree by the long periods of delivery which the manufacturers are requiring at the present time?

A. Mr. Gorman, I think you had better direct your questions with respect to that to the witness who gave evidence in connection with it?

Now, let me say this: As to any difficulty that the company is experiencing with respect to delivery, I am not too familiar. I know, generally, that we are having trouble, just as one knows in general about a lot of things that are happening in an organization. The purchasing of materials, the following through to see that we get deliveries and payment for those materials, and so forth, is something that I run up against in the manner that you run up against things of that sort in the day-by-day operation of an organization such as ours. Specifically I don't keep very closely in touch with it.

Q. Does that mean, Mr. Watkins, that you have no information or knowledge as to this matter that I am speaking of now?

A. I wouldn't say exactly that. You couldn't ask me whether or not we had purchased an order for 14 automobiles and whether or not we had delivery of those, be- [fol. 6201] cause I wouldn't know. If you were to ask me whether or not we were generally getting decent deliveries with respect to such purchase, I could tell you yes or no. If you were to ask me whether or not all of the materials purchased for our present expansion construction program had been delivered, I could not answer you specifically, yes. I could tell you that I thought the deliveries were coming along satisfactorily or I probably would have heard somebody doing a considerable amount of growling concerning them.

Q. Does your knowledge permit you to say whether or not the placement of such a large amount of orders as this has apparently been customary, as indicated by the amounts shown on this exhibit, and is due in part to the fact that by the time that actual deliveries are made the present inventories will have been depleted to a considerable extent?

A. I don't have any opinion with respect to that other than that I am quite positive that Panhandle Eastern Pipe Line Company would not be ordering unnecessary materials.

Q. Well, I am not making any such accusation or suggestion. I am just trying to find out what your information and knowledge is as to this policy and what the present practice might be.

A. Well, I am frank to admit, sir, I don't know how I can answer you any differently than I have. I have [fol. 6202] stated that I am not charged with the responsibility of procuring materials and supplies. I do not follow the orders after they are placed. I don't know to what extent deliveries are being received, except in a general way. I do know very definitely that we, as an organization, watch our requirements so that there are sufficient materials when we need them for the requirement of our operations or construction. Now, if you are trying to elicit testimony from this witness with respect to Mr. Sperry's statements, you are going to have difficulty, because I had nothing to do with the preparation of his material, although I have a very definite belief that it is absolutely correct.

Q. Well, I am not trying to elicit information from this witness with respect to Mr. Sperry's testimony. I am trying to find out from this witness what is the arrangement with respect to this particular account. Now, do I understand correctly that you are not prepared to answer the question which I put to you a few moments ago?

A. I think I have answered it, sir. If I haven't, I have given the answer as far as I know that I can go.

* * * * * * * * *

[fol. 6204] By Mr. Gorman:

Q. Turning your attention now, Mr. Watkins, to Lines 17 and 18 on Page 1 of this exhibit, which is the account for Unamortized Discount and Expense, can you tell us whether or not the Directors of the respondent company have recently made any decision as to the disposition to be made of the $2,101,985.62 which was in this account as of June 30, 1941, as indicated at Column M?

* * * * * * * * *

A. At the meeting of the Board of Directors held December 19, 1941, the Directors of Panhandle Eastern authorized the charging of the balance in the accounts called Unamortized Debt Discount and Expense to Surplus after having credited to that account the saving resulting from the retirement of the funded debt in existence prior to February 3, 1941, and after restoring to income the amount of amortization taken on the unamortized balance subsequent to February 3, 1941, and after restoring to expense duplicate interest amount to $79,667.11, which had previously been charged to the Unamortized Debt Discount and Expense so that the general effect of such action was that the unamortized balance of the Debt Discount and Expense Account was charged to Surplus as of February 3, 1941—I mean effective as of February 3, 1941, and the call premium for redemption on February 3, 1941, which [fol. 6205] also was included in the debt discount and expense and the expense in connection with the issuance of the securities the proceeds from which were used to redeem the bonds outstanding prior to February, 1941, was likewise charged to surplus.

Q. Have the entries for these various charges which you have just enumerated, actually been made on the books of the company?

A. They are being made in the month of December.

* * * * * * *

[fol. 6209] Q. Is the effect of these entries which you have just detailed such that it leaves, as of the present time, no remaining balance in this account for unamortized debt discount and expense?

[fol. 6210] A. That is correct. However, there are work orders in existence which, if our present proposed refinancing is consummated, may ultimately give rise to further amounts of unamortized debt discount and expense.

Q. Yes. Am I correct in understanding that that is the proposal which you now are seeking approval of by the Securities and Exchange Commission?

A. That is correct.

Q. I invite your attention now to Line 19 of this exhibit, which is the account for "Extraordinary Property Losses." Can you tell us, generally, what charges are made and what they represent in this account?

A. Generally, the balances shown on Line 19 as extraordinary property losses at December 31, 1932, '33, '34, '35 and '36 in Columns D, E, F, G and H, Page 41 of Exhibit No. 48, represent the cost of property retired by certain of the subsidiaries of Panhandle Eastern, since dissolved.

These charges arose as a result of the fact that at the time the properties were abandoned, there had not been sufficient reserves provided to absorb the charges.

The classification of accounts the company was following at that time permitted the charges of such amounts to an account titled, "Extraordinary Property Losses", subject to some subsequent distribution.

At the time the companies were dissolved, the amounts [fol. 6211] were charged to surplus or some liquidation account and the result of the charges as to Panhandle Eastern itself was reflected in any loss that it might have had to absorb at the time the subsidiaries were dissolved.

As far as my knowledge goes at the moment, I do not believe there were ever any amounts in this account and here we are speaking of a consolidated amount, that is, an amount representing Panhandle Eastern and subsidiary companies.

Q. Yes.

A. There was never any charge, as far as I know, in these amounts for property of Panhandle Eastern itself. I could be wrong there, but if you have any interest in the development of that fact, I will be very glad to give you a specific answer tomorrow. I think my answer, however, is correct.

Q. Well, may it be understood, Mr. Watkins, that you will make this check and if there is no reason for changing it, it will stand as correct?

A. That is quite all right, sir.

Q. Do the charges to this account, Mr. Watkins, represent transfers from the plant account?

A. Generally, over the years, our practice with respect to retirement of property has been this: There may [fol. 6212] have been some slight variations here or there or refinements as we went along, but when the time arose for us to retire any property, we followed the practice of

the issuance of a retirement work order and immediately upon the issuance of a retirement work order, the amount at which the property to be retired was carried in the gas plant account, known by us as another account at the time, was charged to suspense-retirement clearance.

When the retirement job had been completed, the original cost of the property retired plus the cost of retiring it less salvage recovered during the retirement was charged either to a reserve account or, if the reserve account was not sufficient, as was the case in the subsidiaries where the charges to extraordinary property losses arose, the charge was made to that account and later, as I previously testified, in liquidation the amount became a part of the loss, if there happened to be one, that Panhandle Eastern sustained in the disposition of the company or in connection with the dissolution.

I believe that the result of all of those amounts will be found in this witness' Exhibit No. 50 where it may be observed that certain charges have been made as a result of the dissolution of some of the companies that, at some previous time, had been a subsidiary of Panhandle Eastern.

Q. Is it correct to say, Mr. Watkins, that the primary [fol. 6213] purpose in transferring these items from the gas plant account to the account for extraordinary property losses was necessitated by reason of the fact that it was necessary to amortize these amounts in some manner different from that amortization or depreciation which was then provided for gas plant property?

A. I think that is correct. If I understand your question, it boils itself down simply to the fact that there were insufficient reserves, some disposition had to be made of the amounts, the classification of accounts used at that time provided the disposition by a charge to extraordinary property losses to be held pending some disposition and the disposition in cases of companies involved here was dissolution.

Q. Yes. Has the company had any similar instances which might be classified as extraordinary property losses since 1936 which have been disposed of in some manner other than that which you have just indicated?

A. One would have to have some definition, would they not, as to what would comprise an extraordinary loss, to answer specifically that question.

Maybe I can state the condition that I believe you are interested in in this fact: That any losses sustained by Panhandle Eastern or its subsidiaries subsequent, shall we say, to December 31, 1936, were not of the nature that there had not been reserves provided against which they [fol. 6214] could be charged.

Now, to characterize them as being extraordinary or not being extraordinary, I should think we would have to give weight to the particular loss, whatever it happened to be. Does that cover it?

Q. Yes, it does. Your answer indicates the thought that I had in mind, that is, that property losses presently are charged directly to the reserve for plant account without carrying them through some such account as this for extraordinary property losses.

A. That is correct and had the companies involved in these charges to extraordinary property losses had reserves sufficient, that same situation would have prevailed with respect to those companies.

Q. Will you please turn your attention to Line 22 of this exhibit, which is the account designated as "Other Work in Progress".

Can you explain to us the reason for the increase in this account from December 31, 1940, as shown in Column L when there was an amount of $2,975.91, to the amount remaining at June 30, 1941, as shown in Column M of $643,791.98?

A. I can, sir, and that is a very natural increase.

Q. Will you do so, please, that is, explain for us?

A. The $643,791.08 balance shown on Line 22 in Column M on Page 1 of Exhibit 48 was made up of the following items:

[fol. 6215] Expenses in connection with the issue of first mortgage and first lien bonds, Series A, due serially, November 1, 1946, to November 1, 1950, inclusive; first mortgage and first lien 3 percent bonds, due November 1,

1960; and serial notes, Series A, B, C, and D, due serially November 1, 1942, to November 1, 1945, inclusive;

Call premium on first mortgage and first lien bonds, Series A, 4 percent, due March 1, 1952;—$420,040.

Expense of new issues (since January 1, 1941)—$244,074.03.

Making a total of—$664,114.03.

Less estimated amortization recorded as of June 30, 1941—$24,585.61

Leaving a balance of—$639,528.42.

Work in progress—chargeable to Others—$1,242.18.

Preliminary expense—proposed construction projects—$2,471.75.

Electrical protection tests on lines and other minor items—$549.63.

The expenses in connection with the securities amounting to—$639,528.42 were cleared from the account "Other work in progress" in the month of October by a charge to unamortized debt discount and expense, and in the month of December, as this witness has previously testified, disappeared from the company's records altogether by a charge to surplus.

[fol. 6216] Does that give you the information?

Q. Yes, it does.

Now, will you please turn to Page 2 of this exhibit. In your direct testimony, Mr. Watkins, you stated on page 894 with reference to the account shown at Line 2, Page 2, of Exhibit No. 48 as representing the account titled, "Common Capital Stock", that an amount of $15,017,300 was transferred from capital surplus to common stock.

Can you tell us what part of this amount, so transferred, represented cash?

A. I cannot.

Q. Do you know whether any part of it represented cash?

A. I am quite positive that a substantial amount of it represented cash.

Q. Do you know whether or not a part of it represented property?

A. Are we talking about representing cash or property of Panhandle Eastern or to some other organization?

Q. Well, since this is a consolidated balance sheet of the Panhandle Eastern Pipe Line Company and subsidiary companies, as the title indicates, I think we must necessarily talk about a consolidated item.

A. Maybe I do not ask the question correct, Mr. Gorman.

If you will refer to Exhibit 51, you will observe that on Lines 3, 4 and 5 there appears an amount of $19,335,867.47 [fol. 6217] in Column B. Without reading the testimony that I have previously given in connection with this amount of 19 million-odd dollars, I believe my statements with respect to the $15,017,300 which likewise is shown in Exhibit 51 on Lines 39 and 40 in Column H, referred to the fact that the $15,017,300 was a part of the capital surplus or $19,335,867.47 appearing on Lines 3, 4 and 5 of Page 1 of Exhibit 51.

The $19,335,867.47 became capital surplus on the part of Panhandle Eastern as a result of the donation to it of certain assets, funds and indebtedness canceled by Missouri-Kansas Pipe Line Company as of August 31, 1930.

This witness has had no access to the books and records of Missouri-Kansas Pipe Line Company, but, in the disposition of the $19,000,000-odd dollars donated to Panhandle Eastern by Missouri-Kansas Pipe Line Company as of August 31, 1930, and the many ways in which, during the course of the ten years I have been connected with the operation of the books and accounts of these companies, I am very definitely of the opinion that a great portion of the $19,335,867.47 represented cash originally invested by some organization in properties.

Now, at the time the entries with respect to this amount were recorded on the books of Panhandle Eastern certain of the properties received by Panhandle Eastern were owned by subsidiaries, since dissolved.

[fol. 6218] However, most of such properties remain a part and parcel of the general properties and facilities

owned by Panhandle Eastern. Some of the $19,000,000 represented indebtedness of Panhandle Eastern to Missouri-Kansas Pipe Line Company as a result of advances made by Missouri-Kansas Pipe Line Company to Panhandle Eastern; either secured by notes or on open account for construction purposes.

They represented, likewise, advances made to certain companies which became subsidiaries of Panhandle Eastern as a result of the donation on August 31, 1930, by Missouri-Kansas Pipe Line Company and that indebtedness to Missouri-Kansas Pipe Line Company likewise represented amounts due it from these subsidiaries, either on open account or notes, for funds advanced to the subsidiaries and actually used by them in construction purposes and further represented the amounts invested by Missouri-Kansas Pipe Line Company in certain other subsidiaries and in the company's so-called Local Area System.

I believe, sir, without trying to say categorically that I have definite knowledge that each of the dollars represented by the $19,335,867.47 were actually invested in property, it is quite proper and logical to state that my knowledge of the amounts is such that I can have no hesitancy in saying that the greater part of it actually was invested in properties.

Q. But was this acquisition of assets of properties and [fol. 6219] other items from the Missouri-Kansas Pipe Line Company brought about through an agreement which was made between the Missouri-Kansas Pipe Line Company, the Columbia Oil and Gasoline Corporation and the National City Company as of September 17, 1930?

A. That is correct, together with certain amendments made within the next month or so thereafter.

Q. And was this amount of $19,335,867.47 set up for the purpose of determining how much the Columbia Company would provide to continue the construction program undertaken by the Panhandle Eastern Company at that time?

A. No, not as far as I know.

Q. What is your understanding of it?

A. The agreement of which you spoke dated September 17, 1930, as amended in October, 1930, perhaps Oc-

tober 23, and actually consummated along about that time, provided the amount of assets, properties and so forth to be donated to Panhandle Eastern by Missouri-Kansas Pipe Line Company.

Q. Are you quite sure of that statement, Mr. Watkins, or did it not provide the manner in which such calculations should be made?

A. That is correct. Generally speaking, the effect was to provide it.

Q. But it did not specifically state any amount whatsoever except I believe there were certain figures given [fol. 6220] with reference to the so-called Local Area properties, is that correct?

A. Well, I do not really know just exactly what figures were given in the September 17 contract without referring to it except that it is my remembrance that the contract was the basis upon which the donations, concerning which we have been discussing here in the last few minutes, came into the possession of Panhandle Eastern.

Q. It also follows, does it not, that this amount of $19,000,000-odd of which we have been speaking, was a calculation resulting from the terms and conditions of that agreement of September 17 which provided for the transfer of these properties to the Panhandle Company?

A. So far as Panhandle Eastern is concerned, the $19,000,000 concerning which we have been speaking is the amount at which the assets, properties, cancelation of indebtedness and so forth were recorded on its books.

I do not hardly know how to characterize your observation with respect to "calculation."

My memory goes that the September 17, 1930, contract, as modified, did provide the machinery by which certain amounts would be determined. Now, so far as Panhandle Eastern is concerned, it was the recipient of certain assets which were recorded on its books on the basis of the best information available to it.

[fol. 6221] Q. Have you ever made an investigation to determine what portion of this $19,335,867.47 actually represented the value of property or what amounts actually represented cash transferred?

A. Well, I believe I can be helpful in that respect, perhaps, if you will bear a moment or so with me.

Q. If you will, please.

A. It appears from an analysis the witness has before him of the paid in capital and surplus of Panhandle Eastern Pipe Line Company as of September 1, 1930, that the capital stock of the Company at August 31, 1930, was carried on its books at $50,000;

That there were acquired from Missouri-Kansas Pipe Line Company, without cost to Panhandle Eastern Pipe Line Company, the following assets:

Property, plant and equipment (Local Field),		$ 2,197,475.40
Purchase and sales contracts (Local Field),		$ 2,398,402.19
Construction work in progress (Local Field),		$ 220,473.12
Investment in associated companies:		
Missouri-Kansas Gas Company,	$ 627,661.22	
Central States Gas Utilities Company,	$ 112,420.74	
[fol. 6222] J. D. Judd & Company (51%)	$ 35,266.72	
Shale Gas Corporation (51%)	$ 164,902.37	
General Supplies,	$ 46,140.41	
Inter-Company Accounts represented—		
Notes Receivable from—		
J. D. Judd & Company,	$ 57,500.00	
Accounts Receivable represented by accounts receivable from—		
Central States Gas Utilities Co., amounting to	$ 16,094.21	
Missouri-Kansas Gas Co.,	$ 392,564.75	
J. D. Judd & Co.,	$ 10,354.93	
Prepaid Accounts amounting to	$ 3,565.19	
Less Deferred Liabilities,		
Jacksonville Property,	$ 18,569.56	
And Less Accrued Taxes,	$ 14,066.06	
Those items make a total of		$ 6,250,185.63

Missouri-Kansas Pipe Line Company canceled the following Inter-company accounts on the books of Panhandle Eastern Pipe Line Company:

Notes Payable to Missouri-Kansas Pipe Line Company by Panhandle Eastern,	$ 1,990,975.00
Accounts Payable by Panhandle Eastern to Missouri-Kansas Pipe Line Company,	$ 4,377,407.16
Accounts Payable by Panhandle Eastern [fol. 6223] to Texas Interstate Pipe Line Company,	$ 245,613.18
Less a credit represented by interest during construction,	$ 7,617.38
Making a total of,	$ 6,606,377.96

Missouri-Kansas Pipe Line Company made a payment to Panhandle Eastern to liquidate the current indebtedness of Panhandle Eastern, Panhandle Illinois Pipe Line Company and Texas Interstate Pipe Line Company obligations shown in purchase price, $ 6,479,303.88

All of which items aggregate, $19,385,867.47

Q. Was that 385,000 or 335,000?.

A. 385,000, sir, because, if you will recall, the analysis covered both paid in capital and surplus.

Q. Yes.

Do I understand from your answer, Mr. Watkins, that this analysis which you have just given showed by detailed accounts and amounts the charges which were made on the books of the Panhandle Eastern Pipe Line Company at the time of these acquisitions from Mo-Kan Company?

A. I think that is substantially correct. There may have been some slight deviation in the accounts when recording the amounts on the books of Panhandle Eastern.

Counsel for the Commission might be interested in the table shown on Page 17 of a report on the accounts and records of Panhandle Eastern Pipe Line Company as a [fol. 6224] result of an examination made by the Federal Trade Commission, copies of which I am quite positive would be available to the Power Commission.

This table gives a comparison of the amounts at which the donated assets just described were carried on the books of Missouri-Kansas Pipe Line Company and later recorded on the books of Panhandle Eastern Pipe Line Company.

* * * * * * * *

[fol. 6242] By Mr. Gorman:

Q. Mr. Watkins, at the time of taking the luncheon recess, we were discussing the amounts which had been set up on the books of Panhandle Eastern Pipe Line Company as representing assets and other items acquired from the Missouri-Kansas Pipe Line Company in 1930. I don't recall

[fol. 6243] whether I asked the question. If I did, I would like to have the answer repeated now, and that is whether or not the figures which you read as representing the value of these properties represents the extent of your knowledge as to the cost of various items transferred to the Panhandle Eastern Company.

A. I believe you did ask that question and my remembrance is that the witness replied that his knowledge with respect to these amounts began with the time when they were donated to Panhandle Eastern, and that we had no direct knowledge of the amount at which any of them were carried on the books of Missouri-Kansas Pipe Line Company, or any other company that may have theretofore owned them.

. . . . . .

[fol. 6245] By Mr. Gorman:

Q. Now, referring, again, to the reference which I made previously to the original Registration Statement as filed on December 24, 1941, there appears the following note attached to the balance sheet and made an integral part of such balance sheet of the Panhandle Eastern Pipe Line Company:

> "Property plant and equipment is stated at cost except for $2,417,948.52 thereof assigned by the Board of Directors to assets acquired as of August 31, 1930, as a capital contribution."

Now, that, as I understand, Mr. Watkins, relates to this property which was acquired from the Missouri-Kansas Company, does it not?

A. It relates to a portion of such property and states the amount thereof as of September 30, 1930. A good deal of this property represented by the $2,417,948.52 has since been retired and some of it replaced.

Q. Now, can you explain to us the significance of the statement that the property plant and equipment is stated at cost except for this $2,000,000-odd?

A. I can.

Q. Will you do so, please?

A. We have had a great deal of testimony today about certain assets, obligations, and so forth donated to Pan- [fol. 6246] handle Eastern by Mo.-Kan.

Mr. Culton: By "Mo-Kan" you mean Missouri-Kansas Pipe Line Company?

The Witness: That is correct. It was my understanding that in the proceedings Panhandle Eastern Pipe Line Company and Missouri-Kansas Pipe Line Company have been referred to as Panhandle Eastern, and as Mo-Kan, and if I may be permitted to do so I shall follow that procedure.

(Continuing) Included in the amount of this donation or, rather, included in this donation was certain property plant and equipment consisting of Organization amounting to $10,018.14; Miscellaneous Intangible Capital amounting to $25,192.17; Land, amounting to $1,940.75; Measuring Station Buildings, amounting to $9,793.95; Other Transmission System Buildings, amounting to $4,750.48; Meters and Gauges, amounting to $52,035.48; Compressor Station Equipment, amounting to $270,534.33; Field Lines, amounting to $214,324.74; Transmission Lines, amounting to $1,494,487.79; Furniture and Fixtures, amounting to $41,728.81; Automobiles and trucks, amounting to $65,459.17; Shop Equipment, amounting to $3,867.22; Laboratory and Engineering Department, amounting to $2,509.77; Other General Equipment, amounting to $832.60; Construction Work in Progress, amounting to $220,473.12.

These amounts make up the total shown opposite the [fol. 6247] caption "Property, Plant and Equipment" on page 17 of the Federal Trade Commission report by Mr. M. C. Steele, referred to in the testimony of the morning session, and the amount of construction work in progress shown thereon.

Mr. Wheat: May I ask, Mr. Watkins, under what general heading is that shown in Mr. Steele's report?

Mr. Gorman: This is identified, is it not, as Table 2?

The Witness: That is correct, it is so identified.

I believe I have with me, although I am not able to find the Table readily, a statement which will show the changes in the $2,417,000-odd figure since September 30, 1930. A great deal of the property represented by the charges to the accounts which the witness stated in the record a

moment or so ago has been retired and portions have been replaced and additional property has been constructed, so that out of the $2,400,000-odd we still have a residue of the amount represented at September 30, 1930, as property received by Panhandle Eastern, Organization, Miscellaneous Intangible Capital, and so forth, as shown by the detail previously stated.

* * * * * * *

[fol. 6248] A. The reason for the statement to which you refer in the Registration Statement is a well recognized requirement of independent public accountants and reports made as a result of their investigations and was followed by the public accounting profession quite a while in advance of the advent of the Natural Gas Act or the Securities and Exchange Act of 1934, or the Act of 1933.

However, there are manifestations in the requirements of certain forms to be filed under those Acts, that the basis upon which properties are carried on the books of an organization should be stated in accounting certificates or notes with respect to accounting reports and I verily believe, sir, that if we do not make some such statement in any Registration Statement filed with the Securities and Exchange Commission we would immediately get a deficiency.

Q. Well, in that connection, Mr. Watkins, I note at page S-1 of this Registration Statement, to which we have been making reference, there appears the Auditor's Certificate of Arthur Andersen & Company. Do I understand from the testimony which you just gave that that note [fol. 6249] which we have read from the statement was inserted at the request and insistence of the auditor?

A. And you should deduct, sir, the accounting information included in the Registration Statement which is covered entirely by the accountant's certificate to which you have just made reference.

Q. That is correct.

A. The financial information included in the Registration Statement is certified to entirely by Arthur Andersen & Company with respect to Panhandle Eastern and the matters covered by their work, and with respect to Michigan Gas Transmission Corporation and Indiana Gas Dis-

tribution Corporation the matter is certified to by Messrs. Price, Waterhouse & Company with respect to the matters covered by their work.

I don't believe you meant to infer that the company suggested to Messrs. Arthur Andersen & Company or the other firm of public accountants what those organizations should put in the balance sheet or in the Registration Statement as their comments?

Q. No, I merely intended to indicate, without any harmful intention whatsoever, that the certification of the auditors of that balance sheet was qualified to the extent indicated in the notes attached to that balance sheet. Was that the correct assumption?

[fol. 6250] A. Oh, I think it has to be, sir.

* * * * * * * *

[fol. 6254] By Mr. Gorman:

Q. Mr. Watkins, at the time of the recess, you were to undertake to find certain notes which would explain certain matters in connection with the amount of $2,417,948.52 to which we have previously made reference.

Were you able to locate those notes?

A. Yes, I was, and the particular reason I wanted to locate the notes was because of the fact that I felt that there might be some question in someone's mind that this $2,417,948.52 received by Panhandle Eastern as a part of the total of $19,300,000-odd donated by Mo-Kan did not represent actual cost and, by the introduction of the total amount of retirements made out of the $2,417,948.52 from August 31, 1930, to September 30, 1941, [fol. 6255] a portion of that question, if there be any, would be dispelled from anyone's mind.

The retirements of property represented by the $2,417,948.52 from August 31, 1930, to September 30, 1941, amounted to $1,034,043.54.

During that same period, there was subsequent additions made having a cost of $534,243.91.

Q. What was that figure again? A. $534,243.91.

Q. Thank you.

A. So that the balance represented by the original amount, $2,417,948.52 less subsequent retirements plus subsequent additions was $1,918,148.89 at September 30, 1941.

Q. From this statement, Mr. Watkins, is it correct to say that as of September 30, 1941, there remained of the property acquired from the Missouri-Kansas Company, which is related to this statement which we have quoted, $2,417,948.52, less retirements of $1,034,043.54, is that correct?

A. I am afraid, Mr. Gorman, we could not quite say that properly because some portion of the retirements amounting to $1,034,043.54 may have represented retirements of a portion of the subsequent additions amounting to $534,243.91.

I do not actually have with me a segregation of the retirements as to the amount originally received from Missouri-Kansas represented by the $2,400,000-odd and as [fol. 6256] applicable to the $534,000 item comprising the subsequent additions.

Q. Do your notes indicate the period during which these additions comprising the total of $534,000-odd were made?

A. Yes, they do, and I believe I have stated that they were made between August 31, 1930, and September 30, 1941.

Q. Would it be your opinion that in all likelihood there would have been only a very small amount of this $534,000 retired up to September 30, 1941, by reason of the newness of this property?

A. If I express such an opinion, I would have to give consideration to the fact that the properties originally represented by $2,400,000 were what has been characterized in these proceedings as the Local Area properties in which there is a considerable turnover in investment by reason of the diminution of supply, the movement of gathering lines, field lines and measuring stations, and I am afraid it would be improper for me to hazard a guess.

Q. Your reference to the Local Area properties is predicated upon the fact that it is anticipated that the reserves of gas in the Local Area will be exhausted within the next few years, is it not?

A. No, sir. My statement with respect to the rapidity of turnover in investment in the Local Area is because [fol. 6257] there have been certain producing properties which, since August 31, 1930, have become non-producing properties. The wells in this Local Area are shallow wells, the gas reserves under them are not great.

There is a great deal of drilling and a great deal of recovery of materials in the property, movement from one place to another within the Local Area field, not so much crystal gazing as to what might happen to the reserves in the future.

My statement is predicated entirely upon what I know has happened in the past. I would be afraid to state that only a small portion of the $534,000 figure had been retired.

I would want to be as realistic as one possibly can about the matter and I cannot conscientiously make such a statement.

Q. Well, to accurately and definitely determine that would require an analysis of each retirement which has been made from August 31, 1930, through September 30, 1941, of the property originally donated by Mo-Kan?

A. That is true and which I certainly hope you will not ask us to prepare.

Q. No, I understand. Do you have no accounts from which this amount could be easily and readily ascertained?

A. As to the investment as it existed at August 31, 1930, and as to the subsequent additions, we do not have [fol. 6258] any records from which a segregation could readily be made of the amount of retirements during that period applicable to those two classes of investment.

Q. And you are, therefore, not in a position at the present time to indicate specifically what portion of this amount of $2,417,000 which has been included in your gas plant account was donated by the Mo-Kan Company?

A. Yes. I have specifically testified during the proceedings today that the whole of the $2,417,948.52 was among the assets donated by Mo-Kan.

Q. I was speaking—

A. (Interposing) As to the retirements, no.

Q. I was speaking as of the amount remaining at the present time.

A. No, I could not segregate that.

Q. You understand, of course, I am speaking of the gas plant account as it stood at June 30, 1941?

A. With respect to this particular item only?

Q. Yes, that is right.

A. Yes.

Q. Mr. Watkins, all of this discussion which we have been recently engaged in concerned only $15,017,300 of the total shown in Column M of Line 2 of Page 2 of Exhibit No. 48 which, at June 30, 1941, was $20,184,175, the difference being, according to my calculations, $5,166,875.

[fol. 6259] Can you tell us what portion of this valuation of common capital stock represents property and cash?

A. I am afraid you have me confused, sir.

We have recently been talking about $19,300,000-odd that came into the proceedings as a result of the question previously predicated and you are now asking about the $15,017,300, is that correct?

Q. That is correct.

A. Now, we are going back to the $15,000,000-odd figure that is in the capital account, is that right?

Q. No, to the difference between the $15,017,300 and the $20,184,175, which was present in this account as of June 30, 1941. Do you understand my question now?

A. Yes, I believe I have your question in mind correctly.

If I may give you the general substance of what happened without testifying with respect to specific amounts, I believe it would speed things along and perhaps reach the conclusion that you have in mind.

If you will observe Page 2 of Exhibit No. 48, you will observe that at December 31, 1930, the common capital stock is stated on Line 2 of Column B at $100,000. If we may begin there and proceed toward the $20,184,175, will that be satisfactory?

Q. I am sure that will be.

[fol. 6260] A. At or about October, 1930, a contract was entered into between Columbia Oil and Gasoline Corporation, Missouri-Kansas Pipe Line Company and, I believe, the Chase National Bank—

Q. (Interposing) I believe it was the National City?

A. This, I believe, was the Chase National Bank, providing the medium through which some $10,900,000, I believe, would be available to Panhandle Eastern Pipe Line Company to complete the construction program under which, at the time, Columbia Oil and Gasoline Corporation acquired one-half of the outstanding stock of Panhandle Eastern from Missouri-Kansas Pipe Line Company.

Without indulging in too much explanation as to the nature of that contract, it provided that by the submission by Panhandle Eastern of certain construction certificates, there would be made available to it 100 percent of the amount of such construction certificates out of funds provided by Columbia Oil and Gasoline Corporation and Missouri-Kansas Pipe Line Company.

Now, when the witness refers in this respect to Missouri-Kansas Pipe Line Company, he is stepping through several corporate walls because, actually, there was another corporation interposed that provided the funds, but the effect was they came from Mo-Kan.

Q. You are speaking of the Panhandle Corporation?

[fol. 6261] A. That is correct, and the funds made available to Panhandle Eastern for construction purposes were to be represented by notes and common stock in the proportion of $90 of notes and two shares of common stock to each $100 of construction.

You will observe the common capital stock account increased up to a total, in 1935, of $1,199,000 as shown in Column G on Line 2 of Page 2 of Exhibit No. 48.

That increase was the result of the issuance of stock as a part of Panhandle Eastern's obligation to the two companies under this three-part contract through which the additional construction funds were provided.

Q. Was that for cash received?

A. Entirely for cash received. As I have stated, Panhandle Eastern was required, under this contract, to sub-

mit to the Chase National Bank, I believe, certain specific construction certificates and there was some legal procedure followed by the bank or its nominee to acquire the funds from Columbia Oil and Mo-Kan upon the receipt of which Panhandle Eastern gave its notes and stock certificates.

The increase beginning in 1936 came about from two directions. My memory runs to the fact that in March, perhaps March 24, 1936, Panhandle Eastern issued the right to its stockholders, there being only two at that time, to subscribe to 160,000 shares at $25 a share.

[fol. 6262] One of the two stockholders subscribed to its 80,000 shares on April 1, 1936, which increased the common capitalization by $2,000,000.

Then, as shown by Exhibit 51, there was transferred from capital surplus to the common stock account an amount of $15,017,300 as a result of action by Panhandle Eastern Pipe Line Company's Board of Directors.

These transactions increased the common capital stock to $18,216,300, as shown on Line 2 in Columns H, I and J of Page 2 of Exhibit 48.

In 1939, the 80,000 shares warrant, which had been issued to the second stockholder in 1936 and held subsequent to that time by that stockholder's receivers, was offered to the stockholders of that organization and all but 1,285 shares of the 80,000 shares were subscribed by such stockholders on or before October 29, 1939.

This increased the balance in the common capital stock account, as shown on Page 2, Line 2, Column K, to $20,184,175, which amount remained unchanged to June 30, 1941 and, for that matter, to January 20, 1942.

Q. Does that complete your answer, Mr. Watkins?

A. If it answers your question, it does.

Q. Yes, it does. Can you tell us, Mr. Watkins, to the best of your recollection how many shares of common stock were outstanding at December 31, 1935, as represented [fol. 6263] by the amount shown in Column G, Line 2, of this exhibit?

A. I believe there were 2,298.

Q. Referring to Page 1 of Exhibit No. 51, Lines 39 and 40 bear the following statement, "Capital surplus assigned to stock dividend paid by the issuance of 646,354 shares of common stock" which, according to Column H for the year 1936, represented the amount of $15,017,300 of which we have been speaking.

Therefore, the common stock outstanding was increased as of that year to the extent of 646,354 shares, was it not?

A. That is correct.

Q. Will you explain to us the circumstances, that is, explain somewhat briefly the circumstances which brought about the issuance of this stock?

A. I am not sure that it was entirely a result of the agreement entered into in October 1930, between Panhandle Eastern, Mo-Kan and the Chase National Bank or as a result of some other corporate action that the stock of Panhandle Eastern was represented in the hands of the stockholders by voting trust certificates.

In 1935, I believe at July 31, the voting trust was dissolved and either coincident with the dissolution of the voting trust or the common stock or perhaps slightly prior thereto, the number of shares of common stock was reduced from 229,800 such shares to 2298 of such shares.

[fol. 6264] The latter number of shares remained unchanged until the stock dividend referred to in Lines 39 and 40 of Exhibit No. 51 was paid.

The Board's action was, I believe in conformity with the general corporate laws of the State of Delaware, that the price at which the 648,354 shares paid as a stock dividend was deemed to have been issued was $25 a share and by a simple arithmetic calculation, we arrived at the $15,017,300.

Does that answer your question, sir?

Q. Yes, excepting for another thought which I have in mind.

Was the issuance of this stock related in any way whatsoever to the settlement of a suit which had been instituted by the stockholders or receivers for the Missouri-Kansas Pipe Line Company against certain individuals claiming,

I believe, some $180,000,000 in damages? You had better answer that phase of the question first.

A. I doubt that it had too close a connection to that. There might have been some connection. Frankly, I do not know. There was a recapitulation of Panhandle Eastern Pipe Line Company under way at the time. There were a great many corporate matters being disposed of.

The fact that the corporation had 2,298 shares was a terrific amount in its capital account and was a bit awkward and that perhaps gave rise to some additional taxes [fol. 6265] and shares were unwieldy as represented by the amount as stated by the books and unquestionably, there were a great number of things considered by the stockholders and the Directors in determining to increase the number of shares from 2,298 to 668,652 outstanding.

My memory also runs to the fact that the entire authorized capital stock had likewise been increased. There may have been some desire on the part of the stockholders to have the evidence of their ownership of Panhandle East- broken up into smaller pieces in order that they might deal more freely with them.

Along about the middle of 1936, Panhandle Corporation, an organization to which you referred a short while ago, transferred the common stock of Panhandle Eastern it owned to the receivers of Missouri-Kansas Pipe Line Company.

Missouri-Kansas Pipe Line Company, I believe, asked that the one large certificate for the total number of shares that it received be broken down into smaller pieces and, as I say, there were those and perhaps a great number of other things that entered into the consideration involving the stock dividend.

Q. Yes. Now, Mr. Watkins, you referred in your answer to a question of a few moments ago to two stockholders of Panhandle Eastern Pipe Line Company. Those stockholders were the Columbia Oil and Gasoline Corpora- [fol. 6266] tion and the Missouri-Kansas Pipe Line Company?

A. The Missouri-Kansas Pipe Line Company has not held stock as a corporation throughout the entire period.

It was about the middle of 1936 when Missouri-Kansas Pipe Line Company became the record holder of a portion of the common stock of Panhandle Eastern.

Apparently at that time, the stock that it became the record holder of had either been in the name of a voting trustee or Panhandle Corporation or maybe back in the early days, some other nominee.

Q. Might it not be well to explain at this point that the Panhandle Corporation was an entity set up by the Missouri-Kansas Pipe Line Company for the purpose of certain financing arrangements which it undertook in 1930?

A. I do not really know.

Q. I do not want you to go into the detailed explanation.

A. I do not really know the basis upon which it was set up. My personal observation of the corporation was that that might have been the case.

Q. Yes. Do you know whether or not, Mr. Watkins, the issuance of this 646,354 shares of common stock was brought about, in part, by a consent decree entered in the District Court of the United States for the District of Delaware on January 29, 1936, as a result of an anti-[fol. 6267] trust action brought by the United States Government?

A. Now, I am just a simple sort of a person. If you will not involve me in any actions that might have been brought by the Department of Justice or any consent decrees that may have been issued, I certainly will be obliged to you.

I have tried to say, in answer to your previous question, that it is my belief that the origin of the 646,354 shares was as a result of a wide variety of things, one of which might have been this particular transaction to which your question is directed.

Q. You personally, as secretary and controller of the company, are not aware of the facts with respect to that matter?

A. I would not say that. I am aware of the fact that there is a consent decree, that there was an anti-trust suit. Whether those particular circumstances were the only

circumstances that have anything to do with the issuance of the stock dividend, I do not know.

I presume that it probably did have something to do with it.

There may have been some provision in the consent decree or the stipulations I presume issued thereunder or concurrent with it that caused the issuance of these stock dividends.

Q. Can you say at the present time whether the minutes of the Board of Directors of the Panhandle Company [fol. 6268] would set forth in detail the reasons for the issuance of this amount of stock?

Mr. Wheat: Do you mean the Panhandle Company?

Mr. Gorman: That is right.

Mr. Wheat: Yes.

Mr. Gorman: Panhandle Eastern Pipe Line Company.

The Witness: I think there would be some reference, unquestionably, in the minutes of the meeting in which the stock dividend was declared as to its purpose.

Whether that statement would run to the anti-trust suit to which you referred to or to the consent decree, I am not sure that I know.

I believe Panhandle Eastern made an offer to issue certain shares of stock and to issue certain stock rights and to do certain other things to its stockholders somewhere along about June 19, 1935.

These transactions we are referring to might even have a part of their origin back in that offer.

By Mr. Gorman:

Q. I believe you stated, Mr. Watkins, that the 80,000 shares of stock which were purchased by one of the stockholders in 1936, whom I assume to be the Columbia Oil and Gasoline Corporation were purchased actually on a cash basis, were they not?

A. That is correct.

[fol. 6269] Q. And is that also true of the sales of stock

which took place in the year 1939 to which you made reference?

A. That is correct.

* * * * * * * * *

I was not controller, of course, back in 1936.

Q. Well, we understand, of course, you were only secretary at that time.

Referring now to Line 3 of Page 2 of this exhibit, which is the account for preferred capital stock, at December 31, 1936, and continuing up to and including June 30, 1941, there was outstanding some $11,000,000 in this account.

Can you tell us whether or not this preferred stock was all issued for a cash consideration?

A. Yes, I can explain that.

Going back to the responses I gave with respect to the fact that Missouri-Kansas Pipe Line Company may not have been a record holder at all times of the stock it now owns, my mind is refreshed that there was a nominee of Panhandle Corporation involved.

I presume it is sufficient, so far as our interest in this matter is concerned, to refer only to Panhandle Corporation.

Now, as to the $11,000,000 principal amount of preferred [fol. 6270] stock which came into existence in 1936, we must turn again to the three-party agreement entered into to provide for the additional $10,900,000-odd of cash needed to complete Panhandle Eastern's construction program as it existed in the latter part of 1930 and to the fact that Panhandle Eastern thereafter issued certain of its notes, together with certain shares of stock, to the organizations advancing to it approximately $10,990,000 in cash.

This cash was advanced to Panhandle Eastern in equal amounts by Columbia Oil and Gasoline Corporation and by the Ottiwell & Company, the latter in behalf of Panhandle Corporation for construction requirements of Panhandle Eastern and its subsidiaries.

These advances, as the witness has stated, represented $90 in principal amount of Panhandle Eastern notes and two shares of its no-par common stock.

There were issued, during the years of 1931 and 1932, Panhandle Eastern Pipe Line Company's 6 percent promissory notes due October 2, 1950, aggregating $9,891,000. There had accrued but was unpaid in 1936, interest on such notes in excess of the difference between $9,891,000 and $11,000,000.

On February 6, 1936, according to the revised plan of readjustments of funded debt and capitalization of Panhandle Eastern Pipe Line Company dated June 19, 1935, Panhandle Eastern authorized the issuance of 94,000 shares [fol. 6271] of convertible cumulative preferred stock, having an aggregate par value of $9,400,000 and $1,600,000 principal amount of promissory notes convertible into convertible cumulative preferred stock at par at option of the holders, against the receipt for cancelation of $9,891,000 principal amount of 6 percent promissory notes due October 2, 1950, with unpaid and accrued interest thereon in the amount of $1,440,789, so the witness believes, to answer the question originally put; that the total of the $11,000,000 carried in Exhibit No. 48 on Page 2, Line 3, in Columns H, I, J, K, L and M was represented by cash or its equivalent.

. . . . . .

[fol. 6275] Q. Referring now, Mr. Watkins, to Line 6, Page 2, of this exhibit, which is the long-term debt accounted for by bonds, I note that in Column M as of June 30, 1941, there was outstanding a total of $18,250,000 in bonds and that prior to that year, specifically shown in Column I for the year 1937, there was outstanding a total of $24,000,000 worth of bonds.

Can you tell us the total amount of money which has been raised by the Panhandle Company through the issuance of bonds?

A. The actual dollars, no, without some preparation. There is, however, in the record testimony by this witness with respect to three major financial transactions involving bonds, aggregating, in the first instance, a total principal amount of $20,000,000; in the second instance, a total principal amount of $24,000,000; and, in the third instance, a total principal amount of $18,250,000.

If it is necessary to supply the actual dollars received by the company as a result of the sales of those securities, I will have to have that prepared.

Q. Before I discuss that, Mr. Watkins, can you tell us whether or not certain of the issues which you have just [fol. 6276] spoken of were used, in part at least, for the retirement of bonds which had been issued previous to such later transactions?

A. Yes, I can do that.

* * * * * * * *

Q. Without specific detail, I merely intended to ask a general question. I believe you answered by saying "yes."

What I meant by my question is this, I see you do not understand, that certain of your issues have been used, in part, for the retirement of outstanding bonds, have they not? A. That is correct.

* * * * * * * *

[fol. 6277] Q. Will your notes also indicate the amount of such money that was received that was used for the construction of plant and properties?

A. No, they will not, and I do not know how in the world one could determine such an amount because the proceeds of the sale of securities, along with any other funds that the company received, are thrown into a general bank account from which payments of varied nature are made, either for construction, for operation or for payment of salaries or any other payments that need be made in the ordinary course of business.

We have made no attempt whatever and I do not know how we would go about making an attempt to try to earmark the dollars that go into the general treasury.

Q. Of course, in making such statements, you are taking into consideration all of your books and records and the fact that they would not disclose such information?

A. The books and records do disclose the actual amounts expended for any purpose for which funds have been expended.

One could refer to the income statement introduced as Exhibit No. 49 in these proceedings and observe, for in- [fol. 6278] stance, that the operating and maintenance expense for the period from April 1, 1932, to December 31, 1940, as shown on Line 9 of Column K on Page 1 of Exhibit 49, have amounted to more than $15,600,000.

Now, obviously, that money had to come from some place and there is a complete and very definite record in the company's accounts as to what that money was spent for.

Further than keeping a most accurate record as to where the money is spent, what it is spent for, the account to which it ultimately must properly be charged, the company has no records that show how much of any dollar it received is spent for construction, maintenance, or for any other purpose.

Q. Has it been the experience, according to your information, Mr. Watkins, that in each succeeding issue of bonds the company has been able to acquire funds at a lesser amount of interest?

A. It has not only been the experience but that is the fact.

Q. Yes, that is what I meant by experience.

A. What the future will hold is an entirely different matter.

. . . . . .

[fol. 6282] LEITH V. WATKINS a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Mr. Wheat: Mr. Examiner, in connection with yesterday's cross-examination of Mr. Watkins, certain documents were referred to, and I should like to offer now for identification the following documents:

First, "Panhandle Eastern Pipe Line Company—Compiled Registration Statement", being registration No. 2-4919; date of filing, December 24, 1941; Amendment filed, January 20, 1942; effective date, January 21, 1942, as of January 12, 1942, covering issues of $10,000,000 first

mortgage and first lien 3 percent bonds, Series C, due January 1, 1962, and 150,000 shares of a yet unstated percent cumulative preferred stock (par value $100 per share) and I ask that that be marked with the next exhibit number.

Trial Examiner: The document which you have just described will be marked for identification as Exhibit No. 145.

(Exhibit No. 145 was marked for identification.)

Mr. Wheat: Second, I should like to offer similarly for identification a document entitled, "Prospectus—Panhandle Eastern Pipe Line Company—$10,000,000 First [fol. 6283] Mortgage and First Lien 3 Percent Bonds, Series C, Due January 1, 1962, and 150,000 Shares of (Unstated) Percent Cumulative Preferred Stock, (Par Value $100 Per Share)" dated January 21, 1942.

Trial Examiner: This will be marked for identification as Exhibit No. 146.

(Exhibit No. 146 was marked for identification.)

Mr. Wheat: In addition, I would like to have marked for identification, with the right to withdraw later and substitute a typed copy, an order of the Securities and Exchange Commission made at a regular session of the Commission at its office in Washington on the 21st day of January, 1942, "In the Matter of Columbia Gas and Electric Corporation, Columbia Oil and Gasoline Corporation, Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation, Indiana Gas Distribution Corporation and The Ohio Fuel Gas Company, File Nos. 59-33, 70-263, 70-371, 70-387, 70-430 and 70-431, under Public Utility Holding Company Act of 1935."

* * * * * * * * *

Trial Examiner: This is the order, I take it, which entitles the Panhandle Eastern Pipe Line Company to ac- [fol. 6284] quire certain interests in the Michigan Gas Transmission Corporation?

* * * * * * * * *

Trial Examiner: Very well, we will mark this Order to which you have just referred as Exhibit No. 147 for identification.

. . . . . .

[fol. 6285] Mr. Wheat: May I say with respect to Exhibit No. 146, that this is a bidding prospectus and not the one which offers the securities in question to the public.

I think that distinction is one which possibly should be made of record.

Now, Mr. Examiner, I would also like to offer for identification, also with the right to substitute a mimeographed copy for this typewritten and carbon copy, the Order of the Securities and Exchange Commission in File No. 2-4919, "In the Matter of Panhandle Eastern Pipe Line Company", made at the session of the Securities and Exchange Commission on January 21, 1942, consenting to the filing of amendments to the Registration Statement.

I think that will make the entire group of these documents complete.

Trial Examiner: This will be marked for identification as Exhibit No. 148.

. . . . . .

[fol. 6287] The Witness: In some of the answers to questions put to me yesterday, I may have referred to Columbia Oil and Gasoline Corporation as a stockholder of Panhandle Eastern Pipe Line Company.

Subsequent to the consent decree to which Mr. Gorman made reference during yesterday's proceedings, the stock of Panhandle Eastern Pipe Line Company, beneficially owned by Columbia Oil and Gasoline Corporation, was registered in the name of Gano Dunn, Trustee for Columbia Oil and Gasoline Corporation, appointed pursuant to a decree dated January 29, 1936, in Cause 1099, in Equity in the District Court of the United States for the District of Delaware.

. . . . . .

The Witness: If I may at this juncture, however, suggest that if we could, each time we refer to Columbia Oil

as a stockholder, if such reference is hereafter made, understand we are referring to its beneficial interest and not to the fact it is a record owner subsequent to January, 1936, it might simplify our work.

Mr. Gorman: Can you advise us at this time, Mr. [fol. 6288] Watkins, whether or not that trusteeship is still in effect?

The Witness: It is.

Mr. Gorman: However, as you have indicated, Columbia Oil and Gasoline Corporation is the beneficial owner of such stock?

The Witness: That is correct.

. . . . . .

[fol. 6290] Now, as to the information requested yesterday which the witness is prepared to supply, shall we proceed with that?

Mr. Wheat: Mr. Gorman, would that be satisfactory now?

Mr. Gorman: Yes, quite.

Mr. Wheat: It seems to me that would be a good method to handle this.

Mr. Gorman: Yes, I am agreeable to that.

Mr. Culton: These are the special deposits, are they not?

The Witness: That is correct and the breakdown which the witness is about to supply is that referred to in the question appearing on Lines 7, 8 and 9 at Page 6185 of the transcript of yesterday morning's session.

[fol. 6291] "Special Deposits", amounting to $1,489,127.23 as of June 30, 1941, appearing on Line 6 of Page 1 of Exhibit 48 in Column M. consisted of:

First mortgage and first lien bonds, Series A, 4 percent, due March 1, 1952, City Bank Farmers Trust Company, paying agent (called for redemption March 1, 1941)—$3,820.

First mortgage and first lien 3 percent bonds, Series B, due November 1, 1960, City Bank Farmers Trust Company—paying agent,—$2,055.

Those two items make a total of $5,875.

Miscellaneous Special Deposits are as follows:

Sinking Fund—first mortgage and first lien bonds, Series A, 4 percent, due March 1, 1952, City Bank Farmers Trust Company-Paying agent (called for redemption March 1, 1941)—$9,000.

Funds for redemption of first mortgage and first lien bonds, Series A, 4 percent, due March 1, 1952, City Bank Farmers Trust Company-Paying agent (called for redemption March 5, 1941),—$1,473,524.23.

Funds in Escrow consisted of:

Service Deposits made with the City of Belton, Missouri $5.00;

City of Hugoton, Kansas, $40.00;

Missouri Public Service Company, $5.00;

Kansas Utilities Company, $3.00;

[fol. 6292] These comprise a total of $53.00.

Right-of-Way Deposits consisted of:

State Highway Commission of Kansas, amounting to $25;

Jackson County, Missouri Highway Department, $50;

Making a total of, $75.

There was also a deposit for guaranty of insurance premium with Zurich General Accident and Liability Insurance Company, amounting to $600.

The total of the Miscellaneous Special Deposits was $1,483,252.23 which, taken together with the interest special deposits amounting to $5,875 as an aggregate, made up the total of special deposits amounting to $1,489,127.23 as shown on Exhibit No. 48 at the place hereintofore referred to.

Cross-Examination (Continued)

By Mr. Gorman:

Q. Do you have any other statements that you desire to make, Mr. Watkins, before we proceed?

A. Yes, I do.

At Lines 19 and 20 on Page 6192 of the transcript of yesterday morning's session, the witness was requested to supply for the record the balance in the materials and supplies account as at December 31, 1941.

This amount was $374,839.09, and to completely clear up the record—

Q. (Interposing) Mr. Watkins, before you proceed to [fol. 6293] another subject, does that figure which you have just given represent the closed account or is that account still open for further adjustments prior to closing?

A. As far as I know, it is completely closed. However, if it does not represent the final balance in the account comparable with such balances shown elsewhere at different periods on Exhibit 48, the witness will advise the Commission in some proper manner of whatever the difference may be.

Q. But, in so far as you know at the present time, that does represent the amount which will be in the closed account as at December 31, 1941?

A. That is right.

Now, at Lines 16, 17 and 18 on Page 6211, the matter was left if there be no reason for changing the statements made by the witness, the statements would stand as correct.

Mr. Wheat: To what does that refer?

The Witness: That referred to the fact that there had been no extraordinary property losses experienced by Panhandle Eastern.

The witness has verified the fact and the statements heretofore made in that respect are absolutely correct.

* * * * * * * *

[fol. 6295] By Mr. Gorman:

Q. Mr. Watkins, will you please refer to Page 2 of Exhibit No. 4-S. Line 6, the account "Long Term Debt-Bonds", and particularly to Column M which shows the status of this account as of June 30, 1941.

A comparison of the amounts shown as of that date of $18,250,000 with the amount shown at December 31, 1940, of $22,500,000 indicates that certain bond retirements have been made during the first six months of 1941.

Can you tell us briefly of the transactions which resulted in such diminishment of the bond account of the bonds outstanding?

A. As a result of certain financial transactions consummated as of February 3, 1941, a portion of which was accomplished following the making effective of Registration No. 2-4975 on Form A-2 filed with the Securities and Exchange Commission on November 18, 1940, under the Securities Act of 1933, there were issued and sold on February 3, 1941, $12,000,000 principal amount of Panhandle Eastern Pipe Line Company Series B bonds and, at the same time, $6,250,000 of Panhandle Eastern's Series A bonds, and $5,000,000 principal amount of Serial notes, a more complete description of such securities the witness believes is in the transcript of his original testimony in response to questions directed to him by Mr. Wheat. My remembrance is that the maturities of the securities is [fol. 6296] stated in complete detail in the record.

Having issued and sold these securities, coincident with their delivery, there was deposited with the Corporate Trustee under the company's previous mortgage trust indenture an amount sufficient to redeem the full principal amount and accrued interest on a prior issue of 4 percent bonds.

Is that sufficient, sir?

Q. I think it is, yes.

Can you tell us also whether or not certain refinancing operations are proposed to take place pursuant to an order granted by the Securities and Exchange Commission which has been identified as Exhibit No. 147 and the concurrent findings which are identified as Exhibit No. 148?

A. Yes, I can, and they consist of the expectation of the company to issue and sell $10,000,000 principal amount of first mortgage and first lien 3 percent bonds, Series C, due January 1, 1962, and 150,000 shares of cumulative preferred stock with a par value of $100 per share, all of which is more fully described in Registration Statement No. 2-4919, and in the bidding prospectus, both of which documents have been heretofore identified in these proceedings as Exhibits Nos. 145 and 146, respectively.

Q. Is the purpose of this proposed financing operation to acquire additional properties or will they also result in certain refunding operations? If the answer is [fol. 6297] completely set forth in these exhibits to which you have made reference—

A. (Interposing) The answer is completely set forth and on Page 66 of Exhibit No. 145 is a part of Item No. 28 which is not yet fully complete.

These details are shown with respect to approximately how the net proceeds from the sales are to be applied.

Would counsel like for that information to be read into the record or shall we leave the matter by referring to the item?

Q. I think it might be well for the witness to read into the record that portion of the answer to Question No. 28 which appears on Page 66.

Mr. Wheat: Of which Exhibit, No. 145?

Mr. Gorman: Of Exhibit 145.

Mr. Culton: The same information appears on Page 3 of the Prospectus, Exhibit No. 146, does it not?

The Witness: That is correct. In the Prospectus the designation of the section is, "Application of Proceeds".

In the registration statement, the item is identified as "Furnish a reasonably itemized statement of the approximate amount devoted to each purpose, so far as determinable, for which the net proceeds have been or are to be used."

In said Item No. 28, there appears the following tabulation:

1. To the purchase from Columbia Gas & Electric Cor-
[fol. 6298] poration of all the outstanding securities (stock and indebtedness) of Michigan Gas Transmission Corporation, $10,676,000.

That amount is followed by an asterisk referring to a footnote which reads as follows:

"This figure will be adjusted upward or downward in an amount equal to the increase or decrease, as the case may be, of the surplus of this corporation during the period between September 30, 1941, and the date of purchase."

Section No. 2 reads as follows:

"To the purchase from Columbia Gas & Electric Corporation of all the outstanding securities (stock and indebtedness) of Indiana Gas Distribution Corporation. $154,000.

The note previously read in connection with Item No. 1 likewise refers to this amount.

Section No. 3:

"To the purchase from The Ohio Fuel Gas Company of certain natural gas pipe lines in Indiana and Ohio. $439,000.

No. 4:

"To the redemption of all of the Company's outstanding Class A Preferred Stock (now owned beneficially by Columbia Oil & Gasoline Corporation), exclusive of accrued dividends which will be paid out of the Company's general funds. $10,000,000.

Item No. 5:

"To the payment of part of the cost of construction
[fol. 6299] work now authorized as more fully described in Item 7 hereof."

There is no amount shown opposite No. 5 but, in the position where the amount would ordinarily [shown] are two asterisks referring to the following footnote:

"The balance (estimated at blank dollars as of September 30, 1941) of the payments of the cost of con-

struction work now authorized, is to be made from the general funds of the Company."

There follows a footnote referring to all of Item No. 28 reading as follows:

"The answer to this Item 28 will be amended by post-effective amendment to this Registration Statement to show the amount of funds, other than from net proceeds, that will be paid from the general funds of the Company for the purposes aforesaid."

The witness neglected to read, but perhaps the record should show, that preceding the tabulation of the application of the proceeds of the sale of securities to which reference has been made, the Prospectus on Page 3 makes reference to the net proceeds after deducting expenses in connection with the issue and sale of said bonds and preferred stock.

In connection with Portion No. 5 of Item 28 appearing on Page 66 of the Registration Statement, and here it might be noted that we have been referring to this as a "Registration Statement", whereas it states on its very [fol. 6300] face that it is a "Compiled Registration Statement", meaning that it is a compilation of the original Registration Statement and Amendment No. 1 thereto.

I believe I was referring to Section No. 5 of Item 28 on Page 66 of the Compiled Registration Statement which refers to construction work authorized and described in Item 7 of the Compiled Registration Statement.

Item 7 carries a description "Property" and neglecting all of the answer to Item 7 except that portion appearing on Page 23 under the general heading "Authorized Construction Work", there appears the following:

"During the year 1941 the Company authorized certain construction work, a large part of which is now in progress, involving expenditures then estimated at approximately $9,000,000, in order to extend natural gas service to a number of communities in the State of Michigan and increase the peak load delivery capacity of its system. It is anticipated the ultimate cost of such work

may exceed such estimate by approximately 10 percent. The principal construction work includes:

"(1) Construction of approximately 256 miles of 20-inch, 18-inch, 16-inch and 12¾-inch pipe line in the State of Michigan for the purpose of delivering natural gas from the Michigan Gas Transmission Corporation system to Consumers Power Company and others;

[fol. 6301] "(2) Construction of aproximately 146 miles of 26-inch, 24-inch and 20-inch pipe line parallel to the Company's present system in the States of Kansas, Missouri and Illinois, and

"(3) Installation of additional gas engine driven compressors in the Company's Pleasant Hill, Glenarm and Tuscola compressor stations.

The Company estimates that all presently authorized construction work will be completed by July 1, 1942."

Which ends the quotation from Page 23 of the Compiled Registration Statement under the general heading "Authorized Construction Work", being a part of Item No. 7 thereof.

By Mr. Gorman:

Q. Mr. Watkins, in connection with the matters which you were discussing, specifically the purchase from Columbia Gas & Electric Corporation of the outstanding securities, including stock indebtedness of the Michigan Gas Transmission Corporation of an amount stated in this Item 28 which you have been reading of $10,576,000, reference to Item 29, part A thereof, indicates that the items to be purchased are certain demand notes and certain demand loans which are respectively $5,900,500 and the demand loans being $2,420,000, aggregating, as I add it, $8,320,500, plus common stock which is said to be stated on the books of Michigan Gas Transmission Corporation of $2,240,000. [fol. 6302] As I add the total of these three items, it produces a result of $10,560,500 which is approximately $115,500 difference from the figure stated in Item 28. Will you explain the items, if any, which comprise this difference of $115,500 or can you invite my attention to any part of this exhibit No. 145 which would explain that difference?

A. You find approximately $150,000 less—

Q. (Interposing) My total of the three items which I mentioned specifically, demand notes, loans and stated stock [stock] value, aggregate $10,560,500 as compared with the stated total in Item 28 of $10,676,000 which is a difference, I believe, of $115,500.

A. As the note on Page 28 referring to the Item $10,676,000 indicates, an adjustment must be made in the amounts at which these securities are carried on the books of Columbia Gas & Electric Corporation with respect to the surplus at the time of acquisition.

Mr. Wheat: You referred to Page 28. You mean the answer to Item 28 on Page 66?

The Witness: Thank you very much.

Mr. Wheat: On Exhibit 145.

The Witness: That is exactly what I meant.

The order issued by the Securities and Exchange Commission provides for an adjustment of Columbia Gas' investment in these securities [downard] by an amount, I [fol. 6303] believe, that ranges around $130,000 odd.

If you have a decided interest in this difference, I shall be glad to work it out for you, either at noon or this evening.

By Mr. Gorman:

Q. No, I think that it will be satisfactory, Mr. Watkins. As I understand your statement, this total of $10,676,000 is interpreted, for the purpose of the proposed purchase, to be the investment of the Michigan Gas Transmission Corporation in its properties, is that correct, properties and other assets?

A. It would hardly be proper to say that as the plan provides and as the Registration Statement speaks and as the Order of the Securities and Exchange Commission speaks, the acquisition is to be made on the basis of the investment of Columbia Gas & Electric Corporation in these securities as of September 30, 1941, adjusted upward or downward for the amount of surplus created by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation up to the time they are actually acquired by Panhandle Eastern Pipe Line Company and provides further for an adjustment in Columbia Gas &

Electric Corporation's investment by the amount the witness previously referred to, ranging around $125,000 to perhaps $130,000.

That adjustment is one which represents some fees in-
[fol. 6304] curred in connection with the original construction after having reduced such fees, their original amount having been, as I believe, about $165,000, by the amount of depreciation provided by the company since the date such fees were incurred.

It is somewhat difficult to give expression, in a document that has not yet become effective and which depends on a transaction to be consummated at some time in the future, to an exact, precise amount.

Mr. Culton: The price is based on Columbia's investment in these properties?

The Witness: That is correct, plus the surplus less this adjustment that we have just referred to.

By Mr. Gorman:

Q. Wouldn't the result of the statement that you have just made that the figure resulting after the calculation is made, according to your explanation, wouldn't the result be the net investment of the Michigan Gas Transmission Corporation as of the time of acquisition by Panhandle Eastern Pipe Line Company of the properties and assets of the Michigan corporation?

A. You may interpret it that way sir, if you wish. As far as the witness is concerned, the Compiled Registration Statement clearly defines the basis upon which the properties are about to be acquired.

As far as this witness knows, there has been no discus-
[fol. 6305] sion, plans or anything else that would indicate that the purchase is based on anything other than the investment of Columbia Gas and Electric Corporation in the securities as of a certain date plus or minus the adjustments I have described.

Q. Yes.

A. If that connotes to you net assets, why, that would be entirely all right, I suppose.

Q. Well, would it not be a true statement to say that the aggregate of these outstanding notes and loans and the

common stock as of the value stated represents the equities in these properties and other assets of the corporation?

A. Let's put it this way, sir. They will represent at the date Panhandle Eastern acquires the properties, if it ever does, the amount that Panhandle Eastern is perfectly willing to pay for them regardless of how it came into existence.

There are reams and reams and reams of description and testimony in Combined Docket No. 59-33, I think, in the Securities and Exchange Commission to which the witness might suggest reference be made if further or more complete details are desired than those shown in the combined Registration Statement and Prospectus offered here and identified as Exhibits Nos. 145 and 146.

Q. What is your answer to my previous question, Mr. Watkins, with respect to the equities of the company as [fol. 6306] divulged by the balance sheet of Michigan Gas Transmission Corporation?

A. I have no answer to it, sir. I do not understand it.

* * * * * * * * *

[fol. 6319] Q. Do you have any understanding of the phrase "equity in the property"?

A. Your questions directed to me with respect to Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation may tend to develop some data with respect to whether or not Panhandle Eastern was purchasing equities or purchasing something else in the event it is entitled to acquire these properties. I should like to let my answer take this form:

I have no doubt, whatever, that each of the figures and all of the data included in Exhibit 145 with respect to Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation are anything other than an exact statement of those amounts and that data with respect to those companies, in other words, that they are entirely accurate whether they represent reasonable costs, whether they represent equity; whatever they represent, the statements are included in the Registration Statement. They are adopted by Panhandle Eastern Pipe Line Company, they have been certified to by independent public accountants for all periods with the exception of September 30, [fol. 6320] 1941, and are unquestionably correct.

Now, if the specific thing you are trying to get me to say is whether or not, aside from any purpose for which these statements may have been included in this Registration Statement, it is possible to determine the equity in a corporation from its balance sheet, the answer, naturally, is yes.

Q. Yes, that is what I have been seeking all the time, Mr. Watkins.

A. And the customary manner in determining that is to observe its surplus.

Q. Without reference to the stock or bonds outstanding?

A. Well, if we are talking about net equity without respect to debt—

Q. (Interposing) Yes.

A. (Continuing) —we must refer to surplus. If we are talking about the net assets of a corporation, I should think we are referring to a simple deduction of the total assets less the total liabilities excluding debt, stock and surplus. Does that help you, sir?

Q. Well, yes, and then, again, no.

Turning now to page 66 of this Exhibit 145, referring to Item 29 on that page, can you tell us whether or not the total of the demand notes, which is stated at $5,900,500, [fol. 6321] plus the stated amount of the demand loans of $2,420,000, plus the stated book value of the common stock of $2,240,000 plus surplus represents the equity and investment of the owners, including the creditors of the Michigan Gas Transmission Corporation as reflected in the figures which I have read?

A. I doubt seriously, sir, whether it can represent both equity and investment. Now, actually, the amounts you have enumerated represent simply this: The debt of Michigan Gas Transmission Corporation to Columbia Gas & Electric Corporation in the form of demand notes and demand loans and the amount at which it, Michigan Gas Transmission Corporation, carried its 44,800 shares on its books. Those sums, those amounts added, including the surplus of Michigan Gas Transmission Corporation, less the adjustment that they spoke about heretofore, is approximately the $10,676,000 shown in Part No. 1 to Item 28 on page 66 of the Registration Statement.

(Discussion off the record)

By Mr. Gorman:

Q. Mr. Watkins, in your answer you indicated a doubt as to whether or not the figures which I have read properly represented the investment of the Michigan Gas Transmission Corporation in property and other assets held by that company.

[fol. 6322] Mr. Wheat: Now, Mr. Gorman, wouldn't you prefer to put that as a question? I do not believe it is quite fair to the witness to state that he indicated a doubt. He said that it could not be both, probably, or would not represent both the equity and investment.

I am wondering if that would not be fair to the witness, to put that as a question, rather than to make a statement on the record.

Mr. Gorman: I was going to put the following question, but it was a matter of clarification. Suppose we have the witness' previous answer read back so that I may be correct.

(Record read)

The Witness: Let me see if I can clear up this whole thing.

By Mr. Gorman:

Q. I will appreciate it if you can.

A. Michigan Gas Transmission Corporation has an indebtedness to Columbia Gas & Electric Corporation according to the portions of the Registration Statement to which we have been referring and according to the statements included in the Registration Statement, the accuracy of which the witness has already testified to, amounting to $8,320,500. That is in the form of demand notes and demand loans, and here we are speaking as of the date re-
[fol. 6323] ferred to in the Registration Statement.

The equity of Columbia Gas & Electric Corporation in the form of common stock is represented by the 44,800 shares of common stock without par value of Michigan Gas Transmission Corporation which it, Columbia Gas, owns.

I believe it is stated, perhaps in this Registration Statement, or at some other place, that Columbia Gas carries that on its books at $2,240,000.

. . . . . .

Q. Yes, your answer there indicates that this common stock represents the equity of the Columbia Gas & Electric Company in the Michigan Gas Transmission Corporation. Isn't that correct?

A. In the form of common stock, yes. Whether that value represents the entire value of such equity, I make no pretense of trying to testify.

Q. Now, of course, you must understand, Mr. Watkins, that we are dealing at all times with these figures which I understand were taken from the books and records of the Michigan Gas Transmission Corporation and which reflect items excerpted from the balance sheet of that corporation, do they not? A. That is correct.

Q. Yes.

Mr. Wheat: May I ask, Mr. Watkins, what was the [fol. 6324] principal amount of that adjustment referred to in the order of the Securities and Exchange Commission?

The Witness: In the neighborhood of $105,000.

By Mr. Gorman:

Q. Is it correct for me to understand, Mr. Watkins, from your various statements that your hesitancy in expressing an opinion as to whether or not the total of these figures represents the investment in the properties and assets of the Michigan Gas Transmission Corporation is due solely to your inability to state specifically that the common stock is of the value of $2,240,000, which is carried on the books of the Michigan Gas Transmission Corporation?

A. That does not seem to be the proper statement of my position at all. I have no hesitancy in making any representation that I properly know. I am not an officer of Michigan Gas Transmission Corporation, I am not an officer of Columbia Gas & Electric Corporation, I know nothing about their books or records except those things that it has become necessary for me to learn as a result of the pendency of the possible acquisition of certain

securities, and so forth, from them. I have no doubt, however, but that the $2,240,000, if stated in the Registration Statement as the amount at which Columbia Gas & Electric Corporation carries its investments in Michigan Gas [fol. 6325] Transmission Corporation's common stock, is correct.

Furthermore, Panhandle Eastern took the precaution when, in June of this year, Columbia Gas & Electric Corporation and Missouri-Kansas Pipe Line Company entered into an agreement, reference to which I believe has heretofore been made in the proceedings, to forthwith have its public accountants, Messrs. Arthur Anderson & Company, determine from the books of Columbia Gas & Electric Corporation just what these amounts were. We have a report from the accountants with respect to that and that report is, I believe, a part of the proceedings in the Securities and Exchange Commission, Consolidated Docket No. 59-33, if I remember correctly, to which I respectfully refer you for further information.

Mr. Culton: I wonder if Mr. Gorman had noted how closely the capital stock and surplus come when added to the loans and notes to making he $10,676,000?

Mr. Wheat: May I state the figures for you, Mr. Gorman?

Mr. Gorman: I am not denying that figure in any way.

Mr. Wheat: Just for your information, may I state the figures, which, looking at page T-3, Michigan Gas Transmission Corporation balance sheets, if you add the items of demand notes, demand loans and common stock, and then add the three items of surplus stated on the bal- [fol. 6326] ance sheet, will give you a total of $10,780,840.59.

Now, if you deduct from that the $105,000 adjustment which the witness has stated to be an approximation of the adjustment which must be made, you have $10,675,840.59, or a difference of only $159.41 out of the $10,676,000 figure stated on page 66.

I don't know whether that helps you or not, but if that adjustment mentioned by the witness were $159.41 out of $105,000, the figures would be exactly the same.

Mr. Gorman: I accept that as accurate. As a matter of fact, my questions have not, I hope, indicated anything to the contrary.

Mr. Wheat: No, they have not, I just thought, possibly, that might assist you in this matter.

Mr. Gorman: But taking those figures which you have just read, and the aggregate result which they produce, my questions have been solely directed to this witness to determine whether or not that is considered by the proposed purchaser, Panhandle Eastern Pipe Line Company, to represent the investment of the Michigan Gas Transmission Corporation in its properties of gas plant, and other assets. That, stated very concisely, is the whole question that I have been attempting to secure an answer to from this witness. That is the net investment, of course, that I was referring to.

[fol. 6327] As a matter of fact, stated even more simply, if we put that on one side of the page, that is, these amounts which I have termed, appropriately or inappropriately, as equities of the owners and creditors, my question which is directed to this witness is to find out what would be put opposite that to balance it on the other side of the page.

I do not know that I can ever, if we stay here all day, state it more concisely or simply than that.

Mr. Wheat: Are you in a position to answer that question?

The Witness: I do not understand that to be the question.

Mr. Wheat: I understood Mr. Gorman to say that was the question.

By Mr. Gorman:

Q. I will say, can you put the balance on the other side of the sheet to the last illustration I gave?

A. The first part of your question, if I remember it correctly, now that we are considering your statement a question, had to do with whether or not this witness could state certain things with respect to the investment of Michigan Gas Transmission Corporation. Maybe you

did not include Indiana Gas Distribution Corporation, but I presume you intended to do so.

[fol. 6328] Q. No, we are dealing solely, at the present time, with Michigan Gas Transmission Corporation.

A. In properties and so forth. With the hope that this answer may avoid any further time in this matter—

Q. (Interposing) I will go along with you in the hope.

A. (Continuing)—let's have a look at the balance sheet of Michigan Gas Transmission Corporation on page T-3 of Exhibit No. 145 where we note that the total assets at December 31, 1940, and September 30, 1941, are stated at $14,413,819.06 and $14,303,305.07, respectively.

Now, if we deduct from those amounts the sum total of all of the liabilities except the $8,720,500 and $8,320,500 representing, respectively, at December 31, 1940, and September 30, 1941, notes and loans payable to Columbia Gas & Electric Corporation and the $2,677,945.07 and $2,460,340.59 representing, respectively, at December 31, 1940, and September 30, 1941, the combined capital stock and surplus of Michigan Gas Transmission Corporation, we have the net assets of that corporation.

After you have made those computations, if you make them correctly, I shall immediately adopt them, sir, as being correct.

Q. Thank you.

Now, so that we may all readily understand the answer, [fol. 6329] may it be read back by the reporter, please?

(Answer read)

The Witness: May I have the privilege of adding, after we have the net assets as stated by the books—

Mr. Gorman: Yes.

The Witness:—of Michigan Gas Transmission Corporation.

Mr. Gorman: As shown by this balance sheet to which reference has been made?

The Witness: Correct.

By Mr. Gorman:

Q. And would you, also, say, Mr. Watkins, that the addition of the figure of $8,320,500 and the figure of $2,460,346.59 would represent the investment by the owners and stockholders, including creditors, of the Michigan Gas Transmission Corporation in the net assets as shown by this balance sheet?

A. The balance sheet, itself, does not show, so far as I know, the investment by the owners, and when we say "owners", I presume we are speaking of Columbia Gas & Electric Corporation. This balance sheet refers entirely to the affairs of Michigan Gas Transmission Corporation and to the extent that it refers to the affairs of Michigan Gas Transmission Corporation it is, unquestionably, correct in every respect.

[fol. 6330] Q. And you say that it has no relation to investment?

A. I do not say that, sir.

Q. Did you not say—

A. (Interposing) I simply said that the balance sheet of Michigan Gas Transmission Corporation gives no evidence whatever of the investment of the owners, and when we refer to "owners" we must be referring to Columbia Gas & Electric Corporation. That is as far as I go in that connection. I do not know what Columbia Gas & Electric Corporation's investment is other than, as I have previous explained, reported to us by Messrs. Arthur Anderson & Company, and I have given counsel for the Commission the place where he may go to obtain a copy of that, refer to it and find out whatever it is that he is seeking with respect to Columbia's Gas investment.

Q. Well, of course, I think you will recall, Mr. Watkins, that my question included not only owners as represented by the holders of the common stock, but the creditors of the company who hold the demand notes and demand loans which aggregate the total of $8,320,500, to which I made reference.

A. Well, you will have to break such a question as that in parts. I cannot deal with it in that form in any fashion whatever.

[fol. 6331] Q. Do you have before you a copy of the findings of the Securities and Exchange Commission which has been identified as, I believe, Exhibit No. 147?

A. I have before me an order of the Securities and Exchange Commission. The order of the Securities and Exchange Commission which has been identified as Exhibit No. 147 in these proceedings has been sent to the photostatic organization who will reproduce the copies necessary for distribution.

The Exhibit, as you will recall, was received and marked for identification with the right of substitution later in the day. We are having the copies prepared for substitution.

Q. May I ask, Mr. Watkins, whether you are generally familiar with the terms and the conditions of the proposed findings and opinions of the Securities and Exchange Commission?

A. You may.

Q. Well, are you familiar with that?

A. I am not. I zipped through the thing when it came [fol. 6332] out two or three days ago in about ten minutes to find out what the general purport was and further than that I have no knowledge of it.

Q. Do you know whether or not such opinion contains a statement as follows, which I quote:

"The price fixed in the application for the sale and acquisition of Michigan Gas is stated to be the actual investment of Columbia Gas therein, plus any undistributed surplus of Michigan Gas at the time of the consummation of the transaction. With the exception of one item the record indicates that the figure stated in the application, $10,780,840.59, as constituting the investment of Columbia Gas and Michigan Gas, plus surplus at September 30, 1941, constitutes actual system expenditures, and is equal to net plant account after depreciation less the excess of current liabilities over current assets."

A. I may have observed that when I read the proposed findings. I attach no special significance to it. I presume the staff of the Securities and Exchange Commission are qualified to properly interpret documents and information filed with them so that they may correctly reach the conclusion stated in the proposed findings.

I have not made the computations, I cannot specifically [fol. 6333] answer you. I assume they are correct. If the Securities and Exchange Commission state they are correct, I believe I would accept their statements.

Q. Yes. Well, was not that proposed opinion and findings submitted to the Panhandle Eastern Pipe Line Company for examination and possible argument upon any objections which they might have to the proposed findings and opinion?

A. To the extent that a copy of it was submitted to the General Counsel for Panhandle Eastern Pipe Line Company, I presume we would very naturally say that it had been submitted to the company. Actually, as far as I know, there was never a copy sent directly to the company and I have wondered, to some extent, about that, because I know that copies of the proposed findings were sent to other organizations involved without the procedure of approaching them through their counsel.

Certainly we had copies of it after the general counsel received it, but my answer to you is that the only way that it was presented to the Panhandle Eastern was through its general counsel. That may be proper procedure under the Securities and Exchange Commission's rules of practice. I do not really know.

Q. Do you know whether the submission of it to the general counsel of the company was for the purpose which [fol. 6334] I mentioned specifically, for the purpose of voicing any objections that they might have thereto?

A. I did not see any communications that came with it to the general counsel. I had general knowledge, the same, I believe, as most of the officers and men connected with the various companies who were participating in these proceedings, that there would be tentative or proposed findings distributed and that there would be an invitation to the participants to appear, argue, file briefs or whatever you do in a matter of that nature. I believe the date upon which those appearances was to have taken place was last Friday. I am not too sure about that. Whether there were any appearances, whether there were any arguments, whether there were any briefs filed, whether there were any exceptions taken to the proposed findings, I do not rightly know. My remembrance is that I heard one

or two representatives of some of the participants state they thought the proposed findings were ship-shape.

Mr. Lee: Pardon me: You are famliiar with the fact, are you not, that all the parties in interest in that case,—City of Detroit was an intervener,—had copies of the proposed findings and that last Friday, January 23, 10:00 A. M., was the time set before the Securities and Exchange Commission for the purpose of filing objections, if any, and that nobody appeared and no objections were filed?

[fol. 6335] The Witness: I believe I stated, Mr. Lee, that I thought it was Friday the 16th, did I not?

Mr. Lee: That is right.

The Witness: I will accept your correction as to the date.

Mr. Lee: No, it was the 16th.

* * * * * * * * *

By Mr. Gorman:

Q. Do you know, Mr. Watkins, whether or not your general counsel did make exception to this proposed opinion and findings and specifically to the paragraph which I have quoted?

A. We thought the findings were swell. So far as I know we have no reason to object to them, sir, and I feel rather sure that our general counsel did not object.

[fol. 6336] Q. Well, did you agree with the principles in the statements made in the paragraph which I quoted?

A. I will have to let my previous remarks with respect to that answer this question, sir. I believe I stated rather fully what my view was in answer to your previous question. I do not know how I can enlarge on it. I do not believe I could make it any more precise.

* * * * * * * * *

[fol. 6337] Q. Well, I would like to get your opinion, of course, Mr. Watkins, on different things.

Now, the paragraph which I quoted mentions a figure of $10,780,840.59, which is a total of the figures to which you made reference to previously on page T-3 of Exhibit No. 145 in the amount of $8,320,500 as representing notes

and loans payable to the Columbia Gas & Electric Corporation, and the figure of $2,460,340.59, as representing the total capital stock and surplus.

Now, appreciating these component parts and the significance of the statement you have made heretofore with respect to these component parts, are you in agreement with the statement which I have read from the reported paragraph of the proposed findings and opinion to the effect that, "With the exception of one item the record [fol. 6338] indicates that the figure stated in the application, $10,780,840.59, as constituting the investment of Columbia Gas and Michigan Gas, plus surplus at September 30, 1941, constitutes actual system expenditures, and is equal to net plant account after depreciation, less the excess of current liabilities over current assets."

Now, are you in agreement with this quotation in so far as it states that it constitutes the investment of Columbia Gas and Michigan Gas, plus surplus, and, also, constitutes actual system expeditures and is equal to net plant account after depreciation, less the excess of current liabilities over current asset?

. . . . . .

[fol. 6343] A. Here we go again, sir. I do not know anything about the Securities and Exchange Commission's proposed findings. I do not knew anything about the books and records of Columbia Gas & Electric Corporation. I am quite willing and have said repeatedly this morning that to the extent that information is included in Panhandle Eastern Pipe Line Company's Registration Statement with respect to Michigan Gas Transmission Corporation or with respect to Columbia Gas & Electric Corporation, or with respect to any other corporation or individual that I stand squarely behind them.

Now, if I may say this, I have no reason in my own mind, I have not the slightest hesitancy, whatever, to state [fol. 6344] that if Michigan Gas Transmission Corporation, if Columbia Gas & Electric Corporation, or if the Securities and Exchange Commission represent these

amounts you have been discussing as what you characterize them, that they are exactly those things.

* * * * * * * * *

[fol. 6345] LEITH V. WATKINS a witness, having been previously duly sworn, resumed the stand and testified further as follows:

* * * * * * * * *

[fol. 6346] By Mr. Gorman:

Q. Mr. Watkins, continuing with our discussion of the items disclosed on Page 2 of Exhibit No. 48, I invite your attention now to Line 7, which is the account, "Miscellaneous Long Term Debt", which, at June 30, 1941, is indicated in Column M as $5,017,543.80.

Does this amount represent certain notes of the company which are outstanding and certain cumulative interest thereon?

A. It represents certain notes that were outstanding at June 30, 1941, the nature of which has heretofore been testified to by this witness but does not include any interest on such notes or on any other of the company's obligations for, as you will observe, the amount of interest accrued for whatever purpose at June 30, 1941, is shown on Line 17 in Column M on Page 2 of Exhibit No. 48, and my remembrence is that details information concerning such accrual has heretofore been made a part of the record.

In addition to the serial notes comprising the major [fol. 6347] part of the $5,017,543.80 shown on Line 7 in Column M of Exhibit No. 48, Page 2, there was an unextinguished balance of $17,543.80 on a leasehold purchase obligation to J. T. Sneed, Jr., and Elizabeth Sneed Poole, the principal amount of which was $62,000 which concludes the remarks the witness has with respect to this item.

Q. Yes. Are these notes explained in some detail on Pages 75 and 76 of Exhibit No. 145 for identification under the part or item numbered 3, commencing on the lower half of Page 75?

A. They are.

Q. Turn your attention now, please, to Line 16 of this page we are discussing which is the account for "Taxes Accrued" which, according to Column M at June 30, 1941, amounted to $3,176,774.41.

In your direct testimony, you itemized, somewhat in detail at Page 868 of the transcript, certain State income taxes, Federal income taxes and excess profits taxes which were a part of the total which I have just stated and you indicated also that certain of these taxes were for the years 1938, 1939, 1940 and 1941 and, in response to a question of Respondent's counsel as to why there appeared in this account at June 30, 1941, taxes other than those for the year 1941, you replied as follows:

"Without being facetious, by reason of the Acts of [fol. 6348] State Legislature, principally", could you explain in somewhat more detail than that why there were outstanding amounts for taxes in the years 1938, 1939 and 1940?

A. Putting it as simply as possible, the time of accrual of the various types of taxes heretofore enumerated in the record at Page 867, et seq., does not coincide with the actual time of payment of such taxes, so that in any statement which Panhandle Eastern Pipe Line Company and its subsidiary companies may prepare at any given period, there will always be accrued but unpaid taxes representing periods not exactly coincident with the accounting period for which the report is prepared.

As an example, my remembrance is that in the State of Missouri, ad valorem taxes are assessed as of July 1. Perhaps I am wrong there to this extent: It may be that our return is due on July 1, that the assessment is made by the State Tax Commission sometime between July 1 and December 31 of each year, but the amount of such taxes is not due until the following December.

Likewise, accrued Federal income and excess profits taxes at any date prior to December 31 in the year in which any statement may be prepared will contain unpaid portions for, as you know, Federal income and excess profits taxes are generally paid on a quarterly basis.

Furthermore, the Federal capital stock taxes are paid [fol. 6349] on or about July 1 of each year and at any date other than on that date, there may be such taxes applicable to a prior year or to a subsequent period and the same general situation exists, to some degree, more or less with practically all the taxes that Panhandle Eastern Pipe Line Company or its subsidiary, Illinois Natural Gas Company, are confronted with.

Q. Does that complete your answer, Mr. Watkins?

A. It does not.

In addition to the condition governing such of the taxes to which the witness has made references, there is most always present in the affairs of any organization accrued but unsettled Federal income taxes of prior years.

Very few organizations are fortunate enough in being able to exactly determine the amount of their Federal taxes of whatever nature and find it necessary, in a great many instances, to carry those accruals for some substantial period until an agreement has been reached with the taxing authorities covering the final determination of such taxes.

If that explanation is satisfactory for your purposes, I believe the witness has no further statements to make.

Q. You stated, Mr. Watkins, that the Federal income taxes are paid by this company in quarterly divisions. Can you tell us when the first quarterly payment is normally made, that is, approximately when it is normally made?

A. I believe we have no choice in that matter, do we? [fol. 6350] Q. I do not think so, but I just wanted the record to state what the date was.

A. I think the date is each March 15th, is it not?

Q. Yes.

A. And to the extent that the company has any taxable income, whether or not it has finally determined its return for the preceding year, it must make an estimate and pay a portion of the estimated amount of taxes at the time the tentative return is filed.

Q. Yes, and by analogy, of course, the second quarterly payment would be due and payable on June 15, would it not?

A. That is correct.

Q. Is it a correct conclusion to draw from your statement then, Mr. Watkins, that any reference to balances in this account for taxes for the years 1938 and 1939 represent amounts which were, as of June 30, 1941, in an indeterminate status? A. Yes, that is correct.

Q. In other words, they were amounts left over your actual payments but which might possibly be paid as a result of a final determination by the Bureau of Internal Revenue, the taxes required of you during those years?

A. Yes, that is correct. However, prior to the reduction of the original accrual to the amounts heretofore [fol. 6351] shown in the record with respect to the years 1938 and 1939, there may have been some adjustment made in the accrual by reason of an Examiner's Report if we found that our accrual had been excessive or if it had been insufficient.

Q. Yes.

A. I would not wish at this moment, without further investigation, to state that the $24,000-odd for 1938 and the $14,000-odd for 1939, Federal income tax accruals, had not been subjected to such adjustments although my belief is that they have not.

Q. And if upon a final determination it were decided that further payments in these amounts were not required for the years 1938 and 1939, would such amounts, according to the bookkeeping practices of the company, be transferred to earned surplus?

A. The company's bookkeeping practice does not recognize that adjustments of such an inconsequential nature should be made through earned surplus.

Our procedure which, if I am correctly informed, meets with the concurrence of the company's public independent auditors, is to route such adjustments through income rather than through surplus.

Now, if we had an item of some substantial nature as we may have in the year 1940, after our examination had been completed and we had arrived at some basis upon [fol. 6352] which the total taxes for that year were to be paid and there remained a substantial amount, we might give consideration to treating that as a surplus adjustment,

if, to do otherwise, it was of the nature to seriously distort income.

My remembrance is that the classification of accounts adopted by this Commission for use on and after January 1, 1940, recognizes as proper accounting procedure the treatment the witness has just described.

I have finished, sir.

Q. Yes, I was just pondering your answer, sir. I am not certain whether I got lost or not. Did you state, Mr. Watkins, specifically what accounts such adjustments would be made to? A. I did not.

Q. Would you do so, please?

A. May we proceed without repeating the previous statements?

Q. Yes, indeed.

A. And simply state that if the adjustments were to be made through income, it would very naturally be made to the account to which the prior accrual had been charged or credited.

If it were to be made to surplus, the credit or debit would be made to the appropriate surplus account as prescribed in the Power Commission's Classifiication of Accounts.

[fol. 6353] Q. Do I understand correctly that if it was made to surplus, it would not go through your income account?

A. Not again, no.

Q. One further question on that subject. If such an adjustment was required, the normal effect, no matter how the bookkeeping transaction might be made, would be to increase the net income of the company to that extent for the particular year, would it not?

A. I am afraid we are at cross purposes there. If the credit were made to the expense account, it would increase the net earnings of the company, net operating revenue of the company for that particular year.

If it were made to surplus, it would simply increase or decrease the surplus account.

Now, if you choose to interpolate any increases or decreases in the surplus account itself within a given account-

ing period as a part of the net income for that period, then the answer to your question would be "yes".

Q. Yes. What I was getting at, simplified, was this, Mr. Watkins, without any attempt to confuse you or any other such thought: taxes are paid, are they not, out of gross income and such payments necessarily effect a reduction in the net income?

A. Well, without quarreling over the word "paid", that is correct. Actually, they are paid out of cash. They [fol. 6354] are recovered out of gross income.

Q. Of course, the lesser the amount of taxes paid, the greater the net income would be as a consequence thereof, is that a correct statement?

A. Yes, that is correct.

Q. Now, Mr. Watkins, on Page 3 of this Exhibit No. 48, there are certain notes to the balance sheet, the first of which refers to this item of taxes accrued states that: "Including Federal income taxes and excess profits taxes computed"—that is as of June 30, 1941—"without regard to special deductions resulting from the refinancing consummated during February, 1941, and without making provision for possible increases of rates or otherwise during 1941."

Have any computations envisaging the qualifications set forth in this note Number 1 been made since this Exhibit No. 48 was submitted?

A. There have been some such computations made.

Q. And would those computations of which you speak accurately or more accurately reflect the proper balance as of June 30, 1941?

A. The proper balance of the accrual account?

Q. Yes.

A. The computations were not made as of June 30, 1941. They were made in connection with Exhibit No. 145 and at September 30, 1941, appear in the income account consolidated on Page S-7 of that Exhibit under the general head- [fol. 6355] ing of "Charges in lieu of", Federal Taxes, $100,000; Federal Excess Profits Taxes, $487,000.

There is a reference with respect to the first of these two amounts in Note D on Page S-8 of the same exhibit.

Mr. Wheat: That is "D", is it not?

The Witness: That is correct.

There will be further adjustments of credit or rather charge in lieu of taxes during the year 1941 so that at December 31, 1941, there will have been given effect to the total adjustment resulting from this cause amounting to $823,881.49.

Mr. Wheat: May I ask a question. That will be the amount which you figure would have been payable annually if the company had not had the benefit for tax purposes of deduction for discount, premium and expense resulting from the refinancing of its long-term debt during 1941?

The Witness: That is correct, and which amount has been credited to the unamortized debt discount and expense prior to the charging of the unamortized balance of the debt discount and expense accounts to surplus in the manner described by this witness in the testimony given yesterday.

Mr. Wheat: Yes.

By Mr. Gorman:

Q. Do understand correctly that your last response [fol. 6356] to Mr. Wheat's inquiry indicates that the total income taxes payable for the year 1941 would have been $823,000-odd?

A. More than they actually will be because of the refinancing consummated in February, 1941.

Mr. Wheat: In that connection, I think possibly the witness ought to explain why there is that difference in taxes so that the record will be clear.

Mr. Gorman: I think that might well be done.

The Witness: Simplified, the reason is this: The regulations of the Internal Revenue Department and under the effective Revenue Acts, when long-term debt previously issued is disposed of, by refinancing or otherwise, require that the entire portion of the existing debt expense in connection with it must be taken as a deduction for Federal tax purposes in the year in which the refinancing is consummated.

Now, the $823,881.49 will be distributed in subsequent financial statements prepared by Panhandle Eastern Pipe Line Company for its internal purposes after this fashion —I am about to supply that information by months and if we do not need it, I will forego the explanation or I may give you—

By Mr. Gorman:

Q. (Interposing) I do not know that we would need that at all, Mr. Watkins.

. . . . . .

[fol. 6357] Mr. Chamberlain: Mr. Watkins, do you have the ultimate division of the $823,000 as between Federal income taxes and the excess profits taxes?

The Witness: I do.

Mr. Chamberlain: What would those amounts be as of the end of the year?

The Witness: The amount applicable to Federal income taxes as of the end of the year 1941 will be $141,106.77 and the amount applicable to Federal excess profits taxes will be $682,774.72.

The sum of the two is the $823,881.49 concerning which we have been speaking.

By Mr. Gorman:

Q. Now, as I understand, Mr. Watkins, the taxes which you actually will be required to pay for the year 1941 will be some $823,881.49 less than they would have been otherwise is the adjustments had not been made which you have previously testified to, is that correct?

A. That is correct, if we are speaking of the actual taxes to be paid. If we are referring to the amounts that we have heretofore or may hereafter accrue for the year 1941, that amount will be subject, of course, to consideration as to any differences the Internal Revenue Department Examiner may disclose and we may agree to or disagree with.

[fol. 6358] Q. Yes, naturally so. Are you prepared to tell us what the Federal income tax will be for the year 1941 as you presently compute it and estimate it?

A. No, our books have not been completely closed yet.

Mr. Chamberlain: Have you made you accruals?

The Witness: Why, Mr. Chamberlain, since our books have not been closed, I have no preliminary figures with respect to any of the amounts at the year-end.

They will be available and will be shown in our Annual Report when released. As you may know and as Mr. Tuttle will verify, you do not arrive at your year-end figures without a good deal of clean-up work. Ours has not been completed.

Mr. Chamberlain: Don't you accrue by the month on those Federal taxes?

The Witness: That is not the point, sir. You asked me whether or not we have them for the end of the year and I stated we have not.

Mr. Chamberlain: What I intended to ask you for what amount you had accrued in the accounts up to the end of the year?

The Witness: We do not yet have our year-end figures. Now, if you care to observe the accruals at September 30, you will find them in Exhibit No. 145, a copy of which you have.

[fol. 6359] Further than that, there has been no information introduced in these proceedings with respect to the accruals and I do not have the accruals as at December 31, 1941.

By Mr. Gorman:

Q. Mr. Watkins, can you, by reference to Page S-7 and the notes and explanations which appear on Page S-8 of this Exhibit No. 145, indicate to us what the Federal income taxes would have been as you computed them at September 30, 1941, without the adjustment of debt discount and expense to which you have previously made reference?

A. Assuming we had no such deduction?

Q. Yes.

A. Would you please look at Page S-7 and note an amount under the heading "Charges in lieu of—Federal income taxes" of $100,000.

Will you further observe under a heading "Provision for income and excess profits taxes" opposite Federal in-

come—$1,202,000. At September 30, the accrual for such taxes, had there not been the deduction concerning which we have been speaking, would have been the sum of those two amounts or $1,302,000.

Will you also observe an amount opposite Federal Excess Profits Taxes under the heading, "Charges in lieu of—" amounting to $487,000 and, on the same page, under the general heading "Provision for income and excess [fol. 6360] profits taxes" opposite Federal excess profits taxes—$648,000.

The sum of those amounts would have been the accrual at September 30, 1941, for Federal excess profits taxes had there not been such deduction and the amount would have been $1,135,000.

On this assumption, the net taxable income, as estimated by the company, would have been the actual net taxable income were the company required to render a report of its net taxable income to Federal authorities and make such payment on the basis of the nine months ended September 30, 1941, and could have exactly and correctly estimated such tax.

Q. Now, on the basis of your recomputation, including the amortization of debt discount and expense, are the accruals which were set aside for taxes accrued as of September 30, 1941, and June 30, 1941, in excess of the taxes which the company will be ultimately called upon to pay, according to its present computations?

A. That is, reinstating the credit of $487,000 for charges in lieu of taxes or representing that portion of the $823,000-odd heretofore referred to as the total savings and taxes as a result of the refinancing consummated on February 3.

Q. Yes.

A. The total thus arrived at would be greater than the [fol. 6361] amount of the Federal income and excess profits taxes this company would have to pay were it necessary to render a report and make a settlement for such taxes as of September 30, 1941, or, for that matter, as of June 30, 1941, as well.

Q. Have the recomputations which you have made necessitated any adjustments in the account for taxes ac-

crued? What I am inquiring about, Mr. Watkins, is whether or not it has been necessary, by reason of your revised estimates and certain transactions on your books relating to amortiation of debt discount and expense, to transfer from your income and excess profits tax accrual account certain amounts previously accrued therein?

A. We have charged, by Journal Entry No. 10 74 entered in the month of October, an aggregate of $823,881.49 to the Federal income and excess profits tax accrual accounts for the year 1941 and have credited such amounts to the appropriate unamortized debt discount and expense accounts.

That credit having been made prior to the charging of the unamortized debt discount and expense to surplus as discussed in yesterday's proceedings, there was also an entry made through the Journal Entry 10 75 in October, 1941, charging to two new accounts created by the company under the No. 507-1 entitled "Charges in lieu of Federal income taxes" and "Charges in lieu of Federal excess profits taxes", with a corresponding concurrent credit to Account 507, "Taxes Federal Income" and [fol. 6362] Account 507, "Taxes Federal excess profits taxes", the total of $823,881.49; this amount having been divided between the debit and credit accounts in the order stated in this testimony in the amount of $141,106.77 and $682,774.72, respectively.

Of these latter amounts, the journal entry shows their application to the period from January 1 to September 30, 1941, and for the period October 1 to December 31, 1941.

Have you any interest in that segregation?

Q. I might ask you this question which I believe would obviate any answer such as you have just suggested and that is whether or not such entries, as you just mentioned, would reflect any change in the income accounts for the first six months of 1941 and when I say "Income accounts" I mean any change in the net income.

A. They will not.

Q. That is true not only of June 30, 1941, but also of September 30, 1941?

A. That is correct. So far as the net income of the operation for the company and its subsidiary, Illinois

Natural Gas Company, is concerned at those periods, the effect of these entries was simply to lift the $823,000 from the tax expense accounts to expense accounts which we have characterized as "Charges in lieu of Federal income and excess profits taxes" and made no change whatever in the net income.

[fol. 6363] Q. That was my understanding and, with that understanding, of course, I do not believe any further explanation is necessary.

Now, Mr. Watkins, referring to this Line 16 for taxes accrued, with the exception of the amounts which you have indicated in your direct testimony as being attributable to the years 1938, 1939, 1940 and 1941, due the balances shown at December 31, for each of the years on this line reflect taxes actually paid or do they reflect the accruals in this account based upon estimates of taxes to be paid?

A. For the most part, the amounts shown on this line for the end of each of the respective periods covered by this exhibit represent the best possible estimate the company has been able to make and when I say "company", I include the subsidiary, of the amount of taxes it will eventually have to pay.

There were, however, and are in each of the periods, certain specific taxes that were determined during that period and, to that extent, however much or however little such amounts may be, they are not pure accruals.

As you know, Social Security taxes clear themselves within an annual accounting period. There are certain gross sales taxes in some of the States in which we operate, certain gross production taxes and certain other taxes that will find their way into our accruals in one [fol. 6364] month and are paid in the next month.

Q. Yes, your statement is that, with the exception of those taxes which are capable of definite ascertainment during the periods taxable, the balance represent accruals based upon estimates of taxes to be paid rather than actual payments subsequently made?

A. That is correct. However, we may—before passing from this subject—be assured that for the most part our acutal taxes have been somewhat in excess of the accruals.

Q. Could you, Mr. Watkins, for the year 1936 and the years following, furnish a statement of the actual taxes paid to date for those respective years?

A. Such a statement could be furnished. It would be difficult to match the payments made in those years with the accruals in those years because of the lag or overlapping of the period of accrual and dates of payment.

When I made the statement a moment ago that, for the most part, the company's accruals have been slightly less than its payments, there was, in the year 1937, a situation such as that which we have described here this afternoon wherein the company had the benefit of certain deductions as a result of the financing operation carried out in that year.

There was likewise, I believe, a slightly excessive accrual in both the Federal income and State income taxes in the [fol. 6365] year 1936. That was the first year in which we had Federal taxes to worry about. Prior to that time, we had losses, both from a corporate standpoint and from a tax standpoint.

There is a situation in connection with the year 1940 which may involve something on the order of $200,000. This arose because of the fact that the income tax laws were changed in that year or rather were changed in the year 1941 and our accruals for the year 1940 were on what is known as the invested capital method rather than the income method.

After the change of the law in early 1941, it appeared we might have some advantage by using the income method and, as far as we now know, although the year 1940 has not been examined by the Federal authorities, there will be an excessive accrual for that year.

Now, to go a bit further with respect to the excessive accruals and to perhaps make a little speed, may I call your attention to an amount of $624,800.94 appearing on Line 36 in Column M on Page 2 of Exhibit 48, and supply a statement showing the amounts that constitute that reserve?

Q. If you will, please.

A. $76,580.60 of such reserve represents a transfer of the balance remaining in Federal income tax accrual account for the year 1936.

Now, said differently, there was $76,580.60 of accrued taxes for the year 1936 not used for that purpose. In that [fol. 6366] same year, 1936, there was $20,220.34 of the accrual for the State income taxes not used.

In the year 1936—

Q. (Interposing) Just a minute, Mr. Watkins, may I interrupt.

That statement tends to indicate, does it not, that the accruals were approximately $125,000 in excess of the actual taxes paid, is that correct?

A. If I may finish, I believe I will be able to answer the question—

Q. (Interposing) I am sorry.

A. (Continuing)—answer the question with respect to the whole amount.

There is a further transfer with regard to accrued but unpaid taxes in the year 1937 as a result of the financing operation carried out in that year of $492,000 and an addition of $36,000 because of State income taxes accrued for the year 1937 not needed.

Now, the entire $624,806.94 does represent taxes accrued but not paid. It is being carried on the company's books in general reserve to be used with regard to any demands that may be made on the company hereafter for undetermined or disputed income taxes.

It is the reserve of the nature, naturally, that the Board of Directors or the management of Panhandle Eastern [fol. 6367] Pipe Line Company or of Illinois Natural, if some of this amount belonged to Illinois Natural, can be returned to surplus and used for the general purpose that surplus is customarily used for.

Whether that will be done or not, is something the witness cannot say at this time.

Now, the transfers to this account of other reserves that you are speaking of, were those transfers from the taxes accrued account?

A. That is correct.

Q. Are the figures shown at Line 16 for the taxes accrued the balances remaining from the total accruals after such transfers have been made in the respective years to which you have previously testified?

The Witness: May I have the question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: Save for the amount $36,002.66 shown on Line 36 in Columns B, C, D and E, the amount shown on this line on Page 2 of Exhibit No. 48 represent amount transferred from tax accruals because of accrued but unpaid Federal and State income taxes during the years 1936 and 1937.

The transfers may not have actually been made exactly in those years, the returns not having been completely examined by the Federal authorities cause delay in the transfer.

One observes in Column I, that only $96,000 was trans- [fol. 6368] ferred in the year 1937 whereas this amount increased at December 31, 1938, to $424,800.94 as shown in Column J on Line 36 and, at the close of the year 1939, had been built up by an additional $200,000 so that at the end of the year, the total became $624,400.94 and continued at this amount to June 30, 1941, and to this very date, for that matter.

Q. And there have been no payments, have there, Mr. Watkins, from this other reserve account since 1936 or charges to this account which would tend to diminish the amount remaining there?

A. There were never any payments from this account.

Q. Yes.

A. I stated that rather positively. That is my remembrance at the moment.

Q. I think that is borne out by reference to your Registration Statements which indicate that the amounts set aside in the particular years which add up to the total shown at June 30, 1941—I am not testifying—

Mr. Wheat: (Interposing) That amount of $36,002.66 shown on the earlier years, that had nothing to do with what you are talking about, did it?

The Witness: That had nothing to do with that, no.

* * * * * * * * *

[fol. 6370] By Mr. Gorman:

Q. Mr. Watkins, turning our attention to the reserve for depreciation of gas plant, you have heretofore in your direct testimony stated the rates which were applied to the gas plant account for the accruals for depreciation, allowance for the various years from 1931 through 1940. An examination of such rates indicates a considerable variance over a period of years. Can you tell us, somewhat generally, of course, how the rates were arrived at during the years I have just mentioned?

A. Will the record bear out the fact that rates were stated for all of those years?

Q. I think that it will. I will check it.

Yes, I think if you will turn to page 884 of the transcript you will find that a reading was made from Registration Statement No. 2-2867 before the Securities and Exchange Commission effective March 29, 1937, which set forth the rates for the years 1931 through 1936, and at page 887, there is a reference to another Registration Statement which sets forth rates for the years 1938, 1939, and 1940.

A. I believe, sir, that is a statement showing the percentages which the provision for the years 1938, 1939, and 1940 was equal rather than the rate used. Is that correct?

[fol. 6371] Q. I believe that is so stated. Is that true in each of the years that I have mentioned?

A. No, only for the years stated on page 887.

Q. That is 1938, 1939, and 1940?

A. That is correct.

Q. And for the other years a definite rate was determined and applied to the plant accounts for the years in question. Is that correct?

A. Yes, that is correct, and is so shown on page 884 of the transcript.

Q. But taking up, first, the years 1931 through 1936, when definite rates were determined, can you indicate to us how such rates were determined?

A. You may well imagine that in a situation such as that maintained by the companies from an earnings standpoint through the earlier years of its existence, the ques-

tion of the provision for depreciation, depletion and otherwise might not carry with it the prominence that such consideration would receive when the facilities began to be operated more nearly to their capacity. The rates used in the earlier years were recognized by the company officer or company officers as being inadequate. There was no great reason, as we saw it at that time, to provide provisions and, as a matter of fact, we lacked a good deal of [fol. 6372] information upon which to predicate what might be a reasonable provision over the probable life of the properties for this purpose, and it was not until around the year 1936 and, as a matter of fact, at about the time when Mr. Creveling became our president, that real consideration of this problem took very definite form.

Among the first things which Mr. Creveling was interested in when he came with the organization and among the things that the present witness had awaiting some determination was this particular question.

Now, I do not mean to say that over the previous years we had not been thinking something about what we would eventually use and when we would begin to use it.

By reference to Exhibit No. 49, it will be noticed that the amounts deducted from gross income beginning with the year 1936 for this purpose, including, shall we say, the amounts shown on Lines 10, 11, 12, 13, 14, and 15 in Columns F, G, H, I, J, L, and M of page 2 of that exhibit, were increased.

Since Column L is an average of the period for the years 1932 to 1940, it should be stricken from the previous statement being merely the result of a stipulated period and not particularly applicable to an accounting period.

Our consideration in the year 1936 was such as to cause [fol. 6373] us to arrive at what seemed at that time, and as far as we could gaze into the future, a proper basis upon which our depreciation accruals should be predicated. This question, as you know, is not one left entirely to the officers or to management and must, in most cases, be acted upon by the Board of Directors. Those of us connected with the organization giving consideration to this matter felt it appropriate to have some independent approach made to the question of the amount that should be recommended to

the Board for this purpose and the services of Mr. P. MacDonald Biddison were engaged for that purpose. Mr. Biddison, as you know, has been a witness in these progeedings. His aproach was entirely different, as far as I know, from any consideration theretofore given or being given by the company at that time. We did not confer with him as to what method we had in mind, what conclusions we had tentatively or finally reached, but simply requested that he make a determination as to what should be an approximate annual amount and whether or not the reserves accrued to that date were adequate.

There were at least two of the officers of Panhandle Eastern Pipe Line Company somewhat astonished at the result of Mr. Biddison's consideration. My remembrance is that his conclusions were within, perhaps, one-tenth of one per cent of the amounts independently determined by the com-
[fol. 6374] pany, that is to say, the rate resulting from the annual amount of Mr. Biddison's determination was within, say, one-tenth of one per cent of the resultant rate determined by the management.

Mr. Culton: That is in dollars you are within that percentage of each other?

The Witness: Applied to the base upon which they were determined, yes, sir.

Now, there has been introduced in these proceedings as Exhibit No. 108, a letter from Mr. Biddison dated December 13, 1937, which speaks for itself, and, if I interpret it correctly and if I did at that time, it was more or less a green light to the company, in Mr. Biddison's opinion, to follow on the method we had, without his assistance previously arrived at.

Our independent public accountants have had, very naturally, some interest in this matter, and beginning with the year 1937 or the year 1938 their certificates used in connection with the company's annual reports have been of such nature that the auditors were satisfied that the annual accrual and that the provision to date was reasonably adequate.

Now, as a result of all this study by both the company officials and by the independent engineer and by the consid-

eration of the accountants, and I mean independent public [fol. 6375] accountants, although they made no specific study other than to satisfy themselves, as accountants usually do, that the proper basis was being followed and that the provision was within reasonable bounds of what it should be, and that the amounts at the end of the year were reasonably adequate and not excessive and of such nature that it was unnecessary for them to qualify their certificates, the amounts shown were provided.

At page 887 of the record, particularly on Line 14 thereof, the provision for this purpose,—and in using the word "provision" here the witness intends to take in the reserve for depreciation, depletion and amortization and all of such reserves,—was equal to 2.98 per cent, 3.2 per cent and 3.16 per cent of the Consolidated Property, Plant and Equipment Accounts at the beginning of the respective years.

I believe the equivalent amounts for the year 1941 and for the year 1942, if no change is made in the plan of accrual, will be somewhere on the order of 3.2 per cent.

I believe it was yesterday that we took into the record a portion of Note A to the Income Account of Panhandle Eastern Pipe Line Company and subsidiary companies included as a part of Registration No. 2-4919. Need I describe that further?

By Mr. Gorman:

[fol. 6376] Q. I believe not. I think that is sufficient.

That appears, does it not, at page S-8 of the Registration Statement to which you have just made reference?

Mr. Wheat: Exhibit 145, you refer to?

Mr. Gorman: No, I believe the witness is referring to a document which is not an exhibit.

The Witness: Yes, it appears on page S-8 and likewise, is substantially repeated again on page—well, it was not repeated. As a matter of fact, by reference to periods here today were to the same registration statement.

Mr. Wheat: Exhibit 145?

The Witness: That is correct.

. . . . . .

[fol. 6377] By Mr. Gorman:

Q. Now, as I understand your statement, Mr. Watkins, for the years 1937, 1938, 1939, 1940, and, I believe you also mentioned 1941, the management submitted to the Board of Directors an amount of dollars, which should be, in their opinion, that is, the management's opinion set aside for depreciation, depletion and amortization based upon the Gas Plant Account, as of the beginning of each of these years. Is that correct?

A. The amounts were not necessarily based upon the Gas Plant at the beginning of each of the years. The amounts gave consideration to possible increases in Gas Plant during the year for which the recommendation was being made and were intended to provide under such circumstances substantially the equivalent rate that resulted from the determinations made by the management and made by the independent consulting engineer back in the year 1936.

Q. Yes, and I assume, naturally, that the objective in considering expenditures to be anticipated during the [fol. 6378] current year was for the purpose of giving recognition to the average balance in this account during that year? A. On the order of that, yes.

Q. And was my statement that this recommendation was in the form of an amount of dollars correct rather than a specified percentage of individual items of Plant Account?

A. Yes. We made no submission to the Board at any time of any specific rates applicable to any portion of the Plant Account other than to perhaps state that there was a provision in the Certificate of Incorporation which made necessary the amortization each year of an amount carried on the company's books as gas sales and purchase contracts, being the equivalent of twelve times $24,419.05; that there were other gas sales and purchase contracts being amortized on the basis of their respective lives; that depletion would be based on gas withdrawn, and that the difference would represent the amount applicable to all of the rest of the properties.

The amounts determined gave consideration, as the witness has previously testified and as the registration statements to which certain reference has been made in this and

yesterday's proceedings show, to the necessity for an amount each year representing amortization as distinguished from amortization of the gas sales and purchase [fol. 6379] contracts.

Q. I do not recall, Mr. Watkins, that in your statement a short while ago you indicated more or less definitely the manner of determining the percentages which were applied during the years 1931 through 1936. You did discuss them, but I do not believe that you stated how those percentages were determined. Do you recall at the present time?

A. Well, as a matter of fact, I do not believe I know because in some of those years when I was assistant secretary and assistant treasurer of the company, I was not present at some of the Board meetings at which the amounts were discussed and decided upon. I learned of the result of such discussion after the facts had been accomplished.

Q. So your present answer is that you have no recollection or knowledge of the manner in which those percentages were determined?

A. Oh, I might go back over the records for those years and be able to state that it appeared from the information available to me at this time that this was about the method or manner of approach.

Q. Well, I am speaking of your knowledge right at this instance without consultation of company records.

A. Well, I should have to say, sir, that I have no [fol. 6380] very great knowledge as to the method used in their determination. I believe I have previously said, however, that they did impress me as being inadequate.

Mr. Wheat: You are referring now to the percentages which you read into the record at page 884, are you?

The Witness: I am referring now, Mr. Wheat, to not only the percentages used in the years prior to 1936, if percentages were used in those years, but, likewise, to the amounts resulting from the use of any such percentages in any such of those years.

. . . . . .

By Mr. Gorman:

Q. Your answer was, was it not, to my previous question that the amounts set aside in 1937, 1938 and 1939,

and 1940, as reflected in the Income Account of Exhibit No. 49, were determinations made by the management and confirmed by an independent consulting engineer, namely, Mr. P. MacDonald Biddison?

A. The amounts now shown in this income statement or rather this Exhibit are the result of recommendations [fol. 6381] made to the Board of Directors and of authorization by the Board of the establishment of certain amounts for annual provision, all of which was predicated upon and the direct result of studies made by the management and the independent engineer.

Now, a moment ago you asked the question as to what the witness' view was with respect to the provisions for the year 1931 or, rather, for the nine months of 1931 up to and including 1936, and Mr. Wheat tied it up with previous testimony by this witness on page No. 884 of the record. In connection with that I should like to draw attention to the fact that a few moments ago in discussing this question the statement was made, notwithstanding the witness' view with respect to those years, that the independent engineer's first determination proved that the reserve made up to that time was adequate.

. . . . . .

My personal view of those particular years, taken as such, is that the provision for the years, if we consider it on a basis of the operation of the facilities, somewhat on the basis of the manner in which they might have been intended to operate, would have been inadequate.

Q. That is the years through and including 1936, as [fol. 6382] you testified?

A. Not necessarily including 1936, because in 1936—no, I am wrong, it was not until 1937 that we substantially increased the provision.

Q. So it did include 1936? A. Yes, it did.

Q. And that opinion, of course, is based upon your more recent experience from and after 1936 and studies made by the management from that date?

A. Just how do you mean that, sir?

Q. Well, I mean primarily that you have gained a great amount of information and knowledge on this subject which led you to the opinion that the provision in the

original years was inadequate. I am not attempting to confuse you, I am just—

A. (Interposing) Well, I want to get it straight, so that I can answer it properly. I do not believe my opinion is based upon anything that I may have learned and I will admit that I have learned considerable in late years,—I should hope I never stop doing so,—but, rather, as I recall upon the condition existing in those years.

Now, as I have said before, possibly twice, the independent engineer's conclusion,—and that was one of the reasons why we employed him,—was that the total amount of the provision up to and including, shall we say, the [fol. 6383] year 1937 was adequate and that the amount that management was about to recommend to the Board for the ensuing year was, likewise, adequate.

Now that condition, as far as I know, remains unchanged for all the years since.

As I have stated, our public accounting firm has not found it necessary to make any exceptions in their certificate with respect to this particular matter subsequent to that time.

Q. Yes. When you use the term "adequate" in connection with the accumulated reserves as of the particular years in referring to the letters of this independent engineer, which are Exhibits 108 to 111, both inclusive, you mean, do you not, that they were not only adequate provisions, but they were not excessive amounts?

A. No, Mr. Gorman, we are talking, I hope, about records and not about whether or not these amounts are adequate for rate purposes. I cannot qualify to express an informed opinion with respect to the rate side of it. We have considered them and wherein this witness has referred to them as being adequate and where, in my judgment, Mr. Biddison has referred to them as being adequate and so far as the public accounting firm is concerned we are dealing entirely with the provision made per books and without respect whatever to a rate proceeding.

[fol. 6384] Mr. Culton: Or to actual accrued depreciation observed?

The Witness: Our actual sustained depreciation, if you please, whether or not our guess over the period as to which we shall recover our amortization is correct.

Our philosophy, I believe, could be summed up this way, that over the life of the properties devoted to the service that Panhandle Eastern Pipe Line Company's properties are, there must be recovered through the income that is earned a certain amount of depreciation. We hope we have made an estimate which will produce desired results.

By Mr. Gorman:

Q. Of course, the accruals which are set aside each year include not only depreciation, but amortization, do they not?

A. Well, they include in our minds some specific amortization of certain specific things.

Q. Yes.

A. But the other amortization to which this witness is making reference is that which must in the very nature of these properties be inexorably tied up with any determination as to what annual provision is made for books or for any other purpose, for that matter, because we are dealing with a wasting asset. We are in a mining industry. We do not know how long our reserves will last. We have [fol. 6385] some estimates, certainly. Our facilities may be worth something, we may be able to use them for some other purpose after those reserves are gone. We do not know so that we cannot wait until the time approaches when that condition is evidenced and then come to the Federal Power Commission, or any other regulatory body under which we may be operating, and say that we have to collect from the consumers this year blank millions of dollars to take care of this particular thing that we see at this particular moment.

Q. May I qualify my previous question, then, and ask whether or not your opinion and, also, your conclusion as drawn from the statements or letters submitted by Mr. Biddison to the management of the company, that the annual accruals in these specific years referred to were adequate and that the accrued amount in such years was ade-

quate, meant to you that such accruals and such accrued amounts were not only adequate, but were not excessive when considered as amounts provided for depreciation and amortization of your property?

A. For the company's internal purposes and for the purposes of these records, my answer is yes.

Q. Yes.

A. For all other purposes I have no answer.

Q. Mr. Watkins, in your opinion, do the same forces and [fol. 6386] reasons that determine the amount of the annual accrual also determine the total amount of accruals to date in the reserve accounts?

A. I do not believe I understand just what you mean.

Q. Well, let me put it this way: If your annual accruals are determined properly, the amount resulting from such accruals must necessarily have been determined properly?

A. Well, I do not believe I can—

Q. (Interposing) Well, that is so simple it sounds confusing, I imagine.

A. We have a situation here, as I see it, where the company has used reasonable, perhaps more than reasonable prudence in determining for its internal use and purposes what should be the amount set aside annually for this purpose and whether or not when those amounts have been set aside the result, after having deducted any retirements made prior thereto, is reasonably adequate for the purpose.

Now we believe that to be the condition. Whether the year 1937 or the year 1931 was all haywire, whether it was 1,000 per cent high or 7 per cent low may, in this witness' estimation, be of little consequence. In looking at the results of what has happened in restrospect, we are dealing [fol. 6387] with a certain condition that existed at June 30, 1941. There are exhibits here that show what happened in the various accounting periods prior to that time. There have been a multiplicity of things that might now, as we look back at the results of some of those years, change them. I should not want to state categorically whether the year 1938 accrual picked up any deficiency in any prior year or provided any excess for any subsequent year.

Again, I am speaking entirely from the standpoint of the company's internal needs, and not with respect to any rate proceedings or otherwise.

Q. Yes. Of course, we are all aware of the fact that the company has made a determination in previous years of the amount which it considers necessary to set aside in a reserve account during that year for depreciation and amortization. You have so testified, of course, have you not?

A. Well, I have not only testified that there have been such amounts determined, but I have presented an exhibit showing what is the result of such determination. That exhibit is No. 49.

Q. Yes. And has the company and the management of the company,—when I say "company", of course, it must necessarily be the management and the Board of [fol. 6388] Directors,—also determined that the accrued amounts remaining in these accounts to date represent a proper reserve for depreciation and amortization?

A. For what purpose?

Q. Well, for the purpose of these exhibits which you have put in here showing the condition of the company on its books and records.

A. The Board of Directors have made no determination whatever, as far as this witness knows, with respect to the accumulated accruals at any particular time, nor has the Board of Directors made any determination with respect to any of the exhibits submitted in these proceedings by any of the witnesses, as far as I know, that have appeared, but the Board of Directors has determined and authorized certain annual amounts and the officers of the company have carried out the Board's determination. We may have squeezed a little extra once in a while, we may have failed to take quite as much as the Board determined, but, generally speaking, the amounts provided in each year have been most comparable with the Board's determination for that particular year.

If that is not responsive to your question, will you please ask me another one?

Q. Well, I was just examining the response in my own mind. Of course, the Board of Directors' determina- [fol. 6389] tion in each year of the amount to be set aside

in the reserve accounts for that particular year represents, does it not, the opinion of the Board of Directors?

A. It represents their action, certainly. I may inform you, sir, that the Board of Directors is cognizant of the fact that the company has received these annual letters from an independent engineer.

Q. Yes.

A. The matter is presented to the Board when the annual accrual is suggested to the Board; the amount of it. The Board is informed that it is in concurrence with the suggestion of the independent engineer. The Board then, very naturally, has the right to accept it or reject it.

Q. Well, in these letters to which we have been making reference, Exhibits 108 to 111, the consulting engineer has stated that the reserves at the end of the years which he has studied are reasonable reserves based on the age and estimated life of the property. Of course, he is referring there, is he not, to the accrued reserves as of the date mentioned?

A. Would he not have to be?

Q. I say, is he not there making such reference?

A. It seems to me that he is.

Q. Yes. Well, has the management, also, made a [fol. 6390] similar study, resulting in an opinion on this subject?

A. Based on the age and estimated life, no. The management has no mortality tables available to it with respect to this class of property. Long-distance transmission lines are relatively new. It may very well be that because the greater amount of their retirements to date has been functional rather than physical we may suddenly awake one of these times and find that the aggregate of the accruals, less the amounts charged to the accruals up to that particular date certain, is astonishingly disproportionate to what we might require. We might even find that it is too much. Time alone will tell us that.

Q. Yes, I think that is true. Of course, you are merely basing your estimates on your best present information?

A. For internal company purposes.

Q. That is right, the accuracy of which can only be borne out and proved by future experience?

A. Is that a question?

Q. Yes. A. I think that is correct.

Q. Can you tell us, Mr. Watkins, what amortization period the management uses in determining the amounts to be set aside each year?

[fol. 6391] A. Amortization of what?

Q. Of plant property, speaking now, still, of the—

A. (Interposing) Well, let's put it this way, Mr. Gorman: We do actually amortize a portion of the investment of the company over specific periods, that is, the gas sales and purchase contracts. We, also, have some investment in unoperated leaseholds.

Q. Yes, if I may interrupt, Mr. Watkins, I wanted to confine this question to the account for the reserve for depreciation of gas plant as indicated at Lines 28 and 29 of page 2 of Exhibit No. 48, as distinguished from the other reserves.

A. You understand, of course, that in the preparation of the exhibits introduced through this witness, we tried to relate all of the facts shown by those exhibits to the classification of accounts adopted by the Federal Power Commission and made effective January 1, 1940, notwithstanding the fact that in some of the prior years our accounts had not been exactly in conformity with that classification and, further, that the reclassification required as a result of the adoption of the classification of accounts prescribed by the Federal Power Commission had not been completed.

You are also aware, I m sure, that there must be some determination of the adequacy of the depreciation reserve [fol. 6392] and, further, that that information is available to the company and to the Commission itself, but not necessarily part of the formal records. The reserve accumulated at January 1, 1940, and annually thereafter must be segregated as to production, transmission, distribution, general property, and so on.

Now, in the determination made by the management, concurred in by the consulting engineer who was independent and approached the problem without any knowledge whatever of the company's conclusions, and subsequently recommended to the Board of Directors, we had an objective of a rate, an effective rate or a percentage that would represent the result of the combined total we were going to ask the Board to act upon of around three per cent. Three per cent represented the total property subject to either amor-

tization, depreciation or any other cost. If that were translated to a life span and if the corporation ultimately recovers through earnings 100 per cent of its investment, it is pure mathematics to see that it would be about 33 years, but actually we did not determine 33 years because, as this witness has testified, there are so many things that we yet do not know about what the life span of these properties will be that we may have to change our views next year, maybe five years from now, perhaps at the very end of the life of the properties.

[fol. 6393] Does that help any?

Q. Yes, it does, considerably. But do I understand correctly that in providing an amount for amortization you do not, necessarily, predetermine a period for such amortization? A. And depreciation.

Q. And depreciation?

A. No, we do not. That is a life span.

Q. That is right.

A. We determine a period for the amount we suggest which is one year.

Q. And the fact that in late years you have been setting aside each year an amount equal, approximately, to three per cent of the Gas Plant Account, despite the fact that it, if carried continuously on throughout the succeeding years, would amortize and depreciate the property within a period of 33⅓ years, does not carry any connotation that in arriving at such three per cent you did, in fact, consider a life span of 33⅓ years?

A. It does not. If I may correct your statement, sir, we did not arrive at three per cent as such. We found three per cent when we were finished with our conclusions.

Q. I intended to say equal to three per cent, but I did not. A. Pardon me.

[fol. 6394] Q. Is it correct, then, to draw the conclusion from your statements that in providing an annual accrual for depreciation and depletion you give no consideration to the estimated life of the reserves presently available to the Panhandle Company?

A. It would not be proper to say that, no.

Q. Why not, may I ask?

A. We are conscious, always, of the probability that the reserves available to Panhandle Eastern Pipe Line Com-

pany's facilities may be overestimated. It may not last anything like as long as our estimates show that they probably will last. There could be some act of God that none of us know anything about that would completely destroy them. I do not know anything about geology, but something of that sort might happen. There might be some change in the utilization of natural gas that would make it a product that nobody would want. There might be the introduction of sulphur, a sulphur content in our natural gas such that it could not be used.

Now, whether that is possible or not, I do not know. I cite these things to show that we are naturally conscious that if one determines the probable life of a facility at any particular date certain, they must be conscious of the things, the very nature of which can make that estimate erroneous the next instant.

[fol. 6395] Certainly, we gave consideration to the possible length of the life of the properties. That did not necessarily mean, however, for internal purposes that we acted upon the estimates that we might have had at that time as to reserves.

We, also, had in mind the possible rate at which we were going to withdraw those reserves. We have in mind and have constantly in mind how we were going to develop our facilities, where we were going to sell our products, and a very wide variety of things that must be considered in approaching a matter as important as the determination of a provision for depreciation for internal, and no other purposes.

Q. What do you mean by "no other purposes", as distinguished from "internal"?

A. Well, sir, I am simply trying to say to you that I am in no wise trying to testify to depreciation to be or not be included in a rate proceeding.

Q. Well, I gather the impression, from your last statement, Mr. Watkins, that your company and the management thereof, in fixing an annual accrual, takes cognizance of the fact that the operations of the company are dependent upon a wasting asset, but that in fixing such annual accruals they do not give definite expression or weight to any particular span of years which these reserves will

[fol. 6396] last in the opinion of any expert geologist or other competent experts who undertake such estimations?

A. That strikes me as a fair statement of the situation, except that each of us approaching this subject very naturally have in the back of our minds something with respect to the probable life span of the properties and the reserves.

Q. But you and the others who participate in the management of this company have not looked upon any particular figure as representing the probable life of your reserves?

A. No, Mr. Gorman. We would like to be flexible in such matters. It would be improper, it seems to me, and highly so, for the present management of Panhandle Eastern or the management of Panhandle Eastern three years hence, or the management of Panhandle Eastern back in 1930 to have signed a blank check here for the company that was so hide-bound that attention could not be given to changing conditions.

It is not only true with respect to the depreciation reserve, but everything that we do in connection with the company.

Q. Yes. Is it your opinion and, if you know, is it also the opinion of others who participate in the management of this company, that for internal purposes, as you have [fol. 6397] expressed it, your accruals to date are adequate?

A. Speaking entirely for myself they appear to be and as far as my memory goes to any observations that may have been made in my presence by others, I think the same thing would be true. There has been some attitude expressd here and there that perhaps some of these days the Internal Revenue Department, for instance, will require us to give expression on the books to the same amount we seek as a deduction for income tax purposes. There have been many discussions concerning a thing of this sort. One just does not catalog in their mind every viewpoint expressed, but I think you have stated it fairly correctly.

Q. Now, in determining in your own mind that this accrued amount is adequate and not excessive, were you guided by the same factors and did you consider the same things which you take into consideration each year in de-

termining the amount of the accrual for that particular year?

A. There is no question but that the consideration given to this question each time it has been considered has been the result of a sincere effort on the part of the individuals involved in such consideration to take into account all of the factors present at that time, whether they be factors present in other considerations or whether they be factors that [fol. 6398] may never be present again.

Is that understandable?

Q. I think so. That is true in considering both the amount accrued, as well as the annual accrual at the time of consideration, of course? A. I think so.

Q. Yes. Now, Mr. Watkins, you made reference a short while ago to page S-8 of Exhibit No. 145, for identification, to certain statements contained therein to the effect that the Articles of Incorporation of this company require it to set aside certain amounts annually for the amortization of gas sales and purchase contracts. I notice on this same page that Note A refers to certain provisions of the Articles of Incorporation, as amended, and requires certain provisions to be made for depletion, amortization and depreciation of property, plant and equipment prior to the distribution of dividends. Is that correct?

A. There is a statement on page 8 of that general nature.

Q. Yes. Now, you have undertaken in this paragraph A to state certain amounts which, on the basis of the provisions of the Articles of Incorporation, as amended, would have been provided for the years 1938, 1939, and 1940, and the first nine months of 1941. Those amounts and those computations have no direct relationship, do they, to the [fol. 6399] annual accruals which are set aside in a reserve for depreciation of gas, gas plant, shown at Lines 28 and 29 of page 2 of Exhibit No. 48.

A. No, those amounts are the result of a computation based on one-third of one per cent per month as stipulated in the Certificate of Incorporation, as amended, to determine to what extent the dividends may be paid out of surplus in accordance with the provisions of the Certificate of Incorporation. We considered them as restrictions of surplus with respect to dividends.

Q. Yes, and only with respect to dividends?

A. I think that is correct. And if you have any interest in the amount of such restrictions at September 30, 1941, June 30, 1941, or any other date, the witness will attempt to supply it. It is available for June 30, 1941, included, I believe, as a part of one of the exhibits. The witness can supply it for September 30, 1941.

There is a further and greater restriction in the mortgage and deed of trust dated November 1, 1940, which is on the order of $4,113,000, so that, in effect, the restriction, as provided by the certificate of incorporation, does not come into play until it accumulates an amount in excess of the restriction provided by the mortgage and deed of trust.

* * * * * * *

[fol. 6403] LEITH V. WATKINS, resumed the stand and testified further as follows:

Cross-Examination (Resumed).

By Mr. Gorman:

Q. Mr. Watkins, at the time of recess yesterday afternoon we were discussing the account for reserve for depreciation of gas plant as shown as Lines 28 and 29 of page 2 of Exhibit 48. This reserve represents, does it not, those annual accruals which were shown at Line 10, account entitled "Depreciation Under Operating Revenue Deductions (Including Amortization)" on page 1 of Exhibit 49?

A. You mean it shows the residue?

Q. Yes, that is right.

A. (Continuing) Of the accruals made over the period as shown by the point specified in your question, that is correct.

Q. And accurately speaking, this reserve for depreciation of gas plant includes a provision for amortization, does it not?

A. Yes, I believe we covered that rather fully yesterday. We must not lose sight of the fact that it includes [fol. 6404] amortization with respect to gas sales, and purchase contracts and, also, an element of amortization with regard to the physical properties themselves.

Q. Yes.

My point was merely for clarifying the title which is shown in Exhibit 48, which merely refers to depreciation.

A. I believe the company is not necessarily responsible for that title.

Q. You mean that that is the title which is contained in the Commission's uniform system of accounts?

A. That is correct, and the total amounts shown in the various columns on page 2 of Exhibit No. 48 on Line 29 are the amounts or aggregate amounts of the reserves of any class the company might have had on its books at any of these periods, even though they were not specifically designated as "Reserve For Depreciation of Gas Plant."

Q. Yes. I believe you indicated, did you not, in your testimony of yesterday, that you were one of the officials of the company who assisted in the determination of the annual accruals to be set aside for this reserve each year?

A. My statements were not that definite with respect to the entire period. You will recall, and I believe the transcript of yesterday's testimony will reflect the fact, [fol. 6405] that the witness stated that during the earlier years of his association with the company that he was assistant secretary and assistant treasurer, and, as such, did not necessarily have direct contact with or assist, other than in a general way, in the determination of some of the matters of policy that I have, since I became secretary-treasurer and since my titles were changed from secretary-treasurer to secretary-controller, been quite intimately associated with and have participated in such determinations subsequent to those changes to a much greater degree than before that time.

My senior officers in the earlier days of my association had more to do with matters of policy than the witness, himself.

Q. Well, it is correct to conclude that since the time, at least, when you became secretary in 1935, that you have been intimately connected with such determinations?

A. Well, even before that, Mr. Gorman.

Q. Yes, but I mean since that time, at least.

A. That is true.

Q. Can you tell us, in a general way, without going into too much detail, how or what method or basis is

used by the management in determining such annual accruals? We touched upon that somewhat briefly yesterday.

[fol. 6406] A. Well, I do not believe I can add any more in that respect than is already in the record. I should be very happy to read the portions of the record that I think are responsive to your question, if that would be helpful.

Q. My inquiry was whether or not you could give it in any greater detail than you did on yesterday. My recollection of your testimony,—of course, it will speak for itself,—was,—

A. (Interposing) I think I am willing to let it rest as we left it yesterday.

Q. Your present thought is that you can add nothing to it?

A. Oh, I might, but I do not believe it would be particularly helpful. If such a thing would be helpful to whatever point you have in mind, I should like to give you a little of my philosophy with respect to depreciation.

Q. Well, I am only interested in that to the extent that that represents the basis or method of determining accruals of the management of this company.

A. I think, to an extent, it probably will.

Q. Suppose you proceed to do so. In looking back through yesterday's transcript I, myself, fail to find where you offered any explanation of such method or basis. You offered to refer me to the pages, and if you can do so, [fol. 6407] I would appreciate it.

A. I do not believe I offered to refer you to the pages. I referred you to the entire transcript of the proceedings of yesterday.

Q. I see. Well, will you go ahead with such explanation as you propose to offer?

A. I do not believe I characterized it as an explanation. I think I said that I would be glad to give you what I think is the management's philosophy with respect to depreciation and its determination.

Q. That definition is all right with me.

A. We do not believe that depreciation is subject to the application of a mathematical formula. We do not believe that it proceeds uniformly with the passage of time.

. . . . . .

[fol. 6410] Q. Now, to get back to the subject of our original discussion, can you give us a statement of the basis or method or reasoning which is applied by the management of the company in determining each year the annual accruals to be set aside and the reserve for depreciation of Gas Plant Account?

. . . . . .

[fol. 6411] A. Now, Mr. Gorman, I am going to be as brief as I possibly can, because we have spent a terrific amount of time on this question. I should like to help all I possibly can and if I may try to answer your question, your most recent question, by describing what we may have done with regard to the determination of an amount for the year 1940 and skip any efforts to try to recall all these questions that arose in the tabulations that we might have made in various directions, and the consideration we gave to our wasting-asset problem, and the fact that we might not have as property tomorrow [fol. 6412] or that our product would not be susceptible to use or any of the variety of things that would alter one's estimate made for the immediate future, perhaps we can come to a point where the information you seek is available.

Q. Yes.

A. So that approaching the estimated amount for the year 1940, we, first, gave consideration to the fact that there was on the company's books a certain amount of gas sales and purchase contracts which, for our own purpose, we look upon under the classification of "Old".

I imagine before we get too far along in this proceeding we will hear more about those gas sales and purchase contracts. There is a provision in the Certificate of Incorporation that says that we must amortize those gas sales and purchase contracts on an annual basis at the rate of $24,419.05. Computing that, we find that we must have about $293,000 for that purpose.

There are other gas sales and purchase contracts which, using our own vernacular, we classify as "New". Those gas sales and purchase contracts came into existence subsequent to the procurement of our contract with Detroit City Gas Company; now Michigan Consolidated Gas Com-

pany, and we must provide an amount to take care of those over their life span based on units of sales, as the conditions may be, and we determined an amount for that period.

[fol. 6413] Did I mention the amount that we determined for amortization of the old gas sales and purchase contracts?

Q. The provision of the certificate, the Articles of Incorporation? A. Yes.

Q. Yes, you did.

A. (Continuing) So that we add another $40,000 for amortization of the new gas sales and purchase contracts.

We have found by studies made over a period of years that our investment in unoperated leaseholds should be completely recovered over a period of about ten years because the average life of the leases themselves, is that period. That gives rise to another $86,000.

Several years ago we determined that, based on the estimated amount of recoverable reserves, it would take about three mills per m.c.f. of production to recover the cost of operated leases.

As I mentioned yesterday, we employed the services of an independent consulting engineer, and his approach to the matter of depletion was on a little different basis than that of the company and, generally speaking, we came to the same end.

The depletion on unoperated leases for the year 1940 would be, naturally, based on the estimated amount of gas we were going to produce during that year, and it [fol. 6414] was fixed for the year 1940 at $72,000.

Now, as I mentioned yesterday, somehow we came to a point where, when our total amount of provision was applied to the Plant Account, we had a result of about three percent, so to the figures that I have mentioned we add an amount which, divided by the total Plant Account at the beginning of the year, would give a resultant figure including all of these items that the witness has enumerated, and the amount to be added was something in the neighborhood of three per cent.

That, sir, represents our best judgment for the year 1940 as to the amount that should be set aside and was

the basis upon which a recommendation was made to the Board of Directors. The Board authorized the establishment of $1,900,000. That figure, however, did not include the amount already stipulated in the Certificate of Incorporation, because it is unnecessary for the Board to, again, take action each year on something that the stockholders had already acted upon. The plan, therefore, at the beginning of the year 1940, called for the appropriation from income of, approximately, $2,200,000. I believe, if you will refer to the company's published annual report and, perhaps, also, to Form No. 133, which is a form used by natural gas companies to make a financial and statistical report to this Commission you will find [fol. 6415] that the actual amount appropriated was $2,210,000.

Mr. Culton: You said "this company." You mean this Commission, did you not?

The Witness: If I used the word "company" in place of the word "Commission," I was incorrect, sir. Thank you.

By Mr. Gorman:

Q. Now, of course, that aggregate provision which you just referred to includes reserve other than reserve for depreciation of gas plant, which we have been discussing and which is shown at Line 29 of page of Exhibit 48, does it not?

A. Mr. Gorman, the witness enumerated the items that made up the amount.

Q. Yes, I realize that. I just wanted to ask that clarifying question.

A. If the accounts on Exhibit 48—

Mr. Wheat: (Interrupting) Page 2.

The Witness: (Continuing) —segregate the amount determined by the Board of Directors and the amount actually appropriated, the answer to your question is, "Yes."

Now, as you know, the classification of accounts prescribed by the Commission requires a reclassification of the depreciation reserve, just as it does the Plant Account itself.

[fol. 6416] By Mr. Gorman:

Q. That is correct.

A. So that our actual accounts, per the books, may not carry the exact segregation shown in Exhibit No. 48 and may not, at this moment, represent the amounts that would have shown, shall we say, at the end of the year 1940 in Column L on the appropriate lines or in Column M on the appropriate lines of June 30th, had such segregation been made. It is not yet completed.

Q. Can you supplement your answer by giving us a statement of the consideration by the management of the fact that the company is dealing with a wasting asset in providing an amortization provision annually for Gas Plant Property as distinguished from contracts for producing and non-producing acreage which you have previously mentioned?

A. I am afraid I do not understand what it is that you would like to have me do.

Q. Well, as I recall your testimony of yesterday, you stated that in determining the annual accrual the management did consider and provided a certain amount for amortization in addition to depreciation of Gas Plant Property and that this was brought about by reason of the feeling of the management that they were dealing with a commodity which, by reason of the manner of its production, was considered as a wasting asset and that [fol. 6417] in determining and considering amortization allowance there was no specific period or term of amortization provided.

Now, I am asking you if you can give us a little more complete explanation of just how the management did consider this matter of amortization of Gas Plant Property other than those amounts which have specific rates to which you have previously made reference.

A. I assume, sir, you will take no offense if I suggest that your reference to what I stated yesterday be limited to the inability of each of us to exactly remember what we may have said in the precise words. I think I said, in general, what you recited.

Now, if you have this in mind, perhaps I can get to the point you are after.

If you are seeking to learn whether or not, in all the effort we consume to determine these annual amounts, there was a specific rate that we used for amortization of the physical properties, or a specific number of years we used to determine that, the answer is no.

Q. I understood that from your testimony of yesterday, but I do not understand that the management merely considers that they are dealing with a wasting asset and, accordingly, plucked some specific amount out of the air.

A. Oh, certainly not.

Q. What I am trying to get at is how they arrived [fol. 6418] at the amount which they do so provide for amortization.

A. Well, that is based on our best judgment. Now, we do have certain things, as the record of this morning's session will show, that are provided on specific bases. As the witness has testified, there is then added to those amounts an amount which includes both amortization and depreciation, as it is commonly known, and as it relates to the wasting away of the physical assets in actual use.

Specifically, we have not had a definite rate for either of those two amounts. We used our best judgment, which converted into a percentage after we were finished, that amount plus the sum of the specific amounts, came to about three per cent, sir.

Mr. Wheat: What you are trying to say is that you do not start with a percentage and apply that, but that over these years which you have had to do with this matter you have had certain specific amounts and you have added other amounts and afterward, as you come to look at that, you have found that it has approximated three per cent in those years?

The Witness: If that satisfies Mr. Gorman, Mr. Wheat, I have certainly wasted a lot of time.

Mr. Wheat: No. Can't you answer my question?

The Witness: That is what I have been trying to say.

[fol. 6419] Mr. Wheat: Thank you.

By Mr. Gorman:

Q. Yes. Well, I think you have said that on several occasions, but that, as you seem to think, would not quite satisfy me.

A. Well, I do not know, sir.

Q. Well, I am not sure that we still have got to the point which satisfies me, Mr. Watkins, and that is, you stated the amount which you add to your other figures, which amount is a provision for amortization, represents a judgment figure. That was your statement, was it not?

A. Yes, I think so.

Q. Yes. Now, what I am trying to secure from you, Mr. Watkins, is the basis of that judgment. In other words, what factors do you consider? Do you just consider the fact that it is a wasting asset?

A. Oh, no, indeed. Mr. Groveling has been engaged in the gas industry for years and years and years. He knows it backwards, forwards, top and bottom, inside and outside. He has bumped into, unquestionably, all the problems that can be gathered together that have been the experience of all the gas companies. Of course, he has not bumped into the ones that we will have in the future.

Q. We will agree with that.

A. My experience in the gas industry goes back to 1926. [fol. 6420] In know a few of those things. There are others connected with our organization in an operating capacity and in a managerial capacity that have the same line of experience either in the gas industry, or otherwise.

Now, the composite of the thoughts of all of us, based on our experience, our investigations, our discussions, our general knowledge, has led us to the conclusion that this is a good thing, and that is what we are using for internal purposes, not for rate purposes and not for income tax purposes.

Q. Well, by that do you intend to indicate that the approximate figure of about three per cent annually, is a good figure? Is that what you meant?

A. It is a good figure for our purpose. It is not intended to represent a life span. We went over that time after time before and, if I may anticipate, that is the thing that is troubling us now; we have not definitely concluded in our mind what should be a proper one because we do not have enough knowledge at this time.

I mentioned yesterday that this is a new industry; long-distance transmission of gas is something that probably is not over ten years of age. Many of the long-distance transmission lines did not get into what one would consider full operating condition until perhaps seven years ago, or something of that nature. Our retirements have not been suffi- [fol. 6421] cient at this time to indicate what might happen by way of physical deterioration. We do not know what confronts us by way of functional effect of depreciation. We do not know what confronts us in the way of depletion. There are so many unsettled things that it would be most unwise at this time to try to arrive at a mortality figure. The information just is not available.

Q. Yes. Well, you answered my question very quickly and your answer was that the figure to which you previously had reference was the resultant figure of approximately three per cent.

A. It resulted in approximately three per cent, sir.

Q. That is right. I thought that was what I said.

Now, do I understand correctly that after you have computed your depreciation and the various amortization provisions for other items of property, that to that resultant figure you add an amount which we have been designating as an amortization provision for gas plant property which is sufficient to bring it up to the resultant figure of approximately three per cent?

A. No, sir, we do not make any such addition. The addition that you speak of is a mental process.

Now, if we could move time back, shall we say, to about [fol. 6422] 1936, when we went through all of the things that we have been discussing here, and determined an amount that we thought was sufficient for our internal purposes at that time, and that, as we have gotten into the record numerous times, resulted in rate of about three per cent, so that as we came along in the subsequent years and we found no particular reason to change the basis upon which we had approached this matter before, it was simply a mathematical calculation of what we expected to have at the end of the year.

Q. Well, when you say "mathematical calculation", do you mean that the amount provided for amortizing gas

plant property is a calculation? I understood previously that that was a judgment figure.

A. No, sir, I am talking about the composite whole.

Q. Oh, I see. This amount provided for amortization of gas plant property is wholly a result of a discussion, so to speak, around the table and then in that discussion you arrived at an amount which you are going to set up for that particular year?

A. Well, I think that probably would be all right. Let's put it this way: If we were using a fixed rate of six per cent or 60 per cent, some portion of the six per cent or the 60 per cent, in our judgment would represent the amount that an industry such as ours should provide annually as [fol. 6423] amortization of facilities that would not be completely used up when its reserves has been completely exhausted. It is part of the composite whole, just as you might say that because of the retirement unit provision in the classification of accounts used by this Commission our depreciation reserve or our reserves for depreciation and amortization, however we choose to characterize them, are going to be increased substantially, because we now have to work small units of property in and out of capital, whereas before we may have charged them to maintenance, or that one of the reasons for an upward trend in the annual provision is because the State Highway Commissions in Kansas, Missouri, and Illinois, are going to indulge in a tremendous road buildnig program which is going to involve the changing of a lot of facilities and, as a result of that, we, again, have our units of property to contend with and that affects the depreciation reserve.

There are so many things of that nature that can cause the conclusions to be changed at different periods, even changed within an annual accounting period, that one cannot specifically put their thumb down on them and catalog them or characterize them as something that is going to recur constantly in the same manner, in the same fashion, at the same time, and in the same proportion.

What I am trying to say is that we have made a desperate [fol. 6424] effort to arrive at a conclusion which when applied to the company's property and taken out of the company's gross earnings will be such year for the purpose these reserves are intended. We may have erred terribly.

That error, if [they] be any, may be on the upward side. It may be on the downward side. Here is what we have done; it is our best judgment, and I am afraid we will have to leave it just as I once heard of a Negro boy who had bought a watch. Another high brown came along and asked him what time it was. The second Negro looked at the watch and said, "Dar she is," and the other Negro said, "Damned if it ain't!"

Q. Well, now, of course, your analogy there is not, in my mind, a good one, so that is neither here nor there. I think you will agree with me when I say that apparently I am very dense because I still do not understand just what you do or why you do it.

A. I would not say that at all, sir.

Q. I am just trying to clarify it in my own mind. If everybody else understands it, I apologize for taking up so much time.

Now, as I understand your feeling and the feeling of others of the management, after you arrive at an amount, before you provide this other amount for amortization of Gas Plant Property, you have the feeling that your result [fol. 6425] is not adequate. Is that correct?

A. Oh, no, no.

* * * * * * * *

Q. Let me put it this way, you do have a definite feeling that to reflect your best judgment and to provide what you consider to be an adequate amount, you must provide a specific amount which you determined by a judgment calculation for amortization of your Gas Plant Property?

A. We make no specific calculation, applicable only to the amortization. Now, there is only one of the several things that the witness mentioned a moment ago that is specifically based upon the Certificate of Incorporation, and that is this amortization figure which runs around [fol. 6426] $293,000 a year and is stipulated in the Certificate of Incorporation at the rate of $24,419.05. That is the only definite thing that our Articles of Incorporation say we must do.

Now, everything after that is something that we arrive at without direction from the Certificate of Incorporation, if I may use that language.

Q. Yes? Well, I think we all so understand.

A. So that, to repeat, we take the other gas sales and purchase contracts and work out an amount which will provide the recovery of the total amount at which those gas sales and purchase contracts are carried on the company's books over their life or, if they be based on some unit of sales, on the basis of the unit of sales that is added to the amounts specifically required by the Certificate of Incorporation.

We then treat our amortization of unoperated leaseholds separately. As I have testified, we find that a 10-year period is about what is required for those, so we set up one-tenth of that in this mental computation and then we come to our operated leaseholds and we have found, as I have previously testified, that a rate of about 3 mills per M.c.f. of gas produced was good enough for that, so we then make that computation.

Now, the sum of those items represents the things that we have thus far determined.

. . . . . .

[fol. 6427] Now, when we get to that point, there is then the necessity of providing for both what we choose to consider physical deterioration and amortization.

That is a composite figure and it, added to the sum of these other four elements that I have mentioned, divided by property, usually comes out to 3 percent.

. . . . . .

Q. Yes. Now, if we just understand each other that we are only talking about this last amount, disregarding everything prior to that but the physical depreciation and the amount provided for amortization, which goes together as I understand your last statement, which is separate and apart from everything else you have mentioned such as contract provisions, reserve for amortization, depletion for producing natural gas lands, reserve for abandoned leases and other things of that ilk which have a specific manner of annual determination, it is this last figure that you mentioned which I am discussing solely and that, as I understood you to say, is strictly a judgment figure.

A. Well, there are many things that enter into the determination of that judgment and I have tried to tell you what they were this morning.

[fol. 6428] If we want to wave those all aside and just simply call the amount a judgment figure, I do not think I could agree with that. I can state, as I have two or three times, that it is not based on a specific life span.

Q. Yes.

A. And, therefore, has not specific rate.

Now, it might very well be that if we took that figure alone and divided by property, it would come out to, let us say, somewhere in the neighborhood of 2.75.

I do not know whether it will, but suppose it did, it is not significant, so far as we see.

Q. Of course, it has great significance, the whole resultant figure. Whether you come out at 3 percent or whether you come out at 10 or 15 percent, I think it has a great significance.

However that might be, you indicated that this last amount, which you understand we are now discussing, is to provide not only for physical deterioration but, also, a certain provision which may or may not be set aside or cataloged in your own mind as an amount sufficient to amortize and depreciate your property by the time that you anticipate your gas supply will have been exhausted.

Now, is that correct?

A. Well, the combined total of the two has been provided by us for those purposes and any other purpose that a [fol. 6429] depreciation and amortization reserve applicable to property may be needed at some indeterminable time in the future.

Q. Now, isn't it your testimony that you and others of the management feel in considering this last figure that we have been discussing that an amount, which you estimate to be equivalent to physical deterioration, considered in conjunction with the other amounts provided for amortization and depletion of producing natural gas lands, reserve for abandoned leases, and your reserve for contracts, would not be sufficient to recover your investment at the time the gas supply had been exhausted?

A. We sincerely hope that it will be.

Q. Now, I wonder if you understood my question properly. A. Perhaps not.

Q. Because I did not mention any provision for amortization of gas plant property over and above the amount you had provided for physical deterioration.

A. We have made no specific provision for either deterioration or for amortization of the physical property.

We have made a provision and our records do show the result of that provision and the residue of the provision made to take care of those things and any other elements or functions that give rise to the march of our properties to the junk heap.

[fol. 6430] Q. Well, of course, Mr. Watkins, that is merely repetition of what you have said before and does not clarify my question whatsoever.

Let's go back and put it down in somewhat detail. First, you have an amortization provision.

A. First, we determine, sir, that we must follow the Certificate of Incorporation, we have no choice.

Q. Which provides an amortization for gas contracts?

A. So if we follow that we have to have $293,000.

Q. That is for the gas sales and purchase contracts?

A. (Continuing) As stipulated by the Certificate of Incorporation and over a ten-year period.

Q. Secondly, you have what?

A. We have other gas sales and purchase contracts for which we provide amortization and apply that amortization monthly to the Asset Account.

That varies from year to year, based on the amount of such account, and is determined by the life of the contracts to which the amounts are associated, or on a gross sales basis, or some unit basis, if such a thing is present.

For the year 1940 it ran around $40,000, so you may write down, in addition to the $293,000, $40,000 for other gas sales and purchase contracts.

Q. Thirdly, you have what?

A. We have investment in unoperated leases which, as [fol. 6431] has been stated many times this morning, we determine should be recorded over a ten-year period.

The computations with respect to that developed an approximate amount for the year 1940 of $86,800.

Q. Fourthly, you have what?

A. Unoperated leases. On the basis of the estimated gas to be produced in the year 1940 times 3 mills we arrive at a figure of $72,200.

Q. Did you say "unoperated" or "operated" leases?

A. If I said, "unoperated", I am incorrect.

Q. Well, I understood you to say "unoperated". You meant "operated"?

A. This last item we are talking about is operated leases. It is providing depletion for that purpose.

Q. Your fifth item is what?

A. The fifth item we call depreciation in a very broad sense of the word and is intended for all other purposes that it may be needed. That figure, in our estimate for the year 1940, was $1,708,000, the total of which is $2,200,000.

When this was presented to the Board, the only action the Board took was with respect to $1,900,000 of that.

Q. Now, as I tried to indicate before, I think we have disposed, at least for the time being, of the first four items which you have mentioned, which leaves only the fifth item. [fol. 6432] A. $1,708,000 estimated.

Q. (Continuing) Which, in your last analysis, you have characterized as depreciation. A. Very broadly.

Q. Yes. Now, was it not your previous testimony that in this fifth item you include not only physical deterioration as depreciation, but you, also, include an amount for amortization?

A. It gives consideration, sir, to both of those items.

Q. Yes.

A. And any other item that we may have. Whether or not we include in our mind's eye blank dollars for the one or the other, I do not believe anybody can say because we simply did not do that.

Now, if you could tell us or anyone else could tell us exactly and precisely what we should do with respect to that item, you certainly would render a tremendous service to us.

Q. I am not trying to indicate what you should do, Mr. Watkins, I am merely trying to find out what you did do.

A. I am telling you that your help would be quite welcome.

Q. I can fully appreciate that.

So that in arriving at the amount to be provided for this last item, which you said in 1940 was estimated to be $1,708,000—

[fol. 6433] A. (Interposing) And actually was $1,720,744.97.

Q. (Continuing) That represents the best judgment of the amount to be set aside for this Item No. 5 of depreciation, including amortization, by the management of the company as arrived at by a round table discussion?

A. Many, perhaps, such discussions.

Q. Yes, but it is solely the result of discussion by the management?

A. No, I do not think you could say that, Mr. Gorman, in the light of all the remarks the witness has made with respect to this.

We do not want to go around that circle again, I hope. We just did not simply sit down and discuss this, certainly not. The length and breadth of the experience of the people connected with the company, the information we could assemble from all other organizations similarly situated to ours, the general knowledge that we gained with respect to these matters, the interest that was developed with regard to such things in the American Gas Association, The Controllers Institute, The American Institute of Public Accountants, the advice that we could get from our own accountants, the man in the ditch that could help us about this, that or the other thing, the things we observed that were happening to other gas lines and gas properties, the knowledge we gained of what might be the trend of the develop-
[fol. 6434] ment of further reserves, the things that we sought that might shorten the life of the reserves and all of the conglomeration, if you please, of things that must be considered went into the consideration of this and we did not sit down at any particular table and any particular time and make such a determination. It was a long, laborious thing.

Q. And it, as I understood your testimony, represented no division for physical deterioration or other provisions for other purposes?

A. No, it is a composite amount for whatever purposes it may be required.

Q. And did that figure result in any sense from a feeling of the participants in such discussions that the amount to be set aside for this Item No. 5 in each year when added to the amount provided in the first four items must be suffigient to enable the management to recover its investment within a given period?

A. Not with respect to a given period. I do not know how to make that any more definite than I have many times during this testimony.

We expected and hoped that the amount would be sufficient if continued and if adjusted as adjustments were necessary or required, either upward or downward, to recover at the time when such recovery became necessary the entire investment in the facilities, the use of which gave rise to [fol. 6435] such determination.

Q. Yes. A. If I may interrupt?

Q. You may.

A. I should like to caution us about characterizing this one thing as Item No. 5. Let's think of it as Element No. 5.

Q. I will appreciate it if you will.

A. Mr. Gorman, perhaps this would add to what you have in mind, I do not know; if it won't, you may stop me if you please.

The result of the method that we have been discussing here this morning for the years 1937, 1938, 1939, 1940 and estimated for 1941, comparing the plan with the actual and what follows, would you like to have that?

Q. Well, by that you mean the recommendation of the management as compared with the final determination of the Board of Directors?

A. I am going to give you, sir, the resultant percent of the plan and of the amount actually provided after the determination by the Board as compared with the investment at the beginning of the year, if it will be of any service to you.

Q. Suppose you do that.

A. This we understand to be simply a percent.

Q. An equivalent percent?

[fol. 6436] A. Yes, an equivalent percent of the fact, shall we say?

In 1937 the plan and the authorization by the Board resulted in 2.58 percent; the actual amount recorded was 2.7 percent.

In 1938 these comparable figures were 2.77 and 2.8.

In 1939 they were 2.82 and 3.

In 1940 they were 2.96 and 3.0.

In 1941 they are estimated to be 2.99 and 3.09 percent.

Q. The first figure that you gave was—

A. (Interposing) 2.58.

Q. No, I did not mean specifically in numerals.

A. It represented the result of the application of the amount the management determined and recommended to the Board and the Board acted upon plus the amounts stipulated by the Certificate of Incorporation to the Property Account at the beginning of the year, each year.

Q. And the figure each year represented—

A. (Interposing) The actual application of such determination and such approval by the Board.

Q. That is the application on the books? A. Oh, yes.

Q. Yes.

A. I believe I mentioned yesterday that for the year [fol. 6437] 1942 the plan might run on the order of 3.2.

Q. Yes.

A. Actually I think it is somewhere in the neighborhood of 3.18. I should not like to be bound by those last two figures.

Q. Now, of course, at the time of the determination of the annual accrual, I assume it is the judgment of the management that upon the circumstances as of the time of determination their decision, of course, is a proper one for that year and upon such facts as they stand at that time, in so far as they know them, it would be entirely proper to continue, all other things remaining the same, the allowance of such amounts throughout the history of the property?

A. Well, the answer to the first part of your question would, necessarily, have to be that management could not very well impeach itself.

If it determined an improper amount, it will certainly have to stand by it.

As to the second phase of the question, if I understand that correctly, if there be no presence of disturbing influences with respect to the futu[illegible] and such an amount were applied proportionate to the investment in property over the subsequent years and if the amount up to that time had been adequate and we had come out exactly even, then the answer is "yes".

[fol. 6438] Q. Yes.

Mr Watkins, you have from time to time in the discussion of this question of reserves for depreciation and amortization referred to the fact that these figures and computations and methods used were satisfactory for internal purposes but for no other.

Now, will you please explain to us what is the significance of your phrase, "internal purposes"?

A. First, at Page 6395 of the transcript of the session of the afternoon of January 22, on Lines 16, 17 and 18, the witness in response to a question you asked stated, "Well, sir, I am simply trying to say to you that I am in no wise trying to testify to depreciation to be or not to be included in a rate proceeding."

The position of the company with respect to its provision for this purpose, as shown by the witness' statements relating to internal purposes, is that its records are not kept for purposes of determining the net taxable income in the manner prescribed by the regulations pursuant to the effective Revenue Acts nor do its records in any fashion [pretent] to represent a base upon which there could be applied a rate of return in rate proceedings, nor are the records maintained in such manner that information may be extracted immediately from them and used, without adjustment, for any other purpose which it might become [fol. 6439] necessary to treat with, any investment or liability or other item that was shown on the company's books at any time in any manner wherein such an adjustment need be considered in the development of data responsive to any regulation, question or otherwise.

Now, when we speak of internal purposes, including the explanation that has just preceded this remark, we think of the company affairs in the light of their use in any direc-

tion other than those that I have heretofore specifically mentioned.

Q. Well, as I understand your answer then, your books and records are satisfactory for the purposes of consideration by the management but for no other purposes?

A. Oh, no.

Q. Well now, let's see. You said they were not satisfacory—

A. (Interposing) Our books are predicated upon sound accounting practices and accepted standards for correct and proper accounting methods.

Q. Yes, but, of course, they are not satisfactory for rate proceedings?

A. I do not believe that it is possible at this moment, at least, to interpolate rates into books of accounts, sir.

Q. So that for a rate proceeding you will have to, more [fol. 6440] or less, set up a new set of books?

A. Oh, I do not know about that. When you come to rate proceedings, sir, you have me out beyond my depth. I know little or nothing about rate proceedings, I am having my eyes opened, however.

Q. You were the one that made the statement, Mr. Watkins, that they were not satisfactory for rate purposes.

A. I do not believe I said that at all.

Q. I so understood.

A. I should not like for you to so interpret my remarks in that respect.

Q. I just misunderstood, then. I understood—

A. (Interposing) I said they were not kept specifically for that purpose.

Q. Well, naturally not.

A. If I said something else, I must correct myself, because I did not intend to say that.

Q. We understand now what is your statement.

A. O. K.

Q. Do you think that they could not be used for rate proceedings' purposes? A. As such?

Q. As such.

A. I do not believe they could, no, from what little I know of rates.

[fol. 6441] Q. So from what little you know of rates, you do think it would be necessary to set up the equivalent of a new set of records?

A. Well, I would not characterize it as a new set of records. I see in this proceeding here where we have something in regard to claims for this or a statement made with respect to something else.

There have been over 6,400 pages of testimony thus far. The record must have some purpose with all that stuff in it.

Q. Yes, I imagine that is true, but you do not know the answer to my question?

A. I do not know but very little about rates, if that is what we are talking about. When I say "rates", I mean rate proceedings, of course.

Q. Yes.

A. Let us say this, Mr. Gorman, maybe this will be helpful, it is most infrequent that records can exactly coincide with the statutory conception of information that much be extracted from those [recrods] for a varied number of purposes.

Recognition, I believe, of that theory, is present in most everything we do with our books of accounts. For instance, this Commission, by its Order No. 86, has established a very voluminous report with respect to companies subject to the Natural Gas Act and that report includes a tremendous amount of information that is not present in a company's books of accounts.

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[fol. 6443] By Mr. Gorman:

Q. Let us turn our attention, now Mr. Watkins, to the next account shown on Page 2 of Exhibit 48 at Lines 30 to 32, which is the "Reserve for Amortization and Depletion of Producing Natural Gas Lands and Land Rights."

This reserve represents, does it not, the balance remaining of the accruals which are shown at Lines 11 and 12 on Page 1 of Exhibit No. 49?

A. It does, and is a result of a part of the plan that we have been discussing here this morning.

Q. Yes.

A. Our discussion, as I understood it, took into consideration all of the reserves shown on Lines 27 to 33, inclusive on Page 2 of Exhibit 48.

Q. Well, I attempted, of course, to confine it to the several accounts. However, I realize that the testimony got beyond that scope and did touch upon these other matters.

Now, the accruals in this reserve, as I recall your previous testimony, are provided upon a basis of three mills per thousand cubic feet of gas produced, is that correct?

A. At the present, yes.

Q. And how long has that been the method of computing [fol. 6444] the annual accrual to this reserve?

A. Since the first accrual of this nature made by the company, so far as I know.

Q. And that was made when, do you know? You mean that goes all the way back throughout the history of these properties?

A. Apparently it was made in the year of 1932. Yes, it goes all the way back throughout the history of these properties.

Q. Including the time the property was held by a subsidiary of the company which has since been dissolved?

A. We are referring to Texas Interstate Pipe Line Company?

Q. Yes. A. Yes.

Q. Now, I notice that on Exhibit 56 you have set forth the annual production of natural gas by the company. Are these figures computed upon a basis of measurement other than that which is used for the determination of the annual accrual for this reserve we are now discussing?

A. The basis of measurement has nothing to do with the accrual. We determined the amount of production, on whatever basis was used, and then reported the amount of gas produced upon that determination.

We give no consideration to the fact that it may have [fol. 6445] been anything other than 16.4 absolute pressure gas as shown in Note No. 1 on Line 13 of Exhibit No. 46. As a matter of fact, it is my remembrance that that has been the basis that has been used throughout the entire history of the company, so far as gas produced is concerned.

Q. And the annual accrual will be determined simply by the multiplication of the figures which appear in Column E

of Exhibit No. 56 for the respective years by the amount of three mills per thousand cubic feet?

A. Well, it would not be exactly that because the accrual, as a matter of fact, is made monthly and based upon the monthly production figures.

It should be substantially the same.

Q. I see. Referring to another item in your direct testimony at Page 885, you stated that for drilling costs, well equipment and other production system property, the annual accruals are computed at a rate of 6 percent per annum. That is correct, is it?

A. No, not computed at that, but, in determining distribution of accruals and so forth, we give consideration to 6 percent per annum for the properties referred to there.

Q. And has that figure been used throughout the history of this property? A. Yes, it has.

Q. Turning now to the account for the reserve for [fol. 6446] abandoned leases shown at Line 33—

A. (Interposing) The amounts shown there represent the third element of our determination for the total amount to be authorized or rather to be recommended to the Board for consideration.

That is simply the result of the amount set aside monthly for the eventual time when the investment in the unoperated leases must be fully recovered and is based, as I have previously testified, on an estimated ten-year life, so that we take the total amount when our accruals are made of our investment in this particular type of assets and apply the ten-year basis to it.

Mr. Culton: In other words, your ordinary lease provides if it is not drilled within ten years, it terminates?

The Witness: That is true and the average that we are using of ten years, Mr. Culton, is based on the average life of all the leases that we own.

We find that the ten-year period has not changed a great deal over the past years. Some of the leases may, from the time we acquired them, run for a very, very few years. Others, their primary terms may have been extended so the life represents about a life of ten years.

By Mr. Gorman:

Q. When you say "all leases", do you include operated and unoperated leases?

[fol. 6447] A. No, the operated leases are provided for, as the record shows, in the reserves shown in Exhibit 48, on Lines 30, 31 and 32. That is depletion, as we understand it.

Q. Your phrase then, 'all leases" merely refers to all unoperated leases? A. That is correct.

Q. And is this reserve set up with the idea of recovering those amounts which are shown in the gas plant account, Exhibit No. 52, Page 1, at lines 11 and 12 and there designated "Natural Gas Producing Leaseholds—Not Drilled"?

A. Yes, that is correct. The amounts shown at the end of the respective periods stated in this exhibit do not necessarily become the basis upon which the monthly accruals are made because they change from month to month, as you can imagine.

Q. But these reserves are set up as a credit to this [accout] for natural gas producing leaseholds—not drilled, is that correct?

A. That is correct, and my remembrance of the need for the repetition of the language, natural gas producing leaseholds, is that the Power Commission Classification makes no distinction between drilled and not drilled leaseholds.

Am I correct there?

Q. I think you will find that is true.

Now, Mr. Watkins, do I understand that the ten-year term [fol. 6448] over which you provide amortization for these abandoned leases is due to the term of the lease itself or to the period during which the lease is operated or held?

A. It is due to the term of our ownership in the right granted by the lease. Frankly, I do not know the exact difference between a lease and a leasehold. I construe the lease to be the instrument and the leasehold to be the thing that you get by reason of the instrument.

Now, the thing that our ten-year period is based on is the fact that we own whatever right the lease gives to us on an average of ten years for the leases that we have and have

done so over the entire life span of the company up to this date.

Some of them we may have had ownership in only a few years. Others we may have owned them for their entire primary term, which is customarily ten years, and may have extended it for another ten years.

Now, our period of amortization gives consideration and contemplates the ownership of all the leases for an average of ten years.

Q. Referring again to Exhibit 52, and I skip to this exhibit because the questions are so correlated, does the significance of the language "Natural gas producing" and I emphasize "producing", "leaseholds—not drilled", indicate these leases are producing although they have no wells located thereon? Is that the intention?

[fol. 6449] A. No, sir, that is not the intention, necessarily. I believe the witness has stated, on several different occasions, that in the preparation of the exhibits introduced in these proceedings through him, we thought we were being considerate, shall we say, of the Commission in trying to prepare the exhibits after the manner of the balance sheets, income statements and so forth, generally included in the Commission's Classification of Accounts.

Q. Yes.

A. And if we used some language in them that is susceptible to ambiguous interpretation or rather differen interpretation, it was not intentional.

Q. Would you say that this account is set up under the instruction contained in Account 100.4 in the Commission's System of Accounts for Natural Gas Companies?

A. I have not given consideration to that, sir.

Q. You say you have not? A. I have not, no.

Q. Well, that account is designated as "Gas Plant Held for Future Use". Would you say that the items contained in your account for natural gas producing leaseholds—not drilled, is land and land rights held to insure a future supply of natural gas?

A. Without indulging, if I may avoid doing so, in any [fol. 6450] discussion as to what my personal feeling might be with respect to property in use or property held for future use, I should like to answer your question this way:

That we have segregated, in our records, our ownership in leaseholds as between drilled and not drilled. There is some difference of opinion, I think, between myself and the Classification of Accounts in more places than that.

My feeling is that whatever leaseholds the company has, whether they be at that particular moment producing or not producing or in service, we have separated them here and have kept them separated on our records so they may be treated in whatever manner is termed appropriate.

Q. Yes. Is it the proper interpretation of your intention in designating these accounts to refer to the account shown at Lines 9 and 10, Page 1, of this Exhibit No. 52, instead of saynig, "Natural Gas Producing Leaseholds—Drilled" would it be proper to say, "Natural Gas Producing Leaseholds distinguished from Non-Producing Leaseholds"?

A. The distinction is simply this: The amounts shown on Lines 9 and 10 in Exhibit No. 52, for all the periods, represent the company's investment in leaseholds which, at the date certain for which the information has been prepared, were producing or they were drilled, as you wish, and that the amount shown on the lines opposite the caption on Lines 11 and 12 represented the company's investment at the date certain shown on this exhibit in natural [fol. 6451] gas leaseholds which had not been drilled.

Q. I see.

A. Now, it could very well be, if I understand correctly, that some of the leases included on Line 12 in the various columns of this exhibit, or a great many of them for that matter, were susceptible to drainage at that particular time.

If we look at the year 1932, for example, out of the $1,455,000-odd shown there, there may be values in the neighborhood of $5,000 or $50,000 or $500,000 that later become a part and parcel of the amounts shown on Line 10 in the various years on this exhibit.

Q. May we properly conclude from this, then, that the producing leaseholds designated as "drilled" are those upon which you pay royalty payments to the lessors?

A. Yes, because we own no producing lands in fee.

Q. And would it also be proper to conclude that on the leaseholds set up in the accounts shown in Lines 11 and

12 as being not drilled, you do not make royalty payments but only pay delay rentals?

A. As far as I know, there is not a single lease represented by any of those amounts to which you have just referred on which the company makes any royalty payment whatever.

Mr. Culton: The latter part of your question, Mr. Gorman, I might clarify.

[fol. 6452] Are there some tracts which have not been drilled but on which the company pays no delay rentals because of drilling operations on other tracts covered by the original lease?

The Witness: Yes, and to that extent, Mr. Culton—

Mr. Culton: (Interposing) There may be no delay rentals payable on portions of the items on Lines 11 and 12?

The Witness: I doubt very seriously, sir, that any of those amounts remain in the classification shown here, "Natural Gas Producing Leaseholds—Not Drilled."

That has been our custom throughout the years where a leasehold was involved in a block of land cured by the drilling of a well.

Mr. Culton: There are delay rentals on all of those covered by 11 and 12?

The Witness: Correct.

Mr. Culton: That answers the latter part of your question.

Mr. Gorman: Yes.

By Mr. Gorman:

Q. When a well is drilled on any of the leaseholds which are included presently in the account shown at Lines 11 and 12 for not drilled leaseholds, I assume it is transferred then to the account for drilled leaseholds?

A. Our investment in such acreage, including the acreage [fol. 6453] covered by the lease upon which the well is actually drilled, plus the cost to use any acreage for which we no longer have to pay delay rentals by reason of the drilling of that well, are forthwith transferred to the other account.

There is this point that I should explain to you and you may have some questions to ask about it later, and that is this: That at the time such transfers are made, there is no transfer made from the reserve accounts.

Now, our ten-year life span and our three mills per M.c.f. contemplate that fact. We are engaged just now, as you know, in the reclassification of our reserves and it may very well be that there should be some transfers made from the amounts shown opposite Line 33 on Page 2 of Exhibit No. 48 to the amounts shown opposite Line 32 on the same page of the same exhibit, or vice versa.

Q. And you say there have been no transfers from that reserve account in past years?

A. Coincident with the transfer of the investment in a non-drilled lease to the account in which the drilled leases are placed, there has not been any such transfers.

I do not mean to say by that, if I may speak further, that the result of that would be that the reserves have been duplicated. I tried to make that plain. I hope you understand that.

Q. I think so, yes. I think the record will so disclose. [fol. 6454] Of course, in connection with your last statement, the result would be, would it not, that for a period you have depreciated your investment in these leaseholds on a basis of 10 percent per year or one-tenth based upon your life of ten years, as you have previously testified, and then when you transfer that to your drilled leasehold account, you again commence the depreciation of these same dollars upon a basis of three mills per thousand cubic feet of production?

A. We continued the amortization upon the basis of three mills.

Q. Do you not—

A. (Interposing) We do not transfer the balance from one of the reserve accounts to the other but the composite basis of arriving at the reserves contemplates this situation.

Q. Yes, but my question, of course, is directed to the fact that at the time you make your transfer from your non-drilled account to the drilled account, you transfer your entire investment—

A. (Interposing). Yes, I have stated that.

Q. Can you state offhand at the present time, Mr. Watkins, whether or not there have been any substantial amount of leaseholds abandoned by the Panhandle Company in recent years?

A. Quite a substantial amount, yes. If you wish to [fol. 6455] have me do so, I will see if I have something here that will be helpful. If not, I probably can answer your question more specifically this afternoon. What is your pleasure?

Q. If you have the information, we will be pleased to have it in the record.

A. I have an analysis which shows the balance of this account at the end of 1931 and at the end of the year 1940, those amounts being, respectively, $17,100 and $710,486.45.

During that period, charges were made to the reserve account aggregating slightly over half a million dollars.

Q. That is for the period from 19—

A. (Interposing) If you will excuse me, please.

There have been included in [thos] charges, certain amounts representing the cost of leases transferred to the production group, that is, the natural gas producing leaseholds.

My data here does not show the exact charges represented by leases abandoned or surrendered or disposed of in some other manner.

If it will be helpful to the Commission, I shall attempt to supply that information for the period or for any annual period.

Q. Well, as I understand the qualification of this, the amount which you have just read would include not only abandonments and surrenders but also leaseholds transferred to the drilled account?

[fol. 6456] A. Yes, or any other adjustment which it is necessary to normally make in the account.

. . . . . .

[fol. 6457] Q. Will you please turn your attention to Line 36 of this Page 2 of Exhibit No. 48 which is the account for "Other Reserves".

I think in your explanations of yesterday you testified up this matter somewhat.

A. Well, I would say completely, sir. I think we covered it rather broadly.

Q. I believe that is so to the extent, at least, of showing the charges made to this account in the various years.

A. May I refer to those as credits rather than charges?

Q. Well, when I used the phrase "charges" at that time, I merely meant "entries".

A reference to a Registration Statement which was filed by the Panhandle Eastern Pipe Line Company with the Securities and Exchange Commission on July 7, 1939, indicates at Pages S-20 and S-22 of such statement that in 1937 there was added to this reserve $96,800.94 and in 1938, there was added to this reserve $328,000 and, on Page S-22 of this Registration Statement, is an explanation which reads as follows:

"Excess of provisions for Federal and State income taxes over revised estimated liability therefor ($96,800.94 applicable to 1936 and $328,000 applicable to 1937) transferred to the reserve for contingencies pending final determination of such liability by the Treasury Department and the State income tax authorities," and further, at Page S-24 of the Registration Statement identified as Exhibit [fol. 6458] No. 145, there is indicated that during the year 1939, there was made a further charge to this account of $200,000 and, on that same date a reference to a note which reads:

"Excess of 1937 provisions for Federal and State income taxes over revised estimated liability therefor, transferred to the reserve for contingencies."

Of course, as will be seen, the addition of these three items represents your total at June 30, 1941, of $624,800.94.

May I ask whether, since June 30, 1941, there has been a final determination with respect to any of these tax obligations for which provision has been made in this reserve account?

A. Well, you are asking a question of me that has likewise been one that I should like to ask of someone else.

When, if ever, you reach a final determination of some of your Federal income tax matters, it is a thing I should like to know.

As to the year 1936, which really is the only year open among those you included in your question—

Q. (Interposing) Mr. Watkins, I believe that was 1937, was it not? You said 1936.

A. The amount of $624,800.94 includes some $76,000-odd that had to do with the excess accrual for the year 1936 so that, to start again, as to the year 1936, we have recently executed the Internal Revenue Department's Form 874, I believe it is, agreeing to the refund by the Revenue Depart- [fol. 6459] ment of a certain amount of the taxes heretofore paid by the company for that year and, as the record will show as to the year 1937, there were no Federal income taxes for that year because of the refunding operation consummated during that year.

The Internal Revenue Department thus far has had no particular interest in the year 1937. Apparently it appeared to them to be such a big loss year that it was not fertile ground for further cultivation.

This witness could not definitely say that the year 1937 is closed or that there will be no further assessment. I should say there will be no assessment instead of further assessment because there has been none for that year.

Those are the only two years involved in the credits in this particular account.

My testimony yesterday, I think, went to the fact that upon a final determination, this amount was available for whatever disposition the management or the Board of Directors or the stockholders or whoever has the authority to dispose of it sees fit to make of it.

Q. Yes. Your statement is that so far as you know, up to the present date, there has been no disposition of this particular reserve?

A. That is correct and it may be we may decide it is a possible cushion for possible taxes which would be normal for an organization such as ours to preserve. I am not

[fol. 6460] predicting that will take place but I am saying that is an eventuality.

Q. Would not the fact of any elimination of this account in its entirety or in part result in an increase in the net income of the company during the years when such amounts were set aside?

A. I should think not. We went over the ground yesterday with respect to what the company's accounting policy has been with respect to such adjustments.

The normal procedure that we would follow, I believe, would be to restore whatever amounts ultimately remain of the $624,000 to surplus rather than to take it through income.

Q. Yes, you mean that you would handle this account in the same manner which you indicated yesterday you would handle any excesses in the account for taxes accrued as shown at Line 16?

A. Yes, I think that is correct and I believe such plan would be generally in conformity with "Instructions—General" included in the Federal Power Commission's Classification of Accounts for natural gas companies.

At any rate, if it did affect income, it would affect it before regulation overtook us.

Q. Can you tell us, Mr. Watkins, what is represented by the account shown at Line 38, "Contributions in Aid of [fol. 6461] Construction"?

A. I observe at Page 30 in the Federal Power Commission's Classification of Accounts prescribed for natural gas companies subject to the provisions of the Natural Gas Act effective January 1, 1940, an account, No. 241, the title of which is "Customers' Advances for Construction".

Generally speaking, the amounts to which you refer fall in the general category of the explanation to the account in the Power Commission's Classification just referred to.

I cannot give you the detail as to whose advances they were or exactly what the advances were for but the purpose coincides with the instruction in No. 241 in the Classification.

. . . . . .

[fol. 6464] Q. Mr. Watkins, as Controller of the company you are charged with the responsibility; are you not, of reporting balance sheets and other similar statements showing as accurately as possible the financial position of the Panhandle Eastern Pipe Line Company?

A. Even were I not so charged, that is exactly what I would do to the best of my ability.

Q. That is one of your responsibilities, is it not?

A. I think it may be prudently said that it is.

Q. And is the balance sheet so prepared by you a financial report of the Panhandle Eastern Pipe Line Company and its subsidiaries?

A. Are we now referring to Exhibit No. 48 of this proceeding?

Q. Yes, that would be necessarily—

A. (Interposing) That means all of the periods covered by that exhibit?

Q. That is correct. A. They are.

Q. And such balance sheets are designed, are they not, [fol. 6465] to give information and a financial report to all interested parties?

A. That is correct, to the extent that they are available for general distribution.

Q. Do the balance sheets show the status of each equity in the business of the company?

A. With respect to Panhandle Eastern's affairs?

Q. Yes. A. I think they do.

Q. Yes.

And, consequently, it is of marked significance to those who have invested capital in the enterprise or to those who are contemplating the investment of such capital, is it not?

A. There has been no opportunity for such investments. Generally, prior to the year 1939, other than in the sale of senior securities in the form of funded debt.

There is a Registraiton Statement pending through which some substantial holdings may develop in equity securities and it is the witness' belief that to the extent that a prudent investor may wish to measure the affairs of the company any information, including balance sheets, which Panhandle Eastern Pipe Line Company prepares and distributes for that purpose may be relied on entirely by the investor.

Q. Yes.

[fol. 6466] A. When we speak of "investor" here, I presume we mean possible or potential or proposed investor?

Q. That is correct. And is the balance sheet, also, of marked significance to the management because it represents the standing or the condition of the business by presenting a periodic statement of assets and equities?

A. From an operating standpoint, sir, I should think we would treat the income statements with a great deal more significance than the balance sheet, itself, necessarily, however, they both form mediums through which management, owners, the public or anyone else can draw certain conclusions and make certain measurements of the status of the company at any date certain when such information is made available or for any periods for which such reports or statements speak.

Q. Yes, but, of course, the income statement does not show the assets and equities in the business?

A. Well, if my remarks were such that one would infer that the income account did make such shownig, they should be corrected to the extent that you have indicated.

I believe what I stated was that the income account from an internal company standpoint would probably have as much, if not more, significance to us than the balance sheets, themselves.

Q. Yes.

[fol. 6467] Now, is it necessary for the management to consider the relationship of the assets and equities in the business in determining the actual working capital situation?

A. Mr. Gorman, I doubt that I am qualified to discuss working capital with you to any great extent.

Q. Well, by that do you infer that you are unable to answer the question I have propounded?

A. I do not quite understand just what you mean. Let me see if I can give you an answer that is satisfactory. If we are thinking, when we speak of working capital, of the funds the company needs to carry on its day-by-day operations, to take care of any construction program it may

have authorized, to take care of any construction program which may be anticipated; to provide funds to pay taxes and to have on hand sufficient cash for any and all other purposes that it may find necessary during the course of its operations my answer would be that certainly we must take into consideration all of the information available not only from the books and records but elsewhere.

Q. Yes. Of course, the balance sheet is a reflection of certain of the books and records of the company?

A. Well, doesn't it epitomize the entire books and records of the company, so to speak?

Q. Well, I think so, yes. I did not know whether you wanted to go so far or not.

[fol. 6468] A. Well, I stand solidly, sir, behind any of the statements that have been prepared with respect to the company and submitted here through me.

Q. Is the balance sheet considered by the management of showing the relationship of assets and equities in determining the amount available for the payment of dividends?

A. The balance sheet, alone, would not necessarily be subject to such considerations. The first move we make, very naturally, with respect to dividends is to find what our legal hurdles are.

We must consider the laws of the State in which we are incorporated. We must then turn to our Articles of Incorporation to find what restriction, if any, there is there that is superimposed over and above the laws of the State.

I do not mean by that that our Articles of Incorporation can be in violation with the provisions of the general corporation laws of the State of Delaware. We must, also, have a look at our mortgage and deed of trust, we must turn to our note indenture, we must think something of whether or not the funds that we might otherwise use for the payment of dividends would serve a better purpose in the interest of the public, the investor or the consumer and a vast number of other elements go into our consideration of a matter of this sort.

Q. Including the balance sheet?

[fol. 6469] A. Oh, very naturally, we think of the balance sheet.

Q. Well, does not your statement of earned surplus, as qualified by the note contained on Page 3, that is Note 2 on Page 3 of Exhibit No. 48, reflect all restrictions which are placed upon your disposition of earned surplus?

A. Not all of them, no sir. It reflects the one restriction which is applicable at the moment. As the witness explained yesterday, there is a restriction in the Certificate of Incorporation running to the amount which must be set aside in determining—now, when I say "set aside" here I do not mean as per books—the amount of earned surplus under certain conditions available for dividends.

So long as the restriction in the mortgage and deed of trust exceeds that restriction, then the mortgage restriction is applicable.

Q. I see. And if, perchance, the securities covered by Registration No. 2-4919 were to be issued with restrictions which imposed greater barriers than those now in existence, they would be controlling?

Ordinarily, in issuing a balance sheet statement, do you qualify the issuance of such statement not only by the Note No. 2, which is on Page 3 of Exhibit No. 48, but, also, append the note to such balance sheet the qualifications of the Articles of Incorporation to which you have just made reference?

[fol. 6470] A. There has been no annual report released by the company since the mortgage and deed of trust dated November 1, 1940, was consummated in February of 1941.

Unquestionably if and when we do release an annual report, we shall see that the public is fully informed as to any restrictions that we may have.

The annual report for the year 1940, a copy of which I show you, carries a balance sheet note on Page 10 with respect to the restriction of surplus as provided by the Certificate of Incorporation.

We hope we shall always be cautious enough to see that any information we prepare and release for the public is sufficiently qualified to avoid any difficulty for the public, the investor or the company.

Q. Yes, and of course, as we have seen previously, such notes have been appended to balance sheets containd in Registration Statements and made an integral part of such statements as they are filed before the Securities and Exchange Commission. Is that correct?

A. That is correct, sir.

Q. Now, does the management consider the relationship of assets and equities as reflected on the balance sheet in determining the programs for expansion of facilities or the raising of capital to be used by the company?

A. Mr. Gorman, we have this situation in our organi- [fol. 6471] zation:

We have a go-getter who expands property and then tells us to worry about how we are going to get the funds.

Q. You mean—does that intend to indicate that this individual gives no consideration to the—

A. (Interposing) Oh, no indeed, sir, his primary purpose is to develop the properties to their full economic potentialities.

The predominating thought in his mind—and I think that is more or less true with the whole organization—is, "let's get this job done and then let's get busy and pay for doing it."

As a matter of fact, we have to pay for it before we do it, but we approach it, perhaps, from a slightly different angle than it might be with someone else or even some other organization.

Q. I see.

A. That does not mean to say, sir, that we do not eventually give consideration to everything that should be given consideration. I merely state that the order is slightly different and it is a rather refreshing way to do things, if I may say so.

Q. Yes, I can understand that. Of course, assuming that I know who the individual is, I rather gather the impression that he is undoubtedly familiar with the as- [fol. 6472] sets and liabilities as reflected on the balance sheet anyway, without a detailed study of such sheet?

A. That is quite correct, sir.

Mr. Wheat: Well, Mr. Watkins, you do not want to keep it a secret whom you are referring to, do you? You are referring to the President of the company?

The Witness: That is right. I did not think it was necessary to name names. I believe the individual is quite well known to everybody in the hearing room here.

Mr. Wheat: I was afraid that, on the cold record your meaning might not be apparent.

The Witness: Well, for the benefit of posterity, then, we are referring to Mr. J. D. Creveling.

By Mr. Gorman:

Q. Is it essential in any planning for the issuance of long-term securities, is it necessary to consider the disposition of equities of the company?

A. Let me see if I understand that. Do you mean the proportion of senior securities, junior securities and so forth as to the total capitalization?

Q. That is right.

A. I believe you will find, if you care to observe the record, quite a considerable amount of data that would indicate that such consideration has most recently been given with respect to applications that were pending be- [fol. 6473] fore the Securities and Exchange Commission in its Consolidated Docket No. 59-33 and if there be further interest in the matter, I might refer you to the material which you will find in the copies of Form U-1 in File No. 70-387 and Amendments 1 to 5 thereof which have heretofore been delivered to you.

Mr. Wheat: When you refer to Form U-1, you refer to a form of the Securities and Exchange Commission, do you not?

The Witness: A form filed in the matter designated by the Securities and Exchange Commission's File No. 70-387.

Mr. Wheat: Thank you.

By Mr. Gorman:

Q. So the answer to my question, briefly stated, is "yes"?

A. Oh, surely we give consideration to the avoidance of overloading our capital structure with a type of security that is going to rise up to haunt us when business conditions are different from what they are at the moment.

Q. Does the balance sheet show the equities of the owners and the creditors and the assets of the business?

A. From the company's standpoint or from the investors' or owners' standpoint?

Q. From the standpoint of anyone who examines the balance sheet for the purpose of determining such information.

A. On the basis of the balance sheets, themselves, they do give such a reflection. I am laboring with the fear [fol. 6474] that you are asking me to say that if I were an investor in Panhandle Eastern Pipe Line Company or a major owner of some of its equity securities, that my personal feeling or evaluation of my ownership in Panhandle Eastern Pipe Line Company would be exactly reflected by any equity determination made from its books.

If that is the purpose, I shall have to say that my view would be "no".

Q. Well, by that you mean, can you divide up, on the basis of the balance sheet information, the equity of a bondholder as distinguished from the equity of a common-stock holder and such things as that?

A. Not only that, sir, but I might have an entirely different view of the worth of my investment in any corporation than that which could be reached by simply referring to cold facts and figures taken from its records.

Q. Yes. Well, let me put it this way: Does the balance sheet show the combined equities of the owners and creditors in the assets of the business?

A. As reflected by the company's books, yes.

Q. Yes.

A (Continuing) For any other consideration which the owners might wish to give, I do not consider it as making any such showing.

Q. Yes. Well, of course, we understand that at all [fol. 6475] times the balance sheet is, as was stated before, merely a reflection of the books, themselves?

A. Then, we seem to have a meeting of minds as to this particular thing.

Q. Yes, that is right. And, as we stated before, the balance sheets have been in the past, and in the very recent past submitted to and made an integral part of Registration Statements filed with the Securities and Exchange Commission?

A. Not for all periods represented by the company's operations, no.

Q. I did not say throughout the years.

A. To the extent that the periods were applicable at the time the Registration Statement was filed, yes.

Now, there has been a constant audit of the company's affairs and its balance sheets have been certified to from its very inception by independent public accountants.

Q. And it is also true that, generally speaking, the management bases its decisions upon data set forth upon the balance sheet?

A. Not altogether, no.

Q. I say "generally speaking".

A. Well, the management gives consideration to the information shown in the balance sheet, certainly but there are so many other things other than cold facts and [fol. 6476] figures and records that must be treated with in most everything that we do that this witness could not agree that that would be a proper statement.

Q. Yes. Well, of course, we all understand that the management also considers other reports in connection with the information set forth on the balance sheet.

I merely intended to indicate that that is one of the main objects of their study.

A. It is one of the objects of their study, not necessarily the main one.

Q. One of the main ones, I said.

A. O. K.

Q. And, of course, in the past, as I think we have seen from an examination of certain Registration Statements, public accountants have on occasions certified to the financial position of the company as disclosed from the balance sheets, have they not?

A. They have.

Q. And can it be properly said that the balance sheet per books is the presentation of the general ledger accounts

and is, so to speak, the master control of the books and records of the company?

A: I would hardly characterize it as a control. Any balance sheet, it would seem to me, is simply a statement prepared from the books of the company. I do not know [fol. 6477] to what extent it could [—] said that a balance sheet controls the books.

Q. Well maybe we should put it this way, Mr. Watkins:

It does reflect the general ledger, which general ledger shows the control accounts?

A. That would be correct, yes.

Q. Mr. Watkins, the presentation of this Exhibit No. 48 for identification in this proceeding, was it done for the purpose of representing to the Commission the financial position of the company and the equities of the owners and creditors in the assets of the corporation?

A. I do not know that I remember that at the time that we were planning to present an exhibit showing the balance sheet of the company for the periods shown by Exhibit No. 48 that we had any particular discussion as to what purpose it would serve in the proceedings other than the fact that the Federal Power Commission would likely want it for the entire periods and here it is.

Q. Yes. If you had that particular thought in mind, you would have presented a balance sheet which would not differ from that which is presently identified as Exhibit No. 48, would you not?

A. I do not know, sir. I would have to go back, I suppose, to the time that we were doing all this work and try to evaluate what the purposes were and how the information could best be shown and what time we had in which to [fol. 6478] prepare the exhibit.

If I remember correctly, we threw a tremendous mass of information together here for you in the space of a very few weeks upon not too great notice. My personal decision might have been one of a half dozen approached from 40 to 50 different ways.

Q. Do you know of any reason at the moment why the balance sheet presented with such a thought, as I have indicated, in mind would have differed in any respect from that which is presented as Exhibit No. 48?

A. I have not given any thought to the matter, really.

Q. You have no thought of any differentiation?

A. None that I would care to express at this moment.

Q. You, of course, have no doubt at the present time that the balance sheets, as reflected on this Exhibit 48, properly reflected the position of the company for the various years shown thereon?

A. Not the slightest.

Q. Mr. Watkins, do you presently have any intention of revising the balance sheet in any manner which would change it from that which is shown on Exhibit No. 48?

A. If it were so revised, the facts would not change.

Q. Well, that does not exactly answer my question. Do you have presently any intention of making any revision?

A. Do you mean for internal purposes?

[fol. 6479] Q. For any purpose.

A. It is my remembrance that when and if our proposed securities are registered with the New York Stock Exchange and are registered under the Securities and Exchange Act of 1934, we must give some indication as to the manner in which our annual reports, our certified annual reports, if I recall, are required by both the New York Stock Exchange and the Securities Act of 1934.

To the extent that those requirements bring about a different presentation than that shown by Exhibit No. 48, such changes will be made.

The witness has not made a comparison of the proposed balance sheets in the new form of annual report.

Mr. Wheat: You are referring now to the Federal Power—

The Witness: (Continuing) Prescribed by the Federal Power Commission in its Order No. 86, so that he is not in a position to state even as to that whether it will require a restatement of the assets and liabilities in any form other than that shown by Exhibit No. 48.

Further than that, we haven't any particular view with respect to the balance sheets. They seem adequate to us.

By Mr. Gorman:

Q. Yes. Well, of course, any such changes would be minor in character and, also, would be only in form rather than in effect, would they not?

[fol. 6480] A. I do not believe I understand that you are inferring that a formal balance sheet could change the effect as of a date certain?

Q. No. The point I wanted to make is certainly clear here.

A. Well, we seem to be in the same bed there.

Q. Well, we seem to be getting there quite often.

A. Mr. Gorman, before we leave the subject, if you please, the witness does not know of any restriction whereby a corporation can not present its balance sheets in any form it wishes if making such a balance sheet for any purpose other than the specified one under certain stipulated conditions. We are not in disagreement there, are we?

Q. Oh, I think not.

Have any representatives of the company, that is the Panhandle Eastern Pipe Line Company, or expert consultants employed by that company presented any information or opinions which would cause you to revise or restate the equities or assets as shown in the balance sheet?

A. By "restatement" do you mean change them, change the amounts either upward or downward?

Q. That is right, change the—

A. (Interposing) Why, I would not have any authority to do such a thing, sir. As Controller of the company and as its Secretary and an officer of the company and as a [fol. 6481] prudent individual, why, I would be astonished if anyone offered any such suggestion as that.

Not only would I be astonished, I think I would more than likely beat the stuffing out of them.

Mr. Wheat: I wonder, Mr. Gorman, in connection with that question, which I think is as unintelligible to us as it apparently was to the witness, whether you could define what you mean by "change" in the balance sheet or items of the balance sheet?

Mr. Gorman: Well, of course, counsel recognize the general terminology of the word "change" means substituting something for that which previously existed or presently exists.

Mr. Wheat: You mean renaming some account or changing its name?

Mr. Gorman: Well, I thought I said "in amounts" or, if I did not, at least that was what I meant, that is, changing the amounts which are shown on the balance sheet to reflect some other amount.

Mr. Wheat: You mean a substitution of one item for another, is that what you are asking the witness?

Mr. Gorman: Well, by "item" I do not suppose you mean an account designation. I am speaking of the amounts reflected.

Mr. Wheat: No, I meant to take $1,000 out of the ac- [fol. 6482] count on Line 18 and put it into the account on Line 19. Is that the kind of a change that you meant?

Mr. Gorman: Either that or take $1,000 out of one account and not put it in another account.

The Witness: Well, maybe I misunderstand. If you are talking about any corrections that might have to be made, I would ask nobody about any proper correction, I would simply make the correction.

When I say "correction" there, I mean if we find an improper charge to a wrong account.

By Mr. Gorman:

Q. Well, that is merely an adjustment.

A. If you are directing your question toward improper procedure, I do not have to work for Panhandle Eastern Pipe Line Company, if it ever gets to a position where we are doing some things that are illegal.

I can still starve, sir, before I encounter a situation of that sort.

Q. Well, of course, now, Mr. Watkins, I do not think there was any reflection of any kind whatsoever. That was not intended by my question.

Mr. Wheat: Mr. Gorman, if you have any idea of any misplaced items, I know we would appreciate it if you would suggest them.

I know the witness would be the first one, if he knew [fol. 6483] something was wrong at same place in the balance sheet, to correct it. He has stated that he does not know of any such.

Mr. Gorman: That was the answer to my question. I have no such thought in mind. I am not proposing any adjustments, I just asked if any such adjustments had been proposed.

By Mr. Gorman:

Q. Has there been proposed any modification of the equities, as shown on the balance sheet, by the President and the Chairman of the Board of Directors or the Board of Directors, themselves?

A. We have no Chairman of the Board of Directors and as to any such proposals with respect to the Board, itself, or to the President, the witness must confess that he does not quite understand what you mean.

Q. Well, do you know of any modifications whatsoever that have been proposed?

A. The Board of Directors, generally, does not have any direct contact with the record, that is in the keeping of the records of the company, and our President has not, to my knowledge, suggested to anyone that any of the accounts be changed in any manner whatever.

If they are not right, he takes the heads off of us and if they are all right, that is the way we should have them [fol. 6484] in any event.

Q. Well, of course, Mr. Watkins, without quarreling with you whatsoever, I believe you previously testified, did you not, that the Board of Directors annually passed upon at least the reserve accruals for that year?

A. Oh, surely, with respect to the matters of policy, naturally.

Q. And, of course, those are ultimately reflected in the balance sheet?

A. Some of them have to be, directly or indirectly.

Mr. Gorman, is this the thing that your most recent line of questioning is directed at, do I know of any instance during the time I have been associated with Panhandle Eastern or most recently where any member of the Board of Directors, or the President of the company or anyone

else connected with the company in authority may have expressed some view that some phase of the company's accounting did not correctly represent conditions that had actually transpired or were present that particular moment?

Q. No, as a matter of fact, definitely to the contrary. We are not intimating any impropriety in any past actions of the company or officials.

A. Well, I asked my last question with the view of trying to get to the point that you were driving toward.

Q. Yes. Of course, I think you will readily recognize [fol. 6485] that all of the questions I have previously asked tend to emphasize by the answers given thereto on your part the importance and accuracy and propriety of the balance sheet statements as contained in Exhibit No. 48.

A. Oh, they are accurate, there is no question about that.

Mr. Wheat: I think the simple question, Mr. Gorman, of the witness is whether he stands on the balance sheets as shown in Exhibit 48.

The Witness: And if such a question were put, the answer would be "implicitly."

By Mr. Gorman:

Q. Well, we so understand. We just want to find out whether everybody stands on it as well as Mr. Watkins does.

Mr. Wheat: Well, he cannot answer for other people except as they may have expressed themselves to him, if they have.

By Mr. Gorman:

Q. Do you, Mr. Watkins, know of any presently proposed changes which will materially affect the financial position of the Panhandle Eastern Pipe Line Company?

Mr. Wheat: Changes in what, Mr. Gorman, just to clarify your question. Changes in its capitalization or changes in its operations?

Mr. Gorman: Well, I think it would include all of those, [fol. 6486] most certainly changes in equity or changes in assets would affect the financial position of the company.

The Witness: Could we limit that to the things that would normally happen to an organization?

Mr. Gorman: I think so.

The Witness: Such as the additional investment in income-producing properties?

Mr. Gorman: That is what I had in mind.

The Witness: The change of the character of its capitalization and things of that nature?

By Mr. Gorman:

Q. Yes. What I have in mind, particularly, Mr. Watkins; is any present plans underway or proposed plans which will materially change the position of the company as evidenced by the balance sheet at June 30, 1941, which is the date shown on Exhibit No. 48?

A. I wish I could answer specifically as to what our tax situation is going to do to us. All of us know the tremendous load that is going to be put on an organization to help pay for our war activity and, generally speaking, I believe organizations will be happy to pay up to the limit of their ability, providing they pay proportionately.

That will, naturally, make a change. The company, as you know, anticipates the purchase of some additional properties.

[fol. 6487] That will bring about a change. It will add assets, liabilities, income, just what it will do to the net I do not know because there will come along the additional taxes.

If you have any interest in that particular phase of possible changes, take a look at Page 3, I believe it is, of the Prospectus accompanying Registration Statement No. 2-4919.

* * * * * * * * *

The Witness: There are now under construction some $9,000,000 of additional facilities, a portion of which will be income-bearing, a portion of which will simply strengthen the facilities as they now exist.

There may be some considerable additional load available to the company in off-peak periods. It may be pos-

sible that as a result of the control by the National Defense Authorities, whoever they may be or whatever organization in which such activity may ultimately fall, which will result in the placement of our gas available for use in certain directions, that would tend to either increase or decrease our income.

There are so many things, sir, that might ultimately change the operations of the company and, thereby, have some immediate effect on its financial position as re- [fol. 6488] flected by a balance sheet that might be taken at any particular time, that this witness should hate very much to have any obligation thrust upon him to try to define all or even a great part of what potentialities might be in existence.

Now, said differently, at this particular moment I, personally, know of nothing that may tremendously affect the company in an adverse way.

We have found it necessary most recently to increase expenses because of certain conditions. Subsequent to December 7, 1941, we began a very definite program of property protection which brought about the necessity to employ more than 80 additional employees.

The annual cost of that addition, expressed in payroll, and any other expense that may result from it might range around $175,000 a year. Whether that shall be increased or decreased is something that this witness cannot answer.

My judgment is that as long as our world conditions remain as they are, we may look for an increase. We hear a good deal and read some in the papers about the possibility of a change in Social Security Laws, making necessary additional contributions on the part of the employers.

We see evidence every day of increased costs. Only yesterday morning, I believe it was, this witness noticed that railroad fares would be increased 10 percent. You [fol. 6489] hardly turn, toward the purchase of anything, either necessities for one's life or necessities used in connection with operation of an industry but what you do not bump into an astonishing increase in costs.

Certainly I am not crystal gazer enough to answer your question any more than I have in this general way.

Q. Well, that is quite satisfactory.

Now, Mr. Watkins, if the assets or equities as reflected in the balance sheet submitted by you are modified by representatives of the company or experts employed by the company for the purposes of this proceeding, do you propose to present a revised balance sheet or make any revision in your balance sheet to show the financial position of the company after giving effect to such changes?

A. Well now, sir, there is not going to be any expert that modifies any balance sheet that this witness submits, if I understand your use of the word "modification".

Q. That is correct.

A. Now, if your question means this:

Suppose, for instance, Panhandle Eastern has employed some expert for use in connection with these proceedings or, suppose, for instance, some of its officers or employees used by this witness in these proceedings placed some different interpretations on the balance sheet or any of the [fol. 6490] items disclosed by the balance sheet, then because of the factual interpretation that can be placed on the material included in Exhibit No. 48 does this witness intend to present another balance sheet giving expression to those modifications? Is that what we are talking about?

A. I should say, sir, that the answer would be most definitely "no".

Now, it may very well be that before these proceedings have been consummated that additional balance sheets with respect to Panhandle Eastern Pipe Line Company may be required.

There are certain transactions in the process of consummation, we hope, that would give rise to considerably more assets and considerably more liabilities. They would, likewise, change the income position.

It is my belief that the Commission will wish to be fully informed as to that condition, if it ever exists.

Q. Such a condition would, would it not, Mr. Watkins, change the balance sheets which are shown on Exhibit No. 48?

A. They might, for this reason: If the interpretation of the acquisitions which are contemplated is such that Panhandle Eastern Pipe Line Company becomes the owner of those properties on a date certain, shall we say as of September 30, 1941, it might very well follow that a proper presentation of the combined picture would be such [fol. 6491] as to require a consolidation of balance sheets and income statements prior to June 30, even.

Now; it may be that I misunderstand. In making such a consolidation the facts as shown by Exhibit No. 48 would remain unchanged.

Q. Yes. You are only taking into consideration the eventuality that a retroactive effective date to such an arrangement would provide additional items over and above those which you have presently shown?

A. That is correct.

Mr. Gorman: Mr. Examiner, I have here a statement entitled, "Panhandle Eastern Pipe Line Company, Statement Showing Investments Made by the Owners and Long-Term Creditors at June 30, 1941."

May this be numbered for identification as an exhibit, please?

Trial Examiner: This will be marked for identification as Exhibit No. 149.

* * * * * * * * *

Q. Now, for the purposes of the record and to clarify this statement in your own mind, Mr. Watkins, if you will bear with me, I should like to determine the source of each of the figures which are shown on this statement which has been identified as Exhibit No. 149.

[fol. 6492] Will you refer, please, to the heading "Plant Assets" and the subheading, "Gas Plant", which is shown to be a total of $66,689,669.57?

This, is it not, is the figure which is shown at Column M of Line 1 of Exhibit No. 48, Page 1?

A. It is.

Q. And is the next item "Contributions in Aid of Construction" the amount shown on Page 2 of Exhibit No. 48 at Line 38?

A. In Column M?

Q. In Column M, yes. A. It is.

Q. Is the next item, "Reserves for Depreciation and Depletion" in the amount of $10,135,513.92 shown in Column M of Page 2 of Exhibit No. 48 at Lines 28 to 33, inclusive? A. That is correct.

Q. And without asking you to make the addition, we will assume, subject to anyone's check, that the amount of $56,512,808.74 represents the amount of $66,689,669.57 less $41,346.91 and less $10,135,513.92 and is the total shown opposite the heading, "Net Investment in Gas Plant".

Now, the next item, "Other Investments" in the amount of $214,298.25—

A. (Interposing) Pardon me, sir, that assumption simply goes to the total and not involving any of us in an [fol. 6493] assumption that it is what it is stated to be here.

Q. Well, yes, I am speaking now only of the mathematical calculations.

The amount of $214,298.25, shown as being "Other Investments", appears on Page 1 of Exhibit No. 48 in Column M at Line 3, does it not?

A. It does.

Q. And does the amount of $9,990,919.84, shown as being, "Current and Accrued Assets" appear at Column M, Page 1 of Exhibit No. 48 at Line 15?

A. It does.

Q. And does the amount of $5,149,111.73, as shown here as representing "Current and Accrued Liabilities", appear at Lines 20 and 21 of Page 1 of Exhibit No. 48 in Column M?

A. It does.

Q. And this exhibit indicates, does it not, that the deduction of the latter figure from the one previously named produces a result of $4,841,808.11?

A. It does.

Q. And is the amount shown as "Deferred Debits", totaling $2,763,002.03, shown at Line 24, Column M of Page 1 of Exhibit 48? A. It is.

Q. Is the amount shown as "Deferred Credits", total-
[fol. 6494] ing $43,333.69, shown at Line 26, Column M of Page 2 of Exhibit No. 48? A. It is.

Q. And is the "Reserve of Uncollectible Accounts" in the amount of $44,819.88 reflected at Line 34, Page 2 of Exhibit No. 48, Column M? A. It is.

Q. And is the amount of $93,123.74 reflected as "Reserve for Injuries and Damages" shown at Line 35, Column M of Page 2 of Exhibit No. 48? A. It is.

Q. And is the "Reserve for Contingencies" in the amount of $624,800.94 shown at Line 36 of the same column and page of this exhibit? A. It is.

Q. And, of course, "Total Other Assets, Liabilities et cetera", in the amount of $6,798,731.89 has not, as yet, been checked by you? A. It has not.

Q. Nor has the total under this heading of "Other Assets, Liabilities, etc.," of $63,525,838.88 been checked by you?

A. It has not nor have any of the additions or subtractions shown on Exhibit No. 149 been verified by this witness.

[fol. 6495] Q. Yes. Now, under the main heading of "Net Equities of Owners and Long-Term Creditors" there appears under the subheading, "Long-Term Debt", an amount of $23,267,543.80.

Is this amount shown in Column M, Page 2 of Exhibit No. 48 at Line 8? A. It is.

Q. And is the amount of $20,184,175 representing "Common Capital Stock" shown at Line 2 of this same page of this exhibit? A. It is.

Q. And is the amount of $11,000,000 representing "Preferred Capital Stock" shown at Line 3 of the same page of this exhibit in Column M?

A. It is and the sum of those two items I will agree, is $31,184,175.

Q. And the "Earned Surplus" in the amount of $9,074,120.08 is shown at Line 41, Column M on Page 2 of Exhibit No. 48, is it not?

A. Not only there, sir, but at Line 41 in the same column on the same page of the same exhibit.

Q. Yes. And the total "Capital Stock and Surplus" would be represented by the addition of the two figures which we have just read which result on this proposed exhibit in the total of $40,258,295.08.

[fol. 6496] Assuming that to be an accurate addition, that does, does it not, represent the total capital stock and surplus outstanding?

A. Under such an assumption, it does.

Q. And assuming the addition which appears on the next line resulting in the total of $63,525,838.88 to be correct, that does, does it not, represent the total net equities of owners and long-term creditors?

A. It does.

* * * * * * * * *

[fol. 6497] Q. Mr. Watkins, is it correct to conclude, either from this Exhibit 149 or from Exhibit No. 48, that as of June 30, 1941, the equity and investment by the holders of long-term debt amounted to $23,267,543.80?

* * * * * * * * *

The Witness: It is correct to assume that the $23,267,543.80, to which you have just referred, represents the balance of the unpaid long-term debt of Panhandle Eastern Pipe Line Company at June 30, 1941.

By Mr. Gorman:

Q. Does that conclude your answer, Mr. Watkins?

A. Yes.

Q. What about the answer to my question?

A. To the extent that there may be provisions in any of the instruments which the long-term debt is created, imposing definite payment obligations or preferences as to the assets of the corporation, whether they be gross assets or net assets, this amount, $23,267,543.80, would represent a preference on the part of the holders of that debt as to such assets.

Q. Does that make any distinction between the invest-
[fol. 6498] ment and equity of the holders of this long-term debt?

A. I do not know whether it does or not.

Q. Are you attempting to make any distinction?

A. I am not attempting to state that a specific equity, as concluded to be such by the holders of securities, can definitely be determined from the books or records of a corporation.

Books and records of a corporation do not represent value. Values, it seems to me must be known before equity can be determined.

Q. Does that represent the equity and investment, as stated in dollars?

A. The amount $23,267,543.80, of itself, is not included as a part of the records of Panhandle Eastern Pipe Line Company to represent investment.

Portions of it may have been used for investments. Portions of the funds originally received, when the debt was created, may have been used to discharge certain obligations then existing by way of taxes or for any other purpose so that this witness cannot properly state that the $23,267,543.80 represents anything other than that which it is shown to represent by the balance sheet identified in these proceedings as Exhibit No. 48 and "balance sheet" as stated there means, of course, the balance sheets at the ends of the various periods.

[fol. 6499] Q. As I recall one of your previous statements, you stated that to this amount the holders of the long-term debt had a preference rating.

Is that recollection correct?

A. That is not correct, sir, because my statements were, I believe, to the extent that any of the indentures, under which this long-term was issued, gave preference to either gross or net assets, rather than as you put it.

Q. Yes.

A. As a matter of fact, as you know, a portion of the $23,000,000-odd is represented by first mortgage and first lien bonds which, very naturally, do carry some preference.

Q. Do the long-term notes also carry any preference, or do you know?

A. I cannot answer that properly for you at the moment. I do believe there are some restrictions that make

necessary the payment of notes in advance of either the Series A bonds or Series B bonds.

In effect, one might conclude that that carried some preference as to assets in a liquidation.

Is that a fair statement to make?

Q. I think so. Are the holders of the long-term debt entitled to recover, in any way whatsoever and excluding interest, an amount of the assets of the company which [fol. 6500] would exceed $23,267,543.80?

A. Mr. Gorman, as you might well realize, the indentures, under which the long-term debt in the form of bonds has been issued, is a tremendously large affair. There are probably as many as 300 pages in it.

This witness does not definitely recall all of the provisions of the mortgage. As a matter of fact, when he has needed to ascertain what the specific provisions are, he refers to the mortgage.

There is, unquestionably, in that indenture, certain provisions with respect to the payment of premium on the call of the securities issued under it which could increase the principal amount shown per the books.

To what extent it would increase that portion of the $23,000,000 represented by bonds, which is $18,250,000 at June 30, I am not prepared to answer you at the moment.

Mr. Wheat: There may be other items, such as expense of litigation and collection and so forth that may be covered? I am not suggesting there are but most indentures do.

The Witness: I presume, sir, that there are such provisions. It occurred to me, when the indenture was being prepared, that it certainly nailed the company in every way that the investor could possibly wish to have it nailed down and provided for all the exigencies or contingencies that could be provided for and further it has, of necessity, [fol. 6501] been made to conform to the Trust Indenture Act of 1935, which, per se, takes care of the public and investors.

By Mr. Gorman:

Q. Well, Mr. Watkins, if this amount to which we have just been making reference does not represent the investment of the holders of the long-term debt in the Panhandle Eastern Pipe Line Company and its subsidiaries, can such an investment be determined by a reference to the balance sheet?

A. Mr. Gorman, I do not believe that I have stated that the principal amount of the bonds shown by the balance sheet did not represent the investment of the investors in those bonds.

I would have no way to know that. Panhandle Eastern Pipe Line Company sold the bonds, received certain proceeds from them; the bonds were, in turn, sold by an underwriting group to the investors.

There may have been some intermediaries between those transactions and whether you happened to have been one of the investors and you paid $110 for something we sold for $100, or whether you were fortunate to purchase it for $60, you should not imagine I would be able to answer that question.

Q. Well, of course, my question is directed to whether or not it represents their equity and investment in the [fol. 6502] properties of the company as shown by such bonds and notes.

Now, when you get to discussing intermediaries and that sort of thing, of course we all recognize that those kind of transactions deviate from the face amount of bonds or the face amount of notes but, for balance sheet purposes, are those transactions of any importance?

A. Is that a question?

Q. Yes.

A. For balance sheet purposes, they would not be reflected in the company's books because the company would have no knowledge whatever of them.

Q. And, of course, for balance sheet purposes, the face amount of the bonds and the face amount of the notes present the liability of the company to the holders of those notes and bonds, do they not?

A. As to the principal amount of such securities, yes.

Q. Is it correct to conclude, Mr. Watkins, either from this Exhibit No. 149 or from Exhibit No. 48 that, as of June 30, 1941, the equity and investment of the stockholders amounted to $40,258,295.08?

A. Mr. Gorman, this witness has stated repeatedly that, in his judgment, equity, as such, in the hands of an investor or creditor cannot necessarily be determined from [fol. 6503] a balance sheet or balance sheets such as those shown by Exhibit No. 48.

Our books do not and have not been intended to represent value. It does not occur to me that, as an investor or as a creditor, I could ever determine what my equity was in an organization without knowing something about it.

I can, however, take that organization's balance sheet, have a look at its liabilities and assets, make certain deductions and so forth and see what the books say are my posibilities for recovery.

Q. From the statements reflected on this Exhibit No. 149 and Exhibit No. 48 and by an examination thereof, would you conclude that the equity and investment of the stockholders amounted to $40,258,295.08?

A. If I may take the liberty of rephrasing your question, I think I can answer it definitely.

Q. You may do so.

A. If you are intending to ask this witness what his personal view is of the value of the stock and notes of Panhandle Eastern Pipe Line Company, his answer will most certainly be that it is tremendously in excess of any figures that may be determined with respect to such thing from the books of the company.

Q. Now, of course, you must appreciate the fact, Mr. Watkins, and I think my question was predicated upon [fol. 6504] such fact, that we are here, in these questions, dealing with the representations made on Exhibit No. 48 and Exhibit No. 149 and no other extraneous matter.

A. There are no representations, as far as this witness knows, made on Exhibit No. 48 other than a pure statement of the facts as they existed at the dates shown on such exhibit.

You have prepared Exhibit No. 149 or have had it prepared and must have in mind something that you expected

to show and this witness does not have the benefit of the purpose for which you have had it prepared and is earnestly trying to answer the questions you put in the most sincere, honest and forthright manner he can possibly do.

Q. Of course, my questions were in the alternative, considering either Exhibit No. 149 or Exhibit No. 48, and with my suggested explanation that these questions are dealing with the figures shown on these two exhibits, can you now answer the question which I previously put to you?

A. I have answered it.

* * * * * * * *

[fol. 6505] Q. You answered the question as you proposed, by rephrasing it. I am asking if you can answer the question as I originally stated it.

The Witness: Let's have it read again, please.

(Whereupon, the question indicated was read by the reporter as follows):

"Q. From the statements reflected on this Exhibit No. 149 and Exhibit No. 48 and by an examination thereof, [fol. 6506] would you conclude that the equity and investment of the stockholders amounted to $40,258,295.08?"

The Witness: Without binding myself to the $40,258,295.08, I would conclude that their equity was at least that much.

By Mr. Gorman:

Q. Why do you make the exception, because you have not made the addition which results in the figure of $40,258,295.08?.

A. Not at all, sir. I believe I would be more willing to accept your figures than you would be willing to accept mine but, as I have stated several times this afternoon, you just do not determine equity from figures extracted from the books.

The books of any corporation do not reflect value at any certain time, if ever, and to determine equity, you must know that and that, sir, will be my answer to your question if you put it to me in the form you have from now until the time I am relieved as a witness.

Q. Would you say, Mr. Watkins, that these figures reflect the equity of the stockholders in so far as the books of the company are concerned?

A. In so far as the books of the company can show equity and on the assumption that the figures in Exhibit No. 149 have been correctly computated and at this mo- [fol. 6507] ment I have no reason to doubt but what that is correct. The answer to your question is "yes".

Q. Yes, and your answer is the same with respect to the investment of these stockholders in so far as the books of the company are concerned, is it not?

A. It would have to be, would it not?

Q. That was my impression. I did not know whether it would be contrarywise or not.

It is, therefore, correct to conclude, Mr. Watkins, either from Exhibit No. 48 or Exhibit No. 149 for identification, that, as of June 30, 1941, the permanent equities invested in Panhandle Eastern Pipe Line Company as reflected by the books of the company and these exhibits amounted to $63,525,838.88, assuming the addition made on Exhibit No. 149 to be correct?

A. We would not quite characterize those amounts as permanent equity, could we, because some of them change constantly. The long-term debt itself is subject to gradual reduction. The amount of earned surplus works upward or downward, dependent upon earnings or appropriations to surplus and it will not be a great while before perhaps our long-term debt will change.

So let us say that, as of June 30, 1941, in so far as it is possible for the books of Panhandle Eastern Pipe Line Company or its subsidiary companies to reflect the obli- [fol. 6508] gations of those companies and the amount of earned surplus at that particular date, it does show an amount of $63,525,838.88.

Q. Of course, I intended, if I did not do so, to confine my question to the situation as of June 30, 1941.

A. I wish to make that qualification particularly because we have had introduced in the proceedings in the last two or three days the fact that the earned surplus, for instance, will be reduced by an amount of something in the neighborhood of $2,000,000—

Q. (Interposing) Yes.

A. (Continuing) By entries being made in the month of December or rather being made in the work for the month of December.

Q. Now, the investment made by the stockholders, bondholders and note holders is represented by plant, property, other investments and other current and accrued assets, is it not?

A. You mean the amount of proceeds Panhandle Eastern Pipe Line Company received from the sale of such securities as represented, in some form, on its balance sheet by either plant, property and equipment, cash, special deposits, accounts receivable, deferred debits reduced by the amount of its obligations?

Q. Yes. A. Then the answer is "yes."

[fol. 6509] Now, as to any representation with respect to what the investment of the investors is, I cannot help you.

Q. Well, of course, in so far as we are getting down to detailed and specific amounts, we are and have been confining our questions and answers to the amounts reflected here on Exhibit No. 48 and Exhibit No. 149 for identification.

Now, assuming the figures and the mathematics applied thereto, as shown on Exhibit No. 149 to be correct, is the net investment in plant property of the Panhandle Eastern Pipe Line Company $56,512,808.74?

A. I do not know that I can concur in the fact that the net investment of a corporation at any date certain, resulting from a simple deduction of the reserve per its books, represents anything other than a mathematical computation resulting in the reduction of the investment as shown by the company's books in its gas plant, since we are dealing with a gas company, of the amount it had at that particular time included as its total reserve for depreciation and depletion, as you have characterized them in Exhibit No. 149.

We have had a very great amount of discussion here today about reserves. The record is replete with the thought that those reserves, at any particular time, may be either quite inadequate or they may be totally adequate

[fol. 6510] or they may be excessive, so that it would be difficult for this witness to state, without some reservation, that the net investment in gas plant as of June 30 could be arrived at simply by reducing the $66,689,000-odd shown in Exhibit No. 149, by the sum of $41,000-odd and $10,135,000-odd.

Q. Well, Mr. Watkins, giving careful consideration to your previous statements of the accuracy of this balance sheet and your statement that you propose no change in the balance sheet as here reflected, does that not, in your opinion, represent net investment in gas plant?

A. I would like to help you, Mr. Gorman, and I should like to be able to answer the question in the manner in which I believe you wish it answered but I must simply say that at June 30 the records of Panhandle Eastern Pipe Line Company and its subsidiary companies show figures which could be used and have been used in Exhibit No. 149 for the determination of what is there characterized as net investment in gas plant but as to whether or not that is definitely the net investment in gas plant for many and varied purposes, I really do not know.

Q. But according to the best information available to you and to other officers of the company and upon the considered judgment of you and other officers of the company and the Board of Directors as reflected in the books and records of your company, that did, did it not, represent [fol. 6511] net investment in gas plant property as of June 30, 1941?

A. It represents what it shows that it represented.

Q. Is that not what it represented as of that date?

A. Is that not what it represented?

Q. Yes.

A. I have stated several times that I do not believe I can answer the question specifically as you put it.

Q. And is that due to the fact that you do not know exactly what precise amounts should be set aside in reserves for depreciation and depletion—

A. (Interposing) That and other things.

Q. (Continuing) May I finish—as of June 30, 1941, because you are unable to look into the future and see exactly what is going to happen there?

A. It is due to that and other things.

Q. Yes, but in so far as these reserves for depreciation and depletion are concerned and as reflected on these exhibits which represent amounts taken from the books of the Panhandle Eastern Pipe Line Company and its subsidiaries they, as you have previously testified, represent the considered and final judgment of the officers and management and Board of Directors of the Panhandle Eastern Pipe Line Company as of June 30, 1941, do they not?

A. I cannot answer, sir, as to the considered judgment of the Board of Directors. I have made no examination [fol. 6512] of them to determine what their considered judgment might be.

I cannot answer as to the officers of the company because I have made no examination of them to determine what their considered judgment might be.

Whom else did you mention?

Q. Others who participate in the management of the companies.

A. I have made no examination of the minds of any others who participate in the management of the company to develop information upon which I might express an informed opinion as to their considered judgment.

Q. Are you referring to your inability, Mr. Watkins, to read the minds of others?

A. No, I believe I said I had made no investigation. I am, of course, not a mind reader.

Q. Well, to go back and reconsider certain of your testimony previously given with respect to reserves and depreciation and depletion, including amortization, did you not so testify that the amounts set aside annually represented the judgment arrived at after consideration by officials and others charged with the management of the company which conclusions were submitted to the Board of Directors of the company and passed upon by them?

A. Yes, I may have said that in somewhat that language. Now, if this will come at all close to satisfying [fol. 6513] your inquiry, let me state, without equivocation or without any mental reservation whatever, that the amount shown by the balance sheet or balance sheets included in Exhibit No. 48 as to gas plant do specifically

represent the amounts which the company or its subsidiaries, over the period of years, have considered as proper charges to such accounts and if they have made no substantial blunders in their classification, would represent actual investment in gas plant and to the extent the reserve for depreciation, either annual or the cumulative amount at the end of any of the accounting periods has been properly computed or rather I should say estimated, it represents an amount which, at that time, is sufficient for the purpose.

Now, if you choose to reduce the amount of gas plant by the cumulated reserves and characterize it as net investment, that, sir, is a matter for your own choice.

Q. Well, may I ask you, Mr. Watkins, if you were given the balance sheet as of June 30, 1941, as such balance sheet is shown in Column M of Exhibit No. 48 and were asked to [determined] from the figures contained thereon the net investment in gas plant property, would you do it in any other manner than as it is shown on Exhibit No. 149?

A. It is quite probable that the first thing I would do would be to reduce the amounts shown by the books of the company as investment in gas plant by total reserves.

[fol. 6514] I would then turn my mind to a determination of what was in both of the items, how it came to be there, and whether or not it was full of bugs—

. . . . . .

[fol. 6515] Trial Examiner: Are you unable to answer that question, Mr. Watkins, without qualifications? It is a very simple question, you know.

The Witness: Mr. Examiner, it is most probable the conventional way, the rule-of-thumb way, the everyday-man-in-the-street way of determining that investment is exactly as Mr. Gorman has put the question.

Here we are in a rather involved rate proceeding. The witness suspects that Mr. Gorman is trying to elicit testimony from him that this is the actual value of the assets of the company and the witness can not unqualifiedly state that such condition is present.

. . . . . .

[fol. 6516] By Mr. Gorman:

Q. And as I understand the witness' conclusion stated simply so that even I can understand it is, no, he would not. Is that correct, Mr. Witness?

A. You are drawing your own conclusion, sir.

Q. I am asking you whether or not that is a proper conclusion to draw from your answer?

A. That I would not assume that to be net investment?

Q. No, that you would not make such computation upon the basis I have previously indicated in a manner different from that which has been performed on Exhibit No. 149?

A. I do not believe I have given testimony that would indicate that that was my conclusion or, as you stated, the conclusion that I would agree to.

Q. [You] qualification being that you would start looking for bugs?

[fol. 6517] A. Not necessarily, no.

Now, I have tried to answer you as frankly as I can and have stated that the ordinary way, the man-in-the-street way, the perhaps conventional way of casual determination of the net investment would be as you put it.

Q. Yes. Would you conclude from that answer that you personally would do it in a manner different from what you have characterized may be the conventional way?

A. I believe my whole line of answers, sir, indicates that.

Q. By that you mean that you would not accept the figures which are shown on the balance sheet?

A. As net investment.

Q. As computation, Mr. Watkins, if you please, of net investment as reflected on the balance sheet set forth in Column M as of June 30, 1941, on Pages 1 and 2 of Exhibit 48?

A. As a conventional method of determining it and for the everyday use, yes, I would.

Q. Yes, that is what I tried to get you to say.

Now, the other investments in the Panhandle Eastern Pipe Line Company, other than gas plant investments, amount to $214,298.25 at June 30, 1941, as shown in Column M, Page 1 of Exhibit No. 48 at Line 3, do they not?

A. Did you characterize those as "other invest-
[fol. 6518] ments" or did you state they were other investments in gas plants?

Q. No, I stated they were other investments than investments in gas plant.

A. There is an amount of $214,295.25 stated in Column M opposite Line 3 on Page 1 of Exhibit No. 48, the complete details of which have heretofore been made a part of the record in this proceeding and the accuracy of which this witness has readily agreed to.

Q. The answer is, therefore, "yes", is it?

A. That the $214.295.25 represents other investments at June 30, 1941—I am only being careful here because I really did not understand the first part of your question and if I had a mental lapse, will you excuse it?

Q. Your last statement is absolutely correct except you did say "295" instead of "298".

A. Let's split the difference.

Q. I was going to correct it in the record so it won't be necessaray to do it later.

If the mathematics applied to the figures shown on Exhibit No. 149 are accurate, the total of other current and accrued items, both debit and credit, amounted to $6,798,731.89, did they not, at June 30, 1941?

A. Other current and accrued assets?

Q. Yes.

A. They did.

[fol. 6519] If there were assets unrecorded or liabilities unrecorded, it would change that figure. I do not know of any liabilities that have not been recorded.

As to the value of the assets, the books do not necessarily show such amounts.

Q. And finally, the total of the plant property, other investments, cash and other current and accrued items at June 30, 1841, amounted to $63,525,838.88, did they not, assuming the additions and subtractions shown on Exhibit 149 to be correct?

A. I think that is correct except that the Exhibit No. 149, as such, does not show a cash item separately.

Q. Yes.

A. It is included, I presume, in current and accrued assets.

Q. Yes, that is right. Of course, we have previously indicated that, I think, to clear that item up?

A. Yes, I believe the record is very clear on that item.

Mr. Gorman: If the Examiner please, I offer Exhibit No. 149 for the record at this time.

Trial Examiner: Any objection?

(No response.)

Trial Examiner: There being no objection to the reception of the computation marked for identification as [fol. 6520] Exhibit No. 149, it will be received in evidence by the corresponding number.

* * * * * * * * *

(Exhibits Nos. 145, 146, 147 and 148 Were Received in Evidence.)

* * * * * * * * *

[fol. 6521] By Mr. Gorman:

Q. Mr. Watkins, referring back to a subject which you have previously testified concerning, a reexamination of your testimony particularly at Pages 6209 and 6210, which concern the subject of unamortized debt discount and expense and certain adjustments which have been made to that account, you have indicated that all of the remaining amount in Account No. 140 covering unamortized debt discount and expense has been charged to earned surplus.

Were you in your answers referring only to that portion of Account No. 140 applicable to refunded issues or were you also referring to that portion applicable to presently outstanding issues?

Mr. Wheat: Do you have it before you?

The Witness: I do not have this before me but the whole bag of tricks has been disposed of.

Mr. Wheat: What do you mean by that?

The Witness: All of the unamortized debt discount and expense, either with respect to the refunded issues or with respect to the refunding issues, if you please, if we are thinking now of February 3, 1941, with the adjustments previously referred to in the testimony.

By Mr. Gorman:

[fol. 6522] Q. Now, at Pages 6208 and 6209 of the transcript, it seems that the substance of your answers was that the amounts of $517,772.53 and $304,108.96 representing amounts equivalent to savings and income and excess profits taxes were credited to Account 140, unamortized debit discount and expense, was that correct?

A. There was a total of slightly more than $822,000 credited to such accounts. The two figures you mention were a segregation of that total because there were two accounts involved.

My remembrance is that one had to do with call premium and one had to do with debt discount and expense.

Q. Yes, but those were both credited to Account No. 140?

A. Prior to the charging of the residue in the account to surplus.

Q. Yes. Were offsetting charges to these credits entered in Account 507, taxes, or were the amounts charged to some other account?

A. They were, as the record will show, charged to Account 507.1.

Q. Account 507.1 is, of course, your subdivision of Account 507 as shown in the Uniform System of Accounts for natural gas companies as issued by the Federal Power Commission, is it not?

[fol. 6523] A. It is really a new account which we have raised for the express purpose of receiving these charges. Our title, if I remember correctly, is "Charges in lieu of Federal income taxes and charges in lieu of Federal excess profits taxes."

Q. Yes.

A. That entire transaction was a part of previous proceedings. As a matter of fact, if you will recall, the witness read into the record, in response to your request, two journal entries giving effect to these transfers and what-

ever information you may want with respect to them, I believe is already present.

Q. Of course, your Account 507.1 is your subdivision, is it not, of F. P. C. Account 507?

A. The witness stated that when the entry was first placed in the record; stated that just a few moments ago and reiterates the fact that Accounts 507.1 are Panhandle Eastern Pipe Line Company's accounts created for this specific purpose.

My impression is that the Power Commission's Classification of Accounts permits that procedure.

Q. So that the answer then is "yes"?

A. Three or four times, "yes".

Q. Once was satisfactory.

Mr. Watkins, did you receive a letter signed by the [fol. 6524] Secretary of the Federal Power Commission dated October 29, 1941?

A. I did.

Q. And did that letter—

A. (Interposing) That letter was addressed to Panhandle Eastern Pipe Line Company for my attention as Secretary-Controller.

Q. But you did, in fact, receive such letter?

A. Yes, I have so stated.

Q. Yes. Did that letter in Paragraph 7 on Page 2 thereof request you to furnish—

"A statement to the effect that Account 507, Taxes, for the year 1941 will not include a charge (either directly or through Account 228, taxes, accrued) equal in amount to the estimated saving, if any, in 1941 Federal and State income taxes resulting from deductions to be made for income tax purposes, arising from the financial transactions. In this connection your attention is directed to Interpretation Case No. G-52, issued by National Association of Railroad and Utilities Commissioners, which reads as follows:

"'The tax account (507), should include only provision for actual taxes and the account should not be increased by the amount which would have been paid had the refunding transaction not occurred. In other words, there

was an actual saving in taxes and this saving should be [fol. 6525] reflected in the income statement because it is a fact. It believed, too, that the text of Account 507 does not permit the accounting practice resorted to by the utilities in the illustration cited' ".

Now, are we to understand that your charge to Account 507.1 is contrary to the indicated procedure to be followed in this statement of Paragraph 7 of the letter of October 29, 1941, which I have just read?

A. Mr. Gorman, if you will pardon me, I think we are shooting buckshot at canary birds here. This has been the treatment the witness has described which has been discussed informally with the Power Commissions' Chief of the Bureau of Accounts, Statistics and whatever is a part of his title and, as far as this witness knows, there is no disagreement as to the treatment.

Now, if the thing that is bothering you is the fact that we used Account 507 as a means of raising the new account and you fear that we are going to put out some statements to the public or otherwise characterizing these items as taxes, may I please remove that fear without any hesitancy, because if you will observe the income account consolidated which is made a part of Registration Statement No. 3-4919 at Page S-7, it will be noticed that there is shown there two items under the general heading "Charges in lieu of", and we then follow that by the two amounts applicable as of [fol. 6526] September 30 equivalent to the Federal income or excess profits taxes that would have to be paid had we not had the benefit of such savings.

Q. And those figures to which you have just made reference as reflected in the column headed, "Nine months ended September 30, 1941," are, first, charges in lieu of Federal income taxes—$100,000; and, secondly, charges in lieu of Federal excess profits taxes—$487,000?

A. That is correct.

Q. And did you also mention other items—provisions for income and excess profits taxes?

My recollection of your answer is rather incomplete.

A. That was the $487,000 amount.

Q. And those were the two items to which you made reference a few moments ago? A. They were.

Mr. Culton: And they are explained on Note D, Page S-8?

The Witness: Yes, sir.

[fol. 6527] By Mr. Gorman:

Q. Are we to understand your books will be closed out on the basis of the entries which you have heretofore discussed and explained, including the entry to your Account 507.1? A. That is correct.

Q. Is it your understanding that the conference with the officials of the Power Commission which I have more or less forced upon you to disclose—

A. (Interposing) Not more or less, sir, I think you have been entirely responsible for it.

Q. I will accept that responsibility for it.

A. And, if you please, let's avoid any further refer-

[fol. 6528] ence to it if we may.

Q. Very well.

The reason I am asking is whether or not you were advised in any respect differently from the advice contained in Paragraph 7 of the letter of October 29, 1941?

A. If I was what?

Q. If you were advised to make entries or that you would be permitted to make entries which would be considered favorably—

A. (Interposing) By the letter?

Q. (Continuing) No, advised otherwise than the provisions of this letter.

In other words, to my mind, it would seem to indicate that your charges to Account 507.1, are not in conformity with the suggestions offered in Paragraph 7 of the letter of October 29, 1941, which I have read.

Do you consider that they do conform to such a suggestion?

A. Well, I do not know that I do or I do not.

Here is the situation with respect to the debt discount and expense and its disposition:

We have been conscious all this year of the fact that balance sheet accounts, Instruction No. 6-E of the Commission's Uniform System of Accounts for natural gas companies, placed certain requirements upon us with respect to the continued amortization of the debt expense [fol. 6529] with respect to the refunded issues sometime within the current accounting period.

We had also been conscious of the fact that sometime during the year, it was possible we would find it necessary to create other issues of securities which might give rise to further debt discount and expense.

We were not at all anxious to come to the Commission with a form of application covering the previous situation and then be right back in again within a few months with another application so we, therefore, withheld any such application and much to this witness' surprise when, during his first appearance, he made a statement in the record that had the general tenor that presumed we might be in with an application, forthwith we received the letter concerning which we have been discussing.

Subsequent to that time, we gave further consideration to the debt discount and expense and at a meeting of the Board of Directors, the action described in the record a day or so was taken.

We know of no reason why the treatment we have given to these particular items is not in conformity with standard accounting practices consistently followed, and do not believe it is in disagreement with the Commission's view.

Q. And that is without regard to the provisions of [fol. 6530] Paragraph 7 of the letter of the Commission of October 29, 1941, for I believe you previously stated you did not know whether or not your entries were or were not in conformity with that suggestion?

A. There is no fancy footwork undertaken here. They have all been open and above board. It is in the record in its fullest extent.

The results seemingly harm no one. What more can I say?

Q. And in so far as you know and in so far as your entries with respect to the books and records are concerned, is a concluded matter?

A. I think it may well be left that way.

. . . . . .

[fol. 6534] PAUL B. COFFMAN, a witness, having been previously sworn, resumed the stand and testified further as follows:

Direct Examination (Continued)

By Mr. Wheat:

Q. Mr. Coffman, since the time when you appeared and began your direct testimony in this matter, have you prepared certain data largely in compliance with certain suggestions and queries of the Trial Examiner during your direct testimony?

A. Yes, I have.

Q. I show you a document consisting of four pages headed on the first page, "Financial Data on Common Stock Issues of Electric and Gas Utilities Years 1935, 1936, 1937, 1938, 1939 and 1940" and ask you whether that is one of the documents [your] prepared in this connection? A. Yes, sir, it is.

. . . . . .

(Exhibit No. 150 was marked for identification.)

[fol. 6535] Q. Mr. Coffman, have you also prepared a document consisting of nine sheets, the first of which is headed, "Earnings-Price Ratios of Common Stocks in Various Divisions of the Utility Business? A. Yes, sir.

Q. And was this prepared in the same connection that I previously mentioned? A. Yes, it was.

. . . . . .

(Exhibit No. 151 was marked for identification.)

By Mr. Wheat:

Q. Mr. Coffman, have you also prepared a series of tabulations consisting of four sheets, headed on the first sheet, "Panhandle Eastern Pipe Line Company—Estimate of Federal Income and Excess Profits Taxes, Apply-

ing Rates Levied in the Revenue Act of 1941 to Net Income for the Year Ended June 30, 1941"?

A. Yes, sir.

Q. Was that prepared in the same connection?

A. Yes, it was.

. . . . . .

[fol. 6536] (Exhibit No. 152 was marked for identification.)

By Mr. Wheat:

Q. Mr. Coffman, does the data contained in the exhibits for identification Nos. 150, 151 and 152 comprise the extent of the general data which you prepared in connection with the Examiner's suggestions during your direct testimony? A. Yes, it does.

. . . . . .

[fol. 6537] By Mr. Littman:

Q. Mr. Coffman, do you have a copy of your Exhibit No. 65 before you?

[fol. 6538] [Q.] Yes, sir.

Q. Will you please refer to Chart No. 37 of that exhibit, which is entitled, "Dollars Needed Annually by Panhandle Eastern to Provide Service to Customers, a Fair Return to Investors and Restore Invested Capital When Gas Reserves are Exhausted Based on Present Capital Structure."

Is my understanding correct that your term, "Total Dollars Needed" as it appears at the bottom of the extreme left-hand side of your Chart No. 37 is synonymous with the term, "Total Operating Revenues" as that term is ordinarily used in an income statement?

A. I would say "Total operating gross revenues", yes.

Q. Is my understanding correct that your terms "Operations and maintenance", "Taxes" and "Return of Capital when gas reserves are exhausted", collectively comprise what is ordinarily termed "Total operating revenue deductions" as used in an income statement?

A. That would be correct, with this further explanation, so there won't be any misunderstanding, that those would be the deductions from gross which would arrive

at the figure that we call "Net available for interest charges, dividends and corporate purposes."

In other words, it is all deductions taken out prior to charges for capital

Q. And that is ordinarily called "Operating revenue [fol. 6539] deductions" in an income statement, is it not?

A. Well, of course, those terms—

Q. (Interposing) Of a public utility?

A. Generally speaking, that is correct; yes.

Q. And these comprise all of the deductions which you take into account for purposes of this study?

* * * * * * * * *

The Witness: Those varying figures are explained in the preceding charts and, for the purpose of building the total that I call the "total dollars needed" as shown on this Chart No. 37, they were all the figures finally accumulated but they were not the only ones that were considered as shown in some of the prior exhibits—

Mr. Wheat: (Interposing) You mean prior charts in this exhibit?

The Witness: (Continuing) Prior charts in this exhibit because of certain changes that were made and certain considerations were made as I went along in my approach to this problem.

I will answer your question "yes", subject to the things that are shown in the preceding charts in this exhibit.

By Mr. Littman:

Q. Your answer would be "yes", if I were to confine my question to Chart No. 37?

[fol. 6540] A. No, not exactly, because, as I say, there were other considerations made along the line which in certain cases cause a change in figures for what I call the projected amount as against what was the actual figure for the twelve months ended June 30.

Q. Aren't all of these figures projected figures that are shown in Chart No. 37?

A. They are the accumulation of all of those figures shown in the preceding charts and I want to make sure

that a person [understand] that when they are talking about No. 37 because, after all, it is merely the summary chart which takes into consideration all of the various things that I have shown in the preceding charts in this exhibit.

Q. Chart No. 37 summarizes the conclusions reached by you from the various underlying data which is shown in the preceding charts, is that correct?

A. That is correct, yes, sir.

Q. And in order that I may be certain that I understand Chart No. 37; I wanted to ask whether these amounts shown on Chart 37 and called, "Operations and maintenance", "Taxes", "Return of capital when gas reserves are exhausted" collectively and in total comprise all of the deductions from operating revenue in arriving at the "dollars needed annually by Panhandle Eastern to provide service to customers, a fair return to investors and to re- [fol. 6541] store invested capital when gas reserves are exhausted?"

A. Yes, that is correct.

Q. So that the total of these deductions is what is commonly referred to in an income statement as "Total operating revenue deductions", is that correct?

A. That is correct.

Q. Is my [understand] also correct, Mr. Coffman, that your term "Current capital requirements" as used in Chart No. 37 is synonymous with the term "Net operating revenue" as that term is ordinarily used in an income statement?

A. That is correct. It is the net operating revenue figure prior to interest charges, dividends and such amounts as might be carried to surplus.

Q. Mr. Coffman, I would like to have you refer to Schedule 1 of Exhibit 49, which is the income statement, per books, presented by Panhandle Eastern in this proceeding by its Controller, Mr. Watkins.

Trial Examiner: The Trial Examiner will hand the witness his copy of that exhibit.

(A document was handed the witness.)

Mr. Wheat: Mr. Coffman, you will note that is an income statement covering quite a longer period of time.

The Witness: Yes.

By Mr. Lipman:

Q. I refer you to this schedule and I will ask whether [fol. 6542] your term "Total dollars needed" is synonymous with the term "Total operating revenues" which is shown in Line 7 of Schedule 1 of Exhibit 49?

A. You are referring now to the gross figure?

Q. I am referring to the term which appears in Line 7, Mr. Coffman, "Total operating revenue"?

A. That is correct.

Q. And am I also correct in understanding that the sum of your "Operations and maintenance", "Taxes", and "Return of capital when gas reserves are exhausted" shown in Chart 37 are synonymous with the term "Total operating revenue deductions" which is shown in Line 21 of Schedule 1 of Exhibit 49?

A. Yes, that is correct.

Q. Am I also correct in understanding that the term "Current capital requirements" as it is used in your Chart No. 37, is synonymous with the term "Net operating revenue", as it is used in Schedule 1 of Exhibit 49 in Line 22?

A. Yes.

Q. Now, your written testimony in the text which accompanies Chart No. 37 in the last paragraph reads as follows:

"As shown in the accompanying chart based on the present capital structure, the Panhandle Eastern Pipe Line [fol. 6543] Company would require a total of $15,529,855 annually to provide service to customers, a fair return to investors and restore invested capital when gas reserves are exhausted".

Is that correct?

A. That is correct.

Q. Which figure, in your Chart No. 37, represents the "fair return to investors"?

A. The figures that are used there in Chart No. 37 would be contained in the last column which totals $5,064,821 and the details of those various items in that column would be explained in the preceding charts as to fair return.

In other words, I merely want to make clear that the specific fair return which I am talking about is not shown, percentage-wise, as you note in that column but the total figure which I show there has been explained in the preceding charts.

. . . . . .

Q. But am I correct in understanding that the amount of $5,064,821 which appears in Chart No. 37 represents the fair return to investors based on the present capital structure?

[fol. 6544] A. That is correct.

Q. And, of course, the details as to your method and manner in arriving at that amount are shown in preceding charts, is that correct?

A. The preceding charts and the tables supporting the individual charts, yes. I mean all of the detailed figures are there, too.

Q. Was the amount of $5,064,821 shown in the cross-hatch bar in Chart No. 37 a fair return to investors of Panhandle Eastern for the year ended June 30, 1941?

A. All the figures that were used to arrive at that result and calculation were based upon the current trends in the capital markets and, therefore, I would say it represented a fair return, if you consider that at the present, that is, in 1941, not this year, Panhandle Eastern would have been required or had it been necessary for them to finance again securities in the market because the figure which I used to arrive at that dollar amount was based upon an investor's appraisal of what investors required if they would make an investment in a particular risk.

I would say that it represented very definitely a fair return to them in 1941.

Q. For the year ended June 30, 1941?

A. That is right.

Q. In other words, is my understanding of your answer [fol. 6545] correct that any amount of net operating revenue earned by Panhandle Eastern during the year ended June 30, 1941, in excess of this amount of $5,064,821 was in excess of a fair return, in your opinion?

A. For the particular period in question, which is 1941, because of conditions in the capital market at the time,

my statement is that at least the total figure shown in the last column in Chart No. 37, $5,064,821 is required and, for that particular time, to me that is the irreducible minimum which the management of this company must have.

Now, whether or not if they receive more dollars that is beyond a fair rate of return, I would not say. I mean there may be more dollars than that there but I say that the irreducible minimum they must have is the figure shown.

That, to my way of thinking, is not saying that if they received more dollars that that is necessarily more than a fair rate of return.

Q. Mr. Coffman, you have referred to this figure of $5,064,821 as a "fair return to investors".

Now, is that or is that not a "fair return to investors"?

A. I say that that is the amount and I think you will find in my statements throughout the written matter in the exhibit I have made mention of it also as an irreducible minimum. I say that that is the amount of cash that [fol. 6546] the company must have per annum if they are going to continue to maintain a position whereby, if they need additional capital, investors in the public market will be willing to have the financing forthcoming. It is a fair return.

At the same time, if they receive more money, I presume that could be a fair return also, to answer your question.

Q. It would be a fair return in so far as the investor is concerned if he received more than $5,064,821?

A. No, it would merely mean if there was more than that, if the investor can be satisfied under the present coverage and is willing thereby to [investmen] further in this company, then if the amount is larger than what I say, I presume he would be equally willing to invest.

On the other hand, I contend that if the amount falls below this, the investor would be very reluctant, if not hestitate entirely, to finance or supply money for financing should this company need it.

Q. I gather from your answer, Mr. Coffman, that any amount in excess of $5,064,821 would be an equally "fair return to investors"?

A. I merely say that it gives the investor more protection and I believe it is true that, so far as investors are concerned, they naturally want the capital they put in any concern sufficiently covered by earnings so that their capi-
[fol. 6547] tal investment is fairly protected.

If they believe they are making an investment or if they think a particular investment they are contemplating is not so protected, they are not going to invest any money at the rates I have used. They will require something higher because they think the risk is greater.

Q. Could you answer my question yes or no, Mr. Coffman?

Will you please read the preceding question and see if you can answer that question yes or no. You have already made an explanation but I wonder if you could give me a direct answer to my question.

(Whereupon, the pending question was read by the reporter.)

The Witness: I should say it might be.

By Mr. Littman:

Q. Would it be?

A. Well, if they feel that they are protected with what they have, if there was something more, I should feel that was also satisfactory to them.

Q. How would you feel about it?

A. I would feel just as I have stated to you. I believe this to be an irreducible minimum requirement. If I could get that or more, I would be willing to invest my money in the particular enterprise, if I had money available for investment.

[fol. 6548] Q. Well, suppose Panhandle Eastern were to earn in the year ended June 30, 1942, the sum of, let us say, $5,564,821 instead of the $5,064,821 which latter figure you have called "a fair return to investors."

Would the amount of $5,564,821 be a fair return to investors?

A. Well, I do not know because the study that I have made here was predicated upon conditions as they existed in 1941 at the time I made the study and, at that time, the relationship of earnings of various companies to the prices of their securities, which is what I call this "Investor's Appraisal of the Risk of Capital", were [maintaning] a particular relationship.

Now, as we know, the *prices of* securities have been altered since that time because of Pearl Harbor and a number of incidents which have caused the prices to go down so I would say I would make the same kind of study that I have already made, finding out what the relationships were and if the result came out the same for 1942 that it did at the date of this study, why, then the excess of $500,000 you are mentioning is just so much additional protection.

Q. And you would consider, under those circumstances, that the additional amount still represents a fair return?

A. Well, I am not saying that, because I made a par- [fol. 6549] ticular study, and arrived at a particular figure under particular conditions at a particular time, and I say that is the amount you must have to attract capital.

Now, if you get more, how much easier it will be to attract capital and so on, I do not know. I make that point because of the fact, if a company has bonds outstanding, for example, one method of arriving at the risk involved in that particular security is to consider, among other things, fixed charges times earnings.

Now, if a bond, for example, has a coverage of 1, 1½ times as against a bond that has a coverage of 3 or 4 times, in our language, we say the quality rating of those two securities is different and they will sell on a different yield basis so that definitely would work into this figure and I cannot say, if you keep pyramiding the $5,064,821 so as the coverage on the senior securities becomes greater and great, the quality classification on those particular securities becomes better and better with the result that investors, looking at such securities in the market, would see their quality rating improve and their yield basis would decline.

Taking that decline into consideration on the figures used to make up this particular resultant figure would have a bearing and change the amount.

Q. And would reduce the current capital requirement? [fol. 6550] A. It would reduce the requirement because it would make it easier, presumably, other things being equal, to sell that particular class of [esecurity] to the general public.

Q. Now, this term of yours of "a fair return to investors" does not seem to have any upper limit, does it, Mr. Coffman?

A. Well, I think that apparently we are talking about different things. As I see it, I was asked to make a study as of a given time, which I did and took all the facts which I thought were pertinent into consideration prior and up to that time.

Now, this figure of $5,064,821 is the figure which I say is necessary based upon those facts.

If you go on to 1942 or any other period you would like to mention and the facts and conditions have changed, as I say, I would like to take a fresh look and see, so that, in specific answer to your question, I would say that my answer is "no", that I am not saying there no upper limit to this at all.

I am sticking to the figure that I have here as being the best of my judgment to ascertain such a figure based on the facts and considerations at the time.

Q. Well, if you have an upper limit, I would appreciate it if you would state the amount.

A. I do not see how you can talk about limits at all, [fol. 6551] Mr. Littman, because I am not making a study where I am prescribing limits. I am merely saying, from the facts based upon the particular theory which I believe to be sound and which I am using, that the company must have this particular annual dollar return to maintain the service to the customers and maintain its credit position.

Q. Now, you used a moment ago the term "necessary" in describing and in characterizing this amount of $5,064,821, did you not?

A. Yes, and I further said that the total amount is, in my opinion, an irreducible minimum to render this service and maintain credit.

Q. Would you say that any amount in excess of $5,064,821 was not necessary for the purpose of satisfying the current capital requirements of Panhandle Eastern upon all of the assumptions that you have assumed for the basis of your study as it is summarized in Chart No. 37?

A. Well, to be sure that we are still talking about the same thing, if all the conditions under which you make your statement were identical with all the conditions that I studied here and made calculations upon, I say, in my opinion, that the Panhandle Eastern Pipe Line Company could maintain its service adequately to the customers and maintain its credit position if it needed additional financing and I say no more.

[fol. 6552] Q. Do you mean that Panhandle Eastern could do that with the $5,064,821?

A. If all the conditions were identical with what I considered here.

Q. And any amount in excess of that would not be necessary for that purpose?

A. I do not see that it would, although if they could get it, they would be just that much better off as the management of the company.

I mean, there would be additional amounts to surplus that, in my opinion, would just make the company that much more secure but they would not have to have it, in my opinion, to maintain the service and to maintain their credit to the public.

Q. And it would not, of course, then be necessary to have the additional—

A. (Interposing) It would not be an unsound managerial condition, if they did have it.

Q. Of course, from Panhandle Eastern's standpoint, it would be well to have more; speaking in the terms that any man in business wants to make as much as he can?

A. Well, or to state it differently, I think it is good, sound business policy for any management to, if they can, have a certain amount filtering through after all charges and expenses to surplus to build up just a good, what you

[fol. 6553] might call margin of safety for contingencies and so on, but if they do not have it year in and year out and can get this necessary income, all right, but if they did have it, it would be just so much additional margin of safety.

Q. Now, in all of this discussion, Mr. Coffman, you have not mentioned the public. We have been, thus far, looking at this amount purely from the standpoint of the investor, have we not, in our discussion?

A. Well, no. I thought I had mentioned the public in these last answers I have given you. I say that at least there are two very definitely interested parties here, the public who is in receipt of the service being rendered by this company on the one hand, and the investors on the other, who are, at present, having money invested in the firm and who, from time to time, may be asked to put in more money, so I thought I had definitely mentioned the public and certainly these figures take that into consideration for the various deductions which you referred to a little while ago are deductions necessary to maintain this service and to render adequate service to the public.

Q. Now, Mr. Coffman, we are, at the moment, presupposing adequate allowances for operations and maintenance and taxes and amortization and we are confining, for [fol. 6554] the moment, our discussion of this $5,064,821 which you have labeled a "fair return to investors".

Now, confining ourselves to just that and assuming that Panhandle Eastern were to earn more than the $5,064,821 under the conditions which you have assumed, from the public's point of view, would it not be true that the excess would represent something in excess of a fair return and something in excess of that which is necessary to Panhandle Eastern for its earned capital requirements, isn't that correct?

A. I would say that as long as conditions are identical or the relative relations of these figures remain the same, that any amount in excess of the $5,064,821 would be available, either if the management or the Commission would allow it, for adequate or additional margin of safety or, if they felt it was not necessary, it could be passed along in the form of a reduction in the charge to customers for service.

Q. Then your answer to my question is "yes"?

A. Well, I was not so sure I understood your question thoroughly, so I would like to stick by my own answer if I can.

Mr. Littman: Suppose we have the question read again and ask you to see if you cannot answer that question yes or no.

[fol. 6555] (Whereupon, the question indicated was read by the reporter.)

Mr. Littman: Perhaps I should use the term "rate payer" rather than the "public."

The Witness: Mr. Littman, I do not want to appear to be talking overmuch or dodging your question, but there is a certain phase of that question which I still do not think is perfectly clear.

By Mr. Littman:

Q. What disturbs you, maybe I can clear it up?

A. You say we presuppose adequate tax allowance and so forth which is perfectly all right except for one thing. I want to make it clear, in my theory as I have applied it throughout, that I am talking about the conditions as I have found them at the time and I am not presupposing, at the moment, that this reserve and that is sufficient because I contend that if conditions change so that the capital markets, among other things, have altered to the point where you can not finance on the same basis that we were talking about here, then I would not want to give my figure until I had taken those new conditions in to make a study so I prefer to stick to my answer, if you [done] mind, because I want to be sure that I am getting across the particular type of approach that I thought I was actually doing.

[fol. 6556] In other words, I am not saying here that $5,064,000 from here on out for Panhandle Eastern is a perfectly adequate or irreducible minimum. I am not saying anything like that whatsoever.

What I am saying is that if conditions should be identical with the conditions at the time I made this study, then I say $5,064,821 looks—

Q. (Interposing) Under those very conditions—

Mr. Wheat: (Interposing) Wait a minute. He did not finish his answer.

The Witness: (Continuing)—looks like a fair amount so that the company could maintain its service to the public and, at the same time, maintain its credit position, yes.

By Mr. Littman:

Q. Now, under those conditions which you have just assumed, if Panhandle Eastern were to earn in excess of $5,064,821, would such excess represent an excessive return from the rate payers' point of view?

A. Well, in that case, depending on how you define "excess", it is more than I think the company needed at the particular time under the particular conditions to maintain the service and its credit position and I would say then it was for the Commission to determine whether or not that excess was sufficient to warrant some reduc-
[fol. 6557] tion in rates or something else.

In other words, I can conceive of the point where even though my figure, which is an irreducible minimum, is more than met that the Commission might well figure that the overage could well be accumulated in surplus as a margin of safety.

Q. Well, now, does this amount of $5,064,821 which you have called a "fair return to investors" in Chart No. 37 include surplus accruals which are adequate, in your opinion?

A. Yes. That is the total amount that is necessary prior to interest charges and the various requirements of the other forms of capital that are presently outstanding in the capital structure of the company.

Q. Does this $5,064,821 which appears in Chart No. 37 represent, in your opinion and under the conditions which you have assumed, a fair return as defined by the United States Supreme Court in the Bluefield case?

Mr. Culton: You aren't reading Mr. Justice Brandeis' definition of fair return, are you?

Mr. Littman: I am using Mr. Coffman's quotations which are shown in his exhibit.

Mr. Culton: I thought when you referred to maximum return you probably had in mind Justice Brandeis' suggestion that there is some leeway in between minimum and maximum.

[fol. 6558] Mr. Littman: I think my question is clear. If this witness does not understand it, I will try to make it clear.

The Witness: Can you give me the reference page, please. What is that page number?

Mr. Wheat: Page 3 of your statement.

By Mr. Littman:

Q. Page 3 of your Exhibit 65 contains a quotation from the Bluefield Water Works and Improvement Company versus Public Service Commission of West Virginia Case.

A. Well, Mr. Littman, my answer to that, I think, is very definitely "yes",—I mean I have just taken time to read it again and I thought it was at the time and I still do think we are following that very closely.

Q. In other words, $5,064,821 represents, in your opinion, a fair return within the meaning of that term as used in the Bluefield Case?

A. And under the conditions existing under the study.

Q. Now, we have from time to time been referring to certain conditions which you [asssumed], in arriving at the figures shown in Chart No. 37.

I should like to know what period of time is contemplated by the fair return shown in Chart No. 37.

Mr. Wheat: You mean whether those figures are stated on an annual basis?

[fol. 6559] Mr. Littman: No.

. . . . . .

By Mr. Littman:

Q. Do you understand the question, Mr. Coffman?

A. Yes, but there again I am going to answer the question and if you don't think I answer it directly, you can correct me.

As you know in the calculations that I made, there were certain estimates made in regard to taxes, an assumption of a change in capital structure in regard to the preferred stock and so forth.

I think there were only three, as a matter of fact, an estimated increase in the raw materials and wages, an [fol. 6560] increase in taxes and the change in the preferred stock, as I recall it. If I am wrong, the study will show.

Q. Chart No. 37, if I may refresh your recollection, does not contemplate a change in capital structure.

A. Then the estimate I made for the change in raw material prices and wages and the change in the taxes which supplement statement—

Q. (Interposing) And the change in the amortization allowance.

A. Yes, correct. Those items made, as I have mentioned, the only changes from the 1941 actual statements as will be shown in my report so that I am not contemplating any period of time for the $5,064,821 for the reason that I have given before.

I still come back to this matter, assuming the conditions which I took into consideration in this study and I am not saying that from here on out for four years or five years or for any other period, that this figure would be the figure at all.

I am saying that so long as these conditions maintain what they are, this is the best judgment that I have in regard to the question and certainly, under present conditions as they are existing, I would not be talking in terms of two, three, four or five years.

I do not think any other analysis would [—] just on the [fol. 6561] basis of what external conditions are doing to all of us. I mean who knows what is going to happen next month or next year or two years hence?

Q. Mr. Coffman, would you say that this figure and these figures shown in Chart No. 37 would hold good for at least a year after June 30, 1941?

A. Well, at the time I would make any such study, I would make it up hoping that the condition would last as

long as the company but the very purpose of my particular theory, if it has any soundness to it at all, is to give some method whereby currently, from time to time, you can make a check on these matters as against the old method, where, as I saw it, it was a rather laborious task to figure a rate base which took months and months of engineering work and then a rate on the other hand and thereby get some combination which would stay for quite a period.

I am trying to develop a theory, if I can, by which it would be very simple to check conditions from time to time to see what actually would be fair at the particular time and I thought I had really got on to that in this study and the approach that I made.

Q. Well, coming back to my specific question with respect to a one-year period, you would not say that these figures would hold good for even one year in the future, would you?

[fol. 6562] A. I would start out with these figures hoping they would hold good for quite a while but, being well aware of the fact if conditions changed materially, it would be very simple to make this study all over again in view of the changes and see what the situation was.

Q. Six months or more have elapsed since June 30, 1941, which was the end period of your actual figures. Would you say that these figures hold good for the six months that have elapsed?

We are looking back in retrospect.

A. I think they are holding fairly well and yet, among other things, there are two material changes that have taken place, not referring to this company particularly but taking companies, generally, most of them have shown further increases in earnings.

That is particularly true of industrial companies as the quarterly statements have come out since June have shown higher earnings.

On the other hand, taking the capital markets as we know and particularly after the Pearl Harbor situation, prices of securities have gone down so here we have two fundamental factors that are most important in any such consideration as this, higher earnings and lower prices.

Ordinarily, that would not make sense to any individual but the fact is, it is a fact. You can read the statements [fol. 6563] every day and see that there is no question about it.

Q. Is your answer to my question "yes"?

A. I say that, generally speaking, I think the figure has held but if I were to make this study right today, it might be a few dollars different.

Q. You would not expect it to be much different if you did make a new study today?

A. I do not think, dollar-wise, it would be a great deal of difference, but some difference.

Q. Perhaps, if I stated to you, Mr. Coffman, the reason for my inquiry in this connection you might be in a better position to answer my question.

I would like to know to what practical use these dollar figures may be put by this Commission? I fear that unless the Commission knows the period of time for which these figures may be used in the future, that these figures may be of little practical value to the Commission.

I, therefore, want you to fully explain your position with respect to the time element inherent and implicit in the figures shown in Chart No. 37.

A. Exactly. Well, I think that does help me quite a bit.

If you will give me just a few minutes to tell you why I used this particular type of approach, I think probably we would both be getting together.

[fol. 6564] Over a good many years in my position in making studies on public utilities, of one kind or another, we have made specialized studies, investors' appraisal of risks and so on, in various phases of rate of return cases.

During the course of that experience, I have had occasion many times to look over reports of others, general approaches that were used, and I have read a good many cases on the subject.

It impressed me as I read these various reports and the cases that the methods that had been commonly used to that date included an elaborate study and investigation, on the one hand, usually from an engineering point of view to determine a rate base.

This, at least, supplies figures to the Commission which would give you something on that angle of the problem. Then, on the other hand, a report of another group, usually economists or people qualified to make the study to make their best determination of a rate, as such.

It seemed to me to leave certain gaps open that well could be fortified and I have been for several years undertaking to discover something that might fit in the middle of all this so if a person said in their opinion the rate is 6, 7 or 8 percent and somebody said the rate base was [fol. 6565] $100,000,000,000 or whatever it was, the multiplication of those two figures, as I understand it, was to give you a fair rate of return, dollar amount.

A good many times, as we know, it did, and a good many times, as we know, it did not.

What I have tried to do is to slip in between those two things, if I can express it that way, and get a method from an economic point of view which would assist in arriving at a dollar figure which, in any one's best judgment, would have to be had to maintain the service adequately to the public and maintain the company's credit position, and I think the purpose of this figure is to do that very thing, so that if, for example, under the old method, as I term it, a multiplication of a rate, so determined by a rate base, let us say as it worked out gave us $6,500,000 under these conditions and I make my study just as I have done and come out with $5,064,000, I say the Commission, in this figure, has a very good one to check the result of those other studies and that was the whole purpose of this particular approach as I used it.

Now, this figure, I say, will hold up to a reasonable extent the same as a determined rate of 6; 6½ or 7 times $100,000,000,000. will stand up and no longer because the reason your other rate changed was because conditions changed and the only reason this will change is because [fol. 6566] conditions changed so that is my explanation of this particular approach.

Q. Is your approach a substitute or a check of the old or, may I say, the classical method heretofore used in rate making?

A. Though appearing egotistical, if I can make the statement, I think this comes a little closer to fitting actual conditions in the world we are living in today than the old, classical approach does.

I won't say it is a substitute but I think it ought to be a part of the over-all consideration, I mean throw this in the hopper with the rest and it may be a very good double check.

Q. Coming back to the time element, I take it from your answers that you are unable to state at this time how far in the future this figure of $5,964,821 which you have called a "fair return to investors" may be projected?

A. Well, avoiding answering your question in terms of months or years, I think this figure will hold up as long as a figure you determine from your old classical approach will hold up and no longer, because the only reason that I know that the results of the old classical theory went bad was because conditions went bad.

The same thing is true of this and no more. I do not see why this figure would not hold up as long as your other [fol. 6567] figure holds up.

Q. Then you cannot state, in days or months or years, can you?

A. No, I say as long as conditions remain relatively as they were here, this figure holds.

Q. How long do you think we may expect conditions to remain as they are, inasmuch as we must make a reasonable [forecase] in the future?

A. Well, of course, on all operations of any kind for any industry for any company, you have got to go ahead operating, assuming that you will be able to meet conditions.

At the present time, I do not see how anyone can figure that they can see much more than six months or a year ahead because the defense program is going to lead us to points that probably none of us suspect and make all kinds of changes and even though that is true, it does not negate, it seems to me, this study at all.

It is just one of those things under which a man has to operate. It makes the operations a little more difficult

and the figuring a little more difficult but we have to go on living just the same.

Q. Well, if we are going to put this study of yours to any practical use, Mr. Coffman, I assume from what you have said that we must make a new study similar to that [fol. 6568] which you have made throughout to get a new answer before acting on the matter in the question of rates in this proceeding, is that correct?

A. No, that is not correct, Mr. Littman, because I just got through saying this figure will hold up as long as a figure you get from your classical procedure will hold up.

If you say I should make another study in six months following my procedure, then I say you should make a study in six months following the classical procedure.

Q. Then this approach is no different from the classical method—

A. (Interposing) So far as the time element and being useful is concerned, not at all.

Q. Now, if I correctly understand this new theory of yours and it is a new theory, isn't it, Mr. Coffman?

A. I do not believe it is a new theory, Mr. Littman. Actually, I think I have been following the Bluefield Case and United Railway versus West and the Solar Electric Case and so on. If there is anything new about it, I think it is merely trying to reduce the thing to tangible form instead of just talking, and I tried to put the thing down so a person could see it in figures and charts.

Q. Then this study of yours is not new?

A. In its present presentation, I have never seen it [fol. 6569] set up in this form but, so far as the actual theory is concerned, I think I have just made a literal interpretation of those law cases I mentioned.

Q. Well, this approach is different from any heretofore used by any other witness, to your knowledge, in a rate proceeding, is it not?

A. From the standpoint of making it all in one collective parcel, I think perhaps that is true. From the standpoint of using a continuous graphic and statistical story is concerned, I think it is true, but so far as the various elements that have been taken into consideration, to the best of my ability, they are just the same elements, as I remember the Bluefield Water Case.

I do not think I took in any more or left out any.

Q. I was not talking about the elements that you claim you considered and which elements others have considered. I am talking about the approach, the method used to arrive at the results.

A. And the form of presentation?

Q. That is right.

A. Yes. I have never seen anything like this before, no.

Q. It is your own idea? A. That is right.

Q. And as you have heretofore testified, you do not [fol. 6570] arrive at a rate of return?

A. No, sir, I arrive at the dollars needed, as I say, to maintain the service to the public and the credit position.

Q. And those dollars remain the same regardless of the rate base that may be adopted by the Commission?

A. Yes, I think so, because you have here a property, a management operating the property. It takes so much for wages, materials, operating expenses and so on.

You must have enough dollars, then, to cover all of those items so that the service will be good to the public and also so you will have something left over for capital to meet the necessary capital requirements.

Q. And do I correctly understand that, in your opinion, Panhandle Eastern Pipe Line Company and its wholly owned subsidiary, Illinois Natural Gas Company, must have, as an irreducible minimum, annual gross revenue of $15,459,545, assuming that the present preferred stock is refinanced, or $15,520,855, assuming no change in the present capital structure, such sums to be available to meet operating expenses, taxes, current capital requirements and provide a reserve to restore invested capital after the gas reserves of the company are exhausted?

A. Yes, sir, so long as conditions remain relatively as they were at the time I made the study.

[fol. 6571] Q. And your ultimate conclusions in this regard are summarized in graphic form in Charts 36 and 37 of Exhibit 65, is that correct?

A. Yes, sir, that is correct.

Q. Now, in arriving at your conclusions as to the so-called "irreducible minimum of annual gross revenue", you made no examination of the books and records of the company, did you?

A. No, sir. In this particular case, I used the published annual reports of the company which were in our files.

Q. And you made no examination of the property itself? A. No, sir.

Q. You are not an engineer? A. No, sir.

Q. You are not a geologist? A. No, sir.

Q. You obtained your information, as you just stated, from the annual reports of Panhandle Eastern Pipe Line Company and the other companies with which it was compared and other public sources, such as records from the Bureau of Mines, Standard Corporation Records, and Financial and Commercial Chronicle, is that correct?

A. That is correct, yes, sir.

[fol. 6572] Q. Now, you undertook no investigation of the original cost or the value of the property itself?

A. No, sir.

Q. Nor have you related your estimate of dollars of gross revenue required to any value of the property claimed for rate making purposes, have you? A. No, sir.

Q. Now, Mr. Coffman, if this new method which you suggest is correct and proper, if the amount of gross revenue can be correctly and accurately determined by your method, then it would not be necessary to determine any rate base at all, would it?

A. It may very definitely be necessary from the standpoint of wanting to keep track of the figure and see what is going on so far as the invested capital of the company is concerned, but the figure that I have gotten is merely one which can be related to these other figures as a matter of checking other approaches.

I am not content to say "use this and none other", but I am perfectly willing to say this should be used along with others to keep the thinking straight.

Q. But you arrived at your "dollars needed annually by Panhandle Eastern to provide service to customers, a fair return to investors and restore invested capital when gas reserves are exhausted", without having first determined a rate base, is that correct?

[fol. 6573] A. Yes, but that does not mean that it was ignored altogether, Mr. Littman, as you know, because in the figures in operating expense you do have maintenance

figures, you have depletion and depreciation figures and so on which, after all, are related to the investment.

As we all know, gas reserves at one time for a company for example, can be estimated to last 75 years. When a person takes a new look, it may be 25 years.

In this particular case, we took what seemed to be a reasonable average of 25 years based upon fact that were available but we did not determine that upon an engineering or geological study.

Q. You do say you had a rate base in mind all the while?

A. I say in this case since I took the figures on depreciation and [depletion], except for the change that I have mentioned in regard to the gas reserves, putting them on a 25-year basis, those figures are related to the rate base.

I did not have to relate it because I did not audit the books nor make a depreciation study. I assumed that the figures published in the annual reports which are certified by reputable public accountants was somewhere within the realm of reason and I took those figures but, at [fol. 6574] the same time, depreciation is tied in with the tangible property, as you know.

Q. But you did not use a rate base in making your determination of the fair return, did you?

A. No, except that, as I say, in these deductions that you were referring to a little while ago, there are certain figures which are related to a base and those, of course, are used in the calculations for income here.

Q. And what is that base to which you have just referred?

A. In this particular case, they were the book figures as shown in the published annual reports.

Q. The investment—

A. (Interposing) As shown in the annual reports.

Q. In other words, you relied exclusively upon the investment in the property as reflected by the company's books, is that right?

A. No, I did not rely heavily but, in so far as a figure for depreciation or maintenance is concerned, those figures were taken from the annual reports of the company and

the reason that that source was used rather than company figures was that, so far as the investing public is concerned, they have only the annual published reports of the company from which to get information.

They cannot go to the company books so I wanted to [fol 6575] place myself in exactly the same position they were in.

Q. You were interested primarily in the investment in the property as reflected by the property accounts of the company?

A. I would not say that I was interested primarily in that because the whole business is wrapped up in one package. I do not see how you can separate it. When you talk about operating expenses, I do not see how you can separate them when there is service to the public.

When there are expenses, then you obviously are considering the public and, after all, of the total amount of the $15,000,000 I am talking about, three-quarters of it is wrapped up in service to the public.

There is only one-third of it that is wrapped up with the investing public, as a matter of fact, less than one-third, so I do not see how you say I lean heavily on the investing public and pay no attention to the consuming public.

Q. Am I correct in understanding that under the method that you used, you can arrive at the total dollars needed and so forth as used by you—

A. (Interposing) May I have that question read?

Q. I have not finished the question. Suppose I start over again and I will read the whole title.

Am I correct in understanding that under your method, it is possible to arrive at the "dollars needed annually by [fol. 6576] Panhandle Eastern to provide service to customers, a fair return to investors and restore invested capital when gas reserves are exhausted", without having first determined a rate base for rate-making purposes?

A. I think that is very definitely possible, yes.

Q. It is true under your method, is it not?

A. That is right.

Q. And if your method is correct and proper, you can determine the amounts of deductions from revenue, to wit,

the operation and maintenance expenses, the taxes and the return of capital when gas reserves are exhausted without an examination of the company's books?

A. I think so very definitely because I just cannot conceive that any company in this country today, whose books are certified by a reputable firm of public accountants, has anything in its published annual reports that is at variance or at substantial variance with the facts and, so far as the individual deductions are concerned, much of it is for various items that are in the nature of wages, payments for materials and so on and for which you definitely know, from the amounts paid out, what the sums are.

I do not see why you have to audit the books. They have already got a firm of accountants out there doing it and they have certified their statements. I do not know what good it would do for me to go all over that.

[fol. 6577] Q. You do not see any point to an examination of the books by the Commission for the purpose of ascertaining the propriety of the claimed expenses for operation?

A. Well, that is a different question, Mr. Littman. If the Commission has any question about the propriety of any items or the way any accounts were conducted, of course it would be the only thing to do, to examine the books.

In my particular case, obviously, that was not my assignment and I took the published annual reports which were certified by reputable public accountants as being reasonably close to facts but, if the Commission has any question about any of the figures, the only way I know to get it is to go to the company and get into the books.

Q. Mr. Coffman, you have a whole rate case, this entire rate case, within the confines of the first and last pages of your Exhibit 65, have you not? A. That is correct.

. . . . . .

[fol. 6578] Q. Mr. Coffman, I take it from your previous answers that you consider the method which you used to arrive at the dollars needed annually by Panhandle Eastern to provide service to customers, a fair return to invest-

ors and restores invested capital when gas reserves are exhausted was a fair, proper, equitable and correct method?

A. Yes. I go further than that, Mr. Littman, and say that it is really an [indispensible] part of such a study.

From an economic point of view I feel that a rate study without this is considerably inadequate.

Q. And you think that the use of the methods which you have employed which are set forth in Exhibit 65 can give the correct answer to the question of how many dollars are needed annually by Panhandle Eastern to provide service to customers, a fair return to investors and restore invested capital when gas reserves are exhausted?

A. Yes and, further, I say that without such study any other result that you get is still faulty for a lack of such considerations as I have made.

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[fol. 6579] A. I said that I had used, so far as the company was concerned and so far as companies with which this company were compared, most of those figures coming from annual reports come from certified statements.

Q. Well, now, will you refer us to the statement which you used for the company's figures for the year ended June 30, 1941?

A. On the table for Chart No. 13—that is at the end there, there is no page number on that—is presented a table captioned, "Panhandle Eastern Pipe Line Company, Consolidated Statement of Profit and Loss for the 12 Months Ended June 30, 1941", and the footnote there is from the company's report of June 30, 1941.

Q. Was that an audited report?

A. That particular statement may not have been audited because it was not an annual report, but my statement to you was that the figures came from annual reports.

If I used an interim figure, there is no annual report for that. I am not inconsistent in what I say.

Q. I wanted to be clear on the subject. A. Yes.

Q. You were not endeavoring to say that you used audited reports throughout but that wherever the interim figures were used those were not audited figures?

A. Those would not be the published annual reports, [fol. 6580] but I would like to enlarge my answer to point

out that I have considered, as you know, a number of years, full years, in comparisons here and those were from the annual reports in most cases and the interim statements are comparatively few in number.

Trial Examiner: May I suggest that you make careful reference to your exhibit numbers in your references? The last one I assume was to Exhibit 65.

The Witness: The last one was to Exhibit 65, yes.

By Mr. Littman:

Q. Well, now, Mr. Coffman, if your method is correct and fair and is the proper way of determining the required amount of gross revenue for rate making purposes, then we are simply wasting our time in this hearing going through the process of determining a rate base and determining the sums to be allowed as operating revenue deductions, are we not?

A. Well, of course, if I answer you "yes", Mr. Littman, it is a pretty strong statement and one that is so strong as that; it seems to me, should have some explanation.

I say this: That so far as I know the cases to date, anyway, have been predicated upon the old classical approach and if there have been inconsistencies or erroneous results gained therefrom; which there have, it seem to me, which accounts for the various cases now before the Com- [fol. 6581] mission, I should say that at this point perhaps it would be helpful to look at this kind of an approach.

I do not see how one can determine the final result without doing it. For example, to turn the answer around, if you will tell me whatever rate base the Commission has determined to set, I have no trouble, as you know, from my figures in determining what the rate should be.

In other words, if my figure is the best judgment that can be made on this particular thing of $5,064,824, if I know the base, it is a simple arithmetical calculation to find out whether that is 6, 7, or 8 or some fraction in between or lower.

Q. But, Mr. Coffman, assuming that your method is 100 percent correct and proper and fair, then there would be no need for the Commission to do anything but to accept your estimate of minimum gross revenue required for

Panhandle Eastern Pipe Line Company and adjourn these hearings without the necessity of determining a rate base and investigating the propriety of the various expenses claimed. Is that correct?

A. No, that is only partially correct. Let us put it this way: If the Commission had satisfied itself, to use your language, as to the propriety of the individual accounts in the company's books and after such investigation had [fol. 6582] found that those figures were proper throughout, then my answer is "yes, I think this is the answer" and it would continue to be the answer except if in your investigation you found this account or that account improper as to some of its contents.

Otherwise, I say this is the figure.

Q. In other words, your study is subject to check with respect to the accuracy as to the amounts of deductions from revenue which are assumed by you in your exhibit?

A. Well, let's use this phrase, it is so in so far as the deduction is applied to the Property Account.

In other words, if the Commission would study the Property Account and find that the figures upon the books or later contained in the annual report were definitely about as accurate as you could get and the calculation for depreciation based thereon was right, then my figure stands.

Q. Then, original cost or prudent investment would be accurate from your point of view, would it not?

A. Well, I would say that both factors have to be considered very definitely. The original cost, presumably, has been accumulated on the books. Also, for a period of time of the company's operations there have been additions to surplus which are, also, a part of the accumulation of earned surplus.

The prudent investment theory, so far as I see, I con- [fol. 6583] sider when I talk about the capital markets, because there I am trying to ascertain what people reasonably, under the facts, feel they could pay for a particular security that was issued, which is, after all, representing the capital behind all these assets. I think they both have to be considered.

Q. Well, are you sponsoring the prudent investment theory by this method?

A. I am sponsoring my theory and nothing else, Mr. Littman. That is about the way I would like to put it. I did not make an original cost study but I did make this study and so far I am willing to defend it.

Q. If the company's accounts, as shown on the books, property accounts reflect no water, then those accounts would reflect the original cost, would they not?

A. No, there is a qualification on that statement from an accounting point of view. There are certain items, as you know, in the construction of any property or plant wherein there may be a question at a given time as to whether you will capitalize the item or whether you will charge it to operating expense, and there may be some place along in any company where certain items were capitalized and certain were not.

If a policy had been followed throughout which in its inception was believed to be sound and henceforth had been [fol. 6584] followed consistently, I would say yes, but if there had been places along the line where at one time certain things had been capitalized and other times where they had been charged to expense, I would say it might be worth an investigation to see.

Q. With those exceptions which you have named and which are, for the most part, minor, your answer to my question would be yes? A. Yes, that is correct.

Q. Well, are we together on this: That under this method that you have presented in Exhibit 65 you determine the amounts of dollars needed annually without the use of a rate base?

A. Well, I do not think that is a fair way to put a question for this reason: A rate base, after all, is the sum total of dollars that go into the property and upon that certain [deductible] items such as depreciation, depletion and maintenance relate to that base and yet those items are not balance sheet items but they are operating statement items.

To the extent that those items are included as deductions, it seems to me that you cannot say "with no relation to a base"; you have to qualify it, at least to say to those de-

ductions that were made upon the Property Account, property, as I use it here, taken from the statements.

[fol. 6585] Q. With those exceptions that you have named, there is no rate base utilized?

A. That is right and, as I say, other than those exceptions I do not need one. If you will tell me what the base is, I will tell you the rate.

Q. And to the extent that you have utilized a rate base, as you have just described it, you have utilized the investment in the property?

A. The investment in the property as recorded in the annual reports of the company.

Q. Yes. Is that right? A. Yes.

Q. In your opinion do those reports reflect something very close to actual legitimate investment in the property?

A. Well, so far as I know they do, Mr. Littman, but as I say my answer is not predicated upon an audit or engineering investigation. I have made the assumption that, the reports having been audited, the figures were reliable and I have so accepted them.

Q. In order that there be no misunderstanding on this score, Mr. Coffman, am I correct in understanding that we are agreed that if in these proceedings it should be established that any of the figures upon which you relied for "operations and maintenance", "taxes" and provision for [fol. 6586] amortization are shown to be less than the amounts which you show in Chart No. 37, then the amounts would have to be reduced accordingly, would they not?

A. Yes, if by an investigation that you make you find any variation, of course, it will make a change.

Q. And that would, of course, reduce your "Total Dollars Needed" accordingly?

A. If you change one variable, you change them all.

Q. So your answer to my question is "yes"?

A. That is right.

Q. A moment ago I used the term "amortization". I was referring to the figure of $2,541,034 shown in Chart 37 of Exhibit 65 which is labeled "Return of Capital When Gas Reserves are Exhausted".

Did you so understand me?

A. Yes, I did.

* * * * * * * *

[fol. 6587] By Mr. Littman:

Q. Now, you show on this chart that $2,541,034 is required annually to return the invested capital to the investors when the gas reserves are exhausted. Is that correct?

A. That is correct.

Q. What is the amount that was charged for this purpose by the company in the year ended June 30, 1941?

A. The amount was $2,316,560, as shown on Chart No. 31 of Exhibit 65.

Q. In other words, your provision for amortization is $224,474 more per year than the amount which Panhandle Eastern Pipe Line Company charged on its books for depreciation and amortization for the year ended June 30, 1941. Is that correct?

The Witness: Will you read that statement, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: The figure should be $234,474. I think you said, $224,000. It is $234,474.

By Mr. Littman:

Q. Mr. Coffman, if you will look at Chart 37, you will note that your figure is for "Return of Capital when Gas Reserves are Exhausted", $2,541,034.

A. That may be a typographical error. Let me look at the table supporting that figure.

[fol. 6588] Your figure is correct. That is $224,474 and the figure on Chart No. 31 is a typographical error and should be stated as $2,541,034.

Mr. Wheat: Mr. Examiner, may that correction be made, that typographical error?

The Witness: It is the supporting figure, Mr. Examiner, on Chart No. 31, that is a typographical error of $10,000.

Trial Examiner: The correction may be made in the copies of this Exhibit 65.

By Mr. Littman:

Q. Am I clear in understanding that your provision for depreciation, depletion and amortization is $224,474 more

per year than that which Panhandle Eastern charged for those purposes for the year ended June 30, 1941?

A. Yes, that is correct.

Q. Now, will you please state how you arrived at this figure of $2,541,034 for depreciation, depletion and amortization?

A. That figure is explained in the statement opposite Chart No. 31 in Exhibit 65 wherein I state in the second paragraph:

I made no actual survey of the properties nor did I question the adequacy or inadequacy of the annual provision for depreciation, depletion and amortization, however, in order to determine the dollar amount that would be necessary to return capital to investors when the company's [fol. 6589] reserves are exhausted I adopted the assumption that the company's reserves would last for an additional 25 years as indicated by Ralph E. Davis in Registration Statement No. 2-4579, filed November 18, 1940, and computed by a straight line method an annual provision necessary to return $63,775,839 of invested capital over such period.

Mr. Wheat: Pardon me, Mr. Littman. I believe that the witness ought to recalculate that amount.

We have been trying to calculate it and I do not believe that there is that error that he just mentioned. I think we ought to be sure as we go along. I think this is a mere matter of arithmetic.

By Mr. Littman:

Q. Mr. Coffman, perhaps this would be helpful, suppose I tell you my understanding of the figures and then you tell me whether I am correct or not. A. Yes.

Q. In arriving at the figure of $2,551,034 shown in your Chart No. 31 you used as the invested capital the sum of $63,775,839. A. Yes.

Q. And obtained the amount of dollars for amortization by dividing 25 years into the sum of $63,775,839. Is that right? A. That is right.

[fol. 6590] Q. Now, is it correct to say that your $63,775,839 represents the invested capital based upon your proposed changed capital structure?

Mr. Wheat: May I suggest, Mr. Littman, that the witness look at Chart No. 36 as well as Chart No. 37 in connection with Chart No. 31 and, I think, if he then will divide his figures, he will find that the correction heretofore made should not have been made in Chart No. 31.

The Witness: Yes, that is correct. On Chart No. 36 the assumption is made that there is a refinancing of the preferred stock.

By Mr. Littman:

Q. Yes.

A. And on that figure the item captioned "Return of Capital When Gas Reserves are Exhausted" is $2,551,034.

Q. Now, am I also correct—

Mr. Wheat: (Interposing) Pardon me, I think the witness still had a part of his explanation to finish and there is another figure on the text in reference to Chart No. 31 that he ought to explain at the same time.

The Witness: To continue, the figure on Chart No. 37 of Exhibit 65 is calculated on the basis of the present capital structure without refinancing the preferred stock, so that the item "Return of Capital When Gas Reserves are Exhausted" is correctly stated in the amount of $2,541,034, [fol. 6591] so that the statement that you make about the overage of one figure against the other would apply if you were talking about Chart No. 36 and my figure, as I originally gave it, would apply if you are talking about Chart No. 37.

Mr. Wheat: In that connection, I wonder, Mr. Coffman, whether you hadn't better check the figure in the text with reference to Chart No. 31 so that we will be sure that we have the correct figure.

The Witness: Yes, sir.

Well, there the figure is stated in the last full paragraph in the fourth line from the bottom, that the estimate of $2,511,034 as the annual amount necessary to restore to investors when the reserves are exhausted should be $2,551,034 as shown in the specific Chart No. 31.

Mr. Wheat: May that correction be made, Mr. Examiner?

Trial Examiner: Those corrections should be made in the exhibit.

. . . . . .

By Mr. Littman:

Q. Well now, am I correct in understanding that you arrived at your sum of $2,541,034 shown in Chart 37 and called there "Return of Capital When Gas Reserves are Exhausted" simply by the dividing 25 years into the sum of $63,525,839 of invested capital?

[fol. 6592] A. Yes, sir.

Q. Now, will you please turn to Chart 26 and state whether that chart shows the invested capital figure of $63,525,839 which you used for purposes of arriving at the amount of amortization? A. Yes, that is the figure.

Q. Now, this $63,525,839 figure which you used for your amortization basis is simply the total of all of the outstanding bonds, preferred stock, common stock and surplus, is it not, as of June 30, 1941?

A. Yes, what we have termed the "Invested Capital" as of June 30, 1941.

Q. Well, what amount of earned surplus is included in that $63,000,000-odd figure?

A. Well, I cannot give you the breakdown figure. I have the table which supports Chart No. 26 shown at the end of the Exhibit No. 65, but there the figure is grouped.

Mr. Wheat: I have here the report from which the witness obtained that group figure from which he can obtain the breakdown which is not shown on this chart, if you would like to have him do that.

Mr. Littman: It is perfectly satisfactory for the witness to make reference to any working papers to refresh his recollection.

(A document was handed the witness.)

[fol. 6593] Mr. Culton: The source of it, Mr. Littman, is shown at the bottom of the table, Chart No. 26, from which he made his computation.

Mr. Littman: I am quite certain that the same figure can be obtained from Exhibit 48, Page 2.

Mr. Wheat: I feel sure that is correct.

Do you have that figure now, Mr. Coffman?

The Witness: Yes, I have it.

Mr. Wheat: What is it?

The Witness: $9,074,122, which is calculated by taking from the condensed consolidated balance sheet as of June 30, 1941, unaudited, of the Panhandle Eastern Pipe Line Company and its subsidiary company's common stock in the amount of 807,367 shares issued and shown on that balance sheet as $20,184,175, subtracting the latter amount of dollars from the total figure, $29,258,295, which shows the $9,074,122.

In other words, I have eliminated the common stock figure at its book figure.

By Mr. Littman:

Q. The surplus shown on Page 2 of Exhibit 48 in Line 42 as of June 30, 1941, is $9,074,120.08.

A. That is correct. I said $122, it is $120, that is correct.

Q. Now, in your opinion, can the amount of depreciation, depletion and amortization be accurately and correctly determined simply by dividing the total invested capital by a given number of years?

[fol. 6594]

A. Well, so far as I know, Mr. Littman, that is the way it has always been determined. So far as your statement is concerned, it is dividing one figure by another.

Now, as to whether you divide by 25 or 30 or some other figure, that depends upon the most competent person's judgment who does the job to tell you what the years are.

In this particular case I have assumed that Mr. Ralph E. Davis was one of the leading engineers in the country on this particular situation and I would accept his judgment as being about as good as any I knew.

I mean, after all, it is not just as if you have picked a figure out of the air. There was a thorough survey made and probably as important a statement as you can find, namely, a Registration Statement, and if that was his best judgment of a thorough and adequate study, I do not know any other figure to use for division.

Q. Well, is it your opinion that the proper way for determining the amounts to be allowed for depreciation, amortization and depletion is by dividing the total invested capital represented by the total of the outstanding securities and surplus by a given number of years?

A. Well, of course, talking about invested capital on [fol. 6595] that basis is about the same as talking in terms of a fixed property and equipment, and on that basis I do not see why, if the basic figure is accurate to begin with, the calculation would not be as reasonable an approximation or as accurate an approximation as one can make.

Q. But so far as you are concerned, the proper method is to divide the invested capital, as you have done in your Exhibit 65, by a given number of years.

A. That is one acceptable way. If you are questioning me now on various methods, there are other methods, but the straight line method is one acceptable way that has been used over the years.

Q. You consider the method which you have used as the most accurate one?

A. I think to date that it is as accurate as any other method that has been devised.

I, further, will go on and say that where the method has been used on that base it hasn't changed to some other in the course of the company's history.

Q. Do you think your method is the straight line method?

A. Well, ordinarily, I believe the phrase "straight line method" is applied where you will divide a base figure by a number of years and come out with the same exact amount per annum for the estimated length of life, yes.

[fol. 6596] Q. And the method that you have used is what you would call a straight line method?

A. Defining it as I do where, in terms of depreciation and so on, a straight line method is a procedure wherein you take the same amount at each year, that is it.

Q. Now, I believe you stated that you used 25 years in making this calculation because of a statement that had been made by Mr. Ralph E. Davis in connection with Registration Statement No. 2-4579 filed November 18, 1940, with the Securities and Exchange Commission. Is that right?

A. Yes, sir.

Q. Now, I believe the statement of Mr. Davis, upon which you relied, also appearrs in your Exhibit 65 in one of the early unnumbered pages of your exhibit which contains some text under the heading of "Synopsis of History and Development of Company" and under a subheading called "Property—Gas Reserves".

I believe it is the second unnumbered sheet of that text. Do you find the statement?

A. Yes, I have it.

Q. And the statement as shown there reads as follows:

"The combined gas supply controlled by your company in the Amarillo and Hugoton fields is, in our judgment, adequate to supply its present markets and any reasonably anticipated increase in the gas requirements of said markets for a period of more than 25 years."

[fol. 6597] Is that correct?

A. That is correct.

Q. Why did you use 25 years rather than a period of more than 25 years?

A. Well, because of the fact that you had to have a specific number of years in order to get an annual charge.

Since Mr. Davis had made that statement in terms of those years, I took that figure as being the one which apparently he felt could be a possible determination of exhaustion of reserves and since he mentioned no other figure I had no other figure to use.

Q. Certainly he indicated that the period was going to extend beyond 25 years, did he not?

A. Well, it may, I do not know whether it will extend one or five or what and because of the fact that he, himself, said 25, I stuck with his figure on the theory that he knew pretty much what he was talking about.

Q. Well, so far as you know, it may extend another 25 years, is that correct?

A. Well, it might but I have an idea that if he thought it would he would have said 50 years or more.

Q. Well, the purpose for which Mr. Davis' statement was presented would have something to do with that, would it not?

[fol. 6598] A. I do not quite know what you know. If he has made an engineering and geological survey, ascertaining to the best of his knowledge and belief what is the capacity of the reserves and their length of life, I presume it would not make much difference as to the nature of the study.

If he made the same kind of study, regardless of purpose he would get the same kind of answer if conditions had not changed.

Q. You made no further investigation of the matter of gas reserves other than to take the minimum period set forth in the Davis statement, is that correct?

A. We made no other study than exactly what is shown here, that is correct, and accepted the 25-year period as the basis of calculation.

Q. Are you aware of the fact that Mr. Davis has on occasion testified before the Securities and Exchange Commission that the life of these fields might extend as long as 50 years?

A. I do not believe that I have seen any such statements, no.

Q. Have you heard of any such statements? A. No.

Q. Would it make any difference to you if he had so testified?

[fol. 6599] A. Well, if to the best of his knowledge and belief he can give some specific years other than what I have here used, I would use that figure.

Q. You would revise your estimate?

A. Yes, if I had any better figures.

Q. You, of course, are not vouching for the accuracy of this 25-year estimate? I really should not call it a 25-year estimate. You are not vouching for the accuracy of the 25-year figure, are you?

A. I am using that figure and citing the source of it as the only figure that I had for the particular purpose since I had not made a detailed study myself, as I am not competent to make such survey.

Q. Mr. Coffman, isn't it true that, as has been the experience of the oil industry, estimates of natural gas reserves have increased as gas production has expanded?

A. Well, yes, the estimates have been increased. There have been new fields from time to time discovered and

there have been new methods of drilling, deep-well drilling and so forth which have in some cases given a larger supply, but, on the other hand, it is equally true that in places like Pennsylvania some years ago when they had gas there they were making unusually large estimates and suddenly the wells went dry and many investors lost large sums of money, so that it is one of those things, I believe, where [fol. 6600] you cannot reduce to a fixity at all because it is not known.

Q. Well, is the statement a correct one which I just made, to-wit, that, as has been the experience of the oil industry, estimates of natural gas reserves have increased as natural gas production has expanded?

A. Yes, I think that is very true, but I would want to qualify, again, the statement that even though there are those estimates we, also, know that reserves will exhaust.

Q. Mr. Coffman, is it correct to say that the question of over-all reserves need be given little weight for most companies in appraising the value of their securities?

A. Well, my feeling on that, Mr. Littman, is this:

The reserves of any natural resource have to be given weight, but in the last analysis those reserves are worth no more than the product can be converted to a tangible product and sold at a price on the market.

What that price will be remains to be seen. For instance, I know as an investment analyst that for many years oil companies have not been the most profitable companies and yet they have had hundreds of millions of barrels of crude oil in the ground.

The reason for that is that when they converted the crude oil to refined oil and gasoline and tried to sell it to [fol. 6601] the customer in the market, they wound up with prices that caused losses instead of profits.

The same thing goes for natural gas, so that the reserves in terms of M.c.f. is one thing, reserves of gas in terms of M.c.f. times a price is something else again.

Q. Well then, is the statement correct that I made a moment ago, that the question of over-all reserves need be given little weight for most companies in appraising the value of their securities?

A. It has to be considered very definitely and we do consider it, but in the last analysis in an appraisal of securities, it comes down in the investor's mind to whether or not the company earns or loses money. You cannot find many investors that are willing to invest in securities, even though a company has large reserves, if they cannot be convinced that such reserves can be pulled out of the ground and sold to the using or consuming public at a profit.

Q. Well, you still have not answered my question, whether the statement that I made is correct. Is it or is it not correct?

A. Well, the statement, to answer you directly, is what I have just given you, what we consider, but you say, "more or less" and I refuse to answer the question because I do not think it can be done that way without the explanation I have given you.

[fol. 6602] Q. If I would ask you the question this way, to answer true or false to this question, namely, the question of over-all reserves need be given little weight for most companies in appraising the value of their securities, would you say it is true or false?

A. Well, I would say that it was false if you wanted it on that basis.

Q. Isn't it a fact, Mr. Coffman, that Standard and Poor's, of which you are a Director and officer, has predicted a conservatively estimated life of at least an additional 40 years for the gas reserves of this country?

A. Well, I do not know the specific document to which you refer, but we have from time to time passed comments upon the life of reserves, yes.

Q. You do not recall the matter to which I just referred?

A. I do not know the particular statement because we are producing hundreds of bulletins, as you know, and there are statements from time to time in various of those.

I would not want to say that I remember the particular statement that you are talking about.

Q. Well, does your company, Standard and Poor's publish a document called, "Industries' Surveys, Utilities, Electric, Gas and Traction, Basic Survey of the Electric, Gas and Traction Industries"?

[fol. 6603] A. Yes, we produce that.

Q. What is the purpose of this survey?

A. Well, the purpose of that survey, the particular one you are referring to is classified as "basic", which means that we write that particular sheet once a year in which we try to summarize all the more available statistics on the industries that you mentioned, namely, natural gas, electric and so on, utilities for such use as can be made by the investing public or anyone that might be interested in such study.

Q. Well, do you [intent] this to be published as reliable information and, also, advice for the investors, is that correct?

A. Well, we believe, as we qualify there in our qualifying note some place on the bottom of the last page, I think it is, it to be reliable. We do not guarantee any of it because it comes from various and sundry sources, press releases and some field investigation on our part, annual reports, interim reports and so forth, so it is no better than the source, in other words, from which we took it.

Q. Well, the note to which you have referred reads as follows, "The factual information contained herein has been derived from sources which are believed to be accurate but is not guaranteed. Opinions and forecasts are based upon careful analysis but are, also, not guaranteed [fol. 6604] and are subject to change without notice."

Is that the statement to which you just referred?

A. That is the statement to which I just referred, yes.

Q. Well, with that qualification, do you believe what is written in these industry surveys, published by Standard and Poor's?

A. Yes, that is as good information as we have.

Q. Now, there really is not any essential difference, is there, between the sources of the data upon which your company as the publisher of the "Industry Surveys" relies and that upon which you have relied in this proceeding for the purposes of your study which is contained in Exhibit 65? Is that right?

A. Yes, there is one fundamental difference, because here, as I have stated, we have gone back in every case to the original published annual report or whatever it was, confining it to the Panhandle Eastern Pipe Line Company.

That is a broad case covering every single company and industry mentioned in there and is not confined to one given thing at all. The result is that when we do it on this basis we get an exhibit of whatever the number of pages are here, whereas you are covering three different industries with about a hundred or so odd companies in 10 or 12 [fol. 6605] pages. That is one way to look at the difference.

Q. Well, I am going to read from Page U-1 16, Standard and Poor's "Industry Surveys" issue of May 14, 1941.

This page has the heading, "Survey of the Gas and Traction Industries, Natural Gas". Then there appears another heading called "Reserves", and, also, a heading called "Estimates Increased".

This statement reads, "As has been the experience of the oil industry, estimates of natural gas reserves have increased as gas production has expanded."

Now, you have already stated that you agree with that statement.

A. That is correct.

Q. "The latest authoritative estimates of natural gas reserves in this country are around 100 trillion cubic feet distributed between the individual fields as follows:—"

Then, there appears a small tabulation in which the figures are headed, "Estimated Reserves, Trillion Cubic Feet", "Texas Panhandle and Oklahoma, 22.2, Kansas 18.0, California, 34.3, Gulf Coast and Louisiana 16.2, and Appalachian 7.0, Rocky Mountain 2.2, North Central 0.1, Total 100.0.

"On the basis of present consumption these estimates (which will doubtless prove conservative) would indicate a life of at least 40 years for the gas reserves. Thus, the question of over-all reserves need be given little weight [fol. 6606] in appraising the value of their securities."

Now, did you rely upon any of this information and data which I have read in arriving at your estimate of the 25 years as your period of amortization?

A. No, I did not and I do not think that has any bearing on this whatsoever. I would just eliminate that from consideration.

I say that for this reason: That in that particular case we are talking generally about an over-all industry and those estimates there come from here, there and you, from no individual, but they are just a figure that someone put out to shoot at.

In this particular case we concentrated on the Panhandle Eastern Pipe Line Company and we were trying to get references in every specific instance that applied to this company, and none other, where we were talking about the company and that is the reason we referred to Ralph E. Davis' statement in the Registration Statement mentioned because he, there, was not talking about the Amarillo and California and so on territories, he was talking about the Panhandle Eastern Pipe Line Company and that is what we are talking about.

What you find in there, what you have read, has nothing to do with this company, so I say eliminate it.

Q. You fail to see any significance or any relation [fol. 6607] I should say, between statements which I read and the problem of determining the period of amortization for Panhandle Eastern Pipe Line Company. Is that right?

A. Where we have good figures, by a reputable man, on this company I say that those figures should be relied upon rather than general statements in regard to the overall industry, such as you read from the service my company produces.

Q. Well do you know whether the Davis' estimate is based wholly upon the present reserves controlled by Panhandle Eastern Pipe Line Company and its vendors?

A. I was under the impression that the statements that he made there were such as to give him a reliable basis upon which to make a statement as to about the term of years Panhandle Eastern could see, so far as their own reserves were concerned.

Q. But you do not know, I take it from your answer, whether Mr. Davis based his estimate wholly upon present

reserves controlled by Panhandle Eastern and its vendors or not?

A. I am not sure on that point.

* * * * * * * * *

[fol. 6608] By Mr. Littman:

Q. Would it make any difference to you if you knew that Mr. Davis had based his estimate of "more than 25 years" wholly upon the reserves controlled by Panhandle Eastern and its vendors and had excluded from consideration the additional reserves which are available to [fol. 6609] that company, particularly in the Hugoton Field?

A. Well, Mr. Littman, on the basis of your statement I think we have to segregate two things. We have, first, as I understand it, the company which owns certain acreage and upon which estimates have been made as to M. c. f.'s that are available under the group.

Then, they are situated in a territory where there are many other hundreds of thousands of acres in which there are reserves which at some time might be tapped if their own reserves go out, but to get at these other reserves they must do one of two things, either buy the acreage and carry it until they need it or else at the time their own reserve exhaust make some arrangement whereby they can buy their necessary gas requirements from someone else, but which in one case will give you a much higher capital investment.

If you buy or if the best you can do is to lease or pay for M. c. f. as you take it, additional operating expenses to buy the commodity will result.

I mean it is not as if suddenly, if the estimates are accurate, you can pick up so many more M. c. f. without any additional capital expenditure.

Q. Well, without intending any criticism of the company's method of operation, it is a fact, is it not, that there is available to Panhandle Eastern additional re- [fol. 6610] serves which may very well extend its life far beyond the 25-year period which you used? Is that correct?

A. Very definitely there are those acres and that available M. c. f.'s but the company cannot bring that into its

invested capital picture until it either lays out a large sum of money to buy the acreage or else contracts by lease to take over the acreage.

In any case your invested capital is going up by the amount of those items.

Q. Would your same answer apply with respect to the amortization of your main pipe line?

A. Well, in the case of the pipe line it seems to me that you have got a different situation. Where you are talking about the pipe line, you are talking about a mental situation and not a particular natural resource in the ground.

I do not quite get that comparison.

Q. You are dealing with dollars that have been invested in the main pipe line?

A. That is correct.

Q. Which, incidentally, makes up the larger portion of [you] invested capital?

A. That is correct.

Q. Is that right?

A. That is right.

[fol. 6611] Q. Now, if the life of these fields is going to extend beyond 25 years, you certainly would use a term larger than 25 years for purposes of determining amortization of the pipe line, would you not?

A. Well, that depends upon the circumstances. After all, where you build a pipe line and issue bonds, you have certain other calculations to make.

Q. Well, let's assume, in order that we may determine your method of procedure, that the life of the Hugoton Field was 50 years.

What figure would you use for amortization purposes in this case?

A. Well, that is partly determined, as I say, by the way the pipe line was financed. If the pipe line was financed by bonds, you have to have provisions in your bonds as to how the pipe line will be amortized and there is relationship of that to the gas supply and that depends partly on how the conditions are worked out at the time.

Q. In other words, if I correctly understand you, it is the provisions in the bonds that govern the period of amortization?

A. Well, not altogether. What I am trying to point out is that you have reserves on the one hand to consider, you have the pipe line as a different thing to consider and you are going to finance the pipe line.

[fol. 6612] Now, that takes money and this company got it from the public. Now, it depends upon conditions at the time the money is secured from the public as to what kind of provisions you have to put into the particular security to get the market to supply these funds.

Now, if the market at the particular time is such that the reserves seem adequate and you can see a full life for the pipe line, they will try to work out the amortization on that basis, but if they cannot they will make such adjustment in there as will give such added additional protection to bondholders as that given group of monied people, so to speak, require in order to put their funds in to finance the pipe line.

Those things are delicate matters that have to be worked out. They are not straight arithmetical matters, nor can a man sit down and tell you the answer right now.

There are many angles to that thing that have to be figured out and it is not a simple mathematical calculation.

Q. Well, yours is a very simple mathematical calculation in Exhibit 65, is it not?

A. Certainly, but I am not starting a new company here nor is the Panhandle Eastern. The company is in existence, the facts are all known.

Q. Do you claim any real accuracy for this figure of $2,541,034 for "Return of Capital When Gas Reserves are Exhausted"?

[fol. 6613] A. Let's put it this way: I stand 100 percent on that figure until someone produces an engineering estimate which proves conclusively that it is wrong.

Q. I would like to understand your reasoning in arriving at this figure. I am asking you to assume that the

gas reserves of the fields in which Panhandle Eastern is operating are going to last 30 years instead of 25 years.

What term would you then use for purposes of determining the proper amortization allowance?

A. Mr. Littman, I thought I had answered that by saying that if Ralph E. Davis or some other reputable engineer had stated some other figure than 25 as directly applied against the Panhandle Eastern, under my method I would have applied that figure.

Now, because of the fact that Ralph E. Davis said 25 years, I took it. He said, "25 years or more", but the fact that he said "25" indicated to me that he thought there was a possibility it might be fully exhausted by then, it was a possibility.

If that is the case, I think there is every argument for using that figure. If he had thought 50, he would have said 50 or more or 30; he did not say that.

Q. And for purposes of this study you were not interested in whether there were other gas reserves available [fol. 6614] than those reserves which Panhandle Eastern presently owned and controlled?

A. Mr. Littman, I know there are other gas reserves. I have been all through this territory, not making a survey, but I have traveled through the country and know something about its layout and so on.

My statement is that although these other acreages are available with their various estimated reserves, when the time comes that they are needed before Panhandle Eastern can have access to them their acquisition is going to cost this company more money.

Now, I say either they will go out and buy the acreage, in which case their invested capital goes up so you have more to amortize and you may come out with exactly the figure of $2,500,000 although you are talking of $125,000,000 invested capital instead of $60,000,000 or some other figure, or, if they do not go out and buy the acreage, they then must go out and lease it, in which case they have charges against operation for leases to acreage they are not now using which will cause their cost to go up.

Now, you cannot, it seems to me, talk in terms of those things and still be talking in terms of $63,000,000, because the $63,000,000 is no longer your base.

Q. Well, are you assuming that Panhandle Eastern is going to cease its exploration of gas after June 30, 1941, [fol. 6615] and stop leasing new acreage?

A. No, but by the same token I see no reason for the management to go out and take on another 100,000 or 500,000 acres with whatever the estimated M. c. f.'s are if they do not need the gas right now.

Why should they pay the additional cost of carrying all that acreage if they do not need it, unless they are fearful that next year or the year after their own reserves will be gone and they must tie this up before someone else gets that same acreage?

The only point I am trying to make is, Mr. Littman, that you cannot go out—all these acreages are around and the M. c. f. is there—and get it and still have $63,000,000 on the books.

You are going to have $63,000,000 plus.

Well, you tell me the figure and the years and I will divide that total and I do not know whether I get $2,300,000, $2,500,000 or what.

Q. Well, Mr. Coffman, if your advice is followed, the company is going to have $2,541,000 each year, a large portion of which is intended for the purpose of replenishing its wasting assets, is that correct?

A. That is correct.

Q. What does it intend to do with that money?

A. It eventually, when the time comes, whether it is [fol. 6616] that money or some that they have segregated for refinancing, will go out and buy such additional acreage as is necessary.

Q. And to the extent that $2,500,000 is returned each year under your method—well, of course, the property is depreciating to that extent each year, is it not?

A. It is being exhausted to that extent.

Q. It is being exhausted to that extent?

A. Yes.

Q. And this amount measures approximately the amount of that exhaustion, does it not?

A. As we have used it, it does.

Q. And so your rate base or your base of invested capital need not change at all through the years, need it?

A. Well, no, that is just absolutely not true.

Q. What is wrong with it?

A. This is wrong with it: The company, as I see it, is not static at one point and does not remain that way for 25 years, let us say, nor say, "Well, we have washed ourselves up, let's start over".

They are maintaining the property day in and day out as we go, price levels are changing, everything else is changing, they go over and buy some new acreage they are wanting to deal on.

They may take a few thousand acres and so on it goes day in and day out. It is not a question of where you have [fol. 6617] a situation there and we say, "Go for 25 years, if it is exhausted we will start clean and fresh". This thing goes on hour by hour during the working day.

Q. I think I understand your theory now, Mr. Coffman. Your amortization term is based, according to your theory, upon the amount of reserves presently controlled by a given company and not upon the life of the fields in which that company operates. Is that correct?

A. The amount of the acreage that is controlled by the company and the actual reserves is the only investment that that company has.

Q. The answer to my question is, yes that is your theory?

A. That is exactly right. I do not believe it can be otherwise. That is the investment of the company. I would like to amplify that answer on this score, again, to repeat myself, that you have, as you go on expanding your reserves although they are there, to make further investments and those investments may cost you more or cost you less and I do not think anybody can dodge that issue.

[fol. 6622] PAUL B. COFFMAN a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Coffman, at the close of the last session, we had been discussing your allowance for an annual provision to return capital to investors when gas reserves are exhausted which is shown in Chart No. 31 of Exhibit No. 65, and I believe you testified that the sum of $2,551,034 shown in Chart No. 31 as "Projected" annual amount, was obtained by dividing 25 years into the invested capital in the amount of $63,775,839, is that correct?

A. Yes, sir.

Q. And is my understanding correct that the $63,775,839 represents the total of the outstanding securities, to-wit, bonds, preferred stock, common stock and surplus as [fol. 6623] of June 30, 1941, under your assumption of refinancing?

A. Yes, that is correct, or as shown in Chart No. 27 of Exhibit 65.

Q. Before going to the next question, I would like to make certain my understanding is correct that this annual provision of $2,551,034 which you term "dollars needed annually by Panhandle to return capital to investors when gas reserves are exhausted", is for the purpose of covering the annual depreciation, depletion and amortization allowances?

A. That is generally correct. It is the amount annually that would be necessary to fully compensate capital for the amount invested in the estimated length of life which, in this case, was taken as 25 years.

Q. Well, you intended it to cover all three items which I named, to-wit, depreciation, depletion and amortization?

A. That is correct.

Q. When did Panhandle Eastern Pipe Line Company first [connence] its operations?

A. Well, as I recall, it actually commenced operations in the early part of 1934. The company was originally formed in 1932.

Q. I hand you a copy of Exhibit 49, which is the com- [fol. 6624] pany's income statement per books as presented

in these proceedings by Mr. Watkins, and ask you to refer to that for the purpose of refreshing your recollection on the subject.

A. Well, from this Exhibit 49 on Schedule I, it is indicated that there were revenues as of December 31, 1932, covering the period April 1 to December 31, of that year.

Q. That indicates, does it not, the company was operating at least for a time in 1932?

A. That is right. It was formed in 1932, but when you said "operating", I interpreted that to mean when it really got under way as a pipe-line company and I believe it was in 1934 that it really began to function.

Q. Panhandle Eastern Pipe Line Company was incorporated sometime prior to 1934?

A. I think I can give you the exact dates on that question.

Q. I believe you show that in your exhibit?

A. The company was incorporated in 1929, December 23, as the Interstate Pipe Line Company and it adopted its present title on May 9, 1930.

Q. At any rate, it is your understanding that Panhandle Eastern Pipe Line Company did not commence operations as a pipe-line company until 1934?

A. No, that was not what I meant. It was organized [fol. 6625] at the date I have read but, actually, for a company which was transporting gas long distances on a profitable basis, the company really did not get under operation, as I remember it, that is, fully, until 1934 and it was not until they had the Detroit contract in 1937 that it went on to a large-scale basis.

Q. Mr. Coffman, I hand you a copy of Exhibit 52 which was presented in these proceedings by Mr. Watkins, which shows the gas plant of Panhandle Eastern Pipe Line Company and subsidiary companies for the years 1930 through June 30, 1941.

What is shown on that exhibit to have been the amount of gas plant as carried on the books of the company in 1930?

A. A total of $44,432,256.86.

Q. What is the total for 1931?

A. $56,414,134.

Q. That indicates, does it not, that Panhandle Eastern Pipe Line Company had a substantial investment in gas plant in those early years, is that correct?

A. Yes, that is correct, but when I said "operations", I was looking at it more from the income standpoint and from the study we have made here when we started tabulating the facts in 1934.

Q. Mr. Coffman, when I used the term "operations", I had reference to that term as it is used in the Com-
[fol. 6626] mission's Uniform System of Accounts.

Now, there is not any question about the fact that Panhandle Eastern had commenced operations within the meaning of the Uniform System of Accounts as early as 1931, is that correct?

A. No, that is correct.

Q. Now, as of what date do you commence amortization of the total invested capital as reflected in Chart No. 31 of Exhibit 65?

A. You are referring now to the $2,551,034?

Q. Yes, sir.

A. In that particular case, the calculations that were made were to determine the annual amount of deduction that would be taken from gross operations and that figure is merely the annual charge, irrespective of what time it was taken.

I mean the annual rate, after all, so far as the operating statement is concerned, has nothing to do with the number of years that you are talking about, once you have discovered what the particular figure is.

Q. You use a period of 25 years, do you not?

A. I use that merely for the purpose of determining the $2,551,034 and then when I proceeded to make up the projected figure which is shown in Chart 37, that was the amount that was used as the deduction from gross revenue
[fol. 6627], for a return of the exhausted capital.

Q. But your 25-year period commences as of June 30, 1941, does it not?

A. Because it was based upon $63,775,839, which was the amount at that time under the assumption that I made.

Q. In other words, your term of years commences, as applied by you, to run from June 30, 1941, and your base to which you apply your years, which is the total invested capital as represented by the outstanding securities is also as of June 30, 1941, is that correct?

A. That is correct.

Q. Well, if you were making this study as of June 30, 1942, what would you do in respect to making your determination of annual provision for returning capital to investors when gas reserves were exhausted?

A. Well, I will answer that in two parts:

So far as the method is concerned, I would do exactly the same thing.

So far as the figures are concerned, I would want to review the situation. If I discovered that 25 years continued to appear to be the proper and most reasonable estimate to use, then I would use 25 years against the then-invested capital of the [of the] firm.

If it were different than the $63,775,839, I would take into consideration that portion, but it must be clearly [fol. 6628] understood that in the $2,551,034, there have been past accumulations, obviously, for the prior years in which the firm operated because, obviously, you begin to amortize from the time you have any exhaustible reserves which are actually exhausting as you proceed to operate, so that the $2,551,034 is not an entirely new figure.

It is merely a sum total of figures that you have gotten as the conditions within the business have changed from year to year.

In other words, as you add on more reserves and exhaust more reserves, naturally the figure changes, but a great portion of the $2,551,034 was already taken into consideration.

Q. And I understand you to say that you would, in making this study as of June 30, 1942, first do the same thing that you did here, namely, take the outstanding total invested capital as represented by the outstanding securities and surplus and divide by how many years?

A. I said 25 if that was still the best estimate that was available.

Q. You would still use 25 in 1942?

A. Well, no, there is where I apparently do not make myself clear.

I am saying that if from one year to another conditions in the business have changed so that you have added addi-
[fol. 6629] tional invested capital, that portion has to be amortized. Obviously, already in the $2,551,034, you have considered the capital that was existent up to June 30, 1941.

You have already established a rate on that so you continue to apply it and the annual rate for that portion will remain the same but, for the additional capital that was added between June 30, 1941, and June 30, 1942, you will make a study of that to see what the amortization rate is.

Q. Do I understand you would or you would not use the same method in 1942 that you used in your Chart No. 31?

A. Yes, I am using the same method but not necessarily the same figures for all of it because, if the total capital is changed, obviously, there is a new factor to be considered.

Q. Assuming there were no new estimates of gas reserves and no capital additions, how would you compute the allowance as of June 30, 1942?

A. If there had been no changes at all since I had started out with a straight line annual deduction of $2,551,034, there would be a deduction for $2,551,034 as of June 30, 1942.

Q. Now, in other words, it would be 24 years divided into the invested capital figure?

A. The net invested capital figure.

[fol. 6630] Q. That is, another way of stating what I understand you to say, is that you would deduct from the net investment figure the $2,551,034 which had been allowed for the year ended June 30, 1942.

You would deduct that from the gross investment figure and you would then divide the balance by 24, would you not?

A. From the property standpoint, yes, that is what it amounts to.

Q. You just stated that would be the way to do it from the property standpoint. What would be the way to do it from the standpoint of invested capital?

A. I do not recall stating at the time of the direct testimony, but there are two ways that one can calculate invested capital.

You can take the net property plus the intangibles and working capital, or you can take invested capital. In this particular case, I took the invested capital because, using the annual reports, it seemed to be a simpler way to proceed; so when you are talking about exhausting the property, you, as referred to in the language used as depreciation, depletion and so forth, apply that against property as such, and not against capital because, after all, as you take these deductions, the charge which you make is first converted into cash and from there is then converted into other assets as you continue as a going business and that [fol. 6631] continues on as long as the firm continues to exist.

Q. Are you or are you not claiming that the method followed by you is the correct method for rate-making purposes?

A. I say it is one very good method for rate-making purposes, absolutely. I do not want to be misunderstood on that.

Q. And you say it is proper and correct to do it in the way you suggest?

A. Yes, as a method.

Q. Well now, let us say that you are making this study, as of June 30, 1942. Assuming that the estimate of gas reserves which you used and adopted from Mr. Ralph E. Davis' study was the same, how would you go about making your allowance?

The Witness: Would you read that back, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: On that, if all factors remained identical, as I say, I have already, as of the date of this study which is a year preceding the date you are assuming, established an annual rate of $2,551,034, and having elected to take

a straight line deduction, that amount for that identical capital will remain the same for 25 years unless, in the meanwhile, new conditions developed where it would be indicated that the relationship of the figures changed and [fol. 6632] you would have to make a change in your accounting.

In other words, for example, suppose that we, after the tenth year, let us say in 1950, found that the reserves were all gone on this particular amount that was included in the $63,000,000.

Obviously, the accounting method would have to be changed at that point and adjustments to surplus made and so forth, to take into account that fact but, assuming the conditions are identical from which I start and assuming that year after year these reserves go on in the ratio of 1:25, then the amount is $2,551,034 for that amount of capital in the business as of June 30, 1941.

Q. Under the assumption which you just made, the investors will have received $2551,034 for the preceding year, is that correct?

A. Well, it really isn't that simple, Mr. Littman, because, as I have just tried to indicate, when you have a going concern, if you make deductions of $2,551,034, you do not take that out and pass it right back to the original people that invested the original capital, as you know.

The deduction, as I say, for all practical purposes goes through the cash account. That cash is reinvested in the business to keep it a going business.

Part of that cash may be for new equipment, new booster stations, new gas reserves, leases or acreage and so forth, [fol. 6633] so that no, they have not got it back directly.

All that has been done is to allow for it to keep this property going to cover the capital they originally had but, in any event, the investors who put money in this business certainly want to be assured that there will be sufficient assets there in some form to cover the amount of their original investment in what seemed to be the reasonable estimated life of the property when they first made the investment.

Q. Well, let me ask you this: Would it be proper, in making this study as of June 30, 1942, to do what you have done here, namely, to divide the total outstanding securities and surplus, meaning invested capital, by the remaining life, according to Mr. Davis' study and as interpreted by you of 24 years as of that date?

A. Well, apparently I am unable to get across to you a distinction that has to be made.

Q. You will help me a lot if you will state whether that is what you would do in June 30, 1942.

A. The only way that I can say that it is, is to say that, if every single condition and factor remained identical with June 30, 1941, I will say "yes", but that is an impossible situation or at least I think so.

Q. All right. You would then, under the conditions which you have described, divide the $63,775,839 of in-
[fol. 6634] vested capital by 24, is that correct?

A. No, that is not correct, because you have just already, in the first year, taken out $2,551,034, and you have said that the length of life is 25 years.

You are taking one-twenty fifth out of each year, so the second year you certainly could not divide the original amount of invested capital by 24 and get the same result.

Q. So you would deduct the $2,551,034 from the $63,775,839 in June 30, 1942, before you make your division?

A. That is correct.

Q. By the 24 years?

A. That is correct, but that still leaves the question wide open because it is not that kind of a situation and never could be unless you had a straight liquidating firm.

Q. I presume your answer would be the same with respect to the next succeeding year, being 1943, and you would then make the deduction of 2 times the $2,551,034 for the two years, is that correct?

A. That is correct.

Q. And then you would divide the balance by the remaining 23 years?

A. Yes, still qualifying such answer by the statement that assuming all conditions remain 100 percent identical throughout.

[fol. 6635] Q. And if you got down to the very last year of the purported life of this property, that is, down to

the 24th year, you would have only $2,551,034 left to be amortized in one installment, is that right?

A. If all conditions remained identical, nothing had been added or taken away from the property, that would be correct.

Q. And it follows that after ten years have elapsed from June 30, 1941, you would deduct $25,551,000 from your $63,775,839 and divide that balance by the remaining 14 years, is that right?

A. That is correct but I qualify my answer again to say that the assumption that you are making just is not in accordance with any of the facts and cannot be with a going concern.

It is impossible, so I do not see that the point you have been making is pertinent to the particular analysis and the method of approach that I have used.

Q. Are the deductions which I have suggested in accordance with the theory of straight line depreciation?

A. They are in accordance with that, but you have set up conditions which cannot possibly exist, namely, that all these conditions must remain identical, one year to the next.

Q. Do you mean to say that the straight line theory [fol. 6636] cannot be applied?

A. No, I do not say that at all, not in the least.

Q. Well, you do not deny that in each succeeding year you have got to make a proper allowance for the diminution in the property as represented by the annual provision to take care of the wasting away and the amortization of the property, is that right?

A. Yes, I agree with that.

Q. Now, will you tell us where you have made such a deduction in your calculation which is reflected by Chart No. 31 for any depreciation which has accrued on this property down to June 30, 1941?

A. I am not sure that I understand the whole of your question but, as much as I understand of it, Mr. Littman, the answer is this:

It seems to me that your question applies principally to the balance sheet, as I understand it, in which I think you are driving at the point that there has been a re-

serve for depreciation and amortization built up on whatever the invested capital was from the April date in 1930 over to June 30, 1941.

Now, the balance sheet item is one part of the equation but from the standpoint of Chart No. 37 which we have been discussing and the annual deduction of the $2,551,034, that is, from an operating income and expense point [fol. 6637] of view, wherein I was trying to determine the amount of dollars necessary that the management would have to have to render adequate service to the public and maintain the credit and that amount of $2,551,034 has already been explained as to calculation and would be the amount that would continue to be deducted.

In other words, I still come back to my original explanation that whenever you deduct from operating expenses any items which are in the nature of a return of capital, you do not actually, in most instances anyway, return that capital directly to the investors.

What you do is have that amount automatically flow through the cash account to be reinvested in the business and it is continuously being reinvested in the business so long as you have a going concern.

If you arrive at any point where you are then becoming a liquidating concern, presumably with no new investments, you proceed to pay out as quickly as you can wind up the business.

Mr. Littman: I am going to ask that the question be read again.

(Whereupon the question indicated was read by the reporter as follows:

"Q. Now, will you tell us where you have made such a deduction in your calculation which is reflected by Chart No. 31 for any depreciation which has accrued on this pro- [fol. 6638] perty down to June 30, 1941?")

The Witness: Then I will have to ask you, if you can, to elaborate your question, as to what your meaning is. If I understand your question to mean one has a reserve for depreciation, amortization and so on set up upon the books, the answer is "yes."

If you further mean has that amount or should that amount be deducted from the gross property, the answer is "yes", but those two answers relate to balance sheet considerations only.

I was not, in Chart No. 37, talking about the balance sheet. I was talking purely about the profit and loss or operating statement. I think I have answered your question directly, as I understand it.

By Mr. Littman:

Q. Are you suggesting that the company's operating statement and balance sheet cannot be reconciled for rate-making purposes?

A. Not in the least. I do not see that I even raised that question.

Q. In my opinion, Mr. Coffman, you have not answered my question. I asked you to point out where, in your calculation of this $2,551,034, the annual amount which you claim is required to return capital to investors when gas reserves are exhausted, I asked you where, in that simple [fol. 6639] calculation, did you make any deduction for the depreciation that had been accrued in the preceding years for that same purpose?

A. And my answer to you is that you are talking about balance sheet consideration, whereas I, in Chart No. 37, am talking about profit and loss considerations and I cannot show you in Chart 37 because there you talk about one year and one year only at a time, so far as these figures are concerned and which is true of any profit and loss statement, as you know.

Q. I take it your answer to me is that you cannot do that, namely, you cannot show me where you made any deduction for the preceding year's depreciation, depletion and amortization?

A. My statement is for this particular calculation there are certain operating expenses necessary to render the service, that is, the service to the consuming public and maintain the credit position of the company.

Those are purely operating considerations which are usual and always expressed in a profit and loss statement and each of the items taken there were the best estimate of the annual amount that had to be set aside to maintain

this service and maintain the credit and you cannot find, in Chart 37, any accumulations of anything just the same as you cannot find, in any profit and loss statement that I [fol. 6640] ever saw, any accumulations except those shown for the twelve months or except as the statement varied in the twelve months.

A profit and loss statement is not to accumulate anything except the current charges accumulated in the twelve months period.

Q. You cannot tell me wherein you made the deduction?

A. None was made in Chart 37 because here we are talking about the annual allowance in the profit and loss statement since this particular profit and loss statement covered the particular period of a year.

Q. Now, Mr. Coffman, as you have indicated, it would not be proper to, ten years hence, divide the total invested capital, as represented by the outstanding securities and surplus, by the remaining purported life of 15 years, is that correct?

A. No, that is not correct because—maybe your intention is all right, but I do not think your question indicates it—because I have said and I repeat again that the only way your statement could be true is if all conditions and factors remained identical but that is impossible in a going business and all I am trying to do, Mr. Littman, is to indicate that as you go ahead and you subtract, deduct something for amortization of capital in one year, if you trace that through the operating statement in any profitable firm, it is converted to cash. That is the first step.

[fol. 6641] Then the cash is used for operating purposes in the firm to make new capital commitments, maintain the property and so forth, so that, day in and day out, this thing is changing so that at the end of ten years, you do not divide by 15 because you do not have the same amount.

It is impossible in a going concern. It is just absolutely impossible.

Q. Well, are you suggesting that this method of yours of simple division of the remaining years in the total invested capital is not the proper method from here out?

A. I have not said anything like that up to the present.

Q. Let's see if I can understand you now.

What you did here in this proceeding was to take the total outstanding invested capital as represented by the outstanding securities and simply divide by the remaining number of years. Is that right?

A. Divide by the estimated life at that time, yes.

Q. Now, would you do that same thing next year or would you not, if you were making a study for rate-making purposes?

A. I think I have answered that question once before in these terms: That if next year came to pass and the best estimate of the length of life that I could get at that time was 25 years, I should apply 25 years against any [fol. 6642] increments which had been added to the invested capital from June 30, 1941, to June 30, 1942, but for that particular amount of invested capital which had already been on the books and remained on the books, there would be no reason to change the rate unless I found that the 25-year engineering estimate which was made originally was seriously at fault and I say that in a going concern, you must divide those two things because day in and day out there is additional capital worth in this investment:

It was $44,000,000 one year and it was $55,000,000 the next and it is now up to $63,000,000. There are items being added all the time.

Q. And you would, next year, make a deduction of $2,551,034 under those conditions, is that right? Would you or would you not, under the conditions which you assumed of no change?

A. Just a moment. I would deduct the $2,551,034 as a deduction relating to the original $63,775,839 but, if from June 30, 1941, to June 30, 1942, there had been changes in the business so that the invested capital was then, let us say, $65,000,000 in round figures, that additional $2,000,000 which had gone into the business would be computed like we computed it originally, that is, so far as the method is concerned.

We take a look at that particular portion and if the best [fol. 6643] engineering estimates you could get were still 25 years, all right. I would start then and take one-twenty fifth but if in that one-year interval, engineering estimates indicated there had been a change so that it should be one-fifteenh or one-thirtieth, let us say, I would use that and I believe that is in keeping with sound accounting procedure.

Q. I would like to discuss with you for a moment the theory of straight line depreciation, Mr. Coffman. Have you applied the straight line method of depreciation here?

A. In this particular case, so far as the return of capital is concerned and so there won't be any confusion in phraseology, I think I understand accounting language but maybe I am wrong; but the phrase "straight line", whether applied to depreciation or anything else, as I understand it, means that you know the depreciable asset value at hand.

You make an estimate as to its length of life. You divide that value by that length of life and thereby get an annual deduction which is the same figure year after year for the estimated length of life.

That is called a straight line method. That is what I understand to be a straight line method.

Q. Now, assuming that a property commences operating with $35,000,000 of invested capital and it has a 35-year over-all life, am I correct in stating that when that property is 10 years old, it has a remaining life of 25 years [fol. 6644] and that under the straight line method, $10,000,000 will have been accumulated in its reserves?

A. That is correct.

Q. And when you come to the tenth year of the life of this property, you use what figure for purposes of making your division?

A. Well, Mr. Littman, it all depends. I could do one of two things and what is commonly done in all accounting practice that I know about is, you set up on your books an asset account originally which had $35,000,000 in it and, in order that you can keep track of that accurately throughout the 35 years, the $35,000,000 remains as a debit to that particular property account.

In the meanwhile, you take out the one-thirty fifth each year and put it in a reserve. For all practical purposes, that reserve is merely the credit side of the property account.

However, it is not shown that way. It is shown on the liability side usually of a statement or, more accurately stated, it is shown as a credit to a reserve account and that reserve, however you show it, whether you show it on the liability side or whether you show it as a deduction on the asset side makes no difference but, nevertheless, you take one-thirty fifth of that original amount until the original amount is exhausted.

[fol. 6645] Now, if you wish to call it net and make the deductions each year, then the number of years you go you will divide the net amount by one—whatever the number of years left to go is—although I have seen very few situations where anybody has handled their accounts that way.

Q. Well, Mr. Coffman, when the property is 10 years old, you certainly do not divide the original amount of $35,000,000 by the remaining life of 25 years, do you?

A. No, you established a rate when you started and if the rate proves to be accurate through the years, you continue to use it.

The only time you would ever change it is when a new engineering investigation would indicate that the original estimates are all wrong and then at that time surplus accounts are adjusted, reserve accounts are adjusted and a new rate is determined for the then net balance remaining in the asset account.

Q. Now, under my hypothetical case of a $35,000,000 invested capital at the beginning and an over-all life of 35 years and under the further assumption that the property is now 10 years old, you are still deducting $1,000,000 a year, is that right? Can you answer that, yes or no?

A. Thirty-five years, $35,000,000, $1,000,000 a year, that is right.

Q. Yes, and the balance of the property account, that [fol. 6646] is, the net investment as of that 10th year is $25,000,000, is that correct, under the calculation?

A. At the end of 10 years, $25,000,000 balance, that is correct.

Q. Would it or would it not be proper, Mr. Coffman, to divide the original amount of $35,000,000 in the 10th year by the remaining life of 25 years?

Can you tell me whether it would or would not be proper to do that?

A. You mean divide the original amount by the number of years then left to run?

Q. Yes.

A. No, it would not be proper.

Q. That is what you have done here, in effect, haven't you, Mr. Coffman?

A. No, not at all and I will take your own hypothetical situation and show you why, I think.

If you have $35,000,000 that you invested originally in a property, as I say that goes into a property account as a debit to some particular asset account.

At the end of 10 years, so far as that particular original $35,000,000 of property is concerned, if the rate of $1,000,000 per annum proved to be correct in each of those ten years, $10,000,000 has gone. It has been exhausted.

However, when you make a deduction in your operating [fol. 6647] statement for amortization or depreciation and such business is operating at a profit, you have a sales account, as you know, which gives you gross revenue.

From that you make deductions. You have a resulting profit. The gross revenue was an account receivable. The account receivable was paid in cash. The cash was invested in other various means of operation so that, as this firm went on, whereas you say they have only $25,000,000 left, it is very possible and most likely that by the flow of that cash, the $10,000,000 has been reinvested in the property so that there is still $35,000,000 worth of property in that business and not $25,000,000 and that belongs to the original owners and I contend that is 100 percent sound and is the way every business in this country is operated.

Q. What you are saying is that the company is, in reality, entitled to have amortized the net investment in

property used and useful in the public service, is that right, over the remaining years?

The Witness: Will you read that question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: I think, if I can state what I believe to be what you are getting at it will help me if I am correct in this understanding.

If you mean to say that the original investors in this [fol. 6648] property put in $35,000,000 and that when depreciation has exhausted the $35,000,000, irrespective of whether or not the items that went through the reserve are reinvested in the business, that the original investor no longer has any equity in the business, then my answer to you becomes very clear.

After all, the original capital was supplied by bonds. So far as I am concerned, that is a contract with the public. It was done by preferred stock which is also a contract with the investing public and the common stock and if those securities were sold to the public on a basis where it was not understood that, at the end of 20 years, they were to be paid off and everybody would be free and clear, I say that the theory does not hold unless it can be established in court that that is perfectly all right.

As I understand, most of these investments that are made the people put in the money with the understanding, except where it was a bond which said, "At the end of 50 years", or whatever the maturity date was, that they would be paid off, all of the other investment of the common stock and preferred stock and so forth was to stay invested and as the items go through reserve and are reinvested, that is exactly the contract that those people made.

Until it can be squared off that the preferred and common holders are paid and they are told, "Here is your [fol. 6649] money back or until you have the money back there is no investment", I do not think there is a leg to stand on.

The capital is still there. That is my contention and although you have a reserve, it was reinvested. It is a work-

ing asset in the business and a working capital in the business.

The people still wanted their interest. They wanted a common dividend or preferred dividend and they have received that but that was not a return of capital and the only place that would be true would be in sulphur companies where they have followed the accounting procedure of an exhaustible asset and they are told, "This dividend you are being paid, one part is return of capital and the other is by way of income" and if you have not stated that, it seems to me it has to be settled in the courts before you can start doing it.

Q. Are you assuming that every dollar of this depreciation reserve which has been accumulated by Panhandle Eastern Pipe Line Company has, in fact, been reinvested in the business?

O. It is all in the business right now, Mr. Littman.

Q. Some of it is in the bank, isn't it?

A. There is some cash in the bank but every business has to have cash in the bank to operate.

Q. Some cash—do you know how much cash there was [fol. 6650] as of June 30, 1941?

A. I think so. Yes, the company, as shown in the condensed consolidated balance sheet as of June 30, 1941, and this is the unaudited statement of Panhandle Eastern Pipe Line Company and its subsidiary company, had cash of $7,042,691.65 and special deposits of $1,489,127.23.

That, let us say, is a total of around, well, about $8,550,000 in round figures.

Q. Now, it is your testimony that the investor is entitled to have the amount of $8,500,000 of cash in the bank amortized, too? Can you answer that yes or no and then explain it, if you wish?

A. I will answer "yes" on this basis, absolutely. This cash is not as if it were a gold bar down in the basement of the Federal Reserve System which we can plant there and forget.

They have this amount of money but deductions are being made every day and additions are being made every day. For a firm that has an invested capital and doing ap-

proximately $15,000,000 of business, I say has to have this much cash.

Further than that, this company has mortgage bonds of one kind or another outstanding. That is merely a working asset.

Unless person or the Commission can show me that amount is excessive, I say absolutely it is a working asset [fol. 6651] and should be included in the figure.

Q. And an allowance should be made to amortize this $8,500,000 of cash in the bank over the remaining 25 years?

A. Because—

Q. (Interposing) Is it "yes, because"?

A. Yes, because it may be next week I am ready to put in a new pipe line or a new looping of the pipe line. It may be in a booster station.

Q. And it may be declared in dividends too, is that right?

A. All of the corporate assets which are liquid can be declared in dividends, if the management believes that the conditions of the firm are such that a dividend is warranted and the amount they select seems to be reasonable.

To put it the other way, the figures I have used for capital requirements is going to be even higher because the people do not invest their money to get no return.

If the Government wants to finance these utilities so that the public won't have to do this, that is another matter. That is something else again.

Q. Do you think that dividends should be amortized too?

A. I do not see what your question means. Dividends are a cash outgo and a company that has mortgage bonds outstanding of the amount that you have here, has preferred stock [outstandin] in the amount you have here [fol. 6652] and common stock, certainly if it wishes to maintain its credit to the public must conduct its operations that there will be something available by way of current earnings from time to time to meet the interest unless they want to default on their securities, to meet the dividends on their preferred stock unless they want to

go into arrearages and something for common and that is not an unusual corporate practice in any man's language.

Q. It is your testimony, I take it, that working capital must also be amortized over the purported life of the gas reserves?

A. I say that the amount of invested capital which is represented by money put in by investors or someone must be accounted for and, in order to maintain your credit position and to get it back, these various items must be taken into consideration.

Q. And then your answer to my question is "yes"?

A. On the invested capital, yes.

Q. And is your answer "yes" on the working capital, that it must also be amortized?

A. It is not in the invested capital, Mr. Littman. In invested capital never, to my knowledge, there is never included the sum total of working capital.

After all, it is current assets against current liabilities, [fol. 6653] whereas the invested capital is bonds, preferred stock and common stock plus surplus.

Q. Didn't the investor put up money for working capital as well as for the other property?

A. He did and originally it was accounted for, but as you go along and make earnings or make losses, those proportions are changed and you have to take that into consideration. It is not a status quo figure at all.

Q. Whatever working capital is included in the invested capital figure of $63,775,839 which you used, you have provided for amortization, have you not, to that extent?

A. To the extent that it is there, I think I can make a calculation to find out what it is, as a matter of fact.

Q. All right.

A. On the table for Chart No. 11, I show there the calculations related to your question, up through 1940 from 1934, and show the property, plant and equipment of $64,854,956 less the retirement, renewal, depreciation, amortization reserves of $9,189,501, giving the net property of $55,665,455 and then the intangibles which include the gas sales and purchase contracts of $2,051,434 and below, the net working capital which amounted to $2,205,097, giving the total invested capital of $59,921,986.

Now, to the extent that the net working capital is in-
[fol. 6654-55] volved, all right, but that is not the $8,000,-
000-odd you were talking about in cash.

[fol. 6656] Q. Well, what was the net working capital figure as of June 30, 1941? I think your table for chart No. 14 will show that.

A. The net working capital as of June 30, 1941, was $4,661,875.

Q. And you are amortizing, in your calculation, that amount of net working capital which you just named; is that correct?

A. Yes, I am, because I say that that is absolutely needed to keep the wheels turning in this business and maintain it as a going concern, and it represents active invested capital.

Q. And in addition to amortizing the amount of $4,-661,875 of working capital, you also require a return upon it, do you not?

A. What kind of a return? Do you mean a return of it?

Q. A return upon it. That is, you tell us how much money is required to raise securities to cover that amount as well as the other amounts in the property accounts.

A. Yes, I do, because although that may be liquid, Mr. Littman, it is just absolutely as essential to keep this business going as a booster station or the eight hundred or more miles of pipe line or the gas reserves down here. The gas reserves without the pipe line and without this par-
[fol. 6657] ticular margin of working capital couldn't function.

Q. Well, doesn't it strike you that $4,661,875 is a rather large amount of working capital for a company of this size?

A. Why, as of June 30, 1941, I wouldn't say so. At that time there were questions, for example, about further needs for looping the line, other expenditures that were going to have to be made, the question of the Michigan Gas Transmission system and so forth. It doesn't seem to me that that is anything out of line at all, included in current working capital requirements. Further than that, I point out that as all balance sheets show, they give you the figure as of a given moment of time. As of June 30, 1941, it might have been $4,661,875.

Q. Well, it was.

A. It was, and by July 15th, it might have been $1,500,000 or $6,500,000. In other words, it is a going concern. There are these debits and credits to the cash account, so you can't say that it is static.

Q. But your amortization figure is predicated upon the use of $4,661,875 of working capital; is it not?

A. It is based upon a total of $63,775,839.

Q. Which includes $4,661,875 of working capital?

A. That is correct. And I say that that is absolutely necessary, because that net working capital is just as indispensable as bricks and mortar to a booster station or a pipe in the pipe line or gas in the reserve.

[fol. 6658]

Q. Now, you claim that the company is entitled to earn a fair rate of return upon that amount of $4,661,875 of working capital and you have made such provision, have you not?

A. I say that they have to make a return on that basis in order to keep the wheels turning in this business and offer adequate service to the public and maintain their credit position, yes.

Q. Do you know Mr. Sperry, treasurer of Panhandle Eastern Pipe Line Company?

A. Yes.

Q. Have you ever discussed the subject of working capital with him?

A. No, I have not.

Q. You didn't ask him what he thought was the proper requirement for working capital for Panhandle Eastern Pipe Line Company, did you?

A. No; as I said originally, I took all of my figures directly from the published annual reports of the company with the exception of the June 30, 1941 statement which was published from an unaudited statement, because it was an interim statement.

[fol. 6659]

Q. How much weight do you attach to Mr. Sperry's opinion on the subject of the amount of working capital required by this company?

A. I would attach considerable weight to it. After all, Mr. Sperry is an operating official and knows the ins and outs of the business.

Q. If I were to advise you that Mr. Sperry has testified in these proceedings that the proper amount of work-

ing capital for purposes of these proceedings is $1,519,000, would you be willing to reduce your amortization allowance, would you want to make a revision of your estimate?

Mr. Culton: Just a minute. We object to that question because it is not in accordance with the facts.

Mr. Littman: What is wrong with it?

Mr. Culton: Because he testified that that was the minimum, the absolute minimum and you used the word "proper." That is the difference.

Mr. Littman: Well, that is the amount that he testified should be allowed in this proceeding.

Mr. Culton: No; he testified that that was the absolute minimum. He did not say it was the proper amount. That is my only criticism of it.

Mr. Littman: Of course, the record will speak for itself. Of course, you would like to get 20 million if you could get it. But he said that that was the amount that they required for their purpose, and in my judgment, [fol. 6660] which, of course, is not testimony in this case, that is plenty high.

By Mr. Littman:

Q. By the way, your testimony also has the term "irreducible" in it, doesn't it?

A. That is right.

Q. Well, your irreducible minimum is what, for working capital?

A. I don't know what that is. I say this: that the $15,520,855 based on the present capital structure as shown in chart 37 is the irreducible amount of operating revenue that the company must have, or $15,459,545 based upon the refinancing of preferred stock as shown in chart No. 36 is the irreducible minimum that the company must have and in either event so far as the credit position of this company is concerned, it must have for current capital requirements an irreducible minimum of $5,064,821 on the present capital structure basis or $4,993,511 based upon refinancing of preferred stock, and I have not made any statement as to detailed items other than that, but I have said that those were irreducible minimums.

Q. Well, of course, your $2,541,034 shown on chart No. 37 for return of capital when gas reserves are exhausted, is one of your "irreducible minimums"; is it not?

[fol. 6661] A. That is the invested capital of the figure which has been mentioned, $63,775,839.

Q. And it includes 1/25 of the four million odd dollar figure of working capital which you have used for purposes of this proceeding, does it not?

A. That is correct.

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By Mr. Littman:

Q. Mr. Coffman, does Panhandle Eastern Pipe Line Company provide for any amortization of working capital on its books?

The Witness: May I have that question read?

(The pending question, as recorded above, was read by the reporter.)

A. I don't know whether it does or not, Mr. Littman, because, as I have said to you, I haven't examined the company's books, I am just taking the annual reports.

By Mr. Littman:

Q. Do you know of any natural gas company that provides on its books for the amortization of working capital?

A. Well, not directly, but I think in regard to the pro- [fol. 6662] ceedings here it should be pointed out that, while I am talking of invested capital in terms of the various forms of securities outstanding and the surplus account, it so happens that a calculation of invested capital by the method of taking the net property and the net working capital and intangibles is about the same figure and that is the reason that I followed, in this particular case, the procedure that I did. If you will look at chart No. 10 in Exhibit 65, invested capital is there discussed as meaning net debt, preferred stock, common stock, and surplus. In 1940, in round figures, the amount was $59,400,000. On Chart No. 11, in Exhibit 65, we defined invested capital there as net property and net working capital, and intangibles which in 1940 was $59,900,000, so that it so happens in Panhandle Eastern Pipe Line Company that irrespective of how you define invested capital, you are

talking about the same sum of money, so that I think in answer to your immediate question about amortization of working capital, the answer I have already given in regard to the amortization as applied to the invested capital still holds good.

Q. My question was whether you knew of any natural gas company that made a provision on its books for the amortization of working capital. Now, what is your answer to that specific question?

A. None, directly.

[fol. 6663] Q. Do you know whether such a practice would be permitted by the Federal Power Commission under its uniform system of accounts?

A. I don't believe it would, that is directly on that particular item; no.

Q. Now, you stated at the last session that you had read a number of rate cases on subjects touching your study contained in Exhibit 65, did you not?

A. Yes, I did.

Q. Can you cite to me one rate case in which any rate making body or court has permitted the amortization by a natural gas company of its working capital?

A. Well, I say that in the Bluefield case, which is referred to in this study I have made, it states that: "The company is to be entitled to a return which will permit it to render and maintain a proper service to the consuming public, maintain its credit position, and have something above for a margin of safety.

No one of these cases or any other report that I have seen breaks the item down minutely to net working capital. They are all talking in terms of the invested capital or property that is necessary to produce this service and, also, the return that is necessary to have that property produce a service which will be adequate to serve the consuming public and, also, this return to maintain the credit [fol. 6664] position. In that connection must be taken net working capital because it is a part of the active invested capital used in the business.

Q. Well, I take it then that you can cite me no specific instance where any court specifically made any allowance in operating expenses for the amortization of working capital; is that correct?

A. Well, perhaps I interpret the language improperly, but in the Bluefield case, among other things, it says that "the return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate under efficient and economical management to maintain and support its credit position and enable it to raise the money necessary for the proper discharge of its public duties."

Well, so far as I am concerned, that is what they are talking about, among other things.

Q. Well, what you have just read to me defines return, does it not, which is equivalent to net operating revenue on an income statement? Is that correct?

A. Well, all the figures, as I have just discussed earlier this morning, that are included in the operating statement some place along the line are converted to cash and working capital. It is inevitable.

[fol. 6665] Q. Now, we are not talking about net operating revenue, we are speaking of operating revenue reductions among which is a provision which you make for amortization of working capital. Now, I am asking you whether you know of any Commission or Court that has ever allowed such an item in operating expenses of a natural gas utility?

A. Well, I think we are talking about different things, Mr. Littman. What I have been talking about right along is the invested capital in this business and a part of that is this net working capital, the sum total of all the capital that was put in has come through an issue of securities to the public. I first said that that working capital is not static but is used and being converted all the time, some to fixed form of capital, some to current capital, and some to things in any going business day in and day out and merely because they have cash today means nothing at all. They have to have some liquidity in order to operate the business and so far as I am concerned, that is absolutely as essential as to have the pipe line out here to deliver the gas.

Q. Now, will you answer my question, please, Mr. Coffman? I think it can be answered with a very simple yes or no.

Will you please read the question again?

(Last question read by the reporter.)

The Witness: I still stand by my answer. I think [fol. 6666] that as I interpret the language in the Bluefield case and what I have said is the only answer I can give you.

By Mr. Littman:

Q. Well, are you stating that in the Bluefield case which was a water case, that the Courts and Commisssion made an allowance for amortization of working capital?

A. I didn't say that. I quoted the Bluefield case and said that I interpreted the language to mean that they would allow for any such item where it was a part of invested capital.

Q. Well, that is the only case that you can cite on the subject?

A. No, that isn't true. I told you that I had looked at United States vs. West, Railway vs. West, and, also, the Solar Electric case, that those were the three that I had given the most attention to at the time of preparing this, and that I had read a summary of many other cases in the field. After all, I was not reading those cases from the standpoint that an attorney might read them, I was looking at them to see whether I could discover whether the Courts might have said some place along the line or enumerated the factors that should be credited in any such study. I thought I had found that and I think they are pretty well stated in the Bluefield case. That is the only reason I quoted it.

Q. Your understanding of the law is that net working [fol. 6667] capital should be amortized over the remaining life of the property. Is that your testimony?

A. No. I said that, as I have indicated, I think the invested capital in this case, net invested capital, should be amortized as I have defined, and, as a part of that, there was a net working capital item in the amount mentioned. In other words, I contended that if the invested capital in the business is so many dollars, then there must be an allowance for that to make or cover a return of the capital over the estimated life that has been made. Otherwise investors would not buy securities in this firm, therefore, the credit position could not be maintained so it could finance its new business.

Now, if you have working capital such that it can finance itself partly without going to the market, that is one way to do it, and it is one sound way to do it.

Q. Well, have you amortized in your calculation over the remaining 25 years the amount of four million odd dollars of working capital which you stated a few minutes ago?

A. I can't give you the specific amount, but it is included in the $63,000,000. There is a net working capital amount in the $63,775,839.

Q. Will you refer to your table for chart No. 14? In the eighth line of that table appears a sum of $4,661,875 [fol. 6668] which is labeled "Net Working Capital." Now, I am asking you whether or not your allowance of $2,551,034 to return capital to investors when gas reserves are exhausted, includes the amortization of that amount of net working capital? Now, can you answer that question or not? It either does or it does not. It seems to me that a question like that should be answerable yes or no.

A. Well, my answer still stands that it includes a portion, but the base figure that we we were using was $63,775,839. The reference that you make here is not directly to that figure. That is the reason I won't say yes or no.

Q. You cannot answer my question yes or no?

A. I say there is an allowance, but I won't say it was the $4,661,875. I do not have that specific dollar amount here.

Q. Well, would your allowance be very close to the $4,000,000 figure?

A. I think that would be true, yes.

Q. So that for all practical purposes, your amortization claim of $2,551,034 does contemplate the amortization of substantially the $4,661,875 of working capital?

A. Yes.

Q. Well, now, I take it, it is your estimony that that [fol. 6669] is an altogether necessary thing to be done?

A. You mean there as to both the amount and the method?

Q. I mean as to the necessity or need for amortizing that amount of working capital.

A. My contention is that that net working capital, as is shown in the statements from which I got the figures, so

long as it remains in the business it is necessarily a part of invested capital.

Now, if the management belied, in their opinion, that the working capital position was such that it was too large and could be reduced, there are several alternatives which they might have followed. They could have reduced the debt, paid a dividend or the like in each of which events the invested capital would have been reduced. Now, the fact that at the date we are talking about the management did not do such things but maintained this capital in the net working capital part of the company, I take it they believed as a matter of business policy that it was necessary. However, if the Commission or any other tribunal by its study should find that it was not necessary, then I would be willing to use such figure as might be determined, but that would have, still, no effect on the final item in my charts either No. 36 or No. 37, that is the amount that would be necessary, still, for this company [fol. 6670] to secure to maintain its credit position.

Q. In other words, you would stick by your final amount regardless of what the Commission would do with respect to cutting down this allowance of $4,661,000 for working capital; is that your testimony?

A. Well, to be sure that we are discussing exactly the same thing, you have referred here to chart No. 37 and I just want to be sure that we are talking about the same thing. I contend that the $5,064,821 which is captioned "Current Capital Requirements," regardless of whatever else the Commission may find about any of the preceding items included in Chart No. 37 will remain until conditions change. Now, if they change for the worse, it will be higher; if they change for the better, it will be lower. But so long as they remain the same, you can do whatever you please, as a Commission, with the preceding items, but I say the $5,064,821 is absolutely essential to maintain the credit position.

Q. And in the event the Commission were to reduce the three items shown in Chart No. 37 labeled "Operations and Maintenance," "Texas," and "Return of Capital when Gas Reserves are Exhausted," then the "Total

Dollars Needed," as shown by the extreme left-hand bar in your chart No. 37, would be correspondingly reduced; is that correct?

A. Yes. If a study made by the Commission should [fol. 6671] take any amount which I have used, based on annual report figures, and should prove to be improper, then, that necessarily would have a bearing upon the total amount.

Q. That is the gross revenue?

A. Gross revenue, but so far as the $5,064,821, captioned "Current Capital Requirements," is concerned, that will not be changed, because that figure was determined, not by what the company was doing, but by the capital markets. In other words, what was happening in the securities market.

Q. Yes. We are going to come to that figure a little later, Mr. Coffman, and we will have a rather full discussion of that item a little later. The thing that disturbs me somewhat is the fact that you label that Chart No. 37 "Dollars Needed Annually," and the total dollars to which you refer include these various items among which is the claim for amortization.

A. Yes.

Q. Now, that is why we are trying rather fully to develop these subjects.

Now, coming back to the subject of working capital, you understand that working capital is the amount of money which the company requires for the conduct of its business and for the purpose to which working capital will ordinarily apply, do you not?

[fol. 6672] A. Well, I understand working capital to be defined as the difference between the current liabilities and the current assets. That difference is called "Net working capital" and I say that net working capital is required to keep the wheels turning in any business. Now, the size of the working capital in the first instance is usually determined by management as they are going along and the Commission can review that and decide whether or not it is excessive or not large enough, but I, as I have said, relied upon the figures shown in the annual reports, took the figure as it was and said that that is a part of invested capital which was actually operating in the business.

[fol. 6673] Q. Now, is the definition of working capital which you gave a moment ago, to-wit, the difference between current assets and current liabilities, a proper definition, in your opinion, of working capital for rate-making purposes?

A. Why, I would say that is was, generally.

Q. Now, in your opinion, this $4,661,000 of net working capital is necessary. Is that right?

A. I said that at the date of issuance of the statement there was that much shown. It is within the province of the management to determine as they are operating a business whether or not they need more or less.

They have several possibilities. If it is more, they can pay off debt or pay a dividend, in either of which cases they reduce invested capital. The fact that the money remained in the business and had not been so used, in my opinion, indicated that the management felt that it was necessary and if it can be proved otherwise, then, we will determine what the new figure is and use that figure, but for the moment I used the figure so shown for the reasons given.

Q. Now, assuming that the company actually needs and requires this amount of $4,661,000 for working capital in the conduct of its business and will require that amount throughout the life of the business, when the day arrives [fol. 6674] on which the company is going to wind up its business 25 years hence, according to your prediction, the company will still have this $4,661,000, will it not?

A. Well there, again, I make the same contention that I made earlier this morning, that this $4,000,000 is not like a gold bar in the basement of the Federal Reserve Building.

It is being turned around day in and day out, so that the $4,000,000 you have today has long since been buried in fixed assets and you may wind up with another $4,000,000 or something, but you have not had that $4,000,000 throughout all the time.

It has been in and out and is being used in the business.

Q. Yes. That is precisely the purpose of working capital, isn't it, to be used in a business?

A. Exactly.

Q. Well, I am assuming all of those things, Mr. Coffman, for purposes of my question but notwithstanding the use of this amount of $4,000,000 from time to time throughout the life of the business, when the day of death of the business arrives and the company is liquidated, the $4,661,000 will then be available and on hand for distribution, will it not?

A. Well, I certainly would not want to say that. I will give you this situation to define my answer: As this com- [fol. 6675] pany goes on, I can easily see questions of higher costs arising, more difficulties of securing gas and they get to a poin' where instead of showing a large profit there will be a smaller one.

It is easily conceivable to see where the company may not wind up with this given amount at all. A good many companies in Pennsylvania wound up some years ago, you know, leaving $6,000 and $7,000 or millions of dollars, taking them as a group, in bonds that were not paid off.

Q. Mr. Coffman, I am assuming that your advice is taken and that everything is going to go along very lovely right down to the last day and your advice is followed and down on the last day they have made adequate provisions for all the things that you have made.

Now, on that last day the $4,661,000 of working capital which was on hand on June 30, 1941, will still be on hand on the last day. Isn't that correct?

A. It will be then available if they have suffered no losses [of] if there is nothing else that has happened to wipe it out.

Q. All right. In addition to that you are going to have another $4,661,000 on hand because you have made an allowance for amortization of that amount over the remaining life of the property. Isn't that correct?

A. Well, it seems to me that that was included. If you [fol. 6676] agree, to begin with, that invested capital is entitled to a return and the $4,000,000 was a part of invested capital, I see no difference between a return on that, if it is actually needed to run the business, and the amount that you have exhausted in your reserves, your plant, your pipe line, and so on.

Q. Well, you are beginning to inject a third item. I thought that I could point out to you that under your method the investors will not only have their original investment in working capital of $4,661,000 on the last day of the life of the business, but will also have another $4,661,000 brought about by reason of your amortization allowance.

Now, what is this additional item that you are speaking about? Are you proposing that a third allowance be made?

A. Well, I do not know of that, if I did. I do not know where you got that impression.

Q. Well, do you think it fair for rate-making purposes that the investor be given a provision for the amortization of working capital, so that at the end of the life of the business he not only will have his original investment in working capital, but, also, another similar amount?

Does not that strike you as being a fallacious method?

A. Well, it seems to me, of course, under your question, if everything works like clockwork from beginning to [fol. 6677] end and there were no hazards involved in the business at all, I could see it, but where there are hazards in the business it seems to me that there necessarily must be some net amount to provide for those contingencies and I do not think that that is unreasonable.

As a matter of fact, I do not know how a business could operate otherwise and a provision, therefore, will have to be made for it.

Q. Is there any depreciation suffered on working capital?

A. On cash working capital there is not, but all of this working capital that you are talking about, in the first place, is not cash and, in the second place, as the business goes on it is being invested in various forms of capital from fixed to semi-fixed which definitely have problems connected thereto, so I cannot say at the end of a certain amount of time that the amount will be one item or another.

Twenty-five years is a long time to be taking into consideration, obviously, and it is a long time for an investor to take a risk with his capital.

Q. But your theory presupposes that this entire $4,661,000 working capital is going to be used up in the next 25 years, by reason of the exhaustion of the gas supply. Is that correct?

[fol. 6678] A. It is included, that portion of it is included in invested capital and by dividing the sum total by 25, in this particular case, at the end of the time you have presumed to recover or at least cover that investment.

Q. Well, are you expecting the entire amount of $4,661,000 of working capital to have been consumed in the business at the end of the 25-year period?

A. Well, it may well be. I do not know what the actual working out will be in 25 years. I say, if you want to take it the other way around, you are operating a business to render a service to the public.

The pipe line and all the necessary equipment that goes with it, plus the reserves, standing alone, cannot render a service to anybody. It is just idle equipment.

Now, if to put that idle equipment to work it is necessary to have some working assets to make the business wheels go round, then it is just as essential in the business and the customer must allow for it as much as any other part of the business.

Q. Now, assuming, Mr. Coffman, that at the end of the life of this business, 25 years hence, the company has on hand its working capital of $4,661,000, which is the same amount which it had on hand, according to your [testimoney], on June 30, 1941, would you say that it would be proper to return to the investors an additional amount of [fol. 6679] $4,661,000 by the medium of amortization allowances?

A. Well, the purpose of the amortization is to cover the invested capital in the business. Now, if that is accomplished just to the dollar, all right. If there is any over, well then, that merely indicates, it seems to me, the vicissitudes of the business wherein you could not calculate to the penny and there are just as many chances, it seems to me, before you wind up the business that you won't have enough to go around as that you will have $4,000,000 something over.

You are always assuming, it seems to me, a wind-up of the business where we have all the $63,000,000 in the till so we tell everyone to come around and get their money.

I never knew any business yet that wound up that way. It has always been the other way, I come around and ask the people to take 50 cents on the dollar or 25 cents on the dollar or something else.

Q. Well, you are assuming that there is not going to be any money left in the working capital till at the end of the business unless provision for amortization is made. Is not that your assumption?

A. I think we are talking in circles, Mr. Littman. You are trying to say, as I understand it, that this is a 100 percent static proposition.

You can start today and 25 years hence you wind up, and [fol. 6680] I am saying that that cannot be considered in a going concern, so as you go on there are these hazards coming in, a higher charge to get gas and a number of other things, so that these factors have to be taken into consideration, and they will be as the years go on.

Q. Will you answer my specific question, please? I think it can be answered yes or no. It deals with your method.

Will you read the question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: Yes, that is correct, that is correct.

By Mr. Littman:

Q. Now, if it should happen that there is money left in the working capital till at the end of the 25-year period, your allowance would be a duplication to that extent, would it not?

Now, can you answer that yes or no?

A. To the extent that there is money over and above?

Q. Yes. A. Yes, to that extent, there would be.

Q. You understand by "over and above", I meant to the extent that there is any money left in the working capital accounts.

A. Starting with zero, anything above the zero amount from where we started of the $63,775,000—

[fol. 6681] Q. (Interposing). Would be duplicated?

A. That is right.

Q. You are a certified public accountant?

A. No, I am not. I have taught accounting for a number of years and collaborated on several books.

Q. But you are, of course, an accountant?

A. I think I understand the subject fairly well.

Q. Do you think any certified public accounting firm would certify an income statement which showed amortization of working capital in a gas utility?

A. I do not think they would, as such.

Q. Under what circumstances, would they?

A. Well, it seems to me that, here again, we are confusing the issue. You are talking about, I presume, an annual report or some other statement to be made to the public which contains a certification.

I do not see any reason in such statement to make any such amortization that you are talking about; therefore, I do not think it would be in, but, on the other hand, if you were making a study such as we are here and certain factors have to be considered, why, you will take those factors into consideration.

After all, a certified public accountant at a given [fol. 6682] moment of time is merely saying there are $4,661,000 to the penny in the bank and they counted it and know it to be such. They are not saying any more.

Q. Have you ever seen an income statement, certified or otherwise, that included an allowance for amortization of working capital?

A. Well, there again, it is the amortizations that you see appearing in various certified statements that are usually for a particular asset.

Q. Can you answer that question yes or no, to your best recollection?

The Witness: Would you read that question again?

(Whereupon, the pending question was read by the reporter.)

The Witness: No, not directly.

By Mr. Littman:

Q. Now, you have testified that the amount of $4,661,875 of working capital, which you used for purposes of your study as of June 30, 1941, was obtained simply by deducting the current liabilities from the current assets shown in the company's balance sheet. Is that correct?

A. Yes, as shown on the table for Chart No. 14 there is shown there the working capital of current assets, less current liabilities to compute the net working capital of $4,661,875.

Q. Now, that amount is more than $1,000,000 in excess [fol. 6683] of the total "Operations and Maintenance" expense which you show in your Chart No. 37 for the entire year. Is that correct?

A. Yes, that is right.

Q. Are you recommending that this Commission find any such figure for working capital as $4,661,875?

A. Well, I think I have clearly indicated my position on that by stating the sources from which I took the material.

Now, if the Commission, by investigation, finds some other amount which is stated to be proper, why then I would think that that was the amount to use but I have given the source of my data and have predicated my results on it.

Q. Well, are you or are you not, as an expert, recommending that amount of $4,661,875?

A. Well, I am recommending two things, I am recommending the method No. 1 and the amounts, No. 2, unless the Commission can find that the amounts are in error, in which case I still say that my method can be applied and I will take the corrected figure.

Q. You are standing by the $4,661,875, are you?

A. Yes, for the purposes of this study it is the only figure I have.

Q. And for purposes of rate making, is it good?

A. For the purposes of the results that I show in [fol. 6684] this study.

Mr. Wheat: Mr. Littman, when you say "rate making", do you mean for purposes of fixing a rate base or some other base?

Mr. Littman: Suppose I ask the witness that very question.

By Mr. Littman:

Q. Would you say that this amount of $4,661,875 of working capital would be a proper amount to include in a rate base for rate-making purposes?

A. In so far as it is actually included in the amount of invested capital, I say "yes".

Q. All right. Now, will you please turn to your table for Chart No. 11.

Now, you show the amount of net working capital for each of the years, 1934 through 1940, on this chart, do you not? A. Yes, I do.

Q. Those are the figures which appear about the center of the chart?

A. Well, yes, on the line captioned, "Net Working Capital".

Q. Yes. Now, in 1936, as shown by this table for Chart No. 11 of Exhibit 65, the net working capital is $413,082. Is that right?

[fol. 6685] A. That is correct.

Q. Now, will you please explain why, in your opinion, the company should have more than ten times that much working capital in 1941 as it had in 1936?

A. Well, I think the table helps support the answer to that.

In 1934 they had a deficit in working capital of $74,837 and in 1935 they had a deficit of $376,327. In 1937 they had a deficit of $1,394,366.

Now, that merely proves the contention that I have been trying to make, namely, that conditions vary from time to time and at a given moment there may be a certain amount of working capital.

There may be at another time a deficit in working capital and in order to continue to operate this business successfully you must have a net working capital balance.

Now, in 1937 I presume that part of that drain at the moment was in connection with something to do with the Detroit operations. If I recall correctly, that was the first

year in which they began to render full service to the City and it probably required quite a bit of current capital.

Meanwhile, of course, the company has enlarged. It really has become a full-fledged pipe-line company. In 1936, the year in which you are talking about, if my recol- [fol. 6686] lection is correct, was before they really were servicing the City of Detroit, at which time, as we know, the size of the business jumped considerably, so I do not quite see that the comparison of the figure for 1936 with the one for 1940 necessarily would prove anything.

Q. Well, suppose we compare the figure of 1940, $2,205,097.

A. That is right.

Q. Will you tell me why it is necessary to have twice as much working capital six months later?

A. Well, I should suppose, Mr. Littman, that it would be a fair answer to say that there is just as much reason, I should think, for the possibilities of that in view of the negotiations that are now on for Michigan Gas Transmission, which will further elaborate this company, as there would be to show that for 1936, let us say, that it was twice as great as 1935.

Mr. Littman: Will you please read back that answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. You expect part of this working capital to be used for the purpose of purchasing Michigan Gas Transmission Company?

A. No, not necessarily, but I would assume that if the Michigan Gas Transmission Company is acquired and con- [fol. 6687] solidated with the Panhandle Eastern Company naturally the consolidated situation is going to be much larger in total dollars and in volume of business and I should suppose, therefore, that it would require more net working capital.

Q. But you do not know?

A. I don't know what the amount will be, but that just seems to me to be good business judgment to expect that.

Q. As a matter of fact, you did not make any study to ascertain what amounts of working capital were actually

required by Panhandle Eastern Pipe Line Company for the next year?

A. No, that is correct, I took the figure as it was stated.

Q. Now, according to your method, if you had made this study as of the end of the year 1937, in which year the company had a negative working capital figure of $1,394,366, you would have found that negative amount as the required amount of working capital in that year?

A. No, because I am not talking in terms of working capital here at all, I am still talking in terms of total invested capital and the only way that I know that invested capital can be changed is in case you suffer an actual earnings loss or in case you pay off some of the capital, so I still, when I talk about the over-all picture, want to talk about the invested capital as a whole and not about a par-
[fol. 6688] ticular item that you may be referring to.

Q. But if you had used invested capital as you used it for purposes of this study, then in 1937 your invested capital amount would have reflected a negative net working capital of $1,394,366. Isn't that correct?

A. And if such item could have been—

Q. (Interposing) Did you say "yes"? I thought you nodded your head.

A. No, I said if in that year that amount of deficit in working capital you are talking about had meant a deduction in or a reduction in the total invested capital, I should have taken the invested capital for the amount as stated, which was $55,477,864 and that is the figure that I am using throughout.

It is the item appearing in the line captioned "Total Invested Capital for 1937".

Q. And that $55,477,864 reflects the net working capital figure in the negative amount of $1,394,366, does it not?

A. It reflects it and it would merely mean to me that if you found a situation like that carrying over a period of time, the company would then have to consider some additional financing to bolster its position, in which case invested capital would then go up.

[fol. 6689] By Mr. Littman:

Q. Mr. Coffman, I have prepared for purposes of simplifying and facilitating this cross-examination a very simple balance sheet, a copy of which I hand you.

Now, Mr. Coffman, this balance sheet which I have just handed you shows, on the asset side property of $33,000,000 and cash and Government bonds, $30,000,000, total assets of $63,000,000.

On the liability side, it shows invested capital of $63,000,000, a total of invested capital of $63,000,000.

Now, I am going to ask you to assume that this is the balance sheet of a natural-gas pipe-line utility as of June 30, 1940, and that there is a remaining life of gas reserves of that company as of that date of 25 years.

Assuming these conditions and assuming the accuracy of this balance sheet, under your method you would divide the 25 years into the total invested capital of $63,000,000 in [fol. 6690] order to obtain the annual provision for depreciation, depletion and amortization, is that correct?

A. Looking at it from the standpoint of the investor, that is correct.

Q. And that is the method you have followed, is that correct, namely, dividing the total invested capital by the remaining years of life?

A. That is the method I have used.

Q. I now hand you another balance sheet shown on a single sheet of paper purely for the purpose of facilitating this cross-examination.

This balance sheet is for the same company and is as of June 30, 1941, and this balance sheet shows, on the asset side, property of $33,000,000 and cash and Government bonds of $32,520,000, total assets of $65,520,000.

It shows on the liability side that reserves for depreciation, depletion and amortization are $2,520,000 and the invested capital is $63,000,000, making total liabilities of $65,520,000.

I want you to assume, Mr. Coffman, that conditions during the year ended June 30, 1941, have remained static with respect to capital additions.

A. You mean June 30, 1942?

Q. 1941. You see, my first balance sheet is as of June 30, 1940.

[fol. 6691] A. I see.

Q. I want you to assume that conditions remain static in so far as the property account is concerned and I want you to assume the conditions which I have just stated and I will ask you whether or not this balance sheet would correctly reflect those conditions as of June 30, 1941?

A. Well, with one exception, Mr. Littman, that obviously, from your balance sheet dated June 30, 1941, the company must have earned in the interval June 30, 1940—June 30, 1941, the sum of $2,520,000.

Every other condition remained static.

Q. Why do you say that the company must have earned $2,520,000?

A. Well, you have reserves here for $2,520,000, all of which you have assumed went to cash and stayed in cash and there is only one place that it could possibly have come from unless they sold more securities and your capital indicates they did not, so the only possible place it could have come from was earnings.

Otherwise, you would have had $63,000,000.

Q. Would not this balance sheet as of June 30, 1941, obtain if the company had not earned any money?

A. No, it could not possibly have obtained. It would be impossible. If it had not earned any money, you would have had $33,000,000 of property offset by $2,520,000 in [fol. 6692] reserves and your cash would have been $30,000,000.

Q. Assuming that the total operating revenue was $10,000,000 for purposes of illustration and assuming that the operating expenses together with the amortization allowance was $10,000,000 leaving a net operating income of zero, would not this balance sheet as of June 30, 1941, properly reflect the situation as of that date?

A. No, because there had been no way you could have increased the cash $2,520,000.

In other words, your assumption is that they received $10,000,000 in and they spent $10,000,000 out, so how could you have increased the cash $2,520,000?

Q. No, the illustration which I just gave assumed that they took $10,000,000 by way of gross revenue.

A. Yes.

Q. And that they paid out in cash, operating expenses of $7,500,000 and that they retained $2,520,000 for amortization, depletion and depreciation.

Wouldn't this balance sheet properly reflect the situation as of 6-30-41?

In other words, you would, under those conditions, have an increase in your assets of $2,520,000, is that correct, offset by a corresponding amount in the reserves?

A. I think some of those figures you have given me do not check, do they? If you had taken in $10,000,000 and [fol. 6693] you spent out $7,750,000—

Q. (Interposing) The operating expenses should be $7,480,000 to be exact. Those are cash operating expenses.

A. That would indicate that $2,520,000 of fixed property had been converted to cash so that now your property account would net stand at $31,480,000 and your cash would show $32,520,000, merely a conversion of a fixed asset to a current asset.

Q. Would that be true under the assumption that the company had operating revenues of $10,000,000 and cash operating expenses of $7,480,000 and had charged $2,520,000 to its reserves for depreciation, depletion and amortization, leaving a net operating income of zero?

A. I do not see how it could be otherwise. I mean, your own balance sheet shows it.

Q. You say this second balance sheet that I have handed you is incorrect and does not properly reflect the situation existing as of June 30, 1941?

A. The balance sheet as you show it, taking out a reserve of $2,520,000 correctly represents the situation as it stands at the present time.

Q. And that same situation would obtain as shown on this second balance sheet as of June 30, 1941, even if the company did earn some net operating income provided it paid that net operating income out in dividends before [fol. 6694] the end of the year, isn't that correct?

* * * * * * *

The Witness: I will answer "yes", with this further explanation to be sure we are talking about the same thing.

If the company earned any amount over and above the allowance for depreciation which you took and such amount, whatever it may have been, was to the dollar distributed, then this balance sheet still correctly reflects the condition.

By Mr. Littman:

Q. Yes.

Now, will you point out for us, by reference to this second balance sheet which speaks as of June 30, 1941, where, under your method, is any credit whatever given to the rate payers for the $2,520,000 paid during the year for depreciation, depletion and amortization and charged to those reserves?

A. Well, under this hypothetical balance sheet dated June 30, 1941, which you have presented, looking at it from the investor's point of view, there was set aside, representing exhaustion of an asset, $2,520,000 which, for all practical purposes, was conversion of a fixed asset to a current asset as fully represented in your item captioned, [fol. 6695] "Cash and Government Bonds."

However, so far as the investors were concerned, they had no return of that whatsoever so it is still invested in the business so that, at the present time, there is invested in the business the $63,000,000 plus $2,520,000 or a total of $65,520,000 which represents their total invested capital and until you would use a portion of the $2,520,000 to distribute to the investors, that cash is actually working and invested in the business and they would expect, naturally, leaving that cash in the business rather than taking it out, to be compensated for the use of that money.

Q. And under your method you would continue to reflect in the current rates charged to the rate payers a full return on the total invested capital, would you not?

A. I say to maintain the credit position of this company, if the investor leaves his money so that it is working in the business or at least, to put it the other way around, he does not get it to use personally himself, it is

just the same working there as it would if he received it and placed it elsewhere to work.

He wishes to have a return and whenever any company is privately financed and does not so return a fair amount on capital, you no longer maintain the credit position of this company. You no longer can finance by private means.

[fol. 6696] Q. So that your answer to my question specifically is "yes", with the explanation you have given?

A. Exactly, yes, sir.

Q. Now, your answer remains the same notwithstanding the fact that this balance sheet as of June 30, 1941, clearly shows that the company has $32,520,000 of cash and Government bonds on hand?

A. Well, of course, I think that assumption is fallacious and unreasonable but, taking it as an assumption, if the management retains the sum total of that cash and Government bonds in the business which, after all, belonged to the original investors who put the money in, they naturally will expect a return.

Now, if the management should feel or the Commission should feel or the security holders should feel that the amounts of cash and Government bonds being retained is not warranted and is an unreasonable amount, then they have the option, that is, the management, of distributing a portion or all of the cash and Government bonds to the security holders in which case, they have been paid off their capital; the invested capital of this company is less and we go to the new base but, so long as the security holders do not have any return of that invested capital and it is still working in the business, it handicaps him or deprives him of using his capital elsewhere where he could make a [fol. 6697] return and he demands a return upon it.

Q. Now, is it also your testimony that under your method no credit whatever is given to the rate payer for the $2,520,000 paid during that year for depreciation, amortization and depletion under the assumptions comprehended by these two balance sheets, is that correct?

A. So long as those items are not used to distribute to the security holders, yes.

Q. You realize, do you not, that we are undertaking to illustrate the straight line method of depreciation?

A. Well, I was not aware of that but I think what I have said to date would still answer.

Q. Your answers would still hold?

A. I think so.

Q. Do these balance sheets show a correct application of the straight line method of depreciation as you have used it?

A. In so far as you have assumed $63,000,000 of invested capital at the outset and have assumed 25 years of life, the $2,520,000 is one-twenty-fifth which is the first year's operation that we are assuming under that and if that method were followed with the same amount each year on that amount of invested capital, it does.

Q. I wanted you to state whether or not these illustrations which we have just gone through as evidenced by [fol. 6698] these two balance sheets is, in your opinion, a correct application of the straight line method of depreciation?

A. It is, based upon the assumption that there is no salvage value to be left at the end of time.

Q. You understand, Mr. Coffman, that by my questions I am not intimating that Commission counsel agrees necessarily that these balance sheets and the methods that you have described are a proper application of the straight line method of depreciation? I do not want you to understand that I am necessarily agreeing with this.

A. No, I understand but I still stick with my answer that, so far as accounting procedure is concerned, if you assume no salvage at the end of time and when I say "end of time", that is currently used in accounting terminology to mean the length of time estimated for these properties, this represents the straight line method.

Q. Have you made any investigation, Mr. Coffman, to ascertain whether this method of yours of determining the amount to be set aside annually for depreciation, depletion and amortization is in accordance with the Commission's Uniform System of Accounts?

A. No, I have not made that investigation. I am talking purely from the technical accounting point of view.

Q. And not having made the investigation, you are not prepared to say that your method is in accordance with [fol. 6699] the Commission's Uniform System of Accounts?

A. No, I am not prepared to say whether it is or not.

Q. Is your method in accordance with any accepted method of determination of amortization allowances as evidenced by certified statements?

A. Well, I do not know just what you are driving at there. After all, the subject of depreciation and amortization is a complicated one.

I say this, that in any particular piece of property where engineers can estimate the reasonable life of the property, that it is customary, in many instances, to take out an equal annual allowance until the orginal investment in that property is covered where you assume that there is no estimatable allowance for salvage at the date you originally considered the first investment.

Q. Now, you have testified heretofore that you placed great reliance upon certified statements of various corporations, is that correct?

A. That is correct.

Q. Now, would you give us the name of a natural gas utility whose statement you have examined, as certified, which utilizes this method of determining the amounts to be set aside annually for depreciation, depletion and amortization?

A. I do not believe that you could find any statement, [fol. 5700] Mr. Littman, which would tell you the method that was used. As a matter of fact, it will tell you that, in the depreciation and depletion was a certain amount.

In some of the registration statements where they define completely their depreciation policy, it may state it but it would not state it in most annual reports as certified, because it is not a common practice.

They merely tell you they have reviewed the books and the depreciation and depletion reserve allowances were in accordance with company practices and the amounts set aside were proper in their opinion.

Q. Can you cite us one natural gas utility that actually uses your method of determining the amounts to be set

aside annually for depreciation, depletion and amortization?

A. I do not believe I could at this time; no. I would have to review the various companies and discover that.

Q. Now, do you know whether Panhandle Eastern Pipe Line Company uses this method of yours in making its determination of the allowances for depreciation, depletion and amortization annually?

A. No, I do not know that because I did not refer to the books and in the annual reports, as I recall it, there was no statement except certain amounts were set aside.

Methods were not described.

[fol. 6701] Q. Do I correctly understand your testimony to be that the only time you deduct a reserve for depreciation, depletion and amortization to establish a base for rate making purposes is when the equivalent amount of the reserve has been paid out as a liquidating dividend?

The Witness: Would you please read that?

(Whereupon, the pending question was read by the reporter.)

The Witness: Mr. Littman, that question is confusing to me for this reason: I have tried to make it clear that in my approach I have been attempting to determine the dollars necessary to keep this business operating in an efficient manner from both the standpoint of the consuming public and the investing public, that is, maintaining the credit.

When you refer to the rate-making base, it confuses me because I do not quite tie that in. I mean, I am not talking the classical theory and when you say, "for rate-making purposes", I think you are.

I would like to be clear on that one point throughout. When I have been talking here, I have not been trying to distinguish between the classical theory and my own approach.

I have been talking about my approach altogether.

By Mr. Littman:

Q. Well, under your approach, it is correct to say that the only time you give any credit to the depreciation, depletion and amortization reserve is when the equivalent amount of that reserve has been paid out as a liquidating dividend?

[fol. 6702] A. Yes, I would say that is generally true, that until the cash has actually been paid out to the investor, it is still maintained in the business as a part of invested capital and the investor says, "If you want more capital from me, you must continue to maintain the credit and give me a return thereon."

Q. And that is your understanding of the correct application of the straight line method of depreciation?

A. I do not know as that has anything to do with the straight line method. You could call it a sinking fund method.

There are various methods of depreciation. There is one where you take out the identical amount each year. There is another where you say the assets are exhaustible and in the early years, you take out more and in the later years you take out less.

In other forms of business it is the reverse. You take out smaller amounts in the earlier years and more in the later years, so I do not see there is any connection between what I have just said between the straight line method or any other method.

Q. Did you investigate to ascertain the amount in the reserves of Panhandle Eastern Pipe Line Company for depreciation, depletion and amortization as of June 30, 1941?

[fol. 6703] The Witness: May I have that read, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: You are talking about the reserves for depreciation and so on. Yes, I was aware of that. It was in the balance sheet and the figures are shown here in my report, if you are talking about the dollar amount.

By Mr. Littman:

Q. Yes.

A. If you are talking about the number of M.c.f.'s, no, but if you are talking about the dollars, yes.

Q. The latter is correct. I am not now speaking of gas reserves.

A. Yes, that is right.

Q. You are aware of the fact, are you not, that as of that date the reserves for depreciation, depletion and amortization and of gas sales and purchase contracts totaled $11,747,170 as of June 30, 1941, is that correct?

Would it be more helpful if I handed you the balance sheet?

A. I have one here. I was seeing if I had it in a table so I could refer specifically to it.

Mr. Wheat: On the table for Chart No. 14 there is an item of retirement, renewal, depreciation and amortization reserves of some $10,000,000-odd.

Mr. Littman: Is that $10,135,000?

[fol. 6704] The Witness: Yes, that is it.

Mr. Wheat: Yes, $10,135,514.

Mr. Littman: Yes.

By Mr. Littman:

Q. Do you find that, Mr. Coffman?

A. Yes, I have that now.

Q. I will tell you how I got the additional amount in just a minute.

Now, that $10,135,513 is made up of reserves for depreciation of gas plant in an amount of $9,345,403; reserve for amortization and depletion of producing natural gas land and land rights of $403,389 and reserve for abandoned leases in the amount of $386,721, making a total for those three reserves of $10,135,513.

Do you find those figures, Mr. Coffman, as of June 30, 1941?

A. I do not have the sum of the individual items that you mentioned at the moment, but I do have the $10,135,

514—the figure you mentioned is $10,135,513, but there is 92 cents so we call it $10,135,514.

Mr. Culton: Was that the aggregate that you originally used?

Mr. Littman: No, I am now going to explain how I got the other amount.

By Mr. Littman:

[fol. 6705] Q. Those three items, I might state for the purpose of the record, were taken by me from Exhibit 48, Page 2, which is the balance sheet offered in these proceedings by Mr. Watkins and are shown from Lines 28 through 33 of that page.

Mr. Wheat: In column—

Mr. Littman: (Interposing) In Column M as of June 30, 1941.

By Mr. Littman:

Q. Now, that $10,135,514 jibes, does it not, with the one in your Exhibit 65?

A. Yes, it does.

Q. Now, to that I have added an item which appears in Exhibit 52, Page 2, Line 42, called, "Reserve for Amortization of Gas Sales and Purchase Contracts" in the amount stated as of June 30, 1941, of $1,611,657.

I hand you Exhibit 52, Mr. Coffman, so that you may see the item as it is set forth. A. Yes.

Q. And adding that figure of $1,611,657 to the amounts heretofore stated produces the total reserves as of June 30, 1941, of $11,747,170, is that correct, Mr. Coffman?

A. I did not get some of the detailed figures you read off but if they add up to that, I agree to the total.

Q. Well, at any rate, you have ignored these reserves [fol. 6706] in calculating your so-called "Dollars needed annually by Panhandle to return capital to investors when gas reserves are exhausted", have you not?

A. Yes, the total figure that I used as shown in the table for Chart No. 14 in Exhibit 65 was $10,135,514 which is the amount taken from the condensed consolidated balance sheet as at June 30, 1941, of Panhandle Eastern Pipe Line Company.

Q. My question is, have you ignored these reserves in calculating your so-called "dollars needed annually by Panhandle to return capital to investors when gas reserves are exhausted"?

I am now speaking of the reserves for depreciation, amortization and depletion accumulated by Panhandle Eastern as of June 30, 1941?

A. You cannot say that exactly, Mr. Littman, for this reason:

You will find in my exhibit, for example, on the table for Chart No. 10 where I have been trying to look at this thing from both angles, namely, the property on the one hand and the net working capital intangibles on the other hand, looking at it purely from the capital structure standpoint, you will see in table for Chart No. 10 where I have listed there the details of the capital structure for the individual years which, in all the cases, is a figure [fol. 6707] very closely approximating a calculation if you work out invested capital on the net property plus the net working capital figure and it was that invested capital figure that I used and when you pin me down to individual items, that is difficult for me to say because I talked in terms of the total invested capital as one lump sum and as represented by the securities outstanding in the hands of the public.

Q. Let us put it this way:

In calculating your so-called "dollars needed annually by Panhandle to return capital to investors when gas reserves are exhausted", you made no deduction of Panhandle Eastern's reserves for depletion, depreciation and amortization accumulated on its books to June 30, 1941?

A. I think we have. Your figure, I believe, if you work back and I am talking now from this statement captioned, "Condensed consolidated balance sheet as at June 30, 1941", there is an item captioned, "Less reserve for amortization of gas sales and purchase contracts—$1,611,657,-30 which was and is subtracted from a caption, "Intangibles representing gas sales and purchase contracts" and so forth of $3,475,221.97, leaving an amount net of $1,-

863,564.67, which is the amount that is shown in table to Chart No. 14 which is—

Mr. Wheat: (Interposing) Of Exhibit 65?

[fol. 6708] The Witness: Of Exhibit 65, which is added in to get the total invested capital which I am talking about. I believe that is the identical figure that you are talking about.

By Mr. Littman:

Q. Now, excluding from consideration the reserve for amortization of gas sales and purchase contracts and speaking now only of the $10,135,513 accumulated in Panhandle Eastern's reserves for depreciation, depletion and amortization, I am asking you whether or not it is a fact that you made no deduction of those reserves in calculating your so-called "Dollars needed annually by Panhandle to return capital to investors when gas reserves are exhausted"?

A. I think I did take them out by the amount I have just read to you.

In other words, you see what I did, in table to Chart No. 14, I hoped to segregate first, the $10,135,514 which relates to retirement, renewal, depreciation and amortization reserves.

Then later on down in the tabulation, I took the intangibles net which automatically, of course, excludes the reserve of $1,611,657.

Now, I could have done the same thing in that table as I did up above. In other words, I could have shown intangibles at $3,475,221.97.

[fol. 6709] I could have substracted the $1,611,657 to show the $1,863,564. Instead, I just showed the figure net.

Q. I just asked you to exclude from consideration this reserve for amortization of gas sales and purchase contracts of $1,611,657. A. Yes.

Q. And I asked you to discuss with me for a moment purely the $10,135,513 balance in the reserve for depreciation, depletion and amortization as of June 30, 1941.

A. Yes.

Q. Now, we are talking about the $10,000,000 figure, aren't we? A. All right.

Q. Now, I am asking you whether or not it is a fact that you ignored those reserves totaling $10,135,513 in calculating your so-called "Dollars needed annually by Panhandle to return capital to investors when gas reserves are exhausted"?

A. Whether I ignored it?

Q. Yes.

A. No, I do not think I ignored it because I had to get the total invested capital I am showing by deducting it.

Q. Well, is the invested capital figure that you used for purposes of determining the amortization allowance shown anywhere on table for Chart No. 14 in Exhibit 65?

[fol. 6710] A. Not specifically in that amount but the method whereby I arrived at the amount is very definitely shown there.

Q. Well, the method whereby you arrived at your total invested capital was simply this, to add the total amount of the outstanding bonds, preferred stock, common stock and surplus, is that correct?

A. That is correct.

Q. And that came to $63,000,000-odd, did it not?

A. That is correct. On the invested capital as shown on June 30, looking at Chart No. 26, that was $63,525,839.

Q. Yes, and you simply divided that by 25 years to get your annual allowance for depreciation, depletion and amortization?

A. That is correct, but I just want to be clear when you say I ignored looking at something, I have demonstrated I am aware that I took them into consideration.

For this particular calculation, I based it on one-twenty fifth of $63,525,839 on the assumption I just mentioned; on this particular assumption.

Q. Now Mr. Coffman, I will ask you to turn to your table for Chart No. 14 of Exhibit 65 and I will ask you this question:

If this Commission were to use the property as the [fol. 6711] amortization base, what figure on this chart should be divided by 25 if that is the correct remaining number of years of life?

A. That figure is shown in Chart No. 14 computing invested capital on the basis of net property and net working capital intangibles of $61,216,031.

Q. Now, your figure of $61,216,031. which you just read includes $4,661,875 of working capital, does it not, Mr. Coffman? A. Yes, that is correct.

Q. Now, assuming that the Commission were to adopt Mr. Sperry's estimate of working capital in the amount of $1,500,000, what would be the total invested capital indicated on that basis?

Mr. Wheat: May I ask, Mr. Littman, are you making that assumption in connection with the development of a rate base, that that is the amount to be allowed for working capital?

Mr. Littman: I am asking this witness to state what the company's net investment is in the property plus Mr. Sperry's working capital. That is what I wanted him—

Mr. Wheat: (Interposing) If his balance sheet had shown that instead of some other item?

Mr. Littman: That is right.

The Witness: The invested capital as of June 30, 1941, [fol. 6712] would have totaled $58,054,156 if it had been tabulated on the basis of net property, $54,690,591; net working capital, $1,500,000; and net intangibles of $1,863,565.

By Mr. Littman:

Q. Now, in order that we all may follow this testimony, I am going to ask that you refer to the Chart No. 14 of Exhibit 65. A. Yes.

Q. Now, there you show the net property to be $54,690,591? A. Yes, sir.

Q. Then you show the net working capital of $4,461,875 and then you show intangibles which includes gas sales and purchase contracts in the sum of $1,863,565. Is that correct? A. Yes, sir.

Q. A total invested capital as of June 30, 1941, based on net property accounts, intangibles and working capital of $61,216,031. Is that right? That is what your chart shows?

A. Yes, that is what the chart shows. That is correct.

Q. Now, Mr. Coffman, am I correct in understanding that all of this amount of $61,216,031, except the net working capital of $4,661,875, represents every dollar that the [fol. 6713] investors have invested, according to the books of the company, in the property of Panhandle Eastern Pipe Line Company as of June 30, 1941? Isn't that correct? I am not speaking of dollars, I am speaking of the amount invested in properties, both in fixed capital and intangibles. A. As shown on the books.

Q. Yes.

I thought there was a pending question—

A. (Interposing) No, I thought I had answered the question.

Mr. Littman: Will you read the answer?

(Whereupon, the answer indicated was read by the reporter.)

By Mr. Littman:

Q. The answer is "yes", as shown on the books?

A. That is right.

Q. And that amount, by pure arithmetic, is $56,554,156, is it not? I would like to make certain of this figure.

A. What is the component parts of this figure you are giving me?

Q. I am taking your total of invested capital shown on your Chart No. 14 of Exhibit 65 of $61,216,031 and I am deducting $4,661,875 of net working capital. A. Yes.

Q. And I get the amount of $56,554,156.

[fol. 6714] A. That is correct.

Q. Now, this amount of $56,554,156 represents all of the money that the investors have invested as of June 30, 1941, in the fixed property of Panhandle Eastern, is that right?

A. Looking at it from the asset side of the balance sheet, that is true, but I also look at it from the liability side of the balance sheet, so you also have to refer to my table which shows the amount of the various securities outstanding plus the surplus accounts.

Q. Well, Mr. Coffman, here is what I am trying to get and I think we will have no difficulty in agreeing:

If every dollar invested in the plant and property of Panhandle Eastern, as shown on its books, is found to

have been actually and legitimately invested in property used and useful in the public service, then this amount of $56,554,156 would correctly represent the actual cost, the actual original cost of the property as of June 30, 1941, would it not?

Mr. Culton: You do not mean that question. You do not mean original actual cost. You mean depreciated original actual cost, don't you?

The Witness; It is the net value of the property as of the date stated.

By Mr. Littman:

[fol. 6715] Q. Less depreciation reserves?

A. Yes, or the net value of the property as of this date.

Q. It would represent the net investment in the property as of June 30, 1941, is that right? A. That is right.

Q. Now, notwithstanding the fact that the $56,554,156 represents the net investment in the plant and property of Panhandle Eastern as shown on its books as of June 30, 1941, you are undertaking to amortize not that amount but you are undertaking to amortize something in excess of $63,000,000, are you not?

A. I am, on my calculation, amortizing the amount of $63,775,839 as shown in Chart No. 27, Exhibit No. 65.

Q. Now, will you state why, under any theory, this Commission should allow to be amortized any sum in excess of the net investment in the plant and property of Panhandle Eastern as of June 30, 1941, which was, as you have stated, $56,554,156?

A. Well, I thought I had explained that a couple of times, Mr. Littman, on this [bases]:

It is my opinion that if this company continues as a going concern and depreciates and amortizes its properties but such sums forthcoming from such bookkeeping transactions are retained in the business to keep it going [fol. 6716] and are, therefore, reinvested in some form of asset except that portion that remains in cash that, so far as the investors are concerned, their money is still working in this business and to maintain the credit position of this company, they must be allowed some return for that use of capital.

Now, whenever it comes to a point that this company ceases to grow, ceases to need any additional amounts of capital so that even your own hypothetical balance sheet tends to be true, namely, the only operation is one of converting fixed assets to cash and the management thereupon pays out such cash or current assets in the form of liquidating dividends, the invested capital will begin to come down.

There is no reason for the maintenance of the credit position any more because there is no need for new financing and you will get the result.

Q. Will you point out what property over and above the $56,554,156 is used and useful in the public service?

A. Well, as I said this morning, I can take your very figure here of $56,554,156 which allows you net property which is fixed plant and allows you intangibles which is also, for the most part, fixed plant or semi-fixed plant and I will ask you how the business can be operated by the management with no cash or working capital.

Q. All right. Let's add to that amount the $1,500,000 [fol. 6717] suggested by Mr. Sperry.

Now, will you point to any property other than which is represented by Mr. Sperry's $1,500,000 of working capital and this $56,554,156 which is the net investment in plant, will you point out anything that is used and useful in the public service that is not represented by those two amounts which I just read?

A. Well, I do not know as I can point it out directly but I can make this observation, that so far as I understand what you have said about Mr. Sperry, Mr. Sperry, I believe, must have been talking about a different thing than I am talking about.

He apparently was talking about a rate base. I, on the other hand, am looking at what the management needs to maintain the credit position and I continue to say and maintain that if the management retains the $4,661,875 in the business rather than distribute it to the people who put in the original capital, it is still invested capital from their standpoint and they will require a return on it or,

if you refuse to allow them one, they will refuse to finance this property any longer.

Q. Let us exclude, then, this item which seems to be disturbing you, of working capital. Let's put that aside and let's confine ourselves to physical and tangible property, per se.

[fol. 6718] A. Yes.

Q. Will you tell me what property is used and useful in the public service, both tangible and intangible, belonging to Panhandle Eastern Pipe Line Company which is not represented by the net investment of $56,554,156?

A. Mr. Littman, I would have to say if you take the extreme example, as I believe this is, you are taking away from the management all of the current assets, net current assets.

Q. I am talking about a natural-gas plant—

A. (Interposing) You are taking away everything but the plant, fixed property.

Q. I am talking about the fixed property.

A. Then I ask you how does the management continue to operate one hour after you have done it?

Q. All right. I will ask you to assume, then, the correctness of Mr. Sperry's figure, just assume it, assume he is right.

Assume his $1,500,000 of working capital is a correct estimate and is all that is needed.

A. All right.

Q. And I want you to state what more is this company entitled to have by way of a return than a return upon its net investment in physical and intangible property represented by the $56,554,156 plus the $1,500,000 working cap-

[fol. 6719] -ital of Mr. Sperry's?

A. I think the answer to that is simple, Mr. Littman. If the Commission says and determines, after thorough study, that $1,500,000 is absolutely all that is needed and the management thereupon agrees or abides by that decision, whether they agree or not, then the first step, No. 1, to take is to take the $3,000,000 which is the difference between the $4,600,000 and the $1,500,000 and immediately distribute it to the security holders so it will be taken

out of invested capital and put in their hands to do with as they please.

Now, if the management, in spite of the decision on the part of the Commission would say, "Of course, we will have to abide by the decision and talk in terms of $1,500,000 but, as a matter of business policy, we still say to run this business for public service and maintain credit, we must have $3,600,000", I, as an analyst, would have to make that deduction; but, so far as I am concerned, the logical move under such decision would be to distribute that $3,000,000 odd out of invested capital to security holders so it isn't in invested capital.

Q. There is nothing to prevent the company from doing that, is there?

A. Sure, there are many things. If they believe that the operations of the company are such they need it for [fol. 6720] working capital, that is the best reason I know of for not distributing it.

After all, they are the management and if they believe they need it so the business will be operated efficiently, I believe that is a perfect reason for not distributing it.

Q. And whatever amount the company happens to have on hand is, in your judgment, the correct amount they should have on hand?

A. No, indeed. I am not saying that.

Q. What analysis did you make to ascertain whether this $4,000,000 of working capital was actually and necessarily needed for that purpose in this business?

A. I am not saying; you are reading into me some words I am not saying.

I never said that it was necessary. I said it is there and if it proves to be there and necessary, it is a part of invested capital and, therefore, must be so considered.

I never said it was necessary but I have relied upon the figures on the basis that, to date, I have heard no one say that it was unnecessary or unreasonable.

Q. Well, but you used the term "dollars needed" and I take it that the word "needed" is synonymous with necessary. Am I right?

A. And so far as the investor is concerned and the [fol. 6721] $4,000,000 is in here, it is needed, every dollar of it.

Q. Whether it is needed or not—

A. (Interposing) Unless you pay it back, it is still needed. You cannot pay it back to people unless you do something about it.

They paid their money for bonds, preferred stock and common stock and they cannot have it taken away from them unless there is a lawsuit.

* * * * * * * * * * *

Q. Mr. Coffman, what do you expect Panhandle Eastern Pipe Line Company to do with this amount of $2,551,-034 which you are providing annually for depreciation, depletion and amortization?

A. Well, the company, as I have said, first receives that amount so long as it reports earnings in the form of cash and then through the cash account, it goes to other forms of assets as the management operates the business.

So long as the company continues to show growth, so long as the hazards continue to be in existence, so long as the company faces a condition whereby it may show [fol. 6722] increasing costs as it becomes a little more expensive to get gas, it will use the working capital to operate this firm as a going concern.

When it arrives at a point, however, where the accumulations are such that it is not necessary to spend these sums to keep this business operating at the same pace and working capital or cash begins to build up, I should then say possibly that the management would consider reducing its debt or calling its preferred stock and these would have to be done in the order mentioned, or paying a dividend on common stock, but until such time as they have such liquid position built up that they feel it unnecessary, that is, for all of it to be retained to operate the business efficiently, they will retain it in the business but when they arrive at that point, they will begin to reduce the outstand-

ing capital, pay off the bonds and thereby reduce the invested capital.

Q. And during the time such funds are actually used in the business, the rate payers receive no credit for the amounts provided for depreciation, depletion and amortization?

A. Well, I think that comes back to the basic condition, again, Mr. Littman, that this business was originally financed through the public with an understanding, so far as I know, that if the public invested money in the firm, [fol. 6723] the money was going to be efficiently handled, the company was going to be efficiently managed so that that investment would be secure and there would be a reasonable income thereon.

Otherwise, the investors would not have purchased these securities in the first place or otherwise financed this company.

So long as those securities remain outstanding and the capital has not been returned to the original investors, I do not see how it can be contended that the rate payer, that is, the consuming public or the consumers of this service can receive credit except as you, through efficiency, reduce costs and can pass that along to the customer and I still come back to my point if it is done any other way, it seems to me the matter will have to be taken to the Courts as to what the right of those original security holders is or was.

Otherwise, you are just confiscating capital. You are just telling them that you are going to take part of it away and, if you go on to an extreme example, you can see that no man can contend he has had a return of capital unless he is paid off.

If you take the extreme example here, for instance, of having rate reductions to the point where there are little earnings and you arrive at the point where the company is [fol. 6724] in liquidation and you convert the remaining property into the cash that you can get and pay bond holders off at 50 cents on the dollar and you allow nothing for preferred and nothing for common, it seems to me it is proved that the original investor does not get his capital

back, so who knows he is going to get it back until that time arrives?

Q. So the investor does not have his investment returned to him until he actually receives the cash in hand, is that right?

A. Absolutely, until he gets it and puts it back in his pocket or into his bank account, he just doesn't have it.

I mean, if I had the choice, for example, of having my money in the Panhandle Eastern without getting a return, as was the case for common stock here for quite a while in earlier years, or having it in my pocket to buy defense bonds or some other security, as I please, I would take the latter, any time.

Q. In other words, if the rate payer has paid the annual sum for depreciation, depletion and amortization to the corporation, the rate payer does not get any credit for such payment until the amount is actually distributed by the corporation to the individual investors, is that correct? Can you answer that yes or no?

A. Yes, so far as that particular item is concerned, [fol. 6725] but now you are talking about a very complicated situation as if it were a very simple one, but I will answer you, if every other thing remained the same except the charge for amortization and depreciation which amount was retained in the firm and not distributed in any form to the security holders, yes.

I do not see any reason why the consuming public should have any credit for that whatsoever.

Q. And that would be true even if this money paid by the rate payer for depreciation, depletion and amortization were placed in a safe deposit box by the corporation until the end of the life of the business and then distributed to the investors?

A. Well, that question, it seems to me, just cannot be borne out by the facts, Mr. Littman, because so far as I know and there certainly have been cases at point, I believe, although I cannot announce them, that if you continue to do that, there would be certainly some security holders who would immediately go to Court to ask the question, "Why is the management retaining such sums?"

I do not believe that condition could exist.

Q. Well, assuming that the condition did exist, under your concept of rate-making the rate payer would receive no credit until the investor had actually received the money at the end of the life of the property, is that right?

[fol. 6726] A. I say as long as the investor's money is retained in the business and he does not get it back, he expects a fair return thereon and security of principal included.

. . . . . .

Q. Now, if you will allow a return on an undepreciated rate base, isn't it only fair and proper that you allow a credit for interest accruals on this annual amount under a sinking fund arrangement?

A. Well, in so far as the sinking fund is built up and the bonds are called in automatically you reduce invested capital. When you accumulate a sinking fund, usually it works out that you buy in the bonds and, therefore, you reduce the invested capital.

[fol. 6727] Q. Now, Mr. Coffman, I wasn't referring to any particular sinking fund condition in bonds. I was referring to the sinking fund method of depreciation as distinguished from the straight line method of depreciation.

A. Well, now, we have got to get one thing straight, the terminology. I understand the sinking fund method of depreciation to be a method which is worked out, again, on an engineering basis as to what the proper charges are for allowance for depreciation and amortization. Now, if, when you charge that allowance against the operations in the operating statement, you at the same time establish on the assets side of the balance sheet an asset with cash and nothing else in it, which is building up, if that cash remains in such account and is not distributed in any form to the security holders, it is still a part of invested capital. On the other hand, if such fund is used to buy in securities, so that you lower your asset account and you, also, lower your invested capital on the other side, on the liability side, that is sound procedure. I merely say that, as long as that asset remains on the books it is still invested capital and the security holders will so contend.

Q. Well, as a rate-making formula, isn't it a fact, Mr. Coffman, that where a full return is allowed on an undepreciated rate base interest is credited on the annual ac- [fol. 6728] cruals to a sinking fund? Isn't that generally correct, as a rate-making formula?

A. Well, I would not want to answer as to that specifically. I would rather confine my answer directly to my approach and say that you have two people to consider, the investors, on the one hand, and the consuming public, on the other hand, and you cannot think of one or the other, you must think of both of them.

Q. Mr. Coffman, I was putting to you a very simple question that had to do with a rate-making formula. Now, we have heretofore discussed the straight-line method of depreciation. Now, I wanted to discuss with you, for a moment, the sinking-fund method of depreciation. Isn't it a fact that where a rate-making body fixes a rate base and does not deduct anything throughout the life of the property for depreciation, that in such event the Commissions invariably allow a credit for interest on the annual accruals for depreciation, depletion, and amortization? Isn't that correct?

A. Well, I think I will answer the question, I don't know. I have made no thorough investigation for this purpose on that. I think the best answer I could give to your question is, I don't know.

Q. Well, do you know what the sinking-fund method of depreciation is, Mr. Coffman?

A. Yes. A sinking-fund method of depreciation, as [fol. 6729] commonly used in accounting, is a method whereby, as you charge an allowance for depreciation, which is worked out on some engineering formula, you set up a fund as such to offset, if they complete the sinking-fund method.

If you are using just one portion of it, whereby you are trying to work out a schedule from an engineering standpoint as to the actual reduction per year through exhaustion or wear and tear, which may allow in the early years for more wear and tear or exhaustion and in the later years the reverse, that is the usual method as distinguished from the straight line. In other words, what they are trying to do there is to say that the amounts you charge at one period

are greater than the amounts you charge at another, whether it be the first years or the later years.

Q. Isn't it a fact that there is never an actual fund set up for that purpose, but that the fund is purely a theoretical device?

A. No, that isn't true, because I can go back in accounting and show you examples where depreciation funds in past have been set up very definitely. That is what I want to be sure you understand.

Q. You are not prepared to say whether an undepreciated rate base is used in connection with the sinking fund method of depreciation?

A. No, I have not made any particular investigation of [fol. 6730] that for this particular study.

Q. That is, you do not know whether it is or is not used?

A. That is right.

Q. Well, now, of course, if your annual allowances for depreciation, depletion, and amortization were determined by the use of a sinking-fund method, your annual accruals would, of course, be lower, would they not, than the amount which you have used of $2,551,000?

A. They might or might not. To answer your question, so far as my method of approach is concerned, if the sinking fund were to be used or had been used, I would then find out what the schedule from the engineering standpoint was that was operating at the time, and use such amounts. It would work no differently under my method of procedure than what I have done on what we have been terming the "straight-line method." The item might be different, but the over-all result on 25 years, if that is still the estimated engineering life, presumably, if the figures were accurate, would work out to the same point.

Q. You then think that the sinking-fund formula could be applied in connection with your annual allowances for depreciation?

A. Oh, I am sure it could.

Q. And the annual accruals would then be much smaller [fol. 6731] than the $2,551,000 which you have allowed, depending on the rate of interest used. Is that correct?

A. It would depend on the schedule that was worked out. As I say, on a sinking-fund basis you will work out

a schedule of depreciation for the estimated life, the same as you will work out the estimated length of life for a straight-line method, and you will build up a schedule accordingly.

Q. And the amount required annually would, of course, be less under any sinking-fund arrangement than that which you have determined under your theory of $2,551,034? Isn't that correct?

A. Well, that is correct technically, so far as the interest involved in the sinking fund is concerned, but practically, if the actual fund isn't established whereby you can invest the sum for the interest, it would make no difference, as I see it.

In other words, a bookkeeping entry merely to take interest on something that doesn't exist, even though you say it is a sinking fund, means nothing so far as my particular approach is concerned, because I am still, as I have shown here, talking about the over-all revenue that is needed by management to get at, finally, this amount of dollars that is needed to operate this plant efficiently, render service to the public, and get the last column that we have been referring to from time to time to maintain [fol. 6732] the credit of the corporation and the investment in the public's eyes.

Q. What would be improper about using a sinking-fund method for the purpose of determining the amounts required to be returned to the investors when the gas reserves are exhausted?

A. I did not say there was anything improper about it. It is one method that is actually used.

Q. And you would not claim that the use of such a method would be improper, would you?

A. No, not at all.

Q. For purposes of this proceeding?

A. For purposes of my study and my approach.

Q. Well, do you know, Mr. Coffman, what your annual claimed amount of $2,541,034 for depletion, depreciation, and amortization would be if the sinking-fund formula were to be applied for 25 years of remaining life at an interest rate of 6½ percent?

A. No, I do not know what the figure will be.

Q. Now, you could make such a calculation, could you not?

A. Yes, I can work it out; not here, I mean not in a short space of time, but I can easily work it out, yes.

Q. Well, if we gave you the sinking fund tables, the interest tables, you would not have any difficulty in working that out between now and tomorrow, would you?

[fol. 6733] A. No.

Q. Are you aware of the fact that this Commission in the Natural Gas Pipe Line Company of America proceeding used the 6½ percent sinking-fund formula? Did you know that?

Mr. Culton: Applied to what base?

The Witness: I do not recall specifically all the details, but I did read the general release on the Natural Gas Pipe Line Company.

By Mr. Littman:

Q. Did you know that in that proceeding the Commission found that an annual allowance of $1,557,852 would amortize $78,284,009 in 23 years, using a 6½ percent interest rate?

A. I do not recall those figures, no.

Q. Assuming the correctness of my reference to the Commission's opinion in the Natural Gas Pipe Line Company proceeding, why should it be necessary for you to require $2,551,034 per year for 25 years to amortize a fund of $63,775,839?

A. Well, I cannot, I believe, answer that question unless I have time to refresh my memory on that decision and see what the factors were that were involved and the specific amounts that were discussed. I have made this study, and on the basis that I have made it and the approach I have used and the figures I have used, all of which have been defined to this point, I say that the amount [fol. 6734] stated here is required until some portion is paid off to the security holders which will reduce the invested capital.

Q. Well, you have heretofore testified that if the Commission were to find an annual return for amortization, depreciation, and depletion in an amount less than $2,551,034, you would reduce your total dollars needed, accordingly. Isn't that correct?

A. I believe I said that if it were shown that the length of life of 25 years proved to be wrong, so that a new figure would be established, why, then I would adjust the accounts accordingly and go on, on whatever the basis was so determined.

Q. Do you have any opinion as to the correct interest rate to be used in this case if the sinking-fund method of amortization were used?

A. Well, at the moment I do not have a specific rate, but that can be determined. I have made a study which is shown as a part of this over-all exhibit entitled, "The Investors' Appraisal of the Risk of Capital", which I think closely approximates what the investing public is saying about this particular company and the type of risk it is as of the date we made the study. That should give you a close approximation.

Q. I take it from your answer that in your opinion the rate of interest to be used in connection with the sinking [fol. 6735] fund established for depreciation, depletion, and amortization should be the same as the rate of return fixed by the Commission. Is that correct?

A. Well, I think there you have to distinguish between two things. So far as the sinking fund is concerned, I would say that that still had some relationship to conditions that you actually can find in the financial markets at the time as well as what the Commission might find from the standpoint of rate of return, as I believe you are using it, to a property which renders a public service, that is talking about the consumer rate.

Q. Well, does that mean that the interest rate for the sinking fund might be higher than the rate of return allowed by the Commission on the rate base?

A. Well, that all depends on the factors taken into consideration. I would suppose that if the Commission determines a rate which is based upon all the facts to be considered, including the investor, that rate ought to approximate fairly closely the amount. On the other hand, if it follows a line of discussion that I understood you were making for a while, wherein you consider for the most part the customer and let the investing public go by the board, why, then I think there could still be some dispute about it.

Q. Can we not agree, generally, in principle that the interest rate to be used on accruals to a sinking fund for

[fol. 6736] depreciation, depletion, and amortization should closely approximate the rate of return fixed by the Commission on the rate base used by the Commission?

A. Well, I think my answer still is that if all the factors, the two most important ones, as I see it, are taken into consideration and given thorough weight, namely, the customer for the service, on the one hand, and the investing public, on the other hand, yes. If it does not, I still think there is some further study which would be warranted in trying to ascertain the figure. Now, whether they closely relate will depend upon the study. I do not believe I can answer any closer than that.

Q. In other words, your answer to my previous question would be "Yes" if the Commission were to adopt your suggested rate of return. Is that correct?

A. No, that would not be correct, because I have not given a rate here. I have talked about so many dollars.

Q. Well, if the Commission were to accept your method?

A. Well, then, if the Commission were to accept my method, I still have not arrived at a dollar amount, but if the Commission would tell me what the rate base is that they have determined and I use my method with the figures so shown for the moment, then I can tell what the rate is, but at the moment I cannot tell any rate because I do not know the base and until you tell me the base fixed by the [fol. 6737] Commission I cannot tell you any rate.

Q. I believe you stated a moment ago that you could tell me the interest rate which should be used for purposes of a sinking fund for the accumulation of the amounts required annually for depreciation, depletion, and amortization from an examination of the investors' appraisal of risk of capital.

A. No; what I said, I think, Mr. Littman, was that in connection with the study, I made, also, a study entitled "Investors' Appraisal of the Risks of Capital", which, I believe, could be used as a basis to help determine such a figure.

Q. Now, I refer you to your Exhibit No. 64, Appendix C, page 131, on which is shown for Panhandle Eastern Pipe Line Company the "Investors' Appraisal of Risks of Capital" as 9.10 percent. Is this the percentage figure which you had in mind?

A. No, not necessarily, because that figure there, as clearly indicated, is a figure calculated on what I would describe as the over-all capital. In other words, as you can see clearly from the exhibit you cite, it includes common stock, preferred stock, bonds and other long-term debt, and the over-all coverage there is 9.10 percent.

Now, obviously, you have an admixture of items in there ranging all the way from common stock, which might be rather speculative, to their present first mortgage bonds [fol. 6738] which are carrying a rate of 2.74 percent. I merely say that, from the basis of this study, if I were to pursue an investigation, I think that I could determine a rate. I am not saying that it is 9.10, because this includes all the capital of the company and there are different forms. If you can tell me upon what basis the sinking fund is to be constructed, why, that would assist in determining what rates seem to be applicable in view of the circumstances.

Q. Well, you are the expert here. Suppose you tell me what rate would be properly applicable to the sinking fund in the light of the knowledge which you have of investors' appraisal of risks of capital.

A. As an expert, I say I would want a little time to study that before I made an answer. This is a perfectly new problem to me and it is one that I do not believe any expert would be wise, upon his feet in a few seconds, to give an answer. As a matter of fact, I do not think he could, unless he made the specific study you mentioned, and I have not made such a study.

Q. Would you expect the amount to closely approximate the 9.10 percent figure shown on page 131 of Appendix C?

A. I really have not any idea, Mr. Littman. As I say, the rates go all the way from 2.74 for the bonds, as shown in my study, Exhibit No. 63, I believe it is.

Q. What is the over-all rate which you have applied to [fol. 6739] the invested capital to secure the $5,064,821 of "Current Capital Requirements", shown in your Chart No. 37?

A. Well, there are various rates.

Q. Well, isn't that rate shown in your table for Chart No. 26 as 7.99 percent?

A. Chart No. 26, is that right?

Q. Yes.

A. Well, what that chart shows there is that there are varying rates which I have discussed. There is the 2.74 percent for the bonds, the 8.45 percent for the preferred stock, and the 12 percent for the common.

Q. Now, if you will refer to your Chart No. 26.

A. That is what I am looking at.

Q. Yes. You show there the actual amount of bonds, preferred stock, and common stock, the latter including surplus outstanding, as of June 30, 1941, do you not?

A. Yes, I do.

Q. And in your table for that chart, to wit, Chart No. 26, you show the over-all "Yield Rate" applicable to the 7.99 percent?

A. That is correct.

Q. Now, that is the yield rate which you recommend be adopted by this Commission for application to the actual invested capital as of June 30, 1941. Isn't that correct?

A. No, that is not correct, because, as I have just [fol. 6740] finished stating, you have long-term debt in at least four classifications, preferred stock in at least two classifications, and the common stock including surplus. Each of those classifications takes a different rate.

Now, the way you get the 7.99 percent is to first consider each of the various classifications of the capital structure and then strike an average. Well, now, obviously, if you change the proportions from one to another, which will happen as you go along if you are calling in some bonds or building up a sinking fund for it, or if you refinance, as was the case beginning along in February 1941 by the company, I do not know just what that figure would be and I would want to make some calculations on it before I gave an answer.

Q. Well, why do you show this over-all rate of 7.99 percent in your table for Chart No. 26, if it does not mean anything and if it is not to be used for any purpose in these proceedings?

A. Well, it does have a meaning because it is based on each of the figures, but I am still telling you that, so far as the sinking fund is concerned, I want to know from you, if you are going to be technical about it, what kind of

capital you are talking about. After all, all the capital has to be amortized. That includes common stock. Now, if you are going to talk about that, it is going to be 12 percent, if the rates remain the same as they were as of June 30, 1941.

[fol. 6741] If it is going to be preferred stock, it is the figure shown there, 8.45 percent. If it is the bonds it is 2.74 percent and I say I would merely like to make an investigation before I give a particular answer, if you are going to work out a new schedule.

Q. In other words, you are certain that if you were to make a study of the problem of the proper interest rate to be applied for a sinking fund calculation for depreciation, amortization and depletion, your study would be predicated upon the same general principles as those reflected on your Chart No. 26 of Exhibit 65?

A. Well, rather than say predicated, I would say that I would certainly take into consideration all those factors.

Q. Now, if Panhandle Eastern Pipe Line Company had as of June 30, 1941, only common stock outstanding in place of preferred stock and bonds, then the rate would be necessarily 12 percent?

A. Well, there, again, as I say, you are changing two factors right off. The common stock in Panhandle Eastern at the present time is twice removed from the capital and I do not see how you can reason until you make a study on the basis of the assumption you make.

Q. Mr. Coffman, in computing your annual allowances for depreciation, depletion and amortization, which total [fol. 6742] $2,551,034 per year, have you allowed any credit for salvage?

A. In that particular figure I have allowed nothing for salvage because I could not find available in any figures any estimate for salvage.

I have worked these figures out at the moment on the assumption that there is no salvage.

Q. Well, you know that there is going to be considerable salvage, do you not, at the end of 25 years?

A. No, I do not know that at all. I am very much afraid it is going to work the other way around, that there won't be any salvage.

Q. In your judgment there is not going to be any salvage at the end of 25 years hence on all of the property of Panhandle Eastern?

A. To state the question a little differently, looking at it from the standpoint of the investor, the investor would not believe, in view of the facts that are available on this company today, taking as long-run a view point of 25 years, which certainly includes, that he can see any salvage left nor have I taken any; nor have I seen any engineering estimates which include them.

I believe it would be a hard package to sell the investor.

Q. You have not seen any engineering estimates that [fol. 6743] include an allowance for salvage?

A. In this firm, no, because I used the annual reports which are the only thing available to the stockholder. I did not see any facts there in regard to that, neither did the investor and I think he would be rather hard to sell on that idea.

Q. Did you inquire whether there were any exhibits offered in this proceeding which showed whether there would be any salvage?

A. No, and for the reason given, that I have taken these figures from the annual reports which are the only figures that are available to the prospective investor, as well as the present stockholder.

Q. Do you know of any certified public accountant that would certify a statement of this company without giving effect to salvage?

A. If he has given effect to it, we have included it because we used the certified statements and we took the various figures right off the books as you know; so if he did it, we did it and he did not do it, we did not do it.

Q. But you do not know what method had been used or has been followed by the company in determining their amounts of amortization, do you?

A. No, I did not make any investigation of that.

[fol. 6744] Q. I believe you stated in your direct testimony that your annual provision of $2,551,034 for depreciation, depletion and amortization includes maturity and sinking fund provisions.

. . . . . .

The Witness: That is right.

By Mr. Littman:

Q. How would your allowance be affected if the company had no outstanding debt?

A. Well, if the invested capital were represented solely by preferred stock presently outstanding but in larger proportions and common stock in larger proportions to take up the amount now represented by bonds, you would find the same amount of invested capital obviously as now stated upon the exhibits and one-twenty-fifth of that amount would be taken.

Q. In other words, your allowance would not be affected if the company had no outstanding debt. The [fol. 6745] allowance would still be $2,551,034, wouldn't it?

A. If that were invested capital, it still would be, yes, sir.

Q. In other words, I would like to know what effect did you give in arriving at your allowance of $2,551,034 to the maturity and sinking fund provisions of the present debt?

A. Well, in that particular connection the consideration was not made there. Where the consideration was made as to the sinking fund provisions and actually given weight was when the calculation was made as shown in Chart No. 37 to arrive at the figure of $5,064,821.

Mr. Littman: Will you please read that answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. But in your text accompanying Chart No. 31, you make a reference to "this amount" which, of course, refers to $2,551,034, do you not?

A. Well, that just means that we are working now at an amortization figure to retire the capital and I wanted to make clear that when I did that I considered all the various provisions.

I did not say there that I was giving a specific weight at that point. I merely say that the amount, of course, includes maturity and sinking fund provisions.

[fol. 6746] I am aware of the fact that they were required. I may have been rather faulty in my examination if I had not made such investigation.

Q. Well, are you stating that your maturity and sinking fund provisions are made in two places, first, in the amount of $2,551,034 and, secondly, in the amount which you just named, "Current Capital Requirements" in the amount of $5,064,821 shown in Chart No. 37?

A. No, I did not say that nor did I imply it.

Q. Well, would your provision of $2,551,034 be any different if the maturity provisions on present debt were longer or shorter?

A. Well, if the provisions were such that the bonds, the bond section of the capital structure were to mature in a much shorter life than the 25-year estimate, then there would have to be a segregation for that portion of capital, but your question originally asked me if there were no funded debt whatsoever outstanding, but, other forms of capital, was what I answered.

Namely, that you would still have the $63,775,839 and that has to be amortized if these assets are going to be exhausted in 25 years.

Q. Well, Mr. Coffman, I am at a loss to understand what the maturity and sinking fund provisions had to do with your calculation of this $2,551,034 shown in Chart [fol. 6747] No. 31, which latter figure was computed simply by dividing 25 years into the sum of $63,775,839 of invested capital.

A. Well, I think that that probably is fully explained in Chart No. 17 where I give the details to the funded debt, which is the only issue at point.

There the issues of the bond are so worked out to show the present schedule of debt retirement and to show the outstanding amount of debt through the years to the maturity date of the bonds.

Q. How did the information or data shown in Chart No. 17 affect the very simple calculation of dividing 25 years into $63,000,000-odd?

A. Well, they did not have any great material effect for the simple reason that so far as the length of capital was concerned and the maturity date of the bonds, they are about one and the same thing.

In other words, the bonds are not to mature until 1960 and the 25 years that we are talking about would be at

approximately the same time, so there is very little discrepancy.

Had you had the bonds, on the other hand, mature, let us say, in 10 years and the full invested capital going on for 25 years, which is the estimated length of life, then there would have been some additional consideration given. [fol. 6748] If so happens that the sinking fund will take care of the debt retirement as a separate part of the overall capital.

Q. Well, if your bonds mature in 20 years and you have provided for a 25-year life for purposes of amortization, depletion and depreciation,—isn't that correct?

A. That is correct.

Q. Now, what does the 20-year life have to do with this 25-year life that you actually used for purposes of Chart No. 31?

A. Well, I merely say that there are two observations to be made. In the first place, the debt so happens to expire only a short time prior to the estimated life as used in this study, so that per annum, it would not make much difference.

Actually, from the standpoint of debt retirement the schedules shown indicate how the outstanding debt will diminish as the years go by and the sinking fund on the bonds operates.

Q. Now, referring to Chart No. 17, isn't it a fact that the lower left-hand portion of this chart clearly shows that the schedule of outstanding debt indicates that your invested capital in the enterprise is going to decrease through the years steadily until 1960? Isn't that correct? [fol. 6749] A. What that indicates is that as the provisions of the bonds operate, a sinking fund will be built up, which sinking fund presumably will be used to buy in certain bonds.

As those bonds are purchased they will retire or reduce a part of the invested capital. If, meanwhile, the company continues to go on and need invested capital of $63,000,000 or more, that will be supplied either through earnings or new financing.

Part of that is already being accomplished at the present time as we know, that is, the company is contemplating new financing.

Q. Mr. Coffman, does your estimated annual provision of $2,551,034 to return capital when gas reserves are exhausted hold good for the year ended June 30, 1941?

The Witness: May I have the question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: I think is does, yes.

By Mr. Littman:

Q. Will you again turn to Chart No. 31? During that same period the company actually charged the amount of $2,316,560 for depreciation, depletion and amortization. Is that not correct?

A. That is correct, but when you are talking about this report you have to relate the figures that you are referring to, to their base and in that particular case [fol. 6750] where you are talking about the $2,551,034 you will see in the explanatory note that it is based on a return of capital $63,775,839 which was fully explained in Chart No. 27 and was based upon the assumption that the preferred stock would be eliminated and the company's capital structure thereafter would be bonds and common stock.

Q. Well, I thought you just said a minute ago that this estimate of $2,551,034 held good and was properly applicable to the year ended June 30, 1941.

Did you answer that question that way?

A. I answered the question incorrectly. I did not know that you were trying to trip me up because I thought in my study it was clear as to how the things had been based and if it is not clear I have just verified it by my answer.

Q. You understand this is your exhibit, Mr. Coffman. I don't doubt that you know more about this exhibit than I do, so I hope I am not going to be able to trip you up, but I would like to know now to what year this $2,551,034 applies.

You now say it does not hold good for the year ended June 30, 1941.

A. It is the amount, as I have explained before, that has been calculated upon the assumption made of a change in the capital structure and based upon the operations of the company with the adjustment in figures which I have [fol. 6751] already described this morning and on Saturday.

Q. Well, is this annual provision that you provide here one that hops around, jumps up and down from year to year, or is it something that can be used over a period of time? Now, which is it?

A. I think it very definitely can be used. If you make the assumption that the company will refinance its present stock by means of 50 percent in bonds sold at $3.25 percent and 50 percent of common stock sold at 12 percent, you will then have a total invested capital of $63,775,839 which is comprised of bonds and common stock.

If you then assume a length of life of 25 years to account for full exhaustion of the property and take one-twenty fifth of the amount you get $2,551,034.

The reason that it was assumed that there might well be considered for purposes of this study a change in the capital structure is because of an exhibit—of a chart which is contained in this Exhibit 65 which indicates that the company might well consider the revamping of its capital structure.

That chart which I referred to is Chart No. 25, wherein I compare various natural-gas pipe-line companies and to ascertain whether or not they have preferred stock outstanding.

Q. Well, now, under the present capital structure, you [fol. 6752] only have $10,000 less, do you not, namely, $2,541,034? Is that correct?

A. Yes, that is correct.

Q. Well, let's take that figure under the present capital structure, $2,541,034. A. Yes, sir.

Q. In order that we have no further quarrel about the amount. Now, was that the proper amount in your opinion for amortization, depletion and depreciation ap-

plicable to Panhandle Eastern Pipe Line Company for the year ended June 30, 1941?

Now, I think you can answer that yes or no, can you not?

A. If the 25-year length of life is correct, I answer "yes" and I base that on Ralph Davis' statement which I have referred to before.

Q. Now, is it your testimony that the company, itself, has understated its depreciation, depletion and amortization for the year ended June 30, 1941?

A. Well, so far as my study is concerned, using the sources I did, getting the best estimate that I could in regard to the length of life of the properties, the figure of $2,541,034, which is arrived at as already described, seemed the reasonable figure to use and in so far as it was in excess of the other, I am not prepared to say why the difference existed.

[fol. 6753] I merely am defending and describing why I arrived at the figure I got.

Q. In your opinion, then, the company did not set aside a sufficient provision for depreciation, depletion and amortization for the year ended June 30, 1941? Is that your testimony?

A. If the length of life proves to be 25 years, that is exactly my testimony, yes.

Q. And, according to your testimony, the company set aside in its reserves for depreciation, depletion and amortization $224,470 less than it should have set aside and provided for that purpose in the year ended June 30, 1941?

A. That is correct.

. . . . . .

[fol. 6756] Q. Mr. Coffman, will you please refer to Chart No. 37 of your Exhibit No. 65?

This chart shows, among other things, that in your opinion, Panhandle Eastern will require $3,516,000 annually for operations and maintenance expenses. Is that correct? A. That is correct.

Q. How much did the company actually expend, according to its income statement, for operations and maintenance for the year ended June 30, 1941?

A. $3,196,797.

Q. Chart No. 29 of Exhibit 65 shows the figure which you just named as "Actual 12 Months Ended June 30, 1941". Is that correct? A. Yes, sir.

Q. Now, you have added an arbitrary 10 percent or $319,679 to the company's claimed expenses for the "Projected" figure which is shown, again, in Chart No. 37. Is that correct?

[fol. 6757] A. Well, I have not that specific amount in mind. The figure that I used in Chart No. 37 of Exhibit 65 was $319,203 higher than the amount shown for the 12 months ended June 30, 1941.

Q. Now, you added this additional amount to the operations and maintenance expenses for the year ended June 30, 1941, in order to secure the amount for the future without making any study of the books and records or any examination of the detailed items of operations or maintenance expenses. Is that correct?

A. I did it without examining the books and based it upon an analysis of the trend of the company's affairs over a number of years as I could interpret them from the various published statements and, also, from a careful study of the trend of material prices and material costs and wage-rate trends that had been going up in an upward move for the last two or three years.

Q. But you did not make any study of the books and records in arriving at this 10 percent increase?

A. No, that is correct.

Q. That is, you started your computation on the assumption that every dollar claimed by the company was properly includable for rate-making purposes without making any investigation of the books and records?

A. You have added in there, again, "For rate-making [fol. 6758] purposes".

Confining the answer to the study that I made under the approach that I used, taking the figures from reliable statements which had been reviewed by public accountants, I believe that the figure was within reason.

Q. Well, the statement that you relied upon as the basis of adopting the amount claimed to have been actually expended by the company for maintenance and operations

for the year ended June 30, 1941, showed the details of these maintenance and operations expenses to what extent?

A. Well, it showed the figure as I have broken it down in the exhibit. In other words, the figure for operations, as such, was a total figure and the figure for maintenance was a single figure.

Q. In other words, you had no details before you from the statement that you examined showing the individual items included within the meaning of the terms "Maintenance" and "Operations"?

A. That is correct, but I did have a series of figures which gave me some idea of trends. For example, for the 12 months ended June 30, 1940, operations, taking the single figure, was $2,561,71[illegible]8.

The same figure for the 12 months ended June 30, 1941, was $2,902,352.57 and so on.

I have the various other figures available for the years, [fol. 6759] so that you could get some very good idea as to what the trend was on those items for the company and then, in addition, as I say, I was familiar with other statistics which gave a good idea of what wage rates were doing by way of trend, what material costs were doing and so forth.

Q. Now, I believe you stated that you examined statements that had been certified by a certified public accountant.

A. Generally, you mean?

Q. Yes. A. Yes, I have.

Q. You have had no such statement for the year ended June 30, 1941, did you, but had such a statement for the periods previous thereto ending with December 31, 1940. Is that correct?

A. That is correct.

Q. Now, is it your understanding that a certified public accountant passes upon the propriety of items of maintenance and operations from the point of view of rate making?

A. I do not think that the public accountant, unless he has the specific assignment, has that in mind, but he does have in mind accounting practice which is believed

to be sound and which is acceptable under present-day conditions to most regulatory bodies.

In other words, they are certainly not certifying to [fol. 6760] various practices which they believe to be unsound, although at the same time they are not making a rate study unless they have been retained to do it.

Q. Mr. Coffman, even if you had made an investigation of the detailed operations and maintenance expenses, would you feel qualified to express an informed judgment or opinion as to their propriety for rate-case purposes?

A. Well, there, again, Mr. Littman, I am making a study which I have explained, using an approach which I have explained. From the standpoint of this approach I would feel qualified to do exactly what you say.

Now, when you talk in terms of rate-making, again, I get confused because I do not know whether you are referring to the classical theory or some other formula, but if I can confine my statements to this approach, my answer is "yes".

Q. You feel competent to examine the detailed operating statement of a company and to express an informed opinion as to the amount of maintenance and expenses required by a company such as Panhandle Eastern Pipe Line Company for a given year?

A. I think on a thorough investigation and having such checks as are necessary with various executives of the company, I can form a pretty good opinion as to drawing a distinction between what would be legitimate [fol. 6761] charges to capital and what would be legitimate charges to income; as I am using this approach, yes.

To me that is not greatly different than any other analyses which we are doing on financial and operating statements or analyses of a company and we do hundreds of them throughout the year.

Q. Do you feel that you could express a qualified opinion in that regard with respect to the detailed operations expenses?

A. Upon thorough study I think for use in my approach that I could have a very good reliable answer, yes.

Q. I believe you have heretofore testified that you are not an engineer? A. That is correct.

Q. And you have not made such a detailed study in any event, have you? A. No, I have not.

Q. And you have never seen the property of Panhandle Eastern Pipe Line Company, have you?

A. I have seen parts of it. I have not been over the entire property, no.

Q. What part have you seen?

A. Well, I have seen certain parts of it when I have been to their Kansas City office, I have seen certain parts of their company when I was in the Texas area.

[fol. 6762] I was not working for this company, but when I was going through the particular area, I have seen various parts of the pipe line through some of the country that it has crossed.

Q. Did you ever see any of the pipe, did you ever make any examination of the pipe in the system? A. No.

Q. I take it that the property of Panhandle Eastern which you have seen was by a rather casual observation, was it not?

A. Yes, I was not making an investigation of it. You asked me if I had seen part of the property and my answer is yes, but I was making no study of it.

Q. And the part that you saw was a very small part of the whole, was it not?

A. Yes, a small portion of the whole.

Q. Of course, among the matters to be decided by this Commission by investigation is whether the amount claimed to have been expended heretofore by Panhandle Eastern Pipe Line Company for operations and maintenance are properly allowable for purposes of this proceeding.

A. I should suppose that were true.

Mr. Wheat: Mr. Littman, I am wondering whether you really meant what you said there, that amounts expended in the past were properly allowable.

[fol. 6763] You understand, I do not think you meant to lead the witness astray with respect to that but I suppose you had in mind amounts to be allowed in the future, did you not?

Mr. Littman: Yes, I had that in mind and I had particularly in mind the question of past expenditures to be used as a guide.

Mr. Wheat: As a criterion?

Mr. Littman: Yes, as a guide for the future.

Mr. Wheat: I so understand you, but I just wanted to draw that particular matter to your attention.

Mr. Littman: I think I might have made my question clearer.

By Mr. Littman:

Q. You had such an understanding, did you not, of my question? One of the things to be decided by this Commission, of course, is the proper amounts to be allowed in the future for maintenance and operations?

A. That is correct. I understood that.

Q. Of course, you understand that such an investigation involves a detailed study and examination of the various accounts and practices of the company in that regard? A. By the Commission?

Q Yes. A. Yes, I so understand.

Q. Now, is this increase of 10 percent for the pur-
[fol. 6764] pose of taking care of an increase in labor and materials incurred in maintenance and operations?

The Witness: May I have the question read?

(Whereupon, the pending question was read by the reporter.)

The Witness: I do not believe that question is clear to me, Mr. Littman.

By Mr. Littman:

Q. Well, what is the purpose of this 10 percent increase that you have allowed after June 30, 1941?

A. Well, the purpose of that was to register what we believe to be a fact in this country at the present time, that an emergency has changed conditions, other factors in the country, external conditions, economic conditions have changed so that we have been having increases in wage rates, shortening of hours, greater demands for materials, therefore, higher prices, and, of course, there are some scarcities.

Those factors, all of them, so far as the management is concerned, are going to have an influence on their cost of operations and maintenance.

I felt that in making an estimate of 10 percent I was making a very conservative one. If I had to make a study today, with the additional information that I have at hand, I should say it should be higher, so that the purpose was merely to register the economic conditions that [fol. 6765] are having a bearing on the cost of operating this business.

Q. Was this 10 percent increase based upon a study made by Standard and Poor's Company?

A. Not on a direct study. We are commenting upon these things [dails], as you know, in our various printed services and as conditions change we are changing our opinion. That is a part of our business.

Q. Well, did you assume that all labor and all things purchased by this $3,196,797 shown in Chart No. 29 and Exhibit 65 during the year ended June 30, 1941, would increase 10 percent?

A. I had a specific figure, as shown in the financial statement, covering the 12-month period ended June 30, 1941, which showed a total for operations and maintenance of $3,196,797.

In view of all the conditions, as we see them today, with rising trends of commodity prices, raw material prices, wages and so forth, I used a simple method of saying that certainly on the average these items would be at least 10 percent higher and, as I say, if I were making the study today I would say it was even higher than that.

Q. Well, you did predicate the increase primarily upon the proposition that in your opinion, first, the cost of labor would increase by 10 percent. Is that right?

A. It is correct.

[fol. 6766] Q. And, secondly, that the cost of materials would increase by 10 percent? A. That is correct.

Q. Will you enumerate the major items of maintenance and operations and the amounts of each for the year ended June 30, 1941?

A. I do not have that figure or those figures.

Q. You never did have them? A. That is correct.

Q. Well, can you state generally what is included among these operations and maintenance expenses, giving us the major items?

A. Well, the major items are already included in the two captions. The major items are wages and materials as far as my calculations are concerned.

If you can present me with the company's exhibit, with a detail statement, I can easily read them off. but I admit I did not have them to begin with nor did I use them.

Q. Well, here you have an item of operations in the amount of $2,902,353 for the year ended June 30, 1941.

Suppose you state what you consider to be the largest item of operations of Panhandle Eastern Pipe Line Company.

A. Well, I would not attempt, Mr. Littman, to enumerate those without looking at the statement, because, in the first place, for this study I did not use the details as [fol. 6767] I have already said.

Q. Well, how do you know the costs of operations are going to go up, if you do not know what elements are included within the meaning of the term "operations"?

A. Because, in so far as their materials and labor are involved, this company cannot be the one exception in the country that is going along without suffering the increases that everyone else is going to have to meet.

Further than that, I state, again, the answer that I [have] you wherein, without any major changes in the business, the operations charges as made on the company statement increased from $2,561,715 for the 12 months ended June 30, 1940, to $2,902,352 in the 12 months ended June 30, 1941.

That is about $400,000 of increase and they have not yet faced the largest increases that probably will be forthcoming from the emergency period.

Q. Well, suppose you name three or four large items of operations of this natural gas pipe-line company.

A. Well, I do not know to what detail they break down their various accounts.

Q. You do not need to give it to me by accounts. Just name a few items.

A. Well, for example, in their operations they are operating and maintaining the pipe line as such, they have stations all along the line with telephones and tele- [fol. 6768] graphs which they are maintaining.

They have men at various stations to report, they have other men to take care of valves and cut-offs, they have booster stations, they have men where the line has been looped, so there are repairs all along.

If they have an explosion, for instance, or a flood so that a part of their pipe is washed out, there are men there immediately to take care of that and so on.

Q. What percentage, would you say, of the total maintenance and operations cost for the year ended June 30, 1941, is embraced by the items which you just named?

A. I would not say until I see the figures.

Q. You would not have the slightest idea, would you, even if you did see the figure—

A. (Interposing) Yes.

Q. Well, I mean without seeing the figures. Would you have the slightest idea without seeing the figures?

A. I would not know now because I have not seen the figures.

Q. Well, you do not know from your own general knowledge what percentage of operations and maintenance is related to the items which you just named?

A. Stating it the other way around, for purposes of this study I did not have the detail figures, nor did I think that they were needed for my particular approach. [fol. 6769] Q. Well, the answer is you don't know?

A. I say I don't know and I don't need them for this approach, taking a view from the investor's standpoint.

Q. You do not know now and you never did know?

A. Of the detail figures, that is absolutely right.

Q. Well, not only of the detail figures, but of the percentage, generally, of operations and maintenance expenses which comprise the elements and items which you just named?

A. No, but I still say that I know that there was $350,000 of increase between two different 12-month periods

and that was reported to the stockholders who have an investment in this company.

They know, also, of the rising trend of prices and they are taking that very definitely into consideration. Assuming that someone doesn't come along and show that these figures are all improper or misstated, they presumably stand in totals.

Q. Will you read the revenue figures for those corresponding periods?

A. Yes. The total revenue figure, the gross revenue which is gas, gasoline and other, was $13,096,556 in round figures for the 12 months ended June 30, 1940, and $14,336,448 in the 12-month period ended June 30, 1941.

Q. And what is the difference between the revenue [fol. 6770] figures?

A. The difference in the total gross revenue figure is $1,239,892.

Q. Now, can you state what part of the increase between the two periods which you mentioned, that is the increase in maintenance and operations expenses, was occasioned by rising wages and materials costs and what part was brought about by the requirements for the purpose of securing this additional revenue?

A. No, I cannot state that figure.

Q. As a matter of fact, the operating costs per dollar of revenue have been going down, according to the figures that you just read. Isn't that correct?

A. That is per unit sold, yes.

Q. And those are figures upon which you relied in part to secure this 10 percent increase over the figures as of the year ended June 30, 1941?

A. Which months did I rely upon?

Q. Operations and maintenance expense figures for the preceding years.

A. Well, I relied upon the actual figures for operations and maintenance as shown in the various financial statements, yes.

Q. Now, what other items are included within the meaning of the term "Operations", as you have used it [fol. 6771] on this Chart No. 29 of Exhibit No. 65?

A. Well, as I say, Mr. Littman, I do not think I can go into much more detail unless I have the company's figures before me and read them off.

I did not use them for this study because I did not feel it was necessary. What I was doing, as I have explained previously, was looking at this from the investor's point of view who has only the various financial and operating statements that are published in order to form a judgment. That is exactly what I had to form a judgment.

Q. Well, do these operations include bond interest, for instance?

A. No, they do not include bond interest.

Q. Do they include rate-case expense.

A. I do not know.

Q. It might?

A. I would not say. I have not made a study, so why should I go on guessing with you?

Q. Well, if you do not know what is included in the meaning of the term "Operations", as you have used it on your Chart No. 29, I am at a loss to understand how you could determine that the amount was going to increase 10 percent after June 30, 1941.

Now, can you explain how you can arrive at such a conclusion without knowing any more about the details than [fol. 6772] that which you have told us?

A. Yes, I think it is very reasonable, to me, Mr. Littman, just as, right now, for example, I do not know and I don't suppose the company knows what the income, taxable income for this firm is going to be, but they know that the taxes, when they pay them, so far as rates [as] concerned, are going to be much higher than they are now.

Well, I know that about wages and materials and yet I do not know the individual items any more than I know what the taxable income is, but I know it is going to be higher, so do I know what the wages and materials are going to be higher and that the total on operations figures is going to be higher.

Q. We are going to take up the subject of taxes a little later, but confining ourselves for the moment to maintenance and operations expense, you cannot give us any further explanation than that which you have already given as to why you expect a 10 percent increase?

A. I think the Exhibit 65, Chart No. 29, states the situation exactly. There was a figure of $3,196,797 which was recorded for the 12 months ended June 30, 1941.

That is the figure that the various people who were interested and who received the published statement saw. That figure was increased; that total figure, broken down as to maintenance and operations, was increased by 10 [fol. 6773] percent because of a study and analysis that we make currently and day in and day out as to what is happening to wage rates and material cost and material prices.

Q. If I were to tell you, Mr. Coffman, that the operations expense shown in the amount of $2,902,353, included a single item of an amount in excess of $1,000,000, could you tell me what that item was?

A. Not at the moment.

Q. You would not have the slightest idea?

A. Not at the moment, because, as I have said, I did not study the breakdown, so I do not know how I can answer.

The figure I had before me was the only figure that was available to the investing public.

Q. Well, that is not quite so, is it, Mr. Coffman? The stockholder has a right to examine the books and records of the company, hasn't he, at reasonable hours?

A. Well, on occasions, there is usually a certain time set but for all practical matters he does not have the chance to have access to the books, because people just cannot take trips to Kansas City and spend two days poring over the books.

Q. Well, they can write to the Federal Power Commission, can't they, concerning the subject matter filed as public record in their annual reports?

[fol. 6774] A. They can do that.

Q. Well, the information is available to them if they want to go and get it, isn't that right?

A. Or part of it, anyway, if not all of it.

Q. Well, all this information about the detail items of maintenance and operations expense was available to you if you had wanted to get it. Isn't that correct?

A. I could have gotten a good portion of it, but the time which I had to spend on this study would not permit the number of weeks it would have taken.

Q. Well, let me be clear about one thing. Is it your testimony that all things purchased by the amount of $2,902,353 of "Operations" expense for the year ended June 30, 1941, will increase 10 percent by reason of materials and wage costs increases?

A. Are you referring to the matter generally or are you confining it as applied to Panhandle Eastern?

Q. I am speaking of Panhandle Eastern and particularly of the figure shown in the Chart No. 29.

A. Well, what I am saying on that, then, is that the operations and maintenance charges, in my opinion, can reasonably be expected to be 10 percent higher for the coming 12 months than they were in the last.

Q. Do you mean per unit of sales or in the aggregate?

A. I am talking altogether in terms of aggregate dol- [fol. 6775] lars as shown on the chart.

Q. Regardless of the amount of revenues expected to be derived?

A. Revenues haven't anything to do with this particular item, as such. If you do more business or if you service more communities, the likelihood is that there will be more operations and maintenance, naturally, but so far as this individual item is concerned right now, that is a separate division.

Q. In other words, this increase of 10 percent which you show in your Chart No. 29 of Exhibit 65 does not include anything for increased business, for maintenance and operations to take care of increased business, but simply reflects a 10 percent rise in materials and labor costs?

A. No, it takes in other factors, also. I refer again to the figures that I used as an illustration on operations. [Betwen] the 12 months ended June 30, 1940 and the 12 months ended June 30, 1941, as I just answered you, during those two periods there was an increase in gross revenue and more business done. At the same time, as I have shown, there was some $400,000-odd increase in operations expense alone.

That was approximately a 20-percent increase.

[fol. 6776] Q. Well, then, this increase of 10 percent is going to take care of the increased business requirements for the year ended June 30, 1942?

A. Will you read the question?

Trial Examiner: Read the question.

(The pending question, as above recorded, was read by the reporter.)

The Witness: I would say that most of it is related to the increase that can be expected from the price trends and wage trends and that if there is any over that can be attributed to increase in business, but so far as your question is concerned, I did not there make a break down as between how much is increased business and how much is attributable to rise in wage rates and material cost.

Mr. Wheat: I am sorry, I didn't hear that last part. Did you say you did not make a break down?

The Witness: I said that I did not segregate. I didn't use that word. But I am saying that I did not segregate in the increase of the difference between $3,196,797 and $3,516,000, the amount that would be for 10 percent increase in wages, 10 percent increase in material costs and other factors. In other words, looking at the over all amount, I said that 10 percent was a reasonable expectancy as an increase when compared with the actual 12 months ended June 30, 1941.

[fol. 6777] By Mr. Littman:

Q. For how far into the future after June 30, 1941?

A. I have already explained so long as there is no major change in conditions.

Q. Well, that might hold good for one day, then, might it not?

A. Well, it might hold good for one year, but so far as the approach is concerned, it will hold good just as long as the classical theory of forming a rate basis and the rate of return will hold good.

Q. Well, now, seven months have elapsed since June 30, 1941, will this amount which you set for the Chart 29 in the amount of $3,516,000 for operations and maintenance hold good for these past seven months?

A. I don't know. I haven't seen the statement as of December 31, 1941, so I can't say. I haven't made the comparison, but it would not be a difficult thing to do.

Q. Well, Mr. Coffman, you based your increase and your determination of the entire projected amount upon your general knowledge. Now, why can't you apply your general knowledge of conditions to the item of maintenance and operation and look back over seven months and tell us whether your prediction was proper in the light of what has transpired?

[fol. 6778] A. Well, so far, generally, as the economic conditions are concerned with material costs and wage rates, I think that they have more than been borne out. I think they have been higher on the average than 10 percent. And as I say, if I were to make this study today exactly on the same basis I made it some seven or eight months ago, or whatever time it was, I would make the allowance higher than 10 percent in view of my general knowledge as it is today.

Q. Now, you can't tell us what proportion of this investment of $319,000 in maintenance and operation expenses is strictly attributable to increases in the cost of materials and labor and that which is attributable to increased business, can you?

A. No. And I would go further, Mr. Littman, and say that in my approach I was trying to get some method which would be comparatively simple and, unless some figure as reported can be stated to be wrong, that there might come from this a quick method to get at some rates available for the purpose of this proceeding. Now, if I am going to have to follow on an approach which will become as laborious and as costly as used to determine reproduction cost new and the others substituted yesterday that were originally made on the old classical theory, then it seems to me that you handicap the whole approach.

Q. Well, does the determination of the amount of op- [fol. 6779] erations expenses have anything to do with reproduction cost. A. Operations and expenses?

Q. Operation expenses.

What does the reproduction cost there have to do with operations expenses?

A. I wasn't saying anything about that, Mr. Littman, so far as my approach was concerned. I was merely citing by comparison the difficulties that you get into if you carry all of these studies to such minute detail that it takes the better part of a year or longer to complete them and the cost is run into tremendous sums of money. For my purpose, I was trying to find some method which appeared to me to be reasonable, wherein you could get some figures for this purpose. Now, if the Commission makes an investigation and finds that one of these figures is improper, I would be perfectly willing to take the proper figure, but until that is straightened, I have nothing else to accept than the figures that are reported to the public.

Q. Plus 10 percent.

A. Well, I made that allowance because of the reasons I have already given, yes.

Q. Now, you have indicated that most of this 10 percent is for the increase in wages and material costs rather than increases in the amount of labor and the amount of material. Is that correct?

[fol. 6780] A. I don't recall that I said any such thing.

Q. Well, what is the fact?

A. I said that what I had was a figure of $3,196,797 and in studying the external conditions, knowing the general trends and so on, it seemed reasonable to me that a figure would increase at least by 10 percent, so I multiplied such figure by 10 percent and added on the additional amount to get the figure. That is the fact and there is no other explanation to it.

Q. Can you state the amount of wages paid by the company in the year ended June 30, 1941?

A. Well, I have really answered that, haven't I? I have told you I have no break down, so how can I tell you what the wages are that are involved in this?

Q. Did you assume that the cost of gas purchased by Panhandle Eastern Pipe Line Company from its vendors was going to increase per unit after June 30, 1941?

A. You are talking now purely about the purchase price?

Q. Yes.

A. Well, in so far as they had contractual arrangements with their various vendors, it certainly wouldn't change until the contract so stipulated. If they had to

make some new contracts, that portion of the gas might cost them a little more. They don't just go out and buy [fol. 6781] that without some contractual arrangement, of course.

Q. Do you know how much of it is contracted for and how much of it is not contracted for?

A. No, I didn't make a detailed study of that.

Q. Do you know anything about the terms of the gas contracts?

A. No, I did not review those.

Q. Well, without knowing something about the contracts and the dates when they expire and the conditions under which Panhandle Eastern Pipe Lines purchases its gas, you can't tell whether the cost per M.c.f. of gas purchased is going to increase after June 30, 1941, or is going to remain the same or is going to be less, can you?

A. As to the specific amount, no, but you are working in a variable time element which I do not think is to be involved. In no case throughout the approach am I saying that this study will last any longer than any other approach. If conditions change or contractual arrangements change, a new set of factors must be considered. I say we make the study and I shall proceed to do it. If a change is to occur in any major factor, then, obviously, a new study would be necessary.

Q. Well, omit the time element from my question and answer as of the day, June 30, 1941.

A. Is that an additional question?

[fol. 6782] Mr. Wheat: Have you completed your question?

Mr. Littman: Perhaps I better reframe it in the light of the witness' answer to my previous question.

By Mr. Littman:

Q. You say that you cannot state what period of time into the future after June 30, 1941, your "projected" figures of operations and maintenance shown in Chart No. 29 of Exhibit 65 will go? Can you?

A. Well, I didn't say exactly that. I said that these figures would hold good if they were found to be proper figures, that is, for what they represent if they are found to be proper they will hold until there are any major

changes in any of the important factors relating to this approach. At that time it would be necessary to reappraise the situation and come to new conclusions and I don't see that that is any different than would be the case under the classical approach. I mean if a major factor changed there, you either have to make a new study or find that the results are no longer in keeping with the original opinion.

Q. Well, has any major change occurred since June 30, 1941, that would change your 10 percent increase?

A. As I say, the trends are continuing to go up and if they continue on, further allowances will have to be made. [fol. 6783] If the management doesn't make them, they are going to be stuck with them just the same as anyone else.

Q. I am talking about the seven months that had expired June 30, 1941.

A. Generally, prices have gone up and wages have gone up more than 10 percent, yes.

Q. Then you want to change this projected figure and increase it some more?

A. Not at this point. I have made the approach and at the moment, I stick with it, but I say this, that if the trends continue to go up, further allowances are going to have to be made because they are actually going to have to be met.

Q. So far, down to date, you stick by your projected estimate of $3,516,000 as the "dollars needed by Panhandle Eastern Pipe Line Company for operations and maintenance"?

A. That is right, and I will stick with that until such time as a reappraisal of all these factors indicates that 10 percent is not sufficient, that you will have to have more and other allowances for increases will have to be made in the other figures I have used, yes.

Q. I take it from your testimony, Mr. Coffman, that in order to make an estimate of operations and maintenance expenses for the future, you don't have to know anything about the amount of sales or the amount of pur- [fol. 6784] chases or the amount of materials or the detailed accounts in order to make a proper estimate?

A. Why I haven't said that, and I haven't implied that.

Q. All right, let's go through these. Can you tell us what the sales of Panhandle Eastern are going to be on and after June 30, 1941, as estimated by you or as estimated by anyone else?

A. I have got the figure right in the exhibit here, what the gross revenue is going to have to be on the basis of calculations I have made. So long as the conditions generally exist under which I made this study, I still say that those figures are the reasonable figures, based upon this approach.

Q. Is the amount of $15,920,855, which is shown in your chart No. 37, as "Total Dollars Needed", the amount of revenue which you expect Panhandle Eastern to have in the future?

A. I say that under conditions which existed at the time this study was made, allowing for increases that are specifically stated in the various amounts, allowing for what will be necessary in the way of current capital requirements executed on the basis as clearly stated in this report, that this company would have to have gross revenues of $15,459,545.

[fol. 6785] Q. How many M. c. f.'s are contemplated by that figure?

A. I don't know. I haven't worked it out on a unit basis.

Q. Well, what I would like to know is how many units you expect to sell and how many units you considered would be sold in arriving at this estimate. Without this number of units, Mr. Coffman, you appreciate that it would be practically impossible to put this exhibit to any use.

A. There is another angle, also, that has to be considered besides that, it seems to me, Mr. Littman.

Q. Well, suppose you answer my question first and then we will talk about the other angle that you want to talk about.

A. That is exactly what I am going to do, if you will permit me. If you will make the assumption that as of today the M. c. f.'s being sold were to remain static, but because of external trends the various costs for operations, maintenance, and taxes and so forth, which I have enumerated, arrived or reached the figures which I have, even though there had been no increase in M. c. f.'s, I would still say that the company under those conditions I

have just outlined, had to have $15,459,545; so that what you have to have is not only the M. c. f.'s, but you have to have the trend of the times and the cost of doing business. I think that, if you will take the example I have given, [fol. 6786] answers your question.

I have said here that these estimates which I have made were reasonable and when you accumulate those various items, you arrive at $15,459,545.

Q. Well, do you assume that the number of M. c. f.'s sold by Panhandle Eastern will remain static?

A. I don't think they will, no. I think this is still a growing industry and I think this particular company is a growing company.

Q. And you think that the sales are going to increase?

A. I think they will.

Q. Now, am I correct in understanding, then, that this amount of operations and maintenance of $3,516,000 shown in Chart No. 29, is the amount which would be required in order to produce the $15,520,855 of revenue shown in Chart No. 37?

A. I don't know whether I get your question correctly, but so far as the relationship of $3,516,000 for operations and maintenance, as I have projected the figure, is concerned in comparison with the $15,549,545, obviously, they are related because the $3,516,000 is a part of an accumulated total to arrive at the larger figure.

Q. Well, you say they are related, but you don't tell us how they are related. Will or will not Panhandle Eastern Pipe Line Company be required, according to your [fol. 6787] estimate, to spend $3,516,000 in maintenance and operations expenses in order to receive $15,520,855 of revenue? That is Chart 37.

A. Under the study that I have made and the approach used, that is the amount that I believe reasonable under the conditions mentioned for operations and maintenance, yes.

Q. So that your study contemplates, as shown in Chart No. 27, a horizontal 10 percent increase in wages and materials costs required to produce that revenue after June 30, 1941; is that right?

A. I believe I have answered that by the explanation that I gave originally. I merely—

Q. (Interposing) Can't you answer that yes or no?

A. (Continuing) —I increased. I don't know what you mean by "horizontal." The $3,196,797 which was the actual figure, was increased by 10 percent to arrive at $3,516,000. There can't be any other explanation to it, that is it.

Q. Take it or leave it, that is it, that is all there is to it?

A. That is exactly how I got my figure so far as the $3,516,000 is concerned, that is the only explanation I can give you.

Q. Suppose you had estimated the increase to be 20 [fol. 6788] percent by mistake. How would we know or how could we ascertain that you had made a mistake from the explanation that you have made?

A. Well, I would presume that with the experience that the Commission has they must know whether a figure, in the first place, looks reasonable or unreasonable. In addition to that, I had assumed the Commission was making rather elaborate studies as to all these items and arriving at a conclusion as to whether the figure was proper, whether the accounting for the figure had been proper and so forth.

Q. It looks like we are going to have to go through the figures by the classical method, after all, in order to test whether your very general estimate of an additional 10 percent is right or wrong. Is that correct?

A. Well, that isn't the way my mind works. It may be true, but I don't believe it.

Q. Well, in order to check whether you are right or not, what do we have to do?

A. Well, so far as the operations and maintenance are concerned, if you want to find out whether that is right, that is just one set, one group of accounts that are included in those classified cases. They can be analyzed.

Q. Yes, but how about this 10 percent increase that you applied?

[fol. 6789] A. Well, economists and all people interested in what is happening to the economic factors in the country study the trends. I should suppose that the Commission is doing the same thing, as well as studying the records of the company. I am sure you must be.

Q. Doesn't your 10 percent increase apply to all of the items of operations and maintenance?

A. Well, the 10 percent is applied against the total figure, Mr. Littman, and how can I break it down in detail more than I can tell you the individual items when I tell you I didn't have them to work on? It seems to me I get no place answering your questions, because I have to give you the same answer. I have already admitted it a half dozen times. I don't have the details now, I didn't when I made the study, and I can't make them up here.

Q. Well, did you or did you not reflect an increase in the unit cost of gas purchased from vendors in your estimate of operations for the projected period? Can you answer that question or not? You either did or you didn't, you know.

A. Well, no, your question still isn't fair, because you are pinning me down to one item. I didn't have any of the individual items, so I will answer your question as specifically as I can by saying that if such item were in the amount of $3,916,797, and I increased that over all [fol. 6790] figure by 10 percent, in so far as another figure is in there, you could multiply each of the items by 10 percent to get the total or not. But I didn't do it that way; I took one total figure and increased it by 10 percent.

Q. The thing we would like to know is how you did do it. A. Well, I just got through telling you.

Q. And what it contemplates. Does or does not your study contemplate an increase in unit cost of gas purchased, assuming that the cost of gas purchased is in here, and which you don't know, incidently? Assuming that it is in there, will you answer my question, please?

A. I will answer your question as I did before. The $3,196,797 was increased by 10 percent to arrive at my figure and I do not have any break down of details or any individual figures to which I applied individual percentages. I say that it is a reasonable expectation, with conditions as they were when I made this study, that this particular item would increase 10 percent.

Q. Now, I want you to assume that all of this operations expense of $2,902,353 represents gas purchased from vendors. Under that assumption would you have applied a 10 percent increase to it?

A. I wouldn't have applied a 10 percent increase if there had been no wages and materials, because, as I [fol. 6791] have told you, wages and materials increases

were part of the explanation of getting the 10 percent. Now, if there were no wages or materials involved at all, there wouldn't be any 10 percent. If there were any additional contracts for gas written, I could get some idea of an increase in that, I would take it into consideration, if I had those detailed facts.

Q. Now, you have to have those detailed facts, don't you, before you could do anything with such a figure?

A. No, I don't have to, because I have already done this and I have it right here and I didn't have any of them.

Q. Now, assuming that $2,000,000 of this operations expense, which totals $2,902,000, were gas purchased expenses, what would you do in those circumstances? Would you still apply a 10 percent increase to get your projected figure or wouldn't it make any difference?

A. To the extent that there was no labor and materials involved in the particular item, there would be an adjustment for that amount. But taking the figure your over all—

Q. (Interposing) How would you adjust it?

A. Well, depending upon what facts I could get, but I say that individual figures, for example, in a total, one you might increase by one figure and another figure by another, [fol. 6792] and if you come out with an average, it would be 10 percent; just as I have studied yield rates on securities, bonds are 2.74, preferred stock 8.45 and common stocks 12. If you average that, you get 7.99. Well, this 10 percent—

Q. (Interposing) We will come to that.

A. I am just using that as an illustration to come to this, so that when you get through you get a 10 percent over all increase. That is the method that was used here.

Q. Well, assuming that there was one million dollars worth of gas purchased expenses, and I am speaking now of amounts paid to gas vendors by Panhandle Eastern included in this $2,902,353 figure of operations for the year ended June 30, 1941, what would you do in that event?

A. I don't know, Mr. Litman. I come right back to my original answer. I increased a sum total figure of $3,196,797 by 10 percent.

Q. Now, how do you know that is right without knowing how much labor is in here and how much gas purchased is in here?

A. I don't really know that it is right, but it was my very best judgment under all the factors I considered and made at the time, just the same as anyone else uses his judgment on everything that he is working with. I don't know. Time will prove whether it is right or not.

[fol. 6793] Q. But your judgment is not any better than what you know about these things, Mr. Coffman. Now, you told me a minute ago that you would want to know how much gas is included in here and that you would want to make adjustments accordingly, is that right?

A. I say, if I had all of those figures, it is like every other study in that it would be just that much more material to work with.

Q. And so much better an estimate?

A. It might be, but, after I got through, I might come out with 10 percent.

Q. You would be lucky if you did, wouldn't you?

A. No, I do not think I would be too lucky, no.

Q. Do you know whether any delay rental expenses are included in the amount of $2,902,353 of operations?

A. No, I do not.

Q. It is a fact, is it not, Mr. Coffman, as you know in your Exhibit 65, that the operating ratio of this company has declined consistently through the years.

Do you recall the chart where you show that conclusion? I believe it is Chart No. 8 of Exhibit 65?

A. Yes, Chart No. 8. The operating ratio of Panhandle, before taxes, has shown a general decline from 1934 through 1937.

During 1937 there was an increase and then, beginning [fol. 6794] in 1938, it started to decline again. After taxes, however, the operating ratio showed a decline until 1937 and, since that time, has shown a rather marked increase.

Q. And the operating ratio, as indicated by your Chart No. 8 for Panhandle Eastern Pipe Line Company, is substantially below that of the average of other pipe-line companies, is that correct?

A. Yes, that is correct.

Q. And do I correctly understand you to mean by the term "Operating Ratio", the relationship between revenues and expenses?

A. Yes, sir.

Q. That is the percent of gross revenue consumed by operating expenses. Is that a correct definition?

A. That is correct.

* * * * * * * *

By Mr. Littman:

Q. Will you turn to Chart No. 10 of Exhibit 65. On this chart you show in graphic form, the "Percent earned on invested capital of Panhandle based upon capital structure".

[fol. 6795] Will you state the percent earned by Panhandle Eastern on its invested capital as defined in this chart for each of the years 1937 to 1940, inclusive?

A. As shown in table for Chart No. 10, Exhibit 65, the percent earned on invested capital for each of the years 1934-1940, both inclusive, are as follows:

2.24 percent; 3.50 percent; 6.05 percent; 8.78 percent; 7.77 percent; 9.57 percent; 9.62 percent; and the average for those years was 7.11 percent.

Q. Now, will you please turn to Chart No. 11 of Exhibit 65 entitled, "Percent earned on invested capital of Panhandle based upon net property, intangibles and working capital."

Will you state the percent earned by Panhandle Eastern on its invested capital, as defined in this chart, for each of the years 1937 to 1940, inclusive?

A. In table for Chart No. 11 in Exhibit 65, the percent earned on invested capital for the years 1937-1940, both inclusive, were as follows:

8.76 percent; 7.75 percent; 9.49 percent; and 9.54 percent.

Q. What is your opinion as to the reasonableness of the percents earned by Panhandle Eastern on its invested capital which you have just read into the record for each of the years 1939 and 1940?

[fol. 6796] A. Mr. Littman, you cannot consider it, looking at it from the over-all investor's point of view, for any individual year.

To answer your question, I would have to look over a period of years to satisfy myself that, over such years, the

average that you might get would be satisfactory to the investor and I would have to have such figures in order to determine whether or not the figures in the few years you mention were in line with the general average, higher or lower, because, after all, the invested capital was in the company for many years and would continue to be and the investor watches that, not as of a given year, but tries to ascertain how he will fare over the length of life of that investment.

Q. Well, what would you say about the percent earned on invested capital by Panhandle Eastern in 1939 and 1940 in the light of the data which you have for the previous years as shown in your charts Nos. 10 and 11 of Exhibit 65?

A. Well, as the table mentioned shows in the early years, because this company was just then getting underway, so to speak, it was a comparatively new company and its earnings were not large in comparison to invested capital.

The return was very small.

Now, if the investors had thought that making such investments in this company, the return was going to continue on those low levels, I do not believe they could ever have [fol. 6797] been encouraged to make the original investment. They did feel, however, that although there was a period of waiting, perhaps later on, when the corporation got settled in some degree of maturity, its earnings might be better, in which case they would make up in the later years some of the lower returns that they had to suffer in the earlier years and they will look at it on the basis of the average over all to see whether or not, in their opinion, it proved to be a sound investment.

Q. My specific question related to the percent earned on invested capital of Panhandle Eastern in the year 1939 and in the year 1940, which was very close to 9.5 percent in each of those years. Do you think that was reasonable?

A. In view of the past history, I do, Mr. Littman, for the reasons I have just given. The average for the period 1934-1940, both inclusive, as shown in this particular table, is 7.11 percent and, in another connection, with the figures I have already recited, the investor's appraisal of the risk of capital at the same time this study was made varied all

the way from 2.74 percent on down to 12 percent on common stock.

This takes the invested capital as a whole. If you take in the other study, the invested capital as a whole, the figure as we already have it in this record is 7.99 so that it seems to me one must conclude that the two years you [fol. 6798] mention where the figures are 9.5, approximately, for 1939 and 1940 had to be such in order to bring up the average to what would appear to be a reasonable figure so that, so far as those figures are concerned, I do not believe they are unreasonable.

Now, if you should continue a period of years in which they should remain at that same level, when the over-all investor's appraisal of the risk of capital was running 7.99, I would then review the facts but, until such time as you find such average, I say the figures here are not unreasonable.

Q. You mean the figure of 9.5 percent, approximately, earned on invested capital of Panhandle Eastern in the years 1939 and 1940, is, in your opinion, reasonable?

A. That was not quite my answer, Mr. Littman; I said you had to consider a period of years because that is the way the investor looks at the situation.

He is perfectly willing to make an investment in an enterprise knowing there might be a period of waiting for some return but he would not make any investment at all unless he felt at some point along the line the company would settle down on an earnings basis whereby the original investor would begin to get a return.

Now, in the period mentioned, 1934-1940, both inclusive the average percent earned on invested capital as shown [fol. 6799] in table for Chart No. 11 of Exhibit 65 is 7.11 and at the time this study was being made, our study of the investor's appraisal of the risk of capital showed that to sell securities of this general type in the market, the investor required 7.99 percent.

Therefore, I say that, taking a look at the years generally from the investor's point of view, the 9.5 percent approximately, for 1939 and 1940 was not unreasonable because those were necessary to bring the average up to

about what the investor said he would require if he was to finance this particular property.

Q. Is what you have just said true of an investor who first invested some money in this enterprise in 1940? What does he have to make up?

A. Well, the capital is already in the business. The exchange of shares from one stockholder to another has nothing to do with the company.

In other words, whatever gain or loss there is [there] to be considered is made up between the two parties.

Q. In other words, if I were to buy a share of stock in Panhandle Eastern today, you think I would be entitled to require an over-all return of 9.57 percent in order to make up what my vendor of that stock had not earned in the previous years?

A. I say that if you buy a share of stock in this firm [fol. 6800] as of today or as of the date of this study, rather, confining it to stock, our study indicates that you would have to sell that stock on the basis of a 12 percent return and that is based on actual transactions of similar securities in the market as of the date of this study.

Q. Well, of course, here we are speaking of an overall return.

A. The over-all return, as of the same date, was 7.99. You might call it 8 percent in round figures.

Q. Suppose I were to buy, today, bonds, preferred stock and common stock in the precise proportions which would equal this 9½ percent earned on invested capital.

Do you think that I, as a new investor in Panhandle Eastern, would have any right to expect to recover and make up for lesser earnings in earlier years on invested capital?

A. According to my study of the investor's appraisal of the risk of capital, the demand at the date of this study was an over-all 8 percent.

However, your particular illustration points out one very small part of total, namely, shares that you might buy from me or from someone else. There is the further consideration that many of these investors who originally

put money into this situation put it in as an investment. They did not go into it as a speculation.

Therefore, they are not buying and selling these shares [fol. 6801] currently or, for that matter, frequently. They are holding it or retaining it for the purpose that they originally made it so that you have to draw a distinction between what you as an investor might do and what the great majority of the people are doing who put the money originally in it and those people are holding on because they still think, as the situation goes on, that the average of 7.11 will approach 8 percent.

Q. Isn't [you] study, contained in Exhibit 65, predicated upon the proposition that the entire invested capital in Panhandle Eastern is going to be floated on the market as of June 30, 1941, and isn't your capital requirement figure predicated upon the cost of raising that amount of capital?

A. It is predicated upon the basis that as of the date of this study with this company going to need financing, it would have to pay at the over-all rate mentioned.

Q. Now, does that presupposition take into account that these securities are going to be floated on the open market to whomsoever wants to buy them?

A. Well, if the company is to be and continues to be privately financed, that is, publicly financed, I presume that is where the money will come from, the general investor.

Q. Now, that might give you an entirely new set of [fol. 6802] security holders of Panhandle Eastern on this theoretical assumption, might it not?

A. If you brought out a new issue, you might get some old ones, you might get some new ones or they might all be new. I do not know.

You will naturally be trying to tap that capital market where the capital is available and where the investor believes that this is an attractive investment at the price you are attempting to sell it.

Q. Do you think, under those circumstances, that the new investors would have any right to expect or would reasonably expect to recoup past deficiencies in earnings on invested capital?

A. As I say, our study indicates that for an over-all picture, the rate is approximately 8 percent at the time this study was being made.

Q. Eight percent on what? I do not get that 8 percent.

A. Eight percent as the investor's appraisal of the risk of capital. That is the 2.74 for bonds, the 8.45 percent for preferred stocks and the 12 percent for common stock and then working it out for the over-all capital, the rate was 7.99.

That figure has already been mentioned in these hearings, calling it 8 percent in round figures.

Q. If I may interrupt to explain something for the pur- [fol. 6803] pose of the record? A. Yes.

Q. This 7.99 percent, or 8 percent that you have just mentioned is a percent of earnings related to market value of the total outstanding securities, is that right?

A. That is the percent that the prospective investor says he now wants if he is going to put a dollar into this business.

In other words, that is his appraisal of the risk of this business at the time of the study. However, as I tried to point out, the great majority of original investors in this business made their commitment by way of an investment.

That is, with the idea of buying these securities and holding them in contrast to buying them and selling them. Now, if any one or more of those original investors elect, for one reason or another, to sell their securities and they sell to another individual at a price, they naturally will sell at whatever price they can make the sale.

If that involves a loss to them in comparison with what they think they should have had over the period, that is perfectly all right. They took that loss at that time and were willing to do so or they would not have sold.

For the rest of the investors in the company, they are still holding on with the idea that, on the average, when [fol. 6804] this company goes enough years, instead of having 7.11 percent, they will approach this 8 percent or until conditions so changed that we are not talking in

terms of 8 percent but some other, but as I have shown in this particular investigation as of this date, they were definitely talking of 8 percent over-all.

Q. Now, the fact remains, does it not, Mr. Coffman, that in 1940 Panhandle Eastern earned on its invested capital 9.62 percent, according to Chart No. 10 and 9.54 percent, according to Chart No. 11?

A. That is correct, yes, sir.

Q. And you say that the investor's appraisal of risk, according to your testimony, is 8 percent or slightly below 8 percent?

In other words, Panhandle Eastern Pipe Line Company actually earned something in excess of 1½ percent above what you have termed the investor's own appraisal of the risk, is that right?

A. That is correct, with this added explanation:

That, as the two tables you refer to clearly show and continuing to look at this picture from the investor's point of view; although the figures for percents earned on invested capital were 9.5, approximately, in 1939 and 1940, the investor looks back to earlier years, such as 1934, '35 or '36, where he finds that the return percent earned on [fol. 6805] invested capital was 2.30 percent, 3.50 percent and 6.05 percent which merely indicates a fact that I have been trying to mention all along, that conditions change from time to time. Sometimes conditions are better, sometimes they are worse.

The investor is not going to be unduly excited about any one year so long as he has confidence in the firm. The percent earned may be a little higher one year, lower the other, but he says that if, on the average over a period of years, this matter works out, he is perfectly willing to continue to refinance or newly finance this company whenever they need capital.

Q. Now, is it your opinion that if the return in the early years was low, that it should be compensated for by a higher rate in later years to make up for it?

A. It is my contention—

Q. (Interposing) Can you answer that yes or no, first?

The Witness: Will you read that question?

(Whereupon, the pending question was read by the reporter.)

The Witness: Yes. I say that with this explanation:

That investors will not finance this company unless they are going to see a fair average over the years. Now, to make my answer very specific, if this company has shown, over the years, because of unfortunate results, or some [fol. 6806] other condition a percent earned on invested capital for a number of years of 2.30, as it did show in 1934, I do not think any investors would be willing to put a nickel in this business today.

In other words, the company would not have maintained its credit position and it would be impossible to finance the company.

Now, the reason people have been willing to stay in this company as investors is because they knew the company was new in these early years. They hoped, as it settled down, got more service to the public, that it would begin to earn money, which it did, and when the rate approaches 8 percent, on the average, they would say they were willing to continue to finance this company.

Q. Did you make any investigation, Mr. Coffman, to determine the fundamental and underlying reasons why the return earned on invested capital of Panhandle Eastern was what you term "low" in the early years?

A. I think I know generally why it was. I made no particular investigation because, in this particular situation, an investor merely looks at the result.

You can have all of the reasons you please but the fact remains that the earnings on invested capital was 2.30, that is a fact which you cannot explain so far as the investor is concerned and he would not continue to finance [fol. 6807] the investment unless you can show him the conditions are to be changed favorably.

Q. You are not interested so much in the reasons as you are in the fact the investor did experience what you call "low returns" in the early years and wants to make them up in later years?

A. I say that the investor puts the money in with the idea that he, first, was getting security of principal and an assurance of a reasonable return on that principal and a good many of the securities which he purchases actually are in the nature of a contract to that effect and anything short of that involves some difficulty unless the investor's property is just going to be confiscated, just taken away from him.

Q. Mr. Coffman, do your rate of return figures reflected in Charts No. 36 and No. 37 which produce the dollars called "current capital requirements" for each of those charts reflect the element which you have just discussed, to wit, the element of making up for low returns in the past?

The Witness: Would you read that question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: I think the two—

By Mr. Littman:

Q. (Interposing) Can you answer that yes or no, first, [fol. 6808] [Mr.] Coffman, and then make your explanation?

A. No. The answer is no as you put the question because, in Charts Nos. 36 and 37, the item which involves the matter of the investor is contained in the two columns, one each on Chart No. 36 and the other on Chart 37 captioned, "Current capital requirements", and there those figures are based upon the principles we have already discussed, namely, the rate of 2.74 for bonds, 8.45 for preferred stock and 12 percent for common stock or the 7.99 percent on the over-all basis.

Q. You then have not fixed rates which will compensate the investor for these past low returns, have you?

A. The—

Q. (Interposing) Have you or have you not? May I have an answer?

A. Yes, certainly I have because I am stating here that, on the average, the investor says he will be content with 8 percent and if the company can approach that over a period of time, conditions remaining about as they were at the date of this study, he says he is perfectly willing to finance this company. Now, the average over the past

years, as a fact, have been 7.11. It is true that they have been increasing.

Q. If the rates earned by a given company in recent years are considered high by its investors, then, to follow [fol. 6809] your theory, the investor should expect lower rates of return in the future years to compensate for the past high rates, isn't that correct?

The Witness: Would you read that question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: I still answer as I have been in accordance with my study.

By Mr. Littman:

Q. I have not asked you this question before, Mr. Coffman. I mean to say you have not answered it before. I have not even approached this new thought yet.

A. I thought this was a question. Didn't you just ask a question?

Q. I just asked this question but you are telling me you have already explained it. This is an entirely new thing.

A. No, so far as I am concerned, it is not, Mr. Littman. What I was just about to say is that when the investor looks at a given situation, he is not talking about the particular year because he knows because of business cycles and other conditions, some years are good and some are bad.

He will not be disturbed one way or another so long as, on the average, he finds he can get this particular rate he believes to be reasonable. So that a few years may be high. [fol. 6810] He knows that there will be some other years low, because history, from the beginning of time, proves that.

If he can get 8 percent on the average he is not unduly disturbed. Now, if a few years are low, he expects other years to be high to offset it. If a few years have been high, he knows, by the same token, that a few years will be low which will offset it. He is not disturbed either way on that if, on the average, he can get this figure.

Q. What, in your opinion, is the highest percent that one might reasonably expect Panhandle Eastern to earn on its invested capital in the years 1939 and 1940?

A. So far as the investors are concerned, the percents they did earn were in line because if the investors said that an average of 8 percent was the risk, then the average for these preceding years, as a whole, showing only 7.11 percent, were still not giving him on the average what he believed he required.

Q. Well, Mr. Coffman, I take it from your answer that, in your opinion, the investors of Panhandle Eastern Pipe Line Company had a right to reasonably expect Panhandle Eastern, to earn on its invested capital in 1939 and in 1940 the amounts which it did earn, approximately 9½ percent? Can you answer that yes or no?

A. No, I cannot answer it yes or no because I do not [fol. 6811] know about some of the words. I would like to state this: You say, "their right" to do something. Well, "right", to me, for the most part, is a matter of law. "What your rights are."

I say that the investor said that if he were to put money in this business, he would require, over a period, a return of 8 percent or he did not want to put his money in this business. Somebody else could, but he did not want to.

That is the matter of what he requires. I am not talking about right. I believe those are matters of law, for the most part.

Q. Let me put it this way, that, in your opinion, the investors of Panhandle Eastern might reasonably have expected Panhandle Eastern to earn on its invested capital in 1939 and 1940 the return of 9.5 percent which was, in fact, earned?

A. In view of the history of the company to this date, I think they could reasonably have expected that condition, yes.

Q. Now, Mr. Coffman, did you testify before a Special Master in the United States District Court for the District of Delaware in a suit in which David Young III, was plaintiff and Columbia Gas and Oil Company was one of the defendants?

[fol. 6812] A. Yes, I did.

Q. Can you state approximately when you testified in that proceeding?

A. I am not certain. As I recall it, that was along in the fall, I would say, of 1939, fall or winter of 1939.

Q. Mr. Coffman, I will read a question which appears on Page 3434 of the transcript of that proceeding. Before reading that, I will hand you a copy of the Defendant's Exhibit No. 33 in that proceeding.

Mr. Wheat: Can you identify the proceeding for the record? Would you like to, Mr. Littman, more closely?

Mr. Littman: Well, it is the proceeding which is referred to in Exhibit 145 on Page 12 in the middle of the paragraph: David Young III, Plaintiff, commenced an action in the United States District Court for the District of Delaware against Columbia Gas and Columbia Oil as Defendants.

That is the proceeding, is it not?

The Witness: Yes, that is right.

By Mr. Littman:

Q. I hand you a copy of Defendant's Exhibit No. 33 for purposes of assisting you to follow the testimony and refresh your recollection. But first, am I correct in understanding that you prepared Defendant's Exhibit No. 33, the photostatic copy of which I have just handed you, sub-[fol. 6813] ject to your check of details?

A. I do not remember the number but this material I prepared.

Q. Yes.

Now, I will read from Page 3434 of a copy of the transcript:

"Q. What significance, if any, do you attach to the right-hand column in which these percents on invested capital are set forth and to the tabulation which you have submitted to it and which is to be inserted in your book of exhibits in connection with Chart No. 16?

"A. The Panhandle Eastern Pipe Line Company is a public service company subject to regulation, and I made the tabulation in the right-hand part of the chart showing return on invested capital and, operating from the past

history during the years 1934 through 1938, what the company had averaged in earnings in terms of return on invested capital, and I found that the 1938 total income figure indicated a return slightly under 8 percent. The 1937 figure was slightly in excess of 8½ percent and my projected figure, depending upon which calculation you use for invested capital, was 8.34 percent if you talk of invested capital in terms of funded debt, preferred stock and common stock and surplus, and 8.41 percent if you describe invested capital on the basis of the property account.'

[fol. 6814] "I made that tabulation merely to familiarize myself with the comparison of the projected earnings with past experience on the one hand, and considerations of reasonable return on invested capital on the other, and it seemed to me from experience in rate cases, and more particularly a recent experience of the Natural Gas Pipe Line Company of America that the amount of projected income was about as high a return on invested capital as one might reasonably expect. Anything higher than that, it would seem to me, would be an invitation for some investigation or trouble of some kind or other with the various Commissions."

Now, did you make that answer to that question in the proceeding to which we have just referred, Mr. Coffman?

A. Well, if the record says that is what I said, I admit I said it.

Q. What about your recollection? Is that your best recollection of what you said?

A. Generally, I think so. I mean if you are reading correctly, why, I accept it that I did say it.

Q. Well, subject to your check. You may, of course, make any correction to this that you may find but this is your recollection at this time of what you said?

A. That sounds substantially correct but I mean just technically, I say if it is as you read it, I said it.

Q. What was the projected figure that you were re-[fol. 6815] ferring to in the answer that I quoted from your testimony?

A. You said Exhibit 16, was that right, or Chart 16, I mean.

Q. Chart 16 of Defendant's Exhibit 33. What I want, Mr. Coffman, is the projected income figure to which you referred in that answer which I read from your testimony in the Young III case?

A. The projected total income figure was $4,715,000.

Q. I meant to have you state the projected figure in percent. It was 8.34 percent, was it not?

A. If the net operating income is based on the percentage of capital account, the figure "percent earned on invested capital" was 8.34 percent and if the net operating income was based on "percentage of invested capital", the figure was 8.41 percent.

Q. I so understood your testimony. However, the projected figure of 8.34 percent earned on invested capital will appear in the next succeeding few questions and answers of your testimony.

Now, I will continue reading without any interruption from the transcript. Nothing appears between these questions or answers, Mr. Coffman.

By the way, what I have read occurred on direct examination, did it not, or don't you recall?

[fol. 6816] A. I do not recall, Mr. Littman.

Q. Mr. Payer was one of the attorneys that cross-examined you, was he not?

A. That is correct, yes.

Q. He came into the record at this one point, to clear up something.

"Mr. Payer: When you said 'amount of return', what amount did you have in mind?

"The Witness: You mean return on invested capital?

"Mr. Payer: Yes.

"The Witness: I did not have any particular figure in mind. It just seemed to me that if it got much above 8 percent for a period of time that such percentage return on invested capital might be an invitation for investigation.

"Q. Now, that projected figure of net income before charges other than depreciation and depletion and those that go to operating expenses, is less than the actual income

before charges for the 12 months ended September 30, 1939, is it not?

"A. Would you repeat that?

"(Last question repeated as reporter.)

"A. I believe that the statement that shows the 12 months' figures ending September 30, 1939, are somewhat higher than the projected figure which I show in this chart, No. 16.

[fol. 6817] "Q. Now then, do you justify the use of a projected income figure lower than the actual income before charges during the most recent period for which figures are available?

"A. As I think I said the other day in connection with part of my testimony, I am not attempting in this study to project the income for the next year, which, as a matter of fact, would be the full year 1939. What I am attempting to do in this study is project the income which a willing buyer could reasonably expect on the average after a reasonable period of time, and I do not believe that a willing buyer could reasonably expect to find peak earnings year after year. In other words, there will be some good years and some bad years, and I felt that my projected figure here was a reasonable average over a reasonable number of years in the future.

"Q. In arriving at that conclusion, what consideration, if any did you give to the rate of return on your projected earnings as related to the rate of return in 1937, or the rate of return on the current income for the 12 months ending September 30, 1939?

"A. I took into consideration all the information that was available in regard to total income for the preceding period, covering 1934 through 1938, both in terms of aggregate dollars and return on investment.

[fol. 6818] "So far as the September 30th figures were concerned, this part of my study had been completed before they were available. Actually when they came to my attention, I noted that the figures, as I recall it, for the 12 months ended September 30, 1939, showed something in excess of 9½ percent return on investment, and, therefore, I did not go back and revise my figure because I felt that over a reasonable period in the future such return

on the investment would be above the line of what was considered reasonable in view of cases on the subject, more especially the recent case on the Natural Gas Pipe Line Company of America, which is a very comparable Pipe Line Company."

Now, to the best of your recollection, did you make those answers to those questions in the proceeding of David Young III as Plaintiff, versus Columbia Gas and Oil?

A. Yes, as my recollection goes and if it has been read as it is in the record, I admit having said that.

Q. Mr. Coffman, what other cases or proceedings have you testified in beside the Young case and, of course, the instant case and the Hope case, the latter case having been heard by this Commission?

A. Before this Commission, you said?

Q. I was merely stating that the Hope case had been tried before this Commission.

A. Yes.

[fol. 6819] Q. And I want you to exclude that from the list of cases in which you have testified.

A. In regard to matters similar to this, you mean, or in any matters? I mean do you want the whole list of items where I testified or just in regard to public utilities or what?

Q. Not knowing much about the facts, I do not know whether to ask for all or just those which are rate matters or not. Can you give us an idea how many cases you have testified in first so that we can know?

A. Before this Commission, for example, I have testified in the last two years in the Colorado Interstate case, the East Ohio Gas Company case, in addition to the Hope which you mentioned and excluded.

I have testified in the David Young suit. I testified in a suit, the full name of which I cannot give you, but it was against the General Motors Corporation regarding their management bonus plan.

There have been a fair number, Mr. Littman. I could go on and enumerate some more. I testified before the Board of Tax Appeals and before the Civil Aeronautics Authority.

Q. What other Commissions?

A. The Treasury Department, the Internal Revenue Department in cases involving tax questions before they were taken to the Board, if they were taken there.

[fol. 6820] Q. What other rate cases have you testified in?

A. The only rate cases I have testified in are the ones I enumerated: Hope, Colorado Interstate, East Ohio, Panhandle Eastern and the Pennsylvania Power and Light Company.

Q. Now, the Pennsylvania Power and Light Company proceeding was had before the Pennsylvania Commission, was it not?

A. That is correct, yes, sir.

Q. You do not have any recollection of any others at this time?

A. Involving rates?

Q. Yes.

A. I believe that is all of them.

Q. Well, if you recall any others later, you will advise us, will you not?

A. I can check that up this noon, I think.

Q. Have you been cross-examined on your testimony given before the Pennsylvania Commission in the Pennsylvania Power and Light Company case?

A. Yes, I was cross-examined and relieved with the understanding I might be recalled but, to date, I have not been.

Q. When did you complete your cross-examination before that Commission?

[fol. 6821] A. Well, it was at the same time the direct testimony was given. I do not recall now just what date that was. It has been some three months, I think, two or three months ago.

Q. I see. We were specifically inquiring whether you had been recalled since that first day or two that you testified there?

A. No.

Q. Will you please turn to Chart No. 14 of Exhibit 65. Yesterday, we were discussing the subject of invested capital of Panhandle Eastern Pipe Line Company as of June 30, 1941.

I asked you to substitute for the net working capital figure shown on this chart of $4,661,875 the amount of working capital estimated by Mr. Sperry in the amount of $1,500,000.

Do you remember that?

A. Yes, I do.

Q. Now, the invested capital computed in that manner amounted to $58,054,161, did it not? That is, rounded out, to $58,054,000?

A. Yes.

Q. That will be close enough for our purposes.

Now, in this chart, you show the percent earned on invested capital, that is, on Chart No. 14, which is determined [fol. 6822] by relating the net operating income before and after taxes to the total amount of invested capital of $61,216,031, is that correct?

A. Yes, sir.

Q. And the amount that you show is 9½ percent earned on invested capital before taxes, I mean—

A. (Interposing) That is based on the 1940 rates.

Q. Based on the 1940 tax rates?

A. That is right.

Q. And 7.86 percent based on the 1941 tax rates?

A. 7.86 percent, yes, sir.

Q. Now, this 7.86 figure was determined by applying the 1941 tax rate to the entire year ended June 30, 1941. Is that correct?

A. Yes, that is correct, the 12-months' figure.

Q. In other words, you did not apply—I want to be perfectly clear about this—you did not apply the 1940 tax rate to the last six months of 1940 and the 1941 tax rate to the first six months of 1941, did you, in arriving at this 7.86 percent?

A. No. The purpose of this study was to get a better idea of what the effect of the increasing tax rates were going to have on the business so I kept a static figure.

In other words, if they earned $5,814,000 which was a known fact, at the 1940 rates, the tax was so much. Using [fol. 6823] that same figure as a constant, if the 1941 rates had been in effect, then the net operating income would have been approximately $1,000,000 less.

In other words, I merely wanted to show what the effect of the increased tax rate was going to have upon this company's net operating income.

* * * * * * * * * *

[fol. 6824] PAUL B. COFFMAN resumed the stand, and having been previously duly sworn, testified further as follows:

Cross-Examination (Resumed)

By Mr. Littman:

Q. Mr. Coffman, I requested you to make a calculation over the noon recess in connection with Chart No. 14 of Exhibit 65. Have you made the calculation?

A. Yes.

Q. Will you please state what it shows?

A. Adjusting Chart No. 14, Exhibit 65, so that the total invested capital as of June 30, 1941, would be composed of net property of $54,690,591, intangibles net of $1,863,565 and allowing your assumed figure for net working capital of $1,500,000 gives a total assumed invested capital of $58,054,156. Using that figure as a base and making the same calculations, to-wit, that I have actually made on Chart 14, the percent earned on the $58,054,156 before making an adjustment for the 1940 tax rates would be 10.02 percent and after making adjustment would be 8.29 percent in contrast to the 9.50 percent and the 7.86 percent [fol. 6825] shown in the Chart, respectively.

Mr. Wheat: Will you give me those figures again please?

The Witness: 10.02 percent.

Mr. Wheat: Thanks.

By Mr. Littman:

Q. Yesterday I requested you to make a calculation for the purpose of determining what your annual provision for depletion and amortization of $2,551,034 would be if computed on a 6½ percent sinking fund basis instead of the straight line basis. Have you made that calculation?

A. Yes, sir, I have.

Q. And what would it amount to?

A. It would be at 6 and ½ percent for 25 years life annual payment of $1,083,008.21.

Q. Is my understanding correct that the amortization base used in connection with the figure of $1,083,008, the invested capital figure of $63,775,839, which is shown in Chart 27 of Exhibit 65?

A. Yes, sir.

Q. Will you please refer to Chart No. 37 Exhibit 65? You have testified that the amount of $5,064,821 shown on this chart as "Current Capital Requirements" represented a fair return to investors of Panhandle Eastern for the year 1940, have you not?

[fol. 6826] A. I don't believe I said that, no. What I said was that the $5,064,821 was the amount required in order to maintain the credit position of this company that is required by the investors.

Q. Well, isn't that the amount to which you refer in the caption of Chart No. 37 as "A Fair Return to Investors"?

A. Yes, that is the amount, all of which is attributable to the investors' equity in this business or their investment, if you want to particularize.

Q. In other words, if I correctly understand you, this amount of $5,064,821 represents in your opinion a fair return to the investors of Panhandle Eastern Pipe Line Company, as of June 30, 1941; is that right?

A. Well, it is a little more than that. I not only say that it is a fair return, I say that in the conditions existent in the capital markets at the time of the study that that is what they required; not only that it is fair, I say that they required it. I merely want to make my point clear that I am going that far. I am not just saying it is fair, but I am going beyond that.

Q. Well, you are merely emphasizing the use of your term "fair return", are you not?

A. Well, maybe you understand the language one way and I understand it another. I am trying to point out throughout the study that if the investors are to be kept [fol. 6827] in a position where they are willing to invest money in this business, the returns which I use to arrive at this figure of $5,064,821 have to be met under the conditions then existent or the capital is not forth coming to this business, at least from the public.

Q. Well, at any rate, it is the $5,064,821 figure, to which you are now referring?

A. That is correct.

Q. My understanding of your testimony was that this amount, if earned by Panhandle Eastern Pipe Line Company in the year 1941, would have constituted a "fair return to investors" for that year.

A. I am saying more than that, Mr. Littman. I don't recall that I ever said for 1941 at all. If I did, it is in the record, but I don't believe I said it. What I said was—

Q. (Interposing) For 1940.

A. Well, or for 1940. What I said was that that amount of earnings would have to be made so long as conditions in the capital market remained as they were at that time. Now, that may be for 1940, it may be for 1941, it may be for a shorter time or for a longer time. I would have to make the study to find out. As of that time, that is what the capital market said.

Q. As of what time?

[fol. 6828] A. As of the time I made the study.

Q. When was that?

A. It was in the late summer, let us say, of 1941.

Q. Do you know whether the current capital requirements for the year 1940 would have been higher or lower than that shown in Chart No. 37?

A. No, I don't believe I can give you that figure.

Q. Well, I didn't ask you for any particular figure. I wanted you to state whether, in your opinion the amount of "current capital requirements" for the year 1940 would have been smaller or larger than that shown in your Chart No. 37.

A. I don't know; I don't have that particular analysis here.

Q. Did you make such an analysis?

A. No.

Q. Will you please refer to Chart No. 36? I am not sure that you show the "Current Capital Requirements" which is referred to in the caption of that chart as "A Fair Return to Investors," in the amount of $4,993,511, do you?

A. Yes, sir.

Q. Am I correct in understanding your testimony to be that that figure was, also, predicated upon market con-

ditions as they existed as of the date when you made this study?

A. Yes, with the added qualification that the entire [fol. 6829] calculation was based upon refinancing the preferred stock.

Q. I so understand.

A. Yes.

Q. And your caption of Chart No. 36 so indicates, does it not?

A. Yes.

Q. Would you say that this sum of $4,993,511 would be applicable to the year 1940 or don't you know?

A. I don't know, I confine this figure to the date of this study, that is the best I can do on that.

Q. And you can not state from your understanding of general market conditions whether it would be higher or lower?

A. We, speaking very generally, taking securities as a whole, I would say that in 1940 the likelihood was that the amount required percentagewise, not dollarwise, because I can't give you that without computing it, would have been somewhat lower than in 1941. When I say "percentagewise," I am now referring to that 2.74 for bonds, the 8.40 for preferred and 12 percent for common stock.

Q. At any rate, may we agree generally on this, that you, from your general knowledge of conditions as they existed in 1940, would not expect the current capital requirements of $4,993,511, shown in your Chart No. 37, to be materially different, either up or down?

A. I wouldn't suppose it would be materially different, [fol. 6830] but I couldn't be exact, obviously, until I could make the calculations on a comparable basis.

Q. I don't remember whether your exhibit shows the net operating revenues of Panhandle Eastern Pipe Line Company for the year ended 1940. I know that Exhibit No. 49 will show that, but if you—

A. December 31, 1940?

Q. Yes.

A. Table for Chart No. 9, Exhibit 65, shows the net operating income figure for the year 1940, in the amount of $5,714,218.

Mr. Littman: Will you please read the last answer?

(The last answer, as above recorded, was read by the reporter.)

By Mr. Littman:

Q. Now, it is a fact, is it not, Mr. Coffman, that the Panhandle Eastern Pipe Line Company earned, in the year 1940, $649,397 more than the amount of $5,964,821 shown in your Chart No. 37 of Exhibit 65 which you call "A Fair Return to Investors," is that correct?

A. It is higher by $649,397.

Q. Now, by what amount does the net operating revenue of Panhandle Eastern Pipe Line Company for the year 1940 exceed the amount of $4,993,511 shown in your Chart No. 36, as "A Fair Return to Investors"?

[fol. 6831] A. It exceeds it by $720,707.

Q. Now, Mr. Coffman, will you please state what amount of operating revenue would be required to produce this amount of $720,707 which you just named in the year 1940?

The Witness: Would you read that question, please?

(The pending question, as above recorded, was read by the reporter.)

By Mr. Littman:

Q. I have in mind, Mr. Coffman, that, due to the taxes, gross revenue considerably in excess of $720,707 would be required to produce that much of net operating income.

A. I don't believe I can answer that question, Mr. Littman.

Q. Am I correct in understanding that it would require a sum very greatly in excess of $720,707 by way of gross revenue to produce that much net operating revenue? Isn't that correct?

A. Well, I am frankly a little confused on that question for the reason that I should suppose that the only figure you could use would be the figure for the full year 1940, in which this amount that we are discussing is already included, and the total gross revenue on that amounted to $13,536,453. That already includes this item you are talking about, so when you ask how much more will it take, [fol. 6832] I don't know what you mean.

Q. Well, now, let me get at it this way: if this Commission, for example, were to want to cut rates so as to reflect a cut in Panhandle Eastern's net operating revenue for the year 1940 in the amount of $720,000, by how much would the Commission have to cut the gross revenue in order to effectuate a cut in net operating revenue of $720,000? Have I made myself clear?

A. Yes, I think I understand your question. Well, if you will assume that all of the operating expenses and other deductions, except, of course, the tax item which varies with the amount of earnings, were to remain the same, then you would merely take off the $720,707 directly from gross.

Q. Well, of course, you are begging my question, I believe, because these operating revenue deductions that you state you want to assume will remain the same and include all the taxes. Isn't that correct?

A. They include an allowance for taxes, yes.

Q. Now, assuming that all the revenue, the operating revenue deductions remained the same except the taxes, and assuming that you are going to calculate in such manner as to reflect the reduction in taxes occasioned by reason of a cut in rates, which will bring about a reduction of $720 in net operating revenue, can you state, approximately, what cut would be made in gross revenues to pro- [fol. 6833] duce this result?

A. I couldn't state that without making a [calculation,] because as you know it is intricate. I mean you have several variables, and all problems which have several variables, one depending on the others, are difficult to calculate.

Q. In other words, you could make the calculation, but it is a rather intricate and involved task, is it not?

A. That is right.

Q. But you do know that the amount of reduction in gross revenue, that is in rates themselves, would be considerably in excess of the $720,000 of net operating revenue. You know that, don't you, in view of the 1940 tax situation?

A. I will say this: it would make a difference, whether it is substantial or not, I wouldn't want to say until I have the figure and then I can make a direct comparison.

Q. Don't you know, offhand, Mr. Coffman, even without making the calculation, that the cut in gross revenue would be at least double the $720,000?

A. No, I wouldn't say that, not by a long way, no, indeed, no. Mathematically, I don't think that will work out.

Q. At any rate, one familiar with the tax laws of 1940, could readily make the calculation, if he had sufficient time within which to do it, could he not?

[fol. 6834] A. Yes, he could make a very reasonable approximation.

Q. Yes. Will you please refer to your Chart No. 28 of Exhibit 65?

Mr. Wheat: Which one?

Mr. Littman: 28.

By Mr. Littman:

Q. Now, this chart is headed "Over-all Cost of Capital to Panhandle Eastern Based on Ideal Capital Structure." Now, this so-called ideal capital structure consists of 40 percent bonds and 60 percent common stock. Is that correct?

A. That is correct.

Q. Will you define the term "ideal" as you have used it in this Chart?

A. Well, I mean by that that from a study of various pipe line companies, as illustrated in a preceding chart in this exhibit, the number of which I will have in a minute, Chart No. 25, I found that preferred stock in a natural gas pipe line company was uncommon, of the various natural gas pipe line companies shown there in, El Paso Natural Gas is the only one, excluding the Panhandle Eastern, that has any preferred stock outstanding and that in a much smaller percentage than Panhandle Eastern. I therefore thought that it would be wise for me to make a calculation on a basis wherein no preferred stock would be outstand-

[fol. 6835] ing. Then next considering in the nature of a risk which is involved in a natural gas pipe line company, the question arose as to what percent such company might well carry in senior securities and what percent would be carried by equity. It seemed to me that it probably would be in the relationship of 40 percent bonds and 60 percent common stock and merely title that "The Ideal

Relationship" as being about the happy balance for those kinds of securities.

Q. Now, when you use the term "ideal" I presume you mean that this capital structure shown on Chart No. 28 would be ideal from the point of view of the investors.

A. And from the standpoint of the company, yes.

Q. How about from the point of view of the rate payer? Is it also ideal for him?

A. I think it is ideal for him so long as conditions remain what they are and it is impossible to get any better rates in the investors market than you can secure by this combination. After all, the customer may wish certain things, but if to get the services you have to sell securities to the investing public, you have to take them into consideration, also, so what is good for the two is good for each.

Q. Now, the cost of capital shown on Chart No. 28, Exhibit 65, is 3 percent for the bonds and 12 percent for the common stock, making a total over-all cost of 8.40 percent. Is that correct?

[fol. 6836] A. Yes, that is correct.

Q. And that is on your so-called ideal basis?

A. Yes, sir.

Q. Will you please turn to Chart No. 27, which shows a capital structure which assumes the refinancing of preferred stock by means of 50 percent bonds and 50 percent common stock, and will you please state what over-all cost of capital to Panhandle Eastern is indicated by this chart?

A. Before I answer that, may I be sure that this question states what the exhibit shows? In regard to that refinancing, it is not 50 percent in bonds and 50 percent in preferred stock; the situation is one where the preferred stock that is retired will be taken care of 50 percent in bonds and 50 percent in common stock, so that it wouldn't necessarily mean that the outstanding bonds and common stock were 50 percent each. I just want to be sure that we are talking about the same thing.

Q. Yes, I am referring to Chart No. 27, which assumes the refinancing as there shown and stated.

A. Yes. Well, then, the amount of earnings required would be $5,006,338.

Q. And what is the percentage over-all cost of capital to Panhandle Eastern on that basis?

A. I believe the percentage is shown in your table for [fol. 6837] this Chart No. 27.

A. The over-all rate is 7.85 percent.

Q. Yes.

Now, will you please turn to Chart No. 26, which shows the present capital structure of Panhandle Eastern Pipe Line Company, and will you please state what over-all cost of capital to Panhandle Eastern Pipe Line Company, under the present capital structure, is indicated by this chart in percents?

A. The amount is $5,077,648.

Q. What is the percent? I think your table for this chart shows the percent.

A. The over-all percent, as shown in table for chart No. 26, Exhibit 65, is 7.99 percent.

Q. Well, now, Mr. Coffman, we have this figure of 7.99 percent as the over-all cost of capital under the present capital structure, as shown by Chart No. 26, and we have 7.85 percent as the over-all capital under the refinancing assumptions set forth in Chart No. 27, and we have the 8.40 percent set forth by you in Chart No. 28 as the "Ideal Capital Structure." Now, will you state what is so ideal about this capital structure that appears to be the highest of the three in cost of capital to Panhandle Eastern Pipe Line Company?

The Witness: Would you read that question, please?

[fol. 6838] (The pending question, as above recorded, was read by the reporter.)

The Witness: If I get your question correctly, the figures don't work that way. The over-all percent, based upon the capital structure, as of June 30, 1941, was 7.99 percent or $5,077,648 and the figure on the assumption of a refinancing of the preferred stock was 7.85 percent, or $5,006,338.

Well, now, the percent as well as the dollars that you secure in the tabulations are lower for the assumption that there will be a refinancing of the preferred stock than is the case if you take the present capital structure. If I understood your question, they worked just in the reverse of what you were asking.

Q. Yes, but you haven't mentioned in your answer anything about this so-called ideal capital structure on page 28 which is the highest of the three in cost of capital. What do you say about that one?

A. Well, so far as the percent there shown is concerned, it is true it is 8.40, that is combining the 3 percent on a 40 percent debt basis and the 12 percent return on a 60 percent common stock basis, and that is just the way the mathematics worked out, that is just arithmetic, the fact that it comes out 8.40, it is just 8.40.

Q. What is "ideal" about a capital structure that [fol. 6839] costs more to Panhandle Eastern than the other two which are not "ideal"?

A. Well, I don't want to discuss the merits of the word "ideal" and if that is bothersome, it can be left out of the discussion. What I am saying is that in an analysis of various pipe line companies I discovered that there was only one besides Panhandle Eastern that had any preferred stock outstanding. Now, I take it that the reason for that must have been that a preferred stock in a natural gas pipe line company over the years has not been particularly attractive to the investors or more companies would probably have sold preferred stock. So if you then come down to the option of having bonds and common stock, the question is: about what proportion this type of business risk would stand. So far as I could see, in my best judgment, anything larger than a 40 percent amount in bonds just wouldn't be easily carried. You might have a lower amount but in any event a 40-60 arrangement was about as far as you could go in bonded debt and attract investors to the security.

Q. After you eliminate the preferred stock from Panhandle Eastern's present capital structure by this "ideal" method you then get a higher cost than is presently incurred by Panhandle Eastern, do you not?

A. You get 8.40 percent in contrast with the 7.99 percent or the 7.85 percent.

[fol. 6840] Q. Now, will you explain how you conclude that this ideal capital structure is advantageous to Panhandle Eastern and the public and the investors and the consumers?

A. Well, in this particular case, as the actual figure works out, I don't think it is as advantageous as the 7.99 or the 7.85.

Q. You mean your ideal capital structure is not as advantageous as the two you mentioned?

A. Well, I think, I believe the Securities and Exchange Commission has also talked about 40-60 in times past. This idea doesn't altogether originate from my own analysis, but has been made by statements by other commissions.

Q. We are going to discuss the policies of the Securities and Exchange Commission in these regards a little later, but from a standpoint of cost to Panhandle Eastern Pipe Lines Company, it appears, does it not, that your ideal capital structure is the most expensive of the three?

A. That is correct.

Q. Mr. Coffman, you have no doubt, have you, that the cost of capital to Panhandle Eastern Pipe Line Company after the presently contemplated financing is completed, under which Panhandle Eastern acquires Michigan Gas Transmission Corporation, will be substantially less than the 8.40 percent shown in your Chart No. 28 or the 7.85 [fol. 6841] percent reflected by your Chart No. 27 or the 7.99 percent reflected by your Chart No. 26?

A. Well, I am unable to answer that, Mr. Littman, because there is an entirely new group of figures to be carried and I wouldn't know, really, what the percentage was likely to be until I put the figures together and worked them out.

Q. You have not made any study in that connection?

A. No, sir.

Q. How much more in dollars would your so-called ideal capital structure cost Panhandle Eastern Pipe Line Company annually than under the plan shown in Chart No. 27, which assumes the refinancing of preferred stock?

A. That would be approximately $350,832.

Q. Now, the ultimate effect on the rates paid by the rate payer, that is, the ultimate cost to the rate payer of this additional $350,767, would be three or four times that much, would it not, before taxes?

A. Well, there, again, I can't make that statement, Mr. Littman, I don't know.

Q. Well, assuming the correctness of my three times figure for taxes, this ideal capital structure would cost a rate payer a million dollars more per year, would it not, than if the structure were used which is shown by you on Chart No. 27?

[fol. 6842] A. I don't know what amount of dollars it would make, nor I couldn't tell until I had actually made some calculations to ascertain the fact.

Q. Well, if gross revenues were reduced one million dollars in 1941, how much of a reduction would this company suffer in net operating income?

A. I can't answer that, because you still have a tax question in there. I don't know what it would be.

Q. Well, now, let's see for a moment whether we can't get some approximation of what the amount would be. In 1941 you have Federal excess profits taxes of 60 percent in one bracket, have you not, in the highest bracket?

A. Which exhibit are you looking at?

Q. Well, I just started to look at your Exhibit 152.

A. Yes.

Q. Am I right in stating that under the 1941 Revenue Act, $600,000 out of each $1,000,000 in the high bracket would be taken for excess profits taxes?

A. When you are juggling revenue on the one hand and dealing with tax rates on the other, it isn't that simple. I wouldn't—I just can't answer that question without making some calculations. It would be a wild guess and would mean nothing in the record.

Q. Let's assume that we have one million dollars of revenue way up at the top, the cream, and it is in the [fol. 6843] high bracket, that is, the 60 percent excess profits tax bracket. A. Yes.

Q. Now, $600,000 of that goes to the Federal Government for excess profits tax, does it not, under the 1941 Revenue Act; isn't that right?

A. If it is in the 60 percent bracket, it goes, yes.

Q. Incidentally, Panhandle Eastern Pipe Line Company is in that 60 percent excess profits tax bracket, is it not?

A. Well, it may be at the present time, yes.

Q. Well, your exhibit shows that, does it not, your Exhibit 152 shows that?

A. Yes, on part of the remaining income there is a 60 percent tax.

Q. When a rate reduction of one million dollars is made, for example, it comes right off the top, does it not, and right out of the top bracket; isn't that correct?

A. Well, as you reduce the net taxable income, you will go from one bracket to the next lower. You can describe

it any way you please; you just go from a higher bracket to the next bracket beneath.

Q. Now, we have the $600,000 that would come off for excess profits taxes out of this one million dollars of revenue which falls in the highest bracket. Now, another $124,000 would come off, would it not for normal surtaxes? [fol. 6844] A. Approximately.

Q. So that a rate cut of one million dollars of revenue in that bracket would reduce the company's net operating revenue by only $276,000, would it not?

A. Well, I haven't made those calculations. I don't know what the dollars are. I don't know whether your calculation of $276,000 is correct or not.

Q. Well, I just added the $600,000 of Federal excess profits taxes to the $124,000 of normal income tax and surtaxes and deducted the $724,000 from the one million dollars to get a reduction in net income of $276,000. Now, what is wrong with my calculation?

A. Well, as I say, whenever you, in any calculations, are dealing with variables; so far as I am concerned, as an analyst, I prefer to work all the items out to be sure I am right.

Q. I am going to ask you to—will you please refer to Exhibit 152? On the first page of that Exhibit about the center of that page under the heading "Taxes Computed at Rates Levied in the Revenue Act of 1941," you have an item "Taxes at 60 Percent on Remaining $2,708,000," have you not? A. There is such a figure.

Q. Now, that indicates that Panhandle Eastern Pipe Line Company is in that very dignified 60 percent bracket, [fol. 6845] at least to the extent of $2,708,000; isn't that right?

A. For this calculation, that is the figure we use, that is right.

Q. And you add an additional 10 percent on top of that in one of your tables in Exhibit 65, don't you?

Well, let's pass that for the moment. Will you compute for me the amount of reduction in net operating revenue to Panhandle Eastern Pipe Line Company that would result if this company were to cut its rates one million dollars?

Of course, that one million dollars would fall within that 60 percent bracket. Now, if this calculation takes time, why, I—

A. I wouldn't want to make that while I am sitting here.

Q. I see. It is perfectly all right for you to make the calculation by tomorrow.

A. May I be sure that I have the assumption? I am to assume that rates to customers are to be so reduced that there will be a million dollars less gross under this calculation; is that a fair statement?

Q. Of gross revenue. A. Of gross revenue?

Q. Yes, and assume that the million dollars of gross would fall within this 60 percent tax bracket. That is a [fol. 6846] correct assumption, isn't it? That is a fact, isn't it?

A. As I say, if you are in one tax bracket and the revenue goes down so that you slide into the next bracket, you don't slide up, you slide down.

Q. Well, you aren't going to slide down below the 60 percent bracket if you are only going to take one million dollars off the top, are you?

A. I don't know whether that is true or not.

Q. Well, your Exhibit 152 shows that you have $2,708,000. in that 60 percent bracket. You would have to slip a lot further down the line than one million dollars to get below the 60 percent, wouldn't you?

A. That may be true, Mr. Littman, and after I have made the analysis, if it is true, I will be the first to state it, but I would rather make the calculations first, if you don't mind.

Q. Very well. I wanted to make certain that you knew what I had in mind rather than to have you come back with a figure that is not the one we want.

A. I understand your assumption.

Q. Also assume, Mr. Coffman, for purposes of this calculation, that all other operating revenue reductions except Federal taxes remain the same.

Mr. Wheat: Do you want this on the basis of the [fol. 6847] 1941 Act?

Mr. Littman: Yes.

By Mr. Littman:

Q. Will you please refer to Chart No. 19 of Exhibit 65? Now, in this chart you [shown] earnings price ratios of natural gas pipe line common stock for the years 1937 to 1940, inclusive, for five natural gas pipe line companies as shown in the Chart; is that correct? A. Yes, sir.

Q. Now, in order that we may have no misunderstanding as we go along, will you please define the term "Earnings—Price Ratios"?

A. Well, the basic figures for Chart No. 19 of Exhibit 65, are shown in the table for Chart No. 19 and an earnings price ratio is the relationship as here used of the average of the high and low prices for the securities of the companies therein discussed with the earnings per share. In other words, it is the average of the high and low price for a security of 1937 and the earnings per share for 1937 and the ratio shown is secured by dividing the earnings figure for the given year by the average of the high and low price for the same year, so that you arrive at the percentages which are shown at the top of the columns in that chart.

Q. Now, these earnings to which you have referred [fol. 6848] are not the earnings that were, in fact, distributed?

A. No. When I say "earnings" I am talking about the full earnings that were made. I am not talking about dividends or that portion of earnings which was distributed. It is the full amount of the net earnings that were reported that were available per share.

Q. Now, in the next chart, that is, Chart No. 20, you show the current earnings price ratio of these five pipe line companies, including Panhandle Eastern, for the calendar year ended December 31, 1940, except for Panhandle Eastern which is for the twelve months period ended June 30, 1941, related to the average market price between January 1 and August 31, 1941; is that a correct statement of what this chart purports to show?

A. Generally speaking, you are right, but as I understood your statement, not all of these earnings per share figures were shown for the year ended December 31, 1940, as I understood you to say. As you see, they are clearly marked, the Interstate Natural and Memphis Natural cover the year 12-31-40. El Paso and Southern and Panhandle are for the years ended June 30, 1941. Except for that

correction, what you have stated is what I have shown in Chart No. 20 in Exhibit 65.

Q. I am sorry, I didn't intend to mislead you on those dates. They are clearly shown.

Now, are these the only four pipe line companies that [fol. 6849] you consider to be comparable to the Panhandle Eastern Company?

A. These pipe line companies that I have here shown are the only pipe line companies that I believe to be comparable and upon which there is adequate data available to make tabulations in regard to investors' appraisal of the risks of capital.

Q. Now, what do you mean by the latter part of your answer?

A. Well, I mean that in calculations I have made and used in this study, I have attempted to ascertain what investors felt was required for them to make an investment. Well, in order to make such study, it was necessary for me to find available information on the different securities each company had outstanding in the hands of the public so there would be figures available as to the market prices and so on, otherwise, I did not have one basic figure that was necessary to calculate an earnings price ratio.

Q. Now, where did you draw the line with respect to a company whose common stock was not sufficiently distributed in the hands of the public, so as to warrant a proper analysis of earnings—price ratios?

A. No, I didn't quite say that. I say if any of the securities are in the hands of the public so that you can get a reliable market quotation on the security, I will use it, [fol. 6850] but in any cases, for example, where either an entire bond issue or all of the preferred stock or all of the common stock is owned by some holding company so that there were no quotations of the bond on the market, then I lacked one fundamental factor to make this calculation and that company was eliminated, but if I could find reliable market quotations, then I include all of the companies. In so far as I know, taking my three exhibits here, I have included all such companies.

Q. Is it your opinion that the market quotations on Panhandle Eastern's common stock are reliable for purposes of making a determination of earnings—price ratios?

A. Well, it is the only guide that you have for a share of stock transferring hands from one person to another. I don't know what else [hou] can use other than that. The United States Treasury, so far as I can see from experience I have had with them, contend that it is a very reliable guide to fair value.

Q. Well, now, first, I would like to have you specifically answer my question as to whether or not you consider the market quotations on Panhandle Eastern's common stock a reliable basis for a determination of earnings—price ratios.

A. So far as the investor is concerned, I say it is the only guide to the particular value that you have at the [fol. 6851] time. In other words, if a buyer of a security puts in a bid for the stock and finally secures it at a price so that there is a stock transaction, that price for that share is apparently its value, so far as those two people are concerned. That is what I used.

Q. I am not talking about the mind of the investor. I am talking about the reliability of the available market data on Panhandle Eastern's common stock for the purpose of determining current earnings—price ratio.

A. Well, earnings—price ratios involve two factors, earnings per share and the stock price, and that is all earnings price ratio means, so I don't see how I can answer it.

Q. Perhaps, I can make myself more clear by asking you what percent of Panhandle Eastern's common stock is in the hands of the public.

A. I don't remember offhand.

Q. Don't you show it in one of your exhibits? Suppose I refer you to your Exhibit No. 64, Appendix B, page 8. Doesn't that show the data?

A. Appendix B, page 8, of Exhibit 64, shows a schedule of the distribution of the stock as prepared by Mr. Knapp of the Federal Power Commission for the Hope Natural Gas hearings, and that indicates that there were $12,017,544 of bonds and notes in the hands of the public—

[fol. 6852] Q. (Interposing) And 1,589,150 shares of stock, common stock outstanding.

Q. What was that, again?

A. $1,589,150. I think I said "shares." It is dollars.

. . . . . .

Q. Mr. Coffman, doesn't your page 8 of Appendix B of Exhibit 64 show that less than 8 percent of Panhandle Eastern's common stock is in the hands of the public?

A. Yes, it indicates that there is about 7.8 percent of the common stock in the hands of the public.

Q. The balance is owned by affiliated companies?

A. Yes, sir.

Q. And what affiliated companies are those?

A. Well, the Panhandle Eastern Pipe Line Company securities are owned [parly] by Missouri-Kansas Pipe Line Company and the Columbia Gasoline Corporation, a subsidiary of the Columbia Gas and Electric Corporation.

Q. Isn't that company the Columbia Oil and Gasoline Corporation? A. Yes, that is what I meant to say.

. . . . . .

[fol. 6853] By Mr. Littman:

Q. Can you state the proportion of ownership by those two companies of the common stock?

A. I don't believe I can state exactly, but as I recall there are some shares in the hands of the Trustee. I believe, as I recall the percentage, that something like 48 percent is owned by the Missouri-Kansas Pipe Line Company and the rest that is outstanding is held by the Columbia Oil and Gasoline Corporation and the shares that are being held by Gano Dunn, the Trustee,—I would have to look it up to get the exact percentages. I think that is generally close.

Q. So that less than 8 percent of the outstanding common stock of Panhandle Eastern Pipe Line Company is in the hands of the public and is traded on the market; is that right? A. That is correct.

Q. Now, what about the preferred stock? None of that is in the hands of the public?

A. None of that is in the hands of the public.

Q. All of that stock is beneficially owned by Columbia Oil and Gasoline Corporation; is that correct?

A. Yes, sir, that is correct.

Q. Now, referring again to this approximately 8 percent of common stock that is in the hands of the public, isn't it a fact that only a small fraction of that 8 percent [fol. 6854] is actually traded—

A. I don't believe I can answer that question, Mr. Littman.

[fol. 6855] Q. Do you have any data that will show how many shares of Panhandle Eastern Pipe Line Company were actually traded in the market within recent years or over a given period?

A. I do not recall that I have such figures in this exhibit.

Q. Maybe you do not have them in your exhibits but have you any such data in your working papers?

A. No, I do not recall having tabulated the trading. I recorded only the prices.

Q. Did you make any investigation of the amount of trading of Panhandle Eastern's common stock?

A. No, for this study I did not, because it was not necessary. All I needed was two factors, the earnings per share on the one hand and the price quotation on the other and those were the two which were used to make the calculations of the ratio.

Q. Isn't it important to ascertain those facts in order to know whether the amount of trading is sufficient upon which to make a proper analysis of the current earnings price ratio?

A. No, I do not think so. In determining the investor's appraisal of the risk of capital, you secure that by using the price quotations and if there are any shares traded so that a price is recorded in a reputable exchange, there can [fol. 6856] be no dispute about that particular price.

Q. Well, is Panhandle Eastern's common stock traded on any stock exchange?

A. It is traded between a present owner and a prospective purchaser so that there are quotations. It does not make any difference which exchange or whether it is over-the-counter so long as there is an actual transaction and a quotation.

Q. Well, the trading on the market of Panhandle Eastern's common stock is rather thin, isn't it?

A. There again, that is a relative thing. If you were comparing, for instance, the trading in Panhandle Eastern with the trading in General Motor's common stock, I would say it was relatively thin, yes, sir.

Q. If Panhandle Eastern's stock in the hands of the public represented less than 5 percent of the total out

standing common stock, you would not consider it reliable at all, would you?

A. I still say that a quotation is a quotation. I do not care whether it represents one share or whether it represents 100,000 shares. It is still a quotation.

It is a price established at an arm's-length transaction, so far as I am concerned.

Q. Would you consider the earnings price ratio of Panhandle Eastern reliable even if less than 5 percent of [fol. 6857] its shares were outstanding in the hands of the public and traded?

A. I say that a price quotation is a quotation and it is the only guide you have, regardless of the number of shares traded or as to what the investors who were involved in that particular transaction think about the price and it is the only price available which I could use to calculate an earnings price ratio and I have done no different here than Mr. Knapp did in his own exhibit.

I merely followed his own procedure.

Mr. Wheat: To whom are you referring when you mention Mr. Knapp?

The Witness: Mr. Knapp was formerly with the Federal Power Commission and introduced some testimony in the Hope Natural Gas Company case on behalf of the Federal Power Commission.

As a matter of fact, the list and exhibit referred to, Exhibit B, was taken directly from his own exhibit.

By Mr. Littman:

Q. Well, are you relying upon Mr. Knapp's testimony for the purpose of determining the amount of dollar return required by Panhandle Eastern Pipe Line Company?

A. No, not directly, but the exhibit which is Exhibit B to which you referred a short time ago as to the outstanding securities and how they were held, was all taken [fol. 6858] from his exhibit.

Q. I am not now questioning you concerning the accuracy of the statistics shown in Appendix B, Page 8, but I am asking what reliance can be placed upon an earnings

price ratio which reflects the trading on the market of a fraction of 8 percent of common stock of a company that is in the hands of the public.

That is the matter that I wanted to discuss with you.

A. Yes, and my answer is just exactly what I have given you, namely, that there are transactions in this stock upon which there are prices and I used those prices irrespective of whether one share or 100,000 shares were traded.

If there was a reliable price quotation, I used it. Otherwise, I could not have made the calculation.

Q. And you considered the price quotation reliable for Panhandle Eastern Pipe Line Company, notwithstanding the fact that only 8 percent of its common stock is in the hands of the public and only a fraction thereof is traded?

A. Yes, it was the only guide there was on the subject available.

Q. I know it was the only guide. There isn't any question about that. That was the only data available but I am asking you what you think about those data for the purposes to which you put those data?

[fol. 6859] A. I still say if a stock changes hands at $21.75 a share, whether it be one share or more, that is the price for that transaction and that transaction is reliable.

Q. Reliable for the purposes of working out an earnings price ratio for purposes of this proceeding?

A. I think so.

Q. Isn't it a fact, Mr. Coffman, that you actually made numerous eliminations of companies whose common stocks were outstanding in the hands of the public to an extent less than 5 percent in working out the earnings price ratios in your Exhibit 63?

Did you or did you not? You can answer that yes or no.

A. No, I am sorry, I cannot answer it that way, Mr. Littman. I did not take any arbitrary percentage. What I had in mind was to ascertain whether the great bulk of invested capital represented by different securities did have quotations which I could secure.

Now, if there was any block of the capital which was entirely held by some affiliated or holding company so that I could get no quotation, I eliminated it.

It may figure out to be 5 percent, I do not know. The original elimination was based upon whether I could get the securities or not, I mean the quotations.

Q. Didn't you draw the line at 5 percent for purposes of Exhibit 63?

[fol. 6860] A. It may work out that way but I did not start out with the idea of 5 percent, as such. It was only after I had made considerable tabulations to see what I could find as being available for calculations.

Q. Let me refer you to Page 11 of Exhibit 63, Mr. Coffman.

Now, on that page, you discuss your analysis of data on electric utility operating companies and you state that eliminations were made from the complete list of 40 telephone, electric and gas companies for various reasons and then you state that you eliminated "companies whose common stocks were outstanding in the hands of the public to an extent less than 5 percent."

Isn't that correct?

A. Yes, and that is correct only as applied to Section 3, Page 11 of this Exhibit 63 which applies to electric utility operating companies.

Q. Why did you eliminate from this list of electric utility operating companies those companies whose common stocks were outstanding in the hands of the public to an extent less than 5 percent?

A. Because of that particular classification, by eliminating those items, all the other important companies were still left in the tabulation so the ones that happened to be eliminated were immaterial, so far as the results were [fol. 6861] concerned.

There was no purpose in going on with that additional work.

Q. How do you know whether or not they were immaterial? Did you make a calculation to see what the results would be?

A. No, but having a familiarity with the companies, I felt pretty sure, after an examination of the ones that were left, I felt I had a pretty good representation of that particular class of utility company.

Q. Then you consider the data with respect to all of the companies that you eliminated because of the fact that there were outstanding in the hands of the public common stock to an extent less than 5 percent—then you eliminated these companies notwithstanding the fact that their earnings price ratios were just as reliable as the other companies which have more than 5 percent of their common stock in the hands of the public?

A. No, that is not quite correct. I think we are talking about two different things.

In this exhibit to which you have referred, it is specifically stated that we are talking about electric operating utility companies and nothing else and that situation applied to that list.

All the companies were studied and those with 5 percent [fol. 6862] or less than 5 percent were eliminated and I felt that the resulting items and companies which were left were absolutely representative of that particular class of public utility company.

Q. And those that were eliminated for that reason were just as reliable?

A. You could have put the figure in but it would not have changed the result a fraction.

Q. You do not know that, do you, without having first made the calculation?

A. I do not know that for certain but knowing the natures of the companies and so on against those actually included in the list, I think I have a pretty reasonable generalization.

Q. Now, you show in Charts Nos. 19 and 20, the earnings price ratios of common stocks of the Interstate Natural Gas Company, do you not? A. Yes, I do.

Q. That is a rather small company, is it not?

A. Well, in comparison to some of the others, yes.

Q. What is the amount of securities outstanding of that company as shown in your Exhibit 64?

On Page 3, Appendix B, of Exhibit 64, there is outstanding common stock of the Interstate Natural Gas Company as of December 31, 1940, $6,529,530 of which $1,893,564 is in the hands of the public and the remainder is in [fol. 6863] the hands of affiliates.

Q. Now, Panhandle Eastern, as of the same date, had $54,451,000 of securities outstanding in the hands of the public, is that correct?

A. That is including all forms, bonds, notes, preferred and common, $54,451,719.

Q. We are now comparing the sizes of [thse] companies as represented by their total outstanding securities? A. Yes.

Q. Now, when you compare Interstate Natural Gas Company, you are comparing a $6,500,000 company, as far as outstanding securities are concerned, with a company having $54,500,000, approximately, is that right?

A. Yes, that is correct, but I would like to amplify my answer by stating that so far as the investor is concerned, size is not a predominant factor in his mind. He is interested in the potential earning capacity of the company and if a small company has greater potentiality in that respect than [an] larger company, other things being equal, he would prefer the small company as against the larger so that so far as the investor's appraisal of the risk of capital is concerned, it makes no difference to the investors.

Q. Of course, I may have another purpose in mind in asking you these questions as will later be revealed.

[fol. 6864] A. All right.

Q. Now, Memphis Natural Gas Company also appears in Chart No. 20 and that is another small company, is it not, which has only $4,993,000-odd of securities outstanding, is that right?

A. Yes. On Page 4 of Appendix B of Exhibit 64, it is shown that the Memphis Natural Gas Company has total securities outstanding in the amount of $4,993,400 of which $2,381,678 are in the hands of the public.

Q. You also show in Chart No. 20 the current earnings price ratios for Southern Natural Gas Company. That company has been in financial difficulties, has it not?

A. It was a few years ago, yes.

Q. Is it still in financial difficulties?

A. I do not believe so.

Q. You are not sure about that?

A. I do not think it is in financial difficulties, as I understand your term. Today it is beginning to show earnings and it is picking up in its business.

I would not say it was in financial difficulties.

Q. It was recently a bankrupt company, was it not?

A. Well, it depends on what you mean by "recent". As I recall—

Q. (Interposing) Suppose you give me the date.

A. As I recall it—I am not certain of the date—but as [fol. 6865] I recall, it was sometime in 1936. I would want to check that, but in terms of recent, it was not last year or the year before, as I remember it.

Q. Are the investors in that company seeking to make up today the losses which they experienced in the past, as you indicated was the thing that was in the mind of the investor?

A. Well, I think you are talking about something different there. I do not remember now the refinancing plan that was laid out but whatever the plan was in the reorganization it presumably took account at that time of those items and the losses were stricken at the time of the plan.

Q. In other words, the investors wrote them off when the company went through the wringer, so to speak?

A. That is right—he did not write them off. He was forced to write them off.

Q. Now, that company has around $30,500,000 of securities outstanding in the hands of the public, does it not?

A. Yes, it has total securities outstanding of $30,473,304.

Q. Now, will you please turn to Chart No. 22 of Exhibit 65.

In this chart you show, by the green bar at the extreme left side, that the average of the pipe line companies was [fol. 6866] 12.99 percent with respect to earnings price ratio based on 1941 market prices. Is that correct?

A. Yes, sir.

Q. Now, what companies have you averaged to secure this figure of 12.99 percent—by the way, this 12.99 percent relates only to common stock, does it not?

A. That represents the various companies that are shown in, or is based upon the various companies shown in the preceding exhibit.

That is the chart that we just referred to as to the pipe line companies considered.

Q. Including Panhandle Eastern?

A. No, not including that because that is the basis for comparison.

Mr. Wheat: Do you want to check on that?

The Witness: I will check on Panhandle Eastern.

Mr. Littman: I was under the impression that Panhandle Eastern was included.

The Witness: I say I will check that and see. My recollection was the other way around. I will have to make some calculations, I think, to check that but I can report back to you, Mr. Littman.

Mr. Wheat: Just a second, I think we can give you that figure.

Mr. Littman: I check it to be the average of the five [fol. 6867] companies, including Panhandle Eastern Pipe Line Company.

That is, it includes the following companies: El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Southern Natural Gas Company and Panhandle Eastern Pipe Line Company.

The Witness: Yes, that is correct.

By Mr. Littman:

Q. Now, this 12.99 percent shown on Chart No. 22 as the average earnings price ratio of those five pipe-line companies based on 1941 market prices is a straight mathematical average, is it not? A. Yes, it is.

Q. Do you think that is a proper kind of average to use when you have companies having the varying amounts of securities outstanding as you have heretofore testified?

A. I think it is reasonably accurate because there are some difficulties involved in working it out any other way where you have variations as to the class of security you have outstanding.

That is, some companies having only common stock, others having common, preferred and bonds and others having just common and bonds.

Q. We are just talking about common stocks of these companies, are we not?

A. That is correct and, therefore, the earnings price [fol. 6868] ratio that you get on these is representative of their particular division for each company.

Q. You think it is proper to simply add the five ratios and divide by five to get the proper figure?

A. I do because you make a computation and the only way you can make such a computation as this is on the basis of the earnings per share and when you get earnings per share, then you talk in terms of price per share and that gives you the percentage relationship.

Q. Now, when you do that, you are giving just as much weight to Memphis Natural Gas Company, having a 15.10 earnings price ratio and having only $4,993,400 securities as you give to Panhandle Eastern Pipe Line Company, which has $54,451,000 of securities outstanding?

A. That is correct and the reason for that is the one I have already given, that the investor, after all, looking over the entire field of investments that is available to him, compares the earnings per share against the price and it makes no difference whether it is large or small.

Q. Mr. Coffman, do you believe that the straight mathematical average of all these companies, giving each one equal weight, is the proper way of getting the average of the earnings price ratios of those companies?

A. Yes, the [earnins] price ratios for the common stock, [fol. 6869] yes, sir.

Q. Now, will you look at your Exhibit No. 63 and tell me whether you used the mathematical average in determining your average earnings price ratios or whether you used the weighted average?

A. Before we go on, Mr. Littman, we might as well understand we are talking about two different things. This present exhibit to which you are referring is covering over-all capital which includes bonds, preferred stocks, and common stocks.

When you do that, it is possible to make and use a weighted average and I used it; but when you talk in terms of common stock, you have some difficulties because there you are trying first to ascertain the percent of earnings that are available for the common shares only, where there is senior capital outstanding, and it is a little difficult to do so when—

Q. (Interposing) What is difficult about it?

A. The amount of earnings that are finally available are dependent upon how many senior charges are ahead of it and if the company has nothing but common stock outstanding, all of the earnings go to common; but another company, if you have interest charges and preferred dividends and something on common, other types of securities that are paid first, you have to make allowances for those items.

[fol. 6870] In other words, you have to break your earnings figure down per bond, per preferred stock, per common. That is the reason you come out with a per-share earning.

Q. You could weight them, according to outstanding stock, couldn't you?

A. Well, I still say that where you have some companies that have all common and others that have other types of capital outstanding, it works out as accurately to talk in terms of per share.

Q. You show on Chart 22, by a yellow bar, the "Actual public financing based on price to seller" for the Northern Natural Gas Company at a cost of 11.35 percent, is that correct? A. Yes, sir.

Q. Now, that 11.35 percent is not comparable to the 11.53 percent shown immediately to the left for Panhandle Eastern Pipe Line Company and the 12.99 percent shown by the green bar as average of pipe-line companies, is it?

A. That shows the net amount and, in my opinion, is the most and best pragmatic test of what you have got as to what the market actually said about a common stock and natural-gas pipe-line common stock in September, 1941—

Q. (Interposing) That is not my question—

A. I am answering your question.

Q. That is not my question at all, sir. In order to save [fol. 6871] time, I hope you won't mind my breaking in.

What I am getting at is the two bars at the extreme left represent the yield price to the public, do they not?

A. They represent the yield price to the investor that holds the stock right now.

Q. And the yellow bar represents the price to the Northern Natural Gas Company, that is, to the seller, does it not?

A. That is correct, based on the price to the seller.

Q. Now, in that regard, these three bars are not altogether strictly comparable, are they, because two are the yield price to the investors and the one, namely, the Northern Natural, is the yield price to the seller?

A. They are not entirely comparable on that basis.

Q. That is what I mean.

A. But the point is, the purpose of the exhibit was not to contend that. The purpose of the exhibit was to show exactly what the investors said in regard to investments of this kind regardless of which way you take it.

Q. I understand that but I wanted to make the record clear on that before proceeding with a more full discussion of these other matters.

Now, the percent for Northern Natural Gas Company comparable to the 11.53 shown in this Chart No. 22 for Panhandle Eastern Pipe Line Company and to the 12.99 percent shown as "Average of pipe-line companies" is [fol. 6872] shown on Chart No. 21, is it not?

A. That is correct.

Q. And what is the comparable figure?

A. Before adjusted to reflect the effect of the tax, as clearly indicated there, it is 11.72 percent; 10.38 percent after the tax.

You are taking the after-the-tax figure. The 10.38 percent is the comparable figure with the 11.35 percent.

Mr. Littman: Will you please read back that last answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. Well, the 10.38 percent figure for Northern Natural Gas Company would be comparable to the 11.53 percent figure and 12.99 percent figure shown in Chart 22?

A. That is correct.

Q. Now, your average pipe line companies in Chart No. 22 showing the figure to be 12.99 percent, does not include the Northern Natural Gas Company, does it?

A. No, it does not.

Q. Why not?

A. Because at that particular time, this financing was not done and these shares were not in the hands of the public.

Northern Natural common stock was not held by the pub-
[fol. 6873] lic until this issue on September 10 and the study I made was completed before that.

There was not anything available.

Q. Well, you have been using Northern Natural Gas Company data which was available for purposes of this exhibit.

A. Yes, and that is easily explainable. To have gone back and recalculated everything I had done would have cost a lot of money and there was no purpose in it when, after the study was completed, a few additions showing that alone would very definitely show what was happening.

In other words, after I completed the study, I could not go back and re-do the whole thing unless somebody was willing to pay the cost for that work and wait a considerable period of time for it and I was not willing to do it for my health.

Q. The only purpose that it would have shown would be to reduce the average of pipe line companies substantially below 12.99 percent.

It certainly would have done that, would it not?

A. Well, there would then be six companies instead of five and 10.38 divided by that, it would be less than one-half of one percent difference. I have not made the calculation but it would not have made any more difference than that, which I do not call substantial.

[fol. 6874] Q. One-half of one percent in earnings price ratios is a rather substantial amount of dollars, is it not?

A. Well, yes, it will be a fair amount in dollars, but, after all, the word "substantial" can mean different things. I just want to be clear that if it were one percent or one and one-half, that would be more substantial.

Q. And because of the tax situation, it becomes substantially greater when speaking in terms of gross revenue,

isn't that correct? That is the same question we discussed earlier this afternoon.

A. I am sorry, I do not quite see the application of the earnings ratio, here, to the gross revenue, for the moment. What is your point?

Q. You do not understand my question?

A. I do not quite see the connection that you are now raising to the earnings. I fail to follow you, in other words, from the earnings price ratio, for the moment, to the increased earnings.

Q. Well, earnings price ratio, if applied to the invested capital, will produce a given amount of dollars, will it not?

A. That is correct, but I did not do that in this case, as you will recall.

Q. I am just leading up to an explanation of my question.

[fol. 6875] Now, when you get those dollars, those dollars represent the net operating revenue to the company, do they not, or return to the company or profit or whatever you choose to call it?

A. Well, if you mean that additional amounts of money in the firm will give you a higher earnings so that you will have a higher earnings price ratio, then the dollars are already there but I get the ratio I am talking about, that is the result, not the cause, and, consequently, I do not follow your line of reasoning for the moment.

I did not multiply anything to get a gross revenue figure by earnings price ratio so I am unable to follow your line of questioning.

Q. If you cannot follow it, I do not think we had better pursue it. I think the record is quite clear.

You used 12 percent as the cost of common stock to Panhandle Eastern, didn't you?

A. That is correct.

Q. You based that upon the price earnings ratio?

A. I based that upon what the investor says he will require to finance the company.

Q. On earnings price ratios? A. Yes, that is correct.

Q. Now, state whether or not your 12 percent figure [fol. 6876] is predicated in any way upon the average of

the pipeline companies' figure of 12.99 percent which is shown in Chart No. 22, Exhibit 65?

A. The 12 percent is a judgment figure based upon this preceding study which shows these various items.

Q. All right.

Now, I would like to have you state how you arrived at this 12 percent, give us the process that you went through to get at this 12 percent cost of common stock to Panhandle Eastern?

A. I based it upon the considerations which are in support of Chart No. 22 in Exhibit 65 wherein, after a study, I observed that the earnings price ratios of the pipe line companies which have been enumerated, the average was 12.99 percent, practically 13 percent.

Q. That is a different kind of a figure, isn't it, than the 12 percent that you finally adopted? That 12.99 percent represents the cost to the public?

A. And that is what the 12 percent represents. I am saying that the 12 percent to finance in common stock, Panhandle Eastern requires that type of earnings price ratio. You have to have those earnings to support it.

Q. In other words, the 12 percent figure shown on the extreme right part of Chart No. 22 represents the cost to the public?

[fol. 6877] A. To the investing public, that is correct.

Q. Aren't you confused, Mr. Coffman? That column is headed, "Estimated for new financing", Panhandle Eastern Pipe Line Company. A. Yes.

Q. Isn't that the cost to Panhandle Eastern Pipe Line Company, 12 percent on the common stock?

A. I am saying and using 12 percent on the common stock right through.

That is, the 12 percent is used as a part of the $5,064,821 we have been talking about.

Q. The 12 percent could not be both the price to the investors and the price to the Panhandle Eastern Pipe Line Company, could it?

A. I am saying that so far as the company is concerned, if it were to finance again, the investors will require that ratio in order to be interested sufficiently to put up the money needed if common stock is the medium

of capital to be used, that is, the type of securities to be used.

Q. The investors would require what ratio?

A. The 12 percent.

In other words, if the Panhandle Eastern is to go to the public, they are going to have to see an earnings price ratio of 12 percent if, under the conditions at the date of this [fol. 6878] study, the public would or could be interested in supplying the money on a common stock basis.

Q. If the earnings on the equity capital was 12 percent, as you appear to recommend, what would you expect the dividends to be, in percent?

A. I do not know what the dividends would be because, after all, there are a number of items that have to be considered as a matter of managerial policy as to what will be done in regards to distributing earnings.

The mere fact that any company earns so much money on its common is no guarantee whatsoever that you will get any or a large part of it.

Q. Mr. Coffman, you were explaining how you arrived at this 12 percent and what it represented.

Now, I interrupted you for purposes of clarification. Will you continue with your explanation?

* * * * * * * *

A. The right-hand column captioned "Panhandle Eastern Pipe Line Company", relating to common stock at 12 percent, is a judgment figure based upon the earnings price ratios of various pipe-line companies upon the actual earnings price ratio of Panhandle Eastern Pipe Line Company [fol. 6879] and upon the best test, it seems to me, because it is more recent, of the Northern Natural Gas Company to arrive at a figure and the 12 percent is not an average or an arithmetical figure but it is a judgment figure wherein I felt that I had discovered very clearly that investors in the market were telling the various natural gas pipe line companies that they, as investors, were not interested in buying common stocks in natural gas pipe line companies unless they could see a ratio of about 12 percent.

I had 12.99 percent on the average; 11.53 percent on Panhandle, as such; 11.35 percent for Northern and I selected 12 as being within reason.

. . . . . .

Q. Tell me how you got up to 12 percent for Panhandle Eastern Pipe Line Company from the 11.35 percent shown on Chart No. 22 for the Northern Natural Gas Company?

. . . . . .

A. Northern Natural Gas Company, excuse me, had, before the financing at the date of June 30, 1941, when [fol. 6880] Appendix B on Page 6 was prepared for my Exhibit 64, only two types of securities outstanding, bonds and common stock.

In the case of Panhandle Eastern, there were bonds, preferred stock and common stock so that I felt some allowance had to be made for the fact that there were two classes of senior capital preceding the common as against Northern Natural and all investors purchasing securities usually give weight to those considerations because the more senior charges you have prior to the stock you hold, obviously, the more hazard you have as to what out of the total earnings, you may be able to participate in and, therefore, exercising my judgment, based upon that knowledge, I selected 12 percent, giving some weight to the average of 12.99 and also giving some weight to Northern Natural but taking into consideration that the capital structures were different as between the companies and 12 percent was, in my judgment, the reasonable figure.

Q. Now, is this 12 percent figure which is shown on Chart No. 22 for Panhandle Eastern Pipe Line Company strictly comparable to the 12.99 percent figure shown in that chart as "average of pipe line companies"?

A. Yes, I think it is on the same basis.

Q. That is, that is the return required by the public?

A. Yes, if they see that, I think they would be willing [fol. 6881] to invest in this kind of common stock.

Q. And is the 12 percent shown on Chart No. 22 for Panhandle Eastern Pipe Line Company comparable to the 11.53 percent shown on Chart No. 22 for Panhandle Eastern Pipe Line Company? A. As to type, yes.

Q. They both represent the amounts required by the public? A. That is correct.

Q. Why do you expect investors to require 12 percent for the new financing of Panhandle Eastern Pipe Line Company when your own data show that the present earnings price ratio on Panhandle Eastern Pipe Line Companys stock is 11.53?

A. Well, because on the present basis with the bonds, preferred stocks and common outstanding, you have one relationship.

If there is to be new financing and weight is given to the possibility of eliminating the preferred stock, it then changes the relationship of both the bonds and the common stock and some allowance had to be made for that and our experience and my experience in this business of advising investors over a period of time indicated that some allowances would have to be made.

I know investors well enough to know that they make [fol. 6882] calculations of that type or make considerations of that type.

Q. Isn't this 12 percent figure shown in Chart No. 22 occasioned by reason of the use of your ideal capital structure which we have heretofore discussed?

A. No, it had nothing to do with that, as a matter of fact.

What you get in the ideal capital structure is merely a statement which the Commissions have used from time to time that a 40-percent bond classification and a 60-percent common stock classification would seem to be a rather appropriate capital structure and I merely applied the percent already found in this exhibit that you are talking about, namely, 12 percent and I applied it so 60 percent of 12 and 40 percent of 3 gives you 8.4.

Q. Now, you used the 12 percent in order to finance 60 percent of the capital structure by common stock as shown by your Chart No. 28, isn't that correct?

A. I applied the 12 percent, that is correct.

Q. Now, then, that is why you applied the 12 percent, is it not?

A. No. You get right to the question of what balance shall you have between bonds and preferred stock. Well,

the Securities and Exchange Commission has used, on several occasions, 40 and 60, saying if more equity capital [fol. 6883] is going to be put in the business, 40 and 60 would seem to be reasonable and 40 and 60 give you the two figures you have there.

The rates having been determined by a different process, that is, studying the actual markets, you find 12 percent for the common and, allowing for the increase in bonds that would take place there, it comes to 3 percent cost on the bonds and applying 3 percent by 40 and 60 percent by 12, you get 8.40.

In other words, the result of that study comes by a determination already made. This determination is not predicated upon what you are reading at all.

Q. Now, Mr. Coffman, the present holders of the common stock of Panhandle Eastern Pipe Line Company are only requiring 11.53 percent earnings on that common stock, according to your Chart No. 22, isn't that correct?

A. That is correct.

Q. Now, if that means anything, why do you expect the investor to require something more than that, namely, 12 percent?

A. Because, as I have tried to indicate, you have a certain relationship of common stock, preferred stock and bonds today.

If, in the future, further common stock is used for financing, that relationship will thereby change and I exer- [fol. 6884] cised my judgment as to what effect that change in capital structure by way of number of shares outstanding would be having on the common stock earnings price ratio required by investors.

Q. But, Mr. Coffman, if you will turn to your Chart No. 26, you will see that you are applying the 12 percent to the present amount of outstanding common stock.

A. That is correct.

Q. And to the present capital structure, isn't that right? A. That is correct.

Q. Now, the fact is that Panhandle Eastern's common stock holders are apparently content to get 11.53 percent

by way of earnings on their common stock, according to your Chart No. 22?

A. That is true as of the date the figure was calculated.

Q. And in Chart No. 26, you use the same capital structure as now exists and you want to make an allowance of 12 percent.

Now, assuming no change in capital structure, how do you justify a figure of 12 percent?

A. Well, I justify it on the basis that I had to calculate throughout for purposes of ascertaining the actual capital requirements, that is, the earnings to meet the capital re- [fol. 6885] quirements, what the figures would be and I accepted a judgment figure there for the common stock which I believe, on the average under those conditions, would be required.

Q. You mean it is your judgment that the average required is going to be something in excess of what is presently required?

A. So long as the trend at that time continued, yes. I think that has already been borne out, as a matter of fact, in the market today.

I do not have the figures but I could produce them on a number of these and I think they show them very clearly.

Q. And that is, you say, purely a judgment figure?

A. That is correct, it is a judgment figure based on the facts studied.

Q. And we have no way of checking the accuracy of that judgment figure by reference to working papers, have we?

A. Yes, you have everything here that I had. That is, in regard to the various calculations made on those five companies and the consideration given to Northern Natural Gas Company and so forth.

In other words, I have not withheld anything here at all. Everything I had to work with you have got.

Q. Now, Mr. Coffman, you show by your Chart No. 21 [fol. 6886] that the common stock holders of Northern Natural Gas Company are content with earnings, after taxes, of 10.38 percent on their common stock, isn't that correct? A. That is correct.

Q. Now, you jump from 10.38 percent to 12 percent by the exercise of your judgment, do you not, for Panhandle Eastern?

A. Not at all. I look at the five companies which show 12.99 percent. That is not a judgment figure. That is pure arithmetic.

Q. That includes Panhandle Eastern doesn't it?

A. Yes; it includes it.

Q. That is pure arithmetic, adding the five and dividing by five?

A. That is correct and the actual at the time of 11.53 for Panhandle Eastern based upon the 1941 market prices and the Northern Natural Gas Company experience, making allowances for the difference in the capital structure between the Panhandle Eastern Company and the Northern Natural and considering the trend at the time.

Q. Now, Northern Natural Gas Company experience is 10.38 percent, is it not?

A. Yes, and its setup is different than Panhandle Eastern's. Its capital setup is different.

Q. Panhandle Eastern Pipe Line Company's figure is [fol. 6887] 12 percent which is strictly comparable with the 10.38 percent, is that right? A. Yes, that is correct.

Q. What are some of the risks of capital that are appraised by the investor?

A. They are numerous. In the first place, the investor, to the best of his ability, tries to secure some idea as to what he thinks the trend of business is going to be like over a reasonable time in the future.

Today, he is wondering what influence the armament and the emergency program is going to have upon business. He is trying to appraise the facts as they become available as to how the war is really turning.

He never fails to take into consideration what the Commissions are doing by way of cutting rates and what influence that might have upon the security of his investments.

He is worrying very definitely about what the Treasury is doing by way of increasing the tax rates and taking more earnings away to finance the present emergency period.

There are, I suppose, just hundreds of different things. To generalize and summarize the thing, the investor, to the best of his ability, is trying to consider all the economic factors that have a bearing upon the security of his investment and a reasonable return thereon, including all [fol. 6888] the things mentioned and a good many others I could mention if you would like.

He looks at the management, for example, and tries to ascertain whether they are efficient or not efficient and whether or not the company is keeping abreast of the times with its service and so forth.

Q. Those things which you mentioned all tend to increase the present earnings price ratio, is that right?

A. At the present time, that is the way it is actually working, as indicated by the trend of market prices.

In other words, today, as we all know, the earnings of many companies are going higher while the prices of common stock are going lower and that is not judgment. That is a matter of fact.

Q. Now, those risks include the possibility of higher taxes, of course, do they not? A. That is correct.

Q. Do they include the possibility of increased expenses?

A. The investor is trying to make an appraisal of that, too, yes.

Q. Do they include the possibility that your theory of rate making will not be adopted by this Commission?

A. I do not know as any investor knows about that, do they?

[fol. 6889] Q. Do they include the possibility of a rate reduction?

A. Well, the investors at the present know that there is a hearing being conducted in regard to this company and, naturally, if they think there is a possibility that some action may be taken by the Commission which will reduce the rates, they will try to appraise the effect of that as best they can and if it is going to jeopardize their position, the presumption is the price of their stocks and bonds will go off.

That can be demonstrated in numerous cases, I think.

Q. And those risks also include, of course, the possibility of other Governmental activities made necessary by the national war program? A. Yes, sir.

Q. Do those risks of capital which are appraised by the investors also include the possibility of a change in earnings?

A. Well, from our experience in advising investors, usually the first two questions that a prospective investor will ask you, or even a man that is already an investor in a particular stock, is what we think the company is going to earn and what do we think it is going to pay.

Mr. Lee: Pardon me. Do you ever advise the prospective investor that if the company's rate is cut, the company [fol. 6890] will sell more gas and make more money? Have you ever advised them that?

The Witness: We point out in cases where they have had increases in output with decreased rates, that that is a fact.

You will find that throughout our services. We have no hesitation in stating that. Wherever it is a fact, we admit it.

Mr. Lee: And the imminence of a cut in the rate does not always lead the investors to be discouraged as you indicated a minute ago. It may be a great benefit to the investors, isn't that right?

The Witness: That all depends on the facts. I can show you in Brooklyn Union, for instance, that is not a fact. It has not protected the investors there by a long shot.

Mr. Lee: That may be an isolated case but, in general, isn't it true that where the public utility service rate is cut —I do not mean a cut that involves a confiscation—but a cut that still has a good earning, results in increased volumes of sales and results in increased earnings, isn't that generally true?

The Witness: Where a company has a growth factor and there are possibilities of further expansion and it is evident there are further possibilities of growth and where [fol. 6891] a reduced rate will, within a reasonable time,

stimulate further usage so that the earnings will be there, the investors try to appraise that also.

They do the best they can with their own knowledge and the facts they have before them and we try to do the same thing.

Mr. Lee: The point I am trying to get at, without any equivocation, is from your knowledge as an expert advisor to prospective investors, you know, don't you, that the cut in public utility rates has stimulated the volume in business and resulted in increased earnings and is a benefit?

The Witness: I can state without equivocation it has been true in the past but it can be demonstrated now, because of changed conditions, that decreases in rates in many utility companies, although it can be absorbed by gross revenue, it is not being absorbed in net revenue.

That can be demonstrated mathematically.

Mr. Lee: But it has been, as I say, in the past, and you will concede that, won't you?

The Witness: Yes, that is true and we have made such admissions in our services.

Mr. Lee: Pardon me for breaking in, Mr. Littman.

By Mr. Littman:

Q. Now, in spite of all of these risks that are appraised [fol. 6892] by the investors which I enumerated and which might seriously reduce or impair earnings, is it your opinion that the investor expects the earnings price ratios to remain stable in the future?

A. Not at all. I have not said that any place throughout.

Q. What do you say about it?

A. I just repeat what I have said about it. As long as conditions remain about as they were at the time of this study, I would say that the result I have stated is a very close approximation to the fact.

Now, if there is a material change in one or more important factors, then I would want to take a fresh look and that is the statement I have made throughout this testimony.

Mr. Lee: Pardon me. Just one more question.

You made a statement that there had been increased earnings but, nevertheless, the common stock sold at a reduced price.

The Witness: I say at the present time, generally, in the market, that is, taking common stocks as a class, that while earnings are advancing or are larger, the common stock prices, as we know, have been going to lower levels.

Mr. Lee: What is the reason for that?

[fol. 6893] The Witness: There are several reasons.

In the first place, although the company is making larger earnings, the investor in common stock can see more and more clearly that the Government is going to take a larger and larger share to finance the war.

Mr. Wheat: Pardon me, when you said, "the company", you were not then referring to Panhandle Eastern, particularly, but just in general?

The Witness: No, I am talking about any company that has a common stock outstanding and the prospective investors or the actual common stockholder today has tabulations before him giving effect to the new tax rates and then perhaps making some estimate beyond that as to what they are likely to go to in view of the statements made by Mr. Morgenthau that 6 percent or 7 percent would be the top allowance and President's Roosevelt's statement to the effect that he does not want to see war profits in this war as against the last one, and so forth, and to the best of their ability, they are trying to evaluate those things and they can see pretty clearly, without knowing the exact amount, that although there may be $6.00 of earnings a share there, by the time the company gets through meeting all of its obligations, including the higher taxes, there will be little or nothing available for distribution.

After all, that means to the common-stockholder that [fol. 6894] his principal is less secure.

Secondly, his principal is likely not to get any return, so he is not so interested and the consequence is he is just as happy to be out of the stock as to be in it and the price

keeps going off. It is a seller's market rather than a buyer's market.

By Mr. Littman:

Q. What happens to the stock when the investor begins to worry about all of these things you mentioned?

A. If he worries enough so that there are more people attempting to sell than there are buying, the price goes off.

Q. The price goes down and the earnings price ratio goes up?

A. That is correct.

Q. And that is simply because the investor knows that next year he is going to have to take a cut in his earnings price ratio, is that right?

A. No, the reason for that is that he knows that someplace along, if his interpretation of the facts is correct, the earnings available for distribution will be less and, therefore, it is a question of whether he wishes to hold them until the storm blows over or whether he gets out.

In any event, if he will do any new financing, he will [fol. 6895] have to do it on that basis. Otherwise, the people would be holding their common stock.

Q. In other words, he is, in his own mind, discounting his present earnings price ratio by what he expects to occur in the future, is that right?

A. He is giving some weight to that because it is his money, obviously, and he is trying to protect it.

Q. Well, assuming that brewery stocks were on the market at the time when prohibition was imminent, what effect would the imminence of prohibition against the sale of spiritous brews have upon the price of the common stock of that brewery?

A. Well, it would have a very disastrous effect.

Q. Tell me what would happen to the earnings price ratios?

A. The earnings at that given time would be the same, obviously.

Q. The same as what?

A. The same as they were. I mean if you are talking about June of 1940 and to that date there were so many earnings per share but by December everyone knew the

Act was going to pass and there would be no more, there would be a big rush to buy brew, so the earnings would be tremendous but, nevertheless, the price would go off because the man wants to get his capital out of the hands [fol. 6896] of that particular outfit before it goes broke.

In other words, he wants to save his money. He earned it and he worked hard to get it and he wants to keep it.

Q. So the price earnings ratio would go way up?

A. Temporarily and then they would go to pot.

Q. They would go to pot?

A. That is right.

Q. And that is simply because the investor knows that next year he is not going to be able to make any earnings?

A. Not only that but he may not even get his capital back if he does not get it back now and that is what he is worried about in all of these companies.

Q. Now, if an investor in a natural-gas pipe-line company's stock was fearful that within the next six months there would be a cut in rates, what effect would that have upon the earnings price ratio?

A. Well, to come back to the other gentleman's question, if the investors thought that the imminence of a rate reduction or actually knew that a rate reduction was to take place but, at the same time, knowing the company, believed it had a growth factor—to make my answer simple—if he believed that the growth factor would supply additional earnings net to offset the loss of earnings by virtue of the rate cut so that he was, for all practical [fol. 6897] purposes at status quo, not at a given moment of time but at a reasonable period of time, he wouldn't be disturbed.

Q. I am asking you to assume that the investor was satisfied in his own mind that a rate cut was imminent within six months.

What effect would that have upon the earnings price ratios?

A. Well, the answer I have just given answers that question.

Now, if you wish me to go on and assume that that rate cut is actually going to cut net earnings and he knows that equally well—may I make that assumption?

Q. Yes, he knows that.

A. Then the likelihood is that he will say that he is not as sure about the safety of his principal in that security in that company as he was before and the price will go off.

Q. Therefore, he will want, for instance, 12 percent, let us take that as an example?

A. As against something lower before.

Q. And he wants that 12 percent because he knows that six months hence it is not going to be 12 percent any more, it is going to be something less than 12 percent, isn't that correct?

[fol. 6898] A. He is fearful of that and he is fearful that his principal is no longer secure.

Q. I am asking you to assume that he knows that.

A. My answer is the same. He knows that. The price is going off, because it is becoming a riskier business from the standpoint of his investment and he requires more in the way of return to accept that risk.

Q. Now, he requires more for his rate of return?

A. Or so long as the conditions existent now remain.

Q. And he is perfectly content to take the 12 percent today, knowing that it will be, let us say, 10 percent or 8 percent by reason of a rate reduction six months hence, isn't that correct?

A. He is still talking in terms of the average. That is, what he can sell over a period.

Q. And the answer to my question is "yes"?

A. With the statement that it covers a period of time on the basis of what I have said before.

Q. Now, the investor who knows that increased taxes will have the effect of cutting down his earnings six months hence goes into the venture at 12 percent knowing and being content with something less six months hence, isn't that correct, by reason of the cut in taxes?

A. He will go in if 12 percent is the figure. It takes [fol. 6899] that much to invite his capital, yes.

Q. And six months hence he will, in all probability, be receiving something less than 12 percent by reason of these various risks that are in his mind, isn't that correct?

A. No, you cannot say that directly because there, you see, you are again complicating two factors.

If the earnings are going down and he is fearful the price will go down, now, the relationship of how the two decline will determine whether it is 12, 13, 11 or 15. I do not know.

Q. But every risk in the mind of the investor causes the present earnings price ratio to go up, doesn't it?

A. If it is converted to selling the stock, it will be driving the price down.

Q. And the reason for that is simply because the investor is discounting for the future, is that right?

A. Yes, he has to safeguard his capital, yes, absolutely.

Q. So the investor who is demanding, let us say, 12 percent today may, in all probability, be doing that simply because he knows that he will receive something less in the future and is perfectly satisfied to receive that lesser amount in the future?

A. If he believes that the risk, as he appraises it, is, [fol. 6900] to the best of his judgment compensated by a 12 percent ratio, yes.

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[fol. 6903] PAUL B. COFFMAN a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Coffman, at the close of yesterday's session, we were discussing the matter of the investor's appraisal of risks as indicated by the earnings-price ratios.

Have current prices of utility common stocks been influenced by a notion that original cost may be substituted for reproduction cost in the rate-making process?

A. Mr. Littman, I do not know as I could say whether the price had been influenced or not. I think, from my observations, that this much is true:

Investors and prospective investors as well as investment advisory firms naturally have been following the trend and, in so far as work which has been done before Commissions and this Commission is concerned and dis-

cussions regarding original cost and cost of reproduction new, I presume it has been a part of their thinking but, whether or not to this date that has been conveyed tangibly to any change in price, I do not believe I could pass upon, [fol. 6904] that. I do not know. I know they are aware of it but whether or not it has had an effect upon price, I cannot say.

Q. In your opinion, Mr. Coffman, would an investor who is considering the relative merits of common stocks take into consideration prospective changes in the earning power of the various corporations whose securities are under consideration?

A. Yes, he would.

Q. Is it a fact that investors are more interested in prospective earnings than in past earnings?

A. Yes, I would say that is true and if I may explain more fully, when a security changes hands the present owner has already had the benefit of the earning power in so far as the share he holds is concerned.

The prospective purchaser, on the other hand, has no benefit as to what has happened. He is looking forward as to what he will and how he will benefit after he purchases the security.

Q. So we may agree that investors are primarily interested in prospective earnings?

A. Generally, that is true.

Q. I read from the Standard Outlook for Security Markets, issue of April 8, 1940, published by the firm of which you are a Vice President, namely, Standard and Poor's, as follows:

[fol. 6905] "A high yield is not of itself an indication that a stock is attractive. It may signify that the dividend is vulnerable—the dividend payments are not being covered by earnings or that earnings' prospects do not promise continued coverage for any length of time."

Do you agree with that statement?

The Witness: May I have that re-read, please?

(Whereupon, the portion indicated was read by the reporter.)

The Witness: In the first place, the excerpt that you have just read from our service is now talking about a yield as against earnings-price ratios that we have been talking about.

I want to make that point clear so that what I say will be directed to a yield, as such, and not a price-earnings ratio.

Q. You are now referring to a dividend?

A. That is what is being referred to there. When we talk about a yield in that particular publication, as it is used, we are referring to a yield and on that basis, I would say that the statement you have quoted [in] generally correct.

Q. Do you disagree with it ~~in any particular~~?

A. No, I say it is generally correct. We could be more definitive if we wanted to go on but, as far as it goes, it [fol. 6906] is an accurate statement.

Q. Would this statement also be applicable, in principle, to earnings-price ratios?

A. It would generally apply to this extent that, as an earnings-price ratio goes up, there is at least an indication that investors believe that the risk of the particular business has increased or, to use the term that is used there, it is somewhat more vulnerable, referring, of course, there to dividends.

Q. In other words, a high earnings-price ratio would not, of itself, be an indication that a stock is attractive?

A. Not necessarily. You would have to make an analysis to ascertain that fact.

Q. In other words, it is true that a high earnings-price ratio is not, of itself, an indication that a stock is attractive?

A. That is correct.

Q. And is it also true that a high earnings-price ratio may signify that the earnings' prospects will not continue at the same level for any length of time, to paraphrase the statement?

A. It may well indicate that.

Q. In your opinion, would an outlook for decreased future earnings tend to increase or decrease current [fol. 6907] earnings-price ratios?

A. Well, if you are talking about a single company for the moment as against an over-all group and the earnings-price ratio were to go up because the earnings' prospect looked more dismal, I would say the [the] earnings-price ratio changed because of the possibilities of that change in earnings, that adverse prospective change in earnings.

Q. Would that be true in the case of a natural-gas pipeline utility that was facing a rate reduction?

A. It could be true.

Q. It would be true, wouldn't it?

A. Not necessarily.

Q. All other things being equal and giving weight to that element alone, it would be true, would it not?

A. Well, it might, only temporarily, Mr. Littman. The reason I qualify myself is because of an answer I believe I gave yesterday on the same subject, namely, that if you have a natural-gas pipe-line company or, for that matter, any other company which shows a high growth factor wherein it can be demonstrated or reasonably assumed that a reduction of rates may well stimulate business so that the aggregate number of dollars coming in remains the same or a little larger so that the net income is about maintained, there would only be, I should say, a temporary reduction in the earnings-price ratio.

[fol. 6908] I merely want to point out it is not as simple a thing as you state. There are growth factors to be considered and other factors, all of which will be weighed to the best of the investor's ability.

Q. Your statement would indicate that a rate reduction, in an investor's opinion, can only be made up by future increased business?

A. Yes, if you eliminate that factor and say that the rate reduction coming through is to make a permanent impairment in earnings, then I think the earnings-price ratio would likely register that by showing an increase.

Q. And that is the very thing that an investor is fearful of when a rate investigation is commenced, isn't that correct?

A. Yes, especially if he has got a wide interest, he will begin to pay pretty close attention to see how the situation is going on the score that the money is still

his and it is his option whether he would rather have it there or place it elsewhere and he tries to find out that factor by weighing the relative risks.

In other words, a man that has earned and saved capital and has it invested is always looking at the security of it, as [wells] as the return.

Q. In other words, the investor is rather sensitive on the subject of the imminence of a cut in his earnings when [fol. 6909] an investigation of the rates of a particular utility is launched, isn't that correct?

A. Well, you say "sensitive." That is a little hard to use. I would say that he is very definitely appraising these things with the sole purpose of trying to ascertain whether or not his capital will be preserved.

I do not know that he is any more sensitive to a rate investigation, let us say, than he might have been to the Pearl Harbor episode and the fact we were going to be short on rubber, tin and a few other things from the Far East as it might have affected a rubber company, let us say, and he is sensitive to that, too.

Q. Assuming that this investor knows that gross revenues are going to increase through normal growth in the future and if there were no rate reduction imminent, what effect would that have on the earnings-price ratio?

A. Well, say all other things being equal, it would tend to lower the earnings-price ratio as in comparison to the preceding illustration [your] gave.

Q. Now, if we inject in that situation the imminence of a rate reduction that would, of course, raise the current price ratio, would it not?

A. It would tend to do that because that is an added risk, absolutely. There is more hazard.

Q. If an investor believes that prospective earnings [fol. 6910] will be lower than current earnings, would that fact tend to raise or lower the market price of common stocks?

A. Well, if the prospects were that the earnings would be less, it would tend, other things being equal, to lower the price.

Q. And in that manner, of course, increase the current earnings-price ratio?

A. Based upon the then present earnings, yes.

Q. Have you anywhere in your study shown the prospective earnings of natural-gas pipe-line utilities which you used as a basis of comparison with Panhandle Eastern Pipe Line Company?

A. No, I do not have such figures in this exhibit but, as you know, from time to time in our various printed services, we are making estimates on numerous companies, at least those that are more interesting to the investor.

Q. Has your company, Standard and Poor's, made a survey of Panhandle Eastern Pipe Line Company?

A. Well, it depends on what you mean by "a survey." If you mean, do we comment on the company and its securities, yes, we do.

Q. You referred to such a survey in your testimony in the David Young III case, did you not?

A. No, I did not. Mr. Payer did and had some short written letter in which there were general comments about [fol. 6911] the historical background and so on. I never saw the document myself.

Q. You do know of such a survey, do you not?

A. I do, from the fact that Mr. Payer said he had one in his hand and read from it, although he would not give it to me to look at.

I assumed he was not lying but actually did have such document and was putting it in the record, according to its caption.

Q. You have never studied that survey?

A. No. At the time the case came about, I did not even know of its existence.

Q. Have you studied it since that time?

A. I have studied one particular section which was the particular part that Mr. Payer was referring to, yes.

Q. Will you be so kind as to let me have a copy of that survey and any recent or more recent surveys of Panhandle Eastern Pipe Line Company that have been published by your company?

A. I am sorry, I could not do it on that particular one because I was never able to find a copy of the thing in our files.

It is not a printed document. It was never published. It was not one of our publications.

You see, some analyst in our shop was approached by [fol. 6912] some man from the outside with some figures and the gentleman at that time said he wished we would take the figures, as analysts, and see how we would put them together. That is what he did. They were not our figures and we did not know the use to which they were to be put. It was just a letter—

Q. (Interposing) A letter addressed by whom to whom?

A. By this analyst. As a matter of fact, I do not think it actually carried a signature. I cannot say. I did not see the whole thing but I searched high and low in our files to get a copy so I could see it myself, since Mr. Payer would not let me have his copy and he did not, as you know, put that in as a matter of record. He refrained very diligently from doing that.

I could not get a copy. There is no copy in our files and the people who did the job are apparently no longer with us and I never could find out what the thing was all about.

Q. For purposes of identification in the record, Mr. Payer was one of the attorneys for the plaintiff?

A. That is correct.

Q. David Young III?

A. David Young III, that is correct.

However, on the rest of your question, any publications that we have covering Panhandle Eastern Pipe Line Company, I would be very happy to send you; but that was not [fol. 6913] a printed document.

[It] it was, I could very easily get a copy or a photostat copy.

Q. Assume, Mr. Coffman, that the earnings-price ratio of a particular common stock, based on earnings for the latest available fiscal year is 11.53 percent and assume further that the investor is aware of or has been advised of the following:

First, that an increased cost of operating and maintenance amounting to at least 10 percent of such cost was likely to be incurred in the future;

Assume secondly, that some increase in State, local and miscellaneous Federal taxes is expected;

Assume thirdly, that Federal income and excess profits taxes based on the 1941 tax rate would be more than $1,000,000 greater than on the 1940 tax rates;

Assume fourthly, that the management of the company expects a still further increase in Federal taxes in 1942 of 10 percent;

Assume fifthly, that the depreciation, depletion and amortization allowance made by the company during the last fiscal year is inadequate, in the opinion of one of the company's experts, to return the invested capital when the reserves are exhausted;

Assume sixthly, that the Federal Power Commission was [fol. 6914] currently holding hearings to determine whether the rates of the company are reasonable or unreasonable and, if found unreasonably high, would in all likelihood reduce such rates.

Now, assuming these six items which I have named, if the investor knew or had been advised of these circumstances, could he reasonably expect that an earnings-price ratio of 11.53 percent would be maintained on the common stock during the succeeding year?

A. I would not think so.

Q. You would not think so?

A. No, but, as I have stated in my testimony right along, he is not looking at it for a single moment of time or a single year.

He is talking about over the average. In other words, he did not buy his investment today to liquidate it next month or next year. He bought the investment to let it stay put.

If it averages out over the years, he will feel he has fared all right and the principal was safe and the income on it reasonable.

Q. Under the conditions that I have assumed, would the investor expect the 11.53 percent earnings-price ratio to obtain throughout the year 1942?

A. That would all depend on conditions at the time. If all the conditions were adverse at the time, the given mo-

[fol. 6915] ment of time you are speaking of, then I would say that throughout the remaining months we would not expect it to be maintained because the price might be sliding off gradually.

If there were other factors which would tend to offset part of that it might, for the most part, be maintained, but over a period of time, with these assumptions you have made, it would not be.

Q. I am talking about the year 1942 when I asked you this last question.

A. Conditions existing as we know them to be right now at this time, January 28, 1942, making the assumptions that you have asked me to make and viewing the external conditions as I view them, which also have a part to play in this price, I would not suppose that it would be reasonable to expect the earnings-price ratio to remain at 11.3.

I think for the moment it might be higher.

Q. 11.53 is the figure.

A. I am sorry, 11.53. I should suppose it might be higher. Later, as the rate reduction goes into effect, if it proves to be an actuality and the taxes get higher so the earnings are lower, then the ratio will tend to go down.

How much, will depend upon the relationship of decline between the price, on the one hand, and the decline or [fol 6916] earnings on the other.

Q. You mean the earnings-price ratios might, under these circumstances, go down to 6 percent, might they not, in 1942?

A. It is hard to know how low they will go. If it gets too low, you would not have any investors in the business at all.

Q. But it will go lower and it will go considerably lower, will it not?

A. When the earnings drop off materially, the price will also drop. Now, where that will rest, as I say, depends upon the relationship of the decline between the two and I think it is well to point out in this connection that you are really talking about two confusing things.

In the first place, you are talking about a present earning against a prospective eventuality. The earnings today,

for example, we will say, are $3 a share. The prospect may be $2 but, so far as this year's earnings are concerned, upon which you compute the ratio, you use $3 until the next annual or quarterly or semiannual statement comes out when you can get a new look.

Q. Is what you have given as your last answer the same in substance and does it comport with the testimony which you gave in the David Young suit?

A. I have not read the David Young suit in a couple [fol. 6917] of years, 1939, or whenever it was, but it is consistent with the part of the David Young suit which you read, very definitely.

Q. It is consistent with your—

A. (Interposing) I say it is consistent with the David Young suit, that part of my testimony in the David Young suit which you read. Beyond that, as I say, my memory is not fresh on it but I think it must be the same because I do not believe I have changed my opinion from that time to this in regard to reaction of investors to changes in price and earnings.

Q. You have at least changed your opinion on the worth of market quotations since you testified in the David Young suit?

Mr. Wheat: Is that a question or a statement?

Mr. Littman: It is a question.

The Witness: I do not know that I have.

By Mr. Littman:

Q. You do not think you have?

A. No, I do not think I have.

Q. Did you rely on market prices of stocks in the David Young suit in connection with your testimony on Panhandle Eastern's common stock?

A. No, I did not in that case because there the question was one of trying to determine the fair value.

[fol. 6918] In this particular case, I think I have only said or have solely said that I used price quotations in every instance where they were available because they were the only guide available at the time as to what two independent parties thought about the price of that security.

Q. Do you recall testifying in the David Young suit that the market quotations of Panhandle Eastern's com-

mon stock were wholly unreliable for purposes of relating earnings, dividends and for use in—withdraw that—.

It is a fact, is it not, that you disregarded the market quotations of Panhandle Eastern's stock in your testimony in the David Young suit, is that correct?

A. In regard to the particular security?

Q. In regard to the common stock.

A. Yes, that is correct.

Q. Why did you disregard those market quotations in the David Young suit on the common stock of Panhandle Eastern?

A. Because, in that particular case, the question was one of determining fair value for all the stock and, therefore, I used an earnings-evaluation method to determine it, which I believe to be one sound method and that is in no case in conflict with anything I have said here whatsoever.

Q. Coming back to the question of earnings-price [fol. 6919] ratios, Mr. Coffman, I want you to assume the following:

First, that the investor had been advised that Panhandle Eastern Pipe Line Company had been held to be a subsidiary of a large holding company by the Securities and Exchange Commission after contesting such a finding;

Secondly, that the company was involved in long and costly litigation;

Thirdly, that it was being prosecuted in an anti-trust case;

Fourthly—

Mr. Culton: (Interposing) Panhandle Eastern was being prosecuted in such a case?

Mr. Littman: I am asking him to assume that a company was being prosecuted in an anti-trust case.

Fourthly, that rate hearings were being held before the Federal Power Commission;

Fifthly, that the company had been named in integration proceedings against its holding company by the Securities and Exchange Commission.

"Now, what influence would these matters have upon the current-price ratio of that company?

. . . . . .

[fol. 6920] The Witness: All other factors remaining the same and taking into account these five items, the five hypothetical assumptions that you have asked me to make, it would be likely that the investor would, to the best of his judgment, attempt to ascertain what the likelihood of the outcome of some of these hearings and suits would be and, to the extent that he thought there might be some action taken in one connection or another with these five items, the price of the security would tend to decline, in which case the earnings-price ratio would go up, based upon the then-present earnings.

. . . . . .

[fol. 6921] By Mr. Littman:

Q. Now, where you use the earnings-price ratio of this hypothetical company concerning which I have asked you a number of questions here and a moment ago, I think I asked you to make six assumptions first and then five.

We have eliminated one, making 10 in all. If you were using the earnings-price ratios of this particular corporation as a guide for the determination of the current cost of capital, of course, your guide would be very likely to give you a higher rate of return or dollar return for the present than is clearly indicated by the future, isn't that correct?

A. All other things being equal, that would tend to be true for the period about which you are talking.

I do not mean by "period" a future period. I am talking about the time you are talking about when you have those earnings available and these particular conditions only. I [fol. 6922] do not mean to be misinterpreted by saying "period" that you are interpreting that, that it means a period of years. There is no such thought in my mind.

Q. Well, of course the earnings-price ratio is taken as of the present. You are assuming that, aren't you?

A. Both factors of the earnings-price ratio are being taken as of the present, the earnings which you have available as reported on the last available financial statement—

Q. (Interposing). Yes, you are assuming that—

A. (Continuing) Yes, and the price quotation at the time.

In our particular study, as you know, to avoid any odd day in the market, we used average prices over a period of months so that if one day in the market happened to be out of line, it would not distort in any way the calculations.

Q. Yes. Well, assuming that the earnings-price ratio was calculated as of the period for which you calculated your earnings-price ratios for the year 1941 and assuming these ten conditions which I have asked you to assume, I am now asking you whether a rate of return or a dollar figure of return based upon the earnings-price ratio which results from these ten ominous factors would be too high to be used in the future, all things being equal?

[fol. 6923] A. That is inconsistent on its face, isn't it? If all things remain the same, it seems to me—

Q. (Interposing) All other things remain the same.

A. In other words, all external conditions and everything else remain the same except the ten points—

Q. (Interposing) Except the ten assumptions, that is right.

A. Well, in so far as the prospective investors or the actual investors in the security gave weight to these ten factors and the price of the security declined, there would result, all other things remaining equal, a higher earnings-price ratio.

Now, if you took that amount, that rate that you get to determine the dollars which you are talking about, which, as I interpret it, to get down to Exhibit 65, Chart 37, is the $5,064,821, it would be higher but the point is that as of the time the study was made and so long as these conditions are as they are, I contend that the investor will require that earnings-price ratio before he will be willing to increase his capital in the business.

If you eliminate any of the hazards, the business becomes more certain, his capital becomes more secure, more certain, the earnings price ratio will change. The market has changed and investors will look at it differently.

Q. Now, Mr. Coffman, the first six assumptions which [fol. 6924] I asked you to make all appear in your Exhibit No. 65, do they not?

A. Well, No. 1, increase in operations and maintenance —10 percent, that is correct. Some increase in taxes is correct.

Q. Now, are you talking about State, local—

A. (Interposing) State, local and municipal, taxes. Federal taxes, more than $1,000,000—well that, I do not recall the specific figure, but that is approximately correct as shown in Exhibit 65, chart—

Q. (Interposing) Table for chart No. 30?

A. As shown in Chart No. 30.

Tax, more than a million dollars larger, all right. It is about $1,000,000,—well, I cannot make that.

Taking all taxes together, if you will, for the moment, it is more than $1,300,000. That includes the State, local and miscellaneous and the Federal income and excess profits.

Q. That would take care of the fourth assumption that I made, that is, an additional 10 percent increase in Federal taxes for 1942, as shown by your Chart No. 30 of Exhibit 65, isn't that correct?

A. I am apparently getting a little mixed up with you. I thought that your second item was some increase in taxes which was State, local and miscellaneous and three was Federal taxes, more than a million dollars; and fourth [fol. 6925] was management expects larger taxes. I did not know you had put any particular percent or otherwise on a dollar figure.

Q. I assumed that was the percent that you show in Chart No. 30—

A. (Interposing) Yes, all right.

Q. (Continuing) Which is called, "Allows further 10 percent increase in Federal taxes."

A. All right.

Q. How about the fifth assumption, that the depreciation, depletion and amortization allowance taken by the company during the last fiscal year is inadequate?

A. Yes, we show a difference on that, the figure I used being higher.

Q. And the sixth assumption is, of course, correct. We are holding the hearing to determine the reasonableness of rates.

A. Yes.

Q. So those six assumptions are in accord with your Exhibit 65, are they not?

A. That is correct.

Q. How about the last four assumptions? You know, do you not, that Panhandle Eastern has been held to be a subsidiary of Columbia Gas & Electric Corporation, do you not?

A. Yes, sir.

. . . . . .

[fol. 6926] By Mr. Littman:

Q. Are you familiar with the litigation involved in Panhandle Eastern?

A. Yes, I am—the David Young suit, you mean?

Q. Yes. A. Yes, I am familiar with it.

Let me be sure. You were not asking me if I thought Panhandle Eastern was a part of that suit. You asked me if I was familiar with the David Young suit, is that correct?

Q. Yes.

A. I am familiar with that suit, without saying whether Panhandle Eastern or anyone else was mixed up in it.

Q. Exhibit No. 145 sets forth a number of suits—

Mr. Wheat: (Interposing) For the witness' benefit, you might identify what the exhibit is, Mr. Littman.

[fol. 6927] Mr. Littman: I was just going to hand it to him, Mr. Wheat.

Mr. Culton: On Page 12, it shows Columbia Oil and Columbia Gas as defendants.

By Mr. Littman:

Q. This Exhibit No. 145 is the Panhandle Eastern Pipe Line Company compiled Registration Statement covering issues of $10,000,000 first mortgage and first lien, 3 percent bonds, Series C, due January 1, 1962, and 150,000 shares of (blank) percent cumulative preferred stock filed with the S. E. C. on December 24, 1941, and called "Registration Statement No. 2-4919."]

Now, this document sets forth certain litigation in which Panhandle Eastern has been involved or, at least, which touch upon the issuance of securities by Panhandle Eastern. Otherwise, I assume that would not be mentioned in that statement.

From your knowledge of the company, Mr. Coffman, are you disagreeing with the statement that Panhandle Eastern Pipe Line Company has been involved in long and costly litigation or is that a correct characterization?

A. Well, it is a little hard for me to answer that, Mr. Littman, because when you say "long and costly", in the first place, I do not know what the costs were.

I know that there was the David Young suit, all right. [fol. 6928] As a matter of fact, I do not know just how many months that took or what else followed it. I am not in a position to state. I will say I know about that suit, but when you say "long and costly litigation", I have not anything to go on at the moment.

Q. Well, what about the next assumption?

A. That is the present rate hearings that are being held, that is the same as No. 6 above; and the next item which is now No. 4, the company had been mentioned in integration proceedings, that is true.

Q. Then the only one of these ten assumptions that you are not personally certain about is the one in which I had you assume that the company had been involved in long and costly litigation, so I will just ask you to eliminate that one.

The nine other factors, of course, would tend to increase the earnings price ratio beyond that which would have been otherwise shown in the absence of those items?

A. Yes, at the time you are making this particular calculation, that is, and that is prior to any of these taking actual effect.

Q. And the earnings price ratio which reflected these elements, as well as the other elements extant at the time was 11.53 percent for Panhandle Eastern, is that correct? [fol. 6929] A. That is correct.

Q. That is the 1941 percent?

A. Yes—well, to make it specific, using the earnings figure stated in my exhibit and the price of the security shown, yes.

Q. And you are now referring to your Chart No. 22, to be certain about it? A. Yes, that is right.

Trial Examiner: Mr. Coffman, leaving the hypothetical questions for a moment—

Mr. Littman: (Interposing) By the way, I might state at the moment, Mr. Examiner, I have just asked the witness whether all of these hypothetical matters are facts and, with one exception, he has stated they were.

Trial Examiner: And have been reflected in the ratios discussed?

Mr. Littman: Yes.

Trial Examiner: And he has said they are.

Mr. Littman: That is right, I am sorry to have interrupted you.

Trial Examiner: Eliminating the various hypothetical aspects which you have been discussing you, of course, are closely familiar with the various appropriation acts of the Congress since your study was originally prepared?

The Witness: Yes, I am aware of them. You are referring [fol. 6930] now to those matters particularly related to budget?

Trial Examiner: The obligations of the Nation.

The Witness: Yes, that is correct.

Trial Examiner: Are you able to state what the prospective national debt will be at the end of 1943?

The Witness: Well, I believe the most recent estimates that have been made would indicate that the national debt at that time will be in the neighborhood of one hundred and fifty billion dollars.

Trial Examiner: Your exhibit relating to the effect of the Act of 1941 on taxation of the Panhandle Eastern Company, numbered for identification as 152, contains a quotation from the New York Times in which the Secretary of the Treasury is quoted as predicting the necessity of a

100 percent tax on corporate gains over 6 percent at some time in the near future.

The Witness: Yes, sir.

Trial Examiner: It is, of course, proper to assume that whatever tax legislation may become necessary to maintain the credit of the Government will apply to all enterprises alike?

The Witness: Yes, it would seem to me that it would.

Trial Examiner: In view of these economic considerations, do you feel that the data, the factors and the financial history reflected in your Exhibits 63, 64 and 65, may [fol. 6931] still be accepted with confidence in appraising the demands of future private investors?

I mean in the immediate future, in the future of the next five years.

The Witness: Well, Mr. Crosby, I thought I had, throughout my testimony, made it clear that the statistical data that I have presented in these three exhibits, Nos. 63, 64 and 65 would hold good and be of use so long as the conditions surrounding the date of this study held reasonably the same.

Now, if because of the emergency or some other event the conditions would change radically so that these data would be altered radically, then I would want to review the entire situation and refresh or freshen my point of view and it might be that those changes in data would very definitely lead to a change in the final result.

If they did, I should follow this same procedure to arrive at that result. In other words, as new facts come to bear, I would very definitely wish to look at them and I think the Commission does too and I would do that to the best of my ability.

Trial Examiner: Have not facts just referred to now become realities, with the exception of the ascertainment of the exact method and rate of taxation?

The Witness: If I understand you correctly, what you [fol. 6932] mean there is—

Trial Examiner: (Interposing) The size of the national debt.

The Witness: Yes.

Trial Examiner: The necessities which we all recognize to maintain the credit of the Government, the inevitable effect of these conditions upon all private investors; must we not accept these things as the realities of today and are we deluding ourselves when we continue to rely upon the data which heretofore has proven more or less accurate and reliable?

The Witness: I do not believe that is true, Mr. Crosby. Without question, there will be many changes but, nevertheless, private investors still exist and will be relied upon from time to time, as they are apparently, to buy various kinds of securities or to finance various kinds of enterprises so that you find today people buying Defense Bonds, as well as buying other securities.

Part are to finance the war and part to finance business, and that will continue, I should think, unless the emergency becomes so serious that all such matters as that will have to be stopped.

Assuming that the latter does not happen and that we go on as we have been but taking cognizance of these economic changes, there will arrive a point where the rela- [fol. 6933] tionship of earnings and security prices will be such that the investor, to the best of his judgment, will say that he has pretty much discounted about all of this adverse situation that he can see.

Now, it may be, for example, that the market has arrived at that point now. I think it is rather to be noted that after Pearl Harbor which, I think to most of us was most unexpected, the market held itself pretty well.

There was a decline but it did not become panicky and yet the Securities and Exchange Commission, I believe, at that time was ready to close the Stock Exchange at a moment's notice if it got unruly, which would indicate to me that investors at that time had felt they were pretty well right in discounting these things that were going to happen and one did happen, even though we had not ex-

pected that particular one, but it did not shock them or jar them too much, so I believe you arrive at the point here where you pretty well successfully discount these matters and, at that point, it begins to stabilize.

Trial Examiner: When will that point be reached, in your opinion? Of course, I am not anticipating that you can give a date but what must occur before it can be reached?

The Witness: Well, I would suppose that so far as our war activity was concerned, we would have to wait until [fol. 6934] it became pretty definitely established in people's minds that we were at that date caught up with this war situation so that we, at least, had an even balance of power and were enjoying, from time to time, one or two notable victories as against being caught in a tragic situation like Pearl Harbor and having oil tankers sunk at random off the Atlantic Coast.

Whether we will be prepared to accomplish that by 1943, I do not know although I believe President Roosevelt and some other high Government officials have indicated they believe that our preparedness would be such in 1943 that we would be able to cope with practically any situation.

If that happens in 1943, I would say that is about the date people then would begin to get a little more confident and would be a little more reassured and we would begin to turn our thoughts to ultimate victory even though it were sometime after 1943 and I will say this, Mr. Crosby, I think an analysis of what has gone on in many years in the New York Stock Exchange will indicate that investors as a group have been pretty good in discounting what was going to happen.

I think an analysis of the market will show that very clearly over the years. Very seldom have they been wrong, even as to depressions and return of prosperity, added regulation and so forth.

[fol. 6935] In the Street they usually describe it by that old saying that "fifty million Frenchmen can't be wrong", and I think there is something in it.

[fol. 6936] Trial Examiner: Back of these questions was the basic wonderment whether the old data have been so

seriously disturbed that your present predictions were made with less confidence than they would have been, for instance, at the time you prepared these reports and studies.

A. Well, it is true that more disturbing things have happened to this date than had happened at the date of preparing the report but, as I say, from, well, let us say, from Munich the market has been anticipating something. We didn't know just when it was going to come, but the market pretty definitely had been saying that sooner or later we were going to get into the war and prices have gradually been declining, slowly but surely, anticipating that hazard. Now, as I say, whether or not it has arrived at a level where practically any bad news is discounted so that there would be only the most fractional change in prices, I don't know, but we arrive, as you go in this decline, at a point where practically all the risks have been discounted and then from there on it depends upon the news on the favorable side to begin to lift it up.

Trial Examiner: Is it proper to infer from your inclusion of Mr. Morgenthau's statement in your exhibit marked for identification Exhibit 152 that among these things the market has anticipated is a sharp and vigorous limitation of all the profits of private investors?

[fol. 6937] The Witness: Well, of course, it is a little difficult to say. My impression of what the investor, the general investor has done to date is that he has pretty much thought that there are going to be higher taxes, but he has felt that it would be quite a while before we got down to Mr. Morgenthau's idea, so that the only purpose of my putting that statement in was to show that that is the kind of evidence that the investor is getting from time to time in the press and from other places, the various letters that are sent out discussing these matters and although the investor may not agree that we are ever going to go to quite that limit, at least not in the next year or so, it does indicate that the Secretary of the Treasury feels that we have got to have more money to finance this emergency.

Trial Examiner: Mr. Coffman, is it not an inevitable consequence of our present economic condition as a nation, as a government?

The Witness: That we come to a limitation of 6 percent?

Trial Examiner: That we come to such a low limitation of profits. In other words, it will affect the confiscation of earnings above a fixed moderate maximum in some form and by some means.

The Witness: It may well be, but in working out taxes there is a happy balance as to how far you can go to get [fol. 6938] maximum revenue. In other words, you take various kinds of companies that are earning money, if they are permitted, under the various Government contracts that are let, an opportunity to make money, so there will be taxable income, it may be that there is a point there where there would be a larger aggregate tax collection than if we squeeze so much out that even if you took all the earnings there wouldn't be as much left, because, after all, the earnings that are being taxable, whenever you get into an emergency like this, for all practical purposes, is a loan on future capital. In other words, the way you let the defense contracts out is because you are going to sell Liberty Bonds, and so on, to finance those present contracts which, in turn, show earnings which you tax, so that the debt that is outstanding, presumably, will have to be paid off sometime, or if the emergency is so great that we find it can never be paid off, that is where you get then not only a confiscation of earnings but you get an absolute confiscation of capital and it may well come to that, but I don't know, and I don't think people in this country think so, I mean investors have not gone that far.

(Thereupon a short recess was had.)

By Mr. Littman:

Q. In response to the Trial Examiner's inquiries, you spoke of the market having anticipated the war and that [fol. 6939] when the war came it came as no particular shock. Now, isn't it a fact that the market has also been anticipating these elements which I have asked you to assume and which you have stated were correct assumptions with respect to the investors' appraisal of risks?

A. Yes, I think the investors have been, also, discounting these factors that you mention.

Q. So that if and when a rate reduction comes, that won't be much of a shock to them, either, will it, inasmuch as they have been and are now anticipating and discounting that possibility?

A. Yes, I would say that to the extent that the investors in regulated companies have already discounted these eventualities, there will be less shock shown than if they had not discounted anything at all, yes.

Q. In your Exhibit 152 you show on the last page a statement made by the Secretary of the Treasury, Mr. Morgenthau, which is copied from the New York Times, is that correct?

A. Yes, that is correct.

Q. Now, in the first paragraph of that statement, there is a reference to corporations' profits over 6 percent on "invested capital". Can you define the term "invested capital" as it is used by Secretary Morgenthau in this statement?

[fol. 6940] A. I am not sure that that phrase "invested capital" has been fully defined. I say that for this reason: Corporations now having to file an excess profits tax return along with their regular income tax return have been given the option to date of whether they will compute their credit on the basis of average earnings as defined in the 1941 Act or beginning in the second Revenue Act of 1940, as a matter of fact, or whether they will compute their credit on the basis of invested capital. Now, I believe it is true that some companies who have not established an invested capital base which was accurate or a good approximation of what the Government had in mind under the Act, have been trying to rehabilitate their accounts to establish an invested capital account. In those cases there have been a number of changes because certain corporations over a period of years, for example, were formed by consolidation of companies and at the time of consolidation prices were paid for the securities or assets of the company which involved a payment for good will, as one example. The companies, subsequent to the date of the consolidation or merger, followed a practice which has been considered sound in accounting circles of writing off the good will. Some have done it in one operation, others have

done it in piecemeal fashion, but nevertheless a good will figure, which was actually bought and paid for in cash or [fol. 6941] property, let us say for $10,000,000, has been eliminated from the books by writing it down to one dollar. Those companies, to establish their invested capital base under the Act, have had to rehabilitate their accounts in order to re-establish that invested capital figure.

Q. Which account are you speaking of now?

A. The second Revenue Act of 1940 which was the first, if I recall correctly, to provide for the excess profits part of the tax law.

Q. Well, the Act that I am speaking of is the one that Mr. Morgenthau refers to in his statement dated September 24th in the New York Times, as it appears in your Exhibit 152. Can you define what he means by that term?

A. Well, he means there, as I understand it, the capital that is actually invested in the business as represented by securities but allowing for only 50 percent of any debt outstanding.

Q. What do you mean by the latter part of your statement?

A. I mean when you compute your tax credit at the present time, you are only allowed 50 percent of your bonded and funded debt and other debt to be taken into consideration. I believe I am correct in stating that. I haven't read it for a while, but I think I am right in that. [fol. 6942] Q. Well, have you ever seen Mr. Morgenthau's definition of invested capital as he uses it for purposes of this statement made by him?

A. Not his statement, but if you are including his statement to be that which comes out in the regulations, the regulations at the present time define invested capital and in that calculation they allow only 50 percent of the debt for purposes of computing this credit under the invested capital credit.

Q. Do you know whether Mr. Morgenthau's definition of invested capital is the same as your definition of invested capital as you have used that term in your Exhibit No. 65?

A. I believe generally that with the qualifications of 50 percent of debt there won't be much difference.

Q. You are not altogether certain about that, because you don't know. You would want to check it?

A. I would want to check it, but I think it would closely approximate the figure.

Q. Not having read or seen Mr. Morgenthau's definition of invested capital as he uses it in this statement which appears in Exhibit 152, you are not prepared to state whether it is the same as your term "invested capital" as you have used it in Exhibit 65?

A. I would like to refresh my mind, but I say that [fol. 6943] my recollection is sufficiently good to say that there is not any substantial variance, any substantial variation in the two.

Q. You have not adjusted the earnings-price ratios which you used in order to take into account and to give effect to these numerous risks which we discussed a few minutes ago that the investor has taken into account; is that correct?

A. No, that isn't correct, Mr. Littman. I have very definitely taken them into consideration because, if it is true, which I believe it is, that investors have been cognizant of these various items and appraising them to the best of their ability, I have already said that that is registered in the price of the security, therefore, when I used the price of the security as one factor in calculating an earnings-price ratio, automatically I am giving effect to those items.

Q. Well, of course, the price of the security has already discounted all of these dire consequences, isn't that correct?

A. No, I don't think I said that at all. I said that the investor was discounting and will continue to do so, so long as he has not yet established in his own mind the exact, ultimate act, whatever it may be.

Q. Let's be specific about it. Turn to Chart No. 22 [fol. 6944] of Exhibit 65. There you show the earnings-price ratio of the Panhandle Eastern Pipe Line Company as 11.53 percent for the last 1941 period; is that correct?

A. That is correct.

Q. And it is that 11.53 percent earnings-price ratio, based on 1941 market prices, for Panhandle Eastern Pipe Line Company that has taken into account all of the numerous elements that we have discussed earlier today?

A. That is correct, but when I said that I didn't say nor mean to imply that that meant the investor had

jumped to the ultimate result and appraised it all. I said that as these conditions were occurring he was reappraising the situation. I didn't say that he had jumped to the final result, otherwise the price might have dropped from whatever it was, 36:50 to 5. Investors are perfectly willing to bide time where the eventuality is not a dead certainty, so that there will be a gradual evolutionary process. It isn't done in a single day or week or month.

Q. Mr. Coffman, I thought we had been all through this before and understood each other perfectly. I am afraid we will have to go back over it again. Tell me whether or not this 11.53 percent earnings-price ratio of Panhandle Eastern Pipe Line Company common stock shown in Chart No. 22 reflects the investors' fear that there will be [fol. 6945] an increased cost in operations and maintenance in the succeeding year. Does it or doesn't it?

A. It does.

Q. Now, shall I go through all these elements again or are your prepared to say that this 11.53 percent reflects all these various elements?

A. No, you don't have to do that. I still say that my statement is 100 percent accurate, my answer to you is 100 percent accurate. You did not nor did the investor conclude at the time he was making these appraisals, that is, day in and day out, as he transacted shares in the market, that the final result, for instance, of the rate case, the final result of costly litigation, the final result of increased taxation and so forth, he did not go through that and crystallize the ultimate eventuality, because he is in no better position to do that than anyone else; it is not possible, so what he does is make such allowance as he can at the time, so the 11.53 includes those items but not the final eventuality on all of them, because he doesn't know, he is just trying to approach it gradually as history is made day in and day out.

Q. Don't you know, as an expert in this field, Mr. Coffman, that the investor actually exaggerates elements such as those which you discussed this morning, the imminence of rate cuts, the imminence of higher taxes and so forth? [fol. 6946] Isn't that correct?

A. Why, I don't believe he exaggerates those things, Mr. Littman, no; in some isolated case you might find that he had over shot the mark, that he thought that it was

going to be worse than it really was, but when you talk about the market as a whole, I think it is about as good a barometer for a solid estimate as any you can find.

Q. Then, it is your testimony that the investor does not exaggerate the fears and risks?

A. My testimony is exactly this: I don't know as I could phrase it any better, that taking investors as a whole and on the average, I do not believe they tend to exaggerate. I think they hit the market pretty closely. In isolated or individual cases they may over-shoot the mark, but taking the market as a whole, which I was attempting to do in getting the investors' appraisal of risks, I think it is a very close approximation, weighing the factors, as they come up, to be considered.

Q. Well, if the investor makes a close appraisal, how much has he discounted in this 11.53 percent for the increase in taxes?

A. Well, there, again, I have to tell you that I can't give you a specific amount on each item; I don't know, but any individual that is working on any problem will take a group of figures and he will talk in terms of average ex- [fol. 6947] pectancy of so much and the over-all figure may be pretty close to the final result.

Q. But you know that this 11.53 percent reflects the investor's knowledge that taxes are going to increase next year?

A. That is right, so far as he has discounted that particular item to the date that this ratio was calculated at 11.53 percent.

Q. And that 11.53 percent includes the discount by the investor for all the other fears and risks which we have discussed this morning?

A. In so far as he has discounted them to that date.

Q. Your answer is: yes, in so far as he has discounted it to that date?

A. That is correct.

Q. Do you agree with this statement, which I read from page 473 of the "Outlook for the Securities Market" dated October 13, 1931, published by Standard and Poor's Corporation: "Conjecture along these lines is presumably among the reasons for the further easing of stock prices last week. It is the habit of speculative markets to prepare for the worst, but it is no easy matter to tell in ad-

vance at what level the unfavorable contingencies will be discounted or over-discounted. The market, clearly, is allowing for many unfavorable events which may not come [fol. 6948] to pass." Do you agree with that statement?

A. I think that is a correct statement, yes.

Q. Now, when you came to make an estimate of the cost of common stock money to Panhandle Eastern Pipe Line Company for your projected period of June 30, 1941, you raised the figure from 11.53 percent, as shown on your chart No. 22, to 12 percent; isn't that right?

A. That is correct.

Q. Why did you go even higher than the indicated earnings-price ratios which took into account all of these various hazards and risks that we have discussed earlier today?

A. I did it because in studying the various factors, which are shown graphically on Chart 22 of Exhibit 65, and supporting data, it seemed to me that it was clearly indicated that a figure of 12 percent, which I said was a judgment figure, closely approximated for this study the risk of this enterprise as it would be appraised by investors when it came to additional financing and that was based on the fact that the average of the pipe line companies was practically or was actually 12.99 percent, to use the figures shown in the chart mentioned. The comparison with Northern Natural, which was a later development, and the actual common stock figure, earnings-price ratio was 11.53 at that time.

[fol. 6949] Q. Well, the earnings-price ratio for Northern Natural was 10.38 percent, as shown by your Chart No. 21, and you used 12 percent for Panhandle Eastern? Why?

A. I explained that, I think, to you yesterday, Mr. Littman. I said that I had taken into consideration the difference in the capital structure of this company against Northern Natural Gas Company which would definitely be taken into consideration by the investors along with the other factors which are considered already in the exhibit.

Q. Well, is it your testimony that the investors today would require 12 percent earnings, would expect a 12 percent earnings-price ratio?

A. Yes, that is my testimony and I believe if I took Northern Natural prices as of today and made a calcula-

tion I would find that that percentage had gone up quite a bit from 10.38 which you mentioned, which is a further indication of the trend, so the 12 percent doesn't seem to me to be out of line at all.

Q. You are not suggesting that you want to raise the 12 percent?

A. No. That was a judgment figure that I used at that time based on this study. As I have said repeatedly in this testimony, until conditions change so radically, as related directly to the Panhandle Eastern Company, I will stay with my figure. When conditions so change, I would [fol. 6950] want then to take another look.

Q. Now, in your in opinion, then, you say that the investors expect to earn 12 percent on their common stock investment in Panhandle Eastern Pipe Line Company?

A. Well, to turn it around, what I am saying is that so long as the conditions which we have enumerated continue to be present, that investors in the common stock of Panhandle Eastern Company will likely require a 12 percent earnings-price ratio if they are to be approached to purchase additional common stock.

Q. That statement holds good today?

A. It holds good at the time of this study. I haven't brought this down to the date of January 28. I think, generally, it would be true today and I still make the statement, and I don't know how to change it, that until I am sure that conditions have changed radically, so that the factors are altered radically, this figure would hold.

Q. You say that you cannot advise the Commission whether it may rely upon this 12 percent figure shown in Chart No. 22 today?

A. No. I am saying that so far as I am concerned, that figure closely approximates conditions today, and I am sticking with it.

Q. And it has approximated conditions and would hold [fol. 6951] good each day back to June 30, 1941?

A. Well, I wouldn't say each day, because I have said that we are talking about on the average.

Q. Well, on the average, would it?

A. On the average, yes, I think so.

Q. Well, are you saying that the Commission can rely on this 12 percent figure one day and not on the next day?

A. No, I just got through saying that you can rely on it on the average in a period such as we have been in and are in right today.

Q. How about tomorrow?

A. Tomorrow, too, if you say "on the average." You have to have more than one or you can't get an average.

Q. Did you testify in the Young suit as to what return investors in Panhandle Eastern Pipe Line Company's common stock might reasonably expect?

A. I testified as to what I thought the reasonable expectancy of earnings might be on the common stock, as I recall.

Q. Do you remember what you said on the subject?

A. I don't, no.

Q. Do you remember the percentage that you used?

A. No, I don't believe I remember that.

I recall to your mind again that reference to the date of the Young suit is taking us back before Munich and the [fol. 6952] waf, so far as we were concerned, and a hundred other items, so that certainly whatever I said there would apply to the times then and would not necessarily apply now.

Q. Well, you testified in the Young suit in the latter part of 1939, did you not?

A. That is correct.

Q. And you there stated that your testimony with respect to your projected period would hold good for an indefinite period in the future, did you not?

A. No, no, I didn't say "indefinite period." I said "a reasonable period," I believe.

Q. What was a "reasonable period", speaking as of the end of 1939?

A. Ordinarily, I would define a reasonable period where we weren't having tremendously abnormal conditions as something around three years but after all, it is not the length of period that is to be taken into consideration, it is various factors that you have to consider, for example, I can talk to you today about this situation and if tomorrow I would discover that the British Isles had been blown out of the sea and the Allied Powers were definitely to be licked and the best thing we could do would be to make any kind of peace that could be done,

I think probably I would want to have the opportunity to change my thought.

[fol. 6953] Q. Mr. Coffman, did you testify as follows in the David Young III suit:

"I concluded from this data that 7½ percent rate was a reasonable rate to capitalize the dividends which had been projected on the common stock of the Panhandle Eastern Pipe Line Company"?

A. If it is so stated in the record, I said it, yes.

Q. Now, will you state how you reconcile any such figure with the 12 percent that you are using for purposes of this proceeding?

A. Yes, I just got through doing that. January 28, 1942, is not a point to be compared with July of 1939, or whatever date it was of that case. If all other conditions had remained the same, I probably would be talking in terms of 7½ percent, but the fact is that all other conditions have not remained the same, investors so state, and I am registering that fact in this study.

Mr. Wheat: Mr. Littman, I am sorry. I was doing something else. Was that a 7½ percent dividend rate?

The Witness: I will explain it. It is a 7½ percent dividend rate. It is a yield rate.

Mr. Wheat: Thank you.

By Mr. Littman:

Q. What portion of earnings did you testify in the David Young suit should be distributed by way of dividends?

[fol. 6954] A. I don't recall, but if you have that photostat copy, I can tell.

Q. Was it approximately 80 percent?

A. That would sound about right to me, but if you have those charts, I think I can tell you.

Q. Very well. I will hand you the charts.

A. 80 percent, I think, sounds about right.

Mr. Wheat: Will you read the question, please?

(Whereupon the question on line 24, page 6953, was read by the reporter.)

The Witness: It was 80 percent.

By Mr. Littman:

Q. Yes. Now, Mr. Coffman, you have said that conditions have changed since you testified in 1939 in the David Young suit which warrant raising the figure from seven and a half percent up to 12; is that right?

A. That is correct.

Q. That is right? A. That is correct.

Q. Will you look at your chart No. 19 of Exhibit 65, and will you read into the record from that chart the average earnings price ratios of natural gas pipe lines' common stock for the year ended 1938, the average shown?

A. El Paso Natural Gas Company—

Q. (Interposing) No. I mean the average for all [fol. 6955] of them. Isn't it 13.45 percent?

A. 13.45 percent, yes.

Q. And what is the average in 1939? A. 13.28 percent.

Q. And what is the average as shown in Chart No. 22 as of the last period in 1941 for the natural gas pipe line companies? A. 12.99 percent.

Q. Lower as of 1941 than as of 1939; is that correct?

A. Yes, the 12.99 is somewhat lower than those other figures.

Q. Well, certainly your average earnings-price ratios show that if there has been a change since 1939 with respect to the common stocks of natural gas pipe line companies, the change has been down, not up; isn't that right?

A. Well, for the average that is true and I took that into consideration. I used the 12.99 percent.

Q. You certainly did take it into consideration. You raised Panhandle up from seven and a half percent to 12 percent.

A. No, I deny that.

Q. And the average shows that all the rest of them on the average went down; isn't that right?

A. No, that absolutely is wrong, because you are con- [fol. 6956] fusing two issues. We are talking in this present hearing about earnings-price ratios and have been throughout and now you are trying to make a comparison with the David Young suit of a seven and a half percent which is a yield, so that those two just

can't be compared and it is misleading to undertake to do it.

Q. Well, give me the yield for Panhandle Eastern common stock, in your opinion, comparable to the seven and a half percent that you testified to in 1939.

A. Well, I would have to make some calculations to get that. I can do it at noon or if you want to take some time out, I can do it now.

Q. Isn't that a perfectly simple calculation? 80 percent of your 12 percent would give it to you, inasmuch as you have stated that 80 percent is the proper amount of earnings to be distributed to common stockholders as dividends?

A. No, I don't think it is that simple, Mr. Littman, because what I would have to do to make the calculation is to go back and get the dollar amount and see what is taken out, first, of earnings. In other words, I would have to take the earnings available for common stock, eliminate the senior capital and then find out what that would be in terms of per share. It isn't quite as easy as you suggest.

[fol. 6957] Q. Are you stating that less than 12 percent should be made available to the common stockholders by way of dividends?

A. Well, my goodness, it would have to be.

Q. Well, how much?

A. I haven't heard of any company ever distributing 100 percent of its earnings unless it was about to liquidate. You have to have something for working capital and for a margin of safety if you want to continue to operate.

Q. How much money would be available for dividends on common stock of Panhandle Eastern according to your study in Exhibit 65? It must be 12 percent, must it not?

A. Common stock, earnings available, as shown in Chart No. 37 of Exhibit 65, including the surplus is $3,510,995.

Q. And that amounts to 12 percent of the outstanding common stock and surplus? Isn't that right?

A. That is correct.

Q. Now, how much of that amount should, under your theory and under your study, be available to the common stockholders by way of dividends?

A. You are still confusing two things, Mr. Littman. The common stock, so stated, also includes surplus, so that if you take 12 percent, what you are going to say is that you will distribute not only a percent of this year's [fol. 6958] earnings, but you will distribute all the past accumulated earnings. I say that the management couldn't possibly think of it, so you have got to get that distinction before you go on. That is the reason, if you want the figure, why I would like to calculate it accurately instead of jumping at some of these simple things which will give you a wrong answer.

Q. Are you saying that the earnings required by the common stock and surplus of Panhandle Eastern Pipe Line Company should be something less than $3,510,995, shown in your table for Chart No. 26?

Mr. Wheat: Will you read that, please?

(The pending question, as above recorded, was read by the reporter.)

The Witness: No, I am not saying that it should be less, I am saying that it is the dollar amount represented for the common stock and surplus. All I wish to do is to distinguish between the two items and make a calculation.

Q. Now, you are at this time unable to state what percentage of return the common stockholders of Panhandle Eastern Pipe Line Company are going to earn on their investment as of today under your study?

A. Why, I am not aware that I said any such thing as that.

Q. Well, state the figure, then.

A. The figure for the total amount is just what I have [fol. 6959] read from Chart 37 in Exhibit 65, $3,510,995, but those are dollar earnings, they are not dollars of dividends.

Q. All right. What dividend rate are you assuming for purposes of your study for the stockholders of Panhandle Eastern?

A. In this particular case, I made no assumption of any dividend whatsoever. I didn't make any.

Q. You didn't make any? A. No, sir.

Q. You are unable to state at this time what the common stockholders of Panhandle Eastern are going to receive by way of dividends, according to your study?

A. Yes, that is correct.

Q. You are unable to state that?

A. That is correct.

Q. Now, does your testimony in the David Young suit concerning the 80 percent distribution of earnings available for common stock still hold good?

A. I don't know, it might; I haven't made that a part of this study. It could be 80 percent or it could be less; obviously I don't think it could be any more and still have this company operate on a sound managerial basis.

Q. Will you please make the calculation? Can you [fol. 6960] make that calculation over the noon recess?

A. Yes, surely.

Q. You will report back after the noon recess as to the percentage of earnings to be distributed to the common stockholders? A. Yes, I will.

Q. And that will give you a figure which you will state into the record which is comparable to the seven and a half percent dividend figure which you testified to in the David Young case, I mean the same type of figure?

A. It wouldn't be exactly comparable.

Q. Well, will it be close, close enough for all practical uses and purposes?

A. Well, I will say that it will be a figure.

Q. Well, if that is all it is going to be, it isn't going to be worth much by way of enlightening the record.

A. The only point I make, Mr. Littman, unless I use the identical procedure here throughout the study that was used in the David Young case, is that I don't see how you can say the figures are comparable as such. It is true each figure represents a percent of earnings paid in dividends and gives you a yield rate, but there is still a difference.

Q. Depending on what case you testify in?

A. No, it doesn't make any difference to me about that. [fol. 6961] Q. Well, if we want it to be strictly comparable, can't we use the same 80 percent here that you used in the David Young case?

A. No, I don't think so, because I just don't think at the moment that you are talking about the David Young suit and leaving the impression as to what it was. The

only purpose that I ever had, the only assignment I ever had in the David Young case was to discuss the Columbia Oil and Gasoline Corporation, but I found in making that study that it had a large equity in a subsidiary called Panhandle Eastern Pipe Line Company. Using the method of projection there as a basis of establishing fair value, it was necessary for me, naturally, to find out about what the top company, naturally, Columbia Oil and Gasoline Corporation, could expect to receive from that subsidiary in the way of earnings on the stock it held in order to find out what that top holding company would have by way of earnings for its security holders. That is what I testified in the David Young suit, if I recollect correctly.

Q. Now, would you use a different method here to ascertain what dividends Panhandle Eastern's present stockholders have a right to [reasonable] expect, or do you use a different method here?

A. Well, we are just talking about different things, Mr. Littman. In the case of the David Young suit, I was [fol. 6962] asked to determine a fair value, that isn't a part of this proceeding, if I understand it correctly, at all.

What I did here was to try to ascertain the number of dollars that would be needed to keep this firm going. I wasn't trying to say that the value of the Panhandle Eastern common stock is thus and so.

Q. Well, but, Mr. Coffman, you have clearly stated that in the process of arriving at the ultimate result that you were seeking in the Young suit it became necessary for you to determine the amount of dividends which the common stockholders had a right to expect or could reasonably expect; is that right?

A. That is right.

Q. And that was based upon your projection of earnings of 8.4?

A. I don't know about the figure, but if the figure is what you state in the record, I accept it.

Q. Well, we stated it yesterday.

A. Yes.

Q. I am asking you to do the same thing here, to determine for us, according to your study shown in Exhibit 65, the dividend rate which the stockholders of common

stock of Panhandle Eastern Company might reasonably expect out of this 12 percent earnings figure which you have used. Is that right? Isn't that what you under-[fol. 6963] stand me to ask you to do?

A. That is correct.

Q. Now, why should the method of reaching the answer to that problem here be any different from the method that you used in the David Young suit?

A. Well, merely because that, since the David Young suit, I have made more elaborate studies and I have come to this report, the three exhibits, which is as complete as I have produced and I believe that the calculations that I have made here and the data that I have used is more complete, for one thing, than I had available to me at the time I testified in the David Young suit. I have come to rely more on the matter of what the investors require in the market to find out whether they will be willing to invest further capital in the business or not.

Q. Well, now, you had an over-all earning figure in the David Young case, did you not? A. I did.

Q. And you have an over-all earnings figure here?

A. Yes, that is correct.

Q. And your over-all earnings figure here you consider to be more accurate than the one in the David Young suit?

A. Under the conditions of this study, yes.

Q. That is just what you said in effect a moment [fol. 6964] ago?

A. That is right.

Q. Now, what does that have to do with the accuracy of a method for determining the portion of those earnings attributable to dividends to the common stockholders?

A. Why, it has everything to do with it, Mr. Littman. As I got through saying, in this case I didn't talk about dividends at all. I made no study as to what is the proper rate, what I would suggest as fair, whereas in the David Young suit I did.

Now, I can make a calculation for you again, but it wouldn't be based on a study where I have devoted time to seeing what would be, under the circumstances, a reasonable amount. I will look at it to the best of my ability, take a percentage figure, find out what those dividends would be on the basis of those earnings, and give you a yield figure and that is what it will be, just based on

what I have said and nothing more. That is the difference between this method and that. In the David Young suit I set out to do one thing and did it. In this case I didn't have to consider dividends, so I didn't consider them.

Q. I am asking you here to consider dividends in the same manner that you considered dividends in the David Young suit, that is all.

[fol. 6965] A. I know, but I spent some time doing that on the David Young suit. I didn't just go over on my lunch hour and compute it and come back with a report. I just want to make that clear.

Q. Mr. Coffman, if the figure that you speak of computing over the noon recess is as meaningless as that, as you indicate, I don't think I want you to compute it for me. If it isn't going to mean anything, we don't want to have it.

Trial Examiner: Do you understand, Mr. Coffman, that you are to prepare something?

The Witness: I understand that I am to forget it.

Trial Examiner: That the request is waived?

Mr. Littman: Yes, sir, in view of Mr. Coffman's statement that the figure would not be a proper one for us in this proceeding.

The Witness: I didn't say it wasn't proper. I will stick by the answer I gave, not by the answer you imply I said.

By Mr. Littman:

Q. Well, can you give us a figure that will be a reasonably accurate figure showing the amount of dividends that Panhandle Eastern's common stockholders might reasonably expect to derive from your 12 percent overall earnings on common stock?

[fol. 6966] A. Yes, I can, but I just don't want to commit myself to do it on a noon hour and say, "Here it is. It is perfect." If you want to give me a little more time, I will be delighted, but on a noon hour, no, I am saying it is meaningless.

Q. Don't you recall that I asked you a few minutes ago whether you could do it on a noon hour and you said certainly you could?

Now, if it is going to take longer, you can have more time, but I want you to state how long it will take.

A. I would like to have the record straight myself. I think I said to you that I could get a figure but that it would not be comparable. How long would it take? Well, I could work it over a noon hour, but it is just that kind of a figure, so I wasn't at variance with any of the statements, was I? If you would like to give me a little more time for the figure, I personally would like to have until around Monday.

Q. Well, we have too many strings attached to this figure and, therefore, we will waive the request.

Now, will you please turn to your Chart No. 19, Exhibit 65?

Do you know what the depreciation policies of the five natural gas pipe line companies which are listed in this Chart have been?

[Vol. 6967] A. No, I don't. I have said already that I took the figures that were used in these calculations from annual reports as a dollar figure and that is the amount that goes to the stockholders or the investors and that is the only amount that they have to go on, to form an opinion.

Q. In other words, you do not know what the depreciation policies are of the five natural gas companies shown on Chart No. 19, to-wit, El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Southern Natural Gas Company, and Panhandle Eastern Pipe Line Company?

A. No, but in using the figure in the annual report I was aware of the fact that all of those utility companies are subject to commissions which have certain uniform accounting procedures and they have to file reports. I thought it was a fair assumption of what they showed in their annual report and was not, very likely, very far off from being a fairly proper figure. I made that assumption.

Q. That is quite an assumption.

A. Well, I came back to my statement that that is the figure that is reported to the prospective investor. That is all he has to go on. He is putting his capital up or has

his capital already in the business and that is the figure [fol. 6968] he gets.

Those statements were certified by accountants so they couldnt be too much out of line with sound accounting practice, I would say.

Q. You didn't assume that Panhandle Eastern Pipe Line Company was setting aside a sufficient amount for depreciation, depletion, and amortization, did you?

A. In my calculation, I took 1/25 as I have explained, and as is fully recorded in the record.

Q. Yes, and it gave you several hundred thousand dollars in excess of what Panhandle Eastern was actually charging on its books, didn't it?

A. I forget the exact amount, but that is a close approximation.

Q. And the Panhandle Eastern Pipe Line Company's depreciation amounts have been certified in their statement; is that right?

A. That is right, but you are neglecting to consider other parts, which are equally right, of this study, wherein I said I was undertaking here to ascertain the number of dollars needed to render a service and maintain the credit. In this particular case, looking 25 years in advance, based upon Ralph E. Davis's report, I felt that was as long as you could ask investors to try to discount what was going to happen. Therefore, I took 1/25. [fol. 6969] Q. And that gave you approximately $225,000 per year more for depreciation, depletion, and amortization than Panhandle Eastern Pipe Line Company had charged for those purposes on its books in the past year; isn't that right? Approximately?

A. Approximately, that is correct, yes.

. . . . . .

[fol. 6970] By Mr. Littman:

Q. Mr. Coffman, yesterday I requested you to make a calculation with respect to the net income that would be available to the company after taxes computed on the basis of the 1941 Federal income and excess profits tax, assuming a reduction in gross revenues of $1,000,000.

Do you have the calculation with you?

A. Yes, I do.

Q. What do you show?

A. In answering this, Mr. Littman, may I tell the figures I used and then the answer so that we will be sure that I used the right base from which to deduct the $1,000,000?

Q. Yes.

A. I took the gross revenues for 1940, the full year, which was $13,535,453 and subtracted therefrom the $1,000,000 figure which you gave me so that my adjusted gross was $12,535,453.

[fol. 6971] Then, allowing all other deductions except the taxes to remain the same and calculating the tax figure on the same basis in accordance with the Act as in the exhibit, the amount for Federal income and excess profits taxes would be $2,644,475.

Mr. Littman: Will you read that figure?

(Whereupon, the figure indicated was read by the reporter.)

The Witness: And that figure is based upon the 1941 tax rates.

By Mr. Littman:

Q. I do not know as I understand this figure of $2,644,475. What is that?

A. That is the figure comparable, on Chart No. 30, Exhibit 65, to the figure in the amount of $3,363,000 in my projected column.

Q. What was that figure?

A. $3,363,000 even, and the new figure was $2,644,475, making the adjustments you requested.

Q. In other words, this $2,644,475 is to be deducted from the $3,363,000 shown in Chart No. 30 and you get $718,525?

A. Well, I do not know exactly what you are doing there because the $3,363,000 was computed, as you know, not on the basis of the adjusted revenue for 1940, so that [fol. 6972] I merely said the figure was comparable. I did not say deduct it.

Q. Let me see if I understand you. What you are saying is that, applying the 1941 tax rate, the Federal income taxes and excess profits taxes would be $718,525 less than the $3,363,000 shown on Chart No. 30 if the gross revenues were $1,000,000 lower than that assumed for Chart No. 30?

A. No, Mr. Littman, what I am saying is that computing the Federal income and excess profits taxes at the 1941 rates but based upon the 1940 gross revenue minus $1,000,000 for tax adjustments, gives you $2,644,475.

Q. Of taxes?

A. Of taxes, of Federal and excess profits taxes, yes.

Q. In other words, if the gross revenues had been reduced by $1,000,000, the taxes would have been $2,644,475 instead of $3,363,000?

A. Using the full year, 1940, gross revenue as a base minus the $1,000,000.

Q. And you have read the gross revenue figure into the record, have you not? A. Yes, I did.

Q. Does your calculation show that for each dollar that gross revenue is reduced, net operating revenue will be reduced by less than 30 cents?

[fol. 6973] Mr. Wheat: You mean assuming that Uncle Sam loses a little over 70 cents in each instance?

Mr. Littman: Under the assumption that this witness has made of gross revenue.

Mr. Wheat: That was my assumption, too.

The Witness: Would you read that question now, please?

(Whereupon, the pending question was read by the reporter.)

By Mr. Littman:

Q. Maybe we can get at it this way, Mr. Coffman.

A. I do not believe we are comparing the same figures.

Q. Let me take it up step by step and we will try to make certain that we understand each other.

Now, you have testified that, under the assumption that you made of the reduction in gross revenue of $1,000,000 from 1940 revenue, that if the 1941 Federal income tax and excess profits tax were applied, the reduction of $1,000,000 in gross revenue would produce a reduction in those taxes of $718,525, isn't that correct?

A. No, that is where I say you are making an inaccurate comparison, Mr. Littman.

Q. I am trying to understand your calculation.

A. By your own assumption, in my opinion, there is only one way that it can be done. The comparisons would be this:

[fol. 6974] First, we must stick with the adjusted gross figure which is the full year 1940 figure gross, minus $1,000,000. That adjusted figure was then $12,535,453.

That is merely a million dollars difference in what the actual report shows.

Now, to get the comparison straight, we would have to make a comparison of the reduction in gross, as just stated, calculate the income-tax rate thereon at the 1940 rate to get the new tax figure.

Then we would take the adjusted gross, apply the 1941 rate to get the tax figure. The difference between those tax figures would be the change in the tax on the same basis attributed solely to an increase in rates so that you can not make the comparison and get anything out of it, so far as I can see, by comparing my figure of $3,363,000 against your hypothetical situation.

Q. Well, apparently you have not given me the figure that I want.

A. Yes, I believe I have. You asked me, if I recall correctly, to take the 1940, full year gross, and assume a rate reduction equivalent to $1,000,000, if I recall correctly.

Then you said recalculate that situation, so far as taxes are concerned, using the 1941 tax base and that is exactly what I have done to get the $2,644,475, but that figure [fol. 6975] cannot be subtracted from the $3,363,000, as such, I think, to make comparison if you want to ask the question you are asking.

Q. All I wanted was this and possibly we should not have injected the 1940 revenue into this at all.

A. That is right.

Q. All I wanted was that you assume a reduction in gross revenue in the year 1941 of $1,000,000, which $1,000,000 would fall into the highest tax bracket, and merely state how much of that $1,000,000 would be paid in taxes, both Federal income and Federal excess profits taxes, and how much then would be left to the company by way of net operating revenue after taxes.

A. All right.

Q. That is a rather simple question.

A. That comparison would be all right but the figure I have given you, you cannot use for that purpose. I cannot do that here in a couple of minutes but I can have that done while I am going on or I can do it and submit it to you later.

Q. That is perhaps stated more simply. If you could have that done for me, I would appreciate it.

A. All right.

Q. Now, at the noon recess, we were discussing your Chart No. 49 and Chart No. 20 of Exhibit No. 65 and I be-
[fol. 6976] lieve you stated that you do not know what the depreciation policies are of the five natural-gas pipe-line companies shown in those charts, to wit, El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Southern National Gas Company and Panhandle Eastern Pipe Line Company, is that right?

A. As I said I took the published reports, looked at the dollar amount that was seggegated for the item to which you refer and that is the figure I used.

I have no detailed knowledge about specific depreciation policies or procedures.

Q. Of any of those companies?

A. Of any of those companies.

Q. Then you do not know, of course, whether these companies have, in fact, made adequate or inadequate provisions for depreciation, depletion and amortization?

A. I have not made such study. As I say, I assumed that the figures shown in their annual reports, most of which, if not all of which, were certified, must have been within the realm of reason from the accounting point of view.

Q. So that your answer to my question is that you do not know?

A. No, I made the assumption I have just stated.

Q. Now, if the provisions for depreciation, depletion and amortization by these companies have been inade-
[fol. 6977] quate, what effect would that have upon the companies' earnings? Would they be overstated or understated?

A. Overstated.

Q. And what effect, in turn, would that have upon the earnings-price ratios of those companies? Does it follow that under the assumption which I made the earnings-price ratios shown in Charts Nos. 19 and 20 of Exhibit No. 65 would be correspondingly overstated if those companies had been making inadequate provisions for depreciation, depletion and amortization?

A. That would be true at the time of the calculation.

Q. Now, the earnings-price ratios, as shown in Charts Nos. 19 and 20 and also those shown in Chart No. 22, for "Average of pipe-line companies", Panhandle Eastern Pipe Line Company and Northern Natural Gas Company are determined by using the market price of the common stock as related to earnings?

A. The average market prices related to earnings per share, yes.

Q. Of course, we are excluding from that answer the 12 percent figure shown at the extreme right-hand side of the column of Chart No. 22 of Exhibit 65 which is your final judgment figure?

A. That is a judgment figure, yes, sir.

Q. Now, assuming that the common stock of a natural [fol. 6978] gas pipe line utility is selling on the market at twice its book value, isn't it a fact that such utility would have to earn 24 percent of the book value of its common stock in order to show an earnings-price ratio of 12 percent on the market price of that stock?

The Witness: Would you read that question, please?

(Whereupon, the pending question was read by the reporter.)

By Mr. Littman:

Q. That is purely a mathematical result, is it not?

A. Well, I would like to make the observation that it seems to me there that we are again confusing two things. It is one thing to say what the market price of a share is. It is another thing to talk about book value.

Throughout this proceeding here, I have talked in terms of market value.

Q. I do not think there is anything at all confusing about the question. I am asking you to assume that the

common stock of a given natural-gas pipe-line utility is selling on the market at twice its book value and I am asking you whether, under that assumption, it is a fact that such utility would have to earn 24 percent of the book value of such common stock in order to earn 12 percent on the market price of that stock?

A. Yes, I think that is correct.

Q. Now, would you recommend in those circumstances [fol. 6979] that a 24 percent return be allowed on the book value of the common stock of such a pipe-line company where that stock is selling at twice the book value in the market?

A. Well, before I answer that, I have got to explain I do not think book value, as such, means anything, so why should I say 24 percent, 12, or 36?

Q. You do not think book value of the common stock means anything?

A. Not in comparison to investor's appraisal, no. The investor is appraising this concern as an operating concern and he is looking at the earning power.

Take railroad companies, for example, that have a tremendous book value. The earnings are nothing and the investors in the market are saying they are worth nothing.

Q. Under the assumptions that I have given you of a company whose common stock is selling on the market at twice its book value, would you recommend that a 24 percent return be allowed on that book value where that stock was selling at twice the book value in the market?

I take it your answer is "yes", because you say you do not think the book value—

A. (Interposing) If your assumption is true, I will say "yes", because, as I have stated, book value, as such, without careful analysis, has no meaning.

Q. Well, did you make any allowances of the book [fol. 6980] value of these various natural-gas pipe-line companies which you have compared with Panhandle Eastern Pipe Line Company in your Charts Nos. 19, 20 and 22 of Exhibit 65?

A. The only one that I compared is the one shown on Chart No. 24, Exhibit 65, which is a comparison of Pan-

handle Eastern and there it is shown that the book value and the market value were very close together.

The rest of them, I made no comparison. I used market prices, as I have stated.

Q. Is it your testimony that you do not attach any significance to the book value or book cost of the common stock of any natural-gas pipe-line company?

A. I did not say that. I said that in the analysis which is made here, I had no occasion to use book value and that book value, in and of itself, without an analysis, does not represent any particular thing so far as investors are concerned, because, as we all know, there are many stocks selling above, considerably above, their book value and there are many other companies' stock selling considerably below their book value.

It just so happens in this particular study that the book value and the market value, as of June 30, 1941, for Panhandle Eastern Pipe Line Company, were about the same.

Q. Well, what significance do you attach to that?

A. I did not attach any except to show the comparison [fol. 6981] that existed. I did not use it in the study. I had no occasion to use it.

Q. What, if anything, does it indicate to you?

A. I put it in for the use of the Commission, merely to show, if there was a question about book value of Panhandle Eastern, the figure was a certain amount and if you wanted to compare it on the market value, it was another amount and the two totals are $61,423,853 on a book-value basis for total invested capital and $64,219,240 on a market-value basis. The two figures are close together.

Q. That is just a circumstance or just a happenstance?

A. There are many companies where that would not hold true at all, yes, many companies.

Q. And it would not make any difference one way or another, would it?

A. For this particular study it would not, no.

Q. So that for your purposes, it is the ratio of earnings to the market value of common stock that is important and not the ratio of earnings to book cost of common stock that is important?

A. Well you have there, again, got to define some language.

Q. For the purpose of your study, I said a moment ago, you did not attach any importance in this study to book cost?

[fol. 6982] A. I do not want to be fussing, Mr. Littman, but when you talk about "book cost" in one place and "book value" in another place, let's get the language straight.

There are many companies where books do not show value in book cost because there have been appraisals and reappraisals made which do not show up without analysis so it does not mean anything.

If you eliminate the book cost and talk about book value, such as the book value is, I say that it varies as between companies and in this case, I did not refer to it for purposes of my study.

Q. Let's then talk about book value. You gave book value no consideration because it does not amount to anything for the purposes of your study in this case?

A. That is correct, because I was taking the investor's risk appraisal which depends upon market values and not upon book values.

Q. So that if the earnings-price ratio of a common stock of a particular natural-gas pipe-line company of 12 percent, in reality represented a 24 percent return on the book value of that stock you would, nevertheless, recommend, all other things being equal, that the 24 percent return on the book value be allowed?

A. On the assumption, as you have stated and as I understand it, my answer is "yes".

[fol. 6983] Q. Now, if a 12 percent return on market value of common stock was reasonable, as you suggest, then rates of return on original cost for different companies would vary according to whether the market price of the stock was more or less than the book value under your theory, isn't that correct?

A. I do not think so, if you follow the statements I believe I have made.

In other words, if it is true that a market price is the best indicator you can get as to what investors believe

is the value of this company, which includes original cost plus earning capacity, then that is the value the investors say is there and the book value may be $10 and the market value $20 or any variable.

The market price weighs not only the original cost but the earning capacity of the firm. I think that we have discussed that in perhaps different language but getting at the same point.

Q. Let me put the question this way. If a 12 percent return on market value is reasonable, as you suggest, then rates of return on the book value of different companies will vary according to whether the market price of the common stock was more or less than the book value under your theory?

Now, that necessarily follows, does it not, from what [fol. 6984] you have heretofore testified?

The Witness: May I have the question read back, please?)

(Whereupon, the pending question was read by the reporter.)

The Witness: Yes, I think so.

By Mr. Littman:

Q. Now, you stated a moment ago that it so happened that the book value and market value of Panhandle Eastern's common stock were almost the same.

A. They closely approximate each other, yes, as of June 30, 1941.

Q. What does that indicate to you, if anything?

A. It indicates that the investors in Panhandle Eastern are stating that they believe the book values in the firm are about even with the market price.

Q. Then the investor does attach some significance to the book value of the common stock of a utility, does he?

A. I think I have stated we consider it but whether or not you attach value to it, Mr. Littman, is exactly what is in the record, that I would not attach value to it until I had analyzed it.

In some cases it may mean everything it says. In other cases, there are write-ups, write-downs and appraisals, any

number of things and without knowing that, book value would not mean a thing, not a thing.

[fol. 6985] Q. Are you suggesting there are some write-ups in the accounts of Panhandle Eastern Pipe Line Company?

A. I do not believe I suggested that, did I?

Q. Well, you talked rather generally and vaguely.

A. Yes, I am talking about general companies. You asked about "companies." Your own question here says, "companies" and I am saying that you can find, taking companies as a group, the many corporations in this country, that book value, as such, without analysis to see how it has [een] constructed, would mean very little.

I do not know of any write-ups or write-downs or any appraisals in the case of Panhandle Eastern. I made no investigation as to that fact.

Q. Now, you stated at Page 1127 of the transcript of the testimony in this proceeding that "from studies that I have made of numerous other companies, it is seldom that one finds the appraisal made by the market of the total capitalization of a company approximating the book value and, in this particular case, it would indicate to me that the investors believe that the book value here must be an accurate figure."

A. Well, I believe, in different language, that is just what I gave in the recent answer.

Q. Now, I would like to have you state what you mean when you say that the investors believe that the book value [fol. 6986] here must be an accurate figure. Accurate as to what?

A. Accurate as to the component parts of a corporate entity which include the assets, the management and the combination of the two to create ability to earn money.

Those factors are considered in the market price. The investor, having a price on securities outstanding in Panhandle Eastern is saying if those prices add up and give you a total invested capital which is similar to the book value, that he believes the combination of the assets and the management and so forth warrant that value and that is all he is saying.

Q. Well, if the stock sells for less than the book value, what would that indicate to the investor?

A. Let's take a concrete example. Many of the railroads, until recently, when the armament boom came on, were exactly in that fix.

Market prices were considerable under book values and all the investor was saying is, we do not believe the combination of management and these assets can create sufficient earnings to warrant any such price, so that on an earnings basis, the price is what we say it is in the market and that is considerably under what the books say as to book value, and that would be true, not only of railroads but any other corporate entity that has the same [fol. 6987] combination of factors.

Q. Now, if the stock sold for more than book value, what would that indicate to you?

A. That would indicate to me that the investors say that they believe there is a combination of assets and management here creating earning power which warrants a higher price; more potential earning capacity, in other words.

Q. Well, in your opinion, is it easier or less costly for a company to finance where the market price of the stock is above book value than where it is below book value?

A. I think the predominating consideration there, Mr. Littman, is the matter of earnings, earnings record and prospective earnings, and if those show up to give you adequate coverage for interest, preferred dividends and allow a reasonable amount of return on common stock, why, that will be sufficient to float the issue.

Q. Then doesn't it matter what the matter what the market value of the common stock is, or does it?

A. It doesn't matter?

Q. I am asking you whether it matters or doesn't matter what the market value of the common stock is.

A. I guess I have lost the tread of thought there for a moment. In regard to what, as related to what?

[fol. 6988] Q. At any rate, your earnings-price ratios are definitely related to market value, are they not?

A. Yes, indeed.

Q. Of the common stock? A. Yes, sir.

Q. Let us look at Chart No. 19 of Exhibit 65.

Now, you testified yesterday that the earnings-price ratios shown in Chart No. 19 and in Chart No. 20 were calculated by straight mathematical averages. Is that right?

A. Yes, of comparing the earnings per share with the average price per share.

Q. In other words, looking at the upper left-hand portion of Chart No. 19 for the year 1937, your average earnings price figure of 13.51 percent is [simple] the addition of the three figures on the left, divided by 3, is that right?

A. That is correct.

Q. And the same is true for the other years shown on the chart?

A. Yes, that is correct.

Q. Now, by that process, you gave equal weight to each each of the companies shown in this chart for each year?

A. That is correct.

Q. Whether the company is small or large? A. Yes. [fol. 6989] Q. Now, I believe you stated yesterday that in your Exhibit 63 you determined your earnings-price ratios of over-all capital; not by straight mathematical averages but by weighted averages, did you not?

A. That is correct.

Q. Now, have you ever made a calculation to determine the weighted average of these companies for each of the years 1937 to 1940, inclusive, shown in Chart No. 19?

A. No, I have not because, as I explained yesterday, where you are talking about common stock only, you have a little greater difficulty in talking in terms of a weighted average as against over all capital because there is the question of eliminating the earnings that must be taken out for bonds and [proferred] stocks and, in some cases, participating preferred stocks before you get to common so it is not as simple to take an earnings per common unless you convert it to a per-share basis as it is to do it for over all capital and that is the reason I followed this procedure.

It just is not a simple mathematical procedure.

Q. Well, it is not a difficult mathematical procedure either, is it?

A. Yes, it is much more difficult than doing it for overall capital because there you take net available for distribution.

[fol. 6990] It is one solid and you can put your hand on it and use it, but for common you cannot do that. There are adjustments that have to be made.

Q. We had no difficulty doing it. At any rate, you did not do it?

A. That is correct, I did not do it.

Q. Now, look at Chart No. 20 and state whether I am correct in understanding that in the lower left-hand portion of that chart you show the earnings-price ratios separately for each of the five natural-gas pipe-line companies and then, on Chart No. 22, you show the mathematical average of those pipe-line companies, the figure of 12.99 percent? A. Yes, that is correct.

Q. And that is for the year 1941?

A. For the current period, 1941.

Q. Will you please turn to your table for Chart No. 20 of Exhibit 65?

Now, isn't it clear that you can very quickly and readily determine the weighted average for those five pipeline companies for the year 1941 from the data shown on this table and also by utilizing the data shown for those companies in Exhibit 64?

A. That part can be done, Mr. Littman, but, as I commented yesterday in discussing this same subject, as I [fol. 6991] recall, it makes a difference as to the nature of the capital structure.

One company has all common stock. Another has 40 or 30 percent in bonds, 20 percent in preferred stocks, and therefore, to get a weighted average of common stocks where you include one company that has all common stock and another company that may have only 20 percent in common outstanding, is not, in our opinion, a sound weighed average. Therefore, we did not use it.

Q. What effect did you give to these differences that you have just described?

A. I took the companies just as their stock was outstanding at a market price and weighted nothing, so far as common was concerned.

Q. So you did not give any effect to this condition either, did you?

A. Yes, I did because if the earnings per share are there on the calculation that is made, I used that figure, obviously, in getting whatever the percentage is shown there.

Q. Now, will you state whether or not the weighted average earnings-price ratio can be readily determined for the five companies shown on your table for Chart No. 20?

A. Yes, I can take the earnings there shown per share and multiply it by the number of shares outstanding.

[fol. 6992] Q. You do not even have to do that. All you would need to do would be to total your amount shown for common stock as shown in your second column of figures—

A. (Interposing) That is correct, I can do that.

Q. So that is not a very difficult calculation, is it?

A. No, I can make that one but I still say it has a serious question about it.

Q. Well, what you would get by such a weighting process is the figure that you would get if one person owned all of these shares of common stock of these five companies, is that right?

In which event, if that person, to ascertain his earnings-price ratio, would add up all of the earnings available and divide into that figure the total market value of all of his stocks, then that individual could determine the total earnings-price ratio?

A. So far as his holdings of one share each was concerned, yes.

Q. I am assuming that this individual owns all of the common stock.

A. Of all of the five companies?

Q. Of all five companies. That is what he would do, isn't it? A. Yes.

[fol. 6993] Q. And if he did that, he could tell how much he has earned, isn't that right?

A. That would be his percentage return.

Q. He wouldn't take the five companies and determine what the average was for each separate company and divide by five, would he?

A. No, he would not have to there, since he owned them all, but that does not happen to be the fact nor is it probable it will ever be for some time to come.

Q. Of course, I am making an assumption here for the purpose of pointing out the effect of a weighting process and the logic of using a weighted figure.

Now, that is what such an individual would do, isn't that correct, add his total earnings and divide that by the total market value of his shares?

A. That is what an individual could do. Whether he would do it, I do not know, because we serve clients all the time and they are getting the figures both ways and they are adding them up both ways.

Q. Let's see what figure we would get when we give effect to weighting these figures. I shall read them into the record and I shall ask you to check them at your early opportunity.

A. I do not have to work it out now?

Q. No, I wouldn't work them out now because it would [fol. 6994] take some time.

Looking at Chart No. 19—I might say that in each and every instance, the weighted average figure is below the mathematical average figure which you used and that is obviously so because of the fact that the companies that have the highest earnings-price ratios, as shown on this chart, are given greater weight and effect in the answer when you simply take the mathematical average—.

Now, looking at the year 1937 in Chart No. 19, the weighted average figure is 11.83 percent in place of the 13.51 percent which you have.

For the year 1938—and, by the way, I am writing these figures immediately above the orange column—in 1938, the weighted average figure which we have secured by the use of your charts and figures and Exhibit is 12.12 percent in place of 13.45.

For the year 1939, the weighted average figure is 11.04 percent instead of the 13.28 percent.

For the year 1940, the weighted average figure is 12.56 percent in place of the 13.82 percent.

Mr. Wheat: Are you going to give another figure for 1941?

Mr. Littman: I was just going to go to the green bar shown in Chart No. 22—what did you want, an average figure for all of the years?

[fol. 6995] The Witness: I thought that was what Mr. Wheat—

Mr. Wheat: (Interposing) No, I wanted you to state for the record just how you arrived at your weighted averages so we would know what you did, Mr. Littman.

We are a little dubious here as to what you did.

Mr. Littman: I shall be glad to furnish Mr. Coffman with our working papers.

Mr. Wheat: No, I would like to have you explain it on the record, if you would, so that not only Mr. Coffman but ourselves would know what you did.

It must be a simple calculation if you take just one of them, 1937, where there are only three figures, for example, and tell us what you did, then we would know more what you mean by that 11.83 that you give us.

By Mr. Littman:

Q. Now, turning to Chart No. 22, the green bar shows 12.99 percent on the chart as the average of the pipe-line companies.

I believe you testified yesterday that this 12.99 percent is a straight mathematical average, is that right, Mr. Coffman?

A. I do not have that calculation. I believe that it was.

Q. Well, if there is any doubt about it, I think we ought to establish that now.

[fol. 6996] A. I am getting the figure [the figure] here.

[fol. 6997] The Witness: Yes, it is an arithmetic figure.

By Mr. Littman:

Q. The weighted average figure that we have for the "average of pipe-line companies," for Chart No. 22 is 12.21 percent as compared with your mathematical average of 12.99 percent.

In addition to that, Mr. Coffman, we have made a computation to determine the weighted average for pipe-line companies, including the Northern Natural Gas Company, and we have included in this calculation the earnings figure after giving effect to the 1941 Federal taxes.

The earnings figure for Northern Natural Gas Company which we use is $3,300,260 and the weighted average for those six companies, to-wit, Interstate Natural Gas Company, Memphis Natural Gas Company, El Paso Natural Gas Company, Southern Natural Gas Company, Panhandle Eastern Pipe Line Company and Northern Natural Gas Company, based on the 1941 market prices, is 11.73 percent.

Now, I am going to ask you to check those earnings-price figures and report back with respect to their accuracy when you return here next Monday.

A. Yes, I can do that.

Q. Now, I would like to briefly state on the record [fol. 6998] the method that we have used in weighting. We have totaled the market value of the common stocks for these companies for the periods shown and have divided that total into the total earnings available for common stock for the same period, all of these figures having been taken from your Exhibits 65 and 64.

Will you please refer to Chart No. 22, Mr. Coffman, and state whether the 12 percent estimated cost for new financing to Panhandle Eastern Pipe Line Company shown in the right-hand side of that chart reflects the 1941 Federal tax rate?

A. Yes, I think it has been taken into consideration.

Q. Now, state whether or not any of the earnings-price ratio figures which you show in Chart No. 20 reflect the 1941 tax rate?

A. As I recall it, those figures do not take in the 1941 rate. They were the actual earnings reported by the companies for the 12-month period ended at various dates, as shown on table for Chart No. 20, Exhibit 65.

Q. Panhandle Eastern's earnings are shown for the 12 months' period ended June 30, 1941, is that correct?

A. Yes, that is correct.

Q. And the same is true of Southern Natural Gas Company and El Paso Natural Gas Company, is that right?

A. That is correct.

[fol. 6999] Q. That leaves two companies shown on Chart No. 20 whose earnings were taken for the full year 1940, isn't that right?

A. The full calendar year 1940, yes.

Q. Now, if you had reflected or had given effect to the increased Federal taxes attributable to those earnings of El Paso Natural Gas Company, Southern Natural Gas Company and Panhandle Eastern Pipe Line Company for the six months ended June 30, 1941, you would have shown ver earnings-price ratios, isn't that true?

A. Yes, with that adjustment they would have been lower.

Q. And, of course, that would have lowered the 12.99 percent average of pipe-line companies shown by the green bar in your Chart No. 22 of Exhibit 65?

A. Yes, it would have an effect on that figure.

Q. Both on the straight mathematical average basis or on the weighted average basis, isn't that correct?

A. That is correct.

Q. As a matter of fact, you show in the case of the Northern Natural Gas Company by Chart No. 21, the effect of the increased Federal taxes for the year 1941 upon the earnings-price ratio, do you not?

A. That is correct.

Q. It falls from 11.72 percent to 10.38 percent as shown [fol. 7000] in the lower right-hand portion of the chart as "Based upon price to public", is that correct?

A. That is right.

Q. And that figure of 10.38 percent which I just read, after 1941 taxes, for Northern Natural Gas Company does not give effect to any further increases in taxes which you have stated are to be expected in the year 1942?

A. Not as of the date of that calculation.

Q. Now, while on the subject of Chart No. 20 of Exhibit 65, I note that the Southern Natural Gas Company has the highest earnings-price ratio of the companies there shown, to-wit, a ratio of 17.27 percent; is that right?

A. That is correct.

Q. And looking at the preceding chart, No. 19, Southern Natural Gas Company stands out like a sore thumb in the years 1940, 1939, with earnings-price ratios of 20.13 percent and 21.59 percent, respectively, isn't that right?

A. That is correct.

Q. That is, they are head and shoulders above the other four companies there shown?

A. Yes, those figures are larger.

Q. Now, did you investigate the cause or causes for Southern Natural Gas Company's high earnings-price ratios in the years shown in Charts Nos. 19 and 20?

[fol. 7001] A. No, I did not. I calculated the figure based upon the earnings per share as reported and the average of the high and low prices.

Q. Weren't you interested in what produced this result which affected so heavily your average for the various periods?

A. In this particular case, I was merely interested to see what the investors were saying about the individual companies which were included and whatever the market price, whatever the average of the market price was and the earnings were, I made my calculation.

Q. What reliance would an investor put upon earnings-price ratios such as those shown for Southern Natural Gas Company in Charts Nos. 19 and 20 for the years 1939, 1940 and 1941, without making an investigation?

A. No doubt the investors did make the investigation and through that determined the price which I used but I did not make the investigation.

Q. But this situation, with respect to Southern Natural Gas Company, as, reflected by its earnings-price ratios, does and did have an important bearing upon your ultimate conclusion as to Panhandle Eastern's estimated cost of new financing for common stock, did it not?

[Q.] Well, the Southern Natural Gas figure was included and, naturally, to the extent that it was included [fol. 7002] it had some bearing on the result but so far as

my analysis is concerned, investors not only look at a given company but they also look at the industry to see what the trend is and, therefore, if Southern Natural is a part of this industry it has to be taken into consideration and I included it in the list.

Q. Well, when investors are about to invest their money in the securities of Panhandle Eastern, how much weight do you think they would give to any such earnings-price ratios as those shown for Southern Natural Gas Company in these charts?

A. The investor does, I think, pretty much what we do. We study the industry and try to find out as much as we can by studying the history of the various companies. If there are a number of companies in a particular industry which are having difficult times and so on, we know that it has a definite influence on the investor's thought so that he would give attention to this and if there were two or three similar situations in the natural-gas pipe-line industry, he would give that pretty considerable weight.

Q. You gave it more weight than you gave any other company, isn't that right?

A. I gave it a weight of one in the total of the number of companies shown.

[fol. 7003] Q. Well, inasmuch as it had a much higher earnings-price ratio than any of the other companies, it did get much greater weight than did the other companies, did it not?

A. That is correct but I had no way of weighting it otherwise. I mean it was one company along with Interstate and the rest.

Q. Well, before using the earning-price ratio of Southern Natural Gas, weren't you interested in ascertaining first whether that company was properly comparable to Panhandle Eastern Pipe Line Company?

A. No. In this study I tried, as I think I explained, to include every company upon which there were data available to make the calculation and so far as my ability permitted, I believe I have done that.

Q. In your opinion, is Southern Natural Gas Company comparable to Panhandle Eastern Pipe Line Company?

A. I do not think it is and I do not think I am saying that it was.

This is 21.59 percent in 1939 and 20.13 percent in 1940, and I am not talking in those kind of terms at all for Panhandle Eastern so I do not say that it is comparable but it is, nevertheless, a natural-gas pipe-line company and investors very definitely look at it along with the rest and if there were a number having the same experience as Southern Natural, I think the investors would be on the [fol. 7004] whole a little skeptical of it as an industry in which to place money.

Q. If you had excluded Southern Natural Gas Company from your average, you would have certainly secured an average for pipe-line companies considerably below 12.99 percent, would you not?

A. Yes, and, on the other hand, if I had left Southern Natural in and excluded Interstate Natural, I would have gotten a much higher percent so I included both Southern and Interstate.

Q. You have no basis of comparison, either—

A. (Interposing) In this particular case where I am trying to secure the investor's appraisal of risk in so far as data are available on all companies to get the investor's appraisal, they should all be included.

Q. So you threw all the good ones in and all the bad ones in, added them and divided by the total?

A. That is what the investor says is the industry and what it is doing as an industry, yes, absolutely.

Q. Why didn't you throw a few of the bankrupt companies in here while you were at it, because the investor is always fearful that that might occur some day, sometime, somehow, isn't that correct?

A. The difficulty is, on companies of that kind, you usually find that the data which I am talking about is [fol. 7005] not available.

There were no quotations available to make calculations or the earnings are so tied up in bankruptcy proceedings that you do not have those, so you are unable to make the calculation for lack of data.

Q. You think then, that the consumers and customers of Panhandle Eastern Pipe Line Company should pay a higher return for their service, a higher price for the service rendered by Panhandle Eastern Pipe Line Company

simply because some other companies in the industry have had some difficulties in the past or have been in hot water from time to time. Is that your testimony?

A. I do not believe I said that, did I?

Q. I am asking you whether that is your testimony. That seems to be the effect of it.

A. I do not believe it is. What I am saying is that investors, to the best of their ability, review the trends in the industry which includes all of the companies operating therein upon which they can secure data.

Q. Now, do you think that the natural-gas customers of Panhandle Eastern Pipe Line Company should pay higher rates simply because Southern Natural Gas Company has an earnings-price ratio in excess of 20 percent?

A. Let me answer again—

Q. (Interposing) Can you answer that yes or no?

[fol. 7006] A. No, I do not think I can.

Q. You have some doubts about that, have you?

A. No, I do not think your question is complete so that it can be answered that way. What I have been saying right along is that the investors are appraising the risks of capital in this business to the best of their ability and in so far as they require a certain earnings-price ratio be willing to have their capital invested in this business, the ratio so found pretty much is an indication of what they say.

Now, if the customers, on the other hand, have different ideas about this service, then it seems to me that the only way to settle that is for them to determine that they should not get their money from the public but, perhaps, get it from the Government, in which case, then, we have no worry about the investors at all, but if they are going to rely on public financing, then they must take these various matters into consideration which the investors take into consideration before they will invest their money or not.

Now, it can be done either way, it seems to me, but so long as a private person's capital is in this business he, naturally, wants to have some say about that capital and if it is going to get to a point where the company will not be permitted to make earnings sufficient to give him se-

[fol. 7007] curity of principal and a return, no doubt he

will withdraw it and at that time the Government can finance it.

At least, that is one other possibility of financing.

Q. Well, you are not suggesting that your method is the only method that could be properly adopted for ascertaining the rate of return for rate-making purposes, are you, Mr. Coffman?

A. I have never said that in these proceedings, but I have said that I thought it was one indispensable part of such consideration.

Q. Of course, when you begin to get results like these, it might suggest that something is wrong with this method, might it not?

A. I do not think any more so than with the classical theory where, under that procedure, you find that there seem to be difficulties in the results that have been had over the years.

Q. Will you tell me why the customers of Panhandle Eastern Pipe Line Company should pay more for gas simply because another natural-gas company got into a jam at one time or another?

A. I do not think they are paying more. As I indicated here in Southern Natural, the percent was 21.59, as I remember it.

[fol. 7008] The figure I am talking about is 12 and that is based upon the trends in the industry and the peculiarities of the Panhandle Eastern Pipe Line Company.

Q. Yes, and you arrived at that 12 by giving great weight to this Southern Natural Gas Company's earnings price ratio because it was included in your average, was it not?

A. I am not giving it great weight, I am giving it the weight of one in the amount of the figure that is shown there.

Q. You are giving it as much weight as if it were strictly comparable to the Panhandle Eastern Pipe Line Company?

A. That is right, because the investors placing money in this industry believe it must be a little more hazardous than others or such companies wouldn't be in such difficulty.

Q. Now, suppose Southern Natural Gas Company had an earnings-price ratio of, let us say, 75 percent. Would you average it in with the rest of the companies and use the average, the straight mathematical average of those companies as a guide for you in determining the amount of earnings to which Panhandle Eastern is entitled on its common stock?

A. Well, I think the answer there is "no", because [fol. 7009] the earnings, presumably, under such a situation are approaching zero, in which case there would be some reason for eliminating it.

Q. Well, there are some companies throughout the length and breadth of this land that are in that kind of a predicament. Isn't that right?

A. That is correct, there are companies of that sort.

Q. You wouldn't think of penalizing the customers of other companies simply because some were in that kind of a jam, would you?

A. Well, as I say, this is just one firm that has been included, and the figure that was included here is not 70 percent or 75 percent, as you are talking about, it was 20, which was not so much far out of line with other companies.

It was higher, very definitely, but not so much out of line as to be ridiculous.

Q. Do you know what the figures were for Southern Natural Gas Company for the years 1937 to 1938?

A. In earnings figures?

Q. Yes, which earnings figures are not shown in your Chart No. 19.

A. No, I do not have those figures.

Q. Well, the net effect of your method is to reflect in the rate which you have estimated for Panhandle Eastern [fol. 7010] the earnings-price ratio of Southern Natural Gas Company, among others, as shown in your Charts Nos. 19 and 20, whatever the cause for that rather high earnings-price ratio for Southern Natural Gas Company.

The Witness: Will you read that please?

(Whereupon, the pending question was read by the reporter.)

The Witness: Well, only partially so, Mr. Littman, as you know from the exhibits because, as I stated, the 12 percent which I used was a judgment figure which was not based directly on the 12.99 percent as I calculated it by my method which included the Southern Natural, so that there has not been an undue weight given to Southern Natural by any manner of means.

By Mr. Littman:

Q. Well, you did not shave off the .99 percent because of any situation which prevailed with respect to Southern Natural Gas Company, did you?

A. No, I was talking about Panhandle Eastern and giving my best judgment as to about what that company would have to expect in the market.

Q. Using the average of the El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company and Southern Natural Gas Company as a guide?

A. As one of the guides, yes. That is one of them.

Q. Well, to the extent that you did consider that aver- [fol. 7011] age figure your ultimate judgment rate, the 12 percent does reflect the Southern Natural Gas Company's earnings-price ratio. Isn't that right?

A. I will answer again, partially so and no more for this reason—

Q. (Interposing) Well, I said, "to the extent" and I thought I stated exactly what your exhibit shows.

A. Well, maybe I am being a little too technical here, but as I visualize it, if you have five companies, one of which is a little larger in its earnings-price ratios than another, dividing by five to begin with carries only one-fifth of that overage of weight, as you would like to describe it.

Then in addition to that, I had the 12.99 and took 12, so there is a further amount out, so that when you say that you give it great weight, as you were talking about, I just want to get my answer correct that I do not think that it was given great weight.

My answer does not give it great weight.

Q. When I used the term "great weight", I was referring to the average figure of 12.99 percent, which aver-

age includes Southern Natural Gas Company. Didn't you so understand it?

A. No, I thought you were talking about the over-all picture.

[fol. 7012] Q. Well, let's look at Chart No. 19 for the year 1940.

Now, you gave Southern Natural Gas Company more weight than both El Paso Natural Gas Company and Interstate Natural Gas Company, combined, didn't you, for that year?

A. Just slightly more weight, yes.

Q. Do you know where Southern Natural Gas Company secures its gas supply?

A. Yes, as I recall it, it secures it in the general territory of the Amarillo region, I believe.

Q. In Texas? A. I believe so.

Q. How long has that been going on? Before you look up that matter, Mr. Coffman, you are unable to answer that without making a reference to some publication or other?

A. That is right, I want to check my recollection.

Q. And you are now examining Moody's?

A. Moody's Manual, yes, sir.

I do not know, from what I have read here; at this point the only information I see in Moody's in regard to your question is in connection with the statement that the company formerly owned a half interest in the Georgia Natural Gas Company which it disposed of in 1937 and in 1939 leases on approximately 1100 acres in the Tinsley Field near Yazoo City, Mississippi, were acquired.

[fol. 7013] The company has assigned these leases to an oil operator for development, containing a normal participation of one-fourth in the proceeds of all wells drilled.

I would have to check those facts to answer the matter. I cannot tell you correctly.

Q. Mr. Coffman, you are interested, are you not, in the pronouncements of the Securities and Exchange Commission with respect to various utilities and you keep currently abreast of the opinions and findings of that Commission with respect to the industry?

A. Yes, we try to following all those releases.

Q. Well, I read you from the findings and opinion of the Securities and Exchange Commission, Holding Company Act Release No. 2476 dated January 10, 1941, in the matter of Southern Natural Gas Company and Federal Water Service Corporation as follows—I might state before quoting this that wherever the term "Southern" is used the reference is to Southern Natural Gas Company:

"Southern is presently required to purchase all of its supply of gas in the Monroe Field under contracts with certain producing companies. Such contracts, which extend until December 31, 1949, obligate each seller to deliver gas to a specified maximum amount in any day (which amounts aggregate 162,500 M.c.f.), subject to the sellers having gas available from the Monroe Field and subject, [fol. 7014] also, to the reservation by the sellers of such gas for certain purposes, including the delivery of gas to the pipe lines serving St. Louis, Memphis, New Orleans and Shreveport. The contracts permit the sellers to deliver gas from other fields and provide that, in the event the sellers do not have available gas to supply Southern's requirements, Southern may purchase or otherwise obtain gas from any source to supply such deficiency.

"The Monroe Field is not expected to produce gas in sufficient quantities to meet peak demands for more than three or four years. Since August 1, 1940, Southern's wholly-owned subsidiary, Southern Production Company, Inc. (Production Company) has entered into agreements with the holders of gas and oil leases in the gas producing area known as the Logansport (Joaquin) Field, located partly in Western Louisiana and partly in eastern Texas about 135 miles west of the Monroe Field, providing for the assignment to the Production Company of the gas rights in leases covering an aggregate of approximately 11,000 acres. About 3,220 acres of this land is located within the proven area and comprises about 27 percent of the proven area.

"In order to relieve itself of the limitations of its existing gas purchase contracts with producers operating in the Monroe Field, Southern has for some time been carrying on negotiations with these producers looking toward

[fol. 7015] the execution of new gas purchase contracts, to extend until December 31, 1949, which will provide that Southern will purchase from the present producers specified percentages, aggregating initially 75 percent, of the requirements of its system, the remaining 25 percent to be purchased or otherwise obtained from any source. The price payable for all gas will consist of a commodity charge of 5 cents per M.c.f. plus a demand charge of $4.20 per M.c.f. per year on the maximum number of M.c.f. provided to be delivered in any day during each year. If the proposed new contracts had been in effect during the 12 months ended August 31, 1940, the price paid for gas would have been 6.59 cents per M.c.f. instead of the average price of 5.63 cents per M.c.f. paid under the present contracts, an increase of $418,942."

Now, I ask you, Mr. Coffman, whether you have ever read that part of the Release of the opinion and findings of the Securities and Exchange Commission?

A. No, I have not.

Q. Now, the fact which I have read, that the Monroe Field from which this company, to-wit, Southern Natural Gas Company has been securing its gas supply is not expected to produce gas in sufficient quantities to meet peak demands for more than three or four years would have what effect upon the earnings-price ratios of Southern Natural Gas Company?

A. Well, it would tend to make the price ratio rise.

[fol. 7016] Q. And that factor clearly has something to do with the Southern Natural Gas Company's earnings-price ratio which exceed 20 percent, as shown in your charts?

A. I think the investors have given weight to that.

Q. Now, what do you say about the effect on the earnings-price ratios of Southern Natural Gas Company because of the fact that they were confronted with a situation under which they would have to pay $418,942 more for gas, as I have read from the opinion, than they had paid in the previous year? What effect would that have upon the earnings-price ratio?

A. Well, investors would try to appraise the situation as best they could and if there is a question about the risk, the tendency would be for it to rise under the pres-

ent situation, but that, I think, is in line with what I said a few minutes ago that investors in this industry study that type of situation because they would want to find out whether Panhandle Eastern, for instance, might not have some trouble along the way in the same kind of situation.

Q. Are you still of the opinion that Southern Natural Gas Company—

Mr. Culton: (Interposing) Just a minute. Don't you think, in view of your question, you should also ask if he thought the investors would take into consideration the [fol. 7017] opinion of Ralph E. Davis as to the life of that field since it is in the same one?

Mr. Littman: Mr. Culton, you are at liberty to read any part of that finding you wish to read which you feel is material.

Mr. Culton: I do not think any of it is material, but I just happened to notice that that same thing says that Ralph Davis' estimation was for the supply at 1949 instead of for three or four years.

Mr. Littman: I will read this part into the record, if you will—

Mr. Culton: (Interposing) I do not think any of it is material, but I thought if you were going to ask the witness if he thought he should take the three or four years into consideration—

Mr. Littman: (Interposing) Of course, Mr. Davis is not speaking of peak loads, and my questions, after reading this report, had to do with peak loads.

I think the record will show you did not hear me. The question that I put to this witness was related to the fact that the Monroe Field is not expected to produce gas in sufficient quantities to meet peak demands for more than three or four years, however, I think I had better read the other statement into the record.

Mr. Wheat: Did you, Mr. Littman, also, read in the [fol. 7018] statement from that opinion that the Southern Natural was obtaining an additional gas supply? I believe you did.

Mr. Littman: Yes.

Mr. Wheat: And I would suppose that you would ask the witness whether that was possibly responsible for the reduction in the earnings price ratio for Southern Natural in 1941. I do not know.

Mr. Littman: But they are obtaining it an an increased cost of $418,000 a year.

Mr. Wheat: I am not talking about the other, Mr. Littman, at the Monroe Field. I am talking about that which they are obtaining out of the Logansport and the Joaquin Field which was gone into at such length in the application of Tennessee Gas and Transmission Company.

By Mr. Littman:

Q. Well, do you know anything about these facts that we have been discussing?

A. Not for purposes of this study, because I have described exactly how I prepared the study. I took the prices and I took the earnings as were reported.

Q. Then you do know that the earnings price ratio shown for Southern Natural Gas is unusual, do you not?

A. It is larger or higher than for the other companies shown.

Q. And reflect certain fears, do they not?

[fol. 7019] A. They must reflect that in the minds of the investors.

Q. Now, whether or not I have given you all the fears that are reflected in the mind of the investor or not, of course, I do not know, but you do know that there must be something akin to fear in the mind of the investing public who are investing in the common stock of Southern Natural Gas Company in order to have an earnings-price ratio in excess of 20 percent. Isn't that right?

A. I think the investors by having this higher priced ratio indicated that there is a greater hazard in Southern than in the other companies listed.

Q. And we are agreed, are we not, that you did not make any investigation to ascertain precisely what those hazards were?

A. That is correct, for this study.

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[fol. 7020] By Mr. Littman:

Q. Mr. Coffman, before proceeding with this line of inquiry which I suggested just before the recess, will you please state whether you have made the calculation with respect to the 1941 Federal income and excess profits taxes on the $1,000,000 of gross revenue concerning which we have heretofore discussed?

A. Yes, I have.

Q. Now, will you please state the results of your tabulation?

A. On the assumption of a reduction in rates which would total $1,000,000 in gross, there would be a change in the Federal income tax and excess profits taxes, based on the 1941 rates, so that the net operating income would be $276,000 less or out of a million-dollar reduction there is less than 30 cents change in net, which I believe was the way—

Mr. Culton: (Interposing). Out of a dollar reduction?

The Witness: (Continuing) Out of a dollar less than 30 cents, which I believe is the way you originally asked the question.

Mr. Wheat: Did all the difference represent taxes that would be lost to the Government?

The Witness: Yes, sir, that is correct.

[fol. 7021] Mr. Wheat: How much is that?

The Witness: That would be $724,000.

Mr. Wheat: Thank you.

By Mr. Littman:

Q. Now, I would like to have you assume a bond in the principal amount of $1,000 selling on the market at $105, that is, $1,050, which is commonly referred to as one thousand and five, and having a coupon rate of 4 percent with a maturity date of 15 years hence.

A. How much was the coupon rate, please?

Q. Four percent.

Now, am I correct in understanding that the "current yield" on that bond is determined simply by dividing 4 by 105 to get 3.81 percent?

A. That is the current yield, yes.

Mr. Wheat: How do you do that now?

Mr. Littman. Divide 4 by 105.

By Mr. Littman:

Q. Now, the "yield to maturity" is always less, is it not, than the current yield?

A. That usually is correct, I mean it would depend on whether your bond is selling at a premium or discount and so forth.

Q. Well, that would always be true where the bond is selling at a premium, isn't that correct?

[fol. 7022] A. Yes.

Q. And the premium in this instance is $50?

A. Yes.

Q. Now, am I correct in stating that the amount by which the yield to maturity is less than the current yield is dependent upon and governed by, first, the number of years to maturity and secondly, the amount of the premium?

A. That is correct.

Q. And is it also true that if the premium is large the yield to maturity will be substantially less than the coupon rate or the current yield rate?

A. Yes, generally.

Q. Now, it is a well-recognized fact that these yields to maturity are always a vital factor considered by the investor?

A. Yes, he considers those and refers to yield books, bond tables and so on.

Q. And it is a fact that the yield to maturity represents the investor's real yield. Isn't that right or actual yield?

A. Yes, that is right.

Q. Now, the investor who wants to ascertain the true return upon his investment must use bond tables to make the tabulation, must he not?

A. That is correct.

[fol. 7023] Q. Now, this same situation obtains with respect to preferred stock having a sinking-fund provision which sells at a premium, isn't that true?

A. That would be correct.

Q. And it would, also, be true, would it not, of preferred stock that is not callable until a certain date?

A. The investor would take into consideration the call price, that is, the closer you approach the callable date he would take that into consideration.

Q. That is to say, he would amortize his premium and give effect to the premium in determining his true yield. Isn't that right?

A. That is correct. Presumably as the callable date approached, the price, if it had been in excess, would have begun to come down near or at the level of the callable price.

Q. Now, I want you to assume a preferred stock having a par value of $100 callable 10 years from date at 110 and I want you to further assume that this stock has a dividend rate of 5 percent and is presently selling on the market at $120.

Now, isn't it a fact under these circumstances that the investor amortizes out of his dividend the premium of $10 over the 10 years. Is that right?

A. Yes, that is correct.

[fol. 7024] Q. Another way of stating the situation is that he receives $50 over the 10 years in dividends but he only considers $40 of this total $50 dividend payment as his real income, doesn't he?

A. That is correct.

Q. Because he had to take $10 from the proceeds of his dividends to write off the premium?

A. That is correct.

Q. Now, let's assume that we have some common stock of the Natural Gas Pipe Line Company and now we are speaking of common stock and I want you to assume that this Natural Gas Pipe Line Company has a finite life of 15 years.

I would also like to have you assume that this stock has a book value of $10 and is selling on the market at a price of $20. I would like to have you further assume that this

hypothetical pipe line company is fortunate enough to be earning 10 percent per annum on the market price of this common stock or $2 per share throughout the entire 15 years of its life and I want you to assume that this $2 dividend is paid each year throughout the 15 years.

Now, this $2 per share of earnings represents 20 percent of the book value of the common stock, does it not?

A. Twenty percent of the book value?

Q. Yes.

A. Yes, that is correct.

[fol. 7025] Q. Now, let's look at the picture 15 years hence when the gas supply is exhausted and the company winds up its affairs and goes out of business.

Now, the stockholder has received $2 per share for 15 years, a total of $30 in dividends, has he not?

A. That is correct.

Q. He gets back $10 in liquidation at the end of the 15 years because the company has wound up its business and has paid off the book value to the stockholder. Do you get that?

A. Yes.

Q. So that he has received $30 in dividends plus $10 in liquidation, a total of $40, is that correct, over the 15 years?

A. He gets in liquidation $10 in addition to the $30 he receives, so he received a total of $40?

Q. Yes.

A. That is right.

Q. Now, you understand that this investor's original investment was $20 in this share of stock, was it not?

A. Yes, it was.

Q. What was this investor's true earnings on this share of stock for the 15 year period during which he held it?

A. Are you now asking for dollars or for percentage?

Q. Dollars.

[fol. 7026] A. Well, he received altogether 100 percent on his original investment.

Q. Well, I asked you for dollars.

A. Well: $20.

Q. His true earnings are $20, is that right?

A. That is the amount he received in excess of his original cost.

Q. Now that true earnings of $20 is $1.33 per year, is it not, dividing the $20 by 15 years?

A. That is approximately right. I haven't figured it. Yes, that is correct.

Q. And expressing this true return upon investment in terms of percent, it amounts to 6⅔ percent, does it not?

A. Yes, that is correct.

Q. Now, may we not agree under these circumstances that the true appraisal of risk by this investor is 6⅔ percent? A. Yes, that is correct.

Q. Now, if this company were shown in your Chart No. 19 or 20 of Exhibit 65, the earnings-price ratio of this company's common stock would be shown at 10 percent, would it not, and you would term that 10 percent the "earnings-price ratio" or "investor's appraisal of risk"?

A. That is correct.

[fol. 7027] Q. Notwithstanding the fact that this particular investor has received a true earning of 6⅔ percent?

A. Well, that is correct except in the assumption we have only got one thing straight at this point, that here you are talking about the thing being wound up and all facts known, whereas in this study it is impossible to do that. With that one exception, I agree with what you have said.

Q. Well now, under the set of facts which I have asked you to assume, it is clear, is it not, that this particular investor having paid $10 more than the book value of the stock had to amortize that $10 premium over the 15 years during which he held the stock, isn't that right?

A. That is right, he can do that.

Q. And in order to amortize that $10 bonus that he paid or premium that he paid, he had to do that out of the annual dividends that he received, did he not?

A. He had to make allowance for it in that calculation.

Q. And in order to determine the true yield to the investor you simply have to take into account the fact that he had to amortize this premium out of the total dividend which he received.

A. That is correct.

Q. Very well. In arriving at your 12 percent cost of [fol. 7028] common stock for Panhandle Eastern Pipe Line Company, you stated yesterday in your testimony that you have given considerable weight to the cost of financing Northern Natural Gas Company's common stock, which was offered to the public on September 10, 1941, the facts of which are shown in Chart No. 21 of Exhibit 65 and in the table for Chart No. 21. Isn't that right?

A. That is correct, I considered that.

Q. You considered it and gave it great weight?

A. And gave it weight in my calculation of 12 percent, yes.

Q. Would you say great weight?

A. I do not recall that I did, I gave it weight. I mean I am always fearful when you use these "greats" because they are relative terms. Just how great do you mean?

Q. Well, what would you say in characterizing it?

A. Well, I gave the weight along with these other items and because it was a recent financing of a natural gas pipeline company, I thought it was pertinent to put it in but, in other words, I cannot tell you that I gave it 40 percent weight and something else 20 percent and so on.

My figures of judgment are a figure taking all these factors and forming a judgment.

Q. Well, it certainly entered into your judgment in arriving at this 12 percent estimate?

[fol. 7029] A. Yes, it did.

Q. Well now, what did Northern Natural's common stock sell for as shown by your Chart No. 21?

A. It sold to the public at $31.40.

Q. There seems to be some controversy as to the exact selling price due to a 60 cent dividend that was declared in 1944, is there not?

A. Well, this price that I mentioned is ex the dividend, it excludes the dividend.

Q. As a matter of fact, they did pay a 60 cent dividend and the prospectus of Northern Natural Gas Company for this common stock shows the price per share, including the dividend, at $32, does it not?

A. Yes, that is correct.

Q. Well, I merely wanted the record to show that the price that you have used here is exclusive of the 60 cent dividend.

A. It is exclusive.

Q. Well, at any rate, the price to the public, exclusive of the dividend, was $31.40, as shown by you in Chart No. 21, of Exhibit 65?

A. Yes, it was.

Q. At the time of the sale, what was the book value of this common stock per share? Can you answer that?

A. I don't believe I have that figure, but I will check. [fol. 7030] Q. Mr. Coffman, I hand you a copy of the prospectus of Northern Natural Gas Company for the 355,250 shares of common stock par value, $20 per share, which covers the stock issued shown in your Chart No. 21 of Exhibit 65, and I refer you to page 4 of this prospectus and particularly to the insert on that page, which I believe will give you the book-value figure.

A. Well, the amount stated here is $22.78 per share, but there are qualifications so that it probably would be better to read the whole statement to have it actually in the record.

Q. Suppose you read the entire statement.

A. On Page 4 of this exhibit—

Q. (Interposing) This is not an exhibit in this proceeding.

A. (Continuing) This prospectus, under the caption, "Net Tangible Asset Value," which is an insert to Page 4, it states as follows:

"Based upon the consolidated balance sheet of the company and subsidiary companies as of June 30, 1941, as shown in this prospectus, the net book value of all assets other than intangible assets, prepaid insurance, rentals and so forth and deferred charges, less long-term debt, current liabilities, reserves for depreciation, depletion and insurance and contributions in aid of construction amounted [fol. 7031] to $23,123,531.65 at that date which is equivalent to approximately $22.78 per share on 1,015,000 shares of common stock now outstanding. Neither the company nor the underwriters represent that the amounts at which assets are stated in the balance sheet represent the realizable or fair market value thereof or that the amount of $22.78 per share would be available upon liquidation of such assets and after discharge of the company's liabilities."

Q. You are satisfied from the reading of this portion of the prospectus that at the time of the sale the book value of this common stock was $22.78 per share. Right?

A. Yes, in accordance with that statement.

Q. Now, an investor buying a share of common stock of Northern Natural Gas Company would have to amortize the amount by which the price of $31.40, which he paid for the stock, exceeds the book value of $22.78 of this stock, to wit, the difference of $8.62 over a period. Isn't that right?

A. May I refer to that again before I answer please?

(A document was furnished the witness.)

The Witness: I think there is some question there, Mr. Littman, I would suppose it would be better to consider the par value of $20. After all, that is all the firm commits to pay upon liquidation regardless of what the book [fol. 7032] value was at the time.

By Mr. Littman:

Q. Very well. Let's take the $20 as the amount which the firm will pay upon liquidation when the gas supply is exhausted.

I understand that Northern Natural Gas Company also has a finite life, does it not, inasmuch as it relies upon a natural resource?

A. That is right, it has reserves which will be exhausted.

Q. Now, this investor in a share of common stock of Northern Natural Gas Company has to somehow get back this $11.40 which he has paid over and above the par value of the share of common stock. Isn't that correct?

A. That is correct.

Q. Now, the only way he has of getting that $11.40 premium back is by amortizing that amount over a period from the total dividends which he receives, isn't that right?

A. Well, that is one way of doing it, except that we must still take into consideration that the common-stockholder, unlike the callable preferred holder and the bondholder, has no time except the life of the company.

In other words, his problem is considerably different than a call date in case of preferred or a maturity date in

case of a bond, and yet you were trying to draw an analogy [fol. 7033] here which would put this in that class.

On an assumption I am perfectly willing to go along with it, but I just want to have it clear that there are wide differences between the types of securities.

Q. Well now, let's suppose that you were an investor in Northern Natural Gas Company's common stock. What term would you use for the amoritzation of this premium of $11.40 that you have paid?

A. In Northern Natural?

Q. In Northern Natural.

A. I would assume that if I could get a reliable engineering estimate as to the term of years that would expire prior to the exhaustion of the reserves, that that would have to be used in my calculation.

Q. Yes.

At any rate, there isn't any question but that an investor would have to amortize this premium of $11.40 certainly over some period and, as you have said, probably over the period of the life of the natural gas resources of the company. Is that right?

A. That is right. He wants to, when the thing has wound up, get his capital back and meanwhile have had a reasonable return thereon.

Q. Now, it is equally true, is it not, that if this investor in the common stock of Northern Natural Gas Company [fol. 7034] were to want to ascertain his true earnings on this common stock, he would have to take into consideration the amortization of the $11.40 premium, would he not?

A. Yes, he would take that into consideration although, as we know, common stockholders just do not keep their accounts that way, at least I have never heard of any that did.

Q. Well, let's take a large insurance company that have staffs for that purpose. You would expect that they would certainly go through the calculation to make certain that they had amortized the premium, wouldn't they?

A. I am not sure that insurance companies do that. I wouldn't want to say that they did or didn't. Most common stockholders don't. As a matter of fact, I never heard of one that did.

Q. Well, whether the investor actually sits down and works out the calculation, he certainly has uppermost in his mind, whenever he thinks in terms of true yield and true earnings, the giving of effect to the amortization out of his gross earnings from the start, the premium of $11.40 which he has paid. Is that right?

A. Well, actually he doesn't do it that way, but he could, I mean just as you or I can make the calculation, but actually he doesn't do it.

Q. Well, as the Vice President of a large firm, to-wit, [fol. 7035] Standard and Poor's, which advises investors and acts as counsel to investors; you would certainly advise investors to take this situation into account, would you not, to determine his true yield?

A. I do not know as we ever have, because, after all, we have never, so far as I have known, contended that a common stock was exactly like a preferred stock which is callable, or a bond, not to my knowledge.

Now, if the company has, I must beg off on innocence but I do not know of any such thing.

Q. Well, the logic is the same, isn't it?

A. Well, I wouldn't quite say that; at least, answering it again, the investors have never believed it to be so.

Q. But if you wanted to be exact about the matter, if you own a share of common stock in Northern Natural Gas Company and you wanted to determine precisely what your true earnings were, you would make the calculation, wouldn't you?

A. Well, with the exception of a few companies, Mr. Littman, the common-stock dividends, as we know, jump all over the lot from one year to another in distinction to your interest on your bond and your preferred dividend on your preferred stock.

That is what the investor has to contend with. That is [fol. 7036] the kind of security he bought. One year they may give him $3 in dividends, the next year it may be $1.50, all depending on earnings, so that it is rather difficult to work your situation out on a mathematical scale such as you could a sinking fund bond or a sinking fund preferred stock.

Here again, it is not quite so simple.

Q. Well, would you please answer my specific question?
A. I thought I did.

Will you read the question, please?

(Whereupon, that question at Line 15, Page 7035 of this record was read by the reporter.)

The Witness: If the situation on a common stock were just exactly as you said, a regular dividend each year of $2, a finite term of 15 years for certain, and all other items just as you said, I would believe it possible, but taking the actuality as you find in the market in common stocks, I would say no.

I think you could not do it with any degree of ease or accuracy.

Q. But in buying this share of common stock of Northern Natural, you would certainly be aware of the fact that you would somehow have to amortize this $11.40 through the dividends received, wouldn't you?

A. I would hope, as I believe the average common [fol. 7037] stockholder does, that over the period of years that he holds this common stock there will be enough return in dividends plus what he receives, if any, in liquidation, should he hang on that long, to give him his principal complete and the equivalent of a fair return thereon.

That is actually the way the investors look at common stocks today.

Q. And that is how they look at common stocks where they pay a premium over and above the book value of that common stock. Isn't that true?

A. Well, as a matter of fact, very few stocks sell at their par value and the only place you would ever have the question to begin with would be in a new issue.

The rest of the investors that we are talking about are not buying new issues, they are buying a share on the New York Stock Exchange which has long since been outstanding and been up in price and down in price.

Q. Now, confining ourselves, for the moment, to Northern Natural Gas Company, this is a new issue that we are speaking of, isn't that right?

A. That is correct.

Q. And there isn't any question in your mind that those individuals who invested their hard-earned cash in Northern Natural's common stock and [payed] a premium of $11.40 over par had in mind very definitely the earning of [fol. 7038] a return that would not only compensate them for the use of their money, but which would amortize that $11.40. Isn't that right?

A. That is correct.

Mr. Culton: Mr. Littman, you said that was a new issue of Northern Natural stock. When was it dated? I was under the impression that that was the issue that was sold by one of the owners.

Mr. Littman: September 10, 1941, as reported in Chart No. 21.

Mr. Culton: Is that the date the stock was issued?

Mr. Littman: I read from the caption of Chart No. 21 of Exhibit No. 65—

Mr. Culton: (Interposing) I know when it was offered to the public, but when was the stock actually issued?

Mr. Littman: Maybe the witness can enlighten us on that, if there is any question.

The Witness: The stock was authorized and issued sometime before that, I forget the date, but this was the first offering to the public of a portion of the over-all issued and outstanding some years prior.

Mr. Culton: The offering has not been by Northern Natural, as I understood it, but by the owning company. I may be mistaken as to that.

The Witness: No, I believe that is correct.

[fol. 7039] By Mr. Littman:

Q. Well now, would anything that Mr. Culton has called to your attention—

Mr. Culton: (Interposing) I just wanted to correct your statement that it was a fresh issue of actual stock.

The Witness: I understand, by listening to this, that you were not using "issue" in the technical sense as we say "authorized and issued".

You are referring to it as this quantity of shares that was then being made available to the public. That was my interpretation rather than pinning it to the technical use of "issue".

By Mr. Littman:

Q. That is right.

Now, looking at your Chart No. 21 of Exhibit No. 65, you have shown in that chart an earnings-price ratio for Northern Natural Gas Company based on the price to the public after the earnings are adjusted to reflect an increase in taxes under [they] Revenue Act of 1941 of 10.89 percent. Is that right?

A. That is correct.

Q. Now, the true return and the true appraisal of risk to the investor is something less than 10.38 percent, is it not?

[fol. 7040] A. Well, if you are following the same basis that you wish to amortize the situation, why, you can pack it down between the two items, but I still contend that it is a purely theoretical condition that you cannot find to exist.

Q. Well, what is theoretical about an investor paying out $11.40 in cold cash for a premium that he knows he can never get back except through the medium of dividends?

What is theoretical about that?

A. Well, I answer you in this fashion, that you have many oil companies, for example, that have gone along for years and never paid a dividend. Then, they paid one.

I would not know, as a holder of that common stock, whether I should, because of an expiration of years with no dividends, take that entire dividend and credit it against my premium or whether I should do as you want me to do, take one-fifteenth and say that applies as against the premium and the rest as against income.

I do not know how the investor does it. As a matter of fact, I know he doesn't do it. It is very difficult thing to do, except in your own hypothetical situation.

Q. Are you suggesting by your last answer, Mr. Coffman, that the investor should use the first dividends that he

receives for amortization purposes and then, after having amortized his premium, to receive a return on his investment?

A. I did not make any such suggestion, but in many common stock situations it would have been wise had a [fol. 7041] man done that, because many a company winds up with no liquidation and even many a going concern today under the Commission's rulings is saying there is no equity in the common stock. Well, who knows.

Q. Well, now, there isn't any question, is there, Mr. Coffman, in your opinion, that this 10.38 percent figure shown in Chart No. 21 as the earnings price ratio for Northern Natural Gas Company's common stock does not reflect the true yield to the public?

A. Yes, it includes the entire yield at the moment and I say that unless Northern Natural finds itself in a position exactly as you have enumerated that it would be difficult to apply an amortization scheme such as you propose.

Q. Regardless of how difficult it may be, regardless of how difficult the calculation, in truth and in fact this 10.38 percent upon which you relied in making your estimate contains and reflects a rate sufficient to amortize the premium of $11.40 which the investor has paid on this common stock. Isn't that true?

A. I still say that that is not true, Mr. Littman, and for several reasons.

I want to go back again to make it clear about the analysis between a bond and preferred stock which is callable. Those two items are set up a good many times on a certain [fol. 7042] schedule of life which may or may not be related to your natural resources.

An equity holder, on the other hand, puts money into this business and if he does not receive it back in the form of large dividends over a period of years, but such earnings are retained in the business to finance new purchases, so long as gas might be available on purchase or otherwise to this company, not from its own reserves, but from any reserves which they might lease or buy in the territory, the equity holder then is in perpetuity, not for the length of the preferred stock and its callable date, not for the maturity date of the bond, and that is the difference.

You cannot issue a bond in a natural resource company without taking the immediate reserves into consideration and it would be rather unfortunate to issue a preferred stock.

I just want to be sure that you understand my point of view. I have just stated it, I think, pretty clearly.

Q. I will understand your point of view, Mr. Coffman, only when you tell me how this investor is going to get back his $11.40 from any other source or in any other way than from this 10.38 percent, so-called, earnings-price ratio. How is he going to get it?

A. If he can take the dividends as they come, he can do the best he can to work out some amortization scale if he likes. In a hazardous industry, however, I as ad- [fol. 7043] visor would be perfectly willing to tell him that he might take all his dividends and accumulate them until it met his par and then when that was done anything over that he had would begin to look like a return. I would call that a good, conservative practice.

Q. Well then, you are stating, of course, that this 10.38 percent earnings price ratio on the common stock of Northern Natural Gas Company includes gross, the over-all earnings to the investor, including the amount that he is going to have to use to amortize his premium, isn't that right?

A. For his premium, but that still is separate and apart from the principal amount that he invested. The premium he paid is only one portion and a very small part of the total he paid and he expects to get his principal back, too.

Q. He can get that back on liquidation, can he not?

A. We are not at all sure of that. There are not very many companies that liquidate and pay 100 percent on the common stock. They have no claim whatsoever.

Q. That is all he can hope to get back, isn't it, his par value?

A. If they have retained earnings in the company, no, not at all. If they have distributed all of the earnings as they have gone along he must have some accumula- [fol. 7044] tion there to distribute.

Q. But your earnings as you use them in these charts include all the earnings available for common stock. Isn't that right? A. But not distributed.

Q. Well, whether distributed or not distributed, this 10.38 percent reflects all the earnings?

A. All the earnings available for the stock.

Q. Whether it is paid out in dividends or not paid out in dividends?

A. That is right, so it cannot include dividends. The reason I bring it up is that when you tell me to amortize something, I have nothing to amortize as high as a stockholder gets a dividend.

Not for one minute will I think of amortizing earnings that the company was keeping and not distributing to me, not on your life.

When they give me my capital back in the form of a dividend, I will be willing to talk business with you.

Q. Are you saying that the stockholder is never going to get back even this 10.38 percent?

A. I am saying until it is distributed I do not know and he does not either. That is a management policy. They can pay a dividend or not as they see fit, unless the Commission wants to step in and tell them to or a stock [fol. 7045] holder brings a suit and forces them to.

Q. Tell me how this investor is going to get back the $11.40 of premium that he paid on this common stock, if he is not going to get it back through this 10.38 percent.

A. Well, in the first place, as I have just tried to explain to you, the 10.38 percent is not going to be all distributed, at least it has not been in most companies and I would not suppose it was here, so he will get only a portion of that in a dividend.

Now, if it is regular and he wants to work out an amortization schedule, he can try it, but it is not a very simple thing.

Q. Mr. Coffman, I have a very simple question and I think it can be answered very easily. My question is simply this:

The amortization of this premium of $11.40 must come out of the 10.38 percent yield, must it not? Yes or no?

A. It will come out of there when it is paid. I want to get it in the payment there because it is pretty important to the investor, if you don't mind.

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(Pages 2513 to 3040)

Supreme Court of the United States

OCTOBER TERM, 1944

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vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

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United States Circuit Court of Appeals

EIGHTH CIRCUIT

No. 12,666

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

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Q. Whether it is retained by him and paid out at the end of the life of the company in a liquidating divided is immaterial for purposes of this discussion and this study.

A. Well, I—

Q. (Interposing) That does not disturb me at all. [fol. 7046] The thing I want to make certain about is that the amortization of this premium of $11.40 must come out of the 10.38 percent figure shown in your Chart No. 21 for Northern Natural Gas Company's common stock. Is that right?

A. That is right, it must come out, but I still want to get clear on the record that unless they pay a dividend there is no use at all of any common-stockholder working out any amortization schedule, because he is just sitting there as a stockholder holding the bag and that is important to this study, notwithstanding the statement that you said it was not.

Q. You say the stockholder is not at all aware of the fact that he is paying $11.40 in excess of the par value of the stock?

A. I did not say that.

Mr. Culton: Did you say par value or book value?

Mr. Littman: Either one, I will say par value.

The Witness: Par value, I will say, of course, the stockholder knows that. If he buys a share it is stated on the face.

By Mr. Littman:

Q. Now, your earnings-price ratio of 10.38 percent was not adjusted by you to take into account this situation which we have been discussing of the amortization of the premium. Is that right?

[fol. 7047] A. Not at all, because it cannot be. How can it be?

(Discussion off the record.)

[fol. 7050] LEITH V. WATKINS, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

* * * * * * * * *

[fol. 7051] By Mr. Gorman:

Q. Mr. Watkins, will you please refer to the copy of Exhibit No. 39 for identification which I have handed to you and refer to Page 966 of that proposed exhibit, which is entitled, "Panhandle Eastern Pipe Line Company and Subsidiary Companies—Cost of Business Development" and will you note at Lines 1 to 29 thereon are set forth certain statements purporting to represent payments to utility companies which, according to Line 30, represent a total of such payments of $553,992.48.

Can you tell us what disposition of these various amounts was made on the books of the Panhandle Eastern Pipe Line Company, that is to say, were these items charged to expense or were they capitalized?

A. Before answering, may I properly identify what [fol. 7052] has been submitted to me as Exhibit No. 39. It is not so marked as you gave it. I am of the opinion that it is what I know to be Exhibit No. 39 and I believe your question spoke of the title of the exhibit generally being "Cost of business development" whereas it appears that the correct title of the entire exhibit is "Reproduction Cost New of Property Plant and Business as of June 30, 1941."

Q. Yes, but the title I read is shown on Page 966.

Mr. Wheat: Your question, Mr. Gorman, was whether these items—what was that page?

Mr. Gorman: Page 966.

Mr. Wheat: Were capitalized or charged to operations?

Mr. Gorman: That is right.

The Witness: The witness' memory at the moment with respect to virtually all of the items shown on Page No. 966 of Exhibit No. 39 is that the charges they represent were first registered against gas sales and purchase contracts and have been held in that account subject to gradual amortization.

Now, it may very well be that some of the smaller items, such as that shown on Line 3, amounting to $152.50 or that shown on Line 4 amounting to $651 or other items of that general nature may not have first gone into the account Gas Sales and Purchase Contracts.

As a matter of fact, they may never have been regis-
[fol. 7053] tered as a charge against that account.

Does that supply the information you seek, sir?

By Mr. Gorman:

Q. Partially so.

A. We may as well identify these two sheets, don't you think?

Q. If may be well, yes. You are referring to certain working papers?

A. To two working papers which counsel just presented to the witness?

Q. Yes.

A. They are copies of Pages 13 and 14 to this witness' working papers with respect to Exhibit No. 52.

Q. Do those working papers, Mr. Watkins, show that of this total amount of $553,992.48 only $33,130, representing the amount shown at Lines 3 to 11, inclusive, on Page 966 of this Exhibit No. 39, have been charged to operating expenses on the books of the Panhandle Eastern Pipe Line Company?

A. These working papers do not make such showing, that is, Pages 13 and 14 of the working papers to Exhibit No. 52.

Q. Do you have any other working papers or any other information which would permit you to answer the question I have propounded?

[fol. 7054] A. My attention has been called to a memorandum which apparently was supplied during the course of the examination of certain of the company's records by some member of the staff of the Commission during one of their visits to our office at Kansas City, which seem to indicate that some of the $553,992.48 shown on Line 30 of Page No. 966 of Exhibit No. 39 had been charged to operating expenses and that $520,862.48 of the same total amount had been charged to other gas sales and purchase contracts, but notwithstanding the treatment which may

have been given to these items on the company's books, they do represent payments made to utility companies as shown on Line 1 of Page 966 of Exhibit No. 39.

Q. Yes, but the amount of $520,862.48, which you have just supplied, has been capitalized and charged to the account of gas plant, gas sales and purchase contracts, has it not?

Mr. Wheat: I wonder if you would give me that figure? I want to get it.

Mr. Gorman: $520,862.48, which account is presently being annually provided for looking to a subsequent and complete amortization, is it not?

The Witness: That is true and, Mr. Gorman, there is no contention on the part of the company, as far as I know, that some portion of the total $553,992.48 shown on Line 30 [fol. 7055] as total payments to utility companies has not been charged to operating expenses through amortization since the creation of those charges on the company's books.

There has been testimony, I believe, on questions asked heretofore in these proceedings with respect to that amount, $553,992.48, and an amount of $365,334.99 shown on Page 16 of the working papers to Exhibit No. 52 which represented the balance at June 30, 1940, of a portion of the item shown on Page 966 of Exhibit No. 39 comprising the total $553,992.48.

By Mr. Gorman:

Q. I might state that the questioning with respect to the items shown on this page, according to my present recollection, was directed to Mr. Biddison who offered this Exhibit No. 39.

As I recall Mr. Biddison's testimony, he was not familiar with the charges on the books of the company with respect to the items which make up the total shown at Line 30 on this page.

It is also Mr. Biddison's testimony that he merely took these figures, as furnished to him by the Accounting Department of the Panhandle Eastern Company and, in further explanation, I should like to state I am merely inquiring of you and trying to determine for this record pre-

cisely what portion had been previously written off by the [fol. 7056] company as a charge to operating expenses and what portion was capitalized in the gas plant account of the company and charged to the account for gas sales and purchase contracts.

Now, as I understand, your testimony presently is and in accordance with the best information available to you at the moment, that $33,130 of the total of $553,992.48 was written off as a direct charge to operating expense and that the balance of $520,862.48 was capitalized in the gas plant account, is that correct?

A. Well, without raising any particular objection to your characterization "written off" and "capitalized", I think that is substantially a correct statement.

Q. Yes.

A. We are speaking about the original treatment of these items, that is, at the time they first came into existence, not with respect to what has happened to them since they were first so disposed of.

Q. By that, are you referring to the fact that there has been certain amortization applied to the amount which was capitalized?

A. To illustrate what I mean, if you will refer to Page No. 15 of Exhibit No. 52—

Mr. Wheat: (Interposing) You mean of these working papers that counsel has now presented to you for consideration?

The Witness: That is correct—you will observe there [fol. 7057] that the total amount of payments made, on account of contracts with Michigan Consolidated Gas Corporation, agents assisting in the procurement of such contracts, with respect to the change-over cost by Michigan Consolidated Gas Company and contributions in connection with the acquirement by that company of house heating customers, was $438,000, a portion of which was applicable to Michigan Gas Transmission Corporation.

The residue was applicable to the affairs of Panhandle Eastern Pipe Line Company and constitutes the $371,076 shown opposite Line 13.

Mr. Wheat: You mean Line 13 on Page 966 of Exhibit 39?

The Witness: Correct.

Mr. Wheat: Thank you.

The Witness: Now, at June 30, 1941, there had been $113,214.72 of the $371,076 applicable to Panhandle Eastern amortized through gradual charges to operating expenses so that the portion of the balance in the gas sales and purchase contracts to which the original amount $371,076 had been charged, amounted on June 30, 1941, to $257,861.26.

That is intended to illustrate what has happened to the original charges, either to gas sales and purchase contracts or to operating expenses subsequent to the making of such original charges.

By Mr. Gorman:

[fol. 7058] Q. Yes.

A. Now, if I may proceed slightly further, the items shown on Page 966 of Exhibit No. 39 on lines 1 to 11 and possibly some of the smaller items elsewhere on that page constitute the $33,130 previously referred to here this morning and are not a part of Pages 15 and 16 of the working papers to Exhibit No. 52. But those working papers very clearly show a total amount of original charges of $627,905.55, a portion of which was applicable to the affairs of Michigan Gas Transmission and show that, of that amount, Panhandle Eastern Pipe Line Company had amortized at June 30, 1941, $155,527.49 so that at June 30, 1940—

Mr. Wheat: (Interposing) 1941?

The Witness: That is correct. The working papers, however, have a column headed "June 30, 1940", which is apparently in error. The balance was $365,334.99 of the original $520,862.48.

There is no secret that there has been amortization of those amounts since they were first charged to gas sales and purchase contracts.

By Mr. Gorman:

Q. Yes. Is there presently any proposal on the part of the company or on your own part to change in any way the charges which have been made to these various items [fol. 7059] on the books of the company?

A. Not unless and until there be some circumstance, such as the cessation of deliveries under any of the contracts, for whatever reason, to bring such condition about or unless the company, at some time in the future were to adopt a policy of disposing of the entire balance.

Further than those possibilities, it would seem that our plan of amortization would continue.

Q. You spoke of the possible change in the event that deliveries were ceased under any one of these particular contracts to which any of these various charges are applicable.

What would be done in that event with such amounts?

A. I do not know that I am in position to definitely state. I think we would have to learn something of the conditions that existed at that particular time.

Now, I do remember that with respect to one of the charges made to gas sales and purchase contracts, possibly that shown on Page 16 of the working papers to Exhibit No. 52 which is there characterized as "Partial Refund of Contribution for Line Extension to Serve Industrial Customers (Ingram-Richardson)" that by Voucher No. 10 54 entered in the year 1940, a credit of some $2,500 was made to this account.

The reason for that, if the witness' memory is accurate, [fol. 7060] is due to the fact that the arrangement with the customer in this instance was such that if the total amount of gas purchased over the period covered by the purchase contract under which such sales were being made was not sufficient at some stipulated rate in the contract to equal the amount of the original advance made jointly to that company by Panhandle Eastern, Michigan Gas Transmission and possibly one of the Indiana companies, that the unamortized portion would be refunded and the amount the witness has referred to represents the portion of such residue applicable to the affairs of Panhandle Eastern.

Such things as that could give rise to changes here.

Q. Of course, just exactly what disposition might conceivably be made in the future of these various items is not presently known to you?

A. So far as the records are concerned, that is quite correct.

Now, if I may make this further remark: The request that came to the company with respect to certain items shown on Page 966 of Exhibit No. 39, I am now very much of the opinion, was improperly interpreted by those of us who prepared the information or had it prepared.

Were such a request to be made of this witness today, in the manner in which it was originally made—

Q. (Interposing) By whom was such request made?

[fol. 7061] A. (Continuing) —the total would have been on the order of $2,400,000.

Would you like an explanation of how that might be arrived at?

Mr. Culton: He injected a question there.

By Mr. Gorman:

Q. I was just going to repeat that. I was going to ask, when you referred to a request of your or other accounting officials of the company, by whom was such request made?

A. The record in the proceedings, Mr. Gorman, very clearly shows that Mr. Biddison testified that the information shown on Lines 1 to 30 on Page 966 of Exhibit 39 was supplied to him by officers of the company.

It happens that your present witness is the officer who supplied it. The request for the information came from Mr. Biddison and the request, if I recall it, ran something along this order: "Will you please prepare and furnish me a statement showing payments to utility companies?"

Now, I am probably at fault by not having examined that request a little bit more than my memory at this moment tells me I did examine it. There was and still is on the books of the company two amounts having to do with gas sales and purchase contracts; one of which, at June 30, 1941, as shown by Line 40 on Page 2 of Exhibit No. 52 was $2,930,286.40.

The other amount, as shown by Lines 43 and 44 of the [fol. 7062] same page of the same exhibit was $365,334.99.

Now, when the question was put to your witness with respect to this amount, properly or improperly the witness connected it with the original items which gave rise to the balance of $365,334.99 shown opposite the caption on Lines 43 and 44 on Page 2 of Exhibit No. 52.

It did not dawn on me then and I did not awaken to the fact that perhaps what Mr. Biddison was requesting was the total amount of such payments from the very inception of the company until I had occasion to take a quick glance at a portion of his testimony.

So, as I stated before, had the question been put subsequent to such knowledge on my part or had my thoughts at the moment been a little bit more mature than I now see they were, the total we would have given to Mr. Biddison would have been on the order of $2,408,000 and I should be very glad to supply you what seems to me to be the items that constitute that total, if you wish them.

Mr. Gorman: Will you read that answer back, Miss Reporter, please?

(Whereupon, the last answer was read by the reporter.)

By Mr. Gorman:

Q. Will you please refer us to those items which constitute the total of $2,400,000?

A. Refer you to them where?

[fol. 7063] Q. Well, you said you would furnish that information. I was wondering if it was shown on any of these exhibits.

A. It is not, as such, but the detail of the items is a part and parcel of the company's records. Not all of the things that have been shown here or will be shown here are a minute part of the exhibits which have been or may be presented in the proceedings, I do not believe.

Q. Are such amounts that constitute the total of $2,400,000 shown in the balance sheets, Exhibit No. 48, or in the income statement, Exhibit No. 49, or in the gas plant account, Exhibit No. 52?

A. Yes, sir, they are.

Q. Very well. Will you please proceed to give us an explanation of those items which you are referring to?

A. The total, $2,408,623.50 is comprised of the following items:

In connection with contracts acquired by assignment from Missouri-Kansas Pipe Line Company as of September 1, 1930 (amount at which carried on the books of Missouri-Kansas Pipe Line Company)— $1,106,250.

Notes issued for purchase of Missouri-Kansas Pipe Line Company stock used in connection with obtaining gas sales contracts— $556,000.

Amount paid Missouri-Kansas Pipe Line Company to [fol. 7064] reimburse them for expenses incurred in obtaining gas sales and purchase contracts— $75,000.

Premium paid for contract bond in connection with obtaining gas sales contracts— $1,000.

Payment to agents for fees and expenses in connection with obtaining gas sales contracts— $9,500.

Traveling expenses of F. P. Parish in connection with obtaining gas sales contracts— $786.30.

Payroll and expense incurred in connection with obtaining gas sales contracts— $12,703.04.

Those items make a total of $1,761,239.34 and comprise a part of the $2,930,286.40 shown opposite Line 40 on Page 2 of Exhibit No. 52.

Then there were other gas sales and purchase contracts consisting of the following:

Costs of securing gas sales contracts, contributions to change-over costs, new house heating customers' campaign and line extension costs, and so forth, in connection with gas sales contracts acquired since August 31, 1935, segregated as:

Costs to June 30, 1941— $520,862.48 and

Costs July 1 to November 30, 1941— $6,724.

Making a total of— $527,586.48.

Then there were further costs of attaching business, originally charged to fixed capital account then in use as [fol. 7065] No. 203, separated between:

Market survey— $28,932.74

Other costs— $57,734.94

Those two items aggregate— $86,667.68.

Then there were costs charged to operating expenses as previously testified represented by disbursements for cost of business development in Missouri and Illinois and house heating customers' campaign amounting to— $33,130.

The total of all of which is— $2,408,623.50.

Q. Does that complete your answer?

A. Yes, sir, it does.

Q. And according to your previous statements, had you known at the time you prepared the information at Mr. Biddison's request instead of furnishing the amounts totaling $553,992.48 as shown at Page 966 of Exhibit No. 39, you would have furnished the items which you have just read into the record totaling $2,408,623.50, is that correct? A. Yes, that is correct.

Now, the reason for the apparent misunderstanding, Mr. Gorman, is that no explanation was given, as I remember, as to the use and even had Mr. Biddison stated the use he intended to make of the material or if he had made such an explanation, the witness would probably have attached no great significance to it.

The record has clearly shown the two amounts we have [fol. 7066] referred to this morning on Lines 40, 43 and 44 on Page 2 of Exhibit No. 52. They were there for any one to treat with as they saw proper.

You can appreciate that company officials would not question Mr. Biddison necessarily as to the exact purpose he expected to use material he was requesting, no more than it would to seek to have the representatives of this Commission who were in our office at about the same time tell us what they proposed to do with the information they requested and we refurnished.

Q. Does that complete your answer? A. It does.

Q. Mr. Watkins, your previous references to Mr. Biddison's request indicate that such request was communicated to you in writing, is that correct?

A. No, sir, I do not believe I intended to leave any such inference. Mr. Biddison did make some requests to us

in writing. I do not recall at this moment just exactly what they were.

Mr. Biddison was in our office a very great portion of the time during the preparation of some of the material that he has introduced in these proceedings. Even your own staff, sir, did not present their requests in writing. I doubt very seriously if time would have permitted them to have reduced to writing all of the requests they made or [fol. 7067] [or] may hereafter make.

Q. That is entirely foreign to the question here.

A. The same thing applies to Mr. Biddison.

Q. Did Mr. Biddison furnish a written request for this information?

A. I do not recall.

Q. Will you undertake to determine from your records whether or not he did furnish such a request?

A. I shall.

Q. And if he did, will you furnish us with copies thereof together with any reply that you made thereto?

A. I think I can develop that information for you sometime during the course of a rest period in the next day or so.

Q. Very well.

Now, when you refer to these items under the designation of "gas sales and purchase contracts", does that mean sales by the Panhandle Company to its customers and a purchase by the Panhandle Company of producers or others of a source or supply of gas?

A. Either Panhandle Eastern Pipe Line Company or its subsidiary companies.

Q. They are differentiated then, that is, there is a valuation of sales contracts on the one hand and of gas purchase contracts on the other hand?

[fol. 7068] A. No, they are commingled. There is no distinction between the amounts which occur on the books with respect to gas sales contracts or gas purchase contracts except in so far as some of the charges made to either of these accounts originally represented disbursements for a specific purpose.

I believe, Mr. Gorman, if you will permit the suggestion and without attempting to tell you what you should do, we

probably would get along a little faster and our record would be a little bit clearer if we treat with these items in two parts: If we think first of the $2,930,000-odd item and then of the $365,000-odd item, both of which are shown in Column M on Page 2 of Exhibit No. 52.

I only offer that suggestion, sir for whatever help it may be.

Q. Yes, I think we must necessarily do so.

A. And I believe, if you would permit me to kind of go along in my own fashion, I probably could help you a bit on the $2,930,000-odd item. That is to say, if you want history in the record as to how it came into being and, generally, what it represented.

Q. I think we must get that, but first may I ask you a question or two, Mr. Watkins?

A. Certainly.

Q. Does this $2,930,286.40 item to which reference has [fol. 7069] been made and which, as stated before, is shown at Line 40 of Page 2 of Exhibit No. 52, the particular mention being shown in Columns H to M, both inclusive, for the years 1936 through 1941, that is, through June 30, 1941.

That refers, does it not, to gas sales and purchase contracts acquired from the Missouri-Kansas Pipe Line Company at August 31, 1930?

A. Not necessarily so. My general explanation, if such an explanation is permitted to be made, would cover that point.

Q. Very well, maybe it would expedite things, Mr. Watkins, if you gave us what you consider to be your explanation of that item and, as you indicated before, confining it solely to the item we are now discussing.

A. When I first became connected with Panhandle Eastern Pipe Line Company and noticed an account on its books, "Gas Sales and Purchase Contracts", amounting at that time to something over $3,000,000, I viewed the account with askance.

It seemed to me, from a very casual observation, that it might be the result of the effort on the part of someone to breathe life into something that did not exist, but, at

that time, I simply passed it out of my mind as being something that, when time permitted, I would find out what made it click and, believe you me, I have found out a good [fol. 7070] deal about it during the past ten years, and I turned my attention at that time to matters that seemed more important.

Now, as the years have passed, this is a summary of the things that have weeded themselves out of a great number of many other things with respect to this particular account.

First let's go back to a certain contract that has been mentioned heretofore in these proceedings of September 17, 1930, by virtue of which Panhandle Eastern Pipe Line Company came into possession of some $19,000,000-odd of assets, the detail of which, I believe, is already in the record, and refer, as well, to Table No. 2 of the report by Mr. M. C. Steele of the Federal Trade Commission in response to Senate Resolution No. 83, the exact number of which I believe you, Mr. Gorman, supplied in the record one day last week.

Q. Yes, that is Volume 84-1 of the Federal Trade Commission Report.

A. And note on that table that there apparently was, on the books of Missouri-Kansas Pipe Line Company, an amount charged to gas contracts aggregating $926,250, and that when such amount was recorded on the books of Panhandle Eastern Pipe Line Company, it became $2,398,402.19.

The company's records with respect to the determination of the amount of $2,398,402.19 show action on the part of [fol. 7071] the Board of Directors at a meeting held February 3, 1931, and without attempting to criticize in any manner the action by the Board of Directors at that particular time, it may have proven improvident and certainly troublesome that certain language was used in connection with that resolution because it had to do with statements concerning valuation.

The language might better have run to a statement that the action of the officers was assigning certain amounts to certain things recorded as a result of the contribution by

Missouri-Kansas Pipe Line Company was, in all respects, approved, ratified, and confirmed, but that was not done.

I find, in my search through the company's records and affairs and questioning of anyone that had anything to do with any of the transactions that gave rise to this amount, in so far as I was able to find any such individuals and I could not tell you at this moment who they were, that there apparently was a meeting of minds between a seller and a buyer in September, 1930, with respect to amounts at which one-half of the stock of Panhandle Eastern Pipe Line Company, purchased by Columbia Oil and Gasoline Corporation, were to be determined and it would appear that to an extent, at least, the entry giving rise to the $2,398,402.19 of gas sales and purchase contracts took into consideration such a viewpoint or such an interpretation of the agreement between those two parties.

[fol. 7072] Now, that might be characterized by some as a "writeup". Frankly and honestly, I do not know what a writeup is. I have searched the Authorities and I do not find any specific definition of a write up, nor am I sure that such a statement can be made with respect to the recordation of an amount at which some asset is carried, presented by a donation, but be all that as it may, I have found this with respect to the $2,398,402.19, that at the time an entry was made in 1930 by Journal Voucher J-2, 1930, there was apparently $1,106,250 on the books of Missouri-Kansas Pipe Line Company representing disbursements made with respect to its affairs so that the remainder added to those disbursements by Panhandle Eastern Pipe Line Company in this original entry and by the Board of Directors at the action concerning which this witness has just referred ran to the order of $1,292,152.19 rather than the amount of $1,472,152.19 as shown by Mr. Steele's Table No. 2 as heretofore identified.

The difference between those two figures may have been the result of some adjustment made on the books of Missouri-Kansas Pipe Line Company subsequent to September, 1930, which is a fact that I have no knowledge whatever about and my statement with respect to that is pure conjecture.

Q. May I interrupt to get the statement with respect to those figures which you just read?

* * * * * * * *

[fol. 7073] The Witness: During the year 1930, Panhandle Eastern added to the $2,398,402.19 or rather had had some previous expenditures which raised the total of the charges to the gas sales and purchase contracts at April 30, 1932, to $3,053,391.53.

This total is without respect to an amount which this witness referred to in his original testimony of some $10,300,000 that went into the account in 1930 and was reversed, so to speak, in 1932 so that, if I may, we will simply disregard that total of that amount at this time.

* * * * * * * *

Q. That was a valuation figure, was it not?

A. That is correct. The additions were made up of the totaling items—

Q. (Interposing) You are speaking about the additions—

A. (Continuing) —the additions raising the total from $2,398,402.19 to the total at April 30, 1932, of $3,053,391.53. They consisted of $420,000 which represented the cost of 15,000 shares of Missouri-Kansas Pipe Line Company stock at $28 per share in payment of which Panhandle Eastern Pipe Line Company issued, in compliance with action taken by its Board of Directors at a meeting held May 23, 1930, [fol. 7074] certain 5 year, 6 percent note or notes, and also an amount of $136,000 to record the issuance of a 7 percent bearer note with no maturity mentioned in exchange for 4,000 shares of Missouri-Kansas Pipe Line Company stock at $34 per share.

Apparently the first of these two transactions had to do with contracts wtih Illinois Power and Light Company and Missouri Power and Light Company or it may have been that the latter of the two items had something to do with those contracts.

There was a cash payment made by Missouri-Kansas Pipe Line Company to the American Coke and Chemical Contracting Company to reimburse them for their expenses in securing sales contracts with Keystone Steel & Wire

Company, Peoria Malleable Castings Company, Caterpillar Tractor Company and the R. Herschel Manufacturing Company.

There was a further disbursement for insurance premium on contract bond furnished in connection with the Keystone contract amounting to $1,000. In addition, there were payments made to American Coke and Chemical Contracting Company for engineering fee and/or expenses in connection with the securing of the sales contracts with Keystone Steel and Wire Company, Peoria Malleable Castings Company, Caterpillar Tractor Company and the R. Herschel Manufacturing Company, as well as a small item of expenses amounting to $786.30 of one of the officers of the [fol. 7075] company.

Q. Was that not Mr. Parish?

A. That is correct.

Then, for the period from September, 1930, up to and including sometime in 1932, there were expenses, general payroll expenses, attorneys' fees and so forth, amounting to $42,703.04, all of which we added to the original amount, $2,398,402.19, which aggregated $3,053,391.53.

Now, subsequent to those transactions and I believe it was about the early part of 1936, the small amount of amortization recorded on the company's books with respect to gas sales and purchase contracts was applied as a reduction of the addition between the $2,398,402.19 and the total $3,053,391.53 so that as you observe in Column H on Line 40 of Page 2 of Exhibit No. 52; the balance was reduced to $2,930,286.40 which is the amount now being amortized in conformity with the Certificate of Incorporation of Panhandle Eastern Pipe Line Company at the rate of $24,419.05.

Is that sufficient detail before the witness proceeds, so far as the make-up of the charges are concerned?

Q. Yes. Of course, I anticipate discussing with you somewhat more in detail the several charges which you have mentioned.

A. Yes, I rather anticipate that myself.

Q. Yes, I would imagine so.

[fol. 7076] A. Now, to get back to the general viewpoint and description of the sum total of the items, it appears that there was received as a result of the contribution made by Missouri-Kansas Pipe Line Company, among other things, gas purchase contracts representing some 50,000-odd acres of gas-producing lands or lands which may not have become producing but, at any rate; there was apparently that number of acres involved and there were some 23 or thereabouts gas sales contracts involved.

Now, sales are not at this moment being made under each of such contracts but sales are being made to each of the purchasers represented by such contracts, either in the form of new contracts with them or in the form of rate schedules, so that, as a result of the sales in the manner described from September 30, 1930, to or about December 31, 1940, there has been a total revenue received by the company somewhere in the neighborhood of $15,000,000.

Q. Do you mean from these—

A. (Interposing) From these companies or their subsidiaries under the contracts that were received as a part of the donation from Missouri-Kansas Pipe Line Company or from new contracts executed with them or from sales made to them under rate schedules.

Now, the new contracts, and please do not misinterpret that characterization because that does not mean a new contract with respect to some other uses necessarily but [fol. 7077] it might have well developed that there were circumstances making desirable the execution of a contract in some slightly different form. Regardless of how this total of $2,930,000-odd came into existence or regardless of whether or not a part of it could properly be described as a write-up, if one chose to view it from that standpoint, there was some substantial importance in the thing received by Panhandle Eastern Pipe Line Company without cost to it and it should be represented in its records and affairs in some manner.

Now, if I may go back for a moment to my original statement, you probably drew the conclusion and properly so, that at the time this witness first noticed those amounts on the books of the company, he was of the opinion that perhaps there was nothing there but, I must say, sir, over the

width and breadth of my experience with the company and my knowledge of the benefits received from the rights represented by these so-called charges to gas sales and purchase contracts, whether they were received by Panhandle Eastern Pipe Line Company as a contribution or by any amount at which it was recorded on its books or by subsequent additions, that if I were qualified to properly place a value on such amount, it would be far in excess of any amounts at which those items are carried on the books of the company and that, I believe, sir, finishes my statement. [fol. 7078] Q. By your last statement, you indicate, do you not, that you did not consider yourself qualified to so evaluate these gas sales and purchase contracts?

A. I am not attempting to make any such evaluation, sir. I believe I have sufficient information concerning them to speak something with respect to their value.

I have observed the performance under them over all these years. I have known what the income from them meant to the company when dollars were far more scarce than they are at the moment and I believe I do have some very definite knowledge as to what they have meant to Panhandle Eastern Pipe Line Company.

I am not an expert with respect to the valuation of such items and I hope that is satisfactory for your purposes.

Q. By your explanation, Mr. Watkins, you have not attempted to indicate in any way, have you, that the various totals which you have read aggregating, in 1935 and for several years prior thereto, $3,053,394.53 as shown in Columns D through G on Page 2 of Exhibit No. 52 at Line 40 and the total aggregate amount of $2,930,286.40 as shown on this same line in Columns H through M as representing, in toto, expenditures made in connection with gas sales and purchase contracts either by Mo-Kan or by the Panhandle Eastern Pipe Line Company?

A. I am not so sure I understand just what you mean [fol. 7079] there.

Q. To put it succinctly, has your statement indicated in any way that these amounts to which I just made reference represent expenditures actually made by Mo-Kan or Panhandle Eastern Pipe Line Company?

A. I have no knowledge, Mr. Gorman, of the records of Missouri-Kansas Pipe Line Company. I can only speak

with respect to that as to the information that I have gleaned in searching out data with respect to this.

Q. Yes.

A. I am conscious of the fact that certain representations with respect to those expenditures have been made in certain reports filed in several different matters, so that so far as Missouri-Kansas Pipe Line Company is concerned, or the portion of such expenditures made by that company, I am not qualified to state anything with respect to the actuality of such expenditures.

So far as Panhandle Eastern Pipe Line Company is concerned, to the extent that it represents that it has made any such expenditure, I shall be very glad to assist you in any manner that I can.

Perhaps this should be added to what has already been said: Panhandle Eastern and its subsidiary companies do not follow the custom or practice of charging to an asset account, capitalizing it, as you put it, all the cost incident [fol. 7080] to the acquisition by it of either gas sales contracts or gas purchase contracts.

As you may well imagine over the years we acquire a vast number of gas purchase contracts and if we were to have accumulated the cost of acquisition of all of those we would have had a sum far in excess of what is shown on the records.

Furthermore, gas contracts acquired in the ordinary course of business that require no contribution or payment to the selling company or to another company who may be selling to the distributing company, are not capitalized. There is a tremendous amount of expense incurred by the company in such effort that goes through operating expenses and does not necessarily become a part of a charge to any asset account and held for any gradual amortization.

I should not want the record to indicate that this witness has categorically stated that the amounts shown by any exhibits that he has presented represent all the dollars actually expended by Panhandle Eastern and its subsidiaries for this particular purpose. Are we clear there?

[fol. 7081] Mr. Wheat: Mr. Watkins, in connection with the statements that you have been making this morning, have you prepared a three-page document entitled, "Statement of Cost of Business Development—Period from April 1, 1932, to June 30, 1941", which contains details of the total of $553,992.48 which, I believe, is the item which you gave to Mr. Biddison?

The Witness: I have prepared such a statement, or, rather, such a statement has been prepared under my supervision.

Mr. Wheat: And is the document which I now show you the statement to which you have just referred?

The Witness: It is.

Mr. Wheat: Mr. Examiner, it occurs to me, and I have discussed the matter with Mr. Gorman, that it might be advisable at this time to have the three-page document marked for identification in this proceeding.

Trial Examiner: This will be marked for identification as Exhibit No. 153.

(The document referred to was marked Exhibit No. 153 for identification.)

By Mr. Gorman:

Q. Mr. Watkins, in your statement of a short time ago with respect to these items we have been discussing, you referred to Table No. 2 as contained in the report prepared by Mr. M. C. Steele, an Examiner of the Federal Trade Commission, which has previously been identified in the [fol. 7082] proceeding as Exhibit No. 6575 as contained in Federal Trade Commission Report 84-1 to which reference has been made previously, which table is shown at page 1195 of this volume, and I believe you also referred to the difference between the amount which is purported to have been carried on the books of the Missouri-Kansas Pipe Line Company for gas contracts totaling $926,250, which was subsequently recorded on the books of the Panhandle Eastern Pipe Line Company at a total of $2,398,402.19.

Now, you made some reference to the difference in these figures shown on this Table No. 2, which is purported to be

$1,472,152.19 as distinguished from a total of $1,292,152.19 which you read into the record.

A. What was the last amount, please?

Q. $1,292,152.19. Isn't that correct?

A. I believe there must be some confusion, Mr. Gorman. First, the witness has previously identified the table from which you quoted in the Federal Trade Commission report as being substantially the same as Table No. 2 on page 17 of Mr. Steele's report with respect to Panhandle Eastern, has he not, so if you refer to that table and the witness refers to this, we are unquestionably speaking about the same table?

Q. Yes, they are identical tables, Mr. Watkins.

A. Now, I believe the thing that is just slightly confus-
[fol. 7083] ing here is this: At the time Panhandle Eastern made the entries recording the gas sales and purchase contracts acquired from Missouri-Kansas Pipe Line Company, it apparently had knowledge of the fact that Missouri-Kansas Pipe Line Company carried those amounts on its books at $1,106,250 rather than the $926,250 referred to by Mr. Steele and, in the proceedings this morning, the witness has stated that, while there was such a difference, no one of the people connected with Panhandle Eastern Pipe Line Company had any knowledge as to the exact thing that gave rise to the difference.

There may very well have been an adjustment of some sort made by Missouri-Kansas Pipe Line Company on its books subsequent to September 30, 1930, but before the examination referred to in Mr. Steele's report, or whoever made the report, with regard to Missouri-Kansas Pipe Line Company.

Q. Will you please refer to page 19 of this report of Mr. Steele to which you are referring. Do you note on that page that there is contained a summary of gas contracts as recorded on the books of Missouri-Kansas Pipe Line Company? A. I do.

Q. Do you note also that there is contained in such summary the following statement?

"Less portion of gas contracts acquired at organization and credited to capital surplus written off, $180,000", which
[fol. 7084] results, when deducted from the total of $1,

106,250, in the total stated ledger value of gas contracts as of August 31, 1930, of $926,250, which is the same amount referred to in Table 2 on page 17 of that report?

A. Those facts are shown on page 1196 of Mr. Steele's report with respect to Panhandle Eastern, but the witness wishes to differ in at least two directions with the material shown there.

In the first instance, I must make it clear that in any statements I have made during the proceedings this morning, or heretofore for that matter, with regard to gas sales and purchase contracts, and the amount at which they are carried on the books, that I have in no wise intended to give any indication that it was my view that the ledgers or the records state values.

Secondly, although I do not know the exact date of the adoption of Senate Resolution No. 83 nor do I have at this moment the exact date of the examination by Mr. Steele or any other member of the staff of the Federal Trade Commission of the books and records of Missouri-Kansas Pipe Line Company nor, for that matter, do I recall the absolute dates upon which such examination was made by Mr. Steele and his assistants of the accounts and records of Panhandle Eastern Pipe Line Company, it is still my opinion, from the information I have thus far been able to determine with respect to the $1,106,250 item or the $926,
[fol. 7085] 250 item, as shown in this table, as you have stated, that the adjustment could have very well been made subsequent to the date it was recorded on the books of Panhandle Eastern Pipe Line Company or, for that matter, subsequent to August 31, 1930, the date shown on page 19 of the report to which we have just been referring.

Q. By that do you intend to create the inference that, insofar as your knowledge goes, such write-off of $180,000 was not made prior to August 31, 1930, as of which date the property was transferred to the Panhandle Eastern Company?

A. No, sir, your statement is wrong in two respects. First, the witness makes no effort to characterize the difference of $180,000, I believe it is, as a write-off. Mr. Steele does that, and Mr. Steele speaks for himself.

Secondly, the position the witness has been trying to take and show you is that at the time Panhandle Eastern

Pipe Line Company made the entries recording on its books amounts at which it was to carry the sum total of approximately $19,300,000 of assets received as a capital contribution from Missouri-Kansas Pipe Line Company, the amount of $1,106,250 was based on such entries. Whether that be correct or not, is an entirely different thing.

Q. Is it true that the first recordation on the books of Panhandle Eastern Company of this item was in the amount of $2,398,402.19?

[fol. 7086] A. Yes, sir, that is correct.

Mr. Wheat: May I ask, Mr. Watkins, at what date that entry was made? Do you have that?

The Witness: I do not have the actual date. My remembrance is it was the very first journal entry made by Panhandle Eastern Pipe Line Company, or perhaps the second entry made by Panhandle Eastern Pipe Line Company, at the time all of these assets were received by it as a capital contribution from Mo-Kan back in the year 1930.

Mr. Wheat: In other words, it was synchronous with that transaction, is that true?

The Witness: Quite.

Mr. Wheat: Yes, thank you.

Pardon me, Mr. Gorman.

The Witness: It can very easily be found in the company's records.

By Mr. Gorman:

Q. Do you know whether or not, Mr. Watkins, this amount of $2,398,402.19 represented a valuation made by the Board of Directors at a board meeting held on February 3, 1931, of gas sales and purchase contracts acquired from the Missouri-Kansas Pipe Line Company as of August 31, 1930, without consideration being paid therefor?

A. Mr. Gorman, our entries are actually a little ahead of the Board of Directors' in this instance. The entries [fol. 7087] were made in 1930 and the meeting of the Board held on February 3, 1931, and in the manner the witness has heretofore testified. Whether the Board's use of language in its determination was provident or improvident, the Board did authorize or approve or ratify or

confirm, if you please, the making of what the Board said were certain valuations, but, regardless of what the Board then said or may thereafter have said or may in future say with respect to valuations, it is the position of this witness that books, records, and accounts cannot, except by mere coincident, show valuation, and I doubt if such a coincidence can ever exist.

Q. Well, who, according to your knowledge and information, determined the amount which was, as you stated, set up on the books of the company prior to this so-called valuation by this Board of Directors at their meeting on February 3, 1931?

A. May the witness have this understanding with you, sir, and for the record, that he believes will simplify the response to the questions, that in any sense that you refer to this as a "valuation" and in any response this witness gives in respect to this item, he will not be agreeing with your statement that it does represent value. If we can have that understanding, it will remove the necessity of any qualifications of my answers hereafter as to this item.

Q. That may be so understood but, in that connection, [fol. 7088] if you dislike the term "valuation", what would be your preference in the matter?

A. The amount assigned to this particular item at which it shall be carried on the books of the company.

Q. Which, in your opinion, would have no relation whatsoever to value?

A. This witness has repeatedly stated, sir, that he does not believe that books and records can ever show value.

Q. Yes. With that understanding, can you answer the question which I previously put?

A. My investigation and my remembrance of the multiplicity of things that have passed through my mind in connection with the original entries and the basis upon which such original entries may have been reached or the basis upon which the seller and purchaser may have had some agreement, is that, whoever drafted the original entries recording these items was interpreting, if you please, to the extent that the amounts included in such original entries did not actually represent amounts on the books of Missouri-Kansas Pipe Line Company or its subsidiaries, what he believed was the amount at which the so-called gas sales and purchase contracts were included in the agreements or

discussions before or after the September 17, 1930, contract.

As to the exact individual who made the entry, I am in about as big a fog as you are. I should like to ask that [fol. 7089] gentleman some questions myself, but he seems to be as nonexistent as a dodo.

Does that answer your question, sir, with respect to the origin of the amount that became a part and parcel of the original entry?

Q. I think it does, yes.

And from your last statement, I infer that you have, in times past, made an effort to ascertain the name of the individual who, shall we say, set up the various amounts which were originally entered on the books of the Panhandle Company as representing the recorded value of the property and other assets acquired from the Mo-Kan Company?

A. Prior to the action on February 3, 1931, by the Board of Directors?

Q. Yes.

A. I may have confused you slightly there. The witness believes he could actually ascertain the person who did the mechanical job of making up the entry after somebody else had arrived at what the entry should be.

Q. You mean the actual one who made the entry on the books?

A. I think that person could be found and, as a matter of fact, it is quite probable the entry itself would show his initials on that entry, because our entries are rather full in that respect. As a matter of fact, all of the entries, [fol. 7090] all of the journal entries made by the company since I have been connected with it, I believe, bear my initials, so that I would have to have responsibility for that. Back in the early stages of our affairs, we may not have been so careful in that respect or we may now be too careful.

The gentleman I should like to reach to clear up a few things in my mind, or should have liked to have been able to reach over the past years to clear up a few things in my mind, or gentlemen, if you please, if such were the condition, were the person or persons who determined this

amount of $2,398,402.19 which I now believe is very, very inadequate.

Q. Yes. Well, of course, we are both speaking about the same people.

Do I understand that you have made, in the past, some effort to ascertain the name or names of this individual or these individuals who made such determinations, and by that I am speaking of those, other than the ones who actually made the bookkeeping entry?

A. Yes, we have desperately tried to learn as much as we possibly could about this item. Experience has taught us possibly more about what the item is worth to the company than had we been able to question anyone who had to do with the original entry.

Q. Despite whatever conclusions you may have subsequently reached, they have not resulted in a restatement of [fol. 7091] this amount on the books of the company?

A. They have not.

Mr. Gorman, I should, no doubt, in justee to our independent public accountants who have certified to examinations of the company's affairs over the period of years, state that most of their reports have some statement of the nature this witness referred to in his testimony last week, the necessity of which is manifested in the requirements of certain of the reports to be made to other governmental commissions, but their exceptions, if any, to the item were not of a nature to cause its removal from the books and records of the company.

Q. In that connection, Mr. Watkins, have you or any others of the official staff or the other employees of the company ever caused anything to be removed from the books of the company?

A. That is such a broad question that I do not think one could answer it.

Now, you do not mean, I am sure, improper removals?

Q. No, I am not impugning anything like that.

A. There have, no doubt, been a vast number of items removed from the books through the normal processes of accepted accounting practices consistently followed.

Q. Have there been any such removals occasioned by the request of Arthur Anderson and Company or other accountants who were auditing the books of the company?

[fol. 7092] A. I could not answer such a question as that off the top of my head, sir. I must say in response to that simply this: Panhandle Eastern's officers charged with its accounting affairs have tried to work as closely as they possibly can with the company's public accountants, and if the public accountants, in some form or fashion, appear critical of some charge, shall we say, either to operating expenses or to gas plant, which their judgment would seem to indicate should go to the other account, we have had such discussions as any conditions of that nature might warrant and have properly disposed of the item. You just cannot answer a question such as you have put in any concrete fashion.

Now, if the question were somewhat along this line—Does this witness know of any important instance in which, as the result of a request, a suggestion, or whatever you please, by its public accountant or by any body having competent jurisdiction?—then the answer would be unqualifiedly no.

Is that the avenue down which we are trying to drive?

Q. I think so.

A. Are you conscious of the fact that with respect to the gas sales and purchase contracts following some of the transactions that were consummated in the early part of 1936, perhaps as of December 31, 1935, some $600,000-odd of the original $3,053,391.53 was written off to reserve?

[fol. 7093] Q. Is that shown in any of the exhibits which you have introduced in this case?

A. The effect is certainly shown. Whether it is specifically shown in any of the exhibits, I do not recall at the moment, but the fact is simply this, and I think I touched on it this morning, amortization of the gas sales and purchase contracts originated in the early years and continued at a rather slow pace, shall we say, up to the beginning of 1936 at the time of the Certificate of Amendment in which was a provision that we must amortize the residue of the gas sales and purchase contracts or the amount of $2,398,402.19 at the rate of $24,419.05 per month, the reserve previously created and the difference between the $2,398,

402.19 and the total amount of $3,053,391.53 was disposed of through appropriate entries at that time.

Q. Where is the effect of that reflected in the exhibits presented by you?

A. On page 2 of Exhibit 52 at line 40, column H.

Q. Does that complete your answer, Mr. Watkins?

A. Yes, sir.

Q. And I believe you referred to a figure of approximately $500,000. As I note the difference and I believe you also referred only to line 40, did you not?

A. I did refer to line 40.

Q. As I make that calculation, the difference between [fol. 7094] the figures shown in column H for 1936 and that shown in column G for 1935 is only $123,105.13, which appears to be the amount set forth at line 42 in column G.

Now, what or where is shown the difference between that $123,000-odd and the approximately $500,000 which you mentioned?

A. Counsel will observe opposite line 42 on page 2 of Exhibit No. 52 certain amounts of reserves in the years 1932 to 1935 or, specifically, columns D, E, F, and G, which were applicable, as has been previously stated, to the $3,053,391.53 amount.

[fol. 7095] Q. Are the amounts shown at Line 42—

A. (Interposing) I am sorry, I had not finished, if you please.

Q. I thought you had.

A. This reserve, or rather these reserves were first applied to the asset account and the residue was then written off and the witness is sorry he does not have before him at this moment an explanation of just how that entry was made.

I shall be very glad to get it and supply the information.

Q. Will you undertake to do so, please. A. Yes, sir.

Q. I personally am still somewhat confused with respect to the application of the amounts shown at Line 42 to the amounts shown at Line 40 on this Page 2 of Exhibit No. 48.

First, let me ask you this, whether or not the amounts shown at Line 42 for the respective years do not represent the balances as of December 31; of each of those years?

A. They do.

Q. Does the $123,105.13, as shown in Column G on Line 42, represent the balance as of December 31, 1935, which, apparently, from the amounts shown as remaining in the gas sales and purchase contracts asset account at December 31, 1936, was apparently applied to that account in the year [fol. 7096] 1936? I am still somewhat at a loss to understand your statement with respect to a figure of approximately $500,000 which was applied during this period. Maybe you can enlighten me further with respect to that.

A. I do not recall the $500,000 figure, sir, and the witness has volunteered to obtain the information as to what happened to the difference between the $600,000 odd item and the accumulated reserve of, I believe you said, $123,000 and until I can obtain such information, I cannot enlighten you further.

Q. Very well. We shall let it go at that.

Mr. Wheat: I think, Mr. Gorman, when you referred to a $500,000 figure, you were intending to refer to the $600,000 odd figure that the witness had previously mentioned.

Mr. Gorman: That apparently is correct.

Mr. Wheat: Yes.

By Mr. Gorman:

Q. Now, Mr. Watkins, if you will please refer to Line 40, Column H on this page which indicates that there was a balance at December 31, 1936, in the reserve for amortization of gas sales and purchase contracts of $295,731.30. Does that indicate to you that this amount was accrued during the year 1936 to this reserve account?

A. Accruals to this reserve account began as of January 1, 1936, at the rate of $24,419.05, continued constantly [fol. 7097] throughout that year and, for that matter, have continued constantly at that amount to this date and the $295,731.30, to which you have just referred; shown opposite Line No. 42 in Column H on Page 2 of Exhibit No. 52, must unquestionably represent the total accrual at the monthly rate heretofore stipulated for the year 1936.

Q. Yes.

A. Likewise, the totals shown on the same line on the same page of this same exhibit, in Column I, J, K, L and M represent the accumulation of such accruals at that rate at the dates represented by such columns.

Q. To what extent is the total appearing as of June 30, 1941, which is shown at Column M, Line 40, of Page 2 of this Exhibit No. 52 shown in Exhibit No. 48 at Line 1 of Page 1 of Exhibit 48, Column M, that is, in the gas plant account?

A. The net difference between the amounts carried at Line 40—we are speaking now of June 30, 1941, are we?

Q. Yes.

A. In Column M of Page 2 of Exhibit No. 52, the amount $1,611,657.30 shown opposite Line 42 in the same column is represented as a part of the $66,689,669.57 shown as gas plant at Line 1 of Page 1 of Exhibit No. 48 in Column M at June 30, 1941.

The reason for that treatment, Mr. Gorman, is simply [fol. 7098] this: Company officials and general counsel for the company have interpreted the language of the Certificate of Incorporation in such manner that we are precluded from applying the reserve, as created, to the asset account.

Otherwise, it would have likely been our practice to have taken these amounts as they were created each month or certainly, shall we say, at the end of each year and have applied them to the asset account.

We did that with respect to the amounts shown opposite Line 44 on Page 2 of Exhibit 52 or, said differently, both types of gas sales and purchase contracts are reflected opposite Line 1 in Exhibit No. 48 at the various dates for which information is there shown net.

However, in the one instance, shown broad on Exhibit 52 and, in the other instance, net.

Q. Can you also explain to us why the full amount assigned to these gas sales and purchase contracts, as reflected on Line 40 of Page 2 of Exhibit No. 52 is not, in toto, reflected in the gas plant account as an asset and the reserves also reflected on Page 2 of Exhibit No. 48 as a liability in conformity with the treatment given to other similar items in the balance sheet?

A. Mr. Gorman, there are no other similar items—

Q. (Interposing) Other similar reserves, then.

A. (Continuing) —in the balance sheet. These re- [fol. 7099] serves are quite a different "breed of pups"

from a reserve for depreciation. These amounts have been taken out of earnings to represent the gradual amortization of an asset.

It could very well be that they are improperly called "reserves".

In the instance of the gas sales and purchase contracts shown opposite Line 44 in Columns H, I, J, K, L and M of Page No. 2 of Exhibit No. 52, our accounting treatment has been to reduce the asset account by the amortization taken in each year.

As a matter of fact, my remembrance is that we do that monthly in our entries for that particular month and this witness has shown, by previous answers, that his preference with respect to the other gas sales and purchase contracts would have been to have accorded those the same treatment as new gas sales and purchase contracts.

Our interpretation and the interpretation of the company's general counsel of the requirements of its Certificate of Incorporation is such that we cannot give such treatment, that we must maintain this reserve until there has been created a total of $2,930,286.40 if the Certificate of Incorporation is not amended to cause different treatment in the meantime and, at that time, charge the asset account to the reserve account and wipe it out.

[fol. 7100] There is no significance, if you please, in the variation of treatment between these reserves and the method of showing other reserves in Exhibit No. 48. As a matter of fact, we thought we were being rather nice to the Commission in putting them up in this form. We thought it was informative and probably what the Commission wanted.

Q. By that do you mean that the balance sheet which you have presented here as Exhibit No. 48 is different from the balance sheet which you customarily prepare for other purposes?

A. Yes, it is as to form and, I believe we have covered that ground before. This will be at least the third time that this witness has stated, if you do not stop me, that our effort in the construction of the exhibits that were introduced through him was to conform them as nearly as

we [possible] could to what we understood the requirements of the Federal Power Commission were.

There is no restriction, as far as this witness knows, in any regulation that this company is subject to that it may not treat, in a balance sheet, these items or any other assets in any conventional form which may at the time be acceptable.

This witness has also stated heretofore in these proceedings that when securities are listed on the New York Stock Exchange the company listing such securities must make [fol. 7101] certain representations with regard to the manner in which it is going to continue to supply information contained in annual reports to its stockholders so, in reporting annually to our stockholders the amounts invested in gas plant, we have not even included this item of gas sales and purchase contracts. It had been set out entirely separate under a heading called "Intangibles" and the reserve accumulated at the end of that period has been deducted therefrom and the amount has been shown entirely separate.

Q. But Exhibit No. 48 is, is it not, a reflection of the accounts as shown on the books of the company?

A. It is a reflection of the accounts, not necessarily as the accounts are shown. There are, of course, in the records of any corporation most always far more accounts than can be included in the balance sheet.

Q. Well, of course, I was referring to controlling accounts and those, of course, are the ones which are shown on the balance sheets.

A. There may be groupings, even, Mr. Gorman, of controlling accounts. There is no effort on the part of Panhandle Eastern Pipe Line Company to actually restrict its records to such a point that one could go to the records and instantly pull off information in the exact form in which it is shown in Exhibit No. 48 or any other balance sheet that may be prepared for the company and from my experience, that is most always true in any organization that you en- [fol. 7102] counter.

Q. Now, Mr. Watkins, you have, from time to time, in connection with these gas sales and purchase contracts and

the amortization thereof, referred to provisions in the Certificate of Incorporation, as amended.

Will you please undertake to supply for us copies of the Certificate of Incorporation and the several amendments thereto?

A. Subject to your choice, I shall either do that or read the applicable portion of the Certificate of Incorporation, as amended, into the record.

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[fol. 7103] By Mr. Gorman:

Q. Now, Mr. Watkins, continuing our discussion of the amounts shown at Line 40 of page 2 of Exhibit No. 52 for gas sales and purchase contracts, do I understand your testimony of this morning correctly that you did not designate this $2,930,286.40, which is shown in this exhibit for this account, as either a valuation or as representing cost directly attributable to the acquisition of such contracts, is that correct, but is merely, at least to the extent of $2,398,402.19, an assignment which has been placed upon the books of the Panhandle Eastern Pipe Line Company? Is that a correct summation of your testimony this morning?

A. I am afraid not, sir.

Q. In what respects is it erroneous? Maybe we had better break that down into this fashion: Do I understand correctly that you do not represent this amount of $2,930,[fol. 7104] 286.40 as representing costs to either the Missouri-Kansas Company or the Panhandle Eastern Pipe Line Company of acquiring the various gas sales and purchase contracts represented by this amount?

A. This witness has made no such representation. As a matter of fact, the testimo . . given this morning shows that there was a portion of the $2,930,286.40, shown on Line 40 at Column M of page 2 of Exhibit No. 52, that came into existence perhaps, although I cannot state too categorically that that is the condition without reference to cost to either Panhandle Eastern or Missouri-Kansas. I do not believe there is any misunderstanding between us as to that.

You will recall this morning that we spoke of a difference, both between a portion of this amount between the books of Panhandle Eastern and Missouri-Kansas Pipe Line Company and, further, that we dealt with an amount

that was assigned, at the time that the original increases were made, to gas sales and purchase contracts over and above any amounts that the records might show at that time were costs.

Q. Yes.

A. Now, as to valuation, my statements have consistently been that the records cannot, in my conception of values, show valuations. Further, the testimony this morning will [fol. 7105] show that in my own estimation the effects of the receipt by Panhandle Eastern of whatever contracts for whatever rights it received among the assets donated by Missouri-Kansas Pipe Line Company, aggregating some $19,300,000 flowing from the instruments or the medium or whatever it may be that is now recorded on the books of the company as a part of the gas sales and purchase contracts, is substantially in excess of any amount shown by the books. I went further, of course, to state that I probably could not qualify as an authority to make such valuation.

Q. Now, Mr. Watkins, will you please refer to the report which was prepared by Mr. Steele, the Federal Trade Commission Examiner, and particularly to page 19 thereof, which is shown at page 1196 of Volume 84-I of the Federal Trade Commission reports which we have been discussing, and for the purpose of the record read from the report which you have, commencing on page 19, the paragraph which commences, "A summary of gas contracts as recorded on the books of Missouri-Kansas Pipe Line Company."

Do you find that?

A. I do.

Q. Will you please read that and the paragraph which follows such summary?

A. Without adopting the paragraph counsel has referred [fol. 7106] to as the witness' own testimony, the matter referred to follows:

"A summary of gas contracts as recorded on the books of Missouri-Kansas Pipe Line Company follows:

"Valuation of gas contracts acquired at organization of Missouri-Kansas Pipe Line Company . . $ 880,000

"Non-producing leaseholds held by Missouri-Kansas Pipe Line Company assigned to affiliated companies for certain gas purchase rights.....$ 225,000

"Legal fees.....$ 1,250

The sum of those three items is shown in this tabulation as.....$1,106,250

"Less:—"

Q. (Interposing) Mr. Watkins, what did you state the legal fees to be there? A. $1,250.

Q. Oh I understood you to say $550.

A. (Continuing)

"Less: Portion of gas contracts acquired at organization and credited to capital surplus written off.....$ 180,000"

There then remains an item shown here as [fol. 7107] "Ledger value of gas contracts as of August 31, 1930.....$ 926,250."

Q. Now, will you please read the paragraph which succeeds the summary you have just read?

A. "The value placed on gas contracts at the organization of Missouri Gas Pipe Line Company was credited to capital surplus in the amount of $180,000 and the remaining $700,000 was offset by the stated value of common stock issued to the organizers without cost to the latter. The non-producing leaseholds assigned to affiliated companies for certain purchase contracts were acquired in a similar manner from Messrs. Shippey, Maddin and Parish, who organized and controlled Missouri-Kansas Pipe Line Company.

"Consequently, it appears that except for legal fees the amount of gas contracts shown on the books of Missouri Gas Pipeline Company did not represent actual cost, but merely book figures reflected in the stated value of common stock issued," which ends the paragraph referred to.

Q. Thank you.

Now, have your investigations, which you indicated this morning you had made with respect to ths item, led you to any conclusions with respect to the statements which

[fol. 7108] you have just read from this report of the Federal Trade Commission?

A. They have not. I have been conscious of this statement, very naturally, since the report was first in draft form.

The practice followed by the Federal Trade Commission Examiners was to submit to the companies the draft of their report, the companies had the right to examine it, offer comments, criticism, and so forth, and Panhandle Eastern was accorded this privilege and did act upon it, but with the specific understanding that by so doing it was simply attempting to assist the Examiner in getting his facts correct, but was not in any manner whatsoever adopting the statements made by the Examiner.

Now, this witness' examination of these amounts, very naturally, has been circumscribed by data available to the company subsequent to the acquisition of this and the other items from Missouri-Kansas Pipe Line Company's capital contribution.

We have had no access to their books or records, so that speaking from my own personal standpoint I have no definite information upon which to either base a concurrence of the facts stated by Mr. Steele in the paragraph we have just read, nor to take issue with the statements stated therein.

[fol. 7109] Q. Do you know whether or not any attempt has been made by anyone connected with the Panhandle Eastern Company to obtain access to the books and records of the Missouri-Kansas Company for the purpose of examining them in so far as they touch upon the items which we are now discussing?

A. I made a trip to Chicago during the time Missouri-Kansas Pipe Line Company was in receivership for the particular purpose of trying to eliminate some difference between the receivers and Panhandle Eastern Pipe Line Company as to amounts that were in controversy of what we knew at the time as the Missouri-Kansas open account. This was an account that came into being about the time the properties we have referred to many times in these proceedings were received from Missouri-Kansas and that had for its purpose the receipt of charges and credits to

Missouri-Kansas arising through the transition of the assets or liabilities from their records to the records of Panhandle Eastern.

My remembrance at the moment is that the total amount involved there was some $40,000, which later, by the way, Panhandle Eastern absorbed.

When discussing these items with Mr. C. R. Phillips, the Chicago receiver of Missouri-Kansas, and his assistant—there may have been one assistant—my very distinct remembrance is that the books and records of Missouri-
[fol. 7110] Kansas at that time were in a very disturbed state of affairs. I remember rather vividly walking into some storerooms in the basement of the building in which they had their office and being terribly shocked at the condition of the records lodged there. Without any idea whatsoever of casting any disparaging remarks in any direction, I recall that some offhand statement was made, "This is what the Federal Trade boys do to your records."

It was very difficult to ascertain any facts with respect to the items and there were a great number of them, both charges and credits that made up the balance of some $40,000, so that the purpose of my trip there was a complete bust.

[fol. 7111] Now, subsequent to that time in the preparation of registration statements and for other purposes we have requested certain information of the officials of Missouri-Kansas Pipe Line Company or of the receivers. Not only that, but the public accounting firm, who has made the audits of Panhandle Eastern Pipeline Company's records and the records of its subsidiaries, happened to have been the accounting firm that was employed by Missouri-Kansas Pipeline Company for some of its affairs prior to September 30, 1930 and they may have done some work for them subsequent to that time, and they made inquiry, I believe, and possibly searched some of their working papers for whatever items of any nature Panhandle Eastern had occasion to try to examine with respect to the books and records of Missouri-Kansas.

Specifically as to the items in question here, we have not made a great amount of investigation for the very reason that it did not seem to us over the period of years, as I now

recall, that any demands might have been made during those years, had any great importance to what the amounts were on the records of Missouri-Kansas Pipeline Company. There is a very definite beginning of the amounts, as to Panhandle Eastern Pipeline Company's records, commencing with September, 1930, which were, as we have heretofore spoken of today, concurred in by the Board of Directors at [fol. 7112] a meeting held sometime in February, 1931.

We are in the process, as you know, Mr. Gorman, of making a response to this Commission's Order No. 73 with respect to original cost. We hope to be able to say to the Commission that these items represent cost to the companies first devoting them to public service. I can not assure you that that fact will be the final outcome of our preparation. It might be noted here that the period in which we were to make a report under the Commission's Order No. 73 has been extended to March 31, 1942, although our request was for an extension beyond that date and this witness is at this moment very much of the opinion that it will be totally impossible to meet the March 31, 1942 date.

I hope that that rather long statement was responsive to the question you asked.

Q. Yes, I think we finally got the answer.

Well, have your studies of this original cost statement to be submitted to the Commission included, as yet, any consideration of the items we are now discussing?

A. In a general way only.

Q. In other words, you have not yet completed your study with respect to such items?

A. Well, we have not yet completed our study with respect to original cost as a whole and I should like not to be forced to make any statements with respect to original [fol. 7113] cost as we may finally conclude from our studies at this time.

Q. So that as of the present time you do not consider yourself in a position to state what portion, if any, of this $2,930,286.40 represents cost?

A. I think that is correct.

Q. Now, the items which were referred to and the statements which you read from the Federal Trade Commission

report are those same items, are they not, which were subsequently—in view of your previous statements I find it difficult to refer to that in any manner except that of an assignment of $2,398,402.19?

The Witness: May I have that question, please?

(Pending question read by reporter.)

The Witness: They are.

By Mr. Gorman:

Q. And that amount, of course, of $2,000,000 odd is entered on the books of your company as a contribution of capital from Missouri-Kansas, is that correct?

A. The effect of the entry on the credit side of the ledger took that position, yes.

Q. That is what I am speaking of.

Now, in addition to this amount of $2,398,402.19, is there not a further entry on the books of the Panhandle Eastern Pipeline Company in the amount of $642,286.30, to which I believe you have previously made reference in your state-
[fol. 7114] ments?

A. That amount I do not believe constituted one single entry. There were, and the record of this morning's proceedings will show there were, several items making up that amount.

Q. Yes, I so understood. Now, let us consider each of those several entries. A. All right, sir.

Q. Is the first such entry, in the amount of $556,000, representing notes issued for purchase of Missouri-Kansas Pipe Line Company's stock, used in connection with obtaining gas sales contracts?

A. My analysis of the account shows the $556,000 in two items.

Q. One of which was $420,000 and the other was $136,000? A. That is correct.

Q. And is your analysis in conformity with the books of your company, that is to say, is it set up there as two amounts or one amount?

A. Those two amounts, plus several other amounts, made a part of the record this morning, as well as the $2,398,402.19, to which we have made reference a number of times, constitute a portion of the entries in one account,

which, for convenience, the company thinks of as gas sales [fol. 7115] and purchase contracts, old. It is not so characterized, but the residue of all of those entries is shown line 40 at page 2 of Exhibit No. 52, in column M.

Q. Now, does this first item of $420,000 represent a transaction in May of 1930 whereby five year, 6 per cent bearer notes were given in payment for 15,000 shares of common stock of Missouri-Kansas Pipe Line Company at $28 per share for use in connection with obtaining gas sales contracts with Illinois Power & Light Corporation and Missouri Power & Light Company? A. It does.

Q. And were these notes issued persuant to authorization of the Board of Directors of the Panhandle Eastern Pipe Line Company at a meeting held on May 23, 1930?

A. They were. I believe, although I can not find it at this moment, I have an excerpt from the minutes of that meeting.

Q. May I invite your attention, Mr. Watkins, to page 41 of the Federal Trade Commission report prepared by Mr. Steele and ask you whether or not that is the excerpt of the minutes of which you were speaking?

A. Well, obviously, you would not expect me to remember the exact language from the minutes, but the excerpt shown here on page 41 does appear to be, as best I can recall, the exact precise language taken from the minutes of a meeting of the Board of Directors of Pan- [fol. 7116] handle Eastern Pipe Line Company held May 23, 1930.

Q. Yes.

With the Examiner's permission, I shall propose to read into the record this excerpt to which we have just been making reference with the understanding that Mr. Watkins may consult the official minutes of the company and make such corrections as may be necessary to conform thereto.

Trial Examiner: You may proceed.

By Mr. Gorman:

Q. The excerpt which I propose to read appears at page 1206 of Volume 84-1 of Federal Trade Commission report, which is the same as page 41 of the report prepared by Mr. Steele to which I made reference a moment ago and reads as follows:

"The president stated that under date of May 19, 1930 the company had entered into contracts with Illinois Power & Light Corporation and Missouri Power & Light Company under the terms of which said companies had agreed to purchase natural gas from this company for the purpose of supplying the gas requirements of Decatur, Danville, Urbana, Champaign, Jacksonville and Clinton, Illinois, and Jefferson City, Boonville, Excelsior Springs, Moberly, and Mexico, Missouri and that in connection with the obtaining of said contracts commitments had been made requiring [fol. 7117] 15,000 shares of common stock of Missouri-Kansas Pipe Line Company.

"Thereupon, upon motion made, seconded and carried, the following resolution was unanimously adopted;

"'Resolved, that the officers of this company be, and they are hereby, authorized and empowered to purchase from Frank P. Parish and Company 15,000 shares of common stock of Missouri-Kansas Pipe Line Company, at the price of $28 per share, and to give to said Frank P. Parish and Company in payment of said purchase price the promissory note of this company dated May 23, 1930 in the sum of $420,000, payable five years after date, bearing interest at the rate of 6 per cent per annum; and be it further

"'Resolved, that the president of this company be, and he is hereby, authorized and empowered to make such use of said 15,000 shares of stock of Missouri-Kansas Pipe Line Company so purchased as he may deem advisable and in the best interests of the company.'"

Mr. Watkins, do you know whether or not such transaction was actually consummated, that is, the purchase of 15,000 shares of common stock of Missouri-Kansas?

A. I have no definite information with respect to either the purchase of that stock or what may have been done with it if it was purchased. My belief is that it was purchased and that some distribution was made of the stocks so pur- [fol. 7118] chased. As a matter of fact, I believe throughout the history of the company we have come across divergent views in certain instances as to what happened with that stock and whether it was what should have happened to it. As far as the company is concerned, here is the record.

The notes were issued for the purpose the Board authorized them to be issued. They were eventually paid. I presume the stock was purchased; I also assume that it was distributed. Further than that, I have no specific knowledge and I am sure you do not want any hearsay from me concerning the transaction.

Q. No. Do your statements indicate, Mr. Watkins, or is it your intention to so indicate that the records of the Panhandle Company do not show whether or not the stock was actually acquired and, also, do not show what disposition was made of it, if it was acquired?

A. Mr. Gorman, this witness has never been able to find in the record of the company any specific matter of the nature that he could answer your question other than that it would appear that the stock was purchased and distributed.

There have been responses, I believe, in some litigation, the exact details of which this witness is not too familiar with, which would tend to indicate that some distribution [fol. 7119] was made. We have referred a number of times to Mr. Steele's report and I believe Mr. Steele purports to have some information as to what disposition was made of the stock. Whether that squares with the facts or not, frankly, I do not know.

[fol. 7120] Q. Do the records of your company show that some time subsequent to May, 1930, payment was made by the Panhandle Eastern Pipe Line Company upon the note which was issued for the purchase of these 15,000 shares of Missouri-Kansas stock?

A. I am quite positive that those notes were paid. At this moment I do not know when nor how nor to whom, but, obviously, the obligation has been discharged.

Q. Yes. Well, then, may it not be properly inferred that in so far as the books and records of Panhandle Eastern Pipe Line Company are concerned, that the only data which they would have respecting this transaction would be the minute which we have read into the record and possibly the record of the issuance of the note and, subsequently, the payment of the note?

A. So far as this witness is concerned, Mr. Gorman, I believe we can go a step or so further than that. Prior to September 30, 1930, Panhandle Eastern Pipe Line Company

was wholly-owned by Missouri-Kansas Pipe Line Company. The two items which we have just been referring to came as a result of action taken by the Board on May 23, 1930, and then there was an entry made on June 30, 1930, with respect to $136,000 and it could very well be that there is in existence somewhere and intended for Panhandle Eastern Pipe Line Company's records an accounting to it of the [fol. 7121] disposition of the shares we purchased.

If you understand what I am trying to say, it is simply this: That Missouri-Kansas Pipe Line Company may have carried away from the offices of Panhandle Eastern Pipe Line Company after September 17, 1930, or subsequent to the closing date of the matters covered by this September 17, 1930, contract, as amended, some of the material that rightfully belonged to the record of Panhandle Eastern. It would be very foolish for anyone, I believe, to state that there never was such an accounting, although, as I started to indicate, my feeling is that I should go so far as to tell you that I have never found anything in the records of Panhandle Eastern that shows disposition other than, perchance, it be some statement made by some witness in the record of some proceeding or some deposition or correspondence of some general nature, the exact form of which I would not recall at this moment nor would I definitely recall whether I have ever seen any such statements.

That gives you a rather definite answer, doesn't it?

Q. Yes, I think so. Of course, I assume you are referring to statements and testimony contained in this volume of the Federal Trade Commission reports which we have mentioned and other volumes of reports prepared for the same purpose?

[fol. 7122] A. Oh, anywhere they might chance to be.

Q. Yes. Well, have you or has any other member of the staff of the company ever undertaken to ascertain the complete facts with respect to this transaction?

A. There was no occasion for us to make such an ascertainment, Mr. Gorman.

Q. Well, I merely inquired whether or not there had been such an investigation made.

A. I can only speak for myself. The answer is "No."

Q. Then, in so far as you know with respect to others, do you know whether they have made any such study?

A. I am of the opinion that somewhere among the many discussions that may have taken place between myself and others connected with Panhandle Eastern Pipe Line Company during the past ten years that I have had some statements made to me that some one of those individuals, however many or few there may have been, tried to learn more about these two items than were shown by the cold facts and figures in the books and records.

Q. You do not know who that person might have been or what the result of such a search may have produced?

A. I am afraid you are asking me to draw entirely too much on my memory to state positively whether there was even such a circumstance, although I seem to remember [fol. 7123] that we just did not pass it over lightly. Our custom is not to do that. We have had so many occasions upon which we have diligently sought to know a little bit more about the gas sales and purchase contracts than the records would show us, that we must have pursued and exhausted all reasonable courses and avenues open to us to learn something more about it.

Q. You refer to a note in the amount of $136,000. Was that a similar transaction whereby the company purchased 4,000 shares of common stock of Missouri-Kansas Pipe Line Company, also from Frank P. Parish & Company, and for similar reasons?

A. It was for similar reasons. The transactions may not have been exactly similar due to the fact that it appears that there was no specific action taken by the Board of Directors with respect to the latter amount. There may have been some informal discussions at some meeting of the Board. My memory at the moment is, however, that it was not authorized by the Board in the same manner as the purchase of the 15,000 shares represented by the $420,000 item.

Q. You are, of course, familiar with the statements contained in the report of Mr. Steele of the Federal Trade Commission to the effect that the majority of these 19,000 shares of stock we have been discussing were distributed to [fol. 7124] Frank P. Parish and to W. G. McGuire, are you not?

A. I observe that Mr. Steele states that on page No. 41. I heard of such a distribution before. I have, also, heard —and this is pure hearsay—that there may have been

some difference between those two gentlemen as to who got what and why.

Q. Yes, but you, I assume, according to your previous testimony, know no facts with respect to this distribution?

A. I do not, and from the standpoint of the controversies that I seem to remember I am rather grateful of that fact.

Q. Mr. Parish, according to your knowledge, was president of the Missouri-Kansas Pipe Line Company, and also president of the Panhandle Eastern Pipe Line Company and, also president of the Frank P. Parish & Company in 1930, at the time of these transactions?

A. I have no knowledge, whatever, of Frank P. Parish & Company other than of the nature of one who had acquired such knowledge by hearsay, newspapers, or otherwise. I do not recall at this moment of having any knowledge whatever, specifically, of the officers of Frank P. Parish & Company.

I would assume, however, that the name would indicate [fol. 7125] something and it may have been possible that Mr. Parish was president of the company.

As to Missouri-Kansas, I do not believe there is any question, is there, that Mr. Parish was not the president of that company and, certainly, there cannot be any question that Mr. Parish was not president at one time of Panhandle Eastern Pipe Line Company. Whether all of those facts were coincident is something, sir, I believe you will have to supply me with.

Q. Can you tell us, Mr. Watkins, whether the records of your company show that as of May 23, 1930, or some date prior thereto, the Panhandle Eastern Pipe Line Company had actually entered into contracts with the Illinois Power & Light Corporation and the Missouri Power & Light Company for the sale by Panhandle and the purchase by the other companies of natural gas?

Mr. Wheat: What companies were those?

Mr. Gorman: Illinois Power & Light and Missouri Power & Light. Those are the two companies which were referred to in the minute of the Board of Directors, May 23, 1930, which has been read into the record?

The Witness: Mr. Gofman, if I may, I would like to answer your question this way: I recall very vividly at the time I first became connected with Panhandle Eastern Pipe Line Company, which was the 17th day of November, [fol. 7126] 1931, that the company did have contracts with Missouri Power & Light Company and with the Illinois Power & Light Company. Without refreshing my memory by reference to our documental files, I should say that Panhandle Eastern Pipe Line Company or Panhandle Illinois Pipe Line Company, a subsidiary since dissolved, both or either actually made deliveries to those companies under such contracts and have continued to makes deliveries continuously thereafter, either under the original contracts and some amendment thereof, some extension thereof, some renewal thereof, or some rate schedule, which companies were required to or found it necessary to file either with the Public Service Commission of the State of Missouri, or with the Illinois Commerce Commission.

The total sales to Missouri Power & Light Company from September 1, 1930, to December 31, 1941, arising either from contracts acquired by Panhandle Eastern and subsidiary companies directly or through Missouri-Kansas Pipe Line Company amounted to $3,742,445 and to Illinois Power & Light Company, the successor company—correction, please, the name of which has since been changed to Illinois-Iowa Power Company—on May 1, 1937, the sales were $3,385,922.92 for the same period. During that period Panhandle Eastern or Illinois Natural Gas Company, likewise, sold the Keystone Steel & Wire Company $2,373,[fol. 7127] 964.46, the Caterpillar Tractor Company, $285,076.94, and the R. Herschel Manufacturing Company $41,799.13, or a total of these five organizations of $9,829,208.45.

Q. Are you finished? A. I believe I am, sir.

Q. Despite the length and breadth of your answer, I do not believe you have answered my question.

Will you read that back?

(Question read as follows: "Can you tell us, Mr. Watkins, whether the records of your company show that as of May 23, 1930, or some date prior thereto, the Panhandle Eastern Pipe Line Company had actually entered into contracts with the Illinois Power & Light Corporation and

the Missouri Power & Light Company for the sale by Panhandle and the purchase by the other companies of natural gas?")

By Mr. Gorman:

Q. Do you understand my question, Mr. Watkins?

A. Pardon me, I was trying to find something so that I could answer your question definitely. May I have the opportunity to continue my search?

Q. Yes, indeed. A. Now, may I have the question?

(Question re-read.)

[fol. 7128] The Witness: I am quite positive Panhandle Eastern had entered into such contracts. If you care to have me do so, I shall obtain the dates upon which the contracts, if there be any, came into existence, whether it be prior to May 23, 1930, or subsequent thereto. One of the reasons why I am positive there were such contracts as that when I appeared on the scene in 1931 Panhandle Eastern was involved in a proceeding of some sort before the Illinois Commerce Commission or, rather, I should say, Panhandle Illinois Pipe Line Company was involved as a result of some of the contracts for the sale of gas for distribution in the State of Illinois. I remember that quite distinctly.

[fol. 7129] Q. Had you completed your answer?

A. I believe so, yes, sir.

Q. Was that controversy, to which you are now referring, one involving a proposal of certain towns in Illinois to change over from manufactured to natural gas, which was a proceeding before the Illinois Commerce Commission?

A. It was before the Illinois Commerce Commission. There were change-over requirements involved, the exact file or docket number I could not supply.

Q. And it is your present recollection that the contracts were enter into with these companies before such controversy arose?

A. Yes, it is.

Q. Well you please undertake, Mr. Watkins, to furnish us with the dates of the first contracts with these companies or their subsidiaries if the sales were actually made to subsidiary companies and if you are able to do so furnish

us with at least one copy of such contracts? I might state if it should perchance happen that any of these contracts had been previously filed with the Federal Power Commission, if you will just refer us to the title thereof, we shall endeavor to locate it in the files of the Commission without your furnishing it.

A. I should be very glad to do that, sir.

Q. Now, in the course of a statement a few minutes [fol. 7130] ago in response to the previous question, you referred to certain sales, both in volume, I believe, and dollar value, to certain companies other than the Illinois Power & Light Company and the Missouri Power & Light Company.

A. That is correct, except there was no reference to volume.

Q. Yes. Well, were those other companies to which you made reference subsidiaries of either the Illinois corporation and the Missouri company?

A. I believe they were not.

Q. Well, what was the purport of your statement with respect to sales made to these other companies?

A. If you will recall, this morning reference was made to those five companies in previous testimony and while having the memorandum in front of me at the time I was giving you the data with respect to Missouri Power & Light and Illinois Power & Light, I simply volunteered the remaining information.

Q. Well, now, were those sales made pursuant to contracts which were acquired from the Missouri-Kansas Pipe Line Company?

A. Either pursuant to such contracts, renewals, amendments thereof, modifications, or whatever you do with a contract or rate schedule that subsequently replaces the contract, there were sales, the origin of which can very [fol. 7131] definitely be traced back to the right Panhandle-Eastern acquired from Missouri-Kansas Pipe Line Company by virtue of certain of the assets, constituting a part of the $19,300,000 donated September 17, 1930.

Q. But they were not related to the—

A. (Interposing) Two items of $420,000 and $136,000, no.

Q. Now, were these contracts which we have just been discussing purported justification for the payments in 1930 to the American Coke & Chemical Contracting Company of $75,000 for securing such contracts?

A. If I understand your question correctly, sir—

Q. (interposing) Let me put it this way.

A. If you will pardon me, please.

Q. Yes, indeed.

A. If I understand your question correctly, sir, and I am rather careful with Panhandle Eastern Pipe Line Company's money, there could be no hesitancy whatever on my part of recommending an expenditure of $75,000 which would produce over the period from September 1, 1930 to December 31, 1940 sales from Keystone Steel & Wire Company and Caterpillar Tractor Company and the R. Hersehel Manufacturing Company, aggregating, respectively, $2,373,964.56, $285,076.94 and $41,799.13.

. . . . . .

[fol. 7132] Q. Now, were these contracts which we have just been discussing purported justification for the payments in 1930 to the American Coke & Chemical Contracting Company of $75,000 for securing such contracts?

The Witness: There is slight confusion in the witness' mind, Mr. Gorman, whether or not your question was directed to the $420,000 and the $136,000 items, or whether it was directed to the $75,000 item, because the companies involved in the first two of those items were different from [fol. 7133] the companies that you mentioned with respect to the $75,000.

. . . . . .

By Mr. Gorman:

Q. Let us put it this way, Mr. Watkins, and I think we can dispose of it more readily. Do the books of the Panhandle Eastern Pipe Line Company show a payment of $75,000 to the American Coke & Chemical Contracting Company as payment for their services for securing certain gas contracts?

A. They do, and that facts was fully testified to by this witness this morning.

Q. Yes. And those contracts, in which the American Coke & Chemical Contracting Company was purported

to have rendered assistance in the acquisition of, were contracts with the Keystone Steel & Wire Company, the Peoria Malleable Castings Company, the Caterpillar Tractor Company and R. Herschel Manufacturing Company, all of Peoria, Illinois. Is that correct?

A. I do not know whether all of the companies were of Peoria, Illinois, or not. I will accept your statement as to that. Otherwise, it is correct and the amounts that I have previously testified are the amounts that we received from such sales for the period from September 1, 1930 to December 31, 1940.

Q. Thank you.

. . . . . .

[fol. 7134] Q. Mr. Watkins, at the time of the recess we had just mentioned certain payments to the American Coke & Chemical Contracting Company for its assistance in securing gas sales contracts with the Keystone Steel & Wire Company, Peoria Malleable Castings Company, the Caterpillar Tractor Company and the R. Herschel Manufacturing Company.

Did the Panhandle Eastern Pipe Line Company subsequently enter into contracts or a contract with the Peoria Malleable Castings Company?

A. I do not know.

Q. I believe you have mentioned sales figures concerning sales made under contract to the other companies I have just mentioned, have you not?

A. I have.

Q. Do you know, or do your notes show the date of such contracts with these companies?

A. They do not and, as the witness has tried to explain throughout the testimony today, it may very well be that if there were contracts with the companies to which counsel refers at or about the date of payment to American Coke & Chemical Contracting Company that subsequent deliveries were made in pursuance to such contracts, per se. [fol. 7135] There may have been changes brought about by reason of differences and circumstances or conditions or requirements of the Illinois Commerce Commission, but, nevertheless, sales were made to those companies and came about by reason of the activity of the company to whom

the payment of $75,000 was made, not wholly because of the activity of that company but through the assistance it rendered.

Q. Can you state, generally, what assistance was given by the American Company in securing these contracts? First, let me ask you this, whether or not you know if any of these companies which subsequently became purchasers of the Panhandle Company were subsidiaries or affiliates of the American Coke & Chemical Contracting Company?

A. I do not.

Q. Do you know what assistance it did give in securing contracts from these companies?

A. I would simply assume, Mr. Gorman, that it must have given some substantial assistance, otherwise the payment of $75,000 would not have been made. Actually the exact assistance rendered is something about which I know nothing.

Q. Now, will you undertake, Mr. Watkins, to obtain for us the dates upon which the Panhandle Eastern Pipe Line Company entered into contracts with the Keystone Steel & Wire Company, the Caterpillar Tractor Company and the R. Herschel Manufacturing Company, and also, furnish [fol. 7136] us with copies of such original contracts?

A. I will undertake so to do. May I state, however, that we have throughout the afternoon been referring to Panhandle Eastern and contracts with certain organizations, some of which may be in the State of Illinois? Those contracts may have not been between Panhandle Eastern and the purchasing company. The sale may have been through a subsidiary of Panhandle Eastern. The contract may have been with a subsidiary of Panhandle Eastern or the contracts may have been with the purchasing company whether it was a distributing organization or an industrial user and Missouri-Kansas Pipe Line Company, so that when we speak broadly of Panhandle Eastern it is a witness' assumption that we are talking about the original contract with whomever it may have been, although it came to Panhandle Eastern by right of succession, if that is a proper way to put it.

Do we understand each other?

Q. Yes, that may be so understood. Of course, it is my understanding, also, that since these amounts are set up on the books of the Panhandle Eastern Pipe Line Company itself, it would be some subsidiary other than the Illinois Natural Gas Company. Is that correct?

A. Illinois Natural Gas Company did not come into existence until the early part of 1938, I believe.

Q. So that these contracts could not, in any way, af- [fol. 7137] fect that subsidiary of the Panhandle Company?

A. Oh, yes, they could.

Q. You mean as of delivery?

A. The effect of the delivery subsequent to the time Illinois Natural acquired the properties of Panhandle Illinois Pipe Line Company is a most vital part of Illinois Natural's affairs.

[fol. 7138] Q. Well, now, let us see if we can understand one another a little more. Do you recall approximately when the Panhandle Illinois Company was organized?

A. August 16, 1930, and it was dissolved July 30, 1938. Illinois Natural Gas Company was organized January 19, 1938, and has not yet been dissolved.

Q. Now, any contracts and any payments made in connection therewith, to which the Illinois Natural Gas Company has succeeded to the rights of the Panhandle Illinois Company, would be reflected on the books of those two companies, would they not?

A. That is correct, however, I do not believe there were any charged on the books of either of those companies of the character that Panhandle Eastern carries in its gas sales and purchase contracts. The $75,000 item, concerning which we have been discussing, was registered on the books of Panhandle Eastern Pipe Line Company, although the benefit flowed directly to a subsidiary.

Q. Yes.

A. The reason for that, sir, if I may supply it, if you want it, is due to the fact that originally it was intended that Panhandle Eastern would have all the facilities from the producing fields to its present terminus at or on the Illinois-Indiana State line. There were reasons when the construction work was undertaken that made it necessary [fol. 7139] to bring about the corporate existence of a subsidiary to own and operate the properties and facilities

located within the State of Illinois. Subsequent to those requirements, it has been possible for Panhandle Eastern Pipe Line Company to acquire the main transmission system in the State of Illinois represented by the line the witness is pointing to on Exhibit 15 placed here on the wall at the hearing room.

At that time, which was as of June 30, 1938, I believe, Illinois Natural Gas Company acquired the lateral lines used to serve the customers in the State of Illinois. A recent decision of the Supreme Court may make it possible for Panhandle Eastern to acquire, through the dissolution of Illinois Natural Gas Company, all of the facilities that that subsidiary owns in the State of Illinois.

Now, we are dealing with a consolidated picture here, so that if we inadvertently speak of Panhandle Eastern having made disbursements with respect to something that Panhandle Illinois or Illinois Natural, or any of its other subsidiaries received the benefit of, it does not change the consolidated picture, so far as the whole is concerned. Perhaps we should not worry ourselves about being too precise.

Mr. Culton: Panhandle Illinois was a 100 per cent subsidiary of Panhandle Eastern?

[fol. 7140] The Witness: It was, sir, and the date of its incorporation and the date of its dissolution, as well as the date of incorporation of Illinois Natural, is shown on page 1 of Exhibit No. 112 in this proceeding.

Mr. Culton: And Illinois Natural, likewise, is a 100 per cent subsidiary?

The Witness: That is correct, sir.

Mr. Culton: Pardon me for interrupting, but I wanted that to appear.

Mr. Gorman: Yes.

By Mr. Gorman:

Q. As a point of clarification, only, Mr. Watkins, as a matter of fact, the entire amount which has been set up as representing amounts allocable to gas sales and purchase contracts has been contained solely in the books of

the Panhandle Eastern Pipe Line Company, has it not, despite the fact that such contracts may have been in the past or possibly even in the present made with a subsidiary of the company?

A. I believe that is quite true. There may, however, be this situation, Mr. Gorman:

If you recall during the morning session the witness testified that there were certain office payroll general expenses, attorney fees, and so forth, aggregating some $12,000-odd that formed a part of the $3,053,391.53, to [fol. 7141] which some reference was made this morning, that may have come into existence in one of the subsidiaries, but it found its way into the Panhandle Eastern Pipe Line Company's records, and I do not recall at this moment of any items that now are reflected in records of or books of account of Illinois Natural Gas Company of that nature.

Q. Now, I believe you have previously referred to an item entered on the books of the company under this account in the amount of $1,000, which, as I recall your testimony, was a premium paid for a contract bond in connection with the gas sales contract with the Keystone Steel & Wire Company.

A. I have.

Q. And that, I assume, represents wholly and entirely the actual premium paid on such bond. Is that correct?

A. It does.

Q. Now, do you, also, have an entry on your books in the amount of $9,500 representing payment to agents for fees and expenses in connection with obtaining gas sales contracts?

A. We do.

Q. Can you tell us, generally, what that item represents?

A. That payment was likewise, made to American [fol. 7142] Coke & Chemical Contracting Company for engineering fees and/or expenses incurred by that company in connection with the procurement of gas sales contracts with Keystone Steel & Wire Company, Peoria Malleable Castings Company, Caterpillar Tractor Company, and R. Herschel Manufacturing Company.

Q. In other words, that was for the same purposes that the $75,000, to which we have previously made reference, was paid?

A. Yes, that is correct, except that in the one instance one apparently was in discharge of an obligation for services rendered while the smaller amount or $9,500 was for expenses incurred in connection with the rendition of such services.

Q. And is there, also, an entry on the books of the Panhandle Eastern Pipe Line Company in the amount of $786.30?

A. As a matter of fact, there are three entries making up the total of $786.30, all of which were in settlement of traveling or other expenses incurred by Mr. Frank P. Parish.

Q. And those, I correctly assume, do I not, represent actual moneys expended for such purposes?

A. As far as I know, they do.

Q. Now, all of the items we have heretofore discussed [fol. 7143] in detail were entered on the books of the company prior to December 31, 1930, were they not?

A. Well, we have discussed a lot of items, Mr. Gorman.

Q. Well, shall I sum it up this way, the item of $556,000 the item of $75,000, the item of $1,000, the item of $9,500, the item of $786.30 and the item of $2,398,402.19—

A. (Interposing) Were entered on the books of Panhandle Eastern Pipe Line Company prior to what date, sir?

Q. December 31, 1930.

A. That is correct.

Q. And do you, also, have an entry some time during the year 1931, in the amount of $11,142.12?

A. There were several entries made during the year of 1931 and 1932, the total of which is $12,703.04.

Q. Yes. Were those all made for the same purpose?

A. The same general purpose.

Q. Yes.

A. Not with respect to the procurement of any of the contracts we have specifically referred to.

Q. And what were those payments for in a general way?

A. Well, they were in connection with the procurement [fol. 7144] of any contracts, gas sales or gas purchases contracts procured during that interval by such of the

company's employees whose salaries and expenses were at that time allotted to this particular work and it consisted, generally, as we have heretofore stated, of payroll, traveling expenses and a very small item I observe here of attorney fees.

Q. And with the exception of the attorney's fee, a small item which you mentioned just now, those are what might be termed generally promotional expenses incurred by members of the staff?

A. I think that is correct. Now, in connection with that, I should like to call attention, again, to this fact, that is, as you know, prior to March 31, 1932, although we maintained records with respect to income and expenses, the result of the maintenance of those records is now reflected in the Gas Plant Accounts for the reason that as of March 31, 1932, any net income or net losses were capitalized.

We understand that, do we not?

Q. Yes. Now, the total of all of these items represents, does it not, the aggregate of $3,053,391.53, which is shown under various columns on Line 40 of page 2 of Exhibit No. 52?

A. It does.

Q. And, as you have previously indicated, there was [fol. 7145] debited to this reserve in 1936, an amount of $123,105.13 representing the application of reserves accumulated against this account as of that date?

A. Not debited to it, Mr. Gorman, but credited to it.

Q. I beg your pardon.

A. It was applied to the total. That is the substance of what we are getting at here.

Q. And that, of course, resulted in the total of $2,930,286.40, which is shown at Line 40 of Exhibit No. 52, page 2, in Column M, and the succeeding columns shown thereon?

A. If the reduction of the amount $3,053,391.53 by the $123,000-odd item leaves that figure, yes.

Q. Now, all of these expenses and charges, other charges, are related, are they not, to those contracts only which are said to have been acquired from the Missouri-Kansas Pipe Line Company as of August 31, 1930?

A. At the origin of the account they were related to such contracts. I have tried to explain during the course

of the testimony today that the contracts we may have received at the time the account originated may not be the exact instrument.

Q. Yes, it may have been modified or changed or revised wholly?

[fol. 7146] A. Or service may now be being rendered under a rate schedule.

Q. Yes.

A. With that explanation, the answer to your question is yes.

Q. Now, these items have no relation whatsoever to the amount of $553,992.48, which is shown at page 966 of Exhibit No. 39 for identification, and at page 3 of Exhibit 153, for identification, do they?

A. Mr. Gorman, I am afraid that I cannot make too definite statements with respect to page 966 of Exhibit No. 39, because I am not responsible for that exhibit. The total shown there in one instance of $553,992.48 apparently represents the same items that are a part and parcel of the three pages of Exhibit No. 153.

Q. Yes. Of course, an examination and comparison will readily disclose that, but in your examination of this morning, and I assume you have previously examined page 966 of Exhibit No. 39, it is your impression, is it not, that they do represent the same items?

A. To the extent that the amounts are the same, that is, the total amounts are the same, I think that is quite proper.

[fol. 7147] Q. By that you mean the aggregate total as distinguished from the individual payments to the several utility companies?

A. Not necessarily, no. My remembrance goes to the fact that page 966 of Exhibit 39 has some $5,000,000 odd.

Q. Well, I am speaking now only of the total and components of such total which are shown at line 30 and the lines above line 30 on page 966 of Exhibit 39.

A. With that correction, sir, they are identical.

Q. Now, will you please refer to Exhibit 153, which is entitled "A Statement of Cost of Business Development, Period from April 1, 1932 to June 30, 1941," particularly to lines 1, 2, and 3 on page 1 of this exhibit?

A. I am ready, sir.

Q. I note that as of August 7, 1936 a cash payment of $87,500 was made to one Frank P. Parish and on the same date a cash payment of $12,500 was made to one Dupuy G. Warrick. Are you familiar with the circumstances which led to such payments?

A. I am.

Q. Will you, for the purposes of the record, give us in some detail the circumstances which led to the payments which I have just mentioned?

. . . . . .

A. On or about June 20, 1935, Mr. Frank T. Parish [fol. 7148] came to the company and stated that he had been in Detroit with his lawyer for a considerable time, that he was satisfied he could obtain the contract for the supply of Panhandle gas to the City of Detroit, that it was expensive for him and his lawyer to travel back and forth to Detroit, and live there, and asked if the company would be willing to pay this expense. He was told that the company would give him $1,000 a month for four months and at the end of that time if the situation did not warrant, after a review, the company's feeling that sufficient progress has been made to justify a continuance of the advances, that such advances would cease.

On or about October 15, 1935, the Directors of Panhandle Eastern in an informal discussion decided to continue the arrangements made with Mr. Parish on or about June 20, 1935, temporarily, at the discretion of the officers. After a contract had been obtained with the Detroit City Gas Company,—and there is no question I presume that we are referring to what is now known as Michigan Consolidated Gas Company,—Mr. Parish rendered an expense statement for himself and his attorney in the aggregate amount of $12,769.92, which Panhandle Eastern Pipe Line Company paid.

At a board meeting held July 14, 1936, Panhandle Eastern Pipe Line Company acted upon a claim for compensation by Messrs. Parrish and Warrick in connection [fol. 7149] with the contract with Detroit City Gas Company dated August 31, 1935 and payments of such compensation aggregating $100,000 were made to Mr. Parish for his part in the amount of $87,500 and to Mr. Warrick for $12,500.

If you wish to be very precise about the payments of the $87,500 made to Mr. Parish, $50,000 was made for his account to Michigan Gas Transmission Corporation, I believe, who had previously advanced such an amount to Mr. Parish and to whom Mr. Parish assigned $50,000 of the amount awarded him by Panhandle Eastern Pipe Line Company.

What gave rise to the distribution between Parish and Warrick of the amount, the total of $100,000 paid by Panhandle Eastern is something this witness has no knowledge of. A purely gratuitous observation on the part of this witness, however, is that if Mr. Parish and Mr. Warrick rendered any service whatever in connection with the procurement of the contract with the Detroit City Gas Company, the amount they received from Panhandle Eastern Pipe Line Company was certainly quite modest.

Q. Mr. Warrick was attorney for Mr. Parish, was he not?

A. In this particular instance he was. Whether he was Mr. Parish's—

Q. (Interposing) Well, I meant in this instance.

A. Correct.

Q. And, of course, that would explain any payment [fol. 7150] which was made to Mr. Warrick by Mr. Parish or directly by the company, itself?

A. I think it should, yes.

Q. Now, at the meeting of July 14, 1936 of the Board of Directors of the Panhandle Company at which this compensation was decided upon, the Board had before it, did it not, a letter dated July 6, 1936 from Messrs. Parish and Warrick giving an outline of the services they claim to have rendered in procuring the Detroit gas contract?

A. It did.

Q. Will you undertake, Mr. Watkins, to furnish to me, please, a copy of such letter of July 6, 1936?

A. If I must.

Q. Was Mr. Parish at this time connected with the Panhandle Eastern Pipe Line Company in the capacity of an officer or director of that company?

A. He was not.

Q. Do you know when his severance with the company had been made?

A. Mr. Parish ceased to be president of Panhandle Eastern Pipe Line Company on October 23, 1930 and was replaced by Mr. F. W. Crawford, who became president on that date.

Q. Was that his last official connection with the company, either as an officer or as a director?

A. Mr. Parish continued to be a director of Panhandle [fol. 7151] Eastern Pipe Line Company until the annual meeting of the stockholders of the company held March 14, 1932, at which time he was replaced by Mr. J. H. Hillman, Jr. Slightly prior to that date or about that date, Missouri-Kansas Pipe Line Company found itself in receivership.

Q. Now, all of the other payments shown on this Exhibit No. 153 were in the nature of contributions to public utility companies for expenses incurred with change-over to natural gas or promotion of the sale of natural gas in the communities served by the various utilities, were they not?

A. Before I answer that question, Mr. Gorman, may I go back for a moment to make this observation with respect to the dates upon which Mr. Parish ceased to be an officer or a director and the dates upon which his successors were chosen?

Q. Yes, indeed.

A. And state that the tabulation from which my answers were given speak as of the date the change became effective. It may have been possible, for instance, that Mr. Parish had a resignation pending prior to the date upon which he ceased to be either president or a director.

Now, as to the other payments, Exhibit No. 153, they do represent payments made to distributing organizations or to organizations purchasing gas from Panhandle Eastern Pipe Line Company for resale or to organizations delivering gas on Panhandle Eastern Pipe Line Company's account to some distributing organization.

[fol. 7152] The purpose, I believe, is shown, generally, in Exhibit 153 as to each such payment.

Q. Yes.

A. In characterizing the amounts on Exhibit 153 as payments, it would be well for us to remember that the

totals in several instances are the results of more than one payment. For instance, the $94,000 on line 18, page 1, of Exhibit No. 153 represents three amounts.

Mr. Wheat: Well, Mr. Watkins, as shown in Column F of Exhibit 153, is it not?

The Witness: That is correct.

By Mr. Gorman:

Q. So that the general facts are more or less generally set forth on this Exhibit 153?

A. I believe they are quite fully set forth.

Q. Now, amortization is provided and has in the past been provided, has it not, for this total [mount] of $553,992.48, which is shown in Column E, line 36, page 3, of Exhibit 153?

A. Not for the entire amount, because as you recall—

Q. (interposing) Well, by that I mean the entire amount is presently being amortized, is it not?

A. The residue?—

Q. That is right.

A. Of the original amount is. You recall that you di- [fol. 7153] rected the witness' attention this morning to certain items that have been charged in the first instance to business promotion expense.

Q. Yes, excepting the $30,000 odd which we have previously discussed.

A. Your statement is correct, sir.

Q. Is the accrual for amortization provided in a specified manner, as is the annual accrual with respect to the gas sales in certain contracts as distinguished from this account of "Other Gas Sales and Purchase Contracts"?

A. These items are a part and parcel of the amounts registered as charges to other gas sales and purchase contracts.

Q. Yes, but as I understand the testimony you have previously given, you are required by a certain amendment to your certificate of incorporation to set aside each month a certain specified amount to amortize the amount shown on line 40 at page 2 of Exhibit No. 52, as representing the account for gas sales and purchase contracts. Is that correct?

A. That is correct.

Q. My inquiry presently is whether or not you have such a specific provision for amortization in the amounts shown at lines 43 and 44 on page 2 of Exhibit No. 52 for account entitled "Other Gas Sales and Purchase Contracts."

[fol. 7154] A. In the certificate of incorporation or elsewhere?

Q. Elsewhere.

A. No.

As the witness has previously testified, our procedure with respect to these amounts is to amortize them through gross income over the life of the contract or based on units of sales, as the case may be, and the amount is determined by the conditions present in each of the contracts, in connection with which the expenditures comprising the original total of which the amount $365,334.99 shown on line 44 in column M on page 2 of Exhibit No. 52 represents.

Q. Well, where you are making sales pursuant to a contract which has a certain specified term, do you provide amortization on a straight line basis over the term of the contract?

A. We do. Would you like an instance.

Q. I would appreciate one.

A. With your concurrence, we shall refer to certain of the items shown in detail on Exhibit No. 153, making up a total of $371,076 which have to do with the procurement of our contract with Detroit City Gas Company, now Michigan Consolidated Gas Company. At September 30, 1941, according to our determination, that contract had 123 months to run and the amount of amortization set aside with respect to the $371,076 on a straight line basis for the month of September, 1941 was $2,046.53.

[fol. 7155] Q. That represents, does it, 1-123 of the remaining balance which had not been amortized?

A. In this particular case, I believe it would represent the result of dividing the $371,076 by the total number of months the contract period originally covered.

To amortize it on the basis of 1-123 for the month of September and 1-122 for the month of October might not give exactly that same result.

Q. And in such cases, I assume that you have been providing such amortization since the time that charges were made as shown on Exhibit No. 153?

A. That has been our general practice, yes.

Q. And as you have indicated, on a monthly basis in all cases?

A. Not in all cases. Some of the amortization, in prior periods, may have been based on units of gas sold. The particular treatment depended upon the terms of the contract or the conditions or provisions of the particular contract in connection with which such expenditures had been incurred.

Q. Under what circumstances would you provide for an amortization on the basis of units of gas sold?

A. If we acquired a contract from a distributing organization or from an industry for that matter, and there were [fol. 7156] costs in connection with the acquiring of such contract a portion of which might be returnable to the company if the sales under the contract did not aggregate either certain annual figures or certain amounts in volume over the life of the contract, it would be necessary and proper, we believed and still believe, to base such amortization on units of volume.

Q. Is the company at the present time providing amortization accruals on both bases?

A. I do not believe we have at this time any amounts subject to such amortization that require months amounts determined on the basis of volume.

Q. So that in so far, conversely speaking, as you are presently aware, all amortization accruals are based upon the contract terms?

A. That is correct.

Q. From time to time, Mr. Watkins, you have referred to sales made under rate schedules and, apparently, in such references, distinguish them from sales made pursuant to contracts.

Does the Panhandle Company presently make sales pursuant to open schedules, that is, schedules available to any customer along its line?

A. If so, such contracts are a part of the files of this Commission. If you would not bind me too closely to an [fol. 7157] answer, I will give you the best of my remembrance at the moment.

Q. You may do so, if you will.

A. All or virtually all of the sales made in the State of Illinois for the past several years have been made under rate schedules. At the time of the adoption of such rate schedules, there may have been some contracts in existence and there still may be some peculiar contracts in existence dealing with or having to do with, rather, with industrial sales.

Most recently, Panhandle Eastern adopted rate schedules for the States of Missouri and Kansas and, more recently, for the State of Indiana. And you may recall some delay the company has experienced with the Indiana sales subsequent to August 1, 1941, so that my statement may be imperfect in certain directions with regard to those sales.

Q. Yes.

A. Now, in the filing of the rate schedules for the States of Missouri and Illinois and, I believe, in Indiana, our effort has been to preserve—and here I may be dealing with legal phraseology concerning which my knowledge is somewhat limited—the right Panhandle Eastern has to require any of the organizations it may have been selling gas to under contracts before the rate schedules were filed throughout the natural life of such contracts. Is that understandable?

[fol. 7458] Q. Yes, it is.

May it be properly concluded, therefore, Mr. Watkins, that all of the gas sales contracts which are being presently amortized, represent what you have designated as contracts as distinguished from the rate schedules that you have just been discussing?

A. I think that is proper to state if we connect it with the time at which the disbursements were made.

Q. Yes. I, of course, am not referring at all or considering in any way the fact that most, if indeed not all, of these several contracts have been filed with the Federal Power Commission as rate schedules. You so understood, I believe?

A. I believe I understand that, although I should like to state, without quibbling over minutiae, there may

be some industrial contracts in some of the exhibits presented in these proceedings which Panhandle Eastern does not necessarily, of itself, consider that it has filed. It has furnished, pursuant to certain orders, certain contracts which it, Panhandle Eastern, does not necessarily feel must be filed formally with the Commission.

Mr. Culton: You had reference to gas for resale?

Mr. Gorman: Yes. I think we understand one another. I merely wanted to distiinguish between what we consider [fol. 7159] as rate schedules under the Natural Gas Act as distinguished from those which Mr. Watkins has been designating here as contracts.

* * * * * * * *

By Mr. Gorman:

Q. Mr. Watkins, I invite your attention to Lines 19 to 35, Page 3, of Exhibit No. 153, at Line 23, Column B.

There is set forth a total amount of $33,130 which is explained on the Lines 19 to 23, inclusive. Is this amount of $33,130 the same amount which we have previously been discussing as having been charged as an operating expense rather than to the gas plant account?

A. It is.

Q. And with the exception of that $33,130, has the remaining balance of the total of $553,992.48 been expended in connection with sales made east and north of the termination point of the line of the Panhandle Eastern Pipe Line Company at Dana?

A. You would not be wanting to cause me to state definitely where change of title took place, would you?

[fol. 7160] Q. I do not quite understand your question, Mr. Watkins.

A. Michigan Gas Transmission Corporation transports certain gas for Panhandle Eastern Pipe Line Company—

Q. (Interposing) I am merely speaking now of geographical location as distinguished from the actual seller.

Mr. Culton: That was the question, east of Dana.

Mr. Gorman: Yes, that is right.

* * * * * * * *

The Witness: I shall state that it represents disbursements made in connection with sales, either east or east and north of the termination of Panhandle Eastern Pipe Line Company's facilities at or near Dana.

By Mr. Gorman:

Q. Yes, and do the amounts shown on Page 2 of Exhibit No. 52 at Line 40 for gas sales and purchase contracts represent contracts in what has been generally described in this proceeding as the Local Area?

A. What line, sir?

Q. Line 40.

A. No, it would not be proper to say that. The Local Area, as it has been generally defined in this case, would not, according to my remembrance of such definition here, include sales made, for instance, in the State of Illinois [fol. 7161] and as you will recall, some portion of the $2,930,286.40 shown on Line 40 was in connection with sales to be made or being made in that State.

Now, we must examine the constituent parts of the $2,930,286.40 somewhat more than could be done by your statement, your question, before arriving at an answer and give consideration to the difference between the amount at which this item or the items represented by this amount as carried on the books of Missouri-Kansas Pipe Line Company and as recorded on the books of Panhandle Eastern Pipe Line Company before we dispose of the question.

Said differently, it would seem that there was in the mind of someone the rights either to buy gas or to sell gas somewhere other than perhaps such rights represented by the actual instruments received from Missouri-Kansas Pipe Line Company, without cost, by Panhandle Eastern when the amount at which the items were recorded on the books of Panhandle Eastern was determined.

It is correct to state that a considerable portion of the gas purchase contracts represented the right to purchase gas in the so-called Local Area.

Q. Were there any gas purchase contracts in any other than the Local Area territory?

A. There were some purchase contracts, Mr. Gorman, representing the right to buy gas in either the Panhandle

[fol. 7162] of Texas or in the Hugoton Field in the company's possession at or about this time or in the possession of one of its subsidiaries.

Whether the difference assigned to this particular account represented any of such contracts, I am not in position to state.

I have the feeling, however, that this difference must have represented some substantial right in the minds of the people making the entry and, likewise, in the minds of the Board of Directors when, at its meeting held in February, 1931, I believe, it ratified, approved and confirmed the action theretofore taken in recording the amounts.

Does that seem confusing to you?

Q. Well, I do not quite understand all of it. I was just turning over in my mind the hope that when I see it on the record, it might be more understandable.

A. Thank you, sir.

Q. May I summarize a portion of your statement and ask you whether or not it is to the effect that such obligations or contracts as the Missouri-Kansas Pipe Line Company may have contracted for and which rights were subsequently transferred to the Panhandle Eastern Pipe Line Company as of August 31, 1930, represented not only certain contracts which the Missouri-Kansas Pipe Line Company, as an operating utility, had been performing prior to such transfer and for which it had such facilities [fol. 7163] as would enable it to perform such contracts but also represented other rights or other contracts which, by a subsequent construction, it hoped to be able to fulfil?

A. Well, we have our facts slightly awry there, Mr. Gorman.

First, I would not characterize Missouri-Kansas Pipe Line Company as a utility.

Q. I was speaking of such of its activities as would be classified as a public utility.

A. Second, not all of the facilities were constructed at September 30, 1930, or, rather, September 1, 1930, and, finally, it was not the witness' intention to leave the im-

pression that it was his view that in recording the gas sales and purchase contracts of [of] September 1, 1930, there was, in the minds of the people making the entries or in the minds of the Board of Directors when ratifying such action later in the early part of 1931, an effort to assign any amount on the books of the company representing any contracts that might later be acquired.

The statement or rather the answer that I gave that may have been confusing to you ran to the feeling in my mind that there was some very good reason, unquestionably, for the difference between either amount you choose to use of the $926,250 or the $1,106,250 and the $2,930,286.40, all of [fol. 7164] which we have discussed at quite some length today and I must state again that, looking at this action in retrospect, it does seem to this witness that the amount was totally inadequate.

Q. Yes, but it has also seemed to be your testimony, I believe, that any amount attributable or set upon the books of the Panhandle Eastern Pipe Line Company was supposed to be related in its entirety to contracts which were in existence as of August 31, 1930, at the time of the transfer?

A. Whether or not we have heretofore specifically referred to each of those contracts, as such, in these proceedings, that is my belief.

Q. Yes?

Now, sometime ago, Mr. Watkins, in your testimony, you referred to, if my recollection is correct, some 23 gas sales contracts which were transferred or assigned, if you will, by Mo-Kan to the Panhandle Eastern Pipe Line Company. Is that correct?

A. Yes, I made such a reference.

Q. Could you furnish me with a statement showing the names of the purchasers under these contracts?

A. I could but I would rather refer you to a source where you can get them without my having to do so, if I may.

[fol. 7165] Q. It is satisfactory to me.

A. I believe you will find some substantial detail with respect to those contracts and to the 50,000-odd acres of gas purchase contracts as well in the files of the Internal

Revenue Department having to do with Panhandle Eastern Pipe Line Company's income-tax return for the year 1936 and if it be necessary for Panhandle Eastern to authorize such reference, I shall undertake to supply whatever authorization is required.

I suggest this, Mr. Gorman, because there is a rather substantial amount of detail involved and we are so terribly busy with so many other things that if somehow the Commission's staff could seek the information it wants from that source, it would be a material accomodation to us.

Q. I would be very glad to avail myself of your suggestion, Mr. Watkins, except previous experience in attempting to secure data of a nature similar to this from the Internal Revenue records has demonstrated it is very difficult to accomplish within a very short space of time and, as a contrary suggestion, may I inquire whether or not you have a copy of such income-tax statements which could be made available to me for photostating and return to you?

A. Not here, I do not. I simply have a summarization. If you must do that, we will furnish it.

Q. Well, I meant, do you have one in your office?

[fol. 7166] A. Yes, we will furnish it for you.

Q. I do not want you to think that I am trying to duck you but I have had previous experience with the Internal Revenue Bureau.

A. Well, I would not guarantee that I do not think that but I will get it for you.

Q. And I assume that such data, when it is shown, will indicate the date of the contract with these several customers?

Mr. Wheat: You mean the date of each contract?

Mr. Gorman: Yes.

Is that correct, Mr. Watkins?

The Witness: My remembrance, sir, is that it will not only give that but a great deal of other information concerning each of the contracts.

By Mr. Gorman:

Q. Very well, I think that probably will be sufficient.

Now, you also had previously referred to some 50,000 acres, I believe it was, stated as leaseholds, which were contributed by Mo-Kan to Panhandle Eastern at the time of the transfer in 1930, is that correct?

A. That is correct.

Q. And is it correct that those rights, so transferred, were represented by leaseholds or leases, if you will?

A. They were.

[fol. 7167] Q. And as you have previously indicated, I believe that all such land covered by these leases was located in the so-called Local Area?

A. I believe that is quite correct, sir.

Q. Do you know whether or not the production in the Local Area is presently being made from all or any portion of these 50,000 acres?

A. I would say very definitely that it is not.

Q. That is, it is your opinion that these leases have since been abandoned or surrendered?

A. At least some of them.

Q. To what extent, you are not now prepared to state?

A. I am not.

Q. Now, Mr. Watkins—

A. (Interposing) If I may interrupt, Mr. Gorman.

In determining the number of contracts and the leases representing gas purchase contracts which seem to have been acquired as of September 1, 1930, our approach to that was, a few years ago, in connection with Federal income matters.

There may be some gas purchase contracts or gas sales contracts that were acquired at the time of the substantial contribution of assets by Mo-Kan to Panhandle Eastern that, during the intervening years, we have lost sight of.

If you were to put a question to the witness whether or not, in his opinion, there were a great number, his answer [fol. 7168] would be "no," but it would not quite be proper to say that the list of the 23 contracts we shall procure for you represent exactly the sum total of such contracts coming into the possession of Panhandle Eastern originally and this statement is not made for the purpose of confusing but for the purpose of elucidation.

We are going to give you what we think is the exact number of contracts we received.

Q. That is what I am after, yes.
A. It is sales contracts only.
Q. Yes.

Would your purchase contracts be in a form other than a lease?

A. There were some purchase contracts at or about September 1, 1930, as I have stated, covering lands located in the Panhandle of Texas and southwest Kansas which may have been associated directly or indirectly with this difference between the amounts shown per the books of Missouri-Kansas Pipe Line Company and the amounts assigned to such assets on the books of Panhandle Eastern.

I have tried to simply show that there could have been such a condition without making any specific statement that there was.

Q. Yes.
A. So that the 50,800 acres represented by gas leases [fol. 7169] or leaseholds or gas purchase contracts need not necessarily have been all of the gas purchase contracts at that time.
Q. Would leaseholds or leases have been classified as gas purchase contracts in so far as the account set forth at Line 40 of Page 2 of Exhibit No. 52 is concerned? —
A. In determining the amount set forth there, someone must have given consideration to the instrument or the thing conveyed by the instrument giving Panhandle Eastern a right to buy gas, if there was production on 50,000 acres.
Q. But to what extent or whether or not this was actually done, you do not know?
A. That is a correct summarization of my present knowledge.
Q. And the only place in which your gas purchase contracts would have been reflected would have been in the amount of $2,398,402.19 which was assigned to these contracts by the Board of Directors on February 3, 1931, is that correct?

A. Except to this extent, when Panhandle Eastern Pipe Line Company acquires a lease, it capitalizes the first cost of the lease—

Q. (Interposing) Just a moment, Mr. Watkins. I do not like to interrupt you but have we not gone through all of the details which make up the total of $3,053,391.53 and [fol. 7170] the total for other gas sales and purchase contracts amounting to $553,992.48 and other items of expense in the amount of $33,130 and in going through such amounts, I do not believe that we have come across any payments actually made as reflected by the exhibits and testimony for the gas purchase contracts which we are now discussing. Is that correct?

A. Limiting our question and answer entirely to the two amounts you just mentioned, that is correct.

Q. Yes.

A. But your question before was a rather broad one, according to my interpretation, dealing with gas purchases.

Q. Well, my question—

A. (Interposing) And we have acquired some substantial rights since September 1, 1930, in that direction and I did not want any confusion to creep into the record in that respect.

Q. Yes. Of course, what I am discussing presently are those gas purchase contracts which are purported to have been transferred by Mo-Kan to Panhandle in 1930 and since we have more or less explained all of the claimed expenditures in connection with either gas sales or gas purchase contracts, without referring in such explanation to detailed items of expenses incurred or claimed to have been incurred for gas purchase contracts, they must, of [fol. 7171] necessity, be reflected solely in the $2,398,402.19 which was a subject of confirmation by the Board of Directors on February 3, 1931. Do you understand what I am speaking of?

A. I believe I not only understand it but I concur in the statement.

Q. Yes.

Now, as I understand your previous testimony, you do not know nor have you been able to determine from any examination you have been able to make of the records

and books of the company of any specific amount which was allotted to gas purchase contracts?

A. I have not.

Q. And, conversely, of course, as I believe you have previously indicated, you also were not able to ascertain any specific amount which was allocated to gas sales contracts?

A. I have not and, in both answers, we are dealing solely with the—

Q. (Interposing) $2,398,402.19.

A. That is right.

Q. Sometime previously, in connection with the discussion of the payment made as of August 7, 1936, to Frank P. Parish as shown on Page 1 of Exhibit 153, you mentioned certain advances which had been made to Mr. Parish by the Columbia Oil and Gasoline Corporation, I [fol. 7172] believe, in the amount of $50,000, did you not?

A. I mentioned such an advance but Columbia Oil and Gasoline Corporation was not involved. The company involved was, I am sure, Michigan Gas Transmission Corporation.

Mr. Culton: That is what you testified.

By Mr. Gorman:

Q. Are you familiar, Mr. Watkins, with the fact that Mr. Beckjord, who has testified in this proceeding, testified to the effect that he was the party who represented Panhandle Eastern Pipe Line Company in the negotiation of the contract with the Detroit City Gas Company?

A. I have not Mr. Beckjord's testimony but I can well imagine he may have made such a statement.

Q. Do you know it to be a fact that he was the party who negotiated such contract?

A. Mr. Gorman, I have heard a great number of people claim that they were solely responsible for the procurement by Panhandle Eastern of the contract with the Detroit City Gas Company.

As a matter of fact, Panhandle Eastern was a party to a suit brought by some gentleman for a quarter of a million dollars who claimed he was the person who procured that contract.

I believe Mr. Frank P. Parish probably would make the statement that he was responsible for it. It may also be [fol. 7173] true that some of the officials of Missouri-Kansas Pipe Line Company might likewise make the statement that they were solely responsible for it.

I further believe that there is no gainsaying the fact that Mr. Beckjord was among the principal participants in the acquisition of the contract and he may have been the one person who did more to turn the trick for us than anybody else.

Unquestionably, Mr. Parish rendered some substantial service or our Board of Directors would not have paid him and Mr. Dupuy G. Warrick the sum of $100,000.

We do not toss our money about that way. I am sorry, sir, that I cannot categorically tell you that I know exactly who did that job but whoever did it, did a swell piece of work.

Q. Well, from that and your previous statements, may we not properly conclude that it has not been your intention to create any inference that the payment of $100,000 made to Mr. Parish was in payment for services rendered by him exclusively which resulted in the Detroit City Gas Company contract?

A. I do not believe, sir, that I specified exactly what Mr. Parish's services were. I did make a statement on the circumstances surrounding the payment to Mr. Parish. You have asked that a copy of a letter dated July 6, 1936, [fol. 7174] signed jointly by Mr. Parish and Mr. Warrick be made a part of this record and, when so made, it should speak for itself.

Panhandle Eastern Pipe Line Company's Board of Directors acted upon such a request. The payment was made. This witness has no specific knowledge of the efforts Mr. Parish was making. He knew, in a general way, that he was involved in an effort to sell gas eventually to Detroit and he must have done a pretty good job. He got a lot of money for whatever he did. I would not mind undertaking some task of that sort myself and receiving some such remuneration.

Q. Yes. Since you, yourself, as you just stated, do not know exactly what Mr. Parish's or Mr. Warrick's activities were in connection with the securing of the Detroit City gas contract, you, of course, are unable to say whether or not the statements contained in the letter of July 6, 1936, from Mr. Parish and Mr. Warrick is an accurate statement of their activities in this connection or not, is that correct?

A. I would assume that it was, Mr. Gorman.

Q. I know, merely on the assumption that these men were not falsifying.

A. On that assumption, yes. I do not know what these gentlemen did, any more than I knew exactly what Mr. [fol. 7175] Beckjord did or what Delos G. Smith or any of the members of the Missouri-Kansas Pipe Line Company organization did and I must confess, sir, that all during that whole activity, I had somewhat of a feeling we were throwing money away. Honestly, I did not believe we were going to have a contract with Detroit.

I did not have the feeling that they wanted natural gas and I was among some people that were surprised, when I learned that we had people in Detroit signing the contract.

Mr. Wheat: When you said you did not believe they wanted natural gas; did you mean the company with whom the contract was finally made?

The Witness: Detroit City Gas Company, now Michigan Consolidated Gas Company.

. . . . . .

By Mr. Gorman:

Q. Mr. Watkins, in a Registration Statement which the Panhandle Eastern Pipe Line Company filed with the Securities and Exchange Commission under date of September 24, 1941, which is identified as Registration No. 2-4919 at Page S-5, there appears certain notes as an attachment to the balance sheet in this statement.

Now, the first note "A. (1)" reads as follows:

"Property, plant and equipment is stated at cost except for $2,417,948.52 thereof assigned by the Board of

[fol. 7176] Directors to assets acquired as of August 31, 1930, as a capital contribution, and intangibles are stated at cost except for $2,398,402.19 thereof assigned by the Board of Directors to gas sales and purchase contracts acquired as of August 31, 1930, as a capital contribution."

At Page S-5 of the Compiled Registration Statement which is Exhibit No. 145 for identification, the first note thereof which is also a note to the balance sheet and is also identified as "A. (1)" reads as follows:

"Property, plant and equipment and intangibles are stated at cost except for $4,816,350.71 thereof which was recorded at the amount assigned by the Board of Directors to assets acquired as of August 31, 1930, as a capital contribution. It is the belief of the present management of the company that the amount assigned to the capital contribution represented the value of the assets contributed as determined by the donor, Missouri-Kansas Pipe Line Company. Of the total, $2,417,948.52 represented the amount at which the contributed tangible property was recorded on the books of the Missouri-Kansas Pipe Line Company, was assigned to property, plant and equipment and the balance of $2,398,402.19 was assigned to gas sales and purchase contracts."

Now, of course, a comparison of these two notes indicates there has been considerable change in the language. [fol. 7177] I invite your attention particularly to the second sentence of the paragraph which I have last read, namely:

"It is the belief of the present management of the company that the amount assigned to the capital contribution represented the value of the assets contributed as determined by the donor, Missouri-Kansas Pipe Line Company."

Now, since your name appears on this Registration Statement, both the original as filed December 24, 1941, and in the Compiled Registration Statement, Exhibit No. 145, perhaps you can tell us the reason for and the significance of the sentence which I have last read.

A. I can and I will be very glad to do so.

Q. Will you please?

A. To those who have filed Registration Statements with the Securities and Exchange Commission, it is a well-known fact that frequently you get deficiency memorandums with respect to such filing.

I must say here, parenthetically, that our deficiency memorandums, we believe, have been somewhat modest.

A part of the deficiency memorandum received by Panhandle Eastern with respect to the original filing of Registration No. 2-4919 ran to a request by the Securities and Exchange Commission for the amendment of such Registration Statement to state as nearly as Panhandle Eastern Pipe Line Company could, the basis upon which Missouri-[fol. 7178] Kansas Pipe Line Company had assigned values to such of these capital contributions as are referred to in the note to the balance sheet, both in the original filing and in the Compiled copy of the Registration Statement.

That, sir, is the only purpose of adding the sentence and does not constitute, in this witness' mind, a tremendously important change in the language from the original filing.

It represented purely and simply an effort on the part of the management of Panhandle Eastern Pipe Line Company to satisfy a portion of the deficiency memorandum with respect to the original filing.

Apparently it accomplished that purpose because the Registration Statement became effective January 21, 1942, as of January 12, 1942.

Q. Yes. Can you tell me upon what basis the present management of the Panhandle Company reached the belief that $2,398,402.19 represented the value of the assets of the gas sales and purchase contracts "as determined by the donor, Missouri-Kansas Pipe Line Company", since that was a determination made by officials and members of the staff of Panhandle Eastern Pipe Line Company and was confirmed by the Board of Directors of that company?

A. Well, there may be some improvidence in the language with respect to that. I do not believe that there was an effort on the part of Panhandle Eastern, in making this [fol. 7179] statement, to involve Missouri-Kansas Pipe Line Company in any manner.

I have quoted to you my remembrance of the deficiency memorandum. Perhaps I stated incorrectly that the request of the Securities and Exchange Commission was to state the basis of a determination by Missouri-Kansas when actually, I believe, it was a request for us to state the basis upon which the Board of Directors assigned this amount in its determination on February 3, 1931. As you may well imagine, it was very difficult, from the somewhat meager records we have concerning this particular item and for the further reason that very few, if any, of the Directors of the company at February 3, 1931, are now Directors of the Company, for us to do other than try to ascertain, as best we could, what might have been the basis upon which the Board did take such action.

Q. Well, is this sentence to which I have been making reference intended to represent that the assignment of $2,398,402.19 to gas sales and purchase contracts was determined by the Missouri-Kansas Pipe Line Company as representing the value of these assets?

A. Mr. Gorman, let me try to answer that, if I may, if I can do so, in a common-sense sort of way.

Q. I might state that my present state of confusion is brought about entirely by the fact that throughout the day [fol. 7180] we have been discussing the fact that these determinations were made by officials and Directors of the Panhandle Company, not Missouri-Kansas Pipe Line Company.

A. Is it not true also that in the general statement this witness made quite earlier in the day concerning the gas sales and purchase contracts, that there must have been an effort on the part of the mind of somebody in setting up these entries to cause their general effect to coincide in some degree or in some manner or in some respects with the determination by a buyer and a seller of a value at which those two parties were to determine the cost to one and the amount to be received by the other of one-half of the then-outstanding shares of the common stock of Panhandle Eastern Pipe Line Company.

Now, as nearly as we have been able to do so, from the information we have, it would appear to us that the difference between the amount at which the gas sales and purchase contracts were carried on the books of Missouri-

Kansas Pipe Line Company and the amount at which they appeared in the records of Panhandle Eastern Pipe Line Company could have very well represented the difference between the sum of a certain number of specific assets that Mo-Kan was donating and the amount it included in its computation and which must have been agreed to by the buyer of one half of the interest in Panhandle Eastern, so [fol. 7181] that in recording this amount, consideration was given to that fact.

Now, the language that you observe in the Combined copy of the Registration Statement is intended to encompass such a situation as that and does not, as the witness has stated, intend to involve Missouri-Kansas Pipe Line Company in any manner whatsoever.

Q. And is it upon the basis, that such statement in the Registration Statement was made, upon the basis of the conclusions which you have just mentioned?

A. Those, among others. We tried to find exactly what the Securities and Exchange Commission wished. We, as the witness has said, were not Directors, none of the officers, that is, none of the senior officers were officers at that time.

We could not obviously find all of these people who were Directors and examine them. We did the very best we could. This is the result. It seems innocuous to us.

Q. Well, it may be that I have read it improperly but, as I read the sentence which I have been discussing, it is a very definite statement that the valuation of assets amounting to $2,398,402.19 for gas sales and purchase contracts was made, not by the Panhandle Eastern Company or its officials or Directors, but by the Missouri-Kansas Pipe Line Company.

A. I do not believe one could characterize language [fol. 7182] beginning as this does in this fashion and I quote, "It is the belief of the present management", to be so specifically construed as you have construed it.

Q. Well, of course—

A. (Interposing) Please excuse me.

Q. Yes, indeed.

A. Now, Missouri-Kansas Pipe Line Company had something to sell. It put a price upon it. Part of that price

probably was these gas sales and purchase contracts, perhaps at some determination other than actually shown by its books.

That fact, I believe, will be borne out by some of its income tax returns filed with the Internal Revenue Department. In one of such returns may be found a statement where it computes to it the cost of the things it was obligating itself to turn over to Panhandle Eastern Pipe Line Company without cost to Panhandle Eastern at the time it sold one-half interest to Columbia Oil and Gasoline Corporation and to that extent, this seems a very proper statement for the officers of Panhandle Eastern Pipe Line Company to have included in the Registration Statement.

The statement likewise is a part of the notes to the balance sheet which has been certified to by the company's public accountants and they are just as cautious as the company.

. . . . . .

[fol. 7188] Cross-Examination (Continued).

By Mr. Gorman:

Q. Mr. Watkins, in your testimony of yesterday, I believe it commenced at Page 7062 of the transcript and on certain succeeding pages, you were discussing and made statements to the effect that if you had been better advised of the purpose for which Mr. Biddison requested information as to the cost of business development; instead of furnishing him with the statements which aggregate some $553,000, you would instead have furnished him with a statement which you outlined in detail which, instead of the $553,000 odd would have aggregated approximately $2,408,000.

That is generally correct, is it not?

A. That is generally correct except Mr. Biddison's request, as I recall it, made no reference to cost of business development.

He simply asked for payments made to utility companies.

Q. Yes. May I inquire whether, in introducing those statements of yours in this record, there was any intention on your part of contending for consideration of the amount of $2,408,000-odd instead of the amount of $553,000-odd which Mr. Biddison has set forth at Page 966 of his Exhibit No. 39?

[fol. 7189] A. Mr. Gorman, I believe a proper statement for this witness to make is, that in the introduction of facts with respect to Panhandle Eastern Pipe Line Company or its operations or its combined operation, it has been my purpose to supply, in connection with these proceedings, factual matter for whatever use to which it may be put.

Specifically with respect to the $2,408,000 amount as contrasted with the $553,000 amount, both being approximate figures, the witness attempted to show you the data he would have supplied to Mr. Biddison in the examination referred to at Page 7062 of the transcript of yesterday's proceedings and the pages succeeding that page, rather than the amount he did supply and then it would have been up to Mr. Biddison to treat with it in any manner he saw proper.

Q. Well, in so far as your present intentions are concerned with respect to the testimony relative to this item, you are not here proposing the substitution of the figure of $2,408,623.50, to which you testified yesterday, rather than the figure of $553,992.48, which is the total figure of payments to utility companies shown at Line 30 of Page 966 of Exhibit No. 39?

A. I believe that is a correct statement of fact. However, it does occur to me that consideration should be given to the $2,408,000. I should judge that in a proceeding of this kind, the Commission, as well as the public, as well [fol. 7190] as the company, wants the facts known and that any final determination would naturally take those facts into consideration.

Mr. Gorman: Yes.

May I inquire of counsel for the Panhandle Eastern Pipe Line Company whether or not there is any such contention on their part that this amount of $2,408,623.50, to which reference has been made by Mr. Watkins, should be substituted for the figure of $553,992.48?

Mr. Wheat: Mr. Gorman, we believe, of course, that all facts brought out in this record ought to be considered and we shall, of course, make whatever contentions we feel are proper at the conclusion of the record in whatever briefs may be filed or in arguments made before the Commission.

I am not now advised as to the incidence of all these facts and I am, therefore, unable at the moment to answer you directly on the point.

Mr. Gorman: My query, of course, was propounded with the thought that if the figures shown at Line 30, Page 966 of Exhibit No. 39 are contended to be erroneous by counsel, then I think Commission counsel, the Examiner and all others participating in this proceeding should be so advised so they may treat with that item accordingly.

Mr. Wheat: Nobody has suggested it is erroneous. The [Vol. 7191] witness has suggested that possibly there are other facts which should be taken into consideration with it. That is the point which I wish to express to you.

Mr. Gorman: Of course, we all appreciate the fact that the Commission, in its final determination, will give consideration to any pertinent fact.

Mr. Wheat: Surely.

Mr. Gorman: But my inquiry is as to whether or not we should treat Exhibit No. 39 in this respect as having been corrected to the extent that Mr. Watkins has testified in his testimony of yesterday.

Mr. Wheat: To the extent to which Mr. Watkins' testimony can be considered a correction, and I am not sure that he suggested that, as such, why, I think the facts testified to by Mr. Watkins should be considered, of course, along with all the other facts in this proceeding.

By Mr. Gorman:

Q. Mr. Watkins, I should like to invite your attention to certain statements given by Mr. Biddison in his testimony in this proceeding on September 4, 1941, commencing at Line 25 of Page 554.

I might say for the record this is a part of the direct testimony of Mr. Biddison.

Mr. Culton: I wonder if we might not borrow the Examiner's copy so he can follow you.

[fol. 7192] Mr. Gorman: Yes, indeed. That is Page 554, September 4.

By Mr. Gorman:

Q. Do you have the place, Mr. Watkins?

A. I do.

Q. (Reading).

"Q. Now, will you turn to page 966 which you have headed: 'Cost of Business and Development', and tell us what is included on that page?

"A. Upon the completion of a natural gas line, business does not just walk down the street and attach itself. It takes effort to attach business. It takes time to attach business and costs money to attach business.

"Q. Is there usually some lag of that sort?

"A. It is almost inevitable. I know of one or two exceptions, where business was immediately attached to substantially the capacity of the business, but those are very rare.

"In general, it takes five years or more to develop the business for which a line is constructed.

"On this particular system, in order to develop business, and in line with what is being proposed on more recent construction, payments were made to some of the distribution utilities to aid them in their sales campaigns for industrial gas, for house heating gas, and contributions were made to bear part of the cost of their changing over their systems from manufactured gas to natural gas.

[fol. 7193] "I have listed, on page 966, a statement, beginning at line 2 and ending in a total at line 30, of such payments made to utility companies. The purpose of the payment is generally shown.

"Q. You mean payments actually made by Panhandle Eastern Pipe Line Company?

"A. Yes, sir."

Mr. Wheat: By the way, Mr. Gorman, that refers to the table totaling $553,000-odd that was referred to yesterday in the witness' testimony?

Mr. Gorman: That is correct and is shown, as indicated in this testimony I have just quoted, at Page 966 of Exhibit No. 39.

Mr. Wheat: Thank you.

By Mr. Gorman:

Q. In view of that statement of Mr. Biddison's and his intent with respect to his presentation of that part of his Exhibit No. 39, do I understand correctly that it is your opinion that the cost of attaching business should include payments made by the Missouri-Kansas Pipe Line Company for contracts which it acquired?

A. Mr. Gorman, this witness has given no specific testimony that he remembers with respect to any representation as to what the cost of business development should in- [fol. 7194] clude nor is he entirely familiar with the treatment given any items which may have been furnished by him to Mr. Biddison and used in connection with Exhibit No. 39 on Page 966 or elsewhere therein.

If you wish my personal opinion—

Q. (Interposing) I am asking the opinion upon which you made the statement it was your belief that the amount should have been $2,408,623.50—

A. (Interposing) Let's get our facts straight, sir.

I did not say it was my conclusion that Mr. Biddison should have used $2,408,000. The record does not show that.

Q. Well, I beg to differ with you in that respect.

A. You may do so—

Q. (Interposing) May I refresh your recollection as to what you said yesterday. At Page 7062 you said, in discussing this item:

"It did not dawn on me and I did not awaken to the fact that perhaps what Mr. Biddison was requesting was the total amount of such payments from the very inception of the company until I had occasion to take a quick glance at a portion of his testimony.

"So, as I stated before, had the question been put subsequent to such knowledge on my part or had my thoughts at the moment been a little bit more mature than I now see

they were, the total we would have given to Mr. Biddison [fol. 7195] would have been on the order of $2,408,000 and I should be very glad to supply you what seems to me to be the items that constitute that total, if you wish them."

That, to my mind, is a very clear and definite statement that it is your belief that the figure, instead of $553,992.48 should have been "on the order of $2,408,000."

Is that an incorrect reading of your language there?

A. I believe it is an incorrect conclusion, certainly. My language was a simple statement that my present interpretation of the request put to me by Mr. Biddison, which resulted in the furnishing to him of certain information aggregating $553,992.48, was improper, and in the light of further consideration and of the facts that have developed since, had such question now been put, the answer would have contained the items placed in the record yesterday aggregating slightly more than $2,408,000.

How any other construction could be placed on the statements made by the witness at Page 7062 is something the witness cannot understand.

Q. Yes. Now, you took exception to the phrase "cost of business development." Of course, in reviewing Mr. Biddison's testimony, as you indicated you did and obviously in connection therewith, considered this Page 966 of Exhibit No. 39, you did know the purpose which Mr. Biddison put this information to and the stated purpose for which [fol. 7196] he proposed it to be used, did you not?

A. I not only knew it then but I think perhaps I might have known it at the time he asked for it.

Q. Yes.

A. However, he was the gentleman that treated with it. Now, as I started to say a short while ago, if you would like my expression of what might have been the cost of business development to Panhandle Eastern Pipe Line Company, I do not believe it is yet in the record because certainly we have a situation with respect to our company where some consideration should be given to the years up to the time when the company began to make some sort of a profit that could be represented as a return to the stockholders.

I am not testifying with respect to the cost of business development. I simply give you a slight indication of what my view might be with respect to that particular item.

Q. So, of course, from this and your previous statements, we may properly conclude that you have not and do not now intend to offer the figure of $2,408,623.50 in substitution for the figure shown at Line 30 of Page 966 of Exhibit No. 39?

A. As stated before, Mr. Gorman, the purpose of showing that amount was because the witness wished to have the record disclose what he believed was information that the Commission, the company, the intervenor, the City of [fol. 7197] Detroit, Wayne County, or any other participant in these proceedings might reasonably require for a proper and equitable determination of any questions involved in these proceedings.

Q. Is the answer to my question, Mr. Watkins, no, that you do not propose such substitution?

A. Only to the extent that I have qualified heretofore.

Q. Well, as I understand your qualification, you have submitted your testimony with respect to these figures for whatever use they might be put by the Commission?

A. I believe that is a correct statement, sir.

Q. And that in so far as your intent is concerned, you have not directly proposed it to be a substifution for the figure which we have been discussing as shown on Page 966 of Exhibit No. 39?

A. Not directly, no, sir.

Q. There is a further question, Mr. Watkins. Yesterday we disgussed at some length various contracts of the Panhandle Eastern Pipe Line Company. May I inquire whether or not those contracts that we were discussing, so far as they are presently effective, are they the ones which are reflected on Exhibit No. 60?

A. Did we discuss contracts, as such, sir, or only as they might have been involved in certain other matters we were discussing yesterday? It does not seem to the wit- [fol. 7198] ness that it is quite proper to say that we discussed the contracts, as such. Reference was made—

Q. (Interposing) Well, we made general reference to certain contracts. Exhibit No. 60 is in two parts, one of which deals with sales agreements with other gas com-

panies as at June 30, 1941, and the second portion deals with sales agreements with industrial customers as at June 30, 1941.

A. And your question with respect to the contracts shown on Exhibit No. 60 is in connection with the amount shown on the company's books in the account, "Gas Sales and Purchase Contracts"?

Q. That is correct.

A. They are not necessarily the same at all because there are many contracts included in Exhibit No. 60.

Q. Yes. Well, of course—

A. (Interposing) That had no reference whatever to the amounts carried by the company in its gas sales and purchase contracts.

If I may repeat a portion of what I believe I said yesterday, subsequent to August 31, 1930, save for a very small amount of dollars charged to gas sales and purchase contracts, it was not the accounting practice of the company to charge cost incident to the acquisition of such contracts to an asset account and hold it in such account for gradual amortization.

[fol. 7199] That practice continued until about the time the company, as a matter [—] fact after the time the company acquired a contract on August 31, 1935, with Detroit City Gas Company, now Michigan Consolidated Gas Company, and it was then changed only to the extent that in instances where a specific contract required, on Panhandle Eastern's part, a payment of some nature, that those amounts were charged to an asset account and held for gradual amortization.

The witness tried to show yesterday that there were many other such costs that were not so treated. They were absorbed as incurred through operating expenses.

As you no doubt know, we are constantly dealing with the acquisition of leases, sales contracts and purchase contracts. In the ordinary course of business, we make no effort whatever to accumulate the cost of such acquisitions in an asset account and amortize it over the natural life of such contract.

Does that answer your question, sir?

Q. Yes, I think so. Of course, my only purpose in raising the point at all was merely to indicate on the record that the exhibits which we discussed yesterday, in so far as they related to particular contracts, those contracts were explained somewhat in Exhibit No. 60.

A. Except to the extent, sir, that the witness tried to show that in fixing at least a part of one of those amounts [fol. 7200] at the time the original entry was made, there may have been some contracts, either purchase or sales contracts, that were included in the difference between the two amounts that we cannot definitely put our fingers on.

* * * * * * * *

[fol. 7208] Q. And you went to work, if I understood you correctly, for the Management Company of Columbia Gas in 1926?

A. Mr. Irvine, who was the manager of the Cincinnati [fol. 7209] office of Ernst & Ernst, persuaded me, in 1926, to become a member of his staff. Mr. Irvine at that time had left Ernst & Ernst and had become the general auditor for Columbia Gas & Electric Corporation and its subsidiary companies.

He was organizing a staff and he was going to develop certain different departments and what not. He did not know just exactly where he was going to put what person and I first went into the organization on the payroll of Columbia Engineering & Management Corporation.

My remembrance at this moment is that the first assignment I received under Mr. Ervine was a course of study, so to speak, that consumed a month or some period up until about the time Columbia Gas & Electric Company and Ohio Fuel Corporation—those names may not be precise, sir—

* * * * * * * *

(Continuing) —were merged in late 1926 and my activities after that merger drifted into budget work for the newly-merged system.

My scene of activity was changed shortly thereafter from Cincinnati to New York although my residence was retained at Cincinnati. About 90 percent of the time I was engaged in this assignment, my duties were wholly in connection with the installation of operating and construction budgets

in the various group offices of the Columbia Gas & Electric Corporation organization.

[fol. 7210] That continued until perhaps the year 1927 or 1928 when the management of the Union Gas & Electric Company at Cincinnati asked that I be returned to that organization permanently.

That did not displease me because my family was at Cincinnati. I did not care for this jumping around over the country too much although the experience was quite valuable. I had a great admiration for the management at Cincinnati, as well as the management of the other groups of Columbia Gas & Electric Company so, altogether, I was quite satisfied to go back to Cincinnati.

Q. Then your engagement with Columbia Engineering and Management Company was very shortly after its organization and while it was in a formative period?

A. Yes, but its records might show differently and, if you will permit me to do so, I will develop that fact for you.

Upon returning to Cincinnati, I became assistant treasurer of Union Gas & Electric Company and all of the subsidiaries of the Columbia organization whose headquarters were lodged in the Cincinnati office and retained that office until November 17—no, that is not correct—I was sent to Kansas City to learn something about an organization that I really never had heard anything of with the understanding that I probably would be there about two weeks. This was in November, 1931.

[fol. 7211] When I now look back over the years, I am aware of the fact that I never did get back to Cincinnati but my connection with Union Gas & Electric, according to its records, probably continued until the next annual meeting of the officers which probably was in the early part of the year 1932.

Now, after becoming connected with Panhandle Eastern for some internal purposes, my name was still carried on the organization rolls of one of the Columbia companies, I do not recall which, and the specific and only purpose for that was so that I might enjoy the benefits of a group-life insurance certificate that was issued to me in Cincinnati until such time as Panhandle Eastern might have some

plan of that sort itself and that was the sole purpose for that and I merely mention it so that, if someone reviewing the records ascertains when my name last appeared on the rolls, they would not be misled.

Q. It was my recollection that the Management Company was organized about December 1, 1925.

A. I have no specific knowledge as to that, sir.

Q. Well, you are aware, of course, that you were developing the personnel of the company in 1926?

A. I was a part of the personnel being developed, sir.

Q. Yes, and during that period, your staff developed [fol. 7212] the system of budgetary control that is still in use, did they not?

A. Well, we perhaps had something to do with the development of the system that is being used. Whether it is being used in the exact manner in which we developed it, I rather seriously doubt because, over the period of years, they must have worked some rather marked improvements in the system.

If I know those people very well, that was the natural outcome of any attention they would give to a thing that was installed in 1926 and still is in effect at this time.

Q. To what extent do you follow the construction and operating budget forms that you developed—I mean, to what extent did you follow them in Panhandle Eastern?

A. The staff of Panhandle Eastern at the time I appeared on the scene was composed of certain employees who likewise had been connected with the Columbia Gas organization in some fashion and the budget forms which the Columbia Companies had been using prior to the connection of those gentlemen with Panhandle Eastern were in effect when I appeared.

There probably is some great similarity even to this day between the two sets of forms used by the two companies. We have improved them. We have discarded certain things that that organization may have used. Alto- [fol. 7213] gether, naturally, having had something to do with the birth of the system, I should not say that it was worthless.

Q. Then, in the early period of your employment, you did go into the New York office there for a time?

A. That is quite true and, as the record will show, I likewise returned to New York in 1934, I believe it was, and served in a dual capacity as an officer of Columbia Oil & Gasoline Corporation and its subsidiary companies and of Panhandle Eastern Pipe Line Company and its subsidiary companies.

Q. Your offices then, and I speak of the offices of the Management Company, were with those of Columbia Gas & Electric Corporation?

A. At that particular time, 1934 to 1937, sir, nor subsequent to the time I returned to Cincinnati, as I explained before, I had no connection with the Management Company and we are speaking of Columbia Engineering & Management Company?

. . . . . .

[fol. 7216] Q. But what I was addressing my question to was as to your own personal contacts there during the period from 1926, was it, to 1928 that you were in New York?

A. It was sometime, Mr. Chamberlain, in 1927 and a part of 1928, as well as I recall at the moment.

Q. But the offices were all together, were they not, that is, the Management Company and the Gas and Electric Corporation had the same offices?

A. They occupied the same quarters, whether or not they had the same offices, I do not recall.

Q. Well, they were close, on the same floor, were they not, the same building?

A. Yes, that is correct.

. . . . . .

[fol. 7217] Q. Who asked you to go to Kansas City to look into the affairs of Panhandle?

. . . . . .

A. Well, it came about somewhat like this: I was called into the office of the treasurer one afternoon about 4 o'clock and a conversation was going on over the telephone. The treasurer turned to me and asked me if I could be prepared to be away from home for about ten days or two weeks and, very naturally, my response was yes, so the next I heard was: "Buy a ticket tomorrow from

Dayton to St. Louis and meet Mr. E. B. Flahive on the train leaving Dayton about 1:30 or something like that. Mr. Flahive will tell you where you are heading."

Mr. Flahive was at that time treasurer, I believe, of Columbia Gas & Electric Corporation. He was perhaps also treasurer of Columbia Engineering and Management Corporation. He may have been an officer or director of [fol. 7218] a great number of other companies and he might even have been connected with Panhandle Eastern.

The surprising part of the whole thing was, about the time I got ready to leave, the treasurer handed me a little package and said, "Here is a little present for you." That did not look like a two-week trip, so to make a long story short, I met Mr. Flahive on the train, hit Kansas City November 17, 1931, and have been connected with Panhandle Eastern ever since and I hope I shall be able to be connected with it all my life.

I have enjoyed the work thoroughly, have a wonderful company with wonderful potentialities.

. . . . . .

[fol. 7219] Now, I wish you would read into the record, unless it is already there, the list of the officers of Panhandle Eastern at the time you went there, and as you read them, state whether or not they were connected with the Columbia Gas Organization.

. . . . . .

[fol. 7220] The Directors were Frank P. Parish and, I believe, you will agree that he had no connection with Columbia Gas.

Q. I am sure of that.

A. E. L. DuPont, and I think the same situation may be said to be true with respect to Mr. DuPont—

S. A. Russell—as to Mr. Russell's connection with Columbia Gas, I am ignorant.

. . . . . .

Mr. William G. Maguire—I do not believe you would say that Mr. Maguire had any connection with Columbia Gas.

Mr. E. W. Crawford—Mr. Crawford may have been an officer of Columbia Gas. At any rate, he was an officer of Ohio Fuel Corporation which was a part of the merged Columbia Company.

Mr. T. G. Gregory—Mr. Gregory was at one time a Vice President of Columbia Gas and many of its subsid-
[fol. 7221] iaries or held office in some of its subsidiaries. I think it could properly be said he was connected with Columbia Gas.

Mr. E. Reynolds, Jr.,—Mr. Reynolds was certainly connected with Columbia Gas because he has been an officer of Columbia Gas ever since I have known anything about the organization and is at this [moments] its President, I believe.

Mr. T. R. Weymouth—now, Mr. Weymouth apparently became a Director of Panhandle about November 30, 1931. That would be shortly after I became connected with Panhandle Eastern and Mr. Weymouth, according to my information here, succeeded Mr. C. A. Munroe. You know Mr. Munroe. You know that he was President of Columbia Oil & Gasoline Corporation. I do not recall at this moment whether he was ever an officer of Columbia Gas & Electric Corporation or not.

There was a vacancy as a result of the resignation of Mr. H. G. Howard. Mr. Howard, apparently, resigned about the 4th of November, 1931, or at least at a Director's meeting held that day, his resignation was put in, it is apparent from the memorandum I have here. Now, I do not know much about Mr. Howard except heresay. Wasn't he connected with one of the financial institutions or organizations in New York?

United Corporation, I believe, at the moment owned
[fol. 7222] some of the stock of Columbia Gas & Electric Corporation. Whether or not it did in 1931 is something I do not know so I could not state specifically whether or not Mr. Howard had any direct or indirect connection with Columbia at that time.

* * * * * * * * *

Mr. E. R. Bay was Vice President and Mr. Bay, so far as I know, had never had any connection with Columbia

[fol. 7223] Gas & Electric Corporation. I believe his origin in Panhandle Eastern Pipe Line Company's affairs was from the Cities Service organization or some of its affiliates or subsidiaries.

Mr. R. G. Crandall was likewise a Vice President and Mr. Crandall was a member of a firm of attorneys whose offices were located in Chicago and I do not believe anybody could say that they had had any connection with Columbia Gas & Electric Corporation.

Mr. A. W. Leonard was likewise a Vice President. Mr. Leonard originally came, I believe, from the same general territory in Pennsylvania from which the Crawford family originated and he may at some time have had connection with some of the Columbia companies, either directly or indirectly. I do not know. At the time of he was connected with Panhandle Eastern, he had been loaned to the organization to assist it in the completion of its construction program and did a swell job.

* * * * * * * * *

Mr. E. Reynolds, Jr., was a Vice President at the time— [fol. 7224] Yes; he was likewise Secretary. Mr. Reynolds, as we have stated before, was also a Director and was very closely connected with Columbia Gas.

Mr. Seyffert, whose name you mentioned a short while ago, was Treasurer of Panhandle Eastern Pipe Line Company and Mr. Seyffert, at the time, I believe, held offices with some of the Columbia companies located at Columbus, Ohio.

* * * * * * * * *

[fol. 7225] (Continuing) And, of course, he has, as we have stated, had connection with the Columbia Gas & Electric Corporation or its subsidiaries.

Mr. H. H. Pell, Jr., was an assistant secretary of Panhandle Eastern Pipe Line Company and Mr. Pell at the time was, likewise, an officer of some of the Columbia Companies and one of the hardest workers I believe I have ever come across.

Mr. F. B. Flahive, as we have stated, was assistant treasurer of Panhandle Eastern Pipe Line Company.

Then, there was yours truly, who was, likewise, an assistant treasurer.

. . . . . .

[fol. 7226] Now, what was the fact with respect to who did the actual secretarial work after you were elected assistant secretary and took up your residence at Kansas City?

A. The board meetings were not held at Kansas City. The secretarial work was, no doubt, done by the secretary of the company, or one of its assistant secretaries located at the point where the meetings were generally held. I knew nothing of the minutes of the board meetings until we received copies of them at the Kansas City office.

. . . . . .

[fol. 7227] Q. Now, there was a reorganization of the Columbia Oil & Gasoline Corporation board the day after the Securities and Exchange Act was put into effect, was there not?

A. Well, I do not know, sir. I cannot connect those two things together.

As to Columbia Oil & Gasoline Corporation's affairs, I shall not be able to testify in connection with these proceedings. I am not an officer of the company and I have nothing to say about its affairs. I became an officer of Columbia Oil & Gasoline Corporation, I believe, about May, 1934. I continued to be an officer of Columbia Oil & Gasoline Corporation and its subsidiary companies until February 10, perhaps of 1937.

Q. Well, you were elected as a director and secretary and treasurer of Columbia Oil & Gasoline Corporation on June 7, 1934, were you not?

A. I do not remember the exact date. I think perhaps that is the correct date that I was elected to those offices. [fol. 7228] Q. And you acted as secretary-treasurer and director until some time in 1938, did you not?

A. 1937, sir. The early part of 1937.

Q. Now, who was it who asked you to become an officer of Columbia Oil & Gasoline Corporation?

A. Well, there, again, sir, it was not so much a request as it was direction. That circumstance came about somewhat after this fashion:

Mr. Charles A. Munroe, and several of the other directors of Panhandle Eastern Pipe Line Company visited its offices in Kansas City, perhaps it was in April of 1934, and during the course of that visit Mr. Munroe stated to me that I should report the next Tuesday at 61 Broadway, New York City, because I was to become an officer of Columbia Oil & Gasoline Corporation. There was no alternative left as to whether I wished to become one or not, and I cannot say that I particularly regret the fact that I was an officer of that organization. I had some rather interesting experiences then and have since connected with its affairs and Panhandle Eastern's. They were very instructive, as well.

Q. Mr. Munroe had become an officer of Panhandle Eastern, then, after his resignation in 1931?

A. It seems that Mr. Munroe became a director of [Rel. 7229] Panhandle Eastern about May 5, 1932, and remained the director of Panhandle Eastern until January 31, 1936, which was a day or so after a certain consent decree was entered, and I imagine we may hear more of that in these proceedings.

Q. Yes. That is my recollection, that he again went on the Board. Did he become an officer after 1932?

A. An officer of Panhandle Eastern?

Q. Yes.

A. I do not believe that he did.

Q. Well, then, you recognize the orders of Mr. Munroe, although he was but a director of the company?

A. At the time Mr. Munroe spoke to me there was present with him an officer of the company.

Q. Who was that?

A. Mr. E. Reynolds, Jr.

Q. Yes.

A. Who, at that time, was secretary.

Q. And vice-president?

A. Of Panhandle Eastern, yes, he was vice-president at that time.

Q. Well, at that time Mr. Reynolds was vice-president of Columbia Gas & Electric Corporation, was he not?

A. He may have been; he was vice-president of Columbia Gas & Electric Corporation.

* * * * * * * * *

[fol. 7230] Q. Well, he was, also, an officer of Columbia Oil at that time, was he not?

A. I think he was secretary of Columbia Oil at that time. He may have been a director of Columbia Oil, as well.

Q. Let me withdraw that. Does the incident of this conversation bring to your mind a statement made by Mr. Reynolds and Mr. Manfoe as to why they were putting you on the Columbia Oil board?

A. This thing comes to my mind, that in causing Leith Watkins to become connected with Columbia Oil & Gasoline Corporation, as well as Panhandle Eastern, there was a very definite effort being made to save a few dollars, and that statement was made rather clearly to me.

Q. That is strong in your mind?

A. That is correct. In connection with that they just [fol. 7231] worked the devil out of me.

Now, as to why I was becoming a director, I could surmise, but no definite statements were made. Maybe I was foolish enough to think that perhaps I could be of some assistance. I knew of the affairs of Panhandle Eastern. I had been with it for quite some while. It was so inexorably all meshed up in my life that it meant quite a lot to me and still does, and, as I have said before, I hope it ever shall.

Perhaps it was worth while to have someone on the Columbia Oil board that knew something of the affairs of Panhandle Eastern, because Columbia Oil, after all at that time had a substantial stake in the company and it wanted to know something about what was going on. There was a similarity of duties and functions and procedure with respect to the accounting affairs of Panhandle Eastern, as well as Columbia Oil & Gasoline Corporation. It was of some material assistance to me, as an officer in charge of that phase of the work of both of those organizations and the subsidiary companies, to have knowledge of what the other was doing, because it was not infrequent that I used the employees of those two companies interchangeably to effect economies and to eliminate rough spots, and so forth, in the organizations.

If, perchance, I saw a lad in the Kansas City office of [fol. 7232] Panhandle Eastern that could do us a rather nice service in the office of Columbia Oil & Gasoline Corporation down at Charleston, I sent him over there for that purpose, had him do that particular job, get it under way and go back to his own duties. That was true, likewise, with Columbia Oil & Gasoline Corporation's forces.

Q. The conversation you mentioned with Mr. Munroe and Mr. Reynolds was at Kansas City?

A. It was.

Q. And were you in New York at the meeting of Columbia Oil & Gasoline Corporation on June 7, 1934?

A. I think unquestionably I was.

Q. Now, at that meeting all of the officers of Columbia Oil, who were at that time officers of Columbia Gas, resigned, did they not?

A. I shall accept your statement, sir. I must, again, insist that I am not a witness in these proceedings to testify with respect to the affairs of Columbia Oil & Gasoline Corporation, and were I permitted to make such a statement without seeming to be officious, it would occur to me that they are irrelevant, immaterial, and so forth.

[fol. 7233] Q. Well, I am unable, Mr. Watkins, to change rules of law here to conform to what may be your wishes about these matters, but I must ask you as to facts within your knowledge.

A. I do not recall sir, exactly what happened at that meeting. It was many years ago and there had been a multiplicity of things happen. I have had my hands in what seems to me like a million different things, and I do not specifically recall what happened at the meeting.

Q. Will you refresh your recollection by looking at the annual reports of Columbia Oil & Gasoline Corporation now before you, and tell me in what way the Board of Directors was changed at your meeting of June 7, 1934?

A. You have supplied the witness with a copy of the annual report of Columbia Oil & Gasoline Corporation which shows, in part, on page 2, apparently it is, that the officers of Columbia Oil & Gasoline Corporation at the time such report was issued, which—

Q. Mr. Watkins, I am not asking you to read from that at all. I am asking you to refresh your recollection.

A. The only way I can refresh it is to look at this report—

Q. Of that meeting?

A. This report was apparently issued on March 30, 1934. I had nothing to do with the affairs of Columbia [fol. 7234] Oil & Gasoline Corporation in 1933, and if I must answer a question concerning the affairs of that company as of that date, I must refer to something and you have given me a report to refer to.

If you wish this witness to state the officers and directors of that company as of or about that time, he can only do so by reading from this report.

Q. Mr. Watkins, did you testify before the Securities and Exchange Commission in a recent hearing with respect to the exemption of Panhandle Eastern as a subsidiary of the Columbia system?

A. I may have testified to the extent of introducing some documents only. I do not recall, Mr. Chamberlain, that I gave any testimony in that proceedings with respect to whether or not Panhandle Eastern should be exempted. My remembrance at the moment is that the only purpose for which I was used was, perhaps, to identify documents.

Q. Have you read the findings in the hearing in that matter, which is Release No. 2778 and Exhibit 14 in this case?

A. I probably have.

Q. I now lay before you a copy of that Release, and ask if that refreshes your recollection as to what was done at that time?

A. We are now referring to the meeting of Columbia [fol. 7235] Oil & Gasoline Corporation that occurred on June 7, 1934?

Q. Yes, sir.

A. According to page No. 7 of the Release, to which counsel has referred—

Q. (Interposing) Mr. Watkins, I am not asking you to read that. I am asking you if it refreshes your recollection.

A. It does by reading it, sir.

Messrs. Harrop, Watkins, Philips & Munroe constituted the new Columbia Oil board.

Q. Then, at that time Mr. Reynolds resigned, did he?

A. I presume he did, if he was a director before, and I think he was. I believe, further, he was an officer.

Q. And Mr. Munroe resigned as a director of Columbia Gas, did he not?

A. That I do not know.

Q. You cannot remember that?

A. Mr. Chamberlain, I do not know anything about the affairs of Columbia Gas & Electric Corporation. I wasn't at any of its board meetings. Mr. Munroe may have been a director of Columbia Gas, he may have been a director, I do not know specifically, nor do I know when he resigned. I would assume that he did, and my assumption is based on this fact; that the possible further sever-[fol. 7236] ance of the connection between Columbia Oil and Gasoline Corporation and Columbia Gas & Electric Corporation was intended to be a part of the result of the transactions that took place at this June 7, 1934, meeting; assuming that to be the proper basis of the action that took place there, it would follow that Mr. Munroe would certainly resign from the board if he were on such board.

Q. Then, you do recall that the purpose of the meeting was to sever the relations there, in so far as the two companies were concerned, do you not?

A. I have no notice. I received no notice of the purpose of the meeting. I do not recall that Columbia Oil's by-laws at that time, nor do I recall that their by-laws during the time that I was an officer of the company required that notices of any of its meetings need state the purpose of such meeting.

I was not informed prior to the meeting what its purpose was. What I learned about the meeting was during the process of the meeting.

Now, my memory is not perfect enough to tell you specifically exactly what happened or the purpose of the things that did happen.

Q. The minutes of the meeting were in your custody for some three years, were they not?

A. Oh, yes; but I made no effort to make such a card [fol. 7237] index of my mind that I can instantly pluck from it incidents that occurred eight years ago. There has been so much happened, I have been involved in so many things of what seemed to be matters at the moment, that I feel that a job done is finished, behind, and put on the shelf.

Q. Is your memory clear as to what happened with respect to the resignation of Columbia Gas directors from Panhandle Eastern's board in 1934?

A. I can refer to the memorandum that I quoted you of the officers and directors a few moments ago and tell you what happened to them.

. . . . . .

[fol. 7238] Q. I am asking you whether or not every director of Columbia Gas who was a director on the board of Panhandle Eastern did not resign in the year 1935?

A. I do not know.

Q. Well, will you look and see?

A. Here are the changes in the year 1935.

Q. Let's save time here. Did Mr. Reynolds resign?

[fol. 7239] A. Mr. Reynolds apparently was not a director of Panhandle Eastern Pipe Line Company at any time during the year 1935.

Q. Then, he must have concluded in 1934?

A. According to my information Mr. Reynolds was not a director of Panhandle Eastern Pipe Line Company subsequent to the directors' organization meeting in 1932, which occurred about March 29 of that year.

Q. He was vice-president and secretary, at that time, in 1934?

A. That is correct. We are talking about the years 1932, 1933, 1934, and 1935, and he continued to be secretary of Panhandle Eastern Pipe Line Company until some time around the directors' meeting of the company held in April, 1935.

Q. That is right.

Now, Mr. Gregory was a director?

A. Mr. Gregory apparently ceased to be a director of Panhandle Eastern Pipe Line Company about April 24, 1935, and was at that time succeeded by Mr. W. P. Phillips.

. . . . . .

[fol. 7240] Q. Mr. T. R. Weymouth?

A. Mr. Weymouth was a director of Panhandle Eastern Pipe Line Company for a certain period up to and including April 24, 1935, when, at the directors' meeting held that day, apparently his resignation was acted upon and he was succeeded by Mr. J. L. Harrop.

Q. At that meeting were you elected secretary and treasurer of Panhandle Eastern for the first time?

A. That is correct.

Q. And has there been any officer of Columbia Gas & Electric Corporation on the board of directors of Panhandle Eastern since April of 1935?

A. Mr. Chamberlain, I do not know all of the officers and directors of the Columbia companies, so, please will you tell me who it is you are inquiring about and I shall attempt then to answer? I cannot answer such a general [fol. 7241] question.

Q. You mean that with all of your connections with the Columbia organization, your intimacy with the personnel, that you are unable to tell whether upon the small board of Panhandle Eastern there has been an officer or director of Columbia Gas & Electric Corporation, since April of 1935?

A. I mean exactly, sir, that, and I should ask you whether or not you can look back through your memory and tell me specifically who was a director of the United Power & Light Company, I believe it is, the parent of Michigan Consolidated Gas Company, or any of the subsidiaries or parents of that subsidiary, at any specific date certain.

Q. Do you know of any officer or director of Columbia Gas & Electric Corporation who have been an officer or director of Panhandle Eastern since April of 1935?

A. Of either Columbia Gas or Columbia Oil?

[fol. 7242] Q. I said Columbia Gas & Electric Corporation.

A. It would appear, sir, from the information I have before me and subject to my lack of knowledge with respect to some of the individuals that there had been no officer of Columbia Gas & Electric Corporation an officer of Panhandle Eastern Pipe Line Company, nor has there been any director of Columbia Gas & Electric Cor-

poration a director of Panhandle Eastern Pipe Line Company since the date to which you referred.

Q. Did I understand that after your election the office of secretary-treasurer of Columbia Oil you moved to New York?

A. Yes, sir.

Q. And for how long a period did you live there?

A. In New York?

Q. Yes.

A. Well, I live in South Orange, at this very moment.

Q. You are living there still?

A. Oh, yes, yes, but let's be sure that we understand what we mean when we say that. The record will show that during the time that I was an officer of Columbia Oil & Gasoline Corporation I was running around over the country between Kansas City and Charleston and various other points where my duties took me far more than the Watkins family appreciated. Now, then, I am still sub- [fol. 7243] ject to the necessity of spending a vast amount of my time in Kansas City.

. . . . . .

Q. Yes. Now, you became, at that time, the secretary and treasurer of the various operating subsidiaries of Columbia Oil & Gasolene Corporation, did you not?

A. Not treasurer, sir. Secretary and assistant treasurer of the subsidiaries.

Q. I see. And you served in substantially that capacity with respect to the subsidiaries until your resignation from the Columbia Oil organization in 1937?

A. That is correct.

[fol. 7244] Q. And as secretary of Columbia Oil, were you the chief accounting officer?

A. I was, not necessarily because I was secretary, however.

(Interposing). But I was the chief accounting officer.

Q. The by-laws of Panhandle Eastern make you the chief accounting officer, do they not?

A. The by-laws of Panhandle Eastern provide that there is to be a controller and the controller may be the same person as the secretary and the controller is the chief accounting officer.

Q. But, as a matter of fact, your were the chief accounting officer of Columbia Oil during the period of your service with that company? A. That is correct.

Q. You had the custody of the minutes of the Board of Directors of that Company, and also the subsidiaries, did you not? A. I did.

. . . . . .

[fol. 7245] Q. Do you remember where you were on the 6th day of March, 1935?

A. I do not. Does this mass of details show it?

. . . . . .

[fol. 7246] Q. That was the day the Government filed this anti-trust action against Columbia Gas and Columbia Oil, was it not?

A. I do not know.

Q. You do not know about that. You recall, do you not, about the early part of 1935 that the Department of Justice filed an action in equity in the Delaware District in Cause Number 1699, I believe, which was in the nature of an anti-trust action against Columbia?

A. I know there was such action filed. As to the actual date upon which it was filed; I cannot answer.

Q. And do you remember about in July that there was another suit filed by Henry T. Bush and C. Ray Phillips as receivers of Missouri-Kansas Pipe Line Company, against Columbia Oil & Gasoline Corporation and others in the Southern District of New York, United States District Court?

A. I believe there was such a suit filed. I do not know whether it was filed on that day or not. There have been such a vast number of suits filed directly by all of the companies over the period that I have been connected with them that I could not specifically recall the date of such [fol. 7247] suits or the nature of the action.

Q. These two actions are such that you remember them, do you not?

A. I remember, as I have stated in answer to your question, that there was a suit. I remember, likewise, that Messrs. Phillips and Bush, receivers of Missouri-Kansas, probably filed more than one suit. If they are anything like Missouri-Kansas, they surely did.

Q. Now, what other suits did they file?

A. I really do not know.

Q. That is just sort of a guess?

A. Perhaps a guess.

Q. Now, on June 1, 1936 there was an agreement entered into between Columbia Oil and in this examination may I use the words "Columbia Oil," "Columbia Gas," and "Panhandle Eastern" and "Missouri-Kansas" to represent the four companies, and you will understand them in that way?

A. I shall so understand them and, likewise, use them in that fashion, sir.

Q. Now, on June 1, 1936, was there not an agreement executed between Columbia Oil, Columbia Gas, Panhandle Eastern and Henry T. Bush and C. Ray Phillips, as receivers of Missouri-Kansas Pipe Line Company, which involved a settlement of the various difference that existed between these people?

[fol. 7248] A. There was such an agreement entered into, and we, of Panhandle Eastern, know of it generally as the four party agreement as of June 1, 1936.

If my memory serves me correctly, there was, likewise, a three-party agreement entered into on the same date, whether it be between two of the companies involved in the June 1st, 1936 agreement and the Missouri-Kansas receivers or just who the parties were to the so-called three-party agreement of 1936, my memory is somewhat vague.

Now, as to exactly what the June 1, 1936 three-party or four-party agreements contained, I cannot tell you in very great detail, except this, that I believe you will find by an examination of one or both of those agreements, that they were designed to put in writing certain conclusions tending to dispose of some alleged, real or fancied differences that existed between the parties, part of that time, and did specify certain things to be done by certain of the parties, but you would not ask me to recall each and every thing that they contained, I am sure.

Q. I must ask you if you signed that as secretary of Panhandle Eastern?

A. If the secretary of Panhandle Eastern Pipe Line Company signed it, I surely did, because I was the secretary at that time.

Q. Well, can you refresh your recollection by examin-
[fol. 7249] ing the exhibit before you?

A. The signature of Leith V. Watkins was apparently affixed to the document in question in that attestation of the signature of the vice president of Panhandle Eastern Pipe Line Company, who signed it, and that gentleman's name was Mr. James L. Harrop.

Q. And at that time Mr. James L. Harrop was vice president of Columbia Oil & Gasoline Corporation, was he not?

A. I believe he was and your witness was, likewise, secretary-treasurer of Columbia Oil & Gasoline Corporation.

Q. And a director?

A. Correct, and Mr. Harrop was, likewise, a director.

Q. Now, the settlement that was outlined and set out in this agreement was approved by the Board of Directors of Columbia Oil & Gasoline Corporation, was it not?

A. I think it may have been, Mr. Chamberlain. I would assume that naturally, it would have been.

Q. Yes. And it was done at a meeting at which you were present; was it not? A. Beg pardon?

Q. It was done at meetings at which you were present?

A. I would assume that to be the case, because, as I recall, I was present at most of the meetings of the Board of Directors of Columbia Oil & Gasoline Corporation, as long as I was a director of that company.

[fol. 7250] Q. Now, I shall, again, ask you to refresh your recollection, if you do not remember the matters which were settled by that agreement, and ask you if it did not cover a settlement of all claims between Columbia Oil, Columbia Gas, Missouri-Kansas, the National City Company and Panhandle Eastern with respect to the agreement of September 17, 1930, and the amendment thereto, to which you have referred in your previous testimony?

. . . . . .

A. I was hoping certainly that it would do that very thing. That was among its purposes.

. . . . . .

[fol. 7255] Q. You and I can not argue law, but I am directing your attention to whether or not Panhandle Eastern released all of these parties from any liability under the contract of September 17, 1930, and I refer you—

A. (Interposing) Did I say that the document I am referring to or, rather, it is the four-party contract of June 1, 1936, did not do that very thing?

Q. Yes, sir, but that is my question, Mr. Watkins.

A. Then I misunderstand your question.

Q. Did it?

A. It did, certainly, if it had any such obligation.

. . . . . .

[fol. 7256] Now, this settlement arose out of a longer period of litigation between the two stockholders of Panhandle Eastern, did it not?

A. I think that is correct, sir.

Q. And there passed between these people various charges against each other, and there had been a considerable period of litigation and various cases filed in the court with respect to these charges, had there not?

A. I think there was a lot of such action with respect to those alleged, real or fancied differences or charges, if [fol. 7257] you please.

Q. And these settlements were more particularly of interest to the stockholders than to Panhandle Eastern and, of course, I speak of that only in a financial way, not a business way.

A. Well, I do not believe I would agree entirely with that statement, sir, because Panhandle Eastern has always felt the anxiety of having any alleged, real or fancied difference, whether it be between its stockholders or otherwise, cleared up.

. . . . . .

Q. Well, I think you are quite correct, Mr. Watkins, but Panhandle received a substantial benefit resulting from this compromise settlement, did it not?

A. In what way, sir?

[fol. 7258] Q. Well, in the way that you have just indicated.

A. Well, we certainly received some peace of mind, because one of the humps was behind us. We were over that

hill, at least. We have had some others that have crept up since then.

. . . . . .

Q. It occurs to me that you have had substantial benefits in the way of aid in your refinancing without any particular expense to Panhandle Eastern. That is true, is it not?

A. I do not know what you mean.

Q. Well, you were recapitalized, were you not; without some 11,000,000 of preferred stock or cash without any expense for broker's commissions, is that not true?

A. Yes, there was no brokerage commission in connection with that.

. . . . . .

[fol. 7263] Mr. Watkins, I ask you to examine Exhibit No. 145—

. . . . . .

Now, you signed this Registration Statement?

A. In two or three places, yes, sir.

Q. Are you familiar with it?

A. I think I am reasonably familiar with it, yes, sir.

Q. Now, I would like to have you refer to the first para-[fol. 7264] graph under "Certain other phases of corporate history" if it is necessary to refresh your recollection and then I want to ask you a question.

A. I have referred to the paragraph, sir.

Q. All right. Is it true that on March 6, 1935, the United States Government instituted an anti-trust suit against Columbia Oil, Columbia Gas & Electric Corporation (hereinafter sometimes called Columbia Gas), George H. Howard, Phillip G. Gossler, Charles A. Munroe, Thomas R. Weymouth, Thomas B. Gregory, Edward Reynolds, Jr., Burt R. Bay, and John H. Hillman, Jr., alleging, among other things, the defendants had dominated the company for the purpose of preventing competition between The Company and Columbia Gas?

A. Such a suit was filed and the facts you have recited appear as a part of Exhibit No. 145 in these proceedings and your witness is among the officers of Panhandle East-

ern Pipe Line Company who signed that Registration Statement and the facts stated in it are correct.

Q. And it is your understanding that any reference to "The Company" refers to Panhandle Eastern Pipe Line Company?

A. Wherever the words, "The Company" are used in this exhibit, they do refer to Panhandle Eastern.

Q. Yes. Now, is it true that in October, 1935, the Government amended its Bill of Complaint in that suit and [fol. 7265] that the suit was finally terminated by stipulation and consent decree entered January 29, 1936?

A. That is true and it was also true that yesterday was the sixth anniversary of that.

Q. A copy of that decree was appended to your Registration Statement, A-2, was it not, and the stipulation—

A. (Interposing). Well, it was not appended to the stipulation, no, sir.

Q. Filed as an exhibit?

A. I shall refer to the list of exhibits and see whether or not it was incorporated by reference or filed with the exhibit itself.

On Page 95 of Exhibit No. 145, as exhibit K-1, there was incorporated by reference a copy of the stipulation and decree entered January 29, 1936, in Cause No. 1099 In Equity in the District Court of the United States for the District of Delaware, filed as Exhibit I-1 to the company's Registration Statement No. 2-2764.

Q. Now, you have seen the stipulation in that case, have you not, Mr. Watkins?

A. Unfortunately so, sir, I have.

Q. And you would recognize a printed copy of it, would you not?

A. I think I might.

Q. Now, I would like to have you state whether or not [fol. 7266] the stipulation entered in that case, being Equity No. 1099 of the United States District Court, District for Delaware, did not contain the following provisions:

"V(c) The Defendant, Columbia Oil, agrees to make, within 48 hours of the entry of the attached decree, a bona fide offer in writing to the receivers of Missouri-

Kansas Pipe Line Company, appointed by the Delaware Chancery Court, providing among other things for the settlement of the claims of the receivers, as asserted against the defendant herein and the acquisition by the receivers of a direct interest in the stock of Panhandle Eastern Pipe Line Company, to the extent that one-half of the initial amount of common stock of Panhandle Eastern Pipe Line Company to be outstanding after a recapitalization thereof, subject to any right of preferred stock which may have voting rights and rights of conversion into common stock and also subject to other conditions of the offer which may alter the proportionate interest of the various parties in Panhandle Eastern Pipe Line Company."

. . . . . .

[fol. 7270] Q. Now, Mr. Watkins, is it true that on July 18, 1935, Henry T. Bush and C. Ray Phillips, as Receivers of Mo-Kan, instituted a suit for damages against Columbia Gas; Columbia Oil, and certain individual defendants, claiming damages by reason of the alleged domination of the company by these defendants, and the suit was settled on or about April 29, 1936?

[fol. 7271] A. That is correct.

Q. And is it true that copies of the offer of settlement, as extended and modified, and of the acceptance thereof, [by] incorporated by reference as Exhibit K-2, to your registration statement No. 2-4919?

A. That is correct and the registration statement refers to that exhibit for a complete statement of its provisions.

. . . . . .

Now, I would like to have a document I now hand the reporter marked for identification with the next number and that there be attached the suffixes "A", "B", and "C" to cover what is in the exhibit named as "Exhibit H-6", "Exhibit H-9", and "Exhibit I-2" the purpose being that I desire to offer them collectively and separately, as well, and, further, that they refer to different matters.

. . . . . .

[fol. 7272] Trial Examiner: (Interposing) The folio which you are now discussing will be marked for identification as Exhibit 137 and I understand that it consists of

three parts which you desire now to separately identify as, respectively, A, B, and C?

. . . . . .

[fol. 7274] (Exhibits 157-A, 157-B and 157-C marked for identification.)

. . . . . .

By Mr. Chamberlain:

Q. I refer you, Mr. Watkins, to Exhibit 157, including the three portions, A, B, and C, and I will ask you if Exhibit 157-A is not a copy of the agreement between Columbia Oil, Columbia Gas, Panhandle Eastern and the two receivers of Mo-Kan as of June 1, 1936?

. . . . . .

[fol. 7277] The Witness: The witness has been supplied by Mr. Chamberlain with a file certified to by the Secretary of the Securities and Exchange Commission as being full, true and complete copies of Exhibit H-6, Exhibit H-9, and Exhibit I-2 to the registration statement filed by Panhandle Eastern Pipe Line Company pursuant to the provisions of the Securities Act of 1933 under File No. 2-2764 and in connection with that file, Mr. Chamberlain has offered, if the witness understands the status of the proceedings at the moment, certain portions of that certificate as exhibits Nos. 157-A, B and C.

. . . . . .

[fol. 7278] Exhibit No. 157-A for identification was a photostatic negative copy of an agreement dated January 31, 1936, between Panhandle Eastern, Columbia Gas and Columbia Oil. There were no exhibits attached to that agreement.

Exhibit No. 157-B for identification is a photostatic negative copy of an agreement dated as of June 1, 1936, between Columbia Oil, Columbia Gas, Panhandle Eastern and the receivers of Missouri-Kansas Pipe Line Company, to which there were attached certain exhibits.

Exhibit No. 157-C for identification consisted of photostatic negative copies of a letter dated January 31, 1936 from Columbia Oil to the receivers of Mo-Kan, concurred

in by Columbia Gas, as well; the photostatic negative copy of a letter dated March 4, 1936 addressed to Columbia Oil & Gasoline Corporation which was signed by Messrs. Frank P. Parish and Dupuy G. Warrick; as well as a photostatic negative copy of a letter dated March 5, 1936 addressed to Messrs. Frank P. Parish and Dupuy G. Warrick by Columbia Oil & Gasoline Corporation, concurred in by Columbia Gas & Electric Corporation; as well as a photostatic negative copy of a letter dated April 22, 1936 addressed jointly to Columbia Oil and Columbia Gas, the subject of which is shown as "Missouri-Kansas Pipe Line Company receivership," which was signed by Messrs. C. Ray Phillips and Henry T. Bush as receivers of Missouri-Kansas Pipe Line Company, which said let-
[fol. 7279] ter carries a foot not agreeing to the modifications set forth therein by Columbia Oil and Columbia Gas.

There is a further photostatic negative copy of a letter dated April 29, 1936, addressed jointly to Columbia Gas and Columbia Oil which was signed on behalf of Henry T. Bush and C. Ray Phillips, receivers of Missouri-Kansas Pipe Line Company, by Marvel, Morford, Ward & Logan, their attorneys.

* * * * * * * * *

The Witness: This material is certified to by the Secretary of the Securities and Exchange Commission as being Exhibit H-6, H-9, and I-2, to the registration statement filed with the Securities and Exchange Commission on December 30, 1936, by Panhandle Eastern Pipe Line Company pursuant to the provisions of the Securities Act of 1933, as amended, under File No. 2-2764, and if the witness may speak further, as the respective documents were referred to in identifying them with Exhibit Nos.
[fol. 7280] 157-A, B and C for identification, it is his belief that they are true and correct copies of the documents they purport to be.

* * * * * * * * *

[fol. 7299] Trial Examiner: The item of going-concern value, as presented by Mr. Biddison, I believe, was desig-

nated "Cost of developing business." May I ask, Mr. Wheat, whether you are in agreement with Commission counsel that the items to which Mr. Chamberlain has referred, aggregating $5,000,000 or more, may be classed as [fol. 7300] a part of the claim for going-concern value?

Mr. Wheat: We have not so used any such term. We have considered this as a cost in dollars of carrying unused capacity just exactly the same as interest during construction or any of the other costs to which this company was put in bringing its business to a stage of full operation. That is the basis of the claim.

We do not personally feel, on behalf of the company, I think it should be stated again, as it has been stated many times before in this record, that the type of proof which Mr. Chamberlain now suggests is material to that issue. The money unquestionably was spent and there is not even a hint in counsel's statement or in the statement of Commission counsel that the money was not spent.

Trial Examiner: Is there any distinction between the item in this case aggregating $5,000,000 or more and the item of $8,500,000 which was designated, as I recall, going concern value in the case of the Natural Gas Pipe Line Company?

Mr. Wheat: I do not know, sir. I think that is a matter that would require very considerable consideration. Mr. Culton is, of course, familiar with the record in that matter.

Mr. Culton: The items are the same. It was referred [fol. 7301] to, as Mr. Biddison stated, in that case as "going concern value," but it is not going concern value in the sense that those words have been used in the former cases. The items are similar.

Trial Examiner: You have covered the point the Examiner had in mind, whether or not the character of the expenditures there characterized as going concern value were similar to the expenditures involved in this aggregate of $5,000,000.

Mr. Culton: That is right.

Trial Examiner: Proceed, Mr. Chamberlain.

Mr. Chamberlain: The intervener now offers in evidence as a supplement to Exhibit No. 145, introduced by Panhandle Eastern, and particularly with reference to the statements on page 9 thereof, Exhibit 157.

Mr. Wheat: Mr. Examiner, we have no objection, of course, to any data which this company has filed with the Securities and Exchange Commission being made a part of this record on any basis or principle. We think, however, that we are encumbering the record, commencing, at least, the encumbrance of the record with what probably will become a very large encumbrance before we are through and it is, to a great degree, immaterial.

This witness, of course, can be asked to identify large numbers of documents. We understood the witness was under cross-examination.

[fol. 7302] I offer this statement merely to show that we have no desire to have this record encumbered with tonnage.

. . . . . .

[fol. 7304] Mr. Chamberlain: I am sure that there is a reasonable informality in these proceedings but perhaps I should, as a matter of caution, ask that the record show that I have offered Exhibit No. 157-A, 157-B and 157-C, separately. That is, the ruling is to be deferred and I have no objection to that but I would like the record to show that I offered them separately.

Trial Examiner: Very well, they will be so treated.

Q. Now, Mr. Watkins, getting back to our questions on page 9, I wish to ask you whether the suit of Henry T. Bush and C. Bay Phillips of Mo-Kan against Columbia Oil and others on July 18, 1935, was still pending at the time of the signing of the stipulation and decree in the antitrust [fol. 7305] action, to wit, January 29, 1936?

. . . . . .

A. It was and this witness had testified previously that it was not settled until April 29, 1936.

Q. And that included at least claims of the receivers which had been asserted against Columbia Oil prior to January 29, 1936, did it not?

A. I suppose it did.

Q. Just one more question as to the pendency of the antitrust action. A supplemental complaint was filed by the United States Government on or about December 21, 1938, was it not?

A. In connection with the so-called antitrust suits to which reference has been made?

Q. Yes.

A. That is correct.

Q. And it is still pending at this time?

A. That is correct.

* * * * * * * *

[fol. 7306] Mr. Chamberlain: Of course, you are stating something that refers to peak loads, not to sales of gas. The company has ample gas for sale and I understand it is desirous of selling it.

By Mr. Chamberlain:

Q. I am referring you to the middle paragraph on page 10 for one question. Is it not a fact that the "amended and supplemental complaint of the Government in the antitrust action alleges that the decree of January 29, 1936 failed to nullify elements of control over the company by Columbia Gas which existed at the time of entry of such decree, that the company has been precluded from engaging in commerce in natural gas and from competing in any manner with Columbia Gas and Columbia Oil in the States of Indiana, Michigan and Ohio, and that the acquisition of [fol. 7307] the capital stock of Michigan Gas Transmission Corporation by Columbia Gas has had the effect of restraining commerce in natural gas in said States and of tending to create therein a monopoly in natural gas?"

A. Yes, I believe it is quite correct that the amended and supplemental complaint does contain such allegations but, by virtue of the mere fact of furnishing such information in a registration statement, neither Panhandle Eastern Pipe Line Company nor any of its officers or directors admitted that those facts were correct.

The purpose of supplying this information is responsive to the requirements of the rules and regulations governing the preparation and submission of a registration statement.

* * * * * * * *

[fol. 7310] Q. Now, I direct your attention, Mr. Watkins, to the contract of September 17, 1930, to which you have made a very considerable number of references. Do you have with you a copy of that contract?

A. I have.

Q. Will you get it before you? Did that contract contain a provision to the effect that Missouri-Kansas Pipe Line Company, either directly or through its present and/or future subsidiaries, will enter into gas purchase contracts with the Panhandle Company upon substantially the following terms:

. . . . . .

[fol. 7311] Q. (Continuing) "1. An excess capacity contract for the purchase up to 20,000,000 cubic feet of gas per day at 18 cents per m. cubic feet, without limit as to time so long as the Panhandle Company has any excess capacity, provided that if the Panhandle Company can sell all or any gas at a higher price it may reduce proportionately deliveries under this excess capacity contract.

"2. Firm contract, commencing when the Panhandle Company gives notice to the Pipe Line Company and Columbia that it no longer has any excess capacity, for ten years and thereafter with right of cancellation by either party on one year's notice, at the rate of 26½ cents per m. cubic feet, deliveries under such contract to be as required by the Pipe Line Company and to aggregate for each year an amount producing at least a 70 percent annual load factor based on the maximum daily delivery, [fol. 7312] which maximum shall in no case exceed 20,000,000 cubic feet per day, and after the expiration of one year from the effective date of this firm contract such maximum day shall not exceed the maximum day established during said first year."

A. The contract of September 17, 1930, does have the provisions which counsel has just read, and it might be of interest to observe in connection with those provisions that it is the witness' belief that United Light & Power Company had something to do, perhaps a good deal to do, with the fact that the contracts referred to in this particular section of the September 17, 1930, contract were not actually executed.

. . . . . .

[fol. 7314] Q. Now, let me ask you, Mr. Watkins, whether the contract of September 17, 1930, contains a somewhat similar provision with respect to the contract for the sale of gas to Columbia Gas & Electric Corporation, and, if so, will you read into the record that provision?

A. There is, apparently, a similar provision with respect to Columbia Gas & Electric Corporation included in that contract which appears at V-(c) and is as follows:

. . . . . .

[fol. 7315] "(c) That it will cause the Columbia Gas & Electric Corporation, either directly or through its present and/or future subsidiaries, to enter into gas purchase contracts with the Panhandle Company at or near the Indiana-Illinois State Line upon substantially the following terms:

"(1). An excess-capacity contract for the purchase up to 20,000,000 cubic feet of gas per day at 18 cents per m. [fol. 7316] cubic feet, without limit as to time so long as the Panhandle Company has any excess capacity, provided, that if the Panhandle Company can sell all or any gas at a higher price it may reduce proportionately deliveries under this excess capacity contract.

"(2). Firm contract, commencing when the Panhandle Company gives notice to the Pipe Line Company and Columbia that it no longer has any excess capacity, for ten years and thereafter with right of cancellation by either party on one year's notice, at the rate of 26½ cents per m. cubic feet, deliveries under such contract to be as required by Columbia and to aggregate for each year an amount producing at least a 70 per cent annual load factor based on the maximum daily delivery, which maximum shall in no case exceed 30,000,000 cubic feet per day, and after the expiration of one year from the effective date of this firm contract such maximum day shall not exceed the maximum day established during said first year."

. . . . . .

[fol. 7317] Q. Now, before leaving this contract, I wish to call your attention to Article VIII, particularly with respect to the gas sales and purchase contracts which are now carried on the books of Panhandle Eastern Pipe

Line Company, and I would like to have you read into the record Paragraph VIII.

. . . . . .

The Witness. "The price per share for the stock of Panhandle to be sold by the Pipe Line Company and to be purchased by Columbia under the provisions of this contract shall be ascertained as follows: There shall be de-
[fol. 7318] termined by Arthur Anderson & Co. the actual cash investment as of August 31, 1930, of the Pipe Line Company system in the Panhandle Company and the Panhandle's subsidiary companies as the subsidiaries now exist, such cash investment to be the actual original cash cost to the Pipe Line Company system, plus interest thereon during construction at the rate of six per cent per annum, and such cash cost to include the payments made for engineering services by others than companies affiliated with the Pipe Line Company system, legal expenses, taxes during construction, organization costs, costs of franchises, and the $631,000 expended by the Panhandle Company for gas sale or gas purchase contracts. To such aggregate cash investment shall be added the debts and obligations existing at the Panhandle Company and its subsidiaries on August 31, 1930, to be paid by the Pipe Line Company as per Article IV paragraph (c) above (these debts and obligations not to include those of the subsidiaries of the Pipe Line Company whose stock is to be transferred to the Panhandle Company as per said Article IV paragraph (c). To the sum so ascertained shall be added $7,333,000. This price per share of Panhandle stock shall be obtained
[fol. 7319] by dividing the total sum by 10,000 and adding interest on said price at the rate of six per cent per annum from August 31, 1930, to the date of payment for each share of stock."

[fol. 7320] By Mr. Chamberlain:

Q. Do you have with you a copy of the supplemental agreement between the parties, of date October 23, 1930?

. . . . . .

A. Yes, sir; I have it.

Q. Well, I would like to have you read into the record the first and second paragraphs in that they relate to the facts stated in the Article VIII of the original contract.

1. The first and second paragraphs of the memorandum of agreement dated October 23, 1930, to which counsel has referred, are as follows:

"First: In adjustment of a dispute existing between [fol. 7321] the parties, as to the amount required to be paid by the Oil Company under the contract for said shares of Panhandle stock, it is agreed that the computation of the purchase price per share of Panhandle stock to be purchased by Columbia is to be computed exactly as set out in Article VIII of the contract, except that the figure of $7,833,000 therein mentioned shall be reduced to $6,453,000 and the computation of interest therein provided for shall be correspondingly adjusted. The purchase price per share of Panhandle stock to be paid by Columbia as of the date hereof, before calculating interest from August 31, 1930, is accordingly $1938.58-2/3."

"Second: The book value of the property to be transferred by Missouri Kansas to Panhandle, according to Article IV (a) of the contract shall be not less at the closing date than on August 31, 1930, without revaluation of any of the items. Under date of October 22, 1930, Arthur Anderson & Co. advised Columbia and Missouri-Kansas that the book value of the items referred to, exclusive of investments, was as follows:"

There then follows a table under two general headings, the first of which is: "Particulars", and the second of which is: "August 31, 1930."

[fol. 7322] I shall first read the "Particulars" and then the amounts shown in the column headed "August 31, 1930."

The statement under the heading "Particulars" is as follows:

"Book value of assets to be transferred by Missouri-Kansas Pipe Line Company to Panhandle Eastern Pipe Line Company (paragraph (a) Article IV.):

"Gas purchase and sales contracts—stated at valuation determined by Messrs. Brokaw, Dixon Garner & McKee, Geologists and Petroleum Engineers, and approved by Board of Directors: $1,106,250.00

"Pipe lines, compressors, etc.-exclusive of Kentucky Division properties: 2,417,948.32

"Prepaid accounts: 3,565.19

"Materials and supplies at book values: 46,140.41."

Paragraph Second continues as follows:

"They further state, with reference thereto, as follows:

'The book values of the properties located in Kentucky and Southern Indiana have been determined as accurately as was possible in the time available, as noted above, the book value of the Kentucky Division properties has been excluded in the foregoing tabulation at both dates.' "

Q. Now, in your testimony yesterday you referred to [fol. 7323] certain items on the books of Panhandle Eastern, which reflected the cost of the purchase of these gas contracts, did you not?

* * * * * * * *

A. Well, this witness is not at all sure that Panhandle Eastern may have received all the gas-sale and purchase contracts that Missouri-Kansas had at August 31, 1930. It may have had some that were not even on its books.

Q. All right, will you please turn to Article IV of the contract of September 17, 1930, and read into the record the beginning of that paragraph down to the end of Paragraph (a)?

A. Article IV of the September 17, 1930 contract is as follows:

"IV. The Pipe Line Company agrees with the parties hereto as follows:

"(a) That it will transfer to the Panhandle Company all [fol. 7324] of the natural gas fields, gas contracts, pipe lines, distributing systems, etc. which it owns wherever located, except those located in Kentucky [of] Southern Indiana, and its stock ownership in all corporations which may own similar property located in the same territory."

Does that complete your question?

Q. Yes. Your agreement covered all that it had, did it not?

A. This agreement did. My answer to your previous question was that this witness had no knowledge that Missouri-Kansas actually transferred all of the things that have now been referred to in this Article IV, which has just been read into the record.

[fol. 7327] Q. Please refer, Mr. Watkins, to Article VIII of the contract of September 17, 1930, and to the statement that there is included the $631,000 expended by the Panhandle Company for gas sale or gas purchase contracts.

Now, what was on the books of Panhandle Eastern as of August 30, 1930? Let us have the—

Items as to the cost of gas sale or gas purchase contracts.

A. I cannot answer that question other than in this manner, the analysis that I have with me of the value of gas sales and purchase contracts for the books of Panhandle Eastern Pipe Line Company speaks of an amount as of April 30, 1932. There was, however, an entry made in 1930 which included a total of, $612,286.30. It is my present belief that that amount is substantially the amount referred to by you in Article VIII of the September 17, 1930, contract.

Q. That is the amount named in that contract with the addition of your miscellaneous expense of $11,286.30, isn't it?

A. The miscellaneous expense, to which this witness has testified, was a total of $12,703.04. Without further investigation, sir, I could not reconcile the difference between $631,000, as shown in Paragraph VIII of the September 17, 1930, contract, and the amount included in [fol. 7328] my analysis, other than to say this: that at August 31, 1930, the books of Missouri-Kansas Pipe Line Company or Panhandle Eastern Pipe Line Company were not exactly current. That is not a reflection on the employees responsible for the maintenance of those books or records, nor of the officers or directors of those companies. The companies were engaged in a very extensive construction program and were in the process of spend-

ing some $40,000,000. Their records were not quite up to date at the time this September 17, 1930, contract was entered into or, for that matter, at the time it was consummated, or, for that matter, they were not quite in as complete a state as they should have been when I appeared on the scene somewhat more than a year later.

That does not impeach the record, if you please, sir, that is simply my way of explaining the difference here.

Q. If I have the figures which you gave yesterday correct, you gave three items which would amount to exactly that $631,000. Now, see whether I have this correctly. In May, 1930, did you not mention a five-year six percent note issued to F. 2. Parish & Company in payment for the 15,000 shares of Missouri-Kansas stock at $28 per share for use in connection with obtaining gas sales contracts with Illinois Power & Light Corporation and Missouri Power & Light Company, $420,000?

[fol. 7329] A. I did.

Q. Now, did you not then have one in June of 1930 of a seven per cent note to the same company in payment of 4,000 shares at $34 per share in connection with gas sales contracts, or a total of $136,000? A. I did.

Q. And did you not have an item in June of 1930, payment to American Coke & Chemical Contracting Company for industrial contracts in Peoria, $75,000?

A. I do not know, sir, that I stated that that was in June, but there was such an amount and was paid to the American Coke & Chemical Contracting Company.

. . . . . .

Q. And my information leads me to believe that in [fol. 7330] your registration statement you have reported those payments as having been made by Panhandle Eastern in May and June of 1930 and, if so, that would account for the $631,000 mentioned in Paragraph VIII of the contract of September 17, 1930.

A. Well, they do account for the $631,000 mentioned there. If we are particularly interested in the dates, I shall try to ascertain them.

Q. No, I just wanted to know that they were before the date of the contract at all, except that it is before.

A. Oh, it is before.

. . . . . .

[fol. 7331] Q. Now, have you made any search to find the valuation that was placed on the gas purchase and gas sales contracts of Missouri-Kansas by Brokaw, Dixon, Garner & McKee prior to the September 17, 1930, contract?

A. I have not. Now, let me see, please, if I understand your question. You are asking the witness whether or not the witness has made any search to ascertain the [fol. 7332] fact that there was such a valuation made by that firm?

Q. Yes.

A. As far as I recall, I have never seen a copy of such valuation. It could be that I am wrong.

Q. This is the same firm of engineers who appraised the cash contracts at around $11,000,000, is it not?

A. That is correct, and, also, the same firm of engineers that had to do with the original construction of Panhandle Eastern properties and did a good job.

. . . . . .

[fol. 7337] Q. Now, as secretary of Panhandle Eastern, you are the custodian of the minutes of its Board of Directors? A. I am.

Q. And they are presently in your custody?

A. At this moment, no, sir. When I am in the office they are, sir. When I am away from the office, they are locked in the vault and my secretary has the key to it, yes, sir.

. . . . . .

[fol. 7339] Q. Will you please refer to page 888 of Document 92, Part 82, of the Report from the Chairman of the Federal Trade Commission, in response to Senate Resolution No. 83 of the 70th Congress?

With the agreement that this is subject to correction after an opportunity to compare with the original records, I would like to ask you as to the contents of the minutes of a special meeting of the Board of Directors of Panhandle Eastern, held at 61 Broadway, New York, on Tuesday, May 26, 1931,—first, who was present at the meeting?

A. According to this exhibit there was present Messrs. F. W. Crawford, F. I. Dulpont, T. B. Gregory, W. G. Ma-

guire, C. A. Munroe, F. P. Perry and S. A. Russell.

[fol. 7340] Q. Now, was counsel also present?

A. There was also present Mr. E. C. Bailey of counsel for the company and Mr. Ralph Shaw, who accompanied Mr. Perry.

Q. And did the secretary, Mr. E. Reynolds, preside?

A. No, sir, he acted as secretary of the meeting.

Q. I am sorry, I meant as secretary. Now, I would like to have you read into the record a statement made by Mr. Parish with respect to the management which you will find beginning at the bottom of page 889?

* * * * * * * * *

[fol. 7341] Q. I would like to have you read from the record of the minutes of the Board of Directors as of this date beginning with the words "Mr. Parish stated that he considered"—which you will find near the bottom of page 889, and to read down to the last paragraph of page 890.

A. Down to the last paragraph?

Q. Yes, sir, of Document 82, Part 92.

A. "Mr. Parish stated that he considered that one of the most important matters before the management at the present time was the insuring of the sale of the company's gas production, and that in this connection he requested a statement from the management as to the efforts being made toward that end and offered certain resolutions instructing the officers of the company to proceed with the preparation and execution of the contracts with [fol. 7342] Missouri-Kansas Pipe Line Company, and with the Columbia interests called for by the Agreement of September 17, 1930, between the Missouri-Kansas Pipe Line Company, the National City Company and Columbia Oil & Gasoline Corporation; which resolutions he requested the secretary to read.

"After reading the same, the secretary stated that the officers of the Company had had the form of such contracts under consideration for some time, but that it had not been thought necessary to press the matter since the pipe line would not be ready to deliver gas for several months.

"The president then made the following statement:

"'The Panhandle Eastern Pipe Line Company has made or has under consideration various contracts for the sale of gas to other companies, each for their requirements in certain specified quantities and territories.

"'Among such proposed gas sales contracts are those under which Columbia Gas & Electric Corporation and Missouri-Kansas Pipe Line Company would be entitled to call on the Panhandle Eastern Pipe Line Company to supply them with gas.

[fol. 7343] "'It was definitely agreed that any gas to be taken under such contract by Columbia Gas & Electric Corporation would be for supplying Indianapolis and northern Indiana territory, extending to Detroit and other points in Michigan and connecting with existing pipe lines in Ohio.

"'It was, likewise, definitely agreed that any gas to be taken under such contract by the Missouri-Kansas Pipe Line Company would be only for the purpose of supplying gas to the southwestern parts of Indiana through Terre Haute, and south to Nashville, Tennessee.

"'The Panhandle Eastern Pipe Line Company hereby notifies Columbia Gas & Electric Corporation and Missouri-Kansas Pipe Line Company that it does not consider that either of them would be entitled to gas under such contract, if the gas so supplied is to be used in violation of the above agreements or for the purpose of interfering with the distribution of gas by the other party.'

"Considerable discussion between various members of the Board followed, with reference to certain parts of the negotiations leading up to said contract of September 17, 1930, and developments thereafter bearing on the use of gas to be delivered by Panhandle Eastern Pipe Line Com-[fol. 7344] pany under the agreements provided for therein.

"During this discussion Mr. Parish renewed his motion that his resolutions be adopted and there was a delay of a few minutes while several members read the resolutions in detail. Mr. Munroe then stated that he did not see any particular objections to the adoption of the resolutions or the making of the contracts with Missouri-Kansas and Co-

lumbia Gas & Electric contemplated by them, but he wanted it distinctly understood that those contracts should definitely provide that none of the gas taken by Missouri-Kansas should be supplied in the Indianapolis market because that would be a violation of the agreement to take such gas for the purpose of supplying southern and southwestern Indiana and southward including Nashville, Tennessee. Mr. Gregory suggested that that statement be amended or supplemented by the statement that the Panhandle would sell gas to the Columbia Oil & Gasoline Corporation for distribution in the Indianapolis market because that was in accordance with the agreements on which such contracts would be based.

"The proposed resolutions were thereupon laid on the table without being voted upon."

. . . . . .

[fol. 7351] LEITH V. WATKINS a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Mr. Gorman: Mr. Watkins, at Lines 21 to 25 on Page 7092 of the hearing transcript of January 29, during the course of cross-examination by me, you made the following response to a question:

"A. Are you conscious of the fact that with respect to the gas sales and purchase contracts following some of the transactions that were consummated in the early part of 1936, perhaps as of December 31, 1935, some $600,000-odd of the original $3,053,391.53 was written off the reserves?"

Now, I understand that you have some correction to make with respect to that statement and similar statements which follow in the transcript. Is that correct?

The Witness: That is correct, sir. The actual facts were that the $3,053,391.53, as shown on Page No. 2 of Exhibit No. 52 in Column G on Line 40, was reduced by $123,105.13 as shown on Line 42 on the same page in the same column and that thereafter, the amount became $2,930,286.40 as shown on Line 40, Page 2, Exhibit No. 52, and

that the inference made by the witness previously that the [fol. 7352] difference between $123,105.13 and $600,000-odd was in some manner taken from the records was incorrect.

Mr. Gorman: Yes, and the result of your statement is that the $642,000-odd was originally contained in the $3,053,000-odd and from your present information, you do not know exactly what portion of that $642,000-odd was retired by the reduction of $123,105.13 to which you have made reference?

The Witness: Let's put it this way, Mr. Gorman, if we may:

The $123,105.13 reduction was not necessarily applicable to any individual element of the $600,000-odd. It was applied to the sum total.

. . . . . .

[fol. 7353] Q. Mr. Watkins, I call your attention to the minutes of an adjourned meeting of the Board of Directors of Panhandle Eastern held at 61 Broadway, New York, on Friday, June 5, 1931.

. . . . . .

Mr. Wheat: Mr. Chamberlain, these questions are asked at this time with the understanding that the witness may check against the original records.

Mr. Chamberlain: Yes, certainly.

[fol. 7354] By Mr. Chamberlain:

Q. Who were present at the meeting?

A. Messrs. F. W. Crawford, F. I. DuPont, T. B. Gregory, G. H. Howard, W. G. Maguire, C. A. Munroe, F. P. Parish, E. Reynolds, Jr., and S. A. Russell.

There were also present, by invitation, Messrs. E. C. Bailly, D. M. Moffat, Ralph Shaw, Ralph B. Mayo, Boykin Wright, B. R. Bay and L. A. Seyffert.

Q. Mr. Crawford presided, did he, and Mr. Reynolds acted as Secretary?

A. That is correct, sir.

Q. I would like to have you read into the record that part of it covering the last two or three paragraphs, beginning at the words "Mr. Parish then requested".

Mr. Chamberlain: Page 896.

The Witness: (Reading) "Mr. Parish then requested that further consideration should be given to the subject matter of the resolutions which he proposed at the previous session of the meeting, held May 26, 1931, and which had been laid on the table. Mr. Munroe then offered the following resolution as a substitute for the same:

"'Resolved, That the officers and counsel of this company be, and they hereby are, instructed to prepare and submit to this board, for approval, a form of contract for [fol. 7355] the purchase from this company by Missouri-Kansas Pipe Line Company, of gas in accordance with the agreement between Missouri-Kansas Pipe Line Company, the National City Company, and Columbia Oil & Gasoline Corporation.'

"Mr. Munroe's motion was seconded by Mr. Gregory and after discussion it was put to vote and unanimously adopted.

"Mr. Munroe then moved and Mr. Gregory seconded the following:

"'Resolved, That the officers and counsel of this company be, and they hereby are, instructed to prepare and submit to this board, for approval, a form of contract for the purchase from this company by the Columbia interests of gas in accordance with the agreement between Missouri-Kansas Pipe Line Company, the National City Company, and Columbia Oil & Gasoline Corporation.'

"Upon vote this resolution was also passed unanimously."

Q. Will you refer to the minutes of a special meeting of the Board of Directors of Panhandle Eastern, held at 61 Broadway, New York, on Thursday, July 16, 1931, and first state who were present at that meeting?

A. There were present Messrs. F. W. Crawford, F. I. Du Pont, T. B. Gregory, G. H. Howard, W. G. Maguire, C. A. Munroe, F. P. Parish, E. Reynolds, Jr., and S. A. Russell, who were Directors.

[fol. 7356] There were also present, by invitation of the Board, Messrs. R. B. Mayo, R. M. Shaw, D. M. Moffat, and E. C. Bailly.

. . . . . .

Q. I would like to have you read into the record from the minutes of that meeting the five paragraphs beginning with and following the words, "The president then stated [fol. 7357] that he wished to bring up for the consideration of the board the proposed contract between Panhandle Illinois Pipe Line Company and the local utility serving Lincoln, Illinois".

A. (Reading) "The president then stated that he wished to bring up for the consideration of the board the proposed contract between Panhandle Illinois Pipe Line Company and the local utility serving Lincoln, Illinois, in anticipation of which the construction of the lateral line to Lincoln had been embraced in the original project. During discussion of this matter, Mr. Munroe stated that he felt that consideration of this or any such contract was related to the preparation of contracts for the sale of natural gas at or near the Illinois-Indiana State line to Columbia Gas & Electric Corporation and Missouri-Kansas Pipe Line Company, and with the permission of the chairman, proceeded with discussion of the latter subject. He stated that the officers and counsel, pursuant to the resolution adopted by this board at its meeting held on June 5, 1931, had continued actively at work on the preparation of such contracts, in connection with which it had become necessary to make careful estimates to determine the extent to which this company could obligate itself to make deliveries of gas under such contracts in view of its existing obligations.

"He further stated that the figures which had recently been brought to his attention indicated the possibility of [fol. 7358] demands for gas from the Panhandle Eastern Pipe Line in excess of its available capacity without the expenditure of substantial additional sums for additional compressor capacity and perhaps pipe-line capacity. He therefore recommended that immediate, careful, and complete study of the entire situation involving the gas resources, line capacities, and market requirements of Panhandle Eastern Pipe Line Company, together with

determination by counsel of the obligation and responsibility of the company for deliveries under its present contracts, if demanded in excess of pipe line capacities, be made, as he felt that the board heretofore had not been in possession of sufficient facts adequately to realize the possible extent of the commitments which might already have been incurred by the gas-sales contracts heretofore authorized and executed, to say nothing of what might be incurred by the conclusion of further gas-sales contracts.

"To this end he recommended that a committee, composed of a representative of each of the stockholders of Panhandle Eastern Pipe Line Company, be appointed to investigate and make a report regarding the expected sales and earnings and possible additional investment required on the part of Panhandle Eastern Pipe Line Company, and that in case they could not agree as to such expectations, they should be given authority to employ such independent parties as they desire to assist them and that it was his thought that this information should be made [fol. 7359] available with all possible speed.

"Mr. Russell, in the discussion, said that he had recently been considering the advisability of having just such an examination made and suggested the advisability that Ford, Bacon & Davis, Inc., or some such firm of standing, be employed for the purpose, but Mr. Munroe expressed the belief that economy in time and cost would result from having the work started by members of the Columbia and Missouri-Kansas organizations, who might call in Ford, Bacon & Davis or other qualified advisers, if necessary, to bring them into agreement.

"Thereupon, after further discussion, on motion of Mr. Russell, duly seconded by Mr. Gregory and unanimously carried, Messrs. R. H. Delafield and R. B. Mayo were appointed a special committee to investigate and report to this board the facts regarding the expected sales and earnings of the pipe line west of Indiana, the additional investment required to produce such earnings, and any other relevant facts which would be helpful in preparing the contracts for the sale of gas at the Illinois-Indiana State line, with authority, if the members of said committee were unable to agree, to employ independent

examiners properly qualified to assist them in ascertaining the necessary facts. In connection with the appointment of this committee, the officers of the company were directed to obtain a report from counsel as to the obli- [fol. 7360] gations and responsibility for deliveries under the present gas sale contracts of the company and its subsidiaries in case deliveries should be demanded under such contracts in excess of the present or future pipe-line capacities."

Q. Please refer to the special meeting of the Board of Directors of Panhandle Eastern Pipe Line Company held at 61 Broadway, New York, on Thursday, August 13, 1931, and state who were present at that meeting and who presided.

* * * * * * * *

Trial Examiner: (Interposing) That is not necessary if you identify the source, because we have clearly in the record the understanding this is taken subject to correction of the original.

[fol. 7361] Mr. Chamberlain: May we have this understanding, then, that all of the testimony given by the witness today with respect to the minutes of the meetings of the Board of Directors of Panhandle Eastern will be read from Document 92, Part 82, of the Federal Trade Commission in response to the Senate Resolution No. 83, 70th Congress.

Trial Examiner: That is sufficient.

* * * * * * * *

The Witness: The Directors present at that meeting were Messrs. Frank W. Crawford, F. I. DuPont, Thomas B. Gregory, W. G. Maguire, Charles A. Munroe, Frank P. [fol. 7362] Parish and Edward Reynolds, Jr.

Q. I would like to have you read into the record that portion of the minutes of this meeting beginning with the paragraph after that paragraph noting that the minutes of the last preceding [—] of the Board were approved.

* * * * * * * *

"The chairman then read to the board a copy of a letter from Mr. F. P. Parish to Mr. B. R. Bay, dated August

7, 1931, in which criticism was made of the diligence with which the management of Panhandle Eastern Pipe Line Company was executing its responsibilities.

[fol. 7363] "Mr. Crawford said that he had been advised that a representative of Missouri-Kansas Pipe Line Company had made certain statements indicating that that company was dissatisfied with Mr. Crawford's discharge of his duties as president of Panhandle Eastern Pipe Line Company and felt that on account of his position as an officer and director of the Columbia companies he was not giving his undivided interest and attention to the Panhandle project. Mr. Crawford stated that he had given his entire time and attention to the Panhandle project, to the very great neglect of his Columbia interests, but that he did not care to continue in office if the feeling of the Missouri-Kansas Pipe Line organization was as stated above, and that he wished the representatives of that company on this board to express themselves on this point and wanted to know if such statements had originated with Mr. Parish.

"Mr. Parish denied having expressed any such feeling or ever having heard it mentioned, and Mr. Maguire said that this was the first time he had ever heard such a feeling mentioned. Mr. Parish further said that he was entirely satisfied to have Mr. Crawford continue as president of Panhandle Eastern Pipe Line Company and that he did not think it was necessary for Mr. Crawford to resign from this position or any position in Columbia or from any other position he might hold.

[fol. 7364] "Mr. Parish then said that he still felt that there had been a great deal of delay in effecting arrangements for additional sales of gas by the Panhandle Line and that he felt more would have been accomplished if more diligent efforts had been made to add load to the line.

"There was then a general discussion of the availability of additional gas for sale under contracts for firm delivery and with particular reference to the ability of the Panhandle Line to commit itself to the proposed contracts with Missouri-Kansas and Columbia interests, and as to progress made by the committee appointed by the board at its last meeting to investigate the entire situation.

"Mr. Munroe said that Mr. Mayo had been furnished with all information made available from the Kansas City office of Panhandle Eastern Pipe Line Company, but that there had been so much criticism and suggestion to the effect that the Columbia organization was attempting to color such statements that he wanted it to be made clearly understood that the Columbia organization does not take any responsibility for or express any satisfaction or agreement with such statements furnished to Mr. Mayo; and he said that furthermore the Columbia organization wished the matter taken out of the hands of the said committee, inasmuch as they did not want Mr. Delafield or any other member of the Columbia organization to be subjected to [fol. 7365] the continuation of such criticisms. He and Mr. Gregory recommended the immediate selection of an independent engineer to undertake the investigation in accordance with the discussion held at the last preceding meeting. He quoted remarks made by Mr. Shaw to Mr. P. D. Cravath, counsel for Columbia, charging unnecessary delay in this matter on the part of the Columbia organization.

"Mr. Munroe made it clear that neither he nor any other representative of the Columbia interests had ever said that Panhandle Eastern Pipe Line Company would not sell gas to Missouri-Kansas, but that he did say that representatives of the Columbia interests had expressed grave doubt as to the advisability of the Panhandle management committing the Panhandle line to deliver firm gas in the quantities and for the periods contemplated in the proposed contracts with the Columbia and Missouri-Kansas interests.

"Mr. Munroe reiterated that the purpose of the investigation was to determine the facts as to the ability of the Panhandle line to live up to its present commitments to deliver gas and to make additional firm commitments, because the information so far furnished him (in respect to which neither he nor any member of the Columbia organization took any responsibility) indicated the possibility that under its contracts already executed the Panhandle line might be called on as early as 1934 for deliveries in excess of its present pipe-line capacity, without considering any deliveries at the Indiana-Illinois State

[fol. 7366] line. He said that obviously an increase in the present capacity would require further capital expenditures and he wanted the investigation to determine the extent of the provisions necessary to be made, so that this board could consider means of obtaining the necessary funds.

"Mr. Gregory and Mr. Munroe stated that the successful development of the markets available to the eastern end of the Panhandle line could only be accomplished by the most complete cooperation of all the parties interested and that the present conflict between the stockholding interests in the Panhandle Pipe Line Company was effectively preventing such cooperation and that the reasons for such conflict must be eliminated immediately.

"It was finally decided that the existing committee, consisting of Messrs. Delafield and Mayo, should agree as soon as possible on the employment of an independent engineer to investigate and report to the board the facts of the situation in accordance with the instructions to such committee given by the board at its last meeting held on July 16, 1931."

[fol. 7369] Q. Mr. Watkins, however, you were remarking on one thing that rather fits into the statement of Mr. Gregory at the meeting of August 13, 1931, as to the conflict between the stockholding interests and I would like you to elaborate a little in the record on the information that you indicated that you had received and the actual situation at that time.

A. The witness was about to volunteer, sir, the warning, I suppose one would consider it, which was given to to him before he even put his foot in the offices of Pan-[fol. 7370] handle Eastern Pipe Line Company.

Mr. Wheat: Would you mind identifying the place and the time?

The Witness: As far as I remember, Mr. Wheat, it was on a train on the Pennsylvania Lines en route from Dayton, Ohio, to St. Louis, Missouri, about November 16, 1931.

I was being admonished and warned to the general effect that I was about to become identified, temporarily or permanently, with a situation where there was a conflict between stockholders.

Mr. Wheat: And who do you refer to as the person who admonished you?

The Witness: Mr. F. R. Flahive. Mr. Flahive's words were about like this:

"Now, Leith, the one thing that will cause you to lose your position quicker than anything else is for you to show the least favoritism in any manner, directly or indirectly, with respect to either of the stockholders and particularly with respect to the Columbia Oil side of the thing."

And that, sir is the feeling that was present to me in any contact that I may have had during the entire ten years I have been connected with Panhandle Eastern Pipe Line Company with the so-called Columbia interests.

I had during those years up to and including about the [fol. 7371] year 1936 or 1937, very little contact with anyone having any connection with the Missouri side of the affair but I believe had I had any such contact with that side and had they felt it necessary to make any statements to me, their warning or admonition would have been even stronger than that received from Mr. Flahive.

At any rate, it has been my observation that those of us connected with the affairs of Panhandle Eastern Pipe Line Company have made a most desperate effort to stay in the middle of the road and conduct its affairs purely on the basis of Panhandle Eastern Pipe Line Company without regard to what we might surmise might be the wishes of any stockholder and that is what we are doing at this very moment, sir.

Q. Do you mean that conflict is still continuing?

A. I would not know exactly as to the conflict that might have existed at that time. You remember, of course, that I was a stranger to the operations and knew very little about who the stockholders were.

I would not say it has continued to this date in exactly that manner or whether or not it continues. My statement to

the effect that we are doing exactly the middle-of-the-road job now had nothing whatever to do or any connection with any proposed difference, real or fancied, between stock-
[fol. 7372] holders but that is the position that officers and employees of a company should take in any event, whether there be differences or not.

Q. There was a real conflict up to the settlement in 1936, was there not, a continuous conflict between the two interests of the company?

A. You may know more about that than I do, Mr. Chamberlain. I think the records generally of some of our courts, commissions and so forth do show that there has been some squabbling between those stockholders over a rather long period of time.

Q. Mr. Watkins, you must know much more about it than I know about it. Let me call your attention to various things.

You went into Columbia Oil in June, 1934, did you not?

A. I did.

Q. And Columbia Oil was at least a stockholder owning one-half interest at that time?

Mr. Wheat: In what?

Mr. Chamberlain: In Panhandle Eastern.

The Witness: Yes, it was.

By Mr. Chamberlain:

Q. And it owned all of the bonded indebtedness?

A. As of what date, sir?

Q. 1934.

. . . . . .

[fol. 7375] Q. Well, you knew that they were working in the Columbia Oil offices with respect to the hearings in Delaware in 1934, did you not, and that they had attorneys and witnesses there for many weeks?

[fol. 7376] A. Who do you mean by "they"?

Q. Columbia Oil and Columbia Gas.

A. Well, I suppose they did.

Q. You knew that they had made an offer to the receivers, did you not, to—

A. (Interposing) Mr. Chamberlain, you keep saying "they", sir. I have stated before that I am not sure that that offer was made by Panhandle Eastern or was made by Columbia Oil.

Q. I do not know how Panhandle Eastern could make such an offer.

I am talking to you about what was done by Columbia Oil?

A. I should have to refresh my memory, sir.

Q. Don't you remember there was an offer made to the receivers of $300,000 or thereabouts for the entire interest of the Mo-Kan stockholders?

A. I have stated, sir, that I remember such an offer was made. I remember that there were those proceedings. I remember they were over a rather long period of time.

How they came about or why they came about or the exact details of the offer, I do not recall.

Q. Well, you knew that there were various protective, so-called protective stockholders' committees of Mo-Kan, do you not, which were defending against the proposed plan in the Delaware Court?

[fol. 7377] A. Yes, I remember that rather vividly. It seemed to me they broke out like the measles.

Q. Yes. Then the conflict was on in 1934, you agree to that?

A. The conflict between the stockholders of Panhandle?

Q. The conflict between the stockholding interests and Panhandle Eastern.

A. I should think it might properly be said a conflict of that nature was in existence probably before that, some of the testimony we have read into the record would indicate that.

Q. It was continuous, was it not, up until 1936?

A. I can only speak of that as one who was on the outside looking in and it would seem it was almost continuous. Actually, I cannot tell you.

. . . . . .

[fol. 7378] Q. Now, you knew that during the period that [fol. 7379] the trial was going on in the Delaware Chancery Court in 1934, that the protective committees were

attempting to get the Department of Justice to bring an anti-trust action?

A. I suppose they were, sir. Actually, I do not know. I had no contact with those committees and, as I have stated to you, sir, I was present at that hearing for about two or three days.

* * * * * * * * * *

Q. You knew that the Delaware Court refused the application of the receivers to compromise their difficulties, that is, the receivers of Mo-Kan to compromise their difficulties with Columbia Oil and transfer to Columbia Oil the last of their holdings in Panhandle Eastern?

A. I do not know that I can identify this thing as an [fol. 7380] application of the receivers. I know that this affair we have been speaking of was never consummated. Let me put it that way, if I may.

* * * * * * * * *

Q. Will you refer to the minutes of the special meeting of the Board of Directors of Panhandle Eastern held at 61 Broadway on Wednesday, November 4, 1931, and state who were present at that meeting?

* * * * * * * * *

A. The Directors present were Messrs. Fred W. Crawford, F. I. Du Pont, Thomas B. Gregory, W. G. Magafire, Charles A. Munroe, Frank P. Parish, Edward Reynolds, Jr., and Stanley A. Russell.

Q. Now, I would like to have you read into the record from the report of the minutes of that meeting beginning with the words, "After said minutes had been read, Mr. [fol. 7381] Parish said", near the top of page 902, and continue to the bottom of the page; referring to Volume 82.

A. (Reading)

"After said minutes had been read, Mr. Parish said that he objected to the wording in the letter from Indiana Gas Transmission Corporation referred to therein, which he thought was too broad, and that he wanted it understood and agreed and noted in the minutes that Panhandle Eastern Pipe Line Company was not, by accepting said letter of Indiana Gas Transmission Corporation, waiving its

rights to sell gas elsewhere in Indiana. He stated that the language in the letter as read was so broad that it covered all rights, ideas, and plans that Panhandle Eastern Pipe Line Company might have had or might later have in regard to selling gas elsewhere in Indiana and that he did not propose that it should later be said that the company had forfeited an opportunity which may develop in the future to do business in Indiana by accepting this agreement.

"Mr. Parish specifically asked, in connection with the letter referred to whether it was the opinion of any of the members of this board representing Columbia that if Panhandle Eastern Pipe Line Company should in the future have some opportunity to do business in Indiana it would be claimed then that Panhandle had forfeited such right by accepting this agreement. Mr. Munroe and Mr. Reynolds [fol. 7382] answered 'No' to this question.

"The motion having been made and seconded to approve the minutes as read, the chairman put the question to vote, and Messrs. Crawford, Gregory, Munroe, and Reynolds were recorded as voting 'Yes'; and Messrs. Parish, Du Pont, Maguire, and Russell voted 'No.'

"The discussion on the point in question continued, and Mr. Parish made a motion that a court reporter be called into the meeting and instructed to take down the minutes, including all remarks made during the discussion at this and all subsequent meetings. At Mr. Parish's request Mr. Du Pont, after consideration, seconded the motion.

"Mr. Russell then offered a motion, seconded by Mr. Maguire, that the secretary be instructed to spread the discussion on the minutes. During the discussion of this motion Mr. Munroe said that he felt there could properly be recorded, in connection with the approval of the minutes of the meeting of September 15, the statement that there was no desire to acquire on the part of Indiana Gas Transmission Corporation or to sell on the part of Panhandle Pipe Line Company anything except the property and assets of Panhandle Eastern Pipe Line Company in Indiana as then constituted or later acquired or constructed relating to the pipe line mentioned in the letter.

"After further discussion Mr. Parish withdrew his motion to introduce a court reporter, and Mr. Russell's mo-
[fol. 7383] tion that the discussion be spread on the minutes was put to vote and duly adopted, but it was informally agreed that the approval of the minutes of the September 15 meeting would be specifically introduced again at the next meeting of the board.

"The chairman then presented a letter from Mr. George H. Howard, dated October 21, 1931, presenting this resignation as a director of the company. He expressed his regret that Mr. Howard felt it necessary, owing to his other duties, to resign from the board. He suggested that Mr. T. R. Weymouth would make a very valuable addition to the board, to fill the vacancy, on account of his very great knowledge and experience in natural-gas operation in the southwestern fields. Mr. Parish objected to this suggestion and stated that Mr. Weymouth would not be acceptable to him on account of the nature of the questions coming before the board, although he meant this as no reflection on Mr. Weymouth as a gas-operating man; but he suggested that the filling of the vacancy be deferred until after further consideration."

Q. The minutes of that meeting refer to contracts executed under date of October 3, 1931, by Panhandle Illinois Pipe Line Company with Illinois Power Company and Central Illinois Light Company.

Were these the first contracts that were had with the Illinois Power Company and Central Illinois Light Company?

[fol. 7384] A. I do not know.

Q. Will you please read into the record from the minutes of this meeting the concluding portion of the minutes beginning with the words, "After the business on the program had been taken up", which appears near the top of Page 908 of this Volume 82.

A. (Reading)

"After the business on the program had been taken up, Mr. Parish stated that he wished to renew his objections to the previous approval given to the minutes of the meeting of August 13, 1931. He stated that when such minutes

were presented for approval there had never been read in his hearing a certain paragraph which he read to the board for identification and which is noted in the letter from Mr. Ralph M. Shaw, dated October 2, 1931, which letter from Mr. Shaw he demanded be spread in the minutes of this meeting. He said that he had other points of objection to the procedure and conduct of the business of this company which he had set forth in a memorandum which he would not take up time to present at this meeting, but which he would be glad to discuss at anytime with other members of the board; but he did insist that his objection to the approval of the minutes of August 13, 1931, meeting be recorded, made a motion to this effect, instructing the secretary to spread Mr. Shaw's letter of October 2, 1931, to Mr. Parish on the minutes. This mo[fol. 7385] tion being duly made and seconded and put to a vote, the chairman declared the motion carried. A copy of Mr. Shaw's letter is as follows:"

Do you wish that letter?

Q. Yes, I would like the minutes read to the conclusion.

A. (Reading)

"Winston Strawn & Shaw,

First National Bank Building, Chicago, October 2, 1931.

"Dear Mr. Parish: Referring to your letter of September 29 and confirming what I said to you at our conference in Chicago on October 2, touching the minutes of the Panhandle board meeting held on August 13, 1931:

"Of course I was not present at the meeting and therefore cannot possibly know what in fact took place there, but I direct your particular attention to the third page of the minutes, the third paragraph, reading as follows:

"'Mr. Munroe made it clear that neither he nor any other representative of the Columbia interests had ever said that Panhandle Eastern Pipe Line Company would not sell gas to Missouri-Kansas, but that he did say that representatives of the Columbia interests had expressed grave doubt as to the advisability of the Panhandle management committing the Panhandle Line to deliver firm gas in the quantities and for the periods contemplated in

the proposed contracts with the Columbia and Missouri-[fol. 7386] Kansas interests.'

"With my knowledge of the past the statement is absurd.

"At the meeting of the board held in New York on May 26, 1931, there is not the slightest possible doubt that the Columbia representatives on the board flatly stated that they would not sell any gas to the Missouri-Kansas Company, irrespective of such excess quantities as they might have at the Indiana State line, and irrespective of price, if the Missouri-Kansas Company proposed to sell it to the city of Indianapolis. They (the Columbia crowd) said they proposed to sell gas in the city of Indianapolis and that the Missouri-Kansas Company shouldn't.

"In my judgment the minutes as drawn were drawn for the purpose of clouding the issue and I do not see how you as a director can acquiesce in the statement in the minutes that Mr. Munroe made it clear, etc. The position taken by representatives of the Columbia Company on the Panhandle board at the meeting of the latter company above referred to had nothing to do with quantities or prices. It was a plain refusal to furnish gas irrespective of the contract, irrespective of excess volume, and irrespective of price, if you proposed to sell at Indianapolis, and I think you should hammer that in when you are asked to approve the minutes of the board meeting held on August 13 and say that you do not and cannot possibly acquiesce [fol. 7387] in the position that Mr. Munroe made it clear, because it can't be made clear.

"Very truly yours,

"Ralph M. Shaw.

"(Addressed to) Mr. Frank P. Parish,

"President Missouri-Kansas Pipe Line Co., 40 Wall Street New York."

Mr. Gorman: I wonder if the record heretofore shows who Mr. Shaw was. Was he not attorney for Mr. Parish or do you know, Mr. Watkins?

Q. It was Ralph M. Shaw of Winston Strawn & Shaw of Chicago, was it not?

A. I would assume so, because the letter just read into the minutes of the meeting has that heading. Actually, I do not know who that gentleman was.

Q. Mr. Watkins, refer to Page 916 of Volume 82 of the Federal Trade report and state whether or not Exhibit 6434 which was a letter or report made by Frank P. Parish to Philip G. Gossler, George H. Howard and Frank P. Parish, voting trustees, Panhandle Eastern Pipe Line Company, March 12, 1934, was incorporated or made a part of any of the minutes of the Board of Directors of Panhandle Eastern Pipe Line Company?

[fol. 7388] A. I do not know.

Q. Will you look that up at your convenience, Mr. Watkins, and let us know at a later time? A. I shall.

Q. Mr. Watkins, you were Secretary under the voting trust agreement, were you not?

A. As Secretary of the company, I suppose I was also the Secretary of the voting trustees. Actually, I never acted, as I recall at this moment, in any capacity as Secretary to the voting trustees except perhaps when the voting trust was dissolved and while we are on the subject, I would like to correct the date of dissolution from whatever date the previous record shows, to July 19, 1935.

That was the actual date of dissolution of the voting trust with respect to the common stock of Panhandle Eastern Pipe Line Company and was accomplished by instrumentalities of the voting trustees.

Q. I have a record some place of when you were elected as Secretary of the voting trustees. I thought I could put my hand on it at once.

Mr. Gorman: Yes, I was looking for a similar reference and I find a note on my papers here to the effect, and I merely make this statement to refresh your recollection, Mr. Watkins, so that you do not misspeak yourself, it is to the effect that you were elected and I emphasize the [fol. 7389] word "elected" to Secretary of the voting trustees of the owners of the common stock in Columbia Oil & Gasoline Corporation and—

Mr. Wheat: (Interposing) At what date?

Mr. Gorman: June 7, 1934, which I believe, was about the same date that you assumed the offices of Secretary and Treasurer and became a Director of that corporation and in assuming such position as Secretary of the voting trustees, you succeeded one Edward Reynolds, Jr.

Does that refresh your recollection?

The Witness: I believe you are correct, sir. I know it was about June 7, 1934, that I became Secretary and I recall that I did succeed Mr. E. Reynolds, Jr.

Since there were no activities subsequent to that time involving me as Secretary of the voting trustees and for the further reason I never received any remuneration in that capacity, I was in a complete fog in respect to it.

Mr. Gorman: And that trust was terminated, was it not, on or about May 28, 1936?

The Witness: No, sir, it was terminated on July 19, 1935.

Q. Mr. Watkins, Mr. Bay made weekly reports on his operations back in 1931, did he not, to Mr. Crawford, President of Panhandle Eastern?

* * * * * * * *

[fol. 7399] Q. Mr. Watkins, were gas sales contracts ever executed by Panhandle Eastern with Mo-Kan for the 20 million cubic feet of excess capacity gas at 18 cents per thousand as outlined in the contract of September 17, 1930?

A. They were not but the contract does not stipulate, necessarily, does it, 20 million cubic feet? Doesn't it say up to 20 million?

Q. Up to, I think, yes, but did they execute contracts for any part of it?

A. Panhandle Eastern never executed any contract, so far as I know, with Missouri-Kansas Pipe Line Company for the sale to Missouri-Kansas Pipe Line Company or the purchase by it for any gas whatsoever.

As a matter of fact, as you know, Missouri-Kansas Pipe Line Company had no transmission facilities.

Q. Did it ever execute a contract with Columbia Gas & Electric Corporation providing for the sale of any part of the 20 million cubic feet daily of excess-capacity gas at 18 cents as outlined in the contract of September 17, 1930?

A. Not as far as I know except to the extent that it could be said that the sales made to Indiana Gas Trans- [fol. 7400] mission Corporation beginning about the latter part of 1931, concerning which the witness was about to refer to a letter yesterday, which letter, I believe, is a part of the minutes of one of the meetings of Panhandle Eastern Pipe Line Company whereby the organization which at that time had an option to acquire a half-interest in Panhandle Eastern Pipe Line Company agreed and the Panhandle Corporation concurred in such agreement that, to the extent that Indiana Gas Transmission Corporation purchases its requirements, made up of a part of the quantity of gas that Columbia might purchase pursuant to the September 17, 1930, agreement of which Panhandle Eastern was not a party, that such purchases would be agreeable subject to termination, I believe, on 90-days' notice; and that notice, I believe, could be given by either party.

Those sales, if my memory serves me correctly, commenced, as I have stated, until about the latter part of 1931, which, by the way, was about the earliest date that deliveries could have been made in any quantity and continued on that basis until on or about August 31, 1936, at which time a contract was entered into between Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

The contract entered into with Michigan Gas Transmission Corporation at August 31, 1936, I believe you will find carries an effective rate, under certain conditions, at [fol. 7401] about 26½ cents which happens to have been one of the figures referred to in the September 17, 1930, contract, based upon the time when the excess capacity, as you refer to it, and as it may be referred to in the September 17, 1930, contract, became firm deliveries.

Q. Was a written contract ever entered into with Indiana Gas Transmission Corporation by Panhandle Eastern for the sale of gas at 18 cents?

A. No, sir, it was not. It continued, as the witness has stated, under this informal arrangement which was originated about the time United Light and Power had its options to acquire a certain portion of the ownership of Panhandle Eastern Pipe Line Company and shortly before—

Q. (Interposing) Mr. Watkins, you are usually very accurate, but you do not mean to say "control a portion of Panhandle Eastern", do you?

A. I did not say "control". I said "purchase."

Q. No, but to purchase any portion of Panhandle Eastern, they had no option for that, did they?

A. My understanding is they did because certainly there was some reason Columbia Gas would write to United Light & Power to find out whether or not it was agreeable to them, who had some interest in a purchase—whether or not they had an option, I am not sure—and United Light & Power would certainly not sign an acquiescence [fol. 7402] to such arrangement unless it had some interest.

I can develop that specifically for you, if you do not object. Yesterday you had some objection to my referring to a letter which contained those facts.

. . . . . .

Q. Mr. Watkins, the option, as you mentioned, of United Light was never carried out, was it, and they never acquired any interest in Panhandle Eastern property or securities? A. Property or what, sir?

Q. Property or securities?

A. I do not know about securities, sir. They may have owned some of the bonds. The bonds were bearer bonds and I would have no knowledge of that fact.

Q. You never heard of them owning any of the bonds? [fol. 7403] A. No, and I think they made a rather bad mistake by not owning some of the property, but that is neither here nor there.

A specific answer to your question, as I recall, sir, is, to the best of my knowledge and belief, United Light & Power never owned any of the securities of Panhandle Eastern Pipe Line Company.

. . . . . .

[fol. 7404] Q. Now, Indiana Gas Transmission was a subsidiary of Columbia Gas, you say?

A. No, sir, Indiana Gas Transmission at that time, [fol. 7405] I believe, was a subsidiary of Columbia Oil & Gasoline Corporation.

. . . . . .

[fol. 7413] Q. Let's complete the record on this contract with Indiana Gas Transmission Corporation by reading into the record a letter of January 19, 1932, which I suggest you will find on Page 1225 of 84-1 of the Federal Trade Commission report:

. . . . . .

A. (Reading) "After discussion on motion duly made [fol. 7414] and seconded, it was unanimously

"Resolved, That the arrangements entered into by the officers of this company for the sale of natural gas at the Illinois-Indiana State line to Indiana Gas Transmission Corporation, at the price of .18 cents per thousand cubic feet, and subject to cancellation by either party on ninety days' notice, be and hereby is in all respects approved, ratified and confirmed."

. . . . . .

Q. Will you also include the portion beginning with number "93" in which the chairman made his statement about this informal arrangement?

A. That is on Page No. 1225 of the Field Report which has just been identified?

Q. Yes.

A. Following the numeral "93" in brackets, there appears the following:

"The chairman stated that the officers of the company had made an informal arrangement, subject to cancellation by either side on 90 days' notice, for the sale of surplus gas at the Illinois-Indiana State line to Indiana Gas [fol. 7415] Transmission Corporation. He stated that this arrangement had been agreed to by the present and prospective stockholding interests of the company as shown by letters which he submitted to the meeting and copies of which are as follows:"

. . . . . .

Q. Now, Mr. Watkins, do you have any data available to you showing the amount of gas which was sold to Indiana Gas Transmission Corporation under this informal arrangement? A. I do.

. . . . . .

[fol. 7416] Mr. Wheat: We are able to supply this in exhibit form, Mr. Examiner, if you think it would be well.

. . . . . .

May I ask, Mr. Examiner, that the document which the witness has just produced and handed to the reporter be marked for identification with the next exhibit number?

. . . . . .

Trial Examiner: This is a statement of gas revenues from Indiana Gas Transmission Corporation and Michigan Gas Transmission Corporation during the period from [fol. 7417] November, 1931, to November, 1941, inclusive, as received or derived by Panhandle Eastern Pipe Line Company and will be marked for identification as Exhibit No. 158.

(Exhibit No. 158 was marked for identification.)

Mr. Chamberlain: Do you offer that, Mr. Wheat?

Mr. Wheat: Yes.

. . . . . .

Q. Do you have a statement showing the amount of gas purchased during the same period by Indiana Gas Transmission Corporation from Ohio Fuel Supply Company?

. . . . . .

[fol. 7418] The Witness: Well, I do not remember too definitely, Mr. Chamberlain, whether or not Indiana Gas Transmission Corporation purchased much or little gas [fol. 7419] from Ohio Fuel—you said, "Supply Company."

I believe you meant Ohio Fuel Gas Company.

Q. Ohio Fuel Gas Company, yes.

A. They may have purchased some substantial amounts at times. That I do not recall.

My memory at the moment would indicate to me that most of Indiana Gas Transmission's gas was purchased from Panhandle Eastern Pipe Line Company but I have had no contact with that company or any of its records since the date upon which I was last connected with it or an officer of it and my memory is quite hazy as to it.

. . . . . .

[fol. 7426] Q. Did Panhandle Eastern have an office in New York at that time?

A. I was located in New York and I was an officer of Panhandle Eastern Pipe Line Company and to the extent that it could be said that the affairs of Panhandle Eastern were being conducted from an office in New York, perhaps [fol. 7427] that would be proper. It paid no office rent. It had no separate space but at the time any of the other officers of Panhandle Eastern from its properties came to New York, they used my space as their headquarters, and so forth.

Q. Well, in your intercompany correspondence in the Panhandle Eastern Corporation, you had correspondence right along in your New York office in 1934.

. . . . . .

Q. (Interposing) Pardon me, I mean '34, '35, '36.

A. There were letters written between Kansas City and any of the officers or Directors of Panhandle Eastern Pipe Line Company all through the period of its organization, as far as I know, wherever those people might have been at any particular time and some of the officers of Panhandle Eastern Pipe Line Company, and there is no secret about it, were likewise officers of some of the Columbia Gas companies and they had mailing addresses at New York and it was at 61 Broadway and I believe their offices may have been on the 29th floor of that building or some of them may have been on the 30th floor of that building and when it became necessary for any correspondence to be had between those officers, it was had to the same extent that any correspondence might be had with anyone

[fol. 7428] connected with Missouri-Kansas Pipe Line Company or anyone else.

* * * * * * * *

[fol. 7451] Trial Examiner: The original studies of Mr. Coffman, which were marked for identification as Exhibit 63, covering risks of capital, No. 64, the supporting data related to Exhibit 63, and No. 65, rate of return, will be received in evidence without objection by corresponding numbers.

Likewise, Exhibit 150, relating to common-stock issues, No. 151, covering earnings-price ratios, No. 152, being a study of the effect of recent income and excess profits tax provisions, will be received without objection by corresponding numbers.

* * * * * * * *

[fol. 7452] PAUL B. COFFMAN, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Resumed).

By Mr. Littman:

Q. Mr. Coffman, when you were last on the stand, I asked you to check certain weighted average earnings-price ratios of natural-gas pipe-line common stocks for companies which are shown in your Chart No. 19.

Have you made a check of the weighted average earnings-price ratios which I read into the record at the last session?

A. Yes, sir, I have. I checked the arithmetic, in other words, the figures are properly calculated on the basis that you used.

Q. It is clear, is it not, from Chart No. 19 of Exhibit No. 65, that your average earnings-price ratios for each of the years 1937 to 1940, inclusive, include certain earnings-price ratios of Interstate Natural Gas Company?

A. Yes, sir.

Q. And the same is true, is it not, of your "Average of pipe-line companies" of 12.99 percent shown in Chart No. 22 based on the 1941 market prices?

A. Yes, sir, that is correct.

Q. What was the market value as of December 31, 1940, of the common stock of Interstate Natural Gas Company? In that connection I refer you to Exhibit No. 64, Appendix [fol. 7453] C. A. What was the date?

Q. December 31, 1940. That is at Page 107.

A. Now, the average of the high and low price on the capital stock of Interstate Natural Gas Company, Inc., for the year 1940 was $23.88.

Q. What was the total market value for all of the outstanding common stock of that company?

A. Using the average price just mentioned and multiplying it by the number of shares outstanding as of December 31, 1940, which were 952,953 shares, you have got a total market appraisal as of that date of $22,756,518.

Q. Now, what was the book value of the common stock of Interstate Natural Gas Company for the corresponding period? I refer you to Exhibit 64, Appendix B, Page 3.

A. Is that reference correct?

Q. Appendix B, Page 3, I believe it is, you will find it near the bottom of the page.

A. Are you talking about just the total securities outstanding?

Q. Yes, because I understand Interstate Natural Gas Company has no securities outstanding other than common stock.

[Q.] No, I just wanted to be sure. What you mean at the moment is the total dollars, not a per-share figure. That is what I want to get straight.

The total securities outstanding as shown in Appendix [fol. 7454] B, Page 3, for the Interstate Natural Gas Company as of December 31, 1940, was $6,529,530.

Q. Now, in order to get the book value of that common stock, including the surplus, you would have to add thereto the surplus, would you not? A. Yes.

Q. Now, the surplus figure is not shown in your exhibits, is it? A. No, sir.

Q. I hand you a copy of Moody's Public Utilities for the year 1941 and ask you to refer to that volume and

state the amount of surplus for Interstate Natural Gas Company for the year 1940.

A. The surplus of the Interstate Natural Gas Company, as of December 31, 1940, as shown in Moody's Public Utilities Manual for 1941, Page 1122 is $5,873,982.

Q. Now, adding the surplus figure to the book value of the common stock, produces a total of $12,403,000 odd, which represents the book value of the common stock and surplus as of December 31, 1940, for Interstate Natural Gas Company. Is that correct?

A. Yes, sir, that is correct.

Q. Now, it is obvious, is it not, that the market value of the common stock of Interstate Natural Gas Company, which you stated to be $22,756,518, is almost double the [fol. 7455] book value of that stock as of December 31, 1940. Is that right?

A. Well, the market value as stated is $10,353,000 in excess of the book value as stated.

Q. Now, the El Paso Natural Gas Company is another natural-gas pipe-line company which is included in your 12.99 percent, "Average of pipe line companies," based on 1941 market prices shown in your Chart No. 22. Is that correct? A. That is correct, yes, sir.

Q. Now, will you state the market value of the common stock of El Paso Natural Gas Company for the year 1940?

A. The total indicated market value of the El Paso Natural Gas Company, as shown in my Exhibit 64, Appendix C, Page 101, is $33,000,000—

Q. (Interposing) Pardon me, Mr. Coffman. I would like to have the year 1940 and I believe that is shown in your Appendix C at Page 104, is it not?

I am sorry, I have the wrong number.

A. It is 101, I believe.

Q. I beg your pardon. It is shown on Page 101.

A. All right. That total is $33,411,781, which is for the year 1941 and is based on the average of the high and low prices for the securities and for the full-year period.

Q. You mean for the year 1940?

[fol. 7456] A. 1940, yes, sir.

. . . . . .

Q. I would like to have the market value of the common stock only of the El Paso Natural Gas Company for the year 1940.

A. As shown in my Exhibit 64, Appendix C, Page 101, the indicated market value of the common stock of the El Paso Natural Gas Company, based upon the average of the high and low price for the year 1940 was $20,418,190.

That is, of course, merely the market quotation, including the market appraisal of surplus, and so forth. I merely want to be clear about it; the market quotation, so far as the investor is concerned, pays the full worth of the common stock.

Q. Including the surplus?

A. That is right.

Q. I so understood.

Now, will you please state the book value of the common stock of El Paso Natural Gas Company as of December 31, 1940, exclusive of surplus? I believe that figure is shown on Page 3 of Appendix B of Exhibit 64.

[fol. 7457] A. That, Mr. Littman, is not quite correct because of Knapp's figures, which are contained in my Appendix B, Page 3. These figures there refer to June 30, 1941, so that I will have to refer, if you want the December 31, 1940, figures, to Moody's Manual.

Q. Perhaps we had better do that in order to have the figures on a comparable basis.

A. The book value of the common stock of the El Paso Natural Gas Company as of December 31, 1940, is shown in Moody's Public Utilities Manual, Page 30, as $5,301,994, not including surplus.

Q. That figure is the same as the figure which you show in Appendix B of Exhibit 64, Page 3 as of June 30, 1941, is it not?

A. Yes, sir, the figures coincide.

Q. Now, will you please add the surplus and give me the total book value of common stock of El Paso Natural Gas Company including surplus as of December 31, 1940?

A. The surplus of El Paso Natural Gas Company as of December 31, 1940, as shown in Moody's Public Utilities Manual for 1941 at Page 30, amounts to $4,194,039 and that figure, added to the $5,301,994, gives a total book figure for common stock and surplus of $9,496,033.

Q. Which is the book value of the common stock of El Paso Natural Gas Company, including surplus, as of De-
[fol. 7458] cember 31, 1940?

A. Yes.

Q. Now, it is evident, is it not, that the market value of that stock for the year 1940 of $20,418,100 is more than twice the book value? Is that correct?

A. Yes, the excess of the market value over book value is $10,922,076.

Q. Now, I would like to have you turn to your Chart No. 18 of Exhibit 65 entitled, "Historical costs of Preferred Stock, Capital, of Panhandle Eastern Pipe Line Company as of 1937-1941."

I would like to discuss with you the preferred stock of Panhandle Eastern Pipe Line Company. Now, on this chart you show the actual historical costs of the preferred stock for the years 1937 to 1940, inclusive, and you have estimated the cost for the year 1941. Is that correct?

A. That is correct.

Q. Now, will you please turn to the table for Chart No. 18? You show on this chart that Panhandle Eastern Pipe Line Company presently has outstanding $6 Class A preferred stock, participating and redeemable, having a par value of $100 per share in the total amount reflecting par value of $10,000,000 for each of the years 1937 through 1941.

A. Yes, sir.

Q. And in addition, Panhandle Eastern has $6 Class B
[fol. 7459] preferred stock, non-participating and non-redeemable having $100 par value per share, a total outstanding par value of $1,000,000 for each of the years 1937 through 1941. Is that right?

A. Yes, sir.

Q. Now, that makes the total outstanding preferred stock $11,000,000. Is that right?

A. Yes, sir, according to the books.

Q. Now, the Class B preferred stock, of which there is $1,000,000 outstanding, receives a straight 6 percent dividend per year and is not entitled to any participation in further dividends, isn't that correct?

A. That is correct.

Q. However, the Class A preferred stock, of which there is $10,000,000, is entitled not only to the $6 regular

dividend per year but, also, is entitled to participate to the extent of 25 percent of additional dividends on common stock after $1.50 per share has been declared or paid in any one year. Is that your understanding?

A. That is my understanding.

Q. And as your Chart No. 18 shows, there have been participating dividends paid in 1940 and in 1938. I believe that is more clearly shown in the table for Chart No. 18, is it not?

A. Yes, that is correct.

[fol. 7460] Q. In other words, in the year 1938 the holders of the Class A preferred stock received not only $600,000 by way of regular 6 percent dividend on the $10,069,000, but, in addition, received $182,163 as a participating dividend. Is that right?

A. That is correct.

Q. And you show that in the year 1940 those preferred stock holders received $403,684 by way of participating dividends?

A. That is correct.

Q. Now, the regular 6 percent dividend has been paid on both classes of preferred stock through the years, isn't that right?

A. Yes, sir, that is through the years 1937 to 1940, as shown in the table, I mean without going back beyond that.

Q. Yes. Now, you show an estimated participating dividend for the year 1941 in the sum of $269,122. Is that correct?

A. That is correct.

Q. And you have used this figure of $269,122 as the estimated participating dividend for the year 1941 in calculating the 8.45 percent shown for the year 1941 in your Chart No. 18, is that right?

A. Yes, sir, I have.

[fol. 7461] Q. Now, you estimated this amount of $269,122 upon the assumption that in the year 1941 Panhandle Eastern would pay a common-stock dividend of $2.50. Is that right?

A. Yes, sir, that is correct.

Q. In other words, the common-stockholders would receive, first, $1.50 and out of the remaining dollar the preferred-stockholders would [received] 25 cents and the com-

mon stockholders would receive 75 cents. Is that right, is that the way you computed it?

A. That is right. For each dollar of dividend over and above the $1.50 of common, it was shared 75-25 percent.

Q. Now, will you please check your $269,122 and tell me whether that is a correct figure? I believe you will find it to be in error.

A. I think the figure is correct.

Q. Will you tell me how you compute the figure?

A. Well, the first calculation is based upon the 807,367 per share of common stock and the $1.50 shares total $1,211,051, that is the first payment prior to participation.

An additional dollar available makes $807,367. That is the equivalent of one additional dollar per common share which has to then be divided on a basis of 25-75 percent, the preferred participating 25 percent, and the common participating, 75 percent.

[fol. 7462] Q. Well, if what you have just said is the fact, and I so understand it to be the fact, you would take the $807,367, which represents $1 over the dollar and one-half for each of the 807,367 shares of common stock, and divide that amount by 4 in order to determine the 25 percent, which is the extent to which the preferred stockholders of the Class A preferred have a right to participate, and that would give you $201,842 instead of the $269,122, which you show in your table for Chart No. 18.

Now, I believe that you divided the $807,367 by 3 instead of by 4.

A. That is correct, that is how the $269,122 was calculated.

Q. Well, now, the $269,122 which you show in your table for Chart No. 18 is certainly in error, is it not? The figure should be $201,842, according to my arithmetic.

A. Well, except that I think you are neglecting to take into consideration that the dividend calculated upon the common stock, the total dividend calculated upon the common stock is $2.50.

You have taken out the 25 percent from the common stock. The common stock did not receive an additional 75 cents, the common stock received an additional dollar and

the 25 percent that the preferred received was excluding the dollar, because the common stockholders received a net dividend of $2.50, not a net of $2.50 minus the [fol. 7463] participation to the preferred, so that on that basis you would have to calculate that once you had arrived at a figure of $807,367, then you would figure that that amount was three times as great as the preferred participation.

What you are doing is saying that the total amount of dividend paid was an even dollar which had to be split 75:25. I am saying that the dividend directly to the common stockholders is $1, so there has to be a dividend greater than that amount in order that the preferred holder will get his 25 percent participation.

That is absolutely mathematically correct.

I do not know whether I make my point to you clear, but if I can, I think you will agree with me, Mr. Littman. I think what you are saying is that the total amount of earnings available for distribution over and above the $1,250 was $1.

I am not saying that, I am saying that the common stockholder received $1.50 plus one full dollar, making a total dividend of $2.50. He did not share any part of that additional dollar with the preferred.

The earnings that were shared were in excess of $1 from which the preferred received his participation, therefore, what I did was to calculate it on this basis. The additional dollar, the additional $1 to the 807,367 shares is $807,367 and the participation of the preferred, then, this [fol. 7464] would be in the ratio of one third that amount.

Q. Now, Mr. Coffman, that isn't the way the company figures it at all is it? Look at the year 1940, in which year the company paid $403,684, which covered the years 1939 to 1940 and included two such participating dividends and divide that by two and see what you get.

Then, you will have the method that the company, itself, uses.

The Witness: Will you please read that back?

(Whereupon, the pending question was read by the reporter.)

The Witness: What table are you looking at, Mr. Littman?

By Mr. Littman:

Q. I am looking at your table for Chart No. 18.

A. Yes. Well, the total of $600,000 plus the $403,684, if I understand you correctly, is $1,003,684. Then you say, divide that by two?

Q. No. I am confining my present line of inquiry to the $403,684 participating dividend paid in the year 1940.

Now, divide that by two, because that amount includes two years of participating dividends, and you will get a figure of $201,842.

A. By dividing by two, that is the figure.

Q. Now if you will take 25 percent of the $807,367 you will get the same amount, namely, $201,842. Is that correct?

[fol. 7465] A. By dividing the $807,367 by 4 you get $201,842, that is correct.

Q. Doesn't that indicate to you that that is what the company does when it computes the participating dividend, namely, it takes 25 percent of the dollar available for dividends over the $1.50, namely, the latter dollar of the $2.50 dividend on the common and takes 25 percent of that and distributes it to the preferred stockholders, which is the very method that you described before I called attention to your total figure?

A. Well, so far as the arithmetic is concerned, Mr. Littman, that may very well be the case, but so far as the calculation which I estimated for 1941 is concerned, I have described exactly how it has been arrived at and I believe that is very definitely in line with the provisions of the preferred stock.

[fol. 7466] In other words, in this case I did not have actual earnings to go on, so before I could make any division I first had to decide what would be a reasonable estimate over all for the common stock, and that total was $2.50. Then I merely assumed that the additional participation would have to be over and above that amount. I believe

that follows the provisions of the preferred stock. The mere fact that you can go back and divide the company's figures in the past year by something else, it seems to me, is a different calculation. There you have actual figures to work on and it can be worked out and divided any way you please.

Q. Are you stating, Mr. Coffman, that the Class A preferred stockholder is entitled to something more than 25 percent of the $1.50 dividend paid to the common stockholder?

A. No, that is not my intention. All I am saying is that the total amount paid to the common is net. In other words, it is $2.50 to the common holder, and in order, therefore, to have a 25 percent participation, if common is going to result with a $2.50 payment, that 25 percent will have to be calculated out of earnings over and above.

Q. Let me read from the Securities and Exchange Commission Release No. 3299, dated January 29, 1942, in the matter of Panhandle Eastern Pipe Line Company, File No. 70-447, Findings and Opinion, where it states at page 2, "The Class A Preferred Stock, in addition to a preferential cummulative dividend of $6 per share, [fol. 7467] is entitled to receive as a class one-fourth of all dividend distributions in excess of $1.50 per share on the common stock declared or paid in any one calendar year."

Now, is that your understanding of the preferential dividend to which the Class A preferred stockholders are entitled?

A. That is correct, but in this dollar that you get for common stock, you are not taking a part of that to give to preferred under the very stipulation that you read. If you did, you would not have $2.50 common dividend; you would have $2.50 minus the difference. How can you get around it?

Q. Now, how much did the company pay by way of a dividend on the common stock in 1940?

A. $1,200,684 were paid in dividends on the common stock for the year ended December 31, 1940.

Q. Well, how much was that per share?

A. Pardon me, I am giving you the figure for El Paso. I am sorry. The total dividends paid on common stock for

the Panhandle Eastern Pipe Line Company for the year ended December 31, 1940, was $2,422,101.

Q. How much was that per share of common stock?

A. That was equivalent to $3 per share on 807,367 shares.

Q. Now, what was the common stock dividend that was paid in the year 1939?

Mr. Cotton: You are satisfied with that calculation, are [fol. 7468] you not? It is the same thing he has been saying, it works out on the same principle.

Mr. Littman: Not at all, not at all. It simply cannot be.

The Witness: The total dividends paid on common stock by the Panhandle Eastern Pipe Line Company for the year ended December 31, 1939, was $1,132,336.

By Mr. Littman:

Q. Now, what does that amount to per share?

A. It is equivalent to about $1.04 per share. The same number of shares in 1939.

Q. Will you please recalculate that $1.04 per-share figure? That does not look right to me.

A. The amount of common dividends was $1,132,336, and the number of shares is 807,367. I think the machine is as bad as I am on the figures, this is $1.40. Wait until I check my figures. That is correct. I misplaced one digit. $1.40 is correct. I will go by the machine even though I think it is wrong.

Q. Well, we will check your calculations and come back to this subject after so doing.

At any rate, it is your testimony that the proper way of calculating the dividend to which the Class A preferred stockholders are entitled for participation purposes is as follows:

[fol. 7469] Assuming that the dividend paid to the common stockholders is $2.50 in a given year, you first deduct the $1.50, leaving $1 in which the Class A preferred stockholder is entitled to participate, and then divide that dollar by three? Is that your testimony?

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A. What I say is, where you have to make an estimate as I did, as to a common dividend, the amount of money, which is here $2.50, all went as a dividend to the common stockholder. Now, obviously, following the provisions of the preferred stock certificate, the preferred are entitled to participate in such distribution over and above the $1.50. The common stockholder actually received $1; then the preferred participation must have been out of earnings over and above the $1. It did not come out of the dollar, because the common stockholder got it, so it could not have come out of the dollar.

Q. Mr. Coffman, I understand your position with respect to all that. But can't you tell me how you get at the figure, what calculation do you use? Do you divide the dollar by three or four?

A. I say, for the extra dollar that is available and above the $1.50, you figure that out on the basis of three, because for the amount over and above a dollar the common stockholder gets three times what the preferred holder gets, so it is three, not four, that we are talking about.

[fol. 7470] Q. In other words, you divide the dollar by three to get 33⅓ cents for each dollar by way of participation for the Class A preferred stockholder?

A. Or divide the $807,367, which is $1 per share, by three.

Q. By three?

A. That is correct.

Q. And that is your interpretation of the statement which I just read to you from the Securities and Exchange Commission, namely, that "The Class A preferred stock in addition to a preferential cumulative dividend of $6 per share is entitled to receive as a class one-fourth of all dividend distributions in excess of $1.50 per share on the common stock, declared or paid in any one calendar year"?

A. That is correct.

Q. Now, will you state whether or not that is the method used by the company, namely, the method of dividing the amount over and above the $1.50 by one-third instead of one-fourth? Now, you have told us that is your method. I want to know whether that is the company's method.

A. I have not investigated the company's method as such, as I have stated throughout my testimony, but I

believe that is the method as recorded and shown in the annual reports.

Q. Well, you are not prepared at this time to say that the company calculates the participating dividend in the [fol. 5471] way that you have calculated?

A. As such, I have never prepared it nor have I ever asked them for any calculations nor have I asked to see their books prior to determination of the dividend to see how they ascertain it, so I could not say, specifically, but I think they do follow that method.

Q. Well, why do you think that without having first made an investigation of whether they do actually calculate it in that way? What is the basis for your thinking?

A. Because I think it can be shown from the 1940 figures that that is what it amounts to, as shown by the figures given for dividends and participation.

Q. Well, suppose your make the calculation, let us say, during the noon recess, and satisfy yourself that that is the way they do it.

A. On the 1940 figure?

Q. Yes.

Mr. Wheat: I suggest we do it now. It is not a long job, is it?

The Witness: My associate already made the calculation, so I can explain what we did on the 1940 figures right now.

By Mr. Littman:

Q. All right.

A. The dollar and a half per share on 807,367 shares gives you $1,211,051.

[fol. 5472] Q. Will you read that back?

(The last answer of the witness, as above recorded, was read by the reporter.)

The Witness: Now, as I have already stated, the total dividends on common amounted to $2,422,101, which I calculated for you to be at the rate of $3 per share, so that means that there must have been $1.50 participation over and above the $1.50 as the starting base, so that would mean $1,211,051 for participation.

Mr. Culton: To the common stock?

The Witness: Yes, to the common stock.

By Mr. Littman:

Q. And that is for what year?

A. I am talking about 1940 altogether, so we can check this figure.

Now, the only way that you can get $403,684, as shown in my table for Chart No. 18, as reported, is to divide the $1,211,051 by three, and that is the way the company is doing it. Therefore, I say I think that must be the practice followed by the company, although I was not at the company's offices to check it and I have not asked them to give me any statement about it, but I do not know any other way to get that figure that they report.

Mr. Culton: And that would be a fourth of what aggregate dividend paid?

[fol. 7473] The Witness: Of the total participation to the preferred plus the total over to the common, that is the total common dividend.

By Mr. Littman:

Q. But if you will turn to your Chart No. 18 you will observe that the dividend paid in 1940 was paid out of 1939 earnings. Now, have you taken that into account?

A. Well, insofar as the indenture is concerned, it would not make any difference, Mr. Littman.

Q. Yes, but the earnings which you read on the common stock were for the year 1940.

A. Well, the total dividend paid in 1940 was such and such amount, so what difference does it make? The matter of when the dividend was paid has no bearing on this problem, so far as the calculation is concerned.

Q. Now, will you please—

Mr. Wheat: (Interposing) Pardon me, does this calculation now satisfy you?

Mr. Littman: I will have to check it a little further.

Mr. Wheat: Surely.

By Mr. Littman:

Q. I can see that the witness is convinced that he is right about it and apparently has a basis for it. I would

like to check the matter a little further, because it so happens that the $403,684 figure shown as the participating [fol. 7474] dividend for the year 1940, when divided by two, comes out to precisely the amount of $201,842, which is one-fourth of the $1 amount. In other words, it checks my figures on the subject, so I want to examine it further.

Mr. Wheat: It checks both ways.

Mr. Culton: A suggestion for you to consider is that it shows the relation of $1.50 extra dividend to a dollar extra dividend. That is the reason why the peculiar relationship exists.

Mr. Wheat: May I suggest, Mr. Littman, that possibly Mr. Dunn might check this for you and possibly, if there is still any question, they might discuss the matter with the witness so we will come to a conclusion. I think it is a simple matter eventually.

Mr. Littman: I think so. My only purpose, of course, is to make certain that the method used is correct.

Mr. Wheat: Oh, sure.

Mr. Littman: And once we are satisfied as to that, why, we will proceed with the matter no further. I am certain if there is an error in these figures, you will want them corrected too.

Mr. Wheat: Surely.

Mr. Littman: Very well, we will check the matter and report back on it.

By Mr. Littman:

[fol. 7475] Q. Now, will you please turn to your Chart No. 37? This chart reflects and shows the amount of dollars needed by Panhandle Eastern under the assumption that the company will continue to have outstanding its present Class A preferred stock?

A. Yes, that is the assumption on Chart No. 37.

Q. And the preferred stock requirement of $929,122, shown in your Chart No. 37, is based upon your estimated amount for the year 1941, or estimated cost of that preferred stock of 8.45 percent?

A. Well, and plus the consideration of a $2.50 annual dividend on the 807,367 shares of common stock. I mean,

if you refer in connection with that, Mr. Littman, to the table for that chart, you will see the point that I am making, about two-thirds of the way down in the right-hand column there is an item "Preferred Dividend Requirement Based on Maximum Participation of Class A Preferred Stock, $929,122." The explanation, therefore, is participation of the Class A preferred computed on the basis of a $2.50 annual dividend on 807,367 shares.

[fol. 7476] Q. Where do you find the word "maximum" in your table for Chart No. 37?

A. That is parenthetical in the explanation at the left-hand side where you see the item mentioned, "Preferred dividend requirement (based on maximum participation of Class A stock)".

In other words, I had to make some allowance, not only as to the actual dividend but as to a participation.

Q. Now, Mr. Coffman, this "based on maximum participation of Class A preferred stock" which is stated in your table for Chart No. 37 refers to $1,388,480, does it not, and does not refer to $929,000-odd?

A. Yes, I stand corrected on that. The $929,000 is based upon the $2.50 distribution of common which may or may not be maximum. I mean it could be more or it could be less.

Q. At any rate, the $929,122 of dividends paid to the preferred-stockholders reflects the regular 6-percent dividend and, in addition thereto, the Class A preferred-stockholders participation in a $2.50 annual dividend on the common stock, isn't that right?

A. No, we are getting back on the same confusion again. It represents the preferred-stockholders' participation in the amount properly calculated wherein common actually receives $1 over the $1.50 so we would not get the [fol. 7477] confusion of whether they are sharing in the dollar or sharing in something more than a dollar.

Q. This $929,122 amount to be distributed to the preferred-stockholders which is reflected in your Chart 37 is also shown in your table for Chart No. 18 for the year 1941, is it not?

A. That is the total, that is, $600,000 regular dividend and $269,122 participation.

Q. For the Class A preferred?

A. For the Class A.

Q. Plus $60,000 to service the Class B preferred stock?

A. Correct.

Q. Now, isn't that a rate of 8.45 percent which is the rate which appears in Chart No. 18 for the year 1941, estimated?

A. That is the percentage cost made upon the basis of that figure to the total amount of shares.

Q. And I believe that same 8.45 figure appears in some other charts?

A. That is correct.

Q. For instance in Chart No. 26?

A. That is correct.

Q. Is there any doubt in your mind, Mr. Coffman, that the $10,000,000 of outstanding Class A preferred stock can be refinanced today at more favorable rates than 8.45 [fol. 7478] percent which you have assumed for the purposes of your Chart No. 37?

A. Well, taking the cost to the company, I am not sure that that can be done.

Q. There is some doubt in your mind?

A. Yes.

Q. Is there some doubt in your mind?

A. Yes, there very definitely is.

Q. Is it your testimony that 8.45 percent is a reasonable cost of preferred stock money to Panhandle Eastern as of today?

A. Talking in terms of the cost, I am saying that that portion of the investing public who would have to be approached to supply this money would say that they would require approximately that percentage in order to be encouraged to supply money to this company on a preferred stock basis.

Q. That is your testimony?

A. That is my testimony, yes.

Q. Now, according to your Chart No. 18, the preferred stockholders received in 1940, 9.67 percent, did they not?

A. That is correct.

Q. And, in 1939, they received 6 percent and over the period 1937—withdraw—what does this weighted average of 8.02 on Chart No. 18 reflect? Does it include the year 1941?

A. Yes, it does, and that reflects each individual year [fol. 7479] shown in Chart No. 18 of Exhibit 65 but on a weighted-average basis wherein we give the greatest weight to the most recent trend so that the estimated 1941 figure would carry a weight of 5; the 1940 figure a weight of 4; the 1939 figure a weight of 3; 1938 figure a weight of 2; and the 1937 figure a weight of 1.

In other words, we give the greatest weight to the most recent trend.

Q. Now, what company has held all of the outstanding preferred stock of Panhandle Eastern through the years 1937 down to date?

A. The Columbia Oil & Gasoline Corporation, a subsidiary of Columbia Gas & Electric Corporation.

Q. Now, Columbia Oil & Gasoline Corporation also holds slightly in excess of 51 percent of the common stock of Panhandle Eastern, does it not?

A. Yes, that is correct.

Q. And inasmuch as this preferred stock is not in the hands of the public, you have no market quotations on it, do you?

A. That is right.

. . . . . .

[fol. 7480] Q. Mr. Coffman, I believe that you testified just before the recess that all of the outstanding preferred stock of Panhandle Eastern is now owned by Columbia Oil & Gasoline Corporation and that that situation has obtained for the past few years, back as far as 1937, is that correct?

A. Yes, that is correct.

Q. And Columbia Oil & Gasoline Corporation is the holder of slightly in excess of 50 percent of the common stock of Panhandle Eastern?

A. That is correct.

Q. Have you made any study of the history and background of this preferred stock, particularly the $10,000,000 of Class A preferred?

A. Well, only to the extent of knowing, generally, what type of preferred stock it is and the fact that Columbia Oil & Gasoline Corporation held it and the fact that there is at the moment and was a callable feature in there which

I believe was to become effective in June of 1941 which was recently waived.

As I recall it, it was a stock which could have been called at 110 up to that date and that provision has been temporarily waived in view of some present financing plans which are contemplated.

Q. You know, do you not, that this Class A preferred [fol. 7481] stock can be redeemed today at $100 par?

A. Since they waived the callable $110 price at or around June, 1941, that is correct.

Q. Now, do you know that in July of 1939 offers were made by banking groups to market a cumulative nonparticipating preferred stock for Panhandle Eastern bearing dividends of 4½ to 5 percent, the proceeds of which could be used to retire the Class A stock of Panhandle Eastern?

A. I remember something about those offers and, in connection therewith, I believe I also remember correctly that there were numerous qualifications and restrictions placed upon those offers so that one could not generalize about the situation unless you went into considerable detail in regard to those offers.

I have here, as you know, been talking about the present capital structure which means the present type of preferred stock outstanding and no others and any new offer would have to be considered in view of what ever restrictions were made.

In other words, I think I remember some offer that was made by Glore-Forg a as one banking group but, as I recall, the offer was co ched in very careful language in regard to certain provis ons which would have very definitely had a bearing upon an issue and would have to be considered in any analysis.

[fol. 7482] Q. Have you examined the offer?

A. I remember seeing some of the stipulations. I do not recall what they were but I do recall that I formed the opinion at the time that such stipulations were considerably restrictive and would change the nature of the new preferred and would have a very pertinent bearing upon any considerations.

Q. Are you saying that in 1939 it was impossible to refinance this $10,000,000 of Class A preferred stock at a cost slightly in excess of 4½ percent?

A. I say that to finance this preferred stock by an identical preferred stock at such rates as you mentioned would very likely have been impossible.

If you want to put out a different kind of preferred stock with various provisions for sinking fund and a number of other things whereby the new preferred would be more akin to bonds than the present preferred, that is an entirely new study.

It has no bearing directly upon the present preferred which we have been talking about, at least for all of this morning.

Q. Does it have no bearing upon the return to which this company is entitled?

A. Well, it has very definitely a bearing, the same as I have shown in Chart 36 of Exhibit 65 wherein I say that [fol. 7483] if you assume a refinancing of the preferred stock, the present preferred stock, partly with bonds and partly with common stock, the required amount for return of capital is less on my present approach as shown in Chart No. 36 than is the case for the requirement on the basis of the present capital structure as shown in Chart No. 37.

Q. Well, is it your testimony that your suggestion is the best that the company could do by way of refinancing this $10,000,000 of Class A preferred stock, your suggestion which is shown in Chart No. 27?

A. I say that my suggestion is one very definite reasonable proposal but, as I think I have already testified, after analyzing information shown in Chart No. 25 of Exhibit 65, I concluded if there was to be a change made for a company in an industry such as we are talking about, it might be preferable to perhaps eliminate a preferred stock altogether so that, on that basis, I had concluded if some arrangement could be made for refinancing the present capital structure perhaps some way could be worked out to have merely bonds and common stock as one method and I tried to apply that.

Now, there may be others. I really did not go through an entire explanation of them but in my approach here, I

think I have shown fairly clearly that if the suggestion of bonds and common stock is used as a new setup in com-
[fol. 7484] parison to the present, the requirement would then be as shown on Chart 36, namely, $4,993,511 required for what I call current capital requirements as against $5,064,821 for a similar requirement but based upon the present capital structure as shown in Chart No. 37 of Exhibit 65.

Q. There is not much of a saving there after your method is applied, is there?

A. Not so much saving on this basis, no.

Q. How much is it in dollars if your proposed plan of refinancing the present preferred stock by means of 50 percent bonds sold at 3.25 and 50 percent common stock sold at 12 percent?

Mr. Wheat: Fifty percent of the total amount of present outstanding preferred?

Mr. Littman: That is right.

Mr. Wheat: Not 50 percent over-all.

Mr. Littman: That is right. I am reading from the witness' Chart No. 27.

Mr. Wheat: Yes. Thank you.

By Mr. Littman:

Q. Now, what I want to know is, Mr. Coffman, what savings in dollars will result by the application of this proposed refinancing which you have suggested in your Chart No. 27?

A. $71,310.

[fol. 7485] Q. And the rate of cost of money would be 7.63 percent for the $11,000,000 of refinancing, would it not?

A. Where do you find the 7.63 percent?

Q. I obtained that figure in this way:

Refer, please, to your Chart No. 27. I take 3.25 percent which is the rate on the bonds and 12 percent which is your rate on the common stock, add the two, giving 15.25, and dividing by 2.

Do you follow me?

A. Yes, I see what your calculation is but I want to check a figure.

Q. What I am seeking is to have you express the cost of money in terms of percent so that it may be compared with the present assumed cost of preferred stock money of 8.45 to which we have heretofore referred

A. Well, I think that in answer to your question you would refer to Chart No. 28 because, if you finance on a 50 percent—that is, if you refinance the present preferred outstanding so that when you get through you had approximately a 60 percent common stock figure and a 40 percent bond figure, the percent would be 8.40 percent.

Q. I do not want an over-all cost including common stock and bonds and everything else. I merely want you to state the cost of money for the refinancing of the outstanding $14,000,000 of preferred stock under your as-[fol. 7486] sumption, which assumption is set forth in Chart No. 27.

A. I do not recall your figure. It would be about 7.86 even. I thought you said 56, did you?

Q. The figure I gave you was 7.63.

A. Well, I figure 7.86.

Mr. Wheat: Just what is that figure, Mr. Coffman?

Mr. Littman: Yes, state how you computed it.

Mr. Wheat: And what it represents.

The Witness: The figure I have given you is the total of the present capital structure which is $63,525,839 and applied against that the requirement of refinancing the preferred stock of $4,993,000.

By Mr. Littman:

Q. Well, isn't that the same figure which is shown in your table for Chart No. 27 at the bottom of the chart under the heading, "Yield rate" of 7.85?

A. Well, it so happens that the figures are the same.

Mr. Wheat: I thought you said one was 7.86?

The Witness: This is 7.85. I happened to carry it out one additional decimal point—it comes out 7.859 so I said, 7.86.

By Mr. Littman:

Q. The two figures are identical?

A. The two figures are identical but I did not arrive at this figure in the way shown here.

[fol. 7487] Q. At any rate, it is your testimony, Mr. Coffman, that if your assumed refinancing of the outstanding preferred stock were adopted and were to take place today, the cost of refinancing the $11,000,000 of outstanding preferred stock would be 7.86 percent, is that right?

A. Yes, based upon the calculation I have just given you.

Q. Whereas the present cost which you have estimated and included for purposes of your Chart No. 37 is 8.45 percent?

A. As against the preferred stock requiring 8.45 percent, that is correct, but one, however, is an over-all capital calculation and the other is a calculation directed to preferred stock only.

Mr. Culton: I think there is an unintentional misuse of the word "today". You do not mean on the market as of February 2, do you?

The Witness: No, I mean as of the date of this study, obviously. I have not made any study as of today.

By Mr. Littman:

Q. Now, what, in your opinion, would be the best terms under which Panhandle Eastern could refinance this $11,000,000 of outstanding preferred stock on the market today, and I mean today, February 2, 1942?

A. Well, as a matter of fact, I do not know exactly [fol. 7488] what it would be because I have not made the analysis as of yesterday or Saturday or as of this morning but, if refinancing were to take place as of today for a preferred stock exactly similar in all respects to the present preferred stock, I would say that it was someplace in excess of 8 percent and might well approach the 8.5 percent.

Mr. Chamberlain: May I ask whether that means that the participation in dividends would be carried with the new stock?

The Witness: I say, a preferred stock in all respects identical with the preferred stock now standing in the capital structure.

Mr. Chamberlain: That would be participating?

The Witness: Absolutely. It is the same kind of stock to a "T" or to the letter.

By Mr. Littman:

Q. Now, you are aware of the fact, are you not, that today Panhandle Eastern is receiving bids on a new issue of preferred stock, the proceeds of which will be used, among other things, for the purpose of refunding this $10,000,000 of outstanding Class A preferred stock?

A. Yes, I am aware of that.

Q. Are you familiar with the terms of that new issue of preferred stock?

A. Some of them. The new stock, among other things, [fol. 7489] is to be a sinking-fund preferred as against this. It is to be a non-participating as against this. When you look at the preferred stock, that is, this proposed new preferred stock, its stipulations and provisions are such that it brings the new preferred a little more in line toward the bond side, let us say, of the capital structure picture than does the presently outstanding preferred stock because of the sinking fund provision more than anything else.

Q. And there is not any question in your mind, is there, Mr. Coffman, that this new issue of preferred stock will cost the company far less than the 8.45 percent or the 7.86 percent which you have used for purposes of your Charts Nos. 37 and 36, respectively?

A. Well, if I can, in answer to your question, leave out the "far less" and just say it will be less, whether it is greater or less I am not prepared to say, but it will be less.

Now, how much less will remain to be seen. I would like to see myself what the figure is going to be.

Q. Now, the company and the rate payer are entitled to the lower rate if a lower rate is had today?

A. Yes, if they refinance and the new stock is sold and the cost on that new stock is less, why, then we will take that over-all figure into consideration, that is, that figure [fol. 7490] in conjunction with the common stock, obviously, and the bonds.

We will still have to talk about over-all capital structure but giving weight to the figure for the new preferred instead of the one used in this calculation.

Q. Now, suppose this new issue of preferred stock will cost the company 4½ percent. There isn't any question in your mind but that the company and the public and the rate payers are entitled to the benefit of that new rate?

A. No, I would not go quite that far because there is one thing, by your over-simplification, that you are leaving out.

Q. What is that?

A. The common stockholders of the company at the moment are also going to take a good look at this situation and when they find another security, in addition to the bonds which have sinking fund provisions which again is going to take a portion of the earnings, segregating it for the purpose, the common stock financing, if it is to be done, might cost more than I have been talking about.

In other words, the sinking fund provisions of the new preferred handicap the common stockholder to that great extent and you will still have to talk, so far as your customers are concerned, in terms of over-all capital cost and not in terms of one part of the component of the capital.

[fol. 7491] Q. You think, then, that the companies that hold 92 percent of the common stock are going to want more for their money than they have been getting heretofore just because of the refinancing situation that is present today?

A. The holding companies at the present time are not contemplating continuing holding this common stock. They are also having a problem as to what they are going to do so we cannot generalize on that without considering what the possibilities are.

Q. Now, this 12 percent that you have figured as the reasonable rate for common stock will not hold good after today, will it?

A. It may. I want to see the figures first because after you get the figures on the new preferred stock, I do not know what the over-all cost will be. It may be it won't be far out of line at all with this study.

Q. Well, is this study usable today or isn't it?

A. I think it is just as usable as your classical method, absolutely. As long as the results of the classical method will hold up, the results of this study will hold up.

Q. You do not think much of the classical method, do you?

A. Not in and of itself, no, I do not. I think you have to have something in addition to that to make a study.

Q. Can your rate of return be used today?

[fol. 7492] A. Yes, I think it can very definitely. I think if is a very good guide.

Q. What use can we make of this 12 percent that you have fixed for common stock?

A. I say that that is, as of the time of this study, the best appraisal I could make of what the common-stockholders would require and were requiring on the average for an investment of this kind which means should new equity money be sought, it would have to be sold on about that kind of earnings-price ratio.

Q. Can we rely upon this 12-percent figure today after the new financing?

A. I think generally you can but if you cannot rely on this, then I say the results you are getting from your classical method are equally at variance from the facts as this would be so you are up against the proposition of making a new classical method approach with all the costs involved or using this study of getting the costs which are involved which, I think, is less expensive and I think, in many respect, more appropriate.

Q. Now, Mr. Coffman, I simply want to know whether the 12-percent rate for common stock that you have used for purposes of this study may be applied today after the refinancing? Does it still hold good for all practical purposes?

[fol. 7493] A. I would want to check after the refinancing comes out to see. Why should I say that it will or won't when I can have a chance to check it? After all, one fundamental factor has been changed and when any fundamental factor changes it may change the results radically so if you will tell me this noon or this afternoon what the new financing did, it won't be much of a trick to tell you whether this still holds good after we find out what the new financing is.

Q. You are an expert who holds himself out to the public as an adviser in these matters and by your training and study you claim to know what the market conditions are, isn't that correct?

A. That is correct and one of the first fundamentals that I know is that if any fundamental economic factor or factors pertinent to the line of study you are using changes, maybe it won't, but if it does change that calls for a new study to find out and, after all, that is a basic principle with any analyst, it seems to me.

Q. Are you still sponsoring this 12 percent for common stock or are you not?

A. Under the conditions which existed at the this study was made and under all the factors taken together at the time they were so related, I stick to this 100 percent, yes, sir.

Q. You stick to the 12 percent 100 percent?

A. I certainly do, yes, sir.

[fol. 7494] Q. Have any conditions changed since you made this study that would warrant any change in the use of this 12 percent?

A. Up until this present moment, assuming that the refinancing is not consummated at the moment and a new figure that you might have this afternoon that would change it radically, I would say that this very closely approximates the conditions under which I made the study and the factors as related to each other.

Q. In other words, 12 percent still holds good at the present moment for the common stock assuming no change by reason of the refinancing?

A. And assuming that there has been no radical change in economic conditions which would alter the picture. To my knowledge, no such change at the moment, to date, from the date of this study, has taken place.

In other words, I think if I were to make this study as of today, covering the period from August of last year when the thing was made, I would get at or near the same figure.

Q. What is there about this new financing that might cause you to want to change that 12-percent figure for common stock?

A. I say that the new preferred which is now being offered, among other things, is a sinking-fund preferred [fol. 7495] stock in contrast to the present preferred which has no sinking fund requirement. The new preferred, therefore, so far as the sinking fund is provided, approaches more the classification of a bond and less the classification of a preferred stock.

Such provisions, therefore, create a greater drain on earnings, so far as providing the fund is concerned, to take up at a late date the preferred stock.

Therefore, the common-stockholder to that extent will feel that he is farther removed from a distribution of whatever earnings are left available to his stock.

Q. Now, will you tell us how a sinking-fund provision creates a drain on earnings?

A. Because a sinking-fund provision has to be provided for. In other words, your have to earn money to provide the sinking fund which can be used to apply against the preferred stock the same as you have to provide a sinking fund for the bonds.

For example, $1,200,000 odd, as I recall it, of bonds are due or rather $1,250,000 of serial notes are due November 1, 1942. The company, through earnings, must be able to provide that sum so at the due date those notes can be purchased.

Q. Well, your allowance for amortization takes care of all that, doesn't it? You so said in your exhibit.

A. Well, I have taken that into consideration but I [fol. 7496] also said that if earnings come into a company and are reinvested and put into bricks or mortar or otherwise dispensed and you do not get it because of a rate cut or something else and you do not get the cash, it is going to be a little tough to do it.

Q. Well, Mr. Coffman, did you or did you not make a provision for the sinking fund, bonds and preferred stock when you made your allowance of $2,551,000?

A. Yes, I took the provision into consideration.

Q. Now, in all of the earnings that you provide for in your Charts Nos. 36 and 37, they are earnings after the provision is made for sinking fund, isn't that correct?

A. That is correct.

Q. Now, will you state how the provision in the new issue of preferred stock, the sinking-fund provision in the new issue for preferred stock will affect the common-stockholder adversely?

A. It will affect it to the same extent. You have an additional sinking fund to provide for which I was not providing for when I was making this study.

Q. If you were making this study, do you mean to say you would provide for a sinking fund for amortization over and above the $2,500,000?

A. I say if the preferred stock comes out and it provides for a sinking fund, that has to be taken into con- [fol. 7497] sideration—

Q. (Interposing) How do you mean?

Mr. Wheat: He had not finished his answer.

Mr. Littman: Had you finished your answer?

The Witness: (Continuing) On the basis that I have to have enough in the way of capital requirements, as I see it, to provide the necessary funds so, at the due date of the sinking fund, the payments can be made.

By Mr. Littman:

Q. Will you please refer to a figure in your Exhibit 65 that would be increased by reason of the sinking-fund provision on new preferred stock?

A. The figure that finally would show the amount would be that related to the common stock if investors in the market, that is, common-stock investors in the market, giving full weight to the sinking-fund provisions in the new preferred stock should believe that that was an added additional requirement which might, in some way, enlarge the risk they already have in connection with the equity, if it did, it might be somewhat higher.

If they did not analyze it that way, all right, the figure stands as is. All I am saying is that before I gave the additional figure, I would want to make a calculation to see whether or not there was a change.

I see no difference, in other words, Mr. Littman, be- [fol. 7498] tween having a preferred stock as the present capital stock and issuing new preferred with sinking fund and perhaps enlarging the amount of bonds outstanding.

Now, in the particular case I have assumed refinancing the preferred stock with bonds and common and I have shown had that been done at what I thought were reasonable rates, the amount of money required would have gone down from $5,064,821 to $4,993,511, a saving of around $71,000.

Now, so far as this new preferred stock is concerned, when you make the calculation, it might work out at some saving or it might work out at about $5,064,000 and that all is due to the fact that certain rates changed as you change the type of security and the percentage in the capital structure represented by either one.

As I say, this afternoon when the rate is available, I think it would be pretty easy to tell whether any major change or material change was effected.

Q. Now, the common stockholders would get a considerable advantage by reason of the lowering of the cost of servicing the preferred stock from 8.45 percent, which is your estimate, down to something in the vicinity of, let us say, 4½ percent, wouldn't they?

There would be more earnings available to the common stockholders, would there not, under those circumstances?

A. Well, that will depend on the total number of shares [fol. 7499] that remain outstanding. If there were an equal number of shares and the cost was less than the present cost, there would be some saving to the common stockholder so far as the earnings' picture is concerned.

But I merely want to add again, on the other hand, that you have got more of a higher class, let's call it, of senior capital because of sinking fund and other protective provisions in the new preferred stock than is the case under the present.

Q. Why didn't you assume such a condition when you undertook to determine the cost at which this money might be refinanced? Weren't you interested in giving the rate payer the benefit of the best possible financing?

A. Sure, and, as I studied the facts, again referring to this exhibit which shows the various companies in the industry and those that have [preffered] stock outstanding

—I referred to that exhibit a minute ago, Chart No. 25—it seemed to me that the facts included in that exhibit, in the first place indicated that, in the natural-gas pipe-line business, it was not the practice to finance by preferred stock and; in the second place, I drew the conclusion from that that apparently the various natural gas pipe-line companies had found, after they had made various considerations, that it did not seem to be the best form of capital to sell.

[fol. 7500] Therefore, I concluded that if there was to be any refinancing of present preferred done, probably the most likely and best basis would be some combination of bonds and common to take care of it and I made that assumption.

Q. Now, Mr. Coffman, I want you to answer this question yes or no. When you made that assumption and when you provided a proposed plan of refinancing of the $11,000,000 of preferred stock, did you or did you not present the best and most economical refinancing plan that you could conceive of and imagine at the time you presented it? Did you or did you not?

A. I am sorry, I cannot answer that question as you put it.

Q. Do you have some doubts about whether you were doing your best to refinance at the lowest possible rate, Mr. Coffman?

A. I have not said that up to now, to my knowledge.

Q. If you cannot answer the latter question—

A. (Interposing) I can answer—

Q. (Interposing) Suppose you answer in your own way.

A. All right, I will be glad to do that.

As I told you, there have been statements repeatedly made by the S. E. C. in regard to the type of capital structures that ought to be in vogue in companies of this kind and I believe there are numerous references in S. [fol. 7501] E. C. literature to the effect that an ideal structure for this type of business would be one in which there are 40 percent of bonds, 60 percent of common, and that was why I took this particular ratio and also why I called it "ideal".

It was not because I necessarily thought it was the best nor did I make any other calculations to try it.

Q. It certainly was not the lowest cost of money that you could work out considering the market at the time, was it?

A. I would not say on that, Mr. Littman. I do not know. I would not say at all. It might be, it might well be. I do not know.

Q. You mean it is altogether probable that you could have worked out a lower cost of refinancing this $11,000,000 of preferred stock than that which you presented in your Exhibit 65?

A. I am not too certain of that for this reason:

That, in connection, for example, with the present financing, I have heard, just as hearsay from bankers, [they] they were a little dubious about this issue.

I could have gone on and taken different hypotheses and estimated it on preferred stock all the way from having all bonds down to having a common stock and worked out different figures.

I do not see where, for the life of me, they would have [fol. 7502] been helpful to the study or helpful to the Commission. It did not make them.

Q. You labored and labored and you brought forth the $70,000 figure?

A. I did not labor. I told you exactly what I did. I relied on the S. E. C. statements and took what they said was an ideal capital structure for this kind of company.

That was not much labor because they had laid it out for me, practically. I took their percentages and laid it out.

Q. Evidently, the company is not following your suggestion of refinancing the $11,000,000 of outstanding preferred stock by 50 percent bonds and 50 percent common stock and have already secured the Securities and Exchange Commission's approval of the plan of refinancing this preferred stock, by preferred stock, is that a correct statement?

A. The first part of it is correct, that they are obviously not following the plan as I calculated on a refinancing basis.

Secondly, in putting out the issue, they naturally must have had the approval of the S. E. C. and what the results of it will be, I do not know until we see what the market does.

Q. The company is following the plan that will cost them the least in the matter of refinancing this Class A [fol. 7503] preferred stock, isn't that correct?

A. They are hoping they are following that plan.

Q. And the dividend rate on that new issue of preferred stock is 4½ percent? A. That is correct.

. . . . . .

[fol. 7504] PAUL B. COFFMAN, a witness, having been previously sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Do you know, Mr. Coffman, that since April of 1937 various proposals and attempts have been made to refinance Panhandle Eastern's Class A preferred stock?

A. I know, generally, there has been such proposals but I have not analyzed any of them, Mr. Littman, nor am I prepared to say what one is against the other.

Q. But you do know that various proposals and attempts have been made since 1937 to refinance Panhandle Eastern's Class A preferred stock?

A. To say it differently, I know such matter has been under consideration, yes.

Q. Do you know that these attempts to refinance this Class A preferred stock have, from time to time, been blocked by Columbia Oil & Gasoline Corporation, the beneficial owner thereof and also because of certain disputes between Missouri-Kansas Pipe Line Company and Co- [fol. 7505] lumbia Oil & Gasoline Corporation, Panhandle Eastern's parents?

A. I do not know as to the fact that they may have been blocked but I know that there has been some dispute

over a period between the Mo-Kan and Panhandle Eastern.

Q. Let us be more specific with respect to the efforts to refinance this Class A preferred stock. I will read from Page 27 of Exhibit 14-A which is a release issued by the Securities and Exchange Commission, No. 2778 under date of May 28, 1941, the findings and opinion of the Commission in the matters of the Panhandle Eastern Pipe Line Company, Columbia Oil & Gasoline Corporation, Columbia Gas & Electric Corporation:

"Since April of 1937 various proposals have been made to refinance this Class A stock, all of which is held by Columbia Oil. These proposals and attempts to put through such a refinancing have failed—and the history of that failure is a significant indication of Columbia Oil's control over Panhandle Eastern.

"Proposals to refinance the preferred stock made in 1937 were met by Columbia Oil's insistence that the refinancing take place simultaneously with the refunding of Panhandle Eastern's bonds. During 1937 and 1938 it was believed by some of Panhandle Eastern's officers that the condition of the market made necessary a convertible issue of preferred to refinance the outstanding [fol. 7506] preferred. The Mokan interests refused to make any attempts to secure waivers from the minority common stockholders of pre-emptive rights to new common. This, it was claimed, made impossible the issuance of convertible preferred stock—and dampened efforts at refinancing. There was, however, no indication that Columbia Oil would consent to even a convertible issue during the early stages of the refinancing proposal."

Have your ever read that part of the Securities and Exchange opinion?

A. No, I do not recall that I have.
Q. And you were not aware of those facts?
A. Not specifically, no.
Q. I will read on:

"It will be recalled that pursuant to the settlement with the Mokan receivers, rights to 80 shares of Panhandle Eastern's common stock were to be distributed to Mokan stockholders. During the early part of 1939

hearings in the Delaware Chancery Court were being held on the question of this distribution. Because of the pendency of this proceeding the Panhandle Eastern Board, on January 25, 1939, abandoned plans for selling convertible preferred stock. The alleged reason was that the outcome of the proceedings 'had a vital bearing on the type of financing which it was possible to do at that time.'

"On June 21, 1939, the Delaware Chancellor ordered a [fol. 7507] distribution of the 80,000 shares of Panhandle Eastern's common stock to Mokan stockholders. The tension was broken. A substantial block of stock in the hands of an adversary had been smashed, and in July of 1939 the Finance Committee of Panhandle Eastern was ready to recommend continuation of negotiations with Kuhn, Loeb & Co. for a 4½% cumulative preferred stock without a conversion feature."

"Have you familiarized yourself with those facts, Mr. Coffman?

A. No, not for purposes of this study.

Q. I read on:

"It is apparent that up to this time the dominant factor in the timing of the action of the Panhandle Eastern Board was the relative control positions of Columbia Oil and Mokan. The distribution of a strategic block of stock was the 'vital' factor in 'the type of financing which it was possible to do at that time'. When the block was broken it became 'apparent', according to the testimony of Sperry, Treasurer of Panhandle Eastern 'that we could sell an issue without the conversion privilege attached'.

"But a new barrier was presented. On August 7, 1939, Creveling, president of Panhandle Eastern and chairman of its board, reported that Columbia Oil had determined that the pendency of the plan of divestiture before the Federal Court made plans for refinancing 'premature'." [fol. 7508] Have you familiarized yourself with those facts?

A. Not for purposes of this study, No.

Q. Did you know about these facts?

A. I knew generally about them, yes, but I made no detailed study nor gave weight to them because it was not pertinent for the study at hand.

Q. In your opinion? A. In my opinion, yes.

Q. I read on:

"Panhandle Eastern tried again, in what was deemed a reviving market, in November of 1939. This time negotiations were undertaken for a joint refunding of the bonds and refinancing of the preferred (the action previously recommended by Columbia Oil) with Kidder, Peabody & Company and Glore, Forgan & Company. On December 28, 1939, the Panhandle Eastern directors recommended to Gano Dunn a program of refunding and retirement. On January 19, 1940, Gano Dunn conveyed to the board of Panhandle Eastern the sentiments of Columbia Oil: Columbia was unwilling to consider, at that time, the refinancing of the preferred stock. This ended Panhandle Eastern's efforts at refinancing. Panhandle Eastern in the face of a market which it appears would have absorbed a refinancing at 4½% is still saddled with a 6% cumulative, participating preferred stock which paid in 1940 a dividend of 10%, and which, according to [fol. 7209] its terms, after June 1, 1941, would cost the company a premium of $1,000,000 should it attempt a refinancing."

Were you aware of these latter facts which I have just read? A. Generally.

Q. Did you give those facts any weight in the making of your study which is contained in Exhibit 65 for purposes of this proceeding?

A. No, I did not give those any weight, as I think I have clearly indicated in my testimony.

Q. You understand, do you not, that some nicknames are used for purposes of brevity in this opinion.

For instance, the name "Mokan" refers to Missouri-Kansas Pipe Line Company; the name "Columbia Oil" refers to Columbia Oil & Gasoline Corporation; and that "Panhandle Eastern" refers to Panhandle Eastern Pipe Line Company.

You understand that, do you?

A. I understand that, yes.

Q. And I believe you have already testified late this morning that the dividend rate on the new issue of preferred stock, the proceeds of which are expected to be used to refund the $10,000,000 of Class A preferred stock presently outstanding, is 4½ percent?

A. Well, I think, generally, that is the case although in the particular proposed financing, I think there was [fol. 7510] not an exact determination but the matter was to be determined in accordance with bids to be submitted.

Q. Well, of course, the bids in the ultimate will determine the actual cost of money? A. Yes.

. . . . . .

[fol. 7512] By Mr. Littman:

Q. Will you please turn to your table for Chart No. 37, Mr. Coffman. In your table for Chart No. 37, you show in the right-hand column the amount of $3,510,995 as "Balance for common stock (after participation of Class A preferred stock)", do you not?

A. Yes, I do.

Q. Now, that represents the 12-percent earnings-price ratio on common stock and surplus as of June 30, 1941, of $29,258,295, is that correct?

A. Yes, that is correct.

Q. Now, is my understanding correct that that is the amount which the common stockholders will eventually receive under your projected assumption which is headed at the top of the column, "Projected-assuming present preferred stock remains outstanding"?

A. Not just as you state your question, Mr. Littman. That is the earnings-price ratio that I say is required under conditions existing at the time of the study by the prospective investor and, as I have pointed out on numerous occasions, whether or not he receives that amount [fol. 7513] is going to depend upon dividend policy.

Q. Well, under the assumption that you make that conditions will not be changed, let's put that aside. How much of this amount would be paid in dividends over the life of the company to the holders of the common stock?

A. Well, it is difficult to answer that, because, as I have pointed out throughout, the earnings that the company makes or produces flow through the cash account

which is, in turn, reinvested and this being a growing company, it will be determined by the management what they believe they can reasonably pay out of these earnings, the remainder being retained in the business for operating purposes.

I do not know. If it were in the present status and in a liquidating process, if there was no drainage on those earnings, the entire amount should be available for distribution.

Q. Eventually to the common stockholders?

A. Well, if you will take the statement exactly as I have made it. The money is there but that is a hypothesis which does not exist because this is a going concern and as I have said, hour by hour these earnings are being reinvested in the business so whether or not they will be distributed, is quite a long-shot. I do not know.

This is a business with a wasting asset. If you continue to reinvest the money in that situation, I have not [fol. 7514] any idea but the common-stockholder will wind up with very little in this business before he gets through with it.

Q. Well, it is apparent, isn't it, Mr. Coffman, that under the assumptions which are shown in your Chart No. 37, if anything less than $3,510,995 goes to the common-stockholders of Panhandle Eastern, such stockholders would not receive fully 12 percent on the invested capital?

A. That is correct.

Q. So that in order to get the 12 percent that you say the common-stockholder must have, it would be necessary for Panhandle Eastern to pay out to the stockholders this $3,510,995, isn't that correct, under the assumptions that you have made for purposes of your study?

A. If the full amount of earnings available is to be distributed, the answer is yes, but the calculation here, you must distinguish on the basis that it is an earnings-price ratio and as long as the earnings are there, the management if efficient, all corporate policies are reasonable, he will take, in the meanwhile, something less in the way of dividends, not worrying about the amount that

is retained in the business if the conditions I have just enumerated hold true over the history.

Q. If it is plowed back in the business, it would merely enhance the common stockholder's equity to that extent, would it not?

[fol. 7515] A. That would be true providing all other things remain equal.

Q. But in order for the common stockholder to earn 12 percent, he would have to receive this amount of $3,510,995, is that right?

A. Well, no, your language is confusing there. The company can earn it for the benefit of the stockholders and it is 12 percent.

I did not say that he received it. All I said is that the earnings in that amount must be there. Whether or not the stockholder is to receive that remains to be seen and depends upon corporate dividend policy and we have got to distinguish between those two things.

He will never receive it until it is paid to him even though it is recorded on the books.

Q. Theoretically, it is going to be paid to him under your hypothesis?

A. It is presumed the money—no, I will retract that statement.

It is presumed that the earnings were made and they were converted into cash which, in turn, has been reinvested in the business.

Now, if the business continues on the same kind of earnings basis henceforth, that it was at the time, presumably that ratio will hold good but that is the hazard. [fol. 7516] Whether or not it will operate that way in the future remains to be seen because, as I have tried to point out time and again here, being a wasting asset, costs and other expenses go up and I do not know whether he will bail out or not and it is a fallacious assumption to assume any such thing.

Q. Assuming a static condition and no changing events in the future, under your study and your hypothesis and your assumptions, he would eventually get this $3,510,955 a year, would he not?

A. If all conditions remained absolutely the same, it will be in the company available to him. I want to draw that distinction.

When you get it you get the cash when it is earned. If it is retained in the business, it is available but until it is paid, the stockholder has not received it.

Q. How about 25 years hence when, according to your assumption, the business will be wound up by reason of the exhaustion of the gas supply? Will he get it then?

A. I doubt very much whether he will get it, Mr. Littman, and I will cite you a specific example.

The very thing you read to me sometime back on Southern Natural proves the point. Southern Natural, as I understand what you read, says that at the beginning of certain operations they estimated the length of life of [fol. 7517] reserves to be so many years.

Now, under a recent investigation, they find that at peak loads their present reserves will last four to five years. At the present time, instead of confessing to their stockholders who put in this original money to buy these reserves, that that particular phase of the business will be ended, according to best estimates now at the end of four and five years, and getting themselves into position so they can liquidate for whatever they can net, the management informs the investors and the public and also the Commission that it is now looking around for additional sources of gas supply and they admit that such gas is going to cost them about 1½ cents per M.c.f. more than their present gas reserves so they are taking earnings, such as they are, into cash, reinvesting that cash in a higher-cost reserve and gas supply, and so on, and I presume they are going to operate until there aren't any more available gas supplies and it is my contention if that company keeps on on that basis, there is no way that the company can possibly wind up at the end of time with sufficient money to pay off those securities and the same thing applies to the Panhandle Eastern Pipe Line Company.

Q. Let me be perfectly clear about this, Mr. Coffman. Is that what you had in mind when you fixed the 12 per-

cent rate of cost of money for common stock of Panhandle [fol. 7518] Eastern?

A. No, I did not say that. I have told you exactly.

Q. Why talk about it then?

A. Because it is a point in case in the question you asked me.

Q. Does your estimated cost of common-stock money reflect the situation which you have just described or doesn't it? It either does or it does not.

A. It represents just what I have stated it to represent.

Q. Will you answer my question? It either does or it does not, clearly.

A. I am sorry I cannot answer your question that way, Mr. Littman.

Q. You are stating now you cannot tell me whether or not your estimate does or does not reflect the situation which you have just described with respect to Southern Natural Gas Company?

A. I cannot answer that except in my own language and my language is this, if you want to have my answer:

That the 12 percent, as we know, was based upon an estimated life of 25 years for the reserves. As I have pointed out, that earnings ratio is for earnings solely. The dividend policy is something else.

To the extent that the earnings available under these [fol. 7519] calculations are retained in the business, they are reinvested there and to the extent, over the years, that the management of this company will feel called upon or believe it wise to make new contracts, new leases for acreage, they are going to find the same situation —

Mr. Wheat: (Interposing) The same situation as what?

The Witness: (Continuing) The same situation as Southern Natural Gas Pipe Line Company and that is a matter of business operations.

By Mr. Littman.

Q. In other words, you have provided a sufficient cushion with which to bail out Panhandle Eastern from the same kind of a jam in which Southern Natural now finds itself?

A. No, not at all, Mr. Littman, not at all. That is one question I can answer yes or no and the answer is no.

Q. Well, you said a moment ago, if I correctly understood you, that you expected Panhandle Eastern to experience the same type of difficulty that Southern Natural has experienced or didn't you say that?

A. No, I did not say that. I said if this company with these earnings finds, over the history, that they have the same kind of a situation before it and, therefore, take these earnings and reinvest them in the business, I do not see how even with this figure you can bail a security holder out because the money would not be there. That [fol. 7520] is all I have said.

Now, if we are going to provide for that, then I would have to make a further allowance so it is up to the management of this company to so conduct its business that it can, with these earnings, pay off.

Q. Let's have the amount of further allowance that would be necessary for the situation that you are either expecting or afraid of?

A. I do not need any allowance, Mr. Littman. I believe under the present intention even, that I understand you are making, that the only sound way that this could be done is to say to a company like Southern Natural Gas Pipe Line Company, "If you arrive at a point or are now at a point where you are telling the consuming public and the investors that you must go out and make a new deal, get new resources, you get new financing and set up a new separate organization to do that but do not confuse it with what you have already sold to the investing public and have told the customers you have."

On that basis, it may be we could get this thing straightened out.

Q. You certainly succeeded in confusing me and I would like to be cleared up on this. Let me put it this way:

Is it your testimony that the common-stockholders of Panhandle Eastern will not receive the $3,510,995 which [fol. 7521] is, under your Chart No. 37, available to the holders of the common stock for each year?

A. I say that if the company finds itself, over its history, in a situation such as Southern Natural finds itself

presently and this company follows exactly the same procedure as Southern Natural is following, the likelihood is that at the end of time on Panhandle Eastern, there just would not be enough assets there to pay this off. That is exactly what I am saying.

Q. Now, would you mind answering my question. I think it can be answered yes or no. If you cannot answer that yes or no, I wish you would please state so.

Suppose you read it back, please.

(Whereupon, the question indicated was read by the reporter.)

The Witness: I stick with my answer.

By Mr. Littman.

Q. You cannot answer that yes or no? A. No.

Q. Do you know what use this Commission can make of this figure if we do not know that assumption—

A. (Interposing) Yes.

Q. (Continuing) If we do not know the answer to that question? A. Very definitely.

[fol. 7522] Q. Suppose you tell us what use might be made of this figure of $3,510,995? What are we going to do with it?

A. You are going to add that to the other two items that I have referred to, one on preferred stock and the other on the bonds, to get the total of $5,064,821 as shown in Chart No. 37 of Exhibit 65 as the amount in dollars the company must receive for capital requirements if the market is to be forthcoming for public financing and under the conditions or conditions similar to what existed at the time the study was made.

Q. All right. How much of it is going to be received by the common-stockholder?

A. The amount that was allowed for common is $3,510,995.

Q. How much of that amount is the common-stockholder going to receive?

A. I do not know until they talk about dividends. I haven't the slightest idea.

Q. You cannot tell us, then, what the common-stockholder expects to actually receive?

A. That dividend policy is purely a management proposition.

Q. You cannot state what the common-stockholder expects to receive upon his investment in Panhandle Eastern Pipe Line Company?

[fol. 7523] A. No more than I have shown in the calculations I made in table to Chart No. 37.

Q. Where have you shown how much the stockholder is going to receive?

A. It is included in the $3,510,995.

Q. Well, let's get at it this way:

Are the common-stockholders going to receive $100 of that $3,510,995 a year? Are they going to receive $200, $1,000,000, are they going to receive $2,000,000? How much?

A. It is shown in the calculation where I have made an estimate for what the participations for the preferred stock was, based on a $2.50 annual dividend on the 807,367 shares of common stock.

Q. Is that the dividend which you expect—

A. (Interposing) That was the dividend I used for this calculation.

Q. You used it for a calculation but do you expect the common-stockholders to receive a dividend of $2.50 per share on their common stock?

A. Under the conditions that I analyzed here at the time, it seemed to me that was a reasonable expectancy.

Now, if there is a rate cut or if there is a substantial jump in some cost or some other factor, I do not know. The management will have to meet that as it comes and it seems to me the Commission will, too.

[fol. 7524] Q. What, in your opinion, is the common-stockholder going to require before he invests his money in the common stock of Panhandle Eastern?

A. At the time this was made, he required the earnings-price ratio of 12 and he received a $2.50 dividend actually.

Q. 92 percent of those common-stockholders were the two parent companies of Panhandle Eastern, namely, Columbia Oil & Gasoline Corporation and Missouri-Kansas Pipe Line Company, is that right?

A. Well, yes, the great majority of the common stock was split between Missouri-Kansas Pipe Line and the Columbia Oil and Gasoline Company.

Q. Now, you have in the left column of figures in your table for Chart No. 37 an amount of $1,388,480 which you term "Preferred dividend requirements (based on maximum participation of Class A preferred stock)".

Now, what is that?

A. Well, those figures in the left-hand column are the actual figures for the 12 months ended June 30, 1941. I mean I just took those right from the statement.

Q. Are you stating that Panhandle Eastern Pipe Line Company paid $1,388,480 to the preferred-stockholders for the year ended June 30, 1941?

A. No, I think that calculation is based upon allowing the maximum participation on the earnings available in [fol. 7525] order to see what would be left for common.

Q. That is not an actual figure at all?

A. That figure is not actual but that is to find out what share would be available to common if you distributed all of the earnings so that you had to work out your participation as between the preferred and common for everything over $1.50.

Q. What was the purpose of making that calculation?

A. Well, it is based upon your own question, I think, as to what earnings are necessary if you are going to calculate what the investor needs and add that into the other expenses to get a total dollar needed.

Q. You assumed, for purposes of your study, that the common-stockholders would receive a dividend of $2.50 per share on each share of common stock?

A. Yes, that is correct.

Q. And you consider that a reasonable assumption?

A. Under the facts at the date of this study, I thought that was a reasonable assumption, yes.

Q. What was the market value of Panhandle Eastern's common stock as of approximately June 30, 1941, per share? I believe that is shown in your table for Chart No. 20.

A. As I recall it, it was $36.50.

Q. Yes, that is the figure shown as the "average market price, January 1-August 31, 1941" in your table for [fol. 7526] Chart No. 20.

A. Yes.

Q. Now, on that basis, namely, the basis of receiving a $2.50 dividend per year, what would be the rate of earnings for the common-stockholder on each share of Panhandle Eastern's common stock?

A. You mean rate of dividend?

Q. Yes, the percentage rate of dividend. It is 6.85 percent, I believe.

A. It is about 6.8 percent.

Q. Under the assumptions that you have made for purposes of Chart No. 37, to-wit, the assumption of a $2.50 dividend per share of common stock, the yield to the common-stockholder would be 6.8 percent?

A. That is correct, on the figure we have.

Q. And he would leave the difference between 6.8 percent and 12 percent, namely, 5.2 percent, with the company?

A. Well, he is forced to leave it with the company if they do not pay it out, yes.

Q. In your opinion, under the conditions which you have assumed for purposes of your study, Exhibit No. 65, would the common-stockholders of Panhandle Eastern be satisfied with a yield of 6.85 percent?

A. They probably would so long as the earnings ratio remained at 12 percent.

[fol. 7527] Q. Now, in the David Young III, suit, to which reference has heretofore been made, you testified that 80 percent of the earnings available to the common-stockholders would be paid in dividends, is that correct, on the average?

A. Not quite that way. What I did, because of this participation feature, I had to take the earnings available to both preferred and common and took 80 percent of that.

In other words, since there was that participation feature, I had to first see how much was overall available so that the more accurate statement is the one I gave you rather than the one you used.

Q. Now, assuming that 80 percent of the earnings available for common stock may be properly distributable by way of dividends to the common-stockholders, then in order for the common-stockholders to get this 6.8 percent

yield, the actual earnings would be, under that assumption, 8.56 percent, wouldn't they, instead of 12 percent?

A. Well, I do not know. I have not made that calculation but that really does not mean anything.

Q. Suppose you make it. I am asking you to assume that you are setting aside 80 percent of the earnings for dividends which is what you did in the David Young suit and calculate for me and check my figure of 8.56 percent as the earnings that would be required to yield 6.85 percent to the investor.

[fol. 7528] Mr. Wheat: You are asking the witness merely to check the mathematics of your figures?

Mr. Littman: I am asking him to tell me whether the figure I gave him is correct under the assumptions that I made which are the assumptions which he made in the David Young III; suit.

Mr. Wheat: I am trying to get straight, Mr. Littman, on this. Did you say something about 80 percent of the common stock or 80 percent of net income?

Mr. Littman: 80 percent of the earnings available for the common stock.

Mr. Wheat: That is your assumption.

Mr. Littman: The witness does not seem to have any difficulty.

Mr. Wheat: Mr. Littman, I want to get this straight. You said to me, "I asked him to make an assumption which was an assumption in some other case".

I am asking you merely whether this is your assumption. You combined two things in that which I am advised are erroneous and I want the record to show it.

Mr. Littman: I think your confusion flows—

Mr. Wheat: (Interposing) I am not confused, Mr. Littman, at all.

Mr. Littman: (Continuing)—from your lack of knowledge of this witness' testimony in the David Young case.

[fol. 7529] By Mr. Littman:

Q. What do you find by that calculation?

A. I want to get you to say where you got that 5.8 figure. I have not yet gotten that figure.

Q. The figure I asked you to check was 8.56 percent.

A. No, that is not the figure you gave me first, is it? Let me have this read back. I do not remember that figure at all.

(Whereupon, the portion of the record indicated was read by the reporter.)

By Mr. Littman:

Q. You understand my question, don't you, Mr. Coffman?

A. As I understand it, you want me to take the earnings that I have here, assume a distribution of 80 percent and then calculate the amount, is that right?

Q. I asked you to state the percentage of earnings available for common stock that would be required to produce a yield to the common stockholder of 6.85 percent if 80 percent of the earnings available for the common stock were paid out in dividends.

I believe your answer will be 8.56 percent because 80 percent of 8.56 percent gives 6.85 percent which is the yield to the common stockholder based on an 80 percent of earnings yield.

[fol. 7530] A. I will grant you that 80 percent of 8.56 percent is 6.85 percent but until I went back and found out the earnings that were available and calculated the participation, I would rather see the dollar figure and see if that calculation gives 6.85 percent.

Q. Let me put it this way:

You have already answered my question but in order to clear up the record, I think it might be well to go over the calculation again.

Assume that a hypothetical company has earnings available for its common stock of 8.56 percent.

Mr. Culton: Is that a company that has no preferred stock?

Mr. Littman: I am asking him to assume a hypothetical company.

Mr. Culton: You said available for common stock.

By Mr. Littman:

Q. Suppose we continue. Assume that this hypothetical company is paying out 80 percent of its earnings available to common stock to its common-stockholders by way of dividends.

Query: What would be the yield to the common-stockholder on those assumptions?

A. Well, on that assumption which I indicate has no participation feature or anything else but is just straight [fol. 7531] common, then you could apply 80 percent of 8.56 percent which would be 6.848 percent.

Q. And that 6.8 percent is the amount with which you assumed the common-stockholder would be satisfied if he were a common-stockholder of Panhandle Eastern under the assumptions which you have made for purposes of your Chart No. 37 in your Exhibit 65, isn't that right?

A. No, I do not follow that. That was the assumption that I made in the David Young suit which was two or three years ago.

Q. Didn't you testify a few minutes ago, Mr. Coffman, that you assumed the dividend would be paid on the common stock of $2.50 a share?

A. Yes, I assumed that but I did not say that was 80 percent of anything.

Q. Now, let's go from there. That $2.50 dividend on Panhandle Eastern's common stock which had a market value as of the first 8 months of 1941 of $36.50 represented a yield to the common-stockholder of 6.8 percent, isn't that correct? You just said so a few minutes ago.

A. Maybe I did. I do not recall the figure. If that is what I said, it is correct, or I will recalculate it again.

Q. It is 6.8 percent.

A. All right. It is 6.85 percent.

. . . . . .

[fol. 7532] The Witness: Mr. Littman, I believe that there is a possibility here that on your question I misunderstood you in your last question.

If I understood what you said, I will stay by the answer I have given. On the other hand, if I did not understand it, I would like to make a further point, so may I have the question and answer read back to see if my understanding is correct.

(Whereupon, the portion of the record indicated was read by the reporter.)

The Witness: The only point that I want to get correct is that I had thought that someplace in the assumption Mr. Littman had then said that is what I did in the David Young suit.

Mr. Wheat: I think you will find his assumption in the first question involving it. That is when I interrupted, so to speak.

The Witness: Well, at that point I thought I had said that in the David Young suit I had taken 80 percent of the earnings available for both preferred and common because of that participation feature and that statement is correct, but if you are going to confine the situation to the [fol. 7533] common stock only and still talk about the David Young suit, the percentage was not 80 percent but for the common would have been figured at 74.8 percent because, in the David Young suit, my 80 percent applies to the earnings available for preferred and common.

If we are clear on that point, I will stick by my answer. It is perfectly accurate. I do not know whether I still get my point across.

By Mr. Littman:

Q. The last point just preceding the recess which I was endeavoring to ascertain was simply this:

Whether you considered the dividend payment of $2.50 per share on the common stock of Panhandle Eastern Pipe Line Company to be reasonable under the circumstances?

A. As of the date of this study and our present testimony, I assume that $2.50 was a reasonable dividend and so made my calculations upon that basis, so far as the common stock is concerned, yes, sir.

Q. It is clear that that $2.50 per share dividend on the common stock of Panhandle Eastern would be equivalent to 6 point—

A. (Interposing) —849.

Q. 6.849 percent?

A. On a price of $36.50 for the common stock.

[fol. 7534] Q. Which was the market price as of 1941?

A. Which was the market price as of 1941, yes, sir.

Q. That was what I wanted to make certain was clear in the record. A. That is all right.

Q. Will you please turn to Chart No. 30 of Exhibit No. 65.

In this chart, you have allowed for an increase in Federal taxes owing to the higher rates in the Revenue Act of 1941 over those in effect during the year 1940, is that correct?

A. Yes, sir.

Q. Now, that estimated increase owing to higher rates in the Revenue Act of 1941 is applicable wholly and solely to the rate itself, is that right, that is, the increase in the rate itself?

A. Well, it includes that. As I think I have explained earlier, I took the actual 12-months' figures ended June 30, 1941, which were $3,008,117 and allowed a 10-percent increase generally, and the way I arrived at that was a calculation I had made before which is shown in Chart No. 15 where, on the basis of the calculation I made, I applied to the same base the 1940 rate and then next the 1941 rate, indicated that the difference in dollars was about a million dollars in taxes by way of increase as against what you [fol. 7535] have at the present time.

In other words, what I was trying to ascertain was how much difference had been created by a change in tax rates with no other change.

Q. Now, on top of that, you made a further allowance of a 10-percent increase in Federal taxes to cover the projected period after June 30, 1941, as shown in Chart No. 30, is that correct?

A. That is correct, with the trend of taxes what they were, it was a reasonable expectancy that the increase would amount to at least 10 percent over-all.

Q. Now, you are speaking of a 10-percent increase in the tax rate?

A. Well there, I am speaking of 10 percent as applied to a dollar amount. In other words, I felt that the trend in tax rates was such that, in a reasonable period, a figure of 10 percent applied would give a close approximation of what the specific increase in rates would account for as taxes continue to go up.

Q. It was intended to cover an increase in rate?

A. That is correct without saying specifically the rate, because there again you have your access profits as well as your normal rate.

The two rates will be different so I talked in terms of aggregate dollar and said an allowance of 10 percent over [fol. 7536] all would closely approximate what you could reasonably see in the near future in the way of increase.

Q. And would take care of an increase in the rate?

A. That is correct, not saying what that particular tax rate might be.

Q. Yes. It was intended to give you a general approximation of the effect of an increase in tax rates in 1941 over those which were actually secured by calculating by the use of the 1941 Revenue Act rates, isn't that right?

A. Revenue Act rates plus expectancy and I tried to support that further by that supplemental Exhibit No. 152.

Q. Now, I would like to have you refer, Mr. Coffman, to Exhibit No. 147 which is the Securities and Exchange Commission's findings and opinion in connection with the financing by Panhandle Eastern.

I would like to have you turn to Page 17 of that opinion and refer to the present and pro forma consolidated capitalization of Panhandle Eastern as of September 30, 1941.

A. Yes, I have that.

Q. Do you find that? A. Yes.

Q. Now, you have been speaking from time to time throughout your testimony about changing conditions and the purpose of my present line of inquiry is to ascertain the [fol. 7537] effect of changed conditions, since you made your study, upon your conclusions reached in Exhibit No. 65.

Now, the first thing shown in this consolidated pro forma statement under the heading, "Funded debt" is the first mortgage, Series A, 1946-1950, in the "actual amount" of $6,250,000.

That represents the principal amount of the total outstanding bonds of that class as of September 30, 1941; does it not?

A. It does.

Q. On the pro forma side, you observe, do you not, that this amount will remain the same after the new financing, as well as before A. Yes, that is true.

Q. The second class of funded debt is called, "First mortgage, Series B, SF 3's, 1960, in the "actual amount" of $12,000,000 and in the "pro forma, amount" of $12,000,000. A. That is correct.

Q. You understand that represents the existing bonds of that class that are presently outstanding? A. Yes, sir.

Q. Now, thus far we have no changed conditions with respect to those bonds, have we?

A. That is correct, so far as the bonds are concerned.

Q. Now, let's skip the next one for the time being and [fol.7538] let's go down to the "serial notes, 1942-1945."

The actual amount outstanding before and after the financing is $5,000,000 principal amount, is that right?

A. That is correct.

Q. The last item under funded debt is "leasehold purchase obligation", $14,256 which is the same before and after the capitalization. Do you find that?

A. Yes, that is correct.

Q. Now, the total of those four items which I have read is $23,264,256 which is virtually the same as the total for the funded debt outstanding as of the time you made your study as of June 30, 1941, isn't that correct?

A. The amount outstanding as of the date of my study is shown in Chart No. 26, Exhibit 6, and is $23,267,544 which closely approximates the figure contained in Exhibit No. 147 to which you now have me refer.

Q. Now, the only change is a slight reduction in connection with the leasehold purchase obligation which, at the time you made your study, amounted to $17,544 and which, as of September 30, 1941, was $14,256. Isn't that the only item that accounts for the difference?

A. Yes, that is correct.

Q. Now, will you please refer to your table for Chart No. 26. In that table you show that the earnings requirement to service the outstanding long-term debt was $637,531, isn't that correct? A. Yes, that is correct.

[fol. 7539] Q. Now, in so far as that amount is concerned, there has been no change since you made your study, that is, there will be no change even after the refinancing?

A. Practically none because of the reason given that there has been a very slight change in the meanwhile.

Q. We may therefore conclude, for all practical purposes, that the earnings requirement for the four classes of funded debt to which I have referred and which will remain outstanding after as well as before the refinancing, will be $637,531, may we not?

A. So far as those particular issues are concerned; yes.

Q. All right.

Now, note on the pro forma side of the statement of the S. E. C. on Page 17 of its opinion that there is a new issue of first mortgage, Series C, sinking-fund bonds carrying a 3 percent coupon rate due 1962 in the amount of $10,000,000 which is proposed to be issued. Do you find that?

A. Yes, I do.

Q. Now, I believe Mr. Wheat has stated earlier this afternoon that the bid received in New York this morning on those bonds indicated that the cost or the yield would be 3 percent.

[fol. 7540] A. That is correct.

Q. Now, the capital requirements on that basis for the new $10,000,000 of first mortgage, Series C bonds, is $300,000 per year, is it not? A. That is correct.

Q. Now, that $300,000 added to your $637,531 produces a total earnings requirement for the outstanding funded debt after the refinancing, of $937,531 per annum, isn't that right? A. Yes, that is right.

Q. And thus far, we have taken care of the changed conditions with respect to the capitalization of Panhandle Eastern, have we not? A. That is correct.

Q. That is, so far as bonds are concerned.

A. So far as the bonds are concerned.

Q. Now, the next item on Page 1 of the Securities and Exchange Commission opinion, Exhibit No. 147, is preferred stock.

You will note that the second item, "Class B", in the amount of $1,000,000 remains the same after, as well as before, the refinancing, does it not?

A. It does.

Q. And that Class B Stock, as has been heretofore explained, carries with it a straight 6 percent cumulative [fol. 7541] preferred dividend, does it not?

A. Yes, it does.

Q. And the earnings requirement for that Class B preferred stock is $60,000 per year, is it not?

A. That is correct.

Q. So we have no changed conditions in so far as Class B preferred stocks are concerned, isn't that correct?

A. That is correct.

Q. I note under the heading, "Preferred stock", that the Class A preferred stock, concerning which we have had much comment this morning, in the principal amount of $10,000,000, is to be retired.

Do you see that?

A. That is correct.

Q. So we do have a changed condition with respect to the Class A preferred stock, isn't that right?

A. That is right.

Q. You understand, do you not, that a new series of cumulative preferred stock in the amount of $15,000,000 is to be issued and that out of the proceeds of that sale, the old Class A preferred will be retired. You understand that, do you not?

A. Yes, of course, we are talking about the same stock. The new stock is not only cumulative but it has a sinking fund, and so forth.

[fol. 7542] Q. It has a sinking-fund provision?

A. That is right and there is a new preferred stock to be issued to pay off or to refund the old preferred, and so forth.

Q. But the new preferred stock does not have a participating dividend provision, does it? A. That is correct.

Q. In other words, the holders of the new preferred stock will not have any right to participate in the dividends of the common-stockholders? A. Yes, sir.

Q. And you see that amount of $15,000,000 on the pro forma side of the statement, do you not? A. Yes, I do.

Q. Now, Mr. Wheat has stated that he was advised by telephone that the cost of that money was 5.6 percent. Accepting that figure, will you please compute the earnings-requirement annually to service the new cumulative preferred stock? A. That is $840,000.

Q. Now, so far, we have taken care of the changed conditions with respect to the preferred stock, have we not?

A. And the bonds.

Q. And the bonds. A. Yes.

[fol. 7543] Q. Now, let us go to the common stock and surplus.

Here, we have the same amount of common stock outstanding before, as well as after, the refinancing, namely, 807,367 shares, is that right?

A. That is correct.

Q. And the surplus is the same before and after refinancing, is it not, as shown on the Securities and Exchange Commission's statement? A. That is correct.

Q. Now, if you will refer to your table for Chart No. 26, you will observe that the total common stock and surplus outstanding as of June 30, 1941, there shown was $29,258,295 whereas, on September 30, 1941, the total had become $26,507,216 as shown by the Securities and Exchange Commission's opinion, is that correct? A. That is correct.

Q. So we do have a change in conditions between the date of June 30, 1941, and September 30, 1941, is that right?

A. That is correct, on that particular item, of course.

Q. Yes.

Mr. Coffman, if the common-stock holders of Panhandle Eastern will continue to be satisfied with a $2.50 dividend per share of common stock which, as you have testified, means a 6.8 percent yield to them, what would be the indicated earnings requirement for the common stockholders [fol. 7544] on that basis?

A. Well, in round figures it would be $2,522,897.

Q. May I have that figure again?

A. $2,522,897. That is in round figures.

Q. Will you please state how you obtained that figure?

A. On your statement of the problem, I took the 807,367 shares which were outstanding of common stock and multiplied that figure by $2.50 which is the dividend rate that you stated, which gave me $2,018,317.50 which is the dividend assumed to be paid and on the basis of the rate which you used which is equivalent to 80 percent, I assumed that that figure represented 80 percent of the earnings available

which would be $2,522,897 of the total earnings on your hypothesis.

Q. That would be the total earnings available or, stated in another way, that would be the total earnings-requirement if we were to use the method suggested by you in the David Young, III, suit, wouldn't it?

A. Jiminy Christmas, no, Mr. Littman!

I guess I still haven't got the point across because in the David Young case, I was talking about 80 percent of the earnings available from preferred and common.

I cannot state it any more clearly than that. It was not [fol. 7545] 80 percent of the earnings available to common. That, as I told you, was 74.8 percent so if you will stop confusing the David Young case, I might be able to answer you a little more directly.

Q. Well, at any rate, on the assumption that the stockholders of Panhandle Eastern would continue to be satisfied with the $2.50 per share dividend which was your own assumption in this proceeding and on the assumption that 80 percent of the earnings could be properly used for dividend purposes, you get an earnings-requirement of $2,522,897 under those assumptions?

A. Under those assumptions you get a total earnings available of $2,522,897, that is correct.

Q. Now, for purposes of your Exhibit No. 65, you use a 12 percent earnings requirement for both the common stock and the surplus, do you not? A. That is correct.

Q. And that would be the figure under your assumption to use for our purpose here, would it not?

A. Well, you still, on your basis in this particular case, have not considered the surplus figure at all.

Q. I am stating—

A. (Interposing) Excluding the surplus, your statement is correct but that is not the method that I used in this proceeding because, as you know, I took both common [fol. 7546] stock and surplus on the theory that the surplus available to the common remained invested in the business or otherwise it would not be on the books.

Q. Well, on your assumption, it would be fair, would it not, in your own mind, to use 12 percent as the basis of the determination of the earnings-requirements for the common stock and earned surplus shown in the Securities

and Exchange Commission's statement on Page 17 of its opinion?

A. Accepting the conditions in the investor market as shown in my present Exhibit 65, I would have to use 12 percent. If conditions presently in the market on the common stock of Panhandle Eastern should show a change because investors appraise this new situation which has just now come to light at 12 noon today, then I would have to take into consideration the changed price and see what effect, if any, that made and follow the same procedure in those calculations that I have here but not having those calculations at the moment, I would say that 12 percent still approximated the percent to be used.

Q. The 12-percent rate still represents your best judgment at this time?

A. It still represents my best judgment at this time, that is correct.

Q. That is to say, there have occurred no changes in [fol. 7547] the money market situation of which you presently have knowledge which would cause you to change the 12-percent figure now?

A. Generally, not that I know of, Mr. Littman, because the only way that I could ascertain the figure which would be, in all respects, comparable to the one used in this study would be to bring these calculations down to the present day and see whether or not the percentages are the same or somewhat different.

So far as I know, no major change in the money market has taken place to cause any such change.

Mr. Littman: May I have the last answer read?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. Now, Mr. Coffman, you would not consider it unfair to apply the 12-percent rate to the total of common stock and earned surplus shown in the Securities and Exchange Commission's statement on Page 17 of its opinion in the amount of $26,507,216 for the purpose of determining the earnings requirements for such common stock and earned surplus?

A. No, sir, I would not under the statements that have just been made.

Q. And to state it another way, you would consider it quite fair to do so?

[fol. 7548] A. I would say that it was fair to do so until and when such analysis as I have already made to determine a 12-percent basis should indicate a change in the money markets which would indicate that something other than 12 percent should be used.

Q. And you know of no such change at this time?

A. I know of no such change in the money market that has occurred to date that would cause it, although I have not made the new calculations as of today.

Q. Now, you speak of making new calculations. What do those comprise?

A. Well, as you know in this testimony and in Exhibits 63, 64 and 65, I have attempted to determine the investor's appraisal of the risks of capital by considering earnings on the one hand and prices of the various classes of securities of different companies as of August 31.

That was the date when my study came to a close. Now, were I to make a study today, I would bring those prices and earnings down as close to the date as the most recent figure would be available, go through the same procedure, calculate my ratios and so on and from those additional figures attempt to determine whether or not the judgment figure of 12 percent still seemed the reasonable one.

Q. In other words, you would use the same method that you used in your study contained in Exhibit 65 to arrive [fol. 7549] at the 12 percent shown in Exhibit 65?

A. Well, yes, or to broaden it a bit, in Exhibits 63, 64 and 65.

Q. You considered Exhibits 63 and 64 as well as Exhibit 65?

A. Yes, that is correct. I considered all three of them.

Q. Now, will you please apply the 12-percent rate for the earnings on the common stock and earned surplus to the $26,597,216 shown on the Securities and Exchange Commission's statement on Page 17 of its opinion, which is Exhibit No. 147. A. Yes, and that amount is $3,180,866.

Q. Now, will you kindly add the total earnings requirements which we have calculated and discussed heretofore which give effect to the changed conditions after the re-

financing of the bonds, preferred stock, common stock and surplus of Panhandle Eastern?

A. That total is $5,018,397.

Q. I want to be sure I have that figure. A. $5,018,397.

Q. In your opinion and to the best of your knowledge, would this amount of $5,018,397 represent a fair return to Panhandle Eastern Pipe Line Company on the pro forma amount of $75,771,472 of invested capital shown in the [fol. 7550] Securities and Exchange Commission's consolidated statement on Page 17 of its opinion?

A. Well, if you will pardon me again, I would say that the $5,018,397, without talking about fair return, is the amount the company would have to have to attract investors into this business under the pro forma set-up as shown in Exhibit 147.

Q. And is that amount of $5,018,397 comparable to the amount of $5,064,821 shown in your Chart No. 37 and there labeled "Current capital requirements" and "A fair return to investors"?

A. That is comparable with the figure you mentioned.

Q. Now, will you please state what the earnings requirement of $5,018,397 is when expressed in percent of the total invested capital indicated on the pro forma side of the Security and Exchange Commission's consolidated statement?

A. Well, if the machine is correct—and I have some doubt about it—it is 6.62 percent.

Q. Will you please state what figures you used so that we may check the machine?

A. I used $5,018,397 as the total required for the securities under the pro forma statement contained in Exhibit 147, and divided that by the total capital of $75,771,472.

Q. The 6.62 percent figure gives effect to the change in conditions which we have heretofore discussed in connection with the company's capitalization and refinancing, does it not? A. That is correct.

* * * * * * *

[fol. 7551] Redirect Examination

By Mr. Wheat:

Q. Mr. Coffman, I think, if I recall correctly, that Mr. Littman referred you, in his cross-examination at the outset, to your Chart No. 37 in Exhibit 65. Is that correct?

A. Yes, that is correct.

Q. As a matter of fact, he has referred you to that chart a good many times during the cross-examination, has he not? A. Yes, sir.

Q. I wish you would state briefly just what Chart 37 purports to show.

A. Chart No. 37 in Exhibit 65 purports to show, on the [fol. 7552] basis of the capital structure at the time this analysis was made, what, in my opinion, the company would have to have by way of dollars annually, that is, dollars of gross revenue annually, to enable it to pay for its operations and maintenance, taxes, allow for a return on capital when gas reserves are exhausted, and an amount in addition which would maintain the credit of this company on a basis so that the company could secure new capital when and if needed. It is presented in this fashion because I had in mind that one method of approach to this problem of rate of return was to consider specifically the dollars that a management would need, year in and year out, under whatever conditions were existent, and I took the conditions at the date of this study to use as the basis of my thought that the management would have to have to allow for all the things I have mentioned which, if you convert to different language, would be to enable this company to render its service properly to the public and maintain its credit position.

Q. I notice you state on Chart 37 that what you have had to say there in that chart is based on present capital structure. Do you note those words in that chart?

A. Yes, I do.

Q. I wish you would state why you used that expression, "based on present capital structure".

A. Well, at the time I made the study, the capital [fol. 7553] structure of the company included notes, bonds, preferred stock, and common stock, and although there was a possibility that some change might take place in the capital structure, I did not know at the time of the study what the change might be, specifically, and in order that the Commission could understand my approach and tie it up with figures that were available, I made the calculation on the capital structure then existent.

Q. Now, I believe also you did make an alternative study based on some change in the capital structure. That is correct, isn't it? A. Yes, that is correct.

Q. And does Chart No. 36, Exhibit 65, contain a similar summary of your conclusions based on that particular hypothesis?

A. I have followed the same method in my analysis which is portrayed on Chart 36 of Exhibit 65 as I did and as is shown on Chart No. 37, with the exception that I made the assumption there that the preferred stock which was outstanding at the time I made the study might be refunded on a basis of the preferred stock being paid off by an issue of 50 percent of the amount being in bonds and 50 percent being in common stock.

Q. Now, this has been a rather lengthy cross-examination and I am not sure that you have entirely given your reasons for that particular operation. I wish you would restate for the record what impelled you to make that [fol. 7554] particular study that you have just mentioned.

A. During the course of my examination, I reviewed the capital structure of a number of natural gas pipe line companies, and I found that, excluding the Panhandle Eastern Pipe Line Company, there was only one other pipe line company that had any preferred stock outstanding.

Q. Will you please refer to any part of your Exhibit 65, or your other exhibits where you show the results of that study?

A. I seem to have difficulty finding that one exhibit each time. It is Chart No. 25 in Exhibit 65.

In there, I reviewed the capital structure of the Cities Service Gas Company, El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Mississippi River Fuel Corporation, Northern Natural Gas Company, Southern Natural Gas Company, and Panhandle Eastern Pipe Line Company, and, as shown in Chart No. 25 of Exhibit 65, of all those companies, as of December 31, 1940, only two had preferred stock outstanding. The El Paso Natural Gas Company, of its total capital, had 6.85 percent represented by preferred stock, and the Panhandle Eastern Pipe Line Company, as of the same date, had 18.52 percent represented. All the other companies had no preferred stock outstanding at all, and I concluded from that analysis that these various natural [fol. 7555] gas pipe line companies had, for one reason or another, not found a preferred stock a most suitable vehicle of financing. I might say that in the case of El

Paso Natural Gas Company, that most of the preferred stock that had been outstanding had been recalled, and that portion represented by 6.85 percent, I believe, was merely those shares remaining outstanding which had not, to the date of this analysis, December 31, 1940, yet been turned in; but even that company was trying to eliminate its preferred stock.

Because of those reasons, I felt it a justifiable conclusion that preferred stock did not prove to be, in this industry, the most suitable means of refinancing or financing.

Q. Now, Mr. Coffman, I note in consulting Charts 36 and 37, that the total figure shown in the column at the left-hand side differs, to some extent, to the one on Chart 36, being $15,459,545, and the one on Chart 37 being $15,520,855.

Now, based on your previous answer, is it proper to say that these two figures represent, respectively, the total revenue which, in your opinion, would be required, based on your study; first, if the preferred stock were to be refinanced as you have just mentioned, and, second, if the present capital structure were to remain?

A. Yes, that is correct. Those two figures represent, [fol. 7556] in my opinion, the amount of dollars annually of gross revenue that the company would have to have to make allowance and cover the various expenditures which I have enumerated and maintain the capital requirements of the company, which, in turn, would enable the company to render its services properly to the public.

Q. Now, I think you have outlined it, but I would like to have you again restate your reasoning in reaching that conclusion.

A. Well, on each of the items under the caption of "Operations and Maintenance" on both Charts Nos. 36 and 37, Exhibit 65, I have a supplemental chart which shows how I arrived at those figures. On "Operations and Maintenance," for example, on both Charts 36 and 37, the amount which I have used in my calculations, to cover such items, was $3,516,000, and that figure is explained on Chart No. 29 of Exhibit 65, wherein I indicate that I took the most recent figures that were available to me at the time I made the study, that is, the actual operating results

for the 12 months ended June 30, 1941, which was an amount of $3,196,797, and that figure was made up of two items: operations, $2,902,353; and maintenance, $294,444; and, after an analysis of facts and data which I am following currently in line with my work with Standard and Poor's Corporation, which take into consideration the general trend of various important economic factors that have a bearing upon different operations, I thought it was rea- [fol. 7557] sonable to make an allowance for a 10 percent increase in such figure.

Applying the 10 percent to the over-all figure of $3,196,797 which was—

Q. (Interposing) When you say that you thought it was reasonable, do you also deem it conservative under the conditions which we now face in this country?

A. Yes, I feel it is conservative because, under the national emergency, I believe that until the war ends or the emergency is over this country is going to devote its entire attention to the war, and if that is true, there will be adjustments of all kinds in industrial operations, so that there will be shortages of material in numerous instances for non-defense work, as such.

There will also be demands on the part of labor for additional wages because of the times and the fact that their own living costs are going up, so that I felt that 10 percent was a very conservative figure and was reasonable, and applying that to the actual figure for the 12 months ended June 30, 1941, gave me what I term a projected amount of $3,516,000 for that particular division of the operations of this company.

Q. Did you have in mind an increase of exactly 10 percent in each individual item that goes to make up that total? [fol. 7558] A. No, as I think I have testified already, I did not have before me the breakdown of these various items and, therefore, did not consider each one individually.

What I did, because of knowledge of the general trends in the country and having merely a figure which was presented to me in the interim report of the company covering the actual 12 months period ended June 30, 1941, I applied an over-all percent of 10 percent to the figure.

Now, getting down to individual items, had I had those items before me and considered each one, some might have been higher than 10 percent, some might have been lower than 10 percent, but the over-all average, I think, would be reasonably and conservatively stated at 10 percent.

Q. Now, you have discussed previously this matter of operations and maintenance. That, in general, as you have stated, is what you did in order to get those figures, is it?

A. For that one item, which projected figure I used in both Charts Nos. 36 and 37 in Exhibit 65.

Q. Now, is it necessary for a company of the nature of Panhandle Eastern to earn a sufficient amount through the sales of its product to cover the cost of its operations and maintenance?

A. Yes, it is. Each day that goes by requires some operations in regard to this general classification, so that there are wages and other items of expense in that accounting classification which have to be met, so that you have a [fol. 7559] company which is paying out cash, day by day, as it goes along, and it cannot continue to do that unless it has income sufficient in cash to meet such payments. In other words, that is merely the operation of a going concern where you receive money in and pay money out and, therefore, if it is to be successful and the service is to be satisfactory to the customers, sufficient income will have to be forthcoming to meet the various items of expense.

. . . . . .

Q. All right.

Now, turn to your item of taxes. Quite a little discussion was had with respect to that item on cross-examination. I wish you would, in your own words, outline just what you did with respect to that item so we will have it all in one place.

A. In Charts Nos. 36 and 37 in Exhibit 65, I show an amount for taxes of $4,399,000, and the method whereby I arrived at such figure is shown in Chart No. 30 of Exhibit 65. Generally speaking, I followed the same procedure in regard to this item that followed in regard to the figure for operations and maintenance. In other words, I examined the figures for the 12 months period ended June 30, 1941,

[fol. 7560] which were the most recent and last available, so far as actual operations were concerned, and the total taxes amounted to $3,008,117, which total was comprised of two general classifications: $649,017 for State, local, and miscellaneous Federal taxes; and $2,359,100 for Federal income and excess profits taxes. Here again, having in mind the economic trends that were existing at the time of this study, I allowed for a 10 percent increase as a reasonable expectation for such items.

Q. Were those trends existent only at the time you made those studies or are they still existent?

A. No, they are still existent, and the same thing applies, as I have said before, so long as the war continues and the Government has to devote more and more of the various manufacturing and other equipment we have in this country to war purposes, and also has a larger amount of expenditures for war purposes, such moneys will have to be forthcoming from increased taxes and presumably from further Government financing, so that these conditions will continue in that general trend, I should presume, until the emergency is over, and it may continue, so far as taxes are concerned, after the emergency is over, if we expect sometime in the future to begin to reduce the public debt, which will be the largest we have ever faced in this country's history. It already is, as a matter of fact.

[fol. 7561] Q. Have you, in the course of your studies, discovered any indication that tax rates are going to be lower, at least during the present emergency?

A. No, they cannot possibly be lower. They will have to be considerably higher in order that the Government may have an opportunity to secure as much money as possible from taxes to help pay this defense bill, and that portion that the Government does not get from taxes will have to be forthcoming by increasing the Government debt. It will have to come from borrowings from the public.

Q. Would it be your view that the 10 percent allowance which you have made for any further increase in Federal taxes is too great a figure, based on your present knowledge since you made this study?

A. No, I think that the trend will continue in the general direction on the upward side; and, in support of the analysis that I showed in Chart No. 30 of Exhibit 65, I, at some request that was made, also prepared a supple-

mentary exhibit which is listed or recorded as Exhibit No. 152, to show just what the influence was of the increases that are taking place and, so far as I can see, will very definitely continue.

Q. Now, in that connection, Mr. Coffman, I do not believe that Exhibit No. 152 has been thoroughly explained [fol. 7562] in this record and I should like to have you state what is contained in that exhibit and explain it in some detail.

A. I attempted in this exhibit to supply data which had not been set forth fully in Exhibit 65 in regard to the tax figure, and Exhibit 152 contains four pages, three of which are calculations based upon the figures available and the trend of tax rates, and the last page, which has also been referred to, contains a statement by Mr. Morgenthau in regard to what might happen if this emergency continues and the cost thereof is greater than any of us now forsee.

On page 1 of Exhibit 152, I show under the caption "Estimate of Federal income and excess profits taxes," applying rates levied in the Revenue Act of 1941 to the net income for the year ended June 30, 1941, and the reason I did that is because the full year 1941 had not expired at the time I made the study.

Q. You did not, in other words, at the time you made the study, have available the revenues and expenses and, therefore, the net income for the entire year 1941, did you?

A. No, I did not, and as the annual report of the company shows, the full year 1940 taxes would have been calculated at the rates specified by the Revenue Acts of 1940, and there were two such acts, known as the First Revenue Act and the Second Revenue Act of 1940.

What I attempted to do here was to reconstruct the [fol. 7563] situation, showing what the tax would be if the taxable income were the same figure as shown for the 12 months ended June 30, 1941.

Q. I believe you stated also, did you not, that your made this study largely in response to a suggestion or request of the presiding Examiner? A. Yes, I did.

Q. Now, would you proceed to explain this exhibit? I believe it was also a request by Mr. Littman, was it not?

A. I think it was. I am not sure but I know that it was requested during the course of my cross-examination.

Q. Yes. Now, will you proceed with your discussion of Exhibit No. 152 in some detail, Mr. Coffman?

A. Exhibit No. 152 shows that the Federal income tax at the 1940 rate of 24 percent would have given a taxable income of $6,675,800, and the Federal excess profits tax of $756,900 indicates, at 1940 rates, excess profits of $1,605,800.

Q. When you say "excess profits," you mean that term, do you, as it is defined in the so-called Excess Profits Tax statute?

A. Yes. That, I believe, was called the Second Revenue Act of 1940, which was the Act which was to provide for a tax on excess profits as against our earlier revenue acts, [fol. 7564] Q. Yes. Now, will you proceed?

A. And applying the rates there, there would have been a tax of $204,000 on profits of $500,000, and there would have been a tax of $552,900, which represented a tax of 50 percent, indicating a total excess profit of $1,105,800 which was subject to that particular tax rate.

Q. That is the same figure, ~~is it not,~~ as the $1,605,800 minus the $500,000 item covered by your $204,000 tax?

A. That is correct.

Q. What total tax was shown?

A. The total tax for excess profits was $756,900.

Q. Yes. A. Now, coming down—

Q. (Interposing) Pardon me; what you have been saying is that the figures you have just been quoting are on the 1940 tax rate, is that true? A. That is correct.

Q. All right. Now, come to the year 1941 and state what you did with respect to that?

A. Well, I used the same figures but applied the Revenue Act of 1941 which contained increases in rates. The excess profits indicated by the tax reported for the year ended June 30, 1941, was $1,605,800. I added that to the normal tax which was not deductible under the 1941 Act of [fol. 7565] $1,602,200. The amount subject to the excess profits tax, therefore, was $3,208,000.

Q. Under the Revenue Act of 1941?

A. That is correct. So that taking off the tax first on the non-excess portion of $500,000, and then considering the new excess profits tax bracket in which this company

would now fall under the new Act, which was the 60 percent bracket, there would have been a tax of 60 percent on the differences between $3,208,000 and $500,000, or an amount of $2,708,000. Those were the base figures. So, if I took the amounts then to be taxed to make the overall computation for both the 60 percent and the amount taken out prior to the application of that portion of the Act, the total would have been $1,878,000.

Now, the taxable income indicated by the tax reported for the year ended June 30, 1941, was the figure that I have been using, namely, $6,675,800, and I deducted therefrom the excess profits tax of $1,878,800, leaving an amount subject to the normal and surtax rates of $4,797,000. The normal tax rate at the time was 24 percent, which gave me $1,151,280.

The surtax was 6 percent on the first $25,000, or was $1,500, and the remaining amount that was subject to surtax was $4,772,000, to which a rate of 7 percent was applied, giving a tax thereon of $334,040, so that the total normal and surtax amounted to $335,540.

[fol. 7566] Q. That is the total surtax, is it not?

A. That is the total of the surtax.

Q. Yes, not the normal and surtax?

A. No; the total of the normal and the surtax is $1,486,820.

Q. Yes.

A. So you add that figure to the excess profits tax of $1,878,000 and get a total of $3,363,000.

Q. Now, Mr. Coffman, will you glance at Chart No. 30 of Exhibit 65 and tell us if the item of $3,363,000 noted at the right of the column labeled "Projected" is a figure based upon calculations of some similar character to those shown in Exhibit 152?

A. In Chart No. 30 of Exhibit 65, the $3,363,000 which I have mentioned, which records the effect of the rates contained in the 1941 Act, is shown as a separate item.

Q. In the right-hand bar?

A. In the projected bars and in addition to that, I show $700,000 to cover State, local, and miscellaneous Federal taxes, and also an item of $336,000 which covers the 10 percent increase in Federal taxes, as such.

Q. Which you have mentioned just previously in your testimony?

A. That is correct, and the total of the three items just mentioned gave me the $4,399,000 which I used as the [fol. 7567] projected tax figure.

* * * * * * * *

[fol. 7570] PAUL B. COFFMAN, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

* * * * * * * *

Redirect Examination (Continued).

By Mr. Wheat:

Q. Mr. Coffman, I think at the close of last evening that you had completed your discussion of Page 1 of Exhibit 152 which deals with the matter of Federal income and excess profits taxes. Is that a fact, had you completed your discussion of Page 1 of that exhibit?

A. Yes, sir, I had.

Q. I wish you would turn to Page 2 of that exhibit.

Mr. Wheat: These pages are not numbered, Mr. Examiner, but I am referring to the second page of the exhibit as clipped together.

By Mr. Wheat:

Q. The heading of that page is, "Summary of increases in Federal taxes on incomes for the years 1936 to 1941, both inclusive."

I would like to have you outline what you have included [fol. 7571] under that heading, Mr. Coffman.

A. Well, I have attempted to present additional data in regard to the over-all tax situation which would show why, in my opinion, I thought that the increase in taxes which I had projected for purposes of my analysis as shown in Exhibit 65 over and above the actual taxes reported by the company for the 12 months ended June 30, 1941, was a reasonable increase.

In this Page 2 of Exhibit 152, I make a comparison for the calendar years 1936 to 1940, both inclusive, of the

actual taxes, both normal and excess profits and the total, to see what the general trend was so far as the over-all tax payment was concerned.

In 1936, the company paid $230,000 of normal taxes. There were neither surtax nor excess profits tax at that time.

Q. Well that was before the company obtained the Detroit load, was it not?

A. Yes, that is correct. That change came in 1937.

Q. And simply reflects, does it not, in general, the lower scale of earnings at that time? A. That is correct.

Q. I was going to ask you whether, in general, there has been an increase in each year since then?

A. Yes, there has been an increase in each year. I [fol.7572] do not know as it is necessary for me—

Q. (Interposing) Yes, I think you should explain this in detail, Mr. Coffman.

A. Continuing with the specific figures then, in 1937, the normal tax was $492,000 which was the total tax for that year and figuring the increase of $492,000 over the $230,000 paid in the previous year represented an annual increase of 13.9 percent.

Q. And that also was without any surtax, was it?

A. Yes, that was also without any surtax.

Q. Would you say that that increase reflected increased net earnings on the part of this company?

A. For the most part, it did.

Q. Now, what happened in 1938?

A. In 1938, the normal tax was $513,426 which was the total tax, there being neither surtax nor excess profits and that increase represented 4.4 percent over 1937 taxes.

Q. A much smaller annual increase than the year before?

A. A much [small] increase, that is right.

Q. Then you began to hit real increases, didn't you?

A. In 1939, there begins to be a step-up.

Q. What happened then?

A. The normal tax was $820,286 in 1939. There was no surtax or excess profits tax but that increase represented [fol.7573] 59.8 percent over the 1938 level.

. . . . . .

Well, before I go on, I merely wish to point out that up to 1940, it has been a consideration of normal tax only and there was not any major change in the rates in that period, so that those percent increases, to a large extent, could be attributable to increased earnings which were subject to the tax but, in 1940, when the excess profits tax Act, known as the Second Revenue Act of 1940, was passed, the company has a step-up in normal tax and also an excess profits tax.

The normal tax in 1940 was $1,436,598.

Q. An increase of slightly over $600,000, is that true?

A. That is correct.

Q. In the normal tax? A. In the normal tax.

Q. In addition, did the company then, for the first time, have an excess profits tax?

A. Yes, and there was a change in the normal tax rate so that it wasn't all because of increased earnings but a change in rate and the excess profits tax was a new tax [fol. 7574] which had come through the second revenue act. That amounted to $561,000, making the total tax bill to the company $1,997,598, or the equivalent of the 143.5 percent increase in over all tax load in comparison with the 1939 total tax paid.

Q. As a matter of fact, that was over $1,100,000, was it not, the increase?

A. Yes, that is correct.

Q. Now, that is 1940. What happened with respect to the tax situation after December 30, 1940?

A. The company in its report covering the twelve months ending June 30, 1941 showed normal tax of $1,602,200 and excess profits tax of $756,900, or a total tax of $2,359,100 representing an 18.1 percent increase over the tax shown for the calendar year 1940. However, the company in computing this tax based it entirely upon the rates levied under the Second Revenue Act of 1940 and also made no provision for special non-recurring tax allowances that arose by reason of the refinancing in February, 1941.

Q. In other words, as of the end of the first six months of 1941, you already had 18.1 percent increase in Federal taxes based on the 1940 tax rates? A. That is right.

Q. Now, you also projected these figures for the year 1940-1941, that is, from July 1, 1940, to June 30, 1941, [fol. 7575] inclusive, on the 1941 tax rate, did you not?

A. That is correct.

Q. As you have formerly testified? A. Yes, sir.

Q. And what were the figures that you found when you did that?

A. Well, the normal tax and surtax amounted, on that basis, to $1,485,000 and the excess profits tax at the new rates stipulated in the 1941 Act totaled $1,878,000 or a total of $3,363,000, which is the figure that I have testified to and is included in my study, Exhibit 65.

Q. Now, when you speak of that, you speak of the item of $3,363,000 which appears on Chart No. 30 of Exhibit No. 65 in the right-hand bar, do you not?

A. That is correct.

Q. Now, I think you testified yesterday that that was increased by 10 percent, is that true?

A. That is correct.

Q. And that is the source of the figure of $4,399,000 appearing as the total of the right hand bar in Chart No. 30, Exhibit No. 65, and the same figure appearing in the bar covering taxes on Chart 36 and Chart 37 of that exhibit, is that correct? A. Yes, that is correct.

Q. Now, I note you have two figures for annual in- [fol. 7576] crease on the second page of Exhibit No. 152. I wish you would explain just what those are and how you arrived at them?

A. Those are explained in the footnote shown on that page. The 68.4 is based on an increase over total reported for the calendar year 1940 and the 42.6 percent is the increase over total reported for the year ended June 30, 1941.

In other words, having an interim report as of June as against a full year, I have looked at it both ways.

Q. As a matter of fact, the projected figure of $4,399,000 would represent a very much larger percentage increase, would it not?

A. Well, the only point about the $4,399,000 is that it includes another figure beside income and excess profits tax figures so that you cannot make a direct comparison.

Q. Yes. The figure you refer to is State, local and miscellaneous Federal taxes shown on Chart No. 30 of Exhibit No. 65 at the bottom of the right-hand bar in the amount of $700,000, is that correct?

A. Yes, that is correct and that is not a part of any calculations in this present Exhibit 152. I just want to be sure that is understood.

Q. What I wish to bring out is this, and I will ask [fol. 7577] you this question:

In any of the data contained on Page 2 of Exhibit No. 152, do you reflect the tax increases which may have been suffered by this company in the way of State, local and miscellaneous Federal taxes over and above or separate from the Federal income and excess profits taxes?

A. No, I do not show that on Page 2 of this exhibit.

. . . . . .

[fol. 7585] Q. And is Panhandle Eastern a growing company? A. Yes, very definitely.

Q. You understand, do you not, that it has been testified in this proceeding that it will require additional financing from time to time over the next few years?

A. Yes, I believe that that is true.

Q. Does that fact have any bearing upon the necessity for earning the cost of operation each year in the investor's appraisal of the situation?

A. It very definitely does because in any company [fol. 7586] that is growing and in a growing industry, there is a period usually in the early stages, where they may be a waiting period, so far as investors are concerned, speaking now in terms of an actual return that they get on their investment, in other words, dividends received and that is true in Panhandle Eastern.

There is a chart here in this exhibit which shows what the experience had been or was, at least, during the period 1934 through 1940, both inclusive.

Chart No. 12 in Exhibit 65 shows that, in so far as common stockholders were concerned during this early stage of the company's life, when it was just really beginning to get into large-scale operations, no dividends were paid in 1934, 1935 or 1936.

The dividend paid in 1937 was small—

Q. (Interposing) Well, it was about one-third of one percent, wasn't it?

A. That is correct. Then, in 1938, when the company had consummated its Detroit—

Q. (Interposing) I am sorry, I misled you on that. It was about one-third of a dollar. A. Yes, that is correct.

After it consummated its Detroit arrangement whereby it got into a much larger scale of operations, the dividends were then stepped up, but to me this experience [fol. 7587] represents the usual expectancy in a comparatively new company and a growing industry where the company is growing itself.

Investors, if they think the prospects for the company's success are good, are perfectly willing to invest money in it and wait for a period before they receive dividends so long as the success seems to be in the offing, but whenever the company arrives at a point where it is not necessary to reinvest all their earnings to finance the additional expenditures that are necessary for additional plant and so forth, they naturally expect to come into dividend payments, because that is the only way they can get their money back.

If, in other words, all the earnings, no matter how great, continue to be reinvested in the business and they continue to hold their stock, although the book value continues to go up, the fact is they receive no return of capital or any return thereon.

The only way they can possibly get that is either by a dividend from year to year or at irregular intervals or by a liquidation dividend.

Q. Now, in a growing company, a liquidation dividend would be an anomaly, wouldn't it?

A. In a growing company?

Q. Yes.

A. I do not ever remember having seen one. The only [fol. 7588] current practice in liquidating dividends, aside from an actual liquidating company, would be in cases like

the sulphur companies whereby they pay an annual dividend but break it into parts; one they say is in the nature of a return of capital and the other is in the nature of income, and the reason that that is done is because the sulphur is like the natural-gas business, it is a wasting asset and they have tried, in the sulphur business, to make estimates as to the length of life of a reserve and then they proceed to return the capital each year as they go, breaking it down into the two parts mentioned.

Q. In other words, instead of investing the reserve in additional property, as has been so commonly done in public utilities in this country, there is an actual liquidation on account of the wasting asset?

A. There is an actual payment on account of the wasting asset and then, if they wish to make any new managerial move in regard to new resources, they would set that up as a separate transaction.

In other words, if they can find more mounds of sulphur, they will make a new arrangement.

Q. We will come to that particular problem later, but is it also true that on Chart No. 23 of Exhibit 85, you have disclosed the apparent need of this company for new capital from time to time?

. . . . . .

[fol. 7589] A. (Interposing) I am sorry.

In Chart No. 23, the calculations there very definitely show there will be an annual amount necessary for increases in plant or plant expansions and the annual average over the past 5 years, 1936 through 1940, both inclusive, has been about $4,500,000, so if the company should continue to grow in about the same rate that it did in these years, the presumption is it will need at least that much per annum to continue such operations.

Q. And your studies did not include the amount of capital additions in the year 1941, did they?

A. No, they do not. They were not available.

Q. Now did you take into consideration the amount of capital additions which have been testified in this proceeding as being essential during the next five years?

A. No, sir, I did not have those figures, but coming back to Chart No. 12, if I may, there is one further item

that I would like to comment upon and that is the average figure which I calculated of the percent return to common-stockholders for the period 1934 to 1940, both inclusive.

Because of the period of waiting in the earlier years covered in this chart, the average over the period, even though the amounts have been larger in 1939 and 1940, the [fol. 7590] average only amounted in the entire period to 3.64 percent.

Now, it is my belief that any common-stock investor who has moneys to invest in a company would not wish to invest in a pipe-line or other company with similar risks if he thought that the best he was going to be able to average over the period was 3.64 percent.

In other words, that amount, as I can show from Exhibits 63 and 64, in comparison to investor's risks of capital, is not sufficiently large for the type of risk involved.

Q. Let's turn to Exhibits Nos. 63 and 64 and I wish you would explain what you have in mind.

We will go into some further detail on items which are contained in those exhibits later, Mr. Coffman, but for the moment, explain somewhat at length what you had in mind and what you said and cite the pages of the exhibit.

A. Well, in Exhibit No. 63 on Page 23, which gives a summary figure rather than getting into detail, I show there a 4-year average covering the period 1937 to 1940 for the investor's appraisal of capital risks in various divisions of the utility business and this particular table covers the over-all capital.

In other words, it does not at the moment confine the consideration to common stock alone but on the over-all capital, water companies averaged 5.38 percent.

[fol. 7591] Q. That is a 4-year average?

A. That is for the 4-year average. In other words, what I am trying to show is not a feature peculiar to any one-year because we can see that for a 4-year period which at least can be considered reasonable, the average has been 5.38 percent and the individual yearly figures show no wide variations, so that there is nothing unusual about this period that we are in.

It has been in existence now for at least 4 years.

Electric utility operating companies had 5.47 percent.

Q. (Interposing). These aren't dividends; they are investors' appraisals of capital risks, aren't they?

A. That is correct. These are the earnings-price ratios which are the figures I have been talking about throughout this hearing.

Q. Covering over-all capital?

A. Covering over-all capital, yes, that is correct.

Mr. Littman: Are these figures comparable to the dividend figures of Panhandle Eastern which you just read a few minutes ago?

The Witness: No. I just said these are not. I will come to that later. These particular figures are not.

Manufactured and mixed gas companies, 6.61 percent;

All natural-gas companies, 7.78 percent;

Natural-gas pipe-line companies, 9.38 percent; and

[fol. 7592] Panhandle Eastern Pipe Line Company, for the years in which data on prices were available to make the calculation, which cover 1939 and 1940, 9.15 percent, so that the average of 9.15 percent is a 2-year average, not a 4-year average.

By Mr. Wheat:

Q. Now, the details of the figures making up these averages that you have just read are shown opposite that chart and on Page 23 of Exhibit 63, are they not?

A. The chart opposite Page 23 in Exhibit 63 merely shows graphically what I have read from the statistics. The details actually are supplied in the appendices contained in the end of Exhibit 63. I did not refer to those.

Q. The individual figures from which these averages are calculated are shown on Page 23, are they not?

A. Yes, that is correct.

Q. Now, I know, by looking at that chart, that there seems to be a crescendo or an ascending percentage of investor's appraisal of capital risks. Did you find that to be continued during the year 1941 with respect to natural-gas pipe line companies and Panhandle Eastern over these

other types of public utilities that you have listed on those pages?

A. Well, there were some changes in the interim period January-August, 1941.

[fol. 7593] Q. But the relative relationships remain the same, do they not, and show a crescendo?

A. That is right. The relationships of one classification of company to the other remains about the same but even for the most part where there were changes in the figures for the interim period January-August, 1941, as compared with the four-year average, 1937-1940, both inclusive, the changes were not marked.

In other words, there had been nothing that had happened, so far as I can see, in that period, that interim period, which had changed either relationship from one class to the other or the investor's appraisal of the particular risk classification and, to make my point clear, water companies, for example, had a four-year average of 5.38.

Q. Percent?

A. 5.38 percent; and for the interim period had an average of 5.24 percent. Well, there obviously is some change there but it is still in about the same neighborhood.

The electric utility operating companies showed a four-year average of 5.47 percent and, for the interim period, 5.61 percent. There again, there was some fractional change but, so far as the relationship of investor's appraisal of the risk on electric utility operating companies, to water companies, the same risk seemed to exist as the [fol. 7594] investors appraised these two situations.

Q. You mean the same general appraisal of risk?

A. Yes.

Q. One against the other?

A. Yes, that is correct, but the reference which I made to the fact as stated at Page 23 of Exhibit 63 when I was talking about Chart No. 12 in Exhibit 65, was to indicate that investors do classify risks very definitely, and that natural-gas pipe-line companies have a higher risk factor in the minds of investors than do other branches of the utility industry.

Q. Would it be fair to say that natural gas pipe line companies show a reflection of investor appraisal risks greater than these other types of companies in each year of the four full years' study and also in the interim period January-August, 1941?

A. Yes, it would be and further, by making a direct comparison, so far as the figures show; the investor is saying, for all practical purposes, that the risk is sufficiently greater in a natural-gas pipe-line company over a water company, let us say, that he must have approximately 4 percent additional to compensate for that additional risk or he is not going to invest his money.

Q. That is, over-all?

A. Over-all, but coming from the over-all picture which [fol. 7595] I have discussed to Chart No. 12 where we are talking about the return, the percent return to common-stockholders only, I am just making the point that if the over-all capital appraisal by investors is somewhere in the neighborhood of 9 percent, as shown on Page 23 of Exhibit 63, so far as earnings are concerned, if they require over-all that percent, then when you get down to common stock which is the most risky of any portion of the capital structure, a 3.64 percent return for dividends would seem to be unusually low and I do not believe any investor would be willing, over a period of time, to invest his money in such risks unless he felt that, as the company arrived at an earnings position, a larger dividend would be paid which would give him a better percent return on his equity.

Q. Now, for the moment we got a little off the subject of taxes and before we get entirely off of that, there is one point I would like to clear up.

I think you testified on cross-examination that the current capital requirements based on the financing of preferred stock of Panhandle Eastern Pipe Line Company, which you have shown on Chart 36 of Exhibit 65, was a total of $4,993,511.

A. Yes, sir.

Q. That is based on your hypothetical refinancing of the present preferred stock of 550 percent of its amount [fol. 7596] in bonds and 50 percent in common stock, is it not?

A. Yes, that is correct.

Q. Now, I believe that on cross-examination you testified that that amount of $4,993,511, representing your estimate of current capital requirements under that hypothesis, was some $720,000 lower—the exact figure I have here which I believe is correct is $720,707 lower than the actual net operating income that the company reported for 1940 which, I believe, was $5,714,218. Is that correct?

A. Well, I made that calculation, I think, once for Mr. Littman, and that sounds correct. I do not have it here any more.

Q. I think I have the exact figures. In other words, that item of $4,993,000-odd was some $720,000 lower than net income shown for 1940? A. Yes, that is correct.

Q. Now, at my request, have you made a calculation to show what the net operating income would have been for 1940 had the 1941 Revenue Act been in effect?

A. I have made such calculation and I think that a good portion of the figure was absorbed and I think the actual amount was in the neighborhood of $600,000.

Q. In other words, you assumed that all other factors were unchanged but that the company had been liable for taxes under the Revenue Act of 1941 rather than under [fol. 7557] those established in the Revenue Act of 1940?

A. I believe the figure of increase for taxes would have been $613,358.

Q. And what would have been the net income, operating income after taxes?

A. The net income then would have been $5,100,860.

Q. On the basis of those figures, would it appear to you that if the net operating income for 1940 could, under any approach, be deemed excessive, the Treasury Department of the United States Government has already taken steps to correct any such situation?

A. Well, yes, very definitely. It has to the extent that the increase in taxes has absorbed already most of the $720,707.

Q. And there is no sign of any letting up in these increases in taxes?

A. Certainly not in any near term future.

. . . . . .

By Mr. Wheat:

. . . . . .

Q. Is it your point of view that so long as any moneys, however obtained, are used in the business rather than distributed in dividends or used to pay off debt capital, they remain as invested capital, and the investors expects a return. Would that be a fair statement?

A. Yes, that would be a fair statement, but I might, just to be sure that I am not misunderstood on that fact, add one further fact, that I say that the moneys coming into the business that are retained in the business are considered invested capital from the standpoint of the investors.

Now, so far as moneys not retained in the business are concerned, it must come about, it seems to me, by either a payment of a dividend, a return of capital or pay off capital or, obviously, it can come through suffering a loss. In other words, I merely add the loss factor to be sure I am not misunderstood, because if the company loses money in [fol. 7724] any one year, naturally that loss is carried to surplus and reduces the invested capital by that amount.

Otherwise, I say that all the moneys retained in the business which are remaining there are considered as invested capital from the standpoint of the investor.

* * * * * * * * *

[fol. 7729] Q. Now, turning again for a moment to your Chart No. 37 in Exhibit No. 65, and excluding from consideration in this particular question the item of current capital requirement, which is the righthand bar shown on that chart, do you wish it to be understood to be your testimony that the method which you have adopted of reaching the other item of (1) operations and maintenance, (2) taxes; and (3) return of capital when gas reserves are exhausted, are the only methods which can be used in that connection?

A. Now, I am not saying any such thing at all. What I have tried to say here is that the method that I have used to approach this problem is at least one realistic method and seems to me to be a necessary part of the overall study.

There may be any number of other methods. All I contend is that I think this method very definitely has a place

in such study and further than that is realistic in its approach.

Q. Now, looking at the lefthand bar in Chart No. 37, which is a summation of the four other items and is captioned "Total Dollars Needed," let me ask you whether that total amount that you have there shown allows for or contains any estimate of additional volume of business?

[fol. 7730] A. No, the lefthand bar as shown in Chart No. 37 of Exhibit 65 does not allow for an increase in business. What I attempted to do here was to show that economic conditions were changed to such an extent that if you took those factors into consideration alone, without the variable of an increase in business, it was changing the operating results, or they were changing the operating results of this company materially that allowance would have to be made in any consideration of this kind for those changes.

Now, whether or not the company increases the business, so far as I can see at the present time, these changes, economic changes are going to continue. In other words, I have cited the case that materials and labor and so forth which have been going up, and I think are going to continue to go up some time in the future.

Q. You are speaking of these sharp rises in the cost of doing business that you have mentioned before, is that correct?

A. That is correct, and the same is true of taxes, that the trend is such at the present time that one can anticipate further increases in tax rates and, therefore, further tax payments on the part of all corporations, as well as individuals.

[fol. 7731] Q. Did you relate these various facts to the latest date on which, at the time you made your study, you could find definite and recognized data?

A. Yes, I used the statement which was available of June 30, 1941, which was the most recent statement published by the company at the time I undertook this study.

Q. Now, as far as these items which lie below the item of current capital requirements are concerned, is it true to say that you would admit that if a detailed study of the company's operations disclosed that these facts were incorrect, you would still wait and stand upon them as such?

A. No, I have not made any such contention as that. What I have said was that I think the approach in and of itself has merit. I did not examine the books, as I have already testified, nor did I have any detailed figures flowing from any of the accounts kept in the company's offices.

What I used, because I was taking the investor's point of view, was statements that are available to him and all of my study, so far as the company is concerned, was based upon the figures contained in the interim report which was dated June 30, 1941.

Now, if a study were made which would indicate that any of the items reported therein were not proper [fol. 7732] and a proper figure were determined, I would substitute that in the approach and see what the new result was.

However, so far as the current capital requirements are concerned, that particular figure is based upon an analysis outside the company's figures altogether. As I think I have pretty clearly explained, it is based upon the method whereby I considered all of the quotations on the various securities relating to this or having relation to this particular business to ascertain what the investors were saying at the time I made the study and to what they required by way of an earnings-price ratio to increase capital in that business.

Q. Well, you understood that my question went to the other items?

A. I recall you did say something on that.

Mr. Littman: In order to clarify one point, Mr. Wheat, may I interrupt?

Isn't it correct that you used the actual figures of the company for the bonds and preferred stock, but you used the earnings-price ratios for the common stock? That is what I understood your testimony to be, and I wanted to call that to your attention, because I did not believe your statement was in accord with that.

The Witness: I am talking here about the equity common stock which is included in the over-all figure captioned, [fol. 7733] "Current Capital Requirement."

Mr. Littman: But my understanding is correct, is it not?

The Witness: Yes.

Mr. Littman: You used the actual earnings requirement paid on the bonds and preferred stock?

The Witness: Yes, that is correct.

By Mr. Wheat:

Q. But I understood you also to say that you used the earnings-price ratios on the common stock or equity items, because you felt that that was the only method by which you could get at the capital requirement for those items, is that correct?

A. Yes, and behind the whole study is the material that I analyzed which I have called the "Investor's Appraisal Of The Risk of Capital," which is presented in Exhibits 63 and 64, which is based upon an over-all capital consideration. I mean there the earnings-price ratios which are calculated are based upon bonds, preferred stocks, and common or all these securities of the companies listed where such data was available.

Q. Of course, I take it, Mr. Coffman, that in your statement to the effect that if someone brought in a better figure for these operations, maintenance, taxes or return of capital when gas reserves are exhausted then you may [fol. 7734] have been able to get—provided such thing would happen—I believe you have already stated that these fundamental economic trends of labor, material, and taxes would also have to be given consideration, isn't that true?

A. Yes, that is correct. So far as the economic conditions are concerned, which I have appraised to the best of my ability, and so far as trend is concerned at the date of this study, that would stand. In other words, if I made an over-all allowance of ten per cent for an increase in an item because I thought there was at least that much change due to changing conditions, I would still use that figure, but if the base figure to which it was applied should change, after a thorough study which would indicate that the figure I used and which is in the 1941 statement was wrong, I would be willing to use it, of course.

Q. In other words, I take it you went to the best information you knew how to get from the standpoint of the investors, is that correct?

A. That is correct. I went, as a matter of fact, to the same source that the investor goes to.

Q. And have you any reason to suppose that the amounts that you have included in your study for the item of changing price levels are too high?

A. I have no reason to suppose that. I can cite one [fol. 7735] example in regard to material costs.

As I recall it, the average of wholesale commodity prices, as reported by the United States Bureau of Labor Statistics for about the first eight months of 1941 was around 80 per cent, around 76 per cent, I guess it was, and, at the present time, I think it is around 95 or 96 per cent. As I recall it, it is something like 18 or 19 per cent greater as of this time, so that is just one item where there is definite evidence as to what the changing economic conditions are doing at the present time.

Q. Now, you cite that in connection with your ten per cent allowance. Is that true?

A. Yes, I made a ten per cent allowance over-all, and I have already testified that I did not have individual items, but if I had some might have been more than ten, others less than ten, but it seemed to me that ten per cent was a reasonable estimated figure over-all.

Q. Now, this morning you mentioned this map which is Chart No. 1, in Exhibit No. 65. I wish you would turn to the next six charts which appear as Charts 2 to 7, inclusive, and in the light of what you have been testifying, state what the purpose was of including those particular charts and, to your mind, what they show in this connection.

A. I think I have just said a few minutes ago that [fol. 7736] the natural gas industry and the Panhandle Eastern Pipe Line Company were growing enterprises and I thought that had a pertinent bearing upon such an analysis as this and to familiarize myself with the actual conditions over a period of time, I inserted Chart No. 2 in Exhibit 65, which is captioned, "Growth of Natural Gas Industry in the United States," covering the period of 1906-1940, both inclusive.

There are two sets of data shown graphically, one relating to the natural gas production and the other relating

to the domestic and commercial customers, and those data, shown graphically, indicate that over a period of years the natural gas industry has been showing a very marked growth factor, and the growth factor is particularly marked, beginning around 1932 and 1933, and continuing to date, so far as natural gas production was concerned.

The growth in domestic and commerical customers is also marked, but the line is not as sharp from 1931 to 1939, the last available figure at the time I made this study, as was the case in natural gas production. So I concluded from those data that they showed clearly that this industry was a growing industry. It was not a stable industry, nor was it a decadent industry. It is still in a growing trend.

Q. Well, if this concern you are dealing with were on [fol. 7737] a static basis, would you feel that the factors you have used would have to be reexamined?

A. Yes, very definitely they would have to be reexamined because at least one factor presumably would be somewhat changed, namely, that if there was no longer any growth of the company, I would not feel this need for further reinvestment of capital in this business. I would presume that their plant and equipment, and so on was sufficient to take care of the business under that static condition.

Q. When you said "reinvestment of capital," did you include investment of new capital?

A. Reinvestment of capital and investment of new capital.

Q. Did your study, however, shown in these charts, in Exhibit 65, convince you that new capital would be required?

A. Well, I think I referred this morning to Panhandle Eastern Pipe Line Company, indicating that the recent past history showed an average of about $4,500,000 of additional plant expansion on the average each year, and with the trend what it is in the industry, and the trend what it is at the moment for the company, I should suppose that continued plant expansion might be expected.

[fol. 7744] Q. Mr. Coffman, I would like to have you turn to your Chart No. 11 of Exhibit 65. On the lefthand portion of the chart, I note, and as brought out on cross examination, there is a portion of each column for each year shown as net property after reserves, and then another portion shown as net working capital and intangibles. Has there been any thought on your part in your study of amortizing working capital, as such, in this business?

A. No. That "as such" in your question is not what I was attempting to do. The view that I took on the business was that if, through earnings or otherwise, moneys were received by this company and retained in the business, so long as they were retained in the business they had to be considered as invested capital from the standpoint of the investor.

In a particular calculation which I made from the figures shown in the company's statement as of June 30, [fol. 7745] 1941, there was a figure for working capital including cash, and it was my contention that so long as that money remained in the business, the investor would require a return thereon. If it were not needed in the business, it then could have been used to pay off debt, thereby reducing the invested capital. If that were not done, it was still invested capital, and I believe the investor would require a return on it.

Q. As a matter of fact, it would be reinvested in the business, would it not?

A. So long as they kept it in the business and used the cash or other forms of working capital for other operating purposes, it would very definitely be used in the business.

Q. Now, I notice you have got a heading on the top of the lefthand chart on Chart 11, "Invested Capital," and you have the same heading, "Invested Capital," on the lefthand portion on Chart No. 10. Will you please explain the nature of these two methods of looking at invested capital?

A. I attempted, in chart No. 10 of Exhibit 65, to show invested capital when it is defined as being the net debt, the preferred stock and common stock, and surplus as shown in the balance sheet of the company.

That indicated that the figure for 1940 was $59,400,000 [fol. 7746] in round figures.

In Chart No. 11 I attempted to show the invested capital when such term is defined as net property and net working capital and intangibles, and on that basis, I found that 1940 figure to amount to $59,900,000. In other words, regardless of which definition of invested capital when used, it so happened that the figures for this company were approximately the same.

Q. In other words, you found a close correlation, did you, between the two? A. That is correct.

Q. By the way, on Chart No. 11, the basic portion of each column is net property after the reserves for retirement or depreciation, is it not?

A. Yes, that is correct.

Q. Now, I believe that in connection with the item of working capital on your cross examination you were confronted with a hypothetical balance sheet which showed something like this, I believe:

Property—	$33,000,000.00
Cash and Government bonds	30,000,000.00

Or a total of $63,000,000 of invested capital.

Now, I wish you would state whether it is customary for a corporation to carry on its balance sheet for any length of time cash and Government bonds totalling ap- [fol. 7747] proximately 50 per cent of its invested capital?

A. Well, if you say, "By any length of time, something beyond what would seem to be reasonable," I would say that there was no such practice. You might find at a given time, for example, that a company was accumulating considerable cash because it was about to retire a debt or you might find another situation in which some assets had been converted to cash and a decision had not yet been made as to what disposition of such cash would be or it might be another situation in which the company was contemplating the purchase of a new division of the business in which they had secured the cash to have it ready for the final transaction.

Q. Accumulation of purchase price, in other words?

A. Yes. I think, for example, if on Friday, in relation to this new acquisition that the Panhandle Eastern is contemplating in regard to Michigan Gas Transmission Corporation, they will receive some $25,000,000 from the sale of these securities we have been discussing, and that amount of cash will go into the bank and be there until such time as the checks are drawn to buy the assets that they are contemplating purchasing. Otherwise, I do not conceive of any company carrying such a high proportion in cash or the equivalent of cash in any going firm.

Q. It is possible, I take it from your answer, however, for a corporation to be fully justified at [fol. 7748] times, in having on its books what might, over any great length of time, seem to be excessive working capital?

A. Yes, very definitely.

. . . . . .

[fol. 7750] Q. We were discussing, Mr. Coffman, this hypothetical balance sheet with which you were confronted on cross-examination. Is it a fact that so long as the item of cash is on the books, it is invested capital from the investors' viewpoint?

A. So far as the investor is concerned, so long as the Company keeps his money, he considers it invested capital.

Q. Well, is it possible that that fact has something to do with your answer to Mr. Littman's question in respect to that balance sheet, as to whether you would apply the rate of return method which you have mentioned to the entire $63,000,000?

A. Yes, that is the reason it was, in view of the fact that that is exactly the way I have handled it in this approach which is contained in Exhibit 65. It is my contention that if the Company earns money or secures money by new financing and continues to keep that money, [fol. 7751] for varied purposes, so far as the investor is concerned, he cannot use it for any other purpose and, therefore, he requires a return because if he had kept it and placed it elsewhere, he would have at least have had the possibility of making a return thereon.

Q. That is not a contention. That is a fact?

A. That is a fact, so far as the investor is concerned.

Q. Now, I believe there was some question made of the $4,600,000 which you found on the books as cash at

the time of your investigation as compared with the study made by Mr. Sperry of the Company with respect to working capital for rate base purposes. What have you to say with respect to that matter?

A. It is my contention that so far as the $4,000,000 odd was concerned, which was on the books as of June 30, 1941, as contained in the report by the Company as of that date, that the Company still held the money. I presumed that the reason that the cash for working capital was retained in that amount was because the management believed they needed it in the ordinary course of their business, and so long as they retained it, the investor would feel that his money was invested in this business and therefore he should have a return thereon for the use or such use as the company might make of it.

[fol. 7752] If it should prove to be the case that over a period of time such money was not necessary in the business, then I contend that the investor would insist that such money be used to retire debt and thereby reduce the invested capital by that amount. So far as the figure of $1,500,000 was concerned, which I understand Mr. Sperry had mentioned, I did not know anything about that until informed of it in these hearings, and I do not know the particular purpose that Mr. Sperry had in mind when he talked about it.

I was looking at the thing purely from the investor's point of view and, therefore, concluded, as I have already stated, that so long as the money remained in the business, the investor considered it invested capital.

Q. Well, so long as any investment remains in a business, it is invested capital, is it not?

A. So far as the investor is concerned, I do not think there is any other way it can be considered. If they do not need it, they should use the money to reduce the debt or pay off the securities and thereby in that process reduce the invested capital.

* * * * * * * * *

[fol. 7758] Q. Your studies contained in Exhibits 63 and 64, I believe, were generally based on over-all investor-appraisal, including all forms of securities, were they not?

A. The material presented in Exhibits 63 and 64 cover the investor's appraisal on the risks of capital and therein are considered over-all capital and by that I mean the bonds, the preferred stock and common stock and surplus.

Q. During the interim between your direct examination and re-direct, you prepared Exhibit 151, did you not, which related to the earnings-price ratios of common stocks only, in various divisions of the utility business? [fol. 7759] A. Yes. I prepared that exhibit at the time you have mentioned.

Q. And in that particular exhibit, did you have occasion to determine the investor appraisal of this with respect to common stock as distinguished from the over-all?

A. Yes, that was the purpose of the preparation. During the direct examination, I was asked some question, as I remember it, about the investor's appraisal of common stocks in the various classifications contained in Exhibits 63 and 64, namely, water companies, electric utility operating companies, manufactured and mixed gas companies, all natural gas companies, natural gas pipe line companies and Panhandle Eastern Pipe Line Company, and at the time the question was asked I was unable to give a specific answer as to the earnings-price ratios to common stocks definitely because the material I had in Exhibits 63 and 64 was not broken down in that respect so I prepared Exhibit 151 as a special exhibit to give attention to the common stock phase of capital only.

. . . . . .

[fol. 7760] Q. Now, turning to Exhibit No. 151, in general what was shown by the studies which you undertook at the Examiner's request during that interim which resulted in Exhibit No. 151?

A. In the first place, so that I will be clear on what I did, I covered the same years in this study as were covered in the material shown in Exhibits 63 and 64, namely, the period 1937 to 1940, both inclusive; calculated the 4-year average for that period, and then brought the information down to date for the interim period covering January-August, 1941, on the same topics that I have listed earlier. The exhibit shows that the earnings-price ratios for common stocks, as distinguished from the earnings-price ratios for over-all capital, were higher.

Q. Now, I wish you would turn to your Exhibit 63 and advise us where the figures are obtained which are to be compared.

A. Well, the summary table of Exhibit 63 is shown on page 23, wherein the table there is in exactly the same [fol. 7761] form as the table on Exhibit 151.

* * * * * * * *

Page 1 of Exhibit No. 151. The figures contained on page 23 of Exhibit 63 represent the investor's appraisal of the risks of capital in the various utility businesses, and there, by "capital" I mean over-all capital, the bonds, preferred stocks, common stock, and surplus.

The figures shown in Exhibit No. 151 represent the earnings-price ratios of the common stocks for these same groups, but the common stock only. The comparison of the figures contained in the column captioned, "Four-Year Average, 1937-1940", in Exhibit 151, indicates that the earnings-price ratios of common stocks are higher in every instance than the earnings-price ratios for the same classifications for over-all capital. In other words, the first point that I noted is that the common stockholders ask for a higher earnings-price ratio than do all of the investors in the business, taking in the various classes of securities they might hold.

Q. You mean than do the total group of investors of all types, is that true? A. Yes, that is true.

Q. All right, proceed.

A. The second point to note is that, so far as relationship of risks are concerned, as classified by investors on the basis of an earnings-price ratio, it indicates that they, [fol. 7762] as common stockholders, appraise the risks in the same order as investors of the over-all capital appraise them. In other words, water companies are the lowest, electric utility operating companies are next, manufactured and mixed gas companies third, all natural gas companies fourth, natural gas pipe line companies fifth.

Q. Now, in what you have said there, you are not referring to particular years, are you, but to your average figure?

A. I am referring to the figures shown in the column captioned "Four-Year Average, 1937-1940" in both Exhibit 151 and Exhibit 63, page 23.

Q. And what is the order of the increase of investor appraisal in respect to common stocks and in respect to all types of capital?

A. It is in the order of water companies. That is going from lowest to highest—

Q. (Interposing) You have just stated that. Now, with respect to water companies, I note on page 23 of Exhibit 63 that the four-year average was 5.38 percent.

A. That is correct.

Q. Now, what was it for common stocks of water companies? A. Well, it was 6.50 percent.

Q. And what were the differences in respect to electric utility operating companies?

[fol. 7763] A. In electric utility operating companies, the investor's appraisal of over-all capital risks for the four-year average was 5.47 percent compared with the ratio for common stocks on a four-year average of 7.24 percent.

In the case of manufactured and [mix] gas companies, the over-all capital appraisal for the four-year average was 6.61 percent, and the four-year average earnings price ratio of common stocks was 8.85 percent.

The ratio for all natural gas companies on an over-all capital appraisal on a four-year average was 7.78 percent, and on common stocks on a four-year average was 12.08 percent, and natural gas pipe-line companies, on an over-all appraisal, was 9.3 percent on a four-year average.

Q. Nine point three, what?

A. 9.38 percent on a four-year average, and 13.52 percent for common stocks on a four-year average.

. . . . . .

Mr. Littman: On this new Exhibit No. 151, on the first page, where you show a four-year average for the various companies with respect to their earnings price ratios of common stocks, are those four-year averages straight mathematical averages or are they weighted averages?

The Witness: It is a straight arithmetical average.

Mr. Littman: Now, in your Exhibit 63, in the chart [fol. 7764] shown opposite page 23 to which reference has

just been made by you, showing the four-year average for the various companies, 1937-1940, are those averages straight mathematical averages or are they weighted averages?

The Witness: Those averages, where I have talked about over-all capital, are weighted averages.

Mr. Littman: That is, in Exhibit 63, they are weighted averages?

The Witness: That is correct.

Mr. Littman: And in Exhibit No. 151, they are straight arithmetical?

The Witness: Straight arithmetic, and that is for the reason I think I gave you in our earlier cross-examination where I explained that it was an easier matter to get an over-all capital appraisal on a weighted average basis than I thought it was on a common stock basis where you had variations in capital structure as between the individual companies shown in the individual exhibits and in the different utility classifications.

* * * * * * * *

[fol. 7768] Q. Now, I draw your attention, Mr. Coffman, to Chart No. 22 of Exhibit 65, wherein, on the left-hand bar, you show estimated current cost of financing common stock, a figure of 12.99 percent as the average of pipe line companies. Is that 12.99 percent the same 12.99 percent which is to be found in the last column on page 1 of Exhibit 151 for natural gas pipe line companies during the interim period January-August, 1941?

A. I want to call attention that the 12.99 is the identical figure, but the 12.99, as contained in Chart No. 20—

Q. (Interposing) Chart No. 22.

A. Yes, in Chart No. 22—is based upon the earnings-price ratio as presented in Chart 20 of Exhibit 65, whereas, in the Exhibit No. 151, as shown on page 4-A of Exhibit [fol. 7769] 151, the earnings-price ratios shown thereon for natural gas company common stocks for the interim period January-August, 1941, covered some additional companies that were not included in Chart 20 of Exhibit 65.

* * * * * * * *

[fol. 7772]. Mr. Wheat: Mr. Examiner, I should like to offer for identification and as the next exhibit, a copy of the purchase agreement in connection with the refinancing and purchase of property which has been mentioned on this record. This is a printed document.

Owing to the exigencies of time and getting it here from New York, leaving late last night Mr. Watkins was unable to get up a certification. I now represent it, however, to be a true copy of the purchase agreement dated February 2, 1942, addressed to Glore, Forgan & Co., and Kidder, Peabody & Co., as representatives of the respective purchasers signed by Panhandle Eastern Pipe Line Company by Louis F. Sperry, Treasurer, bearing on its 15th page a statement to the effect that the foregoing purchase agreement is hereby confirmed and accepted as of the date first above written, signed by Glore, Forgan & Co., and Kidder, Peabody & Co., acting on behalf of the several purchasers named in Paragraph 13 of the Agreement and including Glore, Forgan & Co., and Kidder, Peabody & Co., among such purchasers.

We ask that this be received as the next exhibit.

. . . . . .

[fol. 7773] Trial Examiner: The purchase agreement, which has just been identified as Exhibit 160, will be received in evidence without objection.

. . . . . .

Paul B. Coffman, resumed the stand, having been heretofore duly sworn, and testified further as follows:

Redirect Examination (Resumed).

By Mr. Wheat:

Q. Have you, during the overnight recess, been able to obtain data with respect to the price of Panhandle Eastern's stock on the market in New York?

A. Yes, I have the bid prices here from January 28, through February 3.

Q. I wonder if you will read them into the record.

A. Those prices were: January 28, 37⅜;

January 29, 37⅜; January 30, 37; January 31, 36⅞; February 2, 36½; February 3, 36⅜.

Q. That concludes the data that you were able to get as of this morning? A. Yes.

[fol. 7774] Mr. Littman asked that I might try, in addition, to secure the volume, the figures were not available on these days, and these figures that I have here came from the National Quotations Bureau, which sometimes show the volume on over-the-counter transactions, and sometimes do not.

Q. Well, Mr. Coffman, this stock is not listed on the New York Stock Exchange or the Curb Exchange, is it?

A. No, it is not.

Q. And the transactions in this stock are what is known, technically, as "over-the-counter" transactions?

A. That is correct. Sometimes on over-the-counter transactions you can get volume, and sometimes you cannot.

Mr. Littman: Mr. Wheat, may I ask a question of the witness?

Mr. Wheat: Surely.

Mr. Littman: May I ask whether the witness has the asked prices for these dates?

The Witness: The asked prices were—I had most of the prices, I do not know what I did with the sheet, but I can tell you they ran from 38⅞ to 37½.

Mr. Littman: Will you please endeavor to locate the exact ask prices and read them into the record?

Mr. Wheat: We will endeavor to obtain those, Mr. Littman.

[fol. 7775] Mr. Littman: I would like, also, to inquire on this thing subject, Mr. Wheat, whether any transactions were actually consummated on the dates that you mentioned, if you know.

The Witness: I do not know whether I can find that out. I could try, but when an over-the-counter transaction, the only way I could get it would be to canvass the brokers.

Mr. Littman: You do not know now whether any of these represent actual consummated transactions?

The Witness: No. As I say, I do not know of any way I could find this on the over-the-counter transactions unless I canvassed the brokers to get it.

Mr. Littman: I would, also, like to inquire whether you know, Mr. Coffman, whether any of these quotations involve common stock of Panhandle Eastern Pipe Line Company owned by Columbia Oil & Gasoline Corporation, or Missouri-Kansas Pipe Line Company, the two parent companies of Panhandle Eastern.

The Witness: May I have that read?

(Question read.)

Mr. Wheat: I do not know whether you mean just what you said, Mr. Littman. I thought you probably wanted to refer to them as the two major stockholders of Panhandle Eastern, did you not? I do not know that this company [fol. 7776] has been shown anywhere to have two parents.

Mr. Littman: I am referring to the two companies who, combined, own something in excess of 92 per cent of the outstanding common stock of Panhandle Eastern.

Mr. Wheat: Yes, I think that is probably the preferable way to put it.

The Witness: The answer to the question is that I do not know, Mr. Littman.

* * * * * * * *

[fol. 7785] Q. Now, when we concluded the hearing yesterday evening, Mr. Coffman, you were in the midst of a discussion of certain data contained, respectively, in Exhibits Nos. 151, 63 and 64, I believe.

I think there was some ambiguity in respect to a statement made concerning Table 4-A in Exhibit 151. Let me ask you whether you have included on that table certain natural gas companies in addition to those used in your study in Exhibit 65.

A. Yes, the items contained on Table 4-A of Exhibit 151 cover all natural gas companies' common stocks, which is

one classification that I used in Exhibit 63 and 64 and the content of Table 4-A covers the entire natural-gas companies which were included in the study.

Q. You mean covers all, the entire group?

A. It contains all that were included in the study on natural-gas companies.

Q. Thank you.

A. The figure referred to in Exhibit 65, Chart No. 22, first column, as "Average of Pipe-Line Companies, 12.99 [fol. 7786] Percent" is the identical figure with that shown on the first page of Exhibit 151, but the way that such figure would be determined from Page 4-A of Exhibit 151 would be to pick out of the natural-gas companies the five natural-gas pipe-line companies which were the basis of the calculations made for Chart 22, Exhibit 65, and those companies were shown on Chart 20 of Exhibit 65.

Q. Mr. Coffman, as a matter of fact, Table 4-A of Exhibit 151 shows an average of earnings-price ratios for all the natural-gas companies included in that table of 13.97, does it not?

A. No, the figure that I have used excludes the Consolidated Utilities Corporation and that is 13.14 percent which is shown on Page 1.

Q. I was about to come to that. First, will you answer this question: Does the average of all that you have used on that table, first, show 13.97? A. Yes, it does.

Q. And if you exclude the Consolidated Utilities Corporation, for the reasons stated on that page, do you reach the figure 13.14 percent?

A. Yes, and that is the figure shown on Page 1 in the summary of Exhibit 151.

Q. Yes.

Mr. Littman: The figures you just gave relate to common stocks, do they not?

[fol. 7787] The Witness: Yes, they are the earnings-price ratios of common stocks.

By Mr. Wheat:

Q. These are the data which you prepared at the request of the Examiner? A. That is correct.

Q. Well now, these are price ratios for common stocks only, as I understand it, whereas the data contained in

Exhibit 63 and Exhibit 64 include other types of securities, is that correct? A. Yes, that is correct.

Q. And would it be correct to say that Exhibits 63 and 64 show the difference in investors' appraisal of risk between various classes of companies including all of the securities which they have outstanding?

A. Yes, that is correct.

Q. Do those tables in those two exhibits, in your opinion, disclose that investors do carefully appraise the risks in these various types of companies?

A. I believe that the data show that.

Q. Is there anything that you would like to add in connection with that answer with respect to Exhibits 63 and 64 relative to such appraisal of risk by industrials?

A. Well, I do not know that there is, except the one [fol. 7788] observation which I think I have made.

* * * * * * * * *

Q. I will ask you whether in connection with Exhibit 150 this was also prepared pursuant to a suggestion made by the Presiding Examiner? A. Yes, it was.

Q. I do not believe you have yet started in detail what is shown on Exhibit 150. I think you should do that at this time.

A. Well, at the time of the direct testimony I was asked whether I had any information in regard to recent issues that might have been brought out to the public.

I answered that I had not tabulated such data because in my study I was considering stocks that were outstanding and the quotations thereon.

This tabulation on common stock was too—

Q. (Interposing) Exhibit 150?

A. (Continuing) —of Exhibit 150 was to bring out the experience on those new issues of electric and gas utilities which I could find that had come to the public during the years 1935 to 1940, both inclusive.

Trial Examiner: The inquiry about the cost of financing [fol. 7789] through the issue of common stock was, of course, prompted by certain data contained in your Exhibit No. 65 which contemplated the possible refinancing of the Panhandle Eastern Pipe Line Company on the basis of bonds and common stock?

The Witness: Yes. Well, the point was that I could not answer the question because I did not have such material in any of the three exhibits, 63, 64 and 65, so I tabulated this information.

By Mr. Wheat:

Q. On Exhibit 150?

A. On Exhibit 150 and believe that at least so far as our records are concerned that it is an all-inclusive list so far as the new issues of common stocks of Electric and Gas Utilities companies are concerned.

Q. Mr. Coffman, the data contained on Page 1 of Exhibit 150 is derived, is it not, from a publication of the Public Utilities Division of the Securities and Exchange Commission? A. Yes, that is correct.

Q. What about the data shown on Table 3 for the interim period 1941? Is that obtained from the same source or from other records and published data?

A. No, that information contained on Page 3 of Exhibit 150 is taken from the material which was in our files, which [fol. 7790] were prospectuses and our own records on such issues.

Q. Yes.

Now, during your cross-examination you were asked in respect to Chart No. 20 of Exhibit 63 why you included Southern Natural Gas Company and the Interstate Natural Gas Company.

Is it a fact, Mr. Coffman, that you took and included in that study all companies on which information was available by which you could make this study and the calculation?

A. Yes, sir, that is correct.

Q. And in that connection, did you find that information was available with respect to Southern Natural Gas Company? A. Yes, sir, it was.

Q. And with respect to Interstate Natural Gas Company? A. Yes.

Q. As a matter of fact, is the fact that Southern Natural Gas Company has encountered certain difficulties a fact in your estimation which should lead to its exclusion from such a study?

A. I did not think so. What I was attempting to do in this study was to get as broad a picture of the natural-gas pipe-line companies as I could.

Now, the mere fact that Southern has had some financial [fol. 7791] difficulties and some later difficulties, so far as gas reserves are concerned, was just as important to me, so far as viewing the hazards of the industry were concerned as to look at any other company that was having an entirely different and much more favorable experience.

In other words, I wanted to have an entire look.

Q. Well, is it a fact that the Interstate Natural Gas Company has 100 percent common stock?

A. Yes, that is correct. Its capital structure is entirely composed of common stock.

Q. And did you find that its over-all ratio was practically the same as the common stocks of the other companies on the average? A. On the average, yes.

Q. Now, would it be your view that if you were to leave out any of these companies you would distort the picture that you were able to obtain?

A. Well, the only factor that I considered was that the difficulties that have been encountered by Southern Natural, I believe, in large measure account for the fact that investors require a higher earnings-price ratio and yet if the hazards faced by that company are hazards that can be faced by any company in this industry as time goes on, it seems to me to represent a reaction at a given time where such conditions actually exist.

[fol. 7792] On that basis, so far as considering the industry as a whole is concerned, I see no more reason to eliminate Southern Natural from the comparison than I would to eliminate Interstate Natural which happens to be on the low side, because it is ideally situated from a capital structure and from an operating standpoint. They are both important.

Q. As a matter of fact, Mr. Coffman, a rough calculation which I have just made discloses that if you eliminate those two, you have an average of 12.75 as against the average, including them, of 12.99.

I wish you would check me on that and tell me whether that is correct.

A. I do not recall what figure you gave. I have taken here, if I understand your approach correctly, Memphis Natural Gas Company at 15.10, El Paso Natural Gas Company at 11.62 and the Panhandle Eastern figure of 11.53.

I totaled them and took an average.

Q. What did you get?

A. I got 12.78. I do not know whether that is the figure you got.

Q. I may have mistaken that last figure. I had 12.75, but it is close enough. In other words, it was 12.75 or 8 against the 12.99 that you found in using the five companies. Is that correct?

[fol. 7793] A. Yes, that is correct.

Q. Would you consider those two figures reasonably consistent with each other?

A. Yes, I think they are.

Q. All right. Now, there was some other question raised, I believe, with respect to the data contained on Charts Nos. 19 and 20 of Exhibit 65 about the use of simple averages as against weighted averages. Have your anything to say on that subject?

. . . . . .

"Did you use weighted averages?

A. In Exhibit 65 as related to common stocks, I used a straight arithmetic average.

Q. Why?

A. Because where you have different companies that you are considering, such as was the case in the material contained in Exhibit 65, companies of different capital structures, some with bonds and common stock, others with bonds, preferred stocks and common, others with common only, it was my opinion that the only place where [fol. 7794] a weighted average could be used would be where you are talking in terms of over-all capital because there you are considering all earnings available for capital and you are considering all capital.

In the case of common stocks, because of the differences in capital structure, I believe that the only way to get a fair comparison was on the basis of considering one share in each company and making a tabulation on that basis through an arithmetic average.

Q. What do you mean by considering one share in each company?

A. Well, I mean that what I did was to assume that if a company earned $3 a share and the price was a certain amount, I got an earnings-price ratio. I did the same on each of the companies. I totaled up those earnings-price ratios, which is a straight arithmetical average, which is assuming one share of each.

Now, if you wish to make a weighted average under such circumstances, then it seems to me that consideration should also be given weight to the differences in capital structure.

Up to the present time we have never been able to find out a satisfactory method of doing that; so I did not undertake to do it in this study.

Q. Do you feel that an attempt to get a weighted aver-
[fol. 7795] age here would have any particular signifi-
cance?

A. Well, if some suitable method could be worked out I would like to see the results of it wherein it takes into consideration a weight given to the differences in capital structure; so far we have not been able to get a satisfactory method, so the only one that I can use which is fairly satisfactory and simple is the straight arithmetic average and that is what I used in this case.

. . . . . .

[fol. 7797] Q. You were asked some questions about the outstanding common stock of Panhandle Eastern Pipe Line Company and the amount of stock with respect to which prices were obtainable for your figure of investor's appraisal of risk.

Is it your view that the Panhandle Eastern market figures are reasonably used in obtaining the investor's appraisal of risk?

A. Well, it is my contention that so far as the stock outstanding in the hands of the public is concerned, the
[fol. 7798] market quotations on such stock, whether it be 8 percent or a larger percent, are the only figures that are available to register such an indication.

In other words, they are all the quotations that were available through transactions in the market on such stock.

Q. And in your opinion, do they satisfactorily register such situations as you were attempting to determine?

A. For all those transactions they certainly do.

Q. Now, Mr. Coffman, during your cross-examination I believe that you were asked certain questions in which mention was made of a method of rate establishment which I believe was referred to by both Commission counsel and yourself as the "classical method."

Do you recall those references?

A. Yes, I recall them.

Q. As a matter of fact, I believe, you used that term, yourself, from time to time during your cross-examination. Is that correct?

A. I believe I did, yes, sir.

Q. In doing so you were glad to adopt Commission counsel's term?

A. Well, I think we were talking about the same thing.

Q. Well now in order that the record may be entirely clear in respect to what you were referring to, Mr. Coffman, I want to ask you at this time to state your under [fol. 7799] standing of the meaning of this term "classical method of rate making," as you used it in your answers to Commission counsel's inquiries.

A. Well, I understood it to be a method whereby an attempt was made to determine what is commonly called a "rate base" and, in addition, there was an attempt made to determine what was called a "rate of return" which would be a percentage figure and the multiplication of this percentage rate, so determined, against the rate base so determined was to lead to what would be considered a fair return which, presumably, would be sufficient to cover the various operating expenses, taxes, reasonable depreciation, and allow something over which would be equivalent to a return of capital and a fair return thereon and that, also, I believe takes into consideration any interest that may be taken into consideration on funded debt.

Q. In other words, I take it you believe that method includes a determination of the operating expenses, the

taxes, proper depreciation amounts and this item which you designated "fair return", is that so?

A. That is correct.

Q. And the latter item consists of the result of a multiplication of two figures, one of which you have mentioned as "rate base" and the other which you have mentioned as "fair rate of return"?

[fol. 7800] A. That is correct.

Q. Is the latter figure a percentage figure?

A. That is a percentage figure.

Q. Then, this figure of fair return, I believe you just stated that, under the classical method of rate making, that would include sums necessary to pay the fixed charges on net capital?

A. Yes.

Q. In your view would this method of determining a rate base and multiplying it by a percentage rate of return be an essential part of what you term the "classical method"?

A. Yes, it very definitely is.

Q. Now, when you in your answer a few moments ago used the term "rate base", did you mean to imply any special type of rate base or a rate base arrived at by any particular means or method of calculation?

A. No, there have been various approaches from time to time. I have no particular brief for one or the other.

There has been the original cost less depreciation, for example, and the reproduction cost new and prudent investments. There are a number of different approaches that have been made.

So far as I can see, the only point to be sure of is that [fol. 7801] if the base figure that you get actually represents or approximates the capital that was invested in the business, it seems to me any method, if properly used, would give you a satisfactory figure.

Q. When you say "properly used" what do you mean? A. I mean if properly determined.

Q. In other words, I take it you mean by your answer that you do not, in speaking of the classical method, limit your rate-base item to some particular type of rate base?

A. That is correct.

Q. Would that be true whether that rate base were called "fair value" or whether it was arrived at on an investment basis or otherwise?

A. Yes, I say that if the figure that is finally determined is as careful of approximation of the capital that has been invested in the business, that should be a satisfactory basis from which to work.

Q. Well, would you say that the ascertainment of such a rate base is an end in itself in this classical method of rate making, as you have used that term?

A. No, I do not see that it can be an end in itself.

Q. Why not?

A. Well, because, as I have just pointed out, you have to have in addition to that the determination of a return, [fol. 7802] that is, rate of return, which is the percentage figure to which I referred.

The rate base, in and of itself, without this other determination, would not get you any place. There are the two factors.

Q. Well, would the rate base, as such, and standing alone, have any significance at all in your mind?

A. Well, in and of itself I would not say that it did.

Q. Well, do you consider the determination of some rate base an essential in the classical method as you have used that term?

A. Yes, you have to determine a rate base in which to have a figure on which to apply this percentage, which is rate of return.

Q. Well then, I take it you, also, consider this element of percentage, a fair return, as essential in that method?

A. Very definitely as essential.

Q. And would the same statement you made with respect to rate base, standing alone, as being a figure without significance, apply, also, to this fair rate of return element?

A. Well, it seems to me so, because a rate by itself with no base to which to apply it is of no value. The two must be related together if you are to get the result that [fol. 7803] you are seeking.

Q. In developing a fair rate of return, what, in your estimation, would be necessary were you using the classical method of arriving at allowable rates?

A. Well, to determine the final amount of dollars, you have to have first determined the rate base and, secondly, to have determined the rate of return.

It is presumed when one is multiplied by the other that you will receive a dollar figure which should be sufficient to cover all of these items we just mentioned, namely, the operating expenses, the taxes and so forth and allow return of capital.

Q. Well, the return, as such, is the only item in that group that is arrived at by the multiplication of rate base by rate of return? A. Yes, that is correct.

Q. Now, will you proceed to answer my former question as to what would be necessary in your mind under the classical method to arrive at a proper fair rate of return?

A. Well, I do not know whether I just get the whole of your question.

Q. Or would it be necessary, Mr. Coffman, in your opinion, to make the same kind of a study as you have made here in order to arrive at a fair rate of return after you have got a rate base?

[fol. 7804] A. Well, I feel that so far as the objective approach is concerned that this method that I have used takes very definitely, a realistic approach to the problem and is one method of ascertaining the dollars needed to meet the requirements to return to cover all of the expenses and cover the depreciation and allow a return to the stockholders in the invested capital.

Q. Well, this dollars-needed figure is the result that you are after?

A. That is true, in either case. In the multiplication of the rate base against the rate you are attempting, by one method, to do that and the method I have used is just another approach.

Q. Well, do you know of any other objective method of obtaining a proper fair-rate-of-return figure than to multiply against the rate base in order to get this dollar-figure return, which would not be apt to take into con-

sideration the same type of things that you have taken into consideration in your direct approach to that return figure?

A. Well, it seems to me that it will be necessary in any event to ascertain what the investors say in regard to the securities in the particular branch of the business.

The purpose of my undertaking this study, giving attention to the investor's appraisal of risk was to ascertain to the best of my ability what the investor actually says [fol. 7805] he requires so far as his capital in this particular kind of risk is concerned.

It seems to me that in any approach, consideration would have to be given to those kind of data.

Q. Is there any other way that your know of, Mr. Coffman, under our present economy, to obtain financing for such a corporation as Panhandle Eastern Pipe Line Company, except going into the market and obtaining the funds necessary from the money markets?

A. Well, so long as various industrial and public-utility corporations are relying for their additional financial requirements on the [variour] private investors, then their appraisal of the risks must be taken into consideration.

In other words, if they are going to be the source of capital, then one must try to ascertain what they require by way of an earnings price ratio to see whether or not they would be willing to put in additional capital and at what ratio.

Q. Well, is there any other source of such capital except such private investors under our present economy?

A. There are not any other sources at the moment. There are some institutions buying securities, of course.

Q. Are they not private investors?

A. Well, they are private investors, but I merely want [fol. 7806] to draw the distinction between an individual that might buy 10 shares of something let us say, and an institution which would have far larger sums and could invest larger sums.

Q. Well, purchases made by these larger-sum investors go into the data which you use in such an earnings-price ratio study, do they not?

A. That is right. I think the same facts hold true and they are reviewing exactly the same data as the other investors.

Q. In order to obtain a fair rate of return to apply to any given rate base, whether it be low or high, do you know of any other method of obtaining the percentage except to look at what private investors will demand in the market?

A. No, I do not. I do not know any exception.

Q. Well, is it a fact, then, that regardless of whether you use a direct approach at the dollar figure of return or whether you use this classical method, as it has been termed here, of rate base times fair rate of return, you must ascertain these same facts?

A. It seems to me that you must.

Q. Do you believe that that is a necessary condition precedent to the obtaining of a proper fair-rate-of-return figure?

[fol. 7807] A. Yes, I do.

Q. Now, when you talked about fair rate of return, did you refer to any particular percentage rate of return which may have been used in any particular case, for instance?

A. No, I did not have that in mind. I have placed in this Exhibit No. 65 a short quotation from the Bluefield Case.

The reason that I made the reference to it was to see whether or not any factors had been listed as to the proper ones to be considered in a consideration of a rate-of-return case.

I was not interested in whether the rate was determined at one figure or another. I was trying to find a guide. It seemed to me that there were a number of items which were very specifically listed which were reasonable guides to this over-all problem. That was the purpose of the reference.

Q. Under your approach, could any specific percentage be made applicable to all cases?

A. I do not think it could. I think that it is determined by the facts in each situation as, I think, has been indicated in the cases.

Conditions may vary from one part of the country to another as between one company and another and those

[fol. 7808] various factors would have to be taken into consideration to arrive at what would seem to be a fair conclusion?

Q. Well, if a study of this objective data is made in order to arrive at a fair rate of return, are we to understand from your previous answers that you would, in your own mind, reject this so-called classical method?

A. Well, I do not think I have said that anyplace. I have merely made the contention that in this over-all approach it seemed to me that there was room for an additional approach of the problem and in the work that I have been doing on the subject it looked to me as if the approach I had used in Exhibit 65 was a helpful contribution to the general subject and, therefore, I made the study on that basis.

Q. Do you know of any other method, general method of obtaining the objective data which you believe to be necessary?

A. At the moment, I do not know of any. What I have attempted here was to approach the problem on the method described and make it as concrete as I could through the statistics and graphs which show exactly what I have in mind to get at an objective approach with a realistic result.

Q. Do you believe that an objective approach is necessary whether you use this direct approach method or [fol. 7809] the classical method?

A. I think it is, yes.

Q. Under your views of this matter, would it make any difference what particular type of rate base were adopted by a regulatory body provided the rate of return were developed on a basis of reasonable objective data?

A. Well, in my particular analysis I have not determined a rate base but if the figure that I have determined as the amount needed were correct; then, if someone would give me the figure for a proper determination of a rate base, it would be a simple matter to determine what the rate of return should be.

In other words, the rate base under my method could be one figure or another, but if the dollar amount that has been determined would prove to be accurate, then the

rate would be determined depending on which figure or which size of figure you had for the rate base.

Q. I believe you said a few moments ago that you did not cite this Bluefield Case because of any particular rate of return used there. What did you mean by that?

A. Well, the only thing that I wanted to get from any references was such indication as to the items that were believed to be necessary in consideration to treat this problem and the one reference that I made on Page 3 in [fol. 7810] Exhibit 65 I thought pretty clearly specified those various items that one had to take into consideration if they were going to deal with the problem of rate of return.

Q. Well, what were those items that you had in mind?

A. Well, for example, quoting from this quotation:

"A public utility is entitled to such rates as will permit it to earn a return on the value of its property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties."

Now, so far as that item is concerned, when I was looking at the investor's appraisal of the risks of capital, considering various classifications of the public-utility industry such as water companies, electric companies, manufactured-gas companies, natural-gas companies and natural-gas pipe-line companies, I thought in concrete form I was following exactly what that statement meant.

Q. Well, were you there searching for some source of data on what are the considerations in the market of corresponding risks?

A. Yes, I was trying to get at that very point on a statistical basis.

Continuing further, "but it has no constitutional right [fol. 7811] to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures."

Well, in my study, no such ventures were listed because I combined the analysis of investor's appraisal of risks altogether to the public-utility industry in its various classifications which I have already mentioned.

Continuing further: "The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate under efficient and economical management to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties."

Well, there again, speaking of efficiency of management, the purpose of Chart No. 8 in Exhibit 65 in which I made an analysis of the operating ratio and compared that with a similar figure for the industry was to get some idea of whether or not this company could be said to be an efficiently-managed company.

I thought in view of the comparison of ratio that there was some indication of that fact. So far as the financial soundness is concerned, I was attempting to get at that through the analysis of these figures in the June 30, 1941, statement and through an analysis of the operating figures as shown of the same date.

In other words, my whole approach as I have described, [fol. 7812] was based on those figures.

Q. And your approach was wholly an objective approach, was it not?

A. Yes, so what I did was to find in this Bluefield statement a number of items which had been found by experience, apparently, that should be taken into consideration to arrive at a sound conclusion.

Q. And you believe that they were taken into consideration through your study?

A. To the best of my ability I attempted to do exactly that, sir.

Q. Mr. Coffman, is there any way that you know to force investors to purchase the securities in such an enterprise as this and thus finance its operations?

A. No, I do not see that there is any way that you can force a person to invest money in anything. In other words, when you sell a share of stock or a bond you have a commodity which, for all purposes, is like any other. If it is priced right in view of the value you think you are getting, you are perfectly willing to make a purchase.

If you think it is overpriced, you will draw away from it and if it is underpriced you rush to get it if you have

funds for investment, but I do not know how you can force anybody to invest money in anything.

Q. Can you ascertain the behavior of investors by [fol. 7813] a study of the money markets?

A. Yes, I think you very definitely can.

Q. And is that what you have done?

A. That is what I have done in these three exhibits.

Q. Do you know of any other method which offers a similar opportunity to derive the earnings figure consistent with the statements mentioned and quoted by you from the Bluefield Water Works and Improvement Company Case?

A. I do not believe I do.

Q. You recognize, of course, don't you, that there may always be differences of opinion by honest men in respect to the use of any particular factor or elements in such a study?

A. Yes, I think I have indicated that in answers that I have given.

Q. And you recognize, also, that different investigators may give different weight to different elements?

A. Yes, that is correct.

Q. In the absence of obtaining objective data in at least some degree approximating what you have tried to obtain, do you believe that there is any basis for use of judgment in arriving at the rate-of-return figure?

A. Well, I do not know exactly what you have in mind there, but I think it is commonly believed, today, that there has been a substatntial decline in interest rates and [fol. 7814] if one studies indexes, particularly in regard to absolute money rates,—I mean by that something in the way of a call loan or a short-term commercial paper, or even the rate on Government bonds,—they will find that over a period of years there has been a substantial decline in interest rates.

From that knowledge, if they did not go on and make the checks that I have tried to make, you might well conclude that that was true, right across the board, of all investments.

What I tried to do in Exhibit 63 and the supporting material in Exhibit 64, was to ascertain whether, in view of

this decline, investors, when it came to corporate funds, were still analyzing these various securities on the basis of the risk-factor.

It seemed to me that coming right down as close as I have, that is, August, 1941, in spite of a down trend on all of these items, there is still an investor's appraisal of the risks of capital as demonstrated by the capital that I referred to yesterday on Page 23 of Exhibit 63, wherein, for the four-year period that I have there, although each of the items over a period of years might have gone down as between water companies, electric-utility companies, and so forth, nevertheless, as of today investors are still contending and requiring that the natural-gas pipe-line [fol. 7815] companies on the average have about 4 percent more risk than water companies.

The reason, presumably, for that is that investors feel that there is a greater hazard to an investment in the natural-gas business than there is in the water companies, so that unless a person reviewed that they might conclude that this decline in interest rates, just as I say, applied generally right across all securities.

I wanted to ascertain as a matter of fact whether that is true or whether investors right today are saying that if you want their money on corporate securities they require more on one kind of risk than they do on the other and, therefore, it seemed to me that an objective study was the only way to ascertain whether that was true or not.

Q. Well, would you say that your study is based primarily on an objective investigation of what such a company needs to earn and must earn as contrasted with an examination of what it might be merely entitled to earn?

A. Yes, that is correct.

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[fol. 7816] Q. Mr. Coffman, I think from your statements this morning that investor's appraisal of business varies, not only between classes of companies, but between companies of the same classes.

* * * * * * * * *

The Witness: Yes, I think that is right.

Q. And varies also with time?

A. That is correct.

Q. Why does that investor's appraisal vary?

A. For one reason it varies because of changes in economic conditions as between one time period and between another time period. I have tried to make it clear that, so far as my own opinion is concerned that in one particular period, if economic conditions are on such a level that investors appraise the risk at a certain rate, that rate will hold good so long as there is no major change in any fundamental economic condition.

Now, if you come into a new period where there has been a change of a fundamental economic condition, such as [fol. 7817] in the present situation where we have, among other things, this emergency condition, a major change is taking place and investors, therefore, are going to appraise that change in economic conditions to the best of their ability because they believe thereby that the risks of their capital have changed to whatever extent they may appraise the hazard connected with this particular change in economic conditions.

Q. Do you believe that the method which you have adopted is a reasonable method of evaluating these changes in investor appraisal because of economic conditions?

A. Well, I think I make the statement a little stronger than that. What I say is that, so far as the investors are concerned, you have to study some particular phases wherein you can get an appraisal that they are making of the conditions at the time and in the investor's appraisal of the risks of capital, the only way I know that can be done is to see what actually is happening to the securities in the market by way of price changes.

That registers, on one basis I have used, namely, the earnings-price ratio, what the investor says is happening so far as the risk to his capital is concerned and that is appraised in these various earnings-price ratios that I have given in Exhibit 63 and have used in Exhibit 65.

Q. Without some such objective study as that, either on this method that you have used or on what you have called

[fol. 7818] the classical method, if you do not have some such study as that, do you believe you could reach the proper reflection of the economic situation except by pure accident?

A. No, I do not think you can. I say that regardless of which method is being used, if the particular analyst, to the best of his ability, will try to ascertain what the condition is as the investor is appraising it, they can take care of it perfectly all right.

I have got this statement here which I have written out which summarizes the thing about as good as I can state it and that is when the classical method is used, the same kind of an examination of surrounding facts is made as I have tried to make in this particular case—

Q. (Interposing) You mean "if that", "unless that is made"?

A. (Continuing) Unless this is made. I do not care whether it is my method or the classical method or what method is used. It makes no difference but I say it has to be done.

The mere multiplying of any given rate base by any given rate of return will produce a money figure equal to the economic necessities of the enterprise in question only by accident.

In other words, if you go on and arrive at the figure for your percent which does not take into consideration the [fol. 7819] investors' appraisal as they see it, then I do not see how you can arrive at a figure that is accurately appraising these changes in economic conditions, unless it should be accidental that the figure will come out on the same plane.

Q. Why do you say that?

A. I say this because it is not possible to know what the economic need is except as the result of some such study as I have made in this case, as represented by my three exhibits, Nos. 63, 64 and 65.

What I have tried to do is to attempt to develop adequate statistical measures of the factors influencing needed return. Now, if that is also done under the classical method, the result would be the same but, if it is not done,

then I say if the figure comes out to the same level, it is a matter of accident rather than a matter of examination.

. . . . . .

[fol. 7820] Recross-Examination

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[fol. 7850] Recross-Examination (Farther)

By Mr. Littman:

Q. Will you please turn to Your Chart No. 8 of Exhibit No. 65?

Now, during the course of your somewhat lengthy redirect examination I believe you stated that this chart [fol. 7851] indicated to you that Panhandle Eastern Pipe Line Company had a more favorable operating ratio than other natural-gas pipe-line companies. Is that correct?

A. Yes, I believe I said that.

Q. And I believe somewhere in your testimony you stated that that indicated to you that Panhandle Eastern Pipe Line Company was efficiently managed. Is that correct?

A. Well, I do not recall as I said it that way. What I remember saying is that in comparison with the other pipe-line companies I thought there was an indication here that the operating ratio showed that the management of the Panhandle Eastern Pipe Line Company was more efficient than the average [eas] compared with this other index.

Q. In other words, in your opinion, the better the operating ratio of a company, the better its management?

A. Not altogether, because there are various ways of determining the efficiency of management, but from a statistician's point of view the operating ratio is one convenient method where you have only figures to go on as in contrast with making the examination of a plant and seeing just how it is run from, let us say, an engineer's point of view.

I will say that it is one guide, it is not the sole guide, but it is one indicator that can be used.

Q. So that this chart called "Chart No. 8" of Exhibit [fol. 7852] 65 indicates to you that Panhandle Eastern Pipe Line Company is efficiently operated as compared with other natural-gas pipe-line companies?

A. That is one indication and I say that not altogether because of the comparison but more because of the trends shown in the period of years covered, 1935 through 1940.

In other words, the decline in ratio of 58.2, let us say, to 38.5 would indicate to me that the management had been able to accomplish certain things by way of efficiency.

Q. Have you made any other investigation into the efficiency of the management of Panhandle Eastern Pipe Line Company?

A. Well, Mr. Littman, I, also, would include the facts shown in Exhibit Chart No. 16, for example, as, also, an indication that the management have been alert.

In Chart No. 16, Exhibit 65, showing historical cost of debt capital of the Panhandle Eastern Pipe Line Company from 1930 through 1941, there has been a decline in historical cost of debt and in 1941 that cost has been reduced to 2.74%.

I think that indicates the alertness of management in adjusting itself to changed financial conditions and I think that is a part of efficiency.

Q. And I presume, likewise, you would refer to the [fol. 7853] recent refinancing program put through by Panhandle Eastern Pipe Line Company in which it has reduced its over-all cost of money as is shown in the Securities and Exchange Commission's opinion which is Exhibit 147 in this proceeding, as a further indication of the efficiency of the management of the company?

A. I would say that that is a further indication of the alertness of the management, yes.

Q. And, as you testified the other day, the over-all cost of servicing all of the outstanding debt and securities under the pro forma statement, after the refinancing, related to the total capitalization is 6.6 percent.

Wasn't that the figure you used?

A. That was the figure I calculated for you, I believe.

Q. Yes.

A. Yes, I remember the figure.

Q. Now, adhering for the moment, however, to Chart No. 8 of Exhibit 65, in your judgment one company that has a better operating ratio than another company would, in your opinion, have better efficiency of management than the one with the higher operating ratio?

A. I would not restrict my answer quite that way. What I have in mind here is the trend, as much as anything.

In other words, it is not altogether a relation of 38.5 in [fol. 7854] 1940 for Panhandle Eastern Pipe Line against 51.3 that has significance, altogether; it is also the trend that you find from 58.2 in 1934 to 38.5 in 1940.

Q. Well, you state in the text according to Chart No. 8, after making reference to the rising taxes, that "it is obvious that the rising tax burden is tending to offset benefits of efficient operation", do you not?

A. Yes, that statement is there.

Q. So that from that statement would it be proper to conclude that you consider the favorable-appearing operating ratio of Panhandle Eastern over that shown by other pipe-line companies to be an indication of efficient management?

A. Well no, I do not quite see that line of reasoning from that statement. What I am attempting to point out in Chart No. 8, Exhibit 65, in the box containing "After Taxes", that beginning in the year 1937 that exhibit indicates to me that the increases in gross operating revenue were not entirely sufficient to take up increases in taxes.

Had it have been, the Panhandle Eastern Pipe Line Company would not have shown a change in direction and that is the only point I really had in mind on that exhibit so far as reference to taxes is concerned.

Q. Well, aside from the reference to the taxes, did you or did you not state in your redirect examination that the [fol. 7855] favorable operating ratio of Panhandle Eastern Pipe Line Company, as compared with other pipe-line companies, was an indication to you of the efficiency of the operation of Panhandle Eastern Pipe Line Company?

A. Well, as I say, I do not recall, but I say that plus the trend of the operating ratio for Panhandle Eastern, itself, indicates the fact.

Q. That is, they both indicate it?

A. They are a statistical method, but not the sole one, as I have said. There are many other ways of checking efficiency of management.

Q. But it is one of them?

A. From the statistical standpoint it is used by every investment analytical service.

Q. I hand you a written illustration for the purpose of enabling all present to follow the next few questions.

Now, Mr. Coffman, I want you to assume that we have two natural-gas pipe-line companies, "A" and "B", respectively. Company "A" has a total gross revenue for a given year of $1,000,000 and Company "B" has a total gross revenue in the same year of $1,500,000.

Notwithstanding the fact that both of these companies sell the same volume of gas, I want you to assume that Company "B" earns $500,000 more revenue than Com- [fol. 7856] pany "A", simply because its rates are exorbitant.

Now, I want you further to assume, as shown on the sheet which I just handed you, that the operating revenue deductions before taxes for each of these companies is $500,000, leaving net revenue before taxes of $500,000 for Company "A" and $1,000,000 for Company "B".

Now, what is the operating ratio before taxes of Company "A", the one that has the reasonable rates?

A. Well, on this sheet, which is shown here, the Company "A" operating ratio before taxes is 50 percent.

Q. And what is the operating ratio before taxes for the company that has the exorbitant rates, namely, Company "B"?

A. Well, that is 33⅓ percent.

Q. In other words, Company "B" has a much more favorable ratio than Company "A", does it not? Is that right?

A. That is correct.

Q. Now, right there, a company that has exorbitant rates would have a tendency to show a more favorable operating ratio than a company that does not have such exorbitant rates? Is that correct?

A. Oh, in any of these comparisons where you are using a gross-revenue figure, if you change the two figures, you will get that difference in percent, surely.

[fol. 7857] Q. Well, it is a mathematical fact, isn't it, that the higher your revenue occasioned by high rates, why, the better-looking operating ratio you are going to have. Isn't that right?

A. Sure, occasioned by anything. You do not have to mention rates, occasioned by another fortunate circumstance, certainly.

Q. Now, after taxes we have, as shown in this illustration, for Company "A", the company with reasonable rates, a net operating income after taxes of $400,000, whereas Company "B" after taxes of $300,000 has a net operating income of $700,000. I want you to assume those facts as shown in this illustration.

Now, is it correct that under those assumptions that Company "A" has a 60-percent operating ratio after-taxes?

A. Yes, it is.

Q. And that Company "B" has a 53⅓ percent operating ratio after taxes?

A. That is correct.

Q. Now, of course, the company that has exorbitant rates has to pay higher taxes, Federal income and Federal excess profits taxes than does Company "A", which has the lower rates. Isn't that correct?

A. Well, that is correct only under your assumption.

Q. You mean to say that a company earning exorbitant [fol. 7858] rates and exorbitant profits flowing therefrom will not have to pay more taxes, all other things being equal, than a company that does not have such a favorable situation?

A. No, you have corrected your first statement by saying "all other things being equal". The point I wanted to bring out was that the company could have higher rates and if the costs were higher it would have no higher tax because net income was high, because the costs offset the higher-income revenue rate.

Q. Well, of course, we are showing here what is shown for Company "B", namely, that the rates are, in truth and fact, exorbitant.

A. I do not mean to fuss, except that I thought that what you asked in your question was not confined to this example and I wanted to qualify my answer.

Q. I see. Well, we are still talking about the illustration. A. All right.

Q. Now, you notice the trend that results after the payment of these taxes, do you not, Mr. Coffman? You see, do you not, that the operating ratio of Company "B" has now gone up to 53½ percent and very closely approximates and comes much closer to the operating ratio, after taxes, of Company "A"? Do you see that?

A. Well, for this given example that is correct, but [fol. 7859] that is not in line with what I am talking about in Chart No. 8.

Q. Well, let us confine ourselves, for the moment, to the illustration. It is a mathematical fact, is it not?

A. Absolutely.

Q. That a company that is earning exorbitant rates will, because of that fact, pay more Federal excess-profits and Federal income tax than a company that, all things being equal, does not have exorbitant rates. Is that correct?

A. Yes, that is right.

Q. And, consequently, there comes a point after taxes where the two operating ratios will come pretty close together, notwithstanding the fact that one company has the exorbitant rates and the other company has not. Isn't that generally true?

A. Sure, that, mathematically, could be true.

Q. Yes. And what we have said, for purposes of this illustration, would be true even though both companies had exactly the same management? Isn't that true?

A. Both companies had exactly the same management?

Q. Yes.

A. Yes, that would be true. That is still talking under your hypothesis, of course.

Q. Now, I believe you made the statement this morning or possibly yesterday that Panhandle Eastern's common- [fol. 7860] stockholders are not so well situated after the

recent refinancing than they were before. Is that or is that not a correct interpretation of your remarks on that subject yesterday?

A. Well, not quite. I think I know the matter you are referring to. In discussing the percentages which were shown in the Securities and Exchange Commission's release containing actual consolidated capital figures in the pro forma, it was pointed out that on the pro forma—I do not recall the exact percentages at the moment—but the pro forma was 34 percent as against 43 percent.

It showed common stock and surplus to be 34.99 as against the actual of 43.62.

Mr. Wheat: Mr. Littman, I did not recall the witness said anything about favorable or unfavorable. Was that your question, more favorable or less favorable?

Mr. Littman: Yes.

Now, I gave the witness the opportunity and I want him to state whether or not that is a correct interpretation.

Mr. Wheat: I did not recall that and I wonder—

Mr. Culton: (Interposing) My recollection is that he said "further removed."

The Witness: Further removed is what I said, if you will look at the record, I think. I will be glad to discuss it with you again if you wish to have me do so.

[fol. 7861] By Mr. Littman:

Q. Right there, I think maybe you have cleared me up. You did say yesterday that after the refinancing, as shown in Exhibit 147 on Page 17, by the pro forma statement the common stockholders' equity represented 34.99 percent of the total capitalization, whereas before their equity represented 43.62 percent.

Now, you stated that, didn't you?

A. Yes, I did.

Q. Now then, you made some remark with respect to the fact that the common stockholders were further removed from the—well, suppose you tell us what you did say on that.

A. What I said was that with this shift in the common stockholders' position under the pro forma as against the

actual, there were now more senior securities ahead of their equity, therefore, they were further removed.

What I meant was that increasing the senior capital first by way of debt to 43.90 percent as against the present of 32.28 percent and in the preferred stock, which now carries a sinking fund, so I put it over in senior capital classification, to 21.12 percent against 18.10.

It seemed to me that the investor looking at these additional senior securities going out, all, now, providing for sinking funds, would feel he was further removed than heretofore, so far as his position was concerned. In other [fol. 7862] words, more preferences are now outstanding against him, either in case of liquidation or otherwise than were before in the case of these percents.

Q. Now comes my question: Do you mean by that to infer that the common-stockholder is not so well situated after the refinancing as he was before?

A. Not necessarily. I would say that that will be a matter of appraisal on the part of the common-stockholder for this reason, it may be that advantages will flow from the new financing from an earnings standpoint.

Q. Well, you know that will be a fact, don't you?

A. Well, just a moment. I do not know anything until it happens, really, but to continue in answer to your question, the common-stockholder will try to ascertain whether or not, because of earnings coverage, he will still have sufficient advantage so that even though risk and liquidation are now larger and senior capital is larger than before, he will not, over the period, be seriously handicapped.

That will be a matter for him to appraise.

Q. Well now, Mr. Coffman, I take it from the answer which you just made that you are not prepared to state at this time whether the common-stockholders of Panhandle Eastern Pipe Line Company were better situated before than after the refinancing.

[fol. 7863] In other words, you are unable to state whether there has been any change in the situation.

A. Well, to take all factors into consideration, I would not want to say at the moment, but if you will specialize on a few factors, you now have more bonds outstanding

carrying a sinking fund and you, also, have a preferred stock out now for the first time that carries a sinking fund.

Now, so far as the common stockholder is concerned, he does not like to see too much of this but that is one factor.

Now, if, on the other hand, from the earnings standpoint, by savings in financing, he would get an offsetting factor, well, maybe the things will balance out.

That is the reason I said yesterday that I would like to wait and see what the investors in the market say about this. I do not know at the moment.

So far, outside of those bid prices I gave you this morning, the price has not changed much. Maybe it will change more, maybe they will say it is even.

Q. In other words, you would not want anyone to construe your remarks on this subject as meaning that you consider the refinancing as having adversely affected the common stock of Panhandle Eastern?

[fol. 7864] A. No, I do not believe so. As I remember, when I made that statement baldly, I thought Mr. Wheat interrupted to ask whether I was meaning to imply that because of the fact that the S. E. C. had permitted this registration I was in some way condemning the plan.

All I say is that any security, any capital setup wherein you get less and less equity, other things being equal, you get into more of what is called a leverage situation and taking the S. E. C. statement from time to time that they thought in many of these companies there should be more equity capital, it seemed to me, for the moment, this was a little in the other direction, but I do not believe I implied, nor did I say that it had worked a hardship on anybody.

* * * * * * * * *

By Mr. Littman:

Q. In other words, Mr. Coffman, there are favorable aspects and some unfavorable aspects, probably, in your opinion and the two may counter-balance each other.

A. That is right, and I believe that on that score the S. E. C. in its own release made some comments that there were a few things they did not like so well but under the

[fol. 7865] circumstances seemed it to be a perfectly reasonable plan.

Q. With respect to the common stock?

A. Yes, surely.

Mr. Lee: I just wanted to ask you, Mr. Coffman, if as an investment counsellor you would not have given a great deal of consideration and emphasis in your analysis of the size of the common-stockholder after the consolidation as against before, whether or not you would not have given great consideration to the tremendous improvement in the Panhandle Eastern Pipe Line Company in so far as it was becoming a continuous system owned and operated by one management, and that this bottle neck that has existed for some years between the terminus of Panhandle at Dana, Indiana, and the Detroit market was being eliminated.

Didn't you consider that tremendous advantage that ought to result in increased earnings and ought to make a big appeal to the common-stockholder as against the other situation that you mentioned?

The Witness: Well, I think those factors, Mr. Lee, very definitely would be taken into consideration and weighed. I, at the moment, for this particular study, did not do it. The same would go in the change in capital structure, for instance, on the participation feature.

I mean, here is another factor that has been changed as [fol. 7866] between the common and preferred, so I could not say at the moment the relative weights of either. The observation I was trying to make was merely the one that in reducing the percentage and having more senior capital ahead with sinking funds, the common-stockholder was somewhat more removed.

Mr. Lee: Yes, but being somewhat more removed, any detriment that he may suffer by reason of that statement, wouldn't you in all fairness have to consider the benefits that offset that further removal?

The Witness: Oh, very definitely. I have no argument on that, because I have not weighed those various things and I say the common-stockholder will consider all of them as well as the investment analyst and that is the reason I raised the question as to whether there had been a change in price of common stock in the quotations.

Maybe when they get all through with the analysis the benefits will outweigh any detriments or maybe they will do better than that. I merely wanted to wait and see what the market actually said and the mere fact that it is down two points does not indicate to me at the moment one way or another on that, because it will take a little time for them to assimilate these various factors and perhaps make a new appraisal as to the way they see the consolidated company and the new capital structure.

* * * * * * * * *

[fol. 7877] By Mr. Littman:

[fol. 7878] Q. Mr. Coffman, just before recess, we were discussing the changed situation of the common-stockholders of Panhandle Eastern after the refinancing.

Now, isn't it a fact that before the recent refinancing which is reflected in the Securities and Exchange Commission opinion, Exhibit No. 147, the common-stockholders had to give up one-third of all earnings in excess of $1.50 per share before those earnings could be distributed as a dividend to them?

A. There was the participating feature in which part of the earnings were distributed to the preferred and the remainder to common over and above the $1.50 on common.

Q. In other words, the old preferred-stockholders, that is, the Class A preferred-stockholders, were entitled to receive one-third of the earnings in excess of $1.50 per share on the common stock?

A. That is correct.

Q. Now, that feature is no longer present in the preferred stock of Panhandle Eastern under the new refinancing, isn't that right?

A. No, that is correct, but there are other features, of course.

Q. But confining ourselves for the moment to this feature, the holders of the new preferred stock which will supplant the old Class A preferred stock are no longer [fol. 7879] entitled to participate in the dividends of the common-stockholders, isn't that right?

A. That is correct.

Q. And, of course, that factor places the common-stockholders in a better position than under the situation where there existed a participating preferred stock?

A. Yes, so far as that one stipulation is concerned, it is a benefit to the common-stockholder.

Q. I believe you stated this morning on redirect examination that you could determine what the proper rate of return should be if you were furnished with the proper rate base. Is that correct?

A. Well, not exactly, Mr. Littman. What I think I said was that if, by my approach, it were found that all the figures used therein were correct, then my resultant figure, if I knew or were given a rate base, could be used to determine the rate.

In other words, if it were granted or found to be correct that a certain sum of money, $5,064,000 were correct, I merely say that dividing that figure which I find by my approach by whatever rate-base figure is given me will enable me to tell whether it is a 6½, 7 or 5½ rate.

Q. You have faith in the accuracy of your figures, have you not?

[fol. 7880] A. Yes, based upon my calculations as considered in Exhibit 65, I have made a calculation which I think is necessary for the management to have by way of earnings.

Q. Will you please refer to the figure or figures in your Exhibit No. 65 that can be relied upon as the figure to be used to compute a percentage rate of return in connection with a given rate base?

Mr. Wheat: Did you refer to Chart 36 or Chart 37?

Mr. Littman: I began to refer to Chart No. 36. I think he will probably want to refer to one figure in Chart No. 36 and possibly to one in Chart No. 37.

The Witness: Well, the figure in the chart would be $15,520,855 which, applied to whatever the rate-base figure is, would give me a percentage so that that percent times the rate base would give me the total operating revenue.

By Mr. Littman:

Q. I think you probably misspoke yourself. Don't you mean to say you would use the figure of $4,993,511 shown in your Chart No. 36?

Mr. Wheat: Or the $5,064,821 shown in Chart No. 37?

The Witness: Yes, I beg your pardon.

By Mr. Littman:

Q. In other words, the latter two figures would be the ones that would be used in making such a calculation for the purpose of securing a percentage rate of return?

[fol. 7881] A. Yes, that is correct.

Q. In other words, if I correctly understand you, if the Commission were to make a determination of a certain rate base, then you would divide that rate base into the $4,993,511 figure referred to in Chart No. 36 of Exhibit 65 as "a fair return to investors" and obtain in that manner and by that calculation, a fair percentage rate of return under your method?

A. Yes, that is right, under my method.

Q. And under the assumption shown in Chart No. 36?

A. Yes, that is correct.

Q. And you would do the same if you wanted to follow the so-called actual figures which you used for Chart No. 37?

A. Yes, that is correct.

Mr. Wheat: May I ask just to clarify that, what you mean is that you would use your item of over-all current capital requirements as the dividend in that mathematical computation?

The Witness: That is the figure into which I would divide this figure that would be determined as a fair rate base.

By Mr. Littman:

Q. Mr. Coffman, I have before me a photostatic copy of an exhibit which was prepared by you and presented [fol. 7882] before the Public Utility Commission of Pennsylvania in a rate hearing involving the rates of Pennsylvania Power & Light Company.

I hand you a copy of this exhibit and ask you whether it is what I have just described, subject, of course, to check?

A. Yes, it is.

Q. I refer you to Page No. 53 of your exhibit in the Pennsylvania Power & Light Case and I read you the following statement:

"It is assumed here that the capitalization of the company is properly related to the rate base or fair value. If 'prudent investment' had been exercised by the company at the time the properties were acquired, then it must follow that the capitalization presently outstanding would coincide with a fair rate base or fair value on which the company is entitled to earn a fair rate of return."

Have I read correctly from Page 53 of the photostatic copy of your exhibit? A. Yes, you have.

Q. That was your testimony in the proceeding before the Pennsylvania Utility Commission, was it not?

A. Yes, that is correct.

Q. Incidentally, your study which was presented before the Public Utility Commission of Pennsylvania, to [fol. 7883] which I have just referred, is similar to the one which you have presented in these proceedings in Exhibit 65?

A. It is in most respects similar, yes.

Q. When was your testimony presented to the Pennsylvania Public Utility Commission, approximately?

A. About three or four months ago.

Q. At any rate, it was within the past six or seven months?

A. Yes, that is correct.

Q. Now, during your redirect examination, you made numerous references to earnings by other utility companies. I would like to ask you whether you agree with the following statement which appears on Page U1-3 of the August 29, 1941, issue of Standard & Poor's Industry Survey—Utilities:

"The natural gas industry is probably the best situated of the various divisions of the utility industry at this time. It will benefit materially from rising general industrial activity and operating expenses are largely fixed. Thus, even with heavy excess profits taxes, any decline in profits should be held to moderate proportion."

Do you agree with that statement?

A. Not all of it, no.

Q. What part of it don't you agree with?

A. May I see it, please?

Mr. Littman: Yes. (A document was handed the witness.)

[fol. 7884] Mr. Wheat: Did that say "natural gas distributors" or "natural gas pipe line companies?" I was talking at the time and did not hear.

Mr. Littman: I thought I read it exactly as stated.

Mr. Wheat: Would you mind reading that?

The Witness: This particular statement applies to the whole industry with no attention whatsoever given to distribution companies or transmission companies or anything else.

By Mr. Littman:

Q. But it includes, of course, natural-gas pipe-line companies?

A. It is talking about the industry, over-all, that is correct, but no particularizing on pipe-line companies at all.

Q. And the Federal Power Commission Annual Report to which you referred in connection with a purported 27-year life of reserves was also referring, was it not, to the over-all natural-gas industry?

A. Yes, it was. In this particular statement, as I say, from an over-all standpoint wherein it refers or makes this remark:

"It will benefit materially from rising general industrial activity and operating expenses are largely fixed", I, so far as discussing a natural-gas pipe-line company, would (fol. 7885) not agree with that latter statement.

For the industry as a whole, including all divisions, it is a generality.

Q. What natural-gas companies do have fixed expenses, Mr. Coffman?

A. I do not know that any of them do.

Q. Then if that is a fact, that part of the statement to which you just referred is entirely erroneous, is it not?

A. As I say, I do not agree with it.

Q. You are Vice President of Standard & Poor's, are you not, that publishes this document to which reference has just been made?

A. Yes, I am.

Q. And it is published for the consumption of investors and persons interested in making investments?

A. Well, it is a publication which, I say, is available to the public regardless of whom they may be. They may be investors, business men or any other person who has the price to buy the service.

Q. When you put this industry survey out on the market and sell it to the investing public, you, as Vice President of Standard & Poor's, fully expect investors to rely upon it, do you not?

A. I would not say we expect them to rely upon it. [fol. 7886] It is just one source of information like a newspaper. We do the best we can in publishing information, in tabulating it and correlating it. We expect the investor to use his best judgment in view of the information supplied to him.

Q. Do you mean to say you expect the investor to make his own investigation?

A. It is his own money so he certainly should use his own judgment.

Q. Does your company, Standard & Poor's, operate under the Investor's Advisory Act?

A. Yes, it does.

Q. However, you do agree with the balance of the statement other than that part which you read in connection with the fixed expenses?

A. Yes, for the industry as a whole, not making it definitive as to various divisions of the gas industry.

Q. But including, of course, natural-gas pipe-line companies?

A. It is looking over the entire group, the entire industry.

Q. Including natural-gas pipe-line companies?

A. That is correct.

Q. You also testified in redirect examination with respect to your reliance upon the Ralph E. Davis statement [fol. 7887] of "more than 25 years" in fixing a term of years over which you were going to amortize the fixed capital of Panhandle Eastern, a period over which you expect the gas reserves of Panhandle Eastern to be exhausted, is that correct?

A. Yes, that is right.

Q. Now, did you make any investigation of the opinion of Panhandle Eastern Pipe Line Company's management with respect to the life of its properties?

A. No, as I think I have stated, the information that I had so far as the company was concerned, came from its published reports and so far as information otherwise is concerned, it came from our files and public information.

Q. Now, Mr. Coffman, you are [no] so greatly wedded to that 25 years that you would not change your mind about it if someone would present you with cogent proof that the company itself proposes to operate beyond 25 years and could, if it wanted to, operate beyond 25 years?

A. Well, if any engineering study can be developed, so far as that particular invested capital is concerned, which would show that 25 years was inaccurate, I would assume that was a new fact that had come to light and would be taken into consideration.

Q. And you would be glad to revise your estimate to that extent, would you not?

[fol. 7888] A. That is correct.

Q. If the President of Panhandle Eastern Pipe Line Company had testified before the Securities and Exchange Commission to the effect that the general Hugoton area includes the counties of southwestern Kansas and, in addition, Texas County, Oklahoma, and parts of Sherman and Hansford counties, Texas, and with that definition of the Hugoton area, it is his judgment that if he were assigned the problem of obtaining additional gas reserves to meet the present indicated requirements of this company for 30 or 35 years, it could be done on a favorable and economical basis, what would your answer be?

A. Well, I think, Mr. Littman, we are talking about two different things there.

In this particular instance, I am talking about the reserves presently owned by Panhandle Eastern which are presumed, until a different study proves a different result, to last 25 years.

Now, if in the general vicinity of their reserves, there are other reserves which would last longer and such other reserves are acquired and the geologists agree that 30 to 35 years on those new acquisitions will work, I should sup-

pose that was the figure to use on those new acquisitions but I draw the distinction between that and the reserve the company has at the present time.

[fol. 7889] Q. In other words, you confine your amortization period to the life of the reserves presently owned and controlled by Panhandle Eastern Pipe Line Company?

A. Yes, very definitely, for the reason that I think I gave you earlier that although there may be some reserves available in this general area, if they are not now acquired by Panhandle, they may be acquired by competitors so that it is not certain a few years hence that one could acquire anything.

Maybe they can but after all, there are competitors in this business. There is no assurance because someone says they are there and available that they will be there next week, it seems to me, unless they are actually acquired right now.

. . . . . .

[fol. 7897] By Mr. Littman:

Q. If I correctly understand your testimony, you use as the period for amortization, not the life of the gas fields or the gas supply in any given field, as such, but the reserves on hand and owned and controlled presently by the utility, is that correct?

A. Well, to make it a little more accurate, there was an investment here of some $63,775,000 and taking the estimate that I used of 25 years, I apply it against that investment as the best judgment I had at the time, yes, sir.

That is, talking in terms of the investment as against a reserve. Reserves are included in that but what I am interested in still is what the investor has in this business and that I amortize over 25 years.

Q. You amortize the pipe line over 25 years too, do you not?

(fol. 7898) A. That is included in the investment, yes, sir.

Q. Now, assuming that the life of the field in which this company operates is something in excess of 25 years, is it your opinion that the proper amortization period to

be used for this company is the 25 years which reflects the life of the presently-owned and controlled reserves as distinguished from the life of the entire field?

A. So far as this investment is concerned with the 25-year life, I stick with the computations that I have made.

Now if the company can go out or does go out and reinvests money in some reserves that will last 30 years, you have a new investment and I will use the 30-year period but, for the present investment, it seemed to me a conservative figure to use in view of all that had been said about the reserves in the immediate vicinity of the company's present plant and facilities.

Q. I would like to know the basis of your theory and I would like to have the record clear on this subject, Mr. Coffman, so I shall put a hypothetical case, to make it clear.

Assume that we have a company whose presently-owned and controlled reserves will last for a period of 25 years. Assume that that company operates in gas fields whose over-all life will extend over a period of 50 years.

[fol. 7899] What term of years, under your theory, would you use for the purpose of amortizing the invested capital of that company, the 25-year period or the 50-year period?

A. For that particular investment, we are talking about 25 years.

Q. I call your attention to the statement at the bottom of Page 116 of Exhibit 147, which is the Securities and Exchange Commission's opinion to which reference has heretofore been made, with respect to the recent refinancing.

"An independent geologist has estimated that the minimum life of the reserves is 25 years. It was testified that the company could, without difficulty, acquire reserves sufficient for 30 to 35 years after allowing for a greatly expanding market in Michigan."

I take it that, under your method, that statement would not affect the term of 25 years which you used?

A. No, for the reason that I have given, that the 25 applies to the present investment and a new investment would be made to get the 30 to 35 year reserves.

Q. Mr. Coffman, in your opinion, is Panhandle Eastern Pipe Line Company entitled to earn a fair return on anything other than the prudent investment in its property presently used and useful in the public service, less depreciation?

The Witness: May I have that read, please?

[fol. 7900] (Whereupon, the pending question was read by the reporter.)

The Witness: Well, if you mean by "prudent investment", actual capital that went into the firm, I think that is the figure.

By Mr. Littman:

Q. Let me state the question in another way in order to avoid the difficulty that I see we are about to get into.

In your opinion, is Panhandle Eastern Pipe Line Company entitled to earn a fair return on anything other than the original cost of its property presently used and useful in the public service, less depreciation?

Now, when I speak of "property", of course I mean just that, physical property and intangible property used and useful in the public service.

Mr. Wheat: You mean as a rate base?

Mr. Littman: Yes, as a rate base.

The Witness: My answer, Mr. Littman, has to be based pretty much on the statement I made before.

By Mr. Littman:

Q. Can't you answer this particular question yes or no first, and then explain? I think it would be helpful for the record.

A. I do not believe I can for this reason, maybe I am wrong. If you have a situation where the original cost of the company is a certain item and that company has been [fol. 7901] acquired by another company someplace along the line for which the company actually paid for earning capacity that had been built up and cash actually changed

hands or capital does, I say that that, as distinguished from your aboriginal cost, is the cost of the company, is a part of invested capital.

I include it and that is the reason I can't answer your question directly.

I will answer your question directly if you will say that cash was put into the original property and there was no further investment; yes.

If there was any further investment by reinvestment of earnings, then that still is invested capital and I want to amortize that.

Q. Now, you understand I am now speaking of return, not amortization, Mr. Coffman?

A. Yes, I understand.

. . . . . .

[fol. 7903] By Mr. Littman:

Q. Assume we have a natural-gas pipe-line company such as Panhandle Eastern that owns a pipe line and certain other physical property and certain intangible property used and useful in the service of the public.

Now, what I would like to know is whether, in your opinion, and under your theory, that company is entitled to earn a fair return on anything other than the actual original cost of its property presently used and useful in the public service less depreciation.

Trial Examiner: In other words, are you asking this witness to state whether or not his views take into account other factors than are expressed in the Statute?

Mr. Littman: That is right. I would like to know whether this witness is allowing in his "dollars needed" something more than that which the Statute says the company is entitled to, in fact, much more.

By Mr. Littman:

Q. Now, are you prepared to answer this question?

A. I do not know as I can answer it any differently than I did.

[fol. 7904] If the sum total of that represents invested capital, the answer is yes, that is the figure I am using.

Q. Now, Mr. Coffman, in other words, under your theory, every dollar that the investor has invested in the business, as represented by the total outstanding common stocks, preferred stocks, surplus and bonds, is that upon which the investor is entitled to earn a return for rate-making purposes?

A. That is correct.

Q. Even though a large part of those dollars are not actually invested in property, isn't that right, devoted to public service?

A. If they are still invested capital, I use it.

Q. In other words, if a natural-gas pipe-line company has $20,000,000 of actual property, both physical and intangible, and needs $1,000,000 actually for working capital, $21,000,000 in all,—I am speaking of net property when I speak of $20,000,000,—and has $20,000,000 of cash in the bank, you would, under your method, allow a return upon that $20,000,000 of cash over and above the working capital?

A. So long as it is invested capital and remains in the business. Otherwise, I say that it should be distributed to the capital holders.

[fol. 7905] Q. In other words, your answer is yes?

A. That is correct with the additional statement I made.

Q. And you would also amortize the same, to-wit, the total invested capital?

A. That is correct.

Q. I would like to discuss the subject of taxes with you, Mr. Coffman. Will you please refer to your Exhibit No. 152—withdraw that.

Before discussing Exhibit No. 152, I would like to discuss another matter, namely, your Chart No. 29 of Exhibit 65 which is also related to taxes.

Now, you have estimated, as shown in Chart No. 29 of Exhibit 65, a 10-percent increase for higher wage and materials cost for the projected period beyond June 30, 1941, have you not?

A. I have projected the over-all figure by 10 percent, yes, which allows for variations in labor and material costs.

Q. The amount of the increase is $319,000-odd, is it not?

A. That is correct.

Q. Now, each dollar of increased expenses will reduce taxable net income by $1, will it not?

The Witness: Will you read that, please?

[fol. 7906] (Whereupon, the pending question was read by the reporter.)

The Witness: Yes, that is correct.

By Mr. Littman:

Q. And each dollar of reduced taxable income will reduce the company's liability for Federal income taxes and excess profits taxes by 72.4 cents, as you have heretofore testified?

The Witness: I must be a little tired, will you read that question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: I think that is about right, yes.

By Mr. Littman:

Q. That is, provided, of course, that that dollar falls in to the top bracket?

A. In the top bracket, yes.

Q. Now, since you estimate increased expenses of $319,000 for your projected period as shown in Chart No. 29, isn't it a fact that taxes will be reduced by 72.4 percent of that $319,000 amount or by approximately $230,956?

A. If the tax remained the same, it would be, if the tax rate remained the same but that was not the analysis that I made.

Q. Of course, if the tax rate goes up 10 percent in the projected period as you have shown it in Chart No. 30—

[fol. 7907] Mr. Culton: (Interposing) He did not say the tax rate would go up 10 percent.

The Witness: No, I said that I applied the 1941 rate and allowed 10 percent additional, not the tax rate.

By Mr. Littman:

Q. For an increased tax rate, didn't you?

A. No, an increase in taxes, not the tax rate.

Q. Very well, but if it is a fact that the taxes will increase an additional 10 percent in the projected period, the savings in taxes would be even greater than the $230,956 which I have indicated, isn't that right?

A. I do not know what the amount would be but that is included in any calculation to get taxes.

Q. What is included in your calculation?

A. I have allowed for this increase in operations and maintenance so if it makes a saving, I have made this comparison with what it was before.

Q. Mr. Coffman, I would like to have you point out to us in your exhibit where you have made any allowance in your estimate of taxes for the projected period by reason of the increased expenses which you show in Chart No. 29.

A. Well, it is automatic when you rebuild the profit and loss statement and apply the new rates.

Q. Can't you show us how you took care of that? We [fol. 7908] have been unable to find it. Your table for Chart No. 13, I believe, shows your calculation, shows the amount of taxes allowed for the year ended June 30, 1941, as reported by the company and, secondly, as adjusted by you to reflect the 1941 increased tax rate.

A. I guess I do not follow you, Mr. Littman, because, if you look over to table for Chart No. 29, you see there in that column the projected figures for the new allowance in the amount of $3,516,000 and that item was considered in the calculation to get the final result.

The only purpose that I had in the other exhibit of showing the comparison was to indicate on the same income basis that the tax rate alone made a difference of $1,000,000 in cost to the company which was just part of my argument to show why it seemed to me to be reasonable that an increased rate should be allowed.

Q. You still have failed to show where, in your exhibit, you reduced the taxes by reason of the increased expenses that you have allowed for your projected period. Where have you done that?

Mr. Wheat: Mr. Examiner, there seems to be some calculation necessary here. Everyone is fatigued after a long day and we are approaching within two or three minutes of the time of adjournment.

[fol. 7909] I am confident we cannot finish tonight and I suggest we go over to a short session tomorrow morning.

Mr. Littman: I do not believe this requires a calculation. Does it? Of course, I appreciate your position.

Mr. Wheat: I think everybody is tired out.

Mr. Culton: Frankly, we concede he made no calculations based on the increased taxes in 1941.

Mr. Littman: If counsel will concede there is a saving coming of the figure which I named of—

Mr. Culton: (Interposing) I stated he made no calculation based on the increased cost in 1941.

Mr. Littman: And gave no credit in his exhibit—

Mr. Culton: That is all I said. That is what you asked him to show, where he gave that in the showing for increased taxes.

There has been no calculation made of increased taxes. There has been no calculation put in evidence showing the amount of taxes based on increased expenses.

Mr. Littman: You see, this witness, Mr. Culton, has a 10 percent increase in expenses.

Mr. Culton: But you keep quoting a 10-percent increase in tax rate and he never has said anything about 10-percent increase in tax rate.

Mr. Littman: Now, Mr. Culton, I gave that up a long time ago. We passed that bridge away back yonder.

[fol. 7910] Now, he allows an increase in taxes.

Mr. Culton: All right.

Mr. Littman: He allows an increase in expenses. He has given no credit in his exhibit for the increased expenses.

Now, I do not pay very much in taxes but I know when my expenses go up in a given year, my taxes go down, all other things remaining the same.

Now, he has not shown the corresponding saving in taxes.

Mr. Wheat: Are you able to answer the question now?

The Witness: The answer is the same as on some of the other detailed items, that I did not breakdown the individual items so I could say one was 10 percent, one 5, another 20 and another nothing.

I allowed for an over-all increase in taxes and that is the reason I have not been able to get your point. I admit I am a little thick this afternoon.

By Mr. Littman:

Q. We can finish this point, at least, before we quit tonight and I think this will clear it up.

You allowed for a 10-percent increase in expenses, didn't you? A. That is correct.

Q. For your projected period? A. That is correct.

[fol. 7911] Q. But you did not reduce the taxes by reason of that increased expense, did you?

A. No, and on the same theory I used in certain other cases, whereas you had that change in the one instance, there might be something that would offset it otherwise so that, on the average, a 10-percent increase over-all for taxes would be a reasonable ultimate figure.

Q. You do not pay taxes on that basis, do you, Mr. Coffman, nor does anybody else pay Federal income taxes on any such basis as that?

A. No, that is correct, but it was an over-all figure because I could not tell, as a matter of fact, what the ultimate result would be.

Q. Well, you knew what your net income was going to be, didn't you, under your theory?

A. I can calculate that, yes, I have it.

Q. But you have not done it in this Exhibit 65, have you? A. That is correct.

Q. That is, you are saying you have not done it?

A. That is correct, I have not made the calculation, that is right.

Q. Nor have you done it in Exhibit No. 152 in that way?

A. No, the purpose of 152 was for a different matter.

* * * * * * * *

[fol. 7935] GEORGE S. YOUNG, a witness, having been previously sworn, resumed the stand and testified further as follows:

* * * * * * * *

Cross-Examination.

By Mr. Littman:

Q. Mr. Young, you have prepared and submitted in this proceeding an exhibit which has been designated as Exhibit No. 77, "Michigan Gas Transmission Corporation-Description of Physical Property", have you not?

A. I have.

Q. In this exhibit, you describe the lines owned by Michigan Gas Transmission Corporation, do you not?

A. I do.

Q. Mr. Young, you are the Vice President and the General Manager and a Director of Michigan Gas Transmission Corporation?

A. That is correct; until February 6 that was the case.

[fol. 7936] Q. You have resigned certain of these positions?

A. I am Vice President only at the present time.

Q. When did you first become General Manager?

A. When I first came to Detroit, June 1, 1936, I was designated General Manager.

Q. When were you elected a Director?

A. In May, 1940, I was elected a Director.

Q. And when did you first become Vice President?

A. In December, 1936.

Q. So that you have occupied the position of Vice President and General Manager from 1936 to February of 1942?

A. Except for a brief period which I have mentioned here when I was on active duty in the Naval Service.

Q. That was in what year?

A. That was in the year 1941.

Q. How long a period were you away from your duties as Vice President and General Manager?

A. From February 1, 1941, until September 1, 1941.

Q. Would you please give us at this time a brief description of the main transmission lines of Michigan Gas Transmission Corporation?

A. As they exist at the present time?

Q. Yes and, if you wish, you may refer to your map, Exhibit No. 78.

A. The Michigan Gas Transmission Corporation main [fol. 7937] line pipe system starts at the Illinois-Indiana State line or very near the Indiana-Illinois State line and runs eastward from there for about 72 miles and is composed of a 20-inch pipe line and a 24-inch pipe line.

Q. May I interrupt to ask whether the starting point is at Dana, Indiana, and the terminal point for the line which you have just described is at Zionsville, Indiana?

A. That is correct, at a point near Zionsville.

Q. That is what is known as a loop line, is it not?

A. That is correct.

Q. Now, will you continue your description?

A. From Zionsville, a main pipe line continues in a northerly direction to Muncie, Indiana. This is an 18-inch pipe line. At the terminus of the loop pipe line which we have mentioned and which is near Zionsville, Indiana, there is a 22-inch pipe extending in a northeasterly direction about 230 miles to Detroit.

Q. What is the length of the 18-inch line running from Zionsville to Muncie?

A. That is about 52 miles, approximately 52 miles.

Q. In addition to the lines that you have mentioned, is it not a fact that Michigan Gas Transmission Corporation also owns certain lateral lines?

A. That is correct.

Q. Will you please describe those, briefly?

[fol. 7938] A. There is a 6-inch line extending from a point on the loop line to Crawfordsville. That is a 6-inch line. Do you wish me to give the length of it?

Q. Approximately.

A. I can only give the footages as I read them off here. That line is approximately 98,000 feet.

There is another lateral line, A-107, extending from the loop line to Lebanon. I read from the map that that is 69,598 feet.

From the pipe line extending from Zionsville to Detroit which is designated at this point as Line C, there is a lateral pipe line C-104 extending to Tipton, Indiana, which is 69,774 feet. Also from Line C to Fort Wayne, there is a later line designated as Line C-101, 66,104 feet. This lateral pipe line is partially looped, I believe, to the extent of about 60,000 feet. It is not indicated on this map.

Those are the principal lateral lines which belong to the Michigan Gas Transmission Corporation. There are a few very short lines tying on to measuring stations which are adjacent to the main pipe line.

Q. When did Michigan Gas Transmission Corporation begin operating these lines that you have described?

A. As of June 1, 1936, or shortly thereafter. I came to Detroit on June 1, 1936, and it was shortly thereafter we picked up the operation on them.

[fol. 7939] On June 1, 1936, we had only the pipe line extending from Dana to Muncie. Line C, the 22-inch line, had not been completed as of that date but we immediately picked up the operation of the 22-inch line when it was completed.

Q. In addition to the lines that you have just described, Michigan Gas Transmission Corporation has been operating certain other lines, has it not?

A. That is correct.

Q. Will you describe those lines?

A. One of those lines extends from Muncie in a southeasterly direction a distance of about 30 miles. It is a 16-inch line which, until February 6 of this year, belonged to the Ohio Fuel Gas Company.

Q. Now, what other lines belonging to Ohio Fuel Gas Company has Michigan Gas Transmission Corporation been operating?

A. The line which I have just described as designated on the map as Line D and from that line there is a lateral line designated D-172, a 6-inch line extending to Winchester, Indiana.

Q. That line is, in reality, a lateral line, is it not?

A. That is a lateral pipe line.

Q. Will you continue your description of the Ohio Fuel Gas lines which your company has been operating?

A. Since about October 6, when the Richmond market was connected, we have also been operating that part of the 16-inch line which extends into Ohio to a point where [fol. 7940] the line connecting Richmond takes off. We have also been operating that lateral line there which connects Richmond and prior to the time that the Richmond market was connected, we maintained that section of pipe line down to Richmond which was within the State of Indiana.

Q. What is the size of the line running from Richmond north to the junction with Line D?

A. It is indicated as being 10-inch.

Q. Now, has your company also been operating that portion of the Ohio Fuel Gas line which is not colored on this map, Exhibit No. 78, which extends into Ohio?

A. Yes, since the Richmond market was attached which, I believe, was October 6, 1941.

Q. Now, how far does that line extend into Ohio?

A. I do not have that figure.

Q. Just approximately.

A. I would say approximately 2 miles.

Q. And does any of Michigan Gas Transmission Corporation's gas pass beyond that point eastwardly?

A. No, it does not.

Q. But the line itself physically does extend further east, does it not?

A. Yes, there is a continuation of that Line D further east. It is indicated on this map as Z-50.

Q. Is there a break in that line at the point where [fol. 7941] Michigan Gas Transmission ceases to operate the line?

A. There is not. It is continuous.

Q. It is a continuous line?

A. Yes.

Q. There is a valve shutting off the flow eastward?

A. That is correct.

Q. And from that point, the gas flows due south and somewhat to the west to Richmond, Indiana?

A. That is correct. The valve that I speak of, that is, the block valve in that Line Z-50, is not exactly at the point of take-off but it is very close.

Q. How long has your company been operating this Ohio Fuel Gas Line?

A. That is, all of the Ohio Fuel Gas lines that I have described?

A. Yes.

The operation of those lines was picked up shortly after June 1, 1936. I do not remember just exactly when it was but it was shortly after that time.

Q. When were those Ohio Fuel Gas lines that your company has been operating constructed?

A. The information I have with regard to Line D is that it was constructed in 1913. As to the other two, that is, the line which is designated D-178 and the Richmond line, I have no information as to when those were constructed.

[fol. 7942] Q. Isn't the correct number D-172?

A. D-172 is the lateral I do not know about.

Mr. Baldridge: Mr. Young, did you mention the little stub of lateral that goes to Lynn?

A. I have not mentioned that, no. That is a very short lateral.

Mr. Baldridge: That comes off the line you described as being D?

The Witness: That comes off the Line D as indicated on this map.

Mr. Baldridge: These lines that you described as belonging to Ohio Fuel Gas Company were sold by Ohio Fuel Gas Company to Panhandle Eastern Pipe Line Company on February 6, were they not?

The Witness: Yes, that is correct.

By Mr. Littman:

Q. Can you state the price at which these lines which you have described were sold by Ohio Fuel Gas Company to Panhandle Eastern Pipe Line Company?

A. I have read the agreement under the terms of which these lines were sold and my recollection is that these pipe lines to which you have referred were sold for $439,000 in round figures.

Q. $439,326.08 is the figure to which you refer?

A. I do not remember the dollars and cents. I just remember the round figure.

[fol. 7943] Trial Examiner: Are counsel in agreement that that is the figure?

Mr. Culton: Yes, sir. That appears in the S. E. C. statement, Exhibit 147, I believe.

Mr. Littman: The figure which I read was taken from the Securities and Exchange Commission's opinion which is in evidence as Exhibit 147.

By Mr. Littman:

Q. Under what arrangement has Michigan Gas been operating these Ohio Fuel Gas lines which you have described?

A. There has been no written contract covering their operation. The Michigan Gas Transmission Corporation has operated the pipe lines and received the revenue from the sale of gas sold from these pipe lines, but it has not paid the Ohio Fuel Gas Company anything during the period that I speak of for the use of these lines.

Q. No rental was paid?

A. No rental was paid.

Q. For the use of the line?

A. That is correct.

Q. The Ohio Fuel Gas Company is a wholly-owned subsidiary of Columbia Gas & Electric Corporation, is it not?

A. I believe it is. I am not sure of that. It is a Columbia subsidiary. I do not know whether it is wholly-owned or not.

[fol. 7944] Q. Who bore the expenses of maintenance and operation of these Ohio Fuel Gas lines?

A. The Michigan Gas Transmission Corporation.

Q. So that your operating statements in the past few years, at least since 1936, reflect the operations and maintenance costs of those lines, do they not?

A. That is correct.

Q. What of the depreciation expense and cost of replacements? Who has borne that?

A. I am not sure about that, Mr. Littman. I think the Ohio Fuel Gas Company has borne that.

Q. Will you please try to ascertain that for us and report back?

A. I shall.

Q. Did Ohio Fuel Gas Company either directly or indirectly derive any revenue from these lines which you have described during the period 1936 to date?

A. Not to my knowledge, no.

Q. That is, that situation obtained during the time that you operated the lines?

A. That is correct.

Q. What cities are now served by these Ohio Fuel Gas lines?

Mr. Baldridge: May I inject something there. You mean by "these lines", all of the Ohio Fuel Gas lines?

[fol. 7945] Mr. Littman: Yes. I have been describing them as the Ohio Fuel Gas lines. I think the record now shows they have been sold to Panhandle Eastern Pipe Line Company.

The Witness: Michigan Gas Transmission Corporation has sold gas to Indiana-Ohio Public Service Company, which distributes gas in the Towns of Winchester, Portland and Union City. It also has sold gas to Lynn Natural Gas Company and, since October 6, 1941, it has delivered gas to Richmond for the account of Panhandle Eastern Pipe Line Company.

In addition to that, there has been a sale made to the Indiana Gas Distribution Corporation for ultimate resale to the Anchor-Hocking Glass Company which is located near Winchester, Indiana.

By Mr. Littman:

Q. What do you have to say with respect to the physical condition of these lines formerly owned by Ohio Fuel Gas Company?

A. I would say that the condition of the lines is only fair.

Q. What causes you to make that statement and what facts lead you to that conclusion?

A. The leakage which we have been able to determine from that line and the amount of maintenance work which we have had to do on the line. I am speaking particularly of Line D. Line D-172 has not required a great deal of maintenance.

Mr. Littman: Will you please read that answer back?

[fol. 7946] (Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. What has been the recent experience of the company with respect to leakage on Line D which is the 16-inch line extending from Muncie to a point a little beyond the Ohio-Indiana State line?

A. I do not have those figures here, Mr. Littman. I could produce them.

Q. But you do know that the leakage is abnormally high?

A. That is correct.

Q. Will you please secure the leakage figures on that line?

A. I will.

Q. And report back later?

A. All right.

Q. What has been the extent of the leakage on the line running north from Line D, namely, the Line D-172 running to Winchester, Indiana?

A. The leakage on that system east of Muncie has been determined as a whole. That is, we have taken the sum of the measurements of gas taken from that line and subtracted it from the delivery of gas into that pipe line so that the leakage figures which I will present reflect the leakage from the entire system.

Q. You are referring to points east of King measuring [fol. 7947] station?

A. East of King measuring station.

Q. Which is to the east of Muncie?

A. That is right, and the figures that I would present, at least for the years 1940 and prior thereto would only cover down to the State line.

Q. What has been the maintenance experience of Michigan Gas Transmission Corporation in operating Line D extending from Muncie to the Ohio-Indiana Line and slightly beyond it east?

A. We have had a considerable amount of maintenance on that pipe line. By that I mean that we have had to repair a considerable number of leaks on the pipe line and recondition the couplings between that pipe line.

Q. What type of couplings are on this line?

A. Well, they are the Dresser type of couplings. I do not know whether these were manufactured by Dresser or by another manufacturer, but they are the Dresser type.

Q. Are you prepared to state the maintenance figures for the years during which Michigan Gas has operated Line D?

A. I am not sure about that. I cannot at this moment. I am not sure whether they can be segregated or not.

Q. Will you please ascertain that fact and, also, see if you can get us the maintenance figures for the lateral line extending north to Winchester?

A. Yes.

[fol. 7948] Q. Can you give us a description of Line D in the same detail as that which you have given for Michigan Gas Transmission lines in Exhibit 77?

A. Do you mean as to length, Mr. Littman?

Q. I mean particularly as to the type of pipe and the type of couplings, river crossings, the same information which you have with respect to the other lines in Exhibit 77.

A. The 16-inch line is a coupled line and, as far as I know, the points at which lengths of pipe are coupled, I do not believe that double random lengths or 40-foot lengths of pipe were available at the time that pipe line was constructed.

Q. This is steel pipe?

A. It is steel pipe.

Q. Are there any river crossings?

A. There are no multiple river crossings, there are some stream crossings there but no multiple river crossings.

Q. What is the wall thickness of the pipe?

A. I do not know.

Q. Has your company ever made any pipe inspections on that line? By that I mean have they dug any holes along the line and made reports?

A. No, they have not. Of course, they have dug a great many holes to make inspections and have noted the conditions, not to make inspections but to make repairs at points where leakage was indicated, and they reported the condi-

[fol. 7949] tions found when they dug down but we have not made any investigation of this pipe line.

Q. Are the reports that were made at the time each of these repairs was installed with respect to the condition of the pipe line filed and are they on file at your offices here in Detroit?

A. They are. They report the repair work undertaken on the line. I do not believe they express any information as to the condition of the pipeline or anything like that.

Q. Have you personally ever observed any of the pipe on this line?

A. I have not. Well, I have observed it where it has been exposed where it passes through creek beds, but I have not observed any of the buried pipe.

Q. Has Michigan Gas Transmission Corporation followed the practice of making routine pipe inspections on its lines?

A. Oh, it has not made routine pipe inspections but several pipe inspections were made prior to the time that the inspection was made which was presented in connection with this rate proceeding.

Q. You were referring to Mr. Riddle's inspections when you referred to those that were made for the purposes of this proceeding?

A. That is correct.

Q. Will you tell us something about the prior inspec- [fol. 7950] tions, who made them and how often were they made?

A. I cannot give you much detailed information. Copies of those were referred to your engineer, Mr. Bodner. I think there were either three or four of them.

Q. What do you mean by three or four of them?

A. Three or four reports.

Q. Reports?

A. Made at different times.

Q. Do they cover a number of different inspections?

A. They cover a number of different inspections.

Q. Has it been the practice of Michigan Gas to have reports made as to the condition of pipe when pipe is uncovered during the course of repair or other work?

A. If conditions were found when the pipe was uncovered that were not entirely satisfactory, it has been a matter for discussion, but I do not recall that any formal reports have been made covering that.

Q. You mean you have nothing in writing with respect to the condition of the pipe observed at these points when uncovered for purposes of repair or other work?

A. No, not that I can recall.

Q. Can you state how many leaks which were caused by corrosion have been repaired on the main transmission lines of Michigan Gas Transmission Corporation system since you came with that company in 1936? I am excluding the lines formerly owned by Ohio Fuel Gas Company from [fol. 7951] my question.

A. You are referring now to leaks through pitting in the pipe?

Q. Caused by corrosion.

A. I cannot recall any at this moment.

Q. Let us take the past year, do you recall any in the past year?

A. Well, I would say within the last few days, I have had a report with regard to one leak due to corrosion in Line A, I believe it is designated on this map. That is the 20-inch line.

Q. That is the line running from Dana to Zionsville?

A. That is correct, and it is the 20-inch part of that loop.

Q. Where was that leak discovered in the line?

A. I cannot tie that down very definitely, Mr. Littman. It was some place on the 20-inch line.

Mr. Littman: Will you please read the answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. Will you ascertain the point and report that information to us during the course of this hearing?

Mr. Culton: Mr. Young, that is the old portion of the line?

The Witness: That is the 20-inch portion of the loop, the other portion of the loop is 24-inch.

By Mr. Littman:

[fol. 7952] Q. And that latter line, which you have just described, on which the leak occurred was installed in what year?

A. In 1931.

Q. Now, do you know of any other leaks which have been discovered on your main transmission line, since 1936?

A. I know of no others resulting from corrosion. There have been other leaks in couplings.

Q. What caused those?

A. Well, the rubbers in the couplings leaked or the center ring in the coupling failed.

Q. What do you mean when you say, "the center ring failed"?

A. The center ring is welded. If is a ring seven inches wide which is welded and, in some cases, there have been failures of that which have permitted leakage.

Q. That is mechanical failure?

A. That is correct.

Q. Has any pipe been replaced in the main transmission line of Michigan Gas Transmission Corporation since they were first installed for any reason?

A. Yes, at the time the breaks occurred in the pipe line in January 1937, some of the pipe which was blown out of the ground at that—

Q. (Interposing) I believe you have described that in your Exhibit 77.

A. I do not know that I have stated there that any pipe [fol. 7953] was replaced. I have described the breaks.

Q. How many lengths of pipe were replaced by reason of those breaks which are described in Exhibit 77, Pages 15 to 17?

A. Well, I believe that about four or five lengths were replaced. I am not sure of that.

Q. Now, does that constitute all of the replacements of pipe in the main transmission system of Michigan Gas since the lines were originally installed?

A. To the best of my knowledge that constitutes all of the replacements since 1936. There may have been replacements in pipe line extending from Dana to Muncie prior to that time and I would not know about that.

Q. Michigan Gas Transmission Corporation did not own these lines prior to 1936, of course?

A. No, that is correct.

Q. Do you have an opinion as to the probable life of the main transmission lines which were installed in 1930?

A. No, I have not.

Q. Do you have any opinion as to the probable life of the main transmission lines which were installed in 1936?

A. I have not. I have not given any thought to that subject.

Q. You are an engineer, are you not?

A. I am an engineer, yes.

Q. Do you know what amount has been accumulated in [fol. 7954] the depreciation reserves of Michigan Gas Transmission Corporation at the end of 1941?

A. I do not know exactly, Mr. Littman. I believe, from an examination of financial statements, in the neighborhood of $2,000,000.

Q. Do you have copies of the 1941 financial statement?

A. No, I do not have that with me.

Q. Does anyone here have a copy of it?

A. I will get one.

(A document was handed the witness.)

The Witness: On page 2 of the financial statement for the period ended December 31, 1941, it is indicated that the reserves as of December 31, 1941, were $2,212,098.76.

By Mr. Littman:

Q. Now, will you please state how much of that represents the reserves for depreciation?

A. Well, I am not a accountant, Mr. Littman, and I do not know that I can clear that matter up. I am reading from Page 2-A of the financial statement for the period ended December 31, 1941, and it states that the reserves for retirement and depletion as of that date were $1,697,894.03.

Q. In your opinion as the manager of the property of the Michigan Gas Transmission Corporation, is this reserve an adequate, reasonable and proper reserve for the depreciation and amortization which has accrued on this [fol. 7955] property to December 31, 1941?

A. The reserve that has been accrued for amortization and depreciation of the property was based on an estimated life of the field, that is the field which supplies these pipe lines and I am not in a position to say at this moment whether that is adequate or not. That is something that was not within my province to determine.

Q. Well now, what was the life of the gas field upon which the depreciation rates that went to make up this reserve were charged in the past?

A. Well, as of 1936 when we started to charge 3 percent for this account, it was estimated that the life of that field was about 33 years. That figure was given to me at that time and on that basis we proceeded to charge 3 percent.

Q. And you think that on that basis, on that assumption, the reserve is adequate?

A. Well, if the life of the field is, as it has been reported, reasonable, I believe I could say that it was adequate as a figure to cover amortization on a straight line basis, but whether is is adequate to cover other things, I am not sure at this time.

Q. What part, if any, did you have to play in the determination of the depreciation rates which have been applied in the past years for depreciation and amortization?

A. None whatever.

[fol. 7956] Q. You did not have anything to do with it?

A. No, I was simply told what to do.

Q. Who told you what to do in that regard?

A. The management of the Michigan Gas Transmission Corporation which is located in New York.

Q. And what was the name of the individual who told you?

Mr. Beckjord, who was President of the Michigan Gas Transmission Corporation.

Q. Now, the rates that have been charged in the past for depreciation and amortization are shown in Exhibit 99, Page 3, are they not?

A. I am not familiar with the details of this statement, Mr. Littman. It was prepared by Mr. Spitznagle.

Q. Well, the heading of Page 3 reads "Depreciation Provisions Per Books for the Years Ended December 31, 1936, to 1940, Inclusive, and Six Months Ended June 30, 1941."

Don't you recognize these depreciation rates as the rates which are shown on the books of your company?

A. I do not recognize them as such, but I presume that they agree, however, that is, I do not have the figures that were actually charged to this account in my mind.

Q. You mentioned something about a 33-year life of the gas supply. You see, do you not, the rate of 3 percent on Line 4 which has been applied to most of the property of Michigan Gas Transmission Corporation? Do you recognize that?

[fol. 7957] A. Is that on Page 1, Exhibit 99?

Q. Page 3.

A. Excuse me. Yes, I see that.

Q. To the best of your knowledge, Mr. Young, as the operating manager of this property, would you state that the depreciation rates which have been applied by this company since 1936 have been adequate, reasonable and proper and are adequate, reasonable and proper for the purpose of providing annual allowances for depreciation and amortization?

. . . . . .

[fol. 7959] The Witness: Well, I do not know anything about the theory of accounting, understand that, Mr. Littman, but I would say that if the life of this field which has been reported or was reported as of the date that we started to charge 3 percent is correct, that, in my opinion and again understand I am not an expert in these matters—that would probably be adequate.

By Mr. Littman:

Q. And reasonable?

A. Yes, and reasonable.

. . . . . .

The Witness: Mr. Littman, I failed to mention some other pipe lines which are owned by other companies and operated by the Michigan Gas Transmission Corporation. One is a pipe line belonging to Public Service Company of Indiana extending from Crawfordsville to Lafayette.

By Mr. Littman:

Q. What is the distance of that line?

[fol. 7960] A. It is not indicated here but my recollection is that that is about 23 miles.

Q. That is not colored on map, Exhibit 78, is it?

A. No, it is indicated as a dotted line on Exhibit 78.

Q. How long has Michigan Gas Transmission Corporation been operating that line?

A. Since 1937, I believe, since the date the contract was made with the Public Service Company.

Q. Will you describe, generally, the arrangements under which that line is operated?

A. It is a contractual arrangement.

Mr. Baldridge: Isn't that set forth in a contract filed with the Commission?

The Witness: That is right. It is part of the contract covering the sale to this company.

Shall I proceed?

By Mr. Littman:

Q. Yes.

A. And in addition, the line extending from the one just described to Attica which also belongs to the Public Service Company of Indiana and is a 4-inch line.

Q. Now, is the contract under which that line is operated by Michigan Gas also on file with the Federal Power Commission? A. Yes, it is.

Q. What other lines did you want to describe?

[fol. 7961] A. The line belonging to the Toledo-Edisen Company supplying Defiance.

Q. Defiance, Ohio?

A. Defiance, Ohio. My recollection is that about 5 miles of 3-inch pipe line owned by the Toledo-Edison Company is operated under the terms of the lease agreement by the Michigan Gas Transmission Corporation.

Q. Is that agreement on file?

A. I do not know, Mr. Littman.

Mr. Littman: Do you know, Mr. Baldridge?

Mr. Baldridge: Which agreement was that?

Mr. Littman: The agreement with reference to the Defiance line, the lateral line.

Mr. Baldridge: I know the agreement for the sale of gas to Toledo-Edison is on file. Whether the agreement for the maintenance of the line is on file, I rather doubt, because it did not appear to be—as I recall it and I am speaking from recollection now and I may be wrong—it did not appear to be anything that affected the rates and may not be on file.

By Mr. Littman:

Q. Can you state, Mr. Young, whether Michigan Gas bears all of the operation and maintenance expenses of these lines which you have just described?

A. It bears the operating and maintenance expense but does not bear the tax cost.

[fol. 7962] Q. Are you speaking now of the ad valorem taxes?

A. I am speaking of all taxes.

Q. Federal, as well as State and local?

A. All taxes, I would say. We pay no taxes on those properties. Of course, we will pay an income tax to the extent that we profit from the sale to the customers served by those lines.

Q. That is, you pay the Federal income tax and excess profits tax on the revenue derived from these lines as well as other lines? A. That is right.

Q. But all other taxes are borne by the companies that own these lines in fee?

A. Of course, the people who are engaged in operating these lines are our employees and we have to pay certain taxes on those people, Social Security taxes and things of that sort, but we do not pay any property taxes.

Mr. Baldridge: May I interrupt to say that the contract with the Public Service Company of Indiana which has been referred to and under which the seller, that is, Michigan Gas Transmission Corporation, agrees to operate a certain line or lines as Rate Schedule No. 17.

Trial Examiner: When was that filed, Mr. Baldridge? It was filed with the Federal Power Commission on what date?

Mr. Baldridge: It was filed with the Federal Power [fol. 7963] Commission, I think about September 1, 1938, at the time when all the contracts were required to be filed. There have been one or two supplements to that contract but those do not affect the lines in question, as I recall. Those lateral lines were provided for in the original contract which is dated October 1, 1936, and, as I say, was filed, I think, around September 1, 1938.

I am not sure just exactly about the date but it was at the time when the companies' contracts were filed or rate

schedules were filed pursuant to Order No. 53 of the Federal Power Commission.

By Mr. Littman:

Q. What company bears the depreciation cost for these lines, that is, which company carries the depreciation reserve? A. The company owning the pipe lines.

Q. That is not Michigan Gas Transmission Corporation?

A. They are not a part of our property account.

Q. Does that complete your description of the lines?

A. Yes, sir.

Mr. Baldridge: May I inject another question, Mr. Littman. I do not like to interrupt but I think we may get along faster. None of these lines operated by Michigan Gas Transmission Corporation belonging to other companies are carried in any way in the Michigan Gas Transmission Corporation's plant account, are they?

[fol. 7964] The Witness: No.

By Mr. Littman:

Q. Mr. Young, are you generally familiar with the major sources of natural gas in the United States within, let us say, a radius of a thousand miles of Dana, Indiana?

A. Only in a very general way. I have not had any reason to investigate them personally. I have read about them, that is all.

Q. You know, generally, where the major sources of supply are located? A. Yes, I do.

Q. Will you name the major sources of natural gas supply in the United States west and south of Dana, Indiana, which are within approximately a thousand miles of Dana?

Here is a map of the United States which may help you.

(The map indicated was handed the witness.)

A. The major sources that I know about are in the Hugoton Field and the Texas Panhandle fields which are, so far as I know, the major sources. Then I believe that the Gulf Coast area is a major source of supply which, I think, is within a thousand miles of Dana and west.

Q. You are referring to the southeastern part of Texas, are you not? A. That is correct.

Q. And the southern part of Louisiana?

[fol. 7965] A. That is correct.

Q. There is a very extensive gas field down there, isn't there?

A. I understand that there is, yes.

Q. Where is the Monroe Gas Field located?

A. I understand that that is in northern Louisiana.

Mr. Culton: Do you know if that is the field that Southern Natural is having to abandon and get gas somewhere else?

The Witness: I do not know, Mr. Culton.

Mr. Culton: There was some testimony about that a few days ago.

The Witness: I only know it by name. I do not know the condition of it.

By Mr. Littman:

Q. I will not ask you, Mr. Young, to confine yourself to 1,000 miles. You might go out 1,500 miles if required to embrace some of the larger fields of the country.

There is another large field in Texas, is there not?

A. There is the Texas Panhandle, West Texas, which I have mentioned.

Q. Where is the Waskom Field located?

A. I do not know.

Q. Dana, Indiana, is a point close to the Indiana-Illinois State line at which point your lines join those of Panhandle Eastern, isn't that correct?

[fol. 7966] A. That is correct.

Q. And isn't it a fact that the lines of Michigan Gas Transmission Corporation could be used to transport gas from these Gulf fields which you described and from the Louisiana gas field?

A. Physically, yes, if the gas was piped to Michigan Gas Transmission Corporation from the Gulf Coast area, our pipe line could deliver that gas provided they are not prevented from doing so by reason of contracts in existence.

Q. Will you please turn to Exhibit No. 79, Mr. Young.

Before passing to Exhibit No. 79, Mr. Young, I would like to ask you this: If and when the Panhandle Field

of Texas and the Hugoton Field of Kansas and Oklahoma are exhausted, isn't it a fact that the Michigan Gas Transmission lines could be used, in all probability, to carry natural gas from the Gulf gas fields and the Louisiana gas fields, assuming that that could be done economically, isn't that correct?

A. Physically, I would say that the lines would be available to transport gas if they are in condition to do so.

Mr. Baldridge: I did not hear that. Will you read the answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. That is to say, the Michigan Gas Transmission lines are in a direct route between markets presently served, [fol. 7967] such as Detroit, by your lines and these fields that you have mentioned, isn't that correct?

A. The Gulf Coast fields are to the southwest of Dana and they are more or less on the route of a pipe line which might be built from that source.

Q. You are familiar, are you not, with the fact that the Hope Natural Gas Company proposes to build a line extending from the Louisiana gas fields northward into the Appalachian district, particularly into the State of West Virginia?

A. I have no first-hand knowledge of that. I read about it in the trade papers and that is the extent of my knowledge with regard to it.

Q. Let's look at your Exhibit No. 79, sir.

A. All right, sir.

Q. This exhibit is entitled, "Comparison of Daily Provided Capacity to Deliver Firm Gas with Maximum Daily Delivery of Firm Gas from System of Michigan Gas Transmission Corporation".

Were all of the pipe lines of Michigan Gas which are shown on your map, Exhibit No. 78, in service on March 18, 1941, the date of the highest demand in the winter of 1940-41?

A. I was not on the job at that time, Mr. Littman, but I understand that they were.

Q. If your impression is erroneous, you will correct the record in that regard, will you not? A. I shall.

[fol. 7968] Q. What was the total horsepower of the main compressor engines at each of the three compressor stations operated by Michigan Gas on March 18, 1941?

A. At Montezuma compressing station—7800 horsepower; at Zionsville compressing station—6500 horsepower, and at Edgerton compressing station—3900 horsepower.

Q. What additional pipe lines and horsepower have been added since March 18, 1941?

A. The partial looping of the Fort Wayne lateral has been carried out and two additional 1300 horsepower gas engine compressing units have been installed at Edgerton compressing station.

Q. What is the "provided daily capacity to deliver firm gas in M.c.f."; as that phrase is used in your Exhibit 79, for the winter period 1941-1942?

I have in mind that you should supply for me a column in the same detail as shown in Column K in your Exhibit 79.

A. I shall do that.

Q. You can do it now?

A. I can tell you in a general way the additions.

Q. Can you give me the total?

A. The additional markets which have been added are Richmond and Greenfield, Indiana, which would only increase the amount shown there under Column K, that is, the total shown under Column K by 1,500,000 or 2,000,000 per day.

[fol. 7969] Q. You are now speaking of a million or a million and a half cubic feet? A. That is correct.

Q. That is in addition to the 159,850 M.c.f. figure which appears as the total at the foot of Column K?

A. That is correct.

Q. Will you now please supply the information that I have requested, in the same detail as shown in Column K, for the winter 1941-1942? A. I will.

Q. What has been the "maximum daily delivery of firm gas in M.c.f." to date during the present winter of 1941-1942?

A. The maximum delivery of firm gas for the period that you have mentioned—excuse me, Mr. Littman, I cannot give you that figure at this time. I have here a figure of the total gas delivered by our system, that is, by the Michigan Gas Transmission Corporation system during the cold period, January 6, 7 and 8, but I do not have the daily measurement of certain interruptible customers for those days to substract from these so that I can give you delivery of firm gas on those days.

Q. Will you please supply that information in the same detail as in shown in your Column L of Exhibit 79 for the maximum daily delivery of firm gas in M.c.f.?

A. I will.

Q. Mr. Young, I would also like to have you supply [fol. 7970] along with this latter information the total deliveries of gas on that date of maximum demand in the winter 1941-1942 thus far.

A. That would be the total including interruptible gas?

Q. Yes.

A. I can give it to you now.

Q. Very well.

A. For January 6, 1942, the total delivered, including the company use, was 176,347 M.c.f.; January 7, 178,937 M.c.f.; January 8, 177,447 M.c.f. All of the figures which I have given you include the requirements for company use.

Mr. Culton: That also includes certain interruptible customers, as I understand.

The Witness: That includes all of the interruptible customers who are being served at that time.

By Mr. Littman:

Q. And were not interrupted at that time?

A. Some were interrupted, not interrupted, to curtail.

Q. But you did interrupt some customers on January 6, 7 and 8, 1942?

A. There was some curtailment.

* * * * * * * * *

[fol. 7971] Q. Mr. Young, has Michigan Gas Transmission Corporation prepared an operating budget for the year 1942?

A. Yes, the Michigan Gas Transmission Corporation did prepare an operating budget for the calendar year 1942 in the month of December, 1941.

Q. Where is that budget located?

A. It is in the Michigan Gas Transmission Corporation's office.

Q. Here in Detroit?

[fol. 7972] A. That is correct.

Q. What is the form of that budget? Is it a bulky document? Perhaps you had better describe it.

A. I would say it is quite a bulky document, probably 40 pages of certain forms taken from the financial statement which show the estimated net income and net operating income for the year 1942. It also contains statistical data as to estimated sales and statistical data as to taxes and so forth.

Q. And revenues and so forth? A. That is correct.

Q. What part did you play in the preparation of that budget?

A. The budget was prepared under my supervision by several people, several persons employed by the Michigan Gas Transmission Corporation.

Q. And it represents the best judgment of yourself and the management with respect to the revenues and expenses and other items shown therein for the year 1942, does it not? A. That is correct.

Q. Will you produce a copy of that budget for our examination today?

Mr. Baldridge: May I ask a question there, Mr. Littman?

Mr. Young, has this budget been approved by the Board of Directors?

The Witness: No, it has not been. It is submitted as a [fol. 7973] routine matter by us.

Mr. Baldridge: So that it has not yet been adopted by the Corporation as such, either by the former Board of Directors or the new Board?

The Witness: Of course, it was submitted to New York.

Mr. Baldridge: You did not answer the question, it has not been approved either by the former Board of Directors or by the new Board?

The Witness: Not to my knowledge.

By Mr. Littman:

Q. Has it been submitted to either the new Board or the old Board of Directors directly?

A. Not to my knowledge.

Q. Has it been submitted to the management?

A. The routine in connection with submitting those operating budgets is to submit them to the accounting department or the Columbia Gas and Electric Corporation in New York.

Q. That has been done?

A. That has been done.

Mr. Baldridge: Don't you mean Columbia Engineering Corporation?

The Witness: I do.

By Mr. Littman:

Q. Suppose you tell us to whom this budget has been submitted.

[fol. 7974] A. I do not know, I do not believe I can name the person at the present time. It is one of the treasurers in the Columbia Engineering Corporation. There are several of them over there and I cannot name the specific one at this time to whom it was submitted.

Q. And it is a routine matter to submit the budget for each year to the Columbia Engineering Corporation?

A. To a person employed by the Columbia Engineering Corporation.

Q. And that is the company, namely, the Columbia Engineering Corporation, which passes upon the budget on behalf of the management, to-wit, on behalf of Columbia Gas & Electric Corporation?

A. I do not know exactly what use they make of it after they receive it, Mr. Littman. I presume they use it for the purpose of making forecasts, but exactly what use they make of it I do not know.

Q. Is it routine for the Board of Directors of Michigan Gas Transmission Corporation to approve these budgets each year?

A. I do not know whether it is routine or not. At no time while I was a Director of this company was an operating budget submitted to the Board of Directors for approval.

Q. So the fact that the Board of Directors of Michigan Gas Transmission Corporation has not approved this budget is not any different than the situation that has ob-
[fol. 7975] tained in the past years?

A. Well, I was lately made a member of the Board of Directors. Now, it might have been the intention to submit that for the approval of the Board of Directors at a later date, I do not know that.

Q. And it might not?

A. It might not. I do not know what the procedure is.

Q. And the Michigan Gas Transmission Corporation has been operating under and in accordance with the 1942 budget since January 1, 1942, has it not?

A. Well, I would say yes, up until the time of the transfer.

Mr. Baldridge: Mr. Littman, may I interrupt with a question there? I do not like to keep interrupting, but I think we make better progress in this way.

Mr. Young, when was the budget sent to Columbia Engineering Corporation?

The Witness: I think that the date of it is early December and just when it was sent I do not know.

Mr. Baldridge: Of course, the functions of Columbia Engineering Corporation as to matters of Michigan Gas Transmission Corporation would be terminated as of February 6?

The Witness: Yes.

Mr. Baldridge: Except for a few odds and ends necessary in order to provide a smooth transfer from one management to another?

[fol. 7976] The Witness: As I understand it, there will be adjustments made as of a certain date.

By Mr. Littman:

Q. You cannot tell us what they are, can you?

A. No, I cannot. I think they are adjustments which will result from things that might be done between now and the date set to make that final adjustment, such as bills for services incurred prior to February 6 and things like that which have been paid subsequent to February 6.

* * * * * * * *

[fol. 7984] By Mr. Littman:

Q. Mr. Young, in your testimony this morning, you referred to a company called Columbia Engineering Corporation, did you not? A. That is correct.

Q. Does that corporation render services to Michigan Gas?

[fol. 7985] A. It does.

Q. What is the nature of those services?

A. It did render services prior to February 6. The nature of the services was largely auditing, tax, engineering service.

Q. Has that company been rendering management services to Michigan Gas Transmission Corporation?

A. There is a contract, or there was a contract, rather, between Columbia Engineering and Michigan Gas Transmission Corporation, and if I recall correctly, the services of certain people in New York who rendered management service to the Michigan Gas Transmission Corporation were billed at cost.

Q. In other words, it has rendered management services to Michigan Gas Transmission Corporation?

A. Only in the person of Mr. Beckjord, I believe.

Q. What position does Mr. Beckjord occupy in Columbia Engineering Corporation?

A. He is President.

Q. That corporation is what is known as a mutual service company, is it not?

A. I am not familiar with the designation.

Mr. Baldridge: I object to that, Mr. Littman, because that is asking for a very technical designation. It is a service corporation—

Mr. Chamberlain: (Interposing) Isn't that the legal [fol. 7986] terminology for it?

Mr. Baldridge: No, I think not, because the service company's stock is held by Columbia Gas and Electric Corporation and the service contracts and the revival of Columbia Engineering Corporation were approved by the Securities and Exchange Commission.

It is a service corporation as that term is generally used but I do not think it is fair to say it is a mutual service company because the stock is all held by the holding company in this particular case.

Mr. Littman: Does it render management services to Michigan at cost?

Mr. Baldfidge: It does.

Mr. Littman: Is that your understanding, Mr. Young?

The Witness: Yes, that is my understanding.

By Mr. Littman:

Q. Will you please turn to Exhibit No. 95, entitled, "Estimated Cost of Completing Work in Progress at June 30, 1941, and Estimated Gross Income to be Derived from the Completed Projects".

In this exhibit, you have listed a number of projects that were in the process of construction as of June 30, 1941, have you not? A. That is correct.

Q. Will you state how much of this construction was [fol. 7987] completed as of December 31, 1941, or perhaps you might state what remains uncompleted as of that date.

A. I can give you the figures, Mr. Littman, that is, the total estimated project expenditure and then the amount expended during 1941. Will that be adequate.

Q. Very well.

A. The first item, routine minor additions to transmission system property as of December 31, 1941,—$17,086 had been expended;

On the next item, routine minor additions to general property—$6,169 had been expended;

On the next item, expenditures applicable to 24-inch loop line construction in 1940, recorded on the books in 1941,—$74,063;

The next item, expenditures applicable to construction of Edgerton compressor station in 1940, recorded on the books in 1941,—$24,866 were expended;

Construction of central warehouse near Bluffton, Indiana—$26,438 were expended;

The next item, construction of measuring and regulating stations near Monroe, Michigan,—$6,065 were expended.

Q. Apparently you expended more than you had estimated?

A. In some cases, we overran our budget, that is correct.

Q. This is one of those instances?

A. That is correct.

[fol. 7988] The next item, construction of measuring and regulating station near Elwood, Indiana—$4,818;

The last item; installation of two additional units at Edgerton compressor station—$302,102.

I have a total here which I have not personally checked myself, of $461,607.

Q. Can you advise us which of these projects had been completed at December 31, 1941? The reason I ask is because some of these figures which you have given exceed the total estimated project expenditures shown in Column B of Exhibit 95 and others are slightly under the amounts shown in that column. In other words, we could not tell from the figures which you have just read into the record whether the particular project was completed:

A. All of the projects have been completed except the last one, installation of two additional units at Edgerton compressor station.

Q. You have expended $302,102 for that, have you not?

A. That is correct.

Q. Down to December 31, 1941?

A. That is correct.

Q. Now, how much of that project remains to be completed?

A. I do not have the exact figure, Mr. Littman, but possibly $30,000 remains to be paid to the contractor to complete that project.

[fol. 7989] Q. Has the contractor completed the project to date?

A. Except for some minor items, yes.

Q. But $30,000 of the total cost of this project called "Installation of two additional units at Edgerton compressor station", was not recorded on the books of Michigan Gas as of December 31, 1941?

A. That is my understanding, yes. That is an approximate figure.

Q. Now, we may conclude from your testimony that with that single exception, all of the projects set forth in Exhibit 95 have been completed and the amounts which you have read into the record are now recorded in the capital accounts of the company and were so recorded at December 31, 1941?

A. That is my understanding, yes, sir.

Q. Will you please turn to Exhibit No. 96 entitled, "Estimated Costs of Rate Case Proceedings before Federal Power Commission."

Now, this exhibit shows that at the time it was presented, you estimated the cost of the rate case proceedings before the Federal Power Commission to be $57,900, is that correct?

A. That is correct.

Q. Are you now in a position to state how much of this amount has been actually paid?

A. No; I am not at this moment, Mr. Littman.

Q. Will you please ascertain for me the amount of these rate case expenses that have ben paid by Michigan [fol. 7990] Gas to December 31, 1941, and is recorded on the books of the company? A. I shall.

. . . . . .

[fol. 7991] Q. Mr. Young, is it a fact that Michigan Gas Transmission Corporation paid dividends on its common stock of $649,600 in the year 1941 which amounts to 29 percent of the book value of that common stock?

A. I do not know that that is the correct figure. I know [fol. 7992] that dividends were paid but I do not know what the correct figure is.

Q. Does that sound about right to you?

A. $629,000, you say?

Q. $649,600.

A. $649,000—subject to checking the record with regard to one particular dividend that was paid, that sounds approximately correct. There was a dividend paid then that was under circumstances which I am not entirely familiar with at the present time.

Q. Is it a fact that Michigan Gas Transmission Corporation has $2,240,000 of common stock outstanding?

A. That is correct.

Mr. Wheat: You mean par value?

Mr. Littmann: Stated value.

The Witness: Of stated value, yes.

By Mr. Littman:

Q. And that has remained constant from 1936 down to date? A. That is correct.

Q. That is the paid-in value, is it not, $2,240,000?

A. I believe that is, yes.

Q. The dividend of $649,600, of course, represents 29 percent of that paid-in value?

A. That sounds approximately right, if my mental arithmetic is correct.

[fol. 7993] Q. Isn't it a fact that Michigan Gas Transmission Corporation has, since the year when it began to operate its transmission lines down to date, paid the sum of $1,993,600 in dividends or 89 per cent of paid-in value of its common stock?

A. I do not know whether that is correct or not.

Q. I presume Mr. Spitznagle, the accounting witness, will be more familiar with those facts?

A. Yes, I believe that he would.

Q. They do not sound far off to you, do they?

A. The latter one covers four or five years and I cannot give you an answer to that without checking it.

Q. I might state that that is what our investigation of the books shows. We shall interrogate Mr. Spitznagle further on that subject.

Mr. Young, you also testified on direct examination with respect to an allowance annually to be made in rates in the amount of $38,000 for what you have termed "extraordinary or abnormal maintenance", did you not?

A. That is correct.

Q. You did not submit an exhibit on that subject, did you? A. I did not.

Q. Is my understanding correct that $30,000 of this amount is for pipe line maintenance, $6,000 is for extraordinary or abnormal maintenance of compressor stations and $2,000 is for renewals in measuring and regulating stations and on field equipment? Is that right?

[fol. 7994] A. That is my recollection.

Q. How much of this so-called extraordinary or abnormal maintenance expense did Michigan Gas incur in the year ended June 30, 1941?

A. I think that I put in my testimony that it occurred as an item of expense in that period of about $4,500 for the repair of a slip on a bank.

Q. I believe your testimony was $4,572. A. Yes.

Q. Now, with respect to the $38,000 claim for extraordinary or abnormal maintenance, so-called, am I correct in understanding that this is the total amount that you anticipate will be required in each of the succeeding years?

A. I feel that as this property grows older more money will have to be spent upon it to keep it in condition and that in my judgment is a reasonable figure to cover those expenditures, yes.

Q. Now, do you expect the amount of $38,000 to be spent in the year 1942? A. It may not be.

Q. How about the year 1943?

A. It may be twice as much in the year 1943.

Q. And it may be nothing?

A. It may be nothing, it is a judgment figure.

[fol. 7995] Q. Now, a while ago you mentioned that the sum of $4,572 had been expended for so-called extraordinary or abnormal maintenance for the year ended June 30, 1941. A. Yes.

Q. How much was expended in the last six months of 1941 for this character or maintenance?

A. To my knowledge, nothing.

Q. Will your state when this item of $4,572 was incurred? A. In the fall of 1940, as I recall it.

Q. That money was spent to repair and reinforce a steep bank where a slip had occurred. Is that correct?

A. That is correct.

Q. Where had that slip occurred?

A. It was on the 24-inch line, western Indiana, at a point near Route 36.

Q. About how many miles east of Dana?

A. I would judge about five miles east of Dana.

Q. Did this slip occur on the new loop line or on the old line? By "old line" I mean the one that had been constructed in 1930.

A. I am quite sure that occurred on the 24-inch line, which was the new pipe line.

Q. And when was that pipe line constructed?

A. In 1939.

Q. Will you describe the nature of this slip of the line?

[fol. 7996] A. When that line was constructed we had built concrete breakers there. I will explain it this way: Bags filled with cement and sand were piled up at intervals along the pipe line on this steep bank.

Q. When?

A. 1939, when this line was constructed. Those breakers were put in there for the purpose of preventing the cover from washing off the pipe lines. However, in this particular case the breakers did not serve that purpose. They collapsed, evidently, by reason of the head of water which stood behind them and they were not serving the purpose for which they were intended, so we had to resort to other means in order to prevent the erosion of the covering of the pipe line.

Q. Did you have a break in the line?

A. No, no break.

Q. What type of work was done for which the amount of $4,500 was expended?

A. We did an unusual type of work there; not so unusual for this kind of a job. We engaged a landscape gardener to sow this bank or this hill,—and it was quite sizeable,—with trees and plants so that there would be roots from these trees and plants which would prevent the erosion of the soil there.

We gave up the idea of trying to construct these breakers, which I have mentioned, in this particular location.

Q. Was any work done on the line itself?

[fol. 7997] A. None.

Q. So this amount was expended for what you might call protection against erosion?

A. That is correct.

Q. How was this sum of $4,500 charged on the books of Michigan Gas Transmission Corporation?

A. It was charged to maintenance.

Q. As an operating expense?

A. As an operating expense.

Q. In the year 1940 was there any other so-called extraordinary or abnormal maintenance expense incurred other than the $4,500 amount that you just described?

A. Not to my recollection, no.

Q. And there was not any in 1941, was there?

A. No.

Q. Was there any in 1939?

A. No.

Q. 1938?

A. No.

Q. How about 1937?

A. Yes, there was an item of about $7,000 charged to expense at that time, resulting from the repair of these pipe line breaks at the end of January 1937.

Q. Those are the breaks in the line that are described in your Exhibit 77, Pages 15 to 17, inclusive, is that correct?

[fol. 7998] A. That is correct.

Q. Your company has never budgeted itself for any such item as "Extraordinary or abnormal maintenance" in the past, has it?

A. It has not.

Q. As a matter of fact, no such item appears on the books of your company as such?

A. No.

Q. Does your 1942 budget include any such item?

A. No, I do not recall that it does.

Q. Mr. Young, referring to the two breaks that occurred in Line A in 1937, which you are describing in Exhibit 77, isn't it a fact that those two breaks were occasioned by reason of overloading the line?

A. I think in this exhibit here—

Q. (Interposing) You refer to Exhibit 77?

A. Referring to Exhibit 77, that subsequent to the time that those breaks occurred I learned the line had been constructed for a working pressure of 325 to 350 pounds and at the time the break occurred, the first break occurred at 440 pounds on the outlet of Montezuma compressing station.

Q. In other words, at the time the break occurred, Michigan Gas Transmission Corporation was operating at a pressure in excess of that for which the line was originally designed?

A. That is correct, although my understanding at the [fol. 7999] time was that the line was good for 450 pounds.

Q. But subsequent tests showed that not to be the fact?

A. Well, of course, this experience demonstrated that, and in addition to that I had occasion to go over the line with the person who built it, after these breaks occurred, and he told me that the line had been built for 325 to 350 pounds.

Q. Well, don't you state at pages 15 and 16 of your written testimony in Exhibit 77, "The construction superintendent in charge of the 20-inch pipe line east of Raccoon Creek with whom the construction was discussed at a later date stated that the pipe line had been constructed for an operating pressure of from 325 to 350 pounds per square inch gauge"?

A. That is a fact.

Q. Well, it is a fact that you were operating that line at pressures in excess of 350 pounds?

A. Yes. At the time the breaks occurred the pressure out of Montezuma station was 440, that is, the first break the pressure out of Montezuma station was 440 pounds.

Q. And what was it when the second break occurred?

A. That is shown on Page 15 of Exhibit 77. The pressure when the second break occurred was 375 pounds.

Q. Well, does your allowance of $38,000 contemplate the operation of your lines at pressures in excess of those for which they are originally designed?

A. No, not at all.

[fol. 8000] Q. Now, if the Commission were to allow for operations and maintenance for the year 1942 and 1943 and in the future the same amount as that which was recorded on the books of your company in 1940, there would be automatically included at least the sum of $4,500 for extraordinary maintenance, would there not?

A. That is correct, that was included in the pro forma statement that was put in before-hand.

Q. What was included?

A. This $4,000.

Q. Yes. To the extent that it was included in the operations and maintenance expenses in the pro forma statement, there is a duplication in your extraordinary or abnormal maintenance?

A. I believe I stated in my direct testimony that the amount was to be $43,500, if I recall correctly. I gave consideration of that, I recall, but I do not recall just how it was covered in my previous direct testimony.

Q. I have no recollection of any such figure as $43,000 in your previous direct testimony. I understood you to say a moment ago, Mr. Young, that $38,000 was all that was required for extraordinary or abnormal maintenance.

A. Over and above what was included in the pro forma, year ending June 30, 1941.

Q. Well then, in reality you are asking for an allowance of $42,572 per year for this item, are you?

[fol. 8001] A. That is what it amounts to, yes.

Q. Now, I would like to discuss with you for a moment the $30,000 per annum for the so-called extraordinary and abnormal maintenance on pipe lines.

A. Yes.

Q. Is it contemplated that that character of expenditures are those which will be charged to expense as maintenance?

A. Unless some of these repairs that have to be made would be in the nature of renewals. In that case they would be handled in another way.

Q. Well, you have given a list of items on Page 1872 of the transcript which is comprehended by your estimate of abnormal and extraordinary maintenance for pipe lines.

A. What number was that, please, Mr. Littman?

Q. 1872. Now, the first of these is repair of large washouts caused by high water and heavy rains. What do you mean by a "large washout"?

A. Well, I would say that that would be the type that we had at this hill that I mentioned a few moments ago. There was a considerable washing away of the soil covering the pipe line by reason of heavy rains.

Q. You are here speaking of the washout of the earth above the pipe?

A. That is correct.

Q. Not of the pipe, itself?

[fol. 8002] A. Well, it might be the pipe, itself.

Q. Well, suppose you had a washout of the soil or erosion of the soil which does not entail any replacement of pipe. Would all of those costs be included in this $30,000 figure?

A. That does not involve any replacement of pipe, did I understand you to say?

Q. My hypothetical example did not involve any.

A. If there was a washout which does not involve any replacement, I would say that that should be charged to maintenance, yes.

Q. And you in your $30,000 item include such an item?

A. It is intended to, yes.

Q. Now, suppose you have some replacements in addition to that. Let us suppose one length of pipe is required to be replaced by reason of a washout. Would your estimate cover such an item?

A. Yes, it would. That is, if that is a renewal and I do not know whether it is or not. That is something that I have not checked in the record to find out.

Q. Suppose you have two lengths of pipe that are washed out and are required to be replaced. Would your allowance cover such an item?

A. It is intended to, yes.

Q. You would say the same for three, four, five or six lengths, would you?

[fol. 8003] A. If those are renewals, yes. I do not know whether those are property units or not, but if so I would say that this contemplates covering that.

Q. What do you mean by a "renewal"?

A. Well, again, I am not an accountant, but my general understanding of a renewal covers the replacement of some item of equipment or material which is listed in the classification of accounts as a property unit.

Q. You mean a replacement?

A. Yes.

Q. If you have a length of pipe that is taken up and replaced by reason of corrosion, do you call that a renewal?

A. If the length of pipe is a property unit.

Q. Your allowance then covers not only renewals but the other character of expense known as maintenance?

A. That is correct. I think that Mr. Spitznagle amplified that later.

Q. What size of renewal is contemplated by your $38,000 estimate? Suppose you give us the largest one that you had in mind when you made this estimate.

A. Well, this was a judgment figure, Mr. Littman. I do not think that I could put my finger on anything that would cover this situation.

Q. You cannot name any such item?

A. Well, any items that are defined as units of prop-
[fol. 8004] erty in the Classification would be covered by this item.

Q. Any items that are not called a unit of replacement are also covered by the item?

A. I have termed those "maintenance". That is as an engineer and not as an accountant I have said that this amount of money which I have asked for here is what, in my judgment, I think is necessary to cover these—

Q. (Interposing) I recall your testimony to that effect on direct examination and that is why I am asking you to describe the items that you had in mind rather than to tell me precisely how it is to be charged.

A. I see.

Q. Now, you cannot tell me or describe for me the largest item comprehended by your entire estimate, can you?

A. No, I do not believe I can. It is whatever is defined in the Classification of Accounts as units of property which apply to this property.

Q. Now, this allowance also covers repair of pipe line and river crossing breaks, does it not?

A. That is right.

Q. According to your testimony at transcript 1872, is that right?

A. Will you state that again, please, Mr. Littman?

Mr. Littman: Read the question, please.

(Whereupon, the pending question was read by the reporter.)

[fol. 8005] The Witness: That is correct.

By Mr. Littman:

Q. Now, what is the smallest item of repair of pipe line that is comprehended by your estimate?

A. Well, any item of pipe line repair is comprehended by necessity.

Q. Suppose you have an ordinary leak caused by corrosion that requires merely a repair by a leak clamp. Would that be included within this estimate?

A. No, that would not be included in this estimate because we have had repairs of that nature to make right along. I would say that our record of maintenance cost heretofore would reflect the cost of making such repairs as that.

Q. What kind of repairs to pipe lines are comprehended by this item "Repair of pipe line",—well, "Repair of pipe line and river crossing breaks"?

A. Well, I would say that that comprehends major pipe lines, perhaps, involving a renewal of some pipe.

Q. Well, a repair is not a renewal, is it?

A. Well, I have so termed it. I do not know whether that is a correct terminology.

Q. You have also included here the cost of applying cathodic protection where the nature of the soil and inspection of the pipe indicates that the pipe is being actively corroded and might corrode to a serious extent if [fol. 8006] any corrosive measures are not taken. Does your estimate contemplate covering that situation?

A. There is some difference of opinion as to the proper method of charging that item. I would say that this amount of money which I have asked for at least contemplated the renewal of cathodic protection. There is a question of whether it is required to cover new installations by cathodic protection.

Q. Does Michigan Gas Transmission Corporation have any cathodic protection on its lines now?

A. Yes, it does. There is an experimental cathodic protection installation at the present time. It is not of the conventional type. Yes. There is just the one.

Q. Just the one?

A. One installation, that is correct.

Q. How much did that installation cost?

A. My recollection is that it cost between $3,000 and $4,000.

Q. Well, since it is an experiment it may or may not be successful, depending on the outcome of the experiment, is that correct?

A. That is correct.

Q. Nonetheless, your estimate covers it, does it?

A. As I say, there is some question with regard to how these new cathodic protection installations should be charged and there is a question in my mind at this time

[fol. 8007] as to whether a new cathodic protection installation should be charged to this amount of money which I have asked for to cover special situations.

Q. How is this particular cathodic protection charged on the books of Michigan Gas Transmission Corporation?

A. It has not been charged as yet. We are holding that in an account or will be holding it in an account pending a ruling as to the method by which it should be charged.

Q. Well, if it is charged to capital, what effect would that have on your estimate?

A. I do not think it would have any effect on the estimate because there should be some provision in this account to take care of the renewal of that cathodic protection or, at least, the parts of it that need to be renewed.

Q. Well, you take care of that out of your depreciation reserve for short-time property, wouldn't you?

A. I do not think so.

Q. $6,000 of the $38,000 is for "extraordinary or abnormal maintenance" of compressor stations, is that correct?

A. That is correct.

Q. Now, will you name the items that are comprehended by this estimate?

A. Well, I can name a number of items that might be comprehended in that $6,000.

Q. Well, you are not sure about whether they are or are not.

[fol. 8008] A. I am not sure what they will be. A power cylinder, compressor cylinder, connecting rod, crank—

Q. (Interposing) A what?

A. A crank.

Q. What is that?

A. An engine crank, crankshaft.

Q. Crankshaft. What else?

A. Well, I could go on, perhaps, and name a hundred parts of the engine that might be covered by this item which I have referred to.

Q. Those items are the ones which immediately come to mind?

A. Those are major items that come to mind. There are a great many renewals which are not units of property and which would be handled as maintenance items.

Q. Would it cover a cylinder liner?

A. If that is,—well yes, it would cover a cylinder liner; whether it is a renewal or main item it is intended to cover that, however, at least, most or some of our engines do not have cylinder liners.

Q. Would it cover the building up of a piston rod?

A. We do not build up piston rods. We do not believe it is good practice.

Q. What do you do?

A. We replace them.

[fol. 8009] Q. What is "abnormal or extraordinary" about these items of maintenance at a compressor station which you have just mentioned?

A. They are items which have not occurred thus far in the life of the property which I feel, as an engineer, will occur during the balance of the life of the property and some provision should be made to take care of it.

Q. With respect to your depreciation allowances which you have set up on the books of the company, haven't you set up depreciation allowances to cover items of replacement? You call it a depreciation and depletion reserve, do you not?

A. That is the terminology used in the financial statement, I believe, but I do not believe that that checks with the presentation of this case for rate making purposes. That is, we have set up a fund intended to amortize the property over its finite life and this amount of money which I am asking for is to cover renewals and maintenance which have not occurred heretofore but which, in my judgment, will occur in the future.

Q. In other words, your estimate was made for purposes of this proceeding so as to tie in with the allowance for amortization which has been set up in the pro forma statement, isn't that right? A. That is correct.

Q. And was not intended to be used in connection with the company's own depreciation figures?

[fol. 8010] A. No, the system—and again, I am not an accountant, understand—but the system of bookkeeping prescribed for this company I do not believe would reflect that sort of thing as it was set up in this proceeding for the rate case.

Q. Then I understand your testimony to be that if the company's depreciation allowances were made in this

proceeding, then there would not be any necessity or need for an inclusion of this $38,000 estimate, would there?

A. Will you please read that question?

(Whereupon, the pending question was read by the reporter.)

The Witness: Provided the allowances which are ordinarily made are adequate, yes.

By Mr. Littman:

Q. And, in your opinion, they are adequate, are they not?

A. I made the statement this morning that they were based on certain conditions existing, that is, they were, in my opinion, based on certain conditions existing.

Q. In other words, this $38,000 estimate was made for rate case purposes to be synchronized and tied in with the claim in this proceeding for amortization as set forth in the pro forma statement. Is that right?

A. It was made to be used in the pro forma statement in conjunction with the amortization which was set up in that statement.

Q. And that amortization claim which appears in the [fol. 8011] pro forma statement was presented for purposes of this proceeding by Mr. Spitznagle and Mr. Green, was it not? A. That is correct.

Q. And does not reflect the system which has been set up on the company's own books?

A. I do not believe that it does.

* * * * * * * *

[fol. 8018] Mr. Littman: If your Honor please, I should now like to take up Mr. Young's exhibits. Mr. Young's Exhibits 77 and 78 had heretofore been admitted in evidence, I believe. Is my understanding correct, if your Honor please?

Trial Examiner: That is the record as it appears in my minute book. These exhibits marked for identification Exhibits Nos. 77 and 78 were received in evidence on November 18.

[fol. 8019] Mr. Littman: We have no objection to Exhibit No. 95 entitled, "Estimated Cost of Completing Work

in Progress at June 30, 1941, and Estimated Gross Income to be Derived from the Completed Projects".

I might state in that connection that we have requested Mr. Young to supply us with a copy of the company's 1941 financial statement which we propose to offer in evidence. That financial statement will show the company's plant down to December 31, 1941, and will, therefore, include all except approximately $30,000 of these projects that were in the course of construction at June 30, 1941, and which have since been virtually completed.

Trial Examiner: What have you to say with reference to the exhibits marked for identification as Nos. 79 and 96, both of which appear to have been identified by Mr. Young?

Mr. Littman: We have no objection to Exhibit No. 79 but we do have an objection to Mr. Young's Exhibit No. 96. We have heretofore made an objection to Exhibit No. 96 which contains an estimate of rate case expense.

The reason for our objection is we believe that rate case expenses may not be used in testing the reasonableness of existing rates. We object to this exhibit for the reasons stated by Mr. Justice Cardoza in the West Ohio Case.

Trial Examiner: Have you your citation handy, just for the record, to make the reference complete?

[fol. 8020] Mr. Littman: I am sorry, I do not have it with me.

Mr. Wheat: I may be able to give it to you, sir.

In that connection, if I may be indulged for a moment—

Trial Examiner: (Interposing) You can supply that reference?

Mr. Wheat: I can supply it and will supply it in a moment.

It has been noted that Mr. Littman indicated that he would register an objection to Exhibit 96 and he stated the nature of his objection on transcript Page 1871. He said:

"This is rate case expense. We would like to reserve an objection to this exhibit on the ground that rate case expenses are not to be considered in this case, at least

for the purpose of testing the reasonableness of the present rates."

I understand that is the ground upon which he has made his objection for the first time.

Mr. Littman: That is one of the grounds.

Mr. Wheat: Presumably, Mr. Littman's objection will extend to the allowance of rate case expense to Panhandle Eastern as well and for that reason, I think if it meets with your approval, we might go into that matter.

Trial Examiner: Very well.

Mr. Wheat: The allowance of proper rate case expense has been so uniformly upheld by commissions and courts that I think it is unnecessary to cite the many decisions on the subject. Sometimes the question arises as [fol. 8021] to the proper period of amortization of such expense, but that such expenses are allowable has been reiterated time and again.

Now, we suppose that Mr. Littman may have in mind, as the basis for this objection, to claim that the investigation by the Commission, itself, in this proceeding will show that present rates are unreasonable and that, therefore, expenses incurred by the companies to defend unreasonable rates are not allowable. Of course, no one can possibly know, until the decision of the Commission is actually rendered in writing, whether this Commission will hold the existing rates are reasonable or unreasonable, and certainly we do not believe that it is counsel's function to attempt to pre-judge that question.

In any event, the decisions of the Courts do not sustain that theory and, as a matter of fact, are directly to the contrary. I would like to cite, for example, Driscoll, et al. v. Edison Light & Power Company, 307 U. S. 104, in which the Pennsylvania Commission had disallowed rate case expenses on the ground that, as it had found the rates to be excessive, the company should not be allowed the amount incurred in defending them. This holding was specifically overruled by the United States Supreme Court for it said:

"Even where the rates in effect are excessive, on a proceeding by a commission to determine reasonableness, we

are of the view that the utility should be allowed its fair and proper expenses for presenting its side to the Commission."

[fol. 8022] Now, Mr. Littman may perhaps seek some support for his contention in an earlier decision of the Supreme Court, namely, in West Ohio Gas Company vs. Public Utilities Commission, at 294 U. S. 63. I think that is the one he probably had in mind. That case, however, is also contrary to his contention.

In that case, the Court found that, although the Commission and the Court below had intended to allow rate case expense, they had not, in fact, done so, and the Supreme Court said that this constituted error, observing, in respect to the company there involved, that:

"The charges of engineers and counsel, incurred in defense of its security and perhaps its very life, were as appropriate and even necessary as expenses could be."

Not only that, but the Supreme Court in this west Ohio case declared that: "A different case would be here if the company's complaint had been unfounded, or if the cost of the proceeding had been swollen by untenable objections." Of course that may be seized upon, that particular sentence might be seized upon to indicate some support for its contention similar to that which counsel has apparently made.

Mr. Littman: That is what I am seizing on.

Mr. Wheat: But a reading of the entire opinion, as well as a comparison of the West Ohio Case with the later Edison Case, we think, conclusively demonstrates that this dictum in the West Ohio Case does not support a conten-[fol. 8023] tion that, where existing rates are found unreasonable, rate case expenses should not be allowed.

In the West Ohio Case, the company involved appealed from a rate-fixing ordinance of the City of Lima, Ohio, to the Ohio Commission. The Ohio Commission prescribed a schedule of rates higher than that fixed in the ordinance, but lower than that requested by the company. The company's complaint to the Commission was, as the

Court held, at least in part justified. In the Edison Case, the Pennsylvania Commission had disallowed rate case expense because it had found existing rates unreasonable, and this action was set aside by the Supreme Court. I think that case has been entirely overlooked by counsel.

The opinion in the Edison case appears to confine the remarks of the Court in the West Ohio case concerning "a different case" which I have just read to your Honor, where a company's complaint was held "unfounded" to litigation in the Courts for in the Edison Case, which is subsequent, as you will recognize, the Supreme Court said:

"We do not refer to expense of litigation in the courts. 'A different case would be here if the company's complaint had been unfounded or if the cost of the proceedings had been swollen by untenable objections.'" (Citing in a footnote the West Ohio Gas Company v. Commission (No. 1), 294 U. S. 63, 74, Case of Wabash Valley Electric Company v. Young, 287 U. S. 488, 500.)

Now, that case was a case where that portion of the com- [8024] pany's claimed rate case expense was disallowed which was incurred for purposes extraneous to the proceeding under consideration, and that supports the contention which we are now making that proper rate case expenditures are properly allowable.

I think I should add that when the Edison Case reached the Pennsylvania Commission again, after it had gone through the United States Supreme Court and after the United States Supreme Court had issued this strong decision, which is directly contrary to the suggestion made by counsel for the Commission, that Commission, to-wit, the Pennsylvania Commission, reversed its former action in disallowing rate case expense incurred in the Commission proceeding, and, in obedience to the decision of the Supreme Court of the United States on that question, allowed that expense and I refer now to the decision to be found at 40 P. U. R. (N. S.) 146, the discussion being at Pages 169 to 172.

We submit that rate case expense is, in every sense, a proper and necessary allowance and that an exhibit showing estimated rate case expense is, of course, a proper portion of the testimony in a case such as this.

Mr. Littman: May I inquire, Mr. Wheat, is it necessary to take rate case expense in consideration in testing whether the rates are reasonable?

Mr. Wheat: Precisely. That is just what the United States Supreme Court said in the opinion which you ap- [fol. 8025] parently overlooked entirely.

Mr. Littman: If you Honor please, I have not ever looked a thing as counsel says. Perhaps my position might require some further comment, in view of the decisions that Mr. Wheat has read.

Now, in the West Ohio case the ordinance fixing the rates at Lima was held by the United States Supreme Court to be unreasonable and confiscatory. In that event it has always been the law that rate case expenses are allowable, because, obviously, the amount that the company had expended in defense of its life, so to speak, was allowable to it where its contentions had been found to be justly made and reasonable and where the expenses were not found to be swollen with untenable amounts. So that case is no authority for the proposition cited by counsel because there we had an unreasonable ordinance. We had there a finding that the rates of the company were reasonable.

Now, the law has always been, at least up to the time that the Driscoll Case was decided, that you never include rate case expenses for the purpose of determining, in the first instance, whether the rates are reasonable. Now, that must necessarily be so because the first inquiry that we have is this: Are the rates of the company reasonable?

Now, if by the expenditure of large and vast sums of money in connection with rate case proceedings, the com- [fol. 8026] pany should expend large sums, you certainly cannot include those in their operating expenses for the purpose of determining, in the first instance, whether their rates are reasonable or not.

What you do is, first, determine whether the rates are reasonable and then, if it is found that the rates are reasonable, an allowance is made for rate case expense to be amortized over a reasonable period in the future. However, if the rates are found to be unreasonable, then the costs, incurred in connection with stalling and delaying

and fighting an investigation instigated for the purpose of determining whether or not those rates are reasonable, are not allowable. I say that in the face of the Driscoll decision.

The Driscoll decision is one which, to my mind, is wholly untenable and I hope some day that I will be accorded the privilege of asking the United States Supreme Court to reconsider the position it took in the Driscoll case.

Mr. Culton: Meanwhile, do you think we should pay any attention to the Supreme Court of the United States?

Mr. Littman: Just a minute, Mr. Culton, I will make myself entirely clear.

I hope it will also be accorded my privilege to assist in asking the United States Supreme Court to overrule such cases as Smythe against Ames and perhaps some others, but that is beside the point; but what I want to do here is to preserve the Commission's objection to this exhibit so that [fol. 8027] later on it may not be said that we sat idly by and let it go in.

Mr. Wheat: Well, we will stipulate to that, that you did not do that, Mr. Littman.

Mr. Littman: That we did not do what?

Mr. Wheat: That you did not sit idly by.

Mr. Littman: This is the reason for my objection: I simply want to preserve the question for reconsideration. It has always been the law, if your Honor please, that the man who loses the lawsuit bears the costs and if the Commission should ascertain in the final instance,—and we are not prejudging that at this time,—if the Commission should ascertain in the final instance that these rates are unreasonably high and are unconscionable and that the reasonable rates are considerably below those which are now being charged, I then say in that event I hope I shall be given the privilege of arguing that the costs incurred in connection with a futile attempt on the part of the company to keep those rates high and unreasonable should be disallowed and I think that the matter can be presented some day soon to the Supreme Court in that light and that they will reconsider their decision in the Driscoll case. I

merely say that we wish to preserve the question here and we, therefore, object to this exhibit.

Trial Examiner: Let me ask, Mr. Wheat, whether it is your view that the Commission is bound to take any action whatever concerning rate case expenses in its decision in this case?

[fol. 8028] Mr. Wheat: Why, certainly, we think it is.

Trial Examiner: In what way?

Mr. Wheat: We believe that rate case expense is necessarily allowable as a part of the cost of doing business. It has been so held by courts and commissions over many years and the dictum in the West Ohio case, as I have already shown at length, has no significance whatever at the present time. The Supreme Court has specifically overruled it, with respect to Commission cases and investigations by Commissions.

Trial Examiner: Your legal expense of the rate case investigation would either be operating expense or income deduction, would it not?

Mr. Wheat: It is operating expense, your Honor. It might be, of course, amortized over a period of years. Commissions have usually held where a large amount of rate case expense is involved that an amortization over three or five years or some period such as that is a proper way to handle the accounting for it and, of course, no objection could be made to proper methods of accounting, but what we are objecting to is the fact that counsel stands here with a decision of the United States Supreme Court flying in his very teeth and makes the statement that he does not like what the Supreme Court has said.

Well, a good many of us, possibly, have not entirely agreed. Sometimes we have not, when we were on the side of the minority, with the Supreme Court of the United States but, nevertheless, we are bound by the decisions of [fol. 8029] the Supreme Court so long as they remain the decisions of the Supreme Court.

The soundness of this entire determination seem too clear to us that we don't feel we need to argue it any longer. Counsel has admitted that the Driscoll case in con-

trary to his contentions and I, again, wish to read one sentence, "Even where the rates in effect are excessive, on a proceeding by a commission to determine reasonableness we are of the view that the utility should be allowed its fair and proper expenses in presenting its side to the commission."

Citing from the West Ohio case, there is this statement:

"The charges of engineers and counsel, incurred in defense of its security and perhaps its very life, were as appropriate and even necessary as expenses could be."

That is all we need to say on an objection such as that.

Mr. Littman: Well, it might be quite a bit of encouragement to these companies to spend sums of money unjustly and continue—

Mr. Wheat: (Interposing) Mr. Littman, that has been a situation which has faced commissions and both regulatory bodies and the regulated entities during the entire history of regulation in this country since it began many years ago and I have not burdened this record with the hundreds of decisions of State Commissions that have, as a matter of course, allowed rate case expense. I felt merely that we ought to bring the Commission's attention, how- [fol. 8039] ever, to the fact that the United States Supreme Court, itself, has definitely ruled upon this matter and we believe that this exhibit or any exhibit in a case like this, dealing with the rate case expenses is, of course, allowable.

I am not saying, Mr. Examiner, that this Commission cannot determine what is a reasonable rate case expense. Of course, it may. But that reasonable rate case expense is proper has been held so many times that we think the matter is finally determined.

Trial Examiner: I would like to inquire, if your view were accepted, if you would consider an estimate made evidently some time early in 1941 would be considered the most satisfactory evidence as to the cost of a rate case.

Mr. Wheat: Not at all.

Trial Examiner: We are now approaching March of 1942.

Mr. Wheat: Not at all, your Honor. The facts as to the actual expenses are, of course, the facts which the Commission will finally wish to have, but the estimate of what those expenses are to be, the best estimate of what those expenses are to be, the best estimate that can be made at the time the testimony is being given, is not inadmissible because it is an estimate, because throughout the proceedings we deal with estimates.

Mr. Lee: Now, your Honor, that was what I was going [fol. 8031] to ask Mr. Wheat. Isn't it inadmissible on the ground that it is not best evidence?

At the time it was submitted, it was an estimate. Now, they have actual costs, at least down to date. Also, in the production of those actual costs, wouldn't the Power Commission desire testimony that could be interrogated so as to aid them in arriving at the reasonableness of the charges?

Trial Examiner: Exhibit 96 for identification bears at the foot a note which says: "As of June 30, 1941, none of the above fees and expenses have been set up on the company's books."

Mr. Lee: That is right. Now, is it not objectionable at this point because it is not the best evidence?

Trial Examiner: We will receive in evidence at this time the exhibit presented by Mr. Young marked for identification as Exhibit 79 and we will defer the ruling as to exhibit marked for identification 96.

(Exhibit No. 79 Was Received in Evidence.)

* * * * * * * *

[fol. 8032] (Exhibit No. 95 Was Received in Evidence.)

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Mr. Baldridge: I do not think I have much to add in addition to what Mr. Wheat has said, but I should like to point out that when Exhibit 96 for identification was offered in evidence it was certainly the best evidence obtainable at that time.

Now, it may be true that we may desire to supplement that in the light of experience. For one thing, this rate

case has lasted longer than was expected at that time, certainly longer than was expected by us, but at the same time it seems to me that for the time being it is subject to being modified by definite expenditures as they can be determined.

Since the exhibit was offered in evidence and ruling was deferred pending cross examination it seems to me that it should be accepted at this time and put in evidence for what it is worth.

Now, one further word in connection with some of the [fol. 8033] matters that Mr. Littman stated. I should like to point out the difference between the cases arising in Ohio and the cases arising in the way that this case arose. The practice in Ohio is for a municipality to pass a rate ordinance which becomes prima facie the rate to be charged. That rate is attacked affirmatively by the utility if it is not satisfied by filing a complaint and an appeal within a certain length of time.

Mr. Littman: With the Ohio Public Utility Commission?

Mr. Baldridge: With the Ohio Public Utility Commission. If that is a complaint appealed as filed, it might well be said that the utility is, in a sense, the aggressor and is commencing the action and, to that extent, may not be defending itself, but in a proceeding such as this which was commenced by the City of Detroit and the County of Wayne by bringing adversary proceedings against the two defendant companies and, on the other hand, by investigation commenced by the Commission itself, it certainly cannot be said that the companies were the aggressors and they are certainly in the position of defending their rates and, in a sense, their very lives.

Mr. Littman: What would you say, Mr. Baldridge, if the utility—

Mr. Baldridge: (Interposing) Just let me finish, Mr. Littman. I do not want to interrupt you.

Incidentally, these rates were filed with the Federal Power Commission and presumably, are reasonable as a [fol. 8034] general rule as to rates because no other rate

can be charged under the law until they have been changed. There, again, the companies in defending those rates are in the position of defending their rates as they exist at this time. They have to defend.

Mr. Littman: They do not have to defend them, Mr. Baldridge.

Mr. Baldridge: You have to defend them if you believe in them.

* * * * * * * *

[fol. 8037] HENRY C. LEHN a witness, having been previously sworn, resumed the stand and testified further as follows:

Cross-Examination.

By Mr. Littman:

Q. Mr. Lehn, you have presented Exhibit No. 80 entitled "Report of Inspection by H. C. Lehn in Equipment of the Compressor Stations of the Michigan Gas Transmission Corporation", have you not? A. I have.

Q. Will you briefly state what equipment is covered by your Exhibit 80?

A. The main compressor units in each station, the [fol. 8038] auxiliary units furnishing the power for lights, power, pumping, the pumps, for furnishing the jacket water, the heating system, the water treating.

Q. Now, this equipment is located in three compressor stations? A. It is.

Q. Those are the only three compressor stations operated by Michigan Gas Transmission Corporation. Is that right?

A. That is right.

Q. Those are Montezuma compressor station, the Zionsville compressor station and the Edgerton compressor station. Is that right?

A. That is right.

Q. At Page 1 of your exhibit 80 you make the following statement: "The Worthington Pump and Machinery Corporation received a request from the Michigan Gas Transmission Corporation to furnish the services of an engineer for the inspection of the equipment in their compressor stations to determine the ratio between the value of the

equipment when installed and its value as of June 30, 1941". Is that correct? A. Correct.

Q. And is that what you have done?

A. That is what I did, yes.

Q. And the results of that study are shown in Exhibit 80? A. They are.

[fol. 8039] Q. Now, do you mean by the statements which I have read that you have determined the ratio between the value of the main compressor equipment at Montezuma compressor station when installed and its value as of June 30, 1941?

A. Well, not to be strictly exact, whether there would be any difference or not as of the date when I examined it, which, of course, is somewhat later. The request specified June 30.

Q. Well, aside from that point?

A. Aside from that—

Q. (Continuing) I am going to ask you this: Do you mean from the statement which I read you, for example, that the ratio between the value of the main compressor station at Montezuma compressor station when installed and its value as of June 30, 1941, is 96 percent?

A. That was the figure that I read. That was on the basis of my considered judgment.

Q. Your answer to my question is yes?

A. Yes.

Q. And the same is true with respect to the other compressor stations, is it not?

A. It is.

Q. Except that you found a different percent in each?

A. That is correct.

Q. In other words, are you stating that the main com-[fol. 8040] pressor equipment at the Montezuma compressor station, for example, has a present value equal to 96 percent of the value of that equipment when originally installed? A. Yes.

Q. In short, the present value is equal to 96 percent of its original cost?

A. Of its original value to the company. Its present value to the company I consider as 96 percent of its value to the company when installed; to the purchaser.

Q. When installed?

A. When installed or put into operation.

Mr. Lee: Pardon me. That value at that time was determined by the book cost?

The Witness: I gave no consideration to the book cost; it was the value to the company as equipment for delivering gas.

Mr. Lee: Do you mean to say that, if you will pardon me—I do not want to interrupt Mr. Littman there, but it was so unusual—your idea, at least I think it was, that the value originally was 100 percent to the company and the value now is 96 percent but neither the original nor the present has any relation to what the company paid for the equipment?

The Witness: Not from my viewpoint. I considered only the physical deterioration.

Mr. Lee: But before there was anything, it was 100 percent. It had that value, 100 percent value to the com-
[fol. 8041] pany and no relation to the cost to the company?

The Witness: Not from my standpoint, no.

Mr. Lee: Isn't that most extraordinary?

The Witness: I do not know.

Mr. Lee: You are the fellow that sold it, aren't you?

The Witness: Yes, I assisted in it.

By Mr. Littman:

Q. Now, you sold a number of these compressor engines to Michigan Gas Transmission Corporation, did you not?

A. The Corporation has sold a number, all of these in question at the two stations, Montezuma and Zionsville.

Q. Now, they are all Worthington machines, aren't they? A. At the two stations.

Q. And most of them are Worthington machines at the other stations?

A. No, the main units are not.

Q. Well, confining ourselves to the main units which are Worthington units, your company sold these machines brand new to Michigan Gas Transmission Corporation?

A. Yes.

Q. Is that right?

A. That is right.

Q. And they paid you a certain sum of money for them, didn't they? A. They did.

[fol. 8042] Q. And were they worth what the companies paid you for them?

A. We considered them so at the time.

Q. And you consider that they paid you their value at the time, right? A. Yes.

Q. And you say that you have made a determination of the ratio between the value of the equipment when installed and its value as of June 30, 1941, have you not?

A. Yes, that is correct.

Q. So that if a machine is, today, in 96 percent condition, according to your estimate, then its value today is 96 percent of its value when installed. Right?

A. On whatever basis you want to take that value when installed, whether it be purchase value or any other value.

Q. Well, what value would you say these machines had at the date they were purchased other than that which is represented by their purchase price?

A. Well, I do not know just what basis it would be put on, except that I did not consider any money value of the engines in making these figures. I gave no consideration to that. I would consider that beyond my province in what I am supposed to do.

Mr. Lee: If you will pardon me, didn't you predicate your 100 percent value upon the cost?

[fol. 8043] The Witness: No, I did not predicate it on any cost.

Mr. Lee: Well, shouldn't you?

The Witness: I shouldn't?

Mr. Lee: In common sense, shouldn't you do it?

The Witness: Well, let me put it this way, they have a certain value in delivering a certain amount of gas.

Mr. Lee: That is what they are made for, that is what you are paid for, aren't you?

The Witness: That is what we are paid for and at the time I examined them, as far as I know, and I believe it is true, they were delivering the same amount of gas. On that basis they would be 100 percent.

Mr. Lee: I am not questioning you on that. I am just asking you why don't you relate your 100 percent, identified with the cost of the equipment? You say you do not do that.

The Witness: I did not in this particular case.

Mr. Baldridge: May I interject? Perhaps this might be shortened a little bit.

Mr. Littman: Just a minute. We are cross-examining this witness. If you have any objection, I wish you would state it.

Mr. Baldridge: I will. I think you are cross-examining him on something I do not think he testified to at all.

Mr. Littman: That may be your opinion, but I would like to have this witness' opinion on his exhibit.

Mr. Baldridge: After all, we have to get the facts, Mr. [fol. 8044] Littman. There is no use playing on words.

Mr. Littman: We are not playing on words. Let me ask you this, Mr. Lehn: Assume that the value of a main compressor engine, when originally installed, was $100,000. Assume that you have placed a 90 percent condition on that engine by your method described in Exhibit 80.

Is it your testimony that under those facts the value of the machine today is $90,000?

The Witness: On the assumption that the value to the purchaser was $100,000, my figure of 90 percent would be $90,000.

Trial Examiner: You are making a difficulty out of this examination. Exhibit 80 seems to indicate that Mr. Lehn's testimony is based solely on the physical condition of the property.

Mr. Baldridge: That is what he said.

Trial Examiner: Page 7 reduces that to a tabulation which indicates that at the time of the inspection the depreciation or the deterioration of the property was indicated by a certain percentage.

Mr. Baldridge: That is right.

Trial Examiner: Irrespective of amount. If you want to apply this to your purchase price or present day cost, why, that is your starting point.

Mr. Baldridge: That was his testimony on it and that was the purpose of my objection, that we were going afield.

[fol. 8045] Mr. Lee: Yes, but your Honor, everything that you have just stated he understands correctly, but aren't we allowed to ask him if the percentages are applicable to the cost price? That is all we are doing. He says, "No, it has no relation to the cost price."

Mr. Baldridge: He said not quite that.

Mr. Lee: He said that. I will ask him the question.

Have your percentages as to the condition of this equipment as set forth in the exhibit any relation to the cost price of the equipment?

The Witness: They would be applicable to any value which the customer might put on them and that would be included, yes.

Mr. Lee: That is what we are shocked at. He is trying to create a value to the customer and we are contending that he is bound by the value of the cost to the customer. Haven't we got a right to examine him on that?

Trial Examiner: Well, the Examiner just naturally assumed your starting point was the actual cost in this case, because you have a recorded cost and a present state of preservation or service.

Mr. Littman: That is what I understood the testimony to be, that the 96 percent, for instance, which he found today represents 96 percent of the cost when originally installed. Was that your testimony?

The Witness: It can be applied to any value which you [fol. 8046] wish to put on them.

Mr. Wheat: I think all he has said is that if somebody wanted to start with something else he still would go on with 96 percent.

Mr. Baldridge: Mr. Examiner, this testimony must be taken in relation with other testimony and that is this: All that Mr. Lehn is testifying to is that he is a man who knows engines, and he went down and looked at these engines from a physical standpoint and saw what percent of condition those engines were in. That is all he has testified to.

Mr. Lee: If you will pardon me, he has gone one step further. If you will just pardon me, he says that the original 100 percent valuation is not confined to the original cost.

Mr. Baldridge: That is where it ties in with the rest of the testimony.

Mr. Lee: Didn't you say that, Mr. Witness?

Mr. Baldridge: You will find that this is carried on further. If his percentages are applied, when we got down as far as our pro forma statement, they apply to the original cost of property.

I mean what Mr. Lehn has testified to has nothing at all to do with valuation, has nothing at all to do with original cost, it has to do with physical machines. He went in and looked at the machines, they were practically new, but not quite new, so he said that they are not 100 percent [fol. 8047] new, they are 98 percent new, 96 percent new.

Now, it seems to be making a lot of difficulties about something that just is not in there. If there are any words which mislead anybody, we can readily stipulate those out.

. . . . . .

By Mr. Littman:

Q. Mr. Lehn, will you define the word "value" as it appears in the first paragraph of your Exhibit 80?

A. The worth of the property to the owner.

Q. I am sorry?

A. The worth of the property to the owner, that is my idea, on whatever basis he wished to evaluate it and whatever basis he did, its value now, in my judgment, is 96 percent, its value or its worth.

Q. Well then, your 96 percent could be applied to almost anything, couldn't it?

A. Yes; I leave that to somebody else's judgment.

Q. Were you making any effort to determine the value in dollars of these machines?

A. I was not.

Q. Mr. Lehn, will you please turn to Pages 4 and 5 of Exhibit 80? Am I correct in understanding that two main [fol. 8048] units were installed in the Montezuma station in 1936 and two in 1937 and two in 1940?

A. That is correct.

Q. You found an over all depreciation of 4 percent on those six machines; did you not? A. I did.

Q. Will you state the depreciation which you found on each of the two units installed in 1936?

A. I did not make the extensions of my figures in that way. I added up the total hours and took the average of the total for the station as a part but not the entire basis of the figure which I stipulated. It had a bearing on it but not an exact numerical bearing.

Q. Now, suppose you describe the method that you used in arriving at these condition percentages. Let's take the Montezuma station as an example.

A. I found no physical depreciation or deterioration present which would permit of any figure being allotted to it.

Q. So you did not deduct anything for any observable physical depreciation, is that a correct statement?

A. Not quite.

Q. Well, you did not observe any depreciation?

A. I did not observe any depreciation.

Q. Since you did not observe any depreciation, that would leave the machines in 100 percent condition?

[fol. 8049] A. It would.

Q. In so far as those factors were concerned?

A. It would. I gave consideration to other factors involved in, you might say, a qualitative sense, not a quantitative sense. I did not numerically weight them. In all the factors qualitatively involved, I arrived at this figure of 96 which is my considered judgment.

Q. Now, let's go back over that for a minute and see if I understand what you did. You went to these three compressor stations and you looked at the main engines. There was nothing that you could see and there was noth-

ing that you did see that would cause you to place any depreciation on those machines for those factors?

A. That is correct.

Q. Now, you did, however, arrive at a percentage of depreciation for the machines in each compressor station, did you not? A. I did.

Q. What factors did you take into consideration in arriving at the percent of depreciation which you did, in fact, deduct?

A. In addition to the observed physical condition, I did consider, and to almost completely dismiss it, the possible life of the engines of this type, the operating life and for the reason that in spite of my rather lengthy experience with compressor stations or perhaps in spite of [fol. 8050] it, I am not able to arrive at any basis of depreciation based on the life of the engines.

Q. And you did not use the life of the engines as a basis?

A. I considered it, as I say, qualitatively and arrived at a judgment figure but not a numerical figure. For example, along this line I took occasion to inquire into the situation with regard to our first engines built in 1902 which are still in operation. I was advised that those engines are in service daily as required and for the same period as any of the newer engines at the particular station and just as much is expected of them. Their delivery in gas is just as great and just as much as when installed. So on that basis, what are we going to take for the life of the engine?

Q. Did you or did you not consider the life of engines in arriving at your condition percents?

A. I considered it to this extent and I state it somewhat similarly in the exhibit. A station obviously will not go forever. It has already run and time has elapsed so, therefore, there must be some time deducted for the time it has run. I am at a loss to pin it to any definite numerical basis.

Q. Did you base it in part on operating efficiency?

A. I did in part on operating efficiency and the general condition of the engines and what I know of the main- [fol. 8051] tenance and back of that, the manner in which

these engines have been erected at Montezuma and Zionsville.

Q. Well, the condition of the engines, so far as you have observed, were 100 percent? A. They were.

Q. So you did not deduct anything for that. Now, you deducted something for age? A. Yes.

Q. How did you arrive at the amount that you deducted for age?

A. As I say, not by any numerical computation but simply as a matter of judgment. I cannot very well go back of that or beyond it.

Q. Well, did you make a computation to relate the expired hours of service for each machine to the total hours of life that you would expect?

A. I started to but, as I say, confirming my idea of what the engines will do, long life and the information which I got from our first engines, I abandoned it as a basis for computation.

Q. Why did you abandon it?

A. Because there is no life that I know of that has been determined. These 40-year old engines, from all accounts, will go on just as well for another 40 years. You can be assured, if I could find a satisfactory method to [fol. 8052] calculate this on a strict mathematical basis, I would be about the first one to do it.

Q. No one knows how long these machines will last?

A. I do not think they do.

Q. You have been in this business all your life, have you, Mr. Lehn?

A. Practically.

Q. That is, with the Worthington Pump Company?

A. Yes.

Q. And you are unable to give us any estimate of the life of the type and character of the machines that are now installed in the main compressor stations of Michigan Gas?

A. Well, reverting again to these original engines, if the wearing parts are replaced and that, I understand, is not to be considered here, simply the maintenance, I cannot see why they would not go on for another 40 years, again not considering the question of obsolescence or exhaustion of the field or the fact that they are of no further use to the operator.

Q. That would put a life figure on these machines of approximately 45 years, would it not?

A. I do not understand where you get the additional 5 years.

Q. You say that these machines that were originally installed in compressor stations can run for another 40 years?

A. No; I meant the original engines that had run for [fol. 8053] 40 years.

Q. The original engines installed?

A. In 1902 or 1903.

Q. I see.

Mr. Wheat: On some other company's property?

The Witness: Some other company's, yes. I cite those and they are engines that followed along in successive years that are operating under the same conditions.

By Mr. Littman:

Q. You have no opinion as to the life of the main Worthington compressor unit, such as that which is installed on Michigan Gas Transmission Company's lines, have you?

A. By that you mean useful life at reasonable efficiency?

Q. Yes, in service.

A. No, I have not, providing they are maintained, the wearing parts are replaced. Of course, we could take the 40 years that these engines have run as a limit but that is simply an assumption. You might just as well take 30 or 50.

Q. You cannot state the life of Worthington machines of the character owned by Michigan Gas?

A. No.

Q. Expressed in engine hours either, can you?

A. No, I cannot for the same reason.

Q. And why is it that you cannot prescribe an age to these machines?

[fol. 8054] A. Because up to the present time, engines of practically the same type are still in service and delivering 100 percent capacity and 100 percent of hours as are required. At the same time, they would not endure forever but what their limit is, I will not attempt to say.

Q. Do you know an engineer by the name of P. McDonald Biddison?

A. I know him, yes.

Q. Do you know that he has estimated the life of the main compressor units in this proceeding?

A. I believe he has, yes.

Mr. Baldridge: But not of Michigan Gas Transmission Corporation.

Mr. Littman: No, of Panhandle Eastern.

The Witness: Yes.

By Mr. Littman:

Q. Do you know the method he used?

A. I read some of his testimony.

Q. Do you agree with the method he used?

A. He has made an assumption which may or may not be true. I do not know.

Q. What do you think about it?

A. I think not.

Q. You do not agree with Mr. Biddison?

A. I do not agree in that respect on that point.

[fol. 8055] Q. Am I correct in understanding that your 100 percent represents the value to the owner on the date when it is installed new?

A. Yes.

Mr. Wheat: When this engine is installed new?

Mr. Littman: I was referring, of course, to the compressor engines.

By Mr. Littman:

Q. What is zero percent condition under your theory?

A. I cannot conceive of zero percent if the engine is still in existence and operative. If it is entirely destroyed, it would be zero, of course.

Mr. Littman: Will you read that answer back?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. I do not believe you answered my specific question, Mr. Lehn. I want you to define zero percent condition as you understand it.

A. I can hardly carry these numerical percentages down to that extent. Any engine which is running at all, I would say, would be at least 75 percent or no gas company would operate it. To my way of thinking, we cannot extend it down to zero.

Q. You do not believe that a compressor engine can go down to zero percent condition?

[fol. 8056] A. It would still have scrap value.

Q. When is zero percent condition reached?

A. From the standpoint of the operator, if he has no further use for the engine, I might consider that zero percent.

Q. You might, but you are not sure about it?

A. No, not too sure. As I said before, I have attempted, to the best of my ability, to give a quantitative value to what I consider a qualitative question and it cannot be consistently carried too far.

May I amplify that a little bit?

Q. Yes.

A. I could give what I have considered definite percentages to the value of an engine if it were on the assumption that the amount of gas that it was delivering had gone down from the amount guaranteed due to poor operation or poor adjustment or something of that sort. If it were delivering 75 percent of the guaranteed amount, I would say without prejudice to the fact that it could still go lower at that particular time, the engine would be in 75 percent condition. On that basis, I would feel justified in giving exact and rigorous mathematical percentages to the value of the engine. That is one basis which occurs to me.

Q. Have you ever seen a compressor station at zero percent condition?

A. No, I have not.

[fol. 8057] Q. How about one out on the scrap heap?

A. It would still have scrap value.

Q. Now, excluding the scrap value or salvage value from consideration, when is zero percent condition reached on a compressor engine under your theory?

A. When it would no longer be capable of operating or delivering gas and could not be rehabilitated to the extent of being operative and delivering gas.

Q. That is when it is retired from service because it no longer serves its useful purpose?

A. That might be zero value to the owner at that time under those conditions.

Q. And it might not?

A. It might not have a resale value at that time.

Q. I was excluding salvage.

A. I meant beyond salvage or scrap.

Q. Have you ever seen an engine in 50 percent condition?

A. Again, I would not know how to determine an engine in 50 percent condition except under the condition which I have described of its ability to deliver the amount of gas proportional to the guaranteed quantity. That, I think, would be a rational basis for naming a definite percent of a low value.

Q. What would you expect the salvage value of the compressor station equipment of Michigan Gas Transmission Corporation to be 24 years hence expressed in per [fol. 8058] cent of the present worth?

A. It would depend entirely on the market; how anxious Michigan Gas was to sell and how anxious a customer could be found. I do know of some of the old engines which have changed hands recently at what I would consider low figures, possibly 15 or 20 percent of their initial value or the value of what they would cost at the present time.

Q. What is your best judgment of the salvage value of compressor equipment of Michigan Gas Transmission Corporation 24 years hence?

A. I would hesitate to state an opinion.

Q. Can you give us a general idea? Fifty percent, 40 percent?

A. Any figure I would name would be just a pure guess. I would be as well satisfied in my own mind with one as another so I do not see how I can give you a figure.

Q. In other words, it would be pure speculation, wouldn't it?

A. I think it would be.

Q. Will you please turn to Page 6 of Exhibit 80. You state on that page "The company which I am connected with has built in the past 40 years over 530 units of this type totaling over 500,000 horsepower. With few excep-

tions these engines are all running at the present time. Some are out of service by reason of gas becoming exhausted at their original location and not being required [fol. 8059] elsewhere. A number have been moved to different locations, in some cases two or three times. To my knowledge, none have been abandoned due to their being worn out."

Do you have records showing where these 550 units are installed and now located?

A. We have complete records of where they were originally installed, and in the majority of cases, where they are now, that is, those which were moved but not complete records.

Q. Do you have complete records as to where they were originally installed?

A. Yes, sir.

Q. And you have incomplete records as to where they are now located?

A. We have partial records of some that were moved but some were moved without our knowledge.

Q. Do your records show the date of original installation?

A. They do.

Q. And in instances where they have been removed to new locations, you know the date of their most recent installations?

A. In some cases.

Q. Do you have records of the number of hours that each unit was operated in the year 1939-1940?

A. No, we have not.

[fol. 8060] Q. You do not keep any records—

A. (Interposing) No, we do not keep records like that.

Q. Do you know how many hours these machines were operated?

A. No, I do not, except in some special cases where we have contact with a particular customer and have access to their records.

* * * * * * * *

[fol. 8062] Q. Mr. Lehn, in arriving at your estimate of depreciation on compressor station equipment of Michigan Gas, did you give consideration to wear and tear?

A. By wear and tear, you mean deterioration which is recovered by renewal of parts?

Q. By wear and tear, I mean depreciation which is caused by wear and tear.

A. No, I did not. If I understand your question correctly, that is, for example, wear of piston rings, packing, cross head guides which are periodically renewed, restored.

Q. In other words, you would consider those items as maintenance?

A. Yes.

Q. And therefore, exclude—

(Continuing) Any depreciation that you observed on those items from your determination?

A. I excluded them.

Q. What about decay? Did you give consideration to decay?

A. Well, I hardly think there is such a thing as decay of cast iron, steel. There is rust, of course, if it is idle and not properly protected, but with an engine in operation, I do not think we could consider that decay occurs.

Q. You did not see any?

[fol. 8063] A. I saw none.

Q. Did your give consideration to inadequacy?

A. If by inadequacy you mean the inability to perform the service expected, that was 100 percent.

Q. Did you give any consideration to obsolescence?

A. Not in a tangible form, I considered it in allotting that 4 percent, for example, to the 96 percent. There might be such a thing as obsolescence but there is no evidence of it yet in this type of engine.

Q. Did you consider the possibility of future obsolescence?

A. To some extent, but there, again, the length of time hich the engine will be in the service of the company ters and that, again, is also beyond my province.

Q. Well then, you say you considered it and made some allowance for obsolescence?

A. I considered it, to some extent, possibly intangibly, in the allotting of that 4 percent. I cannot segregate the 4 percent, as I have explained before. I cannot break that down into the various factors.

Q. As a matter of fact, one of the major causes for replacement of these machines is obsolescence, isn't it?

A. Well, to my knowledge, none have ever been replaced with another type. The type, itself, has not become obsolete, that is, has not been substituted exclusively in [fol. 8064] any case by another type.

Q. Well, they may keep them on the line and running, but they are not as good as the new ones that come out, are they, by reason of design or improvement?

A. There are very minor improvements made every few years, but they are not of such a type that they affect the efficiency of the engines. For example, we have rearranged the piping to make them more convenient, to make the maintenance and overhauling simpler. Beyond that there have not been any major changes. Material has been improved, of course, due to the advance of the art of metallurgy.

Q. Did you consider the element of changes in the art?

A. That is what I had in mind, yes.

Q. That is, you considered that along with the element of obsolescence?

A. To a very limited degree, yes.

Q. Did you consider that because of changes in demand and the requirements of public authorities?

A. No, I cannot say that I did.

Q. You did not consider it at all?

A. Not from that phase. I do not at the moment just see what bearing that would have.

Q. Well, you did not consider it? A. No.

Q. Did you consider the possibility of exhaustion of the [fol. 8065] natural gas resources of this company?

A. Not in my determination of the figure. That, also, is beyond my province which was only to examine and determine upon the mechanical condition, the physical condition of the unit.

Q. You did not consider any of the functional causes of depreciation but purely the physical causes?

A. Purely the physical.

Mr. Wheat: Pardon me, Mr. Lattman. I wonder if the witness understood your technical term "functional causes". May I ask if you included in that term and placed such causes as obsolescence? Various people in

clude different things under the term "functional causes". If you did, I wonder if the witness understood you.

Mr. Littman: I understood the witness to say that he considered, to some degree, the possibility of obsolescence and so when I used the term "functional" I mean the cause by reason of the claimed exhaustion of the gas and, possibly, the changes in the demand and requirements of public authority.

By Mr. Littman:

Q. Would the testimony that you have given thus far with respect to compressor engines apply equally to those manufactured by companies other than the Worthington Pump Company?

A. Yes, they would. In this respect I would make no distinction between them.

. . . . . .

[fol. 8069] Trial Examiner: The exhibit [market] for identification as No. 80, offered in connection with the testimony of Mr. Lehn, will be received in evidence as Exhibit 80 without objection.

. . . . . .

[fol. 8070] F. S. Haberly a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination

By Mr. Littman:

Q. Mr. Haberly, we will first take up your Exhibit No. [fol. 8071] 82 entitled "Accrued Depreciation on Compressor Structures, Measuring and Regulating Structures and Equipment, Other Transmission System Structures and General Equipment as of June 30, 1940."

Will you state what property of Michigan Gas Transmission is covered by your study of accrued depreciation in Exhibit 82?

A. The property covered by Exhibit 82 includes the property in Account 352.1, compressor station structures and improvements; property in Account 352.2, measuring and regulating station structures and improvements; Ac-

count 352.3, other transmission system structures; certain property in Account 354.1; compressor station equipment, namely, the water tanks and their foundations, and the cooling towers and their foundations; also the property in Account 354.2, measuring and regulating station equipment; and the general equipment in Accounts 372, 373, 374 and 377, namely, office furniture and fixtures, transportation equipment, stores equipment and tools and work equipment.

Q. What is the original cost of the gas plant exclusive of working capital and materials and supplies?

A. The original cost, exclusive of working capital, material and supplies and any cost of developing business or going value, is $12,261,260.55.

Q. As of June 30, 1941? A. As of June 30, 1941. [fol. 8072] Q. I should like to have stated on the record, Mr. Haberly, approximately the original cost of that part of the gas plant which you inspected and made a determination of accrued depreciation covered by Exhibit 82. Can you state the original cost of the items of property which are embraced by your Exhibit 82?

A. Yes, sir. Account 352.1, compressor station structures and improvements, original cost was $446,260.40 as of June 30, 1941. For Account 352.2, measuring and regulating station structures and improvements, the original cost as of the same date was $48,566.40. For Account 352.3, other transmission system structures and improvements, the original cost as of the same date was $27,992.58.

There was a small part of Account 354.1, compressor station equipment, [amade] up of the water tanks and their foundations and the cooling towers and their foundations. I cannot, at the moment, find the original cost of the water tanks and the cooling towers but their cost was a small part of that account which, in total, was $1,800,000-odd. It was not more than 10 percent of that account which I depreciated.

Q. Let's pass that for the moment.

A. I can find those figures but it will take a few minutes.

Q. I do not think it will be altogether necessary for our purpose at this time.

[fol. 8073] A. There were three water tanks that ran from three to five or six thousand dollars and I do not remember what the cooling tower cost was.

Then, there was Account 354.2, measuring and regulating station equipment, the original cost of which was $125,826.02 as of June 30, 1941.

There was also Account 354.3, other transmission system equipment, with an original cost as of the same date of $121.09; office furniture and fixtures of $14,879.76; transportation equipment in an amount of $33,837.47; stores equipment in the amount of $1,609.47, and tools and work equipment in the amount of $13,454.07.

Those original costs are as of June 30, 1941.

Q. Have you completed your answer?

A. Yes. I inadvertently included $121.09 for Account 354.3, other transmission system equipment for which depreciation was not determined in Exhibit 82.

Q. Mr. Haberly, the total of the figures which you have read covering all of the structures and equipment upon which you determined accrued depreciation as shown in Exhibit 82 is, in round figures, $712,000, exclusive of the water tanks and foundations and cooling towers and foundations, is that right?

A. I would say that is approximately correct. I have not added it up.

Q. And it is apparent, is it not, that the structures and [fol. 8074] equipment which you examined and upon which you made a determination of accrued depreciation in Exhibit 82 represent approximately only 6 percent of the entire gas plant?

A. Yes, I would say it was somewhat less than 10 per cent. I have not made the calculation. If you have figured it out as being 6 per cent, I will accept that.

Q. In other words, while we have a good many accounts covered by Exhibit 82, the amount in dollars, as compared to the entire gas plant, is not very large?

A. That is correct. The larger amount of money is in the maintenance and compressor station equipment accounts.

Q. And Mr. Riddle has taken the responsibility for determining the accrued depreciation on the mains, has he not?

A. That is right

Q. And Mr. Lehn has taken the responsibility for determining the accrued depreciation on the compressor station equipment, at least the major part of it?

A. Major portion of it, yes.

Q. One of the accounts covered by your Exhibit 82 is measuring and regulation station structures and equipment. Is that right?

A. Yes, sir, that property is included in two accounts.

Q. By the way, these account numbers that you have read, are those the account numbers of the company or are they the account numbers of the Federal Power Commission?

[fol. 8075] A. I think these are the Federal Power Commission account numbers.

Q. Did you inspect all of the measuring and regulating station structures and equipment of Michigan Gas?

A. No, I did not see all of the measuring and regulating structures. I saw the larger ones at the three pumping stations. I saw the two large ones in Detroit, the one in Fort Wayne, and seven or eight of those which were adjacent to the main transmission line. Those at some distance from the main line I did not see.

Q. Which ones did you not observe?

A. I do not have a complete list of the ones that I either saw or did not see. There are some 40 or more stations and I saw the larger ones of those but, as I previously said, those at some distance from the main transmission line, I did not see.

Q. Do you have a record here in Detroit showing the list of stations and those which you did not examine?

A. I am not sure whether my working papers show that information or not and I do not have my working papers. They were turned over to the Federal Power Commission. I have not received them back yet.

Q. I understand they were returned to Mr. Baldridge.

A. I am not sure whether those working papers show the stations we examined or not.

[fol. 8076] Q. Will you check your working papers this noon and advise us whether you can supply the information?

A. I will.

Q. I would also like to ascertain the same information with respect to the equipment in the measuring and regulating structures which you did not inspect. I presume that the same list would apply to both the structures and equipment?

A. Yes. If I did not see the regulator station building, I naturally did not see the equipment therein.

Q. How much time did you spend in making the inspections on property covered by Exhibit 82?

A. Three days.

Q. Will you briefly describe what you did and the method used by you in determining the depreciation of the structures and equipment which you examined?

A. At each location we visited, we made a general inspection of the property and then, in more detail, examined the building or the equipment, looking for signs of wear and tear, decay, or any other factor which might contribute to its depreciation.

Q. And what did you do with the data which you saw?

A. We made notes so that our memory would be refreshed when we returned to the office to develop them into condition percent figures.

Q. Now, will you describe the method used to translate [fol. 8077] the data which you observed into condition percents?

A. As my direct testimony explains, we endeavored to reflect loss of value due to various factors, such as wear and tear, decay, obsolescence, inadequacy, loss of serviceability, and any other element which would contribute to depreciation and, after considering what we had seen and after considering the age of the property, a figure was placed on the various items which, as Mr. Lehn explained yesterday, was more qualitative than quantitative in consideration of the various elements contributing to depreciation.

Q. Mr. Lehn took no part in your determination of accrued depreciation, did he?

A. No, I merely state that he expressed quite well, I thought, the mental gymnastics one goes through in determining depreciation, that it is a consideration of the various elements rather than a mathematical working out of a final figure.

Q. Mr. Lehn testified, as I recall it, that he did not observe by eye any depreciation. Is that true so far as you are concerned?

A. No, I saw some physical depreciation, minor physical depreciation.

Q. You gave the so-called minor depreciation which you actually saw some weight in arriving at the condition percents?

A. I gave it consideration, yes sir.

Q. And then did you add something to that, something else?

[fol. 8078] A. Not necessarily added something to it. I gave consideration to the other factors.

Q. Now, what factors other than those which you observed by the eye did you give effect to?

A. In our physical inspection, we were looking for signs of age, wear, weathering, state of maintenance, reaction to the elements, degree of serviceability, state of maintenance, obsolescence and to the extent that any of these factors were apparent to us, they were given consideration.

Q. You mean apparent to you by the eye?

A. Yes.

Q. And that which was not apparent to you by the eye, you did not reflect in your condition percents?

A. No, I would not say that. The condition which we placed upon the property was less than was visible by eye, was lower than that which was visible by eye.

Q. In other words, you determined more depreciation in your final answer than that which you actually observed by the eye?

A. Yes, I would say that that was true.

Q. What I am endeavoring to get at is what elements did you consider in that process?

A. I would say that the one factor contributing to the figure which we placed on the property for condition percent that is not visible to the eye, is age.

[fol. 8079] Q. You gave effect to age? A. Yes.

Q. You mean you gave effect to expired life and remaining life?

A. Yes, a reflection of that ratio.

Q. Would you say that your method is the straight observation method? A. No, I would not.

Q. It was the observation method plus something else?

A. Plus consideration of age and life and functional depreciation.

Q. Would you say that your estimate of accrued depreciation reflects and includes all elements of depreciation which bring about the eventual retirement of the property from service?

A. That is exactly what I attempt to determine in placing a condition percent on property.

. . . . . .

Q. Are you familiar with the claim that is being made in this proceeding that this project is to be abandoned in December of 1965?

A. Yes.

Q. Did you give consideration to that element of depreciation?

[fol. 8080] A. No, I did not give consideration in my determination of condition percent to the possibility of abandonment in 1965. That I considered to fall within the determination of amortization and I was striving to get the condition of the property in normal service and throughout a normal life.

Q. Would or would not the normal life of this project extend beyond the year 1965 if it were not for a purported claimed abandonment of the project in 1965 by reason of the failure of the gas supply?

A. In its present location it would not extend beyond that date if the property were abandoned at that time, however, if the property were not abandoned then the property would have value and could carry on for a great number of years thereafter.

Q. Well, the factor of the abandonment of a project, as claimed here, by reason of the exhaustion of the natural gas supply, is a very important factor of depreciation, is it not?

A. I would say, rather, of amortization.

Q. You do not call that depreciation?

A. Not in the sense that I was determining depreciation here.

Q. Well, are you familiar with the Federal Power Commission's system of Accounts?

A. To some extent, yes.

Q. Do you know that the Federal Power Commission's Uniform System of Accounts prescribed for natural gas [fol. 8081] companies states that among the causes to be given consideration in the determination of depreciation is, "In the case of natural gas companies, the exhaustion of natural resources"?

Mr. Wheat: Well, you are speaking, Mr. Littman, aren't you, from the standpoint of the accounting for depreciation now, or are you?

Mr. Littman: I am speaking here, I am reading from the Federal Power Commission's Uniform System of Accounts.

Mr. Wheat: Yes. Well, I did not understand that the Power Commission had essayed to pass a rule to the effect that all persons shall use the word "depreciation" and all its aspects only in compliance with this particular statement. I understood that that was for the purpose of determining the accounting method of handling the accrual for depreciation. I just was merely asking to be sure that I got you straight on this.

Mr. Goodman: I am very well satisfied with Mr. Wheat's statement and I want to emphasize it, because there is, clearly, a vast difference between the fact of depreciation and the particular mode under which it may be accounted for.

Mr. Wheat: Precisely.

Mr. Goodman: After all, accounting merely has the function of making a record on books without regard to what the facts will be. In other words, the facts may be consistent or inconsistent with the particular mode of accounting and since I will argue that in the briefs in this case, I [fol. 8082] want to make clear that I want the benefit of Mr. Wheat's concession in this regard.

Mr. Wheat: I do not regard this as a concession.

Mr. Goodman: I do.

Mr. Wheat: I think it is perfectly clear in the Commission's System of Accounts that it is dealing with accounting

matters and I just wanted to make sure that Mr. Littman did not include all of the possible meanings of the word "depreciation" when he was asking this question.

Mr. Littman: If your Honor please, I think I can clarify my position by saying that the Commission has stated in the Chicago District Electric Generating case that "the true conception of depreciation leaves no room to doubt that annual depreciation expense and actual existing depreciation must be harmonized. Annual depreciation measures the diminution in service life capacity or utility in one year—actual existing or accrued depreciation is the total diminished service life capacity or utility to the date of inquiry. To accept the one while denying the other is to be illogical and guilty of employing dual standards with resulting injustices to the public or the utility."

Now, what I am undertaking to ascertain is whether or not there has been a consistent policy here in the determination of depreciation both for that which is being claimed on the annual allowance or expense side and that which is being claimed on the rate base side as the amount to be [fol. 8083] deducted.

I believe this witness has stated,—I wanted it to be stated even more clearly,—that he did not take into account the very important element of the claimed exhaustion of the gas supply.

Mr. Wheat: I just want one thing added to Mr. Littman's statement, and that is, of course, the case which recites that the Commission was not dealing with a company of finite life. That is the basic difference, of course, between natural gas pipe line companies' operations and those of an electric generating or distribution company.

Trial Examiner: At least, you have stated a contention.

Mr. Wheat: I have stated a fact, Mr. Examiner.

Mr. Littman: You see, if your Honor please, they are claiming a huge annual allowance here with which to amortize the property by reason of the claimed exhaustion of the gas supply over a remaining period of 24 years, but they do not want to deduct anything for accrued depreciation on that account.

Mr. Baldridge: Well, may I say there, this witness has not testified as to the policy of making annual accruals. He has simply testified as to the peculiar condition of the property. Because of the fact that this company has a finite life, it is necessary, of course, that the investment be returned at the end of that finite life in order to avoid confiscation of property.

[fol. 8084] At the same time the property depreciates physically and when we come to the question of accruals for depreciation or for maintenance, ordinary or extraordinary, it is necessary to keep the property in full operating condition during the full period of the life, so that the service will not fail.

However, what this witness has been testifying to is what he actually saw in the property in its present condition.

Mr. Goodman: Now, I want to underline that too, as a concession, as well. It is exactly the way I understand this witness' testimony.

He is here for the purpose of hypothetical exercise, namely, to ascertain how the particular items compared with new items, apart from their use in the business and wholly apart from the question that they would be totally useless when and if the gas supply were exhausted.

Mr. Baldridge: It is apart from the fact that this business has a limited life because of the prospective failure of gas supply which, according to our best information will be around December 1965.

Mr. Goodman: You concede, Mr. Baldridge, do you not, that this witness in putting a condition upon property, a percent condition or a percent value took into consideration a hypothetical consideration contrary to the facts and the evidence in this case, namely, the assumption that the particular items of property would remain in existence and [fol. 8085] would have a separate value apart, from the business, at the time when they would be retired in 1965?

Mr. Baldridge: No, I do not think that you have paraphrased accurately what was said, Mr. Goodman. You have stated what was in my mind. What this witness has done is to look at physical property. He has determined that because of the wear and tear the amount of uses under-

gone and for the other reasons he stated there had been some diminution in condition of this physical property from its condition when new. He was asked to [stated] the amount of that diminution. It is not a hypothetical situation; it is an actual situation because we are dealing with actual property.

Mr. Goodman: I do not want to argue with you at this time and I will content myself with just this statement: I understood him to say and I understand you to mean that the question of whether the property will be retired in 1965 is not material to this witness' testimony. He predicates his valuation or percent condition or whatever you call it in complete neglect of that fact, in complete absence of any retirement date on the property predicated on the exhaustion of the gas.

Now, the age of the property then which he does consider is that age which buildings or structures would have apart from any necessity for retiring them in 1965 by reason of the exhaustion of the gas supply and, therefore, the age which he considers, which is a hypothetical physical age, is [fol. 8086] the age that the property would have if permitted to remain in existence until it wore out.

Now, isn't that right, Mr. Baldridge?

Mr. Culton: Mr. Examiner, may I move the previous question?

Mr. Baldridge: I would just like to have this in the record.

Mr. Culton: I think we have had a good deal of discussion, showing our different philosophies. As a matter of fact, I believe, Mr. Examiner, we have all been discussing philosophies here for quite a while rather than cross-examination.

Mr. Goodman: I said I would have nothing further to say beyond that.

Mr. Baldridge: I do not like to accept all his words. I did not like the word, "neglect" and I did not like the word "hypothetical", but I do not believe it will serve any useful purpose in prolonging this discussion because I think, in substance, Mr. Goodman has about the same thing in mind that I have.

Trial Examiner: We are in a very important aspect of the issues of the hearing, of course, and it is entirely proper to consider and understand each other's position as we proceed.

By Mr. Liftman:

Q. Mr. Haberly, did you determine the accrued depreciation on this property in any different manner than the method that you would use on a property that had an inexhaustible gas supply?

[fol. 8087] A. No, I did not.

Q. In other words, you used the same method here as you would if you were making a determination on a property that had what Mr. Wheat has defined as a finite life?

A. I gave no consideration to any finite life. It was my understanding that the determination of amortization rates would be made by other and I was simply finding the physical condition of the property as at the moment without regard to any finite life.

Q. I should have said infinite life instead of finite life in my question, but I believe your answer has clarified your method. In other words, you gave no effect to the factor of the claimed exhaustion of the natural gas resources in this proceeding?

A. No, I did not. An entirely different method would have had to be used in that case.

Q. When you find a structure or certain equipment in 50 percent condition, does that mean that 50 percent of its life is gone and that 50 percent of its life remains?

A. Not precisely. That element is considered. A property, 50 percent of whose life is gone, might be in less than 50 percent condition or it might be in greater, depending upon how well it had been maintained, how well it was serving, the amount of necessary repairs, how well it was operating, a number of other factors have to be taken into age to life.

[fol. 8088] consideration in addition to a strict ratio of

Q. How much weight did you give to life?

A. I do not think I can answer that question directly. I give consideration to age and life but not in a mathematical weighting.

Q. Well, did you know the average age of every item of property that you inspected?

A. Yes. I know when it was installed.

Q. You had that in the back of your mind and then you had an age and then you had a physical life figure in your mind as you made these inspections, did you?

A. I did.

Q. And you translated the remaining age and reflected that in your percent condition, did you?

A. Yes, I think that is shown on Page 4 of Exhibit 82 where the condition of the measuring and regulating station structures and equipment—

Q. (Interposing) What page?

A. Page 4.

(Continuing)—is listed by years. It can be seen there that, reading from the bottom of the page up, the condition of the structures and equipment in the measuring and regulating stations is 99 percent for the years 1940 and 1941 and constantly decreases as you go up the page for some ten or twelve items, so that the condition percent of [fol. 8089] the measuring and regulating structures installed in 1931 is 77 percent.

Q. You would expect that same condition to prevail whether you gave consideration to age or not, wouldn't you?

A. No, I do not think it would. If you ignore the age completely, you might have a structure built in 1940 that was in no better physical condition than one built in 1930 but, giving consideration to age, the one built in 1931 would necessarily be somewhat lower in condition.

. . . . . .

[fol. 8090] By Mr. Littman:

Q. You are unable to state quantitatively how much you added at any particular inspection point by reason of age?

A. I do not think I can say what weight I gave in a quantitative measure.

Q. I want you to assume, Mr. Haberly, that you are looking at a structure that is ten years old and has a life of 50 years. You know those facts when you make the inspection. I want you to assume that this structure, in so far as your visual observation is concerned, is just as good as new. That is, it is, in so far as observation is concerned, in excellent, brand new physical condition. What would be your percent condition on that structure?

A. Well, that is a hypothetical question and more or less difficult to answer. On a pure straight line basis, that structure would be in 80 percent condition. If it were in 100 percent condition physically and for all other aspects of condition, such as the building lacked any obsolescence, it was perfectly well maintained, perfectly serviceable, I would place a condition on it something in excess of 80 percent, possibly ranging between 80 and 90.

Q. Why would you do that?

A. Simply because you might have another structure built at exactly the same time with the same average life [fol. 8091] that was in, we will say, 50 percent physical condition. That would not be in 80 percent condition even though the pure straight line basis of depreciation would indicate that. It would be, in my estimation, in 50 percent condition. You could ignore life completely and the physical condition would rule entirely in that case.

Q. But I am giving you a hypothetical case where you have 100 percent physical condition, so far as observation is concerned, but you know that 20 percent of its life is gone. You say that you would not put that property in 80 percent condition?

A. No, because life is an average figure. When one speaks of 50-year life, one means that a group of property may live for 50 years. Actually, some units of it may go out in 30 years, some in 40, some in 50 and others in 60, 70 or 80 years, and a piece of property that was in 100 percent condition, when it is ten years old, could be expected to live somewhat beyond the average life and would, therefore, at the age of 10 years, have a condition percent somewhat in excess of that indicated by normal straight line depreciation.

Q. But, Mr. Haberly, I am asking you to assume that this structure is 10 years old and definitely has a remaining life of 40 years. You seem to inject in your answers something that I am not assuming.

A. Are we putting a finite life on that building because [fol. 8092] it has to go out of existence at that time or that it will wear out at that time?

Q. It will wear out at that time.

A. We never know how soon it will wear out, only through averages.

Q. I am asking you to assume the wearing out forty years after you make the examination. You see, I want to ascertain how your mind worked and how you arrived at these percent conditions and, in order to do that, I must make certain assumptions to get the pure theory that you applied.

A. All right. Accepting the stipulation that it must wear out at the end of 40 years more of life and is in 100 percent condition after 10 years of life, I still feel it would be or would have a condition at the end of 10 years of something in excess of 80 percent.

Q. Now, when you place a structure or equipment in 50 percent condition, do you mean that 50 percent of its reproduction cost remains?

A. I mean it has a then value on a reproduction cost basis of 50 percent.

Q. Would you also mean that 50 percent of its original cost should be deducted for rate making purposes?

A. That is getting into the accounting aspects of the management of the property.

. . . . . .

[fol. 8094] By Mr. Littman:

Q. Did you at any time suggest to the accountants of Michigan Gas Transmission Corporation or those accountants representing Michigan Gas Transmission Corporation that your condition percents were properly applicable and referable to original cost?

A. No, I did not suggest that to them, other than that if they were going to make a finding of original cost less depreciation as I have determined it, the percentages which I had determined would apply to original cost as well as to reproduction cost.

Q. To my mind, that kind of begs the question and I do not mean any improper inference by what I say.

In your opinion, is it proper to apply your condition percents to original cost?

A. Yes, they are just as applicable to original cost as to reproduction cost.

Q. Well, are your condition percents applicable to any other kind of valuation or cost however arrived at?

A. As of June 30, 1941, I would say yes.

Q. You can apply your percents to anything you want to apply them?

A. The only two values that I would know of as of that date would be the reproduction cost and the original cost but if there were another basis of value, I would think [fol. 8095] they would apply equally well.

Q. To which valuation or cost did you apply your condition percents?

A. To reproduction cost.

Q. You personally had no part to play in applying your condition percents to original cost, did you?

A. I do not recall at this particular moment, Mr. Littman, whether we made any application of them to any original cost figures or not. We may have done so for a reweighting of the conditions in their application to original cost. However, I am not sure. I do not recall.

Q. Whom do you mean by "we"?

A. Myself and my staff.

Q. You have no recollection of doing that, however?

A. A vague recollection that we may have made some such calculation.

Q. But you have not put any such calculation in evidence?

A. No, I have not.

Q. In this proceeding?

A. That is correct.

Q. Have you ever, in your experience as an engineer, applied your condition percents to original costs for rate making purposes?

A. Whether or not it was for rate making purposes, I cannot now state but I do know definitely that we have [fol. 8096] applied condition percents to original cost.

Q. Now, where original cost is used, Mr. Haberly, you would feel that it was proper, would you not, to make a deduction for depreciation that has accrued by reason of the claimed exhaustion of the gas supply?

. . . . . .

The Witness: It would depend on whether the reserves for depreciation were being accrued on a straight line or sinking fund basis.

By Mr. Littman:

Q. Assume that the company in question is one which is accruing its reserves for depreciation on a straight line basis.

A. My own personal feeling in that case is that the depreciation should be deducted.

Q. For the assumed exhaustion of the gas supply so as to reflect that element, is that right?

A. Yes.

. . . . . .

[fol. 8098] By Mr. Littman:

Q. Will you please turn to Page 3 of your Exhibit 82, Mr. Haberly?

On this page you show the compressor station structures and improvements upon which you determined the percent condition listed according to the year of construction, do you not?

A. That is correct.

Q. What is the probable future life of the compressor station structures and improvements constructed at the Montezuma station?

A. I would say in the neighborhood of 50 to 60 years.

Q. Can you be any more definite than that?

A. I think not. I did not make a more detailed study of mortality of that type of structure other than my general knowledge as to the age of similar structures that have lived 40 or 45 years and are still in very serviceable condition.

Q. What is the probable future life that you had in mind for the compressor station structures and improvements in Account 352.1, the 50 to 60 years which you just mentioned?

A. As I recall, that was about the figure that I had in mind in determining the condition percent.

Q. What would you say with respect to the compressor station structures and improvements at Zionsville compressor station?

A. About the same life.

[fol. 8099] Q. The same is true of the Edgerton compressor station?

A. Yes.

Q. Is the same true of the structures in Account No. 352.23, "Other transmission system structures at Montezuma, Zionsville and Edgerton"?

A. Well, the life of those, I believe, would be somewhat shorter.

Q. What probable future life did you have in mind?

A. As I recall, I think that we had considered the entire life, the total life to be 40 to 50 years, so that the probable future life would be that figure less the expired age in each case.

Q. Now, the 50 to 60 year figure which you gave a minute ago for compressor station structures and improvements, Account No. 352.1, was that the over-all life or was that the future probable life?

A. That was the over-all life.

Q. The over-all life?

A. Yes.

Q. What is the over-all life that you used for Account No. 354.1, "Compressor equipment", shown at the top of Page 4 of Exhibit 82, and will you please give us the figure referable to water tank and foundation as distinguished from cooling tower and foundation?

A. As I recall, I think that I considered the water tanks [fol. 8100] as having a probable life of about 50 years and of the cooling towers about 30 to 35 years.

Q. Now, those lives apply to the property which you just described, located at the Montezuma station, the Zionsville station and the Edgerton station?

A. That is correct.

Q. You, also, found a percent condition for Account 352.2, "Measuring and regulating station structures." Will you state the over-all life that you used in connection with those structures?

A. The structures in that account vary considerably, one from another, and some would have considerably shorter life, in my judgment, than others.

As I recall—

Q. (Interposing) Pardon me. Suppose we take the details of those structures shown at the bottom of Page 4 of Exhibit 82, starting with the Fort Wayne measuring and regulating station.

A. That is a brick structure. As I recall, I made the plans for that building myself in working for the Street

Railway years ago. That building is probably some 20 years old now and, in my estimation, should have an over-all life of 40 or 50 years.

Q. What do you say about the Detroit measuring station which was constructed in 1936? What is its over-all life?

[fol. 8101] A. I thought of that as about a 50-year life.

Q. What do you say is the over-all life of the Detroit regulating station?

A. Well, that station and those at all other locations, my recollection is that we considered those as having a probable over-all life of possibly 35 years.

Mr. Littman: Will you please read back the last answer?

(Whereupon, the last answer was read by the reporter.)

The Witness: Perhaps I should amplify that slightly. By "all other locations", I mean those other than the Detroit measuring station and the Fort Wayne station.

By Mr. Littman:

Q. You mean those that are shown at the foot of Page 4 of Exhibit 82?

A. Under the heading, "All other locations".

Q. Will you describe the types of construction for those regulating stations?

A. The majority of them are sheet metal structures on concrete foundations.

Q. What kind of frame?

A. In some cases, wood frame and in other cases, steel frame.

Q. What causes you to assign a 35-year life to those regulating stations as compared with the 40 and 50 year lives which you have heretofore given for other stations? [fol. 8102] Is that because of the nature of the structure?

A. The nature of the structure and the nature of the materials used in its construction.

Q. What is there about the nature of this latter class of structures that causes you to assign a smaller over-all life than to the other structures?

A. I think that those structures would require replacements of certain portions in a shorter period than the buildings at the pumping station locations or the brick buildings at Detroit.

Q. What is the size of these regulating and measuring stations?

A. They vary considerably in size but I would judge that the average size was from 8 to 12 feet wide and from possibly from 15 to 25 feet long, 6 to 8 feet high at the eaves.

Q. What over-all life did you use for Account No. 354.2, "Measuring and regulating station equipment"?

A. I used the same life for the regulating station equipment as I did for the structures, that is, I considered about the same life.

Q. Wouldn't the equipment outlive the structures?

A. Actually, I think it might to some extent.

Q. Will you give us a brief description of the equipment that is comprehended by Account No. 354.2, "Measuring and regulating station equipment"?

[fol. 8103] It consists of pipes running through the regulator structure coming up through the floor and running across the interior of the building at a level of about two or three feet off the floor and then down and out again and the measuring meters and shut-off valves and regulating equipment are interposed in the pipes going through the building.

Q. Those pipes are all painted, are they not?

A. Yes, they are all painted, protected from the weather.

Q. Protected from the weather by the structure, yes. You do not think those pipes would wear out in anything like 35 years, do you?

A. Actually, the pipe would last a much longer time but the necessity of rearrangement or the installation of new meters and governors would, in my estimation, make an average life of about 30, 35 years for that equipment about the figure to use.

. . . . . .

By Mr. Littman:

Q. Will you please turn to Page 3 of Exhibit 82; you show on that page that the compressor station structures and improvements in Account No. 352.1 that were installed [fol. 8104] at Montezuma compressor station in 1940 have a percent condition of 98.1 percent.

A. That is correct.

Q. And that the 1940 construction at Zionsville has a percent condition of 97.9 percent and the 1940 construction at Edgerton has a condition percent of 97.7 percent, do you not?

A. That is correct.

Q. Now, that indicates for the 1940 construction, a percent depreciation of 1.9 at Montezuma, 2.1 at Zionsville and 2.3 at Edgerton.

A. That is correct.

Q. Now, with respect to this 1940 construction, what conditions did you observe on the structures and improvements at Zionsville and Edgerton which caused you to place them in a lower percent condition than that which you placed on similar construction at Montezuma?

A. As I recall, that is due to the weighting out of the conditions placed upon various individual structures or portions thereof which varied somewhat in condition, one from another.

Q. What did you observe that caused you to place different condition percents at the various stations?

A. I would say, from my recollection now that the physical condition at the three places covering the 1940 construction was generally the same but the resulting con- [fol. 8105] ditions shown here, varying somewhat as they do, are due to the type of construction at the three locations. In other words, there may have been a building at Edgerton in 1940 that I had thought of as having a somewhat shorter life than the majority of the buildings at Montezuma in 1940 which would necessarily result in a somewhat lower condition.

Q. You have testified on direct examination, Mr. Haberly, that the condition in which you found this property offers strong evidence that well maintained property does not depreciate on a straight line [bases] but depreciates less rapidly during its early life than it does in later years.

A. That is true.

Q. That is your testimony?

A. Yes.

Q. Do your condition percents on compressor station structures referred to on Page 3 of Exhibit 82 indicate the depreciation accrued less rapidly during the early life than during the later years?

A. I do not consider that there is any property at the compressor station which is in anything but its early life. It was all property of from less to a year old to about six years old.

Q. All of that property falls within the meaning of the term "early life", as you have used it?

A. Yes.

[fol. 8106] Q. Taking the compressor station structures shown on Page 3 and looking at your condition percents, it is obvious, is it not, that the rate of depreciation in these five years at least, that is, in the first five years of their lives was greater in the first portion than in the latter portion of those five years?

A. I think that is due to the type of structures included in the various years. My recollection is that the 1940 construction at Montezuma consisted of smaller buildings, more or less of the nature of the regulator station buildings than large pumping station buildings.

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[fol. 8107] (Exhibit No. 82 was received in evidence.)

Mr. Littman: If your Honor please, in line with our program of taking up the exhibits in consecutive order as presented by each witness, I would like to next take up Exhibit No. 83 entitled, "Michigan Gas Transmission Corporation Reproduction Cost New of Plant and Property as of June 30, 1941, Exclusive of Working Capital, Materials and Supplies, Cost of Developing Business or [fol. 8108] Going Value".

I wish to make an objection to this exhibit. I propose to follow the plan here of making a motion to strike certain portions of this exhibit which, to our mind, are highly objectionable rather than to object to the exhibit in its entirety.

We move to strike the letter which appears on the first unnumbered page of this exhibit which is addressed by Mr. Haberly to Mr. G. S. Young, Vice President of Michigan Gas Transmission Corporation, dated October 27, 1941. This letter contains certain reproduction cost figures which we deem highly objectionable.

Mr. Goodman: Both the plaintiffs in this case are in complete harmony with Mr. Littman's objections and motions in connection with Exhibit 83, this one and those which are to follow.

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[fol. 8111] Trial Examiner: The Trial Examiner will just interject at this point to say that however erroneously counsel may feel the rulings have been that have been made, there will be at least consistency between the pending ruling and the rulings heretofore complained of, namely, the exclusion of reproduction cost now tendered by the Michigan Gas Transmission Corporation will, by the previous ruling with reference to a similar exhibit offered by the Panhandle Company, be excluded and, of course, we all have in mind that not only exhibit marked for identification as No. 83 but also exhibit marked for identification as No. 84 and apparently Exhibit 87 at least are subject to similar objections.

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[fol. 8112] Trial Examiner: Let me ask just generally, what part of it you are moving to strike?

Mr. Littman: The page to which I have already referred, namely the first unnumbered page containing the letter of Mr. Haberly. We have no objection whatever to the statement of education and experience of Mr. Haberly which is [fol. 8113] set forth in Exhibit 83 from Pages 1 to 7, inclusive. We object and move to strike Pages 8, 9 and 10. We object to and move to strike all of the figures appearing in the columns throughout this exhibit commencing from page 11 to the end of the exhibit headed, "Reproduction cost, June 30, 1941".

We have no objection to the listing of the account numbers and the names of the accounts and the original cost figures which are shown in the columns throughout the exhibit headed "Original cost".

With respect to Page 12 we object to the columns designated "Reproduction cost". That embraces the five columns at the right-hand side of the page. I believe that my objection is now specific enough to cover each and every item of reproduction cost.

In order to make it very clear, I will state, again, that on Page 11; that is with respect to Page 11 we object to the column headed, "Reproduction cost new, 1931" and with respect to all pages commencing with Page 13 and ending with the last page of the exhibit, namely, 64, we object to the figures and move to strike all of the figures shown in the column headed "Reproduction cost, June 30, 1941."

Trial Examiner: I think you inadvertently said, "Commencing with Page 13", did you not?

Mr. Littman: I made a specific motion with respect to Page 12 and, therefore, out of an abundance of precau-[fol. 8114] tion I mentioned Page 11, which is similar to Page 13 and all pages subsequent thereto.

. . . . . .

[fol. 8116] Mr. Littman: Yes, your Honor. We have certain objections to Mr. Haberly's Exhibit No. 84 entitled "Michigan Gas Transmission Corporation Reproduction Cost New Less Depreciation as of June 30, 1941, Exclusive of Working Capital, Materials and Supplies, Cost of Developing Business or Going Value".

With respect to Page 1 of this exhibit, we move to strike the column headed "Reproduction cost new, June 30, 1941", and the column headed "Reproduction Cost Less Depreciation".

. . . . . .

(Continuing) which columns are, together, headed "Cost of Gas Plant Exclusive of Working Capital, Materials and Supplies, Cost of Developing Business or Going Value."

In response to Mr. Culton's inquiry we have no objection to the listing of the account numbers under the heading "Accounts".

. . . . . .

Mr. Littman: With respect to the remaining pages of [fol. 8117] this exhibit, commencing with Page 2 through Page 8, we move to strike all of the figures shown in the

column headed "Reproduction Cost New, June 30, 1941" and all of the figures on the column headed "Reproduction Cost Less Depreciation".

We have no objection to the descriptions of the items for the columns headed, "Condition Percent."

Mr. Culton: There is nothing stricken on Page 2?

Mr. Littman: Yes, that ought to be stricken because of the "reproduction cost new, June 30, 1941," and, also, the same is true of the footnote on Page 4.

There was another exhibit presented by Mr. Haberly to which we wish to make objection. That is Exhibit No. 97 entitled "Michigan Gas Transmission Corporation, Variation in Purchase Power of Dollars as Related to 'Gas Plant' ". We object to this entire exhibit and move that it be excluded from evidence for the reasons which I will now state.

Your Honor has excluded reproduction cost evidence in this case. This exhibit, namely, Exhibit 97, endeavors to do by indirection what your Honor has ruled cannot be done by direction. Reproduction cost evidence in this case was tossed out the front door and here we have an effort to get it in through the back door.

If this Exhibit No. 97 is admitted in evidence, your Honor will have before him the precise effect and result as though he had included all of the evidence on reproduction cost.

[fol. 8118] Mr. Culton: Do you think it would be contaminated?

Mr. Littman: Yes, I think it would be contaminated, I think it is an infectious exhibit.

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[fol. 8119] F. S. Haberly a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Haberly, do you have Exhibit 83 before you?

A. That is the reproduction cost new?

Q. It is your exhibit entitled, "Reproduction Cost New of Plant and Property as of June 30, 1941?"

A. Yes, I have that.

Q. In this exhibit, you show the original cost of the various accounts, do you not?

A. That is correct.

Q. What is the source of those original cost figures which appear throughout this exhibit?

A. They are taken from our analysis of the books and records of the Michigan Gas Transmission Corporation.

Q. You stated that this was "our analysis."

A. Analysis of myself and my staff.

Q. I see. Do you take responsibility for the original cost figures shown in your Exhibit 83?

[fol. 8120] A. Not entirely. We analyzed them sufficiently to permit us to determine the reproduction cost and then finally adjusted our total analyzed figures to the original cost as determined by Mr. Spitznagle, so, on page 11 of Exhibit 83, the totals there shown are actually the totals for the various accounts as determined by Mr. Spitznagle.

Q. In other words, Mr. Spitznagle made the original preliminary report on original cost which is identified in this proceeding as Exhibit No. 91, did he not?

A. Yes.

Q. And you took his work and made a rearrangement of the original cost items in the various accounts?

A. Yes. We analyzed his totals by accounts sufficiently to give us a basis for the application of indexes.

Q. You did not disturb his figures at all, in toto, did you?

A. No, sir, we simply further analyzed his figures for our purpose.

Q. What was the purpose of that?

A. For the determination of the reproduction cost by trending original cost.

Q. The first step you did was to take Mr. Spitznagle's original cost figures and analyze them and put them into the various accounts?

A. Put them into the various accounts and classifi-

[fol. 8121] cations which we needed for our purpose.

Q. Would you explain how you did that, I mean, how did you analyze Mr. Spitznagle's figures? Did you make

changes from the account numbers that appear in the company's books or what?

A. The company's books, as I recall, were kept under a different system of accounts than were Mr. Spitznagle's final figures, although the property was classified in the same groups and the sole use we made of Mr. Spitznagle's figures was to have a total account figure to check to. My engineers made the analysis of the figures as shown in the company's books and endeavored to check out as closely as possible with Mr. Spitznagle's totals without going to more work than was necessary for the purpose for which we needed the figures.

Q. Did you have to make certain allocations in your analysis of original cost which appears in Exhibit 83?

A. Yes. As I recall, we made a number of allocations to the groupings which we were using for grading purposes.

Q. Let's look at page 14 of your Exhibit 83. On that page you show the 1936 construction of the Montezuma compressor station and you have various figures showing the details with respect to the original cost for foundations, floors, super-structure, lighting, heating, miscellaneous, labor, construction overheads, do you not?

[fol. 8122] A. That is correct.

Q. Where did you secure those figures, directly from the company's books?

A. Yes, those were secured from the company's books.

Q. Were they shown in that detail on the company's books?

A. Such items as foundation, floor, super-structure, lighting and heating under the item of material are as shown by the books. There may be a possible slight adjustment of a few dollars. Labor is shown on the company's books. Then, under the heading of "Heating," there are two items, unit heaters and other material. The other material was not analyzed except to get some idea of what it consisted of and then into construction overhead was thrown the various overheads and charges of an overhead nature. The items are not set up on the books. This is not a copy of the books in any sense of the word.

Q. Is there an item on the books called "Construction Overheads," $3,185.00, which relates to the main compressor building at the Montezuma compressor station?

A. I would say that there was. I do not have the working papers with me to determine exactly, but I do not think that was an allocation of cost to that building. I think it was a totalling up of the various overhead charges charged against the main compressor building.

[fol. 8123] Q. Does the testimony which you have given with respect to the 1936 construction at Montezuma compressor station apply with respect to the balance of this Exhibit 83?

A. Generally I would say that it did, yes.

Q. Your total original cost figure is the same total as that which is presented by Mr. Spitznagle in Exhibit 91, is it not, in total?

A. I think it is.

Q. That is, you made no deductions from or additions to Mr. Spitznagle's over-all figure, did you?

A. No, our endeavor was to use the same original cost as he did as representing the same property.

Mr. Littman: If Your Honor please, we have no further cross examination with respect to Exhibit 83.

Trial Examiner: Have other counsel questions concerning Exhibit 83?

Mr. Goodman: No, Your Honor, we have none.

Mr. Littman: If Your Honor please, did you expect to rule on these exhibits as we went along, or did you propose to defer your ruling?

Trial Examiner: The ruling with reference to the evidence on reproduction cost will be deferred to give counsel further opportunity to consider the effect of the motion pending, also to supplement any previous statements with reference to the record as it is before the ruling.

[fol. 8124] Mr. Baldridge: May I say in that connection, Mr. Examiner, that Exhibit No. 97 stands on an entirely different basis from the other exhibits objected to in that it does not relate to reproduction cost?

Trial Examiner: Yes, I think that is true, and the ruling with reference to Exhibit 97 will also be deferred so that it may be discussed later if you prefer.

Mr. Baldridge: Yes, that is what I desired.

By Mr. Littman:

Q. Mr. Haberly, in the morning session I requested you to furnish certain information with respect to the structures which you did not examine. Are you prepared to give me the information at this time?

A. Yes, the working papers which are here in Detroit do not show specifically the stations examined and not examined but I think I can answer your question in this way: Looking at page 26 of Exhibit 83, there is there listed the various measuring and regulating station structures by name, having a total original cost of $48,566.00. The Detroit measuring station and the Detroit regulating station, the Fort Wayne measuring and regulating station, the Montezuma measuring and regulating station, and the Zionsville measuring and regulating station were examined and, to the best of my recollection, some seven, eight or nine other regulating stations were also examined.

[fol. 8125] Q. How about the balance of them?

A. The balance were not examined.

On page 1 of Exhibit 82, a statement is made that in addition, measuring and regulating station structures and equipment were inspected aggregating in excess of seventy-five per cent of the investment in structures, and sixty-five per cent of the investment in equipment, and I recall now that in calculating those percentages, we added up either the original cost or the reproduction cost of those which were inspected.

Q. Do you have any working papers outside the city that will state and show which stations were not examined?

A. The only sheets that would show which were examined would be those on which we made notes, and it may well have been that, as the computations for depreciation were made from the date on these sheets were checked off and the sheets thrown away. I am not positive of that.

Q. Will you please make a check of your working papers and ascertain whether you have preserved your original notes and, if so, will you make a list of the stations which you did not observe?

A. Yes, I will endeavor to do that.

Q. Of course, if you have destroyed your notes, in that event you could not give us that information and you may so advise us.

[fol. 8126] A. I believe that by discussion with my staff I could determine what buildings were inspected, which would naturally result in giving us those that were not.

Q. I note at the foot of page 26 of your Exhibit 83 there is an item called "Not Analyzed," in the amount of $887.00 of original cost. What does that mean?

A. That covers small charges scattered through the construction costs of the company which may have been credits or adjustments or such small charges that it was not worth while to investigate what they covered.

Q. That same term is used elsewhere in this Exhibit?

A. Through most of the accounts you will find a certain amount of property made up of quite small items, adjustments and credits which we did not deem desirable to examine because of the time it would take.

Q. That is, you felt where the item was not sufficiently large in dollars to warrant the time, that it would be best not to pursue the matter and spend your time on it?

A. That is correct. There were many items of $1.00, $2.00 or $5.00 that would not materially affect the final answer.

Q. Now, will you please turn to your Exhibit 84? I will, of course, confine my questions to the column entitled "Condition Percent" and to no other figures shown in this Exhibit, inasmuch as there is a motion pending to [fol. 8127] strike all other figures.

A. Yes, I understand.

Q. Is my understanding correct that the condition percents shown in this Exhibit, which relate to the depreciation of mains were not determined by you, but were determined by Mr. Riddle? Is that correct?

A. That is correct. Those figures were furnished to me by Mr. Riddle.

Q. And you take no responsibility for them?

A. None whatever.

Q. Now, the condition percent figures which appear in this exhibit apply to compressor station equipment or, at least, most of the compressor station equipment? I have in mind by that the compressor engines. Those percents were determined by Mr. Lehn, were they not?

A. Yes, that was shown, I think, best on page 6 of Exhibit 84. At each station you will find an item there for main compressor units. The condition percent applied

against the reproduction cost of such property was determined by Mr. Lehn. The condition percentage applied against the elevated water tanks and the cooling towers was determined by myself and the condition percent applied against auxiliaries was determined by Mr. Lehn.

Q. So that what you have done is to take the various condition percents of Mr. Riddle and Mr. Lehn and yourself [fol. 8128] and summarize them in this Exhibit?

A. Yes, to bring them all in one place.

. . . . . .

By Mr. Littman:

Q. Will you please refer to Exhibit 85, which is entitled "Michigan Gas Transmission Corporation, Average Age at June 30, 1941, Estimated Remaining Life and Estimated Salvage Value of Short Life Property?" Is my understanding correct that the original cost figures shown in the first column for this property in the total amount of $13,400.51 were derived from Mr. Spitznagle's preliminary original cost study?

A. They were either taken from his preliminary figures or from the analysis which we made of the books. I do not recall at the moment, but I do think they checked out with Mr. Spitznagle's figures.

Q. Am I correct in saying that the "percent condition" which you show in the second column was derived by you in the manner set forth in Exhibit 82?

A. Yes, in Exhibit 82.

Q. And did you make the determination of the "aver- [fol. 8129] age age" of this property shown in the third column?

A. Yes, that is my determination.

Q. And, also, of the "remaining life" column and the "salvage value?"

A. Yes, those are my figures.

Mr. Littman: If Your Honor please, we have no objection to Exhibit 85.

Trial Examiner: The computation marked for identification "Exhibit 85" may be received without objection.

(Whereupon exhibit 85 was received in evidence.)

Trial Examiner: This Exhibit is supplementary to Exhibit 82, if I recall correctly.

Mr. Littman: Suppose we ask the witness that question. I rather doubt that it is supplementary. It does contain certain information contained in Exhibit 82.

By Mr. Littman:

Q. Will you please state whether your propose to offer Exhibit 85 as supplementary to Exhibit 82, Mr. Haberly?

A. In a measure yes. It breaks down certain figures a little further and develops the remaining life and the salvage value, and the Exhibit was prepared from Mr. Spitznagle's use in one of his exhibits.

Q. Well, perhaps I can clear up the matter this way: The condition percents shown in Exhibit 85 were not derived wholly by the application of the ratio between the [fol. 8130] average age and remaining life, were they?

A. No, they were derived in the same manner as those in Exhibit 82 and took into consideration salvage.

Q. Now, this exhibit was prepared, primarily, for the purpose of enabling Mr Green to determine his estimate of annual amortization for short life property, is not that correct?

A. Yes, I believe that is right.

Mr. Littman: If Your Honor please, it forms the basis, as I understand it, in part, of Mr. Green's testimony.

By Mr. Littman:

Q. Will you please turn to your Exhibit 86 entitled "Michigan Gas Transmission Corporation, Estimated Salvage upon Exhaustion to the Gas Supply of 'Gas Plant' as of June 30, 1941?" Do [you] estimates contained in Exhibit 86 reflect the dollar amounts which, in your opinion, will be recovered by way of salvage in the year 1965?

A. Yes, the exhibit was made in order to estimate as well as could be the probable salvage which might be realized upon dissolution of the company.

Q. You are not taking any responsibility for the claim that the Michigan Gas Transmission Corporation's project and property will be abandoned in the year 1965, are you?

A. No.

Q. As I understand your testimony, you were given the [fol. 8131] problem of determining what the salvage value would be at December 31, 1965, were you not?

A. That is correct.

Q. You testified on direct examination, Mr. Haberly, that you first determined your percentages of salvage and then applied them to reproduction cost new to secure the amounts which are shown in the column headed "Net Salvage," is that correct?

A. That is generally true where a percentage is shown. There were some items where no percentage was determined, and the net salvage figure was shown. There [there] was simply an estimate made of the possible salvage which might be realized without going through the mathematics of setting it up, percentagewise.

Q. But the major items, that is the items of large amounts, were determined by the application of a percentage to reproduction cost new, were they not?

A. That is correct.

Q. Is it your testimony that the total net salvage of $663,165.00, shown on page 1, is the proper salvage value of all the property of Michigan Gas recoverable as of December 31, 1965?

A. That is so, provided the assumption is made that the entire amount of the pipe in the mains could be sold for re-use in another location. I doubt whether it would [fol. 8132] not be unwise to go upon the assumption that there would be a market for that price for re-use.

At the foot of page 1 on Exhibit 86, there is a note to the effect that if no prospective purchaser could be found, then the pipe could only be sold as scrap and there would be no salvage on the mains because the cost of removal would exceed the amount which could be realized by selling the pipe as scrap. I personally believe the proper figure to use as salvage value would be the $663,165.00 less the estimated salvage for mains of $537,019.00, which is based upon the assumption that the entire amount of pipe could be sold for re-use.

Mr. Littman: Will you please read that back?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. Well, then, your actual salvage value is not any $663,165.00, is it?

A. No, that would be, in my estimation, the maximum salvage which could be obtained provided you could sell the pipe for re-use.

Q. What is your estimate of the minimum salvage which could be obtained?

A. About $127,000.00.

Q. I take it, from your testimony, that you do not consider it likely that the amount of $537,019 could be ob- [fol. 8133] tained for mains?

A. I doubt it.

Q. In other words, it is your best judgment at the time that Michigan Gas Transmission Corporation will not be able to salvage one cent for its mains?

A. Well, it would depend entirely upon the conditions in 1965.

Q. Well, suppose you tell me what you considered would be the conditions that would be found to exist in 1965, upon which you now base your conclusion?

A. Well, I have worked it out on two bases, one, upon the assumption that the pipe could be sold for re-use, and the other upon the basis that it could not. I would lean very strongly toward the assumption that the pipe could not be sold for re-use, that is, that there is no certainty that it could be.

Q. There is no certainty that it could not be, either?

A. That is perfectly true.

Q. What prices did you use for salvage, those which were prevalent as of June 30, 1941, or those which you expect to prevail at December 31, 1965?

A. Well, I would hesitate very strongly to estimate what the salvage value of the pipe might be in 1965, and the entire estimate of salvage is predicated upon percentages of the reproduction cost and salvage values of [fol. 8134] pipe on June 30, 1941.

Q. Well, suppose the Commission were to use original cost as a rate base for the purpose of testing the reasonableness of the rates. Would it be proper to apply your percents of salvage to the original cost?

A. Yes, that could be done, although, as I recall, I made a statement in my direct testimony to the effect that the

amount of salvage, as determined in this exhibit, could be used on either a reproduction or original cost basis.

Q. Well, if you used it on the original cost basis, you would get even less salvage than you found, would you not?

A. It would be somewhat less, yes, not materially so.

Mr. Culton: May I ask a question to get my own mind clear?

Does this show what that salvage would, today, be worth in your judgment as of June, 1941?

The Witness: Yes, it was predicated upon the fact that the prices prevalent at June 30, 1941, would be prevalent in 1965.

Mr. Culton: In other words, this page 7 in Exhibit 86 represents what you considered that salvage could be sold for as salvage net as of June 30, 1941?

The Witness: Yes.

Mr. Culton: Irrespective of what it originally cost?

[fol. 8135] The Witness: Irrespective of what it originally cost, because it was here computed on a reproduction cost basis.

Mr. Culton: By "it" I meant irrespective of what the property originally cost.

The Witness: Yes.

By Mr. Littman: In other words, you are standing on the dollar value of salvage here and not so much on the percent figure?

A. Well, I think it would be equally correct to take the dollar figure here as applying to original cost rather than to recompute it, because it is hypothetical as to what the actual salvage in 1965 will be. The only basis for it is an estimate using today's prices and when none of us know what the price level will be in 1965. It may be considerably higher or considerably lower.

Q. In other words, you would have no objection and it would not be improper to use the dollar figures of salvage which you have set forth in Exhibit 86, regardless of what rate base is used?

A. That is correct, except that in my own judgment the lower of the two figures I testified to would prevail.

Q. I understand the one qualification that you have made very clear on the record. Well, as I understand your testimony, you have determined in this exhibit the salvage value today of the property when sold in 1965?

[fol. 8136] A. Yes. I have maintained the present price level up to 1965 and assumed that we are then at the same price level salvaging the property.

Q. What conditions did you assume, those that exist today or those that exist in 1965?

A. I do not know what the conditions in 1965 will be, so I assumed market conditions as of 1941.

Q. If this property were to be abandoned tomorrow, would it be possible to sell the pipe for re-use in another location?

A. I think it would be very possible to sell the pipe. I do not know whether it would be good for use in another location, but steel is valuable today.

Q. The probabilities are that it could be sold as pipe?

A. It could be sold and well used for some purpose. I think it would probably be up to the Priorities Board as to what use would be made of it.

Q. It would not be sold as scrap today, would it?

A. I doubt it.

Q. And your answer would be the same, even though the pipe in this system were thirty years old today? Is that correct?

A. I think if the pipe were thirty years older today it would not be materially less valuable.

[fol. 8137] Mr. Goodman: Would not be materially what?

The Witness: Less valuable.

By Mr. Littman:

Q. Why don't you assume that condition which exists today in arriving at your total salvage value rather than to assume scrap conditions which you have assumed?

A. Well, in the first place, the determination was made before the war started.

Q. You mean your exhibit was prepared before the war started?

A. Yes, I do not think the war is going to last until 1965, so I do not think I would want to maintain that position at thirty years hence.

Mr. Culton: At least you hope that?

The Witness: I certainly do.

By Mr. Littman:

Q. You certainly went to a good deal of trouble to ascertain what the salvage value of these mains would be if they were sold for re-use in another location, did you not?

A. Yes.

Q. You thought enough of the possibilities to go to that trouble, did you not?

A. I started out both ways so that whichever one the Commission desired could be used.

Q. As far as you are concerned, the Commission could [fol. 8138] use either one?

A. There is nothing I can do about it.

Q. Well, I would like to know what you think about that. You put it in this exhibit. Now, if it does not belong in here, we would like to know it.

A. If it were my own property, I think it would be slightly over optimistic to count on selling the property for re-use in 1965.

Q. Why did you put this figure in here if you did not intend that anyone should use it? We get very optimistic when we see $63,000 salvage and then later on we learn, when we look at Mr. Green's exhibit, that we only have $126,000 of salvage in his pro forma statement and then we are not so optimistic.

A. Well, I set it up in both ways, one assuming that it could be sold for re-use, and one assuming that it could not. I lean more strongly to the second.

Q. In other words, your forecast of things to come in 1965 is not any better than mine or anybody's else, is it?

A. I think that is probably true.

Q. And you would not consider the use of the entire figure of $665,165 as erroneous if it were used in its entirety?

A. No, I do not think it would be erroneous. It would be, in my opinion, the more optimistic view of what you [fol. 8139] might obtain for salvage.

Q. In your estimate of salvage for Account No. 353, "Mains," summarized on page 1 of your Exhibit 86, in the amount of $537,019, what average price per ton did you use in arriving at that figure?

Now, before you answer that question, I presume I am correct in assuming that that is the amount you would expect as salvage in 1965 on the assumption that the pipe would be sold to a purchaser who would have occasion to re-use the pipe at another location. Is that correct?

A. That is correct.

Q. Now, let us have the answer.

A. The average price is one-half of the reproduction cost of the pipe. I do not know exactly what the average price per ton is. The figure for the total reproduction cost includes pipe at several various prices because of the price differential as to size.

Q. You are speaking of the cost of the pipe alone?

A. Yes, so I cannot answer the question specifically without making an analysis to find detail price.

Q. Do you have those figures in your working papers, Mr. Haberly?

A. I believe you have the working papers, and I do not recall now just exactly the detail in which it is set up.

Q. We hand you a copy of your working papers and [fol. 8140] ask you to read into the record the price per ton.

A. I do not believe, Mr. Littman, that I can answer your question much better than I just did. Apparently the material cost on the pipe was added up exclusive of the river crossings and exclusive of the fittings of that type was at various prices due to different prices on different sizes of pipe.

Q. Can you give us an approximation?

A. I would say that in the neighborhood of $30.00 to $32.00 a ton was considered as gross salvage.

Q. Thank you. Have you made any estimate of the salvage value of this plant, assuming that its component parts would be replaced by reason of physical deterioration before the gas supply is exhausted as claimed in this case?

The Witness: May I hear that question?

(Whereupon the pending question was read by the reporter.)

The Witness: As I understand your question, I have assumed that the property would be maintained in adequate working condition, operating condition, up to the time it went out of service and, therefore, that the necessary replacements would have been made from time to time and it would be that property which was being salvaged in 1965.

Q. You have told me what you did. Now, I want you to tell me whether or not you ever made another type of [fol. 8141] study of salvage on the system, namely, a determination of the salvage that would be recovered from this system if the gas supply were ample for a long period in the future?

A. No, I do not believe I have.

Q. You are sure you understand my question—I am referring to the salvage that you would obtain year in and year out by replacing pipe and renewing pipe and then—

Mr. Culton: (Interposing) You mean annual salvage? I am trying to get my own mind clear is the reason for this question.

Mr. Littman: That might be one way of expressing it, that is, assuming at the end of its life the entire property had been replaced with new parts. You answered my question wholly understanding what I have in mind?

The Witness: No. If I still understand your question, I do not think I have made any such determination.

By Mr. Littman:

Q. You know whether you did or not, don't you?

A. If I understand your question, I did not.

Q. You did not make any other type of salvage study than that which is contained in your Exhibit 86, did you?

A. Except in our determination of the percent condition, we kept in mind possible salvage at the end of its natural life which was not as much as I have considered here. For instance, I would not consider that the structures [fol. 8142] would have any net salvage.

Q. Did you consider that the pipe would have any net salvage?

A. I did not make a determination on percent condition on pipe so that question did not come up.

Q. Have you made any estimate of the salvage value of the main transmission line of Michigan Gas upon the basis of its re-use in place in 1965 for purposes of carrying oil or artificial gas or perhaps water?

A. You mean in the same location?

Q. Yes.

A. The question of salvage would not arise if it were going to be re-used beyond that date.

* * * * * * * * *

[fol. 8143] By Mr. Littman:

Q. You made no estimate of salvage or sale of this pipe line system in its present location as of December 31, 1965, did you?

A. In its entirety, a sale in its entirety?

Q. Yes.

A. For re-use for another purpose?

Q. That is right.

A. No, I did not make any such determination.

Mr. Littman: If Your Honor please, we would like to make an objection with respect to this exhibit.

Mr. Goodman: I would like to ask just one question which will complete my cross examination. This might be a good time.

Trial Examiner: Proceed.

Mr. Goodman: In your last answer, do you mean that you excluded consideration of the possible use of the pipe line facility as it exists at the termination or rather at the exhaustion of the gas wells as estimated to take place in 1965?

The Witness: That is correct. I did not assume that the property could be re-used in its present location.

Mr. Goodman: That does not answer my question. You excluded the element of such use from consideration?

The Witness: That is correct.

[fol. 8144] Mr. Goodman: All right, that is all.

Mr. Baldridge: May I inject one question? In that case, it would not be salvage, would it, Mr. Haberly?

The Witness: No, it would not be salvage.

Mr. Littman: Before entering my objection, I would like to ask Mr. Haberly one more question.

By Mr. Littman:

Q. In the footnote on page 1 of Exhibit 86, you state that, "No. 1 heavy melting scrap as of June 30, 1941, ranged in price from $18.25 to $20.00 per gross ton which is less than the cost of removal, including damages and freight to the steel mills."

Will you state the salvage value of the mains if the amount of $18.25 per ton were secured?

A. I would have to calculate it, but it would be a red figure. If the pipe were salvaged and sold as scrap, the net salvage would be a loss.

Q. Not asking you the net salvage. I am asking you to tell me how much money would be secured for this pipe if it were sold for $18.25 per ton.

A. Excluding the price of removal?

Q. Yes.

A. I think about the best way I can answer that, Mr. Littman, is I believe I stated that the gross salvage, assuming it could be resold for use in another location, was [fol. 8145] probably about $30.00 or $32.00.

Mr. Wheat: Per ton?

The Witness: Per ton; and if sold for $18.25 to $20.00, it would be a little better than half of what they would have obtained by selling it for reuse in another location, that is, sold for scrap. That would be, however, exclusive of the cost of removing.

Q. Suppose you tell me the total tonnage of pipe in the system and then we will do our own multiplication and get the figure we are seeking.

A. I do not know the exact total tonnage, but I would judge it was in the neighborhood of about 80,000 tons.

Q. Eighty thousand tons?

A. Yes, that is quite approximate.

Q. The amount covered on the basis of $18.25 per ton would be $1,500,000. Does that sound about right to you?

A. That would be approximately correct. That would be gross without giving consideration to the cost of getting it out of the ground before selling it at that price.

Mr. Littman: If Your Honor please, I wish to move to strike from this exhibit, Exhibit 86, all the figures shown in the column headed "Reproduction Cost New June 30, 1941." We have no objection to the other figures in the exhibit.

Mr. Culton: Mr. Littman, don't you think the Commission might be contaminated by the fact you could apply your percent salvage to the net salvage and get back ap- [fol. 8146] proximately what is in the first column anyhow?

Mr. Littman: If you want to have a good time doing that, you certainly are welcome to enjoy yourself. I do not think anybody else would want to do it.

I might say we want to be entirely fair about this matter. This witness has testified, and we gave him every opportunity to do so, that the dollar figure of net salvage are the dollars that he expects to recover at the end of the purported life of the project. I feel, in view of that testimony, notwithstanding the fact that this witness used a percentage applied to reproduction cost new, that the figures are not objectionable on that basis.

I wanted to state clearly on the record why we make no objection to the net salvage value or the percentage of net salvage value.

. . . . . .

[fol. 8153] By Mr. Littman:

Q. Mr. Haberly, you applied a salvage value of 4 percent on all of the main compressor units, did you not?

A. That is correct.

Q. And that represents junk value at December 31, 1965? A. Yes.

Q. As distinguished from resale salvage value?

A. Well, we gave consideration to possible resale of, say, one out of five units and the junking of the rest.

Q. How much are you getting for the one that is being resold? A. About 15 percent of its original cost.

Q. And that 15 percent was applied on one out of every five of the main compressor units? A. Yes.

Q. Does that contemplate the resale as at December 31, 1965?

A. Of one out of five, yes, at about 15 percent of its original cost.

Trial Examiner: May I ask, Mr. Haberly, are these compressors, in general, of a type similar to the compressors used for ventilating large mines?

The Witness: I really do not know. I doubt it.

[fol. 8154] Trial Examiner: I assume they would not be limited to gas transmission, would they?

The Witness: Yes, I believe they would be confined entirely to the transmission of gas.

Trial Examiner: And they could not be used for air compression?

The Witness: I do not believe so. I am basing most of my statements on discussions with Mr. Lehn.

By Mr. Littman:

Q. Mr. Haberly, you heard Mr. Lehn testify yesterday did you not? A. Yes.

Q. You heard him say he would not even want to venture a guess as to what the salvage value of these compressor engines would be in 1965. Did you hear him say that? A. Yes.

Q. You do not agree with Mr. Lehn, do you, on that subject?

A. Yes, in a measure I do. It is problematical as to what can be obtained for these engines in 1965 but, predicating it upon what he told me of the sale of a number of engines some years ago and the probabilities of how many could be sold were some nine or ten put on the market at once and the probable scrap value that could be obtained for the others, I worked out a figure of 4 percent.

[fol. 8155] Q. Did Mr. Lehn tell you that any of his Worthington engines had ever been scrapped? A. No.

[fol. 8156] By Mr. Littman:

Q. Mr. Haberly, you also heard him testify that machines that had been in operation for 40 years were expected to last another 40 years. Did you hear him testify to that effect? A. Yes, I heard him testify to that.

Q. That would give a life of approximately 80 years on these machines, would it not? A. Yes, it would.

[fol. 8157] Q. In 1965, the oldest of these machines will have reached an age of only 30 years, approximately?

A. Something like that, yes.

Q. And according to Mr. Lehn's testimony, they would be fully expected to last another 50 years?

A. If you can find someone who can use them.

Q. Now, assuming that you can find someone who can use them in 1965 when they are something less than 30 years of age, on the average, you say that only 15 percent of their value would be recovered?

A. Yes, and that figure was based upon conversations with Mr. Lehn and I think he repeated that statement in his testimony yesterday.

Q. Did Mr. Lehn tell you what might be expected by way of resale of these machines in 1965?

A. No, I discussed the matter with Mr. Lehn and, as I recall the conversation, he was of the opinion that there would be little likelihood of disposing of eight, nine or ten machines at one time to a prospective purchaser.

Q. Well now, you confine the 15 percent to only one out of five engines in 1965? A. That is correct.

Q. And 4 percent on all the other engines.

Mr. Chamberlain: It would be much less if he got 15 percent out of one. He only assumes to recover 20 percent [fol. 8158] out of five which would leave 5 percent to be recovered out of four or 1¼ percent salvage.

By Mr. Littman:

Q. Is it correct to state that your salvage on the remaining four machines out of the five is 1¼ percent?

A. I did not approach it that way although it works out to about that, yes.

Q. And that is simply because you say you doubt whether a purchaser could be found in 1965?

A. If the gas field was exhausted, it would probably throw quite a number of engines on the market in addition

to those on this property. Probably all of those on the Panhandle system and other systems which were supplied from the same field. I am of the opinion that it would be very difficult to dispose of more than one out of five for reuse in another location.

Q. Well, if they were all sold in 1965, you would expect to receive 15 percent salvage on them?

A. If you could find a [purchases] for each and every one, you probably could realize 15 percent.

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[fol. 8159] Mr. Littmans: I propose next to take up Exhibit No. 87 entitled, "Michigan Gas Transmission Corporation, Materials and Supplies, Statement of Cost of [fol. 8160] the Major Items at Prices as of June 30, 1941."

• • • • • • • • •

By Mr. Littman:

Q. In this exhibit you show the total cost of materials and supplies per books as of June 30, 1941, in the first column, do you not? A. That is correct.

Q. And that was in the amount of $93,413?

A. That is right.

Q. Now, you made a certain adjustment with respect to the book figures and made an upward revision, did you not?

A. Yes, of about 58 percent of that $93,000.

Q. No, you mean 58 percent of $54,000, do you not?

A. No, it is about 58 percent of the $93,413.

Q. Oh, I see. That is the 58 percent of the $93,000 is the amount of materials and supplies, on whose costs you made a revision? A. That is correct.

[fol. 8161] Q. Now, what is the total amount of your revision? A. $7,311.

Q. And so the upshot of this exhibit is that you added $7,311 to the book cost of materials and supplies at June 30, 1941, of $93,413 to obtain a total claimed amount for materials and supplies of $100,724. Is that correct?

A. That is correct.

Q. Now, pages 2 to 8 show the details of the manner in which you arrived at the additional $7,000?

A. Yes. Opposite each item will be shown the original cost and then its approximate present cost.

Q. You took $54,211 of the materials and supplies on the company's books at June 30, 1941, and repriced that

amount of materials and supplies to reflect present-day prices, did you not?

A. Yes, we priced it by the application of indexes.

Q. Well, how much time did you spend on this job?

A. Personally, about a half-hour and one of the engineers probably spent about two or three hours digging up the indexes and setting them down opposite various items and then it went to a comptometer girl for calculation.

Q. Well, how did you determine how much of these materials and supplies required repricing?

A. It was not a matter of determining how much, it was [fol. 8162] done in this way: We were given a list in detail of the items of materials and supplies, the larger items. No detail lists of the smaller items aggregating about 62 percent of the materials and supplies was furnished to us. That 62 percent we made up from myriads of small items.

Mr. Baldridge: Did you say "62", Mr. Haberly?

The Witness: Yes. No, 42 percent it should be, I am sorry.

Trial Examiner: You are referring now to the—

The Witness: (Interposing) Complement of the 58 percent.

Trial Examiner: (Continuing) —percentage computation appearing on Page 1 of this exhibit?

The Witness: Yes.

By Mr. Littman:

Q. What was your assignment in regard to materials and supplies? Was it to determine the amount of materials and supplies required by this company for purposes of this proceeding or was it purely a repricing?

A. It was a repricing, what would be their value at June 30, 1941.

Q. You are not taking any responsibility then for estimating the amount of materials and supplies actually needed or required by way of working capital by Michigan Gas Transmission Corporation?

A. No, I am simply putting it in present-day values.

[fol. 8163] Q. You went to quite a bit of trouble here to arrive at this additional $7,000, did you not, Mr. Haberly?

A. Well, it may appear to be quite a bit of trouble but actually the indexes had been worked out for purposes of the reproduction costs of the property and the same indexes were applied to these various items, that is, the index indicating the increase in the price of a certain size of steel pipe from 1936 to June 30, 1941, was applied to that same size of pipe both in 1936 for materials and supplies purposes.

. . . . . .

[fol. 8165] Q. Mr. Haberly, I would like to have you turn to your Exhibit 97. In this exhibit you have worked out a factor which you called "Purchasing Power at June 30, 1941, of Actual Dollars Spent on Gas Plant", have you not? [fol. 8166] A. Yes.

Q. Now, you derived that, that factor is shown and I shall not read it into the record because I am going to ask that this exhibit be excluded. You have shown it in the right-hand bottom corner of the page of this exhibit, have you not? A. Yes, double-underscored.

Q. Now, this factor was derived by the application of certain indices which you have worked up from time to time? A. Yes.

Q. And these are the same indices that you have used in arriving at your reproduction cost estimate which is shown in Exhibit 83. Is that not correct?

A. In part, yes.

Q. How much part? A large part or a small part?

A. The major part.

Q. That is, you used the same general method in Exhibit 97, for the purposes of arriving at the factor, as that which you used in Exhibit 83 in arriving at your reproduction cost?

A. That particular figure was arrived at in that way, yes.

Mr. Littman: We have no further cross-examination with respect to Exhibit 97 and we, again, move that Exhibit 97 be excluded from evidence in this case.

. . . . . .

[fol. 8172] FRED A. SPITZNAGLE a witness, having been previously sworn, resumed the stand and testified further as follows:

. . . . . .

Cross-Examination

By Mr. Littman:

Q. Mr. Spitznagle, you are an employee of the Central Service Corporation? A. That is correct.

Q. What position do you occupy with that corporation?

A. An accounting position.

Q. You have presented the accounting exhibits in this proceeding in so far as they relate to Michigan Gas Transmission Corporation? A. That is correct, yes.

. . . . . .

[fol. 8173] By Mr. Littman:

Q. Do you have before you Exhibit 88 entitled, "Michigan Gas Transmission Corporation—Comparative Balance Sheets Per Books as at December 31, 1936 to 1940, inclusive, and June 30, 1941", Mr. Spitznagle? A. I do, yes, sir.

Q. Does this balance sheet correctly represent the true financial condition of Michigan Gas Transmission Corporation as of the dates shown?

A. I think I so testified on direct examination, Mr. Littman, that it does represent the financial condition of Michigan Gas Transmission Corporation at the respective dates shown in the exhibit.

Q. As a matter of fact, Mr. Spitznagle, you have made an actual audit of the books of the Michigan Gas Transmission Corporation, have you not?

A. No. In the direct testimony, I stated specifically [fol. 8174] that no detailed audit of the books was made by myself or anybody under my supervision.

Q. But you did make an investigation of the books?

A. Yes, we examined into the property and plant account in connection with the original cost determination and examined the accounts in a generalized way.

Q. Do you have a copy of Exhibit 146 which is the prospectus of Panhandle Eastern Pipe Line Company dated January 21, 1942, relating to the issue of $10,000,000 of first mortgage and first lien 3 percent bonds and 150,000 shares of cumulative preferred stock?

A. I have a copy of the prospectus to which you refer. I do not know it as Exhibit No. 146.

Q. Suppose you refer to that document.

A. I am afraid I misspoke myself, I do not have it here.

Q. I hand you a copy of Exhibit No. 146 and refer you to Page 74 thereof which contains a copy of balance sheets of Michigan Gas Transmission Corporation as of December 31, 1940, and September 30, 1941. I shall refer in the questions to follow only to the figures at September 30, 1941, on this balance sheet.

Will you state from this balance sheet the total of the outstanding long-term debt, common stock and surplus accounts of Michigan Gas Transmission Corporation as of September 30, 1941?

[fol. 8175] A. The long-term debt is denoted in this balance sheet that you have referred to as notes and loans payable to Columbia Gas & Electric Corporation and are in the amount of $8,320,500.

The capital stock and surpluses appearing in this balance sheet of September 30, 1941, are stated as follows:

The common stock, no par value, authorized 60,000 shares, outstanding 44,800 shares—$2,240,000;

Surplus with a reference to the statement of surplus accounts contained in the prospectus, special capital surplus—$139,500;

Capital surplus prior to January 1, 1938—$26,662.76;

Earned surplus since December 31, 1937—$54,177.83;

Making a total of capital stock and surplus of $2,460,340.59.

Q. Am I correct in stating, by way of summary, that the total of the common stock, long-term debt and surplus of Michigan Gas Transmission Corporation at September 30, 1941, was $10,780,840.59? A. Yes, sir.

Q. Is it correct to say, Mr. Spitznagle, that this amount of $10,780,840.59 represents the total actual investment as of September 30, 1941, of Columbia Gas & Electric Corporation in Michigan Gas Transmission Corporation with the exception of an item of an inter-company fee of $139,423.73 plus interest of $2,200 or a total of $141,157.73?

[fol. 8175-a] The Witness: I would like to have the question read to me, Mr. Littman, please.

(Whereupon, the pending question was read by the reporter.)

The Witness: You asked me if it is the amount of money invested by Columbia Gas & Electric Company. Actually, I do not know how much Columbia Gas and Electric, as such, has invested.

I can say that the amount that you have quoted is the amount that has been paid in for the items that I have enumerated in my testimony, so-called long-term debt and capital stock and surplus. Whether it was all paid in by Columbia Gas & Electric Company, or not, and whether they paid more for their investment in those items, I do not know, Mr. Littman.

By Mr. Littman:

Q. Would you say that the sum of $10,780,840.59 represents the total actual investment by the investors in Michigan Gas Transmission Corporation as of September 30, 1941, with the exception of the $141,157.73 which I mentioned?

A. My difficulty is with the investment and investors. It is the amount of money that has been paid into the Michigan Gas Transmission Corporation, without question.

Q. By whoever paid it in?

A. That is right, by whoever paid it in.

Q. Don't you know that Columbia Gas & Electric Corporation has always owned Michigan Gas Transmission Corporation? A. I do.

[fol. 8176] Q. From the inception down to the date in February of 1942 when the corporation was sold to Panhandle Eastern?

A. Yes, I think that is my understanding.

Q. You know that they owned all of the outstanding common stock and all of the long-term debt, do you not?

A. They made all of the advances that resulted in the long-term debt, that is correct, yes, sir.

Q. And being the owner of the common stock, they owned the surplus, didn't they? A. That is correct.

Q. I might say, Mr. Spitznagle, that if you are finding any fault with language, it is not with my language. It

is with the language of the Securities and Exchange Commission and shall read from Page 12 of the Securities and Exchange Commission's opinion which is in evidence as Exhibit 147 as follows:

"With the exception of one item, the record indicates that the figure stated in the application of $10,780,840.58 as constituting the investment of Columbia Gas in Michigan Gas, plus surplus, at September 30, 1941, constitutes actual system expenditures and is equal to the plant account after depreciation less the excess of current liabilities over current assets."

Does that comport with your understanding of the situation?

A. Yes, it does.

[fol. 8177] Q. Now, are you familiar with the fact that the Securities and Exchange Commission at Page 12 of its opinion which is in evidence as Exhibit No. 147 concluded that the undepreciated portion of this intercorporate profit to which I have just referred a moment ago of $141,157.73 was $104,924 as of September 30, 1941?

A. I need to correct what you have just said before agreeing with your statement in this respect. The amount of $141,000 odd that you referred to also includes, in addition to intercompany profit, an item of interest capitalized on that same amount of some $2,200.

Q. That is a small amount, isn't it? A. That is right.

Q. But you do know that the Securities and Exchange Commission concluded as I have just stated?

A. That is correct, yes sir.

Q. And you are in substantial agreement with that conclusion, are you?

A. I have no reason to disagree with them at all, Mr. Liftman.

Q. Incidentally, the interest item to which you refer amounts to something like $2,200, doesn't it?

A. That is correct, yes, sir.

Q. Now, after deducting this item of intercorporate profit, there is left a balance of $10,675,916.57 which rep-

[fol. 8178] resents the total actual investment in Michigan Gas Transmission Corporation as of September 30, 1941. Is that correct?

A. I think that is correct, subject to checking your subtraction of the figure. I could not follow you to do that.

Q. If you should find any error in the figures which I am reading and which are, of course, always subject to check, I wish you would report back on the record and correct me. A. I shall do so.

Q. But that figure sounds correct? A. It does, yes sir.

Q. Now, Mr. Spitznagle, let us see what assets this sum which I just named of $10,675,000-odd was invested in as of September 30, 1941. I now refer you again to the balance sheet which appears on Page 74 of Exhibit No. 146 and ask you whether you find the total current and working assets as of September 30, 1941, to be $1,673,533.50?

A. Yes, sir, I do.

Q. Now, what were the current and accrued liabilities as of that date? I mean the total, just give the total:

A. The amount is $1,596,340.50.

Q. Now, subtracting the latter from the former gives you what amount as net working capital as of September 30, 1941?

Mr. Baldridge: May I interject a question there? I may have some objection to your question, Mr. Littman, but I do not want to unless I have to.

[fol. 8179] In what sense are you using the word "capital"? Is that the use of the word in this statement or is that a term of your own?

Mr. Littman: I am using the term "actual net working capital" as that term was used by Mr. Coffman who testified on behalf of Panhandle Eastern.

Mr. Baldridge: I think, of course, this witness is not bound by Mr. Coffman's definition. I think we ought to know what we are talking about.

Mr. Littman: I think we can clear that up, Mr. Baldridge, to your complete satisfaction.

Mr. Baldridge: Thank you.

By Mr. Littman:

Q. Mr. Spitznagle, before you answer this question, will you define the term "actual net working capital"?

A. It is generally considered, Mr. Littman, as being the net of current assets less current accrued liabilities.

Q. It is so defined in the Accountant's Handbook, is it not? A. I think so.

Q. Now, will you give me the figure which represents the actual net working capital as of September 30, 1941, reflected by the balance sheet?

Mr. Baldridge: May I suggest one change? May I suggest "net working capital" as so defined.

[fol. 8180] Mr. Littman: Of course.

The Witness: The amount that you have asked me to determine is $77,193.

By Mr. Littman:

Q. Another item on this balance sheet which represents assets in which money is invested by the owners is referred to as "deferred charges". Will you please read into the record the amount of deferred charges as of September 30, 1941?

A. The amount appearing on this balance sheet as of September 30, 1941, is $12,418.89.

Q. There was accumulated in the reserve for "reserve for contingencies", "reserves for injuries and damages" and "Other reserves", the amount of $319,749.39. Is that correct?

A. I will have to check to see if that is the amount, Mr. Littman. $319,749.39 is the correct amount.

Q. That is a red figure, isn't it, so far as assets are concerned?

A. That is correct. It is on the liability side of the balance sheet.

Q. This makes a total net deduction of $230,137.50, does it not, for other assets and liabilities and so forth? That is to say, the net asset amounts to a red figure, doesn't it?

A. The net assets other than property and plant and equipment and the reserve for retirements is the amount you [fol. 8181] have just stated subject to my checking the actual amount in dollars. I presume you have deducted the $12,418.89 of deferred charges from that same amount?

Q. Yes. What I am seeking to do here is to eliminate the small items and get those out of the way so that we can discuss the gas plant and investment in gas plant. Now, the only remaining figures on the balance sheet pertain to the gas plant accounts, do they not?

A. That is correct, yes, sir.

Q. Those are "Gas Plant in Service" in the amount of $12,617,352.68? A. That is correct, yes, sir.

Q. And from that you would deduct contributions in aid of construction in the amount of $9,342.96. Is that right?

A. That is correct, contributions in aid of construction, for construction appearing on the balance sheet in a reserve account, yes, that is correct.

Q. You would have to deduct that $9,000 item in order to secure the actual net investment, would you not?

A. That is right, because the amount was contributed by someone other than the company.

Q. And you would, also, have to deduct from the gas-plant-in-service figure of $12,000,000-odd the inter-company-profit figure which we referred to a few minutes ago in the amount of $104,924, would you not?

[fol. 8182] A. Yes, after netting the plant account by the application of retirement reserve. If you are going to apply gross you would have to take out the $141,000 and then take something off of the reserve to compensate for it.

Q. Now, we are coming to the reserves. And you would, also, have to deduct from gas plant in service the reserves for depreciation in order to get the net investment, would you not? A. That is correct.

Q. And what amount had been accumulated in the reserve for depreciation at September 30, 1941?

A. Well, the caption on this balance sheet is "Reserve for Retirements" and that amount is $1,597,031.63.

Q. Now, on the books of the company what is it called?

A. I think on the books of the company, Mr. Littman, I do not recall right off but I believe it is "Reserve for Depletion."

Q. Very well, we are talking about the same thing, are we not? A. Yes.

Q. Now, that leaves a net investment in gas plant of $10,906,054.09 as of September 30, 1941?

A. It must be approximately that amount, but I have not been able to make the computation here, Mr. Littman. I will make it, if you like.

[fol. 8183] Q. I think perhaps you had better do that before we get too far afield. A. What is that figure?

Q. $10,906,054.09. Now, that represents, does it not, Mr. Spitznagle, the net investment in the gas plant of

Michigan Gas Transmission Corporation as of September 30, 1941?

A. On the basis of the method of computing this amount, yes, that is true.

Q. Well, are you talking about the $2,200 item now, again?

A. No, I am talking about the allocation of dollars that were invested in this business. On the balance sheet they are offset, the aggregate dollars are offset by the various items that you have just enumerated to me and on the basis of the process of elimination that we have gone through, it indicates that of the dollars invested, $10,906,054.09 are responsive to the net plant account.

Q. And represent the net investment in gas plant at September 30, 1941? A. That is correct.

. . . . . .

[fol. 8184] By Mr. Littman:

Q. Now, you remember the negative or red figure that I read of $230,137.50? A. Yes, sir.

Q. Now, you would have to subtract that from the $10,900,000-odd figure that you would have to have to get the total over-all figure, would you not?

A. That is correct, yes, sir.

Q. Now, making the deduction, there is a total over-all investment, as of September 30, 1941, in the plant property business of Michigan Gas Transmission Corporation of $10,675,916.59, isn't that correct?

A. That is correct, yes, sir.

Q. And that is the amount that Panhandle Eastern Pipe Line Company paid for Michigan Gas Transmission Corporation, is it not?

A. I do not know that as a fact, Mr. Littman.

Mr. Culton: I think we have so proven.

Mr. Littman: Is that the figure? Is there any question about that?

Mr. Culton: That is the figure that shows in the Securities and Exchange Commission report, is it not?

By Mr. Littman:

Q. That is the figure, do you recall?

A. I recall the figure in the release of the Securities [fol. 8185] and Exchange Commission, yes, Mr. Littman, but, as a fact, I do not know actually.

Q. And that amount represents the prudent investment in the enterprise as of September 30, 1941, does it not?

A. Mr. Littman, I do not think that is the question that runs to me, I just do not.

Q. You cannot answer that? A. No, sir.

* * * * * * * * *

[fol. 8229] Trial Examiner: The motion specifically is stated as to the exhibit marked for identification Exhibit [fol. 8230] 83 commencing at page 8109 and is more fully defined at page 8113. That is a four-page introduction. Pages 8, 9 and 10 of proposed Exhibit 83 are stricken and all of the figures appearing in the columns throughout the exhibit commencing from page 11 headed, "Reproduction Cost, June 30, 1941," on page 12 the five columns relating to reproduction cost are stricken, and commencing with page 13 and thereafter throughout the exhibit to its end, page 64, the column at the right headed, "Reproduction Cost New, 1941," or "Reproduction Cost, June 30, 1941," wherever they occur, will be stricken. With this revision, the exhibit is received.

(Whereupon exhibit 83 was received in evidence as above.)

Mr. Littman: If Your Honor please, what is your ruling with respect to the letter of Mr. F. S. Haberly, dated October 27, 1941?

Trial Examiner: That was overlooked and because it does include a reproduction cost figure, that, also, will be stricken.

The motion, which is sustained, with reference to the revision of Exhibit 84 is stated on page 8116 of yesterday's transcript and we will now strike from proposed Exhibit 84,—this is Mr. Haberly's Exhibit 84 entitled "Reproduction Cost New Less Depreciation as of June 30, 1941," et cetera,—the column headed "Reproduction Cost New, June 30, 1941," and the column headed "Reproduction Cost Less [fol. 8231] Depreciation" on page 1.

The columns headed "Reproduction Cost New, June 30, 1941," and "Reproduction Cost Less Depreciation," are stricken wherever they occur in the exhibit, leaving only for effective evidence the column captioned "Condition Percent," reflecting an estimated physical condition of the properties listed.

As to Exhibit 86, the motion to strike was made at page 8145 of the record and is sustained, so that there will be stricken from this exhibit all of the figures shown in the column headed "Reproduction Cost New, June 30, 1941."

The exhibits marked for identification as 84 and 86, as so revised, will be received in evidence by corresponding numbers.

* * * * * * * *

Trial Examiner: The exhibit marked for identification as 97 will be excluded and it is excluded primarily because the Federal Power Commission will gain very little information of value from a consideration of mere graphs. The record in this case already contains statistical data, which this exhibit tends to illustrate, covering all of this ground and much more.

The exhibit marked for identification as 96, which was [fol. 8232] under discussion at page 1871 of the transcript and, again, at page 8020, being Mr. Young's estimate of the cost of this rate proceeding, will be excluded because it is not the best evidence at this time of the matter therein contained.

Now, exceptions will of course be noted for all parties against whom the ruling is made.

* * * * * * * *

Trial Examiner: It is, of course, understood that the Trial Examiner was trying to exclude from this record all evidence which might sustain a reproduction cost estimate.

* * * * * * * * *

[fol. 8235] Fred A. Spitznagle a witness, having been previously sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued).

By Mr. Littman:

Q. Mr. Spitznagle, the accounting exhibits which you have presented in this proceeding reflect the annual period for the year ended June 30, 1941, do they not?

A. That is correct, yes, sir. I might correct that slightly. It reflects the 12-months' period ended June 30, 1941, as distinguished from "Annual" usually related to calendar years.

Q. If the 1941 revenues and expenses of Michigan Gas Transmission Corporation had been available for the full calendar year ended December 31, 1941, when you prepared your accounting exhibits, would you have presented them for that period rather than for the 12 months ended June 30, 1941? A. Yes, I think that is true.

Q. There are certain advantages in using figures for a full calendar year, are there not? A. There are, yes, sir.

Q. What are some of those advantages, briefly?

[fol. 8236] A. Well, the books of the company operating on a calendar year basis are always closed as of the end of the calendar year. Certain adjustments are made because of the necessity of using estimates for interim periods. Consequently, the interim period 12-months' reports do not always reflect the same information that you would get on a calendar year basis.

Q. And, as a matter of fact, figures for the latest full year would be more comparable with those on the books for previous years?

A. For previous calendar years, that is correct, yes.

Q. So that you would have a better basis of comparability? A. That is correct, yes, sir.

Q. Of course, when you prepared these exhibits, the figures for this full year 1941 were not available?

A. No, sir, because they were prepared before the end of the year 1941.

Q. The figures for the full year 1941 are now available, are they not? A. That is true, yes, sir.

Q. Are those figures fully reflected in the financial statement for the year 1941 of Michigan Gas Transmission Corporation? A. Yes sir, they are.

Q. Do you have a copy of that financial report with you?

[fol. 8237] A. Yes, sir, I do.

Q. It goes without saying, does it not, that the books of Michigan Gas Transmission Corporation have been closed for the year 1941?

A. That is my understanding, Mr. Littman.

Q. You have caused sufficient copies of this 1941 financial statement to be distributed to counsel and to be made an exhibit in this case, at my request?

A. I did not but the officials of Michigan Gas Transmission Corporation did, Mr. Littman.

Q. Do you have those copies with you?

A. Yes, sir, we do.

Mr. Littman: Mr. Examiner, I would like to have marked for identification as Exhibit No. 163, the document to which the witness has just referred entitled, "Columbia System—Financial Statement of Michigan Gas Transmission Corporation (Unassigned)" for the period ended December 31, 1941.

Mr. Wheat: Mr. Littman, I wonder if you would let me ask this. I have no record of Exhibits marked 160 and 161. I may just have an incomplete record.

Mr. Littman: You may or may not recall that at the very close of the last session held in Washington, I offered two exhibits, namely, Exhibits No. 161 entitled, "Estimated Main Line Sales and Revenues—Years 1941-1946, Inclusive", and Exhibit No. 162 entitled, "Estimated Sales to Detroit, 1941-1951, Inclusive".

[fol. 8238] Mr. Wheat: What about Exhibit No. 160?

Mr. Littman: Exhibit No. 160 was offered by Panhandle Eastern Pipe Line Company and is entitled, "Panhandle Eastern Pipe Line Company—Purchase Agreement", dated February 2, 1942.

Mr. Wheat: I had missed that. My record has not been brought up to date. Thank you.

Trial Examiner: This will be marked for identification as Exhibit No. 163.

(Exhibit No. 163 was marked for identification.)

By Mr. Littman:

Q. Will you please explain the term "unassigned" which appears in the title of Exhibit No. 163 for identification?

A. I do not believe I can. In fact, I never noticed that word appearing on this exhibit. Where do you read it from the one which you put in evidence?

Mr. Baldridge: Was Exhibit 163 marked for identification?

Trial Examiner: It was.

Mr. Baldridge: It has not been put in evidence so far, am I right?

Trial Examiner: It has not been offered.

By Mr. Littman:

Q. So far as you know, the term has no particular significance?

[fol. 8239] A. It has none to me, Mr. Littman.

Q. Have you prepared a supplementary statement to the financial statement which has just been identified as Exhibit No. 163?

A. There was such a statement prepared by the company, Mr. Littman, yes, and we have copies of them here.

Q. I hand you a copy of a document consisting of two pages which I have been advised is a supplementary statement to Exhibit No. 163. Is that the document to which you have just referred? A. It is, yes, sir.

Mr. Littman: If your Honor please, I would like to have marked for identification as Exhibit No. 164, a document of two pages purporting to be a supplementary statement to the 1941 financial statement of Michigan Gas Transmission Corporation.

Trial Examiner: It will be so marked.

(Exhibit No. 164 was marked for identification.)

By Mr. Littman:

Q. Does Exhibit No. 163 and its supplement, Exhibit No. 164, bring down to December 31, 1941, all figures in your accounting exhibits except those which are shown in the pro forma statement, Exhibit No. 104?

A. They do, yes, sir.

Q. Do you propose to present a new pro forma statement based on the figures for the year ended December 31, [fol. 8240] 1941? A. I do not, no, sir.

Q. Do you propose that the pro-forma statement, Exhibit No. 104, be relied upon as a forecast or guide for the future?

A. I have no opinion regarding that Mr. Littman. I had none in the first instance as to Exhibit No. 104.

Q. You had a job to do and you did it?

A. Only in so far as there was factual information contained in that statement.

Q. We will, of course, discuss Exhibit No. 104 a little later, inasmuch as it is our program to take your exhibits up in the order in which they were presented.

Would you say, Mr. Spitznagle, whether the figures contained in Exhibits No. 163 and No. 164 were taken from the books and records of Michigan Gas Transmission Corporation?

A. In my opinion, they were, Mr. Littman. I have checked them sufficiently to ascertain that fact.

Q. Are the figures set forth in Exhibit 163 and 164 in accordance with the Commission's Uniform System of Accounts for Natural Gas Companies?

A. I think they are, Mr. Littman.

Q. At the close of yesterday's session, we were discussing the matter of the net investment in the plant and property of Michigan Gas Transmission Corporation as of September 30, 1941. Can you, by reference to Exhibits 163 and 164, determine the net investment in the gas plant [fol. 8241] of Michigan Gas Transmission Corporation as of December 31, 1941?

A. Yes, sir, that is obtainable from Exhibit 163.

Q. Now, you would determine that in the same manner as it was determined yesterday by you during the afternoon session?

A. That is correct, with this addition. There has accrued additional depreciation on the excluded item of $141,000 odd which would have to be computed and not directly taken directly from the report.

Q. About how long would it take you to determine the net investment in the gas plant of Michigan Gas Transmission Corporation as of December 31, 1941?

A. Well, it would take me some little time. I would prefer not to try to do it sitting here on the stand.

Q. Could you make such determination conveniently during the noon recess? A. I think so, Mr. Littman.

Q. Will you do so, please? A. I will try it, yes.

Q. Thank you. Will you please turn to your Exhibit No. 89. I refer you to Line 8, "Dividend Appropriations—Common Stock". Are the amounts set forth on that line all of the common stock dividends that have been paid from the date that Michigan Gas Transmission Corporation commenced doing business in 1936 to June 30, 1941?

[fol. 8242] A. They are, yes, sir.

Q. You do not show in this exhibit or in any of your exhibits, other exhibits, the percent of dividends as related to the paid-in value of the common stock, do you?

A. No, sir.

Q. Will you please state what those percentages are for each of the years 1936 through 1941?

A. I would have to compute them before I stated them and I have not computed them yet, Mr. Littman.

Q. That would only take a few minutes, would it not?

A. Well, it takes a little division to find out how much the stated value of the common stock was for each of those years. I presume I have it here somewhere.

Q. The stated value of the common stock is shown on your balance sheet, Exhibit No. 88, is it not? A. Yes, sir.

Q. I observe that on Page 2 of Exhibit 88, there appears the amount of $2,240,000 as "Common—No Par Value" for each of the years 1936 through 1940 and down to June 30, 1941.

A. That is correct. You wish the percent return of the aggregate amount of dividends for the whole period as applied to the average stated capital of $2,240,000?

Q. Yes, by years.

A. You want it by years and you also want the aggregate for all of the years?

[fol. 8243] Q. Yes. Mr. Spitznagle, while you are doing that, I would like to have you include the amounts for the full year 1941 which are reflected, of course, in the financial statement for that year, to-wit, Exhibits 163 and 164.

A. For the year 1936, the dividend of $112,000 paid in that period is equal to 5 percent of the stated value of $2,240,000 for common stock.

For the year 1937, the comparable percent is 4 percent.

For the year 1938, the comparable percent is 8 percent.

For the year 1939, the comparable percent is 24 percent.

Mr. Montgomery: What was that figure, again, please?

The Witness: 24 percent.

Mr. Wheat: That is for 1939?

The Witness: That is correct.

For the year 1940, the comparable percent is 19.

Do you wish the same information, Mr. Littman, for the 12-months' period ended June 30, 1941?

Mr. Littman: I believe the figure for the year ended December 31, 1941, would suffice.

The Witness: I would think so too and by the same token, for the six-months' period appearing in this statement, you do not want that because it would be historic.

Mr. Baldridge: Do you mind if I inject one question here?

Mr. Littman: Would you mind letting him read the next figure into the record and then the total?

[fol. 8244] Mr. Baldridge: All right.

The Witness: For the year 1941, the comparable figure is 29 percent.

Mr. Littman: Now, that makes a total of 89 percent of dividends paid on the stated value of the common stock during the life of the corporation?

The Witness: Yes, sir, that is correct.

Mr. Baldridge: May I ask my question now? What is the ratio between the stated value of the common stock and the present book investment of the company as of the last date? I believe that last date is December 31, 1941.

The Witness: Do I follow your question, Mr. Baldridge, that you want the ratio of the stated value of common stock?

Mr. Baldridge: To the net book investment.

The Witness: To the net book value of the gas plant?

Mr. Baldridge: Yes.

Mr. Littman: Or do you mean the net book value of the common stock?

Mr. Baldridge: No, I want the ratio between the stated value of the common stock and the net book investment to indicate what percentage of the investment is represented by the common stock.

Mr. Wheat: May I ask, too, that the witness, in connection with that answer, tell us—I do not know whether he did in answer to one of your questions, perhaps I did not hear it—whether this stated value of the common stock is the [fol. 8245] same through all these years you have mentioned?

The Witness: It is.

Mr. Wheat: What is that figure?

The Witness: $2,240,000.

Mr. Wheat: Thank you.

Mr. Baldridge: The total net book investment, as indicated by all securities of the company, including long-term debt outstanding, I mean capital stock, surplus, bonds, notes and other forms of securities—

Mr. Littman: (Interposing) As of what date?

Mr. Baldridge: As of the last available date, I think December 31, 1941. I think I stated including surplus too, of course.

Mr. Littman: Of course, the surplus amounts will vary each year.

Mr. Baldridge: Yes.

The Witness: I will answer your question in part first ly saying that the total long-term debt is $8,320,500; capital and surplus is $2,372,081.13 and the total long-term debt and capital and surplus is $10,692,581.13.

The ratio of the stated value of the common stock to the total long-term debt and capital and surplus is 20 percent plus, if that is close enough for your purpose.

Mr. Wheat: You mean between 20 and 21 percent?

[fol. 8246] The Witness: Between 20 and 21 percent, yes.

Mr. Littman: As of December 31, 1941?

The Witness: As of December 31, 1941.

Mr. Wheat: Mr. Littman, just to be sure I know what the mathematics of this are—does that mean you took your figure of $10,692,581.13 and divided that into $2,240,000 to arrive at the 20 plus percent?

The Witness: Correct, yes, sir.

By Mr. Littman:

Q. The period over which the 89 percent total of dividends on common stock has been paid is six years, is it not?

A. It is five years and ten months, Mr. Littman.

Q. During this entire period, Michigan Gas Transmission Corporation has paid 6 percent per annum on its long-term debt, has it not? A. That is correct, yes, sir.

Q. And all of its long-term debt during this period was held and owned by the sole owner of its common stock, to wit, Columbia Gas & Electric Corporation, was it not?

A. That is my understanding.

* * * * * * * *

[fol. 8247] Fred A. Spitznagle a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Resumed)

By Mr. Littman:

Q. Mr. Spitznagle, you were going to calculate the net investment in gas plant, Michigan Gas Transmission Corporation, as of December 31, 1941. Are you now prepared to state the figure? A. Yes, I am.

Q. What is the net investment as of December 31, 1941?

A. As prepared from Exhibit 163 it is $10,755,372.15, computed as follows: Long-term debt, $8,320,500;

Stated value of common stock, $2,240,000;

Earned surplus, December 31, 1937, $132,081.13;

Capital surplus representing earned surplus acquired, $28,215.02;

Capital surplus donated—

Mr. Lee: (Interposing) What is that last word?

The Witness: Donated.

(Continuing) —$139,500. The aggregate of the preceding amounts is $10,860,296.15 from which has been de- [fol. 8248] ducted the intercompany profit previously described in the testimony of yesterday in the sum of $104,924. The amount of $104,924 is subject to reduction by depreciation accrued since June 30, 1941, which is approximately $2,000 but which has not been applied in determining the amount of $10,755,372.15.

. . . . . .

[fol. 8249] Q. What you have done is to give me the gross over-all investment in the business of Michigan Gas Transmission Corporation as reflected by its balance sheet as of December 31, 1941, isn't that correct?

A. Well, I gave you just what I first stated. It is the long-term debt, capital stock and surplus of the Michigan Gas Transmission Corporation.

Q. That is the gross investment in the business, isn't it?

A. Adjusted for this item of $104,924.

[fol. 8250] Q. Now, that amount is $10,755,372.15?

A. That is correct.

Q. And was obtained in the manner which you have just described? A. That is correct, yes, sir.

Q. Now, will you please state the net investment in the gas plant as of December 31, 1941, which is the figure that I was seeking all the time?

Mr. Baldridge: As shown by the books?

By Mr. Littman:

Q. As shown by the company's books, yes, and reflected in Exhibit 163.

A. The net gas plant in service as of December 31, 1941, is $10,929,098.47.

. . . . . .

The Witness: Determined as follows:

Gas plant in service, $12,804,341.16, from which I have deducted retirement reserve in the amount of $1,697,965.73;

Contributions in aid of construction, $9,352.96;

Net intercompany profit at June 30, 1941, in the amount of $104,924, making total deductions of $1,812,242.69.

The intercompany profit amount of $104,924 is subject to reduction of about $2,000, approximately.

By Mr. Littman:

[fol. 8251] Q. So that with the minor exception of the $2,000 item which you just mentioned, the sum of $10,992,098.47 represents the net investment in the gas plant of Michigan Gas Transmission Corporation as of December 31, 1941?

A. That is correct. I might add, net investment as determined from Exhibit 163, yes.

Q. Which exhibit is the financial statement of Michigan Gas Transmission Corporation for the year ended December 31, 1941? A. That is correct.

Q. Will you please turn to your Exhibit No. 92 entitled "Michigan Gas Transmission Corporation—Original Cost Depreciated to Present Condition as at June 30, 1941, and Observed Depreciation as at June 30, 1941"? Who originated the idea of presenting this exhibit, Mr. Spitznagle?

A. Well, I do not know as I recall who originated the idea of presenting the specific exhibit.

Q. Did you conceive of the idea?

A. It was discussed by myself and Mr. Green and I believe it was generally considered that an exhibit of this character should be presented in a rate case.

Q. You mean in a rate case or this rate case?

A. Well, this one, too, yes.

Q. Have you ever presented an exhibit like this in any other rate case?

[fol. 8252] A. I do not recall that I have, no.

Q. Do you recall of anyone else ever having presented an exhibit like this in a rate case?

A. No, sir, I do not. In fact, I have not attempted to find out whether anybody did or not.

Q. Well, do you accept responsibility for the presentation of this exhibit, not only with respect to the figures which are shown, but, also, with respect to the theory behind it?

A. No, not with respect to the theory behind the exhibit, if there is a theory behind the exhibit. I am responsible only for the proper expression of the original cost, the

amount shown in this statement and the computations resulting from the application of Mr. Haberly's percent condition.

Q. Well, that is what I wanted to determine, whether you were merely doing an accounting task of assembling the figures as shown? A. Primarily that.

Q. In Exhibit 92 that was primarily your undertaking?

A. That is right.

Q. You are not, then, expressing any view of your own with respect to Exhibit 92 as to the propriety of deducting the condition percents shown from the original cost?

A. No, sir.

[fol. 8253] Q. Well who is taking the responsibility for that, so that we may know whom to cross-examine?

A. Mr. Green, I presume.

Mr. Wheat: May I interpose a question there? This data that is shown on Exhibit 92 is data which can be obtained from other exhibits in the record, is it not? You state that it comes from certain exhibits there. All you did, as I understand your testimony, is to put it together on one sheet of paper?

The Witness: That is correct, yes, sir.

Mr. Wheat: Thank you.

By Mr. Littman:

Q. Does the sum of $310,226.50, shown as the total of the column headed "Observed Depreciation", in your opinion represent all of the depreciation that has accrued to date on the original cost of the property of Michigan Gas Transmission Corporation?

A. Well, I have no opinion on that matter, Mr. Littman.

Q. You did a strictly mechanical job of assembling figures, is that right? A. I think I so stated, yes, sir.

Q. In your examination of the books and records of Michigan Gas Transmission Corporation, you found no such figure as $310,226.50 representing any alleged depreciation, did you? A. No, sir, I did not.

[fol. 8254] Q. And when you prepared the balance sheet of the company for purposes of this proceeding, you did not set forth in that balance sheet what you have heretofore called the "true financial condition of the company" any such figure as $310,226.50 for alleged depreciation, did you?

A. I think the balance sheet speaks for itself, but I did not, no, that is correct.

Q. We have been unable to find such a figure in your balance sheet and we thought perhaps you might refer us to it if such existed.

Well, we will go to the next exhibit and defer further cross-examination with respect to this exhibit to Mr. Green.

Q. Mr. Spitznagle, will you please turn to the next exhibit number which is No. 93 entitled "Michigan Gas Transmission Corporation, Statement of Contributions Made to Customers for Business Development for the Years 1936, 1937 and Five Months Ended May 31, 1938 (Effective Date of Natural Gas Act, June 21, 1938)"? Did you prepare this exhibit at the specific instance and request of someone else?

A. Yes, at the request of Mr. Green and others associated with him, Mr. Green primarily.

Q. Mr. Green is president of Central Service Corporation, which company is your employer?

A. That is correct.

Q. Now, let us look at item 1 on page 1 of this exhibit [fol. 8255] which relates to the Detroit City Gas Company "Contractual Discount Allowed Per Provisions of Article 7 of Gas Contract Dated March 17, 1936" in the amount of $43,560. Will you amplify the description or characterization of this expenditure, inasmuch as the record thus far does not tell us very much about that payment or the reason for the payment?

. . . . . .

[fol. 8256] The Witness: I was about to suggest, Mr. Littman, that I am not familiar enough with these contracts to give you or anybody else a very good interpretation of the reasons for paying these sums of money and I was going to further suggest that Mr. Young would be the man for you to get that information from.

By Mr. Littman:

Q. Can you advise us of the purpose of the payment of the $43,560 to Detroit City Gas Company?

A. It is my understanding, generally, that the purpose of it was to assist somewhat in the change-over from artificial to natural gas.

Q. Do you know whether that was for the purpose of defraying certain expenses incurred by the Detroit City Gas Company in that connection as distinguished from the second item shown in Exhibit 93? Do you get my point?

A. No, I do not, Mr. Littman.

Q. I take it you are not familiar—

[fol. 8257] A. (Interposing) With the background of payments to give you a satisfactory answer, that is correct. I think Mr. Young would be far more able to do that for you.

Q. Do you know to what accounts these amounts were charged on the company's books?

A. Yes, sir, that I know.

Q. And what is the name of the account?

A. I cannot give you the designated account but it was charged to operating expenses.

Q. Would it refresh your recollection to say that these amounts, that is all of them shown on Exhibit 93 in the total amount of $182,626.69 were charged to "Sales Promotion Expense"?

A. I do not recall. I did know at one time, but I do not recall right now, Mr. Littman, but they were charged to operating expenses. Whether it was to sales promotion expenses or a portion of it to general expense, I do not recall.

Q. Will you please turn to Page 30 of Exhibit 163? I show you an item in the amount of $8,069.93 under the heading "Sales Promotion" on that page. Isn't it clear that the expenses of the character shown in Exhibit 93, which were incurred in the year 1941, were charged to that account?

Mr. Baldridge: Whose exhibit was that? Wasn't that a Panhandle Eastern exhibit?

Mr. Littman: 163 is the financial statement of Michigan [fol. 8258] Gas Transmission Corporation for the year ended December 31, 1941.

Mr. Baldridge: Oh, yes.

The Witness: I do not recall, Mr. Littman, that there were expenditures of the character detailed in Exhibit 93 incurred in the year 1941. I can ascertain the fact for you.

By Mr. Littman:

Q. I wish you would please ascertain and report to us whether it is a fact that all of the amounts shown in Exhibit 93, totaling $182,626.69 were charged to the operating expense account, "Sales Promotion", on the books of the corporation.

In your opinion, Mr. Spitznagle, would the Federal Power Commission's Uniform System of Accounts permit the capitalization of this item or any of these items shown in Exhibit 93?

. . . . . .

[fol. 8259] The Witness: I do not know what the Federal Power Commission has ruled with respect to items of this character, but in my opinion they might be includable under "Miscellaneous Intangible Plant" as representing a necessary expense in developing the business of the company.

By Mr. Littman:

Q. Well, are they now so carried on the books of the company? A. No, sir, they are not.

Q. Have they ever been so carried on the books of the company? A. No, sir, they have not.

Q. In your opinion, these amounts were properly charged by the company to sales promotion expense?

[fol. 8260] A. It was purely a matter of election on the part of the company as to whether they wished to treat them as miscellaneous intangible capital or whether they wanted to charge them to expense.

Q. And they elected to charge them to expense?

A. I so said before, yes, sir.

Q. Will you state the amount of sales promotion expense of a character similar to that set forth in Exhibit 93 which was incurred in the last seven months of 1938?

A. I am not in a position to do that, Mr. Littman. I do not have the information here, I can get it for you.

Q. Will you please furnish that information?

Or perhaps you had better let me read you the figures that we have and ask you to check them. It is our understanding that the following amounts were charged to sales promotion expense for the periods which I will name: The last seven months of 1938, which, incidentally, picks up where you left off in Exhibit 93, is $29,000.46; for the full

year 1929, $25,141.93; for 1940, $4,019.71; and for the full year 1941, $8,069.93.

Q. You will check those for me and report back later?

A. I will.

Q. What you propose to do now is to include in the rate base, for purposes of this proceeding, the amount of $182,626 which has been charged in the past to operating expense?

[fol. 8261] A. I do not propose to do anything in that respect, Mr. Littman.

Q. Who does?

A. Well, Mr. Green is supporting the philosophy of the conclusions that were reached in this case with respect to our exhibits prepared for Michigan Gas Transmission Corporation.

Q. Do you have any opinion on the subject as to the propriety of including these past operating expenses in a rate base for rate making purposes? A. No, sir.

Q. We discuss that with Mr. Green, do we not?

A. That is correct.

Q. If you were making up a balance sheet of this company, would you permit this amount of $182,626.69 to be restated on the books of the company and included in the capital accounts?

A. No, sir, and I have not in any of these statements included the item in any capital accounts, Mr. Littman.

Q. Have you been advised that the figures shown in Exhibit 93 are to be used in this proceeding as a basis for so-called going concern value?

Mr. Baldridge: May I make a slight correction? I do not think we use the term "going concern value", do we? I am asking you, Mr. Littman.

[fol. 8262] Mr. Littman: Well, I am asking this witness, Mr. Baldridge.

The Witness: In Exhibit 104 on Page 2, which I prepared, the items are included under the caption "Rate Base" and denominated "Cost of Developing Business."

By Mr. Littman:

Q. Have you ever heard this item referred to by any other name? A. No, sir, I have not.

Q. You know, do you not, that it is very similiar to amounts which have been designated in rate making proceedings as "Going Concern Value"?

A. Yes, it is one of the elements that sometimes is included in the computation of going concern value.

Q. I take it from your testimony with respect to Exhibit 93 that you do not take any responsibility for the inclusion of these figures in any suggested rate base for the purpose of this proceeding? A. No, sir.

Q. What instructions did you have, if any, with respect to securing these figures from the company's books?

A. Well, I was requested to secure the cost of developing business, particularly items of the nature described in the exhibit, and we did take the items in question from the company's books and I was instructed to include in the computation shown in Exhibit 104 the amounts shown in Exhibit 93.

[fol. 8263] Q. In other words, you did a mechanical job of accounting here. A. That is correct, yes, sir.

Q. We will now go to Exhibit No. 94 entitled, "Michigan Gas Transmission Corporation—Working Capital as at June 30, 1941."

. . . . . .

Trial Examiner: Very well.

By Mr. Littman:

Q. Suppose you tell us what responsibility you are taking with respect to this exhibit which shows a claimed working capital as of June 30, 1941, of $300,147.08?

A. I am taking no responsibility for the use of the item in connection with the conclusions reached in the matter of rate base and rate of return and any other matters reached in the conclusion presented in Exhibit 104 and presented in Mr. Green's testimony in connection with Exhibit No. 104.

Q. Mr. Green will take the responsibility on Exhibit No. 94? A. Not entirely.

Q. Suppose you state the instructions that you re- [fol. 8264] ceived so that we may be advised of what you did and what you are holding yourself responsible for?

A. The instructions I received were to prepare Page 2 of Exhibit 94 and it was more or less my recommendation

that the exclusions made on that exhibit from operating expenses should be made in order to determine the net for the cash fund computation.

Q. What of the other pages? A. Let's finish this one.

Q. I am sorry, I thought you had.

A. With respect to the computations shown in the last three lines of Page 2, I was instructed to use 45 days as the lag in recovery of the operating expenses shown in this exhibit. I was told that that was the period generally accepted by the Commission in many of its cases.

Q. Who told you that? A. I beg your pardon?

Q. Who told you that?

A. Mr. Green or someone in our organization working with him. I think Mr. Green told me. I also ascertained that fact by looking at a few cases of the Federal Power Commission as well, Mr. Littman.

Q. You verified the matter? A. That is right.

Q. By the way, none of those cases were related to [fol. 8265] Michigan Gas Transmission Corporation?

A. No, that is true. They were previously decided cases of the Commission. I have forgotten where they were, I believe 45 days was used in the Chicago Pipeline case or the case that is known as the Chicago Pipeline Case.

For Page 3 of that exhibit, I was told to gather the information shown on that exhibit and when the information shown on the exhibit was brought to Mr. Green's attention and to the attention of Michigan Gas Transmission Corporation, it was decided by Mr. Green that we should use the material and supplies on hand adjusted for the year amount shown in Column B at June 30, 1941, rather than the average for the 18-month period shown in this statement.

Q. And that decision was made by Mr. Green?

A. Yes, that is right, because the advent of the war was making it necessary to maintain a larger quantity of material and supplies on hand than formerly was thought necessary. I think I so stated in my direct testimony.

Q. This looks like a kind of "triple pass," doesn't it? That is, Mr. Green told you to get the actual figures from the company's books as of June 30, 1941, after you had

shown him the figures for each of the 12 months for the year 1940 and for the six months in 1941 and then Mr. Haberly was instructed to revise the prices on certain of those materials and supplies to June 30, 1941, and they [fol. 8266] came back to you and you included the total amount of $100,723.78 in Exhibit 94. Is that right?

A. I do not think that is quite right. I do not understand your language entirely, especially the "triple pass" and that sort of thing in the first part of your statement.

The fact of the matter is I was told to get the factual information represented by Column A for the 18-months' period.

Q. Just a moment. You did not use any of the figures in Column A in connection with your Exhibit 94, did you?

A. Only in arriving at the amount that we did use in Exhibit 164.

Q. Somebody got hold of it before you put the $100,723.78 in, isn't that right? A. That is right.

Q. And that was Mr. Haberly?

A. No, I doubt whether Mr. Haberly ever saw the figures in Column A prior to his determination of the amount expressed in Column B.

Q. Whether he saw it or not, when he got through it went up to $100,723.78, isn't that right? A. It did do that.

Q. And then you took it and put it on the first page of Exhibit 94? A. That is right.

Q. That is what I meant by "triple pass."

[fol. 8267] A. That is right.

Q. At any rate, you are not taking any responsibility in connection with the reasons or theories behind the readjustment of the figures?

A. I just gave you what I understood to be the reason but I am not taking the responsibility for it.

Q. Are there any other pages of Exhibit 94, Mr. Spitznagle, that you wish to elucidate for us with respect to your particular assignment? How about Page No. 4?

A. Page No. 4, again, I was requested to get the factual information displayed on that page and I was directed to use the amount shown on Exhibit 94 in the compilation shown on Page 1.

Q. You exercised no judgment of your own in assembling those figures other than to take them from the company's books? A. That is all.

Q. Very well. Let's turn to Page 2 of Exhibit 94. You have just testified that you decided to make the deductions shown on that page entitled "Purchased Gas," "Taxes," "Pre-payments included in operation and maintenance," "Depreciation or amortization," isn't that correct?

A. I suggested that those items be excluded, yes.

Q. And your suggestion was accepted by Mr. Green?

A. That is right.

Q. Why did you exclude the purchase gas expense? [fol. 8268] A. For the reason that I found upon examination of the company's records that they collected for the sale of their gas and services, because they are a transportation company at about the same time they paid for the natural gas that they purchased.

Q. In other words, you made the deduction and did not include purchased gas expense in working capital because you found there was no lag between the date of payment and the day of receipt of revenue? A. That is correct.

Q. And of course, that is a proper deduction, isn't it?

A. I think so.

Q. We think so too. We wish Mr. Sperry had done that.

Trial Examiner: Upon examination of the Order of the War Production Board presented by Mr. Baldridge this morning, it appears that this Order probably should be incorporated into the record in some manner.

I wish to ask whether the document from which this photostatic copy was made was an original document?

Mr. Baldridge: Yes, Mr. Examiner.

. . . . . .

[fol. 8269] Trial Examiner: In any event, this photostatic reproduction presents an original order issued to the Panhandle Eastern Pipe Line Company by the War Production Board?

. . . . . .

Mr. Littman: Wouldn't it be a little more accurate to say this order was not issued directly to Panhandle Eastern Pipe Line Company but was issued as a general order [fol. 8270] affecting all companies referred to?

. . . . . .

Trial Examiner: In accordance with the statement made this morning, this order has now been examined and is deemed in all respect proper and necessary for the record and will, therefore, be extended by the reporter into the record.

. . . . . .

[fol. 8272] Title 32—National Defense WPB 230

24033 Chapter IX—War Production Board

Subchapter B—Division of Industry Operations

Part 1056—Natural Gas

Limitation Order L-31

To Curtail Consumption of Natural Gas.

Whereas, because of increased gas requirements for war production and civilian uses, and because of scarcity of materials for the construction of pipe lines and other facilities, shortages of natural gas have occurred in certain areas of the United States and are threatened on others, and

Whereas, during periods of adverse weather conditions, the demand for natural gas in many areas will increase beyond the capacity of existing facilities to meet such demand; and

Whereas, the limitations upon deliveries of natural gas and the integration of gas system operations hereinafter ordered are necessary in order to maintain gas deliveries to war industries and essential civilian services;

Now, Therefore, It Is Ordered That:—

Part 1056.1—General Limitation Order

(a) Definitions. For the purpose of this Order:

(1) "Persons" means any individual, partnership, association, business trust, corporation, governmental corporation, or any organized group of persons whether incor-
[fol. 8273] porated or not.

(2) "Utility" means any person in the United States supplying natural gas or mixed natural and manufactured gas, directly or indirectly, for general use by the public.

(3) "Consumer" means an ultimate user of gas purchased or otherwise received from any Utility.

(4) "Standby Facilities" means equipment in serviceable operating condition designed to use oil, electricity, coal or other fuel to replace natural gas, and for the operation of which a supply of such fuel is available.

(b) Integration of Gas System Operation. Each Utility shall so operate its gas manufacturing, transmission, storage, distribution, and other facilities, and shall so interchange gas with other Utilities as to achieve as far as practicable maximum output in the area or areas in which a shortage exists or is imminent, and each Utility shall make such pooling arrangements as may be necessary to effectuate such purpose. Where necessary for such purpose, the Director of Industry Operations will, from time to time, issue specific directions as to the operation of gas manufacturing, transmission, storage, distribution, and other facilities, and as to deliveries of gas.

(c) Limitation on Deliveries of Natural or Mixed Natural and Manufactured Gas.

(1) In the event that the supply of natural or mixed
[fol. 8274] natural and manufactured gas available in an area served by any Utility is insufficient to meet the demand therefore, and reduction in deliveries to Consumers becomes necessary, the Utility supplying such area shall reduce deliveries to its Consumers in the following manner and in accordance with such other specific directions as the Director of Industry Operations may from time to time issue:

(i) First, the Utility shall, within the limits of its contractual rights, reduce deliveries to all dump or surplus Consumers not engaged in war production, and deliveries

to Consumers who have Standby Facilities, the operation of which can directly or indirectly reduce the total demand for natural or mixed natural and manufactured gas in the area.

(ii) Second, the Utility shall to the extent necessary, operate all of its available gas manufacturing equipment so as to effect directly or indirectly the maximum increase in the supply of gas in the area.

(iii) Third, the Utility shall, without regard to its contractual rights or those of any Consumer, reduce deliveries to all other Consumers who have Standby Facilities to the extent that the operation of such facilities can directly or indirectly alleviate the shortage of natural or mixed natural and manufactured gas in the area, and no such Consumer, after notification of the reduction in deliveries required shall accept deliveries of gas unless his [Fol. 8275] Standby Facilities are being operated so as to effect the required reduction in his purchase of gas.

(iv) Fourth, the Utility shall, without regard to its contractual rights or those of any Consumer, reduce as far as practicable deliveries to Consumers in such manner as will cause the least interference with war production, and each Consumer who receives notification of the reduction in deliveries required shall reduce his acceptance of deliveries accordingly.

(2) Whenever any Utility finds it necessary to make any reduction in deliveries of gas to any Consumer in accordance with paragraphs (c) (1) (iii) and (c) (1) (iv) of this Order, it shall promptly notify the Consumer and at the same time give telegraphic notice therof, to the Power Branch, War Production Board.

(3) Following each such shortage period, each affected Utility shall submit a detailed report of the quantities of gas conserved by the operation of Standby Facilities and the duration of curtailment and the extent to which each industrial Consumer was curtailed. Such report shall be filed on Form PD-283.

(4) Any consumer who considers that any reduction in deliveries to him interferes materially with war production shall have the right to apply by telegram for relief

to the Director of Industry Operation, who may grant such [fol. 8276] specific exemptions or take such other action as may be consistent with the purposes of this Order. Such application shall state the nature of the war materials being manufactured, the extent to which production has been curtailed because of reduced delivery of gas, and the increase in delivery of gas required for restoration of full production.

(5) No consumer shall be relieved of the requirements of section 944.2 or any other section of Priorities Regulation No. 1 Amended, by reason of the provisions of this paragraph (c). (d) Restrictions upon Increased Deliveries to Non-residential Consumers. No Utility shall, after ten days following the effective date of this Order, deliver natural or mixed natural and manufactured gas to any new non-residential Consumer in the areas specified in Exhibit "A" annexed hereto, as the same may be amended from time to time, or increase deliveries of such gas to any existing non-residential Consumer in such areas for the operation of any new gas equipment, unless:

(1) Such new existing non-residential Consumer shall have installed, prior to the date of the increase in deliveries, Standby Facilities of sufficient capacity to replace the new or increased deliveries of such gas during periods of shutoff, or

(2) Such new or existing non-residential Consumer cannot reasonably use any fuel other than gas, natural, or mixed natural and manufactured, because of technical utilization factors or process requirements.

[fol. 8277] (3) Such new delivery or increase in deliveries shall have been specifically approved in advance by the Director of Industry Operations. Any Consumer or Utility who considers that such deliveries are necessary for war production may apply for such approval to the Director of Industry Operations, who may grant such specific exemptions or take such other action as may be consistent with the purpose of this Order. (e) Prohibition against Delivery to New Space Heating Installations.

(1) No Utility shall deliver and no Consumer shall accept delivery of natural gas or mixed natural and manufactured gas in the areas specified in Exhibit "A" annexed hereto; as the same may be amended or modified from time to time by the Director of Industry Operations, for either of the following purposes:

(i) for the operation of central space heating equipment (or for heating requirements of the premises), unless such equipment was installed prior to March 1, 1942, or unless, in the case of new construction, the equipment was specified in the construction contract, and the foundation under the main part of the structure in which the equipment is to be installed was completed prior to March 1, 1942; or

(ii) for the operation of central space heating equipment for (or heating equipment supplying the major portion of the heat requirements of the premises), which has [fol. 8278] been converted from other fuel to natural or mixed natural and manufactured gas unless such conversions has been completed prior to ten days after the effective date of this Order.

(2) Any Utility affected by the provisions of this paragraph (e) or any governmental agency which considers that supply of gas available on any particular system or portion thereof is adequate to take care of all existing and estimated future requirements of war industry, and unrestricted civilian use for the period ending April 1, 1944, may apply for exemption of the system or any portion thereof from the provisions of this paragraph to the Director of Industry Operations, who may grant such specific exemptions or take such other action as may be consistent with the purposes of this Order.

(f) Appeal. Any person affected by this Order who considers that compliance therewith would work an exceptional and unreasonable hardship on him may appeal for relief to the Director of Industry Operations, who may grant such specific exemptions or take such other action as may be consistent with the purposes of this Order.

(g) Reports and Information.

(1) Each Utility shall keep and preserve for not less than two years accurate and complete records concerning deliveries of natural gas to Consumers.

(2) Such records shall be subject to inspection by duly, [fol. 8279] authorized representatives of the War Production Board.

(2) All persons affected by this Order shall execute and file with the War Production Board such reports and questionnaires as said Board shall, from time to time, request. (h) Communications to War Production Board. All reports required to be filed hereunder, and all communications concerning this Order, shall, unless otherwise directed, be addressed to:

"War Production Board

Washington, D. C. Ref.: L-31"

(i) Violations. Any persons who wilfully violates any provisions of this Order, or any other order, direction or regulation, issued pursuant hereto, or who by any act or omission falsifies records to be kept or information to be furnished pursuant to this Order, may be prohibited from delivering or receiving gas, or any other material subject to allocation, and such further action may be taken as is deemed appropriate, including a recommendation for prosecution under Section 35 (A) of the Criminal Code (18 USC. 80).

(j) Effective Date. This Order shall take effect immediately and, unless sooner terminated, shall continue in full force and effect until April 1, 1943.

(P.D. Reg. 1 Amended, Dec. 23, 1941, 6 F.R. 8680; W.P.B. Reg. 1, Jan. 26, 1942, 7 F.R. 561; E.O. 9024, Jan. [fol. 8280] 16, 1942, 7 F.R. 329; E. O. 9040, Jan. 24, 1942, 7 F.R.; sec. 2 (a), Public No. 671, 76th Congress, Third

Session, as amended by Public No. 89, 77th Congress, First Session.)

Issued this 16th day of February, 1942.

J. S. KNOWLSON,
Director of Industry Operations.

Exhibit A

Areas subject to prohibitions contained in paragraph (e) of Limitation.

Order L-31

Alabama—(except the area served by the United Gas Pipe Line Company)

Arkansas—(only the area served by the Mississippi River Fuel Company)

California—District of Columbia—Georgia—Illinois—Indiana—Kentucky—Maryland—Michigan—Mississippi—(except the area served by the United Gas Pipe Line Company)

Missouri — New York — Ohio — Pennsylvania — Tennessee—Virginia—West Virginia.

[fol. 8284] Trial Examiner: Proceed, Mr. Littman.

By Mr. Littman:

Q. Will you please refer to the 1941 financial statement of Michigan Gas Transmission Corporation which has been identified as Exhibit No. 163 and state whether the operating and maintenance expenses, exclusive of gas purchase cost, taxes and depreciation, amounted to $417,848 for the year ended December 31, 1941?

A. Mr. Littman, don't you think it might be well for you to give me the figures that you used and where you located them?

Mr. Littman: Yes, I think I could do that. The figures which go to make up the amount of $417,848 are shown on Page 4-B of Exhibit 163.

Mr. Wheat: Do they appear on that page as a single figure at any place, Mr. Littman?

Mr. Littman: I had not completed my explanation.

Mr. Wheat: Pardon me.

By Mr. Littman:

Q. The total operating expenses shown for the full year 1941 on that page amount to $4,506,302.99, do they not? A. Yes, sir.

Q. Following the method that you have used to arrive at the sums called "Net for cash fund computation" shown on Page 2 of your Exhibit 94, we first deduct "gas pur-
[fol. 8282] chased—others" in the amount of $3,249,178.39. Do you find that? A. I do, yes, sir.

Q. We then deduct the item shown on Page 4 of Exhibit 163 called "Taxes — Federal" in the amount of $329,837.20. Do you find that? A. Yes, sir.

Q. And also there is deducted the State taxes as shown in the amount of $142,655.06. Do you find that?

A. Yes, sir.

Q. Then a deduction is made for depreciation called "Provision for retirements & depletion" in the amount of $366,785.40? A. I find that item, yes, sir.

Q. Now, after those deductions are made, there is a total produced of $417,848. Is that right?

A. $417,854.94, I believe.

Q. Yes, the difference is probably because we dropped the pennies in our calculation. A. Yes.

Q. Now, that figure which you have just read of $417,000-odd is comparable, is it not, to the sum of $349,301.30 shown on Page 2 of your Exhibit 94 for the year ended June 30, 1941 called "Net for cash fund computation," is it not?

A. With one exception. You have not excluded in your latter figure the prepayments that were included in our [fol. 8283] operating expenses.

Q. Suppose you deduct those.

A. That is impossible because it would be a very meticulous computation and the amount is not very large.

Q. It would not affect—

A. (Interposing) Not materially, no, Mr. Littman.

Q. All right. You understand what we are seeking to do now is to apply your method to get the figure for the year ended December 31, 1941? A. Yes, sir.

Q. Now, in order to get the amount comparable to that which you allow for cash funds for operating expenses, we must take 45/365 of the $417,800-odd figure, do we not? A. Yes, that is correct.

Q. And what is the result of that? We get $51,520, is that about right?

A. That is approximately correct, Mr. Littman.

Q. In other words, if the Commission were to take the company's book figures for the full year, 1941, rather than for the period which you used ended June 30, 1941, the result would be $51,520 as compared with the figure which you have used?

A. Approximately that amount, Mr. Littman. I have not completed the computation. I simply roughed it off and know it would be in the neighborhood of $50,000.

[fol. 8284] Q. And that is comparable to your figure of $447,175.05 "Cash fund operating expenses" shown on Page 1 of Exhibit 94? A. That is correct, yes, sir.

Q. In other words, a slightly higher figure would result? A. Yes, sir.

Q. Now, the next item which you show on Page 1 of your Exhibit 94 for working capital is an item of $100,723.78 for materials and supplies. What was the actual amount of materials and supplies on hand at June 30, 1941, as shown on the company's books?

A. The amount was $93,412.78.

Q. Now, Mr. Haberly repriced certain of the materials and supplies which resulted in an upward revision of that figure to the extent of $7,311, did he not? A. That is correct.

Q. Making the total which you have used on Page 1 of your Exhibit 94 $100,723.78? A. That is correct, yes, sir.

Q. What was the amount of materials and supplies on hand at December 31, 1941, as shown by the company's books?

A. Shown by the company's books and as reported on Page 1 of Exhibit 163, Line 53, the amount of materials and supplies on hand was $115,053.90.

Q. Do you know the average monthly inventory of materials and supplies for the full year 1941?

[fol. 8285] A. No, sir, I do not.

Q. I shall read you a figure which we have computed to represent the average monthly inventory of materials and supplies for the full year 1941 as reflected by the company's books and will ask you to check it. The figure which we secure is $93,768. This figure was arrived at by totaling the inventory, as shown by the books of the company, as of the end of each of the 12 months in the year 1941 and dividing by 12. Will you check that figure?

A. Yes, sir, I will.

Q. Perhaps we had better put it this way, Mr. Spitznagle, if there is no objection, suppose you accept the accuracy of these figures that I have been reading, unless you report back to the contrary. I think it would make for a better record. You check these figures and if you find any inaccuracies, please state them on the record.

A. Very well.

Mr. Baldridge: I think, Mr. Littman, to make the record complete in that respect he ought to state definitely whether he finds those figures to be accurate.

By Mr. Littman:

Q. All right.

You are keeping a list of these as we go along?

A. Yes, sir.

Q. Do you know the total of supplies and materials [fol. 8286] issued during the 1941?

A. No, sir, I do not.

Q. The figure which we calculate is $43,390. This figure was calculated by totaling the monthly issues during the entire year 1941, as shown on the company's 1941 financial statement, Exhibit No. 163. I should correct my statement, to the extent that the monthly figures were used they were taken from the company's books?

A. I think that is true, I do not think they appear in Exhibit 163 or in their financial report.

Q. That is right, the Exhibit No. 163 shows the figure for only one month, namely, December 1941. Is that right?

A. That is right, yes.

Q. Now, assuming the accuracy of the figures which I have just given, it is a fact, is it not, that the average monthly inventory of materials and supplies on hand dur-

ing the year 1941 was more than twice the amount actually issued and used during that year. Isn't that correct?

A. Yes, that is true.

Q. In other words, if the computations which we have made are correct, it appears that the company had a two-year supply on hand on the basis of the 1941 supply and use, isn't that right?

A. No, I do not think that is a proper deduction. The company actually has on hand a great deal of pipe and [fol. 8287] compressor parts and what not that do not turn over, as I have indicated.

Q. Well, I am speaking of an average term.

A. Well, you can call it on the basis of the figures you are using, a turnover of two, but I do not believe it is such, I think it is less than that.

Q. What investigation have you made of that matter, if any?

A. I examined the detail of the inventory account and ascertained the fact that the company was in the habit of carrying pipe replacements for future eventualities in their inventory account and more or less large items of replacements for compressor stations and that type of equipment.

Mr. Young, I believe, in direct testimony testified to the need of that practice and of following that procedure.

Q. What you are saying is that some of these materials and supplies are turned over more rapidly than others?

A. Or at a much lesser rate rather than more rapidly.

Q. Well, to state it conversely.

A. Well, that is true, some would be at a more rapid rate and some at a lesser rate.

Q. Well, but looking at the average of the materials and supplies, assuming the accuracy of the figures, the average monthly inventory of materials and supplies on hand during the year 1941 was on the average more than [fol. 8288] twice the amount actually used during that year?

A. Assuming the figures that you used, that is correct, yes. I might add, I do not think that a factor of that character is indicative of the amount of materials and supplies that are to be carried on hand.

Q. Are you expressing an opinion as to the amount of materials and supplies required to be on hand?

A. No, I simply expressed an opinion as to that factor indicating how much materials and supplies should be carried on hand. I do not know how many should be carried on hand. Mr. Young testified to the dollar amount and the quantities that should be carried on hand.

Q. You are not testifying that $100,723.78 is the amount that is actually required?

Mr. Baldridge: May I interject a question?

Mr. Littman: Yes, sir.

Mr. Baldridge: Do you happen to know how much materials and supplies are carried on hand at the present time?

The Witness: No, sir, I do not.

By Mr. Littman:

Q. And the next item which you show in Exhibit 94 is the amount of $116,303 for "Minimum Bank Balances Required to Support Check Privileges Based Upon Advice Received from Depositories." Will you please refer to Page 21-B of the 1941 financial statement of Michigan Gas [fol. 8289] Transmission Corporation, which is Exhibit No. 163? Will you state the amount that has been accrued by the company for Federal income taxes to December 31, 1941? A. $268,384.85.

Q. That money is in the bank, isn't it, or at least it was in the bank at December 31, 1941, was it not?

A. The company had funds in the bank in excess of that sum of money.

Q. And $268,384.85 of the amount which the company had in the bank was expressly for the purpose of paying Federal income taxes?

A. It was usable for that purpose, Mr. Littman, but it was not expressly for the purpose of the income taxes. In other words, you are asking me to match up dollars and I simply cannot do it for you.

Q. That amount was accrued for payment of Federal income tax?

A. That was accrued from the operations, there was cash on hand in the bank of the amount stated in this exhibit.

Q. Will you give us the total amount of cash in the bank at December 31, 1941?

A. Excluding working funds, the amount of cash on hand at December 31, 1941, as shown in Exhibit 163, is $172,585.11.

Q. When will the sum of $268,384 which has been accrued for Federal income taxes to December 31, 1941, be paid?

[fol. 8290] A. Well, it is payable March 15 or in quarterly installments starting from March 15, 1941, upon the election of the company. 1942, I beg your pardon.

Q. And what has the company elected to do in this regard in the past, to pay it all at once or to pay it in four installments through the year?

A. I cannot tell you that right offhand.

Q. What would you suggest that the company do in that regard?

A. Well, if the company had the money, because of the general conditions of the country, I would suggest that they pay it all on March 15, 1942. If they haven't the money I suggest they pay it in quarterly installments.

Mr. Goodman: You would give me the same advice, wouldn't you?

The Witness: I would. I am taking it myself, likewise.

By Mr. Littman:

Q. Our investigation shows, Mr. Spitznagle, that the company has followed the practice of making its income tax payments on the quarterly installment plan, as I think is true of most of us, but I want you to check that and report back. Perhaps Mr. Young—

A. (Interposing) Why not ask Mr. Young now?

Mr. Littman: Do you know?

Mr. Young: On a quarterly basis, I understand. I would [fol. 8291] like to check that, however, and see if it is true.

By Mr. Littman:

Q. Will you report back so that the record may be clear? A. Yes.

Q. As a matter of fact, hasn't the company followed a consistent policy of accruing more taxes than it actually has been required to pay in the past?

A. Yes, sir, that is true, however, the additional accrual is not reflected in the amount of taxes that you asked me to quote from Page 21-B of Exhibit 163.

Q. You mean it is not included in the amount of $268,384.85?

A. That is correct, yes, sir.

Q. What amount had the company accrued for Indiana 1941 property taxes as of December 31, 1941?

A. $114,000.

Q. And when will this be paid?

A. I do not believe I have, Mr. Littman, the payment dates of the Indiana property taxes.

Mr. Littman: Mr. Young, we ask you whether you can furnish us with some of those figures.

Mr. Young: Will you repeat that please?

Mr. Littman: We would like to know when the Indiana property taxes for the year 1941 will be payable?

Mr. Young: I cannot tell you that.

[fol. 8292] By Mr. Littman:

Q. Of course, Mr. Spitznagle, neither the Federal income taxes nor the Indiana property taxes which had been accrued to December 31, 1941, are payable until sometime during the year 1942? A. That is correct, yes, sir.

Mr. Wheat: Mr. Littman, the local property taxes are usually on a July 1 to 30 basis, I think, in most states and of course, whether they are in Indiana I do not know, therefore, the payments come at odd times, usually April and December, but I am not certain about Indiana, of course.

By Mr. Littman:

Q. It is a fact, is it not, that at the end of the year 1941 the company had accrued $114,000 for the Indiana property taxes? A. That is correct, yes, sir.

Q. Will you please ascertain for us the facts with respect to how these taxes are paid?

A. Yes, sir. I might add that property taxes in the various States vary greatly. I think I know when Indiana property tax is payable but I am not sure because I have not had occasion to check it recently.

Q. Of course, the amounts required for the payment of the 1941 taxes have already been collected from the customers, have they not?

[fol. 8293] A. That is on the assumption that the company has earned the taxes as well as all the other expenses and it appears that they have.

Q. Well, the income statement shows that they have, is that right? A. That is correct.

Q. And it shows that the company paid a 29 percent dividend on its common stock in 1941?

A. Not out of 1941 operations, Mr. Littman.

Q. Of course, Mr. Spitznagle, these accruals of taxes provide for more than enough cash to cover the minimum bank balance of $116,000, do they not? A. They do, yes, sir.

Q. What was the actual net working capital of Michigan Gas Transmission Corporation as of December 31, 1941?

Mr. Baldridge: As defined how?

Mr. Littman: As defined in the Accountant's Handbook and as defined by Mr. Coffman.

Mr. Baldridge: And previously referred to by Mr. Spitznagle in the terms used yesterday.

Mr. Littman: Yes.

The Witness: Well, I do not know what Mr. Coffman's definition is.

By Mr. Littman:

Q. Well, his is the same as the Handbook?

[fol. 8294] A. I can tell you what the net current assets are as shown in this balance sheet and I will be glad to give it to you.

Q. I beg pardon?

A. Net current assets, I can give you that figure, sometimes referred to as "Net working capital."

Q. Well, that is the figure we want as of December 31, 1941.

A. Yes. The amount is $58,762.87 determined as follows from the financial report, Exhibit 163, of Michigan Gas Transmission Corporation:

Current assets, $1,533,085.82;

Intercompany accounts receivable not included in current assets but which are of a current asset nature and are collected for currently, $29,323.77;

Current liabilities, $1,495,780.03;

Intercompany accounts payable which are for current liabilities and are paid currently, $7,866.69.

Q. Now, Mr. Baldridge, as you have observed, asked me to clarify and define the use of this term "Actual working capital." You have defined it, have you not?

A. I think I have as it is generally used, generally accepted.

Q. Now, is such a figure proper for rate making purposes, in your opinion, for working capital?

[fol. 8295] A. I have not any opinion on the subject, that is a matter for the Commission to determine what is proper. I have known cases where the net current assets were not a consideration in determining working capital at all.

Q. Well, the figure for working capital shown in your Exhibit No. 94 is $300,147.08, is it not? A. That is correct.

Q. Did you register any disagreement with Mr. Green when you presented this figure to him? A. Not at all.

Q. Of course, if you want to accept the $58,000 figure of actual net working capital arrived at in the manner which you have described it, there will be no objection. You make no such suggestion, do you?

A. I am not either accepting or giving in the matter of what is to be worknig capital, Mr. Littman.

Mr. Baldridge: As counsel of Michigan Gas Transmission Corporation I can assure you that we do not accept that $58,000 figure as being adequate.

Mr. Littman: In this proceeding?

Mr. Baldridge: Or any other similar proceeding.

Mr. Littman: I take it you do not propose to offer Mr. Coffman as a witness in this proceeding?

Mr. Baldridge: All we have done with respect to Mr. Coffman's testimony is to say that he presented certain [fol. 8296] statistical data which, to some extent, may prove the basis of some of the testimony presented on behalf of Michigan Gas Transmission Corporation.

Mr. Littman: You are referring to the data used by Mr. Drew in connection with his testimony?

Mr. Baldridge: Primarily Exhibits 63 and 64, as I recall it.

Mr. Littman: But not Exhibit 65?

Mr. Baldridge: Well, Exhibit 65 may have some statistical data which might be appropriate, but as I recall it, Mr. Drew testified that he had not even seen Exhibit 65 when he presented his testimony.

Mr. Littman: Well, it is Exhibit 65 that contains Mr. Coffman's estimate of so-called "working capital."

By Mr. Littman:

Q. Mr. Spitznagle, will you please turn to Exhibit No. 96 entitled "Estimated Annual Amortization, Short Lived Property—24 and one-half Year Amortization Period" for Michigan Gas Transmission Corporation? Is it your testimony that the sum of $7,802.08 will be required annually to amortize the short-lived property shown on Exhibit 98?

A. Yes, sir. Since I made the computations on this statement, I am charged with the responsibilty of the results shown on the statement.

Q. This is one exhibit for which you take the full [fol. 8297] responsibility?

A. I take responsibility for the computation, Mr. Littman, yes, as it is explained at the bottom and running across the face of the page. The factors that I have used with respect to original cost are my responsibility, the determination of percent condition and salvage is Mr. Haberly's responsibility.

Q. Well, was this exhibit your idea?

A. The average life of equipment is Mr. Haberly's responsibility. The philosophy behind the exhibit, I think, is Mr. Green's.

Q. You are not taking any responsibility with respect to the propriety of the method set forth in Exhibit 98 of amortizing the short-lived property there shown? A. No. [fol. 8298] Q. You understand, do you not, that the method used by Mr. Haberly to depreciate this property to June 30, 1941, which is reflected in column B headed, "Percent condition including salvage" was the so-called observation method?

A. I heard him testify to that fact, yes, sir.

Q. Well, at any rate, it was not the utilization of a straight line life method, was it?

A. I was under the impression when the statement was made up that he had so determined it on a straight line basis plus salvage. However, he testified here yesterday that he determined the amount on an observed depreciation basis.

Q. I had the same difficulty but, at any rate, his testimony is now a matter of record and you understand it as you have just stated? A. That is correct, yes, sir.

Q. Now, that means that we have one method used to arrive at the percent condition at June 30, 1941, namely, the observation method and from there on, we have a new method by which to depreciate it, do we not, or I should say a different method?

A. A different method of calculation, yes, calculating the amount of depreciation responsive to the short-term property.

Q. That is, before June 30, 1941, it is the observation method and after June 30, 1941, it is the straight line [fol. 8299] life method, is it not?

A. No, it is an amortization method, assuming that the property will have to be replaced a certain number of times during the period then applying the 25 years' finite life which was adopted in this presentation, we arrive at the average amount that would be required each year—I misspoke myself as to the 25-year period—it is 24½ years.

Mr. Baldridge: From June 30, 1941?

The Witness: From June 30, 1941.

By Mr. Littman:

Q. You mean the property is amortized in Exhibit No. 98 on the straight line basis?

A. Figuratively speaking, yes, that is true.

Q. What is figurative about my statement? I mean, what is wrong with my statement?

A. Well, you might consider that you would apply the theory of discounting the annual amortization of short-term property in the same manner that you discounted the annual amortization on the straight line basis for the long-term property. In the case of the short-term property, the funds will be used at short intervals and there is no point in amortizing them.

In other words, you do not have any use of that money between the time it is recovered and the time it is required for renewals and replacements.

[fol. 8300] Q. What method does the company use to depreciate this property? A. Straight line method.

Q. Did the company use the observation method of depreciating this property on its books prior to June 30, 1941? A. It did not.

Q. In your opinion, has the company depreciated this property in an improper manner on its books prior to June 30, 1941?

A. I have not any opinion. I see nothing wrong about the manner in which they did it. As to the amount, I haven't any opinion as to whether they fully depreciated the property or whether they did not fully depreciate it in accordance with what experience they might have had.

Q. You believe the company handled it properly, do you not?

A. Well, I have no quarrel with the way they handled it, Mr. Littman, if that is what you mean. Whether they fully recovered the amount which should have been recovered, I do not know. I haven't any idea.

Q. I cannot understand why it is necessary, for purposes of this proceeding, to deviate from the practices of the company in regard to setting up depreciation and I want you to enlighten me, if you can. Why is it necessary?

A. I do not know actually why it is necessary to [fol. 8301] deviate except to attempt to recover the dol-

lars that are invested in the property to be used during the 24½ year life. That is the only object I would know for asking for amortization or depreciation or any other factor.

Q. Isn't that precisely what the company is doing by the present method?

A. They are making a provision. Whether it will recover the property over a 24½ year life or their investment in the property, I do not know. I might add that I do know they are using for the major portion of the property a depreciation rate of 3 percent which infers a straight line period of 33½ years.

Q. Not on transportation equipment?

A. No, not on that.

Q. The transportation equipment makes up the largest portion of the short-term property? A. That is correct.

Q. And the same is true of furniture and fixtures, isn't that right?

A. That is true. You have an exhibit in evidence that gives you that information specifically.

Q. You mean Exhibit No. 99, Page 3? A. Yes, sir.

. . . . . .

[fol. 8302] The Examiner: Let's go forward.

By Mr. Littman:

Q. Before the recess, you made a reference to Page 3 of Exhibit 99 and you were going to tell us something about the manner in which the company has been depreciating the short-lived property shown in Exhibit 98. Will you proceed to advise us as to this company's own method?

A. I do not find that the Exhibit 99 to which you refer and to which I alluded shows the depreciation rate for anything but all items of property except automotive equipment and any transportation equipment and special equipment.

Transportation equipment is depreciated on the straight line basis based upon the life of that equipment and special equipment is determined in the same manner. All of the other plant of the company is currently depreciated at a 3 percent rate.

Q. Confining ourselves for the moment to transportation equipment which is shown on Page 3 of your Ex-

hibit 99, I refer you to Footnote 3 at the bottom of the page, which reads as follows:

"Amounts cleared from these accounts are not charged to depreciation account but to various operating expense and maintenance accounts, construction, etc., based on miles of use of automotive equipment and hours' use of special equipment."

[fol. 8303] It is apparent from that footnote that the company's operating expense accounts and construction accounts include the amounts required for the depreciation of this transportation equipment. Is that correct?

A. That is correct, yes, sir.

Q. In your pro forma statement which is Exhibit No. 104, you have included all of those operating expenses for the year ended June 30, 1941, have you not?

A. Yes, sir.

Q. So that you have already provided for the amortization of the transportation equipment through the medium of your expense accounts and your capital accounts, have you not?

A. Only partially. Some we related to Exhibit 98. Some portion of the amount of $2,484.58 and $198.96 appearing on Page 3 of Exhibit 99 was duplicated in the pro forma statement.

Q. Yes, I was coming to that.

A. Excuse me for anticipating you, Mr. Littman. It was evident that was what you were coming to.

Mr. Baldridge: To get me clear on that, I would like to ask is that the matter that was taken up by you with the representatives of the Commission in advance of the hearing?

The Witness: No, I would not say it was taken ap by me with them, no.

Mr. Baldridge: Wasn't that communicated to the repre-
[fol. 8304] sentatives of the Commission?

The Witness: No, I do not think so, not by me.

By Mr. Littman:

Q. Let me see if I understand your testimony. You provide in Exhibit 98 the amount of $7,802.08 annually for the amortization of short-lived property, do you not?

A. That is correct.

Q. You state that you have made a duplication in so doing, isn't that right? A. That is correct, yes.

Q. Can you state how much of the $7,802 is duplicated?

A. No, sir, I cannot. It would be something less than $2,683.54 which is the aggregate of the two amounts I quoted from Page 3 under the column designated, "H" in Exhibit 99.

Q. Isn't your provision for amortization of passenger cars and trucks and trailers shown in Exhibit 98 duplicated entirely?

A. Not with respect to operating expenses, Mr. Littman, I do not think so; not with respect to the item of amortization as an operating expense.

Q. Certain parts of the cost of amortizing the short-lived property has been charged to this capital, has it not?

A. In the past, that is correct.

Q. And that capital is included in your original cost statement, isn't it?

[fol. 8305] A. Yes, it is included in the amount of original cost.

Q. And you are claiming a return on that amount of capital, are you not?

A. Yes, sir.

Q. And amortization of that?

A. Yes, sir.

Q. So when you say you have duplicated only $2,000 out of $7,802, you mean that that is all you can trace to the operating expense accounts?

A. No, what I am saying is that the amount of duplication cannot be any more than $2,863.54 and that as it relates to operating expenses, it is something less than that amount, a rather small amount less, too.

Q. Then the difference between the $2,000 of duplication, approximately, and the $7,802 which you claim in Exhibit 98 is occasioned by reason of the higher rates of depreciation used by you over those used by the company?

A. That is correct.

Q. Now, Mr. Spitznagle—

A. (Interposing) Just a minute, I must explain my answer to that question a little further.

Q. Very well.

A. It is due to the fact that the rates may be somewhat higher and the fact that we are now making a provision for amortization of all of the cost that will be suf- [fol. 8306] fered during the 24½ years from June 30, 1941, rather than the cost of the equipment that the company presently has in its plant account at June 30, 1941.

Q. Isn't this one of the things that happens when you deviate from the accounting methods and policies followed by the company? Isn't this the inevitable result of tampering with the company's depreciation policies?

A. No, I do not think so, Mr. Littman.

Q. Well, it is what happened in this proceeding, isn't it?

A. Yes. It is entirely my responsibility. I neglected to apply as a reduction the amount of depreciation cleared through clearing accounts to operating expense accounts from the annual amortization of $7,802.08.

Q. If the company's records show $2,000 per annum for amortization of short-lived property against your $7,000, do you think the company has overstated their property?

A. No, sir, I do not. This is a rate case and this was made up for the purpose of being used in a rate case so that we had to know how much amortization you would have to have presently and every year of the 24½ year period in order to recover the total amount of the investment that was going to be made in property during that period. The company is not keeping its books strictly for rate case purposes.

Q. Well, if the company followed its own method, it [fol. 8307] would also recover its investment, would it not?

A. It would recover it at a later period if it continued to make the provision year in and year out for 24½ years and it will recover enough to take care of its property. Whether or not the recovery for the year ended June 30, 1941, would be sufficient to protect the company on the basis of determining what its rate should be based upon

that period is an entirely different factor and an entirely different approach to the problem.

Q. Apparently the company itself thinks that its own method is sufficient for the purposes of recovering its investment in short-lived property, doesn't it?

A. You will have to ask the company that, Mr. Littman. I presume they are because they have not changed it.

Q. Have you asked the company whether they are satisfied with their method?

A. No, I have not asked the company whether they are satisfied or not.

Q. You are not taking any responsibility for the philosophy back of this exhibit and whether Exhibit 98 reflects a proper method or not?

A. No, I have taken no responsibility although I have given you some philosophy in the last few minutes.

Q. But it is not the company's philosophy, is it?

A. The company subscribed to these statements so I [fol. 8308] presume they are satisfied with them.

Q. They are satisfied with the method that they have heretofore used?

A. I do not know about that, Mr. Littman. For this purpose, they subscribed to the presentation that we made and put confidence in me in the computation that was carried from Exhibit 98 to 104 and I let them down when I made a mistake here of roughly $2,400.

Q. Exclusive of the amount that will be found in the capital accounts?

A. That $2,400 would include any amounts that would be found in the capital accounts as well, Mr. Littman.

Q. But not for prior years, would it?

A. No, not for prior years, that is right.

Q. If the Commission were to take the company's own actual operating and maintenance expenses for the year ended December 31, 1941, as a guide for the future in testing the reasonableness of the rates of Michigan Gas, there would, by that process, be automatically included the company's own allowance for the amortization of short-lived property, isn't that correct?

A. In so far as the amount of short-lived property during the year 1941, yes, that is correct.

Q. Are you providing for amortization in Exhibit 98 of property that is not now owned by the company?

[fol. 8309] A. Yes, sir. I think the exhibit says that very distinctly, Mr. Littman.

Q. And that property, of course, is not purchased yet and is not used and useful in the rendition of service, is it?

A. It will have to be purchased and used in the continuation of the rendition of service.

Q. In the future?

A. In the future, yes, that is right.

Q. Would you think it proper to amortize cash in the bank, Mr. Spitznagle?

A. No, sir.

Q. You would not think of amortizing working capital, would you?

A. No, sir.

Q. You have not read Mr. Coffman's testimony on those subjects, have you?

A. I have a recollection I did.

Q. You do not agree with him in those regards at least, do you?

A. I think you had better let Mr. Coffman speak for himself. I do not know what his philosophy is.

Q. Neither do we.

Mr. Spitznagle, will you please turn to Exhibit No. 99, entitled, "Michigan Gas Transmission Corporation—Statement of Income and Expense per Books for Years [fol. 8310] Ended December 31, 1936, to 1940, Inclusive; 12 Months ended June 30, 1941, and 6 Months Ended June 30, 1941, and December 31, 1940."

The company has followed a policy of overstating on its books the Federal income tax and excess profits taxes, has it not?

A. I could not designate it as an overstatement, Mr. Littman. They have stated on their books an amount payable or reserve for those taxes in excess of the amounts they paid, but there is a very good reason for doing that.

Q. Why? What is the reason?

A. Well, you will note that—

Q. (Interposing) By the way, before you proceed with your explanation, may I interrupt to point out that the excess accruals on account of Federal income and excess profits taxes are set forth in Footnote B, are they not?

A. Yes, sir.

Q. Now, will you proceed with your explanation?

A. You will note that the excess of accruals of Federal taxes over amounts paid are not material until the year 1940 which is shown in the footnote at the bottom of Column G.

Q. Will you read into the record the amounts of those excess accruals?

A. All of them?

Q. For the year 1940 and for the year 1941.

[fol. 8311] A. The 12 months ended 1941?

Q. Yes.

A. For the year 1940, Federal income taxes, meaning normal tax, was over-accrued $16,184.67; Federal excess profits taxes were over-accrued $135,595.15.

For the 12 months ended June 30, 1941, the respective taxes were over-accrued $19,228.14 and $123,495.62.

Q. Now, these over-accruals or excess accruals had the effect of understating the true net income to the same extent as the taxes were over-accrued. Is that right?

A. Yes, that is correct.

Q. In other words, the net income figures shown in Line 19 and Line 12 are understated in your Column G, 1940, and for the 12 months ended June 30, 1941, in Column H to the extent of the amounts shown in Footnote B. Is that right?

A. That is correct.

Q. While we are on the subject of Federal income taxes, you have recomputed Federal income taxes for purposes of your pro forma statement, have you not?

A. Yes, sir, that is correct.

Q. That is shown on Pages 4 and 5, I believe, of your Exhibit 104?

A. Yes, sir.

Q. Was this computation based upon the pro forma allowable utility income determined by Mr. Green?

[fol. 8312] A. No, sir, it is not, Mr. Littman.

Q. Well, is it determined upon the pro forma allowable utility income?

A. It is determined upon the allowable utility income as it is set forth on Page 1 of Exhibit 104, adjusted to conform to the requirements of the Bureau of Internal Revenue under the Income Tax Laws.

Q. Well, it is based primarily upon the—

A. (Interposing) The utility income allowable is adjusted for Federal income taxes deducted in arriving at the pro forma utility income. You have to have that in the bank as one element and then there are some other items which are more or less detailed in Item 11 on Page 4 and Page 5 of Exhibit 104.

Q. If the allowable utility income shown in the pro forma statement, Exhibit 104, is too high, the amount of tax shown would have to be reduced, accordingly, would it not?

A. I think that would be the result, Mr. Littman, yes.

Q. That would naturally follow?

A. That would follow, yes, sir.

Q. Now, for rate case purposes, it is necessary to first determine the allowable utility income before you can begin to compute the allowable Federal income tax and the Federal excess profits tax, isn't that correct?

A. Yes, sir.

[fol. 8313] Q. Now, that is almost axiomatic?

A. It is axiomatic.

Q. You never determine Federal income taxes first and then, on that basis, determine what your allowable net income is going to be, do you?

A. Well, we might make the determination on the basis of what we thought the allowable income should be, but you must determine the allowable income first.

Q. That is the proper way to do it, isn't it?

A. That is correct. It is the only way you can do it, in fact.

Q. Mr. Coffman has another way, that is why I wanted to get your understanding of it.

Mr. Spitznagle, I think we should now go to Exhibit No. 104 which is the pro forma statement. What do you mean by "pro forma statement"?

A. What I mean by it is a statement which will adjust actual book figures for all events that may have transpired during the period that is being reviewed in the pro forma statement which were not fully reflected in the actual statements of the company and for those events that may have occurred subsequent to the period for which the pro forma statement is prepared and will materially

affect the company's future income with respect to the actual period reported on. If I have not made myself entirely clear, I will be glad to try to do better.

[fol. 8314] Q. You make certain adjustments of the actual figures shown on the company's books for the purpose of making a forecast of things to come in the future, is not that right?

A. That is right, that is one of the elements, yes, that is correct, and to reflect change in philosophy over the philosophy expressed in the company's books as distinguished from that which is expressed in this statement.

Q. You are not intimating that accountants are, also, philosophers, are you?

A. I have seen quite a few of them who claimed to be.

Q. At any rate, one of the major purposes of a pro forma statement is to tie all of the figures together in one place and present a forecast of the future?

A. No, not necessarily a forecast of the future but to express what the future will hold with relation to the present. In other words, we are reporting here on the 12 months ended June 30, 1941. We attempted to show that if all conditions that we know about plus those that existed in the 12 months ended June 30, 1941, were to take effect in the next year, this would be the result and we, also, injected the change in philosophy on amortization of the investment over what was done by the company on its books.

Q. Do you consider this pro forma statement a reasonable forecast of expenses in operating income for the future?

[fol. 8315] A. I really have little knowledge, Mr. Littman, about what the future will produce in the way of revenue, expense and gross income and net income. There is a slight forecast in this statement in that we tried to apply the effect of completing construction work in progress, which would be completed subsequent to the date of June 30, 1941. To that extent there is forecast in this statement as to the future.

Q. Well, perhaps, I could state your philosophy better in this way: You used the latest available figures on the company's book available to you at the time you prepared

the pro forma statement, Exhibit 104, for purposes of testing the reasonableness of the rates?

A. That is correct.

Q. And you made certain adjustments of those figures because you knew there were going to be certain changes to come in this succeeding period?

A. Some had actually occurred which had not been fully reflected in the actual figures and some we knew were going to occur. In fact, arrangements had already been made for them to occur and we knew they would affect the operations of the company had they been in effect during the 12 months ended June 30, 1941.

Q. You made certain adjustments in the operating expenses, did you not?

A. Yes, sir.

[fol. 8316] Q. For instance, one of the things that you did was to make retroactive certain pay rises?

A. Wage adjustments that were made effective on July 1, the day after the period covered by this statement, that is correct.

Q. And you projected those pay rises back a full year, did you not?

A. That is correct, yes.

Q. We will take these matters up in detail later, but I wanted to touch upon them briefly at this time.

You, also, took into effect certain purported reductions in rates that became effective from time to time through the 12 months ended June 30, 1941, and projected those back for the entire 12 months, did you not?

A. That is correct and some rates that were filed with the Federal Power Commission that had not yet been approved by them that would, again, affect that same period.

Q. Now, will you point out in this statement where you have given any effect to future changes in revenue?

A. We have not, only to the extent of Item 6 on this statement captioned, "Estimated Reduction in Utility Income Before Depreciation and Federal Income Taxes Resulting from Completion of Construction in Progress at June 30, 1941", which is an exhibit, the number of which I do not know, in this proceeding. Only to that extent, Mr. Littman.

[fol. 8317] Q. Well, you make a slight adjustment, do you not?

A. That is a slight figure by the way of net revenue less expenses.

Q. Well, you also made an adjustment shown in Item 4 of Page 1 of Exhibit 104 for an increase in rates to Kentucky Natural Gas Corporation in the amount of $3,333.

A. That is correct. That is a contractual arrangement and we knew definitely that that was going to occur, so we put it in.

Q. Well, you made no forecast of revenues in the future, did you?

A. No, sir.

Q. Well, what is pro forma about these revenues that are shown in Exhibit 104 other than the two small items that you mention?

A. There is nothing pro forma about them, Mr. Littman. There was no intention to pro forma them in the respect that you are now asking me.

Q. Well, you pro forma-ed, so to speak, the operating expenses, did you not?

A. Those changes that were apparent and we knew definitely about, yes. We did not pro forma the operating expenses for the indicated rise in cost of operation due to changing labor rates and changing cost of materials and supplies and what not. We did not pro forma those expenses.

[fol. 8318] Q. Now, that would not amount to much, would it?

A. I do not know, Mr. Littman. I do not know, it is a very difficult thing to determine.

Q. Well, you pro forma-ed, so to speak, the operating expenses and reflected the rise in wages, did you not?

A. To the extent that it was actually known that it had occurred.

Q. You, also, made a pro forma statement for purposes of depreciation, did you not, and amortization?

A. We reflected in the statement the changed philosophy that has been prosecuted in the Michigan Consolidated Gas case right straight on through.

Q. Well, you pro forma-ed, so to speak, the bad news, but you did not pro forma the good news.

A. That was not our purpose, Mr. Littman, to pro forma the bad news and not pro forma the good news. We thought we would put in the facts that were apparent that we knew about.

Q. Did you not know that M.c.f. sales and M.c.f. transported was going to increase in the next year?

A. I had every reason to believe that it would, yes, Mr. Littman.

Q. But you did not reflect anything for that, did you?

A. No, because it is very difficult to determine and, by the same token, I knew that expenses were going to increase by virtue of increased cost of wages, I mean generally, increased cost of materials and supplies and we [fol. 8319] did not pro forma those either which we would have to do. If we were going to pick up the trend in revenue, we would have to pick up the trend in all types of expenses and to make such a computation and defend it is a very difficult thing to do.

Q. Let's look at the gas operating revenues shown in the income and expense statement, Exhibit No. 99. Now, there has been a steady rise in those gas operating revenues from the beginning of the company to June 30, 1941, as shown in Line 4 of Page 1 of this exhibit. Is not that correct?

A. Yes, sir, that is true.

Q. And you fully expect the trend to be in the same direction, do you not?

A. Well, due to the nature of this particular company's business, it is very difficult to relate the trend to the operating revenues. For the 12 months ended December 31, 1941, the operating revenues are $5,527,794.76, whereas in the company's budget for 1941 they are greatly reduced for the reason that the company is changing its method of reporting revenues.

In other words, the company sells gas as such to some people and they transport gas for a service charge. If you change the ratios of those two classes of service you naturally change the resulting operating revenue.

Q. Well, the operating expenses go down, too, when they [fol. 8320] cease buying gas for resale. Then they transport it?

A. Yes, that is true.

Q. Let's not talk about revenues in view of that, let's talk about net utility income shown on Line 12.

A. That would be better.

Q. That shows a steady upward trend from the beginning of the operations of the company in 1936 through to June 30, 1941?

A. That is correct.

Q. Now, in your opinion, should not a pro forma statement give effect to the increased sales and volumes of gas transported in order to fully reflect changed conditions?

A. If the facts can be reasonably determined, both with relation to the income statement as well as to the additional capital that will have to be invested in connection with the maintenance of the present income as well as the future income, yes, I would say so.

Q. Well, we can now look in the budget for that, can we not?

A. Well, you have another 6-months' period. You can look at the results for that 6-months' period and see what the change is, Mr. Littman, yes.

Q. And the results of the last 6-months' period of 1941 are shown in the company's financial statement for 1941, which is now identified as Exhibit No. 163?

[fol. 8321] A. At least they can be adduced from that exhibit, yes, Mr. Littman.

Q. What was the total amount of gas in M.c.f. transported and sold by Michigan Gas during the year ended June 30, 1941? I believe you will find that in Line 25 of Column "H" of Exhibit 103.

A. I do not seem to have a copy of Exhibit 103. 38,555,662 M.c.f.

Q. What is the volume of gas in M.c.f. transported and sold per your pro forma statement? I take it it is the same amount?

A. It is not quite the same amount, because we did give consideration to taking in any income that would result from completing construction work in progress which involved, of course, the sale of some additional M.c.f. How many M.c.f.'s there are, I could not tell you.

Q. That did not amount to much, did it?

A. Not a great deal, no.

Q. In other words, there is nothing particularly pro forma about the number of M.c.f.'s transported and sold in your pro forma statement? A. That is true, yes, sir.

Q. What was the actual amount of gas in M.c.f.'s transported and sold in the year ended December 31, 1941?

I believe you will find that figure on Page 4-B of Exhibit
[fol. 8322] No. 163.

A. Yes, I have that, but these figures are confusing to me because of the delivery feature and the sale feature. I take it that the comparable figure to the one I previously quoted for the 12 months ended June 30, 1941, is 41,304,280 M.c.f.

Q. Will you please deduct the gas used by the company in the amount of 423,552 M.c.f.? A. Yes.

Q. When that is done, I believe you will have the comparable figure. A. 40,880,728 M.c.f.

Q. Now, there was an increase of 2,325,066 M.c.f. sold and transported for the year ended December 31, 1941, over the volume transported and sold for the period used in your pro forma statement, to wit, the 12 months ended June 30, 1941, is that correct?

A. That is the approximate figure, Mr. Littman.

Q. Now, Michigan Gas Transmission Corporation has made its own forecast of the quantity of gas which it expects to sell and transport for the year 1942, isn't that correct? A. That is true, yes, sir.

Q. Will you give us that figure?

Mr. Baldridge: May I interject there. In what form was that forecast made, Mr. Spitznagle?

[fol. 8323] The Witness: What do you mean by "form"?

Mr. Baldridge: Well, in what document is it contained?

The Witness: It is contained in the company's designated operating budget for the year 1942.

Mr. Baldridge: Will you read the date on the outside of that, please?

The Witness: I find the date on the fly sheet indicating that it was prepared December 5, 1941. Is that what you want? It is signed as of that date.

Mr. Baldridge: December 5, 1941, yes.

The Witness: Yes.

By Mr. Littman:

Q. Who signed it?

A. Mr. L. J. Mueller, Assistant Treasurer of the Company.

Q. Assistant Treasurer—

A. (Interposing) Of Michigan Gas Transmission Corporation.

[fol. 8326]

FRED A. SPITZNAGLE a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Resumed)

By Mr. Littman:

Q. Mr. Spitznagle, yesterday I requested you to make a check of a number of figures, as the transcript of yesterday will more clearly show. Have you checked the accuracy of our calculations and the figures which I submitted to you to be checked? A. Yes, sir.

Q. And what did you find?

A. I found that the figures as you quoted them were correct. I also found that in connection with expenditures of the character detailed in Exhibit 93 which have been charged by Michigan Gas Transmission Corporation, that they have been charged on its books to sales promotion expense.

Q. You are now referring to the charges appearing in Exhibit 93 which are there characterized as "Contributions Made to Customers for Business Development for the Years 1936, 1937 and five Months Ending May 31, 1938"?

[fol. 8327] A. That is correct, yes, sir.

Q. I believe I also read some figures to you which we believed to be the amounts charged by Michigan Gas Transmission Corporation to sales promotion expense for the balance of the year 1938, for 1939, 1940 and 1941.

A. That is correct.

Q. Did you check the correctness of those figures?

A. Those are included in the figures that I just previously testified to, yes, sir.

Q. Mr. Spitznagle, I also asked you to ascertain for me the manner of payment of the Federal income taxes by the company. A. Yes, sir.

Q. What are the facts?

A. It has been the policy of the company to pay its Federal income taxes quarterly.

Q. What has been the policy of the company with respect to the payment of its Indiana taxes?

A. Those taxes are payable by the company on the first Monday in May and November following the year for which the accrual for those taxes is made, so that the 1941 accrual of taxes for Indiana property taxes will be payable the first Monday of May and November of 1942.

Q. That brings us down to date with respect to the checking of figures and your further responses to checking the [fol. 8328] information? A. Yes, sir, I think it does.

Q. At the close of yesterday's session, we were discussing Michigan Gas' forecast of the quantity of gas to be sold and transported for the year ended December 31, 1942. I believe you were about to refer to the forecast with respect to those sales and that transportation as contained in the 1942 operating budget of Michigan Gas Transmission Corporation. Do you have the figure before you?

A. Yes, sir. I would like to point out before I give you the figure that the company considers it a forecast, the document that you refer to as a budget. It is not a budget in the sense that it has been approved by the officers and Directors of the Michigan Gas Transmission Corporation.

Further, of course, the budget was prepared, the forecast was prepared, prior to the advent of the present struggle that we are now engaged in.

Q. Well, just a minute, Mr. Spitznagle. By the statement you just made, are you referring to the entire budget or to the forecast of sales and a forecast of the volume of M.c.f.'s to be sold and transported during the year 1942?

A. I am referring, more or less, to the entire budget with the possible exception of the capital expenditures set out in the budget, Mr. Littman.

Q. Who prepared this budget?

[fol. 8329] A. It is prepared by the officers of Michigan Gas Transmission Corporation, primarily Mr. Mueller, the Assistant Treasurer of the company.

Q. Well, if the officers of the Michigan Gas Transmission Corporation prepared it, why, they approved it, did they not?

A. Well, they think that it is as good as they could do at that time in forecasting the 1942 operations of the company. I am sure they feel that.

Q. You understand that it represents—

A. (Interposing) But it does not represent a budget in the sense that such budgets are prepared for formal approval by Directors and officers of the company. That was the only point that I wished to make.

Mr. Baldridge: May I interject a question, Mr. Littman?

Mr. Littman: Do you mind waiting just a minute, Mr. Baldridge? I want to clear up the point on this budget.

By Mr. Littman:

Q. You have stated that this budget has not been approved by the Board of Directors of Michigan Gas Transmission Corporation. Is it not a fact that none of the previous budgets have been submitted to the Board of Directors of Michigan Gas?

A. That is true, they have not followed that practice with respect to the annual forecast in the past periods, that [fol. 8330] is correct.

Q. This 1942 budget has been prepared and submitted to the officers of the company just as it always has been done in the past, is that not correct?

A. That is correct; yes.

Q. In other words, this 1942 budget is not any less formal or less complete than any of the other budgets?

A. That is correct, yes, sir.

The amount responsive to your original question is 47,014,779 M.c.f.

Mr. Littman: Mr. Baldridge, you said you wanted to clear up something.

Mr. Baldridge: You spoke of the officers preparing this budget. You did not mean to include the Directors in that, did you?

The Witness: Mr. Baldridge, I do not know really to what extent all of the officers have perused or examined the budget in any way, shape or form.

Mr. Baldridge: You have no information which would lead us to believe that Mr. Beckjord had any part in the preparation of the so-called budget?

The Witness: No, I have no such information, that is right.

Mr. Baldridge: Just to clear the record further, Mr. Beckjord was President of Michigan Gas Transmission Corporation up until February of this year, was he not?

[fol. 8331] The Witness: I do not know the exact date, but I know it was some date in February, yes, sir.

Mr. Baldridge: And at the present time Mr. Crevelling is President of Michigan Gas Transmission Corporation?

The Witness: That is my understanding.

* * * * * * * *

[fol. 8332] By Mr. Littman:

Q. What did you say with respect to Mr. Beckjord's known participation in the 1942 budget preparation?

A. I will have to have the question read back to me that Mr. Baldridge asked me. I do not recollect just right off, Mr. Littman. I have no knowledge whatsoever as to Mr. Beckjord's participation in this budget and I tried to convey that impression by my answer to Mr. Baldridge.

Q. Well, I thought the inference was being made that Mr. Beckjord did not participate in the preparation of this budget.

A. I do not know, Mr. Littman.

Q. You do not know whether he has or has not participated in the preparation of previous budgets, either, do you? A. Not specifically, no, I do not.

Mr. Baldridge: May I ask for a definition of the term there? When you refer to the budget, generally, I would like to point out the distinction between "budget" as it is ordinarily used and this so-called "operating budget" which is nothing more or less than a forecast.

* * * * * * * *

[fol. 8333] By Mr. Littman:

Q. Mr. Spitznagle, I hand you Exhibit No. 165 for [fol. 8334] identification and ask you whether this is the

document to which you have referred throughout your testimony as the operating budget of Michigan Gas Transmission Corporation for the year 1942? A. Yes, sir, it is.

Q. And it contains the forecasts to which we have been referring? A. Yes, it does.

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[fol. 8335] Q. Mr. Spitznagle, who signed the original budget of 1942, a copy of which has been marked for identification as Exhibit No. 165?

A. The signature appearing on the copy that I have is L. J. Mueller, Assistant Treasurer, Michigan Gas Transmission Corporation.

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[fol. 8337] Q. Now, you stated a few moments ago that the 1942 budget reflects a forecast of a total of 47,014,779 M. c. f.'s expected to be sold and delivered during the year 1942.

A. That is correct, yes, sir.

Q. Now, that represents an increase of 6,134,051 M. c. f. over the volume transported and sold during the full year 1941, does it not?

A. That figure is approximately correct.

Q. Now, do you know how that figure was arrived at by the officers of Michigan Gas Transmission Corporation who prepared this budget?

A. No, sir, I am not sufficiently familiar to give you the detail of the increase.

[fol. 8338] Q. Are you sufficiently familiar with Panhandle Eastern's Exhibit No. 40 which was submitted by Mr. Morton to state whether or not this forecast of gas sold and delivered closely approximates Mr. Morton's forecast of gas to be delivered east of Dana, Indiana, during the year 1942, by Panhandle Eastern Pipe Line Company?

Mr. Baldridge: Don't you want to change that question a little bit?

Mr. Littman: I am satisfied with it.

Mr. Baldridge. I will point out why it might not be entirely satisfactory. The gas delivered at Dana is not all delivered to Michigan Gas Transmission Corporation, as you may know. There is a delivery at Dana to somebody

else. Do you want to limit that delivery to Michigan Gas Transmission Corporation?

Mr. Littman: I shall clear that up.

By Mr. Littman:

Q. Are you familiar with Mr. Morton's estimate?

A. Mr. Littman, I have no familiarity with any of Panhandle's exhibits, including Mr. Morton's.

Q. In view of Mr. Baldridge's statement, I would like to point out that Mr. Morton's Exhibit No. 40 shows his estimated deliveries by Panhandle Eastern Pipe Line Company at Dana, Indiana, and into the lines of Michigan Gas Transmission Corporation for the year 1942 to be 50,711,870 M. c. f.'s.

[fol. 8339] Mr. Littman: I presume, Mr. Baldridge, that the difference between the 50 million figure and the 47 million figure contained in the budget would represent line loss, company use, and so forth?

Mr. Baldridge: I do not know whether it includes only that or something else, Mr. Littman. I just do not know.

By Mr. Littman:

Q. At any rate, Mr. Spitznagle, you are not familiar with Mr. Morton's estimate?

A. No, I am not, Mr. Littman.

Q. Will you please refer to your pro forma statement, Exhibit No. 104. I call your attention to Item 4 entitled, "Income from Rate Change—Kentucky Natural Gas Corporation", $3,333. Is my understanding correct that this amount has been added to the revenues of Michigan Gas Transmission Corporation for pro forma purposes?

A. Yes, sir.

Q. To reflect a rate increase?

A. It is to reflect a change in the rate under the contract that occurred on September 1, 1941, or in the period ended June 30, 1941.

* * * * * * * *

[fol. 8340] By Mr. Littman:

Q. What does it represent?

A. Are you asking me or Mr. Baldridge?

Q. I am asking you, Mr. Spitznagle.

A. The contract provides for an automatic change in the rate occurring on September 1, 1941. It is a fixed basis rate. In other words, it is $12,000 per annum starting September 1, 1941, whereas up to that time, it was $8,667. I do not have too much familiarity with the contract itself, Mr. Littman.

Q. Well, it is your testimony, is it not, as it appears on this pro forma statement, Exhibit No. 104, that the rate change to which you have referred would result in an overall increase in revenues derived from Kentucky Natural Gas Corporation for the full year of $3,333?

A. That is correct, yes.

Q. What you have done is to take the increase effective September 1, 1941, and project it back to June 30, 1940, have you not? A. That is correct.

Q. If the Commission were to use the revenues of Michigan Gas Transmission Corporation for the full year 1941, the figure of $3,333 would necessarily change, would it not?

A. That is correct.

Q. Is it also a fact that if the Commission were to use [fol. 8341] the revenues and expenses for the full year 1941, the Items 1, 2, 3 and 5 shown on Page 1 of Exhibit 104 would also change, would they not?

A. That is true, yes, sir.

Q. For the purpose of the record, Item 1 is "Depreciation per Books Adjusted"; Item 2, "Federal Income and Excess Profits Tax per Books Adjusted"; Item 3, "Reclassification of Donations per Books Adjusted to Deduct from Gross Income"; and Item 5 is "Increase During 12 Months Ended June 30, 1941, in Cost of Line Pack in Mains Not Capitalized." Is that correct?

A. That correctly describes the items you just referred to, yes, sir.

Q. Will you please refer to Item 6 on Page 1 of Exhibit 104, the pro forma statement, which item is called "Estimated Reduction in Utility Income Before Depreciation and Federal Income Taxes Resulting from Completion of Construction in Progress at June 30, 1941, on Exhibit 95". This item would also change, would it not, if the figures for the full year 1941 were used?

A. Yes, sir, that is true.

Q. As a matter of fact, the item would be practically eliminated, would it not?

A. Not entirely but a good portion of it would be already reflected in the last six months of 1941's operations.

[fol. 8342] Q. Isn't that because all but $30,000 of the construction that was in progress at June 30, 1941, was completed at December 31, 1941?

A. I think the amount of $30,000 is approximately the correct figure, yes, sir.

Q. That is my recollection of Mr. Young's testimony.

Looking at Item No. 7, "Amortization of Present Rate Case Expense," you have used the estimated figure for purposes of the pro forma statement which estimate was submitted by Mr. Young in Exhibit No. 96?

A. Yes, sir.

Q. What you have done for purposes of the pro forma statement is to amortize the estimated figure over a five-year period?

A. That is correct, yes, sir.

Q. Mr. Spitznagle, without referring to the amount which represents an allocated portion of the estimate contained in Exhibit No. 96 which has been stricken from evidence, I would like to ask you whether or not, in your opinion, you fully expect the estimate to change when the actual figures are in?

A. Yes, I do, Mr. Littman.

Q. It goes without saying, does it not, that the actual figures paid will be a much better guide for us than any estimates thereof?

A. I think that is generally true, yes, sir.

[fol. 8343] Q. Mr. Spitznagle, in your opinion, should rate case expense be included in a calculation which is made purely for the purpose of determining the reasonableness of existing rates?

A. It has been so included in rate cases that I know about before State Commissions. I am not very familiar with the practice of the Federal Power Commission toward that item. However, Mr. Green will support the philosophy of including it in this pro forma statement.

Q. You are not expressing any opinion on that subject?

A. That is correct.

Let us examine Item 9 on Page 1 of your pro forma statement, Exhibit No. 104, entitled, "Provisions for Wage In-

creases Made Not Reflected in Period Ended June 30, 1941."

Now, the amount shown for this item of $22,099 represents what?

A. It represents the amount necessary to reflect the existing payroll of the company on July 1 1941, for a full year ended June 30, 1941, in the operating expenses of the company.

Q. When were these wage increases effective?

A. The largest one was effective, as I recall, on July 1, 1941. I believe there were a few small ones made during the year ended June 30, 1941, as well.

[fol. 8344] Q. Now, the figures in the operating budget for the year 1942 which has been identified as Exhibit 165 reflect these provisions for wage increases, do they not?

A. Yes, sir, they do.

Q. Do you know whether they reflect any further increases for wages?

A. I do not think they do. In fact, I know the operating budget does not include the addition of some 18 watchmen at a cost of about $21,000 a year because the budget was made before the declaration of war and did not contemplate putting on watchmen, of course, in 1942.

Q. In other words, the budget reflects the forecast as of December 5, 1941, which was two days before Pearl Harbor?

A. That is correct, yes, sir.

Q. If the expenses for the full year 1941 were used for purposes of testing the reasonableness of the rate and those figures are now in the record in the financial statement which has been identified as Exhibit 163, there would be reflected the actual wage increases in effect throughout the entire year 1941, isn't that correct?

A. No, I do not think that is true, Mr. Littman. A wage increase made on July 1, 1941, would not be fully reflected in the year 1941 because you would only have a six-months' period during which the wage increase was paid.

Q. But you would have all wages actually paid during [fol. 8345] the year 1941?

A. All the wages actually paid, that is true.

Q. Including the wage increases actually paid?

A. Correct, yes sir.

Q. And, of course, your Item 9 would be reduced accordingly, would it not?

A. That is true.

Q. Let us now take up Item 10 on Page 1 of Exhibit 104 which item is called, "Reduction in Income Resulting from Changes in Contracts for Sale and Purchase of Gas" in the amount of $93,539.

There were certain rate reductions that became effective from time to time during the 12 months ended June 30, 1941, which is the period used by you for purposes of your pro forma statement, isn't that correct?

A. That is correct and, in addition, there were some contemplated and filed with the Federal Power Commission which have not been acted upon, as well.

Q. What did you do to arrive at this figure of $93,539 to reflect the reduction in income—first, you did not use the actual income for the 12 months ended June 30, 1941, did you, with respect to these rate reductions—that is to say, you projected them back, didn't you?

A. Yes, the actual income was used in determining the amount that is expressed in this statement. I am not suffi- [fol. 8346] ciently familiar with the detail of the computation to fully explain it to you. Mr. Young is and I believe will be very glad to do it for you.

Q. You understand, generally, what was done, don't you?

A. Yes, very generally.

Q. You testified on this subject at Pages 1968 to 1970 of the transcript, did you not?

A. Yes, sir.

Q. And there you show the effective date of the rate reduction applicable to each of the various companies?

A. That is correct, yes, sir.

Q. Where, for example, in the case of Indiana Gas Distribution Corporation a rate reduction became effective June 1, 1941, as shown on Page 1969 of the transcript, you made an estimate of the reduction that would ensue had that reduction been made effective July 1, 1940, did you not?

A. That is correct.

Q. And you did that in each instance?

A. Yes, sir.

* * * * * * * *

[fol. 8347] Q. Is there any confusion on this subject resulting from your direct testimony?

A. None that I know of, Mr. Littman.

Q. What is your understanding with respect to industrial sales by Indiana Gas Distribution Corporation?

A. Well, honestly, Mr. Littman, I am not sufficiently familiar with the types of rates that are in effect to give you very much intelligent information on the subject. I can check a computation, but to create that same computation I would have a lot of difficulty.

[fol. 8348] Q. I see. Well, who made the computation in the first place?

A. The computation was made by the staff of Michigan Gas Transmission Corporation.

Q. That is a computation of the $93,539 shown in Item 10 of Exhibit 104?

A. That is correct, yes, sir. I might add that the Commission was given the work sheets for that computation and their staff have indicated to me that it is a rather complicated affair and I just cannot relate it to you.

Q. Well, we did not intend to go into the intricacies of this $93,539, but so far as you know, this $93,539 represents all of the reductions that would have resulted, had these rate reductions been effective throughout the entire 12-months' period ended June 30, 1941?

A. That is correct.

Q. And do you know of others?

A. I wish to add this, that the $93,000 figure is an income figure rather than operating revenue figure. In other words, it is net of expenses. It is operating revenue less expenses.

Q. To what expenses do you refer?

A. To the cost of purchasing gas to the extent that that is involved in the change in revenue and other types of expense.

[fol. 8349] Q. Now, if the actual revenue figures for the full year 1941 were used, there would be fewer adjustments required. Isn't that right?

A. That is correct.

Q. And that is because many of these rate reductions were effective prior to January 1, 1941?

A. That is correct.

Q. And, of course, the $93,539 figure would be reduced?

A. That is correct, yes, sir.

Q. Now, the operating budget for the year 1942 which has been identified as Exhibit 165 reflects all of these rate reductions, does it not?

A. That is my understanding, Mr. Littman, but I am not positive about it.

Q. You would not have to make any adjustments for that factor at all if you used the 1942 revenues, would you?

A. That is my understanding, Mr. Littman. I am not right sure about it, though.

Q. Now, with respect to Item 11 entitled "Federal Income Tax on Pro Forma Income" in the amount of $181,492, what rates did you use in arriving at that amount?

A. The rates under the 1940 Act as amended by the 1941 Act.

Q. Well, are those the tax rates currently in effect?

A. Yes, sir, they are the rates in effect today.

[fol. 8350] Q. In other words, you applied today's rates to the last six months from the year 1940, at which time they were not effective, did you not?

A. Yes, that is correct.

Q. That is, to which period they were not effective?

A. Plus the adjustments that have been made in the pro forma statement, that is correct.

Q. Now, of course, if you were to use the 1941 figures for the full year 1941, you would have a full annual period that would require no adjustment except for an adjustment in net income. Do you follow me?

A. Not quite.

Q. Well, let me put it this way: You did not use for purposes of your pro forma statement the taxes actually paid during the 12 months ended June 30, 1941, did you?

A. No, sir.

Q. You had to make an adjustment there for the last six months of 1940, did you not?

A. That is correct, to the Act that was in effect at the time we prepared the pro forma.

Q. Now, with respect to the balance of the items on this pro forma statement, Exhibit No. 104, I take it that those

were developed by Mr. Green, were they not, except for Item 12 which we have heretofore discussed?

A. Yes, sir, that is true. Of course, I made some of [fol. 8351] the computations and converted the philosophy represented by the conclusion of those items into the dollar amounts there shown.

Q. Who is taking responsibility for Item 13 which has to do with the amortization of long-term investment and the cost of developing business?

A. Mr. Green has taken the responsibility for that act.

Mr. Littman: We have no further cross-examination of this witness.

I would like, at this time, to offer in evidence Exhibits Nos. 163 and 164.

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(Exhibits Nos. 163 and 164 Were Received in Evidence.)

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[fol. 8352] Q. Mr. Spitznagle, will you first refer to your Exhibit No. 91?

A. I have it, yes, sir.

Q. Now, in making your examination of the accounts of Michigan Gas Transmission Corporation, you found that that company had been organized in November of 1935, did you not, and that Indiana Gas Transmission Corporation had been organized back in 1931?

A. I think that is substantially correct, yes, sir.

Q. And that they have been consolidated as of March 1, 1936?

A. That is correct, yes, sir.

Q. Now, you also found the books of account of Indiana Gas Transmission in the Detroit office?

A. Yes, sir.

Q. Indiana Gas Transmission Corporation began the sale of gas in 1931, did it not?

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[fol. 8353] Q. I am handing you, Mr. Spitznagle, what I understand to be a copy of an exhibit filed with the Securities and Exchange Commission in recent hearings there in

which, among other things, there was involved the matter of the sale of Michigan Gas Transportation Corporation and I would like to ask that during the noon intermission you check that and see if those figures are correctly copied. I think that you can check everything except the last line, [fol. 8354] which is probably not in those records.

A. Yes, sir.

Trial Examiner: This tabulation will be marked for identification as Exhibit 166.

(Exhibit No. 166 Was Marked For Identification.)

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Q. Also, I would like to have you set down on this sheet the amount received for those sales.

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[fol. 8355] Mr. Baldridge: I think if you ask us to do some work on this thing, I think we at least ought to know whether it has any bearing on our case or not. It does not seem to me that it does.

Mr. Chamberlain: If you would like to know, Mr. Baldridge, it will have this effect: It will show why Indiana Gas Transmission was not selling any gas. You introduced an exhibit which shows it fairly well, but that will confirm it.

Mr. Baldridge: What has that to do with the Michigan Gas Transmission Corporation case, Mr. Chamberlain, that is what I want to know. Aren't you really talking now about the Panhandle Eastern Pipe Line case?

Mr. Chamberlain: I am discussing exhibits already filed by Michigan Gas Transmission Corporation and introduced by you, as I understand it.

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[fol. 8356] Mr. Littman: Weren't these sales made over the lines presently owned by Michigan Gas Transmission Corporation?

Mr. Chamberlain: They were made by the Michigan Gas Transmission Corporation because it is a consolidated and merged company.

[fol. 8357] Mr. Littman: I so understood.

Mr. Chamberlain: These were made by Michigan Gas Transmission Corporation under the name of Indiana Gas Transmission Corporation. This is a consolidation and merger. It is one company which has been operating since 1931 in the same way that Panhandle Eastern has been operating.

Now, if counsel wants a statement of what the purpose of this is, on Exhibit 101, he has introduced evidence here which shows that Indiana Gas Transmission Corporation, after five years of serving gas, had six customers. It shows the price that it was charging for gas, which was a prohibitive price, was purely and intentionally charged to defeat the sales of gas at that time.

Mr. Chamberlain: That is right, it shows right here and this completes the story throughout the years. It also shows from this exhibit that when the price of gas was reduced, sales increased very nicely. It shows fine salesmanship after 1936 but it will give this Commission a very potent reason why there is no going value with respect to attaching business.

Trial Examiner: I take it, Mr. Chamberlain, that that last part of your statement indicates the fundamental reason for this inquiry, that is, the cost of business development?

Mr. Chamberlain: That is right.

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[fol. 8361] Q. Now, I want to call your attention to Exhibits 101 and 103. Are the two not companion exhibits?

A. If you mean does Exhibit 101 show the M.c.f. related to dollar amounts of the various companies described and detailed in Exhibit No. 103, yes.

[fol. 8362] Q. Now, I observe that you have listed the customers and sales of Indiana Gas Transmission Corporation on Exhibit 101 for the first two months of 1936. Is that correct?

A. That is correct, yes, sir, for the purpose of supplying information for the full year 1936.

Q. Yes, and that shows a toal of seven customers, does it not?

A. Yes, sir.

Q. Now, included in that is the Ohio Fuel Gas with some $209,000 of payment for the two months, is there not?

A. That is correct, yes, sir.

Q. Please refer to Exhibit 103 and state whether that indicates that purchases were kept up in any substantial amount after 1936 by Ohio Fuel Gas Company?

A. Your question is not entirely clear to me. I think you mean did the Ohio Fuel Gas Company continue to buy gas in the same volume?

Q. In any substantial quantity after 1936.

A. Exhibit 103 shows that Ohio Fuel Gas Company purchased in 1937, 13,185 M.c.f. and, in 1936, 2,767,835 M.c.f. from the two companies denoted in the statement under the column headed "1936".

Q. There were no large sales to Ohio Fuel Gas Company after 1936, were there?

[fol. 8363] A. That is correct.

Q. Now, did you notice the change in that account when you prepared the exhibit, in the way it dropped off?

A. Yes, I perhaps observed it.

Q. Did you make any injuiry as to what period in 1936 that gas was taken?

A. No, sir, I did not, except as is shown on here for the two months and ten months period described under the column "1936".

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[fol. 8366] Robert S. Drew; a witness, having been previously duly sworn, resumed the stand, was examined and testified as follows:

Cross-Examination (Resumed).

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[fol. 8367] By Mr. Littman:

Q. Mr. Drew, you are Vice President of Continental Illinois National Bank & Trust Company of Chicago?

A. Yes, sir.

Q. You are in charge of the Investment Trust Department of that institution?

A. Well, I refer to it as the Investment Trust Division. It is the Investment Department of the Trust Division. That is what you mean, I think

Q. As I understand your testimony, Mr. Drew, you were requested by Mr. Daniel C. Green to give an opinion as to the question, "What rate of return should a company like the Michigan Gas Transmission Corporation earn on its invested capital or fair value in order to be able to finance by public offering of securities?" Is that correct?

A. Yes, sir.

Q. What conclusion did you reach in answering that question?

A. I believe I stated in my direct testimony that in my opinion the rate of return which a company like the Michigan Gas Transmission Corporation should earn on its invested capital or fair value, in order to be able to finance itself at this time by public offering of securities, is at least eight and one-half percent.

Q. In other words, the eight and one-half percent rate [fol. 8368] of return which you have just given applies to to either invested capital or fair value?

A. Well, in my thinking with respect to the words "fair value" I relate that term directly to the market value of the company's securities, which is the primary thing that I was testifying on in this case.

Q. Well, do you understand that invested capital and fair value are equal to each other?

A. Not necessarily, but I should say that there is likely to be a pretty close relationship between the market value of the securities of the corporation and what may be regarded as its fair value.

Q. I take it from your answer that it would not make any difference in your estimate of rate of return whether invested capital or fair value were used as the rate base?

A. My opinion is not worth anything on that point. I am talking about market value of securities.

Q. Well, the thing I am trying to ascertain, Mr. Drew, is to what this eight and one half percent should be applied. In other words, to what is it referable?

A. For the purpose for which I use that expression here, it relates to the market value of securities of the corporation.

Q. And not to anything else?

[fol. 8369] A. Well, I think it would have some relationship to other figures and factors, but my use of it relates to the market value of the securities.

Q. Suppose the market value of the securities were less than the book value of the securities. You would still say that the eight and one-half percent rate should be applied to the market value of the securities?

A. Well, I would not say applied to the market value; I would say that, repeating my direct testimony, in order to finance itself publicly at this time, a company like Michigan Gas Transmission Corporation would have to have net earnings of about eight and a half percent, at least eight and a half percent on the market value of those securities.

Q. Well, at the time you made this study, Michigan Gas Transmission Corporation's securities were not bought and sold on the market, were they?

A. I believe not.

Q. So you did not have at that time any estimate of the market value of those securities, did you?

A. There were no market quotations for their securities, so far as I know.

Trial Examiner: I believe your testimony was given in this case previously on November 18, Mr. Drew, and I do not recall whether you stated when your study was made. Can you give the dates when your study was actually made?

The Witness: My working papers here, one set shows [fol. 8370] the date of October 25, 1941, and this work sheet is dated November 14, 1941.

By Mr. Littman:

Q. Didn't you, in reality, make your study as of November 12, 1941?

A. We used market prices as of November 12, 1941.

Q. Now, none of the securities of Michigan Gas Transmission Corporation are bought and sold on the market today, are they?

A. Not so far as I know, sir.

Q. Have you ever heard of a rate base for rate making purposes that was determined by the market value of securities of a public utility?

A. I do not recall having heard of any such case, but I am not in a position to know very many rate cases. I do not follow them, as a practice.

Q. Well then, it is your testimony that your eight and one-half percent is applicable and referable to market value of securities? A. Yes, sir.

Q. And there is no market value of the securities of the utility in question as of the date you made your study, or as of today?

A. There are no market quotations for the securities of the corporation so far as I know, but I should say that [fol. 8371] those securities could have a market value.

Q. You have not ascertained what that market value is, have you? A. No, I have not.

Q. Well, can this eight and a half percent return, which you have estimated, be properly applied to any other kind of a rate base besides the market value of the securities?

A. I have no opinion to offer on that, Mr. Littman.

Q. You understand, Mr. Drew, it is very important for the Commission to know, because, obviously, if the eight and one-half percent is applied to one rate base, it may produce a different amount of dollars of return than if applied to another rate base: You understand that, do you not? A. Yes.

Q. And you cannot help us out on that score?

A. I do not believe I am qualified to answer that question.

Q. Would your eight and one-half percent rate of return be properly applicable to an original cost rate base or don't you know that either?

A. I do not think I am qualified to answer that question, Mr. Littman.

Q. It is your testimony that the investor in natural gas pipe line companies' stocks would require an earnings-[fol. 8372] price ratio of 14%? I am referring to common stock. Is that correct?

Mr. Baldridge: I do not think you properly characterized that. There is some more to it. He said, "given certain other conditions."

Mr. Littman: I would like to have the witness's view on the subject. Do you want me to read your testimony to refresh your recollection, Mr. Drew?

The Witness: I think I have a copy of it here, a memorandum.

By Mr. Littman:

Q. Would you like to refer to it? I think it appears on page 1917 of the transcript.

A. I think I said in my direct testimony that my opinion was that the setup which I then described would be favorably received by the investing public.

Q. Of course, the investing public would receive favorably the highest possible return, wouldn't they?

A. I do not believe I can answer that question.

Q. Well, the investor wants as much return as he can possibly get on his money, doesn't he?

A. Consistent with the risk he is willing to assume in the investment.

Q. Well, you say at transcript 1917, "The rate of earnings on the common would be about 14% after interest, [fol. 8373] but before serial maturities, and about 7.7% after the serial maturities of the bonds."

Now, isn't the 14% to which you refer by that statement the earnings-price ratio which you feel would be required by the investor in the common stock of Michigan Gas Transmission Corporation?

A. I repeat that, in my opinion, such a setup as I gave which results in 14% of the common stock for serial maturities would be favorably received by the investing public.

Q. This 14% of common stock is comparable to an earnings-price ratio, is it not?

A. No, it is not strictly, for this reason: That the example hypothetical setup which I gave in that direct testimony provided for serial bonds, and those bond maturities would have to be met each year before there were dividends available on the common stock.

Q. Your statement now relates to the 7.7%, does it not?

A. Correct.

Q. I am talking about the 14%. Isn't it a fact that the 14% is frequently called "earnings-price ratio"?

A. I have never heard it called that.

Q. Isn't that the term used by Mr. Coffman?

A. I do not remember seeing the term used by him in his first two volumes.

[fol. 8374] Q. Is that the percentage to which Mr. Coffman referred as the investor's appraisal of the risks of capital in his exhibits?

A. I do not know.

Q. You used his Exhibits 63 and 64—

A. (Interposing) I will try to answer your question if you will show me the volume.

Q. Yes, of course.

Do you want the other volume, Mr. Drew? That is 63 and I can give you 64, if you want it.

(The volume indicated was handed to the witness.)

By Mr. Littman:

Q. Suppose you state on the record what you want to say with respect to Mr. Coffman's exhibits, and your own percent.

A. The 14% to which Mr. Littman has referred is generally termed the "rate of return" on the common stock.

Q. Termed by you as the rate of return?

A. Well, all right, by me. I am willing to restress it, although I think it is used generally.

Q. How is it termed by Mr. Coffman?

A. Off the record—

Q. (Interposing) I would prefer not off the record, Mr. Drew.

A. All right, I will do a little studying.

[fol. 8375] Trial Examiner: Before you make that answer, may I call your attention to your statement on page 1917 in direct testimony, "The price-earnings ratio for the first year would be about 13."

The Witness: Yes, sir; that is just the reverse figure of what Mr. Littman is referring to. The price-earnings ratio, in common investment parlance, is the market price divided by the earnings per share of the stock.

Trial Examiner: Now, he is discussing the earnings-price ratio?

The Witness: Yes.

Mr. Littman: Suppose you define that term?

The Witness: It is your own term, sir.

Trial Examiner: There is an accepted definition, is there not, Mr. Drew, for that term?

By Mr. Littman:

Q. You just said it was the reverse.

A. As I said, price-earnings ratio is quite a common term used in investment work, but I have never heard the term earnings-price ratio.

Q. Mr. Coffman used it, did he not?

A. I have not found it yet. I was looking for it.

Q. What term did Mr. Coffman use in describing the various percentages which he shows in his Exhibit No. 63 which you used as one of the bases for your study? [fol. 8376] A. I think this answers the question, Mr. Littman. On page 7 of Exhibit 63, paragraph 3, it states in part:

"The earnings, so determined under 2-A and B, were then divided by the indicated market value of all securities as determined under 1-A and B respectively, and a rate for the period in question was thus obtained."

Q. What does Mr. Coffman call that rate?

A. In paragraph 4, he states, in part, as follows:

"Having determined in the manner described above the investor's appraisal of the risks of capital employed in each company selected," and so forth, by which I take it that Mr. Coffman using the expression "appraisal of the risks of capital" to mean the "rate of return on the market value of securities."

Q. In other words, in order that the record may be perfectly clear, it is your understanding that Mr. Coffman's term "investor's appraisal of risks" is synonymous with your term "rate of return?"

A. Yes, that is correct.

Q. I might state for the purpose of the record that Mr. Coffman, at times, referred to that same rate as the "earnings-price ratio." I think it well that we define our terms at the outset so that we may have no misunderstanding and that is true when related to common stocks.

Mr. Baldridge: Mr. Littman, you said "that is true when related to common stocks." You also mean it is true [fol. 8377] when related to over-all investment of any other character of investment, don't you? I mean, the addition of those last words make it look like you are qualifying the whole of the last preceding sentence.

Mr. Littman: In order that there be no confusion, I am going to ask you, Mr. Drew, to assume that the term "earnings-price ratio" as used by me throughout this cross-examination is the earnings available for the common stock divided by the market value of the common stock. You understand me?

The Witness: Yes.

Mr. Baldridge: And you are limiting it to common stock only?

Mr. Littman: That is right.

Mr. Baldridge: Of course, I may state for the record that Mr. Coffman did not so limit it except in cases where he specifically stated he was limiting it.

Mr. Littman: I cannot agree with that at all.

Mr. Baldridge: That is my understanding.

Mr. Littman: I think you are confusing the record although I appreciate you are trying to assist in clarifying the record.

We have defined the term. That is the way in which we understand Mr. Coffman used it. We understand that [fol. 8378] when Mr. Coffman used the term "investor's appraisal of risk," he was referring to all of the outstanding securities for the company, and when he used the term "earnings-price ratio" he used it in the manner in which I just defined it as relating only to common stock.

Mr. Baldridge: My understanding has been that when he used "earnings-price ratio" it was in relation to all securities of the company taken together, and it may be that I simply short-cut in taking notes on what he said.

Mr. Littman: Of course, where a utility has only common stock outstanding, and no bonds, in that case, the two terms are synonymous.

Mr. Baldridge: Naturally.

Mr. Littman: Very well.

By Mr. Littman:

Q. We understand, do we not, when we use the term "earnings-price ratio," we are going to use it as referable to common stock? A. Yes, sir.

Q. And as we understand Mr. Coffman's exhibit.

In order to earn 14% on the market price of the stock which is selling at twice book value, a corporation would have to earn 28% of the book value of its stock, isn't that correct?

A. I think your arithmetic is correct there, yes, sir. [fol. 8379] Q. Is it a fact, too, isn't it, assuming the conditions which I have assumed?

A. Yes, I think your arithmetic is correct.

Q. Those conditions actually prevail in some stocks, particularly in some natural gas pipe line stocks, do they not?

A. I do not know, sir.

Q. Have you studied the situation in that regard with respect to the common stock of El Paso Natural Gas Company?

A. Not with respect to the relationship of market value to the book value.

Q. Don't you know that the market price of the common stock of El Paso Natural Gas Company is considerably above its book value?

A. No, I did not know it.

Q. Do you know that the same situation prevails with respect to the common stock of Interstate Natural Gas Company and Northern [Natual] Gas Company?

A. No, sir.

Q. You used the first two companies that I have named in arriving at your rate of return?

A. On market value of their securities, yes, sir.

Q. But you made no study of the situation which I have described?

A. I made no study of the relationship between the [fol. 8380] book value of their securities and the market value of their securities, no, sir.

Trial Examiner: Isn't that whole approach fallacious from the standpoint of the Natural Gas Act? I would like to hear from you on that, Mr. Baldridge.

Mr. Baldridge: I think not, Mr. Examiner. Here is what we are confronted with: You are confronted with the problem of finding out how many dollars should be returned to the investment on the rate base. In order to do that, you reach a percentage, then it is a percentage of what? It is a percentage of a certain number of dollars.

Now, the market values, the aggregate market values of all securities outstanding represent a certain sum of dollars. In other words, if $10,000,000 or $20,000,000 is being raised, we have to determine what kind of return on that $10,000,000 or $20,000,000 is needed in order to enable us to raise it.

Now, what, I take it, is in the Examiner's mind is that that necessarily relates to reproduction cost new. I take it that is the difficulty, is it?

Trial Examiner: Not necessarily.

Mr. Baldridge: I do not think it does.

Trial Examiner: Not necessarily, Mr. Baldridge, but is it not conceivable that the marke appraisal of the equity investment in any highly profitable company would give [fol. 8381] an utterly false basis and gauge for the determination of a fair rate of return, which is specifically required to be determined under the Nafural Gas Act?

Mr. Baldridge: Well, there, Mr. Examiner, I can go into a long series of cases, beginning with the Bluefield case. It has been held, and as far as I know never questioned, that in order to find what a public utility is entitled to receive, you have really two tests. The first is, you must give it a return which is not confiscatory; secondly, the courts have repeatedly said that the mere fact that a return is not confiscatory does not mean that it is necessarily reasonable.

I can remember one Commission said, "The margin between the two rates of return is between one and one-half percent and two percent." That is after you pass the line of confiscation, in order to reach the line of reasonable-

ness you have to add one-half percent, or two percent, somewhere between those two.

Another Commission, I recall, called it one-half of one percent.

Trial Examiner: Yes, but, Mr. Baldridge, you are not driving at the point that I have in mind. The testimony of Mr. Drew is that he has not taken into account book value which, in the sense it was used, indicates an actual investment. He has taken into account the market appraisal [fol. 8382] of the value, the investor's appraisal, if you will, of the value of the company.

Now, we are confined here to, perhaps, in the construction that the Commission has placed on the Natural Gas Act, a consideration of the actual cost. Aren't we dealing with entirely different factors when we take the investor's appraisal of the value of property?

Mr. Baldridge: No, not necessarily, because the aggregate of the market value is an actual sum of money which you raise by going to investors, $20,000,000, we will say, by offering to those investors something they are willing to buy. You may have that all in the form of common stock, you may have that in, partly, bonds and partly common stock, or you may have bonds, preferred stock and common stock, but you do not actually raise that money unless the investors are willing to take it at that rate or at the several rates which the market then shows.

Now, the value of the market appraisal, I take it, is this: In the case of every company, by multiplying its outstanding securities by the respective market prices, you reach a definite sum of money which you can say is the money which at that time you may consider as being raised in the market.

Trial Examiner: Now, just to get to the point of this, I did not ask this question to provoke discussion. I am [fol. 8383] seriously concerned about the relevancy and value of the testimony of this witness because he knows the investment and he applies a very definite rate of return to an utterly indefinite and unascertainable base.

Mr. Baldridge: I do not think the base is unascertainable in this case, Mr. Examiner. If you look at his direct

testimony, he used the words "actual investment or market value."

Trial Examiner: He was asked by the Chairman of the Bank or rather, by Mr. Green, who has referred to Mr. Drew by the Chairman of the Bank, to give an opinion as to the question of "What rate of return should a company like the Michigan Gas Transmission Corporation earn on its invested capital or fair value in order to be able to finance by public offering of securities?"

Mr. Littman: And he defined that term as the market value of the securities, and that cannot be ascertained in this case. Nobody knows what it is.

Mr. Baldridge: If I may be permitted a minute, I think from the standpoint of a man who is not in the untility business, the term "book value" is one which is extremely misleading. Those of us who have dealt with industrial corporations have found time and time again that book value has no relationship to the actual investment made. Perhaps some of the stock is sold at a premium, perhaps it [fol. 8384] is written down, perhaps it is written up. There are all kinds of factors that enter into the picture. What is important is the actual money that either would go into the enterprise today, if it were necessary to refinance today, or if we are not permitted to show that, at least the amount of money that actually was paid into the enterprise.

Now, I think that one way of estimating the amount of money paid into an enterprise, when you do not have all the facts showing your original investment, is to take the aggregate of the market value of securities, although that necessarily is related to the time when that value is taken, obviously.

Trial Examiner: Mr. Baldridge, we have the cost in this case. We have the actual investment; we do know that from exhibits.

Mr. Littman: It is one of the definite things that we have in this case.

Trial Examiner: The book value in this case means exact dollars.

Mr. Baldridge: I do not think he has been asked a question in that form yet, Mr. Examiner. I have been listening to the cross-examination and I think what the witness has been feeling is that he cannot tell whether the book value, as set up, represents something in the nature of cash actually had to be rated, or was rated.

. . . . . .

[fol. 8386] By Mr. Littman:

Q. You testified on direct examination at Page 1913 of the transcript that your bank, as a general policy, has not purchased natural gas pipe line securities for trust accounts, did you not? A. Yes, sir.

Q. However, you state that your bank has bought and does own in trusts a moderate amount of gas distributing company securities, is that right?

A. Yes, sir.

Q. What kind of gas distributing companies do you refer to by that statement?

A. Artificial, natural and mixed distributing companies.

Q. What are the proportions, generally, as among the three types? A. I have no idea.

Q. Is there any particular reason why your company [fol. 8387] has not purchased natural gas pipe line securities other than that stated by you in your direct testimony? What I have in mind is whether your company is limited in its purchase of natural gas pipe line securities by laws regulating trustees?

A. The Illinois statutes do not exclude natural gas pipe line securities.

Q. Do they exclude common stocks?

A. Yes, but I should add, if I may, that in a great many of our trusts, we are not limited in our investment policy to statutory investments.

Q. However, you do administer certain trusts which are under the statutory prohibition against the purchase of common stocks? A. That is correct.

Q. You know, do you not, that large life insurance companies have made heavy investments in natural gas company bonds?

A. I assume that they do. I do not recall seeing in the portfolios of insurance companies natural gas pipe line bonds, but I cannot say.

Q. You cannot give an answer one way or another?

A. No, sir, I cannot say that they do or do not.

Q. Does your bank purchase natural gas pipe line company bonds? A. Not on its own initiative.

Q. Insurance companies are strictly regulated as to [fol. 8388] investments, are they not?

A. I believe they are, in practically all States.

Q. You know, do you not, that banks have made loans to natural gas companies at very low interest rates?

A. I suppose they have in recent years. I do not happen to know of any of my own knowledge.

Q. You did not investigate that? A. No, sir.

Q. When I spoke of low rates, I meant rates as low as 2 percent or 1½ percent. You are not acquainted with the fact that banking institutions in this country have, from time to time, made large loans?

A. I suppose they have.

Q. Has your bank made any loans to natural gas pipe line companies?

A. Not to my knowledge in recent years, at any rate.

Q. Have you made any investigation of the capital structure of Panhandle Eastern Pipe Line Company?

A. No, I have not.

Q. Do you know something about its bonds and long-term debt?

A. I cannot say that I am familiar with its capital structure.

Q. Do you have a copy of Exhibit 64 with you?

A. No.

[fol. 8389] Q. I hand you a copy of Exhibit 64 and refer you to Appendix C, Page 131. You observe, do you not, Item (c) under the heading, "Indicated Market Value of Capital" reading, "Serial Notes, A, B, C and D 0.75-1.50% Due 4/1/42-45" in the amount of $5,000,000?

A. Yes.

Q. You know, do you not, that that amount represents a bank loan to Panhandle Eastern Pipe Line Company?

A. I see under the explanation that it was sold privately to several banking institutions.

Q. You are referring to Footnote C which reads as follows:

"Sold privately in January, 1941, at 100 to several banking institutions."

A. Yes.

Q. However, your bank does not deal—

A. (Interposing) So far as I know, we have not participated in that type of loan.

Q. Do you happen to know whether the Harris Bank & Trust Company of Chicago, the city in which your bank is located, does make such long-term loans?

A. No, I have no knowledge of that.

Q. Then you have not, in the course of your business and in the course of your own duties had any extensive experience with natural gas pipe line company securities or companies, have you?

[fol. 8390] A. Certainly not extensive, no, sir.

Q. Well, to what extent, if any?

A. As I said in my direct testimony, we have not, as a general policy, purchased but we have, from time to time, I believe, owned them in trust, the securities I am talking about, of natural gas pipe line companies. I cannot say offhand at the present time what securities of that character that we own at the present time but I am certain, if any, it is a small amount.

Q. When you did have them, they were in small blocks, were they not?

A. They were in small blocks, yes, sir.

Q. I note that in your direct testimony you stated that in the course of your study, you placed certain reliance upon information contained in Standard & Poor's published pamphlets, "Industrial Surveys" and "Security Markets." Is that correct?

A. Yes, sir. I also mentioned Moody's Manual in that same statement, I believe.

Q. I did not mean that that was the only source of your information. I meant that I understood you to state that that was one of the sources upon which you relied. Is that right?

A. Well, which I used, I should rather say than "relied".

Q. In your opinion, is the natural gas industry the best situated of the various divisions of the utility industry?

[fol. 8391] A. No, it is not.

Q. Is it better or worse than manufactured gas utilities?

A. From an investor's standpoint, I would say that natural gas securities are less desirable than those of artificial gas.

Q. Are they less favorable than the securities of traction companies?

A. I dislike to generalize on that question because I think there is such a wide variation among the companies in each group that I would hesitate to answer that question directly.

Q. Would you say that the natural gas industry is better situated than the electric industry?

A. No, I would not say so.

Q. Would you say that the natural gas industry is better situated than water companies?

A. In that comparison also, I would hesitate to reply to that question without having a more direct comparison by companies.

Q. However, you are certain that the natural gas industry is not as well situated as the manufactured gas industry, is that correct?

A. That is my opinion.

Q. I want to read you from Standard & Poor's "Bond [fol. 8392] Investments" dated September 6, 1941. The excerpt which I shall read appears on Page 612 under the heading "Gas Company Bonds. Natural gas companies in superior positions to manufactured gas units."

"The natural gas industry is probably the best situated of the various divisions of the utility industry at this time. It will benefit materially from rising general industrial activity and operating expenses are largely fixed. Thus, even with excess profits taxes, any decline in profits should be held to moderate proportions.

"The manufactured gas industry, on the other hand, is in a relatively unfavorable position. Its revenues will benefit little from rising industrial activity and rising operating costs will be adversely affected. A continued decline in profits is likely in this industry."

Did you read this statemnt in connection with your investigation?

Mr. Baldridge: Mr. Littman, may I ask the date of that?

Mr. Littman: September 6, 1941, which is at about the time Mr. Drew made his study for purposes of this investigation.

The Witness: I may have seen it, I do not remember specifically.

By Mr. Littman:

Q. One of the sources of your data and information was [fol. 8393] Standard & Poor's pamphlet, was it not?

A. That is correct.

Q. Do you consider it reliable?

A. The purpose for which I used Standard & Poor's was to obtain factual matter and not opinion.

Q. Isn't what I read a fact?

A. It is my opinion that it is not a fact, in the long-term view.

Q. Do you agree with this statement that I read from Standard & Poor's pamphlet?

A. I think it may be true as applied to a short interim period here.

Q. And it may be true as applied to a long period?

A. I believe not.

Q. The writer, as I hand you the article, does not limit this statement to any interim period?

A. I thought he said "at this time".

Q. Well, he talks about the future, too, does he not? About what may be expected in the future?

A. Well, I think if you will permit me, he is referring there to the rising armament activity, the rising general industrial activity because of rearmament and defense industries and it is my opinion and certainly my hope that that will not go on very much longer.

Q. What will not go on very much longer?

[fol. 8394] A. (Continuing) Several years perhaps. This rearmament and war industry.

Q. But it is your opinion that so long as the rearmament and war industry goes on there is a bright outlook for the natural gas pipe line industry?

A. No, I would not make it that strong. I would say there may be.

Q. In all probability there will be. Is that what you say?

A. I would not say that.

Q. These statements are intended for investors, are they not? These statements of opinions in Poor's?

A. They are intended, I believe, for buyers of securities. I would be a little careful how I used the word "investors" because it depends on the definition, and what I mean by that is simply this, that an individual with his own funds is perhaps justified in buying certain securities that institutions including trust institutions would not be justified in buying.

Q. Well, certainly, a prospective purchaser of securities would naturally be led to believe by this statement that the natural gas industry is probably the best situated of the various industries in the utility business at this time, would you not?

A. I cannot say what he would believe, that is what the article says.

[fol. 8395] Q. Are you familiar with the recent refinancing by Panhandle Eastern Pipe Line Company for the purpose, among others, of acquiring Michigan Gas Transmission Corporation?

A. I am not familiar with the details of the financing. I observed some weeks ago that the financing was being undertaken. Prior to that, I believe I had seen a press notice that the Michigan Gas Transmission Corporation was being sold.

Q. Well, you know, do you not, that within the past month Panhandle Eastern Pipe Line Company issued $10,000,000 of first mortgage and first lien 3 percent bonds and 150,000 shares of 5.6 percent cumulative preferred stock, having a par value of $100 per share?

A. Well, as I say, I did not remember the details of the transactions.

Q. But you heard about it?

A. Yes.

Q. You, also, heard, did you not, that no difficulty was experienced at all in this financing and the financing was readily accepted?

A. No, sir, I had not heard that.

Q. You know the bonds sold at the yield of 3 percent, do you not?

A. I do not recall the yield at the offering price.

Q. Didn't you investigate that subject at all, namely, the subject of the recent refinancing by Panhandle Eastern [fol. 8396] Pipe Line Company?

A. Not investigated, no, sir, I did not.

Q. Don't you think that this recent refinancing program has a bearing upon the rate of return to which Michigan Gas Transmission Corporation is entitled for the purposes of this proceeding?

A. Well, I cannot see the connection.

Q. You cannot see the connection? A. No.

Q. Do you know that Panhandle Eastern Pipe Line Company has recently acquired all of the outstanding stock and securities of Michigan Gas Transmission Corporation?

A. I understood that was a part of the purchase.

Q. Now, you used, for purposes of your study, certain earnings and rates of earnings earned by four other natural gas pipe line companies, did you not? A. Yes, sir.

Q. Will you name them, please?

A. El Paso Natural Gas Company, Southern Natural Gas Company, Memphis Natural Gas Company and Interstate Natural Gas Company.

Q. Did you consider those data relevant and material to the issue of determining the proper rate of return to which Michigan Gas was entitled? A. Yes, sir.

[fol. 8397] Q. But you do not consider the flotations by Panhandle Eastern Pipe Line Company within very recent days material to that issue?

A. The issuance of the Panhandle securities came several months after the preparation of my study, which I covered in my direct testimony.

Q. I understand that, Mr. Drew, but I understood your testimony to be here a minute ago that you cannot see the connection between the recent refinancing by Panhandle Eastern Pipe Line Company and the issue before us, namely, the issue of what is the fair rate of return. Wasn't that your testimony?

A. Well, I will correct that testimony, if I may. I think it has some relation, about the same relation as these other companies, perhaps, in an average way.

Q. Not any more relation than those of the other companies?

A. I would not think so.

Q. You have testified at Page 1916 of the transcript that you utilized the Dow-Jones industrial stock average in arriving at your 8½ percent rate of return for Michigan Gas Transmission Corporation. Isn't that correct?

A. That is not quite the full story. I used the companies whose common stocks are included in Dow-Jones industrial average and to those 30 companies I applied the same method which I had used in arriving at an average rate of return on market value of invested capital [fol. 8398] for the natural gas companies.

Q. You consider the Dow-Jones industrial stock average a reliable guide, do you not?

A. Well, I think it is the guide which is most closely followed by investors.

Q. In other words, it is reliable, in your judgment, for purposes of this proceeding?

A. I think it is useful in a proceeding of this kind, yes.

Q. Well, how useful, quite useful?

A. Yes, quite useful.

Q. Is the Dow-Jones index of industrial stock prices the most reliable index?

A. Well, I think that is a matter of opinion.

Q. It is at least one of the most reliable?

A. It is one of the best regarded, certainly.

Q. Now, the Dow-Jones industrial stock average is an average of 30 active stocks of representative companies in diversified industries, is not that correct?

A. Yes, sir.

Q. Would you expect the earnings' price ratios on the Dow-Jones stocks to be higher on the average than the earnings' price ratios on public utility stocks?

Mr. Baldridge: Mr. Littman, I am afraid I have to object to that question if you are going to limit it to common stocks because of the very obvious fact that common stocks [fol. 8399] play an entirely different proportion in the total investment of almost any company.

Mr. Littman: Well, that is what this witness used, Mr. Baldridge. I am asking this witness about what he did. He used the average of these 30 industrials, you see, that is, the average of the common stocks of these 30 industrials. I am not talking about something I did, I am talk-

ing about something the witness did. Are you objecting?

Mr. Baldridge: I do not know that he testified exactly that.

Mr. Littman: There is an objection pending to what I consider a perfectly proper question.

Trial Examiner: Is Mr. Littman's interpretation of your testimony correct, Mr. Drew?

The Witness: I would, again, amplify what he has just said, to this effect, that I used the companies represented in the Dow-Jones industrial stock index and applied to those companies the market values, market prices of their bonds, preferred stocks and common stocks in arriving at the figure that I gave in my direct testimony.

By Mr. Littman:

Q. In other words, your study of Dow-Jones was confined to common stocks?

A. No, sir, that is exactly what I am trying to say, it included the bonds and the preferred stocks of the companies represented in the Dow-Jones index.

[fol. 8400] Mr. Baldridge: May I, in that case, repeat my objection, Mr. Examiner, because I do not think the question has relevancy?

Mr. Littman: Will you please read the question again?

(Whereupon, the question indicated was read as follows:

"Q. Would you expect the earnings' price ratios on the Dow-Jones stocks to be higher on the average than the earnings' price ratios on public utility stocks?")

Mr. Baldridge: The witness has testified that he did not use simply the Dow-Jones stocks but used 30 companies and various kinds of stocks of those companies.

Mr. Littman: Have you seen this witness' working papers? I am sure if you took a look at them you would withdraw your objection.

Mr. Baldridge: I have heard his testimony, I have just heard his testimony.

Trial Examiner: I think the witness is entitled to answer the question in his own way. This does not necessarily require a yes or no answer and Mr. Drew may explain the factors that he wishes to discuss.

Mr. Littman: Will you please answer the question?

The Witness: Shall I answer the question, Mr. Examiner?

Trial Examiner: In your way, Mr. Drew.

The Witness: I would expect the earnings' price ratio of utility common stocks to be somewhat higher than that [fol. 8401] ratio on industrial stocks and I predicate my opinion on that score on Barron's, The National Financial Weekly, of February 23, 1942, Page 17, which shows the yields on the Dow-Jones averages for the previous week and it shows that the yield on the 30 industrials was 7.15 percent and the yield on the average on 15 utilities was 8.56 percent.

Now, I believe that those figures represent dividends divided by market prices, but I think I would find that the earnings divided by market prices would be in somewhat the same relationship.

By Mr. Littman:

Q. You have not investigated that, however, sir?

A. No, I have not.

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[fol. 8404] Mr. Littman: Mr. Drew, did you use your working papers in assisting you to arrive at your rate of return to which you are testifying in this proceeding?

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[fol. 8406] By Mr. Littman:

Q. What was the aggregate market value of the securities of the 30 industrials comprehended by the Dow-Jones averages?

A. The corrected figure is $17,244,000,000.

Q. What do you mean by "corrected figure"?

A. I should like to explain that by saying after I got back to my office from the hearings in Washington, I had the table rechecked and I found one error in the third item, the American Smelting & Refining Company.

Q. That was an error of about $74,000,000, wasn't it?

A. It was an error of $74,500,000.

Q. $74,500,000? A. That is correct.

Q. $74,250,000 to be exact, isn't it?

A. Yes, that is right. It was in the preferred stock.

Q. Of the American Smelting & Refining Company?

A. Of the American Smelting & Refining Company in which case, the man who prepared this for me put down the figure of 500,000 which is the number of shares of preferred stock outstanding but unfortunately, he put in front of that "$", so that he got a result there of $750,000 which is obviously out of line and we have corrected that.

As a matter of fact, it makes very little difference in the net result even though $74,000,000 is a lot of money. The aggregate amount is so large that the effect of the change [fol. 8407] itself is small.

Q. Suppose you give us the corrected figures to be inserted in your working papers. I shall go across your working papers for American Smelting Company and ask you to give me the corrected figures.

In the first column you show common stock—2,191,669 shares?

A. Yes, that is correct.

Q. Then you show the price to be $36?

A. No change there.

Q. Producing a market value of $78,900,084, is that right?

A. That is correct, yes, sir.

Q. Now, going to the columns headed "Preferred Stocks, Bonds and Other Securities", you have 7 percent cumulative preferred in the first column; in the second column, your working papers show $500,000 as the par value of the preferred stocks.

Now, what is the correct figure to be placed there instead of that?

A. 500,000 is correct but it is shares and not dollars.

Q. How many dollars belong there instead of the 500,000 that you show?

A. 500,000 shares is what it should be.

Q. That should be 500,000 shares?

[fol. 8408] A. That is correct.

Q. The dollar sign should be removed?

A. Yes, sir.

Q. Now, the next column shows the price at November 12, 1941, to be $150, does it not? A. Yes, sir.

Q. That is correct? A. That is correct.

Q. And the next column, and this is the one that has the error, shows the value to be $750,000. What figure [belong] in that place. A. $75,000,000.

Q. The next column of your working papers shows "Total market value", $79,650,084. What is the correct figure to be inserted?

A. That should read $153,900,084.

Q. Instead of $79,650,084?

A. That is correct.

Q. Are the figures that appear in the next column, "Estimated 1941 Net Income after Taxes and Depreciation Available for Interest and Dividends" are those figures all right? They are $9,895,000 to $10,995,000. Are those correct?

A. There has been a change made in here. Those two figures should be, $13,360,000 and $14,460,000.

Q. Where did you get that information, from Standard [fol. 8409] & Poor's?

A. Those two figures come from an estimate of Standard & Poor's for the 1941 earnings after taxes.

Q. And depreciation?

A. And depreciation, and to those estimates of Standard and Poor's, we have added back the dividends on the preferred and the interest, if any, on the bonds.

Q. Now, in the final column, your working papers show, "Return on market value" as 12.42-13.80 percent. Those figures are in error, are they not? A. Yes.

Q. What are the correct figures?

A. The corrected figures are 8.68 and 9.39.

Q. Percent? A. Percent.

Mr. Baldridge: I would like the record to show that the correction that has just been made in the working papers relate to matters that have not been offered and introduced in evidence.

The Witness: May I say just a word more?

Mr. Littman: Yes.

The Witness: In my direct testimony, I said that the average of the ratios of the net earnings to market value of capitalization was 9.6 percent. That should be changed to read 9.5 percent.

[fol. 8410] By Mr. Littman:

Q. Now, that change was occasioned by reason of the corrections which you just read into the record?

A. A tenth of one-percent occasioned by $74,000,000 error, because the grand total is so large, the error made little difference. The 8.7 percent which I gave in my direct testimony is approximately correct. The actual percentage corrected is 8.66.

Q. As you stated a moment ago, the active market value of the 30 industrials in the Dow-Jones average was $17,244,000,000, is that right?

A. $17,244,000,000, yes, sir.

Q. What was the net income for those 30 Dow-Jones industrials for the year 1941?

A. $1,494,000,000.

Q. As of what date did you take the market value figure of $17,000,000,000-odd which you read a moment ago?

A. November 12, 1941, in so far as they were available.

Q. You have just stated that you found from your working papers that the arithmetic average of the ratios of net income to market value of capitalization for these 30 Dow-Jones industrials was 9.5 percent. Is that right?

A. Yes, sir.

Q. Now, that is an arithmetic average, isn't it?

A. Yes, sir.

[fol. 8411] Q. And the weighted average was 8.7 percent? A. Yes, sir.

Q. Which of these averages would you consider the more reliable?

A. I think the weighted average is probably the better one to use.

Q. When you use the weighted average that, of course, takes into account and makes proper compensation for the differences in the size of the various companies, doesn't it?

A. Yes. A small company with a very high rate of return would be more or less ironed out in this weighted average.

Q. And, therefore, you consider the 8.7 percent a more truly representative average, do you not? A. Yes, sir.

Q. Now, the figures which you have just read with respect to market value and earnings relate to the total securities of these 30 industrials, that is, all of their long-term debt, preferred stocks and common stocks, isn't that correct? A. Yes, sir.

Q. Can you tell us from your working papers—and I am quite sure you can—the total market value of the common stock of these Dow-Jones industrials—do you want me to read the figure and then will you check it?

[fol. 8412] A. If you wish.

Q. May I ask approximately how long it would take you to check the figure?

A. Well, I have the figure right here.

Q. You have the figure there, I am sorry; $13,812,318,882?

A. That is the figure, yes, sir.

Q. What is the total gross income on that common stock as shown by your working papers?

A. I do not have any such figure available. It could be ascertained by the addition of that column 16.

* * * * * * * * *

[fol. 8413] By Mr. Littman:

Q. Now, the figure which I am about to read will represent the total gross income on the common stock of the 30 Dow-Jones industrials as taken from your working papers and as arrived at by deducting the total annual interest on bonds and dividends on preferred stock from gross income of $1,430,079,140 which is the figure before adjustment for the error. Do you follow me?

A. Yes.

Q. Now, the figure which we would like to have you check and assume for the time being is correct is $1,367,411,573—I will read that again, I am not accustomed to dealing with such large dollar amounts. If it were M.c.f., I would probably get along better—$1,367,411,573.

You understand how we arrived at this from your working papers, do you not?

A. Yes.

Q. And the method we have used is the correct method, is it not?

A. I am just feeling my way on that.

Mr. Baldridge: The right method of getting what, Mr. Littman?

Mr. Littman: The right method of getting the earnings available for common stock.

The Witness: I see quite a wide discrepancy there in [fol. 8414] just a quick check. I would like to go through it a little more completely.

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By Mr. Littman:

Q. Mr. Drew, during the recess have you had an opportunity to study the method which I suggested for the determination of the amount of income available for the common stock?

A. Yes, sir.

Q. And you agree that that is the correct method to be used to arrive at that amount from your working papers?

A. I believe it is.

Q. And you will check the amount, will you not, of $1,367,411,573 of gross income on the common stock, will you?

A. Yes.

Q. Assuming that the figure that I read is correct, what was the earnings-price ratio on the Dow-Jones common stocks as of November 12, 1941?

A. About 10 percent.

Q. 9.9 would be a little more exact?

A. I have not calculated, that is one thing I did not do, but I can see that it is about 10 percent.

Q. Well, suppose you accept our figure of 9.9 percent. [fol. 8415] A. Yes.

Trial Examiner: Subject to correction.

Mr. Littman: Yes.

By Mr. Littman:

Q. What date in 1941 did you use for the market price of the Dow-Jones industrials for purposes of your study?

A. November 12, 1941.

Q. I hand you a copy of the "Commercial Financial Chronicle" dated November 18, 1941, and ask you to state the Dow-Jones average for these 30 industrials for November 12, 1941. You can check from that "Chronicle".

A. 115.44.

Q. 115.44. Now, that relates to the common stock, does it not?

A. Yes, sir.

Q. Of these 30 industrial companies which you have heretofore referred to?

A. That is correct, yes, sir.

Q. I hand you a copy of Standard & Poor's securities statistics and ask you to state what was the average of the Down-Jones 30 industrials' common stock during the year 1936.

Mr. Culton: May I inquire, for information, whether or not those were the same stocks in 1936 and in 1941?

By Mr. Littman:

Q. Are the industries comparable?

[fol. 8416] Mr. Culton: That is not what I asked. I asked, for information, whether or not it was the same stocks.

By Mr. Littman:

Q. There were 30 industrials in 1936?

A. Yes.

Q. Were they the same industrials in 1936?

A. I cannot answer that question.

Q. Well, if they are not identical, they have been made comparable strictly by the Dow-Jones average, have they not?

A. I believe they are comparable.

Q. Will you please read the figures?

Mr. Baldridge: I object to that on the ground that nothing in the witness's testimony relates to the year 1936.

Trial Examiner: You may answer.

Mr. Baldridge: Exception.

Trial Examiner: Exception noted.

The Witness: The high of the Dow-Jones industrial average for 1936 is given in this publication as 184.9 and the low, 143.7.

By Mr. Littman:

Q. That would make an average of 164.30, would it not?

A. It would be close to that figure, I am sure. Do you want me to calculate it?

Q. Suppose you calculate it. Then we won't have to [fol. 8417] assume too many figures.

Mr. Culton: That is an arithmetical average, is it?

Mr. Littman: Adding 184.9 to 143.7, dividing by 2.

The Witness: 164.3.

Mr. Culton: It is an arithmetical calculation.

By Mr. Littman:

Q. You have no reason to doubt the reliability of the figures which you have just read which were published by Standard & Poor's?

A. No, I have no reason to doubt it.

Q. As a matter of fact, they are used in the industry and by you every day, are they not?

A. Yes, sir.

Q. Now, assuming, Mr. Drew, that an investor had purchased $164,300 worth of common stock in these 30 industrials in 1936 at the average prevailing price in that year, his investment would have declined to November 12, 1941, would it not?

A. Yes.

Q. And what would be the amount of the decline in market value of the securities which this 1936 investor purchased in the 30 industrials as between 1936 and November 12, 1941?

A. Well, if the investor bought the 30 stocks in the same proportions as those stocks are used in the industrial averages, then I should say that his investment today [fol. 8418] would be worth approximately $115,440.

Q. You mean as of November 12, 1941?

A. As of November 12, 1941.

Q. Rather than today?

A. Yes.

Q. And you caught precisely the point I am attempting to reach, that is the theoretical purchase equally and ratably throughout the 30 industrials.

Now, what is the amount of loss that this 1936 investor has sustained on his investments in 1936 of $164,300?

A. $48,860.

Q. Now, let me see if I correctly understand you.

Trial Examiner: What percentage is that, before you leave that?

The Witness: About 30 percent, sir.

By Mr. Littman:

Q. Now, let's examine the predicament of the 1936 investor, Mr. Drew, who invested his 1936 dollars in these 30 representative industrials. It is a fact, is it not, that he invested in 1936 $164,300 and he made that investment, of course, with 1936 dollars, did he not?

A. Yes, sir.

Q. No question about that?

A. No.

Q. And on November 12, 1941, he had sustained a loss [fol. 8419] in his investment of $48,860, had he not?

A. Yes, sir.

Q. And his present investment is worth $115,440 in present-day dollars, is it not? Is that right?

A. Yes, sir.

Q. Now, suppose that investor had invested in the common stock of Michigan Gas Transmission Corporation in 1936, which was the year in which it was first organized. He would not have suffered any loss on his investment in common stock, would he?

A. I cannot answer that question.

. . . . . .

By Mr. Littman:

Q. Let us look at it this way, what would the investor have received by way of a dividend since 1936 on his investment in the common stock of Michigan Gas Transmission Corporation? 89 percent, isn't that correct?

A. I cannot answer that question.

Q. Well, in your determination of this rate of return estimate, didn't you investigate the amount of dividends paid by Michigan Gas Transmission Corporation?
[fol. 8420] A. No, sir.

Q. And you cannot tell us whether the investor in the common stock of Michigan Gas Transmission Corporation in 1936 still has all of his present investment?

Mr. Baldridge: Judged by what criterion?

Mr. Littman: By the criterion of the sale by Michigan Gas Transmission Corporation to Panhandle Eastern Pipe Line Company here the other day, which sale price was measured by the net investment of the investors in the property. Does that answer your question, Mr. Baldridge?

Mr. Baldridge: Not entirely. Of course, the question I asked you, yes.

Trial Examiner: Of course, you must not assume that Mr. Drew is familiar with the testimony that has been received in evidence in this case the last few days. There are certain answers that have come into the record here by way of direct testimony with which you are not familiar, Mr. Drew, and when you encounter those, you are at liberty to call attention to them.

The Witness: I think I could answer your question fairly, perhaps, by saying this, that if Michigan Gas Transmission Corporation had had common stock publicly owned upon which there was an active market, an investor who bought that stock at average prices of 1936 would, in my opinion, today have approximately the same loss, paper [fol. 8421] loss, as is shown in these industrial stocks.

By Mr. Littman:

Q. I see. Now, if that investor has been allowed or is allowed a reasonable return upon his original investment from 1936 down to today, he would be better off, wouldn't he, than if he had been allowed a return on the purported market value of the stock through the years? Isn't that right?

The Witness: I would like to have you ask that question again. Perhaps you will read it.

Mr. Baldridge: I will have to point out, Mr. Littman, that that question is a little misleading because you are mixing two things, you are mixing the entire investment in the company, including all kinds of securities with investments in common stock alone.

Mr. Littman: Do you understand the question?

The Witness: I would like to have it read, please?

Trial Examiner: Read the question.

(Whereupon, the question beginning at Line 3 of this page was read by the reporter.)

The Witness: I do not think I can answer that question.

By Mr. Littman:

Q. What don't you understand about it?

A. I do not understand what you mean by an investor being allowed a return.

Q. If this Commission allows a fair rate of return on [fol. 8422] the original investment in this property from 1936 down to the present day, it is a fact, is it not, that the investor still has his investment today and has received a reasonable return from 1936 down to today, isn't that a fact?

A. Well, it seems to me that you are confusing a return allowed to the company and the return which the individual investor is going to receive or did receive during that period. I cannot correlate the two things very well.

Q. What return are you talking about when you speak of 8½ percent? Are you speaking about the return to the company or are you speaking about the return to the investor?

A. I am speaking about the return represented by the earnings of the company divided by the market, the aggregate market value of its securities.

Q. Well, who gets the 8½ percent, the company or the investor, according to your theory?

A. Well, it is not a question as to who gets it, it is a question of the rate of earnings necessary for a company to be able to finance itself publicly.

Q. Are you asking here for an 8½ percent return on 100 percent of the investment in 1936 or on 70 percent of the investment in 1936?

A. I am talking about an 8½ percent return as the net earnings divided by the aggregate market value of the securities of the company.

[fol. 8423] Q. As of November 12, 1941?

A. As of November 12, 1941.

Q. And that, according to your testimony, represented only 70 percent of the market value of those securities in 1936. Is not that right?

A. No, sir, I did not testify to that.

Q. Well, you said that that was what you would expect, did you not?

A. I said I would expect the common stock of a public utility company like the Michigan Gas Transmission Corporation outstanding in the hands of the public and actively traded to have declined in price about the same from the average of 1936 to November 12, 1941.

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By Mr. Littman:

Q. So that confining ourselves to common stock, you are asking for a return on only 70 percent of its 1936 market value?

[fol. 8424] A. Well, if I were dealing with common stock alone, I would raise that 8½ percent.

Q. We understand that, but I would like to have you answer my specific question.

A. But you are tying me down to 8½ percent on common stock.

Q. I have not said anything about 8½ percent in my question.

Will you read my specific question?

(Whereupon, the question indicated was read by the reporter as follows:

"Q. So that confining ourselves to common stock, you are asking for a return on only 70 percent of its 1936 market value?"

The Witness: Well, I am not asking for any return. I will have to state again that I think a public utility com-

pany like Michigan Gas Transmission Corporation, having common stock outstanding in the hands of the public, fairly actively traded, would probably have declined in market value in about the same proportion, perhaps a little more, than this Dow-Jones industrial average.

By Mr. Littman:

Q. What you are saying is that using 1936 as an index of 100, for market value of the common stock, it would have gone down to 70 in 1941, at November 12, isn't that correct?

[fol. 8425] A. I repeat my previous statement.

Q. Is that correct?

A. I think that is substantially correct, yes, sir.

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By Mr. Littman:

Q. Now, going back to your original proposition of the 1936 investor who had invested his 1936 dollars in $164,300 worth of the 30 industrials' common stocks, assuming that that investor held those shares down to and including November 12, 1941, his earnings-price ratio would not be 10 percent based upon his original purchase price, would it? A. No, sir.

Q. It would be something considerably below 10 percent, is that right? A. Yes, sir.

Mr. Culton: May I inquire if that would be the same figure if the purchase had been made in November, 1929? [fol. 8426] That would be a different situation, wouldn't it? Do you recall enough about what the market conditions were in 1929?

The Witness: Yes, it was chaotic. Of course, it did not reach its low until sometime in 1932.

By Mr. Littman:

Q. What would the 1936 investor's earnings-price ratio be on that basis, bearing in mind that the earnings as of November 12, 1941, amounted to 10 percent of the then-market value?

A. Well, I think it would be approximately 30 percent lower return.

Q. That would be something like 6.96 percent?

A. About 7 percent, I should think.

Q. Now, the 6.96 percent is the earnings-price ratio today of the man who had invested his money in 1936 in the common stock of these 30 Dow-Jones industrials, isn't that right? A. Using 1941 earnings.

Q. Using 1941 earnings and the return upon which the 6.96 percent is computed is in today's dollars, is it not?

A. Well, its percentage, its percentage. It is not in dollars. The income is payable in today's dollars, yes.

Q. The income was payable in dollars that would buy the amount of bacon and eggs that today's dollars will buy, is that right?

[fol. 8427] A. Yes, sir.

Q. Now, the investor has suffered a loss, you say, of $48,000-odd since 1936, has he not?

A. A paper loss, yes, sir.

Q. Well, he suffered a loss in 1936 dollars, didn't he, in dollars that bought bacon and eggs in 1936?

A. He has not suffered a loss until he sells his stocks. If he were to sell his stocks today, he would have suffered that loss.

Q. Of course.

A. Until he sells it, it is a paper loss.

Q. The paper loss is in 1936 dollars, isn't it?

A. Well, his purchase was made in 1936 dollars and the receipt of sale, if he were to sell as of November 12, would be in dollars of that date.

Q. The only comfort he has is the hope that some day the stock will go up again?

A. Are you asking me if I think that is correct?

Q. Yes.

A. I do not think it is correct.

Q. At any rate, if he wanted to sell those shares on November 12, 1941, he would be out of pocket $48,860, would he not? A. That is correct.

Q. And those are all 1936 dollars?

[fol. 8428] A. The stocks he would sell would have been purchased in 1936 dollars.

Q. So that his loss would be in 1936 dollars, wouldn't it?

A. I think you could say that, yes.

Trial Examiner: Has some distinction been claimed as to the values of the 1936 dollar and the 1941 dollar?

Mr. Littman: Yes, your Honor, there has been a considerable claim made in this proceeding on that account. I do not know whether Mr. Drew is familiar with it.

Trial Examiner: There have been various references to ascending costs.

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[fol. 8429] By Mr. Littman:

Q. Now, let's again examine the predicament of the 1936 investor to whom we have made reference heretofore. His real return on his common stock is down to 6.96 percent, is it not?

A. On his purchase price?

Q. Yes. A. Yes.

Q. Now, he has lost $48,000 and he has to get that back somehow out of his earnings if he is going to be made whole, isn't that right?

A. I think each investor's position would be different from the other. I cannot write a prescription.

[fol. 8430] Q. How is he going to get the $48,000 back that he lost if he is not going to get it back out of the 6.96 percent return which he is receiving upon his original investment?

A. Has he sold his stocks now?

Q. No.

A. Then he has not any loss.

Q. He does not feel very good about it though, yet, does he? A. I would not, in his case.

Q. All he has is a vague hope that sometime the stock may go back up, is that right?

A. I think he would have a hope for a later rise in the market value of his holdings, certainly.

Q. It has been your testimony, Mr. Drew, that the capital structure of Michigan Gas Transmission Corporation should be 50 percent bonds which should yield 3½ percent, is that correct?

A. I do not believe I said "should be".

Q. What did you say?

A. I said under present conditions, I believe the most economical method of financing publicly a company like Michigan Gas Transmission Corporation, assuming a total capitalization of $13,000,000, would be to set up a capitalization of one-half serial bonds and one-half common stock.

Q. What is wrong with my statement? I thought I said [fol. 8431] just that, except in much fewer words.

A. My opinion is, to finish that paragraph, my opinion is that the following setup would be favorably received by the investing public. I did not say the capitalization "should be" what follows.

Q. Do you consider that capitalization fair and proper?

A. Yes.

Q. For purposes of determining the rate of return for this proceeding?

A. I made that calculation, that hypothetical setup, for the purpose, among other things, of testing out the capitalization along the lines suggested to see where we would arrive in the matter of return, earnings divided by market value of capital.

Q. Then you did use a capital structure which comprehended 50 percent of bonds in arriving at your estimate of 8½ percent rate of return, didn't you?

A. My purpose there was more to test out my conclusion rather than to have it contribute to the conclusion.

Q. We want to do a little testing too, and we want to know whether you agree that it is right to test your method by the same test that you used, namely, the use of a capital structure with a 50 percent bond feature.

Now, do you have any objection to that?

A. Not in the least.

[fol. 8432] Q. Do you think it is fair to do it that way?

A. Certainly it is fair, indeed.

Q. Before we do that, you assume a 3½ percent return on the bonds, do you not? A. Yes.

Q. Now, assuming a capital structure having 50 percent of bonds yielding 3½ percent, such a set-up would require earnings of $1.75 per $50 of bonds, isn't that correct?

A. Yes.

Q. Assuming that 50 percent of the capital stock was floated through an issue of common stock, which I believe is one of the assumptions you made—

A. (Interposing) You mean 50 percent of capitalization in common stock.

Q. Yes. Now, assuming that 50 percent of the capital were floated through an issue of common stock having an earnings-price ratio of 6.96 percent, the cost of $50 of such capital would be $3.48, wouldn't it?

A. For each $50 of market value of the stock, yes.
Q. Of the market value of the stock, right.

Now, let's go back. We have $1.75 of earnings requirement for $50 of bonds and we have an earning requirement of $3.48 for $50 of common stock, do we not? I am merely summarizing.

A. Repeating, yes.
[fol. 8433] Q. Is that right?
A. Yes.
Q. What would be the cost of capital per $100 raised in that manner, expressed in percent?
A. 5.22 percent.
Q. 5.23 percent? A. 5.23 percent.
Q. Now, in this calculation, we have used your interest rate of 3½ percent on the bonds, haven't we? That is the interest rate that you used to test your rate of return?
A. The coupon rate, yes.
Q. And you have used the 6.96 per cent return which the 1936 investor in the 30 Dow-Jones industrials is today receiving upon his 1936 dollars, is that right?
A. That is the figure you suggest, yes.
Q. Yes, and the resulting rate of return indicated is 5.23 percent, is that right?
A. Yes.
Q. You used a coupon rate of 3½ percent on bonds for Michigan Gas Transmission Corporation, is that right?
A. Yes, sir.
Q. Isn't it a fact that Panhandle Eastern Pipe Line Company has, in the year 1941, paid an average rate of 2.74 percent on its outstanding bonds and long-term debt?
A. I have not made that calculation.
[fol. 8434] Q. Well, have you examined Mr. Coffman's exhibit which shows that?
A. Yes, but I do not recall the figure.

Mr. Baldridge: Which exhibit was that in Mr. Littman?

Mr. Littman: In Exhibit No. 65, and, also, I believe Exhibit No. 64.

Mr. Baldridge: The reason I asked is that the witness said he had never seen Exhibit 65.

By Mr. Littman:

Q. I hand you a copy of Mr. Coffman's Exhibit No. 64 and refer you to Appendix C, Page 131, and ask you to state whether it is a fact that Panhandle Eastern Pipe Line Company, as shown on that page, had no long-term debt that exceeded 3 percent in 1941.

A. I believe that is correct, in accordance with this statement.

Q. And it also had some long-term debt that was below 3 percent, isn't that right?

A. Yes,

Q. Does 2.74 sound reasonable or about right to you?

A. That sounds reasonable on the basis of that exhibit.

Q. Well, that is the amount that is shown in this Exhibit No. 65, but inasmuch as you examined his Exhibit 63 and 64 I wanted to show you where it appeared in those latter exhibits.

[fol. 8435] Now, do you know the interest rate on the $10,000,000 of bonds that were issued by Panhandle Eastern Pipe Line Company in February of 1942 in connection with its refinancing program?

A. Well, I think they were 3 percent bonds, were they not?

Q. Three percent. That is your understanding of it, isn't it?

A. Yes.

Q. Now, you know that the proceeds from those bonds are being used for the purpose of purchasing, at least in part, the securities of Michigan Gas Transmission Corporation, do you not?

A. Yes, that is my understanding.

Q. Now, in view of those circumstances, don't you want to revise your 3½ percent rate for bonds?

A. No, sir.

Q. Do you want to revise your 8½ percent in view of the changed conditions?

A. No, sir.

Trial Examiner: Would it be a fair inference, Mr. Drew, from your testimony, from the statement that you have made, that the financial situation from the standpoint of any future financing has deteriorated instead of being strengthened by the recent change in the ownership of securities?

[fol. 8436] In other words, a very important change in ownership has occurred during the course of your testimony and it is a fair question to ask you whether your conclusion are the same, irrespective of that new ownership.

The Witness: With respect to Panhandle Eastern or Michigan Gas Transmission Corporation?

Trial Examiner: Michigan Gas Transmission Corporation, I assume, is now a wholly-owned subsidiary of the Panhandle Eastern Pipe Line Company. Is that not right?

Mr. Littman: That is my understanding.

Trial Examiner: Does that fact in any way affect the prospective cost of money for capital which the future may require?

The Witness: I should not expect any change on that account, no, sir.

Mr. Lee: Despite the fact that the actual cost of the money and the transaction recently consummated is less than 3½ percent for the bonds?

The Witness: Yes, sir, that is correct.

Mr. Lee: Well, why should not actuality take the place of theory?

The Witness: Well, I think we can refer to actuality [is] this way: At the time that I made my calculations last fall for the direct testimony, in which I referred to the four natural gas pipe line companies, I originally had Panhandle [fol. 8437] Eastern Pipe Line Company in the group, making five in all. I decided that it was better to omit it because it was a related company tied in with the general pipe line system. I will be glad to refer to it now and I have here the calculation which I made at that time, about October 25, 1941, made at the same time that I made the other calculations and on the same basis.

At that time Panhandle Eastern had outstanding 6,250,000 first serial A bonds, 12,000,000 first mortgage 3 percent bonds, which had been offered to the public in January of 1941, and 5,000,000 of serial notes which had been sold at par to bankers in January, 1941.

Then, that was followed by two classes of preferred stock and 807,367 shares of common no par.

Applying market value to the 12,000,000 of bonds and using par value for the serial A bonds and the serial notes and using a price of $40 per share for the common stock, which seemed fair in view of the fact that in 1940 the price had ranged from 17½ to 41⅜ and on September 30, 1941, it was 41¾ bid,—applying then the $40 per share to the common stock we came out with a grand total capitalization of $68,245,000.

The company reported earnings for 1940 of $5,714,000 and dividing the one by the other we arrived at an 8.4 percent return of actuality in income divided by the market [fol. 8438] values of those securities, the aggregate market value of the securities as of approximately November 12, 1941.

Trial Examiner: In preparation for this testimony, did you make a similar analysis of Columbia's financial status?

The Witness: No, sir, I did not. This was made on the basis of its being a representative natural gas pipe line company similar to El Paso, Southern, Memphis and Interstate.

Trial Examiner: The reason for the last question was that you seemed to speak with confidence that there is no substantial effect from the change of ownership and I wondered if you had confidence in your own familiarity as a basis for that expression.

The Witness: Well, I must state, Mr. Examiner, that I am not familiar with the details of the financial structure of either Columbia Gas & Electric or Panhandle Eastern.

Trial Examiner: But it is customary, is it not, for changes of affiliations to change financial strength in the market?

The Witness: I do not think it necessarily follows, no, sir.

Trial Examiner: Not necessarily, but I say it frequently occurs, does it not, that a company may be strengthened by new affiliations, for instance?

The Witness: Well, I think that is correct, I think it also could be weakened.

[fol. 8439] Trial Examiner: And in this case you think there has been no substantial effect?

The Witness: Well, based on my limited knowledge of the two companies, I would not expect any change in that regard.

* * * * * * * *

By Mr. Littman:

Q. Mr. Drew, would you be willing to accept as accurate the representations made to the Securities and Exchange Commission with respect to whether or not the acquisition of Michigan Gas Transmission Corporation by Panhandle Eastern Pipe Line Company will improve the financial condition of Michigan Gas and of Panhandle Eastern?

A. If I were attempting to arrive at a considered opinion on that matter, I certainly would give great weight to the opinion expressed by the S. E. C.

Q. Do you mean by your answer that you have not arrived at a considered opinion in that regard?

A. On that point, that is correct.

Mr. Littman: Mr. Culton and Mr. Baldridge, is my impression correct that representations were made by the officers of Panhandle Eastern Pipe Line Company before the Securities and Exchange Commission to the effect that the acquisition by Panhandle Eastern Pipe Line Company of the outstanding stock and the securities of [fol. 8440] Michigan Gas would improve the financial condition of both those companies?

Mr. Culton: Why, Mr. Littman, counsel would not undertake, where they had never heard the proceedings of the investigation or read the proceedings of the investigation, to state a conclusion as to what representations were made.

My suggestion is that you have before you the press release, the opinion of the S. E. C., the documents filed by Panhandle Eastern with the S. E. C. and in evidence, most of them, and we stand by what they say. Manifestly, Panhandle Eastern thought that this would be a good deal for it or it would not have insisted that the deal be made. We know that.

Mr. Littman: And manifestly, the Securities and Exchange Commission would not have approved the acquisition had it not felt it in the interest—

Mr. Culton: (Interposing) I think they have some kind of a finding along those lines.

By Mr. Littman.

Q. Mr. Drew, in response to an inquiry by Mr. Lee, I believe, you stated that the over-all investor's appraisal of risk of securities of Panhandle Eastern Pipe Line Company was 8.4 percent?

A. That was my calculation, yes, sir.

Q. As of what date?

A. Approximately November 1.

[fol. 8441] Q. What were the earnings that you used in arriving at this 8.4 percent figure?

A. $5,714,218.

Q. Investors at that time knew that there was pending before the Federal Power Commission this rate investigation, did they not?

A. Investors, you say, knew that this litigation was pending? A. Yes.

A. Well, I am sure that there had been some notices in the press to that effect. They had the means of finding out, certainly.

Q. Certainly they were not in complete ignorance of that fact, were they?

A. My trouble in answering your question is that you generalize on the word "investors". That is a pretty broad term.

Q. You used the term "investors" when you state "investor's appraisal of risk" and I am using the precise term.

A. Then you mean the people who own the stock?

Q. People that own the stock—

A. (Interposing) Of this Panhandle Eastern?

Q. The bonds and preferred stock.

A. Yes, they should have known.

Trial Examiner: The advisory organizations all knew, [fol. 8442] of course, did they not?

The Witness: Yes.

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TRANSCRIPT OF RECORD

(Pages 3041 to 3536)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. VII.

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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By Mr. Littman:

Q. The investors were, on that date, discounting the possibility of a rate reduction, were they not?

A. I cannot answer that question. I think there were notices in the press to that effect but I cannot say that the investors were discounting it.

Q. Can you state whether or not the investors on that date were anticipating higher taxes in 1942 and in 1941?

A. On what date?

Q. On the date as of which you computed your 8.4 percent "investor's apprajsal of risk."

A. I think they were anticipating higher taxes for 1942.

Q. Were they anticipating higher taxes in 1941?

A. The bill was already out at that time.

Q. Yes, and they knew at that time that that bill, with the higher tax provisions in it, would apply to the revenues in the next year succeeding, did they not?

A. I understood that bill to apply to 1941 earnings.

Q. When you purchased securities on behalf of your banking institution in 1940, didn't you have pretty definitely in mind a tax increase to be applied for the year 1941?

A. Yes.

Q. Yes, and you discounted the present earnings be- [fol. 8443] cause you knew that you could not expect to receive the earnings next year that you were receiving today, isn't that right?

A. I would not state is just that way.

Q. Suppose you state it in your own language. We all know it to be axiomatic.

A. First, let me ask you—are you speaking of bonds or stocks?

Q. I am speaking of stocks.

A. You are speaking of stocks?

Q. Yes.

A. Well, I should say that in the purchase of stocks in 1940, we certainly were anticipating higher taxes for 1941. We had no way of knowing whether the net after taxes would be higher or lower for the year 1941. As a matter of fact, I think in many cases they were higher after taxes.

Q. And the earnings which you required on the securities in your portfolio were discounted for the increased tax rates that you knew were coming in 1941 when you purchased those securities in 1940, isn't that correct?

A. No, that is not quite correct. When a trustee purchases common stocks for a trust account, he is more likely to take a long-term view of the value of the securities than is perhaps an individual who makes such a purchase because it is much more likely that the trustee will continue to retain that stock through lower markets and through [fol. 8444] higher markets, provided the condition of the company, the position of the company and the excellence of its management and the return in dividends on his purchase remain favorable.

Q. You mean to say you ignore the fact that taxes are going up?

A. No, I did not say that.

Q. You take it into account, don't you?

A. Certainly.

Q. When you consider the earnings?

A. Yes, but there are many other factors, is what I mean to say.

Q. I did not mean to be wholly exclusive when I mentioned the item of taxes. That is one of the items, isn't it, that you consider? A. Yes, sir.

Q. And when you buy utility stocks during the course of a pendency of a rate investigation, you take into account the possibility of a rate reduction, do you not?

A. Yes.

Q. Now, this 8.4 percent earnings price ratio reflects the earnings on the Class A cumulative preferred stock; does it not?

A. The 8.4 percent is the total income for 1940 after depreciation and taxes.

Q. Yes, and some of that income, a large part of it, as [fol. 8445] a matter of fact, went to service the Class A cumulative perferred stock of Panhandle Eastern, did it not?

A. Well, I repeat that the 8.4 percent is the earnings figure divided by the aggregate market value of all of the securities outstanding at that time.

Q. Now, at that time, how much cumulative preferred stock was outstanding of the Class A type?

A. Class A—100,000 shares.

Q. What was the market value?

A. There was no market for the stock and the only way I could get at the figure reasonably was to use its call price.

Q. What was the call price?

A. Par value $100 and call price $110.

Q. What is the total for that class of stock?

A. 100,000 shares—$11,000,000.

Q. $11,000,000. A. Yes.

Q. And none of that stock was outstanding in the hands of the public?

A. That is my understanding.

Q. The holding company, namely, Columbia Oil & Gasoline Corporation, owned all of that stock, isn't that right?

A. I believe that is correct.

Q. Then you do not have any real appraisal of earnings in so far as that stock is concerned, do you?

[fol. 8446] A. Not based on market quotations or sales.

Q. There were no market quotations and there were no sales, is that right?

A. That is my understanding.

Q. And you know that one of the things that the Securities and Exchange Commission was extremely anxious to get rid of was this $11,000,000 of Class A preferred stock, don't you, in the capitalization of Panhandle Eastern?

A. I do not know the story back of the recapitalization.

Q. Do you know whether Panhandle Eastern Pipe Line Company itself was extremely anxious to get rid of that $11,000,000 of Class A cumulative preferred stock?

A. No, sir, I am not familiar with their reasons.

Q. As a matter of fact, you know that that Class A stock had a participating dividend feature, do you not?

A. It is called a participating preferred.

Q. You know, do you not, that the holders of the Class A preferred stock had a right to participate in the dividends paid on the common stock, do you not?

A. I assume that that is the meaning of participating preferred. I do not know the terms.

Q. Do you know the Class A preferred stockholders had been receiving something like 10 percent on their holdings for the past few years?

A. No, sir.

[fol. 8447] Q. And assuming that to be the fact, all of that is reflected in your 8.4 percent, so-called "Investor's appraisal of risk", is it not?

A. I do not take it so, no.

Q. What would the 8.4 percent reflect, all of the earnings on all of the outstanding securities, doesn't it?

A. Yes, but it has no reference to where it goes. It might go to a 6 percent bond or 3 percent bond for interest charges or it might go to 6 percent preferred or it might be held over for common stock. It is a net figure available for capital uses, capital charges.

Q. And one of the reasons why we are here today is to determine whether or not Panhandle Eastern is entitled to have that much available, namely, 8.4 percent, isn't that a fact?

A. Well, Michigan Gas Transmission Corporation is the case, as I understand it.

Q. All right. Well, that is another one of the reasons why we are here, of course, but one of the reasons is because we are going to ascertain whether or not the 8.4 percent it reasonable in the first instance, is that not right?

A. Are you telling me if is the case?

Q. I am asking you.

A. I do not know.

Q. Don't you know that the reasonableness of the rates of Panhandle Eastern Pipe Line Company is one of the [fol. 8448] main issues in this proceeding?

A. Well, so far as my testimony and study of the situation is concerned, I am familiar only in a general way with the Michigan Gas Transmission Corporation.

Q. Well, I appreciate that you have not offered any testimony on the question of rate of return applicable to Panhandle Eastern, but I am asking you whether you know or do not know whether the rates of Panhandle Eastern Pipe Line Company are, also, being investigated here in this proceeding?

A. My impression is that they are.

Q. Assuming that to be the fact, and I assure you it is, the rate of 8.4 percent is, itself, in question here, is it not?

A. I think you might say that, yes, at least the figures which produce the 8.4 are in question.

Q. Now, if that is the very question before us, we certainly cannot use the 8.4 percent as a guide for the determination of the reasonableness of that percentage in the first place, can we?

A. I think that is correct and that is the reason we left it out.

Q. That is why you left it out?

A. I spoke of it only because Mr. Lee, I think, brought up the question of actuality which I tried to answer for him, so far as I was able.

Q. Mr. Drew, at Page 1917 of the transcript, you make [fol. 8449] the following statement:

"Now, as to the bonds, the interest the first year would be $22,500 which, I believe, would have to be covered at least five times after taxes."

Is that your testimony? A. Yes, sir.

Q. You have not changed your mind about that since you testified here on direct examination? A. No, sir.

Q. Notwithstanding the recent Panhandle Eastern financing?

A. No, sir.

Q. Now, will you show us any bonds that you consider comparable anywhere in the "Financial World" which has interest covered five times and is selling to yield at 3½ percent?

A. Well, I have not any comparable securities because there are so few natural gas pipe line bonds outstanding.

Q. Well, I ask you to give us one that you consider as comparable as possible. You have a list.

A. It is the same kind of thing, I believe.

Q. May I ask what you are now reading?

A. This is called "The Bond Tabulator", published by Nathan Publishing Company of New York City.

Q. Mr. Drew, may I interrupt for a moment, please?

A. Yes.

Q. Did you have any such company in mind when you [fol. 8450] testified on direct examination in this proceeding?

A. I had no one company in mind, no, sir.

Q. And you do not have any in mind, offhand, now, either, do you?

A. Not offhand, no. On that point, however, I think you would have to give some consideration, considerable weight to the fact that this would be a serial bond issue and the company has to make earnings to gradually retire the bond issue as well as to cover interest charges.

Q. Well, that would tend to make the bonds more secure than otherwise, would it not?

A. Well, on the point that we are talking about, it would tend to raise the necessary coverage of the interest rate of the bond.

Q. Would such a bond cost more than another kind.

A. Cost more.

Q. I refer to cost as interest.

A. You mean a serial bond?

Q. Yes, wouldn't the interest cost on a serial bond be greater than the interest on one without the serial provision, all other things being equal?

A. All other things being equal, I think it would be a little lower interest on the serial bond.

Mr. Baldridge: So we are clear on it, you used interest cost, Mr. Littman, and the witness used interest rate.

[fol. 8451] Mr. Littman: We are talking about the same thing.

Mr. Baldridge. Yes, but from different angles.

By Mr. Littman:

Q. Have you been able to find a bond in your bond list that has an interest coverage of five times which yields 3½ percent?

A. Well, I perhaps could find some bonds of that character, but I would want to make a little further study to see whether I considered the companies comparable and the issue comparable.

Q. Well, didn't you first consider that before you testified on direct examination and used that factor in arriving at your claimed 8½ percent rate for this company?

A. Not in a specific way, no, for the reason that my work is pretty much inclusive of that sort of a consideration almost every day.

Q. Suppose you just name one or two bonds that you can find in your list or anywhere in the financial world, pipe line companies or otherwise, that have an interest coverage of five times and an interest yield of 3½ percent on its bonds?

A. Well, without claiming that they are comparable to Michigan Gas Transmission Corporation, just looking this over, in order not to take too much time, here is Public Service Electric and Gas, first mortgage bonds, rated [fol. 8452] AAA covering their fixed charges 4½ times and yielding 3.6 percent.

Q. What is the call price on that bond?

A. It is non-callable.

Q. What is it selling for?

A. This gives the market as 221, it is a high coupon bond, you see, it is a 4½ percent coupon.

Q. You mean it is selling at, did I understand you to say, 221?

A. Yes. No, I am sorry, the interest rate is 8 percent on this particular bond, long-term, due in 2037, covers its fixed charges 4½ times and yields 3.6.

Q. Are you giving the current yield or the yield at maturity?

A. The yield at maturity.

Q. The bond is selling at more than twice par, is it?

A. That is right.

Q. Incidentally, you would not make any claim that that is anything like comparable to Michigan Gas Transmission Corporation, would you?

A. No, I do not think so.

Q. What is the next one? By the way, the coverage is 4½ times there, is it not?

A. Yes.

Q. You have used 5.

A. Yes, I was picking them when they were close. These [fol. 8453] are grouped by classification, so I have to step down to a 2A and a 1A to get your figures for you.

Q. By the way, isn't Public Service kind of stuck with that bond?

A. Well, of course, they would like to have it callable at about 105.

Q. Your answer to my question is yes?

A. Yes.

Q. You would not suggest that Michigan Gas Transmission Corporation be inflicted with that kind of a bond, would you?

A. No, sir.

Mr. Baldridge: Mr. Littman, while you are waiting between questions, I would like to suggest that if you want a real answer to that question about similar bonds, that you give Mr. Drew a little time to look them up because that is something that cannot be picked up in a few seconds.

Mr. Littman: We have been unable to find any comparable bonds of this character and we would like to have our curiosity satisfied with, at least, one example before Mr. Drew leaves the stand, if he will do it for us.

The Witness: Well, as I say, I would like to have more time to satisfy myself that they are comparable. That is the most difficult part of it.

By Mr. Littman:

Q. I hand you Standard & Poor's "Bond Invest- [fol. 8454] ments", issue of September 6, 1941, and ask you to peruse that and see if you can find such a bond. If you find even one we would like to have you give that.

A. I do not see any on this list from a rapid examination of it.

Q. Thank you. Are you still searching for—

A. (Interposing) Shall I continue to do so?

Q. For just another minute, if you wish.

Mr. Drew, I believe you have been looking for about six or seven minutes. About how much longer will it take you to go through that list?

A. Well, to give you a real answer would take quite a time, because I would rather not try to reply without a pretty careful study of it.

Q. Yes. If you find any of such bonds, even if you can find one, we would like to have you advise us.

A. All right.

Q. How long would it take you to conclude your study?

A. Oh, three or four hours, I should think.

Q. Could you do that upon your return to Chicago?

A. Yes.

Q. And let us know next week?

A. Yes.

Mr. Baldridge: Does that mean you are going to want Mr. Drew back?

[fol. 8455] Mr. Littman: No, he can write a letter.

By Mr. Littman:

Q. Now, am I correct in understanding that the one bond to which you have referred that has an interest coverage 4½ times, namely, the Public Service Electric and Gas Company bond, imposes an undue burden, does it not, upon that company?

A. I do not believe it is a very important burden. There is only $7,600,000 outstanding and it is quite a large company.

Mr. Littman: Will you read that answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. What is the amount of bonds that you propose under your assumption from the capital structure for Michigan Gas?

A. 6½ million.

Q. About the same amount?

A. Well, it is about the same amount, but it is half the capitalization, whereas the company I just referred to is quite a different situation.

Q. In other words, it would be an extremely heavy burden on a company where 50 percent of its capital structure is represented by such character of bonds.

A. Certainly.

Q. And your suggested capital structure for Michigan Gas Transmission contemplates a 50 percent bond struc-

[fol. 8456] ture, does it not?

A. Yes, sir. The Fitch Bond Record, Mr. Littman, shows the total debt of Public Service Electric and Gas is $175,000,000 debt alone, therefore, that was the reason for my remark that $7,600,000 is a small part of it.

Q. Now, can you show us any bond that you consider comparable anywhere in the financial world which has interest covered four times and selling to yield 3½ percent?

A. Shall we handle that the same way as the other?

Q. Suppose you look for the four times bond now.

A. Providence Gas Company, first mortgage 4 percent bonds, covering the charge 4.6 times and yielding 3.59.

Q. What is that bond selling for?

A. 106 bid.

Q. What is the callable price?

A. 103.

Q. The bond is selling well above call price, is it not?

A. Yes.

Q. Do you know what the prospects of its being called are?

A. No. You see I am only picking these out of a chart. I haven't had a chance to study these, obviously.

Q. You would not consider that comparable to Michigan Gas?

A. I cannot answer that without further study.

Trial Examiner: It is clear you will not conclude your [fol. 8457] cross-examination of Mr. Drew today and I suggest, if you have some other similar requests, you submit them now and, as a matter of saving time, get the answers in the morning.

Mr. Littman: Yes, I have this request.

Can you show us any company anywhere in Mr. Coffman's Exhibits No. 63 and No. 64, which earns its interest requirements five times and whose bonds are selling to yield 3½ percent?

. . . . . .

[fol. 8461] Fred J. Spitznagle a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-examination (Resumed).

By Mr. Chamberlain:

Q. Mr. Spitznagle, Indiana Gas Transmission Corporation had its line of some 122 miles in operation throughout the year 1932, did it not?

. . . . . .

The Witness: It was in operation the whole of the year 1932.

[fol. 8462] Q. That is sufficient; and the line in 1932 extended as far [wast] as King measuring station near Muncie, did it not?

A. Is that information in Exhibit 91?

Q. Yes, I think that is factual, too. At the very bottom of Page 13 it states there were 52.4 miles of 18-inch line extending from Zionsville to a point known as King measuring station located adjacent to Muncie, Indiana.

A. That is right.

Q. Referring to your Exhibits 101 and 103, let me ask whether the sale of gas by Indiana Gas Transmission Corporation and, for the moment, we will confine ourselves to the first two months of 1936, were made wholly to gas utilities or what we know as distributing utilities?

Mr. Baldridge: Are you including in that municipalities?

Mr. Chamberlain: Yes, Mr. Baldridge.

The Witness: That is correct, yes, sir.

Q. Now, in 1936, if the two affiliated companies to which Indiana Gas Transmission was selling gas be eliminated, it had five customers?

A. On the assumption that the only affiliations are Indiana Gas Distribution Corporation and the Ohio Fuel Gas Company. I make that qualification because I am not familiar with these names in relation to the Columbia system.

[fol. 8463] Q. Yes. Now, at that time and I speak again with reference to the first two months of 1936, Indiana Gas Transmission Corporation had a connection with the properties of the Central Indiana Gas Company, did they not?

A. That is one of the companies being served by Indiana Gas Transmission Corporation.

Q. And it is still being served by them?

A. Yes.

Q. They also had a connection with the Indiana Ohio Public Service Company?

A. Yes, sir, that is true.

Q. And, in each instance that I will quote here, they are still serving them, are they not?

A. That is true, yes.

Q. Pendleton Natural Gas Company, they are still serving that company, are they not?

A. Yes, sir.

Mr. Baldridge: As of what date was that, Mr. Chamberlain?

Mr. Chamberlain: The first two months of 1936.

By Mr. Chamberlain:

Q. At that time, they had connections with the properties of the Public Service Company of Indiana, did they not? A. Yes, sir.

Q. And they are still serving them?

A. Yes, sir.

[fol. 8464] Q. Then the only additional customer was that of the Montezuma, the only additional customer?

A. In the first two months of 1936, that is correct.

Q. And they are still serving that municipality?

A. That is correct.

* * * * * * * * *

Mr. Witness, your exhibits show that up to the present time, do they not, that Michigan Gas Transmission is serving each of these five customers?

The Witness: The exhibit shows that, yes. Not up to the present time?

* * * * * * * * *

Q. Now, Mr. Spitznagle, you have divided the year 1936 into two parts, the first of which shows the sales by Indiana Gas Transmission Corporation during the first [fol. 8465] two months of the year and, under the name of Michigan Gas Transmission Corporation, for the latter part of the year. There are certain changes in the second period caused by additions of customers, are there not?

A. Yes, sir.

* * * * * * * * *

[fol. 8466] Q. Now, what amount of gas was sold by Indiana Gas Transmission to these consumers during the two month period?

* * * * * * * * *

[fol. 8467] A. The M.c.f. sales in the first two months of 1936 made by Indiana Gas Transmission Corporation to all companies except Indiana Gas Distribution Corporation and Ohio Fuel Gas Company were 480,776 M.c.f.

Q. May I suggest a correction there? You may be right, but I have 490,776, if you will check that. I may be wrong.

A. You are right, 490,776 M.c.f.

Q. Yes.

A. The dollar amount responsive to those M.c.f. sales I determine as $155,059.31.

. . . . . .

Yes, I see I picked up a wrong figure. $159,161.31 is correct.

Now, the revenue per M.c.f., between 34.4 and 34.5 cents per M.c.f. Is that close enough?

Q. I am afraid it is against you, Mr. Spitznagle. I have 32.43.

. . . . . .

[fol. 8468] A. The figure is 32.43 cents per M.c.f.

Q. Now, that was the average price which was collected during that period for gas sold to those whom we termed to be non-affiliates?

. . . . . .

[fol. 8469] Q. (Interposing) If you will do that, I shall change the question and ask for them in order. No. 1 is Central Indiana Gas Company. What was the revenue per M.c.f.?

A. 30.976 cents.

Q. The revenue from Indiana Gas Distribution Corporation, which is the affiliated company?

A. 50 cents.

Q. The revenue from Indiana-Ohio Public Service Company?

A. 50 cents.

. . . . . .

[fol. 8472] Q. Now, what was the revenue derived during this period from Ohio Fuel Gas Company?

A. 22½ cents per thousand cubic feet, that is.

Q. Yes, and that, as was indicated, was a large account of apparently a temporary nature?

A. I do not know how temporary it was. It was an account that did not continue after 1936 in any large quantities.

. . . . . .

What was the revenue per M.c.f. from Pendleton Natural Gas Company?

A. 55 cents per thousand M.c.f.

Q. And from the Public Service Company of Indiana?

A. 35.611 cents per thousand M.c.f.

Q. And from the Town of Montezuma, Indiana?

A. 52.035 cents per thousand M.c.f.

Q. Now, I would like to get in the record the results of the year 1936 both with respect to the sales, sales revenue and revenue per M.c.f. and the additional customers [fol. 8473] that were procured during that year. What customers were added in the year 1936 after the first two months of the year?

A. Kentucky Natural Gas Corporation, Lynn Natural Gas Company, the Town of Lapel, Indiana, the Town of Pittsboro, Indiana, and the Town of Roachdale, Indiana, and the Michigan Consolidated Gas Company, Detroit.

. . . . . .

[fol. 8474] Q. Now, to make that comparable, would [would] read in the revenue per M.c.f. for each one of those customers?

A. Central Indiana Gas Company—30.199 cents,
Indiana Gas Distribution Corporation—29.003 cents,
Indiana-Ohio Public Service Company—50 cents,
Kokomo Gas and Fuel Company—26.5 cents,
Lynn-Natural Gas Company—50 cents,
Ohio Fuel Gas Company—22.296 cents,
Pendleton Natural Gas Company—55 cents,
Public Service Company of Indiana—34.446 cents,
Town of Lapel, Indiana—49.629 cents,
Town of Montezuma, Indiana—50.461 cents,
Town of Pittsboro, Indiana—53.021 cents,
Town of Roachdale, Indiana—52.368 cents.

. . . . . .

[fol. 8477] Q. Now, with the understanding, Mr. Spitz-
[fol. 8478] nagle, that the detail of the sales in M.c.f., the revenue and the revenue per M.c.f. for the years 1937, 1938, 1939 and 1940 and for the 12 months ending June of 1941 will be set out in a detail to be later presented to you, I wish to ask you to state into the record the total sales per M.c.f. for each of these four or five twelve-months' periods and at the same time give the revenue derived per M.c.f.

* * * * * * * *

[fol. 8479] Q. With the exclusion of the two affiliates.

A. With the exclusion of the two affiliates.

For the year 1937 the M.c.f. sales, excluding the Indiana Gas Distribution Corporation and Ohio Fuel Gas Company, were 6,700,042, the revenue per M.c.f. was 27.316 cents;

For the year 1938 the M.c.f. sales were with the foregoing exclusions, 6,558,681, the revenue per M.c.f. was 28.218 cents;

For the year 1939 the M.c.f. sales were, with the foregoing exclusions, 9,142,406 and the revenue per M.c.f. was 26.952 cents;

For the year 1940 the total M.c.f. sales, with the foregoing exclusions, were 10,096,976 and the revenue per M.c.f. [fol. 8480] was 27.903 cents;

For the 12 months ended June 30, 1941, with the foregoing exclusions, the total M.c.f. sales were 11,344,051, the revenue per M.c.f. sales was 27.7 cents.

* * * * * * * *

[fol. 8481] Q. I would like to have you state one more thing and that is for each of the five annual periods that you have just covered give the sales in M.c.f. without deduction for the affiliates and the revenue per M.c.f. resulting therefrom.

A. For the year 1937 the M.c.f. sales to other gas [fol. 8482] utilities were 7,078,054, the revenue per M.c.f. of those sales was 27.375;

For the year 1938 the M.c.f. sales were 7,680,735 and the revenue per M.c.f. was 28.152 cents;

For the year 1939 the M.c.f. sales were 10,355,402 and the M.c.f. revenue per M.c.f. was 27.066;

For the year 1940 the M.c.f. sales were 11,364,929 and the revenue per M.c.f. of sales was 27.775;

For the 12 months ended June 30, 1941, the M.c.f. sales were 12,692,888, and the revenue per M.c.f. sales was 27.429 cents.

Q. Mr. Spitznagle, the same information with respect to the year 1941 is found in Exhibit 164, is it not?

A. Yes, sir.

Q. And in that exhibit there is a division between the sales to affiliates and non-affiliates?

A. Yes, sir.

Q. Now, in order that this page of the record may be complete to the year 1941, will you give the same figures with respect to the quantity of sales and the resulting price per M.c.f. as a total and, also, without the affiliates?

A. Excluding the afore-mentioned affiliates, the M.c.f. sales for the 12 months ended December 31, 1941, were 13,145,792; and the revenue per M.c.f. of those sales was 27.21 cents.

[fol. 8483] Including the afore-mentioned affiliates, the sales in M.c.f. were 14,458,013 and the sales per M.c.f. responsive to the M.c.f. sales was 26.97 cents per M.c.f.

* * * * * * * * *

[fol. 8484] Q. All right. Now, just one more question. Did you have time to check the figures on Exhibit marked for identification as No. 165?

A. 165 or 166?

Trial Examiner: 165 is the prospective budget.

Mr. Chamberlain: Exhibit 166.

The Witness: Yes, sir, I did.

By Mr. Chamberlain:

Q. To what extent were you able to check them, Mr. Spitznagle?

A. I found all of the information shown in that exhibit correct. I was not able to check the last line captioned, "Indiana Gas Distribution Corporation", for the

reason that no information is in the offices of Michigan Gas Transmission Corporation with respect to that transaction.

[fol. 8485] Q. That is as I anticipated. Otherwise, the quantities shown there are correct?

A. Yes, sir.

Mr. Chamberlain: The Intervenor then offers in evidence Exhibit 166 with the exception of those figures contained in the last line entitled, "Indiana Gas Distribution Corporation" which may be stricken from the exhibit.

* * * * * * * *

Trial Examiner: I have heard no objection to the reception in evidence of this exhibit.

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Trial Examiner: The tabulation marked for identification as Exhibit No. 166 will be received in evidence, with the modification which was stated by Mr. Chamberlain, as Exhibit No. 166.

(Exhibit No. 166 was received in evidence.)

Q. Were you able to pick up the gas revenues for the years 1931 to 1935, Mr. Spitznagle?

A. Yes, sir.

Q. What then, were the gas revenues for those years of Indiana Gas Transmission Corporation?

[fol. 8486] A. Exhibit 166 shows both purchases and sales of gas and I am wondering if you do not wish to correct your question to include both so that I could give you the dollar amount responsive to M.c.f. in each of the Columns 1931 to 1935, inclusive?

Q. That is exactly correct, but I had assumed the figures you would find more easily would be the gas revenues which would cover all of the gas sold by each of the companies. If you have it broken down, I will be glad to have it.

* * * * * * * *

A. In Column 1931, the dollars responsive to 265,077 M.c.f.'s is $47,713.86.

The M.c.f. amount of 12,212 and the dollar amount is $2,747.70.

The Column 1932, the dollar amount responsive to the 1,834,120 M.c.f. was $330,141.60.

The dollar amount responsive to the 215,048 M.c.f.'s is $48,385.81.

The dollar amount responsive to the 1,521 M.c.f. is $760.45.

The dollar amount responsive to the 2,336 M.c.f. is $1,097.92.

In the column headed "1933," the dollar amount responsive to the 1,611,437 M.c.f.'s is $290,058.66.

[fol. 8487] The amount responsive to the 55,384 M.c.f.'s is $12,461.41.

The amount responsive to the 7,428 M.c.f.'s is $3,714.

The column headed, "1934", the dollar amount responsive to the 1,726,349 gives $310,742.82.

. . . . . .

[fol. 8488] The Witness: We were talking about the column headed "1934".

[fol. 8489] The 84,034 M.c.f.'s is responsive to the dollar amount of $18,907.67.

The dollar amount responsive to [to] 13,029 M.c.f.'s is $6,514.50.

The dollar amount responsive to the 3,370 M.c.f.'s is $1,583.90.

The column headed "1935", the dollar amount responsive to the 2,369,654 M.c.f.'s is $426,537.72.

The dollar amount responsive to the 315,964 M.c.f.'s—

. . . . . .

A. 315,984 M.c.f.'s is $71,096.42.

The dollar amount responsive to the 25,279 M.c.f.'s is $12,639.50.

The dollar amount responsive to the 37,195 M.c.f.'s is $17,481.65.

Q. Now, I am lacking one set of figures that I need to complete that and on which I think perhaps my question lacked clarity, and that would be the gas revenues of Indiana Gas Transmission Corporation. The exhibits which have been introduced in this proceeding on behalf of Panhandle Eastern have covered the period from April 1, 1932, to date, and, in order to work these up in a comparable way, I should like to ask you, upon your return [fol. 8490] to the stand, to give the amount of gas revenues received by Indiana Gas Transmission Corporation from the time of the commencement of business until the end of February 1936, by years.

* * * * * * *

Mr. Littman: Mr. Examiner, we have no further questions to ask Mr. Spitznagle at this time. However, during the course of his cross-examination, I asked him to state the names of the present members of the Board of [fol. 8491] Directors of Michigan Gas Transmission Corporation and the officers of that company. He stated he did not know but counsel suggested—

Mr. Culton: (Interposing) He is in a position to give them to you.

Mr. Littman: Do you have those now?

The Witness: Yes, I can give them to you.

Mr. Littman: Mr. Spitznagle, will you please give us the names of the present members of the Board of Directors of Michigan Gas Transmission Corporation?

The Witness: The names of the Board of Directors of Michigan Gas Transmission Corporation as of today, February 28, 1942, are: Joe D. Creveling, W. G. Mortland, R. C. Patterson, Jr., W. G. McGuire and H. H. Heimann.

Mr. Littman: Who is Chairman of the Board?

The Witness: That I do not know.

Mr. Littman: When were these Directors elected?

The Witness: Prior to today and after—I do not believe I have that information.

Mr. Littman: Perhaps Mr. Young has the information.

Could you give us the date on which these members were elected to the Board of Directors?

Mr. Young: I believe, February 6, 1942.

Mr. Lee: Are any of these Directors you have just named also Directors at the present time of Panhandle [fol. 8492] Eastern Pipe Line Company?

The Witness: Perhaps so, but I am not very well acquainted as to who the officers and Directors of Panhandle Eastern Pipe Line Company are.

Trial Examiner: Does counsel care to complete that statement?

Mr. Culton: I think all of them are but I would not say that definitely. I know some of them are.

Mr. Lee: Are any of these Directors whom you have just named Directors of Columbia Gas & Electric or Columbia Oil Company or any of its affiliates?

The Witness: I would have no information on that.

Mr. Culton: None so far as I know. Mr. Baldridge answers the same way. How about you, Mr. Young?

Mr. Young: I do not believe any of them are on the Board of Directors.

Trial Examiner: These statements are a bit vague. I do not know what Mr. Littman has in mind but the statement is vague and I think—

Mr. Littman: (Interposing) I was going to have him next name the present officers of Michigan Gas Transmission Corporation.

Trial Examiner: Do counsel care to supply the information just suggested?

Mr. Culton: If I am wrong and there are any of these [fol. 8493] Directors who are not also Directors of Panhandle Eastern Pipe Line Company, we will advise the Examiner. As I stated, my understanding is that all of

them are also Directors of Panhandle Eastern Pipe Line Company.

Trial Examiner: The point is, we should not have to waste any time on the record to get those simple facts.

Mr. Culton: I don't know.

Trial Examiner: You will supply the information?

Mr. Culton: We will advise you if there is one of them who is not a member of Panhandle Eastern's Board and, frankly, we know nothing about any of them being members of either of the Columbia Boards.

Mr. Littman: In other words, we may assume, unless advised to the contrary, that all of the present members of the Board of Directors of Michigan Gas are also members of the Board of Panhandle Eastern Pipe Line Company, is that right?

Mr. Culton: That is right. That is your understanding, Mr. Young?

Mr. Young: Correct.

Mr. Littman: Mr. Spitznagle, will you please give us the names of the officers of Michigan Gas Transmission Corporation?

The Witness: The officers of Michigan Gas Transmission Corporation as of today, February 28, 1942, are: Joe D. Crevéling, President; Gerard J. Neuner, Vice-President; [fol. 8494] George S. Young, Vice-President; Leith V. Watkins, Secretary; Louis F. Sperry, Treasurer; Charley D. Jellings, Assistant Secretary; Norman F. Paxton, Assistant Secretary; L. J. Mueller, Assistant Treasurer; and Norman F. Paxton, Assistant Treasurer.

Mr. Littman: We have no further questions.

Mr. Lee: Are all of these officers at the present time of Michigan Gas Transmission likewise officers of Panhandle, holding a corresponding position in Panhandle as they do in Michigan Gas?

Mr. Culton: Except for Mr. Young and Mr. Mueller, that statement is true.

* * * * * * * *

[fol. 8525] GEORGE S. YOUNG, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Young, when you were last on the stand, I requested you to supply certain information and I shall now take up the items—

Mr. Culton: Don't you have that in written form?

The Witness: Yes, I have.

Mr. Culton: Would you hand it to him? Would it be satisfactory to put it in and cross-examine from that?

Mr. Littman: I believe it would be better to put this information in by question and answer.

Mr. Culton: I thought it might expedite it.

By Mr. Littman:

Q. I ask you to state the leakage on Line D and its laterals which lines have, until this month, been owned by Ohio Fuel Gas Company and operated by Michigan Gas Transmission Corporation. Do you have those figures?

A. I do.

Q. Will you please give them at this time?

[fol. 8526] A. The leakage from Line D extending from Muncie to the Indiana-Ohio State line and from the lateral extending from Line D to a point near Winchester, Indiana, was, for the year 1937,—34,300 M.c.f.

For the year 1938—50,600 M.c.f.;

For the year 1939—24,800 M.c.f.;

For the year 1940—18,100 M.c.f.

In October of 1941, the City of Richmond, Indiana, commenced to take natural gas from the Panhandle Eastern Pipe Line Company and, for the year 1941, the leakage of 28,200 M.c.f. includes the leakage from the lateral serving Richmond and from the short length of additional 16-inch pipe line in the State of Ohio which ties in with the Richmond lateral.

Q. You are speaking of the lines which have recently been acquired by Panhandle Eastern Pipe Line Company from Ohio Fuel Gas Company?

A. That is correct.

Q. Do I understand these leakage figures to represent the difference between the input at King station near Montezuma and the amounts delivered at the various border stations of the various towns served?

A. That is correct. King station is located near Muncie instead of Montezuma.

Q. The figures that you read for the years 1937 to 1940, inclusive, are comparable, are they not?

[fol. 8527] A. That is correct.

Q. But the figure that you read for the year 1941 is not strictly comparable because of the additional lines that were operated in Ohio?

A. By reason of the Richmond delivery, that is correct.

Q. And in the operation of taking over the new lines, to which you have just referred, was there any leakage, I mean to say in making the physical connection?

A. Yes, there may have been some which is not included in this figure.

A block valve which was located very close to the State line has been moved to east of the point where the Richmond lateral takes off and in connection with that shift, as well as in connection with the shift of a measuring station, there was some loss of gas but that is not included in this figure. It was estimated.

Q. That particular loss of gas was occasioned by line purging, was it not?

A. Line blowing, I understand, rather than line purging.

Q. You were also going to furnish data with respect to the repairs made by Michigan Gas on Line D and its laterals. Will you please give us that information?

A. Michigan Gas Transmission Corporation assumed the operation and maintenance of the pipe lines referred [fol. 8528] to in 1936. Our records show that between August 11, 1936 and February 5, 1942, a total of 938 draw bands were installed on the 16-inch pipe line to stop leak-

age and two collar leak clamps have been installed to close leaks in the couplings.

Q. Mr. Young, can you give us the number of those draw bands and leak clamps installed by years?

A. I could furnish that. I do not have it broken down here. It could be furnished, however.

Q. Will you please do that? If you are not available on Monday you may supply it to your counsel who can read it into the record.

A. Very well.

Q. Are any of these repairs which you have just mentioned called coupling repairs?

A. Yes, the installation of the collar leak clamps are coupling repairs.

Q. Will you also furnish us the years in which the two collar leak clamps were installed?

A. Very well.

Q. Now, you have not as yet completed giving all the information with respect to repairs, have you?

A. No.

Q. Will you continue?

A. None of the 16-inch pipe in this pipe line has been replaced except in connection with the installation of an [fol. 8529] orifice meter setting and a main line valve. Since August, 1936, 16 draw bands have been installed to close leaks in the pipe wall and one sleeve has been installed to close a leak in a coupling on the 6-inch lateral pipe line extending to Winchester, Indiana, from the 16-inch pipe line.

A. You will supply the years in which those draw bands and sleeves were installed, will you not?

A. Yes, sir.

Q. Now, you just stated with respect to my request for data relating to whether any pipe was replaced on these lines, that certain pipe was replaced. Will you state where that pipe was replaced?

A. It was at the location where the block valve and the measuring station had been installed prior to the time that the Richmond market was attached.

Q. You mean that was at a point near the Ohio-Indiana State line?

A. That is correct.

Q. Which point was the terminal point of the 16-inch line in 1941?

A. In October.

Q. Now, you say no other pipe has been replaced on these lines?

A. No.

Q. This statement applies from the date in 1936 when [fol. 8530] your company began to operate this line down to date, does it not?

A. Down to the end of 1941.

Q. Do you know whether Ohio Fuel Gas Company made any replacements on these lines since 1936?

A. They have not except on the pipe line leading to Richmond, on the lateral pipe line leading to Richmond, and before that was taken over by us for operation and the Richmond market was attached, they made repairs and replacements in that pipe line—I am speaking of the lateral—in the year 1941.

Q. In the year 1941?

A. That is correct.

Q. Do you know the extent of the replacements made?

A. I have a record indicating changes were made. I do not know how correct it is or whether it represents what was actually done but I do have a map showing the changes that were purported to have been made.

Mr. Baldridge: That line was extensively rehabilitated, was it not?

The Witness: It was extensively rehabilitated.

Mr. Baldridge: That was in 1941?

The Witness: In the fall of 1941 prior to the time that the Richmond, Indiana, market was attached.

Mr. Baldridge: But that rehabilitation was not done by [fol. 8531] Michigan Gas Transmission Corporation?

The Witness: No, that was done by Ohio Fuel Gas Company.

Mr. Baldridge: And you have no direct knowledge of that?

The Witness: I have no direct knowledge. I have a map, though, indicating where replacements were made.

By Mr. Littman:

Q. Do you have any idea how many lengths of pipe were replaced?

A. I do not at this time.

Q. What is the length of that line, the Richmond line, approximately?

A. About 12 miles.

Q. You do not know how many miles of pipe were replaced?

A. I do not, at this time.

Q. Could you readily ascertain that?

A. Yes, that is, as can be ascertained from this map that I have.

Mr. Culton: Does the map show the number of pipe lengths?

The Witness: It was a 10-inch pipe line and, in rehabilitating it, they substituted 8-inch where replacements were necessary. The map which I have shows the amount of 8-inch line put into the pipe line.

By Mr. Littman:

Q. If you will furnish that to counsel, we will then have the statement in the record. I understand you are not [fol. 8532] going to be in town next week.

A. That is correct.

Q. Now, what is the source of the data which you have given with respect to these repairs and replacements?

A. The source is from reports which have been furnished to the Detroit office of the Michigan Gas Transmission Corporation by our field men. I am referring to the repair work done on the 16-inch line in the State of Indiana and to the later D-172 going to Winchester.

Q. What is the manner in which that data has been supplied?

A. It is furnished on periodic reports submitted by the field foreman.

Q. And those reports are on file in your Detroit office?

A. They are.

Q. You were going to furnish us the location of a leak on Line A. Are you prepared to give us that information?

A. Yes.

Q. Very well.

A. One leak was located in Section 2, Union Township, Parke County, Indiana, at a point about 17 miles east of the Montezuma compressor station. A second leak was located in Section 20, Jackson Township, Putnam County, at a point about 31 miles east of Montezuma compressor station.

Q. Can you give us the station number?

[fol. 8533] A. I am unable to identify those by station numbers at this time.

Q. You could secure that for us, couldn't you?

A. Approximately, yes. I could get the approximate station number, but I do not think I could tie it down exactly.

Q. Were these two leaks on the new 24-inch loop line or on the old 20-inch line?

A. They are on the old 20 inch line.

Q. Both of them?

A. Both of them.

Q. Do you know how these leaks were repaired?

A. Yes, they were repaired by draw bands.

Q. I also requested you to advise whether all of the present lines of Michigan Gas Transmission Corporation were in service on March 18, 1941, which was the day of highest delivery in the winter 1940-1941. Do you have that data?

A. Yes. All were in operation on that date except the 6-inch loop line which partially parallels the Fort Wayne, Indiana, lateral.

Q. I also requested you to supply certain data with respect to your Exhibit 79. Have you prepared a schedule in accordance with my request?

A. I have.

Q. Do you have copies available for distribution?

A. Yes.

. . . . . .

[fol. 8534] Trial Examiner: Very well. This tabulation will be marked for identification as Exhibit No. 79-A because it is related to Exhibit No. 79 which was received in evidence on February 26.

(The Document Was Marked Exhibit No. 79-A For Identification.)

Mr. Littman: The title of this exhibit is "Michigan Gas Transmission Corporation-Comparison of Daily Provided Capacity to Deliver Firm Gas with Maximum Daily Delivery of Firm Gas and Total Delivery of Gas from Pipe Lines Owned or Operated by Michigan Gas Transmission Corporation for the Winter Period of 1941-1942 to Date, February 27, 1942".

I would like to have marked for identification as Exhibit 79-B a single schedule entitled, "Michigan Gas Transmission Corporation-Total Delivery of Gas from Pipe Lines Owned and Operated by Michigan Gas Transmission Cor- [fol. 8535] poration on Days on Which the Delivery of Firm Gas from System was the Maximum."

Trial Examiner: It will be marked as indicated.

(Exhibit No. 79-B was marked for identification.)

By Mr. Littman:

Q. Mr. Young, I hand you a copy of Exhibit 79-A and Exhibit 79-B and ask you whether you prepared those two schedules in response to my requests of recent date.

A. They were prepared under my supervision.

Trial Examiner: Do you wish to offer them in evidence Mr. Littman?

Mr. Littman: Yes, I would like to offer Exhibits 79-A and 79-B in evidence.

Mr. Baldridge: No objection.

Trial Examiner: These tabulations, marked, respectively, Nos. 79-A and 79-B, will be received in evidence without objection.

(Exhibits Nos. 79-A and 79-B were received in evidence).

By Mr. Littman:

Q. Now, Exhibit No. 79-A relates to the peak day that has occurred to date during the present winter, does it not?

A. During the winter of 1941-1942.

Q. Exhibit 79-B relates to the various peak days of the winter periods 1936 down to date, does it not?

A. Yes, Exhibit 79-B indicates the total deliveries from the pipe line system owned and operated by Michigan Gas [fol. 8536] Transmission Corporation in the winter periods to which you have referred.

Q. Now, will you please refer to Exhibit 79-A? You show in Column E, "Maximum total delivery of gas in M.c.f." to be a total of 175,435 M.c.f., do you not?

A. That is correct.

Q. Am I correct in understanding that that shows the total actual deliveries on that date?

A. That is correct.

Q. That is on February 27?

A. January 7, 1942. That is referred to in the footnote, Mr. Littman.

Q. In other words, January 7, 1942, is the day of highest demand that has occurred thus far in the present winter?

A. That is correct, that is as to total delivery.

Q. Yes. Now, in Column D you show the "Maximum daily delivery of firm gas, M.c.f.," to be 150,210, do you not?

A. That is correct.

Q. Am I correct in understanding that the difference between columns D and E represents industrial gas? That is to say, not firm gas?

A. That is correct.

Q. Does the difference, to wit 25,225 M.c.f. represent the interruptible gas?

A. That is correct.

[fol. 8537] Q. Now, in Column C you show "Provided daily capacity to deliver firm gas-M.c.f." in the amount of 162,240 M.c.f., do you not?

A. That is correct.

Q. It is apparent that you did not mean by that heading to say that that is the total amount of firm gas that you could deliver.

A. Yes, that is the total amount of firm gas which we feel that we could deliver under any and all conditions which might prevail with regard to the delivery.

Q. Well, you could deliver more than 162,240 M.c.f. of firm gas if you had the market, could you not?

A. Under certain conditions, yes.

Q. What are those conditions?

A. In the winter period of 1940 1941 as a result of the operations and our experience it was decided that it is advisable to have a spare unit, that is, a spare compressing unit in each one of the compressor stations belonging to the Michigan Gas Transmission Corporation not only to serve in case of failure of any one unit in a station but, also, to serve in case the pressure conditions obtaining are such that the units, compressing units in each compressor station cannot be loaded to the maximum rated horsepower.

Now, to the extent that the spare unit is available and to the extent that the conditions obtain which will permit [fol. 8538] utilization of all of that horsepower, we can deliver additional gas. That is indicated by the fact that under Column C, while we feel that we have provided for a delivery of firm gas amounting to 162,240 M.c.f.'s, we were able to utilize the spare horsepower, in part, and actually deliver 175,435 M.c.f.'s on January 7 of this year.

Mr. Culton: May I ask a question?

Mr. Littman: Yes.

Mr. Culton: I think it is appropriate. Does the hourly regularity with which the gas is taken have anything to do with your ability of delivery?

The Witness: It does. That is one of the reasons why we felt it was necessary to install spare horsepower in these compressor stations.

Mr. Culton: In other words, if it is all taken with the same regularity, your daily capacity would be substantially in excess of what it would be if there were irregularity in the hourly withdrawals?

The Witness: If you refer to Column K in Exhibit 79, it is shown there that the provided daily capacity to deliver firm gas is 159,850 M.c.f.'s. If that gas could have been delivered at uniform hourly rates, then the markets listed in that column could have been supplied with one less gas engine and compressing unit in each of the three compressing stations.

I might, also, add that this end of the line is a critical [fol. 8539] end of the line. If there is a break or inter-

ruption of any kind or if there is a failure in a compressing station, it is more critical than it is to have a similar outage farther west.

Q. Mr. Young, let's look at Line 13 of Exhibit 79-A, which shows the deliveries to Fairmount. You show a provided daily capacity to deliver firm gas of 1500 M.c.f.'s, yet you did, in fact, deliver on January 7, 1942, more than twice that amount, namely, 4,995 M.c.f.'s. Is not that correct?

A. That is correct.

Q. Now, suppose you had had a firm market for 4,995 M.c.f.'s, you could have delivered that quantity of gas, could you not?

A. Yes, provided this spare unit which I referred to had been available.

Q. Had been available?

A. Had been available, as it was in this case.

Q. It was available?

A. Yes, it was in this case, and provided the pressure conditions obtaining at the compressing stations were such that the horsepower which we utilized—

Q. (Interposing) You see the difficulty we had with interpreting the meaning of your heading in the columns in Exhibit 79 and in Exhibit 79-A, "Provided daily capacity [fol. 8540] to Deliver Firm Gas-M.c.f." You do not mean by that heading, do you, that Michigan Gas Transmission Corporation could not have delivered more firm gas than the amount shown under that heading?

A. I mean by that heading that that delivery of firm gas could be made under most any conditions that might prevail, that is, under most any conditions that might prevail providing none of these units are out of service. I am referring now to the rate of hourly delivery that might prevail.

Q. The same situation that I described for Fairmount is generally true with respect to Muncie, is it not?

A. That is correct.

Q. You claim that you had a provided daily capacity to deliver firm gas of 8,200 M.c.f.'s, yet you did, in fact, deliver 21,345 M.c.f.'s on January 7, 1942. Is not that right?

A. That is correct and if all of the conditions which prevailed on that date, January 7, 1942, would prevail on every other day when we would be called upon to make a heavy delivery, then it would be proper to say that the deliveries listed in Column E could be firm deliveries.

Q. Well, whether all of those precise conditions prevailed or not, you do not doubt that you could deliver more than 8,200 M.c.f.'s of firm gas to Muncie, if you had the market?

A. I doubt whether we could deliver more if these con- [fol. 8541] ditions which I speak of did not prevail.

Q. Well, what conditions?

A. For that condition to prevail all of the gas engine compressing units which have been installed in these compressing stations must be in condition to operate. The other condition that must prevail is that the pressure conditions at these compressing stations are such that all of the horsepower installed there can be utilized. I might amplify the latter part of that statement a little bit by stating that sometimes, because of pressure conditions in a station, possibly only 1,000 out of a possible 1,300 horsepower in one of these compressing units can be utilized.

* * * * * * * *

Q. Don't you think your heading, "Provided Daily Capacity to Deliver Firm Gas-M.c.f." is somewhat misleading?

A. No, I do not think it is, Mr. Littman. It is intended to provide capacity, it is intended to indicate that there is capacity to deliver the amounts of gas listed under it.

Q. Well, there is not any question in your mind, however, that if you had the market to deliver firm gas in the quantities shown in Column E of Exhibit 79-A you would have had the capacity to do it and could have delivered [fol. 8542] those amounts on January 7, 1942?

A. Yes, if the conditions which I have mentioned prevail—let me change that last, please—if the conditions which prevailed when that delivery was made—will you state that question again, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: That is correct, if the spare unit is available and if all the horsepower in the stations could be utilized.

Q. You would not have any hesitancy in taking on additional firm gas markets, if you could have done so?

A. Yes, I would have.

Q. You would have hesitated?

A. I would have hesitated.

Q. Because of the margin of safety that you have just mentioned?' A. That is correct.

Q. And that is one compressor unit in each station?

A. In each of the three stations as of the date that Exhibit No. 79 was prepared.

Subsequent to that time two additional units have been added at the Edgerton compressing station to further insure that deliveries can be made north of Edgerton without in any way not complying with the contract re-[fol. 8543] quirements as to pressure and, particularly, with regard to the Detroit market.

* * * * * * * *

Q. When were those two units installed at the Edgerton station?

A. Construction of those two units was started June of 1941 and they were placed in service, I believe, in December of 1941.

Q. And they were in service, of course, on January 7, 1942?

A. That is correct. They were available for service on that day.

Q. Now, what you have said with respect to the figures appearing in Column C, appearing in Exhibit 79-A, "Provided daily capacity to deliver firm gas M.c.f.", applies with equal force to Columns D, E, G, I and K in Exhibit No. 79. Is that correct?

A. It does not. We did not consider it necessary to [fol. 8544] provide spare capacity at the compressing station until the summer of 1940.

Q. Well, what about your heading and figures shown under the heading "Provided Daily Capacity to Deliver

Firm Gas, M.c.f." in Exhibit 79? Is that a correct characterization of the figures you there show?

A. That is a correct characterization. That capacity to deliver firm gas was provided but no additional or no spare capacity was provided in those years to take care of the outage of compressors or to take care of this non-uniform hourly rate of delivery to Detroit.

Q. What I would like to know is this, Mr. Young: In Exhibit 79, you show that on December 7, 1936, your so-called "Provided Capacity to Deliver Firm Gas" was 70,600 M.c.f.'s whereas you did, in fact, deliver, as shown in Exhibit 79-B, Column C, on that day, 71,663 M.c.f.'s. It is apparent that you could have delivered more firm gas than that which you did deliver on that day, is that right?

A. Yes, but the slight difference there might have been taken out of pack. The point I wish to make is, Mr. Littman, that prior to the summer of 1940, we did not consider it necessary to provide any spare capacity in these compressor stations.

Q. Let's look at the maximum day of December 27, 1938. Column G of Exhibit 79 shows, "Provided Daily [fol. 8545] Capacity to Deliver Firm Gas" in Column G of 109,000 M.c.f.'s whereas you did deliver 113,347 M.c.f.'s of gas on that day; isn't that correct?

A. That is correct.

Q. You could have delivered 113,347 M.c.f.'s of firm gas if you had had the market?

A. Not for any length of time. That difference there was taken out of pack, as I recall it. We might have been able to do that for one day, maybe for part of a second, but we would not have been able to do that rather continuously.

Q. Let's look at March 18, 1941, the maximum day for the winter 1940-1941. You say you had a "Provided Daily Capacity to Deliver Firm Gas" as shown in Column K of Exhibit 79 in the amount of 159,850 M.c.f.'s whereas Exhibit 79-B shows you delivered approximately 20,000 more M.c.f.'s on that day. A. Yes.

Q. All that did not come from the line pack, did it?

A. No, we had this spare equipment installed at that time. It had been installed in the summer of 1940.

Q. But prior to that time you did not have the spare equipment? A. That is correct.

Q. Now, the difference between the amount of "Provided Daily Capacity to Deliver Firm Gas" and the [fol. 8546] "Maximum Daily Delivery of Firm Gas" throughout Exhibits 79, 79-A and 79-B represents the interruptible industrial gas, does it not?

A. That is correct.

Q. You were going to furnish for the record the amount of rate case expense paid to December 31, 1941, and which had been reported on the books of the company?

A. The expenses incurred in connection with the current proceedings before the Federal Power Commission total $39,801.13 as of December 31, 1941.

Mr. Baldridge: May I ask just one question, Mr. Littman.

That, I take it, does not include such amounts as may have been accrued up to that date but not paid, does it? I have in mind possible bills for services which were rendered prior to that date although the bills may not have been presented to you or paid at that date.

The Witness: That does not include the full amount of our obligations as of that date, Mr. Baldridge.

By Mr. Littman:

. . . . . .

[fol. 8548] If it is a brief examination—

Mr. Chamberlain: (Interposing) I think five minutes would do it and we might as well get it out of the way.

I would like to have this document marked for identification as Exhibit 167.

(Exhibit No. 167 was marked for identification.)

Cross-Examination (Continued)

Q. Mr. Young, I have handed you a document marked Exhibit No. 167 for identification which shows the number of the check, the date and the amount of each of the payments made by Michigan Consolidated Gas Company for gas purchased through Michigan Gas Transmission Corporation for its use in the Detroit district from August 1936 to December 20, 1941. I have heretofore shown

you that exhibit and ask you to check to see at what time funds were received by Michigan Gas Transmission Corporation and deposited to their account.

This exhibit shows the date of the cancelation of each of these checks and I would like to ask you as to whether, with the exception of some nine checks which you can hereafter identify, those checks were deposited by Michigan Gas Transmission Corporation on the dates which show the date of the cancelation of the check?

A. Except in the case of the nine checks which you have referred to, my information is that all of the checks [fol. 8549] on Exhibit 167 for identification were deposited on the same date that they are indicated as having been canceled.

Q. Will you state the nine exceptions and give the number of the check and the date upon which it was actually deposited?

A. Check No. 37720—

Q. (Interposing) I am going to have to change my question a little bit because those numbers do not run always consecutively. I will require the number of the check and the date of the check.

A. I see.

Q. Or the amount, that would do it.

A. I have the amounts here.

Q. Yes, the amount will do it.

A. Check No. 37720 in the amount of $110,641.17 was deposited on October 21, 1936.

Check No. 41286 in the amount of $307,881.32, was deposited on January 21, 1937.

Check No. 284, in the amount of $100,000, was deposited January 21, 1937.

Check No. 2384, in the amount of $150,000, was deposited January 21, 1938.

Check No. 52847, in the amount of $346,002.84, was deposited January 21, 1938.

Check No. 2506, in the amount of $150,000, was deposited [fol. 8550] February 21, 1938.

Check No. 53458, in the amount of $372,993.27, was deposited February 21, 1938.

Check No. 1383, in the amount of $353,553.71, was deposited on November 22, 1938.

Check No. 1140, in the amount of $85,000, was deposited November 22, 1938.

Q. I would like to clear up an apparent discrepancy in these dates. It is a fact, is it not, that three of the nine that you have mentioned were deposited upon the day that the check shows canceled but the reason they were included was because they were deposited with another check on the same day which was deposited one day before the cancelation date?

A. Yes, three of the nine checks which have just been mentioned were canceled on the same date on which they were deposited and they were included in this list because they were deposited with the other six.

Mr. Chamberlain: That is all.

. . . . . .

[fol. 8554] Mr. Littman: If your Honor please, before proceeding with the cross-examination this morning, I would like to have inserted into the record at this point a copy of an order issued by the Securities and Exchange Commission on February 3, 1942, which shows precisely the bid price from a group of underwriters headed by Glore, Forgan & Co. and Kidder, Peabody & Co., with respect to the recent financing of Panhandle Eastern Pipe Line Company. It is a very brief order and I believe it would be helpful to have this order in the record in its entirety.

. . . . . .

Trial Examiner: Very well, it may be copied in the record, at this point.

For Immediate Release Tuesday, February 3, 1942.

Securities and Exchange Commission Washington

Holding Company Act Release No. 3311

United States of America

Before the Securities and Exchange Commission

At a regular session of the Securities and Exchange Commission, held at its office in the City of Washington, D. C., on the 3rd day of February, A. D., 1942.

[fol. 8555] Supplemental Order Pursuant to Rule U-50.

In the Matter of

Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation, Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation, Indiana Gas Distribution Corporation, the Ohio Fuel Gas Company.

File Nos. 59-33, 70-263, 70-371, 70-387, 70-430, 70-431

(Public Utility Holding Company Act of 1935)

Panhandle Eastern Pipe Line Company, a subsidiary of Columbia Gas & Electric Corporation, a registered holding company, having filed an application pursuant to the Public Utility Holding Company Act of 1935, particularly Section 6 (b) thereof and Rule U-50 thereunder, regarding the issue and sale of $10,000,000 principal amount of 3% First Mortgage Bonds and [and] $15,000,000 par value of Cumulative Preferred stock, the proceeds to be applied toward the retirement of $10,000,000 par value outstanding Class A $6 participating Preferred stock, the acquisition of certain wholly-owned subsidiaries of Columbia Gas & Electric Corporation, and additional construction; Panhandle Eastern Pipe Line Company to publicly invite proposals for the purchase of the bonds and preferred stock in accordance with Rule U-50; and

Said application having been consolidated in the above-entitled consolidated proceeding, and the Commission hav-

[fol. 8556] ing, on January 21, 1942, granted such application pursuant to Section 6 (b) subject to the conditions, among others, that applicant report to the Commission the result of the competitive bidding as required by Rule U-50(c) and comply with such supplemental order as the Commission may enter in view of the facts disclosed thereby, jurisdiction having been reserved for this purpose; and

Panhandle Eastern Pipe Line Company having made such report to the Commission in the form of an amendment to the application herein, setting forth the action taken to comply with Rule U-50 (c) and specifying the proposals which have been received for the purchase of said bonds pursuant to the invitation for competitive bidding, and setting forth that Panhandle Eastern Pipe Line Company has accepted a bid from a group of underwriters headed by Glore, Forgan & Co. and Kidder, Peabody & Co., of 100.02% for the bonds which are to be resold to the public at 100.75%, representing a spread to the underwriters of .73%, and 100.2789% for cumulative preferred stock having a dividend rate of 5.6%, which stock is to be resold to the public at 104%, representing a spread to the underwriters of 3.7211%, of which 2.25% represents the spread to dealers; and

The Commission having examined the record and finding no basis for imposing terms and conditions with respect to the issue and sale of said bonds and preferred stock at such price and with such spread;

[fol. 8557] It is ordered that said application, as amended, be and it is hereby granted in regard to the price to the issuer, the spread, and the distribution thereof applicable to such bonds and preferred stock, subject, however, to the terms and conditions prescribed in Rule U-24.

By the Commission

(Seal) FRANCIS P. BRASSOR,
Secretary.

Mr. Littman: I would like to have marked for identification as Exhibit No. 168 a tabulation which has been furnished by Mr. Haberly pursuant to my request, entitled

"Michigan Gas Transmission Corporation-Tabulation of Measuring and Regulating Stations showing Stations Which were Inspected by Francis S. Haberly and Those Which Were Not Inspected."

(Exhibit No. 168 was marked for identification.)

Mr. Littman: I would like to ask that this exhibit be received in evidence at this time.

Trial Examiner: The tabulation marked for identification as Exhibit No. 168 will be received in evidence without objection.

(Exhibit No. 168 was received in evidence.)

* * * * * * * *

[fol. 8558] DANIEL C. GREEN, a witness, having been previously duly sworn, resumed the stand and testified [fol. 8559] further as follows:

Cross Examination

By Mr. Littman:

Q. Mr. Green, you are an engineer?

A. Yes, sir.

Q. You are President and Director of Central Service Corporation, a corporation which specializes in rendering consulting, advisory and special services to public utility companies?

A. Yes, sir.

Q. Your firm has been retained for the purpose of presenting certain exhibits in this proceeding relating to Michigan Gas Transmission Corporation?

A. That is correct.

Q. Your firm is retained by Columbia Gas & Electric Corporation?

A. By Michigan Gas Transmission Corporation.

Q. Who retained you?

A. The President of that company.

Q. You refer to Mr.—

A. (Interposing) Beckjord.

Q. Mr. Beckjord is an officer of Columbia Gas & Electric Corporation, is he not?

A. I think he is, yes.

Q. He is Vice-President, is he not, of Columbia Gas & [fol. 8560] Electric Corporation?

A. I am not certain of that. Whether he is an officer of Columbia Gas or whether he is an officer of their service company, I do not know.

Q. I read from pages 2018 and 2019 of the transcript where Mr. Beckjord testified as follows:

"In 1938 I became President of Columbia Engineering Corporation, still continuing as Vice-President and General Manager of the Columbia Gas & Electric Corporation."

A. Yes.

Q. Does that refresh your recollection?

A. Yes. On second thought, I believe he is Vice-President and a Director.

Q. He says, "Vice-President and General Manager."

A. Yes.

Q. Will you please refer to Exhibit No. 92, entitled "Michigan Gas Transmission Corporation-Original Cost Depreciated to Present Conditions as of June 30, 1941, and Observed Depreciation as at June 30, 1941"? This exhibit shows, does it not, that you have deducted from the original cost new of the plant of Michigan Gas the sum of $310,226.50 which represents the "Observed depreciation"?

A. Yes, sir, that is correct.

Q. Now, this amount of "Observed depreciation" was determined in the first instance, percentage-wise, by Messrs. Riddle, Lehn and Haberly. Is that correct?

[fol. 8561] A. Correct.

Q. You are taking responsibility for this exhibit, are you, Mr. Green?

A. Yes, sir. That is, I directed its preparation.

Q. Yes, I understand that you made no determination of your own of the observed depreciation. Is that right?

A. That is correct.

Q. But this exhibit is your idea?

A. Yes, sir.

Q. Does the sum of $310,226.50 represent all of the depreciation that has accrued to date on the original cost of the property of Michigan Gas Transmission Corporation?

Mr. Baldridge: By "to date" you mean as of the time of the preparation of the exhibits?

Mr. Littman: I mean as of June 30, 1941.

The Witness: The amount of $310,226.50 deducted from the original cost figure of $12,261,260.55 expresses the value of the physical property as of June 30, 1941.

By Mr. Littman:

Q. Now, will you please answer my question, Mr. Green?

Trial Examiner: Read the question, please.

(Whereupon, the question commencing at Line 11 of this page was read by the reporter.)

The Witness: In the opinion of these engineers that [fol. 8562] amount represents, in their judgment, the observed depreciation of the property as of June 30, 1941.

By Mr. Littman:

Q. What I would like to have, Mr. Green, is your opinion of whether this amount of $310,226.50 represents all of the depreciation that has accrued to June 30, 1941, on the original cost of the property of Michigan Gas Transmission Corporation.

A. Where we are confused or where I am confused is your use of the term "accrued." Now, if you are referring to the books of the company and some device of accounting which the management might adopt, on a straight line method or any other method or retirement reserve method, that would be one thing, but that is not this figure, that is not what this figure purports to represent.

Q. Mr. Green, when I use the term "accrued depreciation", I mean all of the depreciation that has accrued down to June 30, 1941. Does that help you?

A. No, it does not. My answer that I first gave as to what the $310,000 odd figure represents is as I have stated it.

Q. It merely represents that depreciation which has been observed?

A. That is correct.

Q. But not all the depreciation that has, in fact, accrued?

[fol. 8563] A. It is all the depreciation that actually has accrued or occurred up to that date,—not accrued, I think our use of the word "accrued" confuses both of us. "Ac-

crued" means more or less per books, an accounting expression, I would think.

Q. Well, did Mr. Haberly's Exhibit No. 82 confuse you?

A. 82?

Q. Which is entitled "Accrued Depreciation".

A. No, because—

Q. (Interposing) On compressor station structures and so forth.

A. No, because these amounts found by the engineers were at my direction to determine the depreciated value as against original cost as of June 30, 1941.

I will give this example which might help. We will assume that a piece of pipe has an estimated life of 75 years. If you would use straight line depreciation you would divide the total cost of that pipe by the 75 years and you would get an amount which, for convenience in accounting, you charge against earnings and set up in a reserve account each year that fixed amount.

Now, my point is that we will say ten years, that the pipe has been in the ground ten years, and the actual value of that pipe will not decrease on a straight line basis, its value will not decrease.

[fol. 8564] Q. How about its original cost as distinguished from what you have termed "value"?

A. I am referring to original cost here. When I speak of "value", "value" means original cost.

Q. Now, you just said if I would depreciate the property on a straight line method I would get the result which you just gave in your hypothetical statement.

A. That is right.

Q. What method does Michigan Gas Transmission Corporation use to depreciate the property on its books? The straight line method, isn't that correct?

A. I think they do. I would not want to say definitely that they used the straight line method.

Q. Didn't you investigate that?

A. I know the amount they are setting up is approximately 3 percent of the plant account.

Q. Mr. Green, do you mean to say you do not know for certain that Michigan Gas Transmission Corporation uses the straight line method of depreciation on its books?

A. They are setting up 3 percent of the plant account.

Q. On a straight line basis?

A. They are charging against income and earnings 3 percent of the plant account and setting it up in reserve.

Q. Which is the straight line method, isn't it?

A. No. A company might be charging 3 percent of its [fol. 8565] plant account and be on the retirement reserve method but, during the early years of the life of the property, they determined 3 percent would be ample, whereas, against the straight line method, the actual depreciation might be 4 percent.

Q. What method does the company use?

A. I do not know. I can tell you what they have done but whether they are accruing on a straight line method of depreciation, I do not know.

Q. I take it from your answer you have set up in your exhibit a different method than that followed by the company in depreciating its property?

A. Yes, sir, we did.

Q. Let me refer you to Page 3 of Exhibit No. 99 which shows "Depreciation Provision per Books for Years Ended December 31, 1936, to 1940, Inclusive and Six Months Ended June 30, 1941," and ask you whether your examination of that page will refresh your recollection as to the method used by the company in setting up depreciation on its books?

A. I cannot change my original statement.

Q. You are at liberty to do so if you want to.

A. I do not.

Q. You do not want to?

A. I do not, no.

Let me say that suppose it is exactly 3 percent of their plant account each year that has been charged. That is not [fol. 8566] proof that they are using the straight line method. In the straight line method of depreciation, you determine the life of the property and divide the number of years by the original cost or value that you are depreciating. That is the straight line method and you set that amount up each year. Now, this company has been charging approximately 3 percent.

Mr. Lee: Wasn't that predicated upon the estimated life of the field?

The Witness: I do not know how they determined the 3 percent but I know the company could set up 3 percent in the early years and later set up 5, an average of 4 percent, if 4 is the proper amount based upon the life of the property. Of course, here, we have a property with a finite life which raises an entirely different question of depreciation and amortization because the life of the property is based on its usefulness and not on the number of years that it will stay in service.

Mr. Lee: Weren't you bound to consider that? Wasn't that the underlying consideration?

The Witness: Yes, we used in our Exhibit 24½ years as the finite life of this property from June 30, 1941.

By Mr. Littman:

Q. Having defined the straight line method, do you see anything on Page 3 of Exhibit 99 which would indicate that the company is not using the straight line method?

A. There is nothing here that would indicate to me on [fol. 8567] what basis they determined the depreciation that they have charged. I see nothing on this page that gives the method of determining the amount they have set up.

Q. If the company had been using a straight line method, for all that appears on Page 3 of Exhibit No. 99, that method could be used? In other words, there isn't anything on Page 3 of Exhibit No. 99 that indicates that the company is using other than a straight line method, is there?

A. There is nothing on that page that indicates that they are using a straight line method either.

Q. They have been setting aside 3 percent each year, have they not, since the beginning?

A. Yes, sir, approximately so.

Q. They have not changed that percentage at all in any year thus far, have they?

A. I think that is correct. They have been setting aside that amount.

Q. Wouldn't you do that by the straight line method?

A. If they are using the straight line method and they set up 3 percent of the property each year, that means the property has a life of 33⅓ years.

Q. That is what Page 3 of Exhibit No. 99 indicates to you, doesn't it?

A. No, it does not.

Q. Have you investigated whether the company pro- [fol. 8568] poses to change this depreciation rate of 3 per cent?

A. No, I do not know.

Q. You did not investigate it?

A. No.

Mr. Baldridge: Mr. Littman, just to be sure you aren't confused, may the record show that 3 percent does not apply to all the property but to most of it. There are certain types of property which, as I recall, consist of non-depreciable property on the one hand and short-lived property on the other, which is depreciated somewhat differently. I assume that you are talking about the great bulk of the property, to which 3 percent was applied.

By Mr. Littman:

Q. At any rate, you have undertaken, for purposes of this proceeding, to set up a new and different method of depreciating this property than that which has been followed by the company to date, is that right?

The Witness: Would you read that, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: That is correct.

By Mr. Littman:

Q. What is wrong with the company's method that requires you to now change the scheme of things?

A. If this property has a life of 24½ years from June 30, 1941, 3 percent of depreciable property set up per year [fol. 8569] will not amortize the investment over that expected life of 24½ years so, if we would use operating expenses and the depreciation that could be charged per books as an item of expense and amortized on that basis, the company would be short in recouping its investment at the end of 24½ years.

Q. You propose, then, to substitute your judgment for the judgment of the company with respect to the life of the property, do you not?

A. Not at all and that is my point. The fact that they are charging 3 percent at the present time in the comparatively early years of the life of this property is no indication whatsoever in later years they might not charge 5 percent. As time goes along and they learn more about the life of this field, it might be found that it is a 20-year life or 40-year life, I do not know.

Q. Has any officer of the company indicated that they were going to change their depreciation rate policies?

A. In our opinion, it was not necessary to use those figures from the company's books in preparing the data which we thought would be useful to the Commission in determining the necessary revenues of this company.

Q. I am not speaking of what was necessary. What was proper? Would it have been proper to use the company's own depreciation rates and methods for purposes of this proceeding?

[fol. 8570] A. It would not. I will answer your question this way: Suppose this company had been setting up 6 percent in depreciation in order to cut down their earnings. They set up 6 percent. I think it would be manifestly unfair, in preparing the exhibits which we have here, if we were to use that 6 percent as a fair amount for depreciation.

Q. Of course, they have not set up anything like 6 percent, have they?

A. I said, if they had.

Q. I take it that you are saying, then, that you disagree with the depreciation policy followed by the company thus far?

A. I will say this, that if I were President of Michigan Gas Transmission Corporation or if I were a large stockholder in that corporation, I would want the company to increase its depreciation charges that they show per books and I would have them increase it so that we would recoup the investment in 24½ years.

Q. You are acquainted with Mr. Young, the Vice-President of this company, are you not?

A. Yes, sir.

Q. You know that he has testified in these proceedings that he is satisfied that the rates presently charged are reasonable, proper and adequate?

A. I do not know. I did not see that.

. . . . . .

[fol. 8571] By Mr. Littman:

Q. What amount has been accumulated in this depreciation reserves at June 30, 1941? You will find that in Exhibit 88, Page 2, Mr. Green.

A. $1,526,600.89.

Q. Now, according to your testimony, the probabilities are that that sum is not sufficient to cover the depreciation that has accrued on the property to date isn't that right?

A. No. In the exhibits which we have prepared here, the accounting method of the company and its practices and policies on the question of depreciation have no bearing whatsoever, in my opinion, on the amount that the Commission should set up here for depreciation.

Q. Didn't you just say a minute ago, Mr. Green, that if 24½ years represent the true remaining life of this property and you do believe just that, then the 3 percent rate which has been set by the company is too low. Hasn't that been your testimony thus far?

A. Correct, yes.

[fol. 8572] Q. All right. Now, if the 3 percent is too low, then this amount that has been accumulated in the depreciation reserve at June 30, 1941, of $1,526,600 is also too low according to your testimony, isn't that correct?

A. No, we are speaking here of amortizing the investment. That is the problem we had before us, to determine how much per year should be charged against income so that the investor will recoup his investment at the end of the 24½ year expected life of the property. What the company charged on its books for depreciation, what it accrued, in my opinion has no bearing whatsoever.

Q. Now, will you answer my question, please.

Mr. Littman: Will you read my question?

(Whereupon, the question commencing at Line 1 of this page was read by the reporter.)

The Witness: If the company had charged earnings and set up in reserve an amount in excess of 3 percent, this amount in this reserve would be greater to that extent.

By Mr. Littman:

Q. I am not asking you to assume any hypothetical state of facts. I am asking you to answer my specific question, Mr. Green.

A. I think I made the statement a little while ago if I were President of this company, I would be setting up on the books an amount for depreciation in excess of what [fol. 8573] this company has.

Q. And if you had been President of this company, you would have accumulated a larger amount than $1,526,600 in your reserve down to June 30, 1941, would you not?

A. If the company had charged more, there would be more in the reserve.

Q. Then your answer to my question is yes?

A. If they had charged more, the amount in the reserve would have been greater.

Q. Will you answer my question yes or no?

A. I think I have answered the question.

Q. The answer is yes?

A. You will have to read the question.

Q. Didn't you have my question in mind at the time when you were giving your answer, Mr. Green?

Mr. Littman: Read the question, please.

(Whereupon, the question was read as follows:

"Q. All right. Now, if the 3 percent is too low, then this amount that has been accumulated in the depreciation reserve at June 30, 1941, of $1,526,600 is also too low according to your testimony, isn't that correct?")

The Witness: If the company had charged a percent greater than the percent used each year and all charges, credits and debits against this reserve account had been exactly the same as they have actually been, this amount would be greater to that extent.

[fol. 8574] Q. And, in your opinion, should be greater?

A. Indeed so, yes, per books, and having nothing to do with this other question.

Q. You want to forget about the books when you come into this rate proceeding and determine depreciation, do you?

A. Absolutely, absolutely.

Q. Well, we don't, Mr. Green. Let's talk about the book depreciation for the moment. It is clear that Michigan

Gas has accumulated $1,526,600 to June 30, 1941. There is no question about that, is there?

A. That is the amount in the reserve account.

Q. And you say that, if anything, that is too low, not enough?

A. I say that I would amortize the investment over a shorter period than they apparently are, from this present amount being charged.

Q. And that would give a greater balance in the reserve if that had been done from the beginning?

A. That is correct, naturally it would. That is pure arithmetic.

Mr. Baldridge: That is assuming the straight line method?

The Witness: Yes, sir.

By Mr. Littman:

Q. Which the company has been doing?

[fol. 8575] A. As I testified in my direct testimony, to me there is no difference whether you use the straight line method or the sinking fund method.

Q. You get the same result, according to your testimony?

A. With proper application of all the principles, you will come out with the same answer.

Q. All right. In place of the $1,526,600 of depreciation which has been set up on the books of the company as represented by the balance in its depreciation reserves at June 30, 1941, you propose to deduct $310,226.50, do you not?

Trial Examiner: Will you read the question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: What we are attempting to do in this exhibit is to determine the value of this property as of June 30, 1941, its dollar value. I contend that the value does not follow the straight line method.

By Mr. Littman:

Q. All right. Now, are you saying that the amount of $11,951,034.05, which is the total of the column headed

"Original Cost Depreciated to Present Condition", represents the value of this property at June 30, 1941?

A. You had better read that to me.

(Whereupon, the pending question was read by the reporter.)

The Witness: Correct.

[fol. 8576] By Mr. Littman:

Q. Now, in arriving at this so-called "value" you have deducted the observed depreciation of $310,226 rather than the actual book depreciation of $1,526,600. Is that right?

A. Yes.

Q. Now, you are familiar with the fact that the Panhandle Eastern Pipe Line Company recently, as a matter of fact during the past three weeks, acquired Michigan Gas?

A. Yes, sir.

Q. In arriving at this purchase price, did they deduct your $310,226 of "Observed Depreciation" or did they deduct the book reserves of $1,526,600? Can you answer that directly, first, and then explain it, if you wish?

A. I do not know what method was used in their negotiations of that sale and purchase.

Q. Well, you know, do you not, that Panhandle Eastern Pipe Line Company paid Columbia Gas & Electric Corporation for Michigan Gas on the basis of the net investment?

A. I understand so, generally, yes.

Q. And the method of arriving at that price, which was the net investment, was by deducting the actual book depreciation from the gross investment?

A. I think the method used in this purchase and sale was a shotgun method, myself.

Q. Now, will you answer my question, please, and then [fol. 8577] we will talk about the shotgun marriage? Suppose you answer my question first. I want to, first, know whether that is the way they arrived at it?

A. You mean the calculation that was made to determine the purchase price of the property which Panhandle—

Q. (Interposing) Well, first, is it your understanding, as it is mine, that Panhandle Eastern paid for Michigan Gas on the basis of the net investment in the property?

A. I think that is correct, that is my understanding.

Q. And the net investment was arrived at by deducting the full depreciation reserve of the gross investment, is not that right?

A. Well, you naturally would.

Q. If there is any question about it, I want to clear that up.

A. That is correct.

Q. Now, you are intimating that Panhandle Eastern Pipe Line Company did not pay the value of the property to Columbia Gas & Electric Corporation?

A. In my opinion, the value of Michigan Gas Transmission would be in excess of the amount that the Panhandle Eastern company paid for it.

Q. Not in the opinion, however, of Panhandle Eastern?

A. Why, it means that they made a good buy, Panhandle Eastern. If they agree with what I am saying, they [fol. 8578] made a good buy.

Q. And according to your testimony, Michigan Gas Transmission Corporation did not make a good sale?

Mr. Culton: You mean Columbia?

Mr. Littman: All right, Columbia Gas & Electric Corporation did not make a good sale?

The Witness: From their own standpoint, probably, it was a good sale for them to make, under the conditions and unusual problems confronting them.

By Mr. Littman:

Q. They were satisfied, were they not, to accept this amount of money that was paid by Panhandle Eastern Pipe Line Company for Michigan Gas?

A. Why, I do not imagine that they would have closed the deal if they were not satisfied with it.

Q. Everybody seemed satisfied with it but you, Mr. Green. Now, I would like to have you tell me what causes you to be dissatisfied with the arrangement that was entered into between Columbia Gas and Panhandle Eastern.

A. Let me make this statement, it will be very broad, probably, you might think. I think that with most any

utility company, its sale value exceeds its net investment per books.

Q. Did Columbia Gas—

A. (Interposing) I will put it this way: I do not think you could go out and buy one out of 50 utilities, that is, [fol. 8579] if they are well managed, and earning on the rate base a fair return, on the proper base. I do not think you could buy the property in normal times for its net investment per books. I think they usually sell in excess of that amount.

* * * * * * * * *

[fol. 8580] By Mr. Littman:

Q. Well, you just spoke about a shotgun marriage of some kind. Now, what was forced about this thing, this sale?

A. My thought was this, I do not believe that Columbia Gas & Electric Corporation would voluntarily sell this property, but on account of the Securities and Exchange Commission's rulings under the Holding Company Act they have to sell it and they were told that they had to dispose of it.

Q. They did not have to sell it to Panhandle Eastern at this price, did they? They could have sold it to somebody else at a higher price if they could have got a higher price?

A. From what Mr. Lee said, apparently, there was some commitment.

Mr. Lee: I was asking you if there was something of that kind that you knew about.

The Witness: I am not familiar with the law suits that are pending against Columbia Gas and Columbia Oil and Panhandle and Missouri-Kansas.

By Mr. Littman:

Q. But you have characterized this arrangement as a shotgun marriage. Now, I want you to point out what characteristic of this sale causes you to describe it in that way.

[fol. 8581] A. Well, the S. E. C., it is my understanding, has, perhaps, ordered,—I think they have ordered Columbia to dispose of this property and others under the Integration Act.

Now, how could they sell this property to anyone other than Panhandle, because you have a pipe line here stuck out in the Indiana-Illinois line hundreds of miles away from a natural gas field and the company with a contract only running 16 years longer for a supply of gas?

Mr. Baldridge: And the main contract is substantially less than that.

The Witness: Substantially less than 16 years, yes.

By Mr. Littman:

Q. Do you know whether Columbia Gas & Electric Corporation made any effort to sell to anyone else?

A. Not that I know of.

Q. Do you think they were negligent in selling Michigan Gas to Panhandle Eastern at the net investment?

A. No, their reasoning, I do not know what their reasoning was.

Q. The Securities and Exchange Commission approved this sale, did it not?

A. Yes, sir.

Q. Do you think the Securities and Exchange Commission would approve this sale if it felt that the owners of Michigan Gas were not receiving a fair price for Michigan Gas?

[fol. 8582] A. Well, under the Act if they approved a sale they have to approve the value amount.

Q. And they found the value to be proper, just and reasonable?

A. Proper and reasonable in their opinion.

Q. But not in your opinion?

A. That is correct.

Q. Do you think Columbia Gas could have got even more for Michigan Gas than it did?

A. I do not know.

Q. Do you know whether Columbia Gas & Electric Corporation appealed from the Securities and Exchange Commission's decision of approval of this sale?

A. Well not, to the contrary they must hav approved it in the hearings.

Q. All of which indicates that they were satisfied, does it not?

A. Certainly.

Mr. Culton: Whether contented or not.

By Mr. Littman:

Q. Regardless of what your opinion is as to the fairness of this price, Mr. Green, are not the consumers entitled now to derive any benefits that may flow from Panhandle Eastern's good fortune in purchasing Michigan Gas?

A. I do not think that that is the determining factor, [fol. 8583] this sale price. For example, suppose that Panhandle Eastern paid 50 percent greater in amount than they did pay for this property, I do not think that that would be the yardstick or the rate base under which rates would be fixed.

Q. Will you please answer my question, Mr. Green, whether it is determinative or not?

A. I say that rates are not based on the sale or purchase price of properties.

Q. They should not be based upon that?

A. Certainly not, they should not. It would be very much against the interest of the consumers all over this country if that would be held to be the method of rate making, to use the purchase price as the rate base, because I know of many properties that were purchased far in excess of a proper rate base.

Q. Do you think Panhandle Eastern Pipe Line Company is entitled to earn a return on something in excess of the price which it paid for Michigan Gas Transmission Corporation?

A. If you use original cost as the rate base, I think you have to take into account other factors in determining the percent return that the stockholders should receive.

Q. Can you answer my question yes or no, Mr. Green?

A. I cannot answer by saying yes or no, it would be misleading.

Q. There is some doubt in your mind about the question, is there?

[fol. 8584] A. I am not in doubt about my own opinion in this matter.

Q. What I am speaking is your opinion, Mr. Green.

A. I am saying that I do not think that rates should be based on the purchase price of properties.

Q. Even though the purchase price represents the actual cost less the depreciation reserve?

A. I do not think that is the point, no.

Q. That would not make any difference to you?

A. No.

Q. And, even though Panhandle Eastern Pipe Line Company paid on the basis of original investment less depreciation reserves, in your opinion, they are entitled to something in excess of that?

A. No. I am saying this, you take that figure then and on the other side of the equation in determining the per cent return then you have some other factors to consider which we have considered and have put into these exhibits.

Q. All of which results in giving Panhandle Eastern a larger rate base?

A. Not a larger rate base, no, because in our exhibits here we are using original cost of Michigan Gas Transmission Corporation.

Q. Mr. Green, you give considerable lip service to original cost. You are not using original cost at all, are [fol. 585] you, in your exhibits?

A. Absolutely we do, sir.

Q. I see. Well, we will come to that a little later, Mr. Green, and we will see what the effect is after you get through using it, but right now do you deny that after you get through with your arithmetic you come out to precisely the same result as though you had used reproduction cost?

A. That is correct, but that does not make our method or answer wrong.

Q. But you come out at the same place precisely as though you had used reproduction cost. Is that correct?

A. That is pure arithmetic. You can make the two calculations and they will be the same.

Q. Is that correct? Is your answer to my question yes?

A. I say the two answers would be exactly the same but a different method of calculation.

Q. Do you think it would be any comfort to the gas consumer that you started out with original cost if, in the final analysis, his rates are the same as though you had used reproduction cost?

A. Well, as I said in my direct testimony, there is no difference between the two. You can use reproduction

cost or you can use original cost if you properly define what is a fair rate of return.

Q. And as you define it, you get exactly the same re-
[fol. 8586] result [regardless] of which you use?

A. You mean the over-all amount that the company should receive in dollars figures out arithmetically the same. Correct.

Q. Almost to the penny, as a matter of fact, does it not?

A. If you use the same factors, yes, sir. Two times six is twelve and three times four is twelve.

Mr. Baldridge: Mr. Littman, what I was going to suggest was that I think you used the wrong word there. You may not have. I thought you used "original cost" at one point where you meant [so] say "reproduction cost." I may be wrong. I think the record will show.

Mr. Littman: I think the record will show that we understand each other on this point.

By Mr. Littman:

Q. Let's exam ne Exhibit No. 92, again. Now, you have an item under "Transmission Plant" called "Land Rights" which has an original cost of $241,467.33. Is that right?

A. That is right.

Q. Now, that is what those land rights cost when first acquired, new. Right?

A. Yes, sir.

Q. Those are rights-of-way, are they not?

A. Yes, sir.

Q. For the main transmission lines and other lines?
[fol. 8587] A. Yes, sir.

Q. Now, at least five years have elapsed since they were acquired. Is that right?

A. Yes, about.

Q. Probably having been constructed in about 1936. How much do you deduct for depreciation on those rights-of-way?

A. There is no deduction made here by the engineers in this calculation. There is no deduction made.

Q. The company has been making some deduction on their books for depreciation on rights-of-way, have they not?

A. The over-all depreciation they have been setting up would be against all amounts in the capital account and this is in the capital account.

Q. At the 3 percent rate which the company has been applying to its lines the annual amount being set aside will amount to $7,244 per year or approximately $40,000 over the 5½ years of the expired life of the company. Is that about right?

A. That is correct. I do not know whether the company, though, in their calculations of percent,—sometimes in the plant account land is not considered a depreciable item, you see.

Q. Well, this is not land, this is land rights-of-way.

A. Yes, but I say I do not know whether they do use that or not.

Mr. Littman: Mr. Spitznagle may be able to advise us [fol. 8588] as to that.

Mr. Spitznagle, does the company depreciate its rights-of-way on its books?

Mr. Spitznagle: I am trying to check it, Mr. Littman, and see whether or not they included the figure in the computation.

Mr. Chamberlain: Refer to Page 76 of the new prospectus there and you will find that that is excluded.

Trial Examiner: Perhaps you should identify what you refer to as the "new prospectus."

Mr. Chamberlain: It is the prospectus for $10,000,000 of first mortgage bonds.

Trial Examiner: Can't you give the exhibit number?

Mr. Chamberlain: I do not know the exhibit number.

It is Exhibit 146. That refers, however, only to land; I do not know that it includes land rights.

It says, "It is the policy of the company to provide the reserve for the retirement of property by the accrual of an annual provision equal to 3 percent of the balance in the property account at the beginning of the year (exclusive of land and contributed property, and exclusive of

automobiles and special tools which are depreciated over their estimated useful lives)".

Mr. Baldridge: That is what I was pointing out earlier, Mr. Littman, when I said the 3 percent was not applicable [fol. 8589] to everything, but to the great bulk of property.

By Mr. Littman:

Q. Mr. Green, the statement which has just been read into the record by Mr. Chamberlain indicates that the company depreciates its rights-of-way, isn't that correct?

A. I would infer so from this statement, yes.

Q. But you do not?

A. What is that?

Q. You do not?

A. The engineers did not depreciate that amount.

Q. In setting up your annual allowances for depreciation in Exhibit No. 104, do you depreciate those rights-of-way?

Mr. Baldridge: Aren't you confusing two things there, Mr. Littman? Aren't you confusing depreciation and amortization?

Mr. Littman: I am not the least bit confused.

By Mr. Littman:

Q. Are you confused, Mr. Green? Do you have difficulty in understanding me?

A. In Exhibit 104, there is reflected a calculation which shows we amortized the full original cost of land rights over the period of 24½ years.

Q. You recognize that these rights-of-way do, in fact, depreciate after June 30, 1941, do you not?

A. That was not the purpose of our calculation. Our [fol. 8590] calculation was to amortize the expense of land rights over the 24½ year life.

Q. Have you deducted anything in Exhibit 92 for amortization by reason of the claimed exhaustion of the gas supply?

A. Michigan Gas Transmission Corporation owns no producing wells. I do not get your question.

Q. Have you made any deduction from original cost in Exhibit No. 92 for any amount which represents the accrued amortization to June 30, 1941?

A. Per books?
Q. Yes.
A. No.
Q. Well, for anything else, have you?
A. They are two entirely different items.
Q. You can tell me whether you did or did not, Mr. Green.
A. What we were determining in Exhibit No. 92 was the value of this property at the date that regulation began which, in this case, is June 30, 1941, and what happened in prior years when there was no regulation, what the company charged on its books for depreciation, I do not think is applicable here.
Q. Well now, you have set up in your provisions for annual allowances for depreciation, an amount with which to reimburse the investors by reason for the claimed exhaustion of the gas supply over the remaining purported 24½ year life of the Transmission Corporation?
[fol. 8591] A. As applied to the long-term investment.
Q. That is practically all of it, isn't it?
A. Percentage wise, yes. The long-term investment is a very large percentage of the total, correct.
Q. 90, 97, if not even more?
A. I should say in this property, pipe and compressor stations would represent 85 percent, maybe more, of the total plant account and the life of both of those items would be far in excess of the 24½ year period that we are using here.
Q. Now, when you go about setting up annual allowances for depreciation, you make those allowances sufficiently large to cover the amortization of the property by reason of the claimed exhaustion of the gas supply, do you not?
A. Yes, when you are amortizing the investment here over a fixed period. Depreciation, as generally used, refers to the life of the property continuing in business, if you are in a business that has an infinite life. Here, we have a business that has a finite life so it is really amortization of the investment rather than depreciation. I think we both would be clearer in our discussions if we used that definition.
Q. I am going to ask you a question and I would like to have you answer this question yes or no, Mr. Green, be-

cause I am fearful that this record is going to be utterly confused unless I have some direct answers to some of these questions.

I read from the Uniform System of Accounts prescribed [fol. 8592] for natural gas companies by the Federal Power Commission.

"Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities and, in the case of natural gas companies, the exhaustion of natural resources."

That statement appears on Page 4. In Exhibit No. 92, have you deducted anything whatever for that element of depreciation which is described in this Uniform System of Accounts as the "exhaustion of natural resources"?

A. I do not know how to answer that question with yes or no. This is not a depreciation—

Q. (Interposing) I do not know how we can even discuss this subject then. Don't you know what Exhibit 92 purports to represent?

A. I do.

Q. Have you or have you not made any deduction from original cost in Exhibit 92 for the element of depreciation which is described by the Federal Power Commission in its Uniform System of Accounts as "the exhaustion of natural resources". You either did or you did not.

A. I cannot answer the question the way you express it, Mr. Littman. I am sorry, but I cannot.

Q. All right, you say you cannot answer my question. Will you tell me why you cannot answer my question? In [fol. 8593] the first place, don't you understand it?

A. No, I am not quite clear just what you are referring to because you are trying to read something in this statement which is not in the statement. The purpose of this exhibit No. 92 is to determine the value of this property based on its original cost as of June 30, 1941. That is the purpose of this exhibit, to determine its dollar value.

Q. Mr. Green, if this property were to be abandoned tomorrow by reason of the claimed exhaustion of the gas supply, would it be worth as much as the original cost less depreciation which you show on Exhibit 92?

A. It certainly would not.

Q. Have you deducted anything from original cost by reason of that element of depreciation?

A. We begin with this figure of $11,951,000. We used that. That is the value as of June 30, 1941. We begin from there in our later exhibits and amortize that over 24½ years.

Q. Will you answer my question, please? Have you deducted anything from original cost in Exhibit No. 92 which would reflect the element of depreciation described in the Uniform System of Accounts as "the exhaustion of natural resources"?

A. There is no amount deducted in these calculations as shown on Exhibit No. 92 that is based on the life of the gas field. Does that answer the question?

[fol. 8594] Q. Yes, that answers my question.

A. Very good, sir.

Q. And that is a pretty important element in determining what the value of a property is, is it not?

A. This is the beginning point here. This figure is the beginning point and then we are going to amortize that, which we do in the other exhibits, over 24½ years. We determined the amount per year that should be charged against earnings to cover that.

Q. If you were purchasing a gas property, Mr. Green, and you had two propositions; you had one company whose gas supply was going to last 25 years and another one whose gas supply was going to last only 10 years and, so far as could be observed, the physical depreciation was the same and all other elements were equal, would you pay as much for the property whose gas supply was going to last only 10 years as for the company whose gas supply was going to last 25 years?

A. That all depends on what these two properties are earning, doesn't it? What I would pay for it would depend on what they are earning.

Q. I said all other things being equal, the same earnings.

A. If the conditions are all the same, there would be no difference because you get your money back at the end of 10 years on the one company and you get it back in 20 years, did you say, on the other company and you only get

[fol. 8595] a certain fair return per year on the amount you pay for the two properties.

Q. Would your answer be the same if there were only one year remaining gas supply on the property—

A. (Interposing) If the company was receiving all of these factors and elements that they should receive, there would be no difference.

Q. In other words, you would amortize in the last, single, remaining year of the life of the property which I have described, the entire investment and shut your eyes to the amount that has been accumulated on the books of that company for that purpose in the past?

A. What was accumulated on the books of the company prior to regulation, I do not think is important or of any use and we have not used it in any way in preparing these exhibits.

Q. Mr. Green, you started on June 30, 1941, notwithstanding the fact that the Natural Gas Act became effective in the middle of 1938, didn't you?

A. Yes, but I think in the Natural Gas Pipeline of America case, that the Circuit Court, at least, gave some statement on that. I have forgotten exactly what it was but the time element here is so short between the two dates, that it would not be material.

Q. Two and one-half years is not material?

[fol. 8596] A. What?

Q. Two and one-half years is not material, in your opinion?

A. It would not have made any difference in these calculations here.

Q. Probably not the way you calculated it, Mr. Green, but I am asking you why you did not start your calculation on the date the Natural Gas Act became effective rather than as of June 30, 1941?

A. We could have made calculations and determined value as of that date. It probably would make no difference.

Q. It probably would have been better, did you say?

A. No, I do not think it would make any material difference.

. . . . . .

Q. Mr. Green, if you sent your engineers out to make a depreciation study by the observation method one day be-

fore the exhaustion of the natural gas supply, would they find any different percent condition than that which they would find if there were an inexhaustible gas supply on that property?

A. Are you referring to this assignment here, the comparable assignment here?

[fol. 8597] Q. I am referring to the method used by your engineers, yes.

A. If the engineers would go out on this property, as they did, the percent condition that they would find would be the same whether the expected life of the gas reserves was one year or 100 years.

Q. Or one day or 100 days?

A. Correct. The life of the field has to do with the period of amortization. We are speaking here of determining values as of some date, which was June 30, 1941.

Q. Well, aren't your engineers, when they ignore the fact that the gas supply in one instance is to be exhausted within one day after they examine the property, ignoring a very important element that goes into the determination of the value of the property?

A. There is a percent condition based on the original cost of the property. Now, whether the property is going to be used one day or 10,000 days after that date is not an element that they even should consider in determining the percent condition of value. There is no relation between the two points. One has to do with determining value and the other thing that you are discussing is the period of amortization.

Q. In other words, when you go about to make a determination of the amount of dollars to be provided annually for depreciation, you take into account the important factor of the claimed exhaustion of the gas supply; [fol. 8598] but when you go about making a determination of the amount of depreciation to be deducted from the rate base for rate making purposes you ignore that fact. Is that what you say?

A. Not at all. I do not believe you have stated your own position there. I believe you have confused the two elements there.

Q. What is there about my question that seems to be confusing to you?

A. I am reminded of the story of the chap that says, "Do you see that big red house?"

"Yes."

"Well, that is not the one."

Q. Well, perhaps we can get at it this way, Mr. Green: You have stated that your deduction from original cost for depreciation does not reflect anything that has not been provided for in the past by way of amortizing the property over the life of the gas supply.

A. In Exhibit 92 the book depreciation is not reflected.

Q. But when you set up your annual allowances in Exhibit No. 104 you do include that element, do you not, namely, the element of making a provision for the amortization of the property over the life of the claimed gas supply?

A. Correct.

Q. Do you believe in harmonizing the annual allowances [fol. 8599] for depreciation with the amount to be deducted from original cost for depreciation?

The Witness: Will you read that?

(Whereupon, the pending question was read by the reporter.)

The Witness: I do not understand your question, Mr. Littman, and I am not trying to be evasive, sir.

By Mr. Littman:

Q. Yes. Well, I think I can make it clear by reading an excerpt from the Commission's Opinion No. 63 in the matter of Chicago District Electric Generating Corporation, Docket No. IT-5500:

"The true conception of depreciation leaves no room to doubt that annual depreciation expense and actual depreciation must be harmonized. Annual depreciation measures the diminution in service life, capacity or utility in one year—actual existing or accrued depreciation is the total diminished service life, capacity or utility to the date of inquiry. To accept the one while denying the other is to be illogical and guilty of employing dual standards

with resulting injustices to the public or to the utility. The principles are identical which govern the estimate of loss in service capacity for both accounting and valuation purposes'."

Do you subscribe to the principles which I have just read?

A. I do not as applied to the Exhibit 92.

Q. Well, of course, if you have not applied the Com- [fol. 8600] mission's principles for purposes of Exhibit No. 92, which is one part of the harmonizing feature, you, of course, are saying that you have not applied the Commission's rule at all, isn't that true?

A. I think in my direct testimony, as well as in my testimony this morning, that I answered that question.

Q. Affirmatively?

A. No.

Q. Well, have you in respect to Exhibits Numbers 92 and 104 harmonized annual depreciation with accrued depreciation as that term is defined in the Commission's opinion in the Chicago District Electric Generating case?

A. Exhibit 92 is determined value as of June 30, 1941. We used that value, which is original cost depreciated to percent condition, and determined the annual dollars necessary to amortize that original cost investment.

Q. Now, will you answer my question, please, Mr. Green?

The Witness: Will you read the question?

(Whereupon, the question commencing at Line 9 of this page was read by the reporter.)

The Witness: I cannot answer the question.

By Mr. Littman:

Q. Why can't you answer the question, Isn't it clear?

A. Well, I think I clearly stated how we had determined Exhibit 92, the figures shown there, and how we used them [fol. 8601] in Exhibit 104. Now, if you want to make any comparisons with the method that I have set up here as against any Commission ruling or any Court ruling, it is perfectly all right. That is your business, but I do not want to be interpreting some Court decision or some Commission's decision.

Q. Well, I have read you an excerpt from the Commission's opinion in the Chicago District Electric Generating case and I merely asked you whether you applied those principles to your depreciation studies which you have offered in this proceeding?

A. Mr. Littman the two cases are not comparable. The Chicago District Generating Electric Company is a utility with an infinite life. This property here is a property that has had regulation over many years, too, by the way.

Mr. Baldridge: You mean—

The Witness: (Interposing) In the Chicago District Electric Generating case.

Here you have a business that is taken over—I don't know, I am using the words "taken over" advisedly, but they have taken over the property as of the date of regulation when the Act was started. Prior to that there was no regulation of the natural gas pipe lines. Here we have a property with a finite life and the two cases are not comparable in any way, in my opinion.

Q. Are you saying that on a property with a finite life [fol. 8603] that the Commission's principles, which I have read to you, cannot be applied?

A. Well, the principles that they are referring to there, as I remember your reading that statement, they are referring to an entirely different situation, entirely different conditions than we have in this case here, entirely different; the two are not comparable.

Q. Do you agree with the statement, "Actual existing or accrued depreciation is the total diminished service life, capacity or utility to the date of inquiry"?

A. With a business that has been regulated throughout as the Chicago District Electric Generating Company has and which has an infinite life.

Q. Does Exhibit No. 92 have any figure thereon that represents "actual existing or accrued depreciation", as measured by the "Total diminished service life, capacity or utility to the date of inquiry"?

A. If the measured life that you speak of is on the straight line depreciation, it does not.

Q. Well, you do not agree with this principle anyway, do you, that I read to you from the Chicago District Electric Generating case?

A. I do not think that the value of all property in the public utility business, each item of property, decreases in the same amount from year to year as you would set up [fol. 8603] on a straight line basis. I think that is purely an accounting device for amortization of property values and that does not mean that the value of that property goes off in the same direct proportion, and it does not, either.

I will give an example. In my opinion a compressor station that is similar to the ones that are installed and in use by this company, that the actual value in dollars of one of those compressor stations is greater, the value is really greater one year after it is installed and operated than it is the day it is installed and has never been rolled over or used for the obvious reason that some use of that equipment should get all the bugs out and it really has a greater value than it did the date that it was first installed.

Q. You think that the consumer should pay a return upon the unearned increment which represents the additional value that you have just described?

Mr. Culton: I would like to know what that is.

The Witness: No. Mr. Littman, when we determined the annual amount here for amortization, it is based on straight line discounted.

By Mr. Littman:

Q. Now, Mr. Green, what I want to do is to discuss your example. What you are saying is that if a compressor engine is installed today at a cost of $100,000 that it is worth more a year from today by reason of the fact that [fol. 8604] it has been worked for a year and operates a little more efficiently than when first installed. Is that right?

A. May I state what I meant by that statement?

Q. Yes.

A. You install a compressor station today that costs $100,000 and it is placed in operation and we will assume

that that compressor station has a finite life of 25 years. The annual depreciation rate would be 4 percent of the $100,000 or $4,000. My point is that at the end of one year the value of that compressor station would be greater than $100,000 less $4,000 or $96,000.

Q. And you would have the ratepayer pay on the basis of what you call the present value. Is that right?

A. No. We were determining the value here as of June 30, 1941, that is what we were determining here. Then, we start from that day and we depreciate it on the straight line basis, discounting the amount to go into a fund compounded semiannually as shown later in the exhibits and which develops the sinking fund method.

Mr. Goodman: Well, you do not answer Mr. Littman's question. Now, who is going to pay you that appreciated value?

That is what I think he means.

The Witness: What we were trying to determine in Exhibit 92 is the value based on original cost of this property as of June 30, 1941. Now, let's get that clear. That is [fol. 8605] the purpose of this exhibit.

By Mr. Littman:

Q. Mr. Green, I am asking you to talk about your own hypothetical case of a compressor engine installed today, having a value of $100,000.

A. Yes.

Q. Now, you say that if it is five years old and has an over-all life of 25 years and has a remaining life of 20 years that for bookkeeping purposes the reserve would be 20 percent, let us say, 20 percent.

A. Yes.

Q. Of the original cost.

A. On straight line.

Q. Or $20,000.

A. On straight line, yes sir.

Q. Now, by the observation method, according to you, you would not find anything like $20,000 of depreciation on that station, would you, on that compressor engine?

A. If you were determining value, not amortization, but if you were determining value as of that date.

Q. By the observation method?

A. Yes, you would not. They would not be the same.

Let us put it this way: Suppose the compressor station cost $100,000 and we will suppose that the life of the gas field is only two years. All right, one year later you would [fol. 8606] have amortized 50 percent of that station, wouldn't you? It would be $50,000. I am claiming that the value of that compressor unit might be $75,000 as of one year hence, although the books would reflect that you have written off 50 percent of the amount.

Q. Now, Mr. Green, let's go back to your original illustration and not confuse the issue. We have a compressor engine installed today at an original cost of $100,000. The over-all life of the gas supply is 25 years and 5 years have elapsed. You will have provided 20 percent of the original cost or $20,000 in a depreciation reserve to take care of the amortization. Is that right?

A. Five years hence it would be that.

Q. That is right.

A. From now.

Q. You have that?

A. Yes, that is correct.

Q. Now, you have stated that for rate making purposes you would not use the remaining $80,000 as the rate base, because you say that does not represent the value of the machine. Is that right?

A. No, sir, that is not correct, for this reason: You get the two dates wrong. You say "if you built a compressor station today." If we built it today, the Natural Gas Act is in effect, so you spend the dollars today and you are as- [fol. 8607] suming that the life of the field is 25 years. Five years from today you will accrue 20 percent. Correct? But you would not determine any value then.

Mr. Goodman: Why not?

The Witness: What would use the figure for, sir? It has nothing to do.

Mr. Goodman: Suppose we have a rate case at that time now?

The Witness: It would not make a bit of difference. You would not use this percent condition at all under this case

now that you are going to build it today. You do not use percent condition.

Mr. Goodman: That is exactly what we want to find out. In other words, because the Natural Gas Act is in effect and for a property on which the Natural Gas Act has been in effect from the beginning, you would say that percent condition is inapplicable in determining the rate base?

The Witness: Percent condition would have nothing to do with the rate base; under the theory I have set up here you know what the original cost is. You built it today under the Natural Gas Act when it is in effect.

Mr. Goodman: And the only reason that you have used percent condition in this case is because you claim that, in the absence of regulation, the property is worth at least its original cost less an amount deducted dependent upon [fol. 8608] its percent condition?

The Witness: Correct, yes, sir.

Mr. Goodman: And that is the justification for your percent condition in this case, namely, you felt that you should determine a value apart from regulation?

The Witness: Apart from regulation?

Mr. Goodman: Yes.

The Witness: What do you mean "apart from regulation"?

Mr. Goodman: In the absence of regulation.

The Witness: No, the property was prior to regulation so what we are trying to arrive at here is the value as of the date of regulation.

Mr. Goodman: That is it. Now, you determined that, you say, on a structural value?

The Witness: Percent condition of original cost.

Mr. Goodman: By the way, is the term "structural value" familiar to you?

The Witness: No.

Mr. Goodman: I see, all right. Now, then, had regulation been in effect prior to 1936, you then are clear that that

method of determining the present value of the property would not be applicable?

The Witness: By this method?

Mr. Goodman: Yes.

The Witness: It would not.

[fol. 8609] Mr. Littman: By "this method," you mean the observation method?

The Witness: Yes. It would not.

Mr. Baldridge: That is based on the fact you used original cost as a rate base?

The Witness: That is correct. In other words, if the Natural Gas Act had been in effect in 1933—

Mr. Goodman: (Interposing) Yes.

The Witness: (Continuing) —or prior to when this property was constructed, you would not use this method at all, sir. I would not use it.

Mr. Goodman: Now, will you tell me what method you would use?

The Witness: As I have applied it here to Exhibit No. 104?

Mr. Goodman: No.

The Witness: I mean if I was running the whole show?

Mr. Goodman: No, assuming regulation had been effected since the inception of the investment.

The Witness: Yes.

Mr. Goodman: What method would you use to accomplish a revaluation?

The Witness: I would not have any revaluation, sir.

Mr. Goodman: You would not find it necessary?

The Witness: It would not be necessary, no. You would not determine the percent condition. It would not be needed.

[fol. 8610] Mr. Littman: You would use the original cost less the reserves for rate base?

The Witness: If you use original cost as the rate base as we have done here, with certain corrections due to the purchasing power of the dollar, if you use original cost as the rate base and the sinking fund method, you do not deduct book depreciation.

By Mr. Littman:

Q. Suppose you used the straight line method of setting up annual allowances for depreciation, would you then deduct the depreciation reserve from the original cost?

A. No, you use the average investment over the life. You get the average investment over life.

Q. Even then you would not deduct the depreciation reserve? A. Yes, you do.

Q. You do?

A. On the straight line method, say you have a property with a life of 25 years, it is 4 percent per year. Now, under the straight line method, you start off the first year with $100. You earn on $100, don't you? The second year, you have $96 left in the business, the third year $92 and so on down, but to determine the amount that this company should earn per year, you average that and you get the average investment. Otherwise, you would have to [fol. 8611] adjust rates each year which, of course, you would not want to do so you use the average investment.

Mr. Goodman: Now then, you have pointed out that, as you would apply it, there is little, if any, difference between the straight line method and the sinking fund method in its application, haven't you?

The Witness: In my opinion, there is no difference.

Mr. Goodman: You mean in their use in determining the proper price of service, that is the way you mean it?

The Witness: Yes, how much should this company earn—

Mr. Goodman: (Interposing) In a calculation of rates to determine the proper price of service, there is no difference in the result?

The Witness: Whether you use straight line or the sinking fund method—

Mr. Goodman: (Interposing) All right.

The Witness: (Continuing) —both properly applied.

Mr. Goodman: Now, is that comparability, in your mind, predicated upon the basic thought that you should, in applying the straight line method average the investment outstanding over the life of the property?

The Witness: That is correct.

Mr. Goodman: In other words, let's take this example: Let's get down to a 10-year, $100 value, having a 10-year life and no salvage. Now, on the straight line method, [fol. 8612] that property will decline in value from $100 to $10, is that right, or to zero?

The Witness: To zero, correct.

Mr. Goodman: So the average investment will be $50, is that right?

The Witness: That is right.

Mr. Goodman: Consequently, you would use $50 as your rate base?

The Witness: The average.

Mr. Goodman: For the price of service.

The Witness: That is correct, roughly.

Mr. Goodman: And that would make it comparable to a price of service determined by the application of the sinking fund method, is that correct?

The Witness: That is correct.

Mr. Goodman: Well now, let's try it a different way that I think will make the thing more clear because I am not sure about the applications of an average property value. This much is clear, that if you compute the price of service under the straight line method and assume that you want your concern or your unit or your enterprise to make 6 percent on its investment, it would have to charge,

in the first year, $10 for depreciation, $6 for return or $16, is that correct?

The Witness: Correct.

Mr. Goodman: Now, in the last year, you would have to [fol. 8613] charge for service $10.60, isn't that right?

The Witness: That is correct.

Mr. Goodman: Now, if you took $16 and $10.60 and you averaged that, you would get a figure of about $13.50, wouldn't you?

The Witness: Average.

Mr. Goodman: An average?

The Witness: That is right.

Mr. Goodman: Average price for service for annual output, is that right?

The Witness: That is right.

Mr. Goodman: And it so happens that that figure would compare with the result under the sinking fund method, isn't that so, which is exactly $13.59?

The Witness: Assuming your mathematics is correct, the principles, I agree with you. There is no difference at all between the two.

Mr. Goodman: There is no difference?

The Witness: Under the sinking fund method, you will come out with the same annual amount per year for amortization plus return on the investment.

Mr. Littman: Using the same rate of interest for the sinking fund as you used for a return, is that right?

Mr. Goodman: What happens—

Mr. Baldridge: (Interposing) I submit the witness can [fol. 8614] only be expected to answer one question at a time.

Mr. Goodman: The question is mine and I am going to rephrase what Mr. Littman has in mind.

Now, it happens that these figures come out approximately correct where a 6 percent rate is being applied. Would you say that they come out in the same way with respect to any rate of interest?

The Witness: Correct.

Mr. Goodman: They will?

The Witness: Yes.

Mr. Goodman: Have you figured it out? Have you tried the calculations?

The Witness: I mean the two, the sinking fund method as against straight line, would be the same whether you used 8 percent as a fair return or 4 percent as a fair return.

Mr. Littman: Provided you used the same rate of interest?

The Witness: In both calculations, yes. That is what I mean to say.

Mr. Goodman: Have you gone through those calculations to see if that is right at any time?

The Witness: I would not have to go through them.

Mr. Goodman: You are sure they would come out that?

The Witness: Yes, sir.

Mr. Goodman: Now you realize, Mr. Green, that your application of the straight line method is not the conven-
[fol. 8615] tional one, isn't that right?

The Witness: We have not used the straight line method—

Mr. Goodman: (Interposing). Nevertheless, you realize that your qualification of the straight line method, that is, by averaging the value at the beginning and end, from the initial value to zero or averaging the return requirement from, in the example I gave you, $6 to $10.60, is not the conventional application. You know that?

The Witness: No, in any rate case I have ever been in, it has always been done the way I say. You take the

average investment. Now, of course, a property with an infinite life, you have got different problems entirely than you have here with a property with a finite life. I want to say that again. They are entirely two different problems.

Mr. Goodman: Do you think, Mr. Green, that by using, in the example I gave you, the averages which you have mentioned that one can, with a fair degree of accuracy, calculate the decline in value year by year which would ensue under the hypothesis? Do you follow me?

The Witness: I do not.

Mr. Goodman: Would this method then—

The Witness: (Interposing) Which method?

Mr. Goodman: Would this method of computation by the straight line method which you advocate and its application which you advocate, result in an approximate determination of value year by year under the hypothesis of the problem, that is, the 10-year life, constant service and no salvage at the end? [fol. 8616]

The Witness: Well, if you were to charge the ratepayers per year the amount that you gave, $10 or $16 the first year?

Mr. Goodman: Yes.

The Witness: And down to the last year, the ratepayers would pay $10 plus 60 cents.

Mr. Goodman: You do not think that is right, do you?

The Witness: Well, I think it would be almost impossible to run a business that way because you are going to be lowering rates each year.

Mr. Goodman: Now, it would not occur to you, Mr. Green, that the freight consignee should pay a less sum depending on whether the freight was hauled in a new car or an old one?

The Witness: I would not think so, no.

Mr. Goodman: In other words, if the car was about to be retired the next day, he should not receive a discount

because his freight was hauled in an old car over what he would pay if the freight was hauled in a new car?

The Witness: I would not think so.

Mr. Goodman: In other words, the value of the service he received is the same, regardless of the age of that property, isn't that right?

The Witness: That is correct, and the cost of that serv- [fol. 8617] ice has been the average life of the car.

Mr. Goodman: And that is why, if you charge your customers approximately $13.30 then, that being the average figured on the straight-line method, you would say that that would approximately be a fair price for service to yield the utility 6 percent throughout the life of the unit?

The Witness: That is correct.

Mr. Goodman: And it will do that, too?

The Witness: It will do that, that is right.

Mr. Goodman: Now, on the basis of those facts, the unit will decline in value according to a certain mathematical rule, won't it? If you assume these facts to be true—

The Witness: (Interposing) I do not know why you are now bringing in this question of value.

Mr. Goodman: You do not want it?

The Witness: I see no application.

Mr. Goodman: All right. You would say there is no need to revalue that unit at any time?

The Witness: Not at all.

Mr. Goodman: That, once having established the correct price for service, there is no reason why that should not stay that way as long as our conditions are maintaining themselves in effect?

The Witness: And the value of the dollar remains the same.

Mr. Goodman: And if you got new conditions as, for [fol. 8618] example, an extention of life—

The Witness: (Interposing) Taxes.

Mr. Goodman: (Continuing) Or the need for some enhanced rate of return, that would be the time to make an application of some new rate?

The Witness: That is correct.

Mr. Baldridge: May I ask a question there? In speaking of the average investment, you mean to include, of course, the investment that is made during the remaining life of the enterprise, don't you, Mr. Green?

I mean, you have been talking about an assumed case where you had a certain investment in an enterprise.

The Witness: And no property additions are assumed.

Mr. Baldridge: And no property additions?

The Witness: That is correct.

Mr. Baldridge: But you would have to take all property additions into consideration?

The Witness: Yes, if there were property additions made, it would change your calculations, of course.

Mr. Baldridge: And if you started with a calculation based on averages over the life of the enterprise, that average, to be accurate, would have to include all property additions made in the future as well as those made in the past?

The Witness: That is correct.

[fol. 8619] By Mr. Littman:

Q. Mr. Green, I am going to read you from Mr. Haberly's testimony at Page 8096 of the transcript. Incidentally, you know Mr. Haberly, do you not? A. I do.

Q. And you consider him a competent engineer?

A. I selected him to do this work.

Q. I read from the transcript:

"Q. Now, where original cost is used, Mr. Haberly, you would feel that it was proper, would you not, to make a deduction for depreciation that has accrued by reason of the claimed exhaustion of the gas supply?

"The Witness: May I hear that question?" . . .

"The Witness: It would depend on whether the reserves for depreciation were being accrued on a straight line or sinking fund basis.

"By Mr. Littman:

"Q. Assume that the company in question is one which is accruing its reserves for depreciation on a straight line basis.

"A. My own personal feeling in that case is that the depreciation should be deducted.

"Q. For the assumed exhaustion of the gas supply so as to reflect that element, is that right? A. Yes."

[fol. 8620] Do you agree with Mr. Haberly's testimony which I have just read?

A. What was this line of examination about, determining what?

Q. Can't you understand what we are talking about, from the excerpt that I have read, Mr. Green?

A. No. What were you cross-examining him about then? Was it this exhibit here (indicating)?

Q. Yes, I was cross-examining him—

A. (Interposing) On Exhibit 92?

Q. I was cross-examining him about Exhibit No. 92, yes.

A. Well, if I understood correctly, I do not agree with that statement.

Q. Now, it has already been stated on this record that the depreciation reserves on the books of the company at June 30, 1941, amounted to $1,526,600. Do you remember that? A. Yes, sir.

Q. Now, the company has collected that amount out of its rates, has it not? A. They have.

Q. By charges to operating expenses? A. Yes.

Q. And through charges to its customers? A. Correct.

Q. Now, what you are doing is to request that, for [fol. 8621] purposes of this proceeding, the largest part of that, namely, all except $310,226.50 be again collected from the consumers, isn't that the effect of your method?

A. No. In determining the value as the date rate making starts here, you get a certain value. From there on, we want to amortize that value and that is what we have here when we get $11,951,034.05.

Q. And if we were to follow your method, we would then return to the company again all of the amount of $1,526,600 which the company has collected in the past except $310,226.50 which latter figure represents the observed depreciation. Isn't that the effect of your method?

A. The effect would be your returning to the stockholder the value of the property as of June 30, 1941.

Q. And you make the duplication that I have just indicated, do you not?

A. I do not. I am not saying there is any duplication.

Q. You are not saying there is not any duplication?

A. No. What happened prior to regulation, I think has nothing to do with this case. Whether they set up one percent or 10 percent depreciation per books would have nothing to do with this case and nothing to do with determining value of the property as of June 30, 1941.

Q. And under your method, the investor receives again the amount which he has heretofore collected for depreciation?

[fol. 8622] A. No, I do not know whether he has received this or not.

Q. He received a large part of it, has he not, Mr. Green, it is obvious.

A. If you mean to ask me this question, Mr. Littman: The original cost of this property less observed depreciation which is given at $310,000 leaves you a net amount of $11,951,000, is that amount, $11,951,000 greater than the original cost less the book depreciation as of June 30, 1941, my answer is yes.

Q. What I am asking you is whether or not, under your method, you are again providing for a return to the investors of the amounts which they have already recouped through their past charges to amortization? You can answer that yes or no.

A. I might be wrong, Mr. Littman, in my concept of how to determine value at the date of regulation here. I might be wrong about that. I am not trying to be evasive about answering your question. I am saying what the company charged on its books, whether it had any earnings in those prior years prior to regulation, I do not

think has anything to do with this question we are trying to determine.

Q. In other words, it has nothing to do with it even though the company has already collected?

A. It has nothing to do with it, whether they have collected or have not collected, yes, sir.

[fol. 8623] Q. And even though your method does result in a duplication in recoupment of those amounts?

A. I did not say that.

* * * * * * * * *

[fol. 8624] Q. Mr. Green, will you please turn to Exhibit No. 93 entitled, "Michigan Gas Transmission Corporation—Statement of Contributions Made to Customers for Business Development for the Years 1936-1937 and Five Months Ended May 31, 1938 (Effective Date of Natural Gas Act June 21, 1938)"?

Do I understand that you have assumed the responsibility of causing this exhibit to be prepared?

A. That is correct.

Q. You have excluded in your pro forma rate base the amount of $182,626.69 which represents the total of the contributions made by Michigan Gas to its customers for what you term "business development" during the years stated in the title of this exhibit? A. Yes, sir.

Q. And all of these amounts have been originally charged by Michigan Gas to operating expenses?

[fol. 8625] A. That is correct.

Q. Mr. Spitznagle has testified that these amounts have been charged to the operating expense account called "Sales Promotion Expense." Is that your understanding? A. Yes, sir.

Q. No such amount as $182,626.69 appears in the capital accounts of Michigan Gas? A. It does not.

Q. Weren't these amounts properly charged by the company to sales promotion expense?

A. That would be a matter of business judgment.

Q. What is your judgment on the subject?

A. Personally I think that an item, an expenditure such as these items here, which was to reimburse the local company for what we call change-over expense from arti-

ficial gas to the use of straight natural gas,—it was an inducement to customers to change-over to use the service of the pipe line company and the benefits of that expense on the part of the company should be spread over the life of the business rather than charged right off in the immediate year. That is my opinion. Since these expenditures were all made and charged off prior to regulation, I think it is a proper amount. If you are going to take over this business for regulation as of June 30, 1941, I think that this amount should be included in capital to be amortized over the 24½-year period.

[fol. 8626] Q. Now, if what you suggest be done were done you would have it both ways, first, on the books of the company as originally charged to expenses and now in capital, wouldn't you?

A. It was charged to expenses per books.

Q. And now you propose to put it in capital?

A. I propose to add it to an amount here which we build up as the rate base.

Q. Then, you answer to my question is yes?

A. Well, I am not proposing that we make any entry on the company's books here. That is why I hesitated to say yes or no. I do not recommend that they make any entry on their books to credit operating expenses and charge operating expenses, credit operating expenses and debit the capital account.

Q. Well, if what you suggest be done is proper, why don't you recommend that it be properly recorded on the company's book as capital?

A. Well, this company is a subsidiary of a holding company and comes under the Holding Company Act and I do not believe that those rules and regulations would permit any such journal entry.

Q. Neither would the Federal Power Commission permit any such journal entry?

A. No, they would call it a write-up.

Q. That is what it would be, wouldn't it, Mr. Green?

[fol. 8627] A. It would be, yes. Not as the word is generally used, "write-up," no, no.

Q. Are you proposing that this Commission include a write-up in the rate base for the purposes of determining the reasonableness of the rates in this proceeding?

A. I am proposing that this Commission add to the original cost. We have here shown this amount in order to determine a rate base for this company, yes, sir.

Q. And, as you have suggested, if this amount were put on the company's books in its capital accounts today, it would be a write-up?

A. I say you would call it a write-up.

Q. I would. Wouldn't you?

A. No, no, just correcting a former entry, that is all.

Q. Well, is there any doubt in your mind, Mr. Green, that the company has already recovered this $182,626.69 from the ratepayers through the medium of past rates?

A. It was charged to operating expenses, these items were, prior to regulation.

Q. Can you answer my question yes or no?

The Witness: You will have to read the question.

(Whereupon, the question commencing at Line 15 of this page was read by the reporter.)

The Witness: No, there is no doubt in my mind but what that is the case.

[fol. 8628] By Mr. Littman:

Q. As a matter of fact, Mr. Green, expenses of this character, which have been incurred since June 21, 1938, down to the present time, have been currently charged to operating expenses of Michigan Gas?

A. That is correct.

Q. You consider that a proper way of recording the matter on the books of the company, do you not?

A. No, as I say, I think an item such as these, such as shown here, it would be better accounting to charge them into capital than to spread them over the remaining life of the enterprise than it is to charge them all into current operating expenses.

Q. In your pro forma statement, Mr. Green, have you made an adjustment to capitalize the current expenses of this character?

The Witness: Will you read that please? I am sorry.

(Whereupon, the pending question was read by the reporter.)

The Witness: We have added these amounts to the original cost less the percent condition to build up a rate base.

By Mr. Littman:

Q. For rate making purposes?

A. For rate making purposes, correct.

Q. Let's look at Exhibit 104, your pro forma statement.

This exhibit was prepared for rate making purposes, [fol. 8629] was it not, Mr. Green? A. Yes.

Q. Now, look at the item of $969,993 appearing in the first line called "Utility Income—Per Books Adjusted—12 Months Ended June 30, 1941, Exhibit 100." Do you find that item? A. Yes.

Q. That item includes whatever sales promotion expenses were incurred by the company during that 12-months' period, does it not?

A. I imagine that it does, Mr. Littman.

Q. Mr. Spitznagle I believe has so testified.

A. Yes. I do not know whether there was any such change-over expense during that year or not. I do not know.

Q. You did not instruct Mr. Spitznagle to revise that figure so as to change the amount charged to operating expenses on that account to fixed capital, did you? A. No.

Q. In your Exhibit 104, Page 2, you apply a return of 7½ percent to the full amount of $182,626 of "Contributions Made to Consumers for Business Development."

A. I do not find that item.

Q. Exhibit 104, on Page 2.

A. Well, there is shown there the cost of developing business, Exhibit 93, $182,626.

Q. What ultimate rate of return do you apply to that? I [fol. 8630] will ask you not to read the factor but to read the ultimate rate of return applied against that amount.

A. 6½ percent.

Q. After adjustment it became 7½ percent?

A. Well, this formula that I have set up, using Mr. Haberly's testimony regarding the purchasing power of the dollar to get 7.54—

Q. (Interposing) That is what I meant.

A. That is applied to that amount, yes, sir.

Q. Now, when you apply this 7½ percent retirement—

A. (Interposing) I am sorry. I am not correct. It is 6½ percent when applied on the cost of developing business. 6½ percent. We did that for this reason, Mr. Littman: Theoretically, to be consistent all the way through with this formula, we should have applied this 7.54 but we did not have any testimony in the case referring to the purchasing power of the dollar and this cost of developing business, so, therefore, we used 6½ percent.

Q. As against this $182,626 item?

A. That is correct, yes. I was on the conservative side and we thought it would be more consistent.

Q. Now, will you please compute for me the rate of return per year on this cost of developing business that you allow in dollars for purposes of your pro forma statement? A. $11,870.

[fol. 8631] Q. Now, you propose that a return of 6½ be allowed each year for the remaining 24½ years of the claimed life of the business, do you not?

A. That is correct.

Q. That would come to $290,815, would it not?

A. I have not calculated it. I am assuming that your figure is correct, 24½ times $11,870.

Q. That is right? A. Yes.

Q. If our arithmetic should not be correct, you will correct us, will you? A. Yes.

Q. Now, you also provide an annual amortization allowance for each of the remaining 24½ years for the purpose of amortizing this base amount of $182,626, do you not?

A. That is included in the amount that we amortize on the sinking fund method, compounding at 6½ percent for 50 percent of the investment and 2½ percent on the remaining 50 percent of the long-term investment.

Q. According to our calculation, over the remaining life of the property your annual allowance would amount to $133,476, computed at the rate of 2.983126 percent.

A. What is that figure?

Q. That is the total amortization allowance to be charged to operating expenses over the 24½-year period [fol. 8632] which you allowed and the interest rate which I have read.

A. No, in Line 13 of Exhibit 104 the amortization of the long-term investment and cost of developing business, based with respect to each 50 percent of this investment at its respective annual amounts which were 6½ percent compounded semiannually and 2½ percent compounded semiannually, will recover the investment, the amount being $333,935 per year.

Q. There isn't any doubt that you did amortize this $182,626? A. Yes, yes.

Q. On a sinking fund basis, of course? A. Correct.

Q. Let us see what that amounts to, Mr. Green. The company has once recovered the amount of $182,626 through the medium of past operating expenses, is that right? A. That is correct.

Q. In addition, you propose to allow a return upon that amount at the rate of 6½ percent for purposes of your pro forma statement over the remaining claimed life of the property for 24½ years, totaling $290,815. Is that correct?

A. I do not know where you get that figure, Mr. Littman. That is 6½ percent times—

Q. (Interposing) Yes, 6½ percent times $182,626.

A. Times 24½ years?

Q. Times 24½ years, yes. If our arithmetic is cor- [fol. 8633] rect, you will allow a total return over the remaining 24½ years of $290,815 on this so-called cost of business development of $182,626.

A. No, you see, Mr. Littman, under the sinking fund method, you use the full rate undepreciated, don't you, throughout in determining the amount which you charge against operating expenses but part of that amount is a return in capital and that is how; if you are using 6½ percent in today's dollars, that is how you get the earnings into the company which must be returned to the investor annually.

Do I make myself clear?

Q. Well, regardless of that, Mr. Green, you are allowing 6½ percent return on this $182,626 down through each of the remaining 24½ years?

A. No, it is averaged. You come again there to the same thing we were talking about this morning, the average investment.

Q. You just explained that you made no deduction from the $182,626 through the years.

A. No, but that is not all income is what I am saying. You calculated it that way, 6½ percent times $182,000 and that amount is included in utility income allowable that I show on Exhibit 104 in the amount of $954,572.

Mr. Goodman: I think I understand Mr. Green's theory very thoroughly and it can be cleared up if I ask a ques-
[fol. 8634] tion or so for the purpose of bringing out what he means.

Mr. Littman: Go right ahead, Mr. Goodman.

Mr. Goodman: You mean that you take 6½ percent of your beginning value and you derive a result from that which you refer to, not as the depreciation for all the years, but as the amortization sum or amount, pure and simple. Is that right?

The Witness: Part of that.

Mr. Goodman: That is the amount that you are going to set aside, literally or figuratively, for purposes of amortization?

The Witness: That is right.

Mr. Goodman: But part of that is return and part of that is interest?

The Witness: Correct.

Mr. Goodman: But regardless of how much is interest of return in any one year as your base declines, the amount of interest is allocable or apportionable as 6½ percent on the declining base?

The Witness: That is correct.

Mr. Goodman: And it works out that way?

The Witness: That is right.

Mr. Goodman: I will say, too, it does also.

By Mr. Littman:

Q. You mean to say that this amount of $182,626 will
[fol. 8635] not remain constant through the remaining

24½ years but will grow less and less in terms of depreciation, that it will be depreciated through the years?

A. It is depreciated through the years.

Q. It is depreciated through the years? A. Yes.

Q. Does your annual allowance on this item increase or decrease or stay constant?

A. Your annual allowance—are you referring to interest or income?

Q. No, I am talking about the annual allowance for amortization on this $182,000. A. That is a fixed amount.

Q. That is a fixed amount? A. Yes.

Q. I thought you deducted only observed depreciation from your rate base. Can you observe any depreciation on sales promotion expense?

A. I say we did not. That is used—

Q. (Interposing) Mr. Green, you do propose to secure a 6½ percent return on this $182,626 of sales promotion expense right down through the years, don't you?

A. May I give you an example of that?

Q. Yes, I wish you would.

A. You start off with a $100 investment. Six percent [fol. 8636] on $100 is $6. That amount remains constant in this calculation that I have shown on Exhibit 104. The item of $954,000 is comparable to the $6 item now. We will assume a 25-year life of the business.

Mr. Goodman: Could you make it 10 with just as much convenience?

The Witness: All right.

Mr. Goodman: The reason for that is I have the 10-year figures in mind.

The Witness: Assuming a 10-year life, at the end of the first year, the investor gets 6½ percent on $100 and in operating expenses is another item for amortization which would be $10, using that amount.

Now, the second year you have only $90 actually invested in the business but we are allowing $6.50 each year. 6½ percent of $90 gives you the income that the investor is getting. That amount less the $6.50 is a return of capital and, for this sinking fund method to work,

the company must give a liquidating dividend each time the payments are made into this fund.

Mr. Goodman: Or you would say, having received the money, it is a matter of indifference to the customer what they do with it?

The Witness: That is right. If they would leave it in the company, then you are not earning on your capital, are you?

[fol. 8637] Mr. Goodman: But the customer, having paid the appropriate rate, is done with the transaction anyway?

The Witness: I think so.

Mr. Goodman: The money is lawfully the money of the company and they are paid out just as if they had taken the return of capital and stuck it in their pocket?

The Witness: That is right.

Mr. Goodman: So the transaction, for the purpose of calculating depreciation, is complete?

The Witness: Yes. I read a brief of the Federal Power Commission in, I think it was the Natural Gas Pipeline of America case where they say in there, this sinking fund method is merely a method of calculation to determine the amount the company should receive annually in earnings but has nothing to do with the books. You do not keep the books that way at all.

By Mr. Littman:

Q. Didn't the Commission use an undepreciated rate base there?

A. That would not make any difference. That would have nothing to do with the calculation.

Q. Didn't you say a few minutes ago, Mr. Green, that you use an undepreciated rate base in connection with the sinking fund?

A. I did not mean to express it that way, I do not believe.

[fol. 8638] Q. You certainly confused me when you expressed it that way.

Mr. Goodman: He means that you can conveniently calculate the amount that way.

The Witness: That is right.

Mr. Goodman: That is what he meant.

By Mr. Littman:

Q. Let me see if I understand you, Mr. Green. There isn't any question that so far as your pro forma statement, Exhibit No. 104, is concerned, you allow 6½ per cent on the full amount of $182,626 business development expense, do you not?

A. Per year, you mean. We allow 6½ percent on that per year.

Q. You allow it certainly for the first year?

A. Each year.

Q. You allow that same return the second year?

A. Pardon me, that is where you are confusing me. You say "return." I say it is that amount of 6½ percent that is allowed on the $182,626 which is shown as a proper item of expense of the company for each year but that amount does not represent—

Mr. Goodman: And that amount—

Mr. Littman: (Interposing) Suppose you go through that answer and make certain the reporter has it. Will you read it so far as you had gotten?

[fol. 8639] (Whereupon, the last answer was read by the reporter.)

The Witness: (Continuing) For each year but that amount does not represent income to the stockholder.

Mr. Goodman: You mean that it is always in each succeeding year 6½ percent on the unamortized balance?

The Witness: That is income. That would be income.

Mr. Goodman: That would be the income?

The Witness: Yes, sir.

Mr. Goodman: And the amount in addition to that is the return of the capital?

The Witness: Correct.

Mr. Goodman: I have your picture exactly.

The Witness: I did not want Mr. Littman to get confused and think that this 6½ percent, as a return to the stockholder, is that amount per year throughout the life of the project.

Mr. Goodman: The fact remains that when you attempt amortization by the so-called sinking fund method, you reach a result which will give you an amortization annuity, not all of which is return, but a portion of which is return of capital, another portion is earnings on the unamortized balance but if your add the two of those together, you will get a constant which constant is equal to the so-called sinking fund annuity on the original sum with which we start?

The Witness: That is well expressed.

[fol. 8640] Mr. Goodman: That is the mathematical working out?

The Witness: Yes, sir.

By Mr. Littman:

Q. Mr. Green, let's confine ourselves for the minute to the ratepayer. Is the ratepayer going to be required to pay 6½ percent on the full amount of $182,626 of business development expense in each and every one of the remaining 24½ years of purported life of this company?

A. No.

Q. He will pay it the first year, 6½ percent of $182,626?

A. Well, in the pro forma statements that we have prepared here, we compound the sinking fund payments semi-annually so, in our setup, you would have 6½ percent for the first six months and, for the second six months, it would be 6½ percent less the sinking fund amount.

Q. Is there any such calculation appearing in your Exhibit No. 104 such as that which you have just described?

A. The principle of the sinking fund basis is part of it. It is the only way you can do it.

Q. We are not talking about the sinking fund. We are speaking about rate of return converted into dollars and cents. Do you understand my question? A. Yes, sir.

Q. Let's not talk dollars, if it seems to disturb you. [fol. 8641] Are you going to apply your rate of return of 6½ percent on the $182,626 in each of the remaining 24½ years of the life of this property? A. No.

Mr. Goodman: If you will permit me, I think I can have the witness tell you exactly what he is doing so you will all understand.

Will you do that, Mr. Littman?

Mr. Littman: All right.

Mr. Goodman: I know what he is about.

Now, Mr. Green, your object was to regard $182,626 as a basis for determining a certain portion of the cost of service, right?

The Witness: That is correct.

Mr. Goodman: And you wanted to burden that cost with an amount which would yield 6½ percent on all of the $182,626 that was, from time to time, outstanding as an investment?

The Witness: That is correct.

Mr. Goodman: So that by the end of the period of amortization, your company will have received its $182,626 back plus 6½ percent on that amount and out of the allocable portions of that amount which were outstanding over the period they were outstanding?

The Witness: That is right.

Mr. Goodman: That is all there is to it?

[fol. 8642] The Witness: Yes, sir.

Mr. Goodman: Now, gentlemen, I suggest you have the reporter read my questions and Mr. Green's answers, you were in conference there, which I think will clarify just exactly how the witness treated the $182,626. He answered my questions there which tell you how he treated it.

(Whereupon, the questions and answers indicated were read by the reporter.)

By Mr. Littman:

Q. Is the return plus the amortization on this item constant each year? A. No, it would not be.

Q. The two items combined are not constant in each year?

A. The amount that we set up semiannually is a fixed amount each year to amortize this investment. It is a fixed amount.

Q. How much is it for each $1,000 of base?

A. On a base of $14,686,827 the annual amount is $333,954.

Mr. Littman: Will you read that answer, please?

(Whereupon, the last answer was read by the reporter.)

The Witness: That is for amortization.

By Mr. Littman:

Q. How much is it for return?

A. Referring to my direct testimony, some items are [fol. 8643] 7.54 and some are 6½, the over-all is $954,572.00.

Q. Does the sum of those two amounts remain constant throughout the life of the property? A. Yes, sir.

Q. So that the ratepayer will pay approximately $100 per year on each $1,000 of rate base, approximately?

A. Referring to Exhibit 104, Item 13, you see the total amount is $1,296,309.

Q. That is the annual return and annual amortization allowance combined, is it not? A. That is correct.

Q. On how much rate base? A. On $14,686,827.

Q. That is approximately 10 cents per dollar, is it not?

A. It would be about 11, wouldn't it?

Q. It would be a little less than 10 cents per dollar?

A. Nine, yes.

Q. About 9 cents per dollar? A. Yes.

Q. Now, we have $182,626 of rate base which is represented by these sales promotion expenses. Is that right?

A. That is correct.

Q. And in each year your return plus amortization will amount to something a little less than $182,626?

A. I imagine that arithmetic is correct. I have not [fol. 8644] checked it out.

Q. It sounds about right to you, does it not? A. Yes.

Q. So that you will give the company over the remaining 24½-year period something more than 2½ times the original amount of $182,000 by way of return and amortization? A. That is merely arithmetic.

Q. Well, that sounds right to you, does it not?

A. Approximately so, yes, but I hesitate to confuse income with return of capital.

Q. Now, let's see what you have done here for the ratepayer, Mr. Green.

Mr. Culton: You mean by that, Michigan Consolidated?

Mr. Littman: I mean the consumers of Michigan Gas Transmission Corporation.

Mr. Baldridge: We have no consumers. Mr. Littman, we sell only to distributing companies. I just do not like the use of "consumers" in this connection, because I think it gives an inaccurate connotation.

Mr. McRee: You have some very good customers.

Mr. Baldridge: I do not deny that.

Mr. Littman: I take it the issue here is the reasonableness of the rates of gas charged by Michigan Gas Transmission Corporation to its customers.

Mr. Culton: We have had no discussion of that at all [fol. 8645] during the entire proceedings.

Mr. Baldridge: The only purpose of my comment was to take up the use of the word "consumers."

. . . . . .

By Mr. Littman:

Q. Mr. Green, let's look at the situation in so far as it affects the rates of Michigan Gas Transmission Corporation with respect to this item of business development expense.

The company has already once recovered the sum of $182,626 through past operating expenses. Is not that correct?

A. That is correct.

Q. Now, you propose by your setup to give Michigan Gas Transmission Corporation that same amount approximately 2½ times through the medium of return and amortization allowance during the remaining 24½ years of the life of the property. Isn't that right?

A. What I propose is that the amount of $182,000-odd should be included in the rate base so that the company will receive a fair return on that amount and an amount in addition to the fair annual return that will amortize the investment.

Q. And the effect of that is to allow over the remaining 24½ years 2½ times the $182,626 which it has already [fol. 8646] recovered?

A. I said it had been charged to operating expenses.

Q. Well, is my statement true or false?

A. I see no relation—

Q. (Interposing) Can't you answer my question yes or no? Let's get that off the record, first.

A. I say it has been charged to operating expenses.

Q. Is my statement correct or is it not?

A. Well, if you add income to amortization, yes, and that is what you are doing.

Q. Well, that is what you are doing, is it not?

A. No, sir.

Q. What are you doing, if you are not doing that?

A. You cannot find that in Exhibit 104.

. . . . . .

[fol. 8648] By Mr. Littman:

Q. Mr. Green, let us look at your annual allowances for amortization which appear in your Exhibit 104 in the pro forma statement. The calculation appears on page No. 6 of that exhibit, does it not? A. Yes, sir.

Q. Your use a 24½-year term as the purported remaining life of this project, do you not?

A. That is correct.

Q. You are not personally assuming any responsibility for that period, are you? A. Yes, sir.

Q. Upon what do you base the 24½-year period?

A. I am advised that the Panhandle Eastern were using a 24½-year life of the field from the witnesses that they had and I am of the personal opinion that the expected

life of 24½ years is the proper amount, in my own judg-
[fol. 8649] ment, that should be used in this calculation.

Q. As I understand your testimony, you are basing the term upon the testimony of others in this proceeding?

A. Yes, but if I had not agreed, I would not have used in these exhibits here 24½ years.

Q. You did not make any independent investigation of your own with respect to the remaining life of the gas supply available to the Michigan Gas Transmission Corporation?

A. Not personally, no. I have familiarized myself with the opinions of others, experts.

Q. In other words, you are basing your judgment upon the opinion of others who have testified in this proceeding? A. That is right.

Q. Now, in your opinion, should the term be based upon the life of the gas reserves now controlled and owned by Panhandle Eastern or should it be based upon the life of the gas fields in which Panhandle Eastern operates?

A. I would say the life of the fields provided the Panhandle Eastern Pipe Line Company will have an opportunity of acquiring that gas.

Q. In other words, if the life of these gas fields, to wit, the Hugoton and Panhandle fields, should extend 10 or 20 years beyond the life of the presently-held reserves of Panhandle Eastern, it would be proper to use the life of the fields rather than the shorter life of the reserves now
[fol. 8650] held. Is that correct?

A. If Panhandle Eastern will be able to acquire that gas.

Q. You mean assuming a market?

A. Assuming it will be able to buy it. Someone else might own that acreage and want to use it for their own pipe line. I do not know.

Q. Do you know of anyone who has testified in this proceeding who has said that the life of the Panhandle Eastern's reserves is 25 years?

A. I think Mr. Ralph Davis testified, did he not, or Mr. Biddison? Now, I have forgotten which.

Q. Well, Mr. Biddison based his testimony on the opinion of Mr. Davis.

A. Of Mr. Davis, that is right.

Q. Mr. Davis said that the reserves had a remaining life of "more than 25 years." Do you recall that testimony? A. Yes.

Q. I am going to read you some testimony that was given by Mr. Creveling, the President of Panhandle Eastern and now the President of Michigan Gas Transmission Corporation before the Securities and Exchange Commission in connection with their recent refinancing of Panhandle Eastern. I am reading from Pages 518 and 519 of the transcript of that proceeding.

Trial Examiner: What docket number?

Mr. Culton: It is the same docket number as the Order [fol. 8651] heretofore offered in evidence.

Mr. Littman: It is the proceeding which culminated in the findings and opinions of the Securities and Exchange Commission shown in Exhibit 147, File Nos. 59-33, 70-263, 70-371, 70-387, 70-430 and 70-431 in the matter of Columbia Gas & Electric Corporation, et al.

By Mr. Littman:

Q. (Reading)

"Q. Could you tell us to what extent, or what limitations there are in purchasing those properties to increase your reserve?

"A. That is rather a difficult question to answer, Mr. Selig.

"We are strengthening our reserves in more than one way. Not only are we acquiring some additional acreage which has not yet obtained the position of being subject to any great drilling programs, and we are also blocking acreage by trading as well as by acquisition, in order to have satisfactory drillings in the Hugoton Field.

"We have a program, I think, in our budget, as I recall the figure as $40,000, and probably will have some such an item in our 1942 budget, although of course that has not been before the Board for approval, and we will

keep acquiring acreage and blocking acreage as our business judgment indicates we should."

"Q. And that is in the same Hugoton area?

[fol. 8652] "A. That is correct, but it is getting away from that part of it in which the production, the major part of the production is now coming.

"Q. And could you tell us what limitations there would be in acquiring this extra acreage?

"A. I could give you my thought on that matter. My thought is that we should acquire property, as much as 25 or 30 thousand acres of additional reserve within the next couple of years.

"Q. Well, is there any limitation upon your opportunity to acquire that amount of acreage?

"A. That is the reason, one of the reasons why we are doing it at this time, one, because the acreage is available now to the greatest extent anyone could figure we would need additional reserve, and, second, it is not in demand today by other existing or potential projects, and therefore it can be acquired on a more favorable basis.

"Q. Mr. Creveling, if it would be your program to get a reserve to last for that 25 years, say for 35 years, would you be able to get it in that field?

"A. I have no hesitancy at all in stating that it is my best judgment that we could, if you will accept my definition of the Hugoton area.

"Q. Well, will you describe the limitations, boundaries of the Hugoton area?

[fol. 8653] "A. If I had a map I could show you. Roughly it includes all southwestern Kansas, the Oklahoma Panhandle, particularly Texas County, and Sherman and Hansford Counties, Texas."

Have you heard of that testimony before the Securities and Exchange Commission before?

A. I just heard it.

Q. This is the first time. Do you want to change your opinion as to the term of years, Mr. Green? A. I do not.

Q. You still stand by the 24½ years, notwithstanding the testimony of Mr. Creveling, the President of both of these companies, who now says that he is acquiring additional acreage and can very readily extend the life of this project for 35 years from today?

A. Yes, if I had two experts and one says "30 years" and one says "24½ years" and I had the authority and responsibility of fixing the rates on that company, I would use the lesser amount, the more conservative. If, in 5 or 10 years from now, you find that the field is going to last these 25 years, I would readjust my costs at that time.

[fol. 8654] Q. You know that Mr. Davis, the expert upon whom you say you relied, based his estimate of "more than 25 years" upon the presently-held reserves of Panhandle Eastern, do you not, and not upon the over-all life of the fields?

A. As I understood, it was on the presently-held and present rate of withdrawals.

Q. Well, you are mistaken about the latter part of that, Mr. Green. The record will show what he said, of course.

Well, what effect did you then give to the life of the fields as distinguished from the life of the presently-held reserves?

A. We are using here 24½ years in this calculation.

Q. And you are going to stand by it in spite of anything that anyone tells you about it. Is that right?

A. I think, in the light of all the record and information coming to me, that is a conservative figure to use at this time.

Q. That is the trouble with it, isn't it, it is too conservative? A. No, I do not think so.

Q. The company, itself, uses an over-all figure of 33 years, does it not?

[fol. 8655] A. They are using at the present time, charging 3 percent of the plant account for depreciation.

Q. So the answer to my question is yes, is it not?

A. If that is straight line, it would be 33⅓ years.

Q. Then you think the company is in error in so doing?

A. I so stated this morning.

Q. You think Mr. Creveling is in error, too?

A. I do not know what they are charging Panhandle. I am not familiar with their bookkeeping methods.

Q. Well, do you think Mr. Creveling is in error when he says he has no difficulty securing sufficient gas acreage to last another 35 years? A. He is entitled to his opinion.

Q. You do not agree with him in that regard, do you?

A. I am not disagreeing with Mr. Creveling, I am saying that, in my opinion, a conservative figure to use here at this time would be 24½ years from June 30, 1941, in determining the rates that this company should charge.

Q. What do you think is the reasonable figure as distinguished from what you call "a conservative figure"?

A. I think that 24½ years is a reasonable figure. I really think that, Mr. Littman, I am not just making conversation either.

Mr. Littman: I am going to a new subject.

Trial Examiner: Before you leave this, referring to your [fol. 8656] original cost rate base on Page 2 of Exhibit 104, your recommendation is that the annual charges be sufficient to retire the present value of $12,779,802 in the 24½ years. Is that right?

The Witness: That is correct.

Trial Examiner: Now, assuming that Mr. Creveling extended the service for 10 years beyond that, what is the rate base beginning the 25th year?

The Witness: And the company had earned and charged off the amounts as shown here?

Trial Examiner: Surely.

The Witness: I imagine the rate base would be pretty low at that time, Mr. Examiner.

* * * * * * * *

Trial Examiner: Proceed when you are ready.

By Mr. Littman:

Q. You have used, as the amortization base, the original cost as adjusted by a trend factor to reflect the purported change in the value of the dollar between 1936 and June 30, 1941, is that correct? A. That is correct.

Q. Would your amortization base be any different if you had used Mr. Haberly's reproduction cost less observed depreciation?

[fol. 8657] A. On the long-term investment, you mean?

Q. Well, let's confine the matter to the long-term investment. A. Yes, that is correct.

Q. The long-term investment comprises—
A. (Interposing) The major portion of the property.
Q. In fact, substantially all of the property, doesn't it?
A. Yes, sir.
Q. In order that we have no mistake about that, the original cost new of the short-term investment is only $54,000, isn't it? A. That is right.
Q. There might be some slight confusion from a strict reading of the record thus far, Mr. Green, and I think I had better go over one point again in order that we may make certain that we understand each other.

Am I correct in understanding that your amortization base is the same as reproduction cost new less observed depreciation?

A. The dollar amount would be the same.
Q. By your method you are, of course, proposing to return to Panhandle Eastern, the present owner of Michigan Gas, something in excess of its net investment in Michigan Gas?
A. The amount which is determined by use of the formula which I have heretofore discussed in my direct testi- [fol. 8658] mony gives you an amount in today's dollars that should be returned to the investor for the original dollars invested.
Q. So that by your method, the amount which you propose to return to Panhandle Eastern Pipe Line Company, the owner of Michigan Gas, over the remaining 24½ years of the purported life of this project will be something in excess of Panhandle Eastern's actual investment therein, isn't that correct?
A. Panhandle Eastern's investment, you say?
Q. Yes.
A. Of course, that investment was made in today's dollars.
Q. Precisely.
A. Yes. What I have determined here is the dollars when spent by the prior owners, how many today's dollars should you give back to the investor for his original dollars invested.
Q. But Panhandle Eastern, the present owner of this property, did not invest any 1936 dollars in this project, did it? A. No, that is correct.

Q. Do you mean that Columbia Gas & Electric Corporation, the former owner of Michigan Gas, still has some money coming from this project?

A. No, I do not and I do not think that if Panhandle Eastern had paid twice the amount that they did pay for this property, that that amount should have no bearing [fol. 8659] on determining the amount of amortization that I have used in this formula.

Q. Panhandle Eastern Pipe Line Company purchased Michigan Gas three weeks ago, did it not? A. Yes, sir.

Q. And it purchased Michigan Gas with 1942 American dollars, did it not? A. That is right.

Q. What you are proposing to do is to amortize, not the amount which Panhandle Eastern has invested in Michigan Gas in 1942, but something in excess of that which represents the purported revaluation of the property as represented by 1936 dollars, is that right?

A. In my familiarity with rate cases over a period of many years, to my knowledge I have never known of a case where the purchase price of a property was the rate base, that it was taken as the rate base.

Q. Will you answer my question, please, Mr. Green?

The Witness: Read the question.

(Whereupon, the question commencing at Line 10 of this page was read by the reporter.)

The Witness: I answered the question a moment ago of how we used this formula and why it was used.

[fol. 8660] By Mr. Littman:

Q. Is your answer to my question yes or no?

A. I cannot answer it by saying yes or no.

Q. It looks like we are going to have to ask you to make a calculation then. What is the original cost of the amortization base that you used in dollars and cents?

A. Less the observed depreciation, Mr. Littman?

Q. That is the base you used before you began to apply the factor.

A. Original cost less observed depreciation less the short-term property?

Q. Yes, what that is.

A. $11,911,979 as shown on Page 6 of Exhibit 104.

Q. $11,911,979? A. Correct.

Q. Will you state the amount which you are amortizing?

A. $13,819,001, which is arrived at by dividing $11,911,979—

Q. (Interposing) Just a minute. I am going to ask you to cooperate and not read the factor which you applied because the factor has been stricken from evidence.

Mr. Baldridge: I do not think you could say that, Mr. Littman. Exhibit 97 has been excluded but I do not think the specific factor has been excluded.

Mr. Littman: Well, certainly we have not withdrawn any [fol. 8661] of our objections to Exhibit 104. Exhibit 104 is not yet admitted in evidence and is still subject to a motion to strike and I think, out of precaution, we should not have read into the record at this point figures that you well know will be subject to a motion to strike.

By Mr. Littman:

Q. In other words, you are amortizing $1,907,022 more than the original investment in this property, aren't you?

A. That is correct.

Q. Panhandle Eastern Pipe Line Company did not pay the $13,819,001 that you are now amortizing, did they?

A. They did not.

Q. As a matter of fact, they did not even pay the $11,911,979 either, did they, but something less than that?

A. That is correct, I think.

Q. Will you state for us the net investment by Panhandle Eastern in this property which you propose to amortize?

A. I do not know what that figure is, Mr. Littman.

Q. I am sorry.

A. I do not know that figure but I think it is in the record here. I think you put it in the record by asking questions of Mr. Spitznagle.

Q. It is something less than $11,911,000, isn't it?

A. Yes, it is.

Q. The depreciation reserve at July 1, 1941, was $1,526,604, wasn't it? A. That is correct.

[fol. 8662] Q. Referring to Exhibit No. 104, Page 6, I see a total in the right hand column at about the center of the page of $14,219,687 which is labeled "Total investment recoverable through amortization". Do you find that figure? A. Yes, sir.

Q. That is the total amount which you are amortizing in this exhibit? A. That is correct.

Q. For purposes of this proceeding, is it not?

A. That is right.

Q. Now, you have already stated that the depreciation reserve at July 1, 1941, of Michigan Gas was $1,526,601, have you not? A. Yes, sir.

Q. Now, that amount has been already amortized and recouped by the company to July 1, 1941, is that right?

A. That is the amount that is in their reserve account.

Q. Now, adding that to the amount which you propose to amortize gives a total recovery from the beginning of the life of the property to the purported end of the life of the property of $15,746,335, isn't that correct?

A. $14,219,687 plus that amount would equal the sum you mentioned.

[fol. 8663] Q. The actual gross investment in this property was $12,207,261, isn't that right, as shown on Page 6 of Exhibit No. 104? A. That is correct.

Q. The difference between the $12,207,261 of actual investment and the total of $15,746,335 which has been amortized and which you propose to amortize is $3,539,074, is that correct?

A. Your mathematics, I imagine, are correct.

Q. Yes, so that over the life of this property, if your method is adopted, the owners of Michigan Gas will have recovered, by way of amortization, $3,539,074 in excess of the actual investment therein, assuming the correctness of my arithmetic?

A. By such a process of arithmetic, Mr. Littman, you are confusing dollars spent in 1936 and dollars that we are speaking of here in 1941.

Q. Aside from that element—

A. (Interposing) That has no relation to this exhibit the way we have set it up here.

Q. Mr. Green, eliminating the element of the change in the valuation of the dollars from year to year, your answer to my question would be yes, wouldn't it?

A. If there had been no change in the valuation of the dollar, that would not be the case, no. We would not have [fol. 8664] had it. Instead of dividing by .862, the factor would have been 1.

Q. If we had not had a change—

A. (Interposing) In the purchasing power of the dollar.

Mr. Littman: I am going to ask that the .862 reference be excluded. My question did not call for it and, as your Honor knows, it is subject to objection.

Trial Examiner: I think the figure should be excluded from the record.

Mr. Baldridge: May I have an exception?

Trial Examiner: You may.

May I ask a question? I do not recall whether the testimony shows the actual excess of the total to be recovered by amortization, namely, approximately $15,000,000 over the price paid by Panhandle Eastern Pipe Line Company to Columbia for the property recently. Was that figure stated?

Mr. Littman: The $12,207,761 figure which I read gives effect to the purchase and reflects the total original investment in the plant and property of Michigan Gas.

Trial Examiner: But this inquiry was with reference to the comparison between the amount, in toto, to be amortized.

Mr. Littman: From the beginning.

Trial Examiner: To be recovered by amortization as compared with the recent purchase price of the property. What was the excess, was that stated?

[fol. 8665] Mr. Littman: Yes, I stated the excess to be $3,539,074.

Trial Examiner: And that is the difference between the total recovery by amortization and the price paid to Columbia?

Mr. Littman: That is right, yes, sir.

Trial Examiner: Thank you.

Mr. Littman: I wanted, however, to get the witness to agree with just that, if your Honor please, which is our understanding.

Do you agree with our understanding that the $3,539,074 represents the excess amount of amortization which you are providing for and which has been recovered by Michigan Gas over the entire life of the property over and above the actual investment in that property?

The Witness: The mathematics which you give are correct but it is my understanding that we begin the rate making when the Natural Gas Act came into existence. We want to start off from that date.

Trial Examiner: That is a legal question, Mr. Green, that you do not need to deal with.

By Mr. Littman:

Q. You see, I am merely trying to get at the fact through the medium of the dollars. I am taking your provision for amortization, that is, your amortization base, and I am adding to that the amount of depreciation reserves that have been accumulated to June 30, 1941, at [fol. 8666] which time you commenced to carry on.

I am asking you whether the total of those two items does not represent an excess of $3,539,074 over and above the actual gross investment in Michigan Gas?

A. That is correct, yes. I have said so several times.

Q. Mr. Green, I do not think the record showed that you answered my question directly. I am sorry if I have taken up a great deal of time needlessly but I wanted to be clear on that.

A. I do not know whether there have been any charges, Mr. Littman, against this reserve account. There might have been. There might have been more charged for depreciation. I do not know. You have got the net.

Q. Taking the books as we find them—

A. (Interposing) You are using the net.

Q. In your opinion, is Panhandle Eastern Pipe Line Company entitled to an excess of amortization of $3,539,074 over that which represents the amount which it paid for this property in 1942 dollars?

A. I have clearly explained, I think, how I made this calculation. Now, the Examiner tells me I should not be giving legal opinions, so—

Mr. Baldridge: (Interposing) I think, Mr. Examiner, now the question is put to him in that form, the witness would have the right to answer the question.

[fol. 8667] By Mr. Littman:

Q. Do you think that is a fair thing to do?

A. I think that the owners of this property should have the amounts that I set forth in Exhibit 104 earned in order for them to receive a fair return on the fair value of their property.

Trial Examiner: We are, however, Mr. Green, trying to arrive at the rate base of original cost.

The Witness: We have determined that or at least gave in an exhibit here what we considered the original cost rate base and that we have used throughout these calculations.

Trial Examiner: You used the term "fair value."

The Witness: No, I meant this whole exhibit. I assume that we are to try and determine the annual revenues of this company which will provide a fair return on the fair value of the property.

By Mr. Littman:

Q. Mr. Green, will you please refer to Exhibit 105 and I shan't read the title. It is very lengthy and I believe the context of my questions will elicit the nature of the exhibit.

A. I have it.

Q. In this exhibit, you make a calculation to ascertain the amount of Federal income tax and excess profits taxes that would be paid under what you call a "proposed capitalization." Is that correct?

[fol. 8668] A. Yes, sir.

Q. What is this so-called proposed capitalization?

A. 50 percent bonds and 50 percent common stock.

Q. You mean 50 percent of 3½ percent serial debentures due in 16 equal annual installments, is that correct?

A. That is correct.

Q. Who has proposed such a capitalization for Michigan Gas?

A. I had this calculation made on the assumption that if this company was sold to the public, in my opinion that

would be a sound capitalization, 50 percent bonds and 50 percent common stock.

Q. You call this a "proposed capitalization"?

A. Yes.

Q. And I am asking you who has proposed it?

A. I did. I say I proposed it.

Q. Do you expect anybody to act on that?

A. No, because the property was not sold to the public. It was sold to Panhandle Eastern and they acquired the securities and it is very much to their advantage to continue to operate this company as a subsidiary with the present capitalization.

Q. In the light of events that have transpired since you prepared this exhibit, No. 105, the exhibit is passe, is [fol. 8669] it not?

A. Not at all.

Q. Isn't this purely a hypothetical exhibit?

A. Yes, the company has not been refinanced and its securities sold to the public. That is the assumption here.

Q. Has anyone connected with Panhandle Eastern or Michigan Gas made any such suggested capitalization?

A. No, the purpose of this exhibit, I think, if you refer to my direct testimony, was to show that the Federal taxes of this company are much lower than they would be if the company was sold to the public.

Now that it is a subsidiary of Panhandle Eastern, you had better throw them all together and make a consolidated statement. We have not used this figure in any of our calculations, you understand that.

Q. Yes, I understand that and that is why I wondered why you put the exhibit in in the first place and I wanted to know what use it was intended to be put.

A. Well, it was to show this, Mr. Littman, that if this company, as long as it is a wholly owned subsidiary of a holding company, it was Columbia Gas and Oil was it?

Mr. Baldridge: Columbia Gas & Electric.

The Witness: Now, it is a wholly owned subsidiary of Panhandle Eastern, but if you take this company by itself now to determine rates, its Federal taxes are not com- [fol. 8670] parable to what they would be if the securities were sold to the public.

By Mr. Littman:

Q. Panhandle Eastern can, at its own discretion, consolidate and merge Michigan Gas, according to whether there is an advantage to such consolidation and merger after considering the tax situation, isn't that correct?

A. Yes, I do not think they will because it is to their distinct advantage to leave it as it is because they save Federal taxes.

Q. The company in computing Federal income taxes and excess profits taxes would, of course, compute them on the basis of the presently existing facts, would it not?

A. I think so. This was put in here merely for the benefit of the Commission.

Q. For illustrative purposes?

A. That is right. Here we are giving an income statement of a company, what it should be, its revenues and expenses, and yet there is an item of taxes in here which we know is out of line. You see.

Q. Which tax is out of line?

A. I mean the Federal taxes are lower than they would be with a company whose securities were in the hands of the public.

Q. Which one of these two tax figures is out of line, the one that is being paid now or the one that would be [fol. 8071] paid under this proposed capitalization?

A. Well, the amount being paid by the company today is less than it would be if the securities were sold to the public. This is merely informative only, Mr. Littman.

Q. And presents a situation which does not obtain today?

A. That is correct.

Q. And so far as you know will never obtain?

A. I do not know, I do not know.

Q. You do not have any reason to believe that it ever will obtain, do you?

A. I do not know, Mr. Littman.

Q. Neither do we.

Mr. Chamberlain: Mr. Green, how is the return affected by its being a subsidiary or holding company?

The Witness: I do not believe you could sell the amount of debentures that this company has outstanding to the public. The ratio of that debt to the total property is way

out of line, but you get a distinct saving in your Federal taxes.

Mr. Chamberlain: What is the saving?

The Witness: What?

Mr. Chamberlain: What is the saving, that is what I want to know.

The Witness: In amount of dollars?

Mr. Chamberlain: Yes. How is it affected in so far as these tax returns are concerned by being a subsidiary?

[fol. 8672] The Witness: The fact that its capitalization is different than it would be if you sold to the public.

Mr. Chamberlain: You mean it might change its form of capitalization or structure in some way?

The Witness: I think it would have to change its form of capitalization if it was going to sell to the public. I certainly know that the Securities and Exchange Commission would not let you issue such amount of securities against this company, outstanding debentures on open account, you know.

Mr. Chamberlain: Are you talking about Michigan Gas Transmission?

The Witness: Yes, sir.

By Mr. Littman:

Q. Will the Securities and Exchange Commission permit you to issue any securities on this amount which represents the difference in your rate base between the valuation of the dollar today and the valuation of the dollar in 1936?

A. I thought we were talking about taxes here.

Q. I know, but this is apropos here at this moment to your rate base.

Trial Examiner: Isn't the gold content of a dollar the same as it was in 1936?

By Mr. Littman:

Q. You are an expert in the change of the valuation of the dollar, Mr. Green. Can you answer that question?

[fol. 8673] A. Not now, I have had some experience—

Mr. Goodman: (Interposing) I think the Examiner means the price on newly-mined gold.

Trial Examiner: Unless we know something about it, I do not think we should refer to the different value of the dollar between 1936 and today. It is not in evidence anyhow. There has been some evidence offered here which has been excluded relative to the purchasing power of the dollar between those periods.

Mr. Baldridge: The evidence on the question of the purchasing power of the dollar runs all through the record. It was brought out by various counsel and was testified to by various witnesses. I do not believe it would be proper to exclude that in a hearing of this kind because, obviously, there are many things that the purchasing power of the dollar and the change in the purchasing power of the dollar may touch and affect. It may touch and affect the necessity for making additions to property.

Trial Examiner: I agree with you, Mr. Baldridge. We have in the record, without objection, some data indicating the change in the purchasing power of the dollar but the value of the dollar, technically speaking, I assume to be the same in 1936 as it is today.

Mr. Baldridge: Well, I do not believe that anybody on our side, at least, has raised any question of the gold con- [fol. 8674] tent of the dollar. I think that all of our discussion has been on the question of varying purchasing power. That is, if I may use this expression, the value of the dollar as weighed by what a dollar will purchase at different times.

Trial Examiner: That is, of course, the sense in which we have used it.

Mr. Baldridge: Yes.

Trial Examiner: Perhaps it is a bit loose.

* * * * * * * * *

By Mr. Littman:

Q. Mr. Green, you have not, thus far, in this proceeding expressed any opinion on the fair rate of return for Michigan Gas Transmission Corporation, have you?

A. I have not. I had better qualify that. You remember at the close of my direct statement I spoke of the present earnings of the company and so forth, but I did not give any percent return that I thought would be a fair return.

Q. You are not testifying on that subject, are you?

A. As to the percent return, no.

Q. You use a 6½ percent return in your Exhibit No. 104 as shown on Page No. 2 but, as I understand it, that rate of return is used for illustrative purposes because the Federal Power Commission used the 6½ percent rate [fol. 8675] of return in the Natural Gas Pipeline of America case. Is not that right?

A. Yes, with a rate base of reproduction cost new.

Q. For interim order purposes?

A. That is correct.

Q. Let's not forget that. Hence, we shall not cross-examine you on what is the fair rate of return.

At Page 2003 of the transcript you make the following statement:

"To use a homely illustration, if a person invests his money in a public utility and the company constructs property today for the public use, he is entitled to receive a fair return on his investment and that investment is equivalent to a certain amount of bacon and eggs. Each year thereafter he is entitled to receive the same amount of bacon and eggs, regardless of the purchasing power of the dollar."

You recall that testimony, do you not, Mr. Green?

A. I believe you must have made a mistake in quoting me, because you speak of investment whereas I am speaking of return, that the return will purchase a certain amount of bacon and eggs.

Mr. Littman: Will you please read the quotation back to the witness and have him check from the transcript?

The Witness: This is correct. Perhaps I misunderstood you, Mr. Littman, and that fair return is equivalent [fol. 8676] to a certain amount of bacon and eggs. I un-

derstood you to read it, "that investment is equivalent to a certain amount of bacon and eggs".

Q. What is the present capitalization of Michigan Gas?

A. As of June 30, 1941, 6 percent demand notes, $5,900,500; 6 percent loans payable to the parent company, $2,420,000 and 44,800 shares of no-par value common stock with a stated value of $2,240,000.

Q. The capitalization today is the same as it was prior to the sale of Michigan Gas to Panhandle Eastern, is it not, in so far as you know?

A. Well, I imagine there would be very little change, Mr. Littman. I do not know whether they have borrowed any money from the parent since this date or not, June 30, 1941.

Q. Will you please turn to Page 2 of Exhibit 88 which is the balance sheet? It is clear from the figures which you have read that 80 percent approximately of the capital structure of Michigan Gas is represented by these 6 per cent notes?

A. Yes, sir.

Q. How much of the capital originally invested in 1936 was secured by these notes, as shown on Page 2 of Exhibit 88?

A. What was your question now?

Q. How much of the capital originally invested in 1936 in Michigan Gas was secured by these notes?

[fol. 8677] A. In 1936 this statement shows as at December 31, $5,136,397.68 is the 6 percent loans payable.

Q. How much of the capitalization at December 31, 1937, was represented by 6 percent demand notes?

A. $6,391,094.30.

Mr. Baldridge: Mr. Littman, I am getting a little confused. You are treating with demand notes and 6 percent loans payable as being the same kind of thing?

Mr. Littman: I called them by the description used on Page 2 of Exhibit No. 88.

The Witness: I think that is correct, Mr. Littman. As of the end of the year they had no loans payable. They were all made in demand notes payable.

By Mr. Littman:

Q. Now, the common stock has remained constant throughout the life of the property?

A. Yes, sir.

Q. Now, those 6 percent demand notes that were outstanding in 1937 in the amount of $6,391,094 still remained unpaid at June 30, 1941, is that correct?

A. The 6 percent demand notes payable as of June 30, 1941, were $5,900,500 which is less than the demand notes payable December 1937.

Q. I see. In other words, there was still outstanding at June 30, 1941, $5,900,500 of the demand notes that had [fol. 8678] been outstanding in 1937. Is that right?

A. That is correct.

Q. Now, Panhandle Eastern Pipe Line Company has within the past three or four weeks acquired these 6 percent demand notes, is not that correct?

A. I understand so.

Q. And now Michigan Gas owes $5,900,500 of 6 percent demand notes to Panhandle Eastern. Is that right?

A. I assume that they do, yes.

Q. Now, is the holder of these notes, namely, Panhandle Eastern, entitled to receive payment therefor in anything other than present-day dollars?

A. No, I do not think so.

Q. In other words, you understand that under the law of these United States, if Michigan Gas Transmission Corporation were to tender to Panhandle Eastern the amount of $5,900,500 in United States currency today, Panhandle Eastern would be required to accept those dollars in full payment of those notes notwithstanding the fact that they were originally made in 1937. Is not that right?

A. I would think so.

Q. As a matter of fact, the entire amount of $8,320,500 of 6 percent demand notes and loans owing today to Panhandle Eastern are payable in 1942 dollars. Is not that right?

[fol. 8679] A. That is correct.

Q. And the interest on these notes and loans is payable each year in present-day dollars regardless of how many bacon and eggs those dollars will buy?

A. That is correct.

Q. What kind of dollars did Panhandle Eastern pay for these outstanding securities of Michigan Gas Transmission Corporation, 1942 dollars or some other kind of dollars?

A. I assume that they used 1942 dollars.

Q. Did Columbia Gas & Electric Corporation make any protest against receiving 1942 dollars in payment in full of the purchase price of all of the outstanding securities of Michigan Gas?

A. No. Such sales and negotiations are always carried on, I think, with the understanding that you pay in today's dollars.

Q. What you are proposing to do is to suggest that the Federal Power Commission predicate the rates in question in this proceeding, not upon the basis of present-day dollars, but upon the change in the purchasing power of the dollar that has ensued since 1936?

A. In determining the rate of return.

Q. And also in determining the amortization base?

A. That is correct.

Q. The effect of your bacon and eggs theory, Mr. Green, [fol. 8680] is to give the investor in this utility's securities, a complete safeguard against inflation, isn't that right?

A. That is right, it has that effect.

Q. Do you know of any security extant that carries with it a safeguard against inflation?

A. If I may be permitted to express my opinion as to what the Act means, a fair regulation meaning a fair return on the fair value of the property, I think this formula I have set up here will apply.

Q. Suppose you name one security extant that guarantees the repayment of the principal in terms of the purchasing power of the dollar as of the date in which the investment was made and which guarantees against inflation?

A. That is not the case. The formula I used here in determining the amount of dollars to amortize this investment is only applied once, Mr. Littman. Later on, you can have inflation or anything else and it will not affect that dollar amount that I use here for amortization.

Changing the purchasing power of the dollar was only used to determine the number of dollars as of June 30, 1941, that the investor should receive equivalent to the dollars that he spent in the prior years.

Now, if later on, the purchasing power of the dollar changes, you will not change that amount that we have determined here for amortization even though the purchasing [fol. 8681] power of the dollar changes.

Mr. Lee: You may not change the amount but, according to your theory, you would have to change the return?

The Witness: You would the return. I am speaking now of amortization. If the purchasing power of the dollar changes under the formula I have suggested, the percent return will vary. The fair rate of return today divided by the purchasing power of the dollar factor equals the percent return that this property should receive. That will change but not the amortization calculation.

Mr. Lee: That is now, according to your theory?

The Witness: That is right.

By Mr. Littman:

Q. I thought Mr. Drew was your witness on the question of the correct and proper rate of return to be applied in this proceeding. Is my understanding incorrect?

A. He was asked to give an opinion of what he thought a company of this sort should receive in percent return.

Q. Did you ask him to testify to the rate of return on an inflation-free investment?

A. No, I did not.

Q. That is what this would be, wouldn't it, under your theory?

A. Are you speaking now of return or are we talking about the amount to amortize, Mr. Littman?

[fol. 8682] Q. We are speaking of return exclusively.

A. Return?

Q. Yes.

A. I claim and the suggestion I have made here in the formula I have given the Commission to use is that we use the purchasing power of the dollar as one factor and the fair rate of return in today's dollars to arrive at the percent return that this investment should receive.

Q. When you asked Mr. Drew to testify in this proceeding, did you instruct him to give us a rate of return which comprehended and gave effect to a guarantee against inflation?

A. No.

Q. You know if you had instructed him to do that, he would have most certainly testified to a considerably lower rate of return than that to which he testified in this case, don't you?

A. I do not know what he would have testified to if I had asked him to do something [to do something] I did not ask him to do.

Q. Would you, as an investor, be willing to accept a lesser rate of return if you were guaranteed against inflation than otherwise?

A. And also if I was guaranteed a return?

Q. Would you require any return at all if you could get a good, safe guarantee against inflation today? You would [fol. 3683] be glad to invest your money without any return if you could get that kind of a guarantee, wouldn't you, Mr. Green?

A. I would not be much interested in investing my money without any return, Mr. Littman, no.

Q. It would certainly be considerably lower than 8½ percent, wouldn't it, if you could get a good inflationary hedge guarantee?

A. I have not fixed any 8½ percent.

Q. Can you advise me where I can find a security that will guarantee me against inflation even if it does not have any return at all?

A. No, I do not.

Q. I wish you could.

A. I do not know where your could be guaranteed anything.

Mr. Goodman: Maybe you know where I can buy some bacon and egg futures to protect me.

By Mr. Littman:

Q. Mr. Green, the Government itself makes no such guarantee upon its bonds, does it?

A. Why, a bond, that is a contract between the Government and some person who wants to make an investment.

The terms are set forth. Here you have an entirely different problem. We are speaking here about a fair return on the fair value of the property invested in the business, a regulated business.

[fol. 8684] Q. We want to get your opinion on the subject of a fair return on an inflationary-free investment. That is, an investment free from inflation.

A. My whole thesis here is that if you are going, on the one hand, to use original cost as a fixed item as the rate base, if you are going to use that, then you must vary the percent return to reflect the purchasing power of the dollar.

Q. Then, as I understand your theory, we must find a reasonable rate of return applicable and referable to original cost, must we?

A. No.

Q. Before we apply your factor to get what you call a reasonable return?

A. No, that is not the way this is applied.

Q. That is the way you applied it in Exhibit No. 104?

A. No, I did not.

Q. You took 6½ percent which the Commission found—

A. (Interposing) As a fair rate of return in today's dollars as related to reproduction new of that property. Now, I am saying if you used that figure, 6½ percent—

Q. (Interposing) Is that 6½ percent a fair return upon an inflation-free investment?

A. The 6½ percent against the reproduction new of the Natural Gas Pipeline of America case was held by the Commission to be a fair return. I am saying that if you [fol. 8685] are going to use original cost as the rate base, then take your 6½ percent, divide it by the purchasing power of the dollar factor and you get an amount which you relate to the percent return on original cost.

You refer constantly to inflation. This formula, with deflation, call it that, would work just the other way.

Q. We understand how your theory works, Mr. Green.

A. But it works both ways, doesn't it, not just with inflation.

Q. I understand you to say that, yes.

A. Yes.

Q You have never applied it, however, in any case that arose during the midst of the depression, did you?

A. I do not suppose I can refer to the exhibits. I can say this—

Q. (Interposing) Did you or didn't you?

A. I can say that during the past several years, the cost of pipe was considerably less than they paid for other pipe on this property.

Q. Have you ever applied this bacon and eggs theory at a period when the purchasing power of the dollar was rising?

A. No, I have not.

Q. We would like to know how to apply your theory, Mr. Green. Your factor has to be applied to a certain rate of return, does it not, in order to get what you call a reas-
[fol. 8686] onable rate?

A. Take return in today's dollars of what is held to be a fair return. That divided by the purchasing power of the dollar factor equals a percent return which I think this property should [—] received based on original cost.

Q. Will you tell us what is a fair return upon an inflation-free investment, and then I think we can apply your theory.

A. I cannot answer that. It is beside the point here.

Q. How is the Commission going to know if you don't know?

A. You can use this formula and if the purchasing power of the dollar goes the other way, you come out with a lesser percent return.

Q. What are we going to apply this formula to?

A. To the original cost as a rate base.

Q. How are we going to get the rate of return which you say is reasonably applicable to original cost?

A. Only by this formula.

Q. We have got to have a rate of return which must be divided by your factor to get what you call a reasonable rate of return. How are we going to get the first one?

A. The Commission fixed one in the Natural Gas Pipeline of America case, didn't they? It fixed it there, 6½ percent.

Q. But that was not on an inflation-free rate base?
[fol. 8687] A. That was on the dollars—whatever the case was decided—those dollars on reproduction cost which

naturally reflect the difference in the purchasing power of the dollar using that as the rate base.

Q. Mr. Green, until you advise us what is a reasonable return on an inflation-free rate base, we cannot apply your theory, can we?

A. I am stating that if the Commission finds a percent return which they consider a fair return on property constructed today, which means today's dollars, take that percent, apply it to this formula and you may derive the percent return that this investment should receive. Certainly no one would say that 6½ percent return they used in the Natural Gas Pipeline of America case, 6½ percent on original cost would be a proper amount for that company to earn. If so, why did they allow 6½ percent on reproduction cost which was considerably higher?

Q. Mr. Green, the first step that the Commission must do under your theory is to determine what is a reasonable return upon the reproduction cost of the property today guaranteed against inflation in the future. Isn't that right?

A. No, I do not think so.

Q. You are guaranteeing the investor against inflation, aren't you, when you apply your factor as you said a minute ago?

A. Let's put it the other way. The same formula, if [fol. 8688] conditions change, protects the consumer in the case of deflation.

Q. Suppose you answer my question, Mr. Green.

A. I have answered it.

Q. I submit you have not. You are, in effect, providing a guarantee against inflation in the future, are you not, by your method?

A. If the purchasing power of the dollar goes that way, this formula protects the investor, yes.

Q. Now, in order to apply your formula, we first must find what is a reasonable rate of return to an inflation-free rate base, must we not?

A. No, sir, you first find out what is the percent return that a utility should receive for property built today and then apply that percentage in this formula.

Q. If the Commission were to follow your theory, it is a fact, is it not, Mr. Green, that we would have the only securities extant that carried with them a guarantee against inflation. Isn't that right?

A. If the investor is entitled to a fair return on the fair value of his property, it is my judgment that that formula if applied and I have tried to explain it in detail, would give him a fair return on the fair value of this property.

Q. And would give him a hedge against inflation, wouldn't it?

[fol. 8689] A. And if the purchasing power of the dollar—

Q. (Interposing) Would it or wouldn't it?

A. Only if the purchasing power of the dollar went that way, Mr. Littman. Now, if it went the other way, it is protection to the rate payer, we will call it, in the event of deflation.

Q. If there is inflation in the future, your theory affords to the investor a hedge against that inflation, does it not?

A. If the purchasing power of the dollar in the future, as applied to this sort of property in this territory is constructed decreases greater than the amount that it is today then the percent return would be higher.

Q. Now, regardless of what happens to the dollar, today, tomorrow or in the future, you are guaranteeing to the investor that he will not be hurt by any inflation that may ensue, are you not?

A. This is a great assistance to the investor in case of inflation, yes, sir, it is.

Q. And would he accomplish that purpose, if this Commission were to adopt your method, we would have the first, one and only security extant that carried such a guarantee, would he not?

A. Well, in the past, we have had—

Q. (Interposing) Wouldn't he?

[fol. 8690] A. Many rate cases and decisions of the Courts and what not have used reproduction cost new as a rate base and that takes into account the purchasing power of the dollar.

Q. Can you imagine, Mr. Green, what kind of a scramble and rush there would be by investors to buy these inflation free investments that you suggest? They would be preferred, would they not, to the Government bonds?

A. Well, during the past—

Q. (Interposing) Can't you answer that question yes or no?

A. Just a moment. I can answer it, yes. During the past when reproduction new was used as the rate base I did not see any great scramble to buy the securities.

Q. Mr. Green, reproduction cost is not synonymous with fair value and never has been, has it? Even under Smythe versus An. it never has been, has it?

A. It is a factor that was used in determining the fair value of the property. Reproduction cost new was a factor which was given considerable weight.

Q. No court ever said that it guaranteed to the investor a fair return upon reproduction cost and that alone through the years?

A. No, indeed, I agree with you, but reproduction cost new in determining the rate base was a factor that was used by the Commission and courts and given, as I re- [fol. 8691] call, considerable weight.

Q. Mr. Green, what do you imagine would happen if the prospectus, which is in evidence as Exhibit No. 146, if this prospectus issued by Panhandle Eastern Pipe Line Company within the past month carried on its face a guarantee to the investors in Panhandle Eastern of a return upon an inflation-free investment? What do you imagine would happen?

A. I could not give any answer to a question like that, Mr. Littman.

Q. Would Panhandle Eastern Pipe Line Company have to pay anything like 3½ percent on its bonds or 3 percent on its bonds, rather?

A. I do not know, I could not answer that.

Q. Why, they might even charge the investor 3 percent as a price for the inflationary hedge, might they not?

A. What we are determining here is a ceiling, not a [guarantee]. The company has not guaranteed a dime of revenue, not a dime. In fact, in this particular company, —a transmission pipe line company I think is a very hazardous business.

Q. I have an insurance policy, Mr. Green, which does not guarantee that my beneficiaries shall be paid in anything but United States currency as of the date of my death. Can you advise me where I can buy an insurance policy that will guarantee me against inflation?

A. Well, that was a contract that you made with the [fol. 8692] insurance company, was it not, sir?

Q. I would like to make a contract hedging against inflation. Can you refer me to anyone that would give me that kind of a contract?

A. Mr. Littman, if the Commission should adopt the formula that I am setting up here, I am not saying that that is any guarantee against inflation.

Q. What you are asking the Commission to do here is to give Michigan Gas Transmission Corporation a contract against inflation, aren't you?

A. No, sir.

Q. What you are asking the Federal Power Commission to do is to protect the investors in Michigan Gas Transmission Corporation against inflation, aren't you?

A. I think as the purchasing power of the dollar changes and you are going to use original cost as the rate base, that you must have some method of varying the percent return.

Q. Now, Mr. Green, you have suggested a method by which we may protect the investors in Michigan Gas Transmission against inflation. Will you please suggest a method whereby the Federal Power Commission can protect the consumers or the customers, if you please, against inflation? What is fair, I presume, for the investor is fair for the consumer.

A. Do you understand in the application of this for- [fol. 8693] mula that as the purchasing power of the dollar goes down or, rather, goes up, that you would be lowering the rates under this formula, you would lower the rates to the consumer as against using the straight original cost as a rate base?

Q. Mr. Green, I do not understand your theory nor do I understand how it can be applied and I am asking you to explain how you may apply it in practice. Now, you have got the investor protected against inflation here by your method, haven't you?

Now, will you tell me what you are going to do for the consumer to protect him? What would you suggest?

A. I am stating that if the purchasing power of the dollar, I will say, becomes the factor, becomes 116, ap-

plied to this formula, the over-all earnings of this company will be less than if you used original cost as the rate base.

Q. Well, you cannot sell me this merely by pointing out that it might produce lower rates some day in the future. I would like to know about the validity of the theory regardless of—

A. (Interposing) It is based entirely upon the purchasing power of the dollar. As it varies, the percent return varies.

Mr. Lee: Rather, isn't your argument a perpetual argument for the reproduction theory as a rate base? That is what you are really striving after, all the time, aren't you?

[fol. 8694] The Witness: No, heretofore the rate base was a variable in all of these rate cases. That was the variable in the percent return as fixed.

Now, I am stating that if you are going to have the rate base to be fixed, in other words, original cost, I think that you have to vary the percent return and I have offered this in my humble way as some formula that would bring that about.

Mr. Lee: Because you are sold on the theory that the rate base should be the reproduction cost?

The Witness: No, I do not think much of that scheme because it is so difficult to determine reproduction cost. It is a difficult thing to do.

Mr. Lee: The rate base, if it were the reproduction cost, would always take care of the variation in the purchasing power of the dollar in the interval between the original expenditure and the fixing of the rate.

The Witness: It is supposed to do that, that is the theory.

Mr. Lee: So in the last analysis that is what you are always contending for, the reproduction cost as the rate base, aren't you?

The Witness: No, I am saying that under that theory it is supposed to take care of it, Mr. Lee, but I say, I think

personally that it is a very difficult thing to determine from time to time.

[fol. 8695] Trial Examiner: The figures that you are reading were adjusted by the use of an index figure obtained as the result of certain fluctuations specifically, I believe, affecting the cost of about six special articles of manufacture. Is that a sound basis for determining the purchasing power of the dollar when you approach the rate problem?

The Witness: Well, that is the way Mr. Haberly developed it.

Trial Examiner: I am just asking you if you accept that as a sound approach.

The Witness: I say that is the way he developed it. Now, on my own initiative I made some investigation on the question of the purchasing power of the dollar and I referred to exhibits introduced by Dr. Friday in this case.

You take his curve that he shows, which is the Department of Labor curve, prepared by the Department of Labor on wages paid over the period of years. Another curve was steel products and I took the curves, 1936 and I took the point "41", 1941, on the curves and found the difference there and it is a rather unusual thing. It came out .86.

Trial Examiner: And that is in accord with your testimony?

The Witness: Yes, sir, and had nothing to do with this property, you understand. That was just taking the purchasing power over-all of all labor of the whole country. [fol. 8696] It came very close to Mr. Haberly's figures.

By Mr. Littman:

Q. Will you give me a yes or no answer to this question: In order to apply your theory we must first ascertain the proper rate of return applicable to an inflationary-free rate base, do we not?

A. No.

Q. To an inflationary-free investment?

A. No.

Q. Well, that is what these investors would have, wouldn't they, if your theory were adopted?

A. I do not think so, Mr. Littman, no.

Q. Well, you have been saying all along that you were going to give them a guarantee against inflation, haven't you?

A. I have not.

. . . . . .

[fol. 8703] Mr. Littman: Mr. Examiner, before I continue with my cross-examination of Mr. Drew, I would like to take up another matter in connection with Mr. Young's testimony. When Mr. Young was last on the stand, I requested him to supply further information and he advised me in writing under date of March 2, 1942, as follows:

"On February 28, 1942, as shown on page 8528 of the transcript of the proceedings before the Federal Power [fol. 8704] Commission, I testified that in the period between August 11, 1936 and February 5, 1942, a total of nine hundred and thirty-eight (938) draw-bands and two (2) collar leak clamps had been installed on the 16" pipe line formerly owned by the Ohio Fuel Gas Company, but operated and maintained by Michigan Gas Transmission Corporation. A subsequent and less hurried check of our records shows that a total of one thousand, one hundred and three (1,103) draw-bands and three (3) collar leak clamps have been installed by years as follows:

August 11, 1936 to December 31, 1936	—63 draw-bands
Year 1937	—221
1938	—203
1939	—212
1940	—177
1941	—216
January 1, 1942 to February 5, 1942	—11
Total	1,103 draw-bands

September 3, 1937—1 collar leak clamp.
August 26, 1938—1
May 3, 1940 —1

Total 3 collar leak clamps

"As stated on page 8529 of the transcript, draw-bands were installed on the 6" lateral pipe line extending to Winchester from the 16" pipe line as follows:

[fol. 8705] Year 1938—1 draw-band
1939—3
1940—3
1941—3
1942—1

16 draw-bands

"The "6" sleeve was installed to close leak in a coupling on March 7, 1939.

"As shown on page 8531 of the transcript, you requested that I ascertain how much pipe was replaced when the Ohio Fuel Gas Company rehabilitated the lateral pipe line extending to Richmond, Indiana. A map furnished by the Ohio Fuel Gas Company shows that a total of 3.50 miles of the 10" lateral pipe line which was owned by Ohio Fuel Gas Company was replaced with 8" pipe during the work of rehabilitation. The length of the Richmond lateral between the 16" Line "D" and the Richmond measuring station is 12.44 miles.

"As shown on pages 8532 and 8533 of the transcript, you requested that I furnish station numbers for the leaks recently found on the 20" Line 'A'. We are unable to establish the exact station numbers, but these leaks were located approximately at Stations 1440/90 and 2200/33. (Station 0/00 is just east of Dana Measuring Station.)"

We accept this as the testimony of Mr. Young, who is now absent from the city.

[fol. 8706] Have I correctly read into the record, Mr. Baldridge, the information which was furnished to me by Mr. Young in writing?

Mr. Baldridge: Mr. Littman, I have assumed that you have. I have not even tried to check it.

Mr. Littman: And, of course, it is understood that this will constitute Mr. Young's testimony in so far as this record is concerned on the subject which I have covered?

Mr. Baldridge: Yes, of course.

Whereupon ROBERT S. DREW a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

By Mr. Littman:

Q. Mr. Drew, when you were last on the witness stand, I asked you to check certain figures which we asked you to assume were mathematically correct during the course of cross-examination. Have you checked our figures?

A. You refer to this working sheet on the Dow-Jones 30 industrial stocks?

Q. There were some figures in that connection, yes.

A. The addition of the column showing the annual interest and preferred dividends resulted in a figure somewhat different from yours but not substantially so.

[fol. 8707] Q. Will you please read our figure and yours?

A. The figure which you gave me last Friday was $122,667,567. To that, because of the change relating to the error in the figure on American Smelting, I added $3,465,000 which makes a total of $126,132,567.

Our addition resulted in a figure of $126,110,007 so that there is a differential there of about $22,000 which is extremely minor in relation to the total figure.

Q. It would not affect the figures that we derived and used in connection with the cross-examination, would it?

A. No, sir, it would not.

Q. In other words, if I correctly understand you, your check of the figures which we asked you to assume when you were last on the witness stand would in no manner change your testimony in connection with those figures?

A. That is correct, yes, sir.

Q. I also requested you, when you were on the stand last, to supply a list of bonds yielding 3½ percent or more whose fixed charges are earned at least 5 times. You recall that this was the assumption you used for Michigan Gas in your rate of return study for that company?

A. Yes, sir.

Q. Have you prepared a list of such bonds which you deem comparable to the bonds proposed for Michigan Gas in your study?

[fol. 8708] A. Yes, sir.

Q. Do you have the list with you? A. I have.

Q. How many bonds do you have on your list?

A. There are fifty bonds on the list.

Q. Do you consider these bonds comparable to those which you propose in your setup for Michigan Gas?

A. I regard these bonds as comparable to the bonds I set up in my hypothetical capitalization in the sense that any public offering of such a hypothetical bond would be in competition for the investor's dollar with such bonds as these, as well as others.

Q. It is in that sense that you consider them comparable? A. Yes, sir.

Q. You do not consider them comparable in any strict sense as being the type of bonds which you would suggest Michigan Gas Transmission Corporation should have?

A. I made no study of these fifty bonds to determine their characteristics other than the figures taken from this printed volume.

Q. Without such a study, you could not determine whether they would be desirable for Michigan Gas, could you?

A. I think such a study would have to be very exhaustive in the case of each one of these bonds to establish com-

[fol. 8709] parability with the hypothetical setup for Michigan Gas.

Q. I would like to have this clear on the record. When you made your study for purposes of this proceeding, you did not prepare any list of bonds such as those which you

assumed for Michigan Gas for purposes of your study, did you?

A. I did not prepare such a list as this but, in my regular work, I have considerable contact and am, therefore, familiar with bonds of this character.

Q. But even as late as this date you were not at all certain that any of the bonds on your present list, which has been furnished at our request, have the characteristics of the bonds which you propose for Michigan Gas under your hypothetical rate-of-return setup?

A. I am certain that many investors, if they were considering the purchase of the hypothetical Michigan Gas bonds, would compare those bonds with such bonds as these as well as others before making the purchase of Michigan Gas bonds.

Q. Mr. Drew, I wish you would listen carefully to my question and endeavor to answer my specific question, please.

Mr. Littman: Will you read the question back, please?

(Whereupon, the question commencing at Line 9 of this page was read by the reporter.)

The Witness: The bonds on this list have two characteristics that are the same as the hypothetical bonds of Michigan Gas, namely, the coverage of fixed charges and the [fol. 8710] rate of the yield on those bonds.

By Mr. Littman:

Q. Now, what other characteristics do they have in common?

A. I cannot say because I have not examined each instance exhaustively in order to compare it with Michigan Gas bonds.

Q. Well, let's examine your list of bonds.

Does your Honor have a copy?

Trial Examiner: Yes.

Mr. Culton: Will you present copies of that list?

Mr. Littman: I do not know whether we shall or not.

Mr. Culton: The rest of us are in the dark.

Mr. Littman: I do not at this stage propose to offer this as an exhibit.

Trial Examiner: I do not think I have a copy of that.

Mr. Littman: I thought you said you had it.

Trial Examiner: No, I misunderstood you.

By Mr. Littman:

Q. You have a list here of 50 bonds. How many of them are public utility bonds, other than railroads?

A. Five.

Q. You have been unable to find any other public utility bonds than the five which you show in your list that have characteristics of 3½ percent yield and fixed charges that [fol. 8711] are earned at least five times. Is that right?

A. That is correct, yes, sir.

Q. All right. Let's examine the first one, which is "Providence Gas, First Mortgage 4 Percent, 1963 Bonds". Now, you show that the yield on these bonds is 3.59 percent and times charges earned is 6.4. Is that right?

A. Yes, sir.

Q. What is the capitalization of Providence Gas?

A. I do not have a record of that here.

Q. I hand you Moody's Public Utilities, 1941, and refer you to Page 67, which shows that information. Before you examine Moody's will you please state whether you consider this Manual of investments a reliable source of information? A. Yes, I do.

Q. What is the amount of common stock outstanding?

A. On December 31, 1940, Moody's Manual indicates that the company had 1,074,028 no-par shares outstanding.

Q. What is the dollar amount of the common stock of Providence Gas outstanding?

A. The book value of the capital stock is shown as $11,307,445.

Q. What is the surplus as of that date?

A. $1,452,540.

Q. What was the amount of bonds outstanding at that time? A. $3,250,000.

[fol. 8712] Q. Now, the total capitalization was $16,209,985. Is that correct?

A. Well, I did not add it, Mr. Littman. Shall I? $16,209,985 book value.

Q. So that the bonds represent less than 25 percent of the capital? A. Yes, sir.

Q. Now, you assumed a capitalization for Michigan Gas Transmission Corporation of 50 percent bonds?

A. Yes, sir.

Q. Now, for Providence Gas, which is the first public utility appearing on your list, you have a capitalization of 25 percent of bonds having a yield of 3.59 percent. Isn't that right? A. I beg your pardon, sir?

Mr. Littman: Will you read the question?

(Whereupon, the pending question was read by the reporter.)

The Witness: Yes, sir.

By Mr. Littman:

Q. Now, let's see what rate of return is indicated for this company based upon the coverage of 6.4 times and the yield. Will you calculate that for us?

Mr. Baldridge: This is a manufactured-gas company, is it not?

Mr. Littman: Do you mean to indicate by your question, [Vol. 8713] Mr. Baldridge, that this bond is not comparable to the one, to the type and character of the one assumed by Mr. Drew for the purposes of his study in this proceeding?

Mr. Baldridge: I do not mean to indicate that in the least but I mean the question of rate of return of a manufactured-gas company in a city like Providence is entirely different from the rate of return of a pipe line company such as Michigan Gas Transmission Corporation. The risks as to the one particular type of securities may or may not be comparable but the over-all return on the two companies certainly is not at all comparable.

By Mr. Littman:

Q. Perhaps we can get at it this way in order to save time. Now, with respect to Providence Gas we have a capitalization of $25 of bonds and $75 of capital stock for every $100 of capital, do we not?

A. Book value, yes, sir.

Q. Now, for each $25 of bonds, the interest requirement is 90 cents, is it not, per year? The calculation is 3.59¢ times 25.

A. Approximately 90 cents, yes, sir.

Q. Now, that is covered according to our list 6.4 times, is it not? A. Yes, sir.

Q. Now, let's multiply the 6.4 times the 90 cents. That [fol. 8714] gives us $5.76 for each $100 of capitalization. Is that correct? A. Yes, sir.

Q. Now, that indicates that Providence Gas is earning an over all rate of return of 5.76 percent, does it not?

Mr. Baldridge: On what?

Mr. Littman: On its capitalization.

The Witness: On its book value of capitalization.

By Mr. Littman:

Q. Yes. And that 5.76 for Michigan Gas Transmission Corporation is comparable to your 8.5 percent, is it not?

A. I would say that, according to our calculation here, it is the return being earned on the book value of the capitalization of a company whose bonds sell in the same market as would those of Michigan Gas Transmission Corporation if they were to be offered to the public.

Q. Now, the calculation that you have just made is the same character of calculation which you made for Michigan Gas Transmission Corporation in testing your 8.5 percent return, is it not? A. No, sir.

Q. Didn't you testify on direct examination that you were assuming—

A. (Interposing) I used market value in place of book value.

Q. But you used this calculation to check the validity [fol. 8715] and reasonableness of your estimate rate of return, did you not?

A. Not this calculation, no, sir.

Q. Well, if market value exceeds book value, the rate of the indicated rate of return would be even lower than the 5.76, would it not? A. That is right.

Q. And only if the market value is less, in fact very substantially less than book cost could you get a rate of return for this company up as high as 8½ percent. Is not that right?

A. I think that is right, yes, sir. I might add that at the end of January, Providence Gas Company's common

stock was quoted at about 7¼ per share whereas the book value including surplus was about $13 a share.

Mr. Culton: For my information, I wonder if the reference book you have there shows when the Providence Gas Company commenced business.

The Witness: The statement here is that the company was incorporated under the laws of Rhode Island in 1847.

Mr. Baldridge: And it is a manufactured-gas company, of course?

The Witness: Yes, sir.

By Mr. Littman:

Q. Well, is this bond or is this bond not comparable to Michigan Gas Transmission Corporation? Now, you un- [Tol. 8716] derstand I only asked for comparable bonds and I do not want to take up a lot of time on this record talking about bonds that are not comparable. Now, is it or isn't it comparable?

Mr. Culton: I think if you will go back, Mr. Littman, you will find that your question related to comparable coverage and comparable rates of return.

Mr. Littman: It related to that plus bonds which he thought were comparable. I will get the transcript and show you.

Mr. Culton: My recollection is that you used comparable in coverage and comparable in rates of return.

Mr. Littman: Well, your recollection is wholly faulty in that regard, I am sorry to say, Mr. Culton.

By Mr. Littman:

Q. Well, suppose you tell us whether you consider these bonds that you have submitted in this list comparable to those which you propose for Michigan Gas?

Mr. Baldridge: I think he has already answered that, Mr. Littman, earlier this morning.

Mr. Littman: I submit he has not.

The Witness: It seems to me the answer to that question depends almost wholly on the definition of the word "comparable". This is a company located in a different

part of the country. It is a manufactured gas company, it is a very much older company, it has a bond issue that is a much smaller proportion of the total capitalization than the one I suggested for Michigan Gas. There are many phases and factors that are different from those of Michigan Gas Corporation and yet I regard the bonds as comparable in the sense that they are sold and traded in the same general market for securities as would the bonds of Michigan Gas Transmission Corporation have to be sold if offered to the public.

[fol. 8717]

By Mr. Littman:

Q. Shall we then assume for purposes of your study that we are going to have 25 percent of bonds for Michigan Gas and 75 percent of capital stock? Do you want to assume that and agree with us on that?

A. It seems to me that that would be a rather expensive way for Michigan Gas Transmission Corporation to finance itself.

Q. Not if it gets down to something like 5.76 percent against your 8.5.

A. May I give you result of my calculation on Providence Gas on the same basis that I used for the other companies?

Q. Yes.

A. I come out with a figure of almost exactly 8 percent in 1940 on the market value of the securities of Providence Gas.

Q. Now, Mr. Drew, are you willing to agree that for purposes of this study we should have a bond comparable to that of Providence Gas in so far as the proportion of bonds to total capitalization is concerned?

[fol. 8718] A. Not so far as the most economical method of financing the company is concerned, no, sir.

Q. Well, let's see where we come out if we use this ratio. Now, your bonds have a yield of 3½ percent, for Michigan Gas, do they not?

A. Yes, sir.

Q. Assuming that we are going to have, as does Providence Gas, 25 per cent of bonds yielding 3½ percent, the interest requirement is 87½ cents per year for each $25 of capital raised through bonds?

A. That is correct, sir.

Q. Now, you have suggested a coverage of five times for Michigan Gas. Suppose you multiply that by five to get the over-all rate of return and tell us what the answer is.

A. $4.375.

Q. For each $100 of capital?

A. Yes, sir.

Q. In other words, if we had a bond like this for Michigan Gas which represented 25 percent of the total capital and we used your formula, we would have an indicated return of 4.37 percent, would we not?

A. On the basis of your assumption, yes sir.

Q. Well, the assumption that I have made is precisely the situation which exists with respect to Providence Gas, isn't that right?

A. Not quite. Providence Gas coupon is 4 percent.

Q. Well, its yield is 3.59, isn't it?

[fol. 8719] A. Yes, sir.

Q. Which is very close to 3½ which you have assumed for Michigan Gas.

A. That is right.

Q. And Providence has 25 percent of its capital represented by bonds. Is not that right?

A. Yes, sir.

Q. And that is the assumption that we have used in this last calculation. Is not that right?

A. I think that is right, but you are getting the two mixed up pretty well here.

Q. Well, just a minute, Mr. Drew.

Mr. Baldridge: Let him finish his answer.

Mr. Littman: I will give you an opportunity to explain, but I want you to tell me what is wrong with our calculation thus far. Thus far we are comparable, are we not?

The Witness: Not entirely.

By Mr. Littman:

Q. Why not entirely?

A. Well, because you are mixing up the two companies and the two bonds. The Providence Gas bond is a 4 percent coupon. My hypothetical bond for Michigan was 3½. Providence's bonds are 25 percent of capitalization. In my case they were 50 percent. Providence Gas bonds

[fol. 8720] earned their charges over six times and I estimate five times as necessary for the Michigan Gas bonds.

Now, what you are doing here is combining a 3½ percent coupon and a 25 percent ratio of bonds to capitalization and a five times coverage of interest charges.

Q. Do the Providence Gas bonds have any serial maturities?

A. The bonds are all one maturity. I will have to check and see if there are any sinking fund provisions.

So far as I can see, there are no sinking fund provisions of the Providence Gas bonds.

Q. And you have assumed a sinking fund provision with serial maturities for Michigan Gas bonds in your hypothetical setup in your study for this proceeding, have you not?

A. Yes, sir.

Q. Are the bonds of Providence Gas callable?

A. They are.

Q. At what price?

A. 105.

Q. They are selling on the market for more than that, are they not?

A. I am sorry, that is 103. I looked at the wrong figure.

Q. 103 is the call price?

[fol. 8721] A. Yes, sir. May I correct that.

Q. And they are selling for about 106, aren't they?

A. Yes, about 106.

Q. What is the yield to the first call date?

A. I have no way of calculating that.

Q. Is it something less than zero?

A. I cannot answer that question.

Q. It is much less than 3.59 percent, isn't it?

A. Well, the bonds are callable on 30 days' notice as a whole at any time or, in part, on any interest date to each February 1.

Q. And that is keeping the price of these bonds down, isn't it?

A. I think it is, yes, sir.

Q. Now, let's examine this bond for a moment. Here is a bond that is callable at 103 and has a market price

of 106. If I bought this bond today at 106, I would do so well knowing that within 30 days that bond might be called at 103 and might lose the $3 that I invested, might I not?

Mr. Baldridge: I do not think that is what Mr. Drew is saying, Mr. Littman. What I understood him to say was to each February 1.

Mr. Littman: Is that what you said?

Mr. Baldridge: I think it is ambiguous, at least to me.

The Witness: I read the provisions from Moody's.

[fol. 8722] Mr. Littman: Mr. Baldridge is incorrect, is he not?

The Witness: I will read the provisions again.

Mr. Baldridge: Read the commas too, the punctuation.

The Witness: "On 30 days notice as a whole at any time or in part"—and with no comma "on any interest date to each February 1 inclusive as follows" and then there is a list of the call prices.

By Mr. Littman:

Q. Let me pose my question again.

If I went into the market and bought this bond at $106 I would do so well knowing that within a very short time, the bond may be called at $103. Isn't that right?

A. That is correct but you would have the knowledge, if you looked into it, that the bond has been outstanding quite a while and has not been called and, in the meantime, has been sold up as high as 108 and a fraction.

Q. Would you, as manager of your Trust Department, advise a prospective investor that this bond would not be called?

A. I would have no way of giving him that assurance, of course.

Q. Now, if I bought this bond at $106 today at the present market price and if this bond were called within six months, I would lose $3, wouldn't I?

A. So far as principal is concerned, you would, yes, sir.

[fol. 8723] Q. How much interest would I have received?

A. You would have received $2 a hundred in the meantime.

Q. So I would have, under that assumption, a negative rate of return of $1, wouldn't I?

A. That is right.

Q. You did not suggest any such thing for Michigan Gas Transmission Corporation, did you?

A. No, sir.

Q. Now, the next public utility bond on your list is St. Louis County Gas, first mortgage, 5 percent, 1951, having a yield of 4.20 percent, which is earning 6.6 times the interest charges. Is my statement correct?

A. Yes, sir.

Q. Mr. Coffman eliminated this company from his list in his rate of return, Exhibits Nos. 63 and 64, did he not?

A. As I recall it, it was excluded from his study, because its common stock was owned by a holding company. I believe that is what he stated.

Mr. Culton: Mr. Littman, would you object to my reading a question which you asked the other day in order to clear my own skirts in this matter? On page 8451, your inquiry addressed to the witness was as follows:

"Suppose you just name one or two bonds that you can find in your list that you have anywhere in the Financial World, pipe line companies or otherwise, that have an in-
[fol. 8724] terest coverage of five times and in interest rate of 3½ percent on its bonds?"

That was the statement.

Mr. Littman: That was a follow-up question on the original question.

Mr. Culton: Your original question used the word "comparable" but you finally got down to "any bond". I just wanted to clear my own statement that I made a while ago in the record which you challenged.

Mr. Littman: I can understand why you came to the conclusion that you did, Mr. Culton, but that question must be read in connection with the full context of the transcript and the other questions that preceded it which used the term "comparable".

Mr. Culton: I thought you were wrong in your inquiry in that question there.

By Mr. Littman:

Q. Mr. Drew, you understood my inquiry to relate to comparable bonds, didn't you?

A. I remember your saying "Comparable bonds" and again I say that it depends upon your interpretation or definition of the word "comparable".

To me, the investor, in considering a bond for his own purchase, is very likely to compare that bond with many other types of bonds which are available in the market and not only that, but investment counsel and investment [fol. 8725] bankers are continually digging up bonds of various characteristics for the consideration of their clients.

Q. Did you undertake here in this list to supply a list of bonds which you considered comparable?

A. From the standpoint of my definition of the word "comparable", yes, sir.

Q. So you did not misunderstand my question, did you?

A. I put my own interpretation on the word "comparable" because my viewpoint is the investor's viewpoint which may be different from yours and because time did not permit; in any event, the exhaustive study which would have been required to establish the comparability of these or any other bonds with those of Michigan Gas Transmission Corporation.

Q. Is it your testimony that an investor would prefer to invest his money in these Providence Gas first mortgage bonds in preference to the bonds which you suggest for Michigan Gas?

The Witness: Will you read that, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: That is by no means my testimony.

By Mr. Littman:

Q. In fact, the contrary would most decidedly be your testimony?

A. I believe it would on the basis of this price relative [fol. 8726] to call price. Yes, but I would say this, that if these bonds dropped one point in price or one point and a half, it is quite possible that you would find buyers for those bonds and I am speaking of the Providence Gas 4's.

Q. However, so long as any of the bonds which you have shown on your list are selling above the call price, you would say, would you not, that no investor would prefer such bonds on your list as against the bonds which you proposed in your hypothetical setup to issue for Michigan Gas?

A. No, sir, I could not make that statement.

Q. Let's look at St. Louis County Gas Company, first mortgage, 5 percent, 1951 bonds, having a yield of 4.20 percent and earning 6.6 times its interest. That is a rather high coupon rate, isn't it, Mr. Drew?

A. In present-day financing, it certainly is.

Q. Now, these bonds could be refinanced at a lower coupon rate, could they not?

Mr. Baldridge: May I have that last question read?

(Whereupon the pending question was read by the reporter.)

The Witness: Without having made an exhaustive study of the bonds themselves or of the company, my opinion is, from the figures readily available here, that those bonds could have been refunded anytime in the last two or three years. It is interesting to note that they have not been.

[fol. 8727] By Mr. Littman:

Q. What is the current market price of those bonds?

A. 106.

Q. That is above call price, isn't it?

A. One point, yes, sir.

Q. Now, what is the capitalization of St. Louis County Gas Company? You will find that on page 1323 of Moody's Public Utilities 1941.

A. Moody's Manual shows, for December 31, 1940, book value, first mortgage bonds, $1,500,000.

Q. What is the capital stock and surplus?

A. The capital stock is shown at $4,100,000 and the surplus as $2,288,948.

Q. So that these bonds represent less than 20 percent of the capitalization of the company, do they not?

A. On book value, yes, sir.

Q. What is the amount of interest required on $20 of these bonds per year in terms of yield?

A. Five percent.

Q. Isn't it 4.20 that the investor is getting?

A. The company has to pay 5 percent on a million and a half of bonds.

Q. All right. Let's take the 5 percent.

A. Five percent on $20, did you say?

Q. On $20 of bonds.

[fol. 8728] A. $1 for interest.

Q. Now, the coverage is 6.6 times, isn't it?

A. Yes, sir.

Q. Indicating a 6.6 rate of return for that company?

A. Based on its book value, yes, sir.

Mr. Baldridge: Mr. Drew, that is a mixed gas distributing company, is it not?

The Witness: Yes, sir.

By Mr. Littman:

Q. Well, have you been able to find any natural gas pipe line companies that have any securities, such as those which you suggest for Michigan Gas Transmission Corporation? I am speaking of bonds.

A. There are none in this list, no, sir.

Q. In other words, you have not been able to find any so far? A. That is correct.

Mr. Baldridge: You mean that have the characteristics you mentioned of times charges and yields?

Mr. Littman: Yes.

Have you been able to find any natural gas companies that have the bond characteristics of those which you suggest in your hypothetical setup for Michigan Gas?

Mr. Baldridge: You mean that are openly sold on the market? You must make that qualification.

[fol. 8729] Mr. Littman: I am not making any such qualification.

By Mr. Littman:

Q. You do not have any such bond on your list, do you?

A. Just a second—the sixth bond on the list, New Mexico Gas bonds, appear to be from the Manual here, although I have not had a chance to study the bond or the company, appears to be a natural gas distributing and transmission company.

Mr. Littman: Will you please read that last answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. I hand you Standard & Poor's "Bond Investments", issue of September 6, 1941, and ask you whether the advice of Standard & Poor's with respect to Providence Gas 4's is to "switch"?

A. Yes, sir, it is.

Q. What does the word "switch" mean as it is used there?

A. It means to sell the bond to somebody else who is willing to buy it and then reinvest the proceeds of your sale in some other bond.

Q. In other words, in the words of a layman, to "get rid of it quick", isn't that right?

A. No, I do not interpret it that way.

Q. Would you say plain "get rid of it"?

A. No, sir.

[fol. 8730] Q. Get rid of it and invest your money in something else?

A. Well, I do not like the words "get rid of it", because I do not interpret Standard's "switch" recommendation to mean that. It means, as I said, to sell the bond to somebody else who is willing to buy it at a price that is mutually agreeable and reinvest the proceeds of your sale in some other security.

Mr. Littman: Mr. Examiner, I see the recess hour has come and gone. I hope we are not foreclosed from our usual brief recess.

Trial Examiner: We will take a five-minute recess.

The Witness: I should like to add one comment on Providence Gas, if I may, before we finish.

In Fitch Bond Record of February 24, 1942, Providence Gas Company bonds are quoted at 106½ bid, not asked but bid, and that means that somebody is willing to pay 106½ for those bonds.

By Mr. Littman:

Q. And if that "somebody" paid $106.50, his yield would be even lower than we have already indicated, would it not?

A. Very slightly.

* * * * * * * *

FRED A. SPITZNAGLE a witness, having been previously duly sworn, resumed the stand and testified further as follows:

* * * * * * *

[fol. 8732] Trial Examiner: Mr. Chamberlain has now handed to the Trial Examiner revised Exhibit No. 166 in accordance with our understanding. While the original was received, it was received last Saturday, the new exhibit may be marked 166 and substituted in the file for the original.

(The Document Referred To Was Marked No. 166 and Received In Substitution For The Original Exhibit No. 166.)

Q. Mr. Spitznagle, have you examined Exhibit 166 which is now handed you?

A. Yes, sir, I have.

Q. And have you checked the figures that appear on that exhibit?

A. Yes, sir, I have checked the figures both with the original exhibit, in so far as the original exhibit contains the same figures, and I have also checked the record which begins at Page 8486.

Exhibit 166, which you are now handing to me, has an error in the figure in the 1932 column under the caption "Amount". The last item should be $1,097.92 instead of 72 cents.

Q. And that has been corrected on all of the copies that have been presented?

A. Yes, sir, I gave it to you and I think it has been corrected.

Q. Now, this data relates to the sales of natural gas and [fol. 8733] purchases by the companies that are identified in the left hand column.

A. That is correct; yes, sir.

Q. And those you find to be correct both as to quantity and the amount of the purchase price?

A. Yes, that is correct.

Q. Now, have you obtained the gas revenues of Indiana Gas Transmission Corporation for the years 1931 to 1935, inclusive?

A. Yes, sir, and I will be glad to read them off to you.

Q. If you please.

A. For the year 1931, $79,063.62.

. . . . . .

The Witness: There are only five figures involved.

For the year 1932 such revenues were $596,898.57;

For the year 1933 they were $547,315.45;

For the year 1934 they were $604,434.81;

For the year 1935 they were $784,265.31.

[fol. 8734] By Mr. Chamberlain:

Q. I will ask you again the revenues for 1932.

A. $596,898.57.

Q. I now hand you the document marked for identification as Exhibit 169 and I wish to ask whether you have checked the figures as well as the percentages given in this document.

A. Yes, sir, I have, but I would like to have you refer to the percentages as revenue per M. c. f. They are really not percentages, they are percent amounts.

. . . . . .

[fol. 8735] Q. Now, will you state for the purpose of the record what the increase in the sales in M. c. f. for the year 1941 has been as compared with the year 1936? I am referring now to Michigan Gas Transmission Corporation's sales.

A. The percentage that it shows on the Exhibit 169 I believe excludes the non-affiliates, if I am correct.

Q. That is right.

A. Excluding the non-affiliates the percentage increase was 324.03.

[fol. 8736] Q. What was the percentage increase of sales of natural gas by Michigan Gas Transmission Corporation to non-affiliates in the year 1941 as compared with the year 1936?

A. Percentage increase of sales in M. c. f. was, as I stated, 324.03 percent.

Q. And what was the increase in revenue for 1941 over the year 1936?

A. With respect to the same companies the percentage increase in revenue was 268.68 percent.

Q. And with respect to the same companies and period, what was the increase as a percentage in the revenue received per M. c. f.?

A. 13.06 percent.

[fol. 8737] Q. Now, I wish to call your attention to the five customers of Indiana Gas Transmission Corporation as of the first two months of the year 1936 and to the percentage of gain or loss in their sales during the period from 1936 to the end of 1941, inclusive. What was the percentage of increase or decrease in the sales of natural gas by Michigan Gas Transmission Corporation to these five customers who continued to be customers throughout the period and all of which were non-affiliated in the year 1941 as compared with the year 1936?

A. The customers to which you refer are on the second page and the sales of Indiana Gas Transmission Corporation to those customers for the period 1936 to 1940, inclusive, appear on that page. The percentage increase in sales of M.c.f. to those customers in 1941 over the year 1936 is 247.93.

Q. And what was the increase in revenue with respect to the same companies and conditions?

A. The increase in revenue was 191.36 percent.

Q. And what was the percentage decrease in revenue per M.c.f. with the same companies and under the same conditions?

[fol. 8738] A. The decrease in revenue per M.c.f. was 16.26 percent.

Q. Now, what was the percentage decrease in revenue per M.c.f. derived by Michigan Gas Transmission Corporation from sales of natural gas to non-affiliated customers in 1941 under the revenue per M.c.f. to Indiana Gas obtained from Michigan Gas Transmission Corporation as compared to the same non-affiliated customers in 1936?

A. Such percent was 19.25 percent.

Mr. Chamberlain: The Intervenor now offers in evidence, as a part of the cross-examination of Mr. Spitznagle, Exhibit No. 169.

Trial Examiner: Any objection? (No response.)

The statistical table, consisting of two sheets, concerning which questions have just been asked, will be marked for identification as Exhibit 169 and will now be received in evidence as Exhibit No. 169, without objection.

(Exhibit No. 169 was marked and received in evidence.)

[fol. 8741] ROBERT S. DREW a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

[fol. 8742] By Mr. Littman:

Q. Mr. Drew, you show on your list New Mexico Gas, first convertible 5½ percent. 1951, bonds. What is the capitalization of that company as shown by Moody's 1941 Public Utilities?

A. As I stated, I have not examined into the detailed characteristics of any of these bonds, Mr. Littman.

Q. It is important to do that, isn't it, to determine whether or not these bonds are reasonably comparable to those which you propose in your structure for Michigan Gas?

A. It would be, yes, sir, but I have made no attempt to do that.

Q. Is there any bond on your list which you consider as good an investment as the 3½ percent bonds which you have proposed for Michigan Gas Transmission Corporation?

A. Since I have not made a detailed study of these bonds, I think the best way for me to answer your question is to say that I would regard those hypothetical 3½ percent Michigan Gas Transmission Corporation bonds as entitled to a rating of BBB and on the list of 50 bonds which you have before you, the entire list down to and including Crucible Steel, 3¼, are rated BBB or better in the Bond Tabulator.

Mr. Baldridge: That constitutes about 25 different issues of bonds, does it not, Mr. Drew?

The Witness: Exactly 25, yes, sir.

[fol. 8743] By Mr. Littman:

Q. How would you rate Panhandle Eastern's recent issue of 3 percent bonds?

A. I think they are worth a AA rating, between A and AA, in my opinion.

Q. How would you rate Panhandle Eastern Pipe Line Company's 3 percent bonds of 1960?

A. I think I would rate them about the same, AA.

Q. The rating on those bonds, as shown in the September 6, 1941, issue of Standard & Poor's "Bond Investment" was A1. Isn't that correct?

A. That is AA. That is the same as AA or double A. Triple A is the same as A1 plus. Different Services use different codes.

Now, I have before me again this Fitch Bond Record and Fitch rates the new 3 percent bonds as A and rates the 3's of 1960 the same.

Q. How did you rate the Michigan Gas Transmission bonds which you have proposed for purposes of your study?

A. I think about BBB.

Q. Why is the Panhandle Eastern Pipe Line Company bond due 1960 a better one than the one you proposed to issue for Michigan Gas Transmission Corporation?

A. In my opinion, there are several factors that probably lead the Service organizations to rate Panhandle [fol. 8744] Eastern bonds either A or AA as compared to my opinion as to the ratings of these hypothetical Michigan Gas Transmission 3½'s.

Q. What are those factors that cause Panhandle Eastern's bonds to be rated better than your hypothetical bonds for Michigan Gas?

A. I think the fact that Panhandle Eastern owns certain gas reserves, is a company having been established longer than Michigan Gas Transmission, serving a wider territory and having, I think, more possibilities of branching off to reach other territories.

Q. Don't you know that all of the outstanding securities of Michigan Gas are now owned by Panhandle Eastern Pipe Line Company?

A. I understand that they are but you are asking me about the relationship between two pieces of property upon which are two separate bond issues, respectively.

Q. Isn't the natural gas supply of Panhandle Eastern Pipe Line Company available to Michigan Gas Transmission Corporation?

A. I would expect so, but I would say it was not necessarily so at the time that I set up this hypothetical bond issue.

Q. Would you change the rating on your hypothetical bonds today in view of the events that have transpired since you made your study originally?

A. No, sir. As compared to Panhandle Eastern, Mich- [fol. 8745] igan Gas Transmission Corporation, as I understand it, takes the gas at a certain point, transmits it up to another point, and has a contract for the delivery of the gas to one large customer and perhaps other smaller customers.

Q. You understand that these two companies are proposed to be operated more or less as a single unit, don't you?

A. I presume they will be.

Q. What exists today in respect of this situation that would cause you to rate Michigan Gas Transmission bonds below those of Panhandle Eastern?

A. Because the bonds, I assume, would be a lien on two separate parts of the property. Otherwise, we would

be talking about another issue of Panhandle Eastern bonds.

[fol. 8747] (Exhibit No. 167 was received in evidence.)

Q. Mr. Drew, you show on your list New Mexico Gas first convertible 5 percent 1951 bonds having a yield of 4.48 percent and earning 7.4 times interest earned.

A. Yes, sir.

Q. Now, I hand you Standard & Poor's "Bond Investment", dated December 6, 1941, and refer you to page [fol. 8748] No. 612. Will you please state what is shown thereon with respect to the interest coverage on those New Mexico bonds?

A. Standard & Poor's publication, which you have just described, shows a coverage of 3.45 times.

Q. Whereas your list shows 7.4 times, does it not?

A. That is correct, yes, sir.

Q. Can you explain the difference between the figure shown in your list and the figure shown in Standard & Poor's?

A. No, I cannot explain the difference. I verified, however, that the Bond Tabulator shows the coverage of 7.4 times.

Q. Well, they cannot both be right, can they?

A. Not if that coverage is for the same period, that is correct.

Q. It is for the same period, is it not?

A. The Bond Tabulator does not give the period covered while Standard & Poor's figure is for the year 1940.

Q. Well, if Standard & Poor's is correct, then clearly this New Mexico Gas bond would not be comparable and should not be shown on this list?

A. That is correct.

Q. Now, the only remaining public utilities which you have on this list, other than those which we have heretofore discussed, are two street-railway companies. Is that right?

A. You refer to the Cleveland Railway sinking fund [fol. 8749] 5's and the New York Railway 6's or '58?

Q. Yes. Are there any other public utilities shown?

A. I think those are the only ones remaining.

Q. Now, we have heretofore discussed three public utilities, to wit, Providence Gas, St. Louis County Gas and New Mexico Gas, have we not?

A. Yes, sir.

Q. The other two public utilities, as you have just stated, are street railway companies, making five public utilities in all on your list of 50 companies?

A. Well, I think they are both street railway companies. You made the statement, I described the bonds. I think, however, they are both street railways. It may be, however, that the New York Railway bonds may have some power business. I do not know. The Manual will show.

Q. Well, it is clear at any rate that the remaining 45 bonds shown on your list are not public utility bonds?

A. I think that is correct.

Q. The New York Railway bonds are selling above call price, are they not?

A. The bid price in the Bond Tabulator is shown as 105 which is also the call price.

Q. Now, with respect to the Cleveland Railway sinking fund first mortgage 5 percent bonds due 1945, that company has an issue of cumulative common stock, does it not? [fol. 8750] A. I do not know, sir. I have not the details of the capitalization before me.

Q. I hand you Moody's Public Utilities for the year 1941 and ask you to verify my understanding.

A. That is correct.

Mr. Baldridge: Mr. Littman, did you say "cumulative common stock"?

Mr. Littman: Yes. A rather startling and unusual thing. Have you ever heard of any such stock, Mr. Baldridge?

Mr. Baldridge: Am I off the record?

Mr Littman: No, you are on the record.

Mr. Calton: I thought all common stock was cumulative.

Mr. Baldridge: I really don't know whether I have or not, but it certainly is not the kind I am accustomed to hearing about.

Mr. Littman: If the inflection of your voice could be put on the record, I do not think there would be any doubt that you were surprised.

Mr. Baldridge: I thought you were going to say "cumulative preferred stock". "Preferred" is the word I expected to hear after "cumulative" and I thought you had just misspoken yourself.

By Mr. Littman:

Q. And that is a very unusual character of security, is it not?

[fol. 8751] A. It is to me, sir.

Mr. Culton: I wonder, just to satisfy our curiosity, if it is described any further there. Does it mean that there is a recapture clause of some kind? In what way is it cumulative?

By Mr. Littman:

Q. Are you ready to answer the question?

The Witness: Will you read the last question?

(Whereupon, the question commencing at line 2 of this page was read by the reporter.)

The Witness: I do not find in Moody's Manual any description of the cumulative provision of the common stock of Cleveland Railway Company.

By Mr. Littman:

Q. That cumulative characteristic of the common stock might have something to do with the investor's appraisal of these bonds, might it not?

A. I should not think so.

Q. You do not think that would affect the situation any?

A. No, sir.

Q. I note on page 60 of Moody's 1941 Manual of In-[fol. 8752] vestments for Public Utilities, that there was a deficit in the interest fund of Cleveland Railways of $5,358,101, that amount appearing on the liability side of the balance sheet as of December 31, 1940. I also see a notation with respect to the same item for 1939 reading as follows:

"After provision for unpaid dividends of $4,552,188" the Interest Fund is described as follows:

"Interest Fund, year ended December 31, 1940: Deficit at January 30, 1940 (after provision for accumulated unpaid dividends) $4,806,915. Add: Net loss for the year computed on the basis of franchise allowances (after provision of $1,883,064 for cumulative dividends on common stock), $1,016,383; total, deficit $5,823,279. Deduct: Balance transferred from operating reserve at February 28, 1940, $465,196; Deficit, December 31, 1940, $5,358,101."

Would an investor who contemplated investing his money in these Street Railway bonds take into account this very unusual cumulative common stock and the other facts which I have just read into the record?

A. I am quite sure an investor, considering the bond, would take those things into account but I should be very much surprised if the principal and the interest on these first mortgage bonds which are due in 1945, I would be very much surprised if they did not represent a prior lien on both the property and the earnings of the company.

[fol. 8753] Q. Speaking of liens, do you consider the liens on property important?

A. Yes, sir.

Q. Do you know whether there is any lien on property secured by the next bond shown on your list, to-wit, American U. G. Chemical Convertible debentures 5½ percent due 1949?

A. I would expect that there would be no mortgage lien on any property of the company.

Q. Is there any other kind of lien on the property?

A. Represented by those bonds?

Q. Is there?

A. I beg pardon?

Q. Is there any other kind of lien on the property that secures those bonds?

A. Without examining the indenture under which the bonds were issued, I would judge, by the description of the bonds, that it ranks as a general obligation of the company.

Q. And has no lien securing the payment thereof?

A. Well, it might have a lien on certain parts of the property.

Q. And it might not?

A. And it might not. I cannot determine because I have not looked at the indenture.

Q. But, offhand, it looks to you like merely a general obligation of the company?

[fol. 8754] A. Yes. It is, in that way, similar to certain other bonds of much higher rating that this one, such as American Telephone & Telegraph debentures which are a general lien but have no direct lien on property. They are general obligations of the company.

Q. What are the American Telephone & Telegraph debentures selling for and what is the yield?

A. Fitch Bond Record of February 24 shows those debentures selling at prices to yield around 246 to 288 percent to maturity.

Q. I note on page 2894 of Moody's Manual of Investments for Public Utilities for 1941, in [refering] to the American I. G. Chemical Corporation convertible debentures, 5½'s due 1949, contains the following statement:

"Security not secured by any lien".

You do not doubt the accuracy of that statement?

A. I think that is correct, no doubt.

Q. Isn't this the Chemical Corporation that is owned by German interests?

A. I believe not.

Q. And is now subject to an inquiry by the Department of Justice?

A. It may be.

Q. You did not [inquiry] into that?

A. No, sir, I did not inquire. I have not examined into [fol. 8755] the circumstances or the terms or the description of any of these bonds.

Q. Mr. Drew, can we agree that in order for these bonds which you show in your list to be reasonably comparable with the bonds which you have proposed for Michigan Gas Transmission Corporation for purposes of your study, such bonds should constitute at least 50 percent of the capital structure of the company?

A. No, sir.

Q. That is the ratio of bonds that you have assumed for Michigan Gas Transmission Corporation, is it not?

A. That is correct.

Q. And yet you say that that same feature is not required to render these other bonds comparable to that which you have assumed for Michigan Gas Transmission Corporation?

A. In answering your question, I would like to say this, that my viewpoint represents the investor's viewpoint and an investor who has funds with which he wants to purchase bonds does several things.

First, he looks at his portfolio and he determines whether or not he has the kind of diversification among different industries that he should have among his portfolio. He looks at his portfolio from the standpoint of diversification of maturities. A conservative investor would like to have or should have a ladder of maturities in his portfolio. [fol. 8756] He must decide for himself how much risk he is willing to assume from the purchase of a new investment.

He must decide for himself what income from that investment he wishes to obtain.

Having reached conclusions on these and some other points, he is not restricted to any field of investment. He is not restricted to gas pipe line securities nor natural gas securities nor to utility securities. Practically speaking, the entire field of investment is open to that investor and if he has decided that he would like to buy with this money at hand an investment which will pay him 3½ percent or better and if he feels that he would like to have a coverage of his interest charges in the neighborhood of five times or better and if he is willing to buy or, at least, consider some bonds which have a rating of less than BBB, then this entire list of bonds would be available to that investor for consideration for purchase and, as such, he will consider that list of bonds comparable to the hypothetical bond issue of Michigan Gas Transmission Corporation.

Q. Now, you say you have a list here of 50 bonds which might conceivably be comparable?

A. I did not say it that way. I said I thought every bond on this list might well be considered by the investor having reached the conclusions which I just stated.

Q. How many bonds did you examine in arriving at this list of 50?

[fol. 8757] A. At your request last Friday that a list of bonds be submitted which bore a return to present prices of 3½ percent or better on which companies were recovering their fixed charges five times or better, time permitted me only to look through "The Bond Tabulator" and to select bonds which qualified under that suggestion of yours and, as a result, these 50 bonds are submitted.

Q. How many bonds are there listed in that Bond Tabulator?

A. I have no idea, sir.

Q. It would run well into the hundreds, wouldn't it?

A. I am sure it would.

Q. Approximately how many?

A. Well, it would be several hundred.

Q. How many pages of bonds are listed in "The Bond Tabulator"?

A. Fifty-four pages.

Q. How many are there on each page, on the average?

A. About 84.

Q. That would be approximately 4,500 bonds, wouldn't it?

A. I think it would, yes, sir.

Q. Mr. Drew, I consider a bond to be reasonably comparable with those which you propose to issue for Michigan Gas when it has the following features:

[fol. 8758] 1. When the bond constitutes at least 50 percent of the capital structure of the company which is precisely what you assumed for Michigan Gas;

2. Where the bond is selling to yield 3½ percent or more, which is what you assumed, more specifically, you assumed 3½ percent;

3. The bond should be selling at or below its call price;

4. The bond should be earning charges five times and have prospects of such continued earnings. Furthermore, the company which has these bonds outstanding should have reasonable and adequate depreciation reserves on its books.

Now, that is my definition of "reasonably comparable" and I shall ask whether you have found any bonds

among the 4,500 which you examined which have all of those characteristics.

Mr. Baldridge: The witness did not say he examined 4,500, Mr. Littman.

By Mr. Littman:

Q. Didn't you examine 4,500?

A. "Examine" is too strong a word. As I say, I looked through this volume, "The Bond Tabulator" for the purposes I formerly stated.

Q. Did you find any bonds in the list of 4,500, approximately, that met the characteristics which I have described?

A. I made no such search.

[fol. 8759] Q. Do you think there are any in there that have these five characteristics which I have described?

A. I have no way of even guessing at that but I should say that from my own viewpoint, representing the investor's regard for investors, that a strict compliance to any set of specifications like this would be utterly unnecessary to the investor who is studying a number of bonds in order to select one for his own purchase.

Q. But you have imposed precisely every one of these five conditions and characteristics that I have named upon the proposed bonds for Michigan Gas Transmission Corporation. Isn't that right?

A. That is correct.

Q. What is unreasonable about my assumption that these five characteristics should appear in other bonds for those other bonds to be comparable?

A. In setting up that hypothetical capitalization, I was undertaking to do two things: I was undertaking to set up a capitalization which would be pretty close to the most economical method for Michigan Gas Transmission Corporation to use in financing itself entirely and, at the same time, to come out with securities which would be acceptable to the investing public.

Q. You would not have any difficulty finding bonds in this list of 4,500 which met the five characteristics that [fol. 8760] you have used for Michigan Gas which are selling to yield about 2.75 percent including the Telephone Company bonds which you mentioned?

A. Are you asking me a question, sir?

Q. Yes.

A. I think that is correct but I would have to add to that that this set of specifications which you have just described—

Q. (Interposing) They are your set of specifications.

A. All right, my set of specifications are only a part of the number of factors to which an investor would give attention in considering the purchase of securities.

Q. And where you would find those specifications, you will find a yield of 2.75 percent, wouldn't you, or thereabouts?

A. I should say that considering just these specifications, the yield would run anywhere from 2.75 to 6.89, perhaps. I have not studied that.

Q. Suppose you find some of those for us. We are using your own characteristics on these bonds. You cannot point to any now, can you?

A. I cannot, offhand, certainly. I cannot carry those details in my mind.

Q. Now, when you went about the task of fixing what you considered to be a reasonable return to which Michigan Gas Transmission Corporation was entitled, didn't [fol. 8761] you consider it important to first make a study of the situation?

A. No, sir, not beyond my everyday contact with securities.

Q. Well, at any rate, as you have heretofore testified, you have not made an investigation which would enable you to now say that the 50 bonds shown in your list submitted today are reasonably comparable with the bonds which you propose for Michigan Gas Transmissioin Corporation, considering the features which I [enumerated] a moment ago?

A. Well, I must make this condition, that I am looking at that question from the standpoint of the investor and from the standpoint of the investor, he would have the means and he probably would have the inclination to make a comparison of Michigan Gas Transmission bonds with these very bonds and others and, therefore, for my purposes they are comparable.

Q. Will you please answer my question? You said you were going to qualify your answer, but you have not answered my specific question.

Will you please read it?

(Whereupon, the question commencing at line 5 of this page was read by the reporter.)

The Witness: I have not made such an investigation.

By Mr. Littman:

Q. Mr. Drew, I would like to buy a bond at par that [fol. 8762] would yield me 3½ percent and will have the characteristics which you have prescribed are necessary for the bonds which you propose for Michigan Gas Transmission Corporation.

Can you advise me where I can buy such a bond?

Mr. Baldridge: Mr. Littman, you used the words "prescribed are necessary". That is not my understanding of the witness' testimony.

Mr. Littman: Whether it is your understanding or not, this witness has no difficulty understanding my question. I am satisfied. He thinks he is able to take care of himself.

Mr. Baldridge: It is not a question of taking care of himself, it is a question of confusing the record.

Mr. Littman: I think you have succeeded admirably in confusing this record all week, Mr. Baldridge, by countless, needless interruptions. Are you objecting to this question or not?

Mr. Baldridge: Unless you will rephrase it, I will. I was giving you an opportunity to rephrase it, out of courtesy. If you do not appreciate that, I will object.

Mr. Littman: Mr. Examiner, the objection is, of course, not well taken simply because counsel does not understand the question. The question is objectionable only if the witness does not understand the question and he has not so indicated.

Mr. Baldridge: I think that any question is objectionable when you state that the witness has testified to something that the record does not show he is testifying. If I [fol. 8763] am wrong, I stand to be corrected, but my understanding of the record is that the witness did not prescribe as necessary any conditions as to bonds. He recom-

mended certain kinds of bonds. I think there is a vast difference between those two uses of the words.

Trial Examiner: Read the question.

(Whereupon, the question commencing at line 25, Page 8761 of this transcript was read by the reporter.)

Trial Examiner: I think that question is clear. He may answer. Of course, you may qualify, Mr. Drew, if it is necessary. The testimony, as I recall it, a few moments ago was that the description of a bond, a hypothetical bond which Mr. Littman read by numbered paragraphs expressed the conditions of the bond which you had used in your suggested refinancing plan, that you assented to that fact, to that statement. Am I right?

The Witness: That is correct, Mr. Examiner.

Trial Examiner: You may answer.

The Witness: In my direct testimony the wording of the paragraph preceding that hypothetical setup was this:

"Under present conditions I believe the most economical method of financing publicly a company like Michigan Gas Transmission Corporation, assuming a total capitalization of $13,000,000, would be to set up a capitalization, one half serial bonds and one half common stock. My [fol. 8764] opinion is that the following setup would be favorably received by the investing public.".

By Mr. Littman:

Q. Will you please read on so that we may have these characteristics?

A. "$6,500,000 3½ percent serial bonds, one to 16-year maturities and $6,500,000 common stock."

Q. You mentioned something about coverage in there, too, did you not?

A. Shall I read the full paragraph?

Trial Examiner: Since it has been brought into question, Mr. Drew, it would be proper to read it if you wish.

The Witness: "$6,500,000 3-½ percent serial bonds, one to 16-year maturities. Interest the first year would be

$227,500 which would have to be covered at least five times after taxes. This would require a gross income of $1,137,500. Interest and serial maturities combined would be covered 1.8 times.

"I believe these bonds could be sold to net the company an average of about par. $6,500,000 common stock after $227,500 interest and $406,250 annual serial maturity total $633,750. There would remain $503,750.

"Price-earnings ratio for the first year would be about 13. The rate of earnings on the common stock would be 14 percent before serial maturities and 7.7 percent after [fol. 8765] such maturities. Total, $13,000,000 total capitalization.

"The $1,137,500 gross income required for this setup would be about 8¾ percent on the $13,000,000 capital."

By Mr. Littman:

Q. Now, will you refer me to a bond such as that which I have described a minute ago?

A. I cannot refer you to such a bond without considerable study and it would be only fortuitous circumstance if I were to find one of that exact specification, but I would say I never heard of an investor who set down such a strict set of specifications when he wanted to make an investment.

Q. Such a strict set of specifications which you, yourself, have prescribed for Michigan Gas?

A. That is correct.

Q. Mr. Drew, does your bank, when acting as Trustee, guarantee any of its beneficiaries against the effects of inflation?

A. No, sir.

Q. Do you know of any Trustee that does?

A. No, sir.

Q. Your bank would soon go broke if it did anything like that, would it not?

A. I cannot say as to that, but I would not want to take the risk.

[fol. 8766] Q. Certainly if it continued to pay current yields it would soon end up on the financial rocks, so to speak, would it not?

A. Your question is not clear to me, sir.

Q. Assuming that your bank guaranteed against inflation and, also, continued to pay the yields which it now pays on its trust funds, it certainly would get into financial difficulties very soon, would it not?

A. Your question still is not clear, but I can answer in the affirmative because I think it would ultimately get into trouble with any kind of a guarantee.

Q. Is any investor that you know of able to hedge his investments against inflation today?

A. So far as I know, there is no perfect hedge against inflation, no, sir.

Q. If the investor in public utility securities were to be given a complete hedge against inflation, he would certainly be the most favored of all investors, would he not?

A. I should say so, yes, sir.

Q. He would probably accept a nominal return or perhaps a negative return rate in order to get the benefit of the inflation hedge, would he not?

A. No, sir, because a part of the inflation hedge is the income that he derives from the investment.

Q. If his capital investment were guaranteed against [fol. 8767] inflation, would he require any income, in your opinion?

A. My opinion is that the vast majority of investors would want income from a security which they bought for the purpose of hedge against inflation.

Q. But that income would be much lower, would it not, than if he had no guarantee against inflation? In other words, he would be willing to accept a considerably lower return on his investment if the investment were, itself, guaranteed against inflation. Is that correct?

A. When you speak of having his principal guaranteed against inflation, I presume you mean that someone guarantees to this investor that the amount that he invests in this given security is going to appreciate at the same rate as, let us say, for simplicity, cost of living.

Q. What I am saying is precisely that, to-wit, that he will be guaranteed that his investment will continue to buy the same amount of bacon and eggs five years from today, for example, as that amount of bacon and eggs which he can purchase today with present-day dollars.

A. Well, in my viewpoint an investor does not buy bacon and eggs with principal, he buys it with income

and, consequently, the income, the rate of income, would have to be guaranteed to increase in the same proportion as the cost of living increases in order that he can buy out of income as much bacon and eggs at the peak of the [fol. 8768] inflation as he could when he bought the investment.

Now, that implies a rapid increase or a rise, at any rate, in the ratio of income to his original purchase cost.

. . . . . .

By Mr. Littman:

Q. Does the investor in Government bonds have a hedge against inflation?

A. Generally speaking, no, but there is one issue of Government bonds in which there is a moderate hedge against inflation.

Q. Which one is that?

A. That is the U. S. Savings Defense Series G, 2½'s due in 12 years, selling at par, under the terms of which there is set up a retirement schedule according to which the Government agrees to buy back the bonds at a given price, according to the time, from the original investor upon his demand. That is so framed that if interest rates should, because of inflation or for any other reason, rise to 5 percent, he could bring demand on the United States Government and get his money back at a discount, the maximum discount being a price of $94.70 per $100 and [fol. 8769] reinvest at the higher rate.

To a degree that is a hedge against inflation, but that is the only one I know of in the Government list.

Q. That is a very minor hedge against inflation, is it not?

A. It is a very important hedge for a 12-year period and it is so important to the trust companies of the United States that millions upon millions of dollars are being invested in those U. S. 2½ Series G.

Trial Examiner: Incidentally, that is a novel development, Mr. Drew, in ultimate finance?

The Witness: Yes, sir, as far as I know it is the first of its kind in our country.

By Mr. Littman:

Q. That is; however, not a complete hedge against inflation, is it?

A. I stated before, I think, that there is no such thing as a perfect or complete hedge against inflation.

Q. If I had deposited dollars in your bank in 1936 and I withdrew them on November 12, 1941, would my withdrawal be scaled up or down because of the change in the purchasing power of the dollar between those two periods?

A. Well, I am not an economist, but in answer to that question I should say that you would get the same kind of dollars when you withdrew as when you deposited. I [fol. 8770] should say, further, that the dollars that you withdrew would buy fewer commodities than those which you deposited, simply because I believe the average of commodity prices has risen during that period.

Q. The same is true of life insurance, isn't it?

A. A similar thing, yes. Of course, life insurance is paid for over a long period of years and usually pays out in a lump sum, it is a little different kind of thing.

Q. What rate of interest does your bank pay on these deposits which are not, of course, as you say, guaranteed against inflation?

A. Now, when you ask me that question, Mr. Littman, you are referring to our commercial deposits or our trust accounts?

Q. Your commercial time deposits.

A. Well, the savings account rate is 1½ percent and the commercial deposits by commercial corporations receive no interest payments by law.

Q. Now, Mr. Drew, if you were to guarantee your savings accounts against inflation, you would, in all probability, not pay any interest, would you?

A. Well, I find it hard to conceive that any such guarantee would ever be given.

Q. Well, if you can conceive of such a guarantee, and a certain witness in this case has conceived it with re- [fol. 8771] spect to Michigan Gas Transmission Corporation, you would not have to pay any interest to attract depositors, would you?

A. I see what you mean.

Q. You would not have to pay me any.

A. Well, I would just dislike to answer such a question that is so far from the realm of possibility in the banking field.

. . . . . .

[fol. 8821] Robert S. Drew a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination (Continued)

The Witness: Mr. Littman, may I make a comment or two having to do with the subject we were discussing before the noon recess?

By Mr. Littman:

Q. Yes.

. . . . . .

[fol. 8824] The Witness: Then, may I make one more com-
[fol. 8825] ment with respect to our discussions of these 50 bonds? I got the impression from your questions that you feel that the smaller the ratio of the bond issue to the total capitalization, the cheaper and the more economical can be the financing of the entire company. If my impression is correct, I should like to say that I think you are not correct in that position because in time of low bond interest rates, it is obvious that the larger proportion of a capitalization which you can finance by bonds, the more economical is going to be the over-all cost of financing a company and while with a lower proportion of [bonds] there would be a correspondingly larger issuance of stock with less bonds proportionately ahead of it, yet, in spite of that, my firm conviction is that the over-all cost of such a financing job, namely, 25 percent bonds, 75 percent common stock, would be considerably more expensive and less economical than would the 50-50 ratio.

By Mr. Littman:

Q. You have testified heretofore that you used as the average market price of the common stock of Panhandle Eastern the sum of $40 per share, is that correct, in determining the over-all appraisal of risk of the investor?

A. Well, Mr. Littman—

Q. (Interposing) Is that right?

A. In my direct testimony I included the four companies which I used in determining the average of the in-
[fol. 8826] vestor's appraisal of risk but I excluded Panhandle Eastern from that study. It was during the cross-examination Friday that I spoke of the Panhandle Eastern study and I did use $40 as the price of the common stock.

Q. Yes, I believe it was in response to a question by Mr. Lee.

A. Yes, sir, I think so.

Q. And you consider the $40 per-share price for Panhandle Eastern a reasonable estimate of the market price?

A. I considered it so at the time I made the study which was at the same time that I studied the other four companies, namely, the latter part of October and early November and I considered that $40 was reasonable at that time. The present market price of the stock is around $35 to $36.

Q. But at the time you made your study, last September or October, you considered $40 per share as the fair market value of the common stock of Panhandle Eastern?

A. Yes, sir.

Q. Now, do you know what the earnings were on that common stock per share for the 12 months ended June 30, 1941, which was the latest available full 12-month period at the time you made your study? I hand you Mr. Coffman's Exhibit No. 65 and refer you to his table for Chart No. 20.

A. Yes, sir.

Q. What were the earnings per share?

[fol. 8827] A. $4.21 per share.

Q. Now, will you please state the earnings price ratio based upon the earnings per share of common which you have just read and the market value of $40 per share?

A. Approximately 10½.

Q. Percent?

A. Percent, yes, sir.

. . . . . .

[fol. 8853] By Mr. Littman:

Q. In your study you considered the earnings of four natural gas companies, to wit, Interstate Natural Gas Company, El Paso Natural Gas Company, Memphis Nat-

urai Gas Company and Southern Natural Gas Company did you not? A. Yes, sir.

Q. Have you made any study to determine whether the securities of those companies are selling at approximately an amount equal to a rate base for rate making purposes?

A. No, sir, I have not.

[fol. 8854] Q. Just answer that yes or no, please. Did you or did you not? A. I did not.

Q. So far as you know, they might be selling at five times what a commission or court would consider a rate base for rate-making purposes?

A. That is correct.

Trial Examiner: And Mr. Drew has also previously testified, if I recall, that he had no knowledge of the book value of either of these companies that he included or included in the study.

The Witness: Yes, sir, that is correct.

Trial Examiner: The original cost as represented or reflected by the books of the company, the capital accounts

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[fol. 8887] LEITH V. WATKINS a witness having been previously sworn, resumed the stand and testified further as follows:

Direct Examination (Resumed)

By Mr. Wheat:

[fol. 8895] Q. Yes. Then will you proceed to the next item?

A. At page No. 859 of the transcript of proceedings in this matter of October 8, 1941, there was received and marked for identification Exhibit No. 48.

Q. What was the title of that exhibit, Mr. Watkins?

A. Exhibit No. 48, as received for identification, comprised the balance sheet, per books, of Panhandle Eastern Pipe Line Company and subsidiary companies for each December 31 from the year 1930 to and including the year 1940 and as at June 30, 1941.

[fol. 8896] Q. Have you, since the presentation of that exhibit and since the passage of time, been able to complete the balance sheet with respect to the year 1941?

A. I have and it was so completed in conformity with the witness' interpretation of a request made by Mr. Gorman, counsel for the Commission, at page No. 7444 of the transcript of testimony in this matter.

Q. Have you prepared an exhibit showing balance sheets, per books, for the years 1930 to and including the year 1941 in a form similar to the form shown on Exhibit No. 48 but including the full year 1941, from the books of the company? A. I have.

Q. And is that one of the proposed exhibits which you have had distributed this morning?

A. It is.

Mr. Wheat: Mr. Examiner, this three-page exhibit which is entitled "Balance Sheets—Per Books" of course is referable to Exhibit No. 48 and in all respects is similar to Exhibit No. 48 with the exception that, for the year 1941, the balance sheet as of the close of that year is taken from the books and, therefore, this exhibit contains no estimates with respect to that year nor does it contain a balance sheet as of June 30 of that year.

. . . . . .

[fol. 8897] (The Document Referred To Was Marked For Identification As Exhibit No. 172.)

. . . . . .

[fol. 8898] (Exhibits Nos. 48 and 172 Were Received In Evidence.)

. . . . . .

A. At page 871 of the transcript of proceedings in this matter of the session of October 8, 1941, there was received and marked for identification, Exhibit No. 49. Exhibit No. 49 was an income statement, per books, of Panhandle Eastern Pipe Line Company and subsidiary companies covering the period from April 1, 1932, to December 31, 1941, and the information there shown was as of December 31, 1932, and covered the period from April 1 of that year. There was also included the income statement

for the calendar years 1933 through 1940, both inclusive, as well as a cumulative total, an average for the period from 1932 to 1940 and the year 1941 which, however, was made up of six months actual figures and six months estimated figures.

Q. Have you, during the interim since the last hearing, prepared an exhibit which may be deemed referable to this Exhibit No. 49 which you have been describing but which includes, instead of the six months actual and six months estimated for the year 1941, an income statement from the books for the year 1941? A. I have.

[fol. 8899] (The Document Referred To Was Marked for Identification As Exhibit No. 173.)

Trial Examiner: The exhibits marked for identification as No. 49 and No. 173 will be received in evidence by corresponding numbers.

A. At page No. 8900 of the transcript of the proceedings [fol. 8900], in this matter, held on October 8, 1941, Exhibit No. 50, being a statement of earned surplus, per books, for a period from the commencement of operations to June 30, 1941, was offered and received in evidence—I beg your pardon, I believe it was offered and marked for identification.

Q. That is correct. It was marked Exhibit No. 50 for identification, I believe.

A. That is correct, sir. Since the witness' last appearance and, in conformity with a request made by Mr. Gorman, counsel for the Commission, at page 7444 of the transcript of a previous session of this matter, there has been prepared under my supervision a similar statement which includes an analysis of earned surplus for all of the period included in Exhibit No. 50 with the exception that the data for the year 1941 covers the entire year rather than the period from January 1 to June 30 of 1941.

(The Document Referred To Was Marked For Identification As Exhibit No. 174.)

. . . . . .

[fol. 8901] (Exhibits Nos. 50 and 174 were received in evidence.)

By Mr. Wheat:

. . . . . .

A. The next item upon which we have been working during the interim conforms to Exhibit No. 51 offered and received for identification at page 893 of the transcript of the proceedings in this matter held on October 8, 1941, and is a statement of capital surplus, per books, for the period from September 1, 1930, to December 31, 1941.

. . . . . .

It contains exactly the same information as Exhibit No. 51 except that column M covers the entire year 1941 rather than the period from January 1 to June 30, 1941, and is responsive to a request made by Mr. Gorman, counsel for the Commission, at page No. 7444 of the transcript of the proceedings.

. . . . . .

[fol. 8903] Mr. Wheat: And we also offer Exhibit No. 51 and Exhibit No. 175 in evidence.

. . . . . .

[fol. 8904] (Exhibits Nos. 51 and 175 were received in evidence.)

. . . . . .

There was offered, received and marked for identification at page No. 896 of the transcript of the testimony in this matter, session of October 8, 1941, Exhibit No. 52. Exhibit No. 52, as received for identification, comprised a statement of gas plant of Panhandle Eastern Pipe Line Company and subsidiary companies as at December 31, 1930, and at the end of each year thereafter up to and including the year 1940 and as of June 30, 1941.

In response to our interpretation of the request made by Mr. Gorman, counsel for this Commission, at page No. 7444 of the transcript of a previous session in this matter, there has been prepared and is available a statement of gas plant which is exactly the same as Exhibit No. 52 except that Column M thereof furnishes information as at December 31, 1941, whereas, in the case of Exhibit No. 52, the information shown in Column M was as of June 30, 1941.

[fol. 8905] (The document referred to was marked for identification as Exhibit No. 176.)

(Exhibits Nos. 52 and 176 were received in evidence.)

Q. Will you proceed to your next item, Mr. Watkins?

A. There was offered and received for identification at page No. 915 of the transcript of the proceedings in this matter on October 8, 1941, Exhibit No. 56. Exhibit No. 56, as there received and identified, consisted of a statement of gas produced for the period from April 1, 1932, to June 30, 1941, giving the amount of production segregated as to the various fields and by total for the years 1933 to 1940, inclusive, for the nine months April 1 to December 31, 1932, and for the year 1941, in which instance the data shown covered the six months period only.

Q. What have you done during the interim?

A. This exhibit, likewise, included the cumulative totals and an average for eight and three-quarters years. In [fol. 8906] the interim, in response to a request made by Mr. Gorman, counsel for the Commission, at page No. 7444 of the transcript of testimony in a preceding session in this matter, there has been prepared a revised "Statement of Gas Produced" which furnishes exactly the same information as that included in Exhibit No. 56 except that the production for the entire year 1941 is shown.

(The Document referred to was marked for identification as Exhibit No. 177.)

(Exhibits Nos. 56 and 177 were received in evidence.)

(Exhibits Nos. 53, 54 and 55 were received in evidence.)

[fol. 8907] A. The next item, sir, is a "Statement of Gas Purchased" which extends the information included in Exhibit No. 57, received and marked for identification, at page 916 of the transcript of the proceedings in this matter on October 8, 1941, and furnishes information similar to that included in Exhibit No. 57 except that it has been progressed through December 31, 1941, and the appropriate changes necessary to accomplish that projection have been made.

(The document referred to was marked for identification as Exhibit No. 178.)

(Exhibits Nos. 57 and 178 were received in evidence.)

[fol. 8910] At page 917 of the transcript of the testimony of the session of the proceedings in this matter on October 8, 1941, there was offered and marked for identification Exhibit No. 58. Exhibit No. 58 consisted of a "Statement of Gas Revenue" for the period from April 1, 1932, to June 30, 1941.

In response to the request made by Mr. Gorman of counsel for the Commission at page No. 7444 of the transcript of the testimony of a preceding session of this matter, there has been prepared a summarized statement of gas revenue which progresses the information included on Schedule 1 of Exhibit No. 58 through the year 1941.

(The document referred to was marked for identification as Exhibit No. 179.)

[fol. 8911] (Exhibits Nos. 58 and 179 were received in evidence.)

Mr. Littman: Mr. Watkins, you show several columns, to wit, Columns H, I and J in Exhibit No. 179 headed "Industrial". Is my understanding correct that those sales represent all of the direct industrial sales for those years?

Mr. Littman: In other words, your columns headed "Sales to Gas Utilities" include the so-called indirect industrial sales?

Mr. Littman: And by direct industrial sales, of course you understand me to mean the sales that are made directly by Panhandle Eastern Pipe Line Company and subsidiary companies in each of the years shown directly to the various industrials included under columns headed H, I and J?

The Witness: Yes, I so understand and that, as far as I know, is what those columns show.

Mr. Wheat: Mr. Littman, may I ask you whether you [fol. 8912] don't want to go forward and clarify also the columns headed "Residential" and "Commercial" as to whether those are direct or indirect so that we will have a clear picture of what this shows?

Mr. Littman: Very well, but before so doing, I would like the record to show clearly what we mean when we use the term "direct." By that we mean sales not for resale, isn't that correct?

The Witness: That is correct. Mr. Littman, the witness believes that reference to the testimony at or about page 917 would probably show that this matter had been covered there when the exhibit was originally introduced.

Mr. Wheat: You mean in Exhibit No. 58?

The Witness: That is correct, yes.

Mr. Littman: Yes, I recall that testimony, having read it recently, but I wanted to make certain the new figures contained in Exhibit No. 179 for the full year 1941 were shown in the same manner here in Exhibit No. 179 as in Exhibit No. 58.

The Witness: They are.

Is it possible that the thing that may be worrying you, Mr. Littman, is the fact that on or about July 1, 1941, both Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation filed certain rate schedules for sales in the State of Indiana by the terms and provisions of which Panhandle Eastern would begin the direct sales of certain gas in that State whereas, prior to those rate schedules, Michigan Gas Transmission Cor- [fol. 8913] poration had made such sales itself? There has been no action taken on those filings in all of this period by the Commission. As far as we know, there is some matter that gives rise to consideration on the Commission's part as to the termination of service in connection with those matters. It has been somewhat troublesome to us to have the thing unsettled all this period and it may very well be that, as a result of whatever pronouncement the Commission makes with respect to those filings, some of the material now included in Exhibit 179 with respect to the year 1941 would have to be changed if the rulings of the Commission make such change necessary.

I do not know whether that was the thing that prompted your questions or not because there can be no sales included in Exhibit No. 58 or Exhibit No. 179 as direct sales other than in the columns corresponding to the headings "Residential", "Commercial", "Industrial" and "Other".

Mr. Littman: What prompted my question, primarily, was the fact that the Federal Power Commission has no jurisdiction over sales not for resale, that is, over direct sales, and I wanted to make certain that your Columns

H, I and J represented the direct sales and did not represent sales for retail.

In connection with Mr. Wheat's suggestion, will you elaborate for us with respect to the columns headed "Residential" and "Commercial"?

[fol. 8914] The Witness: Perhaps we would save time if the witness simply stated that, outside of Columns K, L and M which have to do with sales to gas utilities, all of the gas revenue shown in either Exhibit No. 58 or Exhibit No. 179 represents direct sales.

By Mr. Wheat:

Q. Mrs. Watkins, while we are right on this point, I notice that under the heading "Residential", Column G, for example, "Amount", it is reduced from $186,018.44 in 1940 to $9,446.77 in 1941. That represents a very extensive shrinkage in that direct residential business, does it not?

A. That is correct.

Q. And, likewise, under the heading "Commercial", take for example Column G, the amount reduces from $76,497.50 in 1940 to $290.39 in 1941. That represents, does it not, an almost complete shrinkage of that particular type of sale? A. It does.

Q. Likewise, under the heading "Other", take for example Column P, the amount reduces from 1940, when it was $8,098.95 to an amount in 1941 of $327.50 and that is likewise an almost complete shrinkage of the item, is that not correct? A. That is correct.

[fol. 8915] Q. And, in 1941, except for the direct industrial sales, the total sales which were made direct by the company were less than $10,000, is that not true?

A. That is true, yes, sir.

I might explain that the reason for this shrinkage is due to the fact that as of January 1, 1941, Central Distributing Company ceased to be a subsidiary of Panhandle Eastern Pipe Line Company and the shrinkage in sales which you have just described were sales made directly by Central Distributing Company.

Q. So that, as a practical matter, compared to the total revenues, the amounts received from direct sales other than industrial are negligible, is that not true?

A. They are almost insignificant in addition to being negligible.

[fol. 8921] Mr. Lee: And these residential sales, for example, that are on the exhibit and are listed as direct sales, is that gas sold to a distribution company or sold direct to residential users by the Pipe Line Company?

The Witness: Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company, which are the two main transmission organizations and have been the two main transmission organizations in the Panhandle system, do not hold themselves out as distributing organizations. There are, over the length of our lines, certain instances in which, as a matter of convenience and by virtue of right-of-way agreements and so forth, that both of those organizations make some incidental sales to certain residential or commercial customers and a good part—

—Mr. Culton: (Interposing) Just a moment. May we clarify that for the record. That means when you would get a right-of-way across a man's land, as part of the consideration for that right-of-way you would agree to sell him gas?

The Witness: Exactly so, sir.

Mr. Culton: For his residence on the farm.

The Witness: Otherwise, we have no interest whatever in such sales and we might go a step further, perhaps, and [fol. 8922] state that were it not compulsory that we make such sales, we would have none whatever in an exhibit of this sort that we furnished.

In further explanation of your question, Mr. Lee, the reference to revenue shown in Columns N, O and P under the general heading of "Other" is principally to sales made in the field in the producing field where we supply gas for drilling purposes or things of that nature.

Mr. Littman: Pardon me, I believe you perhaps misspoke yourself somewhat with respect to these residential sales. Shouldn't your last answer be confined to the year 1941? As I understand it, prior to 1941, Panhandle Eastern Pipe Line Company owned a number of subsidiary companies that were actually engaged in the business of distributing gas and isn't it a fact that in the years prior to 1941 shown in Exhibit No. 179, your Columns B, C and D under the heading "Residential" do show those sales and revenues?

The Witness: They do show those, Mr. Littman, and I was hopeful that my most recent answer confined itself entirely to Panhandle Eastern and Illinois Natural. I had no intention of making any reference to the years prior to the last year in which years there were subsidiaries which did have direct sales.

Mr. Littman: I think the record is clear now.

[fol. 8927] Trial Examiner: This exhibit which has been discussed will be marked as Exhibit No. 180 and that is a supplementary exhibit to one marked for identification as Exhibit No. 59?

Mr. Wheat: That is correct, is it, Mr. Watkins?

The Witness: That is correct except we have not discussed it yet.

Mr. Wheat: Yes, we have not yet come to that but we are about to come to it.

That is headed, is it not, Mr. Watkins, "Statement of Gas Revenue by States—Period from April 1, 1932, to [fol. 8928] December 31, 1941"?

The Witness: That is correct, sir.

(The document referred to was marked for identification as Exhibit No. 180.)

By Mr. Wheat:

Q. Is that document referable to Exhibit No. 59?

A. It is, sir, and has been prepared in response to our interpretation of a request made by Mr. Gorman, counsel for the Commission, at page 922 of the transcript of the testimony of the session of October 8, 1941, in this matter.

(Exhibits Nos. 59 and 180 were received in evidence.)

A. The witness' next item is a statement showing "Net [fol. 8929] Additions to Gas Plant—Per Books" of Panhandle Eastern Pipe Line Company and subsidiary companies from October 1, 1938, to December 31, 1941, and is similar in content to Exhibit No. 72 offered and received for identification at page No. 1470 of the transcript of the proceedings in this matter of the session held October 28, 1941, the difference between the two exhibits being only that of the period covered by them.

(The document referred to was marked for identification as Exhibit No. 181.)

[fol. 8930] (Exhibits Nos. 72 and 181 Were Received in Evidence.)

Q. Will you proceed to the next item, Mr. Watkins?

A. Before doing so, Mr. Wheat, may the witness call attention to the fact that the cessation of Central Distributing Company as a subsidiary of Panhandle Eastern Pipe Line Company is shown by the reduction in the additions to gas plant shown opposite lines 17 to 28 in Exhibit 181.

Q. Those are distributing system properties, are they not?

A. That is correct, sir. There may have been a very slight amount of such property belonging to some other one of the companies, but I should say almost 100 per cent of it represented distribution properties belonging to Central Distributing Company.

Q. In every instance, the amounts shown under Column B are net amounts, whether they be black or red amounts, is that correct?

A. That is true, sir, and that explanation, I believe, was given at the time Exhibit No. 72 was introduced.

Q. Before we pass to further documents, Mr. Watkins, do you have Exhibit No. 60 before you?

A. Yes, sir.

. . . . . .

[fol. 8931] Q. Will you state the title of Exhibit No. 60, Mr. Watkins?

A. The title of Exhibit No. 60 is "Gas Sales Agreements with Other Gas Companies as at June 30, 1941."

. . . . . .

(Exhibit No. 60 Was Received in Evidence.)

. . . . . .

A. The next document which has been distributed is a "Comparative Statement of Depreciation, Depletion and Amortization of Unoperated Leases Authorized by Board of Directors and the Amount Booked for the Years 1937, 1938, 1939, 1940 and 1941", and is responsive, the witness believes, to a request made at page No. 6237 by Mr. Goodman during the afternoon session of the proceedings in this matter on January 21, 1942.

Q. Will you state what this document shows?

[fol. 8932] A. This document, as its heading indicates, gives a comparison of the annual provision for depreciation, depletion and amortization of unoperated leases by the Board of Directors with the amount recorded on the company's books for the years 1937 through 1941, inclusive.

The comparison for the year 1937, as shown by line 1, is $1,350,000 authorized and $1,384,387.07 is recorded per books.

For the year 1938, as shown by line 2, the amount authorized by the Board was $1,700,000, the amount recorded being $1,728,607.16.

For the year 1939, as shown by line 3, the amount authorized was $1,800,000 and the amount recorded was $1,870,699.86.

In 1940, as shown by line 4, the Board authorized $1,900,000 and there was recorded $1,880,889.87.

Finally, for the year 1941, as shown by line 5, the authorization was $2,100,000 while the amount recorded was $2,102,857.31.

. . . . . .

(The Document Referred to was Marked For Identification as Exhibit No. 182.)

. . . . . .

[fol. 8933] (Exhibit No. 182 Was Received in Evidence.)

. . . . . .

[fol. 8934] By Mr. Wheat:

Q. Will you now turn to your next document and state what it is, at whose request it was made, if anyone's, and what the request was?

A. Perhaps I had better look at the transcript of testimony first.

There has been prepared and distributed a "Statement Showing the Amount of Depreciation Claimed in Federal Income Tax Returns and Settlement Basis for the Nine Months Ended December 31, 1932, and the Years 1933 to 1940, Inclusive."

This statement, as its heading shows, gives for the nine months ended December 31, 1932, and the years 1933 [fol. 8935] through 1940, the amount of depreciation claimed per Federal income tax returns and the so-called settlement basis therefor in the years described and specifically shown by the exhibit. It is in response to a request made at page No. 6239 of the transcript of the proceedings of the afternoon session of January 21, 1942, made by Mr. Goodman.

Mr. Lee: Mr. Witness, may I ask you, please, what you mean by the term "settlement basis"?

The Witness: Well, of course as you know, Mr. Lee, you do not just simply file an income tax return and proceed to pay your tax without the Internal Revenue Department having looked at the return.

As a result of their examination of the return, there arises some considerable discussion as to whether the findings they make in favor of revenue or in favor of the company are proper and legitimate and, as a result of the difference there may be between the company's representatives and the representatives of the Department, you eventually arrive at some basis of settlement. Whether or not you concede or believe that the contention of the Department is correct or whether they believe your contention is correct, there is a settlement made.

For the years 1936 through 1940—and they, by the way, are the only years in the history of Panhandle Eastern and its subsidiary companies in which there was taxable net income—the amounts shown in the columns headed [fol. 8936] "Settlement Basis" or Column C of—has it been numbered?

. . . . . .

(The Document Referred to was Marked For Identification as Exhibit No. 183.)

Mr. Wheat: You were speaking of Column C of Exhibit No. 183?

The Witness: That is correct, sir, and the amounts shown in Column C of Exhibit 183 are, as far as the company knows at this particular time, the basis of its present settlement with the Internal Revenue Department of the taxes for those years.

. . . . . .

Mr. Lee: After that settlement is made, then do you enter that upon the books of the company as the final determination?

The Witness: It becomes entered, Mr. Lee, in the normal accounting processes of the company. If you were to refer to previous testimony by this witness, you would find that there have been certain accruals made in prior years not ultimately required for taxation which were transferred to an account shown on Exhibit No. 148 on line 36 in Columns I, J, K, L and M which represented, as the witness has stated and stated in the previous sessions, were not required for that particular purpose.

Perhaps, to narrow the thing down and answer you more directly, if the company's accrual for Federal taxes [fol. 8937] or any other taxes or for any other purpose is not sufficient in the year for which those taxes are reported, it must, of course, increase its accrual in some subsequent period or it must decrease it. As these settlements are made, if the differences are such as not to distort the operations of the current year in which they are made, they are adjusted in the operating expenses of that year's business. Under the Classification of Accounts, prescribed by this Commission for natural gas companies, the treatment which the witness has just described is prescribed.

. . . . . .

[fol. 8938] Mr. Littman: I would like to ask a question to clarify the exhibit, if I may.

Mr. Watkins, will you define the term "depreciation", as it is used in Exhibit No. 183?

The Witness: We will have to get a copy of the income tax return, Mr. Littman, for each of those years. It is the amount required to be reported as depreciation in the returns.

Mr. Littman: Does it include and do the figures shown in Exhibit No. 183 include any claimed amortization of gas sales and purchase contracts?

The Witness: May I suggest that you have a look at Exhibit No. 182 along with Exhibit No. 183.

In Exhibit No. 182 in Column B, you will find, for the year 1941, that the Board of Directors authorized an overall provision for depreciation, depletion and amortization of $2,100,000. Now, this $2,100,000 did not include any [fol. 8939] amount which the company proposed to include in its operations for that year and amortization of any amounts included in its books as gas sales or purchase contracts, the reason for that being because, in the first instance, the Certificate of Incorporation of the company provides for the amortization over a ten year basis of certain of the gas sales and purchase contracts at the rate of $24,419.05 per month.

The amounts associated with the gas sales and purchase contracts acquired subsequent to the entering into a contract with Detroit City Gas Company, now Michigan Consolidate Gas Company, are being written off, as the record here will show in previous testimony, over the life of those contracts. None of that amortization is included, either in the $2,100,000 figure made a part of Column B of Exhibit 182 or Column C of the same exhibit and; in the year 1941, of course, we have not yet completed our income tax returns so I cannot give you comparable figures but, whatever is required by the Revenue Department to be reported as depreciation according to the definition in the income tax return, will be grouped together and there reported as depreciation. The definition is not our language.

We were asked at page No. 6239 of the transcript of the testimony of the afternoon session on January 21, 1942, to produce a statement showing depreciation claimed per returns and the settlement basis and that information we be-
[fol. 8940] lieve is shown in Exhibit 183. Unfortunately, I do not have with me the income tax returns and cannot tell you, specifically, just what items are included, for instance, in the amount of $2,381,293.48 in Column B of Exhibit No. 183 on line 8 but, referring to an amount appropriated or authorized by the Board for the year 1940 and shown in Column B of Exhibit No. 182, it is my opinion that the amount shown in Column B on line 8 of Exhibit 183 not only includes certain amortization but an entirely different basis than that either authorized by the Board or booked because the depreciation claim for income tax purposes does not necessarily coincide in this instance, with the amounts recorded.

[fol. 8944] (Exhibit No. 183 Was Received In Evidence.)

The next document prepared for the present hearing is a "Comparative Statement of State, Local and Miscellaneous Federal Taxes Paid with Amounts Accrued for the Years 1936, 1937, 1938, 1939 and 1940".

[fol. 8948] (The Document Referred To Was Marked For Identification As Exhibit No. 184.)

A. Exhibit No. 184 for identification was prepared in response to a request occurring at page 6239 of the transcript of the afternoon session of the proceedings in this matter held January 21, 1942, made by Mr. Goodman and shows, for the respective years, the amount of taxes accrued and taxes paid as well as the difference between the accruals and payments of all State, local and miscellaneous Federal taxes and seems self-explanatory.

(Exhibit No. 184 Was Received In Evidence.)

[fol. 8949] The next document is a "Statement of Taxes Paid for the Years 1936, 1937, 1938, 1939 and 1940" which was requested at lines 11, 12 and 13 of page No. 6364.

(The Document Referred To Was Marked For Identification As Exhibit No. 185.)

[fol. 8952] The Witness: Exhibit No. 185 is a statement of taxes paid for the respective years shown there regardless of when paid.

Mr. Littman: Perhaps it would further clarify the matter if you would explain why you have not shown this statement for the year 1941?

The Witness: All such taxes have not yet been paid and could not, therefore, be shown.

[fol. 8954] (Exhibit No. 185 Was Received in Evidence.)

A. The next document is a "Reconcilement of Federal Income and Federal Excess Profits Taxes Paid with the

Amounts Accrued for the Years 1936, 1937, 1938, 1939 and 1940", and is in response to an oral request made to you, Mr. Wheat, by Mr. Littman, counsel for the Commission, on or about March 9, 1942.

[fol. 8955] (The Document Referred To Was Marked For Identification As Exhibit No. 186.)

(Exhibit No. 186 Was Received In Evidence.)

[fol. 8975] By Mr. Wheat:

Q. Now, Mr. Watkins, will you turn to your next document and state what it is?

A. The next document is a "Comparative Statement of Operation and Maintenance Expenses" of Panhandle Eastern Pipe Line Company and subsidiary companies for the years ended December 31, 1940, and 1941 and consists of a proposed exhibit containing four pages.

(The Document Referred To Was Marked For Identification As Exhibit No. 190.)

The Witness: This Exhibit No. 190 has been prepared and is submitted in response to a request made by Mr. Gorman, counsel for the Commission, at page No. 7444 of the transcript of a preceding session in this consolidated matter.

Q. And what do the numbers shown in this exhibit prior to the titles of the various accounts indicate?

A. The numbers immediately succeeding the line number?

Q. Yes.

A. They are the account numbers prescribed by this Commission in its Classification of Accounts for natural gas companies subject to the Natural Gas Act. The title [fol. 8976] likewise is the name of the account prescribed in such classification.

(Exhibit No. 190 Was Received In Evidence.)

Mr. Littman: I would like to ask Mr. Watkins about one or two items which appear on page 4 of Exhibit No. 190.

Mr. Watkins, I call your attention to an item shown in line 8 on page 4 called "Special Services" in the sum of $19,572.84 for the year 1940 and in the sum of $22,358.80 for the year 1941. Can you inform us with respect to the character of those services?

The Witness: I have no specific information available at this time with respect to the two amounts to which counsel has just referred other than the fact that the charges made to this account, No. 795, the title of which is "Special Services" conform to the description for such account as given on page No. 131 of the Uniform System of Accounts prescribed for natural gas companies by the Federal Power Commission.

Mr. Littman: Can you enlighten us with respect to the items shown on line 9 of page 4 of Exhibit No. 190 entitled "Special Legal Services" in the amount of $76,018.19 for [fol. 8977] the year 1940 and $53,322.07 for the year 1941?

The Witness: The witness' response to that question, Mr. Littman, must, of necessity, be similar to that with respect to your question concerning the amounts included in Account No. 795.

Now, without being bound too closely to this, I should like to state that it is my belief that the charges in both instances do represent the cost of either special services or special legal services in connection with matters either before the Securities and Exchange Commission or before the Federal Power Commission in those two years.

Mr. Littman: You are not referring to rate case expense?

The Witness: The cost of the regulatory commission expense incident to the Federal Power Commission consolidated Dockets G-200 and G-207 have not yet put their appearance in any of the company's financial statements other than in a deferred charge on its balance sheet. The distribution of those costs to operating expenses began first with the month of January, 1942.

Mr. Littman: Will you endeavor to ascertain the nature and character of the expenses which we have just discussed and report back to us at your early convenience? I have in mind that possibly you can find out something about this account over the recess.

[fol. 8978] The Witness: If all you want is a general statement with respect to their content, I believe that can be accomplished and I do not believe it will vary from the explanation I gave a moment ago and asked not to be specifically bound to.

[fol. 8988] Leith V. Watkins a witness, being previously duly sworn, resumed the stand and testified further as follows:

Direct Examination (Continued).

By Mr. Wheat:

Q. Mr. Watkins, have you prepared also a document entitled "Reconcilement of Net Income Per Books with Net Income Per Federal Income Tax Return for the Year 1939"?

A. I have, sir.

Q. Has that document been distributed?

A. It has.

(The Document Referred To Was Marked for Identification As Exhibit No. 191)

Exhibit No. 191 for identification is a reconcilement of [fol. 8989] the net income per books of Panhandle Eastern Pipe Line Company with the net income per Federal income tax return for the year 1939 and is submitted in response to an oral request made by Mr. Littman of counsel for the Commission to Mr. Wheat on March 9, 1942; and if we may at this time refer to the next document—

Mr. Wheat: (Interposing) Yes.

Mr. Examiner, I suggest that the next document which is the same as Exhibit No. 191 for identification except that,

it refers to the year 1940 be marked for identification Exhibit No. 192.

(The Document Referred To Was Marked For Identification As Exhibit No. 192.)

As the witness was about to state, both of these documents have been prepared and are submitted in response to an oral request made by Mr. Littman of counsel for the Commission to Mr. Wheat on March 9, 1942. It is believed the two reconcilements are self-explanatory. However, if there be questions, the witness—

Q. (Interposing) I think, Mr. Watkins, you might explain briefly what is shown on these two documents and [fol. 8990] how the data was developed.

A. The two documents marked for identification as Exhibit No. 191 and Exhibit No. 192 begin with the statement of the net income per books for the years 1939 and 1940, respectively. These amounts are then adjusted by adding thereto certain provisions made on the company's records which are not allowable deductions for Federal income tax purposes and the amount so arrived at is then reduced by a series of deductions determined on the formulae and bases provided in the regulations with respect to the Federal income tax laws for the years 1939 and 1940 and thus finally arrive at the net income per the Federal income tax returns for those years, as adjusted, by the Bureau of Internal Revenue. That is true for the year 1939.

However, for the year 1940, the income and excess profits tax returns have not been completely examined by the Bureau of Internal Revenue. Its representatives are in the office of the company at this time in connection with the examination for the year 1940.

[fol. 8994] Mr. Littman: Mr. Watkins, I note from Exhibit No. 192, lines 22 and 23, that your deduction for income tax purposes for depreciation exceeded the book provision by $745,162.16 for the year 1940 as compared with

the similar item in Exhibit No. 191 for the year 1939 in the amount of $172,053.56.

Will you explain why there is such a great difference between the excess of deduction claimed for depreciation over book provision as between 1939 and 1940?

Mr. Wheat: Have you, Mr. Littman, by any chance consulted Exhibit No. 183 in that connection? I am not sure that would convey the answer but it might be helpful to consider it in connection with your question.

I am not sure, Mr. Watkins, that the answer to Mr. Littman's question is there but I thought possibly we might suggest that the items be considered in your explanation.

The Witness: Gentlemen, I had hoped that I would save complicating this matter by the avoidance of any explanation to you as to the fact that, in the determination of our net taxable income and the arrival at a basis for the proper deduction for depreciation, depletion and amortization over the years in which we first had net taxable income, [fol. 8095] come, that we had employed the so-called wasting assets method and, in making our filings up to date, with the exception of the year 1940 and with the exception of the return for the year 1941 which is in process of preparation although not yet filed, our depreciation claimed is on a wasting asset theory and basis whereas the amounts allowed in the settlement with the Department has been on an entirely different basis. That is quite complicated and is the explanation for the variation that you see in Exhibits No. 191 and No. 192 for identification. That is, that is the general explanation.

There may be some other factors that brought about the variation but I must again call attention to the fact that, for the year 1940 as shown by the note opposite lines Nos. 50 and 51 of exhibit for identification No. 192, the examination by the Department for that year has not yet been completed so that, in answering the oral request made to you by Mr. Littman on March 9, we have tried to give effect in Exhibit No. 192 to the same basis of settlement as shown by Exhibit No. 191.

It is quite possible that we may have improperly handled some of the additions or deductions on exhibit for identification No. 192 because of that fact.

By Mr. Wheat:

Q. But, as a matter of fact, you have done the best you could, have you; to follow the method adopted in the settle-
[fol. 8996] ment in 1939?

A. That is true. We have tried to outguess the revenue agents in the year 1940.

Q. May I suggest not "outguess", but "advance guess"; isn't that true?

A. Either way, you wish to put it. We have tried to make the reconcilement for the year 1940 comparable to the reconcilement for the year 1939.

[fol. 9001] (Exhibits Nos. 191 and 192 were received in evidence.)

Q. Now, Mr. Watkins, will you pass to your next document which I think is one entitled by you "Analysis of Reserve for Depreciation of Gas Plant" and state what is shown thereon?

A. Somewhere between pages 6226 and 6242 of the transcript of testimony on this matter of the session of January 21, 1942, Mr. Goodman asked for certain information with respect to depreciation. The document to
[fol. 9002] which you have just referred has been prepared in response to our understanding of this request.

It shows the balance in the reserve account at the beginning of the period; the retirements classified as to production, transmission and general; the annual provision during each period, and the balance at the end of the periods for the years 1932 to 1940, inclusive, and at June 30, 1941, the first page being somewhat a summary of the pages following and, on page 2, for instance, for the year 1932, there are further details given which show the cost of plant retired, the cost of removing it, the amount of salvage obtained and the net charge to the reserve account segregated as to production; transmission and general in Columns B, C and D and supplies a total in Column E.

(The document referred to was marked for identification as Exhibit No. 193.)

[fol. 9906] Mr. Culton: Mr. Watkins, you have heretofore testified that, in your judgment, when you complete your original cost study, there will be no substantial difference between the results of that study and the values shown on the books, is that correct?

The Witness: That was my judgment.

Mr. Culton: Is that your present judgment?

The Witness: Yes, sir, and I should state at the moment that the testimony given at page 923 of the transcript of the proceedings of October 8 and in the subsequent pages of that session are compatible to the present situation.

Mr. Culton: What is necessary to be done on these original cost studies, is to apply the values shown on the books to the Commission's Classification of Accounts, is that the principal thing?

The Witness: No, indeed.

[fol. 9907] Mr. Culton: What else is to be done?

The Witness: Well, there is set up in the Classification of Accounts itself a vast amount of work determining various and sundry items to conform to the Commission's classification and many studies have to be made because not a great number of the natural gas companies carried their accounts in exact conformity with the Classification prescribed by the Commission. The method in which that data is to be supplied to the Commission is set out in its Order No. 73 and Order No. 72 is a headache.

Mr. Wheat: Mr. Watkins, pardon me. When you said not many of the natural gas companies carried their accounts in the same manner prescribed by the Commission, what you meant there was, was it not, that prior to the issuance by the Commission of its Classification of Accounts, the natural gas companies which later became subject to that order were carrying their accounts according

to their own particular method and that, in many instances, those methods were not the same and could not possibly have been the same as the subsequently ordered Classification of the Commission. Is that correct?

The Witness: Yes, sir, that is correct.

Mr. Wheatley: I just wanted to make that clear. I think you had a further explanation?

The Witness: I was about to draw attention to the requirements of Order No. 73, whether that need be drawn into the record here in a very elaborate way. I think the order will speak for itself. Anyone who has an interest [fol. 9008] in seeing what it requires and knowing something about how records are developed and maintained will see that it is not a thing that can be accomplished in a very short period of time.

We very studiously and laboriously went over our records and our ability to comply with the reclassification work prescribed by the Commission's Classification long before the Classification ever became an actuality because we were among those that were working with the industry [illegible] with the N. A. R. U. C. Committee toward the possible development of such a classification and we could foresee what was ahead of us. We did not exactly await until the thing was thrust in our lap and start our work but began to make our plans long before that.

We developed a list of possible major requirements, possible collateral work and began working on that. Finally, the Classification came to us and we, as the witness has stated in the record before, selected, among the ones who were going to do the reclassification work and make the studies necessary to bring about the transition from our then present method of maintaining our records to that prescribed by the Classification, the better of our employees and released those lads from any other assignment. My remembrance is that up to about July of last year, we had six or seven boys engaged in that work at a cost of some twelve to fifteen hundred dollars a month, that cost having to do entirely with his development or [fol. 9009] development of this data.

The very nature of the experience of these lads was such that when we began to develop information for use in this consolidated proceedings, we had to use some of those boys. Furthermore, you just do not go out and pick up that type of employee even if they were available, which they are not at the moment.

Trial Examiner: I do not like to interrupt this, Mr. Watkins, but the Federal Power Commission has passed on this matter of an extension and, in this hearing, it is not involved.

The question was asked whether you could supply the information with reference to certain transmission retirements and, if you are unable to do so, please so state and let us go on from there.

Mr. Culton: Mr. Examiner, may I make just a short statement here for the purposes of the record in this particular case?

Trial Examiner: You may. I am not unsympathetic but, after all, you know we must confine ourselves strictly to what is before us in this proceeding.

Mr. Culton: This statement I shall make does have relation to this particular proceeding and that statement is this: Mr. Watkins has heretofore testified that, in his judgment, there would be no substantial difference. On behalf of the two companies, we now state, in open hearing so that it cannot be thought that this delay in our studies [fol. 9010] on original cost would be used by the company in any way to try to hold up this rate proceeding, we now state we will not in these proceedings contend for an original cost any different from the original cost which shows on our books at this time.

I want the Commission to understand that and that Mr. Watkins is just referring to a physical situation which confronts him.

[fol. 9019] Trial Examiner: Exhibit No. 193 will be received.

United States of America

Federal Power Commission

Commissioners: Leland Olds, Chairman, Basil Manly, John W. Scott and Clyde L. Seavey. Claude L. Draper not participating.

March 20, 1942

In the Matter of

Panhandle Eastern Pipe Line Company

Order denying application for Extension of time for compliance with the provisions of gas plant accounts instruction 2-D of the uniform system of accounts and the commission's Order No. 73.

[fol. 9020]

The Commission having under consideration the letter of Panhandle Eastern Pipe Line Company (hereinafter referred to as Applicant) dated March 6, 1942, requesting a further extension of time to June 30, 1942, within which to comply with Gas Plant Accounts Instruction 2-D of the Commission's Uniform System of Accounts and the Commission's Order No. 73, relating thereto, and:

It appearing to the Commission from the said application and other matters of record and in the files of the Commission, furnished by Applicant, that:

(a) In a letter dated November 29, 1940, Applicant advised the Commission that its reclassification and original cost studies would be filed with the Commission during the month of November, 1941; and

(b) Thereafter, by letter dated November 27, 1941, Applicant requested an extension of time to June 30, 1942, within which to comply with the aforementioned Instruction 2-D and the Commission's Order No. 73; and

(c) By the Secretary's letter of December 30, 1941, Applicant was granted an extension of time to March 31, 1942;

(d) The reasons cited in the Applicant's letter of March 6, 1942; viz., alleged interruptions to the original [fol. 9021] cost work due to pending rate proceedings (Federal Power Commission Docket Nos. G-200 and G-207).

and certain financial transactions in connection with the acquisition of properties and issuance of securities; also, the work entailed in the preparation of Applicant's Annual Report, Form No. 133, to the Commission, do not justify, or constitute good cause for, a further extension of time;

(c) Applicant has not exercised due diligence in the preparation of its reclassification and original cost studies;

The Commission finds that:

The granting of a further extension of time to Applicant for compliance with Gas Plant Accounts Instruction 2 D and the Commission's Order No. 73 would not be appropriate and in the public interest;

The Commission orders that:

The application of Panhandle Eastern Pipe Line Company for an extension of time to June 30, 1942, within which to comply with Gas Plant Accounts Instruction 2 D of the Commission's Uniform System of Accounts and the Commission's Order No. 73, relating thereto, be and the same is hereby denied.

By the Commission.

LEON M. FUQUAY,

Secretary.

[fol. 9023] C. H. Lewis, a witness called by the Commission, being duly sworn, was examined and testified as follows:

[fol. 9024] By Mr. Littman:

Q. As I understand your testimony, you were given no specific instructions with respect to what you were to find or to determine at the 37 inspection points?

A. Absolutely not.

Q. And am I correct in understanding that the conclusions reached and shown in Exhibit 81 represent your judgment and the judgment of Mr. Riddle?

[fol. 9029] A. That is right.

Q. I have examined each and every one of the 37 inspection sheets shown in Exhibit 81 and I find that the condition per cents shown at each of these points are the same for yourself and for Mr. Riddle. Is my observation correct?

A. I believe you are correct. I prefer, though, to look the exhibit over myself before saying yes. There might be some variance in one or two but I am assuming you have carefully gone over it and, if that is a fact, I shall agree but, before answering the question, I think I should be privileged to look over the exhibit.

Q. Suppose you look over the exhibit and verify my understanding, if you will.

A. That is correct.

Q. I note, Mr. Lewis, that on inspection points Nos. 1 to 29, inclusive, that these inspection sheets are signed by you and initialed by Mr. Riddle and that the reverse is true with respect to inspection points Nos. 30 to 37, inclusive. Is there any particular significance to that?

A. None whatever other than that the person signing the report and the person initialing the report, that just simply means we had to have someone as a bookkeeper, you might say, on the job. Somebody had to keep the records in the field, in other words, write up the findings. The person actually making the first inspection was the person who signed the report. The person who was then [fol. 9630] standing on the ditch or on the top of the ground was recording findings as called off by the man in the bell hole or excavation, you might say.

Q. In other words, the man who recorded the data initialed the report while the other went into the bell hole and made the actual inspection and signed the report?

A. That is right.

Q. The inspection sheet for that particular inspection?

A. That is right, and it also means he followed you into the bell hole and checked your work in the bell hole on each inspection.

Q. You were the first man in the bell hole on the first 29 inspections, is that right or at least on the inspections that are numbered 1 to 29, inclusive, in Exhibit No. 81. Isn't that correct?

A. I will have to look—that is right.

Q. Did the man who did the bookkeeping and went into the bell hole merely to check, did he make as thorough an inspection as the first man in the bell hole?

A. Yes, sir, he did.

Q. And did you and Mr. Riddle each know the results of the inspection by the other?

A. By results—will you clarify that?

Q. I mean conclusions reached with respect to ~~per cent~~ condition?

[fol. 9631] A. We did, yes.

Q. Was there a little collaboration?

A. Absolutely none.

Q. I beg your pardon?

A. Absolutely none.

Q. No collaboration?

A. I would say not. I could write my answer on a piece of paper and throw it down on the ground and Mr. Riddle could do the same thing and then, comparing the result, find there was no difference. I have done that to try to see if there would be any difference and there was none. There was absolutely no collusion. We discussed our findings after we had written down our opinions.

Q. But you each stuck to your finding at each point?

A. Well, I would say there might have been a slight variance in our opinions and it was discussed and threshed out immediately upon the ground and we came to a common agreement before we left the inspection location.

Q. As to the per cent condition?

A. That is right.

Q. In other words, it is not merely a coincidence that, at these 37 inspection points, you and Mr. Riddle arrived at precisely the same per cent condition?

A. I would not say you would term it a coincidence, no.

Q. In other words, there were some differences that [fol. 9632] arose but they were threshed out after discussion? A. And very minor ones at that.

Q. Now, will you describe what you and Mr. Riddle did at these inspection points as a matter of routine and also give some description of the bell hole and the situation existing there?

A. The bell holes were already excavated prior to our arrival at the point of inspection, the bell hole being of sufficient size to permit ready access to the top, both sides and bottom of the pipe. As to the excavation below the pipe, I would judge, in most instances, at least a foot of earth had been removed which made it quite easy to examine the bottom shoulders and the bottom of the pipe.

Q. How much of the pipe was exposed at each bell hole?

A. Approximately five feet of pipe was exposed and four feet of the pipe meticulously cleaned of all scale and rust or all earth that might have adhered to the line and, in instances where the pipe was coated, the pipe coating had been removed very carefully down to a point where the metallic surface of the pipe was exposed for examination.

We measured the depth of coverage in each bell hole, that is, to the top of the pipe, and so recorded it as well as the kind of soil covering the pipe. We calipered the outside diameter of the pipe in a horizontal and vertical plane, recording our findings and we made a very careful exam[fol. 9033]ination of the entire surface of the pipe for pitting or corrosion that might have existed. Any pitting found was measured with an Ames dial gage reading in mils.

Q. What pitting did you record on your inspection reports?

A. The maximum pitting found was recorded, as well as the estimated average pit depth at each inspection location.

Q. You mean the maximum pit was recorded?

A. That is right.

Q. And those are expressed in hundredths of an inch, are they not? A. That is right.

Q. You may continue with your description.

A. I am about to reach the end of that description. I have told you now down to a point where the report was finished other than the application of the per cent condition. After we had examined the pipe thoroughly and it was checked by the person who acted as the recorder of our findings, he then came into the bell hole and he made the same examination and checked the findings.

After the work was completed on the pipe, I then made the photographs of all locations, with the exception, I believe, of the last eight or nine inspections on line C on the Detroit end when I was called away and was unable to accompany the Federal Power Commission engineers and Mr. Riddle during their inspection. However, as soon as I [fol. 9034] returned from Pittsburgh, I made a complete inspection of those by myself, other than company employees who were assisting me, so that made a complete survey of all 37 locations that we have recorded.

Q. I gather that you and Mr. Riddle made the same character of observations on the pipe at the various inspection points? A. That is right.

Q. And did you and Mr. Riddle follow the same method in arriving at your condition per cents? A. We did.

Q. And that method is one which is commonly called the "observation method", is it not?

A. That is right.

Q. The conclusions reached by you and Mr. Riddle with respect to the per cent condition of the main pipe lines and the lateral pipe lines of Michigan Gas Transmission Corporation are summarized on page 2 of Exhibit No. 81, is that correct?

A. My pages are not numbered the same in this volume.

Q. It is the page headed "Summary of Inspection Data —All Transmission Lines Inspected".

A. If you will pardon me then—

Q. (Interposing) Suppose you read the conclusions shown on that page.

A. Under the caption "Summary of Inspection Data— [fol. 9035] All Transmission Lines Inspected—

(1) Average over all per cent condition main pipe lines —97.7 per cent;

(2) Average over all per cent condition lateral pipe lines —99.7 per cent;

(3) Average over all depth of cover—42.9 inches.

Q. In arriving at these percentages, did you consider any factors other than those shown which you actually observed at the 37 inspection points? A. No.

Q. Did Mr. Riddle consider any factors other than those which he acutally observed at the inspection points?

A. It would only be an assumption on my part to know what Mr. Riddle considered but I assume he certainly considered the inspection in the same manner that I did. I could not say what Mr. Riddle considered at all.

Q. To the best of your knowledge, you and Mr. Riddle used the same methods?

A. I would say yes to that.

Q. And as you have heretofore stated, you came out with precisely the same answer, is that right?

A. That is right.

Q. The title of your exhibit is, "Michigan Gas Transmission Corporation—Depreciation Study". Does Exhibit No. 81 purport to comprehend all elements of depreciation [fol. 9036] including functional as well as physical depreciation?

A. I would say any such depreciation study conducted of transmission pipe lines, buried or unburied, certainly cover all the elements that have to do with the lessening in value which is due to physical deterioration and action of the elements.

Q. You mean particularly with emphasis on the term that you just used "physical depreciation", is that correct?

A. That is right.

Q. I take it from your answer that your conclusions do not reflect any depreciation other than physical depreciation?. A. That is right.

Q. Did you give consideration to each of the following causes of depreciation: First—wear and tear?

A. Yes.

Q. Second—decay?

A. Yes.

Q. Third—action of the elements?

A. Yes.

Q. Fourth—inadequacy?

A. Yes.

Q. Did you observe any inadequacy?

A. That is not observable but it was considered or weighted, I would say, in my mind in making a depreciation study, but it certainly is not observable.

Q. Is the pipe line inadequate or is it not inadequate?

[fol. 9027] A. We did not make such a study.

Q. Then your conclusions do not reflect any such study of inadequacy?

A. Did I say they did?

Q. I am asking you.

A. If I did, I misunderstood the question.

Q. I think perhaps I misunderstood your answer.

A. I am not saying they reflected inadequacy, the per cent condition, absolutely not.

Q. I see. I am sorry but I think I misunderstood a previous answer that you gave.

Did you give consideration, in arriving at your conclusion, to the element of obsolescence?

A. In my answer to that, I would like to make more of a statement than yes or no.

Q. Very well.

A. I do not believe there is such a thing as obsolescence in pipe line systems so long as they serve to convey gas for the purpose for which they were originally constructed. Therefore, there would not be obsolescence in our pipe line systems.

Q. Certainly your condition per cents reflect nothing for the element of obsolescence?

A. Absolutely not.

Q. Absolutely not?

A. Absolutely not. My answer to that is no.

[fol. 9028] Q. Would the same be true of the factor of changes in the art? Did you make any study of that factor of depreciation?

A. No.

Q. What would you say with respect to the factor of changes in demand and requirements of public authorities.

A. In so far as such a depreciation study of pipe line systems, you cannot incorporate any per cent condition in your findings as to its physical condition due to demands of public authority because they are certainly unknown by the observer.

Q. At least they were unknown by you as an observer?

A. That is right.

Q. And by Mr. Riddle?

A. That is right now, I would not say for Mr. Riddle. I am speaking for myself only.

Q. In so far as you know, he used the same method?

A. That is right.

Q. What consideration, if any, did you give to the factor of exhaustion of natural gas resources?

A. None.

Q. Assuming the accuracy and the validity of a contention which is being made in these proceedings that the natural gas supply available to Michigan Gas Transmission Corporation will be exhausted 24 years hence, which of the elements of depreciation which I have named is most likely to bring about the retirement from service of the [fol. 9039] transmission mains of Michigan Gas Transmission Corporation?

A. I am not qualified to answer such a question.

Q. What is there about my question that causes you to say you are not qualified?

A. Any answer that I might give to that question, as put, would be an assumption on my part, purely an assumption.

Q. Haven't I given you enough assumptions, Mr. Lewis?

A. Absolutely based on assumption but I do not see that I could answer that question assuming the life of any property based on any findings of present day looking into the future. It would be valueless, any answer that I or any person might give, in my mind. We have not lived long enough to know the length of life of our properties.

Q. Mr. Lewis, you have answered hypothetical questions before, haven't you? I mean, don't be too much disturbed by some of these assumptions. I am going to ask you to assume, now, for purposes of this question, that the gas supply available to Michigan Gas Transmission Corporation will be exhausted 24 years hence. I want you to accept that as a fact for purposes of this question.

Now, assuming that to be a fact, which of the elements of depreciation which I have just enumerated is most likely to bring about the full depreciation and retirement from service of the transmission mains of Michigan Gas Transmission Corporation?

[fol. 9040] A. I would say this in answer to your hypothetical question? Physical deterioration should be the cause of the major portion of your retirements over the

years that we can look into the future. Personally, I have not lived long enough to even reach such a conclusion that I can pick out of thin air the life of our property.

Does that answer your question?

Q. I do not believe you have yet grappled with the question I have in mind. Let me put it this way.

Is there any doubt in your mind that these pipe lines of Michigan Gas Transmission Corporation will have a physical life extending beyond 24 years from the present?

A. Would you mind repeating that?

Mr. Littman: Suppose you read the question.

(Whereupon, the pending question was read by the reporter.)

The Witness: I believe no person can hope to make an estimate as to the life of the pipe line system of the Michigan Gas Transmission Corporation based on past experience and I also believe the life is many, many years more than 24 years, as you have expressed it. However, that is an assumption on my part in answer to your hypothetical question.

By Mr. Littman:

Q. But it is your best judgment, as I understand your testimony?

A. My best judgment would be that the life is far in [fol. 9041] excess of 24 years.

Q. From the present date?

A. I might add that age alone is no measure of depreciation.

Q. Well, we will come to that a little later.

A. Which I believe has a direct bearing on your question.

Q. It has no relation to your method of determining the physical depreciation of a property?

A. Absolutely not.

The character of study which you and Mr. Riddle made is the same as that which you would make on the mains of a water company, isn't that correct?

A. I am not qualified to answer that question, having never made an inspection of water mains.

Q. Did you ever make an inspection of manufactured gas mains?

A. Yes, sir.

Q. You made the same kind of inspection here as you would on manufactured gas mains, did you not?

A. To an extent, yes. In fact, manufactured gas mains are, as a rule, cast iron whereas we are dealing with steel pipelines in our Michigan Gas Transmission system.

Q. Assuming that Michigan Gas Transmission mains were being used for the purpose of transporting manufactured gas, you would have used the same method to de- [fol. 9042] termine the per cent condition as you used here?

A. That is right.

Q. Several of these inspection points are described by you to show pipe in 100 per cent condition. Will you tell us what you mean by the term "100 per cent condition"?

A. Well, a percentage condition is the condition found on the observed inspection, finding the pipe absolutely like new as compared to new alongside the pipe in the ground.

Q. Will you define the meaning of the term "zero per cent condition"?

A. Over a period of years—I do not know whether I can answer that question or not and having thousands of inspections—very few zero per cent conditions have I ever found.

Q. When did you find the last one?

A. I cannot remember that. It has been a long time ago, many years ago.

Q. Tell us what it means.

A. Well, in my mind, it would mean a pipe line which should be removed, absolutely could not be used further for the purpose for which it was intended. I would say it was hazardous to property and life in its location. It would be beyond any maintenance repairs that might be made on that particular piece of pipe in question.

Q. Assuming, Mr. Lewis, that this pipe line could not be used in place for the purpose of transporting gas, because [fol. 9043] there is no gas, and can no longer serve the purpose for which it was originally installed. What is the per cent condition of this line?

A. In so far as the pipe itself is concerned, it might be in 100 per cent condition. Just simply because you have

no gas to transport through a pipe line system does not change the percentage condition of the physical property.

Q. But if there is no gas for this line to transport, of what value is the line?

A. I made no such study in connection with our work on Michigan Gas. We simply made an observed depreciation study of the pipe line system as we found it in the ground.

Q. That is, of its physical condition? A. That is right.

Q. Zero per cent condition is related to that state of physical condition which is reached when the pipe can no longer serve its purpose physically, isn't that correct?

A. That is right.

Q. Now, Mr. Lewis, your condition per cents were not determined by any relationship to the service life of the pipe, were they? A. No.

Q. In other words, if you found 90 per cent condition, that does not mean that 10 per cent of the life of the pipe is gone?

[fol. 9044] A. You made a statement about "service life." I may have interpreted your question incorrectly. Your statement was service life, was it not, and my answer was no?

Q. Yes.

A. Maybe I do not understand your question, sir.

Q. Let's take a pipe that has a physical life of 50 years and assume that the pipe is 10 years old. You would not put that pipe in 20 per cent condition, would you?

A. I would not give consideration at all to the age of the pipe. Age would mean nothing to me.

Q. And the remaining physical life would also mean nothing?

A. It would mean nothing to me in establishing a per cent condition as found in an observed investigation as we now conduct it.

Q. Does your per cent condition in any manner reflect remaining life? A. No.

Q. In Exhibit No. 81, the various lines of Michigan Gas are designated A, B and C and also lateral lines. As I understand it, Line A, that is, the original Line A extends from the Indiana-Illinois State line eastward to Zionsville compressor station, is that correct?

A. That is correct.

Q. That is a 20-inch line, isn't it? A. That is right.
[fol. 9045] Q. And it was constructed in what year?
A. I have a record of the right-of-way date, 1930 and 1931 on Line A.
Q. Line A was constructed in the years 1930 and 1931, isn't that right? A. That is my understanding.
Q. And extends from the Indiana-Illinois State line to Zionsville compressor station, does it not?
A. That is right.
Q. That is a 20-inch line? A. Yes, sir.
Q. There is also a parallel line looping the old Line A which is a 24-inch line. Is that right? A. Yes, sir.
Q. Now, that is a new line. When was it installed, approximately?
A. I think about 1940, maybe some of it in 1941.
Q. You made no inspections on the new 24-inch loop line, did you? A. No.
Q. And neither did Mr. Riddle?
A. Not to my knowledge.
Q. What per cent of depreciation did you find on Line A, that is, the 20-inch line which was installed in 1930 and 1931? A. On Line A, 20-inch?
[fol. 9046] Q. Yes, I think you will find that on page 7 of Exhibit No. 81.
A. I found 100 per cent condition on the coated pipe, 92.2 per cent on the pipe not coated.

Mr. Littman: Will you please read back that answer?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:
Q. What is the over-all per cent condition on Line A, 20 inch, both coated and uncoated?
A. I do not have that record here at all, the over-all per cent condition. The report was not set up that way. We have an over-all per cent condition on the main pipe lines which includes Line A.
Q. Can't you simply add the condition per cents shown on page 7 of Exhibit No. 81 and divide by the 8 inspection points?
A. Yes, I could, but I would prefer to do it off the stand, sir.

Q. You prefer to do it off what?

A. Any mathematics I would prefer to do off the stand, if permitted, if permitted to do it off the stand.

Q. How is my arithmetic— A. (Interposing) Yes.

. . . . . .

[fol. 9048] By Mr. Littman:

Q. Mr. Lewis, at the close of the morning session, I requested you to state what per cent condition you found for transmission Line A. Have you made the calculation?

A. I have. That amounts to 95.1 percent. That is the arithmetic average of coated and uncoated pipe on Line A.

Q. In other words, the 95 percent condition is the arithmetic average of the condition per cents shown on page 7 of Exhibit No. 81, is that correct?

A. My pages do not happen to be numbered the same as yours. I assume that it is.

Q. I hand you a copy of Exhibit No. 81 and ask you whether the figure you gave is the arithmetic average of the condition per cents shown on Page 7 of Exhibit No. 81? A. That is right.

Q. And I believe you have already testified that Line A was constructed in 1930 and 1931?

[fol. 9049] A. That is right, that is the right-of-way date.

Q. Inasmuch as Line A is 10 years old and inasmuch as you have found a percentage of depreciation on this line of 5 per cent, it is a fact that this depreciation on Line A has proceeded at an average rate of one-half of one per cent per year, has it not? A. Approximately.

Q. What over-all physical life of Line A is indicated by the average rate of one-half of one per cent depreciation per year?

A. The rate of depreciation, as observed at the time of our inspection, is not looking into the future life of Line A and the 95 per cent condition, as found at the time of the inspection, only represents the physical condition of the property on the observed date.

Q. Well, assuming that the depreciation which you found proceeds in the future at the same rate which you found that it proceeded in that past, the indicated physical life of that line would be 200 years, would it not?

A. Based on assumption only.

Q. Your answer to my question is "yes", based upon the assumptions that I have asked you to make?

A. I am not answering your question "yes". The life of any underground pipe line system cannot be based upon a per cent condition found as of today. It has been proven [fol. 9050] that pitting and corrosion do not accelerate or continue in a constant manner but rather pitting of our underground structures decelerates.

Q. Well, then I should conclude from your statement that the average over-all life of Line A would be not less than 200 years?

A. Much longer than 200, possibly, but no person has lived long enough to make even such a wild guess as to the length of life of an underground pipe line system.

Q. Well, Mr. Lewis, it is a fact that Line A is 10 years old, is that right? A. That is right.

Q. And you found only 5 per cent depreciation on that line, is that right?

A. That is right.

Q. The average rate of depreciation on that line over the 10 years is certainly one-half of one per cent per year, isn't that correct? A. That is right.

Q. Now, you say that in the future it could be expected that the depreciation would proceed at a decelerating rate?

A. That is right.

Q. Assuming that the depreciation proceeds in the future at the same rate as in the past, the indicated over-all life of Line A would be 200 [huindred] years, would it not?

[fol. 9051] A. That is right.

Q. And in view of your statement that it is expected that pitting proceeds at a decelerating rate through the years, it would be expected that the over all physical life of Line A would be in excess of 200 years?

A. Much in excess, possibly.

Q. Let's examine the facts with respect to Line B. Line B extends from Montezuma compressor station eastward to Kings Station, does it not? A. No.

Q. Will you state the facts?

A. Line B extends eastward from Zionsville compressor station—

Q. (Interposing) I am sorry, I am always confusing Montezuma with Zionsville—from Zionsville eastward to Kings Station?

A. That is right.

Q. What is the size of that line? A. 18-inch.

Q. And it was constructed in 1931, was it not?

A. That is the right-of-way date, 1931, yes, sir.

Q. Now, what condition per cent did your find on Line B? A. 86.7 per cent.

Q. In other words, the depreciation was 13.3 per cent, was it not?

[fol. 9052] A. That is right.

Q. It is evident that the depreciation which you found had proceeded in the past at an average rate of 1.33 per cent per year, isn't that correct?

A. I assume your mathematics are correct.

Q. Well, we have 10 years and 13.3 per cent depreciation over the 10 years, which would be 1.33 per cent per year, wouldn't it? A. That is right.

Q. Now, assuming that the depreciation were to proceed in the future at the same rate as in the past, your finding of depreciation would indicate an over-all life for Line B of 75 years, would it not?

A. Assuming again that your mathematics are correct, I will agree.

Q. Now, let us look at Line C. That line extends from Zionsville compressor station northward to Melvindale which is the Detroit City gate, isn't that correct?

A. That is right.

Q. What is the size of that line, sir?

A. 22-inch.

Q. When was that line constructed? A. 1936.

Q. What percent condition did you find on Line C?

A. 99.3 per cent.

[fol. 9053] Q. In other words, 0.7 per cent depreciation?

A. That is right.

Q. In other words, the physical depreciation which you observed on Line C has proceeded at an average rate of 0.14 per cent per year, has it not?

A. Assuming your mathematics are correct, yes.

Q. And that rate of depreciation, if it were to proceed in the future as in the past indicates an over-all life of Line C of 714 years, does it not?

A. I assume it does, yes.

Q. I wonder whether you would kindly verify my arithmetic as I go along, please.

A. What are the years you are applying to that, on Line C?

Q. Line C, constructed in 1936, your depreciation is 0.7 per cent.

A. Are you considering the age 6 years, sir?

Q. I think I used 5 years? A. Five years?

Q. I think I used 5 years. I do not have my working papers with me but I am quite sure I did not count the year 1936 because that was the year in which the pipe was constructed. A. 1.4?

Q. The average rate is 0.14 per cent per year, is it not?

A. All right, 0.14.

[fol. 9054] Q. That is right? A. All right.

Q. I want now the indicated over-all life.

A. What was your figure, 250 years?

Q. Just a minute—

A. (Interposing) How did you obtain the 250 years?

Q. I had an indicated life of 714 years.

A. All right.

Q. Is that correct? A. All right, I will agree.

Q. Now, let us look at the lateral lines. Michigan Gas Transmission Corporation has a number of lateral lines, that extend off the main transmission lines?

A. Yes, that is right.

Q. Did you or anyone else make any inspections of any of the lateral lines?

A. No, sir, not to my knowledge. I made no inspection.

Q. And, so far as you know, Mr. Riddle made none?

A. That is right.

Q. I am quite sure he so testified in his direct examination, Mr. Lewis. What per cent condition did you assign to the lateral lines?

A. Well, the per cent condition was arrived at by applying the per cent condition as found on the main lines into which the lateral lines were connected or tied into. In [fol. 9055] other words, the arithmetic average, as found on the main line, was applied to the lateral.

Q. Can you be a little more specific for me with respect to the mechanics of that procedure? I will tell you what disturbs me and perhaps you can help me. Which particular inspection points did you select for a given lateral branching off from the main line? Did you select the inspection point and take the results obtained at the inspection point on the main line closest to the point where the lateral extends from the main line?

A. That or the arithmetic average of several that might have been on that same section of line. For example, if we had a section of line that was coated and inspections had been made on that coated section of main line and a lateral tie in occurred within that section, the per cent condition as found on the main line was applied to the lateral line.

Q. And, in some instances, you used merely a single inspection point?

A. If that occurred in the inspection of the property and I do not have in mind that it did occur, but it may have occurred. I rather think, if my memory serves me, that there was always more than one inspection involved in the application of a per cent condition on the lateral line. That also, I might add, would have been worked out exactly the same should the line have been not coated, the main line not coated and a lateral tie in occurred. The [fol. 9056] per cent condition on the main line would have been applied to the lateral tie in line.

Mr. Littman: Would you please read back that answer, it is rather lengthy but I would like to have it read back.

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. I am still not altogether clear with respect to the mechanics of your method. Perhaps you can take a specific lateral line and give us the inspection points which you used for that lateral line.

A. I do not have that information with me. I could not furnish you that information today.

Q. How far on either side of the lateral did you go?

A. That would depend entirely—for example, if you had 10 miles of coated pipe and within that 10 miles one lateral tie in occurred; then that entire 10 miles—if you

had made, say, two inspections on the main line—that entire 10 miles of pipe would have been considered. The two inspections would have been averaged and the average applied to the lateral tie in.

Q. Now, is that because the lateral lines are coated? Are they all coated?

A. Not necessarily. It has nothing to do with whether they are coated or uncoated. That has no bearing at all whether the lateral line is coated or not coated. Later, that was worked out and a weighted average per cent condition was based on the tonnage of pipe in the coated [fol. 9057] and uncoated sections of the lateral lines.

Q. Why do you speak of taking two inspections?

A. It may have been more than two. It may have been several. There may have been 50 miles of coated pipe. Should we only have one lateral tie-in, in the 50 miles, we may have had only five main line inspections so that the five main line inspections would have been tied in with the lateral line.

Q. Why did you confine your inspections to the coated laterals?

A. We did not. It occurred with uncoated laterals. I am only describing that as coated but the same thing would have occurred for uncoated. In 50 miles, five inspections were made on coated or uncoated. That per cent condition was applied to the lateral tie in within that section.

Q. Why weren't inspections made on these lateral lines?

A. Personally, I had nothing to do with the locating of the inspection points. My part in the field survey work was to make a depreciation study of the 37 inspection points that were spotted by the Central Service Corporation and, so far as the lateral lines are concerned, I just simply could not answer why they made no inspections on the lines. They just simply did not make any. However, they were laid in the later years and much the same soil condition existed as in the main line sections that were inspected and the percent condition applied to the lateral.

[fol. 9058] Q. They were installed in 1937, weren't they?

A. Yes, sir, my understanding is they were installed at a later time. I made no survey of those lateral lines so I have no information on the age.

Q. The map, Exhibit No. 78, shows, does it not, that the lateral lines were constructed in 1937?

A. Which lateral are you speaking of? Say, for example, this one into Tipton?

Q. I am speaking of them all, collectively.

A. I am not familiar with this—red shows 1936, doesn't it, or 1937? This is so near the color, what would you say; is it 1937? I rather think it is 1937. Is that right?

Q. That is what I thought.

A. All right, I believe it is 1937. I believe that is also orange. (Indicating.)

Q. Yes. A. Orange, indicating 1937 construction.

Q. Certainly they were constructed not later than 1937 because there are two shades of orange used on this map, one for 1937 and the other for 1936 and so I am correct in concluding, if this map is accurate, that the laterals shown thereon were not constructed later than 1937. Am I correct?

A. I would add with the exception—

Q. (Interposing) Your answer is "yes" with the exception?

[fol. 9059] A. Yes, with the exception of this parallel line to Fort Wayne which was constructed in 1941, in part.

Q. Very well. Mr. Lewis, are you able to advise me, with respect to the loop lateral extending from Line C to Fort Wayne which is colored in purple on Exhibit No. 78, which color is designated "1941 construction in progress", whether your depreciation studies comprehended and included that line?

A. Will you mind giving me the map a moment—Line C-101, the original line was included—

Q. (Interposing) The original line that was constructed in 1937 was included?

A. That was included and my record before me indicates that the new line was not included.

Q. That comports with my understanding, namely, that the new line was a part of the construction work in progress as of June 30, 1941. A. That is right.

Q. Which was shown in one of Mr. Young's exhibits?

A. It had been completed to this point, it ended here and possibly continued on later (indicating).

Q. May we not conclude, Mr. Lewis, that the lateral lines which are covered in Exhibit No. 81 were those which were constructed not later than 1937? A. That is right.

Q. What percent condition did you assign to the lateral [fol. 9960] lines? A. The over-all per cent condition?

Q. Yes, I believe that is shown on page——

A. (Interposing) 99.7 per cent.

Q. 99.7 per cent?

A. 99.7 per cent was applied to all lateral lines.

Q. Now, that is 0.3 per cent depreciation, in other words, is that correct? A. That is right.

Q. Now, this 0.3 per cent of depreciation which you found, has accrued at the rate of 0.075 per cent per year on the average over the four years of life of these lateral lines, is that correct? A. That is correct.

Q. What over-all physical life of these lateral lines is indicated by the average rate of 0.075 per cent per year?

A. It has no bearing on the life of the line, the average rate, as you are applying it. The per cent condition is found by observed inspection. It does not indicate the future life of that property.

Q. Suppose you give me the indicated life which is comparable and similar to those which you have heretofore given me mathematically, based upon the assumption that the depreciation will proceed in the future at the same rate as it has proceeded in the past?

[fol. 9961] A. If I may furnish that calculation later, I would prefer to do it.

Q. It would only take a minute.

A. I would much prefer to do it off the stand, however.

Q. Well, the figure we get is 1333 years. A. Yes.

Q. Will you please check my calculation for me? Assuming the correctness of my arithmetic and assuming that the depreciation which you found proceeds in the future at the same rate as in the past, the indicated over-all age would be 1333 years, wouldn't it?

A. Assuming that your mathematics are correct.

Q. How many river crossings are there in the Michigan Gas Transmission system? I refer you to Exhibit No. 78, the map, to refresh your recollection.

A. Are you speaking of the navigable rivers or small streams, such as Raccoon Creek, White River and the Wabash?

Q. Let me read you a few that I took from the map and you can check me on them. A. All right.

Q. Line A—Wabash, Big Raccoon Creek.

A. All right.

Q. Sugar Creek. A. All right.

Q. Line B—White River crossing, do you know about that one? A. All right.

[fol. 9062] Q. Line C—Mississinewa. A. All right.

Q. Wabash River? A. All right.

Q. St. Mary's River, Maumee, Huron. A. All right.

Q. Tiffin and Raisen. A. All right.

Q. Now, did you make any inspections on any of those river crossings? A. No, sir.

Q. Nor did anyone else, did they?

A. Not to my knowledge.

Q. How many inspections did you make on the loop lines?

A. You are speaking of Line AA and BB, the 24-inch line, sir?

Q. Well, let's take the loop line extending parallel, approximately, with Line A and extending from the Indiana-Illinois line at Dana to Zionsville.

A. It extends to Montezuma, does it not, the end of the line that you mentioned extends to Montezuma compressor station, Line A?

Q. Well, suppose you verify that on the map.

[fol. 9063] A. However, the answer is "no" on that line.

Q. Now, that line was installed partly in 1939 and partly in 1940, was it not, that is, the loop line?

A. I have no information as to the date of installation on the loop lines.

Q. I think the legend on the map, Exhibit No. 78, will show that. A. 1941, Line A.

Q. Did you say 1941? A. Yes, sir.

Q. You have just consulted the map. Will you please state the fact with respect to the loop line A?

A. No inspections were made on loop line A, 24-inch.

Q. And that line was constructed for the most part in the year 1940 and a short section thereof was constructed in 1939, is that right, according to the map, Exhibit No. 78?

A. Yes.

Q. That is the loop line?

The Witness: You will have to read me that question to answer it correctly.

(Whereupon the pending question was read by the reporter.)

The Witness: That is my understanding from the map.

By Mr. Littman:

Q. Did you or Mr. Riddle make any separate determination of the per cent condition on the coating on the coated pipe? A. On the coating or coated pipe?

[fol. 9064] Q. Of the coating on the coated pipe.

A. If you will pardon me, if I may state the question did we make an inspection of the coating?

Q. Did you make a separate determination of the condition per cent of the coating? A. No.

Q. Will you please turn to page 7 of Exhibit No. 81?

A. What line is it, sir?

Q. Line A. A. All right.

Q. I note from inspection Nos. 1, 2 and 3 shown on the table on that page, that those inspections were made on coated pipe. Is that correct? A. That is right.

Q. Now, you found the pipe at those points in 100 per cent condition, is that correct? A. That is correct.

Q. This line was laid in 1930 and 1931, is that right?

A. Those are the right of way dates, 1930, 1931.

Q. Is it your testimony that the coating on this pipe, which is 10 years old is as good as it was when it was first installed?

A. I am not testifying as to the coating condition at all. I am testifying as to pipe condition, the material protected [fol. 9065] by the protective pipe coating.

Q. Now, you found that pipe in 100 per cent condition notwithstanding the fact that it had been in the ground for 10 years, is that right?

The Witness: Would you read that question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: That is right.

By Mr. Littman:

Q. And notwithstanding the fact that that pipe had already marched for 10 years along the road to the scrap heap, isn't that right?

A. Would you mind stating that question again? I do not seem to get your question clearly.

Trial Examiner: I believe he is quoting.

Mr. Littman: My apologies to Mr. Chief Justice Stone.

By Mr. Littman:

Q. I will rephrase my question. You found the pipe at this inspection point in 100 per cent condition notwithstanding the fact that it had marched along for 10 years toward the scrap heap. It is 10 years closer to the scrap heap today than it was when it was first installed, isn't it?

A. I would not say that it is.

Q. You would not say that it is?

A. No, sir, absolutely not. Ten years does not make a bit of difference. The time element has nothing to do with it. It is the physical condition we found at the time [fol. 9966] of the inspection. The pipe had been well protected by this protective coating at the points we inspected. The pipe was as good as new at the three points that are in question.

Q. But it is still 10 years closer to the date of its eventual retirement than it was when it was first installed, isn't it, even though it looks just as good as new?

A. Again age alone is no measure of depreciation.

Mr. Littman: Let me have that answer, will you please?

(Whereupon, the last answer was read by the reporter.)

By Mr. Littman:

Q. Well, it is a measure of how much service it is going to give as related to time, isn't it?

A. No measure at all of the future service of that pipe line.

Q. You will certainly concede, won't you, that that piece of pipe is 10 years closer to the date when the gas supply will be exhausted?

A. That may be true. However, the percentages applied to the three inspection points in question have no bearing on the future life of our gas supply.

Q. In other words, what you are saying is that you did not take that element into account? A. Absolutely not.

Q. In making your determination?

[fol. 9067] A. Absolutely not.

Q. Have you ever made a depreciation study wherein you have taken that element into account? A. No, sir.

Q. I want you to describe how you translate your data shown in Exhibit No. 81 to per cent condition?

A. I just do not understand your question, sir. What do you want translated?

Q. I want to know how you arrive at your percent condition at these various inspection points.

A. I understand you now.

Q. I want you to describe your method.

A. How we arrived at the per cent condition at each inspection point?

Q. Generally, yes.

A. Well, the pipe was carefully scrutinized for all indications of corrosion or pitting. The entire surface was so examined, the bottom half as well as the top half, sides, top shoulders and bottom shoulders. If any pitting was found at all in the cleaned section of the pipe that was measurable, these pits were measured and so reported on our field inspection form. An Ames dial gage was used for the purpose of measuring the pit depths. From the information gained at each inspection point, a per cent condition was applied which is purely a judgment figure, comparing in my mind the condition of the pipe under [fol. 9068] observation with new pipe alongside of that pipe.

Q. That is a judgment of what?

A. Judgment of the physical condition as compared to new pipe.

Q. Not a judgment of how much longer the pipe is going to serve? A. No, absolutely not.

Q. Not a judgment of how much service has departed

A. Absolutely no comparison.

Q. And it has no relation to time, according to your theory? A. Yes, I would say time enters the picture.

Q. Well, you cannot give us any further enlightenment as to the mental gyrations through which you went to reach the ultimate per cent condition from the data which you have described?

A. I would say, rather than the term "mental gyrations", they more truly could be termed "years of experience" working with pipes of similar materials, installing such pipes, actually making the installations yourself, supervising such installations in varying sizes of pipe over a period of time, being familiar with new pipe as well as pipe that has been in use for quite some time, basing my per cent condition entirely upon my judgment as to its condition as compared to new pipe.

[fol. 9069] Q. What does 95 per cent condition mean, 95 per cent of what?

A. As compared to a new piece of pipe alongside of it.

Q. You say 5 per cent is gone. Is that what you say when you find pipe in 95 per cent condition.

A. I would say it has depreciated 5 per cent.

Q. Was the depth of the maximum pit the controlling factor in your determination of per cent condition?

A. Not entirely, not entirely, not in every case. It only had part to do with the per cent condition which we have reported in our 37 inspections.

Q. How much weight did you give to the deepest pit?

A. There is no way in the world that I could explain to you or any other person the weight given to pitting other than it is my judgment, following my examination of the surface of the pipe presented for inspection of any corrosion or pitting that occurred as compared to new pipe.

Q. Where you found no pitting, you assigned a per cent condition of 100, is that right? A. Yes, that is right.

Q. Notwithstanding anything else that may have been found at the inspection point, isn't that right?

A. There was nothing else found. It was perfect pipe, the same as the day it came out of the mill.

Q. What significance do you attach to pitting which is [fol. 9070] described as "etched" or "small"? I note

those two descriptions appear opposite each other on these inspection reports.

A. In so far as they are appearing opposite, it has no significance, their appearing opposite. However, do you want a description of what I mean by "etched"?

Q. No, I want your to tell me what difference does it make if a pit is etched or if it is small?

A. In what way does it make a difference, do you mean, in per cent condition?

Q. Yes, in what way would it make a difference to you, assuming that the two pits are of equal depth?

A. Well, I believe I will have to describe the etching condition, as I see it, and small pits, as I may see it, in my observed inspection in order to make it clear.

Q. All right.

A. An etched surface found upon examination would be one we will describe as the most minute series of pittings possible to imagine, if you are familiar with pipe materials, possibly occupying a very small area on the entire surface of the pipe examined and closely related one to another in their location on the pipe, in more of a close knitted area, if I might say that. Small pitting would be described as very minute in diameter, very small, rather, in diameter and depth possibly. The term "small" is used in this inspection report as not having anything to do with the [fol. 9071] number of pits but with the size of the pits as found.

[fol. 9072] By Mr. Littman:

Q. Assuming that you have two pits at an inspection point of equal depth, one of which is etched and the other of which is small, within the meaning of your definition. What difference would that make?

A. In per cent condition?

Q. Yes. A. Possibly none.

Q. I will ask you the same question with respect to the two pits of equal depth, one of which is "large" and the other of which is "sharp". What difference, if any, would that make?

A. A larger pit being one that covered considerable area, affecting considerable area of the metal and sharp

being descriptive of the type of pitting we will find on steel pipe; the penetration being much sharper on steel pipe than on wrought iron pipe.

[fol. 9073] Q. What difference would it make in per cent condition?

A. I would have to see the particular pipe to answer your question, sir.

Q. Well, so far as I am concerned, you can write your own ticket, using your own definition of a large pit and a sharp pit, both of the same depth, what difference would that make in your per cent condition, whether one is large and the other is sharp?

A. I would still have to see the pipe in order to put a per cent condition on it.

Q. Suppose you had two pits, one of which was "blotchy" and the other of which is one of a number of "scattered" pits and both pits are of the same depth. What difference would that make in your per cent condition?

A. It might make none. I would have to see the pipe before I could put a per cent condition on it.

Q. What weight, if any, did you give to the character of the soil in arriving at your per cent condition?

A. At the time of the inspection, we made a record of the kind of soil covering our pipe line system.

Q. What weight, if any, did you accord to that fact?

A. None.

Q. Did you consider any factors in arriving at your per cent condition other than those which you recorded in your [fol. 9074] inspection sheets shown in Exhibit No. 81?

A. I think we have all the facts before us in the individual inspection sheets that were considered in arriving at the per cent condition.

Q. In other words, everything that you took into account in arriving at your per cent condition or condition per cents and all the data which you used in arriving at your condition per cents are shown in these inspection sheets in Exhibit No. 81, is that correct? A. That is right.

Q. In other words, if you had before you the data at the particular inspection point as shown in one of these sheets, you could determine a per cent condition therefrom?

A. If I have the pipe.

Q. What? A. If I had the pipe along with it.

Q. You would have to have the pipe along with it?

A. Certainly.

Q. I thought you said you did not consider anything other than the data which is shown on these inspection sheets.

A. I considered the data here—I obtained the data in the field from the pipe that I have recorded here, not from the sheet to the pipe. We recorded our findings in the field after observation of the pipe condition.

Q. Assume that at an inspection point, the wall thickness [fol. 9075] of the pipe, which is steel pipe, is 0.281 inches and the maximum pit depth is 0.05 inches and the average estimated pit depth is 0.01 inches; the pitting is etched, sharp, scattered and few; the soil is clay, loam and gravel and the pipe was painted in the mill. What is the per cent condition of that pipe? A. I would have to see the pipe.

Q. In other words, there are some data that you took into account that are not recorded on these inspection sheets?

A. The data that we have recorded on the inspection sheets was obtained in the field by observation and so recorded.

Q. That other factors that are not shown on these inspection sheets would change the per cent condition?

A. I know of no other factors that will change the per cent condition as shown on our inspection sheets. The facts are shown on the inspection sheets as recorded in the field at the time of observation.

Q. Why do you have to look at the pipe if you have all of the data here that you recorded which you felt was necessary to take into account to arrive at a per cent condition?

A. Those are the facts that we obtained in the field from observed conditions of the pipe at the time of inspection.

Q. What is there that you would have to see about the pipe?

A. The entire surface of the exposed section under test [fol. 9076] or inspection.

Q. You have all of that described on your inspection sheets, have you not?

A. That is right and we obtained it from the pipe that is in the ground that we observed. That is nothing more than a record of our findings, an exact record of our findings in the field.

Q. Well, your inspection sheet shows the character of pipe, the wall thickness and the depth of pit, does it not?

A. Yes.

Q. So far as that is concerned, you would not have to go out in the field to see that, would you?

A. How are you going to obtain depth of pitting, for example?

Q. I mean if I gave you the depth of pits, that is all you would need?

A. There is more to it than the depth of the pit, than just the physical measurement of one pit or several pits. It is the general condition observed over the entire surface of the pipe, the number of pits, the general corrosion.

Q. You have described all those matters here in your inspection sheets, haven't you? A. That is right.

Q. Why do you have to go out and look at it the second time if I give you your own description?

[fol. 9077] A. That certainly would be impossible, to make it even come close.

Mr. Wheat: Mr. Littman, Mr. Baldridge suggests that possibly a good analogy would be that of a man trying to judge a beauty contest from a series of typewritten measurements.

Mr. Littman: Yes, but the analogy is not at all proper.

By Mr. Littman:

Q. You have your own description here, have you not, of everything you saw?

A. That is right, obtained in the field from observing the pipe.

Q. And you say that is all you considered?

A. Absolutely recorded all we found in the field.

Q. What is there that you saw?

A. Exactly what you have recorded in front of you on each inspection.

Q. Well, if I read you those data, why do you have to go out and look at it again?

A. In other words, you can make a hypothetical case here and hand it to me and expect me to put a per cent condition on it or even take one out of our record and put a per cent condition on it—that is impossible.

Q. That is impossible?

A. Absolutely. We have got to see the pipe.

Q. I take it then there is some data that you considered [fol. 9078] that is not fully described in these inspection sheets?

A. Other than my judgment and that is the judgment figure in the per cent condition that you have.

* * * * * * * * *

Q. I take it from your testimony that the description of the data observed at the various inspection points as shown in the pipe inspection reports in Exhibit 81 are not sufficient upon which to base a per cent condition without actually going out and observing the pipe?

A. That is right.

Q. Now, the inspection point which I described is the one shown on page 14 of Exhibit No. 81, to wit, inspection report No. 8. Now, you found the pipe at that inspection point 40.95 per cent condition, did you not?

A. That is right.

Q. Will you turn to the inspection report No. 12 which is shown on page 19 of Exhibit No. 81. There you will observe the identical description as that which appears for inspection point No. 8, isn't that correct?

A. Were we comparing No. 6, inspection No. 6 and 12?

Q. We were comparing inspection No. 8 with inspection [fol. 9079] No. 12. Now, let's compare the two. At both these points, the pipe is painted. Is that right?

A. That is right.

Q. The maximum pit depth is 0.05 inches and the average pit depth is 0.01 inches. Is that right?

A. That is right.

Q. The pitting in both cases is described as "small, sharp, scattered and few", is that correct?

A. That is right.

Q. The wall thickness of the pipe in both cases is 0.281 inches, is that right? A. That is right.

Q. The soil is practically the same, but we need not discuss that because you did not take the soil into account in arriving at your per cent condition, did you?

A. No, I did not.

Q. Now, in the case of inspection point No. 8, you found that in 95 per cent condition, didn't you? A. That is right.

Q. Now, as to inspection point No. 12, you found that in 85 per cent condition, did you not? A. That is right.

Q. Why did you find the one in 85 per cent condition and the other in 95 per cent condition?

[fol. 9080] A. Again I would have to see the pipe.

Q. Can you tell me what you would see that would cause a variation of 10 points between the two inspections?

A. I cannot tell you from my memory what we would see in reference to these two inspections we are discussing, No. 8 and No. 12. My memory does not serve me that well to tell you what we found on one inspection as against what we found on the other inspection.

Q. Well, you have got the same data recorded for both, haven't you? A. That is true.

Q. What, in your opinion, could cause such a difference?

A. Now, we can get an answer maybe. It would be very easy to answer that. Possibly the pitting was more numerous on one inspection than on the other—

Q. (Interposing) Just a minute, right there. You describe the pitting exactly the same. You say "scattered and few". A. That is true.

Q. Don't those descriptions cover the same general character of pitting?

A. That is true but still you could have more numerous pitting on one than on another. We are not comparing one inspection point with another inspection point when we apply a per cent condition. We are comparing our observed condition with new pipe.

[fol. 9081] Q. You cannot tell us at this time what caused the variation?

A. Absolutely not. I would have to see the pipe.

Q. Let's look at inspection No. 5 which appears on page 12 of Exhibit No. 81. You found the pipe at that point in 85 per cent condition, did you not?

A. That is right.

Q. The maximum pit is 0.17 inches, is it not?

A. That is right.

Q. Now, that pit is slightly—that is the maximum pit, isn't it, 0.17? A. Yes, the maximum pit is 0.17.

Q. Now, that maximum pit is slightly more than 50 per cent through the pipe wall, is it not?

A. That is correct.

Q. Now, let's look at inspection point No. 9. What is the maximum pit depth at that point? A. No. 9, sir?

Q. Yes, which is shown on page 17 of Exhibit No. 81.

A. 0.05 is the maximum pit.

Q. Now, that pit is approximately 18 per cent through the pipe wall, isn't it? A. That is right.

Q. And your per cent condition at that point is 85 per [fol. 9082] cent, is it not? A. That is correct.

Q. In other words, in one place you have a maximum pit that is slightly more than 50 per cent through the pipe wall. A. That is right.

Q. And in another place at another inspection point, you have the maximum pit which is 18 per cent through the pipe wall and yet you place both of them in 85 per cent condition. Is that correct? A. That is correct.

Q. Now, looking at inspection point No. 8 which appears on page 14—

A. (Interposing) Inspection point No. 8?

Q. Inspection point No. 8, at that inspection point your maximum pit is 0.08 inches—

A. (Interposing) I beg your pardon, sir. My inspection point No. 8 shows 0.05.

Q. I am sorry, that is right, 0.05 inches. The maximum pit at inspection point No. 8 is 18 per cent through the pipe wall, isn't it, approximately? A. Approximately.

Q. Yet you find that inspection point in 95 per cent condition, do you not? A. That is correct.

. . . . . .

[fol. 9085] (Exhibit No. 81 was received in evidence.)

. . . . . .

(Exhibit No. 87 was received in evidence.)

. . . . . .

[fol. 9086] (Exhibit No. 92 was received in evidence.)

. . . . . .

[fol. 9087] (Exhibit No. 94 was received in evidence.)

(Exhibit No. 98 was received in evidence.)

(Exhibit No. 100 was received in evidence.)

Mr. Littman: I would like to take up next Exhibit No. 104 entitled, "Michigan Gas Transmission Corporation—Estimates" which is the pro forma statement offered by Mr. Spitznagle and also Mr. Green. I believe that this exhibit contains a number of objectionable figures and references. However, I shall not object to the admission of this exhibit simply because if any of the figures herein were to be stricken the entire exhibit would be meaningless.

[fol. 9088] The exhibit contains numerous calculations and derivatives comprehending the entire case of Michigan Gas Transmission Corporation. It serves to tie together and present in one summary statement all of the contentions of Michigan Gas. I merely want it understood that my failure to object at this point to certain of the figures for which the underlying exhibits have been already ruled upon as not admissible should not be taken to be any waiver by Commission counsel of its right to contend that reproduction cost evidence should be excluded from consideration.

I think perhaps I have made myself clear upon the record with respect to our position. I simply dislike striking any part of this exhibit because I fear that the entire exhibit would be meaningless if we were to have stricken certain objectionable features thereof.

Trial Examiner: It has been made clear in your statement and previously in the record that any evidence which might be directed to support the evidence of reproduction cost new will be disregarded in the analysis of this proceeding.

The proposed exhibit marked for identification as Exhibit No. 104 comprising six sheets will be received.

(Exhibit No. 104 was received in evidence.)

[fol. 9089] (Exhibit No. 105 was received in evidence.)

[fol. 9099] Mr. Baldridge: May I at this time, Mr. Examiner, go back and re-offer those parts of Exhibits 83, 84, and 86 and all of Exhibit 97 which have heretofore been excluded and, without entering into any extended discussion, I would like to point out that the recent opinion of the Supreme Court of the United States in the Natural Gas Pipeline Company case does not hold that evidence of this kind, whether you call it evidence of reproduction cost or whether you call it trends and indices, is improper evidence for reception by the Commission.

Mr. Littman: Are we going to use as precedent matters which the Supreme Court did not decide? I understood Mr. Baldridge to state they did not decide certain things and he was pressing that as an argument for the inclusion in evidence here of reproduction cost. Indeed, as the three Justices who wrote the concurring opinion stated, namely, Justices Douglas, Murphy, and Black, in their judgment the majority opinion holds that the Commission no longer need admit evidence of reproduction cost.

Mr. Wheat: Where does it say that?

Mr. Littman: The quotation upon which I am relying as authority for my statement is as follows, and I now read from the concurring opinion written by Mr. Justice Black:

[fol. 9100] "As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or of giving any weight to that element of 'fair value'. The Commission may now adopt, if it chooses, prudent investment as a rate base—the base long advocated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in the Southwestern Bell Telephone case there could be no constitutional objection if the Commission adhered to that formula and rejected all others."

Now, who am I or who is Mr. Baldridge to read or interpret the majority opinion any differently than that opinion was interpreted by three Justices who wrote the concurring opinion? Certainly I shan't undertake to disagree with

the three concurring Justices as to the proper interpretation to be placed upon the majority opinion. Certainly the opinion is authority for the proposition that this Commission need not accept any evidence of reproduction cost.

Trial Examiner: The Trial Examiner has referred to the record in regard to the exclusions of Exhibits 83, 84, and 86, which were excluded at page 8230 and page 8231 of the transcript and then exhibits as reformed responsive to Commission counsel's motion were afterward received with corresponding numbers. It would seem to the Trial Examiner that there is less question at this time than there was when the ruling was originally made so the renewed offer is again rejected and the original exhibits as offered, [fol. 9104] are again excluded with an exception if you wish it.

[fol. 9136] Leith V. Watkins, a witness previously called and duly sworn, resumed the stand and was examined and testified further as follows:

Direct Examination (Continued)

By Mr. Wheat:

Q. Mr. Watkins, will you please turn to the next document which you have prepared in connection with this matter and which I believe has been distributed, state what it is and what it shows. I believe it is the one giving effect to certain financing transactions consummated on February 6, 1942.

A. That is correct. The next document which the witness has had prepared for presentation in these proceedings is that consisting of pro forma consolidated balance sheet as of December 31, 1941, which gives effect to financial transactions consummated on February 6, 1942, by Panhandle Eastern Pipe Line Company and the acquisition on that date of the capital stock and debt of Michigan Gas Transmission Corporation and the Indiana Gas Distribution Corporation and the purchase of certain transmission properties of Ohio Fuel Gas Company by Panhandle Eastern Pipe Line Company. This document consists of five pages.

[fol. 9137] Pages Nos. 1 and 2 consist of a pro forma balance sheet as of December 31, 1941, while pages Nos. 3, 4, and 5 carry certain notes to such balance sheet and adjusting journal entries thereto.

Q. Mr. Watkins, are those transactions the ones which were dismissed by the Securities and Exchange Commission in the document which has been received in this proceeding as Exhibit No. 147?

A. I believe they are, sir. Is that exhibit an order of the Securities and Exchange Commission?

Q. It is, yes.

Mr. Wheat: Mr. Examiner, may the document just mentioned by the witness, consisting of five pages, be marked for identification as Exhibit No. 194?

* * * * * * * * * * *

(The document referred to was marked Exhibit No. 194 for identification.)

By Mr. Wheat:

Q. Mr. Watkins, will you state how Exhibit No. 194 for identification was developed and what you have shown thereon?

A. In the development of Exhibit No. 194 for identification, we first combined the assets and liabilities of Panhandle Eastern Pipe Line Company and its newly acquired wholly owned subsidiaries, Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, [fol. 9138] as of December 31, 1941.

Q. Panhandle Eastern did acquire certain properties from the Ohio Fuel Gas Company, did it not?

A. Those properties are likewise included in the balance sheet under the column on both pages 1 and 2 which carries as its heading the word "Combined."

Q. When you say that you did this as of December 31, with respect to financial transactions consummated on February 6 of the next year, how did you accomplish that?

A. We took the balance sheets of the three companies and the properties acquired from Ohio Fuel Gas Company as though they had been acquired on December 31, 1941, and developed the figures shown in the column which the witness has just referred to, carrying as its heading the word "Combined."

Q. Then what did you do to get the final column headed "Consolidated"?

A. It was then necessary to make certain adjustments which are shown on pages 4 and 5 of this Exhibit No. 194 for identification.

As an illustration, the first adjustment required was that on page 4, through which we adjusted cash by $25,156,842.93 to record the sale of $15,000,000 principal amount of 5.60 percent cumulative preferred stock and $10,000,000 principal amount of first mortgage and first lien 3 percent [fol. 9139] bonds, series "C", of Panhandle Eastern Pipe Line Company, and the credits shown in adjusting entry No. 1, established for the purpose of this pro forma balance sheet as of December 31, 1941, give effect to such issue and sale of securities.

Q. And that item is shown with the figure one in parentheses, is it not, on page 1, opposite the item "Cash" and under the column headed "Adjustments and Eliminations Debit"?

A. As to that page, yes, sir, and it is likewise shown on page 2 followed by the numeral one in parentheses in the column headed "Credit" under the general heading "Adjustments and Eliminations" on that page.

Q. In other words, page 1 shows the asset portions of the balance sheet and page 2 the liability portions, is that true? A. That is true.

Q. Now, will you proceed with your explanation of what you did?

A. It was then necessary to record an adjusting entry to give effect to the purchase of stock and debt of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation and certain transmission facilities from the Ohio Fuel Gas Company. To this entry, gas plant in service is charged with $439,326.08, the cost of securities acquired of associated companies amounting to $8,331,715.02 is taken into the records, the amount [fol. 9140] of the advances to associated companies being $2,445,000 is established and a small amount of expense incident to the acquisition of the new securities amounting to $896.40 is charged to other work in progress. To accomplish this acquisition, cash is credited with $11,206,937.50. These amounts are shown in appropriate places in the adjust

ments and eliminations columns on pages 1 and 2 of Exhibit for identification No. 194.

* * * * * * * * * *

In the general description of this proposed exhibit, mention was made of the notes on page 3. They are simply notes explanatory to the pro forma balance sheet and are not in the form of an adjustment.

Is that sufficient, sir?

Q. That, I think is, yes.

[fol. 9141] Will you proceed to your next adjustment?

A. Out of the cash arising from the sale of the securities represented by adjusting journal entry No. 1 shown on page 4 of this proposed exhibit, $10,000,000 was used for the redemption of the company's Class A preferred stock and the payment of dividends thereon to date of redemption. The effect of this use is represented by adjusting journal entry No. 3 on page 4 of the proposed exhibit and the entries appropriate to give effect to this entry in the balance sheet are shown in the appropriate columns under the general heading "Adjustments and Eliminations" on pages 1 and 2 of Exhibit No. 194 for identification.

Q. I think that sufficiently covers item No. 3. Will you now explain item No. 4 of the adjusting journal entries?

A. May I in such explanation combine entries 4, 5, and 6?

Q. Yes, I think that would help.

A. In order to properly portray a consolidated balance sheet it is necessary, of course, to eliminate intercompany items. Adjusting journal entries Nos. 4, 5, and 6 constitute the eliminations necessary in this instance, and it is believed the explanations to such entries clearly state the purpose therefor.

Q. Let me ask you if it is your opinion that Exhibit No. 194 for identification correctly shows what it purports [fol. 9142] to show as explained by you. A. It does.

* * * * * * * * * *

(Exhibit No. 194 was received in evidence.)

Mr. Littman: Mr. Watkins, before you leave Exhibit No. 194, I would like to know whether you meant to say

that you had included the item of "Gas Plant in Service" in the amount $439,326.08 shown as item 2 on page 4 in the combined amount of gas plant shown on page 1 in the sum of $82,652,330.74.

The Witness: If I did, sir, I thank you very much for correcting me because it surely should not be in there.

By Mr. Wheat:

Q. Will you state why, so the record will be clear?

A. Because, Mr. Wheat, the addition of this amount to gas plant did not take effect until the adjusting entries were made and, of course, the amount was not a part and parcel of any of the balance sheets included in the column on pages 1 and 2 of this proposed exhibit headed by the word "Combined."

[fol. 9143] Q. The effect of this, as well as all of the other items covered by the adjustments and eliminations, occurs and is shown in the columns on pages 1 and 2 headed "Consolidated", is that correct?

A. The general effect is there shown, yes, sir.

* * * * * * * * *

Q. Mr. Watkins, will you then pass to the next document prepared by you in connection with this proceeding and state what it is and what it shows?

A. The next document is a pro forma consolidated income account for the year ended December 31, 1941, and as shown by note No. 1 on page 3 of the proposed exhibit, is a condensed pro forma consolidated income account of the company and its subsidiaries, Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, which has been prepared from the books of the companies on the basis that the financing of the cost of the acquisition of the outstanding stock and indebtedness of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation resulted in an annual interest cost of $300,000, and which was consummated on February 6, 1942, had been effected January 1, 1941, and that the interest expense shown as applicable to the obligations of Michigan Gas Transmission Corporation and Indiana [fol. 9144] Gas Distribution Corporation to Columbia Gas & Electric Corporation, then their parent, would have aggregated the same amount had Panhandle Eastern Pipe

Line Company been the parent company and that the dividends had been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to the extent of their net income for the year and is after giving effect to the estimated increases in Federal income taxes which would have resulted, had such interest and dividends been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to Panhandle Eastern Pipe Line Company to the full extent of the net income of those companies.

Q. Mr. Watkins, did you not misspeak yourself at the outset of your last answer when you spoke only of Panhandle Eastern and its subsidiaries, Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation? Did you not mean Panhandle Eastern Company and its subsidiaries, to wit, Illinois Natural Gas Company and Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation? A. That is correct, sir.

* * * * * * * * * * *

[fol. 9145] (The document referred to was marked Exhibit No. 195 for identification.)

Q. Now, in the figures which are shown in pages 1 and 2 of Exhibit No. 195 for identification, have all of the items which you mentioned in your last somewhat lengthy answer been given their full consideration by you?

A. They have and the data shown in the column headed by the word "consolidated" shows the effect of the conditions explained in the answer which you characterized as a lengthy one as though that condition has existed throughout the entire year 1941.

Q. Now, are there any items which you believe ought to be explained in order that thorough understanding may be had of this exhibit?

A. Unless there be some misunderstanding on the part of someone with respect to the method of treatment of additional provision for Federal income taxes arising from the consideration in this pro forma consolidated income account of the receipt by Panhandle Eastern Pipe Line Company of the interest of the obligations of Michigan Gas Transmission Corporation and Indiana Gas Distribu-
[fol. 9146] tion Corporation and from the receipt by Pan-

handle Eastern of the remainder of the net income of those companies as dividends, the data should be self-explanatory.

When the witness refers to the word "receipt", it is in the light of the treatment with respect to this particular proposed exhibit. We know, of course, that there was no such constructive receipt for the year 1941.

Q. What is the elimination which is headed "No. 4" on page 2 and how does that come about?

A. In order to properly consolidate the operations of Panhandle Eastern and its subsidiary company, any inter-company transactions must be eliminated. The only inter-company transaction necessary in connection with this proposed exhibit is that represented by the sale of gas by Panhandle Eastern Pipe Line Company to the subsidiary companies. All eliminations between Panhandle Eastern and its subsidiary, Illinois Natural Gas Company, had been made prior to the development of the figures shown on Page 1 of this exhibit in the column headed by the word "Combined."

[fol. 9147] Mr. Littman: I have a few questions I would like to ask about Exhibit No. 195.

As I understand Exhibit No. 195 and also Exhibit No. 194, you have included certain figures reflecting a company called "Indiana Gas Distribution Corporation", is that correct?

The Witness: That is correct.

Mr. Littman: That corporation is not a natural gas company, is it, within the meaning of the Natural Gas Act?

The Witness: It is not.

Mr. Littman: In other words, it engages, strictly speaking, in the distribution of natural gas within certain city limits, isn't that correct?

The Witness: I do not know whether they could be characterized, really, as cities. They may be, under the laws of the State of Indiana. They are somewhat small if they are cities but, generally, your statement is correct. It has a few lateral lines. These lateral lines probably

have a recorded cost of not more than $50,000. Whether they are in a position similar to the lateral lines of Illinois Natural Gas Company in the light of the law, I do not know.

Mr. Littman: But the balance of its property, other than the lateral lines is purely distribution?

The Witness: That is correct.

Mr. Littman: Can you give us an idea of the size or amount of the property and income involved?

[fol. 9148] The Witness: My remembrance is that the total investment is possibly less than $200,000.

Mr. Littman: I think some of those figures are shown in Exhibit No. 145 but I would like to get an idea of approximately the magnitude and size of this Indiana Gas Distribution Corporation and to what extent it affects the picture?

The Witness: Would you like me to refer, in my response, to Exhibit No. 145?

Mr. Littman: Yes, I think it might be well to leave it stated at this point.

The Witness: Page No. T 14 of Exhibit 145—we may now refer to that as an exhibit, may we not?

Mr. Littman: Yes.

The Witness: (Continuing) Contains a balance sheet of Indiana Gas Distribution Corporation as of December 31, 1940, and as of September 30, 1941. It is my personal belief that the balance sheet as of September 30, 1941, is probably fairly representative of the company's assets and liabilities at the moment.

That balance sheet shows its property, plant and equipment as having a recorded cost of $195,000; its total assets $240,000; its demand obligations consisting of notes and open accounts $141,000; with outstanding capital stock of $1,000 and surplus at that time of some $11,698.20.

Is that sufficient, sir, for the balance sheet?

[fol. 9149] Mr. Littman: Yes, for the balance sheet, for the present.

Now, will you give us some idea of the size of the company with respect to the income statement?

The Witness: On page T-15 of Exhibit No. 145 is shown an income statement of Indiana Gas Distribution Corporation for the years ended December 31, 1938, 1939, 1940 and the nine months ended September 30, 1941, the year 1940 being the last full year of operation, may we refer to that rather than the nine months ended September 30, 1941?

Mr. Littman: I think it would be preferable because it gives us a full year.

The Witness: In that year the total gas revenue of Indiana Gas Distribution Corporation was $403,957.10; its total operation expenses amounted to $373,668.02 of which $335,747.54 represented cost of gas purchased from Michigan Gas Transmission Corporation. Its net income for that year, as shown by this income statement, amounted to $21,810.29.

Mr. Littman: Certainly it is not a very large company, is it?

The Witness: No.

Mr. Littman: And doesn't affect the ultimate picture very much?

The Witness: I should not think so.

There is included among the gross revenue, the sales to one large industrial customer. As a matter of fact, it is my [fol. 9150] information and belief that a great part of the approximate amount of gross revenue, $404,000 for the year 1940, came from the sale of gas to this industrial customer and the contract with that industrial customer was supposed to be changed, I believe, among some of the rate schedules which were filed with the Commission more than a year ago and if such change were made, the importance of this company would be somewhat substantially reduced even as an unimportant as it is taken into consideration with the total combined picture of all of Panhandle Eastern and its subsidiary companies as they existed after February 6, 1942.

Is that sufficient, sir?

Mr. Littman: That is sufficient for the present, thank you.

. . . . . .

(Exhibit No. 195 was received in evidence.)

Mr. Chamberlain: I am not clear, Mr. Watkins, as to just where you obtained your figure in your elimination No. 4 of $5,460,000. That is said to be the gas sold to subsidiary companies. What companies are included in that?

The Witness: That, sir, would cover the sales only to Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation and could include any intercompany sales between those two companies.

[fol. 9151] The intercompany transactions between Panhandle Eastern and Illinois Natural, as the witness has previously stated, were made before the data now shown on page 1 of this exhibit in the column headed by the word "Combined" was prepared.

. . . . . .

[fol. 9155] LEITH V. WATKINS a witness, having been previously sworn, resumed the stand and testified further as follows:

Direct Examination.

By Mr. Wheat:

Q. Mr. Watkins, I believe at the conclusion of the hearing yesterday afternoon you had just concluded your discussion of Exhibit No. 195.

Will you now pass to the next document which you have prepared, state its title and what it shows, briefly, and then we will ask that it be marked for identification.

A. The next document is a pro forma consolidated income account for the year ended December 31, 1941, adjusted to give effect to Federal income and Federal excess profits tax rates proposed in the recommendation of Secretary of the Treasury Morgenthau on March 3, 1942, before the House Ways and Means Committee and, except for the adjustment required for the provision in Federal

income and excess profits taxes is, in all respects, similar to Exhibit No. 195.

[fol. 9156] (The document referred to was marked Exhibit No. 196 for identification.)

By Mr. Wheat:

Q. Mr. Watkins, the content of Exhibit No. 196 for identification is briefly summarized, is it not, on page 2 of that exhibit? A. That is correct.

Q. And pages 3 and 4 contain certain adjustments. Will you state briefly what those are and the causes or the reasons which led you to make them?

A. Generally speaking, the adjustments on pages 3 and 4 of Exhibit No. 196 for identification are similar to the adjusting journal entries made a part of Exhibit No. 195 except in so far as the adjustments with respect to Exhibit No. 196 for identification deal with the change in the provision for Federal income and excess profits taxes to cause such provisions to conform to the recommendation made by the Secretary of the Treasury on March 3, 1942, before the House Ways and Means Committee and save for the three amounts shown on page 1 of exhibit for identification No. 196 opposite the caption "Charges in Lieu of Federal Income and Excess Profits Taxes" being $1,010,000 and $3,400,000 and $1,285,000, respectively, the information shown in the column headed by the word "Consolidated" on exhibit for identification No. 196, the two exhibits are very much the same.

Q. Mr. Watkins, what causes the difference in the net [fol. 9157] income in the column headed "Consolidated" in Exhibit No. 196 for identification as compared to the same figure in Exhibit No. 195 and what are the figures, respectively?

A. The figures that cause the difference are those included in adjustments Nos. 1 and 2 on page 3 of Exhibit No. 196 for identification and are brought about because of the increased rates and different treatment in the Secretary of the Treasury's proposal made on March 3, 1942, over and beyond the Revenue Act of 1941.

Q. And the respective amounts shown as Net Income after the adjustments and eliminations are what figures?

A. Before giving effect to the proposal made by the Secretary of the Treasury on March 3, 1942, the Net Income, as shown by Exhibit No. 195 on a consolidated basis including the operations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, newly acquired subsidiaries, was $5,449,361.60.

Q. That is for the year ended December 31, 1941?

A. That is correct.

Q. And applying the 1941 Federal tax rates?

A. That is correct.

Now, the same figure for the same year and adjusting the Net Income for the proposals made by the Secretary of the Treasury on March 3, 1942, is $3,594,590.72 as shown by exhibit for identification No. 496.

. . . . . .

[fol. 9158] Mr. Littman: The proposed recommendation of the Secretary of the Treasury is, of course, not the present income tax law, is it?

. . . . . .

Mr. Wheat: We will stipulate that that is the fact.

. . . . . .

[fol. 9160] Mr. Littman: Well, let's see how factual this exhibit is.

First, it has been stipulated that this proposal is not the law?

Mr. Wheat: No, it has not.

Mr. Littman: That it has not yet become the law?

Mr. Wheat: That is better.

Mr. Littman: All right.

Mr. Watkins, if the proposal does become the law, it will not apply to the 1941 income, will it?

The Witness: I should not think so, no, Mr. Littman.

Mr. Littman: It will, of course, apply to the 1942 income, will it not?

The Witness: That is correct. If, however, the income for the year 1942 happens to be precisely the same as the net taxable income for the year 1941 and if the proposals made by the Secretary of the Treasury become the law, Exhibit No. 196 for identification would show the effect of that change in the Revenue Act.

Mr. Littman: Obviously, if there were a great reduction ordered effective some time in the year 1942, the amount of taxes applicable to the 1942 income would be decreased proportionately?

[fol. 9161] The Witness: Ordered by the Treasury Department?

Mr. Littman: Ordered by the Federal Power Commission.

The Witness: I presume it would have some such effect, yes.

* * * * * * * * *

[fol. 9162] By Mr. Wheat:

Q. Mr. Watkins, will you turn to the next document which you have prepared and state what that is and what it shows, in general?

A. The next document is the balance sheet, per books, of Panhandle Eastern Pipe Line Company and subsidiary companies as of February 28, 1942.

Q. Is that subsequent to the acquisition of the securities of the two other corporations you have mentioned?

A. It is, and is the first balance sheet which has been presented in these proceedings—

Q. (Interposing) And also subsequent to the acquisition [fol. 9163] of the Ohio Fuel Gas Company?

A. I assumed your previous statement included that and my answer was likewise intended to include it.

This proposed document is the first document, as far as this witness knows, in which there has been presented factual information in these proceedings showing the effect of the acquisition of the two new subsidiaries and the transmission facilities from the Ohio Fuel Gas Company.

* * * * * * * * *

(The document referred to was marked Exhibit No. 197 for identification.)

The Witness: I am quite sorry that it is necessary for the witness to ask that a correction be made on page 2 of exhibit for identification No. 197. In our haste to prepare and have available some of the material that is being now presented, it was necessary to forward it from our Kansas City office before complete verification had been had, for which reason I must ask that the figures on page 2 under the general heading "Reserves" opposite the caption "Reserve for Amortization and Depletion of Producing Natural Gas Land and Land Rights" in both the columns headed by the words "Combined" and "Consolidated" be changed from the ones now shown to $466,287.94; and that the figures shown opposite the caption "Reserve for [fol. 9164] Abandoned Leases" be changed from those now shown to $427,502.68.

These changes do not affect any other figures on this proposed exhibit. The total of the data originally shown is $893,790.62 and, if you will add the revised figures, you will find that their total is likewise $893,790.62.

By Mr. Wheat:

Q. Now, Mr. Watkins, will you please explain, in general, what Exhibit No. 197 for identification shows?

A. Exhibit No. 197 for identification is simply a consolidated balance sheet of Panhandle Eastern Pipe Line Company and its subsidiary companies, per books, as of February 28, 1942, with all intercompany transactions eliminated and shows in the column headed by the word "Consolidated" on both pages 1 and 2 the consolidated assets and liabilities of Panhandle Eastern Pipe Line Company [fol. 9165] and all of its subsidiaries as at that date.

(Exhibit No. 197 was received in evidence.)

Q. Mr. Watkins, will you turn to the next document which you have prepared in this matter and state what it is and what it shows?

A. Our next proposed exhibit consists of a pro forma consolidated income account for the twelve months ended February 28, 1942. In order to produce a consolidated income account for such a twelve-months' period, it became necessary to make the adjustments defined in Note A on page 2 of the proposed exhibit.

. . . . . .

[fol. 9166] (The document referred to was marked Exhibit No. 198 for identification.)

Q. Now, Mr. Watkins, will you go forward with your discussion of Exhibit No. 198 for identification?

A. Exhibit No. 198 for identification produces a consolidated income statement of the company giving effect to the acquisition of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation and the properties from Ohio Fuel Gas Company on the basis that the earnings and expenses of those companies had been present throughout the entire twelve months' period on behalf of Panhandle Eastern Pipe Line Company and that the annual interest costs of $300,000, arising from the financial transactions consummated on February 6, 1942, had been effected March 1, 1941, and that the interest expense shown as applicable to obligations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to their then parent company until February 6, 1942, would have aggregated the same amount had Panhandle Eastern Pipe Line Company been the parent company and that dividends had been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to the extent of their net income for the twelve months ended February 28, 1942, after giving effect on the part of Panhandle Eastern Pipe Line Company alone, to the estimated increase in Federal income taxes which would have resulted had such interest and dividends been paid by [fol. 9167] Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to Panhandle Eastern Pipe Line Company to the full extent of their net income or, perhaps more simply said, this pro forma consolidated income account assumes a full year's ownership and operation of the properties and business of Panhandle Eastern Pipe Line Company and subsidiary companies as

they existed, on February 28, 1942, and under the same revenue laws then in existence.

* * * * * * * * * * *

Q. Will you pass to your next document, Mr. Watkins?

A. Our next proposed exhibit is that of a pro forma consolidated income account for the twelve months ended February 28, 1942, prepared in exactly the same manner as exhibit for identification No. 198 except that the proposed exhibit, which I take it may be numbered 199 for identification—

* * * * * * * * * * *

[fol. 9168] (The document referred to was marked Exhibit No. 199 for identification.)

The Witness: (Continuing) —is adjusted to show the effect of Federal income and excess profits taxes if the rates proposed in the recommendation of the Secretary of Treasury Morgenthau made on March 3, 1942, before the House Ways and Means Committee, become actualities.

* * * * * * * * * * *

Q. Mr. Watkins, may I ask if, in all other respects, Exhibit No. 199 is similar to Exhibit No. 198?

A. It is, yes.

* * * * * * * * * * *

Q. Mr. Watkins, will you explain the document which has just been distributed?

A. The document just distributed is a comparative statement of gas plant as at December 31, 1939, December 31, 1940, June 30, 1941, December 31, 1941, and February 28, 1942, prepared on the assumption that Panhandle Eastern Pipe Line Company owned Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation on those respective dates.

[fol. 9169] Q. And also those properties acquired from Ohio Fuel Gas Company?

A. That is true only with respect to the period at February 28, 1942, as will be shown by page 2 of this proposed exhibit under the general heading "Other Undistributed Gas Plant".

* * * * * * * * * * *

(The document referred to was marked Exhibit No. 200 for identification.)

Q. Mr. Watkins, will you proceed with your explanation of Exhibit No. 200 for identification?

A. I am further embarrassed that I must ask that a correction be made in this exhibit for the same reason as the one made in Exhibit No. 197. This change occurs in two places on page 2 of exhibit for identification No. 200.

The last five digits opposite the caption "Total Gas Plant Classified" in the column headed "February 28, 1942:", should be—

Q. (Interposing) Just where is this? It is near the bottom of page 2, is it not? A. That is correct.

Q. Will you read first the total figures shown on page 2 [fol. 9170] and then the corrected figure?

A. The figure to be changed is $78,715,508.01.

Q. What is the corrected figure?

A. The corrected figure is $78,715,486.88.

Q. Does this proposed correction of yours change the total otherwise?

A. It changes the total opposite the heading "Gas Plant" in the February 28, 1942, column from $84,998,376.60 to $84,998,355.47.

Mr. Wheat: Mr. Examiner, these changes are relatively small but I ask that they be made by counsel on their copies of this exhibit and that the reporter be requested to make the changes on the original.

By Mr. Wheat:

Q. Mr. Watkins, I wish you would explain the totals shown at the bottom of the last two columns on page 2 and how they relate to the balance sheet figures which have already been explained by you?

A. Had the cost of gas plant purchased from the Ohio Fuel Gas Company, being $439,326.08 in the column for gas plant at December 31, 1941, of exhibit for identification [fol. 9171], No. 200, been included in that column, its total would have agreed exactly with the consolidated gas plant figures shown on Exhibit No. 194. The total gas plant, as

shown by exhibit for identification No. 200 at February 28, 1942, is exactly the amount of the consolidated gas plant reflected by Exhibit No. 197.

Q. In other words, the Ohio Fuel Gas Company properties, which were acquired, are included in the figures under the column for February 28, 1942, in Exhibit No. 200 but have not been included in those figures for prior periods?

A. That is correct, sir, and it might be further explained that exhibit for identification No. 200 is simply a detailed statement of the investment in gas plant according to the present Classification of Accounts.

. . . . . .

(Exhibit No. 200 was received in evidence.)

Mr. Littman: Mr. Watkins, is my understanding correct that the total distribution plant shown on page 2 of Exhibit No. 200 in the column headed "February 28, 1942", in the amount of $142,466.11 represents the distribution system of Indiana Gas Distribution Corporation?

[fol. 9172] The Witness: I think that is entirely correct. I would be surprised if you would find any distribution plant on the books of Panhandle Eastern Pipe Line Company or Michigan Gas Transmission Corporation or Illinois Natural Gas Company.

By Mr. Wheat:

Q. Just to make sure the record is clear—I think you did mention it before—but, on page 2 of Exhibit No. 200 in the column for February 28, 1942, after the words, "Gas plant purchased" under the heading "Other Undistributed Gas Plant", we find the figure $439,326.08 which figure does not appear in the other columns of the exhibit referable to earlier periods. I take it that that is the figure reflecting the purchase of the property of the Ohio Fuel Gas Company which you have been mentioning?

A. It is.

Q. And that was the purchase price for those properties, was it not?

A. It was.

Q. Mr. Watkins, will you pass to the next document which you have prepared in this connection, state what it is and what it shows?

A. The next proposed exhibit which the witness would like to introduce is that showing the gas plant of Michigan Gas Transmission Corporation stated as at December 31, [fol. 9173] 1931, through December 31, 1941, inclusive.

* * * * * * * * * *

(The document referred to was marked exhibit No. 201 for identification.)

* * * * * * * * *

By Mr. Wheat:

Q. Mr. Watkins, in that connection, have you recently become controller of Michigan Gas Transmission Corporation and, as such, the custodian of its books and records?

A. I have recently become secretary of that corporation, but not controller. It has no controller but, functioning as I do as controller of Panhandle Eastern Pipe Line Company, I take unto myself the same prerogative as to its subsidiaries.

Q. And the data contained on Exhibit No. 201 for identification was taken from the books of Michigan Gas Transmission Corporation?

A. It was so taken from the books of that corporation under my supervision and has been prepared in conformity with the preparation of Exhibit No. 52 which is a statement of gas plant for Panhandle Eastern Pipe Line Company and subsidiary companies as heretofore explained in these proceedings.

* * * * * * * * * *

[fol. 9174] By Mr. Wheat:

Q. Is there any further explanation which should be made with respect to Exhibit No. 201 for identification?

A. Yes. I was about to state further that Exhibit No. 201 for identification had likewise been prepared in a manner similar to Exhibit No. 176 and I believe treating with the information shown in Exhibit No. 176 and exhibit for identification No. 201, information with respect to the investment of Panhandle Eastern Pipe Line Company and its subsidiaries other than Indiana Gas Distribution Corporation would be available for any of the periods [fol. 9175] shown in those two exhibits.

Q. Exhibit No. 176 was similar to Exhibit No. 52, was it not, with the exception that the full year 1941 was shown for Panhandle Eastern Pipe Line Company?

A. Was exactly the same except for that difference.

. . . . . .

Mr. Littman: We would like to interrogate the witness briefly with respect to one item.

Mr. Watkins, isn't it a fact that you have made no adjustment in Exhibit No. 201 for an item which was referred to in Mr. Spitznagle's original cost study which is in evidence as Exhibit No. 91 and which was referred to in the Securities and Exchange Commission's opinion, Exhibit No. 147, at page 12 as follows:

"The one questionable item is the amount of $139,424 paid as a fee by Indiana Gas Transmission Corporation, a company subsequently merged into Michigan Gas, to the Columbia Gas Construction Company, another wholly owned subsidiary of Columbia Gas."

You have made no adjustment for that item, have you?

The Witness: Will you please refer to Exhibit No. 200, page 1, the next to the very last line?

[fol. 9176] Mr. Littman: Yes, I have it.

The Witness: You note there a deduction of $139,500 in the consolidated gas plant as at February 28, 1942, and as at December 31, 1941?

Mr. Littman: That appears on page 2 of Exhibit No. 200.

The Witness: So it does.

Mr. Littman: I find it now.

The Witness: This may be your question, Mr. Littman, if you will grant me the permission to proceed.

Mr. Littman: Certainly.

The Witness: There is in the gas plant of Michigan Gas Transmission Corporation and on its balance sheet an item on both sides of $139,500 which covers the matter concerning which your inquiry was directed.

Mr. Littman: That amount is included, of course, in the figures shown in Exhibit No. 201?

The Witness: Yes, because this is a statement per books.

Mr. Littman: Per books?

The Witness: That is right.

Mr. Littman: Unadjusted for this item?

The Witness: We have made no disposition of this $139,500 item. It having been included in the so called determination of purchase price, it might be necessary, although I am not sure, to obtain the sanction of the Securities and Exchange Commission before adjusting entries, if any, are determined to be necessary or made.

[fol. 9157] Mr. Littman: Yes.

The Witness: That might also involve this Commission.

Mr. Littman: The Securities and Exchange Commission in the next succeeding sentence following the portion of the opinion which I read, referring to this item, said:

"This item represents an intercompany profit."

I think the record is now clear that Exhibit No. 201 is unadjusted for that particular item.

The Witness: That is correct.

(Exhibit No. 201 was received in evidence.)

By Mr. Wheat:

Q. Will you turn to your next document, Mr. Watkins, and state what it is and what it shows?

A. The next proposed exhibit is that of a statement of estimated Federal income and excess profits taxes for the year 1941 and page 1 states such taxes based on the Revenue Act of 1941 for Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company, Michigan Gas Transmission Corporation, Indiana Gas Distribution Corporation and the total resultant taxes.

On page 2, the same information is shown except that the data there has been adjusted to give effect to the rates

[fol. 9178] proposed in the recommendation of Secretary of the Treasury Morgenthau made on March 3, 1942, before the Ways and Means Committee.

On page 3, there is furnished a recomputation of Federal income and excess profits taxes for the year 1941 as explained in page 5 of the proposed exhibit.

Page 4 adjusts such recomputation by the inclusion of the rates proposed in a recommendation made by the Secretary of the Treasury Morgenthau on March 3, 1942, before the Ways and Means Committee.

. . . . . .

(The Document referred to was marked Exhibit No. 202 for identification.)

Q. Will you proceed with your explanation, Mr. Watkins?

A. Exhibit for identification No. 202 assumes certain estimated excess profits net income as well as certain estimated normal tax and surtax net income and, with such assumptions, supplies the impact of the taxes for the year 1941 as explained on each of the pages of the proposed exhibit. The pattern is simply that provided by the applicable regulations and the witness believes is somewhat self explanatory.

. . . . . .

[fol. 9179] A. The next document, sir, is the statement of operation and maintenance expenses for the year 1941 restated to include the operating and maintenance expense of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation for the year 1941 and, by the amount shown opposite line 24 on page 4 thereof, furnishes the details of the total operation and maintenance expense of $3,829,611.53 shown by page 1 of Exhibit No. 195.

. . . . . .

(The document referred to was marked Exhibit No. 203 for identification.)

Q. Will you explain anything further you think should be explained with respect to Exhibit No. 203 for identification?

A. Mr. Wheat, this exhibit for identification No. 203 is so similar to two or three of the other exhibits of the same nature that have been introduced, for which explanation has been made and concerning which certain [fol. 9180] requests have been made, that the witness believes it requires no particular explanation unless there be questions.

. . . . . .

(Exhibit No. 203 was received in evidence.)

Mr. Littman: I would like to ask Mr. Watkins how the Commission may eliminate, if it desires, from the operation and maintenance expenses shown in Exhibit No. 203 those expenses applicable to Indiana Gas Distribution Corporation, a large part of which relate to purely distribution sales which are not subject to the jurisdiction of this Commission. Can you give us a suggestion in that regard?

. . . . . .

The Witness: The insignificant amount of operation of Indiana Gas Distribution Corporation can be eliminated, of course. The witness' viewpoint would be that they are so insignificant that they need not necessarily be dignified by a lot of work to eliminate them.

I believe that would be the company's position, would it not, as far as this particular company's operations are concerned?

Mr. Wheat: Certainly it would, it is so infinitesimal in [fol. 9181] comparison to the volume of business done by the company.

The Witness: If the Commission, however, wishes the information, it can be developed. If it would be our job, however, we would like to be relieved of it.

I might say in connection with Exhibit No. 203 that its introduction is not necessarily an assumption on the part of the company, if I understand correctly, that had these subsidiaries been owned by Panhandle Eastern Pipe Line Company for the full year 1941 that the expenses shown by this exhibit would necessarily have been precisely what, the exhibits [shown] them to be.

By Mr. Wheat:

Q. Will you explain what you mean by that?

A. Well, Mr. Wheat, a unified operation might have produced economies or it might, by some hook or crook, brought about increases. You just could not take a dissimilar plan of operation under different management and tack them up one alongside of the other and assume that they would occur in exactly the same manner or fashion under unified operation. So far as we have seen up to this time in trying to merge the operations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation into the plan and procedures of our own operations, there is not going to be too much economy result from that. I am only referring to actual expenses without giving any consideration whatever to the increases that are being experienced by not only the two new sub- [fol. 9182] sidiaries but Panhandle Eastern itself, some statement with respect to which has already been made in this record.

Q. Mr. Watkins, in that connection, you have testified in connection with that matter before. It is true, is it not, that any wage increases or other expenses which have increased in volume during the year 1941 are not reflected on this or any other of these exhibits from the books which contain the 1941 total figures on an annual basis?

A. That is quite true.

Mr. Culton: Mr. Watkins, I believe you stated yesterday that the principal portion of the expenses of the Indiana Gas Distribution Corporation represented purchased gas which has now been eliminated in your consolidated statement?

The Witness: Yes, it is not present at all in this Exhibit No. 203 and, on the fact of the exhibit if you will look at lines 27, 28 and 29, page 2, you will observe there that the distribution expense aggregates a total of slightly less than $10,000.

By Mr. Wheat:

Q. By the way, Mr. Watkins, these expenses, as shown on Exhibit No. 203 and also as shown on other exhibits of expenses per books, include the expenses suffered by the company during the particular periods mentioned for all

types of business, including both the sales to industrial or direct sales to commercial or domestic and I think you headed one exhibit, "Other Sales", as well as sales to [fol. 9183] gas distribution companies, is that true?

A. That is quite true and I am particularly impressed with your word "suffered" with respect to some of the expenses.

. . . . . .

Mr. Littman: Mr. Watkins, you would normally expect that the acquisition by Panhandle Eastern of Michigan Gas and Indiana Distribution would result in economies by reason of the combined operations, would you not?

The Witness: I do not believe, Mr. Littman, in this particular that that is a proper conclusion.

Mr. Littman: Do you agree with the statement made by the President of Panhandle Eastern, Mr. Creveling, in the Annual Report for the year 1941, to the stockholders of Panhandle Eastern in which he stated:

"The effect of the acquisition of these properties by your company would be to increase earnings, remove operating problems and enable your management to deal directly with the distributing organizations in the States of Indiana, Ohio and Michigan."

Do you agree with that statement?

[fol. 9184] The Witness: Wholly, yes.

. . . . . .

By Mr. Wheat:

Q. Mr. Watkins, have you also prepared a document headed "Panhandle Eastern Pipe Line Company and Subsidiary Companies 1942 Construction and Retirement Budgets—Summary by Companies" and with additional pages showing data with respect to individual companies?

A. Mr. Wheat, such a document has been prepared and was used in connection with the Board meeting at which the annual routine construction and retirement budget was presented to the Board and the proposals there made were authorized by the Board.

. . . . . .

[fol. 9185] (The document referred to was marked Exhibit No. 204 for identification.)

* * * * * * * *

By Mr. Wheat:

Q. Mr. Watkins, will you explain what is shown on Exhibit No. 204 for identification, please state the date of the Michigan Board meeting at which you state this document was offered and approved?

A. I am not at all sure I can give you the exact date of the Board meeting but it was a meeting held in January or February of 1942. It has been our custom and practice at one of the meetings late in the year or in the very beginning of the next year to present to the Board of Directors the annual routine construction and retirement budget.

Q. Will you state what is shown on this document?

A. This exhibit for identification No. 204 is a summary of the 1942 annual routine construction and retire-
[fol. 9186] ment budgets. It shows that the Board has authorized, as new work for the year 1942, construction items aggregating an estimated total cash expenditure of $462,600 with estimated additions to gas plant of $513,500 of which amount $50,900 is to be taken from the material and supply account.

If I might proceed further without referring to the amounts in each instance as being estimated and if we will understand that they are estimates, it may save some time.

* * * * * * * *

This exhibit for identification No. 204 shows that there have been retirement items authorized involving a cash expenditure of $500,000 and which, if carried out, will reduce the gas plant by $256,000 and that the total of the 1942 authorization from a cash standpoint is $463,100 with the net addition to gas plant of $257,500 and a net charge to retirement work in progress of $465,300. This latter figure will eventually find its way to the appropriate reserve account after the retirements have been consummated.

The summary sheet, being page 1 unmarked, shows likewise that of certain estimated construction expenditures

authorized in the year 1941, unfinished at December 31, which are expected to be carried out in 1942, involve a cash expenditure of $8,080,400, and estimated increase to gas plant of $8,070,125. The detail of these latter amounts is shown on the very last page of Exhibit No. 204 for identification.

[fol. 9187] All of this work is underway and will unquestionably be completed if it is possible to obtain the materials necessary. As an indication of the progress in that respect, the witness would like to refer to the next document he proposes to offer.

Mr. Wheat: Yes. I think possibly we might have that marked for identification as Exhibit No. 205, if that is agreeable, Mr. Examiner.

. . . . . .

(The document referred to was marked Exhibit No. 205 for identification.)

By Mr. Wheat:

Q. Will you state what you had in mind in explanation of the document marked Exhibit No. 205 for identification?

A. The 1941 carry overs, as we term them and as shown by exhibit for identification No. 204, amounted to $8,080,400 at the time this annual routine construction and retirement budget was presented to and approved by the Board of Directors.

Q. You mean Exhibit No. 204 for identification?

A. If I used another number, 204 is correct.

Q. You did not use any number and I just suggested that we identify it.

A. Since its preparation, that is, exhibit for identification No. 204, and since the approval of the proposals therein contained were had by the Board of Directors, certain expenditures have been made on these carry overs and we [fol. 9188] believe in [in] exhibit for identification No. 205, it will be observed that we estimate the unfinished amount of projects approved in the year 1941 which were unfinished at December 31, amounted to $7,433,000 and that the unfinished work on those projects at February 28, 1942, involved an estimated amount of $5,396,000 which shows a substantial expenditure since December 31, 1941, and

likewise a substantial expenditure for additional investment in gas plant since the annual routine construction and retirement budget for the year 1941, which included carryovers amounting to $8,080,000, was presented to the Board.

Q. And it is a fact that that construction is continuing to go forward as rapidly as material and delivery can be had?

A. That is a fact, yes, sir.

(Exhibits Nos. 204 and 205 were received in evidence.)

Mr. Littman: Mr. Watkins, I refer you to the last page of Exhibit No. 204. I note that the larger part of the additions to gas plant for the year 1942 comes under the heading of "Expansion" and totals $7,572,800. Isn't it a fact that the amount of $7,572,800 is being expended for the purpose of acquiring new markets and for the purpose of serving new markets to be acquired in the future?

[fol. 9189] The Witness: As far as I know, Mr. Littman, your assumption is partially correct although not wholly correct.

Mr. Littman: To what extent is it not correct?

The Witness: There are certain expansions or strengthening of facilities on the existing lines in the State of Illinois which may not, of necessity be required for the addition of new markets.

Mr. Littman: That would be rather small?

The Witness: I would not say so at all, sir. That, I believe, is already in the record and there are other witnesses who no doubt can explain that to you more properly than the present one.

By Mr. Wheat:

Q. May I ask a question that might bring that out.

Mr. Watkins, are you referring in what you have just said to the items on the last page of Exhibit No. 204 headed as follows:

205—12,466

"Havrn Loop, Louisburg Loop, Houstonia Loop, Centralia Loop, Mississippi River Crossing, Pleasant Hill Loop, Illinois River Crossing, Glenarm Loop and Tuscola Loop"?

A. Mr. Wheat, I am not an engineer. I am not even an operating man. To the extent that these expenditures are absolutely required for new business or to maintain the status quo of the existing facilities, I am very much afraid I cannot be of too much help to you.

[fol. 9190] Q. But you have testified that the Board has approved these various items?

A. Yes. They have not only done that but the work is underway.

Mr. Littman: And is it expected that this work will continue to completion notwithstanding the fact that the War Production Board issued an order to which reference has been made in this proceeding as Order No. L-31?

The Witness: I should say that is the fact. As to what effect so-called Order L-31 would have on this construction or the company's ability to get materials or any other pronouncement made by any of the defense industries, your present witness is not prepared to answer you.

Mr. Littman: You have not shown in any of your exhibits, particularly the pro forma exhibits, the increased revenues to be derived from these new markets, have you?

The Witness: No. I believe however, there were some presentations made in previous sessions which might have some of that information in them. That, however, is the guess on my part.

[fol. 9225] Mr. Littman: May I take up one matter, however, before Mr. Chamberlain proceeds? I would like to identify and offer certain exhibits with which I am sure Mr. Watkins is familiar.

[fol. 9226] I would like to have marked for identification a document entitled, "Financial Statement of Panhandle Eastern Pipe Line Company and Subsidiary Companies for Period Ended December 31, 1939."

Trial Examiner: This will be marked for identification as Exhibit No. 206.

(The document referred to was marked Exhibit No. 206 for identification.)

Mr. Littman: I would like to have marked for identification as Exhibit No. 207 a document entitled, "Financial Statement of Panhandle Eastern Pipe Line Company and Subsidiary Companies for Period Ended December 31, 1940."

Trial Examiner: This will be marked for identification as Exhibit No. 207.

(The document referred to was marked Exhibit No. 207 for identification.)

Mr. Littman: I ask that a document entitled, "Financial Statement of Panhandle Eastern Pipe Line Company and Subsidiary Companies for Period Ended December 31, 1941", be marked for identification as Exhibit No. 208.

Trial Examiner: It will be so identified.

(The document referred to was marked Exhibit No. 208 for identification.)

Cross Examination—Resumed

By Mr. Littman:

[fol. 8227] Q. Mr. Watkins, I hand you Exhibits Nos. 206, 207, and 208 for identification, and ask you whether those were furnished by you to Mr. Dunn of the staff of the Federal Power Commission at Mr. Dunn's request.

A. They were.

Q. And do those financial statements correctly reflect the books and records of Panhandle Eastern Pipe Line Company and subsidiary companies and do they correctly show what they purport to show?

A. It is my belief they do except for the exhibit marked for identification No. 207 which I observe has the following notation on page 1 thereof:

"This statement complete except for Central Distributing Company."

Q. Will you explain the circumstances surrounding the statement which you just read?

A. Panhandle Eastern Pipe Line Company disposed of its former subsidiary, Central Distributing Company, in the early part of 1941 and, without having made a previous verification, it is my belief that the notation just referred to on Exhibit for identification No. 207 came about through the fact that the financial statements of Central Distributing Company were delivered to the present owners of those companies along with all of the other corporate records for that company and, therefore, is not in this particular copy of the financial statement.

. . . . . .

[fol. 9228] Q. Central Distributing Company is a company which engages wholly in distribution system activities, is it not?

A. That is correct, sir.

Q. And with that single exception, these financial reports are complete and do reflect the books and records of Panhandle Eastern Pipe Line Company and subsidiary companies for those years?

A. With that exception, your statement is correct.

. . . . . .

[fol. 9247]

William G. Mackay, a witness called by and on behalf of the Commission, having been first duly sworn, was examined and testified as follows:

Mr. Littman: Mr. Examiner, before I interrogate this witness, I should like to make a very brief statement with respect to the subject matter concerning which I propose to inquire of the witness.

Panhandle Eastern has presented an exhibit which has [fol. 9248] been identified as Exhibit No. 38 from which the claim is made that Panhandle Eastern Pipe Line Company and subsidiary companies are entitled to have included in the rate base, for purposes of this proceeding, the sum of five and one-half million dollars for what is called interest, ad valorem taxes, and operating expenses attributable to unused capacity, which is alleged to have been present in the pipe line system between April 1, 1932 and September 30, 1936.

On one or two occasions counsel for Panhandle Eastern have referred to this exhibit as the basis for a claim for going concern value.

[fol. 9249] Direct Examination

By Mr. Littman:

Q. Will you please state your full name?

A. William G. Maguire.

Q. What is your address?

A. Legal residence or where I spend most of my time?

Q. Both.

A. Well, Fredericksburg, Virginia; and 120 Broadway, New York.

Q. What is your present business or occupation?

A. I am president of Missouri Kansas Pipe Line Company.

Q. You are under subpoena issued by the Federal Power Commission to testify in this proceeding?

A. I am.

Q. And your appearance here is in response solely to that subpoena, is it not?

[fol. 9250] A. It is.

Q. Are you a director of Panhandle Eastern Pipe Line Company?

A. I am.

Q. How long have you been a director in that company?

A. I was a director from some time in October, 1930, until some time in March, 1932, and from some time in October, 1937, until the present date.

Q. I believe you stated a moment ago that you were the president of Missouri Kansas Pipe Line Company which has been sometimes referred to in this proceeding as Mokan?

A. That is right.

Q. How long have you been president of that company?

A. Since some time in September, 1937.

Q. Had you, previous to that time, occupied an office in that company?

A. No office.

Q. Mokan is the owner of 339,450 shares.

A. (Interposing) It is four hundred seventy-five.

Q. 339,475 shares?

A. That is right.

Q. (Continuing)—of the common stock of Panhandle Eastern Pipe Line Company?

A. That is correct.

Q. And that represents 42 percent of the outstanding [fol 9251] common stock; is that right?

A. I think it does.

Q. And is it a fact that Columbia Oil and Gasoline Corporation owns beneficially 440,326 shares of the common stock of Panhandle Eastern?

A. That is a subject we are disputing in the Federal Court in Philadelphia, whether they own that many shares or not.

Q. I am reading at this moment from page 69 of Exhibit 145, which is the company's registration statement No. 2-4919, filed before the Securities and Exchange Commission, which also shows that Columbia Oil and Gasoline Corporation holds 50.1 percent shares of the common stock. You are familiar with that registration statement, are you not?

A. I am familiar with the registration statement; yes.

Q. But there is some dispute about the matter?

A. Very decidedly.

Q. Now, the balance of the common stock is distributed in the hands of the public, isn't it?

A. That is right.

Q. So that Mokan is at present and for some time, I take it, it has been a minority stockholder in Panhandle Eastern?

A. That is what—yes, a minority—they are not the [fol. 9252] controlling stockholder at the moment.

Q. Who is the controlling stockholder?

A. Well, the S. E. C. says Columbia Gas and Electric Corporation.

Q. Did Mokan at one time own all of the common stock of Panhandle Eastern?

A. That is a subject for dispute, too, but I say yes, they did at one time.

Q. Isn't it a fact that Mokan organized Panhandle Eastern Pipe Line Company?

A. Yes, sir.

Q. That was in what year?

A. As Panhandle Eastern, I think some time in April of 1930.

Q. Prior to that time the name of the company was what?

A. I think Texas Interstate, or Interstate Natural Gas Company. I am not sure. I wasn't connected with it at the time.

Mr. Wheat: Texas Interstate Pipe Line Company.

The Witness: Texas Interstate Pipe Line Company.

By Mr. Littman:

Q. Well, it was that company which was organized originally in 1929 by Mokan; isn't that correct?

Mr. Wheat: Pardon me, Mr. Littman. I am told that I am not quite correct in the statement I made. At first [fol. 9253] there was no word "Texas" there, but that is all shown in Exhibit 145.

Mr. Littman: Yes.

Mr. Wheat: I just didn't want my statement to go on the record being somewhat incorrect.

Mr. Littman: Well, those were merely name changes, weren't they? May we not agree on that?

Mr. Wheat: I suppose they were. I don't know. Mr. Maguire can probably say.

The Witness: I would say not.

By Mr. Littman:

Q. At any rate, you are aware, are you not, of the fact that Mokan caused Panhandle Eastern Pipe Line Company to be formed and organized?

A. I don't think there is any doubt about that.

Q. No doubt about that?

A. Not in my mind, there isn't.

Q. Until what date in 1930 did Mokan control Panhandle Eastern?

A. That is kind of a tough one, too, but I would say October 23, I think that was the closing date with Columbia Gas and Electric Corporation.

Q. Up to that time there is no question but that Mokan was in the driver's seat, so to speak, in so far as Panhandle Eastern is concerned?

A. I don't think there is any—well, let it go at that. Yes, I would say so.

[fol. 9254] Q. And after that time, who controlled Panhandle Eastern?

A. Well, we thought that it was going to be a 50-50 control. That is, I did.

Q. Who do you mean by "we"?

A. Well, Mokan, but I will specify now what I thought at the time. I was not connected with Missouri-Kansas except in an advisory capacity. I was paid just like a lawyer would be paid. When I made the original agreement with Mr. Gossler, and I am the one that did it, in 1930, there was a distinct understanding that they would have four directors, we would have four directors, and there would be an odd man.

Q. By "they" you mean Columbia Gas and Electric Corporation—

A. (Interposing) I mean Columbia Gas, yes.

Q. (Continuing) —interests?

A. Well, the option they had ran to Columbia Oil and Gasoline, but all our dealings were with Columbia Gas and Electric Corporation, officially. And I understood that the bonds that were issued, 20,000,000, were to be sold publicly. I found out some time in November of 1930 that Columbia Oil and Gasoline Corporation had purchased the bonds directly from the National City Company.

Q. Now, do you recall an agreement dated September 17, 1930, which has been referred to as a tri-party agree-
[fol. 9255] ment between and among Mokan, Columbia Oil and Gasoline Corporation, and the National City Company?

A. I do.

Q. Well, then, it was after October 23, 1930, or thereabouts, that Missouri-Kansas ceased to control Panhandle Eastern, or will you state the fact?

A. They most certainly did cease to control. Within about two weeks after the closing date of the agreement we learned of Mr. George Howard, who had been selected as the odd man, he had been elected not only a member of

the Board of Columbia Gas and Electric Corporation, but a member of the Executive Committee, as well.

Q. You referred to Mr. Howard as the odd man.

A. That is right.

Q. What do you mean by that?

A. Well, if there had not been an odd director, if there was—if both parties disagreed all the time, there would have to be an arbiter of some kind, wouldn't there?

Q. I see. And on and after October 23, 1930, who did control Panhandle Eastern, in fact?

A. Columbia Gas and Electric Corporation.

Q. When did you first become interested in the pipe line project now owned by Panhandle Eastern?

A. March of 1930.

Mr. Wheat: When you were speaking, Mr. Littman—[fol. 9256] just so that we may be clear—when you said "you" in that question, do your mean the witness or the company which he was then representing?

Mr. Littman: I meant the witness.

Mr. Wheat: The witness.

By Mr. Littman:

Q. Did you so understand my question?

A. Yes.

Q. As to when you first became interested.

A. That is correct.

Q. Did you testify before the Federal Trade Commission in November of 1935, in that Commission's investigation of certain electric power and gas utility companies, particularly with respect to Panhandle Eastern Pipe Line Company and associated companies?

A. I did.

Q. Mr. Magnire, I shall read from portions of the transcript of those proceedings contained in Document 92, Part 82, of the Senate, of the 70th Congress, First Session, which document was filed with the Secretary of the Senate on November 15, 1935, and which is entitled "Utility Corporations—letter from the Chairman of the Federal Trade Commission meeting in response to Senate Resolution No. 83, 70th Congress, a monthly report on the electric power and gas utility inquiry—No. 82, history of natural [fol. 9257] gas and natural gas pipe lines in United States,

and reports on Columbia Engineering and Management Corporation, Colorado Interstate Gas Company, Canadian River Gas Company, Mississippi River Fuel Corporation," and I shall hand you a—I herewith hand you a copy of that report so that you may follow portions of your testimony which I propose to read. (Handing)

A. All right, sir.

Q. I trust you will correct me at any time, if I should misread or misspeak myself, as I occasionally do.

A. All right, sir.

Q. I refer you to page 301, et seq., of this document which is a transcript of your testimony before the Federal Trade Commission for the afternoon session of November 12, 1935.

I shall start with the seventh paragraph.

A. On 301?

Q. On page 301.

A. Yes.

Q. You understand I shall endeavor to read only those portions of that transcript which I feel are relevant to this present inquiry.

A. All right.

Q. "Question: Did you, after concluding these firm commitments with the North American interests, North American Light and Power, then arrange to see Mr. [fol. 9258] Gossler, in New York;

"Answer: I did."

Before proceeding with the next question, I am going to ask you to identify for the purposes of this record Mr. Gossler.

A. Mr. Gossler at the time of which Mr. Littman speaks was president of the Columbia Gas and Electric Corporation.

Q. I shall continue reading.

Next question: "Can you say about when it was that you saw him first?

"Answer: I saw Gossler early in May, but I talked to him on the telephone, oh, I should say three or four days after my first visit with Chamberlain and Studebaker. I

can place the exact date for you. It was the day that United Corporation trade was made, and I talked to him on the phone. He told me why he could not see me that day, but would I be good enough to see Munroe, and if I could stay over until the next day, he would like to see me."

I shall ask you to state the year in which you saw Mr. Gossler?

A. May, 1930.

Q. Will you please identify for us Mr. Monroe, to whom you referred in your testimony?

A. Mr. Charles A. Munroe at that time, I believe—I am quite sure—was a director and a member of the com- [fol. 9259] mittee of Columbia Gas and Electric Corporation.

Q. Now, at this time, to wit, May of 1930, Mokan was in control of Panhandle Eastern?

A. It was.

Q. I shall continue reading your testimony:

"Question: Did you then see Munroe?

"Answer: I did.

"Question: Will you tell us the substance of your conversation with Mr. Munroe?

"Answer: Well, I knew Mr. Munroe rather well, and he told me that I had undertaken—"

A. Wait a minute. "And I told him."

Q. I am sorry, "—and I told him that I had undertaken a commission from Missouri-Kansas Pipe Line Company; told him what I knew about Missouri-Kansas Pipe Line Company; told him that we were going to build a line to Indianapolis."

A. "At least to Indianapolis."

Q. "At least to Indianapolis."

A. That is very important, that "at least."

Q. "He told me, in his own way, that I was crazy.

"Question: That you were what?

"Answer: Crazy; and that Parish was perhaps crazier, because, if he had as much money as I said he had, that he ought to keep it, and stay out of the natural gas busi-

[fol. 9260] ness, and that, anyway, Indiana was their territory. I asked him how he figured that; as far as I knew, the only place, the only towns that Columbia served in Indiana was a little gas up at Muncie. Well, he said that that didn't make any difference, Indiana was their territory."

Now, will you explain what you mean by the term "their territory"? Do you mean Columbia territory?

A. That is what Mr. Munroe meant.

Q. I shall continue.

"Question: You mean, to be exploited when they got around to it?

"Answer: That is it.

"Question: Although they were not then serving it?

"Answer: That is right; and we talked about Indianapolis. He, of course, knew that"

A. "That I knew about."

Q. "—that I knew about the Citizens gas situation. We discussed that, at length, and he was distinctly hostile.

"Question: Did you go back to Chicago without seeing Mr. Gossler on that occasion?

"Answer: I don't recall, but I saw Mr. Gossler within two or three days, now. Whether I went back to Chicago in the meantime, I do not know, but I do not think that I did, but anyway, Mr. Gossler called me at my hotel, and asked me, would I come down to see him and discuss the [fol. 9261] subject that I had discussed, the previous day or so, with Mr. Munroe."

Did you give that testimony which I have read, before the Federal Trade Commission?

A. I did.

Q. I now refer you to the middle of page 303.

"Question: When you arrived in New York, after that trip, did you get in touch with Mr. Gossler?

"Answer: I did."

Now, will you please fix the date, approximately?

A. Lord, that is 12 years ago.
Q. Well, in what year?
A. No., 1930.
Q. Very well.
A. Early in 1930.
Q. Early in 1930.
A. In May of 1930.
Q. That is close enough.
A. Yes.

Q. "Question: Did you discuss with Mr. Gossler the subject matter of your conversation previously, with Mr. Munroe?

"Answer: Yes. He brought it up, and said it was very interesting, but it was ill-advised; that he had spent some twenty-odd years building up the Standard and Natural Gas Securities, and that a venture of this kind would just [fol. 9262] tend to destroy his work of 20 years. I could not see why and I told him why I could not see why.

"Question: What did you tell him?"

A. May I make a suggestion right here? There must be a misprint.
Q. Very well. Make any correction that—
A. The Standard—I don't know what that means—the "Standard and Natural Gas Securities." What I must have said was "Standard Natural Gas Securities."
Q. Without the "and"?
A. Yes, without the "and." Without the separation.
Q. Thank you. And feel free to interrupt at any time to correct the transcript.
A. All right.

Q. "Question: What did you tell him?

"Answer: That we could sell the output of the line, that we had very cheap gas, that we could sell him the gas at Indianapolis, or east thereof, a little cheaper, probably, than he was buying it in the field, if we had to.

"Question: Was anything said on that occasion about territory?

"Answer: Yes. He reiterated that Indiana was their territory."

"Question: The whole of the State, or some part of it?

"Answer: That he had made arrangements with Mr. [fol. 9263] Insull; the time was not ripe, yet, but that the Midland United business was his business, and that we should stay out of it.

"Question: Midland United was Insull, was it?

"Answer: At that time; yes."

A. Now, it [illegible] interrupt.

Q. Very well.

A. This is not as clear as it should have been. That is about the time that he made the famous deal with the—I think it was Reserve Gas Company or the Hope Natural.

Q. By "he" you mean whom?

A. Gossler. And he had paid 26½ cents at the river for gas. That is what I meant. At the time we could sell it to him cheaper than he could buy it in the field. He was buying it at 26½ cents.

Q. Where was he buying it at that price?

A. It was the division, the imaginary line, the Ohio River between Ohio and West Virginia, the Reserve Ga—

Q. By "he" you mean Gossler?

A. That is right. Columbia Gas is what I mean when I am talking about the field.

Q. I see. Now, will you please turn to page 305 about one third of the way down the page.

"Question: Do you recall going to New York about that time for the purpose of an appointment with Mr. Barthold?

"Answer: Yes."

[fol. 9264] Will you please identify him for the record?

A. Mr. Barthold was vice president of the Consumers Power. He was vice president of the Commonwealth and Southern Corporation, and was president of the Central Illinois Light, and I don't recall what the Springfield property was called. The name has since been changed, and they are all in one. That is, the properties in Illinois, Springfield and Peoria is now Central Illinois Light.

Q. I shall continue reading your testimony.

"Question: What did the appointment relate to?

"Answer: The contracts for Peoria and Springfield; and we had, in the meantime, gone into the Peoria and Springfield markets, and had tied up most of the industrial consumers, particularly the Keystone Steel & Wire.

"Question: Do I understand that Mr. Barthold's company, there at Peoria, made an agreement to take gas from Missouri-Kansas?

"Answer: Yes, sir, they had a verbal agreement.

"Question: Did you report to Mr. Gossler the successful conclusion of your negotiations with the North American Light & Power people?

"Answer: I did.

"Question: What did he have to say about it?

"Answer: He thought the North American Light & [fol. 9265] Power people made a great mistake.

"Question: Is that what he said, or is that what he thought?

"Answer: No, that is what he said.

"Question: Did he enlarge on that, as to why they had made a mistake?

"Answer: Yes; that they would put the 'hall mark,' I think was his exact expression, 'put the hall mark on Missouri-Kansas' enterprise,' and it was a 'raid', he considered it a 'raid', and if such things happened, he did not know where it would stop."

Now, have I read correctly this far that portion of your testimony?

A. You certainly did.

Q. Now, will you please fix the approximate time that this latter portion of your testimony related to?

A. That should be around the early part of June, 1935.

Q. 1935?

A. Yes; 1930, I mean. I am sorry.

Q. You were testifying before the Federal Trade Commission in 1935.

A. That is right.

Q. Now, I ask you to turn to page 306 about the middle of the page.

"Question: During the time that you were carrying on [fol. 9266] those negotiations with Mr. Burrows, were you also in touch with Mr. Gossler, in New York?

"Answer: I was.

"Question: And about when was that, now?

"Answer: This would be the latter part of May. We are about there, now. By that time, Mr. Gossler, I believe, was convinced the line was going to be built. He then wanted to buy gas, or suggested that if a proper price could be made, that they would take gas. Also about that time is when I introduced Parish to him, the first time."

Now, will you please fix the year in which this occurred?

A. 1930.

Q. And will you please identify for us Mr. Parish?

A. Mr. Parish at that time was president of Missouri-Kansas Pipe Line Company.

Q. And he was one of the men who conceived of this project, was he not?

A. You mean of Panhandle Eastern?

Q. Yes.

A. No, he did not.

Q. Well, what was his connection with Panhandle Eastern, just briefly, so that the record may identify him.

A. He was the president of Missouri-Kansas Pipe Line Company and he was the president of Panhandle Eastern Pipe Line Company at that time, but that is not your [fol. 9267] question. You asked: did he conceive of it.

Q. Yes.

A. He didn't.

Q. He did not?

A. He did not, no.

Q. Well, he certainly attempted to promote it, did he not, at that time?

A. Oh, yes. He was—maybe I misconstrued your question.

Q. I think you were following my question pretty carefully.

A. All right.

Q. He did not conceive the enterprise, but he did promote it?

A. He did not conceive the particular enterprise that you were talking about.

Q. What enterprise did he—

A. (Interposing) He intended to go north. He raised money, I since had learned, by selling stock on the open market. He purchased the small gas reserves down in Texas back, I think, in '29. Perhaps some early in '30, and his idea at that time was to build a line that would closely duplicate what is now the Northern Natural Gas Company.

Q. Natural Gas Pipe Line Company of America?

A. No, the Northern Natural.

[fol. 9268] Q. Northern Natural?

A. That is the line up to Des Moines, Omaha, and so forth, up to the Twin Cities.

Q. In other words, it was originally planned that the pipe line company would go up in that direction?

A. That is correct.

Q. Will you state for the record briefly why the line did not go up in that direction?

A. Well, he encountered a great deal of difficulty, but I thought a better place to build the line was to built it east where they used gas.

Q. In other words, build it as it is now built?

A. That is correct.

Q. And that, of course, came about?

A. It did.

Q. Very largely through your efforts, did it not?

A. I think the record will show that.

Q. The record will show that that is a fact?

A. I think it will.

Q. And as a matter of fact, you negotiated certain gas sales contracts that were entered into between Panhandle Eastern and Missouri Power and Light Company and Illinois Power and Light Company?

A. The company that I was president of at that time handled those transactions.

[fol. 9269] Q. I shall continue reading your testimony where we left off. A. All right, sir.

Q. "Question: And would you say that was along early in June, 1930, or thereabouts?

"Answer: It was either the latter part of May, or early in June."

A. What page are you on?

Q. 306, near the bottom.

A. All right. I have it now. And then the next is: "At this meeting—"

Q. That is right. A. All right.

Q. "Question: At this meeting with Mr. Gossler, when you introduced Mr. Parish, what was the subject or scope of the conversation?

"Answer: Mr. Gossler told Mr. Parish that Indiana was their territory, told him again. He said that they had been considering building a line east from the Mid-Continent field, and he opened the drawer of his desk and said, 'Here is the line'; and he said they had a lot of gas in Arkansas, northern Arkansas, and that he was going to build that line over to Cincinnati, and there was no use of our building a line across Missouri and Illinois, which he was going to do, approximately the same thing. I [fol. 9270] pointed out that Josh. Cosden was about the only one I knew who said that there was any gas in northern Kansas in large quantities—"

A. Northern Arkansas.

Q. "Northern Arkansas in large quantities, and that tied up with Mr. Cosden. He said that did not make any difference, they had plenty of gas, and they were going to build the line; there was no need of duplication of effort. I pointed out that our line certainly went through a better industrial territory, and that his line would go through the Ozarks and Egypt, and southern Illinois, and I did not quite know who he was going to sell the gas to. He laughed about that and said maybe he could join us, on some fair sort of proposition.

"Question: Was there a time, about then, when Mr. Gossler discussed with you the effect of this projected

line of the Missouri-Kansas upon the industry as a whole in the Middle West? Answer: Yes, sir.

"Question: Will you state what he said, in that connection?

"Answer: He said it would demoralize it; that it constituted a 'raid.' I asked him how. He told me we went within a few miles of Kansas City, the projected line will go within a few miles of Kansas City; that was Doherty's territory; that we would go within a few miles of St. [fol. 9271] Louis, and that was Christy Payne's territory; we were projecting a line to Peoria, and that was the Chicago line's territory; we were going over into Indiana, and that was his; that it should be stopped; that it would influence the price of gas securities and be generally demoralizing."

Now, who is the Mr. Doherty to whom you referred?

A. He is dead. He was Henry L. Doherty, Cities Service Company.

Q. And who is Christy Payne?

A. Mr. Christy Payne is retired. He was vice president and treasurer of the Standard Oil Company of New Jersey.

Q. And to what line did you refer by the "Chicago Line"?

A. That is called now the Natural Gas Pipe Line Company of America.

Q. Thank you.

I shall read on.

"Question: I am showing you a page of the memorandum that you previously identified, and I will ask you whether you can give us any more details of that conversation?

"Answer: Yes. I recall very well, now, but I have already given you part of that.

"Question: All right.

"Answer: He used his favorite expression, that 'We [fol. 9272] all live in glass houses,' and told me that the Standard Oil folks and Cities Service were very much

disturbed by this Panhandle-Eastern line; also, Mr. Insull. They were disturbed about their rate structure; that he thought he could work out that disturbed situation better than we could, if he went along with us; and he cautioned me to preserve the utmost secrecy about any talks or dealings that I had had with him on the subject; that he would try to work it out.

"Question: Did he say why he wanted it kept secret?

"Answer: He was disturbed. He wanted us to stay out of Indiana; he had a deal with Mr. Insull, for the Midland United. There was some question of whether the Chicago line would be built down in Indiana, or sell gas to Midland United at the State line; that he wanted that; that Mr. Insull and Mr. Doherty had always maintained that he should stay east of the Ohio-Indiana line.

"Question: Did he make any statement with reference to the strategic qualities of this line, based on the map?

"Answer: Yes. He told me, if I would take a map of the Central United States and a pencil and a ruler, I could not draw a line to raise more hell than that one.

"Question: Was there any discussion on that occasion with reference to the Detroit market?

"Answer: He knew that I had a tentative agreement [fol. 9273] with the Great Lakes Steel Co., at Detroit. I had made them a price on gas for their open hearths and soaking pits, at Detroit, and had gotten a commitment from them.

"Question: Did you discuss it, on that occasion?

"Answer: Yes, we did, and that was also his territory.

"Question: Was there any statement with reference to whether or not other interests also claimed that territory, the Detroit market?

"Answer: Yes. Mr. Doherty at that time was considering building a Chicago line over to Detroit, through southern Michigan.

"Question: Did Mr. Gossler on that occasion caution you against any particular individual, as not being safe to

give the information to, that you were discussing between you?"

The latter portion is not germane here. But have I correctly read from your testimony, and was that a part of your testimony before the Federal Trade Commission?

A. There is not much doubt about it. I will say this: This is the first time I read it, though, in seven years. Yes, I gave that testimony.

Q. I will ask you to turn to page 331 of the Federal Trade Commission report No. 82, at the top of the page, by Mr. Wooden. A. I have it.

Q. "Question: At this conference that you have just [fol. 9274] described, Mr. Maguire, attended by a considerable number of people, were any statements made with reference to the matter of division of territory?"

I am going to ask you to fix the approximate time of that conference.

A. Just a minute. I have got to read back.

. . . . . .

By Mr. Littman:

Q. Mr. Maguire, have you checked the transcript to refresh your recollection of the date of the conference to which I referred?

A. In September of 1930. I think it was at the Savoy Plaza, a hotel.

Q. I shall continue reading from page 331 of the transcript of testimony before the Federal Trade Commission:

"Answer: Mr. Munroe wanted Missouri-Kansas to stay out of the—

"Question: Do not say what he wanted. You may say [fol. 9275] what he said.

"Answer: Oh. Mr. Munroe demanded that Missouri-Kansas stay out of the State of Indiana. I said we were building a line in Indiana, then, to Terre Haute, from Evansville, north; we were already operating in the State, or about to, and that we would not stay out of Indiana.

"Question: Was that the extent of the statements that were made regarding the subject?

"Answer: The extent of the statement I made.

"Question: I am asking you what anybody at that meeting said on the subject.

"Answer: Russell spoke up and said we were entitled to an operating situation.

"Question: Meaning by 'we,' whom?

"Answer: Well, Russell was speaking, that Missouri Kansas was entitled to an operating situation; that he thought that my statement was right."

I would like to have you identify Mr. Russell for us.

A. Mr. Russell at that time was vice president of the National City Company of New York, the people that bought the Panhandle bonds.

Q. And that company was one of the parties to the September 17, 1930, contract? A. That is right.

Q. I shall continue reading:

[fol. 9276] "Question: Does that cover the full extent of the statements made on the subject of that meeting, as you now recall them?

"Answer: Well, a little later on, when the question of price of gas to be bought by Missouri Kansas and by Columbia, came up, and there was a question of where we were going to sell our 20,000,000 feet arose.

"Question: That was the 20,000,000 feet provided for in the contract?

"Answer: September 17—in the proposed contract.

"Question: Had it also been provided for, in the option contracts, during the summer?

"Answer: No. Columbia, at that time, were insisting on 30,000,000 feet a day, at the terminus of the line, and covered it by a letter of Mr. Pew to Missouri-Kansas, all through the negotiations. Mr. Munroe asked Mr. Parish within my hearing, not to do anything to disturb Mr. Insull's situation in Indiana. Parish told him that he would

consult with them, or some words to that effect—an evasive answer.

"Question: Do I understand that, following the September 17 contract, you became a member of the board of directors of the Panhandle-Eastern? Answer: I did.

"Question: Who were the other members of that board, [fol. 9277] at the time you were?

"Answer: At the start?

"Question: Yes.

"Answer: On the Columbia side, Mr. Crawford, Mr. Gossler, Mr. Fred Crawford, and Mr. Munroe. On the Missouri-Kansas side, Mr. Parish, Mr. duPont, Mr. Russell, and myself; and Mr. George H. Howard, as the so-called 'neutral director'.

"Question: Was that Mr. Russell, of the National City Company? Answer: Yes, sir.

"Question: You attended meetings of the Board of Directors during the period from late 1930 and through 1931? Answer: I did.

"Question: In a general way, was there considerable difference of opinion between the various factions on the Board, as to the proper policy to be followed?

"Answer: From the very first meeting.

"Question: What were the differences? What did the differences relate to?

"Answer: Started originally on territorial differences, and Missouri-Kansas had taken several industrial contracts in Indianapolis for gas. That was the first difference. The second meeting, as I recall it, was a question of the extension from the then terminus of the line to Detroit, the proposed extension.

[fol. 9278] "Question: Tell us about that. Answer: '—"

A. "About that last."

Q. "'—about that last.

"Answer: Gossler stated that it would be desirable to extend the line to Detroit, so that the Columbia—"

"A. "As that."

Q. "—as that the Columbia, Cities Service, Consumers Power, and possibly Seagraves should have an interest in it, and I recall asking him, 'Where do we get off?' He said we were not entitled to any interest.

"Question: Did this occur at the meeting of the Board of Directors? Answer: Yes, sir.

"Question: And when would you say that came up, first?

"Answer: I would say in a November meeting—November or December, 1930.

"Question: 1930? Was that also about the time that Seagraves was projecting a line toward Detroit from Kentucky?

"Answer: No. It was after he had sold out.

"Question: Very shortly after, wasn't it?

"Answer: A month or so.

"Question: Did Mr. Gossler undertake, on behalf of the Panhandle, to negotiate for service or supply to Detroit?

"Answer: Well, of course, he had his 30,000,000 fee [fol. 9279] that he had contracted for.

"Question: Did you negotiate for Detroit service in any personal way? I mean, did you personally negotiate for a supply at Detroit? Answer: Back in 1930; yes.

"Question: Did you continue your negotiations to the point that you wished to carry them, or did you discontinue them?

"Answer: Discontinued them, in September, at Mr. Gossler's request.

"Question: Did you do it merely at his request, or what was the consideration that led you to accede to his request?

"Answer: Well, his talk, at that meeting at the Savoy Plaza, we were going to go along as partners, real part

ners, and that Detroit would take care of itself very shortly, and to just leave it alone for the time being; gave me—certainly gave me the impression that we were partners.

"Question: Had you made any substantial progress in your negotiations in Detroit, when you discontinued?

"Answer: Yes. We had that key industry, there. They had stayed with us all through the summer—National Steel Company.

"Question: What do you mean, stayed with you all through the summer?

"Answer: Well, Mr. Seagraves was busy in Detroit in [fol. 9280] July and August, contracting or making tentative contracts with the various industries in Detroit. The National Steel would use more than any other two."

I will ask you to identify Mr. Seagraves.

A. That would be quite a job. At that time Seagraves was a partner in a firm down in Texas by the name of Moody Seagraves. That is about all I can tell you about him.

Q. Very well. I shall continue.

Trial Examiner: Banking investment firm of Ed Porters in Galveston?

The Witness: That is right.

By Mr. Littman:

Q. I shall continue.

"Question: Did you negotiate a contract with the National Steel?

"Answer: Never got a contract form. It was a commitment from the officers of the National Steel to me that if, as, and when we built a line to Detroit, they would give us their business, at a certain price.

"Question: Was that reduced to writing?

"Answer: It was confirmed by letter; yes, sir.

"Question: Now, come back to this matter that you stated a moment ago, to the effect that the first division

of opinion manifesting itself in the Board of Directors of the Panhandle was over territory. How soon did that [fol. 9281] question arise after you went on the board?

"Answer: Either the first or second meeting.

"Question: What was the position of the Missouri-Kansas directors on that question?

"Answer: That there were no territorial arrangements of any kind whatever.

"Question: Is that the consistent position taken by the Missouri-Kansas representatives on the Board all the way through?

"Answer: The only one they could take. There never was any agreement."

Have I correctly read from your testimony before the Federal Trade Commission?

A. You have.

Q. I call your attention now to the middle of page 340 of the Federal Trade Commission report No. 82:

"I say in my memorandum to Mr. Hillman, of the same date, in reply to this: 'What he did not tell you was that the gas he refers to, i. e.—' "

A. Wait a minute. You say page 340?

Q. Yes. Just below the center of the page.

A. I have got a question in my mind here: "What statement did you make in your memorandum of April 29 to Hillman—"

Q. Very well. We can go back there if you wish.

A. No, I don't want to go back. We will go ahead.

[fol. 9282] Q. We will start with the question, then.

"Question: What statement did you make in your memorandum of April 29, to Mr. Hillman, with regard to paragraphs numbered 12 and 13, in his memorandum?

"Answer: Mr. Hillman states, in his memorandum:

"'I outlined to them—'

"that would be Mr. Gossler and Mr. Munroe—

—that the additional supply of cheap gas in Kentucky ought to be taken care of, that they could divert their other gas east, and the towns in Indiana and in southern Michigan ought to be developed in time to be big enough to take all of the Texas gas, as well as the Kentucky gas. He reiterated the enormous amount—

"that would be Mr. Gossler reiterated the enormous amount—

"'of reserve gas lines they had, and indicated that there was no room for the Kentucky gas, and that, with the amount of gas developed, anybody could go down and gather up a million acres of gas lands and leases.

"I say, in my memorandum to Mr. Hillman, of the same date, in reply to this:

"'What he did not tell you was that the gas he refers to, i. e. eastern Kentucky, West Virginia, and so forth, costs from 12 to 15 cents per thousand cubic feet at the well, and that Texas gas and western Kentucky gas can be delivered to Indiana consuming points at far less cost [fol. 9283] than eastern gas.'

"Question: Does that cover both those paragraphs?

"Answer: No, sir. In paragraph 13, in Mr. Hillman's memorandum, Mr. Gossler reiterates to Mr. Hillman that he wants him, Mr. Hillman, to know all about the difficulties of the Panhandle project, but that he wants to help bring about the success of the Panhandle line. He went over the history of their development and connection with contracts, in the purchase of Panhandle-Eastern line, and how it was put in, not only merely as to its supply of additional gas, but largely to eliminate competition.

"Question: What did you say to Mr. Hillman?

"Answer: Here, that the very fellow that they had bought half a line from, was starting in when they needed all the customers they had, and was starting to take the trade away from them.

"Question: That is from the Hillman memorandum?

"Answer: Yes, sir. Now, my memorandum:

"The reason that they invested in the Panhandle Eastern system was to protect their rear. Messrs. Gossler, Gregory, Pew, and F. W. Crawford have all admitted to me that Panhandle gas, at actual cost, could be delivered at the Indiana Ohio State line for a less cost, if the line is working at capacity, per 1,000 cubic feet, than West Virginia, eastern Kentucky can be put into the line at the wells."

[fol. 9284] Will you please identify for the purposes of this record the Mr. Hillman referred to?

A. Mr. Hillman at that time was Chairman of the Board of the Peoples Pittsburgh Trust Company, also president of the Hillman Coal and Coke and various other enterprises in Pittsburgh.

Q. When you made this statement: "The reason that they invested in the Panhandle Eastern system was to protect their rear," to whom do you refer by "they"?

The Witness: Will you read that?

(The pending question, as above recorded, was read by the reporter.)

A. Columbia Gas and Electric Corporation.

By Mr. Littman:

Q. Now I have one last—I want you to bear with me on this because it is the last one, but it is the longest of the items I am going to quote. A. All right.

Q. Commencing at page 342 about one fourth of the way down.

"By Mr. Wooden:

"Question: In this exhibit, you describe your conversation that you had with Mr. C. A. Munroe and Mr. Stanley Russell. Will you give us, briefly, the substance of that conversation?

[fol. 9285] "Answer: First Mr. Munroe opened the conversation by saying that he was deeply concerned over the had been deeply concerned over the affairs of the Panhandle Eastern for some time; had now completed his investigation, and, while he could not verify the attached memorandum—he showed it to us at that time but it, in his opinion, would represent what could be ex

pected from the operations of the Panhandle Company for the year 1932. Russell laughed at Mr. Munroe's memorandum. I spoke up, and pointed my finger to an item that I am marking X, on the attached exhibit."

"Question: Is that attached?

"Answer: I don't see any. No 'X' on this one. But it evidently refers to the amounts of gas Columbia would take during the year 1932. Mr. Munroe made the remark, 'Unless the Columbia Company takes gas in large quantities during the coming winter, the line is sunk.' Said the Columbia Company was opposed to taking gas from Panhandle Company in large quantities, because they had so much of their own.

"Question: Let me interrupt you there, and divert your attention momentarily from the memorandum. As a participant in the negotiations, under which the bonds were floated with the National City Company and the September 17 contract was consummated, calling for 30,000,000 feet to Columbia—

"Answer: Firm contract for 30,000,000 feet.

[fol. 9286] "Question: Do you know why that amount of gas was included in the contract, that 30,000,000 feet?

"Answer: Yes, sir. Originally—well, two reasons: first, all through the negotiations with Columbia they had demanded 30,000,000 feet at the terminus of the line at Indianapolis. Then, the original bond issue was to be $30,000,000. Six percent on that is $1,800,000 a year.

"Question: $30,000,000? Answer: Yes, sir.

"Question: Turned out to be $20,000,000?

"Answer: Yes, sir. That is another story, by itself. The 30,000,000 feet, on the 70 percent load factor would service those bonds and the sinking fund.

"Question: In other words, that is how the 30,000,000 feet was arrived at? Answer: Yes, sir.

"Question: For the purpose of servicing the bonds?

"Answer: Yes, sir; and they wanted the gas, besides.

"Question: Now, what is that Mr. Munroe was saying here, in November, 1931?

"Answer: That they had more gas than they could handle of their own.

"Question: And as I recall it, unless they took their gas—

"Answer: Unless they took the gas, the line would be [fol. 9287] sunk.

"Question: Tell us a little more about this proposition that the bond issue originally was to be $30,000,000 instead of $20,000,000, as it turned out to be?

"Answer: That was at the September 15 meeting."

Mr. Maguire, you now are referring to September 15, 1930? A. That is right.

Q. I read on.

"Mr. Gossler had given his little talk about why things had been as they had been; we could now go ahead and finance; mentioned that Mr. Russell had agreed to underwrite thirty to thirty-five million; that he could see where the thing could be a success. He mentioned that they would have the eastern line, this Philadelphia line, about finished by the time the Panhandle Eastern was—"

A. Now, if I may interrupt, "their eastern line" it should be, not "the eastern line."

Q. "Their eastern line," I am sorry. I will read the sentence again.

"He mentioned that they would have their eastern line, this Philadelphia line, about finished by the time the Panhandle Eastern was; that through their connections with the United Corporation they would have the Philadelphia load by the time it was completed; that very large [fol. 9288] quantities of Panhandle gas could be taken and he was not very fearful about the charges. That would be about, oh, 9 o'clock. Along about 11 o'clock that evening, Mr. Gregory and Mr. Munroe said that they were receiving very favorable reports from Mr. Leonard, who was their man in the field from their engineers, and that the line was not going to cost anything like we thought

it was going to cost; that they could probably finish it for $30,000,000, instead of the estimate that we had always gone on, of 40 to 45. I saw what was coming. I said I thought that was ridiculous, that was too big a difference; what did they have in mind? Mr. Gregory said that he thought $15,000,000 was enough of the senior issue on this line. Mr. Munroe agreed, and I turned to Russell I asked him what he thought of it. He said, 'Well, you know what it means.' I said, 'Sure, I do.' Well, what was the Missouri-Kansas to get? Is this off the record?

"Question: I wanted you to develop that. You talked in rather cryptic language then, about you and Mr. Russell, was it? Answer: Yes, sir.

"Question: Saying, 'You knew what it means.' I want the record to show what it meant.

"Answer: Well, it would require, if the line cost $40,000,000, and there was only a $15,000,000 bond issue out, that Missouri-Kansas to furnish their half of that differ-
[fol. 9289] ence, would have to dig about $10,000,000.

"Question: That did not seem at all probable?

"Answer: No, sir; not with the troubles we had just had.

"Question: All right.

"Answer: Russell said—of course, he spoke up. I hoped that the line would be built as cheaply as Mr. Gregory and Mr. Munroe thought it would be, but he was a banker; he was there to serve. If $15,000,000 was all, that was all right with him, or if $30,000,000 was what they wanted, that was all right. Mr. Parish thought that maybe they might be right. I said, 'Maybe they may be wrong,' so we fussed around for 30 or 45 minutes more, and finally Parish agreed—I got down to $25,000,000, as the absolute minimum, but I was just retained as a lawyer would be; I was not running the outfit, but Parish had agreed to $20,000,000, and I said, 'Where are you going to get the rest?' 'Well,' he said, 'Russell will put it up.' Well, Russell was present, and Russell did not say 'Yes,' and he did not say, 'No.' They arrived at the rather ingenious way of $10 stock, in stock, and $90 in notes, for the notes. The

additional money, if needed, was to be furnished in the form of debentures. Along about 1:30, I kind of missed Parish. We had a string of rooms, four or five rooms, and I went looking for him, and I found him in the bath- [fol. 9290] room, around the corner, with Mr. Gossler. Gossler was trying to buy these bonds direct from Parish.

"Question: When you say 'he was trying,' what did you hear? What was said?

"Answer: Why, Mr. Parish said to me, 'Mr. Gossler has offered me 92½ for these $20,000,000 of bonds.' I turned to Gossler, and I said, 'Is that right?' He said it was, and it would save Missouri-Kansas 2½ points, because they were selling it to the City Company, or save the Panhandle Eastern 2½ points, because they were selling it to the City Company for 90. I said in Gossler's presence, to Parish, 'It would be the most expensive 2½ points he ever saved,' and to come with me, and go down to the Vanderbilt Hotel. I took him down to the Vanderbilt Hotel with me, did not give him time to get his hat or his overcoat, and kept him there.

"Question: And, although the Columbia did not buy the bonds direct, they bought them, several days later, from the National City Company?

"Answer: I learned that, however, as far as my own knowledge is concerned, about the first of December.

"Question: Did you understand, during the negotiations, that the bonds were to be publicly offered and sold?

"Answer: Yes, sir. I even helped prepare a circular."

I shall read on, and I believe the testimony from here [fol. 9291] on is particularly apropos to the situation at hand.

"Question: As a director of the Panhandle Eastern Pipe Line Company, did you have any opinion, at the time you were a director, to the effect that the affairs of the company were being handled in a way that was not for the best interests of the company?

"Answer: I did have.

"Question: Will you specify wherein you thought that was the situation?

"Answer: I thought they should sell gas, which they did not do. I thought that the Columbia management of Panhandle-Eastern should live up to their contract.

"Question: And take gas?

"Answer: And take gas. You see, we had an opportunity to sell a big gob of gas to the St. Louis County Gas Company. They even offered to build from St. Louis County up to the line, near Louisiana, build their own line, 62 miles.

"Question: Louisiana, Missouri?

"Answer: Yes, sir; and pay us 33 cents for it. The Columbia management said no, because that would be interfering with the Mississippi River Fuel Company, of St. Louis.

"Question: Where did that come up? Did that come up before the Panhandle board?

"Answer: No. It came up in a meeting that I had with Mr. Gossler, late in October, or early in November, [fol. 5292] 1930. I had told him that the St. Louis County Gas people were in town, that I would like to bring them over. Said he would not stand for it.

"Question: Said what?

"Answer: Said he would not stand for it.

"Question: In other words, they did not care to sell in St. Louis? Answer: That is right.

"Question: Were there any other cities and towns [were] Panhandle Eastern might have sold gas, but where they did not?

"Answer: Well, there is an industrial load in Kansas City, of some 6,000,000 cubic feet a year; cheap gas, that is true; but they could have had that any time in the past five years, around 12½ cents; and their line, right south of Kansas City, is a 24-inch line. They cannot take it

beyond, under normal practice. They might as well sell it and the interesting thing about that is, that they go—that was too cheap a price, was the excuse, one of the excuses, but they go 200 miles farther, and sell the Atlas Cement at 11 cents.

"Question: What about the Cities of Hutchinson, Wichita, Emporia, and Ottawa, Kansas?

"Answer: That was discussed in the board meeting.

"Question: In your presence?

[fol. 9293] "Answer: Yes, sir.

"Question: What was the substance of that discussion? Answer: That was Cities Service territory.

"Question: And? Answer: Should not be considered.

"Question: Was there any record made on the minutes of that discussion?

"Answer: There was not, that I know of, or can recollect.

"Question: Or of that action? Answer: No, sir.

"Question: Can you say at what meeting of the board or the approximate time, when that did occur?

"Answer: Either the January or February meeting of 1931.

"Question: Were you familiar with any negotiations on the part of the cities of Fulton and Fayette, Missouri, to take gas from the Panhandle? Answer: I was.

"Question: What do you know about that?

"Answer: Mr. Munroe was greatly opposed to supplying municipal plants?

"Answer: That is my recollection, yes.

"Question: When you say he was opposed, what do you base the statement on? That is in the form of a conclusion.

[fol. 9294] "Answer: Why, he definitely stated that he was opposed, that if that sort of thing was encouraged, it would spread.

"Question: Do you recall correspondence that the Panhandle Eastern received from its vice president and general manager, Mr. Bay, relating to supplying municipal plants? Answer: I do.

"Question: Did you see such correspondence, in your capacity as a director of the Panhandle Eastern?

"Answer: No.

"Question: How did you see it, or become familiar with it?

"Answer: Mr. Gregory showed it to me, one day.

"Question: After the September, 1930, financing, and the acquisition of the 50 percent stock interest by Columbia in Missouri-Kansas—is that the correct date?

"Answer: October. The actual closing was in October.

"Question: Was there any change in the method of framing the rate base, in Illinois?

"Answer: Yes, it was put on the commodity and demand and service charge basis.

"Question: Instead of what? What had it been?

"Answer: Just straight, flat sale price.

"Question: What effect would you say that change would have upon the consumption of the gas?

[fol. 9295] "Answer: Held it down, and Mr. Barthold, the largest customer of Panhandle Eastern in Illinois, so stated to me, that it was crippling his sales of gas in Peoria.

"Question: Do you know anything of an opportunity that the Panhandle Eastern Company had to supply gas to the Midland United System?

"Answer: What time are you speaking of?

"Question: 1931.

"Answer: Well, in '31, that was still under Insull management, and there was an agreement between Columbia and the Midland United Crowd, on that.

"Question: 'On that,' you mean with reference to taking gas from the Panhandle Eastern line?

"Answer: Taking gas from Columbia.

"Question: Were there any negotiations with regard to Midland United taking gas direct from the Panhandle Eastern? Answer: Not that I know of.

"Question: Did you negotiate a sales contract at Indianapolis? Answer: Folks in my organization did, yes.

"Question: You were in close touch?

"Answer: Oh, yes. I directed it, yes.

"Question: You directed it? Answer: Yes.

"Question: Will you state, just in a general way, what [fol. 9296] was done at Indianapolis, with a view to providing a market?

"Answer: We secured, roughly, some 30-odd contracts, all the larger industrial users, for a period of years, at an average price, I think, on all the contracts, of about 32 or 33 cents. Most of them were executed prior to February. Most of the contracts were executed prior to February, 1931, and we cooperated with the Indianapolis Manufacturers' Gas Association, a group of manufacturers that had been trying to get natural gas for some time and had been unable to. They needed it, and were actively out trying to get it.

"Question: Have they got it yet?

"Answer: They have not.

"Question: And how close are they to it?

"Answer: About eight miles.

"Question: Did you hear Mr. Parish's testimony with reference to your 'stirring up Indianapolis,' and having it 'put back to sleep, again'? Answer: I did.

"Question: What did you do toward stirring it up?

"Answer: Oh, I got an option from the receivers on the 20,000,000 feet that they are entitled to; tried to get a permit to put it into Indianapolis, in 1933. I was unsuccess-

ful, but the Indianapolis manufacturers were just as desirous, then, as they were two years previously."

Now, will you please identify the receivers to whom you [fol. 9297] referred?

A. The receivers were the Missouri-Kansas Pipe Line Company.

Q. I shall continue.

"Question: Do you know of any efforts that were made to 'put Indianapolis back to sleep'?

"Answer: No; not directly, no.

"Question: Do you know whether it is a fact, or not, Mr. Magnire, that Panhandle-Eastern today has any other outlets of importance, in addition to the contracts that it took over from Missouri-Kansas, in 1930?

"Answer: They have increased their load very little. I am not directly familiar, but very little.

"Question: Did you ever make any calculations showing what would have been the result if certain markets had been supplied, which could have been supplied? I refer in this connection to your memorandum, and you make some calculations, there, I believe, regarding available markets in certain towns in Kansas, Missouri, and Indiana. Answer: Yes, I made those calculations.

"Question: What was the purport of those calculations that you made? What do you now say about them?

"Answer: Well, I say they are correct. If anything, they are a little low. Yes, sir; those figures are all right. They are on the conservative side. There is a differ- [fol. 9298] ence of $4,036,500.

"Question: What do you mean by a difference of that much?

"Answer: Well, it is revenue that Panhandle-Eastern could have, right now, that they are not enjoying—if they sold gas.

"Question: And is that based upon estimates of the available business in certain towns? Answer: Yes, sir.

"Question: Will you say what they were?

"Answer: In Kansas, Hutchinson, Wichita, Emporia, and Ottawa. When was this memorandum made?

"Question: I think it is in 1934, if I am not mistaken.

"Answer: At that time, as I recollect it, Hutchinson and Wichita were—there was a municipal campaign on, or something. Anyway, they wanted to buy gas. At Kansas City, the industrial load is far greater than what I show, but the price is much less; and I will see how it works out, if I may take the time. It would work out, the gross revenue would be about the same. St. Louis County Gas Company is gone. That is tied up, now, with Mississippi River Fuel.

"Question: Wasn't it then? Answer: No, sir.

"Question: Wasn't that then considered Mississippi [fol. 9290] River Fuel territory?

"Answer: Well, the St. Louis County Gas people did not consider it that way. They are part of the North American Company, and they did not consider it that way at that time.

"Question: But now it is tied up?

"Answer: Now it is tied up. Indiana: Midland United will take more gas than I show here, and they will pay about that price.

"Question: What price?

"Answer: I show 30 cents here. They will pay about 35 right now. Manufacturers Gas Company, that is all right.

"Question: Is that Indianapolis?

"Answer: Yes, sir; and I call your attention that I figure the Columbia contract on the dump-load base, and not at the firm contract basis, and if it was taken on that basis, the difference would be an additional $557,000 per annum.

"Question: Was that more than enough to carry all the investment in the company? Answer: Yes, sir.

"Question: With a profit? Answer: Yes, sir."

I will interrupt there to ask you what company are you referring to at that point: Panhandle Eastern Pipe Line [fol. 9300] Company?

A. Must have been.

Q. I shall continue.

"Question: You mentioned some prices, there, 30 cents in Indianapolis? Answer: Yes.

"Question: Was that for industrial?

"Answer: No, not industrial. The industrial load at Indianapolis is figured at 26½. The actual contracts we had averaged about 33. The reason we used 26½, there, was that was Missouri-Kansas' firm contract price at that time.

"Question: What was the domestic rate in Indianapolis at that time?

"Answer: Well, that is artificial gas, and I think their lowest rate was somewhere around 70 cents a thousand, 540 gas.

"Question: As against what B.t.u. content for the Panhandle? Answer: One thousand B.t.u.

"Question: What do you know about the extension of the Panhandle Eastern line to Macon, Missouri, the proposed extension? Was it made?

"Answer: Yes, and I opposed it as the useless expenditure of money. There was not enough—well, I just opposed it. It was not good business.

"Question: Were you the only opponent?

[fol. 9301] "Answer: I think I was. Mr. Bay—I think Mr. Parish backed me up, and said he would like to wait and talk to Mr. Bay. He did. Mr. Bay came over to the office, talked to Mr. Parish, and then Mr. Parish wrote, approving it. I learned about that afterward.

"Question: Was that in connection with the budget which Mr. Parish said was old?

"Answer: Well, it took—I have forgotten the amount, but somewhere around $200,000, depleted the available cash that much. I recall I went over and complained about it to Mr. Munroe, as a director, very seriously, and very strenuously. It was too late.

"Question: Had you taken any steps to get business in Detroit before this September, 1930, contract with Columbia? Answer: Yes.

"Question: What had you done?

"Answer: Just gotten in touch with the National Steel people, got a verbal agreement from them that they would, if a, and when we extended to Detroit, if we did it promptly, that they would buy gas from us at a scale of prices. As I recall, they ran, for various operations, the open hearth were to be on a certain basis, soaking pits on another, slab mills on another; the average price to be somewhere around 29 cents.

[fol. 9302] "Question: And that was before September, 1930? Answer: Yes, sir."

Have I read correctly from your testimony before the Federal Trade Commission?

A. I think you have.

[fol. 9303] Q. You have followed my reading of your testimony, have you not? A. I have.

Q. Certain litigation has arisen by reason of claims of Mokan against the Columbia interests, have there not?

A. Yes.

Q. One of those suits was a suit by Mokan for treble damages? A. That is right.

Q. Now, who was the plaintiff in that suit: Mokan?

A. The receivers of Mokan.

Q. And who were the defendants?

A. Columbia Gas and Electric Corporation, Columbia Oil and Gasoline Corporation, P. G. Gossler, George Crawford, Fred Crawford—well, practically all the Columbia Board of directors at that time.

Q. What did the receivers of Mokan sue for: what amount?

Mr. Hand: I can't hear you.

Mr. Wheat: May I suggest, Mr. Examiner, that Mr. Richard B. Hand, an attorney who has represented Mr. Maguire and Missouri-Kansas in many matters, is sitting with me, and I should like to associate him with me in this matter. He may be able to assist in answering some questions of this type in connection with Mr. Maguire's testimony.

[fol. 9304] Trial Examiner: That will be entirely agreeable.

Mr. Hand: I couldn't hear what you said [is] all.

Mr. Littman: What relief was prayed for in that suit, just generally, in order to put it on the record.

Mr. Hand: A suit for money damage.

Mr. Littman: What was the amount claimed?

Mr. Hand: My recollection was that we claimed 30 million, was it?

It is all in that prospectus; I have forgotten the amount.

Mr. Wheat: Exhibit 145, I think you will find, has the complete history of that.

By Mr. Littman:

Q. Well, that suit briefly sought damages arising out of the claims made by the receivers of Mokan with respect to the alleged mismanagement of Panhandle Eastern; is that right generally? A. That is correct.

Q. When was that suit filed, approximately?

A. In '35.

Mr. Hand: 1935, yes.

By Mr. Littman:

Q. That suit was settled, was it not? A. It was.

Q. Do you remember about when?

[fol. 9305] A. June 1936.

Q. One of the allegations made in that petition was that the management of Panhandle Eastern had failed or neglected to develop its markets during the periods which we have discussed: is that right?

Mr. Wheat: I think that would be the document. Mr. Hand who sits next to me, and who was associated in that case, has stated that he—

Mr. Hand (interposing): I wouldn't like to be too sure of that.

Mr. Littman: I thought we might be relieved of the necessity of putting in a lengthy petition.

Mr. Hand: I will be glad to give you a copy of the bill.

Mr. Littman: I would greatly appreciate it.

Mr. Hand: I will be glad to give it to you.

By Mr. Littman:

Q. At any rate the suit was settled? A. Yes.

Q. Can you briefly state the basis of the settlement and the amounts paid by Columbia?

A. That was brought about by the consent decree, and we are still suing about that.

What was supposed to be an initial one-half interest in Panhandle Eastern was to be returned to us.

[fol. 9306] We maintain that that was not done. They agreed to pay, among other things, $300,000 in cash for receivership expenses. We have never seen the "among other things" and we are still at it.

Mr. Wheat: When you spoke of a consent decree, did you refer to some litigation against Columbia Gas and Electric Company in the federal courts?

The Witness: That is right. I think it is No. 1060.

Mr. Wheat: May I ask him a question in that connection, Mr. Littman?

Mr. Littman: Go right ahead.

Mr. Wheat: Who was it that you said—in the testimony that Mr. Littman has read—some company of Detroit with which you had had a verbal agreement?

The Witness: National Steel Company.

Mr. Wheat: National Steel Company?

The Witness: Yes.

Mr. Wheat: That is an industry located in Detroit, is that right?

The Witness: No. It is out of Detroit.

Mr. Wheat: It is close to Detroit?

The Witness: It is in the Detroit area, yes.

Mr. Wheat: Can you state, at that time, whether any contract, verbal or otherwise, was entered into with the Detroit City Gas Company?

[fol. 9307] The Witness: Yes. I talked to Mr. Eaton. Mr. Chamberlain can refresh my mind on that. I don't know whether Mr. Eaton was still Chairman in 1929 or not, but he was still acting.

Mr. William Chamberlain was president of the United Light and Power, United Light and Railways at that time. I think Mr. Brown—Yes. R. C. Brown was over at Detroit. I talked to Mr. William Chamberlain in April of 1930 about Detroit.

Trial Examiner: The Trial Examiner is commencing to be a bit disturbed about the possibility that we are unnecessarily enlarging the scope of our inquiries.

Just how much of this matter is actually relevant to the alleged unused capacity, and the claim variously denominated resulting from that alleged unused capacity? Just how far should we go afield, particularly in view of the expressions recently of the Supreme Court of the United States.

Mr. Littman: I have completed my reading from the Federal Trade Commission reports, and I merely have a few more brief questions to ask of this witness, and I will then have completed my examination.

Mr. Wheat: In connection with the Examiner's remark, I want to say that we also had some worry with respect to the scope of this inquiry.

[fol. 9308] The fact of the unused capacity has nowhere been questioned in this direct, and the fact

Mr. Littman: I certainly can't agree with that.

Mr. Wheat: I repeat that. The fact that there was unused capacity, there was a pipe line which was not used, has nowhere been questioned by anyone at any stage of this proceeding.

Mr. Lee: Yes, but the reasons for that—

Mr. Wheat (interposing): I don't care what the reasons are. I just made a statement of fact. Somebody said he questioned it, and I repeated it.

Now, there is also one other thing: the fact of the history of this company differing from that dealt with in the decision of the Supreme Court, mentioned by your Honor, is also unquestioned in this record, and I thought I ought to say, in connection with my preliminary statement, that I very thoroughly agreed with the Examiner in his thought that possibly we were getting fairly far afield.

Trial Examiner: The Supreme Court called attention to the fact that the facilities in question had been included in the rate base.

Mr. Wheat: Yes.

Mr. Littman: I take it your Honor is accusing me, perhaps, of being a bit too thorough in this matter?

Trial Examiner: Not in the least, Mr. Littman, but [fol. 9309] reminding us all that we must sometime get through.

Mr. Littman: Very well. As I say, I have completed reading from the transcript of the testimony in the Federal Trade report.

I merely have one further question to ask, in that connection.

Trial Examiner: Proceed.

Mr. Wheat: When the question arose, Mr. Maguire was answering a question [which] I admit I had placed in this record out of place, but with the agreement of counsel, and he hadn't quite finished his answer.

Possibly I can shorten the time by asking Mr. Maguire this brief question:

Was any contract made with the Detroit City Gas Company at that time?

The Witness: There was not.

Mr. Wheat: Thank you. That is all.

By Mr. Littman:

Q. Mr. Maguire, when you testified before the Federal Trade Commission, giving the testimony which I have just read this afternoon, who was present at those sessions? I have in mind any representatives of Columbia interests.

A. Well, on one of the days, I am very—I can recollect very clearly that Mr. Moffat was there, and Mr. Harold [fol. 9310] Ritz.

There is another Columbia attorney whose name I can't recall, and then some Cities Service people were there, Judge Burns.

The Standard, Mr. Doherty—an attorney for the Standard—and Mr. Christy Payne, vice president of the Standard.

Q. Were there counsel present?

A. Mr. Doherty and Mr. Hall.

Q. Were you cross-examined by any of those gentlemen? A. I was not.

Q. Do you recall whether the Trial Examiner at that hearing afforded them the opportunity to cross-examine you? A. He did.

Q. But they did not cross-examine you?

A. They did not.

Q. Mr. Maguire, I merely want to very briefly interrogate you about another matter:

There have been offered in evidence in this proceeding, as a part of Exhibit No. 87, copy of a contract between the Panhandle Eastern and Missouri Power and Light Company, dated May 19, 1930, and a contract between Panhandle Eastern Pipe Line Company—

A. (Interposing) May 1930?

Q. Yes. Dated May 1930. (continuing)—and a contract—

[fol. 9311] Trial Examiner (interposing): You are now showing Mr. Maguire part of Exhibit No.—what is it?

Mr. Littman: 187.

Trial Examiner (continuing)—187?

Mr. Littman: Yes, sir.

By Mr. Littman:

Q. Suppose you look at the contract to which I have just referred, and see if you recall that contract.

A. Yes. I made it.

Q. You say you made the contract?

A. Well, my organization did, yes.

Q. Did you negotiate that contract?

A. If it is the one I think it is I did, yes. I can answer this: I know that this contract was negotiated by me but so far as ever seeing the contract as such before: no. The thing that comes to my mind is the 40-cent base, and the reduction in price; and 16 cents plus a half—all that.

Q. In other words it is your best recollection at present? A. Yes.

Q. That you did, in fact, negotiate that contract between Panhandle Eastern Pipe Line Company and Missouri Power and Light?

A. Yes. That is, North American Light and Power, yes.

Q. That is, that company was a subsidiary of North [fol. 9312] American Light and Power? A. Yes.

Q. Did you also negotiate a contract between Panhandle Eastern Pipe Line Company and Illinois Power and Light Corporation? A. Yes.

Q. Which is the second contract which is a part of Exhibit 187? A. And it is the same company.

Q. That is the same holding company?

A. The same holding company.

Q. Now, who if anyone else assisted in the negotiation of those contracts?

A. Maguire and—an outfit called Maguire and Company did this job.

Now, what contracts are you referring to?

Q. I am talking about the two contracts.

A. Just the two: the Missouri Power and Light and the Illinois Power and Light?

Q. That is right. A. Well, that is all.

Q. No one else took part in the securing of the business: that is the part I am talking about.

A. I know no one else did.

Q. Now, what arrangement did you have with Pan-
[fol. 9313] handle Eastern for compensation for your services rendered in connection with the securing of the business comprehended by those two contracts?

A. I got paid for it, got 7,000 shares of stock — Maguire and Company got 7,000 shares of Missouri-Kansas Pipe Line Company stock.

Q. 7,000 shares?

A. That is right, and we got some of them here, but we got them at 33 or 34 or 35 dollars a share.

Q. Now, you have referred to Maguire and Company. Was that your company?

A. I was the largest stockholder, but it wasn't mine entirely, no.

Q. I see. You were the president of that company?

A. I was.

Q. Now, you received 7,000 shares of Missouri-Kansas stock? A. That is right.

Q. And who gave you those 7,000 shares for the services which you performed in connection with those two contracts? A. Frank P. Parish.

Q. In his capacity as president of the Panhandle Eastern Pipe Line Company? A. Yes, sir.

[fol. 9314] Q. And when did that occur?

A. I just don't recall. I should say offhand sometime early in June. I can look it up for you.

Q. Early in June 1930? A. 1930, yes.

Q. Did Mr. Parish render any services in connection with the securing of those two contracts?

A. Well, now, you are asking me for a conclusion. I can only say: not that I am aware of.

Q. Not that you are aware of? A. That is right.

Q. Do you know whether a Mr. Innis rendered any services in connection with the procuring of these contracts, Mr. Maguire? A. None whatever.

Q. Is the same true of Mr. Parish? A. Well—

Q. Or don't you know?

A. I would like to explain my answer.

As far as any real service, no, but Parish was preside of Panhandle Eastern.

What he would contribute as president of Panhand Eastern and as president of Mokan I don't know, but far as I am not aware of his performing any servi other than signing these contracts, even if he did that.

[fol. 9315] Mr. Wheat: You are speaking, Mr. Littma are you, of these two contracts?

Mr. Littman: Yes, sir.

The Witness: Yes.

By Mr. Littman:

Q. In other words you feel that it was your service and your services alone that were responsible for the s curing of the business comprehended by these two con tracts and the two contracts?

Mr. Wheat: Mr. Examiner, before the witness answers I think I am going to have to object to a question as t what the witness feels.

I am sure it is immaterial to this Commission whether he feels this or feels that.

What he knows, if it is perfinent, is a proper inquiry.

Mr. Littman: All right, I will change the word "feels" to "know" and ask that the question be restated in that way.

Trial Examiner: Read the question.

(Whereupon the pending question was read by the reporter as follows:

("In other words you know that it was your services and your services alone that were responsible for the securing of the business comprehended by these two contracts and the two contracts?")

A. Well, it is a self-serving statement, but I certainly do.

[fol. 9316] May I make this suggestion: if you will read Mr. L. E. Fisher's testimony in this same hearing—identical. See what he says about it.

By Mr. Littman:

Q. Very well.

A. I might say this: when these contracts were being negotiated Mr. Innis was up in Omaha, Nebraska. That is quite a ways from Chicago.

Q. Do you know that Panhandle Eastern Pipe Line Company purchased 19,000 shares of Mokan stock, common stock, purportedly for the purpose of making payment through the medium of Mr. Parish as president of Panhandle Eastern for services rendered in connection with the procuring of these two contracts; do you know that?

A. I know it now, but I didn't know it at the time.

Q. You later discovered that 19,000 shares of stock were distributed in payment for those services?

A. I found out about that in 1935.

Q. That was about five years after—

A. (Interposing) That is right.

Q. (continuing)—after the contracts—

A. (interposing) I knew sometime in '32 that that had been taken out, but I never knew that I was supposed to have gotten it, or Maguire and Company was supposed to [fol. 9317] have gotten it until April of 1935.

Q. And what if anything did you do about the situation when you first learned that you were supposed to have received these 19,000 shares of Mokan stock?

A. Well, by that time, relationship wasn't friendly and—Are you referring to the correspondence that I sent Panhandle Eastern on the subject in 1937?

Q. Yes.

A. Well, it speaks for itself.

Q. Do you have a copy of that correspondence here?

A. No.

Q. We have the reference to the correspondence that was made in the minutes, but we don't have the copy of your letter, because it was not in Kansas at the time we first requested it.

I wondered whether you happened to recall the substance of it.

Suppose you state the substance of it: that ought to be sufficient.

A. I thought that the difference between the 7,000 and the 19,000 should be returned.

Q. To you?

A. No, to Panhandle Eastern Pipe Line Company.

Q. To Panhandle Eastern Pipe Line Company?

A. Yes.

[fol. 9318] Q. Why?

A. Well, all Maguire and Company got was 7,000 shares.

Q. It was supposed to have gotten the whole 19,000 shares?

A. That is correct.

Q. What happened to the other 9,000?

A. You are asking me for a conclusion. I have never yet been able to find out.

Cross Examination

By Mr. Chamberlain:

Q. I have about three questions here.

Mr. Maguire, would you refer to Page 402 and 403 of Volume 82?

A. All right.

Q. I ask you to do that merely to refresh your recol-[fol. 9319]-lection if you need to—and I doubt if you do—with respect to your negotiations for a contract for certain industrial gas in Kansas City in 1932. Can you tell us something about that?

A. I think that was '33, Mr. Chamberlain.

Why, we got together—let's see—we had Swift and Company, Armour and Company, Wilson—can you give me some other names?

We had nearly every packer in that district—Swift, Armour—Cudahy is another—Wilson—a tentative arrangement with the municipally-owned electric generating station in Kansas City, Kansas, and a tentative arrange-

ment with the Kansas City Power and Light—Mr. Porter—to sell him boiler gas.

As I recollect it the industrial load was somewhere around between 13½ to 15 cents, something like that, and with Mr. Porter—the Kansas City Power and Light—I think it was on a fuel basis; that is, on a B.t.u. basis—and my recollection does not serve me exactly—I think it worked out about 13½ of 14 cents.

Q. This says 13 or 13½.

A. Yes.

Q. Now, what is the fact with respect to whether you were able to get that contract accepted by Panhandle Eastern—or those contracts?

[fol. 9320] A. They said No.

Q. You negotiated what is known, and has been described here, as a contract of September 17, 1930, between Missouri-Kansas Pipe Line Company, the National City Company, and Columbia Oil and Gasoline Corporation, did you not?

A. Yes, sir.

Q. I ask you to look at Page 4251 of Volume—No, I am sorry; it is Volume 66—Volume 66 of the Federal Trade Commission reports, and to state whether that contains a copy of that contract.

. . . . . .

Now, personally I was interested in two parts of that. It is possible that counsel will want the whole document in evidence and if so I will be glad to offer the entire contract.

Mr. Littman: I think the entire contract, to which numerous references have been made, should be made a part of the record.

Frankly, I had looked for it in those Federal Trade Commission reports, and I was unable to find it. I am glad you found it, and I would like very much to have it made a part of this record.

. . . . . .

[fol. 9321] Mr. Littman: There was also an amendment, was there not, Mr. Chamberlain, to that contract, in the

month of October 1930, that should properly be made a part of the record also?

The Witness: I would like to say I learned about that amendment, however, as far as any question to me, I learned about that amendment in 1937, when we got the Missouri-Kansas books back.

Mr. Culton: Mr. Examiner, may I suggest that this contract, with supplements, apparently 10 or 12 pages long, very fine print—and while we have a very high re-
[fol. 9322] gard for the Electreporter people, we doubt the wisdom of requiring us to pay for that many sheets of paper in the transcript.

If Mr. Chamberlain considers that of importance, I see no reason why he could not produce it as an exhibit and let it go in as an exhibit.

Mr. Chamberlain: I was going to suggest that it be offered as evidence here, with the permission to substitute a written copy of it, under some given number, and I will be glad to do that. It is a long statement.

Trial Examiner: Will you do that, Mr. Chamberlain?

Mr. Wheat: It would be about thirty pages in the transcript, or more.

Trial Examiner: When you have presented that it will be received, I assume, without objection by counsel.

Mr. Chamberlain: All right. Intervenor offers in evidence a copy of the contract of September 17, 1930, between Missouri-Kansas Pipe Line Company, party of the first part, the National City Company, party of the second part, and Columbia Oil and Gasoline Corporation, party of the third part, which is contained in and forms a part of Exhibit No. 6005 of the Federal Trade Commission reports, and is contained in Volume 66 on Page 1251 and the pages following.

. . . . . .

[fol. 9324] Q. Mr. Maguire, were you present at a meeting of the board of directors of Panhandle Eastern Pipe Line Company held at 61 Broadway, New York, at three o'clock p. m. on Tuesday May 26, 1931?

A. I was.

Q. And were there present the following directors: F. W. Crawford, F. I. Dupont, T. B. Gregory, G. H. Howard, W. G. Maguire, O. A. Munroe, F. P. Parish, and S. A. Russell?

A. Yes.

Q. At that meeting did you hear F. W. Crawford, who was then president of the Panhandle Eastern Pipe Line Company, and an officer and director of Columbia Gas and Electric Corporation, make the following statement:

"The Panhandle Eastern Pipe Line Company has made, [fol. 9325] or has under consideration, various contracts for the sale of gas to other companies, each for their requirements in certain specified communities and territories.

"Among such proposed gas sales contracts are those under which Columbia Gas and Electric Corporation and Missouri Kansas Pipe Line Company would be entitled to call on the Panhandle Eastern Pipe Line Company to supply them with gas. It was definitely agreed that any gas to be taken under such contract by Columbia Gas and Electric Corporation would be for supplying Indianapolis and northern Indiana territory, extending to Detroit and other points in Michigan and connecting with existing pipe lines in Ohio.

"It was likewise definitely agreed that any gas to be taken under such contract by the Missouri Kansas Pipe Line Company would be only for the purpose of supplying gas to the southwestern part of Indiana through Terre Haute and south to Nashville, Tennessee.

"The Panhandle Eastern Pipe Line Company hereby notifies both Columbia Gas and Electric Corporation and Missouri Kansas Pipe Line Company that it does not consider that either of them would be entitled to gas under such contract if the gas so supplied is to be used in violation of the above agreements, or for the purpose of interfering with distribution of gas by the other party."

Mr. Wheat: Now, Mr. Chamberlain, may I ask: did you [fol. 9326] ask the witness to state whether he recalled that some person made this statement?

Mr. Chamberlain: That is right.

Mr. Wheat: In those words?

Mr. Chamberlain: That is right: whether Fred W. Crawford, president of Panhandle Eastern made that statement at that meeting, in the presence of Mr. Maguire.

A. He most certainly did. That is the basis—what Mr. Chamberlain is talking about is why we are here today.

Q. Now, at that time, and in your presence, did Mr. Charles A. Munroe state that he did not see any particular objections to the adoption of the resolutions or the making of the contracts with Missouri-Kansas and Columbia Gas and Electric, contemplated by them, but he wanted it distinctly understood that those contracts should definitely provide that none of the gas taken by Missouri-Kansas should be supplied in the Indianapolis market, because that would be a violation of the agreement to take such gas for the purpose of supplying southern and southwestern Indiana and southward, including Nashville, Tennessee?

A. Do I recollect that?

Q. Yes.

A. Very vividly.

Q. And following that, did Mr. Gregory, also a director [fol. 9327] of Panhandle Eastern, suggest that that statement of Mr. Munroe's be amended or supplemented by the statement that the Panhandle would sell gas to Columbia Oil and Gasoline Corporation for distribution in the Indianapolis market, because that was in accordance with the agreements on which such contracts would be based?

A. He did.

May I suggest that there is a lot more in that, that is interesting, there?

The Missouri-Kansas people—that is one of the really choice meetings that we had, and we all stated that there was no such agreement, and no such agreement had ever been made.

That is a little farther along there.

Mr. Wheat: You took part in that meeting yourself, in that connection, didn't you, Mr. Maguire?

The Witness: Yes, I think you can get testimony on that subject, that I took part in that.

Mr. Chamberlain: And at the meeting you expressly denied that there had been any such agreement to allocate territory?

A. That is correct.

So did Mr. Dupont. So did Mr. Parish. So did Mr. Russell.

. . . . . .

[fol. 9328] Mr. Littman: I don't know whether other counsel desire to interrogate Mr. Maguire. I have no further questions.

. . . . . .

Mr. Wheat: We have no questions.

. . . . . .

[fol. 9329]

LEITH V. WATKINS, was recalled as a witness, having been previously sworn, was further examined, and testified as follows:

Cross Examination

By Mr. Chamberlain:

Q. Mr. Watkins, do you recall a provision of the gas contract between Panhandle Eastern Pipe Line Company and Detroit City Gas Company, dated October 31, 1935, with respect to the time of payment and the place of payment?

A. I recall that there is such a provision, yes.

[fol. 9330] Q. And in that contract did the Detroit City Gas Company, as buyer, agree to pay Panhandle Eastern, at its designated office, on or before the 20th day of each calendar month, for natural gas delivered during the preceding months, according to the measurements, computations, and prices herein provided, and billed by seller in a statement for said month?

A. Yes. There is such a provision in Subdivision 1 of Article 9 of that contract.

Mr. Chamberlain: I would like to have that identified as an exhibit.

(The document referred to was marked for identification as Exhibit No. 209.)

[fol. 9331] The letter, of which you have now handed me a carbon copy, will be marked for identification as Exhibit 209.

Q. Did you, Mr. Watkins, as secretary of Panhandle Eastern, direct a letter to the Detroit City Gas Company on March 30, 1936, in which you designated the office to which they should make payment for gas under the contract which I have just described?

A. That is correct, but the letter provides that this plan would be agreeable to the Detroit City Gas Company, and the copy which counsel has just handed the witness carries such an endorsement signed by the president of that company.

May I have a copy of that?

Q. Yes (handing). A. Thank you, sir.

Q. That was not at the request of the Detroit City Gas Company, was it? A. The letter itself?

Q. Yes. A. Oh, no.

Q. It was directed by you to them? A. That is correct.

Q. And is that you designated where they should make the payments? A. Subject to their acceptance.

[fol. 9332] Q. Yes. A. And they did accept it.

Q. They accepted it? A. Yes.

Mr. Chamberlain: The intervenor offers in evidence the Exhibit No. 209.

(The document referred to was received in evidence as Exhibit No. 209.)

[fol. 9349] DAVID FRIDAY a witness, having been previously sworn, resumed the stand and testified further as follows:

[fol. 9350] Direct Examination (Resumed)

By Mr. Culton:

Q. Dr. Friday, you testified in these proceedings six months ago, did you not?

A. Yes, on October 3, I believe it was.

Q. And since that time we have had a war situation exist in this country. I will ask you to state whether or not you have continued the studies which you presented six months ago so as to reflect the present conditions existing?

A. I have.

Q. Have you pursued your studies largely along the same lines as the studies reflected in your former testimony?

A. Yes. What I have done is to bring especially the statistical series there on down to date.

[fol. 9351] Q. Dr. Friday, on Page 4 of Exhibit 61 presented in connection with your former testimony, you incorporated index numbers of wholesale prices of commodities, by groups, using 1926 as 100. What have you done toward bringing that table to date?

A. I have added to that table the index numbers, by groups, for March 21, 1942, which is the last date for which they are available.

Q. Will you explain what is shown by that table with respect to changes since your former testimony was given?

A. This table shows the prices, by groups, at the time my former testimony was given, September 30, 1941, were the last prices we had at that time and the present prices which, by the way, are shown on a second sheet which we have here as issued by the Bureau of Labor Statistics, those prices have now risen to 97.2. The prices stood at 91.5 for all the 900 commodities in September and, on March 21, they stood at 97.2. They had, therefore, risen 5.7 per cent which is a little over 6 per cent. Every group has risen excepting only the group of fuel and lighting. That has fallen a little bit.

Q. Is that reflected in the document which has been passed to counsel giving index numbers of wholesale prices?

A. It is.

[fol. 93521] (The document referred to was marked Exhibit No. 210 for identification.)

Mr. Culton: Mr. Examiner, during the short delay, I have passed around a number of documents and I suggest that the record might now show that they have been given certain exhibit numbers.

I therefore ask that document styled, "Index Numbers of Wholesale Prices of Commodities by Groups" be marked Exhibit No. 210;

A letter or circular from the Bureau of Labor Statistics captioned, "Wholesale Prices for Week Ended March 21, 1942" be marked Exhibit No. 211;

A table showing, "Index Numbers of Wholesale Prices [fol. 93531] of All Commodities by Months" be marked Exhibit 212;

A table showing, "Average Hourly Earnings and Average Actual Hours Per Week Per Wage Earner in 25 Manufacturing Industries" be marked Exhibit No. 213;

A graph captioned, "Average Hourly Earnings and Average Actual Hours Per Week Per Worker in 25 Manufacturing Industries" be marked Exhibit No. 214;

A copy of a table captioned, "Employment, Payrolls and Average Weekly Earnings in Representative New York State Factories" be marked Exhibit No. 215;

A table showing, "Indexes of Wholesale Prices and Cost of Living for Certain Months, 1913 to 1942" be marked Exhibit No. 216; and,

A graph from the Bureau of Labor Statistics, source Bureau of Labor Statistics, and reflecting "Cost of Living, 1935 to 1939 as 100," and I ask that be marked Exhibit No. 217.

(The documents referred to were marked Exhibits Nos. 211 to 217, both inclusive, for identification.)

By Mr. Cultons:

Q. Dr. Friday, you have explained Exhibit 210 and I believe had started to discuss Exhibit 211, had you not?

A. I was explaining Exhibit 210, I believe. What I said about it was that the general index of prices had ad-
[fol. 9354] vanced from 91.5 to 97.2 which is a little over 6 per cent advance and that in every group, the prices set forth below, except the fuel and lighting group, had advanced from September 20 to March 21. That group has declined 1.8 but it is still higher than it was in August, 1939, but it is not higher than it was on September 20.

Q. Why did you use the date March 21, 1942?

A. I used that date because that was the last date available. Those are the figures given out one week ago today, that is, this evening. They give them out at five o'clock at night and it happens to fall exactly six months from September 20, 1941.

Q. Will you please explain Exhibit No. 211?

A. Exhibit 211 I simply introduce because it was the source of the data on Exhibit 210 for the additional date of March 21.

Q. I believe a similar letter was offered as a part of your former testimony?

As A-2?

A. It was, yes sir.

Q. Will you explain Exhibit 212?

A. Exhibit 212 is introduced here primarily because a similar release of the Bureau of Labor Statistics was offered in my previous testimony and this brings it down
[fol. 9355] to date as far as it does exist now. I might say in passing that the prices there, these are for whole months, have risen from an average of 91.8 in September to an average of 96.7 in February. Those figures are not yet available for March.

Q. And that would be what percentage of increase, Dr. Friday, roughly?

A. That would be a percentage increase of a little less than 6 per cent.

Q. You had a similar exhibit to that, I believe, in connection with your former testimony brought down through July, 1941?

A. That is correct.

Q. Will you now explain Exhibit No. 213?

A. Exhibit No. 213 sets forth the average hourly earnings of 25 manufacturing industries as compiled by the National Industrial Council Board. My previous exhibit had a graph showing those figures. It is my recollection we did not actually put them in. Here they are for the convenience of the Court and everyone else.

I put them in completely from July, 1914, to January, 1942, which is the last date for which they are available and that shows that, since last September when the latest figures were available, the average hourly earnings in these manufacturing establishments had risen from 82.2 cents to 88.2 cents, a little over 7 per cent.

[fol. 3356] Q. I believe you had a chart presented with your former testimony, Document C, attached to that testimony?

A. Yes, sir.

Q. This table down to July, 1941, supports that chart, is that correct?

A. That is correct, sir.

Q. Have you also prepared a chart giving that information down to date?

A. I have and that is Exhibit 214. I may say to those who have the previous charts before them, the graphs are in a somewhat different position on the chart. They are lowered and somewhat smaller. The prices had risen so fast they practically ran off Chart C so I lowered this chart and smalled it somewhat so as to get the chart on now.

Q. Dr. Friday, the trend of average hourly earnings and average actual hours per week per worker in these industries has risen steadily since your former testimony, is that correct? A. That is correct.

Q. How about the steepness of the curve?

A. That has continued without abatement. It has not abated at all. The last page of the exhibit, No. 213, shows exactly what has happened during the last year. One year

ago the average hourly earnings were 75.9 cents and at January of this year they were 88.2 cents which is an ad-
[fol. 9357] vance of 12.3 cents in the year.

Q. Has there also been an increase in the hours of work per worker during that same period?

A. Yes, the hours of work have increased slightly. They have increased somewhat.

Q. Now, will you explain Chart 215—the chart, Exhibit 214, shows only the two matters which you have just referred to, does it not?

A. That is all, yes, sir.

Exhibit 215 is a photostat from this publication of the New York State Labor Department, the Statistical Division thereof, and it simply brings the earnings which were shown in a chart in my previous exhibit, that is, the weekly earnings of factory labor in New York State, down to December, 1941. The last figures that we brought in before were July, I believe. They were $33.48 and, in December, they were $35.78. They have continued their trend.

Q. Dr. Friday, this table supports your Graph B that was presented in connection with your former testimony, does it not?

A. That is correct, sir.

Q. You did not at that time present the table but presented only the chart, is that correct?

A. I presented only the chart, yes, sir.

Q. Now, will you explain Exhibit No. 216?

[fol. 9358] A. Exhibit No. 216 is a table prepared from the Bureau of Labor Statistics' September 15 pamphlet on cost of living and, from the subsequent releases that the Bureau of Labor Statistics has made on the cost of living, it shows in the first column the index of cost of living based on the years 1935 to 1939 as 100. Those are the years used by the Bureau of Labor Statistics. The index of wholesale prices appearing here is the Bureau of Labor Statistics' wholesale prices as they appeared on Exhibit No. 212. Those are the annual figures. Using these figures and taking the years 1935 to 1939 as 100, I have converted the Bureau of Labor Statistics' wholesale prices to an index which appears here. When I testified last, in December, the last figures available were in July and the

Bureau of Labor Statistics' cost of living figures stood at 105.3 and, in January, they were 111.9.

Q. You said you testified in December?

A. It was September.

Q. September or October.

A. They came out yesterday for February also and they are still a little higher than this.

Q. Dr. Friday, you did not present this table in connection with your former testimony but presented a chart reflecting the same information, did you not?

A. That is correct. It seems to me this would be more convenient for everybody to use.

[fol. 9359] Q. Your former chart was "D"?

A. That is correct, sir.

Q. Dr. Friday, have you reflected this information which is shown on Exhibit No. 216 on a graph brought down to date?

A. I have. That is Exhibit D in the former testimony brought down to date.

Q. And it is what exhibit number?

A. That is Exhibit No. 217.

Q. Will you explain what the two lines on that graph represent?

A. The dotted line represents the course of wholesale prices and they are taken from this Exhibit 216 and from the price index as these compiled and the solid line is the same index, Bureau of Labor Statistics index, from 1913 to date as shown on Exhibit No. 216 and they have simply been placed upon this graph which has been marked 217 and show that during the last year, especially since the spring of the year, since March, the rise in the cost of living has been a marked rise. It has gone up 11.6 per cent.

Q. Dr. Friday, from the middle of 1938 to about March, 1941, how did the cost of living curve run?

A. At the middle of 1938, the cost of living was just a shade below 100. In fact, it was at 99.7. It sagged a little in 1939, frankly, then it remains stable without any rise, any material rise at all until February, 1941, and after [fol. 9360] that it began to rise and from March on, it has had a rapid rise.

Q. What has been the increase from March to now?

A. There has been a 10 per cent increase.

Q. How much?

A. Ten per cent increase from March, 1941, to January, 1942.

Q. Dr. Friday, so far as you have learned, has there been anything which would have a tendency to retard the increases shown on the various trends about which you have testified from this time forward? A. No, sir.

Q. Has there been anything happen which, in your judgment, would cause increases in those trends?

A. I doubt it. I doubt whether there is anything that will cause increases now. We have finally gotten some action on the question of price fixing and price determination. Nothing seems to have been done about labor, however, and the cost of living has finally come to rise markedly. While there may be other forces that might work a little in the opposite direction, I do not see that the rise in wages or in the cost of living either will fall. Of course, they do not run the same month by month but the factors which were at work and have been at work in the last year, year and a half, which are generally at work during wars, are at work here.

In my own opinion, they will continue to rise steadily as [fol. 9261] long as the war continues, however long that may be, and with the policy we are pursuing now with respect to the restriction of production, especially of the production that people need for the maintenance of their ordinary standard of living, we are certain to have, at the close of the war, a pronounced rise just as we did after the last war.

* * * * * * *

Cross-Examination

By Mr. Lattman:

Q. Dr. Friday, I am not sure that I understand your last few statements. Is it your testimony that you expect prices to continue to rise? A. Yes, sir.

Q. You do not know of anything that is going to check the continuance of the rise?

A. Nothing that is going to check it any more than it has been checked here in these last months.

Q. Is it your opinion that the Government's efforts to check the rise in prices will be unavailing?

A. Not unavailing, no: I think the Government ha checked or retarded the rise in prices in many commod ities already but I think such a rise at the rate which yo have had here will certainly continue because, while it i doing some things to check the rise in prices and has suc ceeded in checking them in some considerable degree, [fol. 9362] there are other things that do not operate in that direction, particularly our policy with respect to ag ricultural prices which are well known and have been stated in the last year and the cost of labor. With respect to those things, we are bound to have continued rises.

Now, as I see the way in which it works, we have gone now—

Q. (Interposing) You mean they will continue to rise as fast in the future as they have within the past year?

A. Wages?

Q. Yes. A. Yes, I think so,

Q. How long do you expect that to continue in the fu ture?

A. I expect that to continue as long as the war con tinues.

Q. Then you expect it to continue to rise even after the war?

A. Then I expect it to continue to rise after the war as it did at the last war.

Q. How high do you expect them to go?

A. You mean wages?

Q. Yes.

A. It depends partly upon how long the war contin ues, how severe the restriction of these consumer goods is. It is a question of how large the deficits of goods, the vacuum, so to speak, of supplies of goods, how large they become.

Trial Examiner: In making that statement, are you en- [fol. 9363] tirely disregarding the effect of any restrictive legislation which might result in the curbing of wage ad vances or do you contemplate that also?

The Witness: I contemplate that too. I think there may be some restrictions but they won't be sufficient to freeze wages at this level, in my opinion.

By Mr. Littman:

Q. Have you related any of the data which you just submitted to the operations of Panhandle Eastern Pipe Line Company and subsidiary companies?

A. I have not, no, sir.

Q. You have not made such a study?

A. No specific study of that, no.

. . . . . .

[fol. 9364] O. W. Morton, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Direct Examination (Continued)

By Mr. Culton:

Q. Mr. Morton, several weeks ago you testified concerning your belief as to the volumes of gas that Panhandle Eastern Pipe Line Company will be able to market over the next five years, I believe covering the period 1941 to 1946. Then later, at the request of counsel for the Commission, you furnished Exhibit No. 161 showing your estimated sales and the estimated revenues for those periods divided between various markets. At that time, you indicated considerable confidence in the accuracy of the figures which you presented.

. . . . . .

[fol. 9365] Mr. Morton, do you now have the confidence in [fol. 9366] the accuracy of the figures which you presented in connection with Exhibit No. 161 that you had at the time that exhibit was presented?

A. I do not have.

Q. What has happened since that time to cause you to doubt the accuracy of those figures?

A. The war and events connected with the war.

Q. Have you attempted to make estimates concerning the volumes of gas Panhandle Eastern Pipe Line Company will be able to market and the revenue which it might expect to get from that gas during the period covered by the war?

A. I have no studies on that matter. I have made many conjectures. I have tried to get together some figures that would represent my best judgment as to what the sales and revenues would be for the future but I am forced to confess that I do not know what they will be.

Q. What causes the difficulty in reaching a satisfactory conclusion? Can you give us the reasons?

A. Well, as I stated, in general it is facts and matters connected with our entering the war. More specifically, I have in mind the effect of the various priority and limitation orders which have grown out of our entry into a state of war. Even more specifically, I refer to WPB Limitation Order L-31.

Q. That is an order promulgated by the War Production Board?

[fol. 9367] A. It is.

* * * * * * * *

Q. Has a change in the policy of any of your customers had anything to do with creating difficulties in reaching a conclusion?

A. There is one circumstance that adds, I might say, to my confusion in attempting to predict future sales and revenue related to the change in policy of one of our customers. I am referring specifically to the changed operations of our largest customer, Michigan Consolidated Gas Company.

Q. What has been that change in policy?

A. I probably could describe it better if I reviewed the premise of my former estimate of the amount of gas that we expected to sell to this company over the next five years and the revenues we expected to receive from that sale. The five year estimate I refer to—

Q. (Interposing) That is Exhibit No. 161?

A. The five year estimate I refer to, Exhibit No. 161, was, in so far as the Detroit sales and revenues are concerned, based upon the premise stated in the footnote of that Exhibit 161 which reads as follows:

"Estimated unit sales used in calculating revenues to be [fol. 9368] received from sale of gas to Michigan Consolidated Gas Company for Detroit are based upon the following assumptions:

"(1) Michigan Consolidated Gas Company will continue to purchase all of Detroit's requirements under the present two-part rate;

"(2) Panhandle Eastern will carry the peak loads and Detroit will, therefore, earn a unit rate corresponding to a poor load factor. If Detroit should shave its peaks or avail itself of the new so-called 28-40 rate, the average rate would be less than that used above."

Now, that is the premise upon which I built up the sales and revenues to the Detroit company. Since the preparation of that estimate, Exhibit No. 161, Detroit has changed its system of operation and has shaved its peaks. During the cold weather of January, they did not call upon us for 150 million cubic feet of gas on their maximum day as they had advised us they would in a letter which we received sometime last summer or spring. Instead, they only took 110 million cubic feet on that maximum day.

I might add that personally I have no complaint about the fact they did take 110 million because what it did was of considerable assistance to us in carrying our peaks on the rest of our system.

Q. That was a contract right that they had?

A. And it was a contract right that they had so I do not intend to convey the idea that this is in the nature of a [fol. 9369] complaint. It is merely in the nature of an explanation of why the revenues and the sales at Detroit may not be those which I had previously estimated in this Exhibit No. 161.

Mr. Littman: Mr. Morton, may I interrupt, to ask whether I correctly understand your testimony to be that the lines of Panhandle Eastern Pipe Line Company were used to maximum capacity on the peak day in the present winter?

The Witness: That is correct. I do not know that I testified to that fact but, if that is a question, my answer is in the affirmative, that our capacity was used fully on the peak day.

Mr. Littman: That is what I wanted to elicit because I gathered as much from your statement that you are, in a

measure, happy that the Detroit Distribution company did not call upon you for the full amount.

The Witness: Yes, that is true. I tried to make that clear.

By Mr. Culton:

Q. What effect on your estimates would their failure to rely upon Panhandle Eastern Pipe Line Company for their entire supply have with respect to Exhibit No. 161?

A. That would tend to earn for them a lower rate.

Q. A lower over all rate? A. Yes.

Q. To them?

[fol. 9370] A. Yes.

Mr. Chamberlain: Wait a minute, lower than what?

The Witness: Than if they had relied upon us for their entire demand.

By Mr. Culton:

Q. Have you been able to determine what that difference would be?

A. There are several other complicating factors that enter into that calculation and due to the multiplicity of those factors, I have not made a definite calculation of it, but I do know that it would tend to be lower than the prices which were estimated and shown in Exhibit No. 161.

Mr. Littman: Can you tell us how much lower in dollars?

The Witness: I cannot.

Mr. Littman: How are we going to know, then, whether it is $10 or $10,000 or $1,000,000 without your giving us some idea?

By Mr. Culton:

Q. You say that your estimates are affected by the operation of Order L-31 of the War Production Board?

[fol. 9371] A. Yes.

Q. In what respect?

A. Well, Order L-31, as I read it, and I have read it over and over many times, in the hope that I could understand

fully its meaning, as I read it, prohibits any of the gas distributing or transmission companies from annexing to their lines or taking on any new house heating customers. The inability of the Detroit company to take on any new house heating customers and the prohibition against our delivering gas for new house heating customers has thrown into the picture an added complication which, of course, was not considered at the time Exhibit No. 161 was prepared.

[fol. 9372] By Mr. Culton:

Q. Had you allowed for some increases in customers of that type? A. I had.

Q. How many had you allowed for Detroit, do you recall? A. About 10,000 a year.

Q. Had you also allowed for additional customers of that type in other markets? A. Yes.

Q. All right. What other provision of Order L-31 would make it difficult for you to reach a conclusion?

A. As I read Order L-31, it sets up some very strict rules as to our operations during periods of emergency or during periods when it becomes necessary to use our line capacity to its fullest extent. That brings us down to a consideration of its effect on presently connected industrial customers.

Under L-31, during these periods of emergency, we are—or, rather, the distributing companies are ordered to handle present industrial customers in a manner which is related to the standby equipment of those industrial customers. That is to say that if an industrial customer has standby equipment and can use some other fuel, why, he is going to be required to use that other fuel.

Now, getting a little closer to your question, that com-[fol. 9373] plicates our situation considerably in trying to predict future sales and future revenues. We don't know. I say we: I mean Panhandle Eastern—doesn't know how many customers these distributors have who have standby equipment. We don't know how much they were cut off during emergencies, how much they can cut off during emergencies, how many of their customers will go over to some other type of fuel and stay there. We do know that, under the order—and I am still talking about presently connected industrial customers—the War Production Board

may order you to continue service to certain classes of industries, and order you to discontinue service to other classes of industries. So much for the presently connected industrial customers.

Now, the order—and again I must say "as I read it" because I don't want to pose as interpreting the order, but just merely as an operating man, tell how it seems to me, how it reads to me. As I read it, applied to prospective industrial sales, we are not permitted to connect any new industrial customers, serve them directly or indirectly if they can use any other kind of fuel.

Now, of the increases which we estimated for the coming years in this Exhibit 161, I don't know how much we can take on under that limitation, because I don't know how many of the prospective customers that I estimated would be served in the coming years, can use other fuel in the [fol. 9374] opinion of the W. P. B.

In cases where a prospective industrial customer cannot use any other fuel than gas, and where a proper showing has been made that he must have gas in his business, then, as I read the order, this prospective industrial customer must provide standby equipment and standby fuel to take the place of natural gas during periods of emergency.

There is one other provision under this section of the order to the effect that by special permission of the W. P. B., any of the two former conditions surrounding service may be waived. That is to say, we may take on a new industrial customer with special permission of the W. P. B.

Now, at this point I must hasten to add again we have no criticism to offer and it is not in the spirit of criticism that we discuss this order in this way. We intend to operate with it fully. We think it is O. K. We think it is workable as soon as the order has been thoroughly interpreted for us. We don't believe that we understand it at the present time, and certainly your estimator feels that he would be going far astray if he would attempt to build up an estimate with the uncertainties that I have related facing him. Another provision of the order calls for interconnections between pipe line companies. It is apparently the plan of the W. P. B., and a nice plan, at that, I believe.

[fol. 9375] Mr. Goodman: Could I ask a question at this time?

Mr. Culton: Yes.

Mr. Goodman: Mr. Morton, you stated that you have a mental condition of uncertainty in respect to this order; is that right?

Mr. Culton: I didn't understand this was for cross-examination purposes. I thought it was for clarification.

Mr. Goodman: No, no.

Mr. Culton: All right.

The Witness: Yes.

By Mr. Goodman:

Q. Now, other than to read the order and attempt to interpret it, what have you done to relieve that uncertainty?

A. We have written the W. P. B. in a serious attempt to get some explanation on some points, and we have tried to get clearance on service to some industrial customers. In other words, we have been cooperative and have worked at the job of trying to understand it.

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The Witness: Speaking of another provision of Order No. L-31 that we think is a good provision but nevertheless is one that projects uncertainty into this business of building up estimates: I speak of that provision which we might entitle, "Interconnections." The order provides that we exchange gas under certain conditions with other pipe line companies. That means that we receive gas from [fol. 9376] them and they receive gas from us during periods of emergency. We don't know just what constitutes a period of emergency yet, but we believe that it is a likelihood that all of next winter will be considered a period of emergency, and all during next winter and succeeding winters, as far as that goes. We will exchange gas with other pipe line companies at prices which no one knows. Continuing, I find the manufactured gas provision of the Order L-31 confusing as far as being able to estimate the quantity of gas we will sell and the unit rate we will receive for it.

By Mr. Culton:

Q. In other words, it is the resulting effect of the order that you are referring to now?

A. Yes, that is true.

Q. Rather than interpretation?

A. Exactly.

Q. All right.

A. I have touched briefly upon the manufactured gas situation with respect to our largest customer, but we also have a problem in connection with other smaller customers. Central Illinois Light Company at Peoria has a gas manufacturing plant. Illinois Texas Power Company at Decatur has a gas manufacturing plant, and there are others. Some are in operating condition and some are not. Order [fol. 9377] L-31 requires, as I read it, manufacturing gas companies who have equipment on hand and in operating condition, to operate that before they interrupt industrial customers during periods of emergency.

I don't know

Mr. Littman: You mean before they interrupt industrial customers that are engaged in national defense work.

The Witness: Possibly that is it. I stand corrected on that.

A. (Continuing) I am uncertain as to whether or not Decatur is going to be able to start up their plant this next winter. I am uncertain whether Peoria can operate and manufacture a gas suitable for combining with natural gas. There are other minor points which I don't recall at the moment in connection with L-31. I have merely attempted to point out some of the principal causes of my inability to estimate with any degree of accuracy for the future.

By Mr. Culton:

Q. None of these reasons assigned by you are intended as criticism of the order in any way; is that correct?

A. That is absolutely correct.

Q. You are in wholehearted accord with the order. It is just attempting to interpret the results of the order in volume of sales and dollars of sales that gives you difficulty; is that right?

[fol. 9378] A. Yes; particularly at this early date. It is possible and I think quite probable I am optimistic

enough to believe that inside of a few months we will be able to weigh the conditions that now are confusing, and possibly make some estimates that would be valuable to all of us.

Q. You will have some past by which to estimate the future, in other words, is that the idea?

A. That is correct.

Q. Has there been any slow-down in the company's expansion program that reflects your estimates in Exhibit 161?

A. Well, I assumed at the time we prepared that estimate, since we hadn't gotten all the pipe we needed nor other transmission equipment, that surely by this next winter we would have sufficient capacity to take care of our anticipated load. It looks like now we are not going to get any more pipe, and it appears that we won't have enough compressor capacity for the coming winter, so that, answering your question, in my opinion, there has been a decided slow-down in the expansion program of the company.

Q. Do you know anything about any contemplated war industries near the company's line that might require substantial volumes of gas over the next few months?

A. I am sure we are all agreed that we wouldn't want [fol. 9379] to call names or places, but I can assure you that I have overheard conversations in our own company concerning the location of extremely large plants along our lines, war plants, war production plants. The quantity of gas which they will use has gone to astronomical figures, but, of course, these are only in the rumor stage, as far as I am concerned, at present.

Q. What can you say as to the price of gas that would probably be sold to such plants as compared with the prices you had anticipated the company would receive for its gas?

. . . . . .

By Mr. Culton:

Q. Well, now, would you expect such sales to be at higher or lower prices than you have assumed in Exhibit 161?

A. I would assume that gas sold in the quantities I have in mind and for the purposes which I have in mind would

be sold at prices lower than the rates which I assumed on Exhibit 161.

Mr. Littman: How much lower do you think?

[fol. 9380] The Witness: I can't say.

By Mr. Culton:

Q. Are your distributing companies in some way bothered by the operation of Order 31 just like yourselves?

A. Yes, we get letters from them all the time indicating that they don't understand L-31 or how it applies to their business.

Q. In other words, the distributor company has its problems and their problems and other problems are carried on to the pipe line company; is that correct?

A. That is correct.

Q. Is it your judgment that under the conditions which now face the company the unit prices received for gas under existing contracts would be less or greater than the unit prices you had assumed in preparing Exhibit 161?

A. Unquestionably less.

Q. Are you able to determine how much less?

A. I am not.

[fol. 9381] Cross-Examination

By Mr. Littman:

Q. Mr. Morton, I want to ask you a few questions at this time.

I gather from your testimony that you no longer have confidence in the estimates which you have submitted in [fol. 9382] Exhibits Nos. 40 and 162?

A. That certainly does, Mr. Littman—that is a correct statement for 40 and 161. I don't recall what 162 is.

By Mr. Littman:

Q. Exhibit 162 consisted of your working papers for Exhibit 40 and Exhibit 161.

A. Your statement is correct.

Q. These estimates cannot now be relied upon for any purpose; is that correct?

A. That is correct.

Mr. Littman: If your Honor please, I move that Exhibit No. 47, entitled "Panhandle Eastern Pipe Line Company and Subsidiary Companies Future Capital Requirements, Gas Transmission Facilities, Liberal Station and Eastward," be stricken. This exhibit—to-wit, No. 47—showing the estimated future capital requirements, which was presented by Witness Burnham, was predicated upon the accuracy and reliability of Mr. Morton's estimates of future sales. If Mr. Morton's estimates of future sales, as he has just stated, cannot now be relied upon, it follows that the estimates in Exhibit 47 showing the capital expenditures estimated, in order to take care of those future sales, equally is unreliable and must be disregarded for any pur- [fol. 9383] pose in this proceeding. I will have something further to say with respect to other exhibits which are bottomed on the reliability of Mr. Morton's exhibits, but I shan't discuss them at this moment.

I would like to have a ruling on Exhibit No. 46 at this time.

Mr. Culton: Mr. Examiner: Those estimates were presented under normal conditions. It is only abnormal conditions which have resulted in their not being accurate, so long as the present war continues. Frankly, I think none of us know where we are on our private business or any other business so long as this war continues. The estimates are what would normally be required if we could get the equipment necessary to supply those markets, and without assuming that we would have force majeure come in here and stop us. Therefore, the estimates are properly admissible for such information as they may give the Commission and the weight that the Commission will take into consideration.

Mr. Littman: If your Honor please, counsel can't blow hot and cold. Mr. Burnham testified that his estimate of future capital additions is predicated upon the estimated peak load sales and estimated annual sales as submitted through Witness Morton. Now, Witness Morton has just testified that his estimates are no longer valid and cannot any longer be relied upon. It follows as an axiomatic [fol. 9384] matter, that this claim which has been submitted through Exhibit 47 for the huge amount of $36,942,600, for

future capital additions, through the year 1936, is equally unreliable and invalid.

I don't believe counsel for Panhandle Eastern have in any manner shown where this Exhibit No. 47 has any proper place today in this proceeding.

. . . . . .

[fol. 9385] Mr. Goodman: I did mention to Mr. Littman what I am going to say, and I think it is a matter worthy of the consideration of the Examiner.

After all, there has been presented in this matter the attitude of a Governmental agency of great importance. The Federal Power Commission is engaged in price fixing activity in this case which, to my mind, is as important in the conduct of the war as is its function in peacetime.

[fol. 9386] The price of gas in wartime is, I think, perhaps more important than in peacetime.

Now, Mr. Morton spreads the infection of uncertainty from his own attitude, which he derives from an order of the War Production Board. It is unfortunate that he should interpret a thing in that way which, to my mind, is clear, but if his interpretation—that is, of utter confusion—is deemed to have any weight, I think that the Federal Power Commission and its properly constituted authority should bring over into this case the agency of the War Production Board and see if they will not for the benefit of regulation clarify those uncertainties.

Mr. Culton: It was not uncertainties that this witness was talking about. It was the effect of the order in its actual operation. There were some uncertainties that other people had in mind, but it was the effect of the order that he was talking about.

Mr. Goodman: I don't want to inject confusion. I asked him a plain straightforward question to develop his mental condition, and I got an answer which I thought confirmed the implication which I made: he was uncertain.

Mr. Culton: As to the effect.

Mr. Goodman: Well, all right.

Now, in my mind, there is no uncertainty about the terms of the order, its purpose and its purport. The order is [fol. 9387] predicated upon the desire to prevent a diversion of a necessary gas use to an unnecessary gas use. It is for the purpose of utilizing to the maximum the capacities of Panhandle Eastern or other gas pipe line companies so as to do the least damage and so as to have gas available for military purposes or other necessary purposes. Gas is always a very necessary commodity. The effect of that order could scarcely be to diminish in any substantial way the quantities of gas which will be transmitted. The effect of that order can hardly be to keep in the ground that which, in the present emergency, should be used. The purpose of the order is to promote utilization and to prevent waste. Now, if there is any doubt about that, I think that the War Production Board should be asked by this Commission, who has the power of regulating prices, for an explanation—

Mr. Culton: There is no doubt about that. It is erecting a straw man.

Mr. Goodman: Now, wait a minute. And should that situation exist or, for a moment, be indulged in, we, who take this task of regulation seriously, have a serious complaint, for, in that instance, the order, by its terms, would be a misconceived effort and a detrimental effort, so far as the conduct of the war is concerned.

Mr. Culton: There is no question as to the desire of the War Labor Board, Mr. Examiner, raised here at all, or [fol. 9388] the purpose of the order.

Mr. Goodman: Well, there is an incidental question as to their competence to draft a significant order.

Mr. Culton: No, there isn't. It is the economic effect is what the witness has referred to.

Mr. Goodman: I am afraid, Mr. Culton, that you are confusing the entire subject in a mass of verbiage.

Mr. Culton: I am not going to let you get me placed in an erroneous position before the War Labor Board. That is why I want that clear. We are not complaining about the order in any way.

Mr. Goodman: You don't need to complain, but your interpretation is a reflection upon the purposes of the order.

By Mr. Lee:

Q. Mr. Witness, despite all you have said this morning, isn't it true that the Panhandle Eastern Pipe Line Company is selling more gas today than it ever sold in its history? A. That is correct.

Q. And despite all you have said this morning, isn't it true that you expect a continuation of that maximum sale and an increase therein due to the war situation? [fol. 9389] A. I expect the facilities of this pipe line company to be pretty well used for transportation of natural gas, yes. I don't expect it to ruin our business.

Mr. Littman: It is pretty close to a one hundred per cent load factor, as a matter of fact, is it not?

Mr. Lee: That is just what I was going to ask the witness.

The Witness: Well, I couldn't say that.

Mr. Littman: Approximately?

The Witness: I wouldn't say even approximately.

By Mr. Lee:

Q. Now, Mr. Morton, your attitude on the stand today and your testimony that you are somewhat baffled and confused and therefore can't anticipate the future, all of that fades into insignificance compared with the fact that you do know, and you are certain in your own mind, I take it, that you are going to be pushed to your utmost because of the war effort, to produce all the gas that you are going to be called upon to produce. Now, isn't that true?

[fol. 9390] It is a superlative situation, isn't it? It is an unusual situation?

A. I can't say that it is a superlative situation, but I can agree with you this far, and I think you have helped

clarify the issues here as I have heard them. I think business is going to be good for Panhandle Eastern. I think we are going to sell a lot of gas. I don't mean, for a minute, to imply that we won't need all the facilities we have said we need to get this gas to the place where we want to sell it.

My principal confusion, if I made that plain, lies in the price we are going to get for it rather than in the quantity to be carried.

By Mr. Littman:

Q. You can't tell us how much the price will be affected in the future?

[fol. 9391] A. No, I can't.

Q. How are we going to know? How are we going to tell, if you can't tell? Can't you assist us in that regard? You haven't made any computations or calculations, have you?

A. I have no formal computations or calculations. I have sat down with a scratch pad in here, made lots of figures on it, tried to visualize the future.

Q. But you are not at all certain about it?

A. No, I am not. That is the crux of the whole matter.

Q. Mr. Morton, is there anything in the War Production Board Order L-31 which you interpret to mean that your company will sell less gas in the future than it sold before the order was issued?

A. The order says that we can take on no more house heating. I take that to mean that we will sell less house heating gas than we had anticipated. The order says that during times of emergency—and that is not very well defined, what emergency is, but I take it during peak times, —industries, certain industries will be cut off from the lines. That would indicate a diminution, in my mind, of the sale of certain classes—

. . . . . .

[fol. 9392] By Mr. Littman:

Q. You completed your answer, didn't you?

A. The order says that with respect to anticipated sales which we might wish to make or be counting on making, or prospective sales, that there will be considerable limitation thereon about those.

On the other hand, as offsetting factors, the order says that we are to make interconnections with other pipe line companies and sell them gas and they, in turn, are to sell us gas where, in the judgment of the War Production Board, or words to that effect, such sales are necessary.

By Mr. Littman:

Q. If you wish to go along, Mr. Morton, with respect to those industrial sales that you say you may be required to curtail, the reason for that will be because you are going to have to sell that industrial gas after curtailment to another industry which is engaged more closely [fol. 9393] or more vitally in connection with the war effort; isn't that correct?

A. That sounds like the meaning of the order to me.

Q. Yes; and you are not—

A. (Interposing). The best utilization of our resources to promote the war effort. I think that is what we are all after, too.

Q. In other words, this particular item you are speaking of, industrial gas, will not result in any diminution of your industrial sales, will it, but merely in a reallocation, so to speak, of the sales?

A. Now, it might work out that way. It sounds to me like that is what they intend to do.

[fol. 9395] By Mr. Littman:

Q. Mr. Morton, you don't expect the firm gas sales to diminish by reason of the War Production Board order No. L-31, do you?

A. To this extent: I can see some diminution. Many of the industrial plants in Detroit are served under firm contracts, firm agreements. As a matter of fact, all of the industries, as far as our deliveries to Detroit are concerned, are firm deliveries.

Now, to the extent that some of those plants might be curtailed, their operations curtailed, discontinued by this order, then I see a diminution in the firm sales of the [fol. 9396] company.

Now, if you speak of them as a whole, why, I expect that we will sell as much or more firm gas than we have been selling in the past.

Q. You have made no investigation of the Detroit industrial situation which you just spoke about, have you?

A. Yes, I am fairly well informed on that. You say have I made any investigation. I haven't, of course, gone up there and gone around personally to these places and asked those questions, but I do talk to the men of the Detroit company, representatives of the company, occasionally, and we have letters from them, so we stay fairly well informed on the matters to which I have testified here.

Q. Now, let's take an industrial customer in Detroit. If a particular industrial customer in Detroit is curtailed by reason of W. P. B. Order L-31, that gas will be sold to another industry more closely associated or connected with the war effort; isn't that correct?

A. The order doesn't say that that is what will be done.

Q. Don't you interpret the order to mean just that?

A. Well, I believe I said before, and I certainly, in general, agree that they intend for the pipe line company to use its facilities to the best advantage, and it is my opinion that where they cut off one industry, they will [fol. 9397] try to sell it to another industry or try to allow the company to sell it to another industry.

Q. So there would not be any curtailment over all in the sale of that gas, would there? That naturally follows, does it not?

A. That follows. I expect the sales of this company to go right forward. I don't expect us to go broke.

Q. Mr. Morton, your company bought Michigan Gas Transmission Corporation and paid more than $10,000,000 for it after Order L-31 was issued, did it not?

A. I believe that is correct.

Q. Panhandle Eastern was not worried about any adverse effects of Order L-31 upon the sales of Michigan

Gas Transmission Corporation, was it, when it purchased that corporation?

A. I don't imagine they were.

[fol. 9405] Trial Examiner: You are referring now to the order of the War Production Board, L-31?

Mr. Culton: That is right. We do not say that we are not going to continue to produce and transport all the gas which we physically can produce and transport under such facilities as we now have or may be able hereafter to get. The management of the company will later present some facts dealing with that particular feature. Frankly, we hope to increase our capacity above what it now is. The services of our gas are needed by certain industries and, if at all possible, we expect to furnish that gas.

We had also hoped to have some other markets available at this time. Because of our shortage of material, those markets are not yet available. We, of course, so long as this order is in effect, cannot say what the ordinary economic effect of conditions will be because there is a matter which now intervenes between us and those ordinary economic conditions on which the former plans had been based.

For example, Mr. Norton referred to a projected plant [fol. 9406] near Kansas City. I do not know whether he stated the volume but the possible volume of that plant, I think I can say, if it materializes, will be probably 25 million cubic feet per day. There may be many other plants of the same kind or for different war purposes constructed at various points along this long line of pipe line.

Obviously, most of the sales which we make, even though we are able to sell more gas than we have sold in the past, even though we get an increase in our capacity and are able to operate to the fullest safe capacity and by that I do not mean 100 per cent capacity factor because it is practically impossible without spare units which we cannot obtain at this time, irrespective of how much gas we sell, we know it will have to be sold, if it is sold, for purposes like that at prices cheaper than we have assumed

we would be able to sell the gas which we now know is going to be cut off. Therefore, it is not the question of volume of sales that we are presenting here. It is the question of diversity of sales. We know some portion, we do not know how much, but we do know some portion of our higher priced gas is going to be cut off and that portion must, of necessity, be sold at the lower prices and we are not attempting to hold the higher price markets but we are gladly cooperating in any way we can with the WPB and will continue to do that.

The point is that estimates heretofore made, based on [fol. 9407] normal conditions, cannot apply to the abnormal conditions under which we are now operating. Mr. Morton, I believe, stated that he had hopes that, after a few months, there might be some kind of a trend which would enable him to make some kind of an estimate with respect to these various sales at the respective markets and the prices for which the gas was sold but, obviously, until there is some history on which we can base his estimates, the estimator cannot make estimates because he can only gage the future by conditions of similar type existing in the past.

That is the position of Panhandle Eastern on this matter, Mr. Examiner, and that is why we had hoped we would be permitted to have 120 days in which to observe the effect of this order, not the interpretation of the order so much. There may be some questions that may need interpretation and if so, of course, the WPB will render the interpretation we requested but our point is that it is the effect of the operation of the order which we cannot determine at this time.

Trial Examiner: May I ask, Mr. Culton, whether you are in agreement with the statement made by Mr. Littman before luncheon that the industrial sales, based on evidence in the case to date, constitute less than 10 per cent of the total sales?

Mr. Culton: You mean direct industrial sales?

Trial Examiner: Yes.

[fol. 9408] Mr. Culton: That is true, Mr. Examiner, but the record—I am not certain that the record in this case

shows—but I know the record in Docket G-240 was to the effect that our principal customer, the Detroit company, had some 1500 to [200], industrial consumers to which it markets gas and a similar situation exists with respect to our other distributors.

Trial Examiner: May I ask whether, conceding, of course, that the War Production Board might divert any gas to any necessary use under its general powers, may I ask whether you made any apprehension of the curtailment of domestic service which you are now rendering?

Mr. Culton: We do, Mr. Examiner.

Trial Examiner: On what is that based?

Mr. Culton: On the right of the War Production Board, if they think it is necessary in the public interest, to require curtailment. The present order, of course, only prohibits certain increases but there is no reason why the War Production Board might not, at some time in the future, extend that to ordinary domestic use.

Mr. Littman: Mr. Culton, in connection with the Trial Examiner's inquiry, I would like to have you point out any part of the War Production Board Order No. L-31, which could conceivably result in any lessening of your present domestic load?

Trial Examiner: Just a moment at that point, Mr. [fol. 9409] Littman. The inquiry I addressed to Mr. Culton had no relationship to the specific provisions of the present outstanding order. I asked him if he had reason to expect, any reason to expect that there would be a curtailment of domestic service. It is, of course, clear that the War Production Board Order L-31 speaks for itself and that does not in any way intimate a curtailment of domestic service, as I read it.

Mr. Littman: That is the way I read it.

Mr. Culton: We do not so contend. I thought the Examiner was inquiring as to the future, if we were wondering something about the future of that and we are.

Trial Examiner: I was wondering if you have any information as to a future order—

Mr. Culton: (Interposing) We have no such information. Mr. Wheat has some knowledge on other phases.

Mr. Wheat: May I say in that connection, Mr. Examiner, I have spent most of the last three weeks in consultation with the War Production Board in connection with telephone communication and there the first order, L-50 which came out about sixty days ago contained no particular intimation of a possible rationing of telephone services.

I may say now that the War Production Board has in contemplation, for publication probably during the current week, three additional orders, the result of which will unquestionably be the start of rationing telephone service in this country. I think that that is an excellent [fol. 9410] illustration of what we may be confronted with in the natural gas business.

Trial Examiner: Thus far, however, it is merely on your part, the recognition of a possibility?

Mr. Culton: That is right.

Mr. Littman: That is kind of speculative, I would think, so far as the gas business is concerned.

Trial Examiner: May I ask further, Mr. Culton, whether you have any reason to expect that you will be able to derive less per unit of industrial gas in your future sales pursuant to Order L-31 than you are now deriving?

Mr. Culton: Unquestionably, Mr. Examiner.

Trial Examiner: For what reason do you say that?

Mr. Culton: There will be a greater volume of what used to be referred to as direct sales. Some of it was formerly referred to as "dump sales."

Trial Examiner: Those are sales by negotiation?

Mr. Culton: That is right, but most of those sales are sales to the United States Government where the price is practically dictated. I say "dictated". We have traded with them and we have made agreements in some respects but, obviously, we are not going to hold up some plant with an unreasonable demand for prices.

Most of those sales are on prices below the prices at which our industrial gas is sold under the firm contracts. [fol. 9411] By that I mean the average price that we receive and the management is unable to say what that price is going to be but we will present, at the hearing which we expect to have a few days from now, a management witness who will explain his views.

Trial Examiner: You, of course, recognize the factor of the service company's rights when it is delivering under order of the Government?

Mr. Culton: That is right.

Trial Examiner: And if you cannot agree with the customer, you will have your recourse.

Mr. Culton: If we cannot agree with the Government, they will take the gas and condemn it.

Trial Examiner: They will take the gas but they will pay you on the basis of its worth and your rights, as established.

Mr. Culton: That is right. We do not want to do that. We are not forcing the Government to any such step as that.

Trial Examiner: I am merely reaching for the effect of these things we are discussing on future revenues.

Mr. Culton: Our difficulty is we know there is going to be some effect and we cannot determine what the impact of that will be. That is our point. We expect the unit price to be less.

Mr. Littman: Less than what?

Mr. Culton: Less than the present unit price of sales.

[fol. 9418] Mr. Littman: May I interrupt to state you estimated the maximum day's sales for Detroit to be 164,500 M.c.f. as shown in Column E of Exhibit 40 which contains your estimate.

The Witness: Yes, Mr. Littman, and I might point out that was before Pearl Harbor.

[fol. 9419] Mr. Littman: You just learned that Michigan Consolidated advised you that they were going to have a requirement of something very close to that amount.

Mr. Culton: How much did they estimate they would require last winter on the maximum day?

The Witness: We have a letter that very much resembles the one we are talking about here and that letter states their requirements were going to be 150 million.

Mr. Culton: What was the maximum they took this last winter?

The Witness: They took 110 million.

Mr. Chamberlain: Are you sure about that amount, Mr. Morton?

The Witness: Yes, I am sure about the 150 million and I am sure about the 110 million.

. . . . . .

[fol. 9420] Q. Mr. Morton, you expressed concern about a change of policy of the Michigan Consolidated Gas Company, your largest customer. Your concern was, I take it, [fol. 9421] with respect to the estimates that you had made in your Exhibit 40?

A. I believe the term "concern" is a misnomer there because I had no particular concern over the matter, Mr. Chamberlain.

Q. I understood that you were very much concerned about the estimates that you had made a few months ago and that that concern arose largely over the fact that Detroit had changed its policies in respect to the use of its standby equipment.

A. I made the statement that they had changed their policy and, of course, I was making comparisons between my estimate and what they took.

. . . . . .

Q. Why were you concerned then? Did you expect the results which would follow would be different [then] your estimate?

. . . . . .

A. Possibly this will answer your question. I think their change in policy, abandoning the old manner of taking their full peak demand from us and going to the original contract, as we call it, or going to the basis of supplying a large part of their own peak, did make some difference in the result.

[fol. 9422] Q. Well then, you calculated that the estimates which you had made would not be accurate because of that change of policy, is that right?

A. You say I calculated. Can you put that in the present? Do you mean to say that in comparison with my estimate that I did make last summer?

Q. I assumed you were here to inform the Commission that the estimates which you made with respect to the prospective sales to the Michigan Consolidated Gas Company, as reflected in your Exhibit 40, could not be relied upon and that the reason was largely due to the fact that they had changed their policy with respect to the use of their standby equipment, am I correct about that?

A. That is correct.

Mr. Littman: By "they", you mean Michigan Consolidated?

Mr. Chamberlain: Yes.

Q. Now, let us take Exhibit 40. You estimated in 1942 that you would sell that company 27 million M.c.f., did you not? A. Yes, sir.

Q. And that their maximum day would be 142,000?

A. Yes, sir.

Q. And you further estimated that the cost to them or, that is, the amount that you would receive would be 27 cents? A. Yes, sir.

[fol. 9423] Q. In other words, that your revenues for 1942 would be $7,290,000. That was right, was it not?

A. Yes, sir.

Q. Now, let us go back to your estimate for 1941. How far did you miss that, if at all?

A. If I recall it, the error was small.

Q. You estimated 26.2 cents, did you not, for the gas?

A. Yes, sir.

Q. And you actually got 26.34 for it, did you not?

A. I do not have that figure in front of me but it is my recollection that that is a fair statement of it.

Q. And the company took very close to the 24 million M.c.f.?

A. As I recall it, yes. I do not have the actual figures in front of me.

Q. Now, we approach 1942 and your estimate there was that the sale would increase by three million M.c.f., was it not? A. Yes, sir.

Q. And you spoke about a demand of 145 million feet. Was there ever any agreement that you know of on the part of your company to furnish more than 125 million feet to Michigan Consolidated Gas Company?

A. No, there was no agreement to furnish any more. That is the contractual obligation of the Panhandle East- [fol. 9424] ern Pipe Line [Line] Company.

Q. And at no time have they agreed to exceed that amount, have they?

A. To my knowledge, that is correct.

Q. I would like to have the record show just what Michigan Consolidated Gas Company did, in the way of its practice, to change the result of your estimate? Will you illustrate that by what happened during your peak load period in January?

A. I presume you are speaking of the calendar year 1942?

Q. I am.

A. I think we can shorten your question and my answer by saying that, for the calendar year 1942, there will probably be very little difference in the unit rate of gas to Detroit, under the method I used in the summer when I prepared Exhibit No. 40 and under estimates which might be prepared now but the principal difference would come in the fiscal period, March 1, 1942, March 1, 1943, rather than the calendar year 1942.

Q. I apparently did not make my question plain, Mr. Morton. What I would like to have you get into the record is just what Michigan Consolidated Gas Company did and how it affected its bills to Panhandle Eastern?

A. All right. Michigan Consolidated Gas Company [fol. 9425] made approximately or produced and put into the mains approximately the difference between their maximum requirement of approximately 140 million and their take of 110 million on January 7, the day of the establish-

ment of the maximum demand. By doing that, they changed the basis.

Q. (Interposing) Will it bother you if I stop you right there. Are you speaking now of the maximum demand to Panhandle or the maximum demand to Detroit?

A. Since we are discussing the bill of the Detroit company, I am referring now to the date of the establishment of maximum demand as between Detroit and Panhandle Eastern Pipe Line Company.

A. Now, you asked me as to what happened as a result of that procedure?

Q. Yes.

A. The result is that for the 12 months period beginning March, 1942, and ending April, 1943, Detroit will purchase its gas on a basis somewhat different from that which it has been purchasing in the past, namely, on the original two-part contract and, by doing that, will reduce its pay [fol. 9426] ments to Panhandle Eastern by several hundred thousand dollars, as I calculate it roughly, over that which it would have paid had it stayed on the old rate.

Q. Now, you say you figured that roughly. Would you give us the method of your computation?

A. The general method of computation is to take the 110 million which is the demand and multiply it by the demand charge of .38 cents per therm times 12 months and that gives you your demand charge for the period, March to March, and charge out your commodity which is the amount of gas purchased at 15 cents per thousand or 1.5 cents per therm, add those two together, which gives you the charge under the original contract. That is the method, I think we all concede, that will govern during the 12 months period, March to March.

Now, if we want to compare that with the old method of billing or the one that we used prior to this March, if we want to compare it with the supplemental billing, we have to go through quite an elaborate process with which I am sure you are quite familiar also and when we compare the prices under those two systems of billing, why, in my judgment, you get a smaller payment than you would with the old supplemental contract. In other words, I think you have saved some money by trimming your peaks.

Q. Well, save money in what money? By getting it for less than we would if we had bought the entire amount?

[fol. 9427] A. That is my judgment.

Q. What do you figure that Michigan Consolidated Gas Company will save by reason of having cut its peak on the 6th of January last, in the next annual period or fiscal year, as you call it?

A. Do you refer to before the cost of manufactured gas? Which cost do you refer to, Mr. Chamberlain, when you say how much would they save, do you mean the gross saving or the net saving?

Q. I mean the saving off the Panhandle bill.

A. I judge it is between $300,000 and $600,000.

Mr. Littman: Is that per year?

The Witness: For the 12 months period.

By Mr. Chamberlain:

Q. Between three and six hundred thousand dollars?

A. Yes.

Q. That their gas bill will be less that year?

A. Yes.

Q. For the equivalent amount of gas? A. Yes.

. . . . . .

[fol. 9428] By Mr. Chamberlain:

Q. Then I take it that it is your judgment that, to the extent of 24 million M.c.f. in the next fiscal year, that it will cost the Michigan Consolidated Gas Company for that amount of gas some $300,000 to $600,000 less than the cost in the past year, is that right?

. . . . . .

(Interposing) 24 million M. c. f.

A. They will probably purchase more than that because 24 million was the quantity purchased for 1941.

Q. Yes, but I am trying to get a comparison of what their gain is going to be in their payments to Panhandle for this gas. It is easier to apply that to an equivalent amount, is it not? In other words, in making a comparison for 1942 under the demand that was established January 6, if we took the equivalent amount of gas in 1942, we would

have, in your judgment, a saving of from three to six hundred thousand dollars, is that right?

A. Over what it would have been had you purchased it on the supplemental contract, yes.

Q. Now, wait a minute. I am asking you what, in your judgment, the saving is going to be. I mean in dollars, not with respect to anything.

A. Your gross saving, I believe I stated, I thought, was between three hundred thousand and six hundred thou-
[fol. 9429] sand dollars.

Q. Then you think that your estimate in Exhibit No. 161 of $7,200,000 is going to be excessive by from three hundred to six hundred thousand dollars?

A. That figure that you are referring to there is for the calendar year and I have been quoting you figures in terms of a fiscal year, March to March.

Q. Yes; how much difference does that make?

A. There is considerable difference between the calendar and fiscal year on this matter that we are discussing. Most of the difference occurs because of the difference between the fiscal and the calendar year.

I believe I might clear it up a little bit by saying that I do not believe that your unit rate that you pay for gas for the calendar year 1942 is going to vary a great deal from what it would have been under the system I used in calculating your 1942 bill in Exhibit No. 40.

Q. What do you mean by that; that we are going to pay 27 cents for the Panhandle Eastern portion of the gas for the 1942 calendar year?

A. Now, I have testified that I have difficulty in calculating sales for the future and, with that reservation, I can-
[fol. 9430] answer your question by saying that, for the calendar year 1942, your unit rate will approximate the figure you mention of 27 cents to Panhandle Eastern, which, of course, would be in the neighborhood of 34 cents at the city gate.

Q. That would make a full 7 cents to Michigan Gas Transmission Corporation?

A. Yes, it would.

Q. And that then increases their allowance of 6.63 cents?

A. I did not understand whether you made a statement or asked a question.

Q. You say that it would be 7 cents. I am asking you whether they would get a larger amount than they got last year which seemed to have been 6.63 cents per M. c. f.

A. Basing my answer on calculations which I show in my Exhibit No. 40 and in 161, the answer is yes.

Q. Have you any reason to change your belief that the sales for 1942 will be 27 million M. c. f.?

A. Yes, that figure of 27 million no longer can be called my estimate for 1942 for Panhandle Eastern's sales to Detroit and the reason becomes immediately clear and immediately apparent when you realize that you have stopped adding house heating customers. We are not going to get the benefit of the sales to house heating customers this fall which I had estimated you would get and which we would [fol. 9431] get when I made my Exhibit No. 40.

Mr. Littman: Didn't you testify, Mr. Morton, when you were here last, that the house heating business was not a very desirable kind of business from the point of view of your pipe line company?

The Witness: I do not hesitate at all to tell you, Mr. Littman, that, in my personal opinion, house heating is the least desirable business from an economic standpoint that we have on our lines.

Mr. Littman: And to the extent that it is undesirable you will be relieved by War Production Board Order L-31 from attaching any new business of that character?

The Witness: Yes, that is true.

* * * * * * * *

Q. And it then becomes your feeling that the sales in the Detroit area will be less than the 27 million that you estimated last fall?

A. Well, certainly in so far as house heating goes, the sales are going to be less than those that I estimated that went into that 27 million. However, I believe that your industrial sales or your base load sales, there is a possibility that they will be larger than those I estimated in Exhibit No. 40.

[fol. 9432] Q. You have no doubt that they will be much larger, have you?

A. Yes, I have some doubt because, as I said before, I still do not know just how far Order L-31 is going to operate against sales and other orders that may come along later. I too am expecting more orders of a limitation nature. I have given it considerable thought.

Mr. Littman: May I interrupt to ask the witness a question or two, Mr. Chamberlain, that seems to me to be apropos to this particular line of inquiry.

Mr. Morton: I am going to read to you some excerpts from the testimony of your president, Mr. Creveling, given before the Securities and Exchange Commission on November 25, 1941, in Docket No. 59-38, etc., in the matter of Columbia Gas & Electric Corporation. I read from Mr. Creveling's direct testimony at page 279 from the official report of those proceedings.

"Question: Mr. Creveling, has the defense program caused any additional load on Panhandle Eastern and its affiliates?

"Answer: It has a very decided one. As a matter of fact, while we do not have the figures here, it is my judgment that probably yesterday, although it is still warm weather, was a peak day for all time for gas deliveries from the Panhandle system.

[fol. 9433] "Question: And you think that is due, in part at least, to the unusual demands by customers engaged in defense operations?

"Answer: We have checked with certain of our customers and through them with the industries served by them and we find that to be decidedly the case and that was one of the items that undoubtedly had a great bearing on our ability finally to get the priority rating that we did for the material being used in our present construction program.

"Question: What was that priority rating?

"Answer: A-2."

Do you agree with the testimony of your employer, Mr. Creveling, which I have just read to you?

The Witness: Well; the fact that he happens to be my employer should not have any bearing on whether I agree or not.

Mr. Littman: Do you or do you not agree?

The Witness: I certainly do agree. I have testified here before today that I think we are going to make lots of industrial sales—"business is going to be good" are the words I used. I did not admit there would be a boom, however, as I was urged to admit but I think it is going to be good.

By Mr. Chamberlain:

Q. Mr. Morton, just a few moments ago you told me you thought the unit cost of gas which you had estimated for 1942 of 27 cents would be substantially the unit cost of [fol. 9434] gas for the year 1942 for the Michigan Consolidated Gas Company. Will you tell me how you can arrive at that estimate without knowing and having, as a base, the amount of gas you are going to sell and the amount and character of the use of that gas?

A. Well, I think I used the expression "approximately" and I believe that is about as good as anybody could do under the circumstances. That was my estimate before for Detroit and I believe I also testified before that it was now my opinion that, for 1942, it would not vary a great deal from the estimate that I used previously in my Exhibit No. 40. The principal differences that I see in the future in unit rates do not come within the next nine months of this calendar year but within the next twelve months, the next fifteen, the next eighteen or two years.

Q. Your twelve months is entirely within the fiscal year of 1942, is it not?

A. Sir?

Q. There will be a twelve months period in your fiscal year of 1942?

A. I refer to it as the calendar year 1942.

Q. You do not think the amount of gas that you have estimated would be sold there was very substantial nor do you think the unit price will vary substantially?

A. I think I said that that total amount would be less because of house heating since you are prohibited from [fol. 9435] taking on additional house heating. I said also

that the base load might be up slightly over that which I estimated but it is very difficult for me to tell how much because I do not know the effect of Order L-31 but the estimate I show there of 27 million for Detroit for 1942 and the money I show there in the exhibit—I am referring to Exhibits 40 and 161—should not vary greatly for the calendar year 1942. The principal variations I see are those which occur within the next twelve, fifteen, eighteen of 24 months.

Q. You mean that the variance is going to come in 1943?

A. Yes, I expect things to be considerably changed so that Exhibits 40 and 161, as they show my estimates for 1943, are going to be considerably changed.

Q. And you made an estimate of a less increase in the sales of gas for 1943 than you did for 1942, did you not?

A. Referring to Exhibits 40 and 161, that is true.

Q. And you know that Detroit is getting into tremendous war production?

A. Yes, I have heard so. I know that to be a fact.

Q. You have read that, haven't you?

A. Yes. We have a letter from your company stating the number of defense workers that you were going to have to take care of there in Detroit, naming your maximum demands for the coming winter that you expected to have [fol. 9436] to take care of. Yes, I am familiar with your estimates.

Q. And you have found those estimates very accurate in the past, have you not? I am speaking of the estimates made as to the maximum days by the staff of the Michigan Consolidated Gas Company?

A. Yes, they are usually pretty accurate.

Q. By the way, I wish you would make a note to get the letter that gave the estimate of 150 million.

A. All right.

Q. And bring it when you come again.

A. Almost the exact words of that letter said, "We will expect you to furnish 150 million." That is from Mr. Battens.

Q. Yes, and he was told they would not agree to furnish more than 125 million, was he not?

A. Yes, he was; that is the contract.

Q. That is right. Now, if the revenue that you are going to receive this year is to be approximately the same,

the unit price is the same and yet the gas a little less, tell me how shaving the peak load benefited the Michigan Consolidated Gas Company?

A. I believe that I have testified that I did not see much benefit to the Michigan Consolidated Gas Company, one way or another, as a result of shaving peaks for the calendar year 1942.

. . . . . .

[fol. 9437] Q. I am going to ask you to give your computation as to how it is going to save them anything for the fiscal year beginning April 1, 1942. Let's get this concrete now and find out just in what way that affects your computations.

A. I should think your own figures would show you that, Mr. Chamberlain. Mr. Batten told Mr. Nenner he had saved a lot of money by shaving his peaks.

. . . . . .

[fol. 9438] By Mr. Chamberlain:

Q. Mr. Morton, to get back to this money making, I want to ask you under which of these contracts settlement was made last year, the supplemental or the original?

Mr. Wheat: You mean 1941?

. . . . . .

The Witness: On the basis of the supplemental contract.

. . . . . .

[fol. 9438a] By Mr. Chamberlain:

Q. Now, Mr. Morton, did you intend to infer that by reason of cutting the peak, the demand charge made by Michigan Consolidated Gas Company to Panhandle Eastern would be decreased over the previous year?

A. I don't know that I made any comparison between the demand charge that would result after trimming your peaks and the demand charge for the previous year.

Q. Well, now, the commodity charge is the same under both contracts, is it not?

A. That is correct.

Q. So that the only difference in the amount of the bills that you render during the year would be in the demand charge, would it not? A. That is correct.

Q. Now, last year a settlement was made under the supplemental contract, was it not?

A. Yes, sir, because that was the cheaper of the two.

Q. And do you have with you the amount of the demand charge for the year—that is, the fiscal year—beginning April 1, 1941? A. I do not.

Q. Is it where you can get it here in the building?

A. I suppose that it is in the files of the Federal Power Commission.

[fol. 9438b] Q. Well, now, what will be the demand charge for the year beginning April 1, 1942, under the original contract as compared with the demand charge under the supplemental contract for the year beginning April 1, 1941?

A. Well, I have neither one of those computations, so that I can't tell what that comparison is.

Q. Well, it would be easy for you to figure this last one, would it not? You have before you the maximum take in therms?

A. Yes. I believe I testified at one time that it was approximately 110,000,000 times 12 times 380 per M.c.f., or stated in therms, would be .38 dollars times 12 times the maximum established on the maximum take amounting to 1,110,161 therms.

Q. The latter figure was the maximum take, was it not, in therms? A. Yes.

Q. The demand charge, then, would be that number of therms multiplied by $4.56, would it not?

A. Yes, it would.

Q. And will you verify this to see whether it would be $5,062,343.14?

A. I agree within two cents. I get 16 cents, where you get 14.

Q. Yes. Now, in your estimate reflected in Exhibit 40, [fol. 9438c] you increased the unit cost of gas to the Detroit company from 26.2 cents to 27 cents, did you not?

A. You are now comparing, I take it, the estimate shown in Exhibit 40 and—

Q. (Interposing) 161.

A. (Continuing)—161?

Q. Right.

A. Year 1941 with year 1942?

Q. Yes.

A. The comparison you mentioned is the correct comparison—that is, the correct figures for the revenues which I estimated at that time that Panhandle Eastern would receive.

Q. All right. Now, I think perhaps I can give you the figures that will enable you to give us the demand charge under the supplemental contract, for the previous year.

Mr. Wheat: Which is that?

Mr. Chamberlain: That is for the year previous to the one that began April 1, 1941.

Mr. Wheat: April 1, 1941, to March 31, 1942?

Mr. Chamberlain: That is right.

Mr. Wheat: Thank you. That is what the witness called the fiscal year under the contract.

Mr. Chamberlain: That is right.

A. The maximum base load demand established March [fol. 9439] 18, 1941, was 742,300 therms. Multiplying that quantity by $4.56, which represents the 12 months charge per therm, yields a total of $3,384,929.04. This figure of $3,384,929.04 is the base load demand charge under supplemental contract for the fiscal year April 1, 1941 to March 31, 1942, inclusive.

By Mr. Chamberlain:

Q. Now, to that must be added the demand for the house heating customers, must it not?

A. If we are making a comparison between the demand charges for that fiscal period and the demand charge which would hold for the 12 months fiscal period '42-'43, yes.

Q. And can you do that?

A. No, I don't believe I have enough information here to calculate the demand charge.

Q. Did you get the figures above (indicating)?

A. (No answer.)

Q. Mr. Morton, if that is substantially correct, I don't want to bind you in anyway to it, but I want you to have ample time to check it, but if that is close enough to adopt for the moment, we will go ahead and let you figure it.

A. I am not having so much difficulty accepting the figures you have handed me, Mr. Chamberlain, for the purpose of this comparison, as I am in reconciling the [fol. 9440] theoretical basis, upon which they are prepared, with the facts.

Q. Now, it would have been an easy matter to arrive at that, would it not, by—you have the demand charge upon the base load. All you lack is the house heating demand.

Now, you can take the rates by your company and by deducting the commodity charge, you would have the total demand charge that was paid last year, would you not? Then by deducting the demand charge on the base load, you would have the amount that was paid for the house heating. It seems to me that would be easy to get from the records here in the Commission, and if you wish, I will frame my question so to assume that that is the correct amount.

A. In order that we may preserve evidence of cooperation here and to get along to the answer, Mr. Chamberlain, I will, for the moment, assume that this calculation is correct enough for all practical purposes.

Q. Yes. We want it right. We don't want anything out of the way, but I understand that that is correct, and if that is not, we want to correct it, but now if that be true, Mr. Morton, the demand charge that was paid by Michigan Consolidated Gas Company to Panhandle Eastern, under the supplemental contract, for the fiscal year beginning April 1, 1941, was $4,497,920.16, was it not?

A. Yes.

[fol. 9441] Q. Now, notwithstanding the peak-load shaving in January, the base load demand went up, did it not?

A. Yes.

Q. And how much did it go up?

A. I can't tell from this exhibit which day established the maximum base load, but I presume from this examination that it is—

Q. (Interposing) January 6?

A. (Continuing)—January 6: that is correct.

Mr. Wheat: 1942?

The Witness: 1942.

A. (Continuing). And the amount that it went up, of course, would be the difference between the maximum load—or, rather, would be the base load maximum demand of 954,043 less the previously established base load maximum demand established March 18, 1941, of 742,309 therms, so that the increase from one year to the next, on that basis appears to be 211,734 therms.

By Mr. Chamberlain:

Q. And what would be the increased cost of that were the settlement to be made under the supplemental contract for the fiscal year beginning April 1 last?

Mr. Wheat: You mean yesterday?

Mr. Chamberlain: Yes.

A. It would appear that the increase in demand charge [fol. 9442] for a 12-month period as between the base load maximum figures above mentioned would be $965,507.04.

Mr. Chamberlain: That is right.

By Mr. Chamberlain:

Q. Now, the cost of gas, then, to Michigan Consolidated, if it be required to settle under the supplemental contract, would be greater by that additional demand charge of $965,507, would it not, notwithstanding the peak shaving we were talking about?

A. That would have been correct had the conditions obtained that we are assuming here.

Q. That is, there are no conditions, are there, other than if they are compelled to settle under the supplemental contract for the fiscal year beginning April 1, 1942?

A. That is correct.

Q. Yes.

Now, let us go back to the original contract and now tell us what the demand charge will be if computed on the original contract for the year beginning April 1, 1942.

A. $5,062,334.16.

Q. Now, will you deduct from that the demand charge that was paid last year under the supplemental contract?

A. When you say "last year," you mean last fiscal year?

Q. Yes, I do.

A. Ending April 1?

[fol. 9443] Q. Yes, I do.

A. I am deducting from the demand charge on the original contract basis for the year '42-'43 in the amount of $5,062,334.16, $4,497,902.16, which latter figure is the one we adopted a few moments ago as representing the demand charges under the supplemental contract for the period April 1, '41-April 1, '42, and the difference is $564,414.

Q. What do you have there?

A. I have a difference of $564,414 even.

Q. Now, you said awhile ago that by the peak shaving there would be a gain if settlement was made under the original contract, did you not? A. Yes.

Q. Then, Michigan Consolidated Gas Company would be required to pay an increased demand charge by $564,414 if the settlement were made for the fiscal year begin[fol. 9444]ning April 1, 1942, under the original contract as compared with the demand charge of the previous year?

A. That is correct.

Q. Then whatever Mr. Batten may have said by peak shaving would be that portion that he could save out of the difference between 564,414 and $965,507, would it not be?

A. As I understand your question, you have asked me to subtract from $965,507.04 another figure of $564,414. The first figure mentioned representing the difference in the base load maximum demands for the two fiscal years which we have been comparing, times $4.56, the second figure being the difference between the demand charge for 12 months beginning April 1, 1942, to April 1, 1943, and the demand charge on the supplemental contract April 1, 1941, to April 1, 1942, and I can't see the connection.

Q. Well, let me put the question in another way.

You concede, of coarse, that the commodity charge remains the same?

A. Yes.

Q. And the only difference in the cost of gas to Michigan Consolidated will be in the demand charge for the fiscal year beginning April 1, as compared with the past year?

A. Yes.

Q. All right. Now, it has one of two options of set- [fol. 9445] tlement: that is, under the original contract or under the supplemental contract, does it not?

A. Yes.

Q. Now, if it settles under the supplemental contract its demand charge increases $965,507, does it not?

A. Yes.

Q. If it settles under the original contract, the demand charge increases over that paid last year by $564,414, does it not? A. Yes.

Q. Now, you have mentioned the difference between the calendar year, and that your figures in Exhibits 40 and 161 were made on a calendar year basis. Under these contracts, the gas company is required to settle, to start with, under the supplemental contract, are they not?

A. Yes.

Q. Then, the demand charge beginning with the first of April will be increased by about $80,000 a month, will it not, beginning with April 1, 1942?

A. Let us concede for the purpose of getting along that that is a true statement.

Q. 8 times 12 is 96, isn't it?

A. Yes.

Q. If you have got 12 months in the year, you have got $960,000, that would be just a shade over $80,000 a month, [fol. 9446] would it not, increase?

A. Let me point out to you that you are discussing a figure which is the difference in the demand charge applicable to the base load maximum demands for the two years in question. That is not the only demand charge under the supplemental contract. There are other items that enter into that charge.

Q. Well, that is perhaps true, but there is at least that much difference, is there not?

A. There is at least that much difference between the base load maximum demand charges for the two years, yes.

Q. I would think there was more. The house heating demand was greater there in 1941. Then, beginning with April, the Michigan Consolidated Gas Company must pay an increased demand charge each month of something over $80,000, must they not, under this contract, or under their contracts with Panhandle Eastern Pipe Line Company?

A. I wonder if I could shortcut this; Mr. Chamberlain, by saying that undoubtedly your demand charges are going to be higher for the ensuing fiscal year than they were for the previous—

Q. (Interposing) Well, you have already stated that under one method they would be at least $965,000 and another would be $506,000, and there are only two, so I [fol. 9447] think we can concede that.

But now what I want to get at is to compare with your figures in Exhibit 40, I want you to make a rough calculation, and you can use, if you like, the paper I have put on your desk, but to make a rough calculation and let us know about what the increased payments on this demand charge would be during the calendar year 1942, so that we can compare it with your estimates.

In this, Mr. Morton, let me say that an approximation is all we care for, and that you may have all the opportunity in the world to recheck.

A. You want to know what is the difference in total demand charge for the calendar year 1942 on the supplemental basis, as estimated in Exhibits 40 and 161, as compared with three months on the supplemental basis and nine months on the original contract; is that it?

Q. What I want to know, Mr. Morton, is what in dollars the Michigan Consolidated Gas Company is going to have to pay you by way of an increase in the demand charges for the calendar year 1942 over the previous year 1941.

Now, let me say this, and I think your will agree with me that settlements in the first instance are made under the supplemental contract, that any rectification is made at the close of the year and that if it should then appear that the original contract was cheaper, there would be a [fol. 9448] refund made, and I think you will also agree

with me in the first instance, that during the summer months the rate would be cheaper under the supplemental contract, and that in the spring months or the winter months of next year, it rises very rapidly under that contract?

A. Yes, that is true.

Q. What I want to know is about how much money Michigan Consolidated Gas Company is going to have to pay in excess of the demand charges last year during the calendar year 1942.

Mr. Wheat: You are speaking solely of demand charge?

Mr. Chamberlain: Yes, sir. The commodity charge remains the same.

Mr. Wheat: Yes, it depends entirely on the amount.

Mr. Chamberlain: Yes. What I am trying to get at is this: what are the finances of these two companies? How much are we going to pay extra and how much will Panhandle receive extra during the calendar year?

Mr. Wheat: Don't you really mean, Mr. Chamberlain—I don't know, the witness may correct me if I am wrong—how much your company would be paying under whatever basis it pays, based on a take of 110,000,000 as against what it would have paid had the take been one hundred twenty-five or some higher figure?

Mr. Chamberlain: No.

[fol. 9449] Mr. Wheat: Isn't that what you are getting at?

Mr. Chamberlain: No.

Mr. Wheat: I thought that was the saving the witness mentioned.

Mr. Chamberlain: The inference has been cast here several times that we had a lower demand by reason of this peak shaving. The fact is that we had an increase.

Mr. Wheat: Not a lower demand in actual cubic feet than you had the year before. I am trying to get myself straight as to your point.

Mr. Chamberlain: It is a miserably complicated thing, but we have an increased base load demand notwithstanding the peak shaving.

Mr. Wheat: That I thought was understood, but that there was a saving because of peak shaving below what had been anticipated that you would take. Might we not ask the witness whether that was what he was trying to get at?

Mr. Chamberlain: Yes.

Mr. Wheat: I hope you will let him explain that because if you will, that will help me.

Mr. Chamberlain: Anything you want.

. . . . . .

[fol. 9450] The Witness: Using approximate methods on the slide rule, it appears to me that on the basis of the calendar years the demand charge for 1942 will exceed those charges paid for gas in '41 by about 360 or 370 thousand dollars.

Q. Well, how do you figure? It would be over a million, wouldn't it? You say that here is nine months of the period which you say the minimum would be 565,000 on that basis.

Mr. Chamberlain: Gentlemen, may we do this: rather than let Mr. Morton take the time now, may we let Mr. Morton make up the calculation and send it in?

Mr. Wheat: Yes, I think that would help.

Mr. Fulton: I think he should know exactly what you want, though.

Mr. Chamberlain: Yes, I will give until tomorrow.

Trial Examiner: Do you agree also, gentlemen, that Mr. Morton, before he takes up this computation, will review his answers to the question which were given on Mr. Chamberlain's interrogatories, and if there are corrections, let us have them?

Mr. Wheat: Yes, I think so.

Trial Examiner: This is a very important ground that has been covered, and the witness has been making his com- [fol. 9451] putations as each question was asked, at the desk.

Mr. Wheat: Yes, we would like to have the witness have that opportunity, and I think it would save a great deal of time.

Mr. Chamberlain: I would be happy to have him have it because these are merely mathematical computations.

. . . . . .

Q. What I want is the difference in the demand charge that will have to be paid by Michigan Consolidated Gas Company in 1942 calendar year over that paid in 1941 calendar year. Now, I realize, Mr. Morton, that you haven't the exact figures for March to determine the house heating demand. You will have that in your office probably in a day or two, but in doing that, I have used the March be- [fol. 9452] fore.

It is based upon 25,000 customers. The only change is in the temperature condition in that month so that it couldn't vary largely. But use either March you want to—this or the last one—because they are very slightly different, but my purpose there is merely to show the cash outlay, by which the demand charge this year exceeds the demand charge next year.

We have got to make provision in our financing here for a million dollars more this year than for last year in the demand charges and it has got to be a matter of cash that is paid if my figures are correct, and I think they will be confirmed.

And, by the way, I might say, Mr. Morton, that my figures indicate that the demand charge of the last year was $4,218,229, and that the demand charge this year under our contract with Panhandle Eastern will be $5,223,654.

Now, the latter is approximate but very close, as I understand it, the only difference being just on the slight variation of temperature in the two Marches.

A. I detect there what I believe to be an error. You multiplied the total demand on the original contract by

12 months, and there is only nine months that it will be effective in this calendar year, so that to get the true demand charges that you would pay this year, you will, as I [fol. 9453] see it, take three months on the supplemental contract and nine months on the original.

We are speaking now of calendar—

Q. (Interposing) Just a moment. You are assuming now that we will get onto the original contract which might make a difference one way or—well, it makes no difference in the calendar year, because we have to pay the supplemental contract, do we not? In other words, we will pay under the supplemental contract for the balance of 1942, for nine months.

A. You are making a distinction between the payments that you will make to us for your gas and the ultimate cost of the gas?

Q. Right. Right. I am getting at the cash outlay for the calendar year and that—

A. (Interposing) I am glad we are clearing that point up, because I think we help the record if we both understand each other.

Q. I am doing that for two reasons. One is to show the cash outlay that must be made by the Michigan Gas Company, and during this period as well as to get a comparison with your figures in your Exhibits 40 and 164.

. . . . . .

[fol. 9454] Mr. Wheat: Now, repeating once more to get it straight: We are interested in what is developing the total demand charges actually paid by Detroit to Panhandle for [fol. 9455] the calendar year '41 as against the prospective payments that will be paid by the former company to the latter for the calendar year '42.

By Mr. Chamberlain:

Q. In other words, the cash paid within that year. Now, I will say this: I asked Mr. Tuttle to make that and he did it hurriedly here and I haven't checked it, but you will check it to see which is correct there.

Now, Mr. Wheat suggested awhile ago, if I am right, a question that I propose to ask you, and that is this: The peak shaving that you referred to as having been done

by Mr. Batten, under which he made money, was done in order to cut down a take which would have been in excess of a base load demand which was figured on January 6 last, was it not?

A. Would this be another way of stating it satisfactorily to you: That it was done to avoid incurring a larger base load billing demand than that previously experienced?

Q. And but for that the base load demand would have been larger by the amount of gas that was sent out by the company? A. Yes.

Q. That is right. Now, will you look at your own bill rendered for January, and state for the record what that [fol. 9456] increased base load demand would have been, had Mr. Batten taken all of the gas from you that day?

A. As I see it, the base load maximum demand would have become 954,043.

Q. Pardon me. You say it would have become that? It did become that, did it not?

A. Had he taken the entire requirements from us on that day, the base load demand would have been the same as I just read: 954,043, since the takes from Panhandle Eastern do not affect the base load maximum. In other words, whether you took it all or didn't take it all from us, under the supplemental contract, the base load—and that is what we are speaking of when we use the base load term.

Q. Yes, you are right about that. You are quite right.

Now, what would be the effect on the original contract?

A. Under the original contract, you would have created a maximum take from us of some 40,000,000 cubic feet or 400,000 therms.

Q. Not that much, would it?

A. Change that to 30,000,000, or 300,000 therms.

Q. Would it be the difference between the send out and the delivery that Panhandle Eastern made?

A. Yes.

Q. Which on that day would be about 207,040 therms, [fol. 9457] would it not?

A. On the sixth it would have been 237,000 therms increase, yes. Just as you have stated.

Q. Now, what would that have increased the demand charge to Michigan Consolidated Gas Company under the original contract?

A. Well, if that had been the situation and if that situation had obtained instead of the one that, as a practical matter, is obtaining, it would have increased the monthly demand charge by a considerable amount, being 90,000 a month approximately, as I calculated on the slide rule.

Q. That is right, or a million eighty thousand dollars a year, would it not?

A. Yes, that is correct.

Q. Then, by the use of the standby service, he reduced what would have been the demand charge under the original contract by $1,080,000 for the fiscal year beginning April 1, 1941?

A. By use of the standby, he reduced the annual demand charges approximately by the amount you stated on the original contracts, but it happens that the original contract would not have been the one that determined the charges between the two companies for that period, since the supplemental would have obtained rather than the demand of 140,000,000—

[fol. 9458] Q. You are just telling us that we have an advantage because we are going to settle under the original contract.

Now, if this had not happened, we wouldn't have settled under the original contract, would we?

A. I believe it is a true statement that you got an advantage by settling under the original contract or you wouldn't be changing over to the original contract.

Q. I don't know how you can tell until the end of the year what it will be.

There is no question, I think, Mr. Morton, in the world, that there wasn't a distinct advantage gained by the use of the standby, an advantage probably of $340,000 over what the bill would have been, but I think you will concede that the bill for demand charge will be, under the lowest method of settlement, $564,414 more than last year, and on the former $565,000 more; that is correct, isn't it?

A. We would expect the demand charge to be more each year because you are adding more business, certainly.

Q. But you complained that you could not arrive at that estimate and that your estimate was now all wet because of that peak shaving. Now, the effect of it is that your estimate is almost a perfect estimate for the year 1942, both as to unit costs and—

A. I testified several times that for the year '42 there wouldn't be much difference between the two.

. . . . . .

[fol. 9459] Now, let me ask you two or three more questions here with respect to the take, and I don't mean this in any sense controversial, because I want merely facts.

A. All right, Mr. Chamberlain.

Q. You have here the sendout which I believe you or some of your men furnished from your measuring station at Dana northward for the period from January 3 to January 11? A. Yes.

Q. There was a period in there of some six days that you averaged better than 175,000 M. c. f., was there not?

A. Yes, I recall those figures, so I can testify to them right off.

[fol. 9460] Q. Yes.

. . . . . .

The 175,000 M. c. f. is what you deem to be the capacity of your line north from Dana, isn't it?

A. That is pretty close to the maximum capacity of that line.

Q. And you had a continued sendout there for that period of time which I think was a remarkably fine bit of operating, and I think you agree with that, but what I am getting at now is: what did the Detroit company do with respect to limiting that load by its standby service during that period?

A. Well, they assisted materially in limiting that load.

[fol. 9461] Q. All right. Now, let us take the sixth day of January, in which you sent through 175,859 M.c.f. beyond Dana. What amount did Detroit add to that for the purpose of consumer use?

A. What portion of that figure is constituted by Detroit's load? is that the—

Q. (Interposing) No. What amount did Detroit send out which supplemented your load?

In other words, what I am getting at is: What was delivered to consumers on that day, and how much did Detroit contribute to it?

A. On the sixth of January?

Q. Yes.

A. According to the record your send out was 1,347,201 therms, and on that day you took from Panhandle Eastern 1,110,161 therms, so that there was a difference there, which was made up from your own facilities at Detroit, amounting to 237,040 therms, or approximately 24 million cubic feet supplied by your own facilities at that critical time.

Q. Well, then, the service in that area was supplemented by that amount of gas in addition to what Panhandle Eastern was able to deliver through their lines, was it not?

A. Yes.

Q. Now, what was your peak day during that period?

[fol. 9462] A. The coincidental maximum day on the Panhandle system occurred on January 7, and it amounted to very close to 254 million cubic feet.

Q. And how much passed the Dana Measuring Station?

A. I will correct that. The figure is 178,868 M.c.f. or 179 million cubic feet approximately.

Q. And how much did the Detroit Company add to that for customer distribution?

A. The Detroit Company added approximately 28 million cubic feet.

Q. And how much on January 8, when your deliveries remained at approximately the same amount, or to be exact 178,324 M.c.f.?

A. Approximately 26 million cubic feet.

[fol. 9468] Mr. Littman: I have a matter that we might dispose of at this time.

Trial Examiner: Very well.

Mr. Littman: It will not take very long, but we might utilize the remaining few minutes.

I have caused to be copied the cross examination of Mr. Joe D. Creveling, president of the Panhandle Eastern Pipe Line [Company,] which testimony was given before the Securities and Exchange Commission on November 29, 1941, in the matter of Columbia Gas and Electric Corporation, et al, File No. 59-33, etc.

[fol. 9469] I would like to have this copy of Mr. Creveling's testimony marked for identification with the next exhibit number.

(The document referred to was marked for identification as Exhibit No. 218.)

(The document referred to was received in evidence as Exhibit No. 218.)

Mr. Littman: As I have stated, Exhibit No. 218 is the copy of Mr. Creveling's cross examination in the proceedings which I just named.

There are, however, some statements that Mr. Creveling made on direct examination, that I think ought to be made a part of this record.

They are not lengthy; and I thought perhaps the most [fol. 9470] propitious way of handling the matter would be to merely read into the record at this point the portions of his direct testimony from the same proceeding, which I deem relevant to the issues at hand in the instance proceeding.

I shall read from Page 277 of the official report of the proceedings before the Securities and Exchange Commission, in the matter of Columbia Gas and Electric Corporation, Docket No. 59-33.

Trial Examiner: That is not contained in your Exhibit 218?

Mr. Littman: That is correct. Page 277:

"Question: Mr. Creveling, I take it that Panhandle Eastern considers that it is most desirable for Panhandle Eastern to acquire Michigan Gas Transmission Corporation?

"Answer: I think that is quite apparent.

"Question: Can you give a brief statement of some of the reasons for that and some of the advantages that would flow from the acquisition of this property by Panhandle Eastern?

"Answer: I think I can give some of them.

"In the first place, from the standpoint of operations and especially as the operations of the various corporations approach 100 percent of the capacity, it is quite apparent that unified management would be more efficient than a divided management.

[fol. 9471] "As an example of that, the item of pressure control is quite important. We, Panhandle Eastern Pipe Line Company, deliver gas to Michigan Gas at a point near the Indiana-Illinois State Line known as Dana. Michigan Gas Transmission Corporation takes that gas and delivers it primarily to our customers in Indiana, Ohio, and Michigan.

"We feel that we have a direct responsibility to these customers to render them as nearly as is humanly possible and economically possible, uninterrupted service in accordance with their varying demands.

"To fully be able to fulfill that obligation, we think it is a handicap to have a third party intervening between ourselves and our customers. We also find out that the customer prefers, in most instances, to deal directly with the owner of the commodity he is purchasing, rather than to deal through an intermediary.

"Question: In other words, the acquisition of Michigan Gas by Panhandle Eastern would afford direct contact between Panhandle Eastern and its customers, present and future, in one of its largest sales territories?

"Answer: That is correct.

"Question: Would there be any financial economies in operation, unified operation?

"Answer: There would be some economies that undoubtedly would result in the consolidation of the two corporations.

[fol. 9472] "There would be only one management and a reduction of general expense. There would be some reduction undoubtedly in the operating expense.

"As an example of that, our contract calls for delivery pressure when demanded at Dana of 225 pounds per square inch. A more economical operation of the two lines as a single project would indicate a pressure at Dana of probably nearer 300 pounds in order to most economically utilize the compressor station installation of the two corporations.

"Also, we find every time we approach either investment or commercial bankers, the proposition of this not being a single unit from the source of supply to our principal markets is brought up and is a hurdle that we have to overcome and, undoubtedly, the tendency of this hurdle is to weaken our credit rather than to strengthen it."

* * * * * * * * *

Mr. Littman: It is stipulated by and between counsel that the word "uncommon" appearing in the second line on page 516 of Exhibit No. 218 should be corrected to read "a common."

* * * * * * * * *

[fol. 9476] Charles W. Smith a witness called by and on behalf of the Commission, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Littman:

Q. Will you state your name and address?

A. Charles W. Smith, 1810 Park Avenue, Halethorpe, Maryland.

Q. What is your present position, and how long have you held it, Mr. Smith?

A. I am chief of Bureau of Accounts, Finance, and Rates of the Federal Power Commission, which position, subject to a few changes in duties, I have held since July 1, 1936.

Q. Will you please describe briefly your education and experience?

A. I have a B. S. Degree in Finance and Business Administration, and also an L. L. B. Degree.

I am a Certified Public Accountant of North Carolina and Maryland, the first having been obtained about twenty years ago.

[fol. 9477] I am a past president of the Maryland Association of Certified Public Accountants and a member of the American Institute of Accountants, the American Accounting Association, American Economic Association, the American Bar Association, and an honorary member of Delta Sigma Pi, an international accounting fraternity, the Beta Alpha Psi, a national accounting fraternity.

I am also a member of the Committee on Statistics and Accounts and the Committee on Depreciation of the National Association of Railroad and Utilities Commissioners, and a member of the Special Committee to report on the effect of national defense laws and regulations on public utilities of the public utility section of the American Bar Association.

I have been admitted to the Bars of the Court of Appeals of Maryland and the Supreme Court of the United States.

Q. How long, by the way, have you been a member of the two committees of the National Association of Railroad and Utilities Commissioners?

A. I was a member of the Committee on Statistics and Accounting back in 1933 or 1934.

In 1936 I resigned my membership because I then became associated with the Federal Power Commission and one of my assistants, the chief accountant of the Commission, was also a member of the committee, and I didn't [fol. 9478] think the two of us should represent the same agency.

I again became a member of the committee in 1937 or '38. I have been a member of the Depreciation Committee for about three years.

For nine years I was an auditor in the Income Tax Unit of the United States Treasury Department, and in this capacity I audited the income tax returns and books and records of practically every type of business corporation, including public utilities.

On June 1, 1929, as the result of obtaining the highest mark in a competitive examination, I became the chief auditor of the Public Service Commission of Maryland, remaining in that position for seven years. I joined the staff of the Power Commission, as I have indicated on July 1, 1936.

For ten years I taught accounting in evening schools in Baltimore, including eight years at Johns Hopkins, where I gave the course in accounting systems, and for two years the course in cost accounting. These courses were for both day and evening students.

While with the Maryland Commission, I did a good deal of work as consultant in accounting, taxation, and finance in my spare time.

On one occasion, I obtained leave of absence to do some work of a consulting nature for the Tennessee Valley Authority, and on two other occasions I was granted leave [fol. 9470] to act as consulting accountant to the Federal Power Commission.

On the latter two occasions I was retained by the Power Commission to supervise the drafting of the uniform system of accounts which the Commission later prescribed for public utilities and licensees.

I have written several articles on accounting and economic subjects, including a text on accounting systems for my classes at Johns Hopkins.

I understand that the latter text is still being used. I have delivered a great many lectures, more than 50, on accounting, financial, and economic subjects, including two radio addresses.

I have testified in more than 35 public utility proceedings of one kind or another. While in the employ of the Public Service Commission of Maryland, I had charge of all accounting, auditing, financial and certain rate matters which were under the jurisdiction of that body. This included the making of the usual accounting investigation for all regulatory purposes, all studies relating to the issuance of securities, financial structure, rate of return, and so forth.

I also testified in proceedings before the Maryland Commission as to depreciation matters.

In my present position, I have charge of four divisions [fol. 9480] of the Federal Power Commission, namely, the Division of Accounts, the Division of Finance and Statistics, the Division of Rates and Research, and the Division of Original Cost.

Q. Mr. Smith, when I hereafter use the term "depreciation" in my questions, I include therein also depletion and amortization.

Mr. Smith, have you had any special experience in the field of depreciation? A. Yes, I have.

Q. Will you describe that experience briefly?

A. I have been actively dealing with depreciation matters since 1920.

When I was in the Income Tax Unit of the Internal Revenue Bureau, I necessarily passed upon depreciation claims in numerous, probably hundreds, of cases. In fact, as I look back upon it, it seems that almost every large case involved depreciation in one manner or another.

When I was in the employ of the Maryland Commission, as I just mentioned, one of my duties was to pass upon matters of depreciation expense and accrued depreciation.

Since joining the staff of the Federal Power Commission, I have taken an active part in the functions of the Commission as relating to depreciation.

All staff matters pertaining to depreciation in rate cases [fol. 9481] are handled by the Bureau of which I am the chief. Here again depreciation is involved in almost every rate case.

I have testified in three or four cases before the Commission on the subject of depreciation. Thus, since 1920, I had been constantly applying depreciation principles, I have been determining, service lives, depreciation rates, depreciation expense, and accrued depreciation.

In addition, I have been a close student of public utility depreciation matters and have taken a very active part in the work of the Committee on Depreciation of the National Association of Railroad and Utilities Commissioners.

Q. Mr. Smith, what do you mean by the word "depreciation"?

A. Depreciation signifies the expiration or consumption, in whole or in part, of the service life, that is, the economic life or the economic utility of depreciable property, resulting from the action of one or more of the various forces which operate to bring about the retirement of such property from service.

Among the forces which so operate are wear and tear, decay, action of the elements, inadequacy, obsolescence, public requirements, and the exhaustion of natural resources. Thus depreciation is not wear and tear, inadequacy, or obsolescence. These are causes of retirement.

[fol. 9482] Depreciation is the using up of the economic life of an asset, of a plant item.

Plant items are considered merely as stored up services; the automobile as transportation miles; the gas well as so much stored up gas; the pipe line as so much stored up transportation units of natural gas. As these stored up services are utilized, depreciation occurs.

Q. Mr. Smith, are there two phases to the depreciation problem?

A. Yes. One phase relates to depreciation expense, and the other to accrued depreciation, meaning depreciation in the properties as of the date of the inqury.

Q. Will you explain the difference between these two phases?

A. I have indicated that depreciation expense occurs as the economic life or the economic utility of plant assets used up.

The cost of plant assets is incurred in advance of use. As the economic life of the assets is consumed, a part of the cost of the plant must be charged as an expense.

Thus the cost of leases and wells is incurred in advance of production. Such costs are recorded as a part of the cost of plant.

As gas is produced, depreciation occurs and a part of the capitalized cost should be charged as depreciation ex- [fol. 9483] pense—the word "depreciation" being used in the broad sense, as defined by you, Mr. Littman.

In the early days of accounting, it was the practice to reduce the plant cost by the amount charged as depreciation expense. Thus, if a pipe line had a life of, say, 20 years and each year one-twentieth of the cost of the line was charged as an expense of doing business, the plant item, namely, the cost of the pipe line would be correspondingly reduced.

For the purpose of the mechanics of accounting and for other purposes, such as the giving of more information, the amounts which formerly were credited to the plant accounts, that is, the amounts which reduced the plant accounts, were set up in a separate account known as the depreciation reserve.

The depreciation reserve, therefore, is complementary to the plant accounts. It relates solely thereto. It shows the amount of depreciation which has been recorded in the books relating to the assets still in use.

The reserve, therefore, should measure the accrued depreciation in the properties.

In industrial accounting, it is the practice to deduct the depreciation reserve from the plant cost in order to arrive at the net cost of the plant.

In other words, it is just as accurate today to reduce [fol. 9484] plant costs by the amount of the depreciation which is recorded as an expense as to set the amounts up in the reserve. The latter device does not change the substance in any way at all, but merely is a better arrangement.

A properly computed depreciation reserve, in my opinion, is the best measure of the accrued depreciation in the properties.

Q. Mr. Smith, what is annual depreciation?

A. Annual depreciation is the amount of depreciation occurring in any given year. As I have indicated, it is measured by the estimated cost of the economic life of the plant which is consumed in the particular year.

Q. Is annual depreciation a precise determination or is it an estimate?

A. It is necessarily an estimate because it expresses the proportion of the total economic life deemed to have been used up in a given year.

To determine the proportion used up, it is necessary to know the total life. Naturally, the life of property, as the life of human beings, is necessarily an estimate.

Q. Mr. Smith, have you given consideration to the making of a recommendation to the Commission as to what should be allowed as the depreciation expense of the companies involved in the instant proceeding for the purpose of determining whether their rates are just and reasonable, [fol. 9485] and, if not, the degree of unreasonableness?

A. I have.

Q. What is that recommendation?

A. It is my recommendation that the depreciation expense which the companies have recorded in their books for the last several years, including the year 1941, be accepted by the Commission as a reasonable estimate of the depreciation expense for each of the respective years.

Q. Now, why do you make this recommendation?

A. I have reviewed the minutes of the Board of Directors of the Panhandle Eastern Pipe Line Company for several years which deal with this subject, and those minutes indicate that the company's officers have made a conscientious attempt to determine the proper depreciation expense.

I have likewise read the testimony of Mr. Watkins and have reviewed certain of the exhibits. These also lead me to believe that a serious and conscientious effort has been made by the company to determine the annual depreciation expense.

Discussions with my staff and a knowledge of the natural gas busines lead me to the conclusion that the amounts which the companies have set up in their books for depreciation expense are within the realm of reasonable amounts. They are slightly on the high side, but I believe they are reasonable, on the whole.

[fol. 9486]. Inasmuch as the Company has made a conscientious effort to determine the particular item of expense and inasmuch as I believe it has obtained an answer within the realm of reasonableness, an answer which it has reported to the stockholders, to financial publications, to the Federal Power Commission, and other interested parties, it is my recommendation that the amounts shown by the company's books and records be accepted as reasonable for the purposes of this proceeding.

Q. Mr. Smith, have you given any consideration to a recommendation as to accrued depreciation to be deducted in arriving at the rate base?

. . . . . .

A. I recommend that the amounts appearing in the depreciation reserves of the companies be considered by the Commission as reasonable estimates of accrued depreciation in the properties.

Q. Why do you make that recommendation, Mr. Smith?

A. I have already indicated that the depreciation reserves are merely complements to the plant accounts, deductions therefrom. They reflect the amounts which have been charged off by the companies as expenses for depreciation for the properties still in use.

The companies have considered such amounts as proper [fol. 9487] expenses and have, therefore, considered the amounts in the reserves as accrued depreciation.

Inasmuch as the reserves reflect the efforts of the companies to arrive at a reasonable figure for the cost of the economic life used up and inasmuch as that figure appears to me to be within the realm of reasonableness, I recommend that it be employed for the purpose of determining accrued depreciation.

Q. What do you mean by accrued depreciation?

A. By accrued depreciation I mean that part of the economic life of plant assets which has been used up to the date of inquiry. The amount which is stated in dollars representing the capital outlay which has expired.

Q. Then you suggest that both for expense purposes and for the purpose of determining the depreciation in the rate base, the company's recorded figures be accepted?

A. I do.

Q. Does this harmonize and make consistent the allowance for depreciation and deduction for accrued depreciation in the rate base? A. Yes, obviously.

Q. Mr. Smith, do you believe that it is sound regulatory practice to require depreciation expense and accrued depreciation, the two phases of the depreciation problem concerning which you spoke, to be treated consistently?

[fol. 9488] A. Yes.

Q. Why?

A. I have already indicated that these are but two phases of the same phenomenon. It is illogical to say that the consumption of economic life of plant is going on at a certain rate for the purpose of determining annual expense and then to deny that consumption is going on at that specified rate in determining the amount of property which has been consumed at the end of a given period, such as a year.

I believe it must be obvious that, if amounts charged to annual expense represents a reasonably accurate determination on a cost basis of the amount of economic life or utility of assets consumed in a given period, the accumulated amounts in the reserve must represent the accumulated consumption of such economic life or utility.

In other words, only actual expense should be charged to the operations of a given year. There is no valid reason to inflate those expenses.

Depreciation is a normal item of expense. If the expense is valid as measuring the cost of the economic life which has been consumed in any given period, the accumulations of these expense charges in an account complementary to the plant accounts, called the depreciation reserve account, must just as validly represent the cost of

[fol. 9489] the economic life or the utility which has been consumed to date.

I believe it fundamental to the sound regulation of public utilities that depreciation expense and accrued depreciation in the rate base be harmonized in the manner in which I have indicated.

Q. Mr. Smith, for the purpose of the record, will you indicate whether you believe, as a general principle, that depreciation expense and depreciation reserves, as shown by the books of the company, should be used in rate making?

A. Where the expense is clearly not within the realm of unreasonableness, where it is inadequate or excessive, and where the depreciation reserve is greatly inadequate or excessive, corrections, I believe, will probably have to be made. Under such circumstances, certainly it is perfectly proper to restate depreciation expense at the proper rate and to restate the reserve so that it would show an amount which would have been recorded therein, had the proper rates been used. In other words, there are cases where the amounts recorded for depreciation are unreasonable. In such circumstances, I believe it is appropriate to recompute depreciation expense at a reasonable amount and show accrued depreciation at the "reserve requirement," namely, the proper reserve as established [fol. 9490] by the revised rates.

Q. Mr. Smith, do you believe it sound economics of regulation for the Commission to allow depreciation expense on the consumption of economic life principle and in computing the rate base to deduct not accrued depreciation but a smaller amount such as that determined by what is known as the "observed depreciation" method?

A. No. Such inconsistency is a violation of sound economics of regulation and violates sound logic as well. It constitutes both an affirmance and denial of the service life basis of determining depreciation, and, therefore, is illogical and inconsistent.

Q. Does observed depreciation as usually made constitute proper accrued depreciation, in your opinion?

A. No. Observed depreciation is not based upon the consumption of economic life of plant, and is not, there-

fore, a proper [meteod] of determining accrued depreciation.

As I have indicated, plant assets are purchased for the services they will render. As this service is rendered, revenues are obtained. A cost of such revenues is represented by the cost of the original service capacity which is used up in the period the revenues are derived.

The observed depreciation process is not based upon the using up of the service or economic life but, rather, upon the physical condition of the properties and, there [fol. 9491] fore, cannot, except by accident, be a proper reflection of accrued depreciation.

. . . . . .

Trial Examiner: I show you, Mr. Smith, the balance sheet of the Panhandle Eastern Pipe Line Company marked for identification in this proceeding as Exhibit 172, and will ask you to state what you would include, from that balance sheet, designating the lines or items by name, in what you have termed depreciation or depreciation reserve.

Mr. Culton: Mr. Examiner, may I suggest that you just use the Panhandle Eastern for the purpose of the record? That includes all the subsidiary companies, I believe, 172.

Trial Examiner: Do I understand, then, Mr. Culton, that in this proposed Exhibit 172, you have included the figures which were at one time proposed in Exhibit 88?

Mr. Culton: 48 or 88; I don't remember which.

Trial Examiner: The Michigan Gas Transmission Company balance sheet.

Mr. Culton: That is right.

I just wanted to make that clear, Mr. Examiner, that for the purpose of the record we are talking about the entire group of companies in this exhibit.

Trial Examiner: I was about to ask that question myself.

[fol. 9492] Mr. Littman: It is my understanding, if your Honor please, that Exhibit 172 covers for the full year 1941 Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company.

Mr. Wheat: That is correct.

. . . . . .

Mr. Wheat: Well, there is another exhibit, Mr. Examiner, that has the pro forma including the Michigan Gas Transmission Company. [A]

Mr. Culton: That is right.

Trial Examiner: Very well. We will deal now with Exhibit 172.

. . . . . .

The Witness: Mr. Examiner, I have not studied these exhibits in detail. Could I confer with a member of my staff for a moment before answering the question?

Trial Examiner: Yes. And before that may we have this colloquy read back commencing with my original question? In other words, if there is some revision required to make this question of value, let us have it now. The thought behind the inquiry was, of course, apparent that the balance sheet breaks down the depreciation re- [fol. 9493] serve on the books into some classifications of depletion and amortization and includes several items instead of a single item termed depreciation reserve.

Mr. Culton: 194 was the exhibit number I had reference to, Mr. Examiner.

. . . . . .

The Witness: Referring to page 2 of Exhibit 172, under the heading "Reserves," opposite line 27, I would include as the accrued depreciation: reserve for depreciation of gas plant—that is lines 28 and 29—reserve for amortization and depletion of natural gas land and land rights, lines 30 to 32, and reserve for abandoned leases, line 33.

Trial Examiner: I show you now an exhibit marked for identification as 194 which, I understand from Mr.

Culton, contains the consolidated [statement] since the acquisition by the Panhandle Eastern Pipe Line Company of the securities of the Michigan Gas Transmission Corporation.

I will ask you to make a corresponding comment with reference to this proposed exhibit.

[fol. 9494] The Witness: The items which I would include are shown under the title of "Reserves," on page 2 of Exhibit 194, and they are: reserve for depreciation of gas plant, reserve for amortization and depletion of producing natural gas lands and land rights and reserve for abandoned leases.

Now, there may be some adjustment necessary to these reserves by reason of the fact that I understand this exhibit includes a small amount of distribution property, property, I believe, of the Indiana Gas Distribution Corporation.

The amount applicable to distribution property, of course, would have to be taken out of the reserve figures.

Mr. Wheat: You understand, Mr. Smith, don't you, that those are quite negligible in the total?

The Witness: Yes, I understand they are quite negligible. I am speaking now from principle rather than practical application.

By Mr. Littman:

Q. Mr. Smith, my understanding is correct, is it not, that the reserves to which you have just referred on page 2 of Exhibit 194, cover the reserves of Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company, Michigan Gas Transmission Corporation, and Indiana Gas Distribution Corporation?

Mr. Wheat: That is our understanding, Mr. Littman.

A. That is my understanding.

[fol. 9495] Trial Examiner: Then the items which you have designated by lines and titles are what you would designate as deductible items in arriving at a rate base?

Q. For accrued depreciation? A. Yes, sir.

. . . . . .

Cross Examination

By Mr. Goodman:

Q. Mr. Smith, what is the depreciation basis embodied by the company in: first, the accrued depreciation, and in the annual charges for depreciation?

A. I think the company has made a serious attempt to find the cost of its expired capital outlay.

In other words, I think the company has made a serious attempt to apply the consumption of economic life principle, which I have mentioned in my testimony.

. . . . . .

[fol. 9496] Q. Now, without knowing the individual lives, which, composited, amount to the composite basis, how are you able to state that the composite basis is reasonable?

A. In the natural gas industry, as in the case of all extractive industries, your controlling factor is the life of the natural resource. It is better to be a little conservative in your estimates of the natural resource, in order to arrive at your over-all rates.

For instance, we know that a natural gas pipe line may last 75 or a hundred years. We found in one case 50 years was clearly indicated, and there are some cases, depending upon soil conditions, where the pipe will last many, many years, probably more than a hundred years.

Mr. Littman: You are now speaking of physical life?

The Witness: I am speaking of physical life.

A. (Continuing) But because of the exhaustion of [fol. 9497] the natural resource to which their economic life is tied, you can't possibly use that life without courting disaster. You have got to use the life of the field.

We have made a great many studies of depreciation; a great many studies of over-all rates. We made studies recently of the Canadian River Gas Company, Colorado Interstate Gas Company, and the Colorado-Wyoming Gas Company. We made studies of the Hope Natural Gas Company. We completed studies of the Interstate Natural

Gas Company. We are engaged in making studies of the United Gas Pipe Line Company, the Cities Service Company, and the Lone Star Gas Company.

Such studies are generally under my direction. I can state, from my knowledge in all these studies that the rates which the company has used appear, on the whole, within the realm of reasonableness.

Mr. Wheat: Pardon me just a second, Mr. Goodman. You mean by the last portion of your answer that the things which have been done by the companies which are respondents here in this proceeding appear within the realm of reasonableness?

The Witness: That is correct, yes.

By Mr. Goodman:

Q. Well, I interpret your answer as responding to my question in this wise: That in judging of the composite life [fol. 9498] for the property, you took into consideration life of pipe as long as 75 years. Now, do you mean to answer that? A. I didn't answer that at all.

Q. That is the way your answer seems to read.

A. Well, you misunderstood the answer, Mr. Goodman.

Q. Well, now, let's see if you understood the question. Is it right that you use a composite life?

A. I didn't use any life. I said the company's life is within the realm of reasonableness on a composite basis.

Q. All right.

Now, what life is the company's life?

A. The company, generally speaking, is using a life somewhat more than 33 years on an over-all basis.

Q. And is this an actual life or what you term a life composited out of different accounts?

A. It is a life—they started off originally by a composite method, and then they changed that method because of the predominance of one factor which appeared to be controlling as to most of their properties, namely, the reverable gas.

It is a fundamental principle of depreciation, of course, that where one factor controls, that has to be given sole

weight. So where you have, as we always have, in extractive industries, one factor which predominates, namely [fol. 9499] recoverable gas, that is given major weight.

Instead of figuring individual lives, I went to the group or composite basis, I tried to illustrate to you that we find the physical lives of pipe line to be very, very long, but we are not able to use those lives in a calculation of depreciation, because the economic life is much shorter. That has been true in practically every case we have had so far.

Q. Now, that feature, a discrepancy between a hypothetical physical life and an actual life has nothing whatever to do with compositing, has it?

The Witness: Read the question, please.

(The pending question, as above recorded, was read by the reporter.)

A. Well, you have got to determine the service life in order to make a theoretically correct composite estimate.

By Mr. Goodman:

Q. Well, is the composite, then, an inclusion of a hypothetical physical life along with consideration of an actual life? A. No. No.

Q. All right.

A. But in arriving at your depreciation rates, you are doing this according to the very fine calculations which we make, you must give consideration to the physical life in [fol. 9500] arriving at your over-all life.

If your physical life is shorter than the life of the natural resources, as it is in certain cases of plant, you have got to recognize that shorter life, of course.

* * * * * * * *

[fol. 9507] Q. So that the consideration of life that you gave was something consistent with or comporting with 35 years; is that right?

A. I didn't give any real consideration to life estimates myself. I say again I took the company's result and I put it down as a percent to plant, and I find that that percent, in my opinion, is within the realm of reasonableness, based upon the experience and tests which I have indicated I have made. When you try to transpose that

into a life of a field, I say that transposition would indicate somewhere around 35 or 36 years.

Q. All right.

. . . . . .

Now, will you tell me how your answer that it would [fol. 9508] not be necessary to transpose that into a life harmonizes with your conception that depreciation is the proportion of service life or is based upon the proportion of service life which has expired?

A. *I stated I thought the company had made such* studies as would indicate the proper amount.

It had made a conscientious attempt to determine the reasonable depreciation. I think the estimate is slightly on the high side. The company has made a conscientious attempt, and from tests I have made, it appears reasonable.

Mr. Goodman, if we are going into a comprehensive depreciation study taking about a year, we are going to make a detailed study of each class of property, we are going to arrive at a composite amount, or we might apply rates to individual pieces of property. Instead of around 3 percent; it might come out to 2.85, 2.90, 2.75. Those changes will always be made, and we reserve the right, when we make a detailed study, but I am trying to tell you that I have tested the company's over all results.

I have indicated the tests I have made and I am convinced that they are within the realm of reasonableness.

. . . . . .

[fol. 9510] Q. So that you think it would be fair in this particular case to use an over all life of 35 years?

A. No, I would say it is fair in this case to use the company's estimates. After all, depreciation is an estimate. As to whether an item will last 35, 36, or 37 years involves, to a certain extent, speculation, and you can't indicate the [fol. 9511] life of a piece of property or the life of a natural resource with precision any more than you can guess the life of human beings with precision.

I repeat my statement that the tests we made, which were comprehensive tests, indicate that the over-all rate

is reasonable, and I think the company has done a more conscientious job than most companies in computing their depreciation expense.

Trial Examiner: By the way, Mr. Smith, this is, in practice, essentially a straight line method of depreciation, is it not?

The Witness: Yes, I would say that.

By Mr. Goodman:

Q. All right.

Now, will you tell me, Mr. Smith—we have covered the element of service life. Now, will you tell me what other factor the company has used in ascertaining depreciation so as to reach what you say is a conscientious conclusion?

A. Well, I tested it by the over-all amount, and that was my basis.

Q. Well, will you proceed to state the method that you applied in estimating?

A. Yes. I compared the over-all rates with the over-all rates which we worked out in other cases, and which many other companies are taking.

[fol. 9512] Q. Now, what was the basis of your comparison? A. Over-all amount.

Q. In terms of percentage? A. Yes.

Q. What percentage? A. Percentage to plant.

Q. I beg pardon? A. Percentage to plant.

Q. Well, what percentage did you use?

A. The company is using about 3 percent.

I didn't use any percentage, I tested the company's amount.

Q. Well, you tested the company's amount of 3 percent; is that right? A. Yes, sir.

Q. And you concluded that 3 percent was reasonable; is that right? A. Yes, sir, that is right.

Q. Now, what do you find about 3 percent which endows it with the attribute of conscientiousness?

A. Well, you are talking about two different matters now.

I find nothing in the three percent itself which endows it with anything. I have studied the minutes of the com-

pany, and I have talked to my staff, too, who investigated the company's books and documents. I have studied [fol. 9513] the testimony that certain men of the company's have given before the S. E. C., and I will say to you the company has made a conscientious attempt to solve this problem.

Q. What are the basic elements of this conscientious attempt?

A. The Board of Directors discussed the matter and the Board of Directors had an independent engineer give his opinion, and they also had other men—geologists—give estimates of reserves.

They have taken these things into consideration in trying to arrive at the proper amount.

Now, that is far better than that of a good many companies which have some one individual just call an amount which they put down often—too often, as a matter of fact,—an amount which is related to the profits and not to the properties.

I said this company got off to a good start and did a good job.

. . . . . .

[fol. 9514] Q. How do you know that it is conscientious?

A. I know it is conscientious because I interpret the record as showing that it was a conscientious attempt and because the results the company arrived at looked very reasonable to me.

And I say to you: compared to many other companies, the company is far ahead of its time.

Q. Well, can you show me any principles which indicate conscientiousness?

A. Well, I think I have already mentioned them.

Q. Well, you mentioned the appointment of an engineer.

A. The company started off in the first instance with a determination of service lives. Then it employed an engineer and employed geologists and had a good deal of information as to what was the probable amount of depreciation, depreciation being an estimate, and the amount it arrived at is a very reasonable figure.

Probably the company has been a little conservative in taking too much, slightly on the high side, not much, but a [fol. 9515] little conservative.

It is not a bad thing in the extractive industry, but I say to you that the record I have studied indicates that the company has done a conscientious job. I have enumerated, I believe, Mr. Goodman, the elements that—

Q. (Interposing) Now, let's see. In the first place, you have not given me any service life as a basis for this conscientious job, though you started your testimony by saying that depreciation and its calculation was always referable to a service life.

[fol. 9516] I am not so sure I started my testimony out in the manner you indicated.

I said that depreciation was the consumption of economic life, and certainly the company has made an attempt to determine that and has so recorded amounts in its books and has published the amounts in its statements.

Q. All right.

Mr. Smith, what economic life, then, did the company use?

A. The company considered that the investment in its properties would come to an end and that it would have to amortize that investment, if amortized at all, during the life of the property.

It started out, first, by making fine calculations as to each class of property. They later changed to an over-all basis, which I said approximates 33 years.

A. Generally speaking the company determined at the present time that somewhat more than a 33-year life is a [fol. 9517] reasonable life of the property.

Mr. Littman: Over-all life?

The Witness: Over-all from the beginning.

By Mr. Goodman:

Q. Is that the reason why you consider it a conscientious job?

A. No. I consider it a conscientious job because of the evidence that the company tried to find the right figure. I don't think for a moment in arriving at that evidence the company has to make the fine calculations as to each item of property every year. Theoretically, that has to be done, but you have got to—practically, it can't be done.

Q. I didn't ask you that.

A. Your question clearly implies that, Mr. Goodman.

Q. I ask you this: Do you consider that the over-all life of somewhat in excess of 33 years, which you say was used and applied by the company, stamps this, the determination of depreciation, as a conscientious job?

A. Well, the result, I think, indicates that it is reasonable. A company could get a result by being conscientious or not being conscientious, but I think in this case it has been conscientious in arriving at that result.

. . . . . .

[fol. 9533] The important thing to do in this depreciation matter is to try and fix depreciation expense as accurately as you can.

If you fix too low a rate you are simply bringing disaster upon the company, and if you bring disaster upon the company you bring disaster upon yourself. You can't fix too low a rate.

The next important thing is that the amount you allow as depreciation expense be deducted in computing the rate base. Those are the first two fundamental principles of public utility depreciation or regulatory depreciation.

Q. Well, you wouldn't think that there would be much harm, then, in fixing too high a rate of depreciation?

A. I would say this: rather than be too low I would rather be too high in the annual allowance, because I agree with the Supreme Court's statement that the detriment to the public, in causing a company to go under, will far outweigh any temporary lowering of rates.

In other words, protection of the company is a protection of the public interest, and that protection requires that depreciation expense be adequate.

. . . . . .

[fol. 9538] By Mr. Goodman:

Q. Now, Mr. Smith, will you come down and tell me when, in reference to the hypothetical question that I asked you, you would recommend that the price of service be changed?

A. I think—of course, we are now getting into the realm of theory in the change of rates—I think that if at all possible, we should fix rates for a period of at least two years, a period of five years being desirable, if you can [fol. 9539] possibly do it. In some cases, you cannot do it very well but a period of two years, I would say, should be the minimum unless you are able to put in a sliding scale arrangement such as we have in the District of Columbia where rates are subject to change annually but, ignoring for the moment the sliding scale arrangement, I think you ought to try to fix the rates for a couple of years and that means you have got to take into consideration the plant additions in the couple of years, the increase in depreciation reserve, changes in the economic conditions and matters of that kind.

. . . . . .

[fol. 9567] Trial Examiner: Mr. Smith, if you have some summary to add to this long examination, will you please do so?

[fol. 9568] The Witness: Mr. Examiner, I believe I have indicated this morning that the subject of depreciation is a very broad subject. We have not reached the development in the science of depreciation where we can say one method and only one method is right. We have reached the point where we recognize merit in several methods.

I would like my testimony to stand that I have examined the Company's method and the Company's amounts and, based upon my experience and the tests which I have made, I think they are reasonable and I think the depreciation expense they have recorded on their books and the depreciation reserves they have set up should be used as the

proper expense in this proceeding and as the accrued depreciation, respectively.

* * * * * * * *

[fol. 9579] EDWARD L. DUNN a witness called by and on behalf of the Commission, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Littman:

Q. Will you state your name and address?

A. Edward L. Dunn, 504 Bashford Lane, Alexandria, Virginia.

Q. What is your present position and how long have you held it?

A. I am an accountant with the Federal Power Commission, entitled chief examiner of accounts. I have been with the Power Commission since 1934, except for a short period of time.

Q. Will you describe briefly your education and experience?

A. Upon graduation from high school in 1924, I entered Missouri University, where I took the first year in Engi-
[fol. 9580] neering School. I attended Penn State for the second and third years, taking mainly engineering subjects.

In 1929 I was employed by Laciede Christy Clay Products Company, St. Louis, Missouri, as an assistant to the industrial engineer. I was transferred to the general offices to learn cost accounting, became interested in accounting, and completed the course in Higher Accountancy of LaSalle Extension University. I also later took a graduate course in Accounting and Finance at Columbia University, New York City.

When it became apparent that the Federal Power Commission would have considerable accounting work relating to natural gas companies, I took a course in natural gas prepared by the University of Kansas, of which I have completed about two-thirds.

My experience has been practically entirely in bookkeeping, auditing, and accounting.

The three years I have spent in the accounting department of Laclede-Christy involved assignments to every bookkeeping and accounting job in the office below the grade of head bookkeeper.

In 1934 I entered the employ of the Federal Power Commission assigned to the Accounting Division. My duties related to accounting work incident to the determination of actual legitimate cost of licensed hydroelectric plants. [fol. 9572] most of the time being engaged in field examinations of the accounts of public utility corporations and assisting in preparing accounting reports thereon.

In 1936 I accepted a position in the comptroller's office, National Lead Company, New York City. My assignments included the accounting work in revising and restating the depreciation expense and depreciation reserves of all the branches and affiliated companies. I also made internal audits, several cost studies used as the basis of large contracts, and certain proceedings before Government bureaus.

I returned to the Federal Power Commission in 1937. Since then I have made many accounting investigations, several of them being rate cases, both electric and natural gas.

In each case I devoted particular attention to the depreciation and depletion phase of the examination. The depreciation report, on one electric case, where I worked under the direct supervision of Mr. C. W. Smith, Chief of the Bureau of Accounts, Finance and Rates, included a comparison and study of depreciation methods and our report has been widely circulated among those interested in the subject.

My natural gas rate case assignments have been an examination and report on original cost of plant accounts, depreciation and depletion of New York State Natural Gas Corporation and Examiner in Charge of the accounting examination of Canadian River Gas Company, Colorado Interstate Gas Company and Colorado Wyoming Gas Com- [fol. 9573] pany and Hope Natural Gas Company.

Some of the electric utilities where I made rate investigations were Philadelphia Electric Company, Safe-

Harbor Water Power Corporation, and Interstate Power Company.

Q. Have you visited the office of Panhandle Eastern Pipe Line Company in connection with the present rate case?

A. I have on two occasions, the first visit covering a period of ten days spent in Kansas City, Missouri, during the last part of September, 1941, and the second trip covering a period of ten days in Kansas City and Chicago during March, 1942. I also spent several days in the offices of Michigan Gas Transmission Corporation in Detroit, Michigan, during February, 1942.

Q. Did you make an examination of the books and records of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Company?

A. I investigated several matters, quite a few matters, but I did not make an audit of the books, even in a limited manner. What I was particularly interested in was verifying the accounting policies of the companies, the manner in which the records were kept, the adequacy of the books and records, the principles followed, the system of accounts followed.

In other words, I wanted to know if the records accurate-
[fol. 9574] ly reflect the cost of plant and the cost of operations and if the detailed information was readily ascertainable from the books and records.

Q. What, in general, are your conclusions with respect to the accounting principles followed and the adequacy of the books and records of these companies?

A. The code of accounts followed by both companies prior to January 1, 1940, is substantially the same—

Q. (Interposing) May I interrupt there? You just referred to both companies. Which companies are you now speaking of?

A. Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

Q. And when you used the term Panhandle Eastern Pipe Line Company, you [include] its wholly-owned subsidiary, Illinois Natural Gas Company, do you not?

A. That is correct.

Q. Proceed, please.

A. I just said the code of accounts followed by these companies—

. . . . . .

A. (Continuing) —was substantially the same in so far as accounting principles are concerned as the present F. P. C. uniform system of accounts. The books and records of the company are complete and the cost of plant and [fol. 9573] cost of operations may be readily ascertained from the accounts.

With the exception of the item of gas sales and purchase contracts, possibly the depletion and amortization of gas producing properties west of Liberal, and the original cost of certain properties known as local area operations, I do not believe that there are any substantial adjustments necessary in the accounts of the company.

Q. Do you propose an adjustment relating to "Gas Sales and Purchase Contracts" shown on page 2 of Exhibit 52 and at page 2 of Exhibit 176, line 40, and "Reserve for Amortization of Gas Sales and Purchase Contracts" shown in Exhibit 52 line 42?

A. Yes, and it follows from the adjustment that I propose that the annual amortization of the item appearing in the income statement, Exhibits 49 and 173, on line 15 "Amortization of Other Limited Term Gas Investments" will be adjusted also.

Q. What is your proposed adjustment of the item "Gas Sales and Purchase Contracts" and will you please state, as you describe your proposed adjustment, the necessary references to the exhibits which show this item?

A. Well, I am now referring to Exhibit 176, lines 40 and 42. The necessary adjustment—

Q. (Interposing) That is on page 2, isn't it?

[fol. 9576] A. Page 2.

. . . . . .

A. The necessary adjustment is to eliminate the net amount of $1,172,114.80 from the gas plant accounts as at December 31, 1941. This net amount is the difference between $2,930,286.40 shown in line 40 column M, and the $1,758,171.60 shown on line 42, column M. Also it is necessary to eliminate the annual amortization appearing in

line 15, column M of Exhibit 173 in the amount of $293,028.60.

Q. Now, the reference to Line 15, column M of Exhibit 173, was to the second page? A. No.

Q. Was to the first page of that exhibit, was it not?

A. That is correct.

. . . . . .

By Mr. Littman:

Q. Why, in your opinion, is it necessary to eliminate [fol. 9577] these amounts?

A. The remaining unamortized amount of $1,172,114.80 contains no element of actual cost. It represents a write-up. The contracts are recorded on the books merely as a valuation and do not purport to represent anything more than a valuation. The basis for the valuation is clearly disclosed in the entry recording on the books of Panhandle Eastern the original amount of 2,398,402.49—

Q. (Interposing) Dollars?

A. Dollars. (Continuing) —for purchase and sales contracts.

This entry is designated voucher J2, dated September, 1930.

I have before me a photostat of the voucher furnished by the company. It shows that the entry was made to record certain items acquired from Missouri-Kansas Pipe Line Company as per a contract dated September 17, 1930, and a supplemental agreement dated October 23, 1930; an amount of $4,816,350.17 was charged to Fixed Capital and the entry was approved by the Board of Directors of Panhandle Eastern at a meeting held February 3, 1931, as follows—

Q. (Interposing) Before you read from the minutes of that meeting, I would like to have you state the names of the parties to the agreement of September 17, 1930, to which you made reference a moment ago.

[fol. 9578] A. The parties to that agreement were the National City Company, Missouri-Kansas Pipe Line Company, and Columbia Gas and Oil Corporation.

Q. Oil and Gasoline.

A. Columbia Oil and Gasoline Corporation.

Q. Do you have before you a copy of pertinent excerpts from the minutes of the meeting of the Board of Directors of Panhandle Eastern held February 3, 1941 relating to these gas sales and purchase contracts?

A. Yes, I have an excerpt from the minutes furnished by the company and also the copy of the minutes which was attached to and made a part of the voucher recording this item.

. . . . . .

Mr. Littman: That should be February 3, 1931. I am sorry, Mr. Wheat.

By Mr. Littman:

Q. Had you completed your answer to my question?

A. I intended to read the minutes of the Directors relating to this item.

Q. Very well. A. "The Chairman stated"

[fol. 9579] Q. These are in quotes, aren't they?

A. These are quotes.

"The Chairman stated that on October 23, 1930, the Company had acquired from Missouri-Kansas Pipe Line Company, without cost to the Company, certain physical property, gas purchase and sale contracts, stocks of subsidiary companies, supplies, accounts receivable from subsidiary companies, and prepaid accounts, subject to the assumption of accrued taxes and deferred liabilities on the Jacksonville property. He stated that it was desirable for the Board to place a valuation on the property so acquired to guide the Treasurer in setting up the acquisition on the books. He submitted a proposed valuation prepared by the Treasury Department and explained in detail how the valuation was arrived at. Said proposed valuation was as follows:

Property, Plant, and Equipment, $2,197,475.40.

Purchase and Sale Contracts, $2,398,402.19.

Total Property, plant and equipment, $4,595,877.59.

Construction Work in progress, $220,473.12.

Total Fixed Capital, $4,816,350.71."

Q. End quote.

A. End quote. The balance of the tabulation contained in the minutes refers to investments in affiliated companies

and intercompany accounts which I don't feel it is necessary to read at this time.

[fol. 9580] Q. Very well.

Does Exhibit No. 176 show an amount of $13,398,402.19 for the year 1930 in line 40, Column B?

A. That is correct.

Q. Of course, for this item of gas sales and purchase contracts?

A. That is correct; it does. In that year, the totals of gas sales and purchase contracts were recorded in the amount of $13,398,402.49, which is exactly $11,000,000 more than the amount of $2,398,402.19 recorded by voucher J2.

Q. How did that come about and what does the $11,000,000 represent?

A. The amount of $11,000,000 is largely a write-up based on a valuation prepared by Messrs. Brokaw, Dixon Garner & McKee, geologists and petroleum engineers, and approved by the Board of Directors of Panhandle Eastern Pipe Line Company at a meeting held September 3, 1930. The valuation is in substance as follows: I am reading from the minutes of that meeting:

"Based on our examination of the leaseholds for natural gas acreage, survey of the natural gas transmission line now under construction from the Panhandle Area of Texas, Oklahoma, and Kansas to Indiana, survey of the markets of the present non-competitive territory to be served by this line, analysis of the contracts signed and under ne-

[fol. 9581] gotiation for gas and of contracts available, we are of the opinion that such present and available sales contracts are of a present fair market value in excess of $11,000,000."

Q. I note that in 1932 the amount shown in Exhibit 176, page 2, line 40, column D, shrunk from $13,409,544.31 in the previous year to $3,053,391.53. Will you tell us what happened to the $11,000,000?

A. It was removed from the records of the company by resolution of the Board of Directors of Panhandle Eastern adopted at a meeting held March 29, 1932. Of the $11,000,000, the amount of $642,286.30 purports to represent cost and therefore the difference in the amount of $10,357,713.70

was removed by reversing the previous entry which recorded the valuation. The minutes read as follows:

"Reduction in Valuation of Gas Sale and Purchase Contracts.

"The Chairman stated that on September 3, 1930, the Board of Directors of this Company, pursuant to an appraisal by Brokaw, Dixon, Garner & McKee, had determined the value of the gas sales and purchase contracts owned by this Company to be $11,000,000 and that an entry had accordingly been made on the books of account of the Company charging 'Gas Sales and Purchase Contracts' and crediting 'Surplus—Valuation of Gas Contracts' with the sum of $10,357,713.70, being the difference between the [fol. 9582] value so determined and the amount already carried on the books. He recommended that this entry be now reversed, and explained to the Board the reasons for this recommendation, stating that it was approved by the Company's counsel and auditors. After discussion, on motion duly made and seconded, the following preambles and resolutions were unanimously adopted:

"Whereas the Board of Directors of Panhandle Eastern Pipe Line Company, at its meeting held September 3, 1930, pursuant to an appraisal by Brokaw, Dixon, Garner & McKee, adopted a resolution determining the value of the gas sales and purchase contracts owned by this Company to be $11,000,000 and ordered the value of said contracts to be so entered on the books of the Company;

"Whereas pursuant to said resolution an entry was made on the books of the company charging gas sales—"

Q. You mean on the books of accounts of the company.

A. "—— books of accounts of the company charging 'Gas Sales and Purchase Contracts' and crediting 'Surplus—Valuation of Gas Contracts' with the sum of $10,357,713.70; and

"Whereas in the opinion of this Board, it is desirable to reverse said entry in order that the books of account of this company shall be as fully as possible in accord with sound and conservative accounting practice:

[fol. 9583] "Now, Therefore, Be It Resolved that the Treasurer of Panhandle Eastern Pipe Line Company be

and hereby is directed to enter on the books of account of the Company a credit of $10,357,713.70 to the account entitled 'Gas Sales and Purchase Contracts' and a debit in the same amount to the account entitled 'Surplus—Valuation of Gas Contracts'; and

"Resolved that the Treasurer of the said Company be and hereby is directed to investigate and report to this Board his recommendations with respect to the balance remaining in said account 'Gas Sales and Purchase Contracts' after the entry of the credit hereinabove ordered."

Q. Do I correctly understand that the amount of $3,058,391.53, which appears on page 2 of Exhibit 176, Column D, is composed of two distinct items?

A. Yes. The amount of $642,286.30 plus expenses of $12,703.04 incarred in 1931 and 1932, or a total of $654,989.34 and the amount of $2,398,402.19 recorded by voucher J2. In 1936 the balance in the reserve at December 31, 1935, shown in Line 42, Column G, in the amount of $123,105.13 was applied to the asset account resulting in the net amount of $2,930,286.40 shown in Line 40 for the year 1936 and subsequent years. The remaining amount of $2,930,286.40 is being amortized at the rate of 10 percent per year. This 10 percent rate of amortization began in [fol. 9584] 1936 and the gross amount would be fully amortized at the end of 1945.

Q. In other words, as I understand your testimony, the Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company are charging annually to expenses at the present time the sum of $293,028 per year for the purpose of amortizing this item of gas sales and purchase contracts to which you just made reference?

A. That is correct, they are.

Q. Now, referring to the amount of $2,398,402.19, which you stated was a "write up," please state what investigation you have made concerning the item.

A. Since the account was transferred from Mokan—

Q. (Interposing) By "Mokan" you refer to Missouri Kansas Pipe Line Company, do you not?

A. That is correct.

A. (Continuing) —the parent company of Panhandle Eastern, obviously the first step was to determine what Mokan had recorded in its accounts and the cost, if any, to Mokan. Panhandle Eastern did not have the Mokan records, which are, at present, in the offices of a law firm in Chicago. I examined these records and noted that Mokan had recorded an amount of $1,106,250 in the account Gas Sales and Purchase Contracts. The origin of this amount was the opening entry on the books of Mokan and the opening entry was again based on a valuation by Messrs. [fol. 9585] Brokaw, Dixon, Garner, and McKee.

Q. Before going into that valuation, am I correct in understanding that by reason of the transaction involving the transfer of properties from Mokan to Panhandle Eastern, the account denominated "Gas Sales and Purchase Contracts" was increased from $1,106,250; the last balance of the account shown on Mokan's books, to $2,398,402.19, the opening balance shown on Panhandle Eastern's books?

A. That is correct.

Mr. Culton: May I ask a clarifying question there?

Mr. Linman: Yes, sir.

Mr. Culton: Did you find any identification on the records of Mokan from which you could identify the contracts there valued as being the contracts entered on the Panhandle Eastern books?

The Witness: They did not list in their general ledger the details of just what contracts. It just said Gas Purchase contracts required.

Mr. Culton: Then, the answer is that there was no identification of what the contracts were which you found on the Mokan books?

The Witness: Well, for that identification, I relied on the description by Panhandle Eastern in which they said they had valued these contracts acquired from Mokan and Mokan was turning over all gas purchase contracts [fol. 9586] it had to Panhandle Eastern which, with the exception of the Kentucky properties—anything relating to their Kentucky properties.

Mr. Culton: I understand that you did not have any discussion with any of the Panhandle Eastern accountants

indicating that they had any familiarity with what is shown on Mokan's books?

The Witness: I, of course, asked them, but they did not know exactly what was on Mokan's books. They had a fair idea what was on there.

Mr. Culton: That was to see whether or not there was anything in the books theinselves to describe the contracts and show that they were the same contracts. My understanding is that there is nothing in the Mokan books identifying what gas purchase contracts were included in the million dollars; that is correct, isn't it?

The Witness: Well, nothing except that Brokaw, Dixon, Garner, & McKee made a valuation of Mokan's contracts which would necessarily include all contracts.

Mr. Culton: What I meant to ask you: Do you have that valuation?

The Witness: No, I do not.

Mr. Culton: Did you see it?

The Witness: I saw many references made to it in the [fol. 9587] reports by the auditors of Mokan who were required to make several audits for various reasons, some of which were denoted stipulated audits and they always referred to these contracts as a valuation basis made by this—

Mr. Culton: (Interposing) Mr. Dunn, I just have one question and probably I am not making myself clear: I want to know if you found on the Mokan books or on any Brokaw, Dixon, Garner & McKee report which you found, an identification of the gas sales and purchase contracts that were either valued by Dixon—Brokaw, Dixon—or put on the books of Mokan, so that we can say between whom the contracts were or anything of that character.

The Witness: Oh, no individual contracts, just all contracts, but no breakdown as to what—

Mr. Culton: (Interposing) No identification of any character except just all contracts?

The Witness: That is right.

Mr. Culton: That is all. Thank you.

By Mr. Littman:

Q. Well, Panhandle Eastern acquired all of the contracts that Mokan had at the time of the transaction, which you just described, did it not?

A. That is my understanding of it, except possibly some contracts that might relate to what they call their Kentucky properties.

[fol. 9588] By Mr. Littman:

Q. You have just testified that the transaction involving the transfer of properties from Mokan to Panhandle Eastern—that is, by reason of that transaction, the account denominated "Gas Sales and Purchase Contracts" was increased from $1,106,250 to $2,398,402.19?

A. Yes.

Q. Is that right?

A. Those contracts transferred from Mokan to Panhandle Eastern were increased that much.

Q. Now, there alone is a write up of at least $1,292,152.19; is that correct?

A. Yes, plus an amount of $180,000 appearing in Capital Surplus account of Mokan as a credit offset to the recorded value of gas contracts. When Mokan closed the accounts transferred to Panhandle Eastern, it also closed this surplus account, then called "revaluation surplus", thereby reducing the recorded value of gas contracts, and the write up becomes $1,472,152.19.

Q. Did any portion of the $1,106,250, shown on Mokan's books for these gas sales and purchase contracts, represent cost?

[fol. 9589] A. Not more than $1,250 represents valid cost. The balance of $1,105,000 was recorded by the opening entry on Mokan records, Voucher #1, June 1, 1930. This entry purported to record the value of properties acquired from Shippey, Maddin, and Parish Gas Company, a partnership. The partners formed Mokan and transferred the partnership properties and contracts to the corporation. The total of the assets acquired by Mokan were carried on the partnership records at the amount of $413,047.28 and were recorded by Mokan in the amount of $630,000. Thus Mokan entered the amount of $1,735,

000 as fixed capital. The valuation of Gas Sales and Purchase Contracts was 100 percent write-up on Mokan books, and was never claimed to represent other than a write-up by any of the Mokan, Panhandle Eastern, or Columbia interests.

Q. Did you request Panhandle Eastern to furnish all support that they had for the cost or other basis of valuation for this item of "Gas Sales and Purchase Contracts"?

A. Yes, it furnished the vouchers and minutes referred to. There was considerable information concerning the item in their files relating to Federal Income Tax Returns. The company furnished me with copies of the Internal Revenue Agent's investigation and reports on the item and correspondence pertaining thereto. They present a rather complete picture of the gas sales and purchase contracts.

Mr. Littman: Mr. Examiner, I would like to have marked [fol. 9590] for identification with the next exhibit number a document entitled "Panhandle Eastern Pipe Line Company Gas Sales and Purchase Contracts, copy of report by Bureau of Internal Revenue and related correspondence."

Trial Examiner: It will be marked for identification as Exhibit 219.

[fol. 9592] By Mr. Littman:

Q. Referring to the investigation made by the Bureau of Internal Revenue, with respect to this item of gas sales and purchase contracts, what conclusion is reached therein? and please make reference to Exhibit No. 219 in answering.

A. The item was disallowed—the amortization of the item was disallowed—because it was—

Q. (Interposing) By "disallowed," you mean it was claimed for federal income tax purposes—

A. (Interposing) That is right: claimed as an operating expense of the company, as a deduction for tax purposes.

Q. (Continuing) —and the Bureau of Internal Revenue [fol. 9593] disallowed it? A. That is correct.

Mr. Wheat: In order that the record may be perfectly clear, I wonder, Mr. Dunn, whether it wouldn't be advisable for you to state what the claim for deduction was, and what

was the ruling, or tell us where it appears in this voluminous document.

The Witness: I will.

Mr. Wheat: Do you mind, Mr. Littman?

Mr. Littman: Not at all, Mr. Wheat, and I believe, if you will just be patient with us for a moment, we will reach all those points shortly.

Mr. Wheat: All right.

By Mr. Littman:

Q. Now, you were saying that the item was disallowed. Now, do you want to particularize with respect to that?

A. Yes. The amortization of the item was disallowed because it was without recoverable basis.

The report recognizes the principle that, if the transferor had a recoverable basis, then the taxpayer has a taxable basis to be recovered.

The exhibits attached to the report disclose that there was no cost or other taxable basis for the gas sales and purchase contracts.

The explanation appearing in the report is on Page 4 of [fol. 9594] this exhibit.

Q. Perhaps it would be well to read the explanation of items shown on that page.

Mr. Littman: Those explanations are not lengthy, and they might serve here to clarify the transcript.

A. Well, the agent first makes a preliminary statement, which appears on Page 3, wherein he says:

"The principal causes of the change in tax liability are the disallowance of amortization of gas sales and purchase contracts acquired from predecessor company without recoverable basis—"

From there on—

Mr. Wheat (interposing): I wonder if you would mind telling us what that means. You have used that phrase: "without recoverable basis." Just so the record will be clear.

The Witness: Yes. He is referring to the Federal Revenue Act of 1928, which covers depreciation and depletion matters.

In general "recoverable" means a cost basis.

Mr. Wheat: I see.

The Witness: Prior to 1913 the recoverable basis was fair value or cost, whichever was higher, but clearly this falls within the cost section of the law.

[fol. 9595] Mr. Wheat: Thank you.

By Mr. Littman:

Q. You have read the pertinent part of the preliminary statement on Page 3, have you not?

A. That is correct.

Q. All right. Will you go to page 4?

A. There is one other point that I might mention that might be of interest here.

Q. Very well.

A. The agent further states:

"The changes were discussed with Leith V. Watkins, secretary; N. F. Paxton, assistant secretary; and Arthur Anderson & Company, accountants. Form 874 has been executed."

This form 874 referred to is a form of waiver executed by the company, agreeing to these changes, and it is attached as a part of this exhibit.

Q. Will you give us the page on which the said form 874 appears in Exhibit 219?

A. That appears on Page 11. Immediately preceding this form is a letter from Mr. Watkins, explaining why the Board of Directors had agreed to the findings of the Bureau of Internal Revenue.

Q. Now, that letter is dated November 7, 1941, and was addressed to Mr. N. F. Paxton, assistant secretary of Pan-

[fol. 9596] handle Eastern Pipe Line Company; is that correct? A. That is correct.

[fol. 5-30]. By Mr. Littman:

Q. Yes. You were going to go back to the agent's report.

Where do you propose now to read?

A. On Page 4. Explanation of items.

Q. On Exhibit 219? A. That is right.

"In original Revenue Agent's reports for 1936, 1937, 1938 and 1939, an amortization of the book value of gas purchase and sales contracts computed on a composite life of 20 years was allowed in computing the taxable income subject to approval and verification by the Valuation Section of the Internal Revenue Bureau in Washington.

"It has since been disclosed that this book value exceeded the taxable basis recoverable by $2,398,402.19, which is the value at which a portion of the contracts were received from the Missouri Kansas Pipe Line Company in October, 1930.

"The latter company at that time owned all the stock of Panhandle Eastern Pipe Line Company, and as provided in Section 118-(a) (8) of the Revenue Act of 1928 the taxpayer has a taxable basis to be recovered the same as in the hands of the transferor.

"Further investigation discloses that these contracts were acquired for stock from a partnership, Shippey, Madden and Parish Gas Company, which at that time in 1928 [fol. 9660] owned all of the Missouri-Kansas Pipe Line."

Mr. Wheat: All of the what?

Mr. Littman: All the stock.

A. "All of the stock of the Missouri-Kansas Pipe Line. It has been also disclosed that the partnership had no cost in acquiring the contracts and reported no taxable profit on the transfer of the contracts to the corporation for stock. See Exhibits B and B(1).

By Mr. Littman:

Q. Now, have you attached Exhibits B and B(1) to which reference is made in the agent's report? A. Yes.

Q. Where do those appear?

A. Reference should be made to Exhibit A, B, and B-1 in this connection.

I want to continue some more from the agent's statement.

Q. Very well.

A. "Under the circumstance described, the amortization allowed—"

Q. (Interposing) Pardon me. Where are you reading now? A. Page 5.

Q. Very well.

A. (Continuing) "—the amortization allowed on the [fol. 9601] book value set up on the contracts received from the Missouri-Kansas Pipe Line Company in the original report is being eliminated.

"Book value of contracts received from Missouri-Kansas Pipe Line Company on October 23, 1930—$2,398,402.19.

"Amortization allowed at five per cent on above amount in original report eliminated—$119,920.11."

Q. Mr. Dunn, is my understanding correct that, for income tax purposes, the Panhandle Eastern claim for amortization of gas sales and purchase contracts was at the rate of five per cent each year? A. That is correct.

Q. Commencing in 1936?

A. Well, he commenced in 1936, because that was the first taxable year that the agents made an investigation.

Q. Yes; now, for the purposes of this proceeding, and for purposes of Panhandle Eastern's own bookkeeping, they amortize at the rate of ten per cent per year, do they not?

A. They are, beginning in 1936. Prior to that they used a slightly different rate.

Q. And as you have heretofore explained, they are currently amortizing the amount and if amortization were to continue at the rate of ten per cent per year the account would be fully amortized at the end of 1945?

A. That is correct.

[fol. 9602] Q. However, as I understand this, the entire claim by the company, of amortization of this item for income tax purpose was disallowed by the Bureau of Internal Revenue, was it not?

A. Yes; after they made a reexamination they came to the conclusion that there was no recoverable basis, and by that they mean no actual cost pertaining to these gas sales and purchase contracts.

[fol. 9602] By Mr. Littman:

Q. Mr. Dunn, you were about to explain Exhibit "A" of the Internal Revenue Bureau's report which appears at page 6 of Exhibit No. 219. Will you proceed with your explanation?

A. Yes. As shown by this tabulation, the Bureau of Internal Revenue had knowledge of the costs from the income tax returns reported by Missouri-Kansas Pipe Line Company and, near the bottom of the page, the last item, "Value of Gas Purchase and Sales Contracts", the cost, as reported by Missouri-Kansas Pipe Line Company, is shown as $926,250. Opposite that is a column headed, "Taken Up By Panhandle Eastern" shows an amount of $2,398,402.19 or an increase in this item of $1,472,152.19 and that amount checks with the amount that I found by an inspection of Mokan records.

Q. By an inspection of Mokan records and also by the record of Panhandle Eastern? A. That is right.

Q. Will you now turn to page 7 of Exhibit No. 219 and explain that schedule?

A. The Bureau of Internal Revenue had a record of cost to a partnership known as Shippey, Maddin and Parish Gas Company and, under Footnote (a), there is shown as cost to Shippey, Maddin and Parish, the amount of $413,047.28 which is the amount of the property that Shippey, Maddin and Parish had at the time these partnership assets were transferred to Mokan.

[fol. 9604] Q. You mean property as distinguished from gas sales and purchase contracts?

A. All the cost of property. That is all they had in total dollars, $413,047.28. Now, Missouri-Kansas Pipe Line Company recorded that on their books in the amount of $630,000 and, in addition, recorded the amount of $1,[illegible]00,000 as a value for gas purchase and sales contracts. Therefore, clearly, all of the gas purchase and sales contracts represented no cost to the partnership.

Q. Do you have any further references to make to the report of the Bureau of Internal Revenue for the purpose of explanation?

A. Exhibit "B-1", which has been referred to, explains the circumstances under which these properties were sold by Shippey, Maddin and Parish and acquired by Mokan.

Q. That appears on page 8 of Exhibit No. 219, does it not?

A. That is correct. That is all I have to say in explanation of the report by the agent of the Bureau of Internal Revenue.

Q. Now, will you proceed to explain the remaining subject matter in Exhibit No 219, confining your description to such matters that relate to the matter of gas sales and purchase contracts.

[fol. 9605] A. On page 13 is shown a letter dated April 11, 1940, from the Chief Counsel of the Bureau of Internal Revenue and there is a reply thereto dated August 21, 1940, with a list of attachments. This letter is signed by Mr. Leith V. Watkins, Secretary-Controller.

Q. In response to the letter addressed to Panhandle Eastern Pipe Line Company by Mr. J. P. Wenchel, Chief Counsel of the Bureau of Internal Revenue, is that right?

A. That is correct.

In these letters, the Bureau requested detailed information in regard to each gas purchase and gas sale contract. The information was furnished as shown by the details attached to the letter of transmittal dated August 21, 1940. The summary sheet of gas purchase contracts showed that they were acquired from Mokan without cash consideration. The summary sheet is shown on page 17.

I omitted the list of contracts because it involved 18 pages.

Q. Those are the gas purchase contracts?

A. I omitted the entire list of gas purchase contracts. There were numerous contracts.

Page 18 is a summary sheet for gas sale contracts. They are also shown to have been acquired from Mokan without cash consideration. Following this sheet, there are shown the original contracts. I note under the column headed, "Duration of contract", that these original con-
[fol. 9606] tracts have now expired.

I might add that the list of contracts contains all other contracts besides the ones acquired from Mokan.

Q. How are the contracts which were acquired from Mokan designated in the schedule which appears on pages 19 to 22 of Exhibit No. 219?

A. Referring to the summary sheet, page 18, Note (1) refers to the gas sales contracts which were acquired from Mokan and each contract, so acquired, is designated by the numeral (1) on the analysis sheets.

Q. Now, this summary shows the names of the contracting parties, the duration of contract, the territory covered, a brief statement of the terms of contract, the date acquired and from whom and the consideration, does it not?

A. It does.

Q. Do you have any further explanation to make with respect to Exhibit No. 219?

A. There is another letter dated October 3, 1940, from the Chief Counsel of the Bureau of Internal Revenue and the reply thereto dated February 24, 1941. This correspondence shows the history of the acquisition of the properties from Mokan very clearly in the first attachment. This is on pages 26, 27, 28 and 29.

Q. As I understand it, pages 26, 27, 28 and 29 contain Panhandle Eastern's own statement given to the Bureau of [fol. 9607] Internal Revenue respecting its understanding of the gas sales and purchase contracts?

A. That is correct.

Q. I note there is a final attachment on page 30, the last page of Exhibit No. 219. Do you have any comment to make with respect to that?

A. The second attachment, of course, relates to other gas sales and purchase contracts concerning which the company had stated the cost of acquisition of these contracts was not capitalized. The wording caused the Bureau of Internal Revenue to inquire into the matter and this is the answer which shows that Panhandle Eastern, of course, acquired many contracts through the services of its own employees without cost other than such incidental overhead costs and traveling expenses of its own employees. That probably explains why there is no capitalized cost for all other gas purchase contracts with the exception of such contracts that involve a payment for change-over costs and house heating costs. Change-over distribution system and house heating change-over costs, to a certain extent, have been capitalized by Panhandle Eastern.

Q. I take it you merely inserted page 30 for the purpose of making the excerpted portions complete because some

reference had been made in the correspondence which passed between the Bureau of Internal Revenue and Panhandle Eastern?

A. That is the reason it was included.

[fol. 9608] (Exhibit No. 219 was received in evidence.)

Q. Mr. Dunn, during the course of your examination into the records of Panhandle Eastern Pipe Line Company, did you examine and read Minutes books of that company?

A. I did.

Q. Did you cause to be excerpted from those Minutes books portions of the Minutes of that company relating to depreciation? A. I did.

[fol. 9609] Mr. Littman: I ask, Mr. Examiner, that a document entitled "Excerpts from Minutes of Meetings of Board of Directors, Relating to Provisions for Depreciation, Depletion and Amortization", be marked for identification as Exhibit No. 220.

Trial Examiner: It will be so marked.

(The document referred to was marked Exhibit No. 220 for identification.)

Mr. Wheat: Mr. Littman, may I ask a question of the witness? Is the material contained in Exhibit No. 220 for identification, Mr. Dunn, material furnished to you by the Panhandle Eastern Pipe Line Company at your request?

The Witness: It is.

(Exhibit No. 220 was received in evidence.)

Q. Mr. Dunn, have you made an investigation of the records of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company in order to estimate the working capital requirements of those companies?

[fol. 9610] A. Yes, including the working papers used by those companies in preparing the estimate of working capital appearing on transcript pages 455 to 473.

[fol. 9612] Q. Coming back to the subject of working capital, I believe you stated that you had examined also the working papers used by company Witness Sperry in connection with his testimony which appears on pages 455 to 475. That is his direct examination which appears at those pages of the transcript. A. I have.

Q. Have you read Mr. Sperry's definition of working capital which appears on page 455 of the transcript, a copy of which transcript I now hand you?

A. Yes, I have read his explanation of the term "working capital".

Q. Will you please read his definition of working capital and read the question that precedes it?

A. (Reading)

"Q. What do you understand the term 'working capital' to include?

[fol. 9613] "A. I understand that term to include the materials and supplies necessary and requisite for the carrying on of current operations and current repairs and also cash balances sufficient in amount to enable the corporation to pay promptly its current operating expenses as they accrue; to provide for such prepayments as are necessary; to afford provision for reasonably to be expected contingencies and to make possible the continuous efficient operation of the corporation. This necessarily includes the meeting of such emergencies as they occur and the proper maintenance of current credit."

Q. Is that what you understand the term "working capital" to include?

A. It is, with the understanding that the working capital estimates to be used for rate making purposes, that is, the amount to be added to the plant and property accounts, should not be duplicated in the allowable plant accounts or operating expenses.

Q. Will you give us an example of how certain items of working capital might be included in plant account and thereby duplicated?

A. We have an excellent illustration in the case of Panhandle Eastern. The company has followed the accounting practice of including an amount in the cost of construction for gas used in blowing, testing and packing lines. In fact, the company has capitalized operating costs on the main line prior to April 1, 1932, by charging such costs to plant.

accounts and crediting the plant accounts with revenues [fol. 9614] from gas sales. In view of the fact that the original line pack is now included in plant accounts, any additional allowance for such line pack represents a duplication of the item.

Q. How much has the company actually included in its plant accounts for blowing, testing and packing lines?

A. Panhandle Eastern has furnished me a statement of the amount showing that $122,824.36, representing 1,319,414 has been capitalized for gas used in construction. Some of this gas was undoubtedly blown to the air, but there is certainly an adequate amount capitalized to cover any required allowance for line pack.

Mr. Littman: I ask that the document entitled, "Panhandle Eastern Pipe Line Company and Subsidiary Company" consisting of five sheets, each of which contains a tabulation relating to the table on the first page which is called, "Computation of Working Capital Requirement" be marked for identification as Exhibit No. 221.

Trial Examiner: It will be so identified.

(The document referred to was marked Exhibit No. 221 for identification.)

By Mr. Littman:

Q. Will you please explain how certain items of working capital might be provided in the allowance of operating expenses? You have already given one example of how working capital may be provided for in an allowance of [fol. 9615] capital.

A. Yes. I might add that this exhibit which we have just distributed—

Q. (Interposing) You mean Exhibit No. 221?

A. Yes. Exhibit 221 shows the source of the amounts in M.c.f. of gas used in testing lines at the last page and at the footnote of the last preceding page.

Taxes—

Q. (Interposing) Before you go to taxes, is my understanding correct that the figures shown on the last page of Exhibit No. 221, "Gas used in construction of pipe line March 31, 1932, to December 31 1941", were furnished to you by Panhandle Eastern?

A. That is correct, they were, and if you will refer to the preceding page, the gas used in testing lines for the year 1931 is shows and that information—

Q. (Interposing) You mean for the year—

A. (Continuing) 1931. That is on the preceding page.

Q. That is at the bottom of the page, yes.

A. That information was also furnished by the company.

Q. Very well. Now, the next subject which we wish to discuss has to do with your explanation of how certain items of working capital might be provided in the allowance of operating expenses.

A. Taxes offer the best illustration. For instance, [fol. 9616] Federal income taxes are paid in quarterly installments beginning March 15 following the taxable year. Thus, the company has the use of the money collected for tax purposes which are collected from the customers more than a year in advance. A study of the balance sheet account, accrued taxes, for the year 1941, shows that Panhandle Eastern had on hand at all times about $3,000,000 for tax accruals. This summary of the account appears on the fourth page of Exhibit No. 221.

. . . . . .

By Mr. Littman:

Q. Now, you were explaining the item of accrued taxes for the year 1941. Will you explain that tabulation which appears at the top of page 4?

A. There is shown, by months, for 1941—

Q. (Interposing) You mean you show the balance in the tax accrual account as at the beginning of the month and as at the end of the month?

A. Yes. The debits, in general, refer to the amounts when they are paid. The credits refer to the amounts which are concurrently charged to current operating costs and credited to this account. The balance at the end of the month shows that the company has accrued and included in current operating costs about $3,000,000 or more [fol. 9617] at all times for taxes.

Q. Let's examine the extreme right-hand column headed, "Balance End of Month" for each of the months in the year 1941. What was the lowest balance at the end of any month in that year?

A. January, 1941, showed a balance of $2,654,680.71.

Q. And what was the largest amount?

A. The largest amount is in September which showed a balance of $3,807,825.20.

Q. Are those balances sufficient for the purpose of providing sufficient cash working capital for the company, in your opinion?

A. This item of taxes which is currently provided for in operating expenses but not actually paid until many months later is contributed in the monthly collections from the gas consumers and they actually provide cash working capital many times the amount computed by Mr. Sperry.

Q. In other words, assuming that the Commission would and, of course, it shall make a proper and adequate allowance for income taxes, that allowance would be sufficient to take care of necessary cash working capital?

A. The allowance for income taxes and all other taxes, of course, property taxes particularly.

Q. However, you are making a certain allowance, are you, for cash working capital requirements notwithstanding that fact, in your estimate?

[fol. 9618] A. I have computed a separate amount without regard to this fact.

Q. Yes. We will come to that presently.

Let's pass on then to the next item. Have you computed the working capital requirement based on the actual operations of Panhandle Eastern and Illinois Natural Gas Company for the year 1941?

A. I have, as shown on page 1 of Exhibit No. 221.

Q. That page contains the summary of your estimate?

A. That is correct.

Q. Will you please explain the first item shown thereon which is headed, "Total Operation and Maintenance—1941" and there is an overriding heading called, "Cash Working Capital". Please explain that item in its entirety.

A. Operation and maintenance expenses for the year 1941 amount to $3,392,827.05. I have deducted gas purchase cost in the amount of $1,180,918.

[fol. 9619] A. (Continuing) leaving the amount of $21,902. I have allowed 45 days as representing an adequate and liberal period for the company to produce and transport the gas for which revenues are collected.

Q. In other words, you have assumed that at all times 45 days of operating expenses are tied up in the business?

A. That is correct, I have.

Q. Now, why do you exclude purchased gas? That is, why do you exclude purchase gas cost?

A. For the reason that the company pays for gas purchases about the same time of each month when it receives revenue from gas sales and there is no requirement for cash working capital for this item of expense.

Q. Have you a tabulation which shows that?

A. Yes, the company furnished me with the statement appearing on page 2 which shows the due and payment dates on major gas sales contracts listing all the important contracts, date due and the date when they received the money for them. At the bottom of the page is shown a statement, "Due and Payment Dates on Major Gas Purchase Contracts. Due Date, 25th of Month. Payments Usually Made from 19th to 21st."

Q. That latter refers, of course, to gas purchased in the preceding month? A. That is correct.

Q. Who is the largest customer of Panhandle Eastern?

[fol. 9620] A. Michigan Consolidated Gas Corporation is the largest ultimate customer; in volume. I suppose Michigan Gas Transmission Corporation, which transports that gas and receives the payment for Panhandle Eastern.

Q. Now, in that connection, when does Michigan Gas Transmission Corporation receive its payments or, I should say, receive the payments from Michigan Consolidated Gas Company?

A. I understand about the 23d to the 25th of the month.

. . . . . .

Q. Let me ask you this, Mr. Dunn. What is the source of the information shown on page 2 of Exhibit No. 22?

A. That was furnished by the company and it answered all the questions in my mind concerning any possible lag between the receipt of revenues and the payments of gas purchase contract amounts.

[fol. 9621] Q. In other words, there was no lag?

A. No. There is a lot of revenue received as early as the 10th of the month, the 15th of the month and that to me was all I needed to know about when the money was received.

[fol. 9622] By Mr. Littman:

Q. Mr. Dunn, looking at page 1 of Exhibit No. 221, I see that you deducted the cost of gas purchased during the year 1941 in the amount of $1,180,917 from the total operation and maintenance for that year in the amount of $3,392,827 to secure the balance of $2,211,909. What did you then do with that amount to put it on a 45 day basis?

A. Divided by 365 for one day's basis, multiplied by 45 to extend that one day to 45 days.

Q. And that gave you what amount?

A. $272,701.

Q. Which is the average cash required for operation and maintenance on a 45 day basis?

A. That is right.

Q. The next item is the sum of $94,732 for "Prepaid Items at December 31, 1941". Where did you secure that figure?

A. That figure is a balance sheet item. The reference is to Exhibit No. 172, line 14, column M. The company pays certain expenses in advance of the period to which they [fol. 9623] relate. I have included the total of prepaid expenses in the working capital allowance.

Q. Now, the next item which you show is the sum of $374,839 for "Materials and Supplies Inventory—12/31/41". Where did you secure that figure?

A. That is also a balance sheet item.

Q. As of December 31, 1941?

A. That is correct, appearing in Exhibit No. 172, line 13, column M. It is the actual inventory at December 31, 1941.

Q. Now, why did you select the day, December 31, 1941, as the basis for amount of materials and supplies?

A. The details of the materials and supplies account for the year 1941 are shown on page 3 of Exhibit No. 221. The inventory is considerable higher at that date than at any other period and higher than the average inventory

for the year 1941. The reason I selected the highest amount is because of Mr. Sperry's testimony that the company really felt it necessary to maintain a larger inventory than in the past.

Q. Now, looking at page 3 of Exhibit No. 221, I note that the balance at the end of January, 1941, for materials and supplies was $211,075. Is that correct?

A. That is correct.

Q. And the balance at the end of each succeeding month was progressively—well, almost progressively greater, I think with but one exception.

[fol. 9624] A. It declined somewhat during the summer months. Other material was issued, I suppose for the repair and maintenance program during the summer time which brought the balance down a little bit in the summer months. That was increased along about September and increased each month up to December.

Q. At which time, that is, on December 31, 1941, the materials and supplies account stood at $333,941?

A. That is correct. I might say that this is slightly different from the amount shown on page 1 due to the fact that there is about $10,000 of materials and supplies in the gasoline plant which I did not bother with in this table.

Q. In other words, you included approximately $10,000 more in your summary and ultimate estimate than the actual balance at December 31, 1941?

A. I did not mean it quite that way. They have really two inventory accounts, one for the gas business and one for the gasoline business and this analysis on page 3 is only for the gas business but, nevertheless, the gasoline business is a part of the company and I naturally included that material and supplies inventory. It was very small.

Q. The total of the items which you have mentioned is $742,279 for Panhandle Eastern and Illinois Natural. In your opinion, does this amount represent the maximum allowable working capital to be added to plant accounts [fol. 9625] and to be added to operating expenses for purposes of this proceeding?

A. It does represent the maximum amount. As I have indicated, the tax accruals are more than sufficient to provide all necessary cash working capital. In view of the fact that gas customers actually provide an ample amount of working capital through the medium of accrued taxes,

it is my opinion that no additional allowance for cash working capital need be separately provided for.

Q. However, you have included an allowance for cash working capital as shown on page 1 of Exhibit 221, have you not?

A. That is correct, I have.

Q. Have you made a study of the working capital requirements of Michigan Gas Transmission Corporation?

A. I have.

Q. I am going to ask you to refer to Mr. Spitznagle's exhibit on the subject of working capital which is Exhibit No. 94.

For purposes of the record, Mr. Spitznagle, a witness on behalf of Michigan Gas Transmission Corporation, testified on direct examination with respect to working capital at pages 1852-1856 of the transcript.

Do you have before you now Exhibit No. 94?

A. I do.

Q. Will you please go through the several items that are shown on the first page of that exhibit which summarizes Mr. Spitznagle's allowance and state briefly which of these allowances you would recommend and which, in your opinion, represent necessary amounts of working capital for this company?

[fol. 9626]

A. The first item, "Cash fund operating expenses" based on monthly average pro forma operating expenses, excluding purchased gas, taxes, prepayments, depreciation and amortization and using 45 days (average period in day's expense is paid before it is repaid by customer)" is shown in the amount of $47,175.05. I have no reason to believe or see no objection to this amount. In fact, it is computed in almost the same manner that I recommended in the case of Panhandle Eastern. However, if we used the full year 1941, the amount would be slightly higher, I think about $50,000.

Q. Instead of $47,175?

A. Yes.

Q. In other words, his estimate speaks as of June 30, 1941, does it not?

A. That is correct.

Q. Mr. Dunn, it is a fact, is it not, that Mr. Spitznagle made no allowance for the cost of gas purchased, did he?

A. He did not. He said he had made an investigation of the item and could find no reason for including it in his working capital allowances.

Q. In other words, his estimate is very similar to yours [fol. 9627] in that regard?

A. It is.

Q. Very well. Now, will you go to the next item which is headed, "Materials and Supplies, Based on Actual Material and Supplies on Hand at June 30, 1941, Per Books, Plus Estimated Amount of Increase There Resulting from Change in Price to June 30, 1941," in the amount of $100,92378.

A. Referring to the materials and supplies account shown in Exhibit No. 163, page 1, the company actually had on hand $115,053.90 representing the actual inventory of supplies and materials.

Mr. Wheat: What date is that?

The Witness: December 31, 1941.

Mr. Culton: Will you give the amount again, please?

The Witness: $115,053.90. I would suggest this amount as being the proper allowance for working capital purposes.

By Mr. Littman:

Q. That is the amount as of December 31, 1941?

A. That is right.

Q. What do you say with respect to the third item, "Purchased Gas Cost for Line Pack after Deducting any Portion of Such Cost Capitalized, Based upon Average for 12 Months Ended June 30, 1941", in the amount of $31,406.70 which Mr. Spitznagle included in his working capital allowances?

A. Well, Mr. Spitznagle was very careful in this ad- [fol. 9628] justment but I think he made a very complicated computation to no purpose here.

Q. What did he do, briefly?

A. Briefly, he added $31,406 to his proposed rate base but he deducted $5,595 from his proposed operating expenses.

Q. From his annual operating expenses?

A. That is right. Such an adjustment results in a decrease in allowable revenue to the company and I believe

it is entirely unnecessary to make such an adjustment. The reason he had to make such an adjustment in operating expenses is because line pack, in the Michigan Gas system, was not the same each year and, having increased in the period June 30, 1941, over the prior year, he had to remove that increase from the operating expense, gas purchased, and, in effect, capitalize it by including it in working capital.

Q. How did the line pack increase? Was that by reason of additional pipe line or by reason of higher pressures?

A. Probably some of both. I am not certain but I did see that it had increased by that amount in his working papers.

I think a much more simple and probably even more accurate method of handling it is to allow the cost of gas purchased as an expense in the year it is purchased and omit this troublesome item of line pack from the working capital.

Q. What effect does that have? Is your recommendation [fol. 9629] in this regard much more liberal to the company than Mr. Spitznagle's treatment?

A. Yes. As far as this item is concerned, it would be just twice as good to the company.

Q. As far as Michigan Gas Transmission Corporation is concerned?

A. Yes.

Q. In other words, if I may summarize, what you propose to do is recommend the disallowance in working capital of the $31,406 for gas purchase cost for line pack and to allow, in operating expenses, the $5,000 odd incurred each year for the cost of gas in that conection, is that right?

A. That is correct.

Q. Now, will you please pass on to the next item of prepayments which Mr. Spitznagle allows in the amount of $4,538.55. What is your recommendation in that regard?

A. Since these items are actually prepaid, I think they should be allowed in working capital.

Q. What is the prepayment amount at December 31, 1941? You are, I presume, looking at the financial state-

ment of Michigan Gas Transmission Corporation for the necessary detail?

A. That is correct. The prepaid accounts are shown under the title "Deferred Debits."

Q. In what exhibit?

A. Of course, deferred debits are prepaid but the [fol. 9630] amount is shown on page 1 of Exhibit No. 163.

Q. That is the financial report for 1941 of Michigan Gas Transmission Corporation?

A. That is correct, in the amount of $6,364.61.

Q. You would recommend the allowance of that amount as of December 31, 1941, rather than an amount at the midyear?

A. That is correct, for working capital purposes.

Q. Yes. What do you say with respect to the final item shown on page 1 of Exhibit No. 94 allowed by Mr. Spitznagle for "Minimum Bank Balances Required to Support Check Privileges Based Upon Advice Received from Depositories" in the amount of $116,303?

A. The accrued taxes provide cash at all times far in excess of $116,000 in much the same manner as it is with Panhandle Eastern and, therefore, I do not believe that this amount should be allowed in working capital inasmuch as the company has ample cash on hand from accrued taxes to cover any minimum bank balances.

Q. I believe the cross-examination of Mr. Spitznagle covered that subject and showed the amounts, did it not?

A. Yes, Mr. Spitznagle, as I recall, admitted that the company had plenty of cash from accrued taxes to more than cover minimum bank balances.

Q. The record will show whatever his testimony was in that regard and will speak for itself.

[fol. 9631] Will you please total the items which, in your opinion, should be allowed for the working capital of Michigan Gas Transmission Corporation for purposes of this proceeding?

A. That total is $171,419 obtained by using a round sum of $50,000 for cash fund expenses covering operation and maintenance. I believe that actually works out slightly higher than this. I would recommend at least $172,000.

Q. And does that amount represent, in your opinion, the maximum allowable working capital to be added to the

plant accounts and to operating expenses of Michigan Gas Transmission Corporation for purposes of this proceeding?

A. It does.

(Exhibit No. 221 was received in evidence.)

[fol. 9632] Mr. Littman: I would like to have marked for identification, Mr. Examiner, an exhibit consisting of two [fol. 9633] pages entitled, "Panhandle Eastern Pipe Line Company and Subsidiary Companies—Computation of Average Return Earned on Net Investment for the Period April 1, 1932 to December 31, 1941."

(The document referred to was marked Exhibit No. 222 for identification.)

Q. Mr. Dunn, what is the source of the information and data shown in Exhibit No. 222?

A. The sources are all indicated. Column (b) is taken from Exhibit No. 173, the income statement prepared by Mr. Watkins. That is a cumulative total from the beginning to December 31, 1941.

Q. The sources of the other figures, of course, you may explain as you go along and I think it will be apparent.

Trial Examiner: Before you leave that, what companies are included as subsidiaries in this study?

Mr. Littman: All of the companies shown in Mr. Watkins' Exhibit No. 112 which was furnished at my request, all of the subsidiary companies owned in each year by Panhandle Eastern. In other words, this exhibit is presented on the same basis as Mr. Watkins' accounting exhibits have been presented.

Trial Examiner: And, of course, does not include anything of Michigan Gas Transmission Corporation?

[fol. 9634] Mr. Littman: That is correct because the last period is December 31, 1941.

I might state in that connection that it is my understanding and I will have Mr. Dunn correct me if I am

wrong, that at no time did Panhandle Eastern Pipe Line Company own any considerable amount of distribution system property. In the early years, it owned more distribution system property than in the later years. As a matter of fact, on January 1, 1941, it owned no distribution systems and then as of some date in February, it recently acquired the Indiana Gas Distribution system which is a small company. However, this exhibit was made on a comparable basis so that it may be conformed and compared with Mr. Watkins' own presentation.

By Mr. Littman:

Q. Is my statement generally correct, Mr. Dunn, about the distribution systems?

A. It is. They were at all times a very minor part of this company's operations.

Q. You had no way of eliminating them without going through a considerable amount of detailed work, did you?

A. That is right. In fact, for the purpose of this exhibit, I had no desire to eliminate them because I wanted to show what the total operations of Panhandle Eastern were as a corporation over this period of time.

Q. Very well. Will you please explain Exhibit No. 222?

[fol. 9635] A. Column (c) shows certain adjustments to operating expenses which I have entitled, "Adjustment for Items Admittedly Not Cost".

Q. Just a minute, have you sufficiently explained Column (b)? Let me repeat, Column (b) is the total operating revenue and operating revenue deductions and net operating revenue, per books, and as shown in Mr. Watkins' Exhibit No. 173 for the period April 1, 1932, to December 31, 1941, on a cumulative basis, that is, the total of all the figures in that period, is that right?

A. That is correct, it is.

Q. All right. Now, go to Column (c) and I might state for the purpose of the record that the net operating revenue shown, that is, the cumulative total, is $21,929,484.

Now proceed to Column (c).

A. The adjustments to which I referred are explained on page 2 of this exhibit. The first one is an adjustment relating to amortization of limited term gas investments and pertains to the item of gas sales and purchase con-

tracts which were not stated at cost. The items which I have included in this exhibit, namely, the gas purchase and sales contracts in the amount of $654,989.34 are contracts with Missouri Power & Light and Illinois Power & Light and certain industrial companies, which Panhandle Eastern secured by payment of some Mokan stock.

[fol. 9636] Q. Are you referring to the 19,000 shares of Mokan stock purchased by Panhandle Eastern and distributed by Mr. Parish, the then president of Panhandle Eastern?

A. That is the item to which I referred.

Q. And how much money is involved in the purchase of that stock, approximately?

A. The purchase of the stock was—

Q. (Interposing) The cost to Panhandle Eastern—

A. (Continuing) $556,000. The total of this amount, to reconcile the figures here, shown as $654,989.34 is represented by some additional payments, one of which is an amount of $75,000 paid Missouri Kansas Pipe Line Company to reimburse them for expenses incurred in obtaining gas sales contracts and that amount was paid to the American Coke & Chemical Contracting Company plus an additional $9,500 for securing the industrial contracts with Peoria Malleable Castings Company, Keystone Steel Company, Caterpillar Tractor Company and R. Herschel Manufacturing Company. Then there were some expenses in the amount of $786.30, a premium on a bond amounting to $1,000 and then, later on, in 1931, and 1932; an amount of payroll and expenses of $12,703.04, all of these relating to the gas sales contracts that I have described.

Q. Well, at any rate, the bulk of the item of $654,000 odd was made up of the $500,000 odd which was paid by [fol. 9637] Panhandle Eastern for the acquisition of 19,000 shares of Mokan stock which was given to Mr. Parish as president of the company to distribute for the acquisition of the Missouri Power & Light Company and the Illinois Power & Light contracts, is that a correct summary?

A. That is correct. The exact amount is $556,000.

Q. Did you hear Mr. Maguire testify he rendered all of the services in connection with the securing of those contracts and that he received but 7,000 shares of that stock?

A. Yes, I heard Mr. Maguire's testimony to that effect.

Q. But you are not making any disallowance of any of this $654,000 item, are you? That is, you are not recommending any disallowance for the purpose of this proceeding?

A. No. The fact I do not see how it can be disallowed. It has all been written off. In effect, more than that has been written off and the company has already disposed of the item.

Mr. Culton: In other words, it is not in their accounts at this time?

The Witness: I do not see how it could be considered in their accounts at this time.

By Mr. Littman:

Q. It has been amortized?

A. That is right.

Q. Very well. This, of course, is the amount before [fol. 9638] amortization, is it not, $654,989?

A. That is right.

Q. Will you proceed with your explanation?

A. Then an amount has been amortized for other gas sales and purchase contracts in the amount of $174,689.20 which is the total allowable amortization for this item in the sum of $829,678.54.

Q. Which is the amount which you are permitting to remain intact?

A. Yes. We can see, from Column (c) that the company has really amortized $1,231,870 more than cost in the past.

Q. All right. Will you proceed with your explanation of this exhibit?

A. The next adjustment I made is self-explanatory. It is charges in lieu of Federal income and excess profits taxes and that is not cost because it represents the amount of taxes which would have been paid had the company not engaged in the refinancing operations in 1941 and since it was not paid, I have not included it in this study of actual expenses.

Q. In other words, they were charges that were accrued but not paid, is that right?

A. That is right.

Q. And, of course, to that extent, the net operating revenue of the company was understated?

A. Yes.

[fol. 9639] Q. And accordingly adjusted by you. Will you proceed with the next item of adjustment?

A. The other adjustments relate to taxes and are taken from certain exhibits presented by Mr. Watkins to show the difference between taxes actually paid and the taxes accrued. There is a reference in each instance to the exhibit and it shows that, in the case of miscellaneous Federal taxes, State and local taxes, about $69,550 was over accrued. In the case of Federal income taxes, about $600,530 and Federal excess profits taxes, $219,881. The sums of all these adjustments which have been included as operating expenses amount to $2,945,713.

Q. In your opinion, has the net operating revenue of Panhandle Eastern Pipe Line Company and subsidiary companies, on a consolidated basis during the period from April 1, 1932, to December 31, 1941, been overstated, cumulatively speaking, in the amount of $2,945,713?

A. The operating expenses have been overstated by that much or the operating revenue has been understated by that much.

Q. Now, that gives us what net operating revenue, as adjusted, as shown in Column (d)?

A. $34,875,197.

Q. And what do the figures in Column (e) represent on page 1 of Exhibit No. 222?

A. That is the annual average obtained by dividing the [fol. 9640] totals in Column (d) by the period of time which is $9\frac{3}{4}$ years.

Q. What is the average net operating revenue for that period?

A. $3,576,943.

Q. I note a figure in line No. 27 denominated "Average Net Investment" in the amount of $47,774,469. Do you have a tabulation in this exhibit which shows how you arrive at that amount?

A. Yes, that is shown at the top of page 2.

Q. Will you explain that tabulation?

A. The gas plant totals shown in Exhibit No. 176, line 38, are listed by years, showing the balance at December 31 for each year. I have added to that the net amount of gas sales contracts shown on line 44 of Exhibit No. 176. I have deducted the balance in the reserves for depreciation

and depletion corresponding to the proper years as shown in Exhibit No. 172, lines 28 to 33, inclusive, and the last column shows the net investment. I have totaled that and divided by 10 to get an average because there are 10 years involved.

Q. That gave you the amount of $47,774,469, does it not?

A. It does.

Q. At line 28 at the foot of page 1 of Exhibit No. 222, you have shown 7½ percent as the "Average Returned [fol. 9647] Earned" Shouldn't that be corrected to "Average Return Earned"? That "ed" on "Return" does not belong there.

A. That is a typographical error. That should be "Return."

. . . . . .

Q. Now, will you explain that item?

A. The company's income statements, particularly the Exhibit No. 173, show that they have earned a fluctuating amount of net income, some years rather high and some years very low. I wanted to see what the average would be to know what the results of operation were more intelligently and that showed they earned on the average 7½ per cent.

Q. On their net investment as shown in Exhibit No. 222?

A. That is correct.

Q. And that is the amount that is somtimes called "net operating revenue"?

A. That is correct.

Q. Expressed in percentage of net investment?

A. Yes.

. . . . . .

[fol. 9648] (Exhibit No. 222 was received in evidence.)

. . . . . .

[fol. 9650] Mr. Culton: Mr. Examiner, I have distributed a number of proposed exhibits and I would like to have them marked for identification at this time. I think that will be a time saving matter.

I ask first that the document entitled, "Substitute Estimate (Less Economic) of Additional Capital Expenditures

South and West of Liberal Compressor Station Required to Meet Peak Day Sales of 307,000 MCF" be marked Exhibit No. 223 for identification.

(The document referred to was marked Exhibit No. 223 for identification.)

Mr. Culton: I ask that the document entitled, "Substitute Estimate (Less Economics) of Additional Capital Expenditures South and West of Liberal Compressor Station, Required to Meet Peak Day Sales of 338,000 MCF", be marked Exhibit No. 224 for identification.

(The document referred to was marked Exhibit No. 224 for identification.)

Mr. Culton: May we reserve Exhibit No. 225 for an exhibit which has not yet been completed but which, in regular order, I think should go in at this point?

[fol. 9651] Trial Examiner: We will reserve that number.

Mr. Culton: It will be for a document entitled, "Estimate of Operation and Maintenance Costs South and West of Liberal Compressor Station, Panhandle Field, 307,000 MCF, Continuous Daily Sales Capacity Operation at 70 Per Cent Capacity Factor."

(Exhibit No. 225 was reserved for exhibit to be submitted later.)

Mr. Culton: We ask that the document entitled, "Estimate of Operation and Maintenance Costs South and West of Liberal Compressor Station, Panhandle Field, 307,000 MCF Continuous Daily Sales Capacity Operation at 90 Per Cent Capacity Factor" be marked Exhibit No. 226.

(The document referred to was marked Exhibit No. 226 for identification.)

Mr. Culton: The next exhibit is entitled, "Estimate of Operation and Maintenance Costs South and West of Liberal Compressor Station, Panhandle Field, 338,000

MCF Continuous Daily Sales Capacity Operation at 70 Per cent (Approximately Normal) Capacity Factor" be marked Exhibit No. 227.

(The document referred to was marked Exhibit No. 227 for identification.)

Mr. Culton: We ask that the document entitled, "Estimate of Operation and Maintenance Costs South and West Hol. 9652 of Liberal Compressor Station, Panhandle Field, 378,000 MCF Continuous Daily Sales Capacity Operations at 90 Per Cent Capacity Factor" be marked Exhibit No. 228.

(The document referred to was marked Exhibit No. 228 for identification.)

Mr. Culton: We ask that the document entitled, "Capacity Study April 7, 1942 Continuous Daily Delivery Capacity 307,000 MCF" be marked Exhibit No. 229.

(The document referred to was marked Exhibit No. 229 for identification.)

Mr. Culton: We ask that the document entitled, "Capacity Study April 7, 1942 Completely Looped and Economically Powered Main Line System with Economic Production Transmission Expenditures" be marked Exhibit No. 230.

(The document referred to was marked Exhibit No. 230 for identification.)

Mr. Culton: I ask that the document entitled, "Capacity Study April 7, 1942, Revised Completely Looped and Economically Powered Main Line System with Less Economic Production Transmission Expenditures" be marked Exhibit No. 231.

(The document referred to was marked Exhibit No. 231 for identification.)

[fol. 9653] EDWARD L. DUNN, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Redirect Examination

By Mr. Littman:

Q. Mr. Dunn, when you were on the stand near the close of the last session, were you requested to furnish certain data and information?

A. I was, yes.

[fol. 9654] Q. And have you prepared that information and data in response to those requests?

A. I have.

Q. I call your attention particularly to a request that was made by Mr. Chamberlain with respect to Exhibit No. 222 entitled, "Panhandle Eastern Pipe Line Company and Subsidiary Companies—Computation of Average Return Earned on Net Investment for the Period April 1, 1932, to December 31, 1941". Have you prepared a table in response to Mr. Chamberlain's request with respect to Exhibit No. 222?

A. I have.

Mr. Littman: I ask, Mr. Examiner, that a table consisting of one page, entitled, "Panhandle Eastern Pipe Line Company and Subsidiary Companies—Comparison of Average Return Earned on Net Investment for the Periods April 1, 1932, to December 31, 1936, and January 1, 1937, to December 31, 1941", be marked for identification as Exhibit No. 232.

Trial Examiner: Would it not be better, Mr. Littman, to mark this exhibit No. 222-A?

(The document referred to was marked Exhibit No. 222-A for identification.)

By Mr. Littman:

Q. I hand you Exhibit No. 222-A for identification, Mr. [fol. 9655] Dunn, and ask whether this is the table you prepared in response to Mr. Chamberlain's request?

A. It is.

Q. Will you briefly explain this exhibit, giving only such detail as is necessary to explain the exhibit briefly?

A. This exhibit is supplementary to Exhibit No. 222 which showed the average return earned over the entire corporate history of Panhandle Eastern Pipe Line Company and its subsidiary companies. The purpose of this exhibit is to break that down into two divisions, namely, the period from 1932 to 1936, inclusive, and—

Q. (Interposing) You mean from April 1, 1932, to December 31, 1936?

A. Yes, and the period beginning in 1937 and ending in 1941.

Q. That is, from January 1, 1937, to December 31, 1941?

A. That is right. Therefore, I started with the total which is shown in Column B of Exhibit No. 222 and divided that into the periods mentioned. The operations are accounted for by years and, of course, I used the years as they are accounted for on the company's books for the purposes of this division.

There is one exception to that statement. In the case of the amortization of gas contracts, that amount is shown as $829,679 for the total. The amount applicable to the first period is one-half of the amount of $654,990 shown in [fol. 9656] the amount of $327,495 under "Amortization of Gas Contracts" in the column under the period 1932 to 1936. The other half is included in the period 1937 to 1941 plus the amortization of the gas contracts new which were entered into during the latter half of this period, namely, the period 1937 to 1941. Therefore, all of the amortization has been applied to that period.

Q. Mr. Dunn, your Exhibit No. 222 showed that Panhandle Eastern Pipe Line Company and its subsidiary companies earned an average return of 7½ per cent per year over the period April 1, 1932, at which date it actually

commenced its operations through December 31, 1941. Is that correct?

A. That is correct.

Q. Now, what you have done in Exhibit No. 222-A is to divide that period into two separate periods so as to show the average return earned during the period from April 1, 1932, through December 31, 1936, on the one hand, and for the period January 1, 1937, through December 31, 1941, on the other hand. Is that right?

A. That is right.

Q. Over the first period, the average return earned by Panhandle Eastern Pipe Line Company and subsidiary companies was what per cent of its net investment?

A. 3.1 per cent.

Q. And what was the average return earned, as shown [fol. 9657] on Exhibit No. 222-A, on the latter period, to-wit, from January 1, 1937, through December 31, 1941, on the net investment?

A. 10.64 per cent.

Q. Now, you made this separation at the request of Mr. Chamberlain, did you not?

A. That is correct.

Q. State whether or not it is the fact that the Detroit business was attached along toward the latter part of 1936?

A. Yes, it was.

Q. So that your latter period reflects the operations and return to Panhandle Eastern after the Detroit, Michigan, load was fully attached, does it not?

A. It reflects the actual sales to the Michigan Consolidated Gas Company, in full.

Q. And, of course, the first period from April 1, 1932, through December 31, 1936, reflects the operations before the Detroit load was attached to the lines, is that correct?

A. Yes. There are some Detroit sales in there undoubtedly for a portion of the year 1936 but not a substantial amount, according to the company's statements of operating revenues.

Q. Now, did you also prepare a table in response to the Trial Examiner's request which was to this effect: That you prepare a table showing the average earned on the net investment of the Michigan Gas Transmission

[fol. 9658] Corporation for the period March 1, 1936, to December 31, 1941?

A. I did.

Mr. Littman: I ask that this table be marked for identification as Exhibit No. 222-B inasmuch as it is a similar computation to those which preceded it.

(The document referred to was marked for identification as Exhibit No. 232.)

By Mr. Littman:

Q. I hand you a copy of Exhibit No. 232 for identification, Mr. Dunn, entitled, "Michigan Gas Transmission Corporation—Computation of Average Return Earned on Net Investment for the Period March 1, 1936, to December 31, 1941", and ask you whether this is the table which you prepared in response to the Trial Examiner's request to which I referred a moment ago?

A. It is.

Q. Will you briefly explain this table?

A. This table is taken from the income account, per books, shown as Exhibit No. 99 up to the end of December 31, 1940, and Exhibit No. 163 for the year ended December [fol. 9659] 31, 1941. Cumulative totals are shown in the first amount column. The second column includes an adjustment for taxes not paid, the amounts being taken from Exhibit No. 99. The third column shows the cumulative totals, as adjusted, and the fourth column shows the average amounts over the life of Michigan Gas Transmission Corporation ending December 31, 1941, which is a period of 5 5/6 years.

Q. What is the source of the figures shown in Exhibit No. 232?

A. The source is Exhibit No. 99 and Exhibit No. 163.

Q. Which, in turn, reflect the company's books, do they not?

A. That is correct.

Q. And the same is true of Exhibit No. 222-A; that is to say, the figures reflect the company's books, do they not?

A. That is right, except for certain adjustments which were explained in connection with Exhibit No. 222.

* * * * * * * *

Q. What does your Exhibit No. 232 show to be the average return earned by Michigan Gas Transmission Corporation on its net investment from March 1, 1936, through December 31, 1941?

A. This exhibit shows that that corporation earned an average of 8⅛ per cent on an average net investment of [fol. 9660] $9,134,568 for that period.

Q. By "net investment" are you referring to book costs of the gas plant less depreciation reserves?

A. That is correct, less an adjustment for an item of intercompany profit which is shown on the bottom of this exhibit.

Q. You mean the figures shown in the column headed, "Net Adjustment for Intercompany Profit"?

A. That is correct. That amount was approximately $139,500. It is depreciating about $3,600 a year or, at the end of 1941, it had depreciated to approximately $103,500. At the end of the preceding year, at the end of 1940, it was $107,100 or $3,600 less, which is carried on back to 1936 in that manner.

Q. Is that the intercompany profit to which numerous references have heretofore been made in this proceeding, namely, the profit that was taken by Columbia Engineering Corporation from Michigan Gas Transmission Corporation's predecessor, Indiana Gas Transmission Corporation?

A. Yes, it was a construction fee, not actual cost, which was paid to an affiliated company by a predecessor company.

Q. That is the intercompany profit referred to by the Securities and Exchange Commission in its opinion which is in evidence as Exhibit No. 147, is it not?

A. That is correct. The real source of the item is disclosed in Mr. Spitznagle's original cost study, however.

[fol. 9661] Q. Which is Exhibit No. 91, as I recall it?

A. I believe it is.

Q. Mr. Dunn, you have just alluded to two adjustments which were made in Exhibit No. 232 shown in the second column for taxes not paid. Is my understanding correct

that, in certain years, Michigan Gas Transmission Corporation accrued on its books an amount greater than the amount of taxes actually paid?

A. That is correct.

Q. And, to that extent, understated its net income per books?

A. That is a result of the over-accrual, yes.

Q. And you have shown the amount of these understatements, to wit, the amount of the accrual for taxes not paid and accordingly you have made the adjustment in Exhibit No. 232?

A. Yes.

. . . . . .

[fol. 9663] Q. You have used the terminology, "average net investment"?

A. Yes.

[fol. 9664] Q. In fact, you have taken the gas plant at the close of each year, have you not?

A. I have.

Q. And you have applied to that the revenues for the year?

A. That is not.

Q. So that it is not the return upon the average investment for each year?

A. Well, that is not what the exhibit shows. It shows the average for six years, and I divided by six to get an average for six years, not an average for individual years.

Q. I see. In the ultimate figure, you take the average for the full period?

A. That is correct.

. . . . . .

[fol. 9668] (Exhibits Nos. 222-A and 232 were received in evidence.)

. . . . . .

[fol. 9669] C. H. Hinton, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Mr. Culton: Mr. Examiner, in line with the suggestion of the Examiner a few days ago, I will make a statement

with respect to the former testimony to which the next witness' testimony is related.

This witness heretofore testified and presented his written testimony which appears as Exhibit No. 42. In connection with that, he offered certain schedules in Exhibit No. 43. His examination appears at three places in the transcript. He was first offered at page 654. Later, there was direct examination at page 1306 and the cross-examination commenced at page 4775.

This witness' former testimony, among other things, related to the capital expenditures which will be required in the two fields in which Panhandle Eastern's reserves are located in order to meet certain volumes and peaks as estimated by Mr. Morton. He also in his exhibit presented the operation and maintenance costs in the field and, by the field, I mean west of Liberal.

His testimony will relate to a further study which he has recently made based on changed conditions. His estimated future expenditures, as contained in his former [fol. 9670] testimony under what was referred to as the anticipated load, commenced on page 26 of Exhibit 42 and for the expenditures through 1946 carried through page 32.

. . . . . .

By Mr. Culton:

Q. Mr. Hinton, in your former testimony on page 26 of Exhibit 42, you detailed certain future capital expenditures in what was referred to as the anticipated load. I will now ask you to state what has been done with respect to the various items referred to under 1941 as it appears on page 26 of that exhibit?

A. All of the items which were proposed for 1941 have now been completed with the exception of the acidization of the gas well shown under item D. That is a matter of about $1,550. That work has not yet been done.

Q. That is largely due to circumstances related to other matters, is it not?

A. It is a matter of holding off on that acidization until such time as we have gas available to load the acid for gas treating rather than using liquid as a drive.

Q. In other words, it will be more economical and more effecient to be able to acidize it in the way you have described?

A. We find we have better results by using a partial [fol. 9671] water load and partial gas load and we are going to hold up that acid treating until such time as we have the gas load available.

Q. This well is that which was drilled in what was, in effect, a new field so far as Panhandle Eastern is concerned, that is, a new area?

A. That is correct. That is our first well.

Q. And I believe it was practically completed the last time you testified?

A. Yes, sir.

Q. What kind of a well did you get from that area?

A. Well, we have a natural open flow there of approximately 5 million cubic feet per 24 hours tested on a 20 minute blowdown pitot test and we feel that is an indication that we have some pretty good acreage surrounding that well.

Mr. Littman: May I inquire whether that 5 million open flow was before or after acidization?

The Witness: Before. The well has not been acidized.

Mr. Littman: You fully expect the well to be greater after acidization, do you not?

The Witness: Yes, we hope so on a pitot tube test of 5 million, I would estimate that we would go to somewhere around 25 to 30 million.

By Mr. Culton:

Q. In other words, you feel, as a result of the drilling [fol. 9672] of that well, that you have proven that the Panhandle acreage in that area is substantial acreage which it will pay the company to develop?

A. Yes, and other wells drilled in the vicinity further prove it, that is, wells owned by other companies.

. . . . . .

Mr. Littman: Will you please give us the location of that well?

. . . . . .

The Witness: The well is located in the north half of Section 25, Township 3, Range 15 and it shows on that map to be located in the center of the west half but we changed that location after this map was made.

Mr. Littman: In what State and in what county?

The Witness: Texas County, Oklahoma.

Mr. Littman: What was the thickness of the lime?

. . . . . .

[fol. 9673] By Mr. Culton:

. . . . . .

Q. Since you formerly testified, have you had occasion to make any computations with respect to future capital expenditures on any basis other than that on which your anticipated load capital expenditures, as reflected in Exhibit No. 42, was prepared?

A. Yes, I have.

Q. What was the basis on which the anticipated load capital requirements, contained in Exhibit 42, was based?

A. They were based upon estimates of Mr. O. W. Morton.

Q. Reflected in his Exhibit No. 40?

. . . . . .

The Witness: The figures which appear on Exhibit 40 are the same as those that were furnished me by Mr. Morton on August 18.

[fol. 9674] Q. In your former study, you took into consideration the volumes of gas shown on Exhibit 40 as well as the maximum day requirements, is that correct?

A. That is correct.

Q. You state that recently you have made another study of capital requirements. What has been the basis of that study?

A. That study is based upon volumes of gas which have been given me by the management of the company.

Q. By the management. You mean the president, Mr. Creveling?

A. Yes, sir.

Q. And what bases were used, what capacity?

A. The volumes which he gave me were continuous daily capacity of 307,000 M.c.f. operating at a capacity factor of both 70 per cent and 90 per cent and a volume of 338,000 M.c.f. peak day sales and that was to be designed for continuous operation and the estimates were based upon a 70 per cent capacity and a 90 per cent capacity factor on that volume also.

Q. In other words, you have made computations for capital expenditures first to meet sales of 307 million daily and second, to meet sales of 338 million daily, is that correct, peak sales?

A. Yes, and I was also instructed to use the minimum amount of steel in both cases.

[fol. 9675] Mr. Littman: When you speak of 338 million and 307 million, you are speaking of cubic feet, are you not?

The Witness: In M.c.f.—

Mr. Littman: (Interposing) No, you mean 338,000 M. c.f. or 338 million cubic feet.

The Witness: You are correct, Mr. Littman.

By Mr. Culton:

Q. The first exhibit which you offer and which has been identified for use in connection with your testimony relates to substitute estimate, less economic, of capital expenditures. What did you consider the most economic method of doing the necessary construction work?

A. The same construction program as outlined in Exhibit 42, pages 26 to 32.

Q. Approximately what annual volume did you take into consideration in the preparation of Exhibit No. 223?

A. The annual volume required at the intake side of Liberal compressor station to furnish the 307,000 M.c.f. at a 70 per cent capacity factor is 76,953,656 M.c.f. and that is on a 16.4 pound pressure base.

[fol. 9676] Q. In other words, it is approximately 77 billion cubic feet?

A. That is correct.

Mr. Littman: Will you explain or define the term "capacity factor" as you use it?

The Witness: That means that the pipe line would be operating at 70 percent of its capacity of 307,000 M.c.f. per day.

By Mr. Culton:

Q. At about what period in Mr. Morton's Exhibit No. 40 would you have reached that volume of annual sales?

A. We would have reached approximately that volume for the year 1944.

Mr. Littman: You mean 1943, don't you, Mr. Hinton?

The Witness: No, sir.

Mr. Culton: It is between 1943 and 1944, isn't it?

The Witness: Yes, it is between 1943 and 1944.

Mr. Littman: The reason I wondered whether he had misspoken himself was because of Column E of Exhibit 40, Mr. Morton's exhibit, which showed the annual requirement for the year 1943 to be 77,461,000 M.c.f.

The Witness: Yes, but the amounts on Exhibit 40 will not tie into this because this has the fuel added in required beyond Liberal station and including Liberal sta- [fol. 9677] tion and is converted from a 30-inch saturated pressure base which is 14.73 pounds to 16.4 pounds for the purpose of production because all production, in both the Panhandle and Hugoton fields is measured on a 16.4 pound pressure base.

By Mr. Culton:

Q. In other words, Mr. Morton's figures were sales figures whereas you have included everything?

A. Yes, sir.

Q. Sales, line loss and fuel.

A. And gasoline plant shrinkage.

Q. Gasoline plant shrinkage and so forth?

A. Yes, sir.

Q. And you have also changed the measurement basis to the field standard of 16.4?

A. Yes, sir.

Q. Exhibit No. 224 for identification shows the less economic substitute estimate required to meet peak day sales of 338 million cubic feet. What would the total volume be on that basis, approximately?

A. When you speak of the total volume, you mean—

Q. (Interposing). Annually.

A. Annually, at a 70 per cent [capcity] factor?

Q. At 70 per cent and 90 per cent.

A. The one we gave there on the 307,000 M.c.f. was at 70 and we have not yet given the 90.

[fol. 9678] Q. Give the 90—you have given us the 70 on the 307,000 M.c.f., is that right?

A. Yes, sir.

Q. Give us the 90 per cent capacity factor on the 307,000 M.c.f.

A. The annual requirement at 90 per cent capacity factor would be 98,940,368 M.c.f., approximately.

Q. Was that figure reached on Mr. Morton's Exhibit No. 40?

A. I do not know how many years he went on that exhibit.

Q. He used through 1946.

A. No, Mr. Morton gave me estimates beyond those shown in Exhibit 40 and a comparable load condition would not be reached under his estimate until the year 1947. That is, it would occur between 1947 and 1948.

Q. Now, will you tell us the annual volume required to meet sales of 338 million at a 70 per cent capacity factor?

A. The annual requirement for 338,000 M.c.f. capacity operating at 70 per cent capacity factor would require annually 85,954,285 M.c.f.

Q. And when would that point be reached on Mr Morton's Exhibit No. 40?

A. That would be reached approximately the year 1946. It would occur between the year 1945 and 1946, the estimate for that year.

[fol. 9679] Q. What would be the annual requirement to meet sales of 338 million operating at a 90 per cent capacity factor?

A. The requirement under that condition would be 110,512,512 M.c.f.

Q. And that point would be reached sometime beyond the date covered by Mr. Morton's five year estimate, would it not?

A. Yes.

[fol. 9681] Mr. Littman: Do these annual figures that you have read into the record reflect the line loss, company use, and so forth?

The Witness: Yes, they do.

Mr. Littman: That is, they include the line loss?

The Witness: That is correct.

Mr. Littman: Have you estimated how much of these annual amounts is actually going to be sold?

The Witness: Yes, that is the volume that they gave me and I worked backwards from that. You see when Mr. Creveling told me to figure out the least steel possible to supply these volumes, then it was necessary for me to start at the sales end of the line and work backwards to the well.

Mr. Littman: The only figure he gave you was the 338,000 M.c.f. and the 307,000 M.c.f.?

The Witness: That is correct.

Mr. Littman: That was your starting figure and you worked back to these annual figures?

The Witness: Yes, sir.

Mr. Chamberlain: And that was sales?

The Witness: Yes, that is sales.

[fol. 9686] Mr. Littman: Mr. Hinton, is my understanding correct that the annual figures which you have read into the record with respect to Exhibits Nos. 223 and 224, that is, the annual figures, are comparable to the annual figures shown on page 15 of your Exhibit No. 42?

The Witness: Yes, I had forgotten they were there but they are.

Mr. Littman: In other words, the annual delivery figures which you have read into the record are the amounts which are required, either delivered at Liberal compressor station or adjusted to a 16.4 pound base with an addition for the gas required for the power and loss due to line leakage?

The Witness: That is correct.

Mr. Littman: And are comparable to annual figures shown by you on page 15 of Exhibit 42?

The Witness: Yes, sir.

• • • • • • •

The Witness: They include the same thing and are on the same pressure base.

By Mr. Culton:

Q. And your computation is on the assumption that the company would get those volumes at an earlier date than estimated by Mr. Morton?

A. Yes, and the time element enters in our expenditure [fol. 9687] requirement.

Q. And it has been on the assumption that the company would have those volumes just as soon as it could by physically possible for the additional expenditures to be made?

A. That is the way I understood that it was. In all probability, the fuel would be used for plants now engaged in making war materials and that it was a hurry-up job and to get the most possible there with the least steel.

Mr. Littman: You are now reflecting your understanding of what Mr. Creveling wanted you to do?

The Witness: Yes.

Mr. Littman: He gave you the hypothesis and you worked out the result?

• • • • • • • •

[fol. 9688] By Mr. Culton:

Q. Mr. Hinton, you stated that the management gave you instructions to prepare further estimates as to capital expenditures, one to meet sales of 307,000,000 cu. ft. and the

other to meet sales of 380,000,000 cu. ft., using both the 70 per cent capacity factor and the 90 percent capacity factor, is that correct?

A. That is correct.

Q. And you said something about the difference in steel requirements. Just what instructions were those?

A. Well, they were not hardly instructions. That is, Mr. Creveling said, "Just what is the least number of tons of steel that you can get this gas into Liberal with?" and for me to make my computations upon that basis, and that is what I have done.

Q. That is, irrespective of whether or not it was the most economic way to furnish the capacity, is that correct?

A. That is correct.

Q. That resulted in what principal differences between your estimates this last time and the estimates which you made last fall, what fundamental differences?

A. Well, fundamentally it is just a shift of the problem from furnishing pipe line capacity, and converting to horsepower.

[fol. 9689] Q. In other words it results in less pipe and more compressor stations?

A. That is correct.

Q. Or compressor units?

A. That is correct.

Q. Now, does it make any difference in where the principal portion of the additional gas will be taken?

A. Yes, it makes a decided difference, because without steel we are not able to reach the pipe line capacity from Texas that we had anticipated under the study shown on Page 27 of Exhibit 42.

Q. Does it also necessitate, in later years, the construction of the gathering lines in Oklahoma about which you testified to?

A. If I—maybe you had better state that question again.

Q. All right. In this new study have you assumed that you would never construct the gathering lines in Oklahoma?

A. No, sir.

Q. Which you have heretofore testified you would construct around Oklahoma?

A. There will be no gathering lines constructed in the state of Oklahoma other than one small line which has not been considered in this study at all.

[fol. 9690] Q. Will these additional capital expenditures about which you will testify, such as reflected in Exhibits 223 and 224, fit into the eventual economic picture which you had presented in connection with your former testimony?

A. Part do and part of them do not.

Q. Will you be able, at the proper time to explain which ones you hadn't taken into consideration in your general study heretofore?

A. Yes, sir.

Q. I note that Exhibit 42, on Pages 27 and 28, list capital expenditures for the year 1942, aggregating $4,530,370, whereas your Exhibit 223 for a peak day sales of 307 million cubic feet shows an expenditure in 1942 of $1,285,301, and for 338 million cubic feet an expenditure of $1,878,096.

Do you have a copy of your Exhibit 42 before you?

A. I do.

Q. Your first item—that is, item A for 1942—shows the drilling of five wells in the Panhandle field, whereas the exhibit 223 and exhibit 224 show only three wells.

What is the reason for the reduction in those two wells?

A. The chief reason is to cut down on the tons of steel required.

Q. In other words, if you had these additional wells, [fol. 9691] then you would have to have more steel for gathering lines, is that correct?

A. And we would have to use more of your casing to case the well.

Q. That is a steel saving proposition then?

A. That is right.

Q. Now, in your exhibit 42 you show installing liners in two old wells, and tubing in two old wells, and the same is shown in Exhibits 223 and 224. Are those the same wells?

A. Yes, those are the same wells, but under item C of Exhibit 242 the cost was estimated at $4,262 for the tubing.

We have since revamped that and, by cause of further study, have decided to use a larger production string in those wells and that has been increased to $6,900.

Q. In other words you think you would get better results by using larger string in those wells than you had originally planned, is that correct?

A. Yes, sir; that is correct.

Q. Now, in your former exhibit you showed acidizing five wells in the Panhandle field, whereas you now show acidizing ten.

Will the acidization of those additional wells give you greater volumes?

A. Yes. The wells will be able to deliver greater vol-
[fol. 9693] umes of gas at a comparative working pressure.

Q. Now, in your former exhibit you showed well lines for five wells, and measuring stations for five wells, whereas that has now been reduced to three. That is because you have reduced the number of wells which will be drilled in the Panhandle?

A. That is correct.

Q. Then Item G shown in 1942 on Exhibit 42 and Item H shown our Exhibit 42 are not reflected in either Exhibit 223 or 224. What is the reason for that?

A. That is a matter of cutting down on the steel requirement.

Q. Does cutting down the steel requirements for the trunk gathering line and the increase in the capacity of the gathering line make any difference in the volumes of gas which you will be able to take out of the Panhandle field?

A. Yes. They make a decided difference.

Q. And you show Items G and H in Exhibit 223 representing the installing of additional horsepower at Sneed and Hansford.

Those are the same items, are they not, as those similar items in Exhibit 42?

A. Yes, that is correct, and even though we will be able to take less gas from the Panhandle field, the horsepower

requirement will be approximately the same, due to the
[fol. 9693] fact that we will have to have a lower intake
pressure at the Sneed compressor station, because we
will have a limited line capacity.

Q. In Exhibit 223 and Exhibit 224 you show acidization of 20 wells in the Hugoton field, whereas I believe in your old Exhibit 42 you showed acidization of only ten wells. What is the reason for that change?

A. That is because we are going to have to take more gas from each well which is now drilled than we would if we would have gone ahead and drilled the 20 contemplated wells in Oklahoma.

Q. It is the result, then, is suspending the drilling of additional wells in the lower part of the Hugoton field and taking increased volumes of gas from the other portions of that field, is that correct?

A. Well, it is a matter of taking more gas from Hugoton field over the entire field. That is, if I understood you correctly, you said that it meant taking less gas from one portion of Hugoton field, and a greater portion from another, but the takes will still be governed by progation, as nearly as it will be possible to do so.

Q. That is, so far as you have gathering facilities to gather the gas?

Mr. Littman: Pardon me, Mr. Culton. Where do you show in Exhibit 42 that you had proposed to acidize in
[fol. 9694] 1942 more than four old wells in the Hugoton field?

The Witness: That is a typographical error, and I believe that was corrected in the record, because the unit cost of the acid treatment is $1,550.

Mr. Littman: Unit cost?

By Mr. Culton:

Q. In other words the item $15,500 under Item 9 is the cost of acidizing ten wells and not the cost of acidizing four wells; is that correct?

A. That is correct, and I thought that that was brought up one time during cross examination.

Mr. Culton: I have my exhibit marked there changed from four to ten.

Mr. Littman: I have no recollection of that change having been made, but if there is a correction to be made on Page 27 of Exhibit 42 let's do it now.

Should that read "Acidize ten old wells in Hugoton field, cost of $15,500"?

The Witness: Yes, sir.

By Mr. Culton:

Q. In other words your unit cost the aggregate cost represents the unit cost of ten wells?

A. Yes, and my working papers show what ten wells were to be acidized.

[fol. 9695] Mr. Littman: Are these 20 wells proposed to be acidized as shown on Exhibits 223 and 224 all old wells?

The Witness: Yes. By "old wells" you mean wells that have been drilled previous to this date?

Mr. Littman: I mean old wells in the same way that you used the term "old wells" in Exhibit 42. I take it you have defined it.

The Witness: Well, my definition for an old well is one that has been completed and has been producing gas into the pipeline for some time.

Mr. Littman: That is what you meant when you used that term in Exhibit 42?

The Witness: Yes, sir.

By Mr. Culton:

Q. Now, in your Exhibits 223 and 224 you show compressor station near Hugoton, Kansas, and a dehydration plant?

Mr. Littman: How about the office building in the [fol. 9696] Hugoton? You skipped that.

Mr. Culton: That is the same, is it not, in all the exhibits?

The Witness: Yes.

Mr. Culton: That was also in the original 42. I am just going to the change now.

Q. Was this compressor station near Hugoton and dehydration plant used in the old Exhibit 42?

A. No. Not for the year '42, but it does appear for the year 1946 under the anticipated load.

Mr. Littman: Where is that shown? What page and what item?

Trial Examiner: Did Mr. Culton's question contemplate the year 1942—

Mr. Culton (Interposing): Yes, sir.

Trial Examiner (continuing):—or Exhibit 42?

Mr. Culton: It happens to be both in that particular instance, Mr. Examiner, but I meant the Exhibit 42 under the year 1942.

The Witness: That is shown on Page 31 under item I and J.

Mr. Littman: On what page?

The Witness: 31. Item I and J.

However, the horsepower requirement for the stations [fol. 9697] shown in Exhibit 42 Page 31, Item I, is not the same horsepower as that proposed shown in Exhibit 223 and 224.

Mr. Culton: What is the difference?

Mr. Littman: What are the horsepower?

The Witness: As I remember it took 2600 horsepower at that time?

By Mr. Culton:

Q. And you are using 4,000 in the current one?

A. And we are using 4,000 now.

Mr. Littman: You mean you are using 4,000 now for the purposes of Exhibit 223?

The Witness: Yes, that is correct. 2600 horsepower.

Mr. Littman: Thank you.

By Mr. Culton:

Q. Now, your dehydration plant in Exhibits 223 and 224 is shown at $60,000 whereas in the exhibit 42 it is shown at $70,000. Do you recall what that difference was?

A. Yes, sir.

Q. All right.

A. The $70,000 was based on a bid that was received from the Finor Company. Since that time we have done considerable experimenting on dehydration plant work, and we have come to the conclusion that our engineering department is capable of building a more suitable dehydration plant for our requirement, and it is estimated that we can do that work for $60,000 and get the plant [fol. 9698] that we want, rather than pay the $70,000 for the plant which was proposed.

Q. In other words, if at this time you were remaking Exhibit 42 you would use $60,000 instead of the $70,000 which you used there?

A. Yes, sir.

Q. You show in Exhibits 223 and 224 an item for looping existing lines, there being one of 3.5 miles and the other of four miles. Where would that looping be done?

There is an Exhibit No. 45 which you can probably describe that from, and you might hold it where Mr. Shattuck and counsel can see it, or they might come up here, and they and the Examiner could all see it, if you like.

A. The looping which is proposed covers the pipe shown to have been constructed—that would have been constructed in 1944 on the original estimate, and that particular location was chosen to enable wells connected to the present eight-inch line to produce gas at the required working pressures for the increased volume.

We have in our pipe yard at Hugoton at the present time some secondhand eight-inch pipe which I did not show because I just didn't have time to get the value of it, and we propose to come over and connect this original line with that eight inch pipe.

Q. The word "this" doesn't mean anything in the record.

[fol. 9699] Will you please give from section corners to section corners, or something like that?

A. Yes. The pipe extends from the end of the present 16-inch line, which is in the northeast quarter of Section 22, Township 33, Range 38, and extends to a point about 3½ miles west to the approximate north half of Section 19, 33, 38, and the four miles, starts from the end of the 16-inch, northeast quarter of 22, 33, 38, and extends along the present eight inch line in a northwesterly direction a distance of approximately four miles.

Trial Examiner: To say it another way, you are trying to increase your capacity immediately west of Hugoton, Kansas?

The Witness: Yes, sir. That is correct. And the reason that we picked that location is because there are so many wells now connected which are dropping off in pressure more rapidly than other wells in the field.

Trial Examiner: And the [reas] you have indicated on the map is a matter of six or eight square miles immediately west of Hugoton?

The Witness: That is correct.

By Mr. Culton:

Q. You said that, in doing this work, you had some eight-inch pipe that you thought you could use. Has the [fol. 9706] cost of that been included in the estimates in Exhibits 223 and 224?

A. No, sir. No allowance has been made.

Q. In other words, the money which you have been providing for in Exhibits 223 and 224 represents new money that would have to be put into the matter?

A. That is right.

Q. New pipe?

A. I think that the secondhand pipe would already be on the books of the company at some value, and the increase in the cost would just be construction, and it amounted to so little that I didn't put it in.

Q. So you are not taking into consideration, in this, either the value of that pipe or the cost of taking it up or the cost of replacing it?

A. No, sir. Neither have I shown that we are going to

12, and move the 16-inch line over to a portion of the system that the 12 will be removed from, in order to give us better capacity in the Panhandle field.

Q. In other words, this study was made as much for the information of those interested in the amounts of new steel which would be required as anything else?

A. Yes.

[fol. 9701] Q. That was one of the important things that you were considering? A. That is correct.

Q. Now, I notice that you have a less number of buildings required on Exhibit 223 and 224 than were required in your old Exhibit 42.

A. The number was cut down because the material situation had become as tight as it has, and the fact that we are not going to be able to build all of the buildings which were originally proposed will influence our operating cost to some extent, and that will be an increase of the operating cost.

* * * * * * * *

[fol. 9707] By Mr. Culton:

Q. Mr. Hinton, I think this morning we had discussed the differences between the capital expenditures in 1942 as shown in your Exhibit No. 223 and the capital expenditures for the same years effected in your Exhibit No. 42.

Is there any change in the expenditures which you contemplate making in 1943 and those you had covered for 1943 in your Exhibit 42?

A. Yes, there is a change unless the present situation ends and it is possible to obtain the desired materials.

Q. You reduce the expenditures for 1943, do you not, as shown on Exhibits 223 and 224? A. Yes.

Q. Substantially below those you had provided for 1943 in your Exhibit No. 42?

A. That is correct. We reduced that, the major reduc- [fol. 9708] tion being to limit the use of steel.

Q. Is there any additional capital expenditure provided for in Exhibit 224 for the year 1942 over and above those provided for in Exhibit 223? In other words, to

A. No, they are identical.

Q. I notice that for the 307,000, there is a total expenditure of $1,335,000 in Exhibit 223 and, in Exhibit 224, that expenditure is shown as $1,978,000.

A. I thought you were speaking of the year 1943.

Q. 1942.

A. Yes, there is a difference in the two expenditures.

Q. In order to meet the 338 million sales, what will you have to have by way of capital expenditures that will not be required to meet sales of 307 million?

A. There will have to be a 4,000 horsepower compressor station built near Santanta and a dehydration plant at that location and a telephone line from the present Liberal compressor station up to the proposed Santanta station.

Q. In other words, the Santanta station will have to be in contact with the line? A. Yes.

Q. So you can tell how to handle your pressures?

[fol. 9709] A. That is right.

Q. There would be no commercial station, telephone line there, that could be used?

A. That is my understanding. I did not investigate it but I had it investigated and that is the answer I got.

Q. Will you refer to Exhibit 45, the map of the future expenditures and tell us approximately where the Santanta station would be?

A. The proposed Santanta station will be in the northwest quarter of Section 28, Township 30, Range 34, Haskell County, Kansas, and it is shown on Exhibit 45 by a dotted triangle that it would eventually be a station location but, as it did not come within the 5½ year period covered in this study, it is not colored. It is just merely shown on there as a triangle at the present time.

Q. In other words, you had originally assumed it would be necessary to put that station in at a date after 1946? A. That is correct.

Q. But by the use of less steel and more horsepower, you have decided it would be necessary to put it in now if you meet these peaks? A. That is correct.

. . . . . .

[fol. 9710] Recross-Examination.

By Mr. Littman:

Q. Mr. Hinton, have any of the expenditures set forth in Exhibits 223 and 224 been as yet approved by the Board of Directors of Panhandle Eastern Pipe Line Company? A. Yes, sir.

Q. Which ones have been approved?

A. Should I identify those by item letter?

Q. Yes. A. Item (A)—

Q. (Interposing) Just a minute, you are referring to which exhibit? A. Exhibit No. 223.

Q. Exhibit No. 223, all right.

A. Item (A), item (B), item (C), one-half of item (D), item (E), item (F), item (G), now under construction, item (H) now under construction, one-half of item (I), item (J) has not been approved. Neither has item (K), nor (L), (M), and I am not sure about (N). Item (O) has been approved, and when I speak of approved, I mean that that is in the budget at this time and the money has been set aside for the use of this construction.

[fol. 9711] Q. Which items are under construction?

A. Item (G) and Item (H).

Q. The others are not under construction?

A. No. We have the pipe for the liners, for item (B). We have the pipe for item (A). We have the pipe for item (C) and as to the items which have not been approved in this recent study, there just has not been a chance to work up the budget for those for approval.

Q. In other words, roughly a little more than a half or approximately a half of the capital expenditures shown in Exhibit 223 have not been approved by the Board of Directors?

A. Yes, approximately half of the money involved.

Q. Have those items which you indicated were not as yet approved by the Board of Directors been submitted to the Board of Directors by way of an estimate or budget?

A. No, they have not and I think that the fuel requirement situation for war industries will govern whether they are submitted or not. If they are not submitted, why, it will mean that we will be supplying a much smaller market than is anticipated on the quantity shown at the top of Exhibit No. 223.

Q. In other words, items (J), (K), (L) and (M), at least, may never be submitted and may never be approved by the Board of Directors for aught that you know?

[fol. 9712] A. Not item (J). Items (K), (L) and (M) will depend upon the need for fuel for war industries.

Q. And those three items alone make up approximately half of these proposed capital expenditures for the year 1942 under the hypothesis stated in Exhibit 223? Is that right? A. Yes, sir.

Q. What is the fact as to item (J)? That item, office building Hugoton, has not yet been submitted to the Board of Directors, has it? A. I am not sure.

Q. Or did I misunderstand?

A. I just do not know whether that has been approved or not. I feel quite sure that it has not been disapproved by the Board because that portion of the budget, my understanding is, has not yet come up for approval.

Q. All right. How about the proposed expenditures estimated for the year 1943 in Exhibit 223 in the amount of $65,262, have any of those items been submitted or approved by the Board of Directors?

A. No and, in all probability, they will not until the early part of 1943.

Q. In other words, no commitment has been made with respect to those?

A. I do not believe that any of the budget items are approved a year in advance in any case by the company.

[fol. 9713] Q. Now, let's look at Item (G) which is a large item in Exhibit 223, which provides for the installation of additional horsepower at Sneed in the amount of 2600 horsepower at a total cost of $362,800. Have you as yet ordered the equipment?

A. It is not only ordered, the major part of it is on the location and the construction work has been going on for some time on the installation of the 2600 horsepower.

Q. You have the machines on hand?

A. Either on hand or shipped. It is quite definite that they are there. I have not been down there for a couple of weeks and I do not know whether they are in or not.

Q. What about Item (H), additional horsepower at Hansford in the amount of $121,200. What is the fact as to that?

A. That is about the same as the Sneed station or Item (G). It is under construction at the present time and if the engines are not there at this time, they are probably on the way.

Q. What assurance, if any, do you have that you are going to be able to get compressor station equipment designated as Item (K), in line 13, for the compressor station near Hugoton, Kansas, shown here as 4000 horsepower and in the amount of $552,560?

A. If it is decided that there is an urgent need for [fol. 9714] gas to be used as fuel in war industries, I think it is rather certain we can get the 4000 horsepower required there. Those will be 800 horsepower engines and they are more readily available than the larger engines at this time.

Q. Who has to decide that?

A. Well, I would say first it would be the W.P.B. and then, I cannot remember the name of the preference rating board.

Q. At any rate, some Governmental agency will have to give you priority before you can obtain that machine?

A. Absolutely.

Q. And you have not as yet received any such priority rating?

A. No, sir, this is too recent to have even made application for a preference rating.

Q. Now, let's look at Exhibit No. 224. Some of the items which you have already described are duplicated on this exhibit but perhaps you had better go on through each of the items on Exhibit No. 224 and tell us which ones have been approved by the Board of Directors of Panhandle Eastern and which have not.

Mr. Culton: Mr. Littman, I think you will find it will be a time saving proposition as there are only an addition of three or four items there so the same status would exist as to the remaining items.

[fol. 9715] That is true, isn't it, Mr. Hinton?

The Witness: Yes, that is true.

Mr. Culton: It is just the addition of three or four items on Exhibit No. 224 that are not on Exhibit 223.

Mr. Littman: Yes.

By Mr. Littman:

Q. I think you can start with line 14, Item (M). Suppose you take up the new items which appear in Exhibit No. 224.

A. Of which there are four.

Q. You know that better than I at this stage.

A. The first being Item (M), a compressor station to be constructed near Santanta and that is the same as the compressor station near Hugoton. It is a recent development, we might say, in our studies and there has been no approval and I feel quite sure there has been no application made for preference rating on the required horsepower.

Q. And it may never be installed, for all you know?

A. You mean during 1942 for the '42-'43 load?

Q. Yes.

A. I feel quite sure that it will eventually be installed but not for that year—what I mean is, it is going to be installed sometime but whether it is installed during the year 1942 to carry the '42-'43 load depends on what is decided as to the requirements for fuel for war industries. [fol. 9716] Q. You did not have any such item at all in your Exhibit No. 42 when you were last on the stand, did you?

A. No, sir, because we were basing our study on the economic method of development at that time.

Q. And within two years, let us say, it is altogether probably that you may revert to your so-called economic studies shown in Exhibit 42. Isn't that within the realm of possibility?

A. Yes, sir, we certainy hope so.

Q. Then it may never be installed?

A. If we furnish the 338 thousand M.c.f. daily sales, it will be installed because we cannot furnish it without it.

Q. With a capital "If," of course. If it is to be installed, it will be installed, of course, but you do not know whether it will ever be, do you?

A. Of course, the title of this exhibit was put on there to try to explain that the capital expenditures outlined here were based on the volumes that were given at the top of the exhibit.

Q. You started out with the premise that if and again I say a capital "If," if this amount is required in 1942, you will install, or in your opinion, the capital additions which you set forth here will be required.

A. Yes. If times were normal and things not so uncertain, there would be no change in the original exhibit. [fol. 9717] Q. All right. What about the next item, "Telephone line" shown in line 15, item (N)?

A. That will be essential if the compressor station is built at Santanta.

Q. You know copper is pretty hard to get these days, don't you?

A. We have no idea of building a copper line. We are going to substitute steel. I think copper would be an utter impossibility.

Q. Has the telephone line been submitted to the Board of Directors for approval?

A. No further than Mr. Creveling, as far as I am concerned.

Q. How about the next item, "Dehydration plant near Santanta"? A. That is in the same class.

Q. "Loop existing lines Hugoton Field," which is the next item. What is the fact as to that?

A. That would also be placed in the same class.

Q. That is, the item has not been yet submitted to the Board of Directors for approval?

A. As far as I know, it has not. I know that Mr. Creveling has approved that method of obtaining the volume acquired.

Q. If certain things are to happen, he approves it? [fol. 9718] A. Yes, and if the gas field does not suddenly become depleted.

Q. Now, how about the next item, "Purchase pickup trucks"? You were a little uncertain about that on Exhibit No. 223, were you not?

A. If we do not increase our load over the load which is anticipated, we will not have to purchase, but one of those.

Q. Now, adding up these items that have not yet been submitted to the Board of Directors for approval and which are in the category of items concerning which you are uncertain as to when they will be installed, I secure the

amount of $1,270,000 odd out of your estimate of $1,978,000 odd. Is that about right?

A. Yes, that sounds about right to me.

Q. In other words, out of $1,978,000 odd of estimated capital additions on Exhibit No. 224 for the year 1942, approximately only $700,000 have been approved by the Board of Directors. Isn't that right?

A. That is correct. These things take time to go through the channels and I would say that these, in all probability, will not be submitted to the Board. I do not know how that works exactly but until Mr. Creveling would find out what the demand would be for fuel, these are largely dependent upon that. In other words, we can give them so much gas without any further capital expen-
[fol. 9719] ditures or we can try to furnish needed fuel by making these additions.

Q. Now, with respect to the year 1943 the capital expenditures shown in Exhibit No. 224, I take it that no submission to the Board of Directors has as yet been made?

A. No, the only thing that has been done for the 1943 program is to secure some casing for the two wells.

Q. I take it from your testimony, Mr. Hinton, and I want you to correct me if I am wrong, you were merely given a mechanical job of estimating the capital additions that, in your opinion, would be required to make the deliveries shown in the captions of Exhibits 223 and 224 and to do so on the basis of the least amount of steel?

A. Steel and other materials in which a shortage appears at this time.

Q. In other words, you are not taking the responsibility for the philosophy of the exhibit but you have done a mechanical job of estimating the amount of capital requirement under the hypothesis given?

A. I do not know whether I would term that "philosophy" or not. I would say the volumes were given me and the problem was just as you stated it and, to supply the volumes that were given me, these were the expenditures that would be required.

Q. You do not know whether the company is going to actually make these amounts of sales, do you?

[fol. 9720] A. No, sir.

Q. Mr. Hinton, will you please give us, in a single statement, the formula which you used to convert the peak day sales amounts of 307,000 M.c.f. and 338,000 M.c.f. into the four annual amounts which you gave as gross amounts available at Liberal station?

A. You refer to the change of pressure basis?

Q. Yes, and to the line loss, company use.

. . . . . .

The Witness: I believe that the most understandable way to do that would be to go through the same procedure which I did to arrive at those amounts.

[fol. 9721] I first took the 307,000 M.c.f. which is the estimated sales. The next thing is the addition of 16,880 M.c.f. which takes care of the fuel that is used east of Liberal. It is found by experience that the gasoline plant shrinkage will amount to 2,640 M.c.f., approximately, and that there will be an unaccounted amount of gas due to line loss of 1,540 M.c.f. which gives a total requirement of 328,060 M.c.f. and that is the requirement east of the Liberal compressor station.

To that amount we add, for fuel for the Sneed compressor station, 2,100 M.c.f.; fuel for the Hansford station is 1,375 M.c.f. and fuel for the Hugoton station is 1,000 M.c.f. and the fuel for the Liberal station is 2,800 M.c.f. which gives a total of 335,335 M.c.f. daily requirement. That is multiplied times the capacity factor used, whether it be 70 or 90, and the product is multiplied times 365 days to arrive at the annual requirement.

Q. You mean if you are using a 70 per cent capacity factor, you take 70 per cent of 365 days and then multiply it by the 335,000?

A. (Interposing) No, I take the 70 per cent of 335,335 and multiply that times 365 days. If it is 90 per cent, the answer is all the same but I never like to take 70 or 90 per cent of a year because it is hard to trace the figures back that way.

Q. But the results are the same?

[fol. 9722] A. That is right.

Q. Now, what pressure base do you have?

A. Those amounts which have been given are all on a 30 inches saturated pressure base which is equivalent to 14.73 pounds, approximately, that is, very close and to convert that to the 2 pound pressure base which is 16.4 pounds, it is necessary to divide 14.73 by 16.4 and that factor is applied to the amounts which have been given to arrive at the pressure base which is used in the production end.

Q. Will you please take the 338,060 M.c.f. peak day sales and give us the method applicable to that amount?

A. We start with the 338,000 M.c.f. To that we add the fuel requirement east of the Liberal compressor station, which is 22,130 M.c.f. The gasoline plant shrinkage for that amount will run 3,375 M.c.f. and the unaccounted for gas, due to line loss, will be 2,327 M.c.f. That gives us a sub-total of 365,832 M.c.f. which is required east of Liberal to supply a sale of 338,000. Then to the 365,832 M.c.f., we add the Liberal fuel in the amount of 3,080 M.c.f.; the Sneed fuel in the amount of 2,400 M.c.f.; the Hansford fuel in the amount of 1,375 M.c.f.; the Hugoton fuel in the amount of 1,000 M. c. f. and the Santanta fuel in the amount of 1,170 M.c.f. which gives us a total of 374,557 M.c.f., the amount which we are required to produce to supply a 338,000 M.c.f. sale.

[fol. 9723] Then, to find out annual requirement on a 70 per cent capacity factor, we multiply the 374,557 by 70 per cent and, in turn, by 365 days to get the annual estimate on a 14.73 pound pressure base. In other words, to convert to the production pressure base, we divide 14.73 by .16.4 and we obtain a factor of .89817 which is applied to the amounts given in any case and that gives us the requirement from the production end.

Q. That is 85,954,285 M.c.f. for the year?

A. On a 70 per cent capacity factor?

Q. That is the one you just gave us.

A. How many did you say, Mr. Littman?

Q. 85,954,285 M.c.f. per year.

A. That is correct.

Q. Now, in order to secure the amounts under the 90 per cent load factor, you used the same formula except that you applied 90 per cent instead of 70 per cent?

A. To the total daily requirement, that is correct. I think that we have the wrong figure there for the annual requirement, though. It is my understanding that we are talking about a 338,000 sale. That is the one we have just gone through.

Q. That is right.

A. And a 338,000 M. c. f. sale daily on a 70 per cent load factor gives us an amount of 95,699,033 M.c.f. on a 14.73 [fol. 9724] pound pressure base or 85,954,285 M.c.f. on a 2 pound pressure base or production base—

Mr. Culton: (Interposing) When you say 2 pound, you mean 16.4?

The Witness: Yes, that is atmosphere plus 2 pounds.

By Mr. Littman:

Q. And the figure I read of 85,954,285 M.c.f. is on the—

A. (Interposing) On the 2 pound base rather than the 8 ounce.

Q. And the latter base is the one which you use and did use in the Exhibit No. 42?

A. That is correct, yes, sir.

Q. Mr. Hinton, when you referred to your annual estimate as "Load conditions comparable" to Mr. Morton's estimates in Exhibit No. 40, you merely meant that the annual volumes were the same?

A. Yes. I did not state that properly and I appreciate your calling attention to it because it had nothing to do with the load factor at all. It was the annual requirement.

Q. Is it not true that in the load conditions which you have assumed, the annual sales are larger in proportion to the system capacity than in Mr. Morton's Exhibit No. 40?

A. Yes, they are somewhat larger and I believe that you are referring to the 70 per cent capacity factor?

[fol. 9725] Q. That is right

A. Of course, we know the 90 per cent is much larger.

Q. What provision has been made to hold the leases which were supposed to be perpetuated by the 19 wells

which you had proposed to drill per your Item (M), page 27, of Exhibit 42?

A. As far as I actually know, there has been no move made but the leases which were at that time owned by Hagy, Harrington & Marsh have been sold to another company and it is possible that we will be able to make some type of deal with the other company. If not, to insure ourselves against an altogether loss there, we have gone out and taken additional acreage elsewhere to make up for these leases, if they are entirely lost to us.

Q. Well, when did you discover this? A. Discover what?

Q. That you could do without drilling these 19 wells?

A. If we did not put in the horsepower up in the Hugoton Field, we would have to have the 19 wells and the pipeline as we originally had it laid out.

. . . . . .

[fol. 9726] By Mr. Chamberlain:

Q. Why would you have to have the 19 wells, Mr. Hinton?

A. To augment the supply which we now are able to put into the Liberal compressor station.

Mr. Culton: That is, you are able to if you get this additional expenditure, you mean?

The Witness: No, I mean under the original system, we plan to take an amount of gas from Oklahoma which is approximately equivalent to the increase that can be obtained by the use of horsepower in the Hugoton Field.

By Mr. Chamberlain:

Q. The 19 wells were to be in Texas County, Oklahoma?

A. Yes.

Q. Now, I think I understand your plan here to be a determination of a method of getting your supply on the basis of steel conservation, is that correct?

A. That is correct.

Q. Why do you have those three Texas wells included in 1942 if you are trying to conserve steel?

A. Just for insurance. To give you an example, during our peak load which occurred last winter when we were taking some 151 or 152 million out of Texas, we had on the line at that time 161 wells. The reason that we

did not have 110 on was because the other nine would not [fol. 9727] feed and we are experiencing, in some cases, very sharp pressure declines on our Texas wells and I did not feel that it would be safe not to drill any wells at all down there and that is the reason that we held it to three instead of five. We, I believe, are on the conservative side and yet on the safe side.

. . . . . .

Trial Examiner: I do not recall, Mr. Culton, that any statement has been made on the record concerning any war [fol. 9728] time restrictive measures, that affect your drilling program?

. . . . . .

Trial Examiner: There have been developments?

Mr. Culton: Yes, sir, not so much the drilling program as the furnishing of the material for the wells, obtaining the material.

That is correct, isn't it?

The Witness: There has been considerable along the lines of drilling also.

Trial Examiner: I have seen in the press statements concerning restrictions as to drilling for oil and I assumed that similar restrictions would obtain with reference to the development of gas. Is that true?

The Witness: That is correct.

Mr. Culton: Are you familiar with what those restrictions are? If so, will you give them?

The Witness: Pretty well. They come under P 68 and provide that no gas well can be drilled on acreage which is less than 640 acres; that it must be drilled approximately in the center of the lease and cannot be drilled on a lease which is more than twice as long as it is wide and they have had—I believe Mr. Littman was down to the hearing they had there on the local supply, no, it was Mr. Jones who was down there—they have had a meeting down [fol. 9729] there trying to cut down the size of the lease required because 640 acres in the Local Area there, that

would completely cure most of those patches of productive areas and they are trying to get a 40 acre spacing area worked out there now.

Mr. Culton: Would it now effect you substantially in the Hugoton area, is what I think the Examiner had in mind.

The Witness: Yes, it would, because we cannot go ahead and develop as economically as we would like to, that is, to cut down our delay rentals and decrease the overall cost of the gas to the extent we might like to because we cannot make an application for the use of materials and say that it was absolutely required that we do this, to furnish our market, say, do the drilling to furnish the market.

Trial Examiner: And the matter is controlled through the priorities regulations?

The Witness: That is correct. We file a notice of intention to drill in both Oklahoma and Texas. That is, they issue a permit and it is just a matter of getting the information into their offices. In Kansas, it is not even necessary to make out an application to drill.

Trial Examiner: Do the restrictions go so far as to deny the use of material you have on hand and in stock?

The Witness: Yes, sir.

[fol. 9730] Mr. Littman: These restrictions to which you have just referred are State, not Federal?

The Witness: That is correct, as far as the permits for drilling, but we are not permitted to use material which we have in the warehouse to drill wells that we could not so far were actually needed, without violation of the priority order as I understand it.

Trial Examiner: Now, you are referring not to State regulation but Federal regulation through the War Production Board?

The Witness: That is correct.

Trial Examiner: Through the Priorities Division?

[fol. 9736] Redirect Examination.

By Mr. Culton:

Q. Some reference was made, Mr. Hinton, to the leases which you have heretofore testified would be drilled if economically handled in order to protect some leases which have been top leased. A. Yes, sir.

Q. And you stated that there was a possibility that something might be worked out with the new owner of those leases. If it isn't, you think that, if you are not able to get the additional pipe required, the additional steel, there is a possibility that some of those leases might be lost: is that correct?

A. I think it quite probable that they will all be lost.

Q. But you will either lose the leases or you will have to make a trade with the present owners of some kind?

A. That is correct.

Trial Examiner: Your contracts are not such that the regulatory orders will relieve you from your obligations?

Mr. Culton: That is true, Mr. Examiner. As a lawyer I might state that those [least] contracts provide that they absolutely terminate at a certain date unless production is then being had.

Top leases are made after that which would immediately [fol. 9737] become effective if that first lease, the lease held by us, terminates, and it is only production that can keep the lease alive after the—what we call—the primary term, and, of course, a new deal can't be made by the land owner now since he has executed a new lease to the top lessee.

Is that explanation sufficiently clear?

Trial Examiner: Yes.

By Mr. Culton:

Q. Mr. Hinton, certain exhibits—225, 226, 227, and 228—have been marked for identification. I will ask you to explain Exhibit 225, which is captioned "Estimate of operation and maintenance costs, South and west of Liberal Compressor Station, 367,000 M. c. f. continuous daily sales capacity, Operation at 70 per cent capacity factor,"

the first page being for the Panhandle field, and the second page for the Hagoton field.

Will you first explain the two columns under the heading "1942 1943" of Exhibit 225?

. . . . . .

A. The amounts shown under the years 1942 and 1943 are the amounts which Estimate would be the cost to the company to operate and maintain the property south and west of Liberal.

[fol. 9738] It is a comparison of what the operating and maintenance cost would be if we were to develop as we desire, or if we are caused to develop as we have to with the shortage of material which is now being experienced.

Q. And will reach 307,000 M.c.f. at 70 per cent capacity factor? A. That is correct.

Q. Where are the principal differences between the economic expenditures resulting from economic construction and those less economic?

A. The principal difference in cost is in the royalties, in the delay rentals, and in the gas purchase costs, and in the increase of routine operating and maintenance costs which are caused by the installation of new compressor stations.

Q. I note on Exhibit 225 Page 23 the royalties are changed from $232,000 to $150,000.

A. You mean Line 23?

Q. Line 23, yes. A reduction in royalties? A. Yes.

Q. 1942 and 1943? A. Yes.

Q. And also a reduction in 1943-44. Why is that reduction in royalties?

A. That is caused by the drilling of additional wells [fol. 9739] in the Panhandle field.

Q. What do you mean by that?

A. As shown in the capital expenditures. In other words, if we would go ahead and develop, as I believe that the company should, to meet these market requirements, we would have, at the time which we would experience this load, have developed so that the amount of gas that we would be producing, which would be in excess of what we will be able to produce under the less economic expen-

ditures; would a [a] comparison of $232,099 against $160,523.

Q. In other words, by producing less of the gas your royalties are less: is that the point?

A. That is correct.

Q. Now, there is an increase in Line 25 in delay rentals, from $4,932, as used under "Economic Expenditures," to $11,031 on "Less Economic Expenditures." What is the cause of that increase in delay rentals?

A. That is because we would be forced to continue to hold those leases by the payment of delay rentals rather than by curing the lease by drilling.

Q. That represents the leases which you have heretofore assumed you would drill in Texas?

A. That is correct.

Q. And in order to hold those leases alive you were required to pay more delay rentals than you had antici- [fol. 9740] pated? A. Yes, sir.

Q. Now, line 27 show an increase of $113,000 in gas purchase costs.

Explain the reason for that.

A. That is because the percent that the purchase wells would participate in the Panhandle field, after we had made our desired development, would be less than it will be under the alternate or substitute method of development.

Q. There is a decrease shown in columns B and C, page 1, Exhibit 225, of some $62,000 in royalties, but there is an increase in the amount of $110,000 or $113,000 in the expense for gas purchase costs, is that correct?

A. That is correct.

Q. That is due to shifting the balance between your purchased gas and your produced gas in Texas?

A. That is right.

Mr. Littman: Why is that necessary? Why are you going to shift—why are you going to make that shift?

The Witness: By the application of the proration formula under which the property is operated, each developed well has a certain participation in the total amount of gas that is taken from that field, and if we were permitted to

go ahead and drill the wells that we would choose to drill to meet this volume—market volume—why, the division of that gas in Texas would be in the following per cents:

[fol. 9741] We would be producing 68.77 per cent of the gas and would be buying 31.23 per cent of the gas, but inasmuch as we will not be able, in all probability, to get the material to develop, as we would desire, the division of the produced and purchased gas will be in the following per cents:

For the first year, which I assume will cover a portion of 1942 and 1943, we will be producing 56.47 per cent of our gas and will be buying 43.53 per cent, but, by the addition of two more wells, before we go into the next year's market, we will increase the amount that we will produce from 56.47 per cent to 57.27 per cent, and will decrease the amount that we will buy from 43.53 per cent to 42.73 per cent.

[fol. 9742] Q. There is also a difference in the production tax shown on Line 36 of Page 1, Exhibit 225, in that under your economic expenditure column B, the company's gross production tax in Texas would be $65,698, whereas with less economic expenditures the gross production tax would be only $40,590.

A. That is right. We would have a reduction of approximately $25,000 in gross production tax.

Q. That is, had you anticipated that you would be able to drill the wells at the time that volume of gas would be required is that correct? A. That is correct.

Q. What was the difference in the first year, in the Panhandle field, between what the operating and maintenance expenses would be on an economic basis and on a less economic basis? A. It would be $27,131.

Q. It would cost more in the Panhandle field than you have heretofore assumed under the same load?

A. Yes, sir.

Q. Annual load? A. Yes, sir.

Q. Now, will you pass to Page 2. Does that reflect the same situation as to the Hugoton field as it reflected [fol. 9743] on Page 1 as to the Panhandle field?

That is, is it prepared on the same general line?

A. The base used for the preparation is the same.

Q. What are the differences in the less economic expenditures and the economic expenditures, as reflected on Page 2?

What are the principal items of difference?

A. The principal items of difference are the operation of a compressor station near Hugoton, and the cost of purchased gas.

Q. There will be an item of $23,000 for the maintenance of the two compressor stations, operation and maintenance of the two compressor stations; is that correct?

A. That is correct.

Q. And an increase in the cost of purchased gas from $508,000 to $931,000; is that correct?

A. No, sir. There will be an increase in the cost of purchased gas from $293,498 to $701,922.

Q. My eyes went crooked. You are right.

A. There will be a reduction in royalty of approximately a thousand dollars.

Q. And what will be the difference in the cost of the Hugoton field between operating with economic capital expenditures and the less economic capital expenditures?

A. It would be $302,846. Four hundred is right— [fol. 9744] $403,846.

Q. Then what would be the net increase in operation and maintenance cost be in the two fields for the first year in operating with what you consider economic expenditures and those less economic? A. $429,977.

Q. In other words, your operation and maintenance expenses, if you attain a production of 307 million cubic feet daily sales capacity, operating at 70 per cent capacity factor, with the expenditures which you have heretofore described, would cost the company more than $429,977, than would the cost have been had you been permitted to make the expenditures referred to in your Exhibit 42?

A. Yes, that is correct.

Q. Now, Exhibit 226; is that prepared along the same lines as Exhibit 225, only for an operation at 90 per cent capacity factor? A. That is correct.

Mr. Littman: —I would like to have the witness clarify one or two matters for me.

[fol. 9745] Mr. Hinton, where do you secure the figures in Exhibit No. 225, which appear in columns headed, "With Economic Expenditures"?

Are those figures taken from your Exhibit No. 43, schedules 3 and 4?

The Witness: Some of them are and some of them aren't. In other words, I—

Mr. Littman (interposing): That is what seems to have me confused.

The Witness [(continuing)]: —I had to make a new estimate of what the expenses would be under each condition for this load.

Mr. Littman: Well, you had them already estimated—

The Witness: (interposing): No.

Mr. Littman (continuing): —in Exhibit 43, did you not?

The Witness: No, sir.

Mr. Littman: Then it—

The Witness (interposing): I had the same comparative type figure, but under a different load condition, and with the time element entering into the problem of the cost.

Mr. Littman: Different volumes of gas too: is that right?

The Witness: Yes; and I used the actual costs which we have on our books for the cost of these functions, as a [fol. 9746] base, but I used my judgment in what it would cost for each particular operation in each case under these conditions.

Mr. Littman: So that you can't take any of your columns headed "With economic expenditures" and compare them with any of the schedules that appear in Exhibit No. 43 directly can you?

The Witness: Not directly, no sir, but they are the base which—that is, they are the base figures on which I based my judgment of revising the estimated cost of maintenance and operation in Exhibit 225.

Mr. Littman: Well, now, looking at schedule 4, page 1 of Exhibit 43, and comparing column—

The Witness (interposing): Which is that, Mr. Littman, please?

. . . . . .

Mr. Littman: Estimate of operation and maintenance costs of west of Liberal, Panhandle field, estimated future load.

Now, I note in your column F for the year 1944, of that exhibit, your operation, your transmission operation expense is $27,078, which is precisely the same as the similar item which appears in Exhibit 225 in Column B.

The Witness: Yes. And it should be approximately the same, because we would have the same number of miles of pipe line to operate.

[fol. 9747] Mr. Littman: Now, the next item "Maintenance" is $13,530 in each of the exhibits?

The Witness: Yes.

Mr. Littman: Now, looking at the measurement amounts for the year 1944 in schedule 4, page 1, of Exhibit 43, the expense is $21,528, which is the same as the amount which appears in Column B of Exhibit 225; is that right?

The Witness: That is correct, and it should be so.

Mr. Littman: Now, the next one appears to show a considerable variance?

The Witness: Yes, sir.

Mr. Littman: Column F for the year 1944 Exhibit 43 schedule 4 shows—page 1—shows $243,200 for compressor station operation and maintenance, as compared with $95,859 in Column B of Exhibit 225. Now, what accounts for the difference there?

The Witness: I would say that the difference is accounted for in the fact that the original figure included a cost of 15 cents per M. c. f. for fuel which was used in the operation of the compressor station, and if you will remember we had considerable discussion about how that should be handled.

It is a washout, as far as regular accounting is concerned, but to bring out our picture more accurately I left the cost of fuel out altogether this time.

[fol. 9748] Mr. Littman: This time you did as we suggested you do?

The Witness: Yes.

Mr. Littman: In other words, take the cost of fuel out so as to avoid a possibility of a duplication?

The Witness: That is right, and I didn't want to get into another accounting argument, because I knew I would lose, so I just left it out.

Mr. Littman: Well, that saved us a lot of money here, didn't it?

That accounts for the paring down from $243,000 to $95,000 for that?

The Witness: Yes, sir.

Mr. Littman: Let's look at the next item which appears to be identical, to wit: cost of or expense for the production operation and maintenance.

The Witness: Right.

Mr. Littman: Now, you show $36,250 in Column B of Exhibit 225, which is identical with the amount shown in your previous schedule, Exhibit 43?

The Witness: Yes, sir. That would be the same number of wells under approximately the same operating condition.

Mr. Littman: So far so good. Now, the next one is entitled: "Land and Lease, Operation, Royalties, Rents, Delay Rentals, Renewal Bonus."

Now, here is a considerable variation?

[fol. 9749] The Witness: Yes, sir. The original did not have the gas purchase costs, but inasmuch as we finally had it all together before we got through making exhibits, I carried the gas purchase costs in this total here.

Mr. Littman: In other words you did not include in the former exhibit—to wit: Exhibit No. 43—the cost of gas purchased, did you?

The Witness: No, sir.

Mr. Littman: You did include it after we made some computations?

The Witness: That is right.

Mr. Littman: And added them together?

The Witness: And I thought it would be handier for everybody concerned if it was put in here at this place.

Mr. Littman: I see. Well, but notwithstanding that, that is, excluding the $650,209 of gas purchased, I believe there would still be a variance.

Let's look at the items. Your operation is the same under both the old and the new?

The Witness: Yes, sir.

Mr. Littman: Now, under the old schedule you had $182,562 for royalties, whereas you now have $232,099 for royalties?

The Witness: Yes, sir. The volume controls royalties, and the volume which we are talking about is the same as [fol. 9750] that which we would experience in the year 1946, approximately.

Mr. Culton: Rather than the year 1944?

The Witness: Yes.

Mr. Culton: Or '43, whichever one you are using?

The Witness: That is right.

Mr. Littman: Then the difference, at that juncture, is simply because of the increased volumes of gas?

The Witness: Right, and if you will notice, all the way through here our operating expenses have been estimated to be less, in almost every case, than they would have been if we would have encountered this load in 1946.

Mr. Littman: So your $232,099 in Column B of Exhibit 225 for "Royalties" is the same as the amount shown in your former exhibit for the year 1946?

The Witness: That is a coincidence if it checks.

Mr. Littman: It comes out to the dollar.

. . . . . .

The Witness: It would have to be a coincidence if it is correct.

[fol. 9751] It is not correct.

Mr. Littman: What is not correct?

The Witness: The amount shown. The $232,099 is not correct.

Mr. Littman: What is the correct amount?

The Witness: It should be $193,185.

Mr. Gulton: It should be what?

The Witness: $193,185 for the first year.

. . . . . .

Mr. Littman: Instead of $232,099?

The Witness: Yes, sir.

Mr. Littman: In other words you have just a slight increase over the 1944 figure in your previous exhibit: is that right?

The Witness: Yes. That is the way it would come about.

Mr. Littman: Now, the next figure of rents, $325, is the same for 1944 under your old schedule?

The Witness: That is the same every year. That is office rent.

. . . . . .

Mr. Littman: Now, delay rentals are the same, are they not?

[fol. 9752] The Witness: No, sir.

Mr. Littman: Under your old schedule and under your present schedule?

The Witness: To fit the time, yes.

Mr. Littman: Beg pardon?

The Witness: To fit the amount of development; you see, the $4,932 would be the last delay rental we would pay before we completed our drilling.

. . . . . .

Mr. Littman: Very well. So the next item of $800 is the same in Column B of 225 as—

The Witness (interposing): That is right.

Mr. Littman (continuing) —as shown in your former exhibit—

. . . . . .

Mr. Littman (continuing) —for the year 1944, is that right?

The Witness: That is right.

Mr. Littman: Very well. Now, so far it looks like you [fol. 9753] have only got about $10,000 more of expenditures in Column B than you had for comparable items in your previous exhibit.

The Witness: Yes, sir.

Mr. Littman: Let's go to the next item of dehydration.

The Witness: No. Wait a minute. You didn't get to the gas purchased there.

Mr. Littman: Well, I mean excluding the gas purchased.

The Witness: Yes.

Mr. Littman: Because you didn't set forth that item in your other exhibit: to wit, Exhibit 43.

The Witness: That is right.

Mr. Littman: Let's go to the next item, the item of "Dehydration Plant; Sneed, Operation and Maintenance."

Now, the total of $6,623 is approximately the same—well, it is the same as the amount which you show in your Exhibit 43, schedule 4, page 2, for the year 1943?

The Witness: Yes. I believe that that is just about correct too.

Mr. Littman: Why do you jump back to 1943 instead of going to 1944?

The Witness: Because the age of the station, the age of the plant, would be taken into consideration.

Mr. Littman: Not many dollars involved there—

The Witness: No.

[fol. 9754] Mr. Littman (continuing) —one way or the other?

The Witness: No, sir.

Mr. Littman: Let's go to taxes. Taxes are $95,976 under Column B, Exhibit 225, as compared with $81,955 for the year 1944 in schedule 4, Page 2, of Exhibit 43. What accounts for that difference?

The Witness: It means that the difference of approximately $30,000 there—

* * * * * * * * * *

The Witness: That is accounted for chiefly in gross production tax, and the gross production tax in the state of Texas runs into considerable money on any volume of gas, and the fact that we would be producing less gas cuts that down from $65,698 to $40,590, and the ad valorem taxes are also lower under the less economic expenditures, because we don't have as much property in the state.

By Mr. Culton:

Q. Just for clarification, that difference in the gross production tax would be paid by the people from whom you purchased gas, since they would pay the gross production [fol. 9755] tax on it? A. No, sir. That is paid by us.

Q. Well, you charge it to them though? A. No, sir.

Q. Didn't you do that?

A. Oh, we can't charge the gross production tax, on the gas we produce, to somebody else.

Q. No, but then there would be more of it, more of the gross production tax—

A. (Interposing) The state of Texas would get the same amount of money. I see what you mean.

Q. More of it would be paid by your vendors than by you? A. That is right.

Mr. Culton: All right.

Mr. Littman: Let's look at the ad valorem tax. The amount is the same in the old Exhibit for 1944 as under your new exhibit 225, Column B—$30,278?

The Witness: Yes, against $25,610.

Mr. Littman: Where is the $25,610? I don't find that.

The Witness: Under Column C, line 35.

Mr. Littman: I was looking at Column B all the while. Your ad valorem tax is the same under Column B as it was under the old setup?

The Witness: That would be the taxable property that [fol. 9756] we had constructed in the state at that time.

Mr. Littman: The gross production tax goes up about $14,000, doesn't it?

The Witness: About $25,000.

Mr. Culton: I think you are talking about two different things there.

The Witness: Are you on Exhibit 225?

Mr. Littman: Yes, sir. You have $65,608?

The Witness: Yes, sir, under Column B. That is the way we would like to have it.

* * * * * * * *

Mr. Littman: Now, for the year 1944, which seems to be the comparable year over in Schedule 4, Page 2, of Exhibit 43, you have $51,677 for gross production taxes?

* * * * * * * *

The Witness: Gross production tax is governed entirely by volume of gas which is produced by the company.

Mr. Littman: Produced by the company?

The Witness: Yes.

Mr. Littman: But you are going to produce less, aren't [fol. 9757] you, under this new setup?

The Witness: Yes, than we would if we would have made the capital expenditures that we would have desired to make to furnish this volume of gas.

What you are losing track of is the time element and the volume of gas that is to be handled.

Mr. Littman: All I wanted you to explain is why, in column B, you have $65,698 for gross production tax in exhibit 225, as against $51,677 in column F of schedule 4, page 2 of exhibit 43.

. . . . . .

The Witness: The gross production tax in the state of Texas is governed by the value of the gas, and the way that is calculated is to take the total amount produced and value the working interest which we have in that gas.

That is, we have seven-eighths, so I take 87½ per cent of the 41,262,000 which we expect to produce, and I value that gas at 3.126 cents and arrive at a total value and take 5.2 per cent of that value which is the state tax, and that is the way I obtain the amount shown under "Gross Production Tax," line 36, exhibit 225.

. . . . . .

[fol. 9759] By Mr. Culton:

Q. Mr. Hinton, have you checked the computations as to lines 23 and 36, page 1 of exhibit 225, during the re-[fol. 9760] cess? A. Yes, sir.

Q. Are your original figures right or wrong on those?

A. The original figures are correct.

Q. In other words line 23, the royalties under column B, are properly shown at $232,099, and the gross production tax at $65,698? A. Yes, sir.

Q. What caused the confusion in your examination a while ago?

A. Well, I had made several trial calculations and I had not marked the sheet of my working paper which I used, and I referred to the wrong sheet of my working papers.

I have now marked the sheet which I used so there can be no further mistake.

Q. And that represents the royalties and the gross production tax on the volumes of gas which you would have liked to have been able to produce from Texas, with a daily sales capacity of 307 million, and operation of 70 per cent?

A. Yes, sir. That represents the amount which I believe that we would use under such load conditions, if it were possible to obtain needed material.

Q. Then from the two fields you would have an increase in operation and maintenance cost of $429,977 by using the less economic method of capital expenditures, is [fol. 9761] that right?

A. Yes. That would be for the first year that we would experience this condition, which I assume would occur during the latter portion of 1942 and the first portion of 1943.

Q. Would there be any substantial difference the second year?

A. No substantial difference. It would be about $700 further increase.

* * * * * * * * *

Mr. Littman: Now, Mr. Hinton, do I understand you to say that the volume of gas contemplated to be produced by the expenditures shown in column B of exhibit 225 is 60 million M. c. f.?

[fol. 9762] The Witness: Annually.

Mr. Littman: From the Panhandle field?

The Witness: Yes, sir.

Mr. Littman: And that is the precise amount of gas which you had originally expected to be produced in 1946 as per your exhibit 43?

The Witness: Right.

Mr. Littman: Now turn, if you will, to page 2 of schedule 4 of exhibit No. 43, and I call your attention to column H for the year 1946.

You show your grand total of operation and maintenance expenses to be $725,317, is that right?

The Witness: Exclusive of the purchased gas.

Mr. Littman: And I want you to add to that the cost of gas purchased which is $650,209. I am correct, am I not, when I state that that is the cost of gas purchased?

The Witness: That is correct.

Mr. Littman: What total do you get?

The Witness: $1,376,526, and from that amount the power or the fuel at 15 cents per M. c.f. should be deducted from the Sneed and Hansford compressor stations to make it comparable to the amount shown on exhibit 225.

Mr. Littman: Suppose you deduct that, and let's see whether it is comparable.

The Witness: I obtain a figure of $1,207,466 after de- [fol. 9763] ducting the amount of $108,460 for fuel at Sneed, and the amount of $60,600 for the fuel at Hansford compressor station, making a total of $169,060, which is to be deducted from the $1,376,526, leaving a comparative total of $1,207,466, against $1,189,009, which is shown under Column B of Exhibit 225, the difference being principally in the time element of higher operating pressures and lower maintenance and operating cost of the wells.

Mr. Littman: The difference to which you refer now is the difference between the $1,207,466 and the $1,189,009?

The Witness: That is correct.

Mr. Littman: A difference of approximately $18,000?

The Witness: Yes, sir.

By Mr. Culton:

Q. In other words, if these economic expenditures were made earlier, the operating expenses would be less than as reflected in your former exhibit?

A. That is correct.

Q. And you have shown that lesser operating expenses in column B? A. Yes, sir.

Q. Of Exhibit 225?

A. That is right. And if they were to be made at a later date than shown on this exhibit they would be increased instead of decreased.

* * * * * * * * *

[fol. 9764] By Mr. Culton:

Q. Passing to Exhibit 226, I notice you show, for the Panhandle there, operating at 90 per cent capacity factor, 307,000 M. c. f. of continuous daily sales capacity, an expenditure in the "economic" column of $1,200,852, and in the "less economic" column $1,216,140, and that the expenditures in the "less economic" column, column C, are the same as those shown by operating at 70 per cent capacity?

A. Yes.

Q. Why is that?

A. Because we would be taking the same amount of gas from the Panhandle field under either condition.

Q. In other words, whether operating at 70 per cent factor or 90 per cent factor, you would take the same volumes of gas from the Panhandle field, and under the same conditions?

A. From the standpoint of protection of reserves it would be the proper method to take it from there as we have done.

Q. But what is the difference in the cost of taking from the Hugoton field, when taken at 90 per cent factor, over and above that when taken at a 70 per cent factor?

A. I would like to find my copy of that 226.

Q. 226 is not in that for some reason (handing).

[fol. 9765] A. That is for 309,000 M. c. f. at 90 per cent capacity factor?

Q. Yes.

A. We would have an increase in the cost, cash out of pocket, to Panhandle Eastern, of approximately $620,000.

Q. Making a total difference in the cost to Panhandle Eastern, in the two fields, of how much?

A. $637,023.

Q. And Exhibit 227, is that prepared along the same lines which show a continuous sales capacity of 338,000 M. c. f. with an operation at 70 per cent capacity factor?

A. That is correct.

Q. Is there any difference in the Panhandle field between the cost under those circumstances and the cost when operating at 307,000 M. c. f. continuous capacity and 90 per cent factor? A. No, sir.

Q. You take the same volumes of gas?

A. Same volumes of gas being produced under the same conditions.

Q. And what is the situation as to the Hugoton field?

A. The increase that will be encountered in the Hugoton field is slightly over $500,000.

Q. Making a total difference of how much in the two fields?

[fol. 9766] A. $523,955.

Q. Now, passing to Exhibit 228, purporting to show the estimated cost of operation and maintenance for 338,000 M. c. f. of continuous daily capacity, operation at 90 per cent capacity factor.

Is there any difference as to the cost in the Panhandle field on the previous bases? A. No, sir.

Q. You are still producing the same volume of gas from the Panhandle field, irrespective of which of these sales capacities is used: is that correct?

A. That is correct.

Q. And what is the increase in cost of producing 338,000 M. c. f. at 90 per cent capacity factor over what it would have been in the Hugoton field, had you been able to handle the economic expenditures?

A. About $744,000.

Q. And the total in the two fields would be how much more? A. $760,963.

Q. Now, are columns D and E in each of these exhibits 225, 226, 227, and 228, prepared along the same lines as columns B and C, except for a subsequent year?

A. Yes, they are.

Q. Are the differences in cost shown on the end of each [fol. 9767] exhibit?

A. Yes, and I believe itemized in sufficient detail to enable anyone to see where the increase or decrease in costs occur.

Q. In your opinion do the figures reflected on Exhibits 223 to 228 inclusive correctly reflect what they purport to reflect?

A. As nearly as I feel that it would be possible to estimate them.

Q. And were they prepared by you?

A. They were.

Mr. Culfon: That is all.

. . . . . .

Recross Examination:

By Mr. Littman:

Q. These figures that you show at the foot of Page 2 of each of exhibits 225, 226, 227, and 228, as representing the difference between the cost of operating under the so-called "less economic" method, as compared with the cost of operating under the so-called "economic" method, do not reflect the saving that will accrue by reason of the installation of considerably fewer capital additions, both with respect to rate of return and with respect to allowances for depreciation?

A. No, sir. They do not purport to show any such [fol. 9768] figure.

They are purely maintenance and operating figures, including the cost of purchased gas.

There is no allowance made in there for excess profits, income tax, depletion of reserves, amortization, or anything other than pure maintenance and operation costs.

Q. No consideration given to rate of return—

A. (Interposing) Executive salaries.

Q. (Continuing) —executive salaries, or the fact that your fixed overhead costs, such as administrative and general expenses will remain the same notwithstanding the increased volume of gas—nothing for that?

A. No, sir.

Q. And as you have said, no reflection of the effect of the differences in depreciation allowances, as between the so-called economic and less economic methods?

A. That is correct.

It is a cash out-of-pocket expenditure, is what it amounts to.

Q. For maintenance and operation?

A. For maintenance and operation.

Q. And nothing else?

A. And nothing else.

[fol. 9769] Redirect Examination.

By Mr. Carlton:

Q. In other words this merely shows the difference in operating and maintenance cost, if you substitute additional power for additional steel which you would otherwise have installed to get the additional volumes of gas?

A. That is correct. If there would be no difference in the operation and maintenance cost, why, then, we would have gone to horsepower in the first place, rather than to pipe lines, in our original study.

Q. Did you at that time make a study to determine whether or not it was more economic to go to horsepower or to steel pipe?

A. I don't believe that we made what you would call a regular study, but we did make a sufficient number of calculations to readily show that we had chosen the economic method of development.

Q. And this less economic method—under this less economic method of development—you will be limited in the portions of your reserves which you can develop within an early period of time?

A. That is correct, and the fact is we will have to go ahead and make, at a later date, practically all of the ad-[fol. 9770] ditions which we originally contemplated, and this is merely a temporary substitute, but it does not mean that the additions proposed will not have to be constructed at a later date.

Q. In other words, you are just switching some of the later expenditures to early years and the early expenditures to later years; is that correct? A. Yes.

Mr. Littman: Can you give us the year? You talk about years; what years?

The Witness: If I knew just exactly what the fuel requirements were to be for the war industries I think I could give you the year, within a year, but I do not know what that load would be at this time, and it would be pretty difficult to answer your question.

Mr. Littman: Neither does anybody else know.

The Witness: That is what I am getting at. In this uncertain time, why, that would be a difficult question to answer.

Trial Examiner: Mr. Hinton, in the preparation of these studies you have adopted a standard of peak day sales of 338,000 M.c.f. and 307,000 M.c.f. at respective load factors of 70 per cent and 90 per cent?

The Witness: Yes, sir.

Trial Examiner: Perhaps it will make this record more [fol. 9771] intelligible if you say why you have adopted this standard.

. . . . . .

The Witness: No, I did not determine the volumes, but it was explained to me why the volumes were used, and I think that Mr. Burnham's testimony will show why we arrived at the volume of 307,000 Mcf per day and 338,000 M.c.f. per day, rather than some other figure, and the understanding that I have, and the reason that these studies were called for was on the assumption that Panhandle Eastern Pipe Line Company will probably be called on to deliver gas in considerable quantities, which will be used at plants engaged in making materials for the war effort.

. . . . . .

[fol. 9772] By Mr. Culton:

Q. Your jurisdiction is only from Hugoton south and west; is it not? A. From Liberal.

Q. From Liberal, I mean, south and west?

A. Yes, sir.

. . . . . .

[fol. 9773] Recross Examination

By Mr. Chamberlain:

Q. Is it my understanding that in 1941 you purchased and produced about equal quantities of the gas which you sold?

A. Yes. That is approximately correct.

Q. Now, is it fair to say that, in the immediate future, you contemplate an increased production of which you can not get the same proportion out of Texas as you have been in the past? A. That is right.

Q. And that the changes that are shown on Exhibits 225 and 226 are because of being required to change the source of your production from that which it would have been had you been able to make the expenditures that you outlined in your former exhibits?

A. That is correct. It is the shift of the division of load between fields.

Q. Now, can you tell me—and I think perhaps you did and I didn't take it down—what percentage you had figured that you would furnish from Texas at the time of your Exhibit 42?

A. At that time, and basing the load increase upon the estimate furnished by Mr. Morton, we assumed that we [fol. 9774] would continue to divide the load between the two fields in approximately the same proportion as we have the past year, that being somewhere around 70 to 71 per cent of the total from the Panhandle field.

Q. Well, now, going to your exhibit 225, column B, will you tell me what amount of gas it is contemplated that you will produce in 1942-43, page 1? I refer to the Panhandle field; page 1.

A. I don't believe I understand you. You asked what amounts we were going to produce for the year?

Q. Yes. Let me ask it again. What I would like there would be the figures of what you contemplate producing and what you contemplate purchasing in that exhibit.

* * * * * * * *

A. We estimate that we will produce —

* * * * * * * *

A. (Continuing)—41,262,000 M.c.f.

Mr. Littman: 41,262,000?

The Witness: M.c.f.

[fol. 9775] Mr. Littman: That is, produced?

The Witness: Yes.

By Mr. Chamberlain:

Q. And you will purchase how much?

A. 18,738,000 M.c.f.

That is what we would do if we were able to get the material to add to our system.

Mr. Culton: The two together make 60 million, is that right?

The Witness: Yes, sir.

A. (Continuing) But what we are actually going to do with the shortage of material, in place of producing 41,262,000, we estimate that we will produce 28,537,417 M.c.f. and we will purchase 21,998,118 M.c.f. making a total of 50,535,535 M.c.f.

. . . . . .

Mr. Littman: That is a different volume of gas, is it not?

The Witness: Yes. If we had the material to build to get to a market of this volume we would take 60 million feet a year from Texas, while we could, rather than being [fol. 9776] forced to cut back to 50,535,535 M.c.f.

. . . . . .

By Mr. Chamberlain:

Q. Now, will you turn to page 2, exhibit 225, and give me similar figures for the Hugoton field?

A. If we were able to develop in the manner which we would like to—that is 307 at 70 per cent, isn't it?

Q. That is right.

A. (Continuing)—we would produce from the Hugoton field 19,128,114 M.c.f. as would be reflected in column B of Exhibit 225, and would purchase 6,825,542 M.c.f.

. . . . . .

A. But operating in the method which is considered under the less economic method we will produce 10,094,364 M.c.f. and will purchase 16,323,757 M.c.f., making a total from the Hugoton field of 26,418,121 M.c.f. which would be taken from that field under the additions shown in Column C. By "additions" I mean additions to the property in the way of pipe lines and horsepower.

[fol. 9777] By Mr. Littman:

Q. Will you give us the corresponding figures for columns D and E on page 2?

. . . . . .

For the column—they will be the same, the volumes will be the same for D and E, the M.c.f. volume will be the same.

Q. Is the same true of the preceding page, namely page 1 of Exhibit 225? Will the volumes be the same—

A. (Interposing) No, sir.

Q. (Continuing)—for columns D and E as for columns B and C?

A. No, sir, they will not.

Q. Will you please give us the volumes for columns D and E?

A. Under the economic method of developing, they will be the same, but as we feel that we are going to add to the system the amount shown to be produced from the Texas field for column B would be 41,262,000, and the amount purchased 18,738,000.

Q. That is the same for column D as for column B?

A. Yes.

Q. Page 1 of exhibit 225?

A. Same for B as for D, but the amount for E is not the same as that for C.

[fol. 9778] Q. Will you give us that figure?

A. Yes. The amount we would produce, and which would be reflected in column E, would be 28,941,701 M.c.f. produced and 21,593,834 M.c.f. purchased.

Q. That gives you precisely the same total—

A. (Interposing) Yes, it would be the same volume.

Q. (Continuing) —as that for column C?

A. That would be the same volume from the Panhandle field, but the division between the purchased and produced changes.

Q. Very slightly at that?

A. By two wells. By the addition of the two wells, the influence that they would have.

[fol. 9784] C. H. M. BURNHAM was recalled as a witness, having been previously sworn, was further examined and testified as follows:

Direct Examination

By Mr. Culton:

Q. Mr. Burnham, exhibits 229, 230 and 231 have been marked for identification.

I will ask you if those exhibits were prepared by you.

A. They were prepared by me and, to some extent, under my direction.

Q. Do they correctly reflect the matters which they purport to reflect? A. They do.

[fol. 9785] Q. I will ask you to explain these exhibits, first taking Exhibit 230—we can go back to 229 later—and ask you to explain Exhibit 230, the occasion for your making the study, and what that exhibit shows.

A. As I have previously testified during this hearing, we are continually studying the loading on our system, the effect of different distributions of load, and the need for power, as evidenced by these studies, at the various compressor stations.

I was assigned the job of determining as accurately as possible the maximum quantity of gas which might be sold on a continuous basis when the system west of Zionsville, Indiana, is completely looped, and with the various compressor stations powered on an economic basis.

This study resulted in the answer shown on Exhibit No. 230.

In other words, when completely looped west of Zionsville, Indiana, and economically powered, Panhandle Eastern Pipe Line Company System, combined with that of

Michigan Gas Transmission Corporation will have a continuous daily delivery capacity of 338,000 M.c.f.

Q. What compressor units are required for that capacity? Where are they reflected on your exhibit 230?

A. They are reflected near the bottom of page 1 at the right-hand side, the additional compressor units that [fol. 9786] would be required.

Q. And what would be the aggregate cost of those compressor units?

A. The aggregate cost of those compressor units, including additions to the gasoline plant at Liberal compressor station, amounts to $2,959,150.

Q. What additional pipe line construction would be needed in order to attain that capacity, and where is it reflected on your study?

A. The additional pipe line construction that would be required is shown on page 2 and consists of two loops in Indiana, or rather one loop in Indiana and one loop extending over into Ohio, and the completion of our loop construction in Kansas.

The loop in Ohio consists of 9.94 miles of 24-inch O.D. pipe on the discharge of Edgerton compressor station, and the loop in Indiana consists of 46.67 miles of 24-inch pipe on the discharge of Zionsville compressor station.

Q. That would make how much investment in pipe line by Michigan Gas Transmission?

A. $1,494,504.

Q. And how much additional capital expenditures would be required for Michigan Gas Transmission by way of compressor station under that method?

A. We have no additional power required by Michigan [fol. 9787] Gas Transmission.

Q. No additional capacity for Michigan Gas Transmission Corporation, solely by reason of the looping which you have described?

A. That is correct.

Q. What looping would be required for the main line of Panhandle Eastern?

A. The looping required for the main line in Kansas will consist of 26.64 miles of 26-inch pipe on the discharge of Olpe compressor station—that is between Olpe and Louisburg compressor stations.

15.53 miles of 26-inch pipe between Haven and Olpe compressor stations.

20.19 miles of 26-inch pipe between Greensburg and Haven compressor stations, and 23.37 miles of 26-inch pipe between Greensburg and Liberal compressor stations.

Q. Making a total of how much for looping?

A. $2,581,160.

Q. And this would require a total of how much for looping? A. $4,075,664.

Q. Now, in addition to the additional compressor stations and the loop lines, would any other expenditure be required on the main line system or on the system east of Liberal?

[fol. 9788] A. To complete the system and to make it possible to operate it on an economic as well as practical basis we feel that the system telephone line should be extended eastward to not only Dana but to Detroit.

Q. Which would necessitate a further expense of how much money?

A. A further expense of $846,800.

Q. Making a total cost east of Liberal of how much for additional facilities in order to have economic production and transmission expenditures?

A. $7,881,614.

Q. Now, did you also ascertain the expense of certain construction west of Liberal station in order to have the gas economically produced and transmitted?

A. Yes. I consulted with Mr. Hinton and determined what field lines would be necessary, including expanding the trunk system into Texas.

Q. And were the figures that you obtained those that are reflected for such items in his original exhibit 42?

A. They are.

Q. Up to the time that volume of gas would be required?

A. That is correct.

Q. Did you consider the figures which he had there as reasonable? A. I did.

[fol. 9789] Q. And accounting only for the well lines, the trunk lines, the gathering lines, and the measuring stations, what additional investment would be required south and west of Liberal station?

A. $3,660,923 in lines and measuring stations.

Q. Is that reflected on your exhibit 230?

A. On page 3.

Q. And to the extent that those items are listed in your exhibit, are they a duplication of similar items which appear in Mr. Hinton's exhibit No. 42?

A. They are.

Q. This would make a total investment of how much for additional capital expenditures over the entire system in order to have a continuous daily delivery capacity of 338 million cubic feet?

A. The figure which I will read is in addition to certain projects now already under construction, and amounts to $11,542,537.

Q. And that, so far as the field is concerned, includes only lines and measuring stations?

A. That is correct.

Q. It does not include the compressor units or gas wells?

A. That is correct, and particularly does not include the two units we are now installing at Sneed and Hans-
[fol. 9790] ford compressor stations.

Q. Now, have you, from this study, determined the amount of tonnage, by way of pipe requirements, that would be required if the line were completely looped and economically powered with economic production and transmission expenditures, so as to have a continuous daily delivery capacity of 338 million? A. I have.

Q. Is that reflected in your exhibit 230?

A. On page 4 of Exhibit 230 that is reflected.

Q. And will you explain page 4 to us?

A. Page 4 is a computation, or the results of a computation totalling the mileage of pipe involved, and determining from it the total tons of pipe.

As will be noted the Michigan Gas Transmission will be required to install 11,820 tons of pipe in Indiana and Ohio.

The Panhandle Eastern Pipe Line Company will be required to install in Kansas, along the main line, 17,502 tons of pipe.

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TRANSCRIPT OF RECORD

(Pages 3537 to 4056)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. VIII.

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

United States Circuit Court of Appeals

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PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

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The well lines, gathering lines, and trunk lines, in Texas, Oklahoma, and Kansas, will require 29,805 tons, giving a total tonnage of pipe required of 59,127 tons.

Q. Now, even if you had that pipe and the compressor stations which you have listed, would you still feel safe in operating the system with a continuous daily de- [fol. 9791] livery of 338 million, without further equipment?

A. That would depend largely on the load factor.

Q. Assuming a 90 per cent load factor?

A. Assuming a 90 per cent load factor it would be practically impossible to operate the compressor stations without a standby unit in each station.

Q. Why is that true?

A. Because it is necessary to repair these units as well as to operate them.

It takes from two to three weeks to repair one of these large engines, and a repair or maintenance job is required after about 4,000 hours of operation.

There are roughly some 8,000 hours in a year, so it would indicate at 90 per cent load factor that these units —one unit would be under a repair operation almost all the time at a 90 percent load factor rating.

Q. What is your practice as to these repairs under the load factor which has heretofore applied?

A. We are able, on the present basis, to repair all of our units during the summer period.

Since our load factor is in the order of 65 to 70 per cent this would indicate that, during the summer, only part of the units in each station is running, giving us a spare, or sometimes two spares, to work on during the slack period.

Q. Then if there was continuous operation on a load [fol. 9792] factor of 90 per cent, what additional capital expenditures would be required for safe operation and dependable operation?

A. The Michigan Gas Transmission Corporation would be required to install an additional compressor unit in each

of its three compressor stations, the total cost of which would be $520,000.

Panhandle Eastern Pipe Line Company would be required to put a new unit or standby unit in each of its compressor stations.

I have included only compressor stations from Liberal eastward, trusting that the field stations would not require a standby unit for the proper maintenance of these stations.

In other words, the flexibility in the field is sufficient to permit the repair of an occasional unit in the field.

Panhandle Eastern's expenditure on this basis would be $1,407,000, making a total of $1,927,000 to be invested in standby units.

Q. Is that study of standby compressors reflected on your exhibit 230?

A. It is, on page 5.

Q. Then, in order to have a continuous daily delivery capacity of 338,000 M.c.f. at 90 per cent capacity factor, and in order to feel safe in the view that you could furnish [fol. 9793] that much every day, it would be required to make that expenditure, in addition to the expenditures for compressor stations and loop lines, which are shown in your exhibit 230?

A. That is correct.

Q. Now will you explain Exhibit 231?

A. 231 follows very closely Mr. Hinton's exhibit No. 224.

In other words, I have carried the computations, and so forth, eastward from Louisburg, with some duplications in the field, as will be explained later.

A minimum amount of steel is to be used in bringing about the same answer as was obtained on Exhibit No. 230, and in reducing this quantity of steel we have assumed that there will be no looping of the trunk gathering line extending up from the Panhandle field to Liberal station.

This gas, which we formerly contemplated would come from Texas and Oklahoma, will come from Kansas.

Q. That is, the greater portion of it will come from Kansas?

A. That is correct.

Q. All right.

A. Therefore, power or compressor stations are to be installed in the Hugoton field. These two compressor stations are—

[fol. 9794] Mr. Littman (interposing) Just a minute. You say "will be." You mean: based on certain assumptions?

The Witness: Yes, sir.

Mr. Littman: If this, that, or the other thing happens?

The Witness: That is correct.

A. (Continuing) These compressor stations are reflected in Mr. Hinton's exhibit No. 224, as well as in my exhibit No. 231.

The same quantity of gas, it is assumed, will be handled on the maximum day.

By Mr. Celton:

Q. What about the compressor station equipment which will be required on the main line, including the Michigan Gas Transmission?

Is there any difference in that?

A. Inasmuch as the quantity of gas to be handled on the maximum day is the same, there is no change in that connection.

Q. How about the looping?

A. The looping is the same.

Q. In other words there is no change between Exhibit 230 and 231, except in so far as the field is concerned?

A. With another exception, and that concerns the telephone lines east of Louisburg, Kansas. We have eliminated those also, in line with cutting down on materials and ex[fol. 9795] penditures.

Q. With the idea of using what facilities for that?

A. Using the private commercial lines for those facilities.

Q. Such as you are now using?

A. That is correct.

Q. The Hugoton and Satanta plants shown in your exhibit 231 are those about which Mr. Hinton testified?

A. That is correct.

Q. Now, did you make a study as to the volumes of pipe required under the plan set out in Exhibits 231 and [231]?

A. The quantity of pipe required in the event we build these two compressor stations in western Kansas, instead of pipe lines in the field, is very much less than that required on the basis that we would bring a considerable quantity of gas up from Texas.

Q. It is the difference between 59,127 tons and 29,824 tons, is it not? A. That is correct.

Q. So that this study presented in exhibit 231 reflects only approximately half the amount of tonnage required as was required under exhibit 230?

A. That is right.

Q. And what would be the total investment, exclusive of standby compressor units, gas wells, and other field [fol. 9796] costs required under exhibit 230?

A. $11,542,537.

Q. And what would be the total investment exclusive of standby compressor units, gas wells, and other field costs required under exhibit 231?

A. The total investment, exclusive of standby compressor units, gas wells, and other field costs, is estimated to be $8,324,534.

Q. Do the same observations with respect to standby units apply to that study as apply to exhibit 230?

A. They do.

Q. Now, will you explain exhibit 229?

A. Exhibit 229 was developed in response to a request to determine how much gas could be delivered on the maximum day with the same looping as was involved in exhibits 230 and 231 but with no compressor additions whatever except as standby units might be required in each of the compressor stations from Liberal eastward.

The maximum capacity which could be delivered on that basis, on a continuous daily basis, is 307 million cubic feet, as compared with the 338 million cubic feet per day in Exhibits 230 and 231?

Q. You used the same looping in all three of those exhibits, is that correct?

A. That is correct. The same looping east from Lib-
[fol. 9797] eral station.

Q. And you used the same capital investment for compressor additions in all three exhibits for standby capacity?

A. No; I made some change.

Q. All right. What was the change?

A. I have recognized the fact in Exhibit No. 229 that when a standby unit is built or installed by itself and not in conjunction with other power, that the cost will be slightly increased.

Q. And is that difference in cost reflected on page 5?

A. It is.

Q. Of Exhibit 229?

A. That is correct.

Q. I believe you stated that the same tonnage would be required under exhibit 229, same steel tonnage, as would be required under exhibit 231?

A. That is correct.

Q. And that by increasing the units in the compressor stations you could increase the daily delivery capacity from 307 million to 338 million?

A. That is right.

Mr. Culton: You may take the witness.

Cross-Examination.

By Mr. Littman:

Q. By "steel tonnage" you mean pipe tonnage, do you
[fol. 9798] not? A. That is correct.

Q. Mr. Burnham, with respect to Exhibit No. 230, that might be characterized, might it not, as a pipe dream under conditions as they exist today, might it not?

A. Well, you (Mr. Littman) might characterize it as that, but we don't know how important the W. P. B. might feel that it is essential that Panhandle Eastern Pipe Line Company do certain things in a certain way.

Q. You can't get the pipe, can you?

A. We might get the pipe.

Q. In other words you have presented these three studies because you don't, at this writing, know in which manner you may be required to operate your system to meet certain requirements?

A. That is exactly right.

Q. But you submitted a study heretofore—Exhibit 47—which set forth your best judgment of the most economical manner in which to operate the property, or in which to expand the property, did you not?

A. Yes, that is true, and it checks very closely with this figure here.

I think that at that time I arrived at an economic maximum capacity of 331 million. We now have 338 million which is a result of recasting our figures and balancing [fol. 9799] the system somewhat in better form—

Mr. Culton: (interposing) That is, as a result of taking over the Michigan Gas Transmission Corporation—did that help you to balance the system?

The Witness: Yes. We balanced by throwing in a little more power in at Tuscola and less power at Montezuma.

* * * * * * * * * *

[fol. 9810] C. H. M. BURNHAM having been heretofore duly sworn, resumed the stand and was further examined and testified as follows:

Cross-Examination (Resumed)

By Mr. Littman:

Q. Mr. Burnham, referring to Exhibit No. 229 which shows your estimate of the capital additions required to increase the continuous daily delivery capacity of Panhandle Eastern and Michigan Transmission Systems to 307,000 M. c. f.; what annual sales are contemplated by this exhibit?

A. In preparing this exhibit, I did not go into annual sales at all. This exhibit is merely to show the investment and the steel required to build the daily delivery capacity of the system to 307,000,000 cubic feet per day.

Q. Now, the 307,000,000 cubic feet represents the de- [fol. 9811] liveries to the customers?

A. Represents the delivery capacity or the ability to make 307,000,000 cubic feet deliveries on peak days on a continuous basis—that is, day after day.

Q. Well, you have labelled on the first page of Exhibit 229, the 307,000 M. c. f. as "Total Sales." I take it that

means that is the quantity of gas which is contemplated to be delivered at the various delivery points on the peak day? A. That is correct.

Q. What pressure base was used?

A. 14.73 pounds per square inch, absolute.

Q. Now, if we were to undertake to determine the annual deliveries on the basis of, let us say, a 70 percent load factor, will you state whether I am correct in saying that we would take 70 percent of your total capacity sales of 307,000 M. c. f., and then multiply the result by 365 days?

A. Yes, you are right.

Q. Likewise, if we were to use 90 percent capacity factor or load factor, as it has been used by Mr. Hinton in several of his exhibits, we would take 90 percent of the 307,000 M. c. f., and multiply the result by 365 days, would we not? A. Yes.

Q. Now, am I correct in understanding that the pressure base reflected in your Exhibits 229, 230, and 231, of 14.73 [fol. 9812] pounds per square inch is the same pressure base which Mr. Morton used in his Exhibit No. 40?

A. Yes.

Q. Is my understanding correct that none of the estimated capital additions set forth in Exhibits 229, 230, and 231, are now under construction? I gather that from your statement on the first page of each of these exhibits, that "All facilities required are in addition to certain projects now under construction."

A. That statement is correct as carried on the first page of each exhibit.

However, there is pending the immediate starting of some of the items shown. That is, some of the work is in phase of being planned at this moment, although construction is not under way.

Q. Have any of the items shown in these three exhibits been approved formally by the Board of Directors of Panhandle Eastern or Michigan Gas?

A. As I understand it—and this is purely hearsay—the Board of Michigan Gas Transmission Corporation approved the purchase of two Worthington 1300 horsepower gas compressor units. These two units, when approved by the management of Michigan Gas Transmission, were to be installed at Montezuma Compressor Station.

Panhandle Eastern has assumed the responsibility of [fol. 9813] placing those units in the system at more desirable points, and at the moment plans are being drawn to install one of these units at Tuscola Compressor Station, and one of them at Centralia Compressor Station.

Q. Now, with that exception, have any of the items set forth in these three exhibits been, as yet, approved by the Board of Directors of the companies?

A. With that exception, none, to my knowledge, has been approved.

Q. Have any of these estimated capital additions set forth in these three exhibits, to-wit, 229, 230 and 231, been submitted to the Board of Directors in a budget or any other form for the Board's consideration?

A. In so far as I know, they have not been submitted to the Board.

Q. What is the present peak day capacity of the system?

A. Approximately 250,000,000 cubic feet sales.

Q. In other words, comparable to the 338,000 M. c. f. and 307,000 M. c. f. figures in your Exhibits 229 to 231, inclusive? A. That is correct.

Q. Referring now to Exhibit No. 229, you do not employ the term "Economic" in connection with this exhibit, [fol. 9814] whereas Mr. Hinton employed the term in connection with the 307,000 M. c. f. sales.

Will you explain why you don't have two exhibits covering the 307,000 M.c.f.?

A. Exhibit 229 might properly be labelled "Less Economic", because if you will note, the gas—or a greater proportion of the gas—must come from the Hugoton field due to the construction of a station at Hugoton, Kansas.

If the Commission would so desire, we can prepare another exhibit supplementing or parallelling Exhibit 229, which would show the investment on an economic basis.

Mr. Culton: Would there be any difference in the main line?

The Witness: There would be no difference in the main line, it would be strictly in the field end of the study.

By Mr. Littman:

Q. Wouldn't your Exhibit 47 already reflect, to a large extent, the so-called economic basis?

A. Except for the fact that there is no study—or, rather, there is no study; that is correct—upon which Exhibit 47 was built, which corresponds to 307,000,000 cubic feet per day capacity.

We would have to develop a study which would reflect the effect of carrying 307,000,000 cubic feet sales back to the field.

[fol. 9815] Q. I see.

I note that Column D of Exhibit 40, a copy of which I hand you, shows, for the year 1942, maximum day total main line sales of 305,200 M.c.f., as submitted by witness Morton.

Would that refresh your recollection any?

A. In that event, no doubt, there is in Mr. Hinton's exhibit, then, sufficient data to permit one to derive the economic expenditures for a sales corresponding to 307,000,000 cubic feet per day.

. . . . . .

Q. Are you referring to his early Exhibit No. 42, rather than his recent Exhibits 223 and 224?

A. I refer to his early exhibit. I don't know the number.

Q. I hand you Exhibit No. 42 to refresh your recollection.

A. No doubt the information is contained in Exhibit 42.

Q. Then, in reality, we have a number of studies with respect to capital additions, to wit—that is, studies that were submitted by you—first, your study submitted originally in Exhibit 47, then the three studies which you [fol. 9816] submitted yesterday, to wit Exhibits Nos. 229, 230, 231.

Now, obviously all of these can't be put into effect, can they?

A. No. These are, as I understand it, alternates. It is proposed that the W. P. B. pass upon which of these construction programs will be undertaken.

Q. What about the study submitted originally by you in Exhibit No. 47?

Is that now out the window, so to speak, or is it still within the realm of real probability?

A. Well, I should say that in as much as we are now in a war, that the status of the early years in 47 is very much changed.

Now, it may be possible that we can swing back on to the proposed investments as reflected in the Exhibit 47 at some later date, but for the moment it seems appropriate that we contribute as much as we can to this war effort, and, in doing so, construction programs as are outlined on these three exhibits, 230, 231, and 229, might receive consideration—favorable consideration—by the W. P. B. to that end.

Q. And they might not?

A. Naturally, they might not.

Q. In other words, at this stage, your company does not know what program of capital additions will even-
[fol. 9817] tually be adopted and put into effect; is that right?

A. That would seem correct.

Q. Now, you have from time to time employed in your Exhibits 229, 230, and 231, the terms "economic," and "less economic."

What do you mean by that?

A. I borrowed those terms from Mr. Hinton's exhibits, and, as I understand it, the economic basis of conducting our business would be to derive larger quantities of gas from Texas than are reflected on these studies which I have labelled "less economic."

Q. Have you made any economic studies for the purpose of determining the over-all cost of gas on these various bases?

A. No, I have not, but, as I understand it, Mr. Hinton has done so, as you know.

Q. Are you referring to Mr. Hinton's recent exhibits in which he gave the estimates of operations and maintenance cost?

Is that what you are referring to?

A. I refer to that and also to all of his previous work which he has done to determine which is the more economic method of producing our gas supplies.

Q. I didn't have those studies in mind. I had in mind studies that took into account the total cost of gas delivered to the various customers, taking into account depreciation, [fol. 9818] return, and all expenses applicable to those sales on the various bases here presented.

A. I believe that, if you remember, Mr. Hinton testified yesterday that he has made studies to determine which is the better or cheaper way, therefore, the economic way, of bringing gas supplies into Liberal Station.

Q. But he, as I recall it, stated he did not take into account return on investment, depreciation, fixed overhead costs, and so forth, but merely confined his estimate to operations and maintenance.

Now, I am asking you whether you know of any such studies of the character that I have described that have been made by yourself or any other officer of the company?

A. No. I know of no such studies.

Q. Well, obviously such studies would have to be made to determine, in the first instance, whether the various alternatives here suggested are economic or non-economic; isn't that correct?

A. That is probably true.

Q. What additions to facilities would be necessary to continue to meet the present sales?

A. The present sales?

Q. Yes.

A. I don't know exactly what you mean by the present sales.

[fol. 9819] Q. Well, let us take the sales for the year 1941, the full year 1941. Would you need any additional capital requirements to meet the sales that you did meet in 1941?

A. I think that on a previous occasion before this, in this hearing, Mr. Hinton testified on what would be the capital requirements to continue on the present basis, and I think, if you will refer to his testimony again on that occasion, you will find present basis is set up.

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[fol. 9820] Q. Mr. Burnham, confining ourselves to our studies, namely, the studies of additions to the pipe line east of Liberal, what, if any, additional facilites would be required to meet the sales that were made in the year 1941?

A. In the year 1941, the peak day sales experienced during that calendar year was something like 240,000,000 per day. Now, on that basis, and disregarding the fact that in the winter of '41-'42, we made a delivery of something over 250,000,000, I should say that the main line capacity would not have to be increased in future years to [fol. 9821] care for such peaks as were experienced in 1941.

Mr. Culton: And with the same load factor?

The Witness: And assuming the same load factor.

By Mr. Littman:

Q. And as a matter of fact, you wouldn't have to construct any additional capital facilities beyond those that are now constructed in order to meet the 1941-1942 peak of 250,000,000 cubic feet?

A. But remember that during that peak period of the winter of 1942, we had interrupted something like 30,000,000 cubic feet, some of which was for essential industries.

Q. I am speaking of the actual deliveries, Mr. Burnham, of—what was it—250,000,000 cubic feet—on peak day of the 1941-1942 winter?

A. Well, if you will confine yourself to the 250,000,000 cubic feet, yes, we do have capacity to carry that great a peak day sales.

Mr. Culton: Is that continuous capacity?

The Witness: Yes.

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By Mr. Littman:

Q. Am I correct in gathering from your testimony that these additional facilities which are set forth in your various exhibits are, in reality, for the purpose of meeting [fol. 9822] additional demands for additional sales?

A. Yes, you are correct.

Q. Mr. Burnham, is there any duplication of facilities set forth in Exhibits 223 and 224 with those set forth in your three exhibits, 229 to 231, inclusive?

A. Yes, there are.

Q. Will you please name the items that are duplicated?

A. In Exhibit 231 I have duplicated in my study, the following items shown on Exhibit 224; Line 12, item K compressor station near Hugoton.

Q. Are you now referring to Exhibit 224? A. Yes.

. . . . . .

Q. Item K?

A. Item K. Line 13, Item L, Dehydration Plant near Hugoton.

Line 14, Item M, Compressor station near Satanta.

Line 16, Item O, Dehydration Plant near Satanta.

Line 17, Item P, looping existing lines, Hugoton field.

There are two items under P which total approximately $64,000.

Q. Several of those items also appear in Exhibit 223, do they not?

[fol. 9823] A. Yes, sir, and referring to my Exhibit 229, I have duplicated in it the following items which are shown on Exhibit 223.

Line 13, Item K, compressor station near Hugoton, Kansas.

Line 14, Item L, Dehydration Plant near Hugoton, Kansas.

Line 15, Item M, the same loop lines in the Hugoton field I mentioned a moment ago, totalling approximately $64,000.

Q. Those items are duplicated also in certain other of your exhibits, are they not?

You merely stated they duplicated certain items in Exhibit 229.

A. And 231. I mentioned 231.

• • • • • • • •

Q. I am sorry.

Are there any duplications between Exhibits 223 and 224 and your Exhibit 230?

A. No.

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By Mr. Littman:

Q. I believe you testified, Mr. Burnham, that the $3,660,923 of field pipe lines and measuring stations appear-
[fol. 9824] ing on page 3 of Exhibit 230 were the same as those which appear in Mr. Hinton's Exhibit No. 42 under the anticipated load.

A. They were furnished me by Mr. Hinton, and I assume they were taken from his Exhibit No. 42.

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[fol. 9825] By Mr. Lee:

Q. Mr. Witness, perhaps this is a repetition of some questions already asked by Mr. Littman, but over-all, have you made any study or prepared any figures to show what the income of the company would be if you had this additional capacity?

A. No, I have not.

Q. It is all predicated, as I understand it, upon what capacity you may need if and when you sell the additional gas to additional customers. By additional, I mean over and above what you have today?

A. We have to build the capacity before we can sell the gas.

Q. I understand that, but it is all predicated upon not today's business and today's customers, but additional customers and additional business; is that right?

A. Well, today's customers' demands are greater than we have capacity today to serve.

Yesterday's customers, we have capacity for. I mean last year's customers.

Q. You mean to say that at the present time the demands are greater than the facilities? A. Yes, sir.

Q. To what extent?

A. Last winter we would have sold, had we had the [fol. 9826] capacity, something in the order of 300,000,000 cubic feet per day.

Q. Well, is it true that so far as the Detroit Company was concerned, that because of their use of their standby facilities, that you did not sell them what you had anticipated you would?

A. That is right.

Q. And is it true that the excess that you had from that source you disposed of elsewhere?

A. Well, it was all thrown in the pot, you might say, but even at that, we were short some 30,000,000, as I testified a moment ago.

Q. And that shortage wasn't caused by the Detroit contract, at least that is true, isn't it?

A. That is right.

Q. What was the cause of the shortage?

A. Well, we just simply did not possess sufficient capacity to meet the demands of our customers. The shortage was caused by customer requirements.

Q. I understand that, but perhaps I didn't make myself clear. Who were the customers that made demands that resulted in a shortage because of your inability to supply those demands?

A. That would be very difficult for me to say, because all of our customers had grown, you might say, during the [fol. 9827] period of the last year, there had been house-heating customers put on in practically every town and village that we served in Missouri, in Illinois, in Indiana, Ohio, and possibly in Michigan—Monroe, particularly—and so the growth was over the entire system, you might say.

You can't put your finger on any one customer and say that he caused an unusual demand on our system.

Q. Now, if you will just pardon me a minute, I would like to get this clear in my mind.

Is it true that the failure of your company—or not failure, but the fact that your company did not supply the requirements, we will say, in some cities of Michigan, outside of the Detroit area, for househeating, is that true because of the nature of the contract?

A. We served all the househeating requirements during that period.

Q. I thought you said a minute ago that in Monroe, for example—

A. (Interposing) I say that all the towns and cities served directly or indirectly from our system grew during the last year—that is, their demands grew.

Q. What you mean is that you could have sold them more if you had the capacity? A. No.

Q. Then I didn't understand you, if you will pardon me.

[fol. 9828] A. What it really amounts to is this: they all grew. We took care of all their requirements, all the domestic requirements, but in that process we had to interrupt from industrial customers some 30,000,000 cubic feet of gas.

Q. Now, that is what I want to get at.

You did not reject any of the requirements throughout your entire system, of domestic customers?

A. No, sir.

. . . . . .

Q. What did happen was that in order to do that was, you said you had to forego industrial sales, interrupt industrial sales? A. Yes, sir.

Q. Now, it is also true, isn't it, that your industrial contracts are interruptible contracts?

A. That is right.

Q. And they are interruptible contracts because you, in making them, take cognizance of the fact that the sales must be made, and the obligations must be met, of the domestic customers; isn't that right?

A. That is correct.

Q. So, in that respect, when you make the broad, general statement that you could have sold and had demands [fol. 9829] for—what was it: 300,000,000?

A. Oh, in that order.

Q. Extra cubic feet. That was for the entire year?

A. Not extra; total.

Q. Total cubic feet, as against what you did supply, the difference being what?

A. Some 30,000,000.

Q. 30,000,000. What you mean is—in the last analysis, now, what you mean is that you just didn't serve the industrials and you were entitled not to serve them because, in making the contract in the beginning, you were taking cognizance of the fact that you may have to shut them off in order to take care of the domestic customers?

A. But it so happened that these industrial customers, to whom we had to curtail the sales of gas, were engaged in war production and that was very embarrassing to have to interrupt and curtail the supply of gas in an essential industry.

Q. That is why I asked you to give me the names of those customers.

I don't dispute your word, but I wanted to see if that was really the situation.

A. It is already in the record, Mr. Lee. I testified to that the last time I was here.

Q. All right.

[fol. 9830] Just one more question. Isn't it the custom in the business that you are engaged in, universal custom, that the industrials are interruptible contracts?

A. Certain types of industrials are interruptible.

Q. Now, what types?

A. Interruptible industrials. We have a firm industrial just now about to go on our line, if you would be interested in knowing the difference between a firm and interruptible.

Q. I know what the difference is, but what I am trying to get at, if you will just bear with me a minute, was: these that you failed to supply were not firm industrial customers, but interruptibles.

A. Yes, that is true.

Q. You did supply all of your firm industrials, if you had any at that time, did you not? A. Yes.

Q. So a condition of your sale of gas to industrials who were interruptible is sort of predicated upon a different basis—if I use the proper term—than your firm [indistrial] customers; isn't it? A. Correct.

What is the difference in that distinction?

A. I don't believe that this company, up to date, is serving any firm industrial customers, but we are about to take on a powder plant which will be, as I understand it, [fol. 9831] a firm industrial customer.

Q. Then you will take care of that contract at the expense of foregoing interruptible industrials, won't you?

A. I assume that we will, yes.

Q. Yes, certainly. A man who gets his gas from you on an interruptible basis knows that he is in a category where he is apt to have it shut off at any time and he takes it upon that condition, doesn't he?

A. He signs that kind of an agreement, but he hopes that we will never shut him off.

• • • • • • • •

Q. Isn't it true that all of the industrial gas that you will sell for defense purposes must be on a firm basis?

A. Well, last winter we interrupted some defense gas or curtailed it, notwithstanding.

Q. Was it on a firm basis under the contract?

A. No, the contract specified interruptible.

Q. That is right, but isn't it true that henceforth any industrial gas for defense purposes will absolutely be on a firm basis?

Mr. Culton: We think that is a matter for the defense industries to determine, Mr. Examiner, what kind of a contract they will require.

[fol. 9832] By Mr. Lee;

Q. Well, isn't it obvious that in order to insure the continuity of supply to an industrial that is engaged in defense purposes, isn't it obvious that there will have to be some guarantee of a continuity of the supply of gas, or that they have standby equipment which will enable them to carry on the continuity of their business?

A. That would be the ideal situation.

Q. Yes. So these customers that you complain you were unable to serve, these customers that you say you could have sold 30 million more cubic feet during the last year than you did: did these customers shut down or go out of business because of your failure?

A. Their operations were curtailed.

Q. Did they have standby service of their own?

A. No.

Q. They did not? A. No.

Q. But it would be good judgment on their part to have some standby facilities that would continue to the interruptible customers?

A. That depends on the customer. He might want to gamble with it.

Q. If he gambles with it, and if he doesn't protect himself with a standby facility—such, for example, as butane [fol. 9833] —to serve as a standby when unable to get the regular supply, then that puts a different face on this whole general allegation that you needed 30 million more cubic feet for customers and that you didn't have the facilities to produce it; isn't that so?

A. Well, butane is hardly a practical substitute.

Q. Well, use some other substitute. They are plenty others, aren't there?

In other words, your general allegation, as you gave it on direct examination, impressed me in the beginning as though you had to forego serving, selling, 30 million cubic feet additional because you lacked the facilities, whereas, when you come to break down that general allegation, we find that that applied only to interruptible industrials, and that you did not fail to supply any of your firm demand customers:

A. Except in the case of City of Detroit, we failed to supply our contract.

Q. That wasn't due to your lack of capacity; that was due to the fact that the distribution company in the City of Detroit utilized its standby facilities and cut down their requirements: isn't that true?

A. It is possibly true.

Q. Well, now, isn't it true?

A. That is my understanding of it.

* * * * * * * * * *

[fol. 9834] Q. Well, that puts a different face upon your general testimony then, what you seemed to imply in your direct testimony.

You don't charge your inability to have adequate facilities to the Detroit Company in any way when you know, as a matter of fact, that what the Detroit Company did was to resort to its standby to cut down—we might say "shave" —the peak loads, cut down requirement, but you had that gas to sell elsewhere, didn't you?

A. It went into the general pot, as I said a while ago.

Q. That is right. So when we get right down to the final breakdown of this statement of yours, isn't it true that it comes to this situation: that what you are complaining of—or what you are alleging—I don't say "complaining—what you are alleging is that you could have sold 30 million more cubic feet of gas than you did last year, but you took care of all your domestic customers, you took care of all your industrial firm customers, if you had any, and the failure to produce the 30 million extra had all been taken cognizance of by both you and the customer when the contract was made: isn't that true?

[fol. 9835] A. That seems to be a fair statement.

Q. You made a statement a minute ago that a standby facility for an industrial, such as butane, was not very desirable: is that right?

A. I am referring particularly to some of the industrials that we curtail—a brick plant, for instance. I think it would be almost prohibitive for a brick plant to put in butane standby.

. . . . . .

Mr. Culton: Mr. Lee, it has been commented that it would be rather difficult, under the present setup, to obtain permits for butane standby equipment.

Mr. Wheat: Those are covered, as you probably know, under Order M 68 of O. P. C., of the Office of Petroleum Coordinator, and are strictly prohibited, except on special permission, which I understand is exceedingly difficult to obtain at this moment.

[fol. 9836] I thought you might like to know that situation on butane.

Mr. Lee: I have heard that.

By Mr. Lee:

Q. But that is why your future contracts for industrials engaged in defense purposes are going to be firm guarantee contracts, aren't they?

A. I don't know.

Q. Well, it is a good reason why, isn't it? Isn't that true?

A. I would say that a defense industry would be able to probably get standby equipment, but the instance that I cited a moment ago, natural gas is essential to that operation, and no other fuel or product will take its place. Therefore, that is a firm contract.

Q. But you can't give me the name of any brick company that you had to deny gas to?

A. Oh, yes, I can. I did name those plants in my testimony.

Q. Weren't they generally brick and tile and ceramic and glass? A. Yes.

By Mr. Littman:

Q. Mr. Burnham, when the W. P. B. orders you to sell gas to an industry closely affiliated or connected with the [fol. 9837] war effort in such manner as to not interrupt the flow of gas to that industry, then, to all intents and purposes, notwithstanding any contract, the industrial firm becomes a user of firm gas, does it not?

A. Yes, if the order has the authority to make it stick.

Q. And that is true notwithstanding the fact that that industry may have a contract with your company providing for interruption?

A. That is true.

* * * * * * * * * * *

[fol. 9838] Leith V. Watkins, a witness previously called and duly sworn, resumed the stand and was examined and testified further as follows:

Mr. Culton: Mr. Examiner, during the intermission we passed around to various counsel numerous documents which we would now like to have marked with exhibit numbers for identification, and I shall list them all at this time.

First, we ask that the document entitled "Prospectus—Panhandle Eastern Pipe Line Company" to which there is a rider relating to the price and dated April 2, 1942, be marked Exhibit No. 233 for identification. There is also another rider in the body of the document.

• • • • • • • • • • •

(The Document referred To Was Marked Exhibit No. 233 For Identification.)

Mr. Culton: We next ask that a document entitled "Summary of Construction and Retirement Budget and Work Order Procedure" be marked Exhibit No. 234.

Trial Examiner: It will be so identified.

[fol. 9839] (The Document Referred To Was Marked Exhibit No. 234 For Identification.)

Mr. Culton: We next ask that a statement entitled "Statement Showing the Computation of Depreciation for Federal Income Tax Purposes for the Year 1939 as Claimed in Federal Income Tax Returns" be marked Exhibit No. 235.

• • • • • • • • • • • •

(The Document Referred To Was Marked Exhibit No. 235 For Identification.)

Mr. Culton: We next ask that a document entitled "Statement Showing the Computation of Depreciation for Federal Income Tax Purposes for the Year 1939 on the Basis as Settled with the Bureau of Internal Revenue" be marked Exhibit No. 236.

• • • • • • • • • • •

(The Document Referred To Was Marked Exhibit No. 236 For Identification.)

Mr. Culton: We next ask that document entitled "Statement Showing the Computation of Depreciation for Federal Income Tax Purposes for the Year 1940 as Claimed in Federal Income Tax Return" be marked Exhibit No. 237.

• • • • • • • • • •

(The Document Referred To Was Marked Exhibit No. 237 For Identification.)

Mr. Culton: I next ask that the document entitled "Statement Showing the Computation of Depreciation for [fol. 9840] Federal Income Tax Purposes for the Year 1940 on the Basis as Settled with the Bureau of Internal Revenue" be marked Exhibit No. 238.

• • • • • • • • • • •

(The Document Referred To Was Marked Exhibit No. 238 For Identification.)

Mr. Culton: We next ask that a document entitled "Analysis of Account 795, Special Services—Years 1940 and 1941—Panhandle Eastern Pipe Line Company and Subsidiary Companies" be marked Exhibit No. 239.

• • • • • • • • • • •

(The Document Referred To Was Marked Exhibit No. 239 For Identification.)

Mr. Culton: We ask that a document entitled "Analysis of Account 795, Special Services—Year 1941—Panhandle Eastern Pipe Line Company and Subsidiary Companies (including Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation)" be marked Exhibit No. 240.

• • • • • • • • •

(The Document Referred To Was Marked Exhibit No. 240 For Identification.)

Mr. Culton: We ask that a document entitled "Analysis of Account 796, Special Legal Services—Years 1940 and 1941—Panhandle Eastern Pipe Line Company and Subsidiary Companies" be marked Exhibit No. 241.

• • • • • • • • •

[fol. 9841] (The Document Referred To Was Marked Exhibit No. 241 for Identification.)

Mr. Culton: We next ask that a document entitled "Analysis of Account 796, Special Legal Services—Year 1941—Panhandle Eastern Pipe Line Company and Sub-

sidiary Companies (including Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation)" be marked Exhibit No. 242.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 242 For Identification.)

Mr. Culton: We ask that the document containing several pages, entitled "Statement of Estimated Federal Income and Excess-Profit Taxes for the 12 Months Ended February 28, 1942 (based on Revenue Act of 1941)," so far as page 1 is concerned and based on rates proposed in recommendation by Secretary of the Treasury Morgenthou as shown on page 2 with an explanatory statement on page 3, be marked Exhibit No. 243.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 243 For Identification.)

Mr. Culton: We ask that a document entitled "Statement of Budget Items Included in Exhibit No. 205—Projects Approved in Year 1941 Which Were Unfinished at the Date Shown" be marked Exhibit No. 244, that document being a two-page document.

. . . . . .

[9842] (The Document Referred To Was Marked Exhibit No. 244 For Identification.)

Mr. Culton: We next ask that printed document entitled "Agreement Between Columbia Gas & Electric Corporation and Panhandle Eastern Pipe Line Company dated February 5, 1942," be marked Exhibit No. 245.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 245 For Identification.)

Mr. Culton: We ask that a document showing, "Preliminary Determination of the Second Installment of Purchase Price to Be Paid to Columbia Gas & Electric Corporation," be marked Exhibit No. 246.

. . . . . .

(The Document Referred To Was Marked Exhibit No. 246 For Identification.)

Mr. Culton: We ask that the document entitled "Certain Increased Costs Not Fully Present in Income Account" be marked Exhibit No. 247.

* * * * * * * * *

(The Document Referred To Was Marked Exhibit No. 247 For Identification.)

Mr. Culton: We ask that a document entitled "Pro Forma Consolidated Income Account for the Year Ending [fol. 9843] December 31, 1941," be marked Exhibit No. 248.

* * * * * * * * *

(The Document Referred To Was Marked Exhibit No. 248 For Identification.)

Mr. Culton: We ask that a document entitled "Pro Forma Consolidated Income Account for the Year Ending December 31, 1941, Adjusted to Give Effect to Income and Excess Profits Tax Rates Proposed by Secretary Morgenthau" be marked Exhibit No. 249.

* * * * * * * * *

(The Document Referred To Was Marked Exhibit No. 249 For Identification.)

Mr. Culton: We ask that a document showing "Statement of Rate Case Expenses in connection with G-200 and G-207, Including Actual Cost, to February 28, 1942, and Estimated Cost to Complete," be marked Exhibit No. 250.

* * * * * * * * *

(The Document Referred To Was Marked Exhibit No. 250 For Identification.)

Mr. Culton: We ask that a document consisting of several pages and captioned on the first page, "Pro Forma Consolidated Net Operating Revenue as Adjusted for a Full Year's Costs (Note A) as Allocated Between Regulated and Non-Regulated Sales for the Year Ended December 31, 1941," be marked Exhibit No. 251.

* * * * * * * * *

(The Document Referred To Was Marked Exhibit No. [fol. 9844] 251 For Identification.)

Redirect Examination.

By Mr. Culton:

Q. Mr. Watkins, will you please briefly explain Exhibit 232?

A. Exhibit No. 232—I do not believe this witness is involved—

Q. (Interposing) Exhibit No. 233, I beg your pardon, sir. I had the wrong figure there. Will you please explain Exhibit No. 233 which is the prospectus of Panhandle Eastern Pipe Line Company?

A. There has heretofore been introduced in these proceedings as Exhibit No. 146 the prospectus of Panhandle Eastern Pipe Line Company with respect to $10,000,000 first mortgage and first lien 3 percent bonds, Series C, due January 1, 1962, and 150,000 shares "blank" percent cumulative preferred estock (par value $100 per share). On April 2, 1942, in compliance with the regulations of the Securities and Exchange Commission, it became necessary to attach to the prospectuses to be delivered subsequent to that date, a rider with respect to the change in offering price of the 150,000 shares of the 5.60 percent cumulative preferred stock.

The rider simply states that certain of the purchasers named in the prospectus are making available for sale to approved dealers certain shares of the stock at an offering [fol. 9845] price less a concession of $1.50 per share.

There is also a rider attached to page 53 which became necessary as a result of an order issued by the Securities and Exchange Commission on March 31, 1942, under the Public Utility Holding Company Act of 1935, covered by Holding Company Act Release 3415, which the witness believes is self-explanatory.

Q. You mentioned a portion of the provisions on the first rider. What change was made in the first rider as to the purchase price to the public, the offer price?

A. The price was changed to $100 per share flat.

Q. From what?

A. From the previous price of $104 plus accrued dividends.

Q. Will you now explain Exhibit No. 234 and state the reason for the preparation of that exhibit?

A. Exhibit No. 234 is a condensed summary of the construction and retirement budget and work order procedure used by Panhandle Eastern Pipe Line Company and its subsidiary companies. Its preparation came about in response to a request made by the counsel for the Commission to Witness Hinton in a previous session in this matter.

Q. Does this Exhibit No. 234 show in detail the policy of the company with respect to such budgets and work orders and reflects the ordinary course that such matters take?

A. Not so much the policy, sir, but it does reflect the [fol. 9846] ordinary course and gives, in a condensed form, the routine through which their preparation proceeds.

* * * * * * * *

Q. Now, will you explain together Exhibits Nos. 235, 236, 237, and 238? I think you can probably discuss those four at one time.

A. Exhibits Nos. 235, 236, 237, and 238 were prepared in response to a request made by Mr. Goodman at page 8941 of the transcript of the proceedings in this matter for the session of March 30, 1942.

The first of these exhibits shows computation of depreciation for Federal income tax purposes for the year 1939 as claimed in the Federal income tax returns and is, the witness believes, in sufficient detail for its complete understanding.

Q. But it shows what total?

A. A total of $2,381,293.48 in Column H opposite lines 31 and 32.

Exhibit No. 236 comprises a statement giving the computation of depreciation for Federal income tax purposes for the same year, 1939, on the basis of the company's settlement with the Bureau of Internal Revenue and provides a total of $2,186,243.66 in Column F opposite lines 23 and 24, which amount is comparable to the figure of $2,381,293.48 heretofore identified by this witness as ap- [fol. 9847] pearing on Exhibit No. 235.

Exhibit No. 237 for identification consists of a statement showing the computation of depreciation for Federal income tax purposes for the year 1940 as claimed in the income tax return for Panhandle Eastern Pipe Line Company and subsidiary companies. The total of such claim was $2,640,225.34 as shown in Column H opposite lines 33 and 34. The basis of the settlement for the year 1940 is shown on Exhibit No. 238 in Column H opposite lines 21 and 22. Here it should be stated that the amount there shown, $2,301,752.34, is not the actual basis of settlement for the reason that the return for the year 1940 has not been completely examined.

The matter presented in this exhibit has been computed, as nearly as it has been possible for the company to do, on the basis of the anticipated settlement with the Revenue Department and conforms to the settlement basis for the year 1939 as shown by Exhibit No. 236.

Q. I think you might now explain Exhibits Nos. 239 and 240 together and you might state the reason for the preparation of those exhibits also.

A. Exhibits Nos. 239 and 240 for identification were prepared in response to a request made by counsel for the Commission at pages 8981 and 8991 as shown by the transcript of the testimony in this matter for the session of March 30, 1942.

[fol. 9848] The first of the two exhibits, namely No. 239, consists of an analysis of Account 795, the title of which is "Special Services." This analysis covers the years 1940 and 1941 and is for Panhandle Eastern Pipe Line Company and subsidiary companies, excluding Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, which did not become subsidiary companies of Panhandle Eastern Pipe Line Company until February 6, 1942.

This exhibit presents, in the order named, the name of the person performing the special service, the type of service, the amount of fees, expenses, and the total of such costs for both years 1940 and 1941, the latter information appearing in Columns (C), (D), (E), (F), (G), and (H).

Exhibit No. 240 for identification is a compilation of the analysis of this account, No. 795, Special Services for the

Year 1941, which includes, in addition to the costs of this nature experienced by Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company, similar costs experienced by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, and is a presentation for the year 1941 as though the latter of these companies were actually subsidiaries of Panhandle Eastern Pipe Line Company during that year.

Q. Now, will you explain Exhibits Nos. 241 and 242?

Mr. Littman: Just a minute, Mr. Culton. I would like [fol. 9849] to inquire whether Panhandle Eastern proposes to retain the services of Columbia Engineering Corporation in future years, including 1942.

The Witness: The contracts with Columbia Engineering by Michigan Gas Transmission and Indiana Gas Distribution Corporation were canceled on February 6, 1942.

Mr. Littman: I note from Exhibit No. 240, line 11, that Columbia Engineering Corporation received the sum of $23,731 for "Services and Expenses under Engineering Contract" for the year 1941. Is that correct?

The Witness: That is a correct statement of what appears on the exhibit, yes, sir.

Mr. Littman: That, I take it, was paid by Michigan Gas Transmission Corporation, was it not?

The Witness: And Indiana Gas Distribution Corporation.

Mr. Littman: You do not expect to have that item of expense in 1942, do you?

The Witness: Not in its precise nature, no, sir, and there is no expectation, as far as this witness knows, that there will be any such expense arising from any services performed by Columbia Engineering and Management Corporation.

I am not able to say there will not be similar expenses of some nature incurred in some other direction within the organization; my statement meaning simply that because of the elimination of the engineering contract, it would not [fol. 9850] necessarily follow that expenses aggregating

this approximate $24,000 might not be present in the operation for such years.

Is that sufficient, sir?

Mr. Littman: For the present, yes. That is all.

By Mr. Culton:

Q. Will you explain Exhibits Nos. 241 and 242?

A. Exhibits No. 241 and No. 242 for identification have been prepared in the same manner and for the same purpose as were Exhibits Nos. 239 and 240 for identification. The information contained in the two exhibits being so similar to the previous ones, might we pass them without further explanation?

Q. I believe you were heretofore requested to make some kind of a report or investigation with respect to Exhibit No. 192?

A. Yes, sir. At page No. 8998 of the transcript of the proceedings in this matter for the session of March 31, such a request was made, and it is explained that the difference between the amount of $153,000—

. . . . . .

Exhibits Nos. 191 and 192—I believe they have been [fol. 9851] received, have they?

Q. They have been identified, I know, and I think they have been received.

A. Exhibits Nos. 191 and 192 were reconcilements of the net income, per books, with the net income per Federal income tax returns for the years 1939 and 1940, and, in the session of March 31, 1942, in this proceeding, a question arose as to two amounts, these amounts appearing opposite lines 27 and 28 of Exhibit No. 191, and opposite lines 22 and 23 of Exhibit No. 192, being $153,053.56 and $715,162.16, respectively. The difference between the two amounts is the result of the fact that Exhibit No. 191 was prepared to give a reconcilement of net income, per books, with the taxable net income on the basis of the settlement with the Bureau of Internal Revenue for the year 1939, while the data shown on Exhibit No. 192 was predicated on a reconcilement of a return as filed, per the books, without giving effect to the expected settlement basis. However, had a settlement for the year 1940 been made

precisely in the same manner as for the year 1939, the comparison would have been as between $153,053.56 and $256,769.05.

The difference of $458,393.11 between the latter figure and $715,162.16 is explained as follows: In the year 1940, the depreciation claimed was on a wasting asset basis and amounted to $2,706,029.59. The Bureau's settlement basis [fol. 9852] of this same amount, as nearly as the company can anticipate it, if such settlement conforms to the treatment in the prior year, 1939, would have been $2,247,636.48, and the difference between these two amounts is $458,393.11.

. . . . . .

[fol. 9853] Mr. Littman: Have you given any explanation anywhere in the record, Mr. Watkins, as to the method and manner by which you arrive at this $7,350,000 of estimated excess profits net income for the year 1941, which figure is shown in the middle of page 3 of Exhibit No. 243?

. . . . . .

The Witness: I doubt if such explanation has been given. I do not find it from a hasty perusal of the transcript of the proceedings for the session of April 1.

Mr. Littman: Can you tell us how you arrived at that figure of $7,350,000?

The Witness: Mr. Littman, of course, in making our tentative income tax return for the year 1941, we must have some idea of approximately what our tax may be and, as you know, the Internal Revenue requirements are such that we must estimate our net income and our tax as well and make a token payment provided we do not file a complete return.

We did not file a complete return. We had an extension of time in which to file our return, and the $7,350,000 was [fol. 9854] determined through our customary procedure of what our tax liability may be at the end of the year at the time our books were closed as well as our estimate used in connection with the filing of the return itself, that is, a preliminary return.

Mr. Littman: Can you enlighten us as to how this figure of $7,350,000 was determined? I have no desire to impede the progress of your presentation of your exhibits, Mr. Watkins. If you would prefer to give us the data later, very well, unless you feel you can give it now.

The Witness: I can answer your question right now. If you will refer to Exhibits 191 and 192 which are a reconcilement of net income, per books, with net income tax returns for the years 1939 and 1940, the determination for the year 1941 was made in exactly the same manner as shown here. I do not have it with me, however. Corporations make accrual for this purpose monthly, and as its accounting periods progress during the year's work, you must make some sort of an estimate as you go along.

Mr. Culton: That was the reason for the estimate of $7,350,000?

The Witness: That is correct, sir, and the witness does not know anything at this particular time that will change that figure greatly.

Mr. Littman: Mr. Watkins, I believe that we ought to [fol. 9855] have in this record a reconciliation between the $7,350,000 of estimated excess profits net income for the year 1941 and the net income, per books, for the year 1941. I wonder whether you could supply that for us.

The Witness: You are the doctor, sir.

Mr. Littman: I would greatly appreciate it, for I think it would greatly assist our staff and the Commission.

The Witness: You understand, of course, the filing is tentative.

Mr. Littman: Yes, I understand.

The Witness: In the event we have completed our actual return for the year 1941, would you prefer the reconciliation between the net taxable income as shown by the return and the books rather than this estimated amount which we find in Exhibit No. 243?

. . . . . .

Mr. Littman: We would prefer the actual if it is available when you submit it.

. . . . . .

[fol. 9856] Mr. Littman: I would like to have all companies, as your Exhibit No. 243 shows all companies.

The Witness: You want the information for all companies rather than a reconcilement of Panhandle Eastern alone?

Mr. Littman: Individually and collectively. In other words, I would like it in the same manner as Exhibit No. 243 presents the data.

. . . . . .

The Witness: We will get it.

. . . . . .

Mr. Littman: I would like to refer to Exhibit No. 241. I note a rather large item on Exhibit No. 241, line 5, giving payment to Edward N. Goodwin, general counsel, in the amount of $50,366.81 in 1940, and $44,824.97 in the year 1941, for fees and expenses.

Can you enlighten us with respect to the nature of the services rendered by Mr. Goodwin, in connection with what particular transactions or litigation or what not were his [fol. 9857] services rendered?

The Witness: Mr. Littman, I could not profess to have at instant call all of the wide variety of matters that the general counsel for the company had his fingers in in the years 1940 and 1941.

I believe your knowledge of legal lore and so forth, if you were to refer to the company's filings with the Securities and Exchange Commission and the matters that you have personal kowledge of that have been before the Securities and Exchange Commission would cause you very soon to reach the conclusion that Mr. Goodwin and his staff had no doubt been quite busy. I do not have information with me that would be sufficient to give you a categorical answer to your question and if a request

were made for such information, it would involve the analysis of all of the statements rendered by Mr. Goodwin which detailed the services which he had performed and those statements are usually two or three pages long of closely typed matter each month. He has been a very busy gentleman and his staff has been very busy.

. . . . . .

Mr. Culton: His services are not confined to work in the office of the company but he is engaged in the outside prac-
[fol. 9858] tice of law, is he not?

The Witness: That is correct.

Mr. Culton: And he is not merely counsel for the company?

The Witness: No.

Mr. Littman: Mr. Clark is general counsel for the company, is he?

The Witness: Not general counsel. Mr. Goodwin is general counsel. Mr. Clark is company counsel. We distinguish between the services of the two in this fashion: Mr. Clark, in the offices of the company at Kansas City, is cognizant, of course, with all the legal matters with which the company is confronted. Their duties have to do with the every-day affairs concerned with corporate procedure or with respect to special work for various governmental commissions and what not.

Mr. Littman: I take it that Mr. Goodwin's services have been rendered chiefly in connection with proceedings before the S. E. C.?

The Witness: And in an advisory manner with respect to general corporate affairs, annual meetings of stockholder, directors' meetings, any general contracts, and any question we wish to ask him, whatever the nature may be.

Mr. Littman: Are these fees paid on a retainer basis or are they billed as the services are rendered?

The Witness: We pay Mr. Goodwin no retainer.

Mr. Culton: Did you have any public financing in either
[fol. 9859] of those two years?

The Witness: Yes, we did.

Mr. Culton: And Mr. Goodwin represented the company in connection with that refinancing operation?

The Witness: He did, and not only that but all of the matters precedent to that financing and the clean-up work after the development of stock certificates, bonds, indentures, and the very wide variety of attendant matters that go along with substantial financing transactions.

Mr. Littman: In other words, a large part of Mr. Goodwin's services were rendered in connection with refinancing and the issuance of securities by Panhandle Eastern during the past year?

The Witness: During the past two years, I think that would probably be a fair statement, Mr. Littman, but I do not wish to be tied down to try to give you specifically what proportion of Mr. Goodwin's services were performed for anything because, frankly, I do not know.

Mr. Littman: Did he assist in the preparation of the indentures and prospectuses that were issued?

The Witness: I should say he did.

Mr. Littman: Were any part of his fees charged to that discount and expense?

The Witness: They may have been.

Mr. Littman: That is, you mean parts of these amounts [fol. 9860] that appear in line 5 of Exhibit 243 may have been?

The Witness: No, these amounts are for special services as defined in Account No. 796. Now, there may have been other charges for Mr. Goodwin that were charged to work orders in which the company accumulated the costs of some of its financing.

Mr. Littman: Do you expect to have any such expense as $44,000-odd for the year 1942—

The Witness: (Interposing) It would not astonish me if it were not that much or even more.

Mr. Littman: At least that much?

The Witness: Of course, I have no way of knowing and I am not a crystal gazer, but, as I say, I would not be astonished, from my knowledge of the company over the years and the ability of certain ones to cause it to undergo costs of this nature, for that cost to be exceeded without too much trouble.

Mr. Littman: It might be considerably lower too, might it not?

The Witness: That could be, too, yes, but I doubt it.

* * * * * * * * *

[fol. 9861] By Mr. Culton:

Q. Will you explain Exhibit No. 243, Mr. Watkins, and explain it in comparison with Exhibit No. 202 or its lack of similarity?

A. Exhibit No. 243 is referable to Exhibit No. 198. Subsequent to the last presence of this witness in this matter, we found that there had not been supplied a statement showing the estimated Federal income and excess profits tax for the 12 months ended February 28 as shown by Exhibit No. 198, as had been the case with regard to certain other exhibits.

Now, Exhibit No. 198 was introduced at page 9166 of the transcript of testimony at a previous session and it consists of a portrayal of the method the companies—and here we have Panhandle Eastern, Illinois Natural, Michigan Gas Transmission Corporation, and Indiana Gas Distribution—used in estimating the excess profits and net income and surtax taxes for the 12 months ended February, 1942. Page 1 gives this information based on the Revenue Act of 1941 and shows a total estimated tax for this purpose. It shows a total tax for all of the companies for that 12 months period of $4,362,229 in column N opposite line No. 43.

Page 2 furnishes similar information for all of the companies but is based on rates proposed in the recommendation made by Secretary of the Treasury Morgenthau on [fol. 9862] March 3, 1942, and develops a total of $6,199,475 in column N, as shown on line 43, as contrasted with $4,362,229 based on the Act of 1941.

Page 3 of this exhibit explains certain adjustments used in the development of the data in the two preceding pages.

Q. I believe you were heretofore requested to give some information about the routine budget on page 9185 of the record?

A. Yes, sir. At that point of the record, Exhibit No. 204 was offered and I believe later accepted. This exhibit consisted of several pages comprising the 1942 routine construction and retirement budgets of Panhandle Eastern Pipe Line Company and subsidiary companies as they then existed, which included Illinois Natural alone. At the time the exhibit was introduced, there were not sufficient copies to distribute one to everyone represented in the matter and arrangements were made and additional copies sent to those who were short-changed. I believe they were mailed on April 1.

* * * * * * * *

Q. Now, will you explain Exhibit No. 244?

[fol. 9863] A. Exhibit No. 244 for identification is an itemized statement of budget items included in Exhibit No. 205. These show projects approved in the year 1941 which were unfinished on the dates of December 31, 1941, and February 28, 1942.

Exhibit No. 205 gave these totals of unfinished work at December 31, 1941, and February 28, 1942, of $7,433,000 and $5,396,000, respectively. The information in that instance, however, was simply totals, by company.

Exhibit No. 244 for identification identifies the specific budget items that made up the totals.

Q. Do you have available the amount of expenditures to date on Items 552R and 553R as shown on Exhibit No. 244?

A. Yes, I have.

Q. What is the amount of them?

A. The amounts of expenditures to February 28, 1942, on Budget Items Nos. 552R and 553R, being the Michigan-North Line and Michigan-West Line, respectively, were $1,605,000 for Budget Item No. 552 and $180,000 for Budget Item No. 553, a total of $1,785,000 against an original authorization or rather revised authorization of $5,145,000, and work is progressing constantly since that date.

Q. Mr. Burnham this morning testified with respect to certain items for which arrangements have recently been made. Do you have budget items on those?

A. That is, the proposed additions at Centralia and [fol. 9864] Tuscola stations?

Q. That is right.

A. Yes, there have been forwarded to the Secretary budget items Nos. 587 and 589, which were approved by all the operating officials on April 3, 1942, and they call for the construction of certain additions at the Centralia station and Tuscola station and are in the amounts of $166,400 and $164,600, respectively.

Q. That item has not yet been presented to the board?

A. It has not, but the witness' observation of the method in which the board has heretofore acted with respect to such items would not indicate to him anything but its approval.

Mr. Littman: Just a minute. I would like to ask that the latter part of that answer go out. It is just purely a hazard, a guess.

* * * * * * * *

Trial Examiner: That portion of the answer following the statement, "It has not," may be stricken.

* * * * * * * *

[fol. 9865] Mr. Littman: Mr. Watkins, referring to Exhibit No. 244, what do you mean by the term "Regular" and the term "Expansion" as used here on the first page of that exhibit?

The Witness: I believe we went through that before, didn't we, Mr. Littman?

Mr. Littman: Those terms are not used on your Exhibit No. 205 to which it refers.

The Witness: No, but we did cover routine construction and retirement budgets and expansion budgets.

Exhibit No. 205 to which it refers was a statement showing certain estimated construction expenditures for the year 1942 and did not purport to segregate such amounts as between regular and expansion programs. If, however,

counsel for the Commission were to refer to the last page of Exhibit No. 204, he would find there that such a segregation has been made.

Mr. Littman: By "Expansion" do you mean that these projects are for the purpose of enabling Panhandle Eastern to serve new markets?

The Witness: The witness has a rememberance that a question similar to that was put to him at the time Exhibits Nos. 204 and 205 were introduced, and his reply went to the general order that, so far as the actual production of new business for any of the total of $8,080,400, as shown by Exhibit No. 204, or either the $7,433,000 or $5,395,000, as [fol. 9866] shown by Exhibit No. 205, was concerned, that such a question would have to be directed to someone else.

Mr. Littman: I see. I believe Mr. Burnham probably covered that this morning.

Is my understanding correct that all of the expenditures shown in Exhibit No. 244 have been approved by the Board of Directors of Panhandle Eastern and Illinois Natural Gas Company and Michigan Gas Transmission Corporation?

The Witness: Michigan Gas Transmission Corporation, sir; I would hesitate to state too specifically about that. But my knowledge, however, of their budgetary procedure is such that I think it could be very safely assumed that such approval has been had. As to Panhandle Eastern and Illinois Natural, there is no doubt about that fact.

Mr. Littman: Now, do you know whether construction is actually in progress on all of these projects shown in Exhibit No. 244?

The Witness: If you will bear with me a moment—yes, the information I have with me seems to indicate that work is actually under way on all of them.

Mr. Littman: Have you received the pipe for all of these?

The Witness: I could not answer that question, sir.

. . . . . .

[fol. 9867] By Mr. Culton:

Q. Mr. Watkins, I believe Exhibit No. 245 is the next exhibit. Will you please explain that?

A. Exhibit No. 245 for identification is an agreement between Columbia Gas & Electric Corporation and Panhandle Eastern Pipe Line Company dated February 25, 1942, and is presented as an exhibit in this proceeding because of the fact that the purchase price to be paid to Columbia Gas & Electric Corporation for the stock and debt of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation is subject to further determination.

Paragraph (e) of the agreement provides that a second installment be paid upon the purchase price, and then there is also a provision in the contract with respect to the treatment of the matters pertaining to income taxes for prior years.

The following exhibit, No. 246, if I may proceed with that, sir?

[fol. 9868] Q. If you will, please.

A. Exhibit No. 246 gives a preliminary determination of the second installment of the purchase price and, signified, consists of the net income of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation for the month of January and 5/28 of the net income of the two companies for the month of February, the total, subject to further determination, being $77,462.02. Final determination of this installment cannot be made until the enactment of the Revenue Act applicable to the year 1942, if there be such an act, and I do not believe there is any question about the fact there will be one and it won't be be "hay".

Q. In other words, this shows the additional purchase price that will have to be paid over and above that which was paid at the time the stock and bonds were delivered?

A. Part of the original purchase price, sir, and as yet undetermined. Just what will happen to the tax side of that determination is something that no one can foretell at this moment.

Trial Examiner: Was this further settlement in contemplation when the Securities and Exchange Commission gave its approval?

* * * * * * * * *

The Witness: I think it was. At least, the contract [fol. 9869] which we are now submitting as Exhibit No. 245, I am quite positive, has the "blessing", perhaps, of the Securities and Exchange Commission.

By Mr. Culton:

Q. Now, will you explain Exhibit No. 247?

A. Exhibit No. 247 consists of a presentation of certain increased costs already authorized but not fully included in the company's expenses for the year 1941. Any explanation of this exhibit should be preceded by a statement that it is not here intended to portray, by any means whatever, all of the increased costs that were suffered by Panhandle Eastern Pipe Line Company and subsidiary companies for the year 1941.

This simply selects some of those increased costs which are not fully present in the operations for that year and shows the amount included in the operations for 1941 together with the remaining portion of the annual authorization which would have been present had such authorizations been made, shall we say, as of January 1, 1941.

Q. Will you please take those items up separately and explain them, please?

A. On May 1 and July 1, 1941, the field employees of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company were granted pay-roll increases having an annual amount of $22,800 as shown by Column (B), line 4, of Exhibit for identification No. 247. The amount of that [fol. 9870] authorization included in expenses for the year 1941 is shown in Column (C) to (L), inclusive, the remaining portions shown in Columns (M) and (N) opposite lines Nos. 3, 4, and 5, being $4,000, to be charged to Account No. 759-111, and $4,200 to be charged to Account No. 759-21, both accounts being those prescribed by the Commission in its Classification of Accounts.

Q. In other words, had the same scale which was effective at the end of the year been effective from the beginning

of the year, the additional amount which would have been included in the expense account for 1941 would have been $8,200 as to the first item?

A. That is correct, sir.

Q. Now, will you explain what the second item of $22,800 represents?

A. That item represents a change in pay-roll base granted to the employees of Michigan Gas Transmission corporation on July 1, 1941, and likewise amounted to $22,800 as shown by Column (B) on line 7, the amount of such authorization not fully included in expense for the year 1941 being $11,400.

Q. Which would be from January to June, inclusive, is that correct?

A. That is correct, yes, sir, and would have been charged to the accounts shown in Columns (M) and (N) in the amount shown in Column (N) of this exhibit.

[fol. 9871] There is no similarity between the two amounts of $22,800 shown in Column (B). It is just a mere coincidence.

Q. Now, will you explain the third item?

A. As a result of the change of hours in the work week of the field employees of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company made about the 1st of August, 1941, the company obligated itself to an annual increase of $92,400, as shown in Column (B) opposite line No. 13. Of this amount, $53,900 had not made its appearance in the expense accounts of the company for the year 1941. Charges for these amounts are being currently made to Accounts Nos. 759-111 and 759-21 of the Classification of Accounts prescribed by this Commission.

Q. Will you next explain the fourth item?

A. There has been considerable discussion, I believe, in the record about the necessity for and advisability of emergency protection of the facilities of not only Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company, but Michigan Gas Transmission Corporation as well. We all know and regret exceedingly the occurrence that took place early in December, 1941, that gave rise to this necessity.

Q. It is protection against action by fifth or sixth columnists, or anybody else who is acting against the governmental interests at this time, is that it?

A. Not only that, but to insure continuity of service [fol. 9872] and it is just general, all-round, good business to have protection against the causes you mentioned.

Q. That includes the hiring of a considerable number of guards, does it?

A. It does, sir, and it seems to me it is something on the order of 120. I am not sure of that amount. I know Panhandle Eastern has in the neighborhood of 85 or maybe 90, the remainder being on the property of Michigan Gas Transmission Corporation.

That information is already in the record.

Of the total amount authorized in Column (B) opposite lines 18 and 19, there was $149,500 and $72,000 not present in the accounts at December 31, 1941. These amounts are being currently incurred and will be present in the expense accounts hereafter.

Q. Will you explain the next item, that of "Rate Case Expense"?

A. The combined annual amortization of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation for costs actually incurred and those estimated to complete this proceeding is anticipated to be amortized on the basis of $70,000 per year. Whether or not the $350,000 shown opposite line 25 in Column A of Exhibit No. 247 for identification is actually incurred, it is the company's present intention to amortize the costs on a basis of $70,000.

[fol. 9873] Michigan Gas Transmission Corporation began its amortization in July, and, in the year 1941, charged to expense $6,000. Panhandle Eastern did not begin its amortization until January 1, 1942, and, beginning with the month of March, the amortization of those two companies, the monthly amortization, will be synchronized with an annual amount of $70,000.

Q. How was Panhandle Eastern's expense carried prior to the 1st of January, 1942?

A. It was carried in a deferred account pending determination as to the proper procedure with respect to its amortization.

Q. You have a subsequent exhibit showing how you arrived at the $350,000, do you? A. That is correct.

Q. Now, will you explain the last item in Exhibit No. 247?

A. If Michigan Gas Transmission Corporation had been a subsidiary of Panhandle Eastern Pipe Line Company at the time Panhandle Eastern adopted its pension plan, Michigan Gas would likewise have participated.

We are engaged at this very moment in working out a plan for the inclusion of Michigan Gas Transmission's employees under Panhandle Eastern's group annuity contract. The cost of the inclusion of the eligible employees of Michigan Gas Transmission Corporation under that [fol. 9874] plan and to provide benefits which have been determined should be provided for them is $30,000. We have obligated ourselves not only to the insurance company but to the employees as well, as to this particular matter. Now, when I say obligated, I am not speaking for the Board of Directors. This amount has yet to be approved by the board but I have no doubt that it will be approved.

Q. The plan is just to put the employees of Michigan Gas Transmission Corporation on a par with the employees of Panhandle Eastern and its subsidiaries, that is correct, is it not?

A. Substantially on a par. We bring them under the same umbrella and we will give them the same protection that employees of Panhandle Eastern may receive in the future.

Mr. Lee: Is that in addition to the Social Security benefits they receive?

The Witness: Yes, sir.

Mr. Lee: What is the limit of earning to entitle an employee to come within it?

The Witness: May I rephrase your question, please? I think perhaps I can answer it better.

The group annuity plan of Panhandle Eastern, which is expected to be extended to Michigan Gas Transmission, is available to all employees.

Mr. Lee: Regardless of their earnings?

[fol. 9875] The Witness: That is right, but it is based on their earning power. It picks up an employee after a certain specified period of service and provides benefits for him on a certain basis up to the age of 40, and, after the age 40, on a different basis. It is the so-called non-contributory plan. The employees have no vested rights whatever prior to 15 years continuous service and do not have any vested rights whatever if they leave company employ prior to that time.

Mr. Lee: As I understand it, everybody working for Panhandle Eastern, regardless of whether they earn $2,000 a year or $40,000 a year, gets a pension in addition to Social Security benefits, to which the employee makes no contribution. The rate payer pays the whole shot, is that right?

The Witness: I would not say that they get a pension, Mr. Lee, but one is being provided, an indefinite amount payable at some indeterminate time in the future.

Mr. Lee: Regardless of the earning power of the employee?

The Witness: There is a limit to the total amount of pension, if that is what you are getting at.

Mr. Lee: What I want to get at is, an employee earning $8,000, $9,000, $10,000, or $40,000 is a beneficiary without making any contribution?

The Witness: That is right.

Mr. Lee: It is all saddled on the rate payer?

The Witness: I do not know whether it is saddled on [fol. 9876] him or not but it is a part of the company's legitimate expenses.

Mr. Lee: Does the employee make any contribution toward it?

The Witness: It is a non-contributory plan.

Mr. Lee: What does it cost the rate payer to carry this system a year?

The Witness: If you will look at Exhibit No. 190, I believe it is, you will find some information with respect to that, opposite lines 12 and 13.

* * * * * * * *

[fol. 9878] By Mr. Culton:

Q. Will you please explain No. 248?

A. Exhibit No. 248 is a pro forma consolidated income account for the year ending December 31, 1941, for Panhandle Eastern Pipe Line Company and subsidiary companies and, as shown by Note A, includes the activities of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, and is prepared on the basis that the financing of the cost of the acquisition of the outstanding stock and indebtedness of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation resulted in annual interest costs of $300,000, and which has consummated on February 6, 1942, had been effected January 1, 1941, that the interest expense applicable to obligations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to Columbia Gas and Electric Corporation, their then parent, would have aggregated the same amount had the Panhandle Eastern Pipe Line Company been the parent company and that dividends had been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to the extent of their net income for the year and after giving effect to the estimated increases in Fed-
[fol. 9879] eral income taxes, which would have resulted had such interest and dividends been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, to Panhandle Eastern Pipe Line Company to the full extent of their net income and to the inclusion of certain authorized increased costs, not fully included in expense for the year 1941.

On that basis, the exhibit for identification No. 248 shows in Column E opposite Line No. 29, net income amounting to $5,342,361.60.

Q. Now, have you made a similar computation and prepared a similar consolidated account adjusted to give effect to the rates proposed in Secretary Morgenthau's recommendation? A. I have, sir.

Q. Is that Exhibit 249? A. It is.

Q. Will you please explain that exhibit?

A. Exhibit 249 for identification has been prepared in exactly the same manner as Exhibit No. 248 for identification, except that the amount of Federal income and excess profits tax used in Exhibit No. 249 are those based on the rates proposed in the recommendation of the Secretary of the Treasury Morgenthau on March 3, 1942, before the House Ways and Means Committee, and varies from Exhibit No. 248 for identification in that the net income shown in Column E of Exhibit for identification [fol. 9880] No. 249 opposite Line No. 29 is only $3,550,590.72 as contrasted with $5,342,361.60 as shown in Column E, line 29, of Exhibit No. 248.

Q. A difference of how much? Will you make a computation? A. $1,791,770.88.

Q. Was this computation evidenced both by Exhibits 248 and 249? Did you take into consideration the increases in company expenditures reflected in Exhibit 247?

A. I did, yes, sir.

Q. Now, will you explain Exhibit 250?

A. Exhibit 250 for identification is a statement of rate case expenses in connection with Federal Power Commission consolidated dockets Nos. G200 and 207, which includes actual cost to February 28, 1942, and estimated cost to complete. It shows in Column A the nature of the expense, in Column B the actual expense incurred to February 28, 1942, estimated cost to complete in Column C, and the total cost in Column D. The actual cost to February 28, 1942, as shown by a long line 13 of Column B is $214,898.95, estimated cost to complete, as shown on Line 13, in Column C is $135,101.05, with a total cost in Column D opposite line 3, of $350,000.

There were at February 28, 1942, certain costs incurred that had not yet been submitted to the company. Those [fol. 9881] costs are included in the estimate shown in Column C. The amount shown opposite the general heading such as "Engineering" includes both fees and traveling expenses.

Traveling expense has been a rather important item in this proceeding.

Q. That is largely due to the circumstance that the hearings will be held at a considerable distance from where the company's offices are and where the witnesses reside? A. That is true, yes, sir.

* * * * * * * *

Mr. Littman: Mr. Watkins, the figures that appear in Column B of Exhibit 250 represent the amount actually paid to February 28, 1942?

The Witness: Column B?

Mr. Littman: Yes.

The Witness: Mr. Littman, they were either paid or in the process of being paid. Now, our accounting routine is such that if we get a statement prior to the closing of, shall we say, February work, we will actually record that in February work, although our payment might not necessarily be completed until some time during the month of March. Do you understand that, sir?

Mr. Littman: Yes, sir.

The Witness: So that the expenses actually incurred for which statements have been presented, although I [fol. 9882] shouldn't feel it proper for me to say they actually had been paid prior to the 28th of February, because some of them, no doubt, were in the process of payment during the early part of March. There is no duplication between the amount shown in Column B and Column C, however.

Trial Examiner: I assume this statement of rate case expenses includes a proration of salary employees' time.

* * * * * * * *

The Witness: No, sir, it does not.

Trial Examiner: So that it does not include any charge for the time of yourself and others who are on these companies' payrolls?

The Witness: That is correct, sir, except to the extent that any overtime incurred by the rank and file, or where it became necessary to employ additional employees, that amount is shown opposite Line No. 7, under the general

heading "Overtime and Additional Employees," but there is no portion of the general salaries of official force or the department heads or the staff, generally, even when they were employed in overtime work, of which there has been a tremendous amount in connection with this matter.

Trial Examiner: To that extent, then, your statement of rate case cost is inadequate and incomplete?

[fol. 9883] The Witness: That is quite true, sir.

By Mr. Culton:

Q. This item of overtime and additional employees: has any of that been charged as a part of regular operating expense?

A. No, sir, no part of it. I want to be clearly understood with respect to that. The additional employees were employees engaged, not to do the work of the regular force who were working on exhibits, and so forth, for presentation, but they were additional employees brought in for the purpose of preparing material for this particular matter.

We had quite a number of artists, for instance, to work on a great number of the maps and so forth prepared during the early stages.

Now, the overtime portion shown opposite No. 7 is the overtime of certain of the staff, the rank and file, in such instances that they had to perform overtime services to keep up with their regular work, and when I say "keep up," that is correct, because we haven't been able to keep up with our regular work, by a great deal.

Trial Examiner: Have you kept records to enable you now to prorate the salaried expense which was necessarily incurred in the rate case matters?

The Witness: I am sorry, sir, we have not.

Trial Examiner: Have you any intention to make such [fol. 9884] a proration?

The Witness: As far as this witness knows, the company has no such intention, sir.

Trial Examiner: Although it is a large sum?

The Witness: There is no question of that, sir. It is a tremendous sum.

Mr. Littman: Those amounts are included in your regular operating expenses for the year 1941, are they not?

The Witness: Yes, that is quite correct.

Mr. Littman: Do I understand that none of the months shown in Exhibit 250 are duplicated or included in any of the operating expenses of the companies as shown on their books for 1941?

The Witness: I don't know how we could indicate them, Mr. Littman, and have our books in balance.

Mr. Littman: I merely wanted the record to be clear on it. I understood you to say that these were over and above the—

The Witness: There is no duplication.

Mr. Littman: That is, these were all carried in the deferred account for a time, or most of them?

The Witness: Yes, a specific work order in which we have gathered the expenses incident to these proceedings. Charges made to that work order have not been distributed to regular expense accounts.

[fol. 9885] Mr. Littman: And in so far as your employees did work from time to time on various phases of this rate case, the amounts expended in that connection would, of course, be included in the regular expenses?

The Witness: Well, it could be, Mr. Littman, that in a very few instances we may have taken a few employees, a very few, and assigned them specifically to the preparation of material for the rate case, in which event their salaries would have been charged on the work order from which the information shown in Column B of Exhibit for identification 250—but I don't remember any of them, any such employees, any such segregation.

Trial Examiner: What is the fact as to the method of charging the expense accounts of salaried employees who have been engaged in this proceeding?

The Witness: As to whether or not there has been any change, sir?

Trial Examiner: As to whether or not they have been charged to operating costs or segregated to the account of the rate proceeding?

The Witness: Only to the extent that employees have incurred overtime.

Mr. Culton: I think the Examiner has reference to expenses to Washington, for example.

Trial Examiner: I stated traveling expenses.

* * * * * * * * *

[fol. 9886] The Witness: Any traveling expense incurred specifically in connection with this rate proceeding has been charged to the deferred account from which these costs that we now have before us in 251 was accumulated.

Mr. Littman: In other words, they are included in Exhibit 251?

The Witness: If they could clearly be shown as being such expenses. Now, some of us officers have to jump hither and yon on different occasions, and so forth, and it could very well be that some of our expenses have not even gotten in here.

Mr. Littman: Mr. Watkins, I would like to have you furnish for the record an itemized statement of these rate case expenses, showing the amounts and the individuals to whom they were paid. Could you do that for us?

* * * * * * * * *

The Witness: How long do we have for the development of that information, sir?

Mr. Littman: How long would it take?

[fol. 9887] The Witness: Possibly a week, ten days, maybe two weeks.

Mr. Littman: Let me suggest, then, that we reserve as Exhibit No. 250-A, a place for this supplemental exhibit to

be inserted when it is received by the Commission, even though it may be received after the hearings on this phase of the proceeding be closed.

* * * * * * * *

Trial Examiner: I think that is an entirely satisfactory arrangement, and I think it is much preferable to let certain supplemental data, which may be required, come in after the completion of the hearings.

* * * * * * * *

[fol. 9889] Mr. Culton: Mr. Examiner, some time back we were requested to produce a letter written by Mr. P. McDonald Biddison to Mr. J. D. Creveling relative to the purchase of the various properties from Columbia Gas and Electric Corporation and Ohio Fuel Gas Company. This is the letter, isn't it, Mr. Watkins?

[fol. 9890] The Witness: Yes, sir, that is an executed counterpart of the letter.

Mr. Culton: We ask that it be incorporated in the transcript, and we understand that counsel has no objection.

Mr. Littman: No objection.

Trial Examiner: Very well, it may come in at this point.

(The letter last above referred to reads as follows:

"Washington, D. C.,
"November 24, 1941.

"Mr. J. D. Creveling, President,
"Panhandle Eastern Pipe Line Company,
"90 Broad Street,
"New York, N. Y.

"Dear Sir: Since your inquiry to me on November 13, 1941, I have secured and examined data on the property presently proposed to be acquired by Panhandle Eastern Pipe Line Company from Columbia Gas and Electric Corporation and The Ohio Fuel Gas Company, those properties and the approximate purchase prices being:

	Approximate proposed Purchase Price
Stock and Debt of Michigan Gas Transportation Corporation	$10,700,000
Stock and Debt of Indiana Gas Distributing [fol. 9891] Corporation	145,000
Certain Properties of The Ohio Fuel Gas Company including: Line Z50 from its intersection with Line Z58 to King Station (Indiana), approximately 32.825 miles of 16". Line Z58 from its intersection with Line Z50 across Ohio-Indiana State line to its end at a point near Richmond, Inc., approximately 12,808 miles of 10". Line Z72 from its intersection with Line Z50 to its end at Winchester, Indiana, approximately 7.187 miles of 6" and 6⅝". Together with Measuring Station Structures designated as King, Western-Lynn, Western-Hollandsburg, Western-New Paris, and Measuring Station Equipment and their connections to the foregoing lines designated as Western-Lynn, General Glass, Ohio-Indiana, Indiana Central Natural, State Line, Western-Hollandsburg, Western-New Paris	440,000
Total	$11,285,000

It is my opinion that the proposed purchase prices are fair prices for Panhandle Eastern Pipe Line Company to pay for these properties.

(Signed) P. McDONALD BIDDISON,
Consulting Engineer."

* * * * * * * * *

[fol. 9893] Recross Examination

By Mr. Littman:

Q. Mr. Watkins, I want to ask you a few questions about a matter that we have discussed on the record heretofore, relating to certain rate schedules that were forwarded to this Commission for filing, but which have not as yet been approved by the Commission.

You recall, do you not, numerous references to those matters?

A. I certainly do.

Q. Can you state whether it is a fact that if those numerous rate schedules which have been forwarded for filing with this Commission, and which have not yet become effective, had been in effect when forwarded to the Commission for filing in 1941, whether the revenues derived from those sales under those schedules would have been any different or would have been substantially differ-[fol. 9894] ent from those actually derived under the present schedules. Do you follow my question?

A. That is a rather broad question for me to answer, Mr. Littman, without referring to that entire file which is probably, by this time, more than an inch thick, but if I may answer it in a general way, if that proves satisfactory, perhaps we can dispose of the question that seems to be bothering you at the moment.

My present recollection is that had those filings been in effect during 1941—is that the period that your question was directed to?

Q. Yes, that is when they were filed.

A. Had they become effective in the ordinary and customary routine after their filing in 1941, there would not have been a very great difference in the amount of revenue that Panhandle Eastern received.

There was some slight change anticipated, statements of all of which are in the possession of the Commission with that tremendous bulk of stuff that has been filed concerning those matters.

My remembrance is there is an individual statement for each individual portion of those filings, that shows what the anticipated effect for the next calendar year might be, and that that has been filed quite some time, and, [fol. 9895] as my memory goes at the moment, the very last thing we have from the Commission formally concerning these matters is an acknowledgment of the receipt of that material, and stating they would take it under advisement.

Q. In other words, it is our best recollection at this time that had these proposed rate schedules been in effect in the year 1941, as filed, there would have resulted no substantial difference or change in revenue to Panhandle Eastern.

A. That is my present recollection. I take it that Counsel's question—and I am certain the witness' answer—assumes that exactly the same quantity of gas would have been purchased.

Mr. Littman: Yes indeed.

Just one moment.

Mr. Culton: Let me ask this and see if I am correct.

By Mr. Culton:

Q. Those contracts were merely changed in form for receiving the same volume of money, were they not?

A. That is true, Mr. Culton. If we look at the matter from the standpoint of Panhandle Eastern before ownership of Michigan Gas Transmission Corporation, there was probably a very slight differential in favor of Panhandle Eastern, but since the ownership of Michigan Gas Transmission is now vested in Panhandle Eastern, the differential would have washed out in consolidation.

[fol. 9896] Q. On a consolidated income account, there would have been no difference whatever?

A. Assuming the same exact quantities of gas purchased. That is my present recollection.

By Mr. Littman:

Q. Mr. Watkins, you, I presume, had some considerable part to play in the preparation of the supplemental information attached to the prospectus of Panhandle Eastern Pipe Line Company here identified as Exhibit No. 233, did you not?

A. I am afraid I did not.

Q. Did you have anything to do with it at all?

A. About all I had to do with the supplemental information shown on page 53 was to take care of the mechanical work involved in having it inserted in the proper place in the prospectus and seeing that the various distributing bodies who had reason to distribute the prospectus were supplied with their required number of copies for dis-

tribution. I had nothing whatever to do with the preparation of that material nor with the preparation of the material shown on the front cover under date of April 2.

Q. I have not had time as yet to go through this prospectus, Exhibit No. 233, but I will ask you whether there is anything contained in this exhibit or the supplemental in- [fol. 9897] formation contained therein which speaks as of approximately April 2, 1942, whether Exhibit 233 makes any statement regarding the effect upon the business of Panhandle Eastern and subsidiary companies by reason of War Production Board Order No. L-31.

A. If the witness remembers your statement correctly, it was directed to a date of April 2, 1942. I don't believe you quite meant that, did you? Is your question directed to the prospectus as a whole or to the rider attached on the cover sheet and the rider attached to page 53.

Q. The rider attached to the first page is dated April 2, 1942, and the rider attached to page 53 is dated April 4, 1942.

A. And those are the two items to which your question refers?

Q. Yes.

A. There doesn't seem to be anything in either of those referring to L-31.

* * * * * * * *

[fol. 9898] C. H. M. Burnham a witness heretofore duly sworn, resumed the stand, and was examined and testified as follows:

Cross-Examination.

By Mr. Littman:

Q. Mr. Burnham, define the term "capacity" as you have used it in Exhibits Nos. 229 to 231, inclusive.

A. Capacity, as used in those three exhibits refers to the ability of the pipe line system to make those deliveries as specified day in and day out. When I say "deliveries" I mean deliveries at the sales points. Which deliveries total to the quantity shown on the various studies.

Q. That is, the ability to deliver day in and day out, the amount of 338,000 M. c. f., as shown on Exhibits 230 and 231, and 307,000 M. c. f., as shown in Exhibit 229; is that right? A. That is right.

Q. Now, do you mean by that, the ability to make those [fol. 9899] deliveries with or without the standby equipment which is set forth on the fifth page of each of Exhibits 229, 230, and 231?

A. At normal load factors, those deliveries can be made without the standby equipment shown on the last page of each exhibit.

Q. And what do you mean by "normal load factors"?

A. Load factors approximating 70 percent.

Q. What was the load factor of the Panhandle Eastern System during the year 1941?

A. It was, to the best of my information, very nearly 67 percent.

Q. Mr. Burnham, I have just one more question. Will you please define the term, "firm basis" as you have used it in Exhibits 220, 230, and 231?

A. Firm basis used in that connection means after having interrupted readily interruptible sales.

Q. Isn't there some little discrepancy between your definition of that term, as just given, and certain responses to some of Mr. Lee's inquiries this morning. If there are any, and I think the record could be clearer, I wish you would explain.

A. I don't believe there is any discrepancy. What it really amounts to is this: that all our special and industrial sales are made on an interruptible basis. That is, the [fol. 9900] contracts specify that these sales may be interruptible in the event of a shortage of gas for domestic customers.

Q. Just right there, if I may interrupt. All industrial sales are—

A. (Interposing) Special industrial sales.

Q. All special industrial sales are contracted on an interruptible basis.

A. That is correct.

Q. What do you mean by special?

A. Well, the pipe line company make direct contracts with industrial customers. We call those, of course, special industrial contracts. Some of the distributing companies make two kinds of contracts with industrial customers. One of them which involves the interruptible clause and another which might be sold on a firm basis.

Q. Now, are those differentiated as between special and not special, the latter class?

A. Well, those that are brought to us for clearance, and to determine whether we have sufficient quantities of gas to supply the proposed industrial customer, are named special industrial.

Q. Those are ones that are made at a kind of special price, too?

A. Well, I think the rate filings specify the prices, if [fol. 9901] I am not mistaken. At least, the filings that we have with the Commission specify the division of the revenue obtained from that sale.

Q. Well; the firm industrials—that is, the noninterruptible industrial sales, are, of course, at a higher rate than the interruptible customers?

A. That is correct.

Q. Now, as I understand your testimony, all of the direct sales—that is, the sales made directly without the intervention of a distributing company—that is, sales made directly to industrials by Panhandle Eastern, are made at all times on an interruptible basis?

A. That is correct.

Q. Do the sales which you show, for instance, in Exhibit 229, page 1, include any sales to interruptible customers or to customers that you have designated as "special industrials"?

A. The fact of the matter is that total quantity of sales on that page and, in fact, on the first page of the other three exhibits—

Q. (Interposing) Of the other two exhibits.

A. (Continuing) —of the other two exhibits.

Q. Exhibits 230 and 231?

A. Yes. (Continuing) —does not specify the distribution of this gas whatever. As I testified yesterday, I was [fol. 9902] handed a problem to determine how much gas a completely looped system with the present power would be capable of handling or delivering on the peak day, and I was also given the problem to determine the maximum capacity that might be developed if we fully powered a completely looped system. So these quantities of gas shown here, as the delivery capacity don't necessarily allocate this gas to any one customer.

Q. In other words, not necessarily to firm customer?

A. That is right.

Q. In other words, these are the deliveries that you could make on a peak day if you had the capital additions which you have estimated in these exhibits?

A. That is correct.

Q And could make every other day?

A. Yes.

. . . . . .

By Mr. Lee:

Q. Do I understand that your present average load is 67 percent, did you say?

[fol. 9903] A. I made a rough calculation the other day and I think it came out 67 percent load factor.

Q. Now, then, these exhibits that Mr. Littman has just been interrogating you about, they contemplate a 90 percent load factor.

A. Mr. Hinton persented some exhibits which contemplated a capacity factor as high as 90 percent.

Q. Well, now, the idea I wanted to get straightened out in my mind is this: your exhibits presented here today contemplated the same as Mr. Hinton, a 90 percent daily load factor.

A. My exhibits do not contemplate any load factor. They are merely to show the investment required and the tons of pipe required to meet certain peak day deliveries.

Q. But it isn't peak day, it is to maintain every day a certain amount of delivery.

A. Yes, the calculations are so carried out that if it will meet one day, it will meet several days.

Q. Yes, that is right, but what will be the load factor on the then existing system?

A. If you ran at the same capacity every day, it would be a hundred percent load factor.

Q. That is what I am getting at.

So you have presented exhibits here that contemplate [fol. 9904] an increase from an average of 67 percent load factor, as it is today, to a 100 percent load factor?

A. No, not necessarily.

Q. Why not?

A. My exhibits have nothing to do with load factor.

Q. I understand, but you agree, don't you, that under the hypothesis you have set up, a daily delivery of a fixed

amount under the augmented increased system, under the expenditure you proposed, would mean a 100 percent load factor?

A. If you delivered the same quantity of gas every day, then or now or last year, it would have been a 100 percent load factor.

Q. And that is what you contemplate under these exhibits, don't you? A daily delivery of a fixed amount?

A. I don't know what you exactly mean by that, but we do design for a daily delivery of a fixed amount on a continuous basis.

Q. Exactly. And that, in the last analysis, would mean a 100 percent load factor, wouldn't it?

A. If it were experienced, it would result in a 100 percent load factor.

Q. Certainly. It is all assumption, anyhow, but if the supposition were carried out, it would be a hundred percent load factor, and you contemplate a situation, as I understand it, your proposed expenditures and increased [fol. 9905] capacity, to accomplish what is set forth in the exhibit, practically one-third increase over your present plant and facilities; is that right?

A. I contemplate a design which would be capable of handling considerably more gas than we now handle, and considerably more gas than we have handled, on a lesser capacity factor.

Q. Yes; but measuring on a low factor basis, it would be a ⅓ increase, the difference between 67 and 100 percent, wouldn't it?

A. I would call that a 50 percent increase in load factor.

Q. Difference between 67 percent and 100 percent?

A. Yes.

Q. Well, 67 out of a hundred is ⅔.

A. And ⅓ is exactly 50 percent of ⅔. ⅓ increase would be a 50 percent increase.

Q. That is right. So you contemplate an expenditure that will double your facilities; is that right?

A. Your word "contemplate" bothers me.

Q. You use your own wording. That is what it amounts to, doesn't it?

A. We have set forth here estimated expenditures which, if incorporated in our plant account, would be

capable of developing capacities that I have shown on these [fol. 9906] three studies, and if the 338,000,000 were carried on a continuous basis, each and every day of the year, namely, on a 100 percent capacity factor, naturally our capacity factor or load factor would be increased approximately 50 percent.

Q. Now, you don't set it forth just as a theory or a possibility, you set it forth as what you say you should have in order to get the return to enable you to make the expenditures to get that; isn't that your purpose here?

A. I haven't testified a word about return.

Q. I know you haven't. You have carefully avoided that. You haven't told us anything about that, but you do seriously come here as a witness and you seriously make this proposal because you seriously say that is what you should have and that is the amount of money you need to create it.

A. That is correct.

Q. Yes, that is right, that is your purpose here, isn't it?

A. I am serious about this matter, if that is what you want to know.

Q. And yet, while you are serious about it, you don't for one minute think that you are going to be able within in next year or two, in view of the conditions that obtain, in getting material, you don't think, really, now, seriously and honestly and in an ordinary common sense method, [fol. 9907] that you are ever going to achieve it, do you?

A. We are getting materials right today for carrying out a lot of our projects.

* * * * * * * *

Trial Examiner: Mr. Burnham, coming back to your exhibits 226 and 227, to which Mr. Lee has just referred, or you, in your answer. Have you those exhibits before you?

* * * * * * * *

[fol. 9908] The Witness: Those were Mr. Hinton's exhibits, aren't they?

Trial Examiner: Yes, they are.

The last two lines of the captions of those exhibits are unpunctuated, and read, in one instance: 307,000 M.c.f. continuous daily sales capacity operation at 90 percent capacity factor, and 227 is 338,000 M.c.f. at 70 percent capacity factor.

The Witness: That is correct.

Trial Examiner: Is it necessary to punctuate those two lines at any point with a comma to make them accurate?

. . . . . .

Mr. Culton: I am just about old fashioned enough, like the Examiner, to believe in a comma after that first word "capacity."

Trial Examiner: All right. That is where you would set your comma?

Mr. Culton: Yes, sir.

Trial Examiner: After the word "capacity"?

Mr. Culton: I know they don't use commas any more like they used to.

[fol. 9909] Trial Examiner: Would you agree with Mr. Culton that the placing of the comma in those two lines might affect the meaning?

The Witness: I don't know that it would affect the meaning, but I think it clarifies it.

[fol. 9910] Trial Examiner: One more question: After you have used the first line, how do you affect the meaning by adding the second line of the words which I have just quoted?

The Witness: Well, as Mr. Hinton testified, to get annual volumes, why, the second line is the determining thing. Annual volume sold.

Trial Examiner: That is, on the assumption that you will be unable at any time to operate continuously at 100 per cent capacity?

The Witness: The assumption, in the case of 226, is that it will be operated at 90 per cent of maximum capa-

city. The average day would be 90 per cent of maximum capacity.

Trial Examiner: When you have stated your pipe capacity at maximum, is that, in the case of Exhibit 226 307,000 M.c.f. each day in the year? Is that what you are talking about: a capacity to deliver continuously, day after day, 307,000 M.c.f. every day in the year?

The Witness: That is the capacity.

Trial Examiner: That is your maximum capacity?

The Witness: That is right.

Trial Examiner: Now, your second line, then, assumes that capacity and also assumes a market limitation, or, in other words, assumes that the market will absorb only 70 per cent of that capacity: is that right?

The Witness: In the case of 227?

[fol. 9911] Trial Examiner: In the case of exhibit for identification 226, page 1.

The Witness: 226 specifies 90 per cent. I beg your pardon, sir.

Trial Examiner: I beg your pardon also.

Mr. Littman: Of course, exhibits 225 and 226 are referring to operations and maintenance expenses, as distinguished from capital expenditures on pipe lines, wells, and so forth.

Trial Examiner: Yes, I understand, but we are referring only now to the contemplated service, to the contemplated capacity of the pipe line, which is stated in this phrase—

Mr. Littman: (Interposing) Contemplated use, as I understand it.

Trial Examiner: Very well.

Mr. Littman: Not contemplated capacity.

Trial Examiner: I simply want to get straight on some of these phrases that are being used and to know what is meant and what the effect is of assuming a maximum de-

livery, a maximum possible delivery, and then a maximum sales outlet, so to speak.

Mr. Culton: There is this distinction, I think, Mr. Examiner: I am not an engineer, but these engineers present may bear me out.

Note the use of the word "capacity factor" here, rather [fol. 9912] than load factor.

Load factor, as I understand it, is the average day to the highest day of a sale to a customer, for instance: is that correct, Mr. Burnham?

The Witness: Yes.

Mr. Culton: Whereas this deals with capacity factor. In other words it would be the relationship of the average day to the absolute capacity of the line: is that correct, Mr. Burnham?

The Witness: That is correct.

Mr. Culton: So that there is some difference between load factor, with respect to a particular customer, and capacity factor with respect to the line as a whole.

Mr. Littman: As a matter of fact, very frequently engineers use the term "load factor" when they refer to what you call "capacity factor" here?

The Witness: Sometimes it is loosely referred to by either term.

Trial Examiner: Well, your prospective betterments are intended to provide—

The Witness: (Interposing) Certain maximum capacities.

Trial Examiner: (continuing) —Certain maximum capacities.

Now, your operating expense depends on how much you actually handle?

[fol. 9913] The Witness: Correct.

Trial Examiner: Capital investment is determined by the capacity provided?

The Witness: Correct.

Trial Examiner: And your operating expense accounts in contemplation depend on the accuracy of your estimates of use, actual sales?

The Witness: Correct.

Trial Examiner: May I ask Mr. Watkins a question?

Mr. Culton: Yes.

Trial Examiner: You have used, in several of your exhibits, including the last one you submitted, the words "pro forma".

Will you please define those for the record, Mr. Watkins?

Mr. Watkins: Well, sir, those words bothered your witness as much as they apparently bothered the Trial Examiner. Where those words were used in connection with any of the exhibits that have been introduced through this witness it was the intent to show by means of tables the conditions that would have existed had the circumstances explained by the notes in those exhibits, or made a part of them, been present throughout the entire period.

I don't know whether that is sufficiently clear to you or not, sir.

[fol. 9914] Trial Examiner: Is it fair to infer from that statement that in every case where you have attached the words "pro forma" to some exhibit, that in part it is hypothetical or based upon assumed facts, the existence of which you do not guarantee?

Mr. Watkins: I would rather we would relate it to the latter part of your suggestion, sir, rather than the thinking of it in the nature of something that is hypothetical.

It is, if we may put it this way, a combination of information or facts extracted from the books and records of the companies combining certain conditions that are now present, but which were not present, in whole, in the books and records for the periods for which the ex-

hibits have been prepared, and includes, in addition to that, certain adjustments made, based on, for instance, the recommendations or proposal by the Secretary of Treasury of March 3, 1942, with respect to the revenue for 1942.

They purport to show, for Panhandle Eastern and its subsidiary companies as those companies now exist, what would have been the material that would have been included in similar exhibits had it been possible to prepare such exhibits under such conditions.

* * * * * * * * *

[fol. 9916] Mr. Littman: Mr. Burnham, you will recall that when you first took the witness stand and were first cross-examined by me, I made a number of requests asking that you furnish certain data and information: do you recall that?

The Witness: Yes, I recall that.

By Mr. Littman:

Q. I hand you a document entitled "Panhandle Eastern Pipe Line Company and subsidiary companies—additional information requested in re Exhibit No. 17," and ask you whether this was prepared by you in response to my numerous requests which were in connection with your exhibit No. 17.

A. Yes, prepared by me and with the help of various departments and members of the organization in Kansas City.

* * * * * * * * *

(The document referred to was marked for identification as Exhibit No. 252.)

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[fol. 9918] (The Document Referred to Was Received in Evidence as Exhibit No. 252.)

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Redirect Examination

By Mr. Culton:

Q. Mr. Burnham, you were asked about the meaning of some words.

What were you referring to in the use of the words "continuous daily capacity"?

A. One might infer that to mean day after day, but from a practical standpoint that means a period of 15 or 20 days, I would say, from a standpoint of pipe line operation.

Q. Why is that?

A. Well, it would be physically impossible to operate a system at the same load every day, particularly if there are no standby units provided in that system.

[fol. 9919] Q. In order to operate continuously on any of the bases which you have mentioned it would be necessary for you to have this additional standby equipment which you referred to: is that correct?

A. Indeed it would.

Q. If you operated the system at the present 250 million continuously, would it be necessary to have that same standby equipment?

A. Yes, it would.

Q. Do you know whether any of the pipe line companies do keep standby equipment available where the loads are high load factors, or high capacity factors?

A. Certain pipe line companies differ with the policy established by Panhandle Eastern Pipe Line Company in the matter of standby units.

The Panhandle Eastern Pipe Line Company, to date, has not adopted the policy that it should have a standby unit in every station.

It believes in properly maintaining these units and having them ready for any long, hard pull, such as might occur over a week or ten days.

Other companies, as I have just indicated, do sometimes provide an extra unit which is always available in case of a breakdown.

Now, as I mentioned a while ago, it would be physically [fol. 9920] impossible to operate at a hundred per cent capacity factor under any condition.

That would infer exactly the same quantity of gas each and every day. Such things do not happen.

Q. It is really rated capacity, then, when you refer to a hundred per cent capacity, isn't it, whether it is actual practical capacity or not?

A. That would be one way of terming it, so, as one increases his capacity factor, the need for standby units becomes greater and greater, until a capacity factor, as I testified yesterday, of something like 90 per cent makes it practically necessary that each and every compressor station be provided with a standby unit.

Now, there are other considerations, too, which would indicate whether or not a standby unit should be provided, and I have in mind, on the Michigan Gas Transmission System, the compressor station which is the first station west of Detroit, Edgerton compressor station; it consists now of five 1300-horsepower Cooper-Bessemer gas compressor units, with the necessary appurtenant equipment.

If, on a cold day, during which period the load would be at or near peak requirements, if one of those engines should fail for some reason, it is apparent that one fifth of the available capacity at Edgerton compressor station would be made unavailable for that period.

[fol. 9921] We have given some consideration, and are now studying, whether or not a compressor station as near the market, or as near our largest market, as is Edgerton compressor station, should not have a standby compressor unit, even under the present load factor.

Trial Examiner: All right. You stated the theory. Now in the last year how many engines have failed in service?

The Witness: I recall just during this last winter, during that very cold weather, we had one or two failures west of Illinois.

I can recall specifically one which occurred in, I think, Haven or Greensburg compressor station, during the very cold snap that we had, or during peak load conditions. That particular engine was down only an hour and a half. We were fortunate in being able to make the repairs rather quickly.

Trial Examiner: It didn't actually affect your service at all?

The Witness: Being that far west we were able to repair it, get it back on the line, without having felt the drop in pressure that would occur had it been near the market.

Trial Examiner: How many have you had in the last five years that you know of for sure?

The Witness: I can't testify as to that, because—

[fol. 9922] Trial Examiner (interposing): Well, quite a number, or just an occasional failure?

The Witness: I would say quite a number. These engines will wear out valves, they will get hot bearings, and they will do this and do that.

Trial Examiner: Knowing the Panhandle System as you do and its future program, what margin of safety do you figure is necessary in the long run?

The Witness: As I just indicated a moment ago we have no margin of safety, in so far as extra units are concerned.

Trial Examiner: What do you figure is necessary in percentage when you are talking about per cent capacity?

The Witness: If the load factor or capacity factor should increase substantially above 75 or 80 per cent, I would say that the factor of safety, in that event, should be increased by installing a standby unit.

By Mr. Culton:

Q. Do you have some safety now under present conditions during portions of the year?

A. As I just mentioned a moment ago, we run all compressor units on the coldest day, and we have no standby units.

Q. The Examiner, I think, probably had in mind a while ago whether there was an actual failure or not, teardowns. What has been the practice in tearing down and rebuilding the engines, whether there was a failure or not?

[fol. 9923] Trial Examiner: I was just referring to the practical fact of the liability to failures.

Mr. Culton: I see.

Trial Examiner: And the final question is perhaps this: When you provided this standby power in reserve, how much margin of safety do you then figure necessary?

In other words, how nearly are you sure to supply the maximum capacity, if you can sell it?

The Witness: Well, if you had a standby unit in each compressor station it would be a very unusual circumstance if you had more than one unit go down in any one station at a time.

Trial Examiner: When you have reached that point, then you are able to go one hundred per cent, if you could sell the gas?

The Witness: I would say you would be able to go one hundred percent under those conditions.

Trial Examiner: If you had it for sale and you were able to sell it?

The Witness: That is correct.

By Mr. Culton:

Q. Has it been the custom to rebuild your units during the summer?

A. Yes.

[fol. 9924] Q. Tear them down and work them over so as to have them ready for the winter run?

A. That is the only time that we have to recondition our units, inasmuch as they are all operating in the winter time.

Q. But if you had additional units you could be reconditioning all during the year, is that it?

A. That is correct.

Recross Examination.

By Mr. Littman:

Q. You said a moment ago that you had no margin of safety on your system.

Isn't is a fact that your interruptible industrial customers furnish a margin of safety?

A. Well, I was contemplating an operation at 100 per cent capacity at that moment. There is no margin of safety when you are operating at 100 per cent capacity.

Q. But I believe you said "under the present conditions," did you not?

In other words, we don't want any misunderstanding in the record with respect to the matter.

There isn't any question, is there, but what your interruptible customers do furnish a margin of safety, do they not?

A. Well, provided they can be interrupted, yes, and [fol. 9925] there is no question about it.

Q. Your contracts so provide, do they not?

A. Did you not mention a while ago that W. P. B. might order us to supply these interruptible customers, even though the contract specified otherwise?

Q. Yes, but you are still going to have some interruptible customers that aren't engaged, necessarily, in defense work, aren't you?

A. In the future or in the past, now, are you talking about?

Q. Well, let's take the past first.

A. Yes, we did have.

Q. You did have a certain margin of safety by reason of your interruptibles?

A. Yes.

Q. And let's put it this way: To the extent that you will have interruptible customers in the future you will have a margin of safety?

A. To the extent that they can be interrupted.

Q. Very well. Now, you also made some reference to the installation of an additional unit for the Edgerton compressor station, which is the last point of compression before Detroit.

Isn't one of the reasons why you might need that the fact that there is a variation in hourly take by Detroit?

[fol. 9926] A. Yes, that is another consideration that I did not mention.

However, the contract with Detroit specifies that that company should, to be best of its ability, although I am not quoting the contract, level off the hourly peaks with its holder equipment.

Q. As a practical matter has that been done?

A. I do not know.

Q. You have made no study of the hourly takes?

A. No. We have only recently assumed control of Michigan Gas Transmission, and for that reason it has not been given much study.

Q. But you do know that there is an hourly variation, do you not?

A. Indeed there is.

. . . . . .

[fol. 9928] LEONARD SPACEK was called as a witness, being first duly sworn, was examined and testified as follows:

Mr. Culton: Mr. Examiner, this witness will testify with respect to Exhibit 25? which has already been marked for identification, I believe, this morning.

Direct Examination.

By Mr. Culton:

Q. Will you please state your name to the reporter?

A. Leonard Spacek.

Q. What is your profession?

A. Public accounting.

. . . . . .

By Mr. Culton:

Q. Where do you live and with what firm are you con-
[fol. 9929] nected at this time, and in what capacity?

A. I live at 415 Laurel Avenue, Wilmette, Illinois. I am a partner of the firm of Arthur Anderson and Company.

Q. What is their business?

A. Public accountants, with offices in Chicago, New York, and twelve other cities in the United States.

Q. How long have you been associated with Arthur Anderson and Company?

A. I have been with Arthur Anderson and Company since 1928.

Q. And how long have you been a member of the firm?

A. Since 1940.

Q. Now will you state your education, training, and experience as an accountant?

A. I received my education in local schools and a college at Cedar Rapids, Iowa.

I took special courses at the University of Chicago, and took an accounting course at the Walton School of Commerce.

I became associated with Arthur Anderson and Company in 1928 as a junior accountant, and worked with that firm in various capacities until about 1935, and became accounting manager.

In 1940 I became a partner of the firm and am now in charge of all the public utility accounting work, of the firm, in the country.

[fol. 9930] Q. Have you done considerable accounting for various utility companies during that experience?

A. Yes, I have.

During that period I have audited, made several hundred audits, of public utility companies, and a few of our clients are:

The Southern California Edison Company.

The United Light & Power Company and its subsidiaries.

The Public Service Company of Indiana.

The Columbia Gas and Electric Corporation and its subsidiaries.

The Panhandle Eastern Pipe Line Company

The Northern Natural Gas Company.

The International Telephone and Telegraph Company.

The Commonwealth and Southern Corporation and its subsidiaries.

The Brooklyn Union Gas Company.

The Middle West Utilities Company.

We are also auditors for several public power projects, the lower Colorado River Authority at Austin, Texas; the Central Public Power District, Nebraska; South Carolina Power Authority; and several of the municipal electric utilities in the T. V. A. area.

[fol. 9931] Q. Over what period of time has your company been doing work for Panhandle Eastern Pipe Line Company?

A. I could not give you the exact date but it is from the beginning of that organization. I believe it is from the beginning of Panhandle Eastern Pipe Line Company when it was first organized.

Q. Have you been doing their work continuously since you have been with the firm of Arthur Andersen & Company?

A. Yes, sir. I might also add that I have been engaged on 15 or 20 rate proceedings, among which were the United Fuel Gas Company, where I represented or was in the employ of the City of Charleston; the Natural Gas Company of West Virginia, representing the company; United Air Lines Transport Corporation; the Commonwealth Edison Company of Chicago; Peoples Light, Gas and Coke Company, Chicago; the Chicago District Electric Generating Corporation, and the Chicago Motor Coach Company.

Q. Were you recently employed by Panhandle Eastern Pipe Line Company to make an investigation and prepare a statement showing the consolidated net operating revenue, pro forma, as adjusted for a full year's costs, as allocated between regulated and non-regulated sales for the year ended December 31, 1941? A. Yes.

Q. Is Exhibit No. 251 that document?

[fol. 9932] A. Exhibit No. 251 is that document and I might explain that the pro forma consolidated revenues and expenses for 1941, adjusted for a full year's costs, as appearing in Column (B) on that exhibit, represent the amounts which have been taken from the exhibits submitted in this proceeding by Mr. Watkins and agree with the results shown in particular on Exhibits 248 and 249.

I would like to incorporate those two particular references, on line 42 where it says, "(Exhibit)", it should be "(Exhibit 248)", which was identified this morning; and, on line 46, where it says, "(Exhibit)", it should be "(Exhibit 249)", which was identified this morning.

* * * * * * * *

Mr. Culton: So that counsel may all get their documents [fol. 9933] straight, let me state, on Exhibit No. 251, page

1, line 42, the figure "248" should follow the word "Exhibit" and lie within the parentheses. Is that right?

The Witness: That is correct.

Mr. Culton: Then, on line 46, the figure "249" should follow the word "Exhibit" and lie within the parentheses?

The Witness: That is right.

Mr. Culton: Then on page 6, in Note A, the last line, where it says, "shown in Exhibit ....", that should be filled in with the figures "247" so it reads "shown in Exhibit 247". Is that right?

The Witness: That is correct.

* * * * * * * *

By Mr. Culton:

Q. Mr. Spacek, in preparing your Exhibit No. 251, did you take the responsibility for the basis of allocation between regulated and non-regulated sales?

A. No, sir. I would like to point out that the heading of that column refers to Note B on page 6 which states that, "The basis of allocating revenues and revenue de- [fol. 9934] ductions between regulated and non-regulated sales is determined upon the opinions of the Independent Engineers", who, I understand, will follow me on the witness stand.

Q. Did you obtain, in addition to your consultation, did you obtain a written instruction from one of those engineers?

A. I received a confirmation of the conclusion reached on the basis of allocation in preparing this exhibit.

Q. You have that with you, do you, if anyone desires to see it? A. Yes, sir.

Q. Now, will you explain Exhibit No. 251?

A. I believe I explained the source of Column (B) and also the source of Column (C). The bases of allocation in Column (C) are explained on all the pages and I believe are more or less self-explanatory.

Columns (D) and (E) represent the percentages and the amount of Column (B), which applies to regulated sales, that is, the amount of operating revenue and operating

revenue deductions that are allocated to regulated sales on the basis of allocation explained in Column (C).

The amount in Column (F) shows a portion of the revenues and revenue deductions that apply to non-regulated sales, as those sales have been defined. The first section of page 1 shows the M. c. f. sales to the regulated and non-[fol. 9935] regulated classifications.

Q. After having made these allocations, did you arrive at a final allocation of the net operating revenues on the basis of the 1941 Federal income tax law?

A. Yes, sir.

Q. What was the total net operating revenue as reflected in Mr. Watkins' Exhibit No. 248?

A. The total net operating revenue reflected in Mr. Watkins' Exhibit 248 was $6,305,818.74.

Q. And on the basis of your allocation, how much of that operating revenue would be allocated to regulated sales?

A. 89.66 percent, or $5,654,052.04.

Q. And how much would be allocated to unregulated sales? A. $651,766.70.

Q. On the basis of Mr. Watkins' Exhibit No. 249, and using the recommendation of Secretary of Treasury for income and excess profits tax rates, what were the net operating revenues?

A. They were $4,514,047.86 for the company and its subsidiaries combined.

Q. But your allocation, how was that divided between regulated sales and non-regulated sales?

A. Of that amount, $4,038,053.88 was allocated to regulated sales, and $475,993.98 to non-regulated sales.

Q. Did you further, in your investigation, relate these [fol. 9936] various items to the Federal Power Commission's Classification of Accounts?

A. Yes. The following pages relate the total operation and maintenance, as appearing on line 25, to the classified accounts appearing in the Federal Power Commission's Uniform System of Accounts. That appears on pages 2 to 4, inclusive, of the exhibit, and, on page 5, the details of depreciation are shown as well as the amount of state, local, and miscellaneous Federal taxes, the last item in total appearing on line 36 of page 1.

Q. Then the Notes A and B shown on page 6 are explanatory of the method used by you in preparing this exhibit?

A. Yes, sir, and they apply to all pages of the exhibit.

Q. Yes. Based on the instructions given to you by Mr. Biddison and on the assumption that those instructions correctly reflect an appropriate allocation between regulated and non-regulated sales, do you think the matters reflected on Exhibit No. 251 are a correct reflection of the books and records of the company and of the exhibits of Mr. Watkins to which you have referred?

A. Yes, they do.

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[fol. 9937] Mr. Culton: And, on that assumption, do they reflect the amount of net income attributable to regulated sales and the amount attributable to non-regulated sales?

The Witness: Yes, as defined thereon, they do.

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Trial Examiner: I would like to ask Mr. Spacek if he heard the definition of Mr. Watkins for the words "pro forma".

The Witness: Yes, I heard that discussion.

Trial Examiner: You have used that phrase in connection with your Exhibit No. 51. Will you explain your definition of its use in connection with this exhibit?

The Witness: The words "pro forma", as used in Column (B) and, of course, as reflected in the other results shown in this exhibit, mean the consolidated revenues and expenses of the Panhandle Eastern Pipe Line Company and its subsidiaries, including the two subsidiaries that were acquired in 1942, for the full year 1941, after giving effect to operating costs which were actually effective for a part of the year but not for the entire year of 1941 as shown in Mr. Watkins' Exhibit No. 247.

The reason the words "pro forma" are used is that actually the Michigan Gas Transmission Corporation and the Indiana Gas Distribution Corporation were not subsidiaries of the Panhandle Eastern Pipe Line Company during the year 1941, and the "pro forma" is merely to [fol. 9938] indicate that those subsidiaries were combined,

together with the fact that the two other adjustments, namely, the taxes and the full year's costs, were also reflected in this amount.

Trial Examiner: Do you distinguish between consolidated analysis or an analysis of consolidated accounts for the purpose of the exhibit, and a pro forma exhibit or analysis?

The Witness: Well, you see, from an accounting point of view, the consolidation of Panhandle Eastern and the Michigan Gas Transmission Corporation and the Indiana Gas Distribution Corporation could not be consolidated as subsidiaries for the year 1941 because they were not subsidiaries during that period. Therefore, the pro forma indicates the effect as if they were subsidiaries for the whole year.

Trial Examiner: Does that mean it includes and is based upon the actual book records of the performance of those companies during the year 1941?

The Witness: It is based on the actual results of operations of those companies for the year 1941, adjusted only by the change there would be in the income taxes because the relationship of those subsidiaries to Panhandle Eastern, as compared to the relationship of those subsidiaries to Columbia, would have changed the taxes, so the result is this statement reflects the results of operation as if they would have been subsidiaries for the entire year.

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[fol. 9939] Cross-Examination.

By Mr Littman:

Q. Mr. Spacek, is there anything in Exhibit No. 251 which represents the result of the exercise of your judgment?

A. In general, my work and the work that I supervised was primarily the clerical allocation of the amounts appearing in Column (B) and submitted by Mr. Watkins in Exhibits 248 and 249.

Q. In other words, there is nothing in this exhibit which represents the result of the exercise of your judgment?

A. No. I would say, as a general matter, no. In other words, let me state this, that in the case of taxes and certain

items it was necessary for me to determine that the clerical work in allocation was performed on a basis consistent with the amount in the first instance. For example, take taxes on gas production which had to be allocated on the basis of production expenses. That was not judgment but it was merely to see that the calculation was applied properly in arriving at the amount assigned to regulated sales and non-regulated sales.

Q. You just pointed out that you did not exercise judgment in that respect.

A. I would say, if I understand your question right, I did not exercise any judgment in these calculations.

Q. Do you know what Mr. Biddison's theories of alloca-
[fol. 9940] tion are?

A. I am generally familiar with them but I am not in a position nor am I taking any responsibility for those theories.

Q. Nor do you subscribe to them?

A. I neither approve nor disapprove of them.

Q. Now, let's examine page 1 of Exhibit 254 for a moment, Mr. Spacek.

A. Yes, sir.

Q. I call your attention to the M. c. f. gas sales volume figures which appear in lines 2, 3, 4, as among residential, commercial, and industrial. Where did you secure those M. c. f. gas sales volume figures?

A. I secured those gas sales volume figures from the books and records after Mr. Biddison informed me which customers were regulated sales and which were non-regulated sales.

Q. Do your working papers show your instructions from Mr. Biddison in that regard?

A. Well, they merely state what sales to which companies are to be regarded as non-regulated sales.

Trial Examiner: Might it not expedite matters, Mr. Littman, since the witness says he has in his possession the written instructions under which he worked, to let them be produced at this time?

Mr. Littman: I think that is a good suggestion.

* * * * * * * *

[fol. 9941] Mr. Culton: It is rather lengthy, but we will be glad to have it read into the record.

Trial Examiner: I think, in view of the testimony to date, that should go into the record.

. . . . . .

Mr. Littman: Mr. Examiner, during the recess I have had an opportunity to examine the letter to which the witness has referred, addressed by Mr. P. McDonald Biddison, consulting engineer, to Panhandle Eastern Pipe Line Company, dated April 8, 1942. I believe it would be well to have that letter copied into the record at this point as was originally suggested.

Trial Examiner: If you will furnish a copy to the reporter, it will be copied in at this point.

(The letter referred to is here copied into the record as follows:)

[fol. 9942] Dallas, Texas,

April 8, 1942

Panhandle Eastern Pipe Line Company,
Kansas City, Missouri.

Dear Sirs:

This will confirm my conclusions as to the proper basis of allocating the combined operating revenue and expenses of Panhandle Eastern Pipe Line Company and Subsidiaries (including Michigan Gas Transmission Corporation and Indiana Gas Distributing Corporation) between regulated sales and non-regulated sales.

Of the total sales of the four companies all direct sales to the following are those determined to be non-regulated.

Panhandle Eastern Pipe Line Company

Industrial Sales:

Kansas—

Osawatomie State Hospital

Phillips Petroleum Co.

Missouri—

Edwards Conley Brick & Tile Co.

Fayette Brick & Tile Co.

John Freiling

Harbison Walker Refractories

Mexico Refractories Co.

Phillips Petroleum Co.

[fol. 9943] The W. J. Small Co., Inc.

United Brick & Tile Co.

Universal Atlas Cement Co.

Walsh Refractories Co.

Wellsville Fire Brick Co.

United Brick & Tile Co. (Local area-Vale)

Field Sales (Kansas)

Gas Utilities (For power plant use)

Missouri Power and Light Co.

Illinois Natural Gas Company

Industrial Sales:

Black White Lime Company

Marblehead Lime Company

Menke Stone & Lime Co.

Indiana Gas Distribution

Anchor-Hocking Co.

Gasoline sales for this purpose are allocable between regulated and unregulated sales on the basis of M.C.F. sales.

Operation and maintenance should be allocated as follows:

All natural gas production expenses including gas purchased and gasoline production expenses are to be allocated on the basis of M.C.F. sales.

Transmission expenses—

Supervision and engineering should be allocated on the basis of the composite result of all other transmission op-
[fol. 9944] erating expenses.

Pumping station labor should be considered 50% directly applicable to unregulated sales and 50% applicable to regulated and unregulated sales on basis of M.C.F. sold.

Pumping station supplies and expenses, and maintenance allocable on M.C.F. sales.

Pumping station structure maintenance as well as other transmission structure maintenance are demand costs of regulated sales only.

Measuring station labor, supplies, and expenses, and maintenance should be allocated to non-regulated sales to the extent applicable to facilities exclusively used for such sales and the entire balance represents demand costs of regulated sales.

Transmission main labor, supplies and expenses and maintenance are allocable to non-regulated sales to the extent applicable to laterals used exclusively for such sales and the entire balance of such costs represents demand costs of regulated sales.

Rents, other maintenance and other credits should be allocated on an M.C.F. basis.

Distribution expenses are all attributable to sales classified as regulated.

Customers' accounting and collecting expenses should be allocated on an M.C.F. basis.

[fol. 9945] Sales promotion expenses are applicable 50% to regulated sales and 50% to non-regulated sales.

Administrative and general expenses should be allocated on the basis of the composite results of all other operation and maintenance expenses as above.

Depreciation (including amortization) should all be allocated as a demand cost of regulated sales except the amount applicable to regulator and measuring stations and lateral pipe lines used exclusively for non-regulated sales which should all be assigned to non-regulated sales and depreciation on gasoline plant which should be allocated on an M.C.F. basis.

Amortization and depletion of producing natural gas land and land rights and abandoned leases to be allocated on M.C.F. basis.

Amortization of contracts, acquired and purchased, are all applicable to regulated sales.

Taxes—

Al valorem taxes should be allocated to regulated sales except such taxes reasonably applicable to stations and laterals used exclusively for non-regulated sales and to gasoline plant which should be assigned to non-regulated sales and allocated on an M.C.F. basis respectively.

Gross production, receipts and other taxes on a basis consistent with the method of assessment.

State franchise and capital stock taxes should be allo- [fol. 9946] cated entirely to regulated sales.

Payroll taxes should be allocated on payroll or on the same basis of administrative expenses.

Federal capital stock and state and federal income and excess profits taxes on basis of net operating revenues.

Yours very truly,

(sgd.) P. McDONALD BIDDISON.

By Mr. Littman:

Q. Mr. Spacek, calling your attention again to the first page of Exhibit No. 251, Column (B), am I correct in understanding that the figures shown in that column, from lines 12 to 46, inclusive, were taken by you from Mr. Watkins' exhibits heretofore presented in this proceeding?

A. They were taken from those exhibits. They may show more breakdown or less breakdown, depending on

the requirements for regulating sales, but the bases of them are from Mr. Watkins' exhibits.

Q. In other words, the source of these figures from line 12 through 46 on page 1 of Exhibit No. 251 is Mr. Watkins' exhibits?

A. That is true.

Q. Mr. Spacek, it follows, does it not, that you are not expressing any opinion with respect to any of the figures shown in Exhibit No. 251 as to the propriety of [fol. 9947] their inclusion in this proceeding for rate-making purposes?

A. No, I am not expressing an opinion either way from the opinion expressed by Mr. Watkins and am taking no responsibility for it. I mean by that I am not saying that they are in any way erroneous. I accept them as they are without verification.

Q. And you have made no study, for purposes of this proceeding, with respect to the propriety of the inclusion of certain operating expenses and costs for purposes of rate making?

A. For purposes of rate making, that is true.

Q. Now, with respect to the letter that Mr. Biddison wrote to Panhandle Eastern, which letter was just copied into the record, did you follow Mr. Biddison's instructions throughout as they appear in that letter? A. Yes, sir.

Trial Examiner: Mr. Littman, I wonder if it would be of any use to us all if Mr. Culton or Mr. Wheat should give us some statement concerning the allocation that clearly appears in this Exhibit No. 251 and its bearing upon the issues in our proceeding?

Mr. Culton: Mr. Examiner, frankly this evidence bears very substantially upon these proceedings, and it was prepared in light of the opinion of the Commission in the Colorado case. Mr. Biddison tomorrow will be in posi- [fol. 9948] tion to testify as to his judgment of allocations between receipts from gas subject to regulation, that is, income from gas subject to regulation and gas not subject to regulation.

We had Mr. Biddison present his views of allocation and his conclusions as to the basis of allocation to Mr. Spacek and then had Mr. Spacek apply those views to the com-

pany's records and to the exhibits which heretofore have been offered in evidence, and tomorrow morning Mr. Biddison will testify with respect to the various matters contained in Column (C) of this exhibit, that is, as to the propriety of the allocation and the basis of allocation.

Mr. Littman: Mr. Culton, may I interrupt to inquire whether you are saying that Mr. Biddison is not going to testify with respect to any allocation among the regulated customers?

Mr. Culton: You mean among our customers—that is correct. The allocation to which he will testify will only be as between regulated sales and non-regulated sales.

Mr. Littman: As reflected in Exhibit No. 251?

Mr. Culton: That is right, just the basis for apportioning between regulated and non-regulated. He will not attempt to testify anything at all about apportionment as between various cities.

Mr. Littman: And he will also testify, I take it, with respect to what sales are, in his opinion, regulated and [fol. 9949] non-regulated?

. . . . . .

Mr. Littman: Thank you.

Trial Examiner: From your statement and your reference to what you have called the "Colorado case"—

Mr. Culton: (Interposing) That is Opinion No. 73.

Trial Examiner: (Continuing)—and which, I assume to be an opinion of the Federal Power Commission?

Mr. Culton: In Docket G-124, G-118, and G-121.

Trial Examiner: You are evidently forming some theory of law which has induced you to present Exhibit No. 251, attempting an allocation thereby and proposing the testimony of Mr. Biddison in further support of some allocation of, I assume, facilities and expenses?

Mr. Culton: Probably a better way to express it, Mr. Examiner, would be to say that we recognize that the Commission, in Opinion No. 73, has recognized the distinc-

tion between income obtained from gas, the price of which is subject to regulation, and income obtained from gas, the price of which is not subject to regulation. We think they have properly recognized and attempted to apply that distinction.

Now, the facts of this case are somewhat different from the facts of that case. Whether or not the same method of allocation should be applied is doubtful because of the difference in facts, but we do expect to present, through [fol. 9950] Mr. Biddison, the judgment of an engineer of experience with respect to what he thinks the basis for allocation should be and what elements should be considered. He will discuss all of these various items which are reflected in Exhibit No. 251.

Trial Examiner: I have a copy of Opinion No. 73 of the Commission before me and I wish you would point out both parts of this opinion which you are endeavoring now to apply in this proceeding.

. . . . . .

Trial Examiner: (Interposing) Will you give us a statement of your application of this opinion to the present case?

Mr. Culton: Frankly, Mr. Examiner, I am going to be frank with the Examiner, and, in saying this, I do not wish to cast any reflection on the author of the opinion in Opin. No. 73. We do not know what formula was applied in that case. Frankly, we are groping in attempting to construe that opinion. The author of that opinion clearly recognizes the necessity of making an allocation between these types of gas.

All of the facts existent in that case do not appear from that opinion and, as happens so many times, a person writing an opinion will have things in his own mind which [fol. 9951] are very clear to him but which will not be clear to someone who is not thoroughly familiar with all the facts. Therefore, we expect to suggest a suggested method of allocation between the two types of commodities as to which the Commission properly recognizes a substantial difference.

Trial Examiner: Can you give us some fairly brief general statement of how that allocation would work out according to your theory and interpretation of Opinion 73 and as demonstrated by proposed Exhibit No. 251?

Mr. Culton: Mr. Biddison will do that at considerable length, Mr. Examiner.

Trial Examiner: You are thinking of the figures from Exhibit No. 251 and I am thinking of the legal aspects.

Mr. Culton: There are some differences between the Colorado case and our case which we think should be recognized. One is that in the Colorado case, the deliveries were all in an area which had similar temperature. In our case, we do not have, in our markets, an area of similar temperatures. It will be cold on one section of the line, hot on the other, and sometimes it will be hot on that section and cold on the other. It, therefore, makes it necessary for us to have capacities able to serve the entire area irrespective of whether we have a cold day all the way through or not.

Another situation is that we have a varying type of industries served by our line, whereas most of the nonregulated gas served by the Colorado line went to one [fol. 9952] industry, a considerable portion of it. Mr. Biddison expects to discuss those various matters and give his views as an engineer as to why he thinks the classification which he has made in the letter which was delivered to Mr. Spacek and which classifications are reflected in Exhibit No. 251 are fair and reasonable classifications, and if those are fair and reasonable classifications, then the operating revenues, as reflected in Mr. Watkins' Exhibits 248 and 249, would be apportioned as shown on page 1 of Mr. Spacek's exhibit.

Mr. Biddison desires to make a further calculation tonight as to one phase of this matter which has occurred to him after having read the opinion in Opinion No. 73 in much greater detail and several times. He will not be ready to fully explain his view on that until tomorrow morning and until after he has made that computation.

We frankly recognize that this Commission is now faced with problems not heretofore faced by other regulatory

bodies, at least in the detail which the Commission now faces. It has a very long pipe line here. It has a portion of gas the price of which is subject to regulation and a portion of which is not subject to regulation. The industries are located at numerous points along that line several hundred miles long and there are towns along that line. It may be necessary, before this matter is finally determined, to go into the question of allocation between towns. [fol. 9953] Panhandle Eastern Pipe Line Company does not propose to present any views in that respect, feeling that is a matter as between its customers. It is not material to Panhandle Eastern what that allocation should be as between its own customers. It does think it is of importance, as the Commission has recognized, for an allocation to be presented so that the Commission can determine as best posssible how much the expense of serving the regulated gas is and how much the expense of serving unregulated gas is.

Trial Examiner: Mr. Culton, in your proposed Exhibit No. 251 at page 5 and line 24, there seems to be a total indicated of 94.23 percent as percentage of the regulated sales to total sales.

Mr. Culton: Yes, sir.

Trial Examiner: What significance does that percentage have in this proceeding?

Mr. Culton: That happens to be an over-all percentage, Mr. Examiner. There are some items that are practically 100 percent allocated to regulated sales. Most of the rest of them are apportioned on the basis of M.c.f. sales volume.

Trial Examiner: Just assuming that 95 percent, roughly, is subject to regulation, and 5 percent or a little more is not subject to regulation, what is the effect of that fact on the determination of rate base and revenues and the other issues in this proceeding?

[fol. 9954] Mr. Culton: I do not understand that the Commission used those allocations in determining rate base, Mr. Examiner. As I understand it, they took the rate base—and this is as I understand their opinion and it is reasonable to me—they took the rate base and then determined cost of service.

These items which we have are all representing cost of service. That item to which Your Honor called attention happened to be the tax question and showed the percentage of the taxes which represented a part of the service of the regulated gas. There are other divisions with respect to all of these other types of expenditures, including the expense of amortization and depreciation. Some of those various items on an M.c.f. volume basis. Some of them are on the basis of all being charged to regulated sales and some items are all charged to non-regulated sales.

Have I sufficiently discussed the general aspects of the thing, Mr. Examiner?

Trial Examiner: Frankly, the Trial Examiner is anxious to have developed on this record your theory of the effect of the Commission's action as evidenced by its Opinion 73 insofar as it affects the issues in this proceeding, and I think it would be well to have as concise and coherent a statement as possible and as early as possisble because we are approaching the conclusion of this proceeding. These things are, of course, for full development in the briefs, but before we close the record, we should [fol. 9955] know your conception of the issues and Mr. Littman's conception of the issues as affected by the Commission's recent action.

Mr. Culton: We consider Opinion 73 as reflecting the Commission's view, which we think is correct, that this company is engaged in a business of selling gas; that part of that gas is to be sold at a regulated price and part at a price which is not regulated; that the Commission has jurisdiction to fix the price of the regulated gas but no jurisdiction to fix the price of the non-regulated gas, and that if the price of the regulated gas is to be fixed by consideration of the profits earned by the company, then the price can be fixed as to the regulated gas only by considering the portion of those profits which were actually earned by the regulated gas.

We consider that the Commission has properly construed the Natural Gas Act and its functions in that respect and we recognize that there must be some kind of an allocation and we wish to be of any service we may in determining what would be a reasonable allocation.

Trial Examiner: Do you have other exhibits that deal with an allocation in addition to your exhibit marked for identification Exhibit No. 251?

Mr. Culton: We do not, Mr. Examiner.

Trial Examiner: So that consideration of this aspect of [fol. 9956] the case will revolve around Exhibit No. 251?

Mr. Culton: That is right. This is a suggestion which we have offered. Mr. Biddison, of course, will testify with respect to this exhibit and present his views as an engineer.

Mr. Littman: Is it your idea, Mr. Culton, that Exhibit No. 251 is in accordance with the Commission's opinion in the Canadian River case?

Mr. Culton: I did not say that.

Mr. Littman: I wondered if you thought that?

Mr. Culton: I have never seen their exhibit in that case.

Trial Examiner: I think you misunderstood the question, Mr. Culton.

Will you read the question back?

. . . . . .

Mr. Culton: I do not know what the question means, but my answer is, Yes, we are presenting what we consider to be a fair method of allocation. I do not say it is the same method of allocation which was presented in that case.

Trial Examiner: This is your theory of the application of the Commission's action to the facts of this case?

Mr. Culton: That is right, of the principles of the Commission's action.

Trial Examiner: Yes.

Mr. Culton: That is right. The Commission recognized [fol. 9957] that you cannot just put up a single standard and go by it because they applied one method of allocation as to one of the companies involved there, and a different method of allocation as to the other company involved, which shows it is a matter of judgment as to how you shall make your allocation, and we are making our suggestion as to what that allocation should be.

Trial Examiner: Is the Commission in this case, then, according to your theory, facing a matter of judgment as relating to or involving the unregulated sales to a large number of customers, whereas, in the Colorado case, it had just a few customers?

Mr. Culton: That is a distinction. Whether or not it is of itself enough to require the use of a different rule, I do not know and, as I stated a while ago, we do not know what their rule was in that case.

We are sorry that we cannot determine from the opinion exactly how they reached the conclusion that they did reach. The only thing we can do is to take the philosophy which they present and attempt to apply that philosophy the best we can to the facts of this case.

Trial Examiner: And you are applying it by individual treatment as regards the individual unregulated customers?

Mr. Culton: Not separated, Mr. Examiner; we have used the individual customers only for the purpose of determining how much gas was purchased by the cus-
[fol. 9958] tomers whose rates are not regulated, and how much gas was purchased in the aggregate by those who are regulated.

We have not attempted to divide the cost of furnishing that gas up between the various customers whose rates are not regulated. We have made a division purely between the regulated business and the unregulated business.

Trial Examiner: Isn't your result, frankly, an arbitrary result?

Mr. Culton: As any method of allocation will be, that is true. It is a matter in that there is no absolute standard by which you can be guided. It is purely a matter of judgment in making your allocation, and whether or not it is the correct allocation depends on whether or not your judgment has been properly exercised. It may be properly exercised as to most of the items and not correctly exercised as to some others. Of course, that is a matter this Commission will take notice of and that is the reason why we have set all of these various items out in the way we have so that the Examiner and the Commission can be

advised of just exactly how we have arrived at this conclusion.

Trial Examiner: We won't ask Mr. Littman this afternoon to express his views of the application of the Commission's recent action to this proceeding but we would appreciate a statement tomorrow, after time is given to consider the proposed Exhibit 251 and the reference to [fol. 9959] those sections of the opinion which Mr. Culton has mentioned.

* * * * * * * * * *

Trial Examiner: It is evident that Exhibit No. 251 is one of the most important that has been introduced and it should receive very careful consideration before we recess and before Mr. Spacek is excused, and I think that should be accompanied by a statement from Mr. Littman as to his view at this time as to its relevancy and meaning [fol. 9960] or importance in this proceeding.

By Mr. Littman:

Q. Mr. Spacek, you have already testified you did not exercise your judgment in compiling this exhibit, did you not? A. That is right.

Q. I take it you have no opinion as to the use to which this exhibit should be put in this proceeding?

A. You mean I am not expressing an opinion to the Commission as to how the results should be used?

Q. Yes. A. No, I am not expressing an opinion.

* * * * * * * * * *

Redirect Examination.

By Mr. Culton:

Q. Mr. Spacek, your company does audit the accounts of Panhandle Eastern every year, does it not?

A. Of Panhandle Eastern?

Q. Of Panhandle Eastern. A. Yes, sir.

Q. And some of the members of your staff who do the actual auditing participated in this work? A. Yes, sir.

Q. Under your instructions? A. Yes, they did.

[fol. 9961] Q. And by saying that you took no responsibility, you merely meant insofar as the basis of allocation is concerned?

A. Yes, as to the basis of allocation and also as to presenting these amounts appearing in Column (B) for rate purposes. We have audited them for annual report purposes but we have not made an examination for the purpose of presentation in a rate proceeding.

Q. And by that you mean you are accepting no philosophy from a rate standpoint? A. That is true.

Q. For example, in residential sales, 78,213 is in accordance with the company's books, the very first item of M.c.f. sales volume?

A. Yes, the gas sales volume, of course, is just a summary of the statistical information shown in the company's books which we examined.

Q. That is right, and the various items shown in Column (B) are reflected in the company's books for the specific items shown in Column (A)?

A. They are shown in the company's books. They are taken directly from the company's books except those items—

Q. (Interposing) The "as-if" items?

A. The "as-if" items as pertaining to the taxes and the operating costs which are not effective for a full year.

[fol. 9962] Q. And those "as-if" items are fully described on page 6, or referred to, at least?

A. That refers to Mr. Watkins' exhibits, which in turn, show the adjustments which he made to the amounts shown by the books.

* * * * * * * * * * *

[fol. 9963] By Mr. Goodman:

* * * * * * * * * * *

[fol. 9964] Q. No; if there were no regulated sales, would it then follow that the non-regulated sales could be made or handled at a production cost of 13.2 percent of the total which is the amount allocated to production for non-regulated sales?

A. I cannot say what the conditions would be other than what actually happened here.

Q. Is there anything in this exhibit to indicate that fact or that conclusion?

A. Only insofar as Mr. Biddison might say that that would be a fact because he gave the basis of allocation.

Now, if the philosophy of his basis of allocation is such that Mr. Biddison could answer the question that you asked, that is the only method by which I could answer it.

Q. I see. Then, I will put it this way: So far as you know, there is nothing in this exhibit purporting to have the effect that the non-regulated sales, standing alone, could be made subject to a production cost of 13.2 percent of the total indicated production cost. Is that right?

A. I do not think the exhibit shows that, but I cannot answer your question.

Q. You cannot answer?

A. No, I cannot answer that question.

Q. All right, let's go on to another.

[fol. 9965] A. I would like to amplify on that and say I cannot answer the question because this exhibit is built upon conditions that actually did exist, not on what did not exist.

Q. In other words, the hypothetical production costs for the non-regulated sales, without the existence of regulated sales, might be an entirely different figure, isn't that so? A. I presume it might.

Q. Yes.

A. Mind you, that is just a guess, as far as I am concerned. I have no means of saying it will be or will not be.

Q. Let's turn to page 3 of the same exhibit and referring to Account No. 758, supervision and Engineering, are you able to say, from your investigation of the data before you, that if the non-regulated sales did not exist, $10,414.34 would be saved?

A. I cannot answer that question either.

Q. I see. Now, let's take it the other way. Would you be able to say, from your investigation of the books and records such as you have made in connection with this exhibit, that if the regulated sales did not exist, supervision and engineering could be had for the non-regulated sales at a cost of $10,414.34?

A. I am not able to answer that either.

Q. All right. Now, would your answer be of the same [fol. 9966] tenor to any other item of the same general nature in the exhibit?

A. Just looking the exhibit over, I do not believe I could state that there is any one item that exists under

conditions different from those under which they actually existed. I have no way to say that any item of expense would or would not exist. I do have reason to believe that these items were incurred in the normal course of business as we examined the books, subject, of course, to my previous comments.

Q. Well, now, we have an item here, pumping station structures, 100 percent of which is assigned to regulated sales. Now, I take it that means that that item would not be incurred, that is, that maintenance item would not be incurred, if the business were exclusively confined to the non-regulated sales such as exist, is that right?

A. You are asking me a question which directly should be directed to Mr. Biddisbn. I could not answer that either. That goes into the basis of allocation about which I am not in a position to answer.

. . . . . .

[fol. 9977] P. McDonald Biddison a witness, having been previously sworn, resumed the stand and testified further as follows:

. . . . . .

[fol. 9978] Redirect Examination

By Mr. Culton:

Q. Mr. Biddison, are you familiar with the Opinion No. 73 of the Federal Power Commission issued in Dockets No. G-124, No. G-118 and No. G-121?

A. I am familiar with it to the extent that I have read it and studied it.

Q. After having read and studied that opinion, did you attempt to determine a reasonable method for allocating costs of Panhandle Eastern Pipe Line Company and its subsidiary companies, including Michigan Gas Transmission Corporation, between regulated and non-regulated sales? A. Yes, sir.

Q. After having made that study, did you furnish to Mr. Spacek a letter dated April 8, 1942, with respect to the [fol. 9979] various classifications of sales and expenses?

A. I did.

Q. Were you present yesterday when a purported letter from you to Mr. Spacek was offered in evidence which now appears on page 9942 of the transcript? A. I was.

Q. Is that the letter? (indicating)

A. That is the letter. I have not read the letter as it is typed in the transcript, but that is the letter.

Q. In your opinion, does the classification of sales therein set out between regulated and non-regulated sales present a fair classification of such sales? A. Yes, sir.

Q. Does the classification of expenses set out therein, in your opinion, represent a fair classification between those classes of expenses of regulated sales and non-regulated sales? A. Yes, sir.

Q. What was the fundamental basis of your allocation of costs in your instructions to Mr. Spacek?

A. The fundamental basis was first, that direct sales, that is, sales not for resale were non-regulated business and that sales for resale were regulated business; that to each class of business there should be assigned those costs which were caused by the respective classes in the proportions caused by the respective classes; that the direct industrial sales of this company, that is, of Panhandle East-
[fol. 9980] ern Pipe Line Company and its subsidiaries, do not contribute to the requirement of the provision for capacity upon peak days.

That is the fundamental basis.

Q. Did the letter given by you to Mr. Spacek incorporate that basis throughout.

A. Yes, sir, it was based upon that basis.

Q. Have you now examined Exhibit No. 251 which has been offered in this case by Mr. Spacek? A. I have.

Q. Do the allocations therein contained comply with the basis which you have just given as your judgment for the proper allocation? A. They do.

Q. In your opinion, are the allocations therein provided reasonable between gas subject to resale or gas sold for resale and gas not sold for resale? A. Yes, sir.

Q. Is there any other cost connected with the production and transportation of gas which is not included among those costs which are reflected in Exhibit No. 251?

A. Yes. If we consider the return obtained, whatever that return may be, the fair return to be a cost of the service, that item of fair return must also be allocated in

addition to the items which have been allocated in Exhibit No. 251.

[fol. 9981] Q. Have you made a study of Panhandle Eastern's situation for the purpose of reaching a conclusion as to a reasonable method for allocating the return between the regulated gas and the non-regulated gas?

A. I have.

Q. What, in your judgment, would be a reasonable method for such allocation?

A. Following the same basis as outlined for allocation of costs as I have already stated that basis, the return which is based upon property should be allocated to the two classes of business in the proportions that the respective classes of business cause investment in property.

Q. Have you applied that rule in an attempt to arrive at a reasonable allocation of Panhandle Eastern's properties? A. I have.

Q. Will you explain what the result of your study in that respect has been?

A. The consolidated property account of Panhandle Eastern Pipe Line Company, as of February 28, 1942—

Q. (Interposing) Do you happen to have the exhibit number?

A. Yes, sir, from Exhibit No. 197 by Mr. Watkins.

(Continuing) is, in round numbers, $84,998,335. Included in that amount are production land and leaseholds, gas wells, production system structures, drilling and clean-out equipment and other production system equipment in the amount of $4,519,177 and gasoline and dehydration [fol. 9982] plant in the amount of $704,284. These two items total $5,223,461. They constitute 6.15 per cent of the consolidated plant account of $84,998,335.

The balance of the plant account is, then, in round numbers, $79,774,894. Of that amount, there is property consisting of lateral lines and their measuring and regulating stations in the amounts of $95,981 and $32,866, respectively, used exclusively in connection with direct sales. The sum of these two items is $128,848. This sum is 0.1625 per cent of the balance of $79,774,894. This constitutes the property, outside of production property and gasoline prop-

erty, required to be provided for the sale of the direct sales by Panhandle Eastern and its subsidiaries.

From Exhibit No. 251, Column D, line 10, 86.8 per cent of the volume of sales are sales to the regulated business. Therefore, of the return on this production property, 6.15 per cent of the total 86.8 per cent should be allocated to the regulated business. The product of these two figures results in an allocation on this account of 5.34 per cent of the return to the regulated business.

Mr. Littman: You mean the unregulated business, don't you?

Mr. Lee: 5.34, that is unregulated?

The Witness: I mean just what I said.

Mr. Culton: Will you explain it over again, please? Counsel think you probably used the wrong word.

[fol. 9983] Trial Examiner: Will you read back the answer, please?

(Whereupon, the last answer was read by the reporter.)

The Witness: That is right. When I have completed my allocation, I think the matter will be explained.

Mr. Culton: All right.

Q. Continue with your explanation and they can ask questions if they are not clear.

A. Now, I have allocated that portion of the return which is allocable to production and gasoline property. If we deduct the 6.15 per cent which is the production and gasoline property from 100 per cent, we have left 93.85 per cent of the return still to be allocated. This amount is to be allocated with reference to the $79,774,894. Of that amount, .1625 per cent is required by and devoted to non-regulated business so, dropping the fraction, 99.84 per cent is required by and devoted to the regulated business; so 99.84 per cent of 93.85 per cent of the total return or 93.70 per cent of the total return is allocable on this account to the regulated business.

The sum of the two allocations, that is, the sum of 5.34 per cent and of 93.70 per cent is 99.04 per cent of the return to be allocated to regulated business.

Q. Then what would be your final figures to apply to the regulated business and the final figures to apply to the [fol. 9984] unregulated business?

A. To allocate to the regulated business 99.04 per cent of the return and to the unregulated business, 0.96 per cent of the return.

Q. And to what return would those percentages be applied?

A. To whatever is, in final analysis, found to be the fair rate of return for this company applied to what is found to be the fair rate base. In other words, it is the total amount of the fair return.

. . . . . .

[fol. 9988] By Mr. Goodman:

Q. All right.

Now, referring to the item of supervision and engineering, would you say that under the hypothesis which I mentioned—that is, if the non-regulated sales were discontinued, that any part of the $3,214.75 would be saved?

A. Yes, sir.

Q. Now, can you state or calculate what part?

A. No, sir.

Q. Is it possible to do so?

A. Why, I think an estimate could be made of it, yes.

Q. Could you indicate what supervision and engineering services could be dispensed with?

A. Not without going to the work of making the study. The amount would be pretty small.

Q. Do you think you could dispense with an employee who does supervision and engineering?

A. I don't know, without making investigation.

Q. That is, you wouldn't know that?

A. I said I didn't know without making an investigation.

Q. You are not familiar enough with the business to be able to say; is that right?

A. I am not familiar enough with the business to be able to say whether you could dispense with an employee. I [fol. 9989] am familiar enough with the business to know that you could make some reduction in that amount.

Q. Well, if you couldn't dispense with an employee, you would have to reduce somebody's pay, wouldn't you?

A. No. Certainly not.

Q. Now, in what way, then, would that saving come about?

A. You might perform some other duties that would be charged against some other account.

Q. That is the way that you would suggest?

A. I don't make any suggestion about it at all.

Q. You mean that through the saving in time you would be able to dispense with some other employee or reduce his pay? A. No. I don't mean that at all.

Q. You don't? A. No.

Q. Now, just try to give some indication as to the manner in which the saving you have in mind would be accomplished.

A. Well, if the amount of time devoted to supervision and engineering in that account were lessened by virtue of the fact that there were not quite so many duties to be performed, the people who did perform these duties to the extent of $3,214.75 might remain on the payroll and perform some other duties which would be charged to some other account.

[fol. 9990] Q. Yes, but the saving would only take place if some other employee's pay were reduced or his services dispensed with? A. No, not necessarily.

Q. You don't think so? A. No.

Q. Well, would you save anything in gas well labor?

A. Yes. You would save some in gas well labor.

Q. And how would that come about?

A. It would come about by virtue of the fact that there wouldn't be as much of it required and, therefore, there wouldn't be as much of it charged to the account.

Q. Well, what kind of labor would be dispensed with, Mr. Biddison?

A. Gas well labor. The labor required for attendance upon gas wells.

Q. You mean to say if the output of gas were reduced by about 13.2 percent, you could dispense with some gas well labor? A. Yes.

Q. How much?

A. I don't know. I haven't made any estimate of it.

Q. 13.2 percent of it?

A. I doubt if, but I haven't made an investigation of it.

Q. You doubt it? A. Yes.

[fol. 9991] Q. Well, how about fuel line labor? Would your answer be the same?

A. That is really field line labor. My answer is the same. No, my answer on that is that as to that field line labor, there probably would be no reduction by virtue of the elimination of direct industrial sales. I believe that item would remain the same.

Q. Now, field measuring and regulating station labor. How would you answer that?

A. That labor would be slightly reduced if the sales to the direct industries were eliminated.

Q. Other production labor?

A. I think that item would be somewhat reduced if the sales to direct industries were curtailed.

Q. Now, gas well supplies and expenses.

A. I think that item would be affected very little, if any, by curtailment of those sales.

Q. And fuel line supplies and expenses.

A. I think there would be no curtailment of that item on that account.

Q. Field measuring and regulating station supplies and expenses.

A. I think there would be no curtailment on that.

Q. Other supplies and expenses.

[fol. 9992] A. I think there would be a curtailment of that item.

Q. Delay rentals.

A. I think there would be a curtailment of that item, yes, sir.

Q. Gas well royalties.

A. There would be a very definite curtailment of that item in direct proportion, probably, to the reduction in M.c.f. produced.

Q. In other words, approximately 13.2 percent?

A. Yes.

Q. Is that right? A. That is right.

Q. Now, in maintenance, would there be any reduction?

A. Very little, if any.

Q. All right.

Q. Now, that brings us down to the item marked "Residual Operation Expenses"; isn't that right?

A. Yes, sir.
Q. All right.

Now, will you give me an idea of what they are: these residual operation expenses?

A. Those are expenses of operating the gasoline and dehydration plant.
Q. And would there be any saving in that regard?
A. Yes, sir.
[fol. 9993] Q. Would you know how much? A. No.
Q. In connection with gas purchased, would there be a saving? A. Yes, sir.
Q. Could you say how much?
A. Well, it could be reduced in the proportion that the M.c.f. of sales was reduced.
Q. All right.

Now, you then have made no attempt to compute the amounts which would be saved or the avoidable costs, if the non-regulated sales were not made; is that right?

A. That is correct. I explained the basis on which I set that matter out.
Q. All right.

Now, passing on to transmission expense, would there be any saving in respect to the item of supervision and engineering if the non-regulated sales were not made?

A. I don't believe so, no.
Q. Now, pumping station labor: would there be any saving in that respect? A. Yes, sir.
Q. And could you indicate the amount in any way?
A. No. I haven't gone into that matter. I can't tell you the amount of it without investigation. I can tell you [fol. 9994] the trends on some of these items.
Q. All right.
Pumping station supplies and expenses, would there be any saving? A. Yes, sir.
Q. Would it be substantial?
A. Yes, it would be substantial.
Q. Now, looking at the items of maintenance shown on page 3 of the exhibit, would there be any saving in any of those items if the non-regulated sales were abandoned?
A. Yes.

Q. Will you point out the items?

A. Well, you have a saving in the maintenance of measuring and regulating station structures. You would have a saving in the maintenance of some of those mains that are used exclusively for that business—you wouldn't have them at all. You would have a reduction in the cost of maintenance for pumping station equipment. You wouldn't be pumping as much gas, therefore, you wouldn't have as much maintenance. You would have a reduction in the maintenance of measuring and regulating station equipment for the same reason that you would have it on structures.

Q. Now, referring again to page 2 of the exhibit. Will you assume that the regulated business were dispensed with? Could all non-regulated sales be made at the production expenses indicated in Column F of your exhibit? [fol. 9995] A. I don't know.

Q. Do you have any idea?

A. Not without some investigation on it, I don't.

Q. Do you think that if the regulated sales were eliminated that supervision and engineering for the plant could be had for $3,214.75? A. I just don't know.

Q. You don't know and you don't have any opinion; is that right?

A. That is right. I haven't made any investigation on it. I have no basis for an opinion on it.

Q. Well, take the item of $800.31 for gas well labor. If the regulated sales were eliminated, could the required production be accomplished on that amount of gas well labor?

A. Well, I don't know. If you eliminated the regulated business, you might run this non-regulated business on an entirely different basis. You might not have any production force. You might buy your gas for a business of that size. Any thing could happen. What would happen, I don't know, because I have made no investigation.

Q. Well, I am dealing with this particular business.

A. So am I.

Q. And I am attempting to develop the direct burden of each class by trying to observe what costs would be [fol. 9996] avoidable should a particular item of business be dispensed with.

A. Well, that method doesn't develop costs for classes of business.

Q. Well, we will argue about that later. I am just asking you for your conclusion as to certain facts. If you don't have the regulated business, Mr. Biddison, you indicate that your development of productive capacity would have taken a different course entirely; is that right?

A. No. I said it might have.

Q. It might have? A. Yes.

Q. Well, in all probability, you wouldn't have these extensive gas fields.

A. Well, there, as a matter of fact, whether you produce your gas or buy it; whether you sell regulated business or don't sell it; whether you sell non-regulated business or don't sell it; the fields are there.

Q. And would you drill the wells?

A. I don't know what you would do. I haven't made any study of what you would do if you didn't have any business or if you didn't have the big end of your business or if you didn't have the little end of your business.

Q. Well, now, it is a fact, is it not, that the costs of production of the non-regulated business are not in this [fol. 9997] business separately incurred?

A. That is right.

Q. Except possibly for royalties or a few items which vary with the units of production; is that right?

A. They are not separately incurred on any of those items—

Q. All right.

A. —for either class of business?

They are jointly incurred by the business as a whole.

Q. And it is reasonable to suppose, Mr. Biddison, that the joint product or the joint undertaking is a more economical venture than would be the undertakings separately considered? A. That is right.

Q. I think so. A. Yes.

Q. So that the regulated business contributes to economies in the regulated service? A. Yes, that is right.

* * * * * * * * * * *

[fol. 9998] By Mr. Chamberlain:

Q. I would like to see, Mr. Biddison, whether I have understood your allocation correctly, and I would like to

see if I can place it in a different way than you have and still reach your result.

If I understand it correctly, you have eliminated the production system as your first move, and then allocated a portion of that to the non-regulated business in proportion to the amount of the unregulated sales to the total sales?

A. Well, no, I didn't specifically allocate the property on that at all, but 6.15 percent of the total property is in property used for production of gas and gasoline and I think, therefore, that 6.15 percent of the total return should be allocated between the two classes of business in the proportion that those two classes of business cause the expense of gas and gasoline production.

Q. You have apportioned that directly in the proportion of the sales, have you not? A. That is right.

Q. The volume of use? A. That is right.

Q. Now, did I understand you correctly that the lateral lines and the measuring stations which you deducted were those which were used in serving the non-regulated busi-
[fol. 9999] ness? A. That is correct.

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By Mr. Chamberlain:

Q. Well, I have just had this, Mr. Biddison. It is a little difficult for me. I am merely trying to get at your ideas about this, and I would be glad to have you correct me anywhere in my questions here, but if I get at your position, you take the position that the return should be apportioned in such a way that the non-regulated business should contribute nothing for the use of the transmission system or for any of the property other than the production system plus these lateral lines that were built to serve
[fol. 10000] that non-regulated business?

A. Are you speaking now of return only?

Q. Yes.

A. Since the non-regulated business does not contribute to the investment required to meet peak requirements, I have held that there should be allocated to the non-regulated business only that portion of return represented by the proportion which these lateral lines and individual meter stations represent in the total of that property exclusive

of production property on the main body of your transmission system.

In other words, the non-regulated business causes no investment. Therefore, on the bulk of that property, it should be allocated no portion of the return.

Q. Yes, I so understood that.

Now, let me approach it from this way. You have first segregated, let me say, 6.15 percent of the property—or, let us say, of the plant accounts? A. Yes, sir.

Q. That is right, isn't it? A. Yes, sir.

Q. Now, you have assumed that 86.8 percent of the sales were made for the regulated business, which would leave 13.2 per cent for the non-regulated?

A. That is right.

[fol. 10001] Q. Now, if one multiplies the 6.15 percent of the property by 13.2, he arrives at .811, does he not—.8118? A. .8118.

Q. That would be .8118, would it not? A. Yes, sir.

Q. Now, as far as we have gone, that is the proportion of that part of the return which you would allocate by reason of this production property?

A. Against non-regulated business?

Q. Yes. A. Yes, sir.

Q. Now, if I understand you correctly, you are to add to that the percentage which the property used exclusively for non-regulated business bears to the remaining portion of the plant account, or .1625 percent?

A. That is the ratio. I used .16 in working it out. Dropped a fraction.

Q. All right.

Now, by adding your .81 and your .16, you arrive at .97, which is substantially what your figures were for that portion of the return which you would allocate to the unregulated business; is that right?

A. No. No. Of this, what we will call the main line property, that is property exclusive of the production property that I have eliminated, about 16/100 of one per-[fol. 10002] cent is devoted to the non-regulated business.

Now, .16 percent then of the return not previously allocated is to be allocated to that business. Now we have

already allocated 6.15 per cent, so we have 93.85 percent to allocate, which will allocate .16 percent to the non-regulated business, so .16 times 93.85 gives—93.85 percent of—wait a minute—of the .16 percent is in round numbers, .15 percent, and that together with the .8118 percent gives you .9618 percent.

Q. Yes. Well, all right. I mistook the .16.
A. That balances out the other one.
Q. Yes, that is correct now. That balances. I was taking it of the lesser amount.

Now, then, the effect of that is that you would make a charge against the public on the regulated sales for all of the return except that upon the 13.2 percent of the production property and .15 percent for property used exclusively for delivering the non-regulated gas?

A. That is correct.

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Mr. Chamberlain: That should be 13.2 percent of the [fol. 10003] percentage, would it not?

The Witness: Yes. 13.2 percent of 6.15 percent.

By Mr. Chamberlain:
Q. Yes, that is right.
A. The 6.15 percent representing the proportion that production property is of the total properties.
Q. Now, I observe that you have allocated to the non-regulated sales a portion of the gasoline revenues. Will you give us your reasons for that allocation? That is in exhibit 251.
A. While it is true that the revenues from the sale of gasoline are not fixed by this Commission, yet during the conduct of this case, the gasoline business has been handled as if it were part of Panhandle's utility business. The expenses of that base are included in expenses, and the earnings from that business become, therefore, a credit to the cost of doing the strictly utility business.

In effect, then, the distribution of the operating costs in Exhibit 251 for gasoline production and of the reve-

nues is an allocation between the two classes of business of a little bit of net profit. That net profit being derived substantially in proportion to the volume of gas consumed by the two classes of business.

Q. In making your apportionments, you have taken the volume of sales or deliveries, have you not?

[fol. 10004] A. That is correct; yes, sir.

Q. And the gasoline extraction process is a process for —well, it is a processing of the natural gas, is it not?

A. Yes, sir.

Q. And it makes it easier delivery and also extracts the condensable hydrocarbons, does it not?

A. That is right.

Q. And they would otherwise make trouble in the line?

A. That is correct.

Q. It is then, in effect, a part of the natural gas business, is it not, and really a necessity, or, at least, an improvement in the art of transporting gas?

A. Well, it is an improvement in the art of transporting gas, without question. Whether it becomes a necessity is dependent upon the character of the gas, in the first instance, and how it is going to be handled and where it is going to be marketed, in the second instance.

Q. Now, the allocation you have made of costs is one in which you have applied a very small amount of depreciation to the non-regulated sales. Will you give us your reasons for that?

A. Well, the reason is that depreciation, as an item of expense, is accrued against property. The property required to conduct this non-regulated business is a small [fol. 10005] percent of the main line property. Therefore, the amount of depreciation which is allocated against this non-regulated business is a small proportion of the total accrual for depreciation, being that proportion which the property devoted to the service bears to the total property for the two services.

Q. In other words, you have attempted to deduct and make as a charge against non-regulated sales, the depreciation only of that property which you hold was of service in the non-regulated business?

A. Which was required for the carrying out of that business, yes, sir.

Q. Now, you find, as shown by exhibit 51, that the revenues from the non-regulated sales amounted to $1,500,527, do you not?

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Q. I refer, of course, to your allocation.

Trial Examiner: Do you mean 51 or 251?

Mr. Chamberlain: 251.

A. That is the result of the allocation of the total operating revenues.

[fol. 10006] By Mr. Chamberlain:

Q. Now, eliminate the expense for Federal income and excess profits tax and give me the amount of the entire operating revenue deductions which you have allocated against this class of business.

A. The total revenue deductions for that class of business, as shown at Line 42—no, Line 41— is $848,761.19.

The Federal income and excess profits taxes allocated to that business are $349,062.28. Cross out that entire answer.

Q. That would be correct. The subtraction there would give you the answer.

A. No. The answer is all right there so far. The amount of deductions exclusive of the Federal taxes is, therefore $499,698.91.

Q. Yes.

Now, what would be the net revenue for these non-regulated sales before provision for Federal income and excess profits tax? I can give that to you the same as Mr. Spacek did last night, if you wish, and you can correct it later, if you find it wrong.

A. Well, the total operating revenues for that business, as shown in Column F, at Line 23, is $1,500,527.89, and if we deduct the $499,698.19, which I have just derived for you, we have left about a million dollars, in round numbers.

[fol. 10007] Q. $1,000,882.98, is it not?

A. I make it $1,000,882.98. Does that check your figure?

Q. Yes, that is right.

Now, that is what you figured to be the net operating revenue or income on the non-regulated sales before provision for Federal income tax and excess profits tax, is it not?

A. Well, I didn't figure it, but that is the amount that results from the basis I set for the computation.

Q. Yes, and that you believe to include all of the costs which should be allocated to the non-regulated sales, does it not? A. No, it does not.

Q. Other than return and Federal income tax?

A. Yes, other than return and Federal tax, it does, yes.

Q. Yes. All right.

Now, have you made any computation to see what proportion of the return you would allocate to this non-regulated business?

A. Proportion?

Q. I mean, you have fixed it as .96 percent of the fair return, but let us go back to your first figures and assume a [fol. 10008] fair return. You started out in your computation with $84,998,335, did you not? A. Yes, sir.

Q. Let us assume now—take any figure near that that you want and set your return, let us say, 6.5 percent as was fixed in a recent case.

What would that return be by that amount and what amount would you allocate now to the non-regulated sales under your theory?

Trial Examiner: For convenience in figuring, I suggest ninety million base and 6 percent return.

Mr. Chamberlain: Yes. All right. Try that.

A. Well, ninety million base with a 6 percent return would give a total return of $5,400,000.

Q. Now, what portion of that would be allocated to 13.2 percent of the volume of sales which you would classify as non-regulated?

A. Well, to the non-regulated business, I would allocate .96 percent.

Q. Yes.

A. That is close to 1 percent or about $54,000, roughly.

Q. In other words, you would ask the public to pay for the regulated business all but $54,000 out of a five million

four hundred thousand return, and you would allocate to that part which has a net profit before income tax and [fol. 10009] before return of a million dollars?

A. I don't ask the public to pay for anything except pay their gas bills.

Q. Well, that is a result of your allocation, is it not, Mr. Biddison?

A. No. The result of the allocation is to allocate the return against the classes of business in the proportion that the classes of business have caused investment and have caused costs.

Q. Now, I would like to have the record show a couple of more details here.

Will you give me the amount received per M.c.f. for these non-regulated sales?

A. In Exhibit 251, Line 10, Column F, the sales shown to be 8,259,026 M.c.f., and the revenues from them are shown in the same column at Line 20, to be $1,403,497.60, and from that I derive that the average revenue per M.c.f. is approximately 18.2 cents.

Q. Are you including Line 20 there or 23? My figures would indicate it is 18.2 for the million and a half.

A. Which figure did I read off there?

Q. You read the million four hundred three.

A. The revenue from gas sales shown at Column F, Line 20, this being gas sales only, is $1,403,497.60, and the [fol. 10010] revenues per M.c.f. from that figure—that is, gas only—is about 17¼ cents.

Q. 17.24? A. About 17¼ cents.

Q. About 17¼ cents? A. Yes.

Q. Now, include in that, then, the revenue which you have allocated to the non-regulated sales arising from the gasoline revenues and see what the total revenue per M.c.f. is.

A. Well, that total revenue, including a little bit of miscellaneous—however, none of that miscellaneous is allocated against the non-regulated business—that total revenue amounts to $1,500,527.89, and revenues per M.c.f. of sales from that total amount is about 18.3, I guess, cents.

Q. Now, what are the expenses other than Federal income and excess profits taxes per M.c.f.?

In other words, to apply your—

A. (Interposing) The expenses other than the Federal income tax?

Q. Yes. A. Per M.c.f. of sales?

Q. Yes.

A. Well, the expenses exclusive of those items are $499,698.91, substantially a half million dollars, and on [fol. 10011] 8,259,026 M.c.f., that amounts to approximately 6.07 cents per M.c.f., as near as I can read it on the small slide rule.

Q. Substantially 6.1, is it not? A. Yes.

Q. Now, if you were to deduct the costs that you have allocated, other than the Federal income and excess profits tax, you would have a net income from the sale of the non-regulated gas of 12.1 cents per M.c.f., would you not?

A. Well, I have been running some calculations through here without keeping a memorandum on them, but my recollection was that we had, including gasoline sales, about—

Q. (Interposing) 18.2?

A. (Continuing) —18.2 cents per M.c.f., and this last calculation of expenses, exclusive of Federal tax, was about 6.1. That leaves a spread of about 12.1.

Q. Now, take the net operating revenue, as shown in Line 42 of your Exhibit 251, and give us the amount per M.c.f., that you find that to be.

A. Well, the amount is $848,761.19.

Q. I am sorry, but I intended to ask you about Line 42, the net operating revenue which I believe would be $651,766, would it not?

A. Yes. That is my error. I am on the wrong line. The net operating revenue. $651,766.70, which, on 8,259,026 M.c.f., is approximately 7.9 cents.

[fol. 10012] Q. Now deducting from the 18.2 cents which—

A. (Interposing) No. Wait a minute. Wait just a minute.

Q. That checks with our figures, doesn't it?

A. That is right.

Q. Deducting that amount from the 18.2 cents which was the revenue per M.c.f., you would have a net operating revenue of 10.3 cents per M.c.f., would you not?

A. That is right.

Q. Now, I would like to compare that with the revenues for the regulated sales.

Will you give me the same figures with respect to those?

A. Well, on the regulated sales, we have a quantity as found in Column E, at Line 10, of 54,302,700 M.c.f., and operating revenues, including gasoline, as shown in Column E, at Line 23, of $16,289,045.01. That is a revenue of approximately 30 cents.

Q. Per M.c.f.? A. Per M.c.f.

Q. Now, what are the revenue deductions without Federal income and excess profits taxes per M.c.f.

A. The total revenue deductions, as shown at Line 41 are $10,634,992.97, of which $3,209,166.84 are Federal income deductions. So the deductions, exclusive of that, amount to $7,425,826.13, and that, on 54,302,700 M.c.f., [fol. 10013] amounts to about 13.65 cents.

Q. I have 13.7 here.

A. Well, that might be it. I am working with a five-inch slide rule and trying to read it in three places.

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Q. Then the net revenue, before deduction for income tax and excess profits, would be the difference between 30 cents and 13.7, would it not? A. Yes.

Q. Or 16.3?. A. That is right.

Q. Now, give me the amount of the net operating income per M.c.f. of the regulated sales, as you have found them in your Exhibit 251.

A. Well, that net figure is $5,654,052.04. And, on 54,302,700 M.c.f., that is approximately 10.4 cents.

Q. Now, if I understand your Exhibit 251 correctly, the allocation which you have made is one by which the company would make from its regulated sales as net operating revenue, after income tax, of 10.4 cents, and from their non-regulated sales, 7.9 cents?

A. I don't know. I haven't a record of those figures. [fol. 10014] Q. Those are just as you gave them to me, Mr. Biddison. A. I believe 7.9 was right.

Q. Yes, sir.

We can always correct these, if you don't find them right.

A. Yes, sir.

Q. And notwithstanding the profit is so nearly the same, you figure that the allocation of the rate of return which is the only element of the cost which you say is now left out, should be the proportion of .96 percent of the return allocable to the non-regulated sales?

A. That is right, and if you were to take these spreads that we have just worked out and weigh them against the respective volumes of business for making an allocation, you wouldn't have a widely variant answer from what I have.

Q. Just one more question now with regard to the allocation of income tax: I notice that you have allocated that in a definite proportion of the sales to each class, regulated and non-regulated, to wit, 90.19 per cent to the regulated sales. A. That is right.

Q. Now, you are aware that in the excess profits taxes that a portion of that revenue is taxed as high as 72 per cent.

A. I know that the rate goes up quite high on some of [fol. 10015] it. I don't know what the limit is now.

Q. In my question I should have included with the excess profits tax and the Federal income tax. And you have applied then to the unregulated business substantially 10 percent of the income tax, whereas the volume is 13.2 percent. A. That is correct.

Q. What is your idea in making an allocation of the heavy taxes against the non-regulated business?

A. I didn't allocate heavy taxes against the regulated business or against the non-regulated business.

The item of taxes is fixed by dollars subject to tax. The source of those dollars doesn't fix the tax. It is fixed by the amount of dollars, regardless of its source. I have allocated, therefore, the taxes on those dollars which were taxable in proportion to the source of those dollars, in proportion to the two businesses which caused those dollars to be made subject to tax.

Q. You have allocated here to the business which you say utilized—you have allocated to the non-regulated business the sum of $349,000 for the payment of taxes on a portion of the business which you say utilizes only about something less than 1 percent of the property.

A. No. I haven't said it uses only 1 percent of the property. I have estimated that of property, exclusive of [fol. 10016] production and gasoline property, there was caused an investment of about .16 percent of that property.

Now, I have followed precisely the same principle in the allocation of return that I have followed in the allocation of Federal tax, allocate them back in the proportion that the two businesses caused them.

Q. Well, you figured this, then, as two separate businesses? A. They are separate businesses.

Q. That is the basis—

A. (Interposing) And each one of them has several subdivisions.

Q. And that is the basis of your allocation, that they are two separate businesses?

Well, they are separate in this manner: that they are different classifications of the total business conducted. They are not separately and individually carried on. They are carried on simultaneously.

Q. Well, wherein arises the privilege of using the transmission system without expense to the non-regulated portion of the business?

A. They don't use it without expense.

Q. Expense for return.

A. In my allocation, they bear the expense of return upon the investment which they have caused.

[fol. 10017] Q. But not for the property which they use in distributing their gas?

A. For the property which they use for distribution of their gas alone they bear all the costs.

Q. Yes, but what do they pay in the return for transmission facilities that bring their gas from Texas to Hannibal, Missouri?

A. As far as the company's books are concerned, they don't set up separate charges for that. They don't attempt, so far as I know, to make a determination of the individual costs for delivery to any class of consumers, nor to any point on the system. Now, I think that could be done, but it hasn't been done.

Q. Well, what is the reason for not allocating a portion of the cost for the facilities used for transmitting your gas from Texas, let us say, to Hannibal?

A. None whatever, and I have made such an allocation.

Q. Of the facilities?

A. No, I have not allocated facilities. I haven't gone entirely through that process. In order to determine costs, it is not necessary to make a complete allocation of facilities to the various classes of business. I think, in some instances, you would be able to allocate facilities, but you don't need to do it in all the property.

Q. Is this a fair statement, then: that it is your thought [fol. 10018] in your testimony here that the pipe line company has a right to take such gas as it wishes to sell on direct industrial sales, and to utilize the entire transmission facilities of the company without any return upon them, and still have their income taxes paid at these high rates as a charge to the public for the gas they get through those same transmission facilities?

A. No, nor have I so estimated any such thing as that. I do think that they are entitled to transmit gas for direct sales without allocating part of their capacity against those direct sales, so long as those direct sales don't entail the construction of capacity. If they entailed a construction of capacity, they certainly ought to bear the cost of that capacity.

Q. A few months ago, did they not have to shut off some of their customers on account of a lack of capacity?

A. Yes, sir, they did.

Q. Well, then, somebody required some capacity, didn't they?

A. Yes, sir, they did, and during that period of cutoff which I have studied, I reached the conclusion fortifying my knowledge that they don't build capacity for this class of business that they had then no capacity for this class of business, and have none now for this class of business.

Mr. Culton: You mean for direct sales?

[fol. 10019] The Witness: That is right.

Trial Examiner: May I ask counsel whether, in your opinion, the Commission has the authority under the Natural Gas Act to require discontinuance of industrial sales

in order to serve communities which are connected and under contract, if the gas is required.

Mr. Culton: I don't think that power is given by the Natural Gas Act, Mr. Examiner, but the question has not yet arisen so far as Panhandle Eastern is concerned.

Trial Examiner: We are at the recess time, but I would like to suggest this question to Mr. Biddison, and perhaps he can answer it after luncheon.

At page 9942, where the letter of instructions to Mr. Spacek appears, you have listed 19 additional customers. I assume that in order to serve each of these customers, some investment was necessary.

Have you made any segregation or computation of the investment required solely for the service to those industrial customers?

The Witness: I have testified to that amount, Mr. Examiner. I had the amount determined for me by Mr. Spacek from the accounts of Panhandle Eastern Pipe Line Company.

Trial Examiner: Does that appear in Exhibit 251?

The Witness: That detail does not appear in Exhibit 251, but the details are available in the working papers of Mr. Spacek.

[fol. 10020] Mr. Culton: The aggregate, however, does appear, does it not, in 251, or do you recall? Give the figures to the Examiner: that is the important matter.

The Witness: The aggregate is $128,848.

Trial Examiner: And that represents the total investment necessary to convey the gas from facilities otherwise provided, or provided for other purposes, to these industrial customers?

The Witness: That is correct.

Trial Examiner: That includes your mains and any other facilities necessary to serve them?

The Witness: Yes; mains and any other regulating and measuring equipment.

. . . . . .

[fol. 10021] Recross Examination.

By Mr. Littman:

Q. Mr. Biddison, the allocation study presented by you in Exhibit No. 251 is necessarily an estimate, is it not?

A. The allocation in Exhibit No. 251 was presented by Mr. Spacek. I supplied him with the instructions or basis for making the allocation. The amounts of money which are to be allocated have been explained in testimony by Mr. Spacek and Mr. Watkins.

Q. Mr. Spacek testified that he did not exercise any judgment in connection with Exhibit No. 251 but merely did a mechanical accounting job, as I understood his testimony. Is that your understanding of it?

A. That is right. He followed the rules which I set out.

Q. Now, these rules which you set out are essentially shown in Exhibit No. 251 under the column headed (C)?

A. That is correct. Those are condensed statements of the principles to be followed.

[fol. 10022] Q. Now, those principles represent necessarily the exercise of your judgment in each of the premises? A. They do.

Q. And are essentially estimates, are they not, as distinguished from the application of a particular set of rules or formula?

A. Well, the rules and formula are set out, in substance, in Column (C).

Q. What I am driving at and I think we will have no difficulty once I make myself clear which perhaps I have not as yet, is this: That there are various methods of allocating expenses and returns, are there not?

A. Yes, sir, that is true.

Q. Various recognized methods, as a matter of fact?

A. Well, various methods are used. Some people recognize one set of rules as valid in one condition and another set is valid in another condition.

Q. And engineers differ with respent to various methods to be used or applied to a given set of circumstances, isn't that correct?

A. Sometimes that is correct, yes.

Q. Now, you have employed here chiefly the M.c.f. sales basis, have you not, that is, the annual sales basis?

A. No, not chiefly, no.

Q. You used that basis as shown on page 2 of Exhibit [fol. 10023] No. 251 as applied to natural gas production expenses, did you not? A. That is correct.

Q. You did not anywhere utilize the so-called demand basis or as it is sometimes called, the peak day basis, did you? A. Yes, sir.

Q. Where?

A. That has been used with reference to transmission expenses, both operation and maintenance.

Q. Where is that shown in Exhibit No. 251?

A. The detail of that is on page 3.

Q. Of the items that are shown on page 3, which are the ones to which you applied the peak day sales basis?

A. To 50 per cent of the pumping station labor, line 6; with respect to measuring and regulating station labor at line 9; with respect to measuring and regulating station supplies and expense, line 13; with respect to transmission mains labor at line 14; with respect to transmission mains supplies and expense, at line 17; it is involved over in the maintenance item of supervision and engineering, line 20; although that is not the sole basis; with respect to pumping station structures at line 22; with respect to measuring and regulating station structures at line 23; with respect to other transmission system structures at line 24; with respect to transmission mains at line 26.

[fol. 10024] Q. Just a minute. Let's look at line 25 for a minute. You have applied 100 per cent of those other transmission system structures to the regulated sales?

A. That is correct.

Q. Now, where does the peak day come in there?

A. The regulated sales constitute the peak day output in capacity.

Q. Are there any others, Mr. Biddison?

A. With respect to measuring and regulating station equipment, line 30.

Q. Are there any other bases other than the annual M.c.f. sales basis and peak day sales basis ordinarily used for allocation purposes?

A. Yes, there are a host of ways of making allocations.

Q. And there are a good many disagreements among engineers and I presume even accountants as to which is the proper method to use, isn't that correct?

A. No, I think the disagreement is largely as to the matters of expediency in the application of the fundamental principles.

. . . . . .

Q. This allocation study which you have presented in Exhibit No. 251 represents, I take it, your best judgment with respect to the application of various methods of allo-
[fol. 10025] cation to the facts in this proceeding?

A. It does. At the same time, with a long series of investigations, there are some modifications that could logically be made. There is, in fact, some portion of production expense and some portion of the return on production property which could rationally be allocated on the basis of the requirements of the peak load. The amounts of those are small compared with the total amounts to be allocated and, in any allocation, some judgment must be exercised in situations similar to that in order to get a workable method and a workable answer.

I have tried, in this instance, where there were some comparatively minor items that could rationally be allocated on a demand allocation, to resolve the doubt in favor of throwing them into the commodity costs and have done so with those items of production property to which I referred and with some other items.

Q. I take it from your testimony that an allocation study is not necessarily an exact thing, is it?

A. There is nothing exact that I know of in engineering or science except the adding up of units.

Q. And a half a dozen very capable and equally expert engineers could very well take—

. . . . . .

[fol. 10026] Q. (Continuing) could very well take the facts in this proceeding and come out with entirely different results in making an allocation study, isn't that a fact?

. . . . . .

The Witness: It is my opinion that expert engineers, making a serious attempt to fairly solve this problem would, among them, each have a different answer but that

the difference between the answers would be very, very small. They would arrive very closely at the same result if they followed the primary principle that costs are to [fol. 10027] be allocated against the service that causes the cost.

* * * * * * * *

Q. Well, you mean if they followed the same philosophy and principles which you have followed, they would come out with about the same results?

A. If they followed the principle which I have just enunciated, that costs should be allocated against the service that causes the cost.

Q. They do not all agree, do they, on that philosophy or the application of it?

A. Everybody that I know of that is competent to have an opinion on it does.

Q. Well, is the allocation study set forth in Exhibit No. 251 purely a mathematical matter or is it a judgment matter?

A. Well, as I have explained, the setting forth of the rules to be followed involved judgment. From that time on, it is a matter of mathematics.

Q. And engineers differ as to the rules to be followed in these allocation studies, do they not?

A. I suppose that some engineers would differ slightly in some of these rules as to specific quantities, yes.

* * * * * * * *

[fol. 10028] Q. Well, I take it, then, you are saying that yours is the only method that could be used for purposes of this proceeding?

A. I did not say that at all or even intimate it. On the contrary, I firmly believe that the fundamental principle which I have stated is sound and is acceptable to [fol. 10029] engineers who are competent to have an opinion on the matter. As to the detailed rules which I laid down, I have already stated that some variations from those would be had by other engineers.

Q. And the matter is, by and large, a matter of the exercise of judgment, is it not?

A. The fundamental principle is not a matter simply of judgment. The setting down of the rules for the han-

dling of individual amounts involves the use of judgment and that judgment must be based upon an understanding of the problem. That understanding can come by experience and that is where I got mine.

Q. It is therein that engineers disagree?

A. No, not wholly. That could quite well account for some disagreement.

Q. Within what over-all percentage limit would you say that you were exactly right in your allocation shown in Exhibit No. 251?

A. Oh, I think I am within 10 per cent either way.

. . . . . .

Q. Now, you have made a separation or allocation in Exhibit No. 251 as between the unregulated sales and regulated sales, have you not?

A. No, Exhibit No. 251 is not my exhibit, but Exhibit [fol. 10030] No. 251 does make an allocation between those two classes of business.

Q. Do you agree with Exhibit No. 251? A. Yes.

Q. If there is anything about it you don't agree with, I would like to have you point it out.

A. I have not disagreed with it. I have stated time and time again that it was made according to my instructions but I did not label it my exhibit because I did not prepare it nor did I present it.

Q. You take the responsibility for the philosophy behind this exhibit, don't you?

A. Exactly. I have taken it and I have testified I took it two or three times.

Q. And if Exhibit No. 251 is accurate mathematically, you take full responsibility for the result, do you not?

A. Absolutely.

Q. Well, assuming that Exhibit No. 251 is accurate mathematically, does it or does it not make an allocation as between unregulated sales and regulated sales?

A. It does make such an allocation. It shows on the face that it does and I have so stated that it did three or four times.

. . . . . .

[fol. 10031] Q. Are any of these unregulated sales to war industries?

A. I am sure that several of the industries in that classification are engaged in the production of materials used directly or indirectly in war activities.

* * * * * * * *

[fol. 10032] Q. What return does Exhibit No. 251 show is being earned on your allocated rate base, allocated to unregulated sales as shown on page 1 of Exhibit No. 251?

* * * * * * * *

The Witness: Page 1 does not show anything on that.

* * * * * * * *

Q. Well, look at line 42 under the column headed, "Non-regulated Sales," Column (F) entitled "Net operating revenue," $651,766.70.

Now, those are the net operating revenues, aren't they, according to Exhibit No. 248, and according to page 1 of Exhibit No. 251?

A. I do not have Exhibit No. 248 before me. I do not know what that shows right there but, on Exhibit No. 251, at line 42, Column (F), the net operating revenue for non-regulated sales is $651,766.70.

Q. Now, I want you to compare that figure with the re-[fol. 10033] turn which you have allocated to the unregulated business?

A. I have not allocated any return to it.

Q. Well, suppose we help you do it. Remember Mr. Chamberlain asked you to assume a rate base of $90,000,000. Do you remember that?

A. No, but I do recall he asked me to assume a rate base of some $84,000,000 and the Examiner suggested we take an example of $90,000,000.

Q. All right. Now, you have got the $84,000,000 from Exhibit No. 197 which amount is labeled, "Gas Plant—Consolidated"? A. That is right.

Q. Now, for purposes of convenience, suppose we just call it, as the Trial Examiner suggested, $90,000,000. Of course, when we use any such figure as $84,000,000 or

$90,000,000 we are making no deduction for depreciation, are we?

A. I do not know what you are doing but reaching out and getting a figure to use as an example.

Q. What figure did you start with when you started your allocation?

A. I did not start with any figure.

Q. Well, didn't you start with $84,998,335?

A. No, sir, I did not start with anything. I set down the rules and regulations to be followed by the man who made the computations and presented them.

. . . . . .

[fol. 10034] Q. Suppose, before we make the assumption of a rate base of $90,000,000, I ask you to what use you put the $84,998,000 figure?

A. In the allocation of return, I apportioned that return over property values which totaled $84,998,335. That is not in Exhibit No. 251, however.

Q. That is right, Mr. Biddison. I think, perhaps, you did not get what I had in mind and perhaps I did not make myself clear. Perhaps I should have said in starting your method of allocating return, you started out with $84,998,000. Is that right? A. That is correct.

Q. Now, that represents the book cost of the gas plant of all these companies consolidated before any deduction for depreciation, doesn't it?

[fol. 10035] A. That is the property account as shown in Exhibit No. 197 by Mr. Watkins and any description further than that will have to come from somebody besides me. I think it has been explained.

Trial Examiner: Those are the figures that you adopted as the basis for the testimony you gave in segregating and allocating return, did you not?

The Witness: That is correct.

Trial Examiner: And did you not add to the segregated return the segregated base from which that return would derive? In other words, did you not break down the $84,000,000 plus in your previous testimony?

The Witness: Yes, I have broken that down in previous testimony.

Trial Examiner: What is the lesser figure?

The Witness: The lesser figure, after deducting the amounts for the gas and gasoline production property, is $79,774,894.

Trial Examiner: And that leaves, as a basis for earnings of $651,766.70 what sum?

The Witness: For the basis of earnings on property exclusive of that production property, $128,848.

Trial Examiner: No, you misunderstand me. The formula, as I understood your testimony, would be—and for these figures look at line 42 in page 1 of Exhibit No. 251—[fol. 10036] $84,000,000 plus is to X as $5,654,052.04 is to $651,766.70.

In other words, you segregated your return. Now, what is the effect of that segregation if you apply it to your base?

The Witness: Well, I will have to make a determination of base the first thing, Your Honor, because I have not made a determination of base.

Trial Examiner: You took the $84,000,000 for your base, did you not, in calculating your return?

The Witness: That is the total base that I started with in allocating return but I have not determined what that base would be as to either one of the classes of property.

Mr. Culton: That is the rate base.

The Witness: Rate base, yes.

Now, on the unregulated business, you would have $128,848, other than production property which you have in addition to that portion of the production property.

Trial Examiner: Is that not included in the $84,000,000 plus figure which has been given?

The Witness: Yes.

Mr. Culton: I think what the Examiner wants to know is the fraction which you used for the purpose of applying to whatever rate base the Commission shall select. I think that is what you are after.

The Witness: In substance what it amounts to and I think this will answer the Examiner's question, to [fol. 10037] determine from the $84,998,335 the respective rate basis conforming to the allocation of return which I have made, you should take 13.2 per cent of $5,223,461 of gas and gasoline production plant plus the item of $128,848 of plant other than gas and gasoline production plant. That would be $498,497 of production property including gas and gasoline production property allocated to the non-regulated business and $128,848 of other property allocated to that business, the sum being $618,345.

* * * * * * * *

Trial Examiner: (Interposing) Just a moment, Mr. Littman: Exhibit No. 251, page 1, line 42, has a segregation of net operating revenues in which, under the column "Non-regulated Sales," Column (F), appears the figure of $651,766.70.

The Witness: That is correct.

By Mr. Littman:

Q. Now, what rate of return is indicated by that kind of a net earning as applied to a rate base of $618,345. Will you make the calculation for us, please?

A. About 94 per cent.

Q. Per annum? A. Yes, sir.

Q. Well, it is more than that, isn't it? Will you please calculate it again? It would be more than 100 per cent, [fol. 10038] wouldn't it?

A. Yes, that is correct. It is about 103¼.

Q. Percent return per annum? A. That is right.

* * * * * * * *

[fol. 10039] Mr. Goodman: In the opinion of the Commission in the Canadian River Gas case, it is said:

"The Commission is aware that in an investigation such as this, it is incumbent upon it to determine the reasonableness or unreasonableness of the rates and charges subject to its jurisdiction. This requires that the total costs of operations, including depreciation, taxes and a fair return be distributed among the various customers served individually or by appropriate groups. To the

extent that such costs allocated to sales under the Commission's jurisdiction are less than the revenues received, [fol. 10040] the rates and charges made are unjust and unreasonable and revenues must be reduced accordingly. It does not follow from this obligation of the Commission that an allocation of physical property or portions thereof must be made before any excessive returns are determined as seems to be the contention of the companies.*** All that can be accomplished by an allocation of physical properties can be attained by allocating costs, including the return."

Now, if I may be permitted to reword a phrase in the foregoing statement, I should like to do so. In place of the phrase "cost including return," I would like to substitute the words "revenue requirement". I make this suggestion because, to me and I know to many others, cost on the one hand and return on the other are distinct concepts whereas total costs, including the portion thereof allocated to depreciation plus a reasonable return, equal the revenue requirement.

I, therefore, repeat and endorse the following paraphrase of the last paragraph of the opinion referred to: "All that can be accomplished by an allocation of physical properties can be attained by allocating the revenue requirement. The latter method is by far the most practical and businesslike."

Now, I do not wish to assert or even endorse a quoted proposition without giving a reason for it. Briefly, it is this:

[fol. 10041] The allocation of a revenue requirement among classes of customers is in no sense a consequence of cost allocations. While differentials in the direct costs of each service, if free, must be recognized, and a fair test of their existence is the amount saved or avoided if the particular service is dispensed with, joint costs are the indivisible burdens of the total operations. Subject to the requirements that each unit should bear its direct or ascertainable avoidable costs, any different price classes per unit of service, that is, any different rates, must be the consequence of considerations of policy, not of cost. This

policy accords with the relative value of the different services which may be developed by the full utilization of the facility.

The opinion just referred to apportions the revenue requirement set by the fixed charges in accordance with the relation on the peak day of the customer's demand to the system peak. The evident object, which is approximated, is to apportion the general burden equally per unit of demand. There is nothing compelling about this policy. If at this equal price per unit the capacity is filled, the policy proves it is sound.

Now, I do not say this in disagreement with that policy. On the contrary, I say it is in fair accord with the application of that policy to that case and very likely to this case but in order to state and apply a general principle, that [fol. 10042] may be tested by the generality of its application and I do not believe that there is any general principle of law or of policy which brings one out to the necessary conclusion that, say, investment in transmission property shall be allocated equally in accordance with the ratio of the customer's demand on the peak day to the total peak demand.

I can conceive of occasions where that would not be a sound or even a business-like policy. Mr Biddison has gone to the far opposite extreme and has concluded that since there is no capacity whatsoever to be allocated to the non-regulated customers, they make no demand whatever on capacity, no capacity was provided for them. Therefore, no transmission line capital is to be allocated to them whatsoever.

But now let me cite a possible example that will bear on this question of allocation. As is well known and has been brought into the testimony in this case, a relatively small increased investment proportionately will pay for the installation of a very large quantity of increment capacity. That is to say that if the price of pipe line be roughly related to the diameter, a relatively slight proportionate increase in the [diaeter] will greatly increase the capacity of the line and if this line had been built, let us say, as a looped line of high capacity pipe, there would

have been plenty of reserve capacity in advance of the present demand and that reserve capacity would have [fol. 10043] been provided at a not impossible increased cost.

Now, let us suppose that there is an industrial customer on the line and he says, "Well, I will take your gas at, say, 15 cents per thousand cubic feet," and the pipe line company calls in its accountant and the accountant starts to figure on the basis of allocating an equal proportion of capacity relative to the demand of this customer on the peak day and the accountant figures out that if this is done, why, the gas will have to be sold at 15 cents per M.c.f. below the total allocated cost.

Yet Mr. Morton has shown to us that production costs and transmission or pumping costs are something around, on an average, 6 cents per M.c.f. and an average price, say, of 15 cents, will bring in 9 cents to relieve the burden of general costs and to afford some profit.

Well, if those figures be correct, I do not state them as correct but merely as general indications of a 9 cent differential between, let's say, the direct cost of the gas and what you are going to get, the businessman is entirely justified in taking on the business for, to him, the problem is, "Am I better off with this business than without it?" and he would be justified, as I know he frequently does—and now I am merely figuratively speaking—in throwing the accountant out the window. I do not mean this as a reflection on the accountant for there are, of course, many [fol. 10044] exceptions but I have heard numerous discussions and arguments between businessmen and accountants to precisely the same effect. The accountant's allocations have a certain tendency to prove that he is selling at a loss but the man operating the business knows that he is better off taking the business than leaving the business because he is going to have those costs anyway. The costs are there and whatever relief he gets is all to the good.

It is clear, then, that if there is plenty of capacity not being utilized and a new customer comes on and will take

some capacity, the question to be considered is not an equal division of the cost of that capacity among the users but this question, that this capacity that this particular customer is using does not have the same value as the capacity that a more necessitous customer is using. Now, I submit that is not any question of cost at all. I submit that one could start figuring from now to doomsday on the subject of cost and never approach a practical, workable solution of the problem. I submit that the efficacy of your cost calculations where joint costs are incurred and where they are inseparable is exhausted by using those costs for a determination of the total revenue requirement.

Now, having exhausted the efficacy of your cost work, your distribution of that total revenue requirement among customers derives and is derived from considerations of [fol. 10045] pricing policy as to where that burden should fall. Your Honor is undoubtedly familiar with the phrase, "what the traffic will bear" which has a primary reference to the subject under regard. I only point that out because it is perhaps better to refer to differences in the value of the service.

Now, let me try to relate this somewhat to this case. If it were possible to take one particular activity and compute the direct expense incurred in it, then the thing to do is to proceed in that way. Well, a customer uses up so much gas but we do not know what that cost is because that gas was obtained under a development project for a completed industry. There is no project in existence whereby fields are developed, gas wells are drilled, purely for a limited, we will say, 8 million M.c.f. per year capacity for non-regulated customers.

Now, a great field is developed. A pipe line is built in no sense for any limited operation but it is built not only for the customers of today but for the customers in the distant future. It is all engineered to handle great volumes and possess great capacities.

Now, I think that it may be assumed, even without argument, that gas can be sold and is being sold to the non-regulated customers at a price far below what would be conceivably possible if a separate industry had been estab-

lished for them. I think, on the other hand, that the de-
[fol. 10046] votion of a certain proportion of the gas, and that is after all production and of the transmission capacity and I think some of it is devoted to non-regulated customers, to some extent cooperates with and relieves the burden of fixed charges which fall upon regulated aspects of the business or would fall anyway if the business were exclusively serving the regulated customers.

I, therefore, think that the direct charges that one can develop here are so small and so trivial as to cut absolutely no figure in the picture and that it is a complete and futile waste of time to attempt to find out how much labor, for example, is expended in serving the direct customers if it were even possible to do so and I doubt it is possible and how much production labor is devoted to extracting the particular gas which they require. The whole thing becomes very small. There are, of course, some laterals which serve these industrial customers, as I recall the figure, about $125,000 worth, and also an infinitesimally small figure in this picture.

Now, following the Indiana Gas case which purported to do just exactly what I think should be done but finding in this case that there is no particular point in starting to make an attempt to allocate so-called variable costs or direct costs serving one or the other classes of customers, we get down to this situation which will do justice in this case with the minimum of trouble and which comports
[fol. 10047] with good theory. We must first study the requisites of a rate structure and we must find out if the policy embodied in that rate structure is a sound policy. It has been mentioned that the company, in general, has a policy of pricing so-called good load factor gas at one price with a differential between that for poor load factor gas and that differential—I do not know the figures, Mr. Culton told me that it was 30 and 40 but I doubt whether that is right:

Is that right, Mr. Culton?

Mr. Culton: That is right. That is what most of them have. It is in the record.

Mr. Goodman: Let's assume, for the minute, that is the differential. In other words, poor load factor gas sells at three-quarters of the price of good load factor gas. Is that it?

Mr. Culton: No, you have that backwards.

Mr. Goodman: Poor load factor gas sells at approximately three-quarters of the price of good load factor gas?

Mr. Culton: Poor load factor gas sells at more than good load factor gas.

Mr. Goodman: Yes, poor load factor gas sells at one and one-third times what the good load factor gas sells for.

Now, in making differentials which, as I say, should accord with the relative value of the service, persons who know something about that should be consulted. The [fol. 10048] matter is not one for merely cloistered scholars. I would consult and pay rather close attention to the practical experience of the persons operating the business as to what those differentials should be for it is not a cost deduction at all. It is a policy deduction, a policy that is pursued by a gas merchant who has practical experience in his business and I do not mean to say, for that reason, that I am prepared to approve of everything or every conclusion that may come from the defendants in this case in that regard but I do say that, in a matter such as this, some attention should be given to what experience is shown on the subject because it is not a matter that can be figured out with a sharpened pencil.

Now then, if we have in mind that level of differentials which experience has shown will work as regard the development of the business and as adapted to a reasonable utilization of the capacity of the business, we should proceed to ascertain the demand of the non-regulated customer for poor load factor gas on the one hand and for good load factor gas on the other hand and then, on that basis, we may proceed to allocate the revenues.

That is to say, we take our differential of one is to one and one-third and we apply that to the total business, total sales to meet the price requirement. We will then

get a rate or a price per unit of service for good load factor gas and for poor load factor gas. That rate, con-
[fol. 10048] sidering all the business is then the appropriate rate for the regulated business, it not being our concern what the company charges in the non-regulated business, where it cares to adhere to the price we set in the regulated business or not but we do know, and we use the same price in general because we apply the same policy for purposes of allocation, the differential between good load factor gas and poor load factor gas for our calculations. When we have calculated those revenues in that manner, we have accomplished our purposes. We could relate that to capital values. It would be a very simple proposition to transpose that into the capitalized amounts.

In my judgment, they would be correct, having in mind that correctness in this subject is conformance to an appropriate regulator or pricing policy and not to a delusive idea of cost.

* * * * * * * *

[fol. 10050] Mr. Culton: The Examiner made one suggestion a while ago as to our position on this exhibit.

I hope I made myself clear yesterday but, if not, I will try to do it at this time. We recognize that whether we can properly interpret the opinion of the Canadian River case or not, and whether the method of allocation which they used there is appropriate or not in this case, we do think that the Commission in that case clearly recognized that the best method of allocating was to allocate costs and that, in determining the allocation which should be made of costs, you should take into consideration an allocation of the return, whatever that return may be.

In that particular case, there was capacity in excess of all demands. In the Panhandle Eastern case, the demands are in excess of the capacity. Therefore, the ordinary coincidental rule or peak day rule would not apply. Here we have a deficiency in capacity if, in determining capacity you add the firm demand, that is, the resale gas, to our interruptible gas and, therefore, it becomes necessary for us to cut off interruptible gas during the peak days. As this witness has testified, the company does not have ca-

pacity in excess of its demands. This witness has presented what he thinks is a fair allocation of costs. If any-[fol. 10051] body else has a better method of allocating costs or any other method of allocating costs, it is appropriate for the Commission to hear it in this hearing.

Trial Examiner: Of your nineteen industrial customers, Mr. Culton, how many of them have contracts which make them subject to domestic requirements?

Mr. Culton: Every one, I think. I am informed that every one of our contracts, our direct sale contracts, is an interruptible contract without exception.

Mr. Littman: Mr. Examiner, I would like to be heard briefly on this subject of allocation.

I would like to express my opinion that this witness has not at all, in my judgment, followed the rules set forth by the Commission in the Canadian River decision. I shall undertake to demonstrate that either by cross-examination or by the introduction of testimony in rebuttal to Mr. Biddison's exhibit or Mr. Biddison's study or both.

The decision, of course, speaks for itself. I consider that the principle is stated on page 56 of the Commission's mimeographed copy of Opinion No. 73 which reads as follows:

"Commission staff exhibits on cost allocation followed principles that have long been recognized as reasonable in the public utility field and are widely accepted. Therein costs are divided essentially into two groups, fixed and variable. Fixed costs are largely joint costs which do not vary with the volume of sales. The total amount of such [fol. 10052] costs are largely proportional to the maximum demand on the system or system capacity. Accordingly, these costs have been allocated basically in proportion to each customer's responsibility for the peak day demand."

Mr. Culton: Would you mind interpreting that sentence, giving your judgment of it? Does that mean that if, on the peak day, our firm customers took all of our capacity and we were required to cut off all of our interruptible gas, then there would be no allocation of cost to the interruptible gas?

Mr. Wheat: That is our problem.

Mr. Littman: You mean where there is an interruption?

Mr. Culton: That is right.

Mr. Littman: Or curtailment?

Mr. Culton: That is right, talking about the peak day.

Mr. Goodman: I would like to answer that question, if you will permit me.

Mr. Culton: We would like to have the Commission's interpretation of it, if we can get it.

Mr. Littman: Of course, you will have that in greatest detail and in practical application very shortly. I would rather not undertake a general answer that may be misconstrued. I would prefer to present it either through cross-examination or direct testimony but I assure you our position will be made clear in detail.

Mr. Culton: Well, that is the thing that gives us difficulty.

[fol. 10053] Mr. Littman: I am glad to have you point out the part of this opinion which does give you difficulty because we may be able to enlighten you as to our detailed interpretation of that.

Continuing with the reading of the opinion:

"Variable costs are largely those that vary proportional to output or volume of sale. Accordingly, these costs have been allocated in proportion to volume of gas purchased by each customer."

Of course, there are other portions of this opinion which elaborate somewhat but, personally, I perceive the section that I have read to announce the principle. As I stated a while ago, I have in my own experience always looked at a result as one of the tests to determine the reasonableness of a method.

Now, according to this witness' method, he comes out with a result which shows, if these figures in Exhibit No. 251 are to be believed and if this witness' testimony is to be

believed, that the gross investment in plant applicable to these non-regulated sales, to-wit, the direct industrial sales, is $618,345. Exhibit No. 251 shows, in Column (F), line 42, that the net operating revenues, to-wit, the return applicable to non-regulated sales for the year ended 1941, amounted to $651,766.70. It is easy to see that the $651,776 represents a return in excess of 100 percent per annum [fol. 10054] upon the alleged gross investment applicable or allocable to the unregulated business according to the testimony of this witness.

Mr. Culton: Mr. Littman, do you know whether there is any difference in that situation which existed in the Colorado-Wyoming Company case so far as the allocation of return was concerned?

Mr. Littman: Certainly the Commission did not adopt this witness' method in that case.

Mr. Culton: I know, but on the allocation of return.

Mr. Littman: As I have heretofore stated, in my opinion the Commission does not and has not sanctioned any such method as this. I mentioned something with respect to profiteering. I firmly do not believe that the company is earning anything like 100 per cent return per year on its investment that is truly applicable to this business but that is where you come out when you use this witness' figures and if I may predict, I believe this witness who thus far has made estimates every one of which is either out the window, so far as this case is concerned, or so close to being out the window that it is almost there now, I would like to predict that this estimate will go the way of the others and will not be utilized.

I am going to urge very strongly that it not be utilized for purposes of this proceeding. However, when the time comes and we shall proceed to prepare ourselves for the eventuality of presenting for the Commission's considera- [fol. 10055] tion the staff's views on allocation, we shall present those views for Your Honor within the shortest possible time.

Trial Examiner: One thing that no one seems to have remarked about is the Commission itself makes a decision

between a company such as Panhandle or Natural Gas Pipe Line Company and a company such as the Colorado Canadian Company with its huge output to Colorado Fuel and Iron Company and affiliate. That is on page 1 of the opinion and that unusual relationship is commented on before anything is said about allocations.

Mr. Culton: That is true, Mr. Examiner. However, it is in connection with showing that the rates to industrials are not subject to the jurisdiction of the Commission.

Trial Examiner: They frankly recognize that in the opinion.

Mr. Culton: Yes and in the Colorado-Wyoming Gas Company case, on page 59, that does not, of course, relate to the industrial sales of the Colorado Fuel and Iron Corporation. They allocate those costs, that is, the costs of the Colorado-Wyoming Gas Company and the comment is made as to that. The principal purchaser, so far as Colorado-Wyoming Gas Company is concerned, is the Portland Cement Company and the statement is made that industrial gas is curtailed regularly during system peak days and they make this statement, "The demand on the system peak day is, in our opinion, a proper measure [fol. 10056] of its proportionate share of the demand costs than its highest off-peak demand."

Now, there is a possibility that if that sentence were the rule by which we would be governed, a considerable portion of Panhandle Eastern's gas would have no cost whatever attached to it.

We are not making that contention. I stated yesterday that, frankly, we do not know just exactly how the Commission allocated the return. We have presented here a method of allocating return which we think is a fair method.

Mr. Littman: In answer to your Honor's inquiry, I would like to point out that in the Canadian River case, the total volume of direct industrial sales was quite considerable. Here, according to Exhibit No. 251, the amount of direct industrial sales sold on an annual M.c.f. sales basis is approximately 13 per cent to non-regulated business

and, on a revenue basis, it is approximately 8½ per cent so we do not have here nearly so large a volume of gas not subject to regulation as was the fact in the Canadian River case.

In the Chicago Pipeline Case or the Natural Gas Pipeline Company of America proceeding, my understanding is that there was a very small percentage of direct industrial sales, something in the vicinity of one or two per cent, perhaps, and no allocation whatever was made there, so far as I know.

Mr. Culton: And no evidence was offered on that, either?

[fol. 10057] Mr. Littman: That is my understanding also, Mr. Culton. No evidence was offered by the company or the Commission, as I gather it.

Mr. Culton: That is right.

. . . . . .

[fol. 10064] By Mr. Littman:

Q. Mr. Biddison, do you know whether it is possible for a company to earn more than a hundred percent per annum under the existing tax laws? A. I do not.

Q. Do you know how much of the capital stock tax and excess profits tax a business earning more than 100 percent profits per annum would have to pay?

A. I do not.

Q. How much have you allocated to non-regulated sales for capital stock tax?

A. Federal capital stock tax has been allocated [fol. 10065] $4,706.53 to regulated sales, and $11,388.97 to non-regulated sales.

Q. That appears on page 5 of Exhibit 251 in Lines 17 and 18. A. Yes, sir.

Q. How much have you allocated to non-regulated sales for excess profits associated with capital stock tax?

. . . . . .

A. Well, Federal excess profits taxes have been allocated $3,209,166.84 to regulated sales and $349,062.28 to non-regulated sales.

By Mr. Littman:

Q. Now, is the sum of $349,062.28 which you just mentioned the proper amount allocable to non-regulated sales for excess profits tax associated with capital stock tax?

A. I don't know about the association you are referring to. I think that is the proper allocation of this amount of tax.

Q. Do you know whether or not you have allocated any [fol. 10066] excess profits tax associated with capital stock tax applicable to non-regulated sales?

A. What I have allocated are the amounts shown in Column B. As to their association, one with the other, I don't know.

Q. Then, you don't know whether you have done it or not, do you?

A. I think I have answered your question. I have simply allocated the amounts shown in Column B. What their association is, one with the other, I do not know.

Q. Well, will you state whether you have or have not allocated to non-regulated sales a business which shows 100 percent return per annum on the gross investment for excess profits tax associated with capital stock tax? Have you or have you not?

. . . . . .

Mr. Culton: Counsel is talking about a non-existent item that isn't listed on the exhibit at any point.

By Mr. Littman:

Q. Do you know that to be a fact, Mr. Biddison, what Mr. Culton has just said?

A. No, I don't. What I have done is to allocate the [fol. 10067] amounts in Column B. As to the association of one with the other in the respect that you have mentioned, I don't know anything about any such association.

Q. Do you know whether a business earning a hundred percent on its investment would have to pay such an excess profits tax associated with capital stock tax?

A. I do not.

Q. How much have you allocated to non-regulated sales for excess profits tax associated with Federal income tax?

A. I have allocated excess profits tax as shown in the exhibit, or had them allocated as shown in the exhibit. As to the association of the one form of tax with the other, I know nothing about the association.

. . . . . .

[fol. 10076] RAWL B. COFFMAN was called as a witness, and, having been first duly sworn, was examined and testified as follows:

Mr. Wheat: Mr. Examiner, I should like to have [fol. 10077] marked for identification two documents.

. . . . . .

I should like to ask, Mr. Examiner, if it will be agreeable to you, that the document entitled "Study Relative to Minimum Requirements of Panhandle Eastern Pipe Line Company (giving effect to property acquisition)" be marked for identification with the next exhibit number.

. . . . . .

(The Document Referred to Was Marked Exhibit No. 253 for Identification.)

Mr. Wheat: And in order to save time, I should like to [fol. 10078] ask also that at this time there be marked for identification as Exhibit No. 254 the document entitled "Investors' Appraisal of the Risks of Capital in 153 Stable Industrial Companies for the Years 1937-1941, inclusive, (also it contains 1941 full year data for the Utility Industry supplemental to Exhibits 63 and 64.)"

. . . . . .

(The Document Referred to Was Marked for Identification Exhibit No. 254.)

Direct Examination

By Mr. Wheat:

Q. Mr. Coffman, you have already been sworn in these proceedings, have you not? A. I have.

Q. Now, since you appeared at a prior date in these proceedings, have you made further analyses?

A. Yes, I have. And the analyses contained in the Exhibit No. 253 and the supporting data to certain of the charts contained therein are presented in Exhibit No. 254.

Q. In order that we may conserve time, Mr. Examiner, I should like to ask Mr. Coffman at this time, please, briefly to restate for the record what you have done in making this analysis.

A. Well, the purpose of this analysis was to present [fol. 10079] factual and objective data on the minimum earnings requirements to maintain the credit position of the company, and enable it to secure capital when needed, giving full consideration to the bonds, preferred stock, and common stock of the company under its present status, after acquiring various properties as of February 6, 1942.

Trial Examiner: Before you leave your Exhibit 253 for identification, will you kindly relate that and the other exhibit to the exhibits you previously offered, namely, Exhibits 63 and 64 and 65, I think?

Mr. Wheat: May I make the suggestion, sir, I think that as the discussion proceeds, the relation of Exhibits 253 and 254 for identification with Witness Paul Coffman's previous Exhibits 63 and 64 and 65 will become evident, and I think it would both conserve time and add to the understanding of what Mr. Coffman has done if he could proceed in this connection as we have done, and explain at each individual point the relation between the exhibits shown.

Trial Examiner: Thank you.

By Mr. Wheat:

Q. Then, Mr. Coffman, will you proceed with, I think, the statement that you had begun, of what you did in [fol. 10080] making this analysis, the results of which appear in Exhibits 253 and 254 for identification?

A. Well, as we all know, the important relationship between return and capital and the total costs of rendering service is due to the relatively large proportion of fixed capital which is required in the utility industry.

The average public utility, for example, requires a plant investment equal to from four to six times its annual gross revenues, whereas the annual gross revenues of most industrial corporations ordinarily exceed this total investment.

In view of the fact that variations of huge monetary amounts may thus result from relatively minor fluctuation in allowed rates of return, it is apparent that too much care and attention cannot be devoted to the factors upon which that rate must itself be predicated.

As I stated when I appeared before this Commission a month or so ago—

Q. You mean about last October, was it not?

A. Well, several months ago, as a matter of fact, now.

(Continuing) —I had reviewed the leading cases on the subject to ascertain what body of principles had been amassed and used for determination of the proper "return," but it seemed to me that in many instances necessary facts had never been available to do what the Court [fol. 10081] said should be done, and at that time I cited the portion of the Bluefield case to which I referred, and which I thought gave a body of principles that was usable for the analysis I presented particularly in Exhibit 65, and which analysis I have brought down to date in Exhibit 253, and that portion was the statement which I quote from the Bluefield case: "A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties."

Mr. Wheat: Mr. Examiner, may I, off the record, correct his statement?

I believe that the word "general" as you read in here, does not appear.

Does it appear?

The Witness: It appears in the same general part, is that what you mean?

Mr. Wheat: Yes, all right.

A. I believe that is exact. I checked it a couple of times.

Mr. Wheat: All right.

[fol. 10082] By Mr. Wheat:

Q. Now, did you attempt to present data on that subject in Exhibit 65?

A. I did. In my Exhibit No. 65, I presented data on this subject and in my present exhibit, which is now No. 253, I have expanded the data so that one would have the relevant facts upon which to exercise one's judgment.

For example, I have attempted to measure the risks and uncertainties attaching to other business undertakings at the same time and, in so far as data are available, in the same place.

My method, as will be shown later, treats of this latter in a substantial and substantive way, although it may not be apparent on its face. The reason for this is that what I call investors' appraisal has as one of its parts the market prices of securities

Various kinds of investment possibilities are available to investors who finally make a selection, all available facts taken into consideration, such as risk, uncertainty, geographical areas, type of service, type of product, and so forth.

It is my belief that so far as available facts are concerned, I have presented all the relative ones so that a person can exercise enlightened judgment.

Q. You mean all the relevant facts. "Relative," I [fol. 10083] think you said.

A. All the relevant ones, yes.

Q. Now, what else have you to say as to what you formerly quoted in the second sentence from the Bluefield decision?

A. Well, in the Exhibit 65 at the time I was testifying, I said I further relied upon that portion of the Bluefield case which is stated as follows: "The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under

efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties."

In so far as the efficiency of management can be measured by the operating results of the company as compared with the results of other companies—and I think this is by far the most reliable method—I made sufficient analysis to lead me to the conclusion that its management was efficient.

My end finding, which I call "Minimum Return Requirements" is based upon this belief, and supplies all the relevant facts on this subject dealing with the return being sufficient to assure confidence in the financial soundness of the utility and maintaining and supporting the company's credit and enabling it to raise the money nec- [fol. 10084] essary for the proper discharge of its public duties.

As a matter of fact, I do not see how a determination on return, as defined above, can be made without using the data contained in my present exhibit which is now No. 253.

I should like to emphasize the fact that so far as the company's credit, risk factors, and so forth, are concerned, it does not make any great difference what I think or what the management of the company thinks or what those of us here present think. The real fellow to tell us about this matter is the man outside who is going to put up the money. He is the person to tell us what the credit risk is and he is the person who will insist that certain yields be granted him or he will not put up the money. In the end, therefore, it is the investor, as a class, who determines with finality what return is necessary.

What I have tried to do in Exhibit 253 and the supporting tabular data give in Exhibit 254, is to show, as completely and fully as possible, what the investor is saying about these factors of risk, management, financial soundness, and raising new money, and I believe that if companies wish to continue to finance through public offerings, it will behoove them to look at this investors' appraisal in these matters.

In other words, all of the elements of risk affecting a particular enterprise are ordinarily reflected in its costs [fol. 10085] of capital which are determined by amounts which must be paid to investors to induce them to supply the capital needed in the enterprise.

Q. Mr. Coffman, in developing your present analysis, what, in general, did you do?

A. Well, primarily, I used my former general approach as presented in Exhibits 63, 64, and 65 to this problem of return, and I have set forth the earnings required to maintain the capital of Panhandle Eastern Pipe Line Company giving consideration to the securities which have been issued since my former testimony.

In other words, this includes now all the events that have taken place which are recorded as of February 6 in the acquisition of these new properties.

Q. By that do you refer to the new bonds and the new preferred stock which were issued in connection with the acquisition and purchase, we may say, of Michigan Gas Transmission Company, and Indiana Gas Distribution Company properties?

A. Yes, I refer to the $10,000,000 in bonds and the $15,000,000 in new preferred stock that was issued in connection with the purchase of Michigan Gas Transmission Company and Indiana Gas Distribution properties, and a small amount of property of Ohio Fuel Gas Company, and the amount involved to refund the former class A preferred stock.

[fol. 10086] Q. As of February 6, 1942?

A. As of February 6, 1942.

Q. In other words, are we to understand that you have here given effect to these transactions and reflect the situation as we now find it in respect to Panhandle Eastern Pipe Line Company?

A. That is exactly correct.

Q. Now, in consideration particularly of the Trial Examiner's suggestion, I wish you would refer to Exhibit 65 and state to what particular charts in that exhibit you would say that your new study, as reflected in Exhibits 253 and 254, refer?

A. Well, I am referring in Exhibit 65, Charts Nos. 36 and 37, to the column and the figure which bears the caption "Current Capital Requirements."

Q. Now, those charts 36 and 37 in Exhibit 65 refer, do they not, to Panhandle Eastern Pipe Line Company as it existed prior to February 6, 1942?

A. That is correct.

Q. Now, in what way would you say that your present study differs from that which is reflected in those charts 36 and 37 of Exhibit 65?

A. Well, in Exhibit 65, I went beyond the earnings required to maintain the company's capital and credit—that is, the item usually denominated "return"—and took [fol. 10087] data from the published sources in respect to operating expenses, labelling the final figure "Total dollars needed by management". Such column and caption is also shown as the left-hand bar on each of the Charts Nos. 36 and 37 in Exhibit 65. In the present study numbered Exhibit 253, I made no attempt to determine this total figure of overall needed earnings, but confined myself to the factor of return.

That is, the amount of revenues required by this company as it now exists, and in its present status, over and above the requirements for basic operating expenses, depreciation and taxes.

Q. Why did you make this present analysis on that basis?

A. Primarily because the time available for study was so short that I found it impossible to develop data beyond that involved in the item of return, that is, the earnings necessary to maintain the credit position of the company.

The fact is that was only by working a large staff both day and night that I was able to have the six copies of Exhibit 253 completed, which has been presented at this hearing.

Q. Now, would you say that there are any further differences which ought to be explained now at the outset between your present analysis in Exhibits 253 and 254 [fol. 10088] and the analysis which you presented in Exhibit No. 65?

A. Yes, there are certain differences. In the present analysis, as shown in Exhibit 253, I have given no time and have presented no charts in regard to the general trends in the industry as was shown in Exhibit No. 65 in Charts 2 to 6, inclusive, and I have made no comparisons of Panhandle Eastern Pipe Line Company's gross revenues and its operating revenues with industry figures—

Q. (Interposing) Operating ratios?

A. (Continuing) And its operating ratios.

with industry figures as shown on Charts Nos. 7 and 8 of Exhibit No. 65.

Q. I wish you would state why you omitted those particular items.

A. Well, as I recall it, in the course of the discussion in the last hearings, no question was raised in regard to the trends in the industry or the comparison of Panhandle Eastern Pipe Line Company's figures with industry figures; consequently, I did not feel it was necessary to include these items in my present analysis as shown in Exhibit 253, since it was already included in numerous charts.

However, so far as the industry figures are concerned, I have included, as Table No. 1 in the tabular section of tables, showing latest available figures, which when considered with tables presented in Exhibit No. 65, would [fol. 10089] bring the tabular material down to date in case any question should be raised as to what any figure might be.

Q. Well, in other words, you have included in the appendix to Exhibit 253 the basic data upon which the charts you have just mentioned in Exhibit 65 could be brought down to date?

A. The very last table captioned "Appendix Table No. 1" in Exhibit 253 contains all the data on the industry figures shown in Charts 2 to 6, in Exhibit 65, that I could find which became available since that last study in Exhibit 65 was made.

Q. Are there any other differences between your present study and the analysis that you presented in Exhibit

65 which you think should be drawn to the attention of the Commission?

A. Well, with the exceptions noted above, my approach is generally the same in this study as that shown in Exhibit No. 65.

However, in the present analysis in Exhibit 253, I have expanded the period covered in certain charts over that which was covered in similar charts in Exhibit No. 65 because my present study is based largely upon figures contained in Exhibits offered through Mr. Watkins, while in my prior analysis, contained in Exhibit No. 65, I took all of my figures so far as the company was concerned, [fol. 10090] from annual reports to stockholders and other published data, the first of which available to the public covered the year 1934. Consequently, my prior analysis was more restricted so far as Exhibit No. 65 was concerned than is true in the present analysis as shown in Exhibit No. 253.

Furthermore, by confining my attention to one item, namely, earnings necessary to meet capital requirements, I was able to make a more detailed analysis of certain items with the result that my present study includes certain items which were not shown in Exhibit No. 65, such as detailed analysis of 153 industrial companies which have paid dividends continuously over a 10-year period and analysis of the various natural gas pipe line companies and the effect upon quality ratings of their securities as the result of certain assumed alterations in their revenues.

[fol. 10091] Q. Would you say, Mr. Coffman, that what you have now stated generally describes the major differences between your present study and that contained in your exhibit 65?

A. Well, broadly speaking it does. However, you realize I have not attempted to particularize by chart number but have covered the subject generally.

On that basis I think I have outlined the principal differences.

. . . . . .

Q. Now, Mr. Coffman, just one more question before I leave this subject:

Is the impression that may have been gained from what you have said correct that all of the figures relating to the company, with the possible exception of one or two minor items, are based upon figures which Mr. Watkins has testified to in this record?

A. Yes, sir. That statement is correct.

You will find the references to Mr. Watkins' exhibits in the sheets of supporting data referable to the various charts in my present exhibit No. 253, and I followed the same procedure that I did in my exhibit 65, namely, in [fol. 10092] the back portion of the exhibit there is a table supporting each chart where a table is necessary, and each table is completely sourced as to data, so that it can be told exactly what figures I am using and from what source I took those figures.

Q. Now, as a result of this study, Mr. Coffman, what figure have you determined to be necessary to meet capital requirements and maintain this company's credit as of February 28, 1942, based on the figures for the consolidated company?

A. According to my determinations, $5,382,677, as shown in chart No. 26 of Exhibit 253 would be required on the consolidated basis, and that figure compares with $5,064,821 for Panhandle Eastern Pipe Line Company alone, as of June 30, 1941, as shown in chart No. 37 in my exhibit No. 65.

Q. When you refer to the first figure you have just stated, you are referring to net income, are you—net operating income?

A. That is the minimum earnings that are necessary to maintain capital requirements, yes, sir.

Q. Now, does this new figure $5,382,677 reflect all property or security acquisitions made by the company prior to February 28, 1942?

A. Yes, it does.

Q. And this figure is after taxes but before interest? [fol. 10093] A. That figure is after taxes, that is correct.

Q. But before interest? A. That is correct.

Q. Now, without at this moment discussing the detailed construction of this figure, I would like to ask you why you believe such a figure as this should be determined at the outset, and why you believe it must necessarily be considered as you have said in a rate of return determination.

A. Well, as I have outlined a few minutes ago, I feel exactly the same now as I felt at the time I testified before this Commission some months ago, so far as the figure representing dollars needed to meet current capital requirements is concerned.

In determining such figure I believe I am following to the letter, as I stated before, the principles of return determination as laid down in the Bluefield Waterworks and Improvement Company vs. Public Service Commission of West Virginia.

Q. You are referring to the case reported at 262 U. S. Reports 269? A. That is correct.

Q. All right. Proceed.

A. Among other things, in regard to determining an annual rate, the court there said:

"The return should be reasonably sufficient to assure [fol. 10094] confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties."

All I have done, as I see it, is to follow a literal interpretation of that statement and present my conclusions objectively in statistical and graphic form.

I believe the Bluefield case stated most clearly the various factors that should and must be considered in the determination of an annual rate, and it was my further belief in that case, and I quote:

"What annual rate will constitute just compensation depends on circumstances and must be determined by the exercise of fair and enlightened judgment, having regard to all relevant facts."

So far as I am concerned, confining my attention to the financial soundness and corporate position of the com-

pany, I think I have given full, fair, and adequate regard to all facts relative to this particular phase of the problem.

Q. I note, however, Mr. Coffman, that you have not related your figure of return to any rate base. Why did you not do that?

A. Well, I had various reasons. I think I explained before, in connection with Exhibit No. 65.

[fol. 10095] The main one is that the use of a rate base, however it be obtained or measured, and the multiplying of that base by a so-called rate of return, comprehends merely one method of arriving at the final end figure of required return in dollars.

I was able to arrive at that figure directly without going through the mathematical process of multiplying a rate base by a percentage rate of return.

As a matter of fact, whatever figure were to be adopted as a rate base—let us, for example, say prudent investment—you would have to make the very studies I have made in order to determine the proper percentage by which to multiply it.

In other words, I have merely done directly what the classical rate base times rate of return method must do indirectly, if a correct result is to be obtained under the Supreme Court's pronouncements in respect to requisite return.

In either case you must arrive at the same result in dollars of required return if you do a fair and proper job in the light of the economics and the objective data.

Q. Now, Mr. Coffman, if you were to be asked to assume a rate base, how would you go about developing the element of fair return?

A. I would make exactly the same studies which I have made, and then I would divide the required return in [fol. 10096] dollars by the assumed rate base.

This would give me the percentage of fair rate of return.

Q. I take it, then, that you are not objecting to the use of the so-called classical method?

A. No. I think I discussed that before in connection with Exhibit No. 65, and I think I said that I didn't see any particular necessity for going through that mathematical process when you can get your end figure directly.

Q. I want you to make it perfectly clear on this record just why you think that is true.

A. For one reason—and I believe it is a compelling one—and that is to do the job properly one must make the economic studies, the objective economic studies, of what such a company must have in order to maintain its credit position and thus be able to go forward and continue to render the service required of it, and when you have done that you arrive at the end figure directly and don't have any further arguments about rate base of rate of return.

Q. Now, just to be sure that the record is clear: What is the rate of return that your study indicates to be required in this present proceeding?

A. I can't answer that. I don't know what the rate base is.

Q. Well, now, I will give you an opportunity. Let us [fol. 10097] assume, for the moment, for the purpose of this question, and purely as an example, as has been done in other questions in this case, that you arrive at a rate of return by taking the total gas plant classified as shown on Mr. Watkins' Exhibit 200—

Mr. Littman: You mean "rate base"? You said "rate of return".

The Witness: I am sorry. Rate base.

By Mr. Wheat:

Q. If we take the total gas plant classified as shown on Watkins Exhibit 200 of, I think, $78,700,000 approximately, and we then reduce it by the reserves for depreciation and depletion, which are in round figures $13,097,700 as shown on Exhibit 197—I believe both of these figures are February 28, 1942—now what would you have to say about a rate of return?

A. Well, using those figures the net plant would then total $65,600,000 in round figures.

Applying my rate of return—

Q. (Interposing) Do you mean your rate of return?

A. My required return. (Continuing)—of the $5,382,677 as shown in chart No. 26 of Exhibit 253 to the base gives a required rate of return, in percentage, of 8.2 per cent.

[fol. 10098] Q. Now, suppose that, for some reason, the Federal Power Commission, in fixing rates for Panhandle Eastern Pipe Line Company, were to desire to use some other figure than we have thus assumed for the rate base: how would that affect your testimony as to the required rate of return?

A. Obviously the results would change if any base figure used in the calculation changed.

If there was a reduction of the net investment figure by an amount it would therefore reduce the rate base by this calculation made.

In that case I would apply the figure of $5,382,000 of required return in dollars to the lower rate base, and arrive at the percentage which the one bears to the other.

That percentage would then be the required rate of return.

Q. And would that same fact hold good, or the same machinery hold good, if the Commission wished to increase that rate base?

A. It would work exactly the same.

Q. Now, do these examples bear out your opinion what you have said in respect to your method as the direct method, as compared with the classical method which I think you referred to by the term "indirect"?

A. Yes, as I have testified, under either method you must eventually come out with the number of dollars [fol. 10099] needed by the company as earnings over and above its reasonable operating expenses, its taxes, and proper accruals for depreciation, depletion, and amortization.

The end figure is what you have after and what you must—

Q. (Interposing) "What you are after" don't you mean?

A. The end figure is what you are after and what you must somehow secure.

My method uses the basic objective studies that must be used to reflect the economics involved, and while, as I have shown, I can go through the process of determining fair rate of return upon any given rate base, that is not a necessary piece of machinery, and the whole process is simplified by using direction instead of indirection.

As a matter of fact I have included a chart in this exhibit No. 253 which makes this point very clear.

Perhaps I could start discussing the individual charts and let further development of this idea come out as I proceed.

Q. Well, I think that is a good idea.

Now, with that in mind I would like to ask you now to turn to Exhibit No. 253 and state first whether you have included, at the outset, an index of the charts and tables for the convenience of anyone considering this document.

A. Yes. There is such an index included in Exhibit [fol. 10100] No. 253.

Q. I notice that the next general section of that exhibit is headed "Graphic Presentation".

I wish you would turn to what you have labeled "Chart No. 1" in that graphic presentation and state what that chart shows.

A. In Chart No. 1, Exhibit 253, captioned "Condensed Actual and Pro Forma Balance Sheets of Panhandle Eastern Pipe Line Company as of December 31, 1941", I show two columns of balance sheet figures, one column captioned "Actual" and the other captioned "Pro Forma".

The pro forma figures give effect, as told in the note, to financing transactions consummated on February 6, 1942, and the acquisition on that date of capital stock and debt of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, and purchase of certain property of Ohio Fuel Gas Company.

The two columns are self-evident.

Looking at the total asset figures for the moment, the actual figure shows $79,000,000 in round figures, and the pro forma statement shows $96,800,000 in round figures.

Q. This all is as of December 31, 1941, is it not?
A. Yes, it is.

A breakdown of the important classifications shows that assets on the actual basis totalled $69,650,000, and [fol. 10101] this is including the net intangibles.

Q. Do you not mean, Mr. Coffman—rather than the assets that the gas plant included in the assets totalled the figure you just gave: $69,650,000?

A. I don't recall what I said. What you say is perfectly correct.

Q. That is correct, is it not? A. Yes.

Q. Will you proceed?

A. And in the pro forma the same item carries a dollar figure of $82,952,000 in round figures.

The only other item in the total asset group is under the caption "Current and Accrued Assets," which in the "Actual" column totalled $8,959,000 and in the pro forma totalled $13,418,000, and that particular item carries a footnote explaining that the investment in tax anticipation notes, amounting to $2,750,000, was included in the current asset group.

Q. Now, there are two other items under "Assets", but I don't believe it will be necessary for you to mention those for the record: they are self-explanatory.

We now turn to the item of "Liabilities and Capital." State what, in general, are the main differences between the "Actual" as of December 31, 1941, and the "Pro Forma" as of that date, giving effect to the acquisition of [fol. 10102] properties and securities made February 6, 1942.

A. The main differences, as shown, between the Actual and Pro Forma occur in the preferred stock items, which under Actual totalled $11,000,000, and under Pro Forma is $16,000,000; under the caption "Long Term Debt" which in the Actual column was $23,259,000 and Pro Forma was $33,259,000.

Q. That is because—is it not—of the increase of bond issue by $10,000,000? A. That is correct.

Q. Proceed.

A. The other item that has any appreciable change is that captioned "Reserve for Depreciation, Depletion, Amortization, and so forth," which in the Actual Column totalled $10,900,000 approximately, and in the Pro Forma was $12,598,000, and I merely presented these data in Chart No. 1 to contrast the Panhandle Eastern Pipe Line figures only with the new situation after the acquisitions as shown in the Pro Forma column.

Q. Well, in general would it be fair to say that what has happened is really an increase in the assets and the accompanying liabilities of Panhandle Eastern Pipe Line Company from $79,000,000 approximately to something just slightly under $97,000,000?

A. I think that is correct.

Q. I think, Mr. Coffman, there are some other minor [fol. 10103] changes that come about by virtue of consolidating the figures, but are the ones which we have mentioned the most important, so far as your analysis is concerned? A. Yes, they are.

Q. Now, I wish you would turn to your chart No. 2 which I note consists really of four separate subcharts. I wish you would state to what chart in your Exhibit No. 65 this chart No. 2 refers, and then explain in some detail what you have shown on chart No. 2.

A. Chart No. 2, captioned "Trend of Revenue and Expenses of Panhandle Eastern Pipe Line Company, 1932-1941," and Pro Forma in Exhibit 253 contains the same information—that is, similar information—to Chart No. 9 in Exhibit No. 65—in chart No. 2 of Exhibit 253 there are these additions, because on this study I had company data available, as already explained, by virtue of Mr. Watkins various exhibits.

Q. Where does that show up?

A. What do you mean?

Q. That shows up all through your figures, does [—] not, but does it particularly show up in the earlier years?

A. Well, what has happened is that under Mr. Watkins' exhibits I have been able to add figures for nine months of 1932 and all of 1933, which were not available before and have been able to add the 1941 full year figure,

[fol. 10104] and have been able also to show the pro forma after the acquisitions.

Q. Yes. You were enabled to do those things by receipt of the data from Mr. Watkins, which he has placed in evidence in this case; is that true?

A. That is correct, and as I have explained before, if one refers to the back of Exhibit 253, to table supporting chart No. 2, wherein are contained all of the figures, there is an item at the bottom captioned "Source" which says: "Watkins Exhibits No. 173, 195, 198, 199," and computations are made by Standard and Poor's Corporation, which are merely these percentage calculations which have been added as I analyzed the figures.

Q. Were those computations made under your direction? A. Yes, they were.

Q. I think you previously stated that you are an officer of Standard and Poor's Corporation.

A. I am a vice-president and director of Standard and Poor's Corporation.

Q. Now, will you turn to the upper left-hand subchart contained on chart No. 2, which is headed "Gross Revenue," and state in general what that shows?

A. Well, I don't think, in discussing these data, that it is necessary to go through the various years.

Q. No.

[fol. 10105] A. I have explained the additions.

Q. I don't want you to do anything that you don't feel is necessary, so that this will be completely understood in the record.

A. The important figures really are contained in that box captioned "Gross Revenue" in the last three columns, namely the red bar, which is the 1941 figures. Actual, for Panhandle Eastern Pipe Line Company alone, which were not available when I made the analysis for Exhibit No. 65, and that figure amounted to $15,434,858.

The next figure is the 1941 figure on the Pro Forma, and that figure totalled $17,789,573.

The second blue column, or the last bar in the section, "Gross Revenue," shows the actual consolidated figures for the year ended February 28, 1942, and that figure totalled $18,378,378, and those figures, as I have stated, are from Mr. Watkins exhibits.

Q. Now, Mr. Coffman, looking at this chart of Gross Revenue, and at the gradual increase which is shown, would you conclude that this company is still a growing enterprise?

A. I think that a fair interpretation of the trend of the data is exactly that.

The 1941 figure, for example, on Panhandle Eastern Pipe Line Company, prior to acquisition, showed quite a marked growth over 1940, and the 1941 figure, Pro [fol. 10106] Forma, for the consolidated picture showed a larger amount.

It would seem to me that it was fair to say that the company was still in a growth stage.

Q. Now, looking at the right-hand box, or subchart at the top of Chart No. 2 on Exhibit 253, I wish you would state generally what that subchart shows.

A. That particular division of chart No. 2 contains the operating expenses before taxes, and the more important figures there again, aside from the earlier ones that have been added, is the full year 1941 for Panhandle Eastern Pipe Line Company alone, which figures totalled $5,827,828.

The 1941 figures on a pro forma basis show $6,635,138, and the Actual figures for the consolidated company, as of February 28, 1942, of $6,758,914.

In addition to those specific amounts, which were presented in Mr. Watkins' exhibits, I have calculated the per cent of the operating expenses before taxes to gross revenue, which shows that the actual 1941 figures for Panhandle only were 37.8 per cent.

The 1941 figure, pro forma, 37.3 per cent, and the actual figure for the consolidated company, for the year ended February 28, 1942, 36.8 per cent.

Q. By the way, Mr. Coffman, your figures shown in the bars running along the bottom of this particular subchart include general operating expenses, and the depre- [fol. 10107] ciation, depletion and amortization charges?

A. Yes, sir. That is correct.

Q. All the operating expenses, in other words, except taxes; is that true?

A. That is correct.

Q. And I note particularly that this per cent of gross revenue is a generally decreasing line, is it not, from the high point at the year 1932?

A. Well, yes. It has shown a marked decrease over the years.

It looks like it is beginning to level out, but the February 28, 1942, figure was the lowest shown to that date.

* * * * * * * * *

[fol. 10108] Q. Will you turn, then, to the lower left-hand subchart of chart No. 2 on Exhibit 253 and state what that shows?

A. In that section I show the taxes as a separate item, giving the full year 1941, and there I show three additional bars: one covering the pro forma 1941 figures, the actual for the year ended February 28, 1942, using, in both instances, the 1941 tax rates, and then in the last bar the figures for February 28, 1942, using the statement that was made by Secretary of the Treasury Mr. Morgenthau in his recent discussion of the proposed new tax bill.

Q. March 3, 1942?

A. March 3, 1942.

Q. Now, what is shown on the right-hand side subchart at the bottom of chart No. 2?

A. In that section is shown the net operating income after taxes, giving the same type of figures, namely the full year 1941 for Panhandle Eastern Pipe Line Company alone, then the pro forma as of December 31, 1941, the year ended February 28, 1942, based on the 1941 tax rates, and the year ended February 28, 1942, based upon the statement of the proposal by Secretary of the Treasury Mr. Morgenthau, and that shows that the influence of the tax would be equivalent to a reduction from approximately $6,400,000 to $4,500,000.

[fol. 10109] Q. Mr. Coffman, do the figures contained on all these subcharts of chart No. 2 come from Mr. Watkins' exhibits?

A. As stated on table supporting chart No. 2 they come from Mr. Watkins exhibits Nos. 173, 195, 198, and 199.

* * * * * * * * *

[fol. 10112] PAUL B. COFFMAN having been heretofore duly sworn, resumed the stand and was examined and testified as follows:

Direct Examination (Resumed)

By Mr. Wheat:

Q. Mr. Coffman, I believe at recess last evening you had completed your discussion of your Chart No. 2 in your Exhibit 253; is that correct?

A. Yes, sir.

Q. Now, will you turn to Chart No. 3 and briefly state what that chart shows.

A. Chart No. 3 in Exhibit 253, captioned "Percent Earned on Invested Capital of Panhandle, Based upon Net Gas Plant and Working Capital 1932-1941," is similar to Chart No. 11 in Exhibit 65.

In Chart No. 3 I have merely added the nine months figures for '32, the full year 1933, and the full year 1941. It shows in the left hand portion the invested capital and for the full year 1941, that was, in round figures, $62,200,000, which was an increase from the 1940 figure of $59,900,000 shown in Chart No. 11 on Exhibit 65.

[fol. 10113] In this exhibit the average which has been calculated now covers 9¾ years as against the shorter number of years covering 1934 to 1940, shown in Chart No. 11 in Exhibit 65.

The average invested capital for the 9¾ years was $53,300,000, in round figures, and invested capital here is defined as net working capital plus net gas plant.

Q. Well, note in two years you do not have any indication of working capital, that is, the years 1935 and 1937. Will you please explain that situation?

A. Well, those two years are marked in the exhibit and are explained by the fact that there was a deficit of net working capital in those two years.

Q. Now, in respect to operating income, what does the chart show?

A. Well, the chart covers the same period, 9¾ years, shows the net operating income in the bars, a 1941 figure of $5,541,000, in round figures, comparing with the $5,700,000 in 1940.

The average for the 9¾ years was $3,300,000, and the average return on invested capital was 6.14 percent for the nine and three-quarters years.

Q. I notice, Mr. Coffman, on Chart No. 11, Exhibit 65, that up to the close of 1940 was 7.11 percent, and that in Chart No. 3 of Exhibit 253, it is the figure you have just [fol. 10114] stated, namely, 6.14 percent. Will you explain the reasons for that difference?

A. Well, it is explained by two facts in Chart No. 3 of Exhibit 253, a longer period considered and taking those figures into consideration, you get a different percent earned on invested capital.

Further than that, the Chart No. 11 in Exhibit 65 did not carry the 1941 figures, whereas this one does.

Q. I notice that the 1941 figure is below the 1940 figure. Will you state what that situation is and what was the cause of that particular decrease?

A. Well, that is just merely registering the increase in taxes taking place.

Q. A decline of something over 1 percent; is that true?

A. That is correct.

Q. Now, is it your view that that particular factor will be equally or increasingly operative in 1942?

A. I think the evidence points in that direction very definitely.

Q. Now, will you turn to Chart No. 4 and let me ask—

Mr. Littman: Pardon me, may I interrupt?

Mr. Wheat: Yes, any time.

Mr. Littman: May I ask whether the figures for the year 1941, reflected in Chart No. 3, are before the consolidation.

[fol. 10115] The Witness: Yes, those figures are before the consolidation. They are for Panhandle Eastern Pipe Line Company alone.

By Mr. Wheat:

Q. May I ask you whether uniformly through your Exhibit No. 253 you have shown items which do contain the consolidated figures with the notation "pro forma"?

A. Yes, they are shown. They are clearly marked when we come to them.

Mr. Wheat: I think that explanation should be made so we all know that where it is marked "pro forma" we will know that the consolidated figures are included.

Mr. Littman, I hope you will interrupt for any purpose such as this at any time. I think it saves time to do it and is a preferable method of handling the examination on a detailed matter such as this.

Mr. Littman: Thank you.

By Mr. Wheat:

Q. Now, will you turn to Chart No. 4, Mr. Coffman? I note that is also percent earned on invested capital of Panhandle Eastern, and I will ask you whether this chart contains information similar to that on Chart No. 3, except that it is based upon the capital structure rather than on book investment.

A. Yes, that is the only difference. It is similar cal- [fol. 10116] culations, but just using a different base upon which to make the calculation.

Q. Does it also contain identical data to that contained on Chart 10 on Exhibit 65, except for the addition of the years 1932 and 1933 and 1941?

A. Yes, that is correct.

Q. Now, on Chart No. 4, I note that the average operating income is $3,300,000, which, of course, is the same figure shown on the right-hand bar of Chart No. 3. I note also that the percentage average for the nine and three quarters years is 6.14, which apparently is the same percentage figure as that shown for percent earned on invested capital in the average in Chart No. 3, those two figures happen to come out exactly the same; is that correct?

A. That is correct. The average invested capital for the nine and three-quarters years regardless of whether you base it upon the capital structure or whether you base it upon the net working capital and net gas plant after reserves, gives you an average of $53,300,000 so that the two approximate each other, for there is no difference in the percent earned on invested capital.

Q. Now, I think we should now turn to your Chart No. 5 in Exhibit 253.

You there also added the periods at the outset and at the end, have you not, that you have mentioned in respect [fol. 10117] to the other charts?

A. Yes, sir, that is correct.

Q. So that you now have an average of nine and three-quarters years in all the subcharts of Chart No. 5? Is that correct?

A. That is correct.

Q. Now, will you please explain what is shown on Chart No. 5?

A. In Chart No. 5 of Exhibit 253, I show information similar to that contained in Chart No. 12 in Exhibit 65, with the exceptions you have just mentioned by way of addition on the nine months figures for 1932, full year of '33, and the full year of 1941.

Chart No. 5 of Exhibit 253 is divided into three parts. The first part shows the investment represented by common stock and surplus, and that indicates that the average for the nine and three-quarters years in round figures amounted to $22,300,000.

The second portion represents the dividend return to the common stockholders from the 1932—April, 1932—beginning to and through 1941, showing that the dividend return to common stockholders for the average of the nine and three-quarters years was $780,000.

The third section shows the percent return to common stockholders which is merely converting the dividend return [fol. 10118] actually received into the investment represented by the common stock and surplus showing that for the nine and three-quarters years on the average the common stockholder has had a return of 3.48 percent and that figure has the significance, as I think I pointed out in connection with Exhibit 65, that I believe that a common stockholder is perfectly willing to invest in a company and he is perfectly willing to bide time to get a return on the investment. But some place along the line he expects to receive enough return so that on the average he will receive what he believes to be a figure sufficient to com-

pensate him for the risk he took, and certainly 3.48 on this common stock wouldn't be considered sufficient.

Q. It wouldn't be sufficient to attract additional capital?

A. No, it wouldn't, unless the company could be permitted to earn money so that over the coming years dividends can be paid on the common stock which will tend to bring that average up to a higher level.

I think it is pretty obvious it would be rather difficult to expect new money on any common stock financing on any such percentage basis as that.

Q. You mean the lean years would have to be compensated for?

A. Yes, you have to make up for the period of waiting [fol. 10119] you have had in the period of bad years you have experienced.

Q. And in saying what you have, you are not referring only to this particular company, but to the general principle of the stock market?

A. I generalize on that point.

Q. Now, will you turn to your Chart No. 6 and state what is shown on that chart?

A. Chart No. 6 in Exhibit 253, captioned "Percent Earned on Invested Capital of Panhandle, Pro Forma for Twelve Months Ended February 28, 1942." This exhibit contains data which does take into consideration the property acquisition. As the title indicates, it is the pro forma, considers the consolidated company, and it shows the invested capital as of February 28, 1942, amounting to $78,477,214, defining here invested capital as the net gas plant which amounted to $71,900,471, and net working capital which amounted to $6,576,743.

In the next two bars I show the net operating income, the first figure of $6,361,247 taking into consideration or after the application of the 1941 tax rates. I show a second bar in the amount of $4,526,619, which is taking into consideration net operating income, but applying Mr. Morgenthau's proposal as of March 3, 1942, as to what the new 1942 tax may be.

Q. Well, you mean, do you not, that based on actual [fol. 10120] net operating income for 1941, should Mr. Morgenthau's proposal, or any approximating it, come to pass, the income on that basis would have been about $1,800,000 less than it actually was?

A. That is right, if the 1942 Act, as he proposed it, were in effect, with the present earnings, instead of having $6,361,247, you would have $4,526,619, or about a million eight hundred thousand dollars less, because of the increased taxes which are proposed.

Q. Now, as I recall it, Mr. Coffman, when you were discussing Exhibit No. 65 some months ago in these proceedings, you used an estimate of $1,000,000 1941 tax increase; is that correct?

A. Yes. In Chart No. 14 of Exhibit 65 I have a similar calculation.

Q. That was for Panhandle alone?

A. That was for Panhandle Eastern alone, as of the 12 months ended as of June 30, 1941, showing an operating income of $5,814,975, applying the 1940 rates, and then taking that same net operating income, but believing that the 1941 rates were then in force, would have shown that the net operating income would have dropped because of increased taxes to $4,811,075, or their one million dollar difference just by change in tax rate.

Q. Well, is the $1,800,000 you have mentioned in con- [fol. 10121] nection with the Morgenthau proposal in addition to that million dollars?

A. Well, for all practical purposes, it is; because we have just come down an additional year and the 1941 rates were applied and now taking the 1942 situation, it is additional taxes that the company would be forced to pay.

Q. What effect does that have on the percent earned on invested capital?

A. Well, on the present reported net operating income for the twelve months ended February, 28, 1942, the company would be showing an 8.11 percent earning on invested capital.

That is where the 1941 tax rate is applied, but it would only show 5.77 percent earned on invested capital if Mr. Morgenthau's proposal becomes an actuality.

Q. Well, that is based upon the assumption that the gross revenue would remain the same?

A. Well, that is just talking about the revenue for the 12 months ended February 28, 1942.

Q. Well, we will come to the question of amounts of revenue later, but let me ask you would those percentages be lower, were a lower base to be used, than the seventy eight million odd dollars which you show?

A. Well, it would depend on the change in figures. Any change in the two base figures, either the net operating income figure or the invested capital figure, necessarily [fol. 10122] will change your percentage, so whichever way the figures change, the percentages will—

Q. (Interposing) You used the 1941 in this chart?

A. Yes, that is correct.

. . . . . .

By Mr. Littman:

Q. Before you leave Chart No. 6, I want you to just refer to "actual 1941."

Mr. Wheat, did you mean that?

A. I was talking about the 1941 tax rate.

Mr. Wheat: Yes.

Mr. Littman: Tax rate?

The Witness: $6,361,247 is after application of the 1941 tax rate.

Mr. Wheat: Yes, that is what I think we both meant.

The Witness: Yes, actual figure.

By Mr. Littman:

Q. Mr. Coffman, I want to make certain, before you leave Chart No. 6, that your computation of "percent earned on invested capital" reflects a purported working capital in the amount of $6,576,743.

A. You mean there that the $6,576,743 was included in the invested capital?

[fol. 10123] Q. Yes.

A. Yes, that is correct.

Q. Now, Mr. Coffman, are the details of the calculations on the tax proposed by Mr. Morgenthau available?

A. I have some calculations that I come to later?
Q. In this Exhibit No. 255?
A. 253.

. . . . . .

Q. Might you give us the reference now? Could you do that for us while we are on the subject? I don't mean that you should elaborate on it. Just merely give us the reference to the exhibit which shows your calculations of taxes.

Mr. Wheat: In this connection, you took Mr. Watkins' figures, didn't you, Mr. Coffman?

The Witness: Yes, that is correct.

A. It starts on Exhibit 253 table supporting Chart No. 4, Page 2 and page 3.

By Mr. Wheat:
Q. That shows the calculations; is that correct?
A. That is correct.

Mr. Littman: Thank you.

By Mr. Wheat:
Q. Of course, that does not show the precise tax rates [fol. 10124] proposed by Mr. Morgenthau, does it? That matter is a matter of public information.
A. Well, I understood Mr. Littman to ask me what the procedure was I followed.
Q. Yes.
A. And I am merely showing him where the figures are. I do not have the newspaper release or a photostatic copy of it in which Mr. Morgenthau made his statements in the newspaper; but I have that reference.
Q. But on the tables supporting Chart No. 4, you do show the actual rates that were applied?
A. Yes, and the principle of calculation; that is correct.

. . . . . .

By Mr. Wheat:
Q. Now, Mr. Coffman, I want to be sure that everyone knows in connection with each of these charts in Exhibit 253 where there is any necessity for any basic data beyond

that shown in the charts themselves, it is shown on tables supporting the individual charts at the end of Exhibit 253, is it not?

A. Well, there is either a full statistical presentation in the tables at the end of Exhibit 253 supporting the charts as designated, or a summary table which would [fol. 10125] give the resume of facts and then reference is made to another exhibit for the detailed facts.

I mean, after all, I couldn't put all this business in one volume, so I put a summary in 253.

Q. When you referred to "this business," you meant Exhibit 254?

A. That is right, 254.

Q. All right.

Now, then, will you turn to your Chart No. 7 and state whether that is similar to Chart No. 6, except that it is upon the basis of invested capital represented by the capital structure of the company as against invested capital as represented by net gas plant plus net working capital, which is shown on Chart No. 6?

A. Yes, that is correct, and this chart No. 7 in Exhibit 253, captioned "Percent Earned on Invested Capital of Panhandle, Pro Forma for 12 Months Ended February 28, 1942," shows that the invested capital on this method of a calculation which is based on capital structure, totalled $77,830,553, and the information contained in here is similar to that contained in Chart No. 15 in Exhibit 65.

Q. Mr. Coffman, I note that the titles of both charts Nos. 7 and 7 were identical.

The important point to recall is that Chart No. 6 as shown at the bottom left-hand side is based on net property [fol. 10126], intangibles and working capital, and Chart No. 7 as shown at the bottom left-hand side of that chart is based on capital structure; is that not correct?

A. That is correct.

Q. The titles themselves do not show that difference, do they?

A. No, sir. That is right. They are both invested capital.

Q. Now, to return to your Chart No. 8, will you state what you have shown on that chart?

May I first preliminarily ask you whether a chart similar to this chart No. 8 was included in your Exhibit 65.

A. No, sir, there was not any.

Q. Why did you include it in Exhibit 253?

A. At the time of the last hearing there were several questions asked regarding the size of the working capital which I had included in the calculation to determine invested capital.

Q. You mean the items which you have labelled, through your exhibits, as net working capital; is that true?

A. That is correct.

Q. Cash on hand, in other words; is that right?

A. That is right.

Q. Proceed, please.

A. The figure as of June 30, 1941, as shown in Exhibit [fol. 10127] No. 65 amounted to $4,661,875.

Q. May I ask whether that is not the same figure shown on Chart No. 14 of Exhibit 65?

A. That is the same figure.

Q. Yes. As of the same date?

A. As of the same date.

Q. Now, what happened to that as time went on?

A. Well, between June 30, 1941, and December 31, 1941, there had been a drop of a little over a million dollars so that the net working capital figure, as of December 31, 1941, amounted to $3,507,683, and in the following two months, over to February 28, 1942, it had suffered further decline to $2,951,908, but in the course of the acquisition of the new companies and the refunding or the refinancing, a certain amount of capital to replenish the working capital was received, so that the total net working capital as of February 28, 1942, was $6,576,743. But against that were estimated plant expenditures carrying out through the ten months of this year to December 31, 1941, which was already budgeted and under way, amounting to $6,530,900, and I show that merely to indicate that although a particular figure of net working capital may be of certain size at one time, by itself it doesn't mean a great deal without further investigation as shown here clearly that if the net working capital of $6,576,743 is considered high, one must [fol. 10128] also consider the estimated plant expenditures

which will use up that working capital and will use it up in the next ten months.

. . . . . .

Q. In other words, all this cash will be used up and eaten away during the year 1942, won't it?

A. That is correct.

Q. Now, there will have to be some replenishment, won't there, in order to run this business?

A. Yes, the company can't continue as a going concern without having working capital day to day as it continues to operate.

Q. Where will it have to come from?

A. Well, it will comes from earnings if the company continues to operate on a profitable basis.

Q. All right.

Now, explain how that can be accomplished.

A. Well, as the company continues to sell its service [fol. 10129] to the public, it receives revenue therefrom out of which the cash is built up and from that cash account are items paid out for expenses, salaries, wages, and so forth, and so long as the revenue flowing through cash account exceeds the amount of outgo, you have a balance in the cash account for working capital purposes.

Q. Well, the company has to pay interest, doesn't it?

A. Well, in addition to the regular operating expenses, there are several different corporate purposes that have to be taken care of: that is, the interest on the bonds and the preferred dividends, and if there is to be a dividend upon common stock, that will take a certain portion of cash and the cash has to be sufficiently large also to meet the sinking fund requirements when bonds and preferred stock must be purchased to meet the requirements as stated in those additional securities.

Q. It will have to pay additional taxes, won't it?

A. Yes, very definitely.

Q. Now, is there anything further you think ought to be said with respect to your chart No. 8 in explanation of it?

A. Well, I don't think there is. The one point that I think is significant: that some question was raised about

the size of the net working capital as of June 30, 1941, but as shown, that had dropped almost 50 percent in a matter [fol. 10130] of eight months, so that it indicates that there is this conversion process going on from week to week and month to month where working capital at one time, converted to other purposes at another time, so that there is a matter of how much you need.

Q. I think, Mr. Coffman, that you just mentioned in connection with Chart No. 8 the necessity for the company having earnings to cover sinking fund and maturity provisions for debt and preferred stock.

Now, will you turn to Chart No. 9 and state what is shown on that chart.

Mr. Littman: Before you turn from Chart No. 8, isn't there a typographical error in the table supporting Chart No. 8, Mr. Coffman? I refer to your caption where you use the term "Net Worth Capital."

The Witness: Yes, sir, Mr. Littman. It is "Net Working Capital."

. . . . . .

[fol. 10131] By Mr. Wheat:

Q. Now, will you proceed with your explanation of Chart No. 9, and state, first, whether it contains data of somewhat similar character to that which was contained on Chart No. 17 in Exhibit 65.

. . . . . .

A. The data contained in Chart No. 9 of Exhibit 253 is somewhat similar to the data contained in Chart No. 17 in Exhibit 65.

Q. What differences are there between these two charts?

A. Well, the principal difference is that in the Chart No. 17, Exhibit 65, there is there shown a schedule of the outstanding debt and the schedule of debt retirement, but in addition to that information on Chart No. 9 is also [fol. 10132] taken into consideration the preferred stock which new preferred stock being issued, carried sinking fund, and therefore the sinking fund provisions had to be taken into consideration, so this shows both preferred and bonds.

Q. Mr. Coffman, would this be a fair statement of the situation: that at the time you prepared Chart No. 17 of Exhibit 65 you had a certain long term debt with a certain sinking fund provision and that now, as reflected on Chart No. 9 of Exhibit 253, you have a larger long term debt or bond issue with a sinking fund and also you have a preferred stock with sinking fund provisions which did not exist at the time you testified before?

A. Yes, that is correct.

Q. What is the annual cost of those sinking funds?

A. Well, referring to table supporting Chart No. 9, in Exhibit 253, the detailed figures are given showing that as of March 1, 1942, the par amount outstanding at the beginning of the year was $33,250,000.

The retirements during the year will amount to one million and a half dollars. The cost of retirement $1,503,125, making the accumulated cost $1,503,125 when the sinking fund begins to operate and then it steps up as is shown in table supporting Chart No. 9.

Q. And also as shown on the right-hand subchart of your Chart No. 9; is that true?

[fol. 10133] A. Yes, except it is a little easier to pick those figures up from the table than it is from the chart to get the total, because the preferred stock also has a cost of retirement feature which must be included.

Q. Now, I notice that for the year 1942 that latter item is considerably less, also with respect to the bonds, than it is in the later years, down to 1961; is that correct?

A. Yes, the figures begin as of March 1, 1942, so that you do not have a full year there, in the first place, so that you get a total funded debt and preferred stock retirement cost in 1942 of $1,503,085, but then starting with January 1, 1943, that figure immediately goes to $2,307,500 and continues at about that same amount over until 1960, so that the annual amount really that has to be provided for sinking fund purposes is equivalent in round numbers to $2,300,000.

Q. In other words, I take it that this chart shows, as compared with Chart 17 of Exhibit 65, that under the new financing and because of these added sinking funds that you have mentioned, a greater cost was placed on the

company than is shown above, and that must be provided for?

A. Yes, there is a greater cost on the company and a larger amount has to be provided for.

This chart No. 17 on Exhibit 65, the annual amount was [fol. 10134] $1,250,000, whereas, as just discussed in table supporting Chart No. 9 in Exhibit 253, that cost will be $2,307,500 per annum.

Q. And will be two million and a quarter at least down to 1961, will it not?

A. Well, I have made a general statement there that it would be approximately that figure to 1961.

There are slight annual variations, but it is better than $2,200,000 through to 1960.

Q. Now, Mr. Coffman, will you now turn to your chart No. 10 in Exhibit 253. Let me ask you whether that chart is similar generally to a chart which was contained in your Exhibit No. 63, and I refer here to chart shown opposite page 23 of Exhibit 63.

A. Yes, that is generally correct. The information at the time of the last hearing which was submitted on investors' appraisal of over-all capital risk in various divisions of the utility industry for 1937-1940, was contained in two separate exhibits: Exhibit 63 in which opposite page 23 there is a chart showing similar information, and then in Exhibit 64 which supported 63; were given the detailed statistics from which the study was originally compiled.

[fol. 10135] Q. Now, how in general does your chart No. 10, Exhibit 253, differ from the previous data?

A. In Exhibits 63 and 64 I had data only for the years 1937 through 1940.

In chart No. 10 of exhibit 253 I have added the figures for the full year 1941, where they were available, and have calculated an average for a five-year period instead of an average for a four-year period, as was the case in exhibits 63 and 64.

Q. Let me ask you, Mr. Coffman, whether the addition of the 1941 data made any real change in the over-all re-

sult or relationships which were shown in the previous exhibits.

A. Well, generally speaking I don't think that the addition of the 1941 figure had changed the over-all figures materially.

For example, in the water companies I show a weighted average figure of investors' appraisal of over-all capital risks for the five-year period of 5.34 per cent.

Q. That is, contrasted with 5.38 per cent for the four-year period, is that true?

A. Yes, that is correct, and in contrast to the various figures which are shown for the individual years, 5.53, for instance, for 1937; 5.24 per cent for 1938, 5.64 for 1939, 5.13 for 1940, and 5.32 for 1941.

I think that is remaining remarkably close for a five-[fol. 10136] year period. I wouldn't say that there are any radical variations in it.

Q. I note that the data on the five-year period, with respect to electric operating utility companies, shows also a fairly close relationship over the years, does it not, in connection with investors' appraisal of your securities?

A. Well, it, I should say, could be described as remaining about as stable as any of the divisions shown here, and the weighted average for this five-year period shows 5.53—or you might call it 5½ per cent on the average.

Q. Well, that is as against 5.47 which you showed for the average of the four preceding years, is it not?

A. That compares with 5.47 per cent as a four-year average for 1937-1940, both inclusive.

Q. Now, what happened with respect to manufactured and mixed gas companies?

A. Manufactured and mixed gas companies showed a variation in 1941 that was higher than 1940. The '41 figure was 7.37 per cent as against 6.89 per cent for 1940, but the average for the five-year period was 6.94 per cent as compared with 6.61 per cent as shown in my exhibit 63.

Q. Now, what did the addition of the year 1941 do with respect to the data on all natural gas companies?

A. Well, on all natural gas companies the 1941 figure tended to reduce the average because the 1941 figure was [fol. 10137] somewhat lower. It amounted to 7.83 per cent

as compared with 8.03 per cent for 1940, and the average was then 7.82 per cent.

Q. Now, what about natural gas pipe line companies?

A. Well, natural gas pipe line companies, the drop is somewhat sharper than the one for all natural gas companies. The 1941 figure was 8.89 per cent compared with the 1940 figure of 9.55 per cent, and the weighted average was 9.19 per cent as compared with 9.38 per cent, the four year average as shown in exhibit 63.

Q. The weighted average, with respect to the natural gas pipe line companies, then was slightly below the arithmetic average of the four year period shown in exhibit 63, is that correct?

A. Yes, that is correct.

Q. In all instances in chart No. 10 of exhibit 253 have you weighted these averages?

A. In each case, in the data shown in chart No. 10 of exhibit 253, the data have been weighted, and by "weighting" I mean there giving the highest weight to the last figure, and so on back.

In other words, being a five year period, I have given the 1941 figure a weight of 5; 1940 figure a weight of 4; and so on back to 1937, which has a weight of 1.

In other words I have weighted the average according [for 1913S] to the most recent information.

Mr. Littman: Is my understanding correct that the weighting feature was not used in your earlier exhibit No. 63?

The Witness: That is correct.

. . . . . .

The Witness: Yes, sir.

Mr. Lee: I don't quite understand your definition of weighting.

. . . . . .

The Witness: If you will refer to table supporting the chart No. 10 at the back of the volume you will see the statistics for each of the groups—water companies, electric operating utility companies, and so forth—for the five

divisions, and there I have given the rate for each year, and then have shown the weighting in reverse, namely that 1941 is given a weight of five, 1940 a weight of four, and so forth, and applied that to get the weighted average which is shown.

* * * * * * * *

By Mr. Wheat:

Q. Now, Mr. Coffman, as shown in the note on the table supporting chart No. 10, the method which you used in selecting the companies and also working papers covering the data up to and including 1940, were actually [fol. 10139] included in your previous exhibits in this matter, 63 and 64, were they not?

A. Yes; that is correct.

Q. And also to working papers covering the 1941 period those data are included in exhibit 254: is that correct?

A. They are included in Section 4 of Exhibit 254.

Q. By the way, in connection with exhibit 254 each separate section is separately numbered by pages: is that correct?

A. Each section is consecutively numbered, and then a new section appears to start new numbering, and that goes on consecutively for just the section only.

Q. Now, is it a fact, in connection with the data shown on your chart No. 10 of exhibit 253, that the general relationships between the various types of utility services included, are shown to continue throughout the years in question?

A. Well, when I originally presented data of this sort at the last appearance I made, I said that I believed this information indicated that investors were demanding more by way of return in the natural gas pipe line companies than the other divisions of the utility field, and showed that there was the graduation in the amount required as shown now by the five-year average of 5.34 per cent for [fol. 10140] water companies, up through the various divisions to 9.19 per cent in natural gas pipe line companies, and I believe that investors are still doing what they have been doing for a great many years: drawing distinctions in risk, and as the risk goes up in their opinion,

the demand for a return on their capital must go up, and does go up.

In other words I think these figures here—it isn't what I think, really, or what anyone else thinks: it is what the man that put up a thousand dollars or a hundred thousand dollars, or is willing to do it, thinks about it, and that is what this figure represents: it is his opinion, and he is the man who is furnishing the capital.

Q. Well, is this chart based entirely on objective data?

A. Yes, all of it is based upon earnings shown by the companies and based upon quotations on their securities which is all objective data.

Q. I think you stated yesterday that, so far as you knew, there is no way to force investors to put up their money in companies of this sort.

A. No, there is no way; it is a matter of making an investment that is a security which you are trying to sell, sufficiently attractive among the great many possible selections, make it attractive enough to have people put their money in so that you can have the use of it.

[fol. 10141] Q. Mr. Coffman, you have used the words "over-all capital risks": I take it that includes both the fixed capital and common stock participations.

A. That includes bonds, preferred stocks, and common stocks.

Q. All those types of securities?

A. That is correct. And notes, if there were any. Any kind of borrowings that might have been made.

Q. Is there anything further that you think should be stated in respect to chart No. 10 at this time?

A. Well, I don't believe there is. I think I have covered the facts pretty well.

Q. All of the data on which you based your chart No. 10 is contained either in the tables in exhibit 253 or in the appendix in exhibit 254 or in exhibits 63 and 64 in this proceeding, is it not?

A. That is correct. If I can restate it: if a person wanted to examine now all the information I have presented on this subject it would be necessary for him to refer to exhibits 63 and 64 and exhibits 253 and 254.

Between those four exhibits are all the basic material and data that are represented here in graphic form.

Q. So that everyone who now has those exhibits in his hands has not only your conclusions, based upon that data, but has all of your working papers, so to speak?

[fol. 10142] A. That is exactly correct.

Q. Now, I wonder if you will turn to your chart No. 11 of exhibit 253, and first briefly state what that chart includes.

A. Well, chart No. 11 in Exhibit 253, captioned "Investors' appraisal of over-all capital risks, 153 stable industrial companies": I had in mind in such tabulation to make a study of industrial companies which could be considered by their record, particularly their continuance and regularity of [dividend] payments, to be as stable as any industrial activity you could get, and therefore closely approximating stability that one would expect in a regulated industry, but I wanted to go out of the regulated field to see what the over-all capital risk, the investors' appraisal, was for that group of companies.

Q. Why did you select a certain group of companies?

A. In order to be sure that I was including all companies I based the data in chart No. 11 on all the securities listed and traded on the New York Stock Exchange over the past ten years.

Q. Let me ask you, right there: How many such securities have been traded on the New York Stock Exchange over the past ten years?

A. Well, there were approximately three thousand different issues.

[fol. 10143] Q. And how many are there traded on that exchange now?

A. Well, according to the last yearbook of the New York Stock Exchange the total is now 2405.

Q. I take it from what you have said, and from the fact that chart No. 11 contains data, according to its title, on 153 companies, that you must have eliminated some companies in arriving at the list which you studied as a basis for chart No. 11: is that correct?

A. That is correct.

Q. Well, will you state, briefly but carefully, for the record, just what you did and how you went about making any eliminations which you may have made?

A. Well, I was interested here in common stock, so I first eliminated all of the bonds, which totalled 1,173. I next eliminated all the preferred stocks, which totalled 398.

That left remaining 934 issues of common stock, but from that group I had to make certain further eliminations.

Q. Why?

A. I eliminated 207 companies which did not pay dividends in 1941.

The remainder of 637 companies were studied for the period January 1, 1932, to April 1, 1942, and from these I had to make certain eliminations.

Q. What were those?

[fol. 10144] A. First I eliminated all the companies that were not listed on the New York Stock Exchange for the entire ten-year period, and secondly I eliminated all companies which had not paid a dividend on common stock in each year of the ten years.

That gave me a remainder of 153 companies, all of which were listed for ten years, all of which paid a dividend on common stock in each of the ten years.

Q. They didn't pay the same dividend, probably, for each of those ten years?

A. No. When I say they paid a dividend, I am not saying that they paid the same dividend: I am saying that they paid a dividend on the stock in each year. That dividend varied from one year to another.

Q. Now, in your studies, after you had made these eliminations, did you develop the investors' appraisal of the over-all capital risks of those companies that were left for that period?

A. Yes. On the remaining 153 stable industrial companies I then made the calculations to determine the investors' appraisal of risk.

Q. Now, as a matter of fact have any of these 153 companies continuously paid dividends for more than ten years?

A. Well, I have got certain figures here. Some of [fol. 10145] them have been paying dividends for quite a period. Most if not all of the 153 stable industrial com-

panies paid common cash dividends for a number of years prior to 1932; while the time available did not permit a detailed study to ascertain all facts for earlier years, data published in the New York Stock Exchange Yearbook indicate that 74 of these 153 companies have paid common cash dividends consecutively for at least 25 years.

48 have paid such dividends for at least 35 years; 21 for at least 45 years, and 18 for at least 50 years.

One company—Pullman, Incorporated—paid cash dividends on its common stock in [ever] year since 1867: a period of 75 years.

Q. Now, the chart No. 11 in exhibit 253 is, in effect, a summary chart of your study, is it not?

A. Yes, that is correct.

Q. Now, where have you included the details which lie behind the summaries shown on chart No. 11?

A. Well, first in exhibit 253 there is a table supporting chart No. 11 which gives summary figures, and then to get the basic data or working papers for more detailed information reference has to be made to exhibit 254.

Q. What is included in that exhibit?

A. That exhibit, in section 1, contains a complete list of industrial companies whose common stocks were listed [fol. 10146] on the New York Stock Exchange from January 1, 1932, to April 1, 1942.

Q. Now, what page are you referring to now in exhibit 254?

A. I am referring to the first section heading which is just before page 1 of section 1.

Q. Now, will you turn to page 1 of section 1 of that exhibit and explain how you have shown that data?

A. Well, beginning on page 1 of section 1, which is captioned "Complete list of industrial companies whose common stocks were listed on the New York Stock Exchange from January 1, 1932, to April 1, 1942," I start there, in alphabetical order, to list the companies that are in the group, and I have shown there the companies which paid dividends each year 1932-1941, both inclusive, as marked with an X in the accompanying column.

Q. So that, by looking at the several pages—I think three of them—of section 1 of exhibit 254, one can de-

termine which companies paid common stock dividends in each year from 1932 to 1941 inclusive, and which companies, therefore, were included in your detailed study the summary of which is reflected in chart No. 11 on exhibit 253?

A. Yes. That is a correct statement.

Q. What detailed data have you included in exhibit [fol. 10147] 254 with respect to the companies which were studied?

A. Well, in section 2 of exhibit 254, captioned "Summary showing computation of investors' appraisal of the risk of capital represented by 153 stable industrial companies," starting on page 1 of section 2, the companies are listed again—that is, the 153 which were selected—and there I show for each of five years 1937 through 1941 the indicated market value of capital of these 153 companies individually, and then I show the earnings available for capital for each of the companies for each of the years 1937-1941.

Q. I notice that in some instances there are no figures shown in the columns under the heading 1941 on pages 1, 2, and 3, of section 2, exhibit 254: why is that?

A. Yes, that is correct, and the reason for it is that the time we were producing this study was early in this year, and as we know annual reports for a number of companies are not available until perhaps in the second quarter or third quarter of the year, so that all annual reports for all these 153 companies were not available.

Q. You used what were available, did you?

A. I used what were available, and if you will refer to chart No. 11—

Q. (Interposing) Exhibit 253?

A. (Continuing)—of exhibit 253, you will see that the [fol. 10148] 1941 figure carries a star, which explains that that figure is based on 119 companies for which 1941 annual reports were available prior to April 1, 1942.

Q. In other words you used every company that you could get 1941 data on out of this group of 153 companies, up to April 1, 1942?

A. That is correct.

Q. This being April 17, 1942?

A. This study for the 153 companies is as all-inclusive as we could make it at the time.

Q. Well, as a matter of fact, even for 1941 the total indicated market value of capital was over 44½ billion dollars, was it not?

A. Yes, the amount involved here in indicated market value is tremendous for most of the years—that is, 1937 through 1940, anyway.

The average would be something in excess of 20 billion dollars, which is a very substantial representation.

Q. Well, that is almost as much—or is as much, isn't it—as the entire national debt prior to the most recent period of increase in that debt?

A. Yes; that would be approximately correct.

Q. In other words you have adopted a very broad base for this study; is that not true?

A. That is correct, both as to the method of selecting [fol. 10149] the companies and as to their dollar value.

Q. Would you say that, in selecting these companies, you used objective data solely after you had determined that you were going to use only companies which paid a dividend in each of the last ten years?

A. What I am doing here is showing exactly what the investor is saying about these securities.

In other words, to get at the over-all investors' appraisal of risk, as I have explained, I used the earnings available for capital, and I used the indicated market value of capital, which is gained from quotations, and those two figures are certainly objective.

I had nothing to do with them except list them and tabulate percentages thereon.

Q. Now, in adopting that period of ten years during which these companies paid common stock dividends in each year, do you believe that you used some abnormal period?

A. Well, as I look upon the five-year period, as indicated by the figures, I think generally throughout there isn't anything especially peculiar about the period.

Q. As a matter of fact, the ratios that you found run fairly close together, do they not?

A. Yes. That was particularly true, it seems to me, of the figures shown on chart No. 10. There are no striking changes there at all.

[fol. 10150] Q. Well, you used the same period, didn't you, here?

A. Same period 1937-1941.

* * * * * * * *

[fol. 10151] Q. Mr. Coffman, I think at the time the recess was called, we were discussing the companies which you have used in your study contained in Exhibit No. 254 and summarized on Chart 11 of Exhibit No. 253. Let me ask you to explain in some detail what you had in mind in connection with the various eliminations which you have already described as having been made by you from the total list of companies whose securities were traded on the New York Stock Exchange?

A. My purpose was to start with some recognized source and, since the New York Stock Exchange is the leading stock market in the country and taking into consideration the time factor, I took all the securities listed on that Exchange solely. If I had had more time, I would have liked to have included the tradings on the New York Curb Exchange, but time would not permit but, nevertheless, since everyone is acquainted with the securities that are listed and traded on the New York Stock Exchange, I believe that to be a well-known and recognized source.

Q. And you had some 3,000 companies, did you, to start with?

A. Some 3,000 companies.

Q. You consider that a sufficient base for such a study as you have made, did you?

A. Not only do I think it is a sufficient base but I think it is probably the most reliable and best recognized base [fol. 10152] because, after all, the New York Stock Exchange has been in existence for many years and they have had some rather definite rules and restrictions as to what companies could be listed and traded so that every company did not get on that Exchange to begin with. I mean they really performed quite an elaborate elimination long before this list that I am talking about was made. They automatically eliminated what they considered to be poor companies or unreliable companies or companies that could not qualify for listing and trading privileges on that Exchange.

Q. Now, you have told us what your eliminations were and given us the number of companies eliminated. Will you go ahead and discuss, briefly, the reasons behind those eliminations?

A. I was principally interested in the common stock phase because the common stocks in any company are the ones which depend for their return on the type of risk involved. In other words, their bonds carry very definite stipulations as to interest, sinking funds and so forth so that if any company should, some place along the line, run into difficulty, presumably the bond holders are the best protected of the various security holders of securities in a particular corporation.

Next in line are the preferred stockholders who are fairly well protected. The common stockholder, on the other hand, [fol. 10153] has to take the luck of the corporation in facing the risks and, if the earnings are sufficient to pay all the operating expenses, all the interest on the bonds, the dividends on the preferred stock and there is something over, then the common stockholder will get his return to the extent that the management feels they can declare dividends upon such stock so, in the last analysis, the real test in this matter was to see, in the companies that are listed here that paid dividends throughout the years, just how stable they were and they were the most stable in the group, what the investors said the risk was as measured by this investors' appraisal of risks.

Q. When you made the computation of the investors' appraisal of risks of capital on each of these companies, just what did you do? Where is that computation shown in your Exhibit No. 254?

A. Well, you will first find in section II the material that I have already recited, namely, the indicated market value of capital for each of the 153 companies except in those instances where the 1941 material was not available up to April 1, 1941, and I show earnings available for capital with the exception mentioned for the years 1937 through 1941.

In section III of Exhibit No. 254, I present the details of the calculations. For example, on page 1, of section III, information is presented in regard to Abraham & Straus,

[fol. 10154] Inc., in which I show the market value, that is, the indicated market value for the various types of capital outstanding as of January 31 for the years 1937, 1938, 1939 and 1940. I show for each of those years the price range for the year and each of the years the high, low and average. I used the average of the high and low in each year as the figure to multiply against the type of capital outstanding—

Q. (Interposing) That is what you did in connection with all your other studies of investors' appraisals, did you not?

A. That is correct.

Q. Go ahead.

A. Now, in the case of Abraham & Straus there is no figure for the year 1941 and that was first clearly indicated in section II, page 1, where it is shown that the Annual Report was not yet available at the date of study so there will be no 1941 figure but, if you take the second company which is shown on page 2 of section III, the Adams Millis Corporation, on page 2, I think the detailed information for the years 1937, '38, '39 and '40 and, on page 3 of section III, I show the same information for the year 1941 so that, if one goes through section III of Exhibit No. 254, you will find always on the first page, covering the company, the figures for 1937, '38, '39 and '40 and if the 1941 figure is available, it is always contained on the second page.

[fol. 10155] Q. Or the page following?

A. The next page following. These pages are numbered consecutively.

Q. Now, there are, I note, 275 pages in section III, is that correct?

A. Yes, that is correct. There are 275 pages in section III of Exhibit No. 254.

Q. Now, is it a fact that section III contains the data by individual years, as you have just described, for all of the corporations which are listed in section II of Exhibit No. 254?

A. That is correct. It contains all the companies listed in section II and that section has three pages.

Q. And is it also a fact that section II and the companies listed in section III are the companies which are

denoted by an "X" in the list of 470 corporations contained in section I of Exhibit No. 254?

A. That is correct or, to state it differently, it contains the companies whose figures are shown graphically on Chart No. 11 in Exhibit No. 253.

Q. And without going through section III, is it your view that anyone who might so desire can determine how you arrived at the figures you used as the basis for your Chart No. 11, Exhibit No. 253, by consideration of these detailed data in Exhibit No. 254?

[fol. 10156] A. That is correct with perhaps the additional statement that there is contained in Exhibit No. 63, in pages 5 through 8, a general statement of method which I used for Exhibits Nos. 63 and 64 which is exactly the same procedure except in connection with industrial companies for which data are supplied in Exhibit No. 254.

Mr. Littman: Mr. Coffman, can you advise whether your list of 153 "Stable industrial companies" includes all of the 30 Dow Jones Industrials?

The Witness: I do not think it does because I do not think that some of those stocks paid dividends throughout this period but that will be an easy matter to ascertain.

Mr. Littman: I thought perhaps you could tell us offhand.

The Witness: I think my answer is correct to say I am sure it does not but I can check it and get the list so there will be proof of it.

. . . . . .

By Mr. Wheat:

Q. I think you have explained why you selected these corporations and why you denoted them as stable industrial companies in connection with the study of the return which you have here made in this proceeding. Now, will you turn to section III of Exhibit No. 254 and state for [fol. 10157] the record what you have included in section III of that exhibit?

A. Section III or section IV?

Q. I am sorry, section IV is the one I meant.

A. In section IV of Exhibit No. 254 which section contains 51 pages, I have presented the working papers show

ing the computation of the investors' appraisal of the risks of capital in the natural gas industry as compared with other divisions of the utility industry for the full year 1941. Such data for water companies begin on page 1; for electric operating utility companies, it begins on page 9; for manufactured and mixed gas companies, it begins on page 25 and natural gas companies on page 36.

Q. Now, all of section IV of Exhibit No. 254—

A. (Interposing) That takes care of section IV of Exhibit No. 254.

Now, supplemental data for the years 1937, '38, '39 and '40—

Q. (Interposing) You mean this is supplemental to that?

A. This is supplemental to that, which data has already been shown in Exhibits 63 and 64 which are already in the record.

Q. So that by consideration of the data in Exhibits 63 and 64 and the data included in this section IV of Exhibit No. 254, all of the basic data underlying the supplementary Chart No. 10 of Exhibit No. 253 can be found?

A. That is correct.

[fol. 10158] Mr. Littman: Mr. Coffman, where is the underlying data for the natural gas pipe line companies shown in Chart No. 10 of Exhibit No. 253?

Mr. Wheat: I think if you will look at page 37 of section IV, you will find those companies listed. Also I think you will find separate sheets for each of those natural gas corporations in the sheets which follow page 37. In other words, they are grouped together there, Mr. Littman.

Is that not correct, Mr. Coffman?

The Witness: Yes, that is correct. Page 37—

Mr. Littman: (Interposing) The reason I inquire is because your caption sheet for section IV has a title that it includes natural gas companies but does not have a separate reference to natural gas pipe line companies.

The Witness: That is correct. I think that was an error. It might well have been put in although the natural gas

companies were put in at page 36 and there should have been included—

Mr. Wheat: (Interposing) You mean you made a separate page 37 listing them alone?

The Witness: That is correct but such page is not listed on the opening page for section IV but might well have been listed there.

By Mr. Wheat:

Q. As a matter of fact, Mr. Coffman, if you take the [fol. 10159] companies listed on page 37, you will find data upon them in the proper alphabetical place among the other natural gas companies for which data is shown on subsequent pages of section IV, is that not true?

A. Yes, that is correct.

Q. So that all the data is here, is it not?

A. All the data is here.

Q. Now, Mr. Coffman, is there anything further that you wish to state in explanation of your Chart No. 11 in Exhibit No. 253?

A. Well, the same statement applies to Chart No. 11 in Exhibit No. 253 that was made to Chart No. 10 of the same exhibit, namely, that the figures shown therein are the investors' appraisal of the over-all risks of capital and these again are objective data. It is not an opinion that I hold. It is merely finding out what investors today are saying in regard to securities and a particular group of securities and, following the processes of elimination which I did to arrive at the 153 companies, I think probably that is as complete a tabulation as was ever made covering a ten-year period with detailed figures showing companies that have paid dividends each year in that ten-year period and I thought that that was a pretty good measurement of industrial stability, any company that could qualify in that list, taking the list as a composite, was a pretty good indication and it would seem to me [fol. 10160] would prescribe a minimum, so far as average is concerned, of 6.97 or call it 7 per cent in round figures which could be described as what investors are demanding in the most stable industries on the average.

Now, if you will break down the average to the individual years, it is obvious, in Chart No. 11, that the figures varied.

The figure for 1937 was 6.38 per cent; in 1938, it was 5.21 per cent; in 1939, it was 6.25 per cent; in 1940, it was 7.14 per cent and, for 1941, it was 7.99 per cent or, call it in round figures, 8 per cent. Now, the 1941 figure, as I have explained, covers only 119 companies, those being the only ones who had issued their annual reports up to April 1 of 1942.

Q. You have already stated also that does include market value of capital of a total of over 14½ billion dollars, does it not?

A. Yes, it does.

Q. That is about a cent higher than your weighted average, 8 against 7?

A. That is correct.

Q. There has been a marked and noticeable increase in investors' appraisal of risks of capital of these companies over the past four of the last five years, is that true?

A. That is correct. The figure has risen from 5.21 per cent in 1938 to a round figure of 8 per cent in 1941.

* * * * * * * *

[fol. 10162] By Mr. Wheat:

Q. I think you stated that your weighted average of investors' appraisal of risks of capital for these 153 stable industrial companies shown on Chart 11 of Exhibit 253 was 6.97 and I believe you stated you would round that out to 7 per cent. Is that correct?

A. That is correct. I said that would indicate a round figure of 7 per cent.

* * * * * * * *

[fol. 10163] Q. Will you turn to your Chart No. 12 headed, "Panhandle Eastern Pipe Line Company Invested Capital as of February 28, 1942," and state what that chart shows and also state its relationship to Chart No. 24 in Exhibit 65.

A. In Chart No. 12 of Exhibit No. 253, I have shown calculations similar to those presented in Chart No. 24 of Exhibit No. 65 but, in the case of Chart 12 of Exhibit No. 253, the figures there are based upon the condition of the company as of February 28, 1942, which takes in the

acquisition of the properties or, to state it differently, considers the consolidated company.

Q. And the new financing?

A. And the new financing, whereas the figures that were shown in Chart 24 of Exhibit No. 65 related only to Panhandle Eastern Pipe Line Company.

Now, in Chart No. 12, a comparison is made between the book value on the one hand and the market value on the other and it shows that as of February 28, 1942, the total invested capital, book value, was $77,830,535.

Q. I note, Mr. Coffman, in that connection where you have a column headed, "Per Cent of Total", that there has been some considerable change in the percentage of the total represented by common stock and surplus. Will you state what that change was and whether you believe it to be significant?

. . . . . .

[fol. 10164] The Witness: You are now making the comparison of the data in Chart No. 12 of Exhibit No. 253 with Chart No. 24 of Exhibit No. 65?

Q. Yes, that is exactly what I had in mind.

A. The changes represent, for the most part, those that were created by the recent financing put out by the company in connection with the new property acquisitions and the figure for common stock and surplus, as of February 28, 1942, for the consolidated company or its present status, was 36.71 per cent of total invested capital whereas the common stock and surplus at book value as of June 30, 1941, for Panhandle Eastern Pipe Line Company alone was 47.63 per cent of the total book value as of June 30, 1941, and the reason for those changes in the percentages is chiefly attributable to the issue of additional bonds and preferred stock in the recent financing which necessarily made changes in the capital structure and the book value thereof and, therefore, changed the percentages.

Mr. Littman: Was the 47 per cent you gave, Mr. Coffman, as of June 30, 1941?

The Witness: The figure of 47.63 per cent is based upon the balance sheet figures as of June 30, 1941, and, [fol. 10165] therefore, applies to book values as of that date.

Mr. Littman: I thought it might be well to note at this point that, in the Securities and Exchange Commission's opinion which is in evidence as Exhbit No. 147, page 17 shows the ratio to be, as of September 30, 1941, 43.62 per cent. It has, however, been called to my attention that the figure which I read is a consolidated figure and, therefore, would not be strictly comparable.

The Witness: That is correct.

By Mr. Wheat:

Q. I think, Mr. Coffman, you also a few moments ago were about to make some comparison between the book value and market value figures as shown on Chart 12 of Exhibit No. 253. Is that correct?

A. Yes, that is correct.

In Chart No. 12 in Exhibit No. 253, the market value of that total invested capital was $73,328,771 and that figure, which is on the consolidated basis, has no counterpart in Chart No. 24 of Exhibit No. 65 so there is no comparison that can be made but it is of interest to see that the figure of $73,328,771 on the consolidated basis at market value compares with the $77,830,535 on book value on a consolidated basis as of the same time.

In the case of Chart No. 24 in Exhibit 65, the market [fol. 10166] value of the total invested capital on June 30, 1941, was $64,219,240, compared with book value at the same time for the same invested capital of $61,423,853.

Now, in Chart No. 12, there are one or two other items that I think have some significance.

Mr. Lee: Mr. Coffman, right on that, if you will pardon me for asking you, right on that last statement you made a comparison between the book and the market value, didn't you?

The Witness: Yes.

Mr. Lee: If the book value of $77,830,535 is so greatly in excess of the market value, $73,328,771, the excess being accounted for, as I understand it, by, in part at least, the earned surplus on the books, if that earned surplus exists why isn't that factor reflected in the larger market value?

The Witness: Well, I think that there are several answers that can be given to the question.

In the first place, I think one must distinguish between an earned surplus item which is already accumulated and on the books as one measuring standard and the earning capacity of the company or its ability to continue its same rate or thereabouts of earnings that it has in the past as another standard.

[fol. 10167] Now, I think the market usually gives more weight to earning capacity than the market has given to book values at any time and the reason for that is that you can conceive of a situation at which, at a given moment of time, a company could show a very good book value with earned surplus and yet be in a dilemma where its business was going to be wiped out with no earning capacity. The minute that was known or believed by investors, prices would begin to go off, naturally.

Mr. Lee: Has that earned surplus shown on Chart No. 12 been distributed?

The Witness: No, it is a part of book value. As long as it is there, it naturally has not been distributed.

Mr. Littman: Mr. Coffman, may I interrupt to ask whether, in this illustration which you just gave, it is the fact that the earnings-price ratio would be high, very high?

The Witness: Well, I will answer it this way: That, as you get into a situation of that kind so that the prices go off more rapidly than earnings, your price ratio will tend to increase but, if the earnings were off too and if they both went off in the same proportion, they would not be relatively high.

Mr. Littman: Well, in your illustration, the earnings-price ratio would be very high.

The Witness: If I took it at that given moment of time, at twelve midnight of December 31 of whatever year, [fol. 10168] it was and the earnings in the particular year had been good or all prior years but, as of that time—just like, for instance, Prohibition. The Act goes in and earnings go out—it would be high at that point but only at that time. In making a study as I have done over a period of years, that would have no significance. It would be washed out.

Mr. Littman: In such event, the earnings-price ratio would be enormous, wouldn't it?

The Witness: It would depend upon the relationship, Mr. Littman. I mean, if you had zero earnings and a price, you have no ratio.

Mr. Wheat: As a matter of fact, it might go to infinity under those circumstances, might it not?

The Witness: As a matter of fact, it would go to a point where you could not calculate the ratio because, if you had no earnings, you could not even calculate it.

Mr. Wheat: Of course no such situation at present, in connection with the studies you have made of earnings-price ratio, is here?

The Witness: No. I was just trying to make clear the answer I was trying to give in regard to the question.

Mr. Wheat: I see.

* * * * * * * * *

[fol. 10169] By Mr. Wheat:

Q. We all realize, don't we, Mr. Coffman, that individual days, with respect to individual companies, may create abnormal relationships?

A. That is correct but, so far as my study is concerned, all such companies with those particular items have practically been eliminated by one process or another. I mean, when you take a five-year period or a ten-year period obviously a thing that happens on one given moment of time has no significance.

* *

Q. Now, is there anything further you think should be stated with respect to your Chart No. 12 in Exhibit No. 253?

A. Well, there is one further point that I think stands out clearly in Chart No. 12 of Exhibit No. 253. At February 28, 1942, on the consolidated basis at market value, the total debt was 45.70 per cent of the total invested capital at market value. The total preferred stock was 21.82 per cent and the common stock and surplus was 32.48 per cent of the total invested capital at market value.

Now, that shows that the common stock and surplus or equity capital, so-called, is getting down to a fairly low percentage in comparison to total capital and I think that there was some discussion of that at the time we went through Exhibit No. 65 several months ago. If you com- [fol. 10170] pare the new figures on the consolidated basis at market value with the situation on the Panhandle Eastern Pipe Line Company June 30, 1941, at market value, the total debt now of 45.70 per cent compares with a total debt of 36.59 per cent.

Q. At that time?

A. At that time for Panhandle Eastern Pipe Line Company alone and the preferred stock now has 21.82 per cent of total invested capital at market value as against 17.52 per cent as of June 30, 1941, for Panhandle Eastern and the common stock and surplus, or the equity, was then 45.89 per cent as against this 32.48 per cent.

Q. At the present time?

A. At the present time. Now, of course, I admit there has been the property acquisitions in between and you have the consolidated company as against just Panhandle Eastern as of June 30, 1941, but regardless of that fact, the present situation of capital now; it seems to me, is such so that the equity portion is to about as low a per cent as one should think it might go.

There is one further fact and that is that, in the new preferred stock that was issued, the preferred stock carries sinking fund provisions and is entirely different than the preferred stock that was outstanding in the old setup and there is, I think, some reason for saying this new preferred stock is more in the nature of a debenture or

[fol. 10171] part of the debt than it is in a straight preferred classification.

Mr. Lee: Isn't that a benefit to the common stockholders of Panhandle because of the unusual voting rights that some of the preferred stock had heretofore in Panhandle?

The Witness: Well, in describing advantages, I do not know because there are several ways to look at it.

For example, if you have added to the debt which has brought on additional sinking fund provisions which must be met year by year and, in addition, now you have brought out preferred stock which also carries sinking fund provisions, this matter, for example, of having to meet every year, according to these debentures, $2,300,000 in order to buy these securities for sinking fund purposes as against the earlier arrangement of $1,250,000, on that score I think there is some question. There is an additional load there.

On the other hand, the old preferred stock was a participating preferred. It is not now a participating preferred so at least whatever earnings come over available for equity are entirely available for equity.

Mr. Lee: And over and above all of that, so far as the common stockholder is concerned, since the acquisition of or the consolidation of the two companies, hasn't he been very fortunate to be able to acquire 100 per cent ownership of Michigan Gas Transmission by moneys furnished by the public and at a price lesser than the market price of [fol. 10172] Michigan Gas Transmission? Hasn't that been of great benefit to the common stockholder of Panhandle?

The Witness: There again there are two ways to look at it. It seems to me the pragmatic test on the thing is what the investor says about it. The investor says, as I interpret it, from looking at the quotations on the common stock, that he does not see any great benefit for the moment because, as of June 30, 1941, the common stock was then quoted at $36.50 and, as of February 28, after all this business had been consummated, it was $29.50. There has been a drop of $7.00 per share so far as market quotations are concerned.

Mr. Lee: Isn't that due to other causes?

The Witness: I cannot say that it may be due to other causes. There may be a number of causes that have a bearing on this and no doubt there are but even so, the investor is saying to this company that, so far as he is concerned, even after the consolidation and all the benefits and everything else, $29.50 is all he can see and that is all he is going to pay for a share of common stock so that, to me, is the significant thing. It makes no difference, as I have said, what I think about it. If the investor out here, who has got $1,000 or $200,000 to invest says the stock is worth $29.50, he is the fellow we have got to talk about. It isn't what I think about it or anybody else thinks about it, [fol. 10173] it is the investor.

Mr. Littman: You do not mean to infer this was a bad piece of financing, as far as the common stockholder was concerned, do you?

Mr. Lee: That is what I meant.

The Witness: I do not see there is any inference in that. All I said was as of February 28, 1942, because of an issue of preferred stock and because of more bonds, the percentages now of these various phases of capital have changed quite materially and that the equity capital, it seems to me, [it] getting down to a fairly low per cent. I mean [some-] like 30 per cent out of the total capital is not in line with what the people in S. E. C. have been talking about when they have used ideal [radios] in looking at funded debt on the one hand and equity capital on the other.

Mr. Littman: Of course, S. E. C. approved this particular financing.

The Witness: That is correct but I believe they made some comment about the fact that they felt that the equity here was getting a little on the low side.

Mr. Littman: Where did they make comment on that?

The Witness: I think I remember seeing that, Mr. Littman. I will check it and see. I think there was some statement in the S.E.C. release to the effect that they

thought that the equity capital was somewhat low. I may [fol. 10174] be wrong but I will check it.

* * * * * * * * *

Mr. Wheat: Regardless of that, the facts are shown on Chart No. 12 of Exhibit No. 253, are they not?

The Witness: That is absolutely correct.

Mr. Wheat: That is not your opinion or the S.E.C.'s opinion or anybody else's opinion except the investors'?

The Witness: That is right.

* * * * * * * * *

[fol. 10189] By Mr. Wheat:

Q. Mr. Coffman, will you turn to Chart No. 13 of Exhibit No. 253, please?

A. Mr. Wheat, before we proceed, do you want me to answer the question that Mr. Littman left with me?

Q. Yes, I think that would be a good idea. State first what the question was so we will have it before us.

A. Before the noon recess, I had made some comment by way of answer regarding the sentiment of the Securities and Exchange Commission regarding the capital structure of Panhandle Eastern Pipe Line Company as it now exists under the consolidated condition and it was my recollection that the Securities and Exchange Commission had made some comment which would indicate that perhaps the equity of this company was approaching the minimum and Mr. Littman asked me just where, in the Securities and Exchange Commission's release, that was and in Exhibit No. 147.

My statement was predicated upon the statement made in the conclusions on page 23, the second full paragraph which I quote:

"Since the company is engaged in the business of the production and transmission of natural gas and hence is dependent upon a wasting asset, an all common-stock structure would seem to be preferable to that here contemplated. In view of the fact, however, that the ratios of [fol. 10190] debt and of debt and preferred stock to property are within reasonable limits and of the fact that

the sinking fund provisions with respect to both the bonds and the new preferred stock of the company should, if earnings are adequate, result in the retirement of all such senior securities prior to the prospective exhaustion of its gas reserves, we deem it proper not to impose any term or condition with respect thereto."

My comment that the equity under the consolidated situation was perhaps as low as it could go and my recollection that the Securities and Exchange Commission had believed that a larger proportion would be wise, came from the statement I have just quoted and particularly the first sentence where they say that—

"an all common-stock structure would seem to be preferable to that here contemplated."

Mr. Littman: You do not agree with the first sentence of that paragraph which you just read from the Securities and Exchange Commission's opinion, do you?

The Witness: In regard to the first sentence, you mean, "Since the company is engaged in the business of the production and transmission of natural gas and hence is dependent upon a wasting asset,—"?

Mr. Littman: That is right. And continuing—"an all common-stock structure would seem to be preferable to [fol. 10191] that here contemplated."

You do not agree with that, do you?

The Witness: I believe that it would be wise for the company to build up its equity position, very definitely. Whether or not it has to have an all common stock seems to me to not be too important.

What I am principally interested in is that a 32 per cent equity in a company engaged in this business seems to me to be approaching the lowest possible point for equity and the equity really should be built up rather than reduced.

Mr. Littman: Can you state yes or no whether you agree or do not agree with that sentence of the Commission's opinion?

The Witness: I should say that in any company dealing in a wasting asset, if they can finance the entire business by common stock, I would think that was preferable.

Mr. Littman: You do not think they can, do you, or should, do you?

The Witness: I do not know that I said anything to that effect any place in the record.

Mr. Littman: Look at your Chart No. 28, Exhibit No. 65, where you show your so-called ideal capital structure of 40 per cent of debt and 60 per cent of common stock.

The Witness: Well, you say [—] me "ideal capital structure." As a matter of fact, those ratios were based upon the ideal ratios that the Securities and Exchange Com- [fol. 10192] mission has been talking about and they have said, I believe repeatedly, a 40 per cent bond and 60 per cent common stock is within reason.

Now, if you can go beyond that and finance it, that is perfectly all right. My whole contention and belief in this evidence that I have submitted is that the common stock and surplus has been reduced to about as low a point as is consistent with the condition of this company.

Mr. Littman: Well, it appears that the Securities and Exchange Commission has said that the ideal capital structure for a natural gas company is an all common stock structure rather than the so-called ideal capital structure shown in your Chart No. 28. Is that correct?

The Witness: I do not think we are talking about the same thing at all, Mr. Littman. You have to start out with what is and what is [is] shown exactly in the chart that I presented in Exhibit No. 253. With the situation what it is, I do not see how it could be possible at the moment to change the capital structure to all common stock. That usually is not done. What you do is try to correct the situation as time permits and conditions enable you to do it and, therefore, I would say if you could work from what is to more in line with 40 per cent and 60 per cent, you would be working certainly in the right direction and if you could go beyond that finally to all common stock, as this company will be if the sinking funds work out and [fol. 10193] so on, for all practical purposes your trend is in exactly the right direction and I say no more.

By Mr. Wheat:

Q. Now, Mr. Coffman, will you turn to Chart No. 13 and state what is shown on that chart?

A. Chart No. 13 in Exhibit No. 253 captioned, "Cost of Financing Panhandle Eastern Pipe Line Company 1st Lien and 1st Mortgage Series 'C', Sinking Fund 3's due January 1, 1962 (offered to public on February 3, 1942)" shows a price to the public of $100.75; shows underwriting commissions of 73 cents, expenses of 60 cents, leaving $99.42 as the net price received by the company. The new Series "C" bonds carried sinking fund provisions and, therefore, had retirement prices and the retirement price graduates downward through the years to maturity from [fol. 10194] $101.25 to $100 at the last call date.

Q. Now, what do you mean by your column colored red at the right-hand side of Chart 13 in Exhibit No. 253 which you have headed, "Adjusted Yield Weight Giving Effect to Sinking Fund Requirements"?

A. It is obvious as the company issued these bonds and the bonds had sinking fund requirements and would have to be called at some price in excess of the original price or carried a premium, that that premium cost must be included with the other cost of financing. I have merely taken into consideration those sinking fund premiums and made the calculation as to what the over-all cost is on an average and that is 3.13 per cent.

Q. Now, is there anything further you want to state about Chart 13?

A. There is merely the one further remark that Chart No. 13 is supported with full details by the table supporting Chart No. 13 at the end of Exhibit No. 253 where the figures are shown and the calculations.

Q. This is purely a mathematical deduction, is it not?

A. That is right. It is purely arithmetic.

Q. Will you turn to Chart 14 of Exhibit 253 and state if that is the same as Chart No. 16 in Exhibit No. 65, except for the addition of the years 1941 and 1942?

A. Chart No. 14 captioned, "Historical Costs of Debt [fol. 10195] Capital of Panhandle Eastern Pipe Line Company—1930-1942" in Exhibit No. 253 contains similar matter to that presented in Chart No. 16 in Exhibit No. 65 with the exception of the additional material that has been presented.

Q. What is that additional material?

A. It shows the figures for the full year 1941, shows the situation as it existed in 1942, February 28, 1942, taking into consideration the consolidated facts.

Q. And the weighted average at the right-hand side is 4.85 per cent instead of 5.17 per cent, is that true?

A. Yes, that is correct and the weighting procedure is exactly the same here as I have described before. It is giving the most recent figure the greatest weight.

* * * * * * *

By Mr. Wheat:

Q. Now, turning to Chart No. 15, Exhibit No. 253, that deals with the preferred stock of the company, does it not?

A. Yes, it does.

Q. Will you state what is shown on that chart?

A. On chart No. 15 in Exhibit No. 253 captioned, "Cost of Financing Panhandle Eastern Pipe Line Company, 5.6 Per Cent Preferred Stock Offered to Public on February 3, 1942", I show the price to the public of $104 per share; [fol. 10196] the underwriting commission which amounted to $3.72; the expenses, amounting to 60 cents, and the net price received by Panhandle of $99.68. I show also, since this is a sinking fund preferred stock, the retirement price of $105.

The total price, that is, the cost including the sinking fund costs, shows the rate to be 5.86 per cent based on the net price received by Panhandle. In other words, the difference between 5.60 per cent and 5.86 per cent registers the additional cost by virtue of having to buy this preferred stock for sinking fund requirements at a premium of $5.00 per share.

Q. The table supporting Chart No. 15 discloses all of the mathematics through which you went to get your final figures, does it not?

A. Yes, it does.

Q. And is the table self-explanatory?

A. I think so. I have listed out each retirement date, the amount involved and explained through the columns how I have used one figure to the next and they are all so captioned that they should be self-explanatory.

Q. What is the cost, then, of this new preferred stock, taking into consideration these items that you have mentioned?

A. The cost will be 5.86 per cent.

Q. That instead of the 5.60 per cent which has been mentioned previously in this record?

A. That is correct.

[fol. 10197] Q. Now, apparently this 5.86 and even the 5.60 are well above the 4.5 per cent that I think was mentioned earlier in the record, is that true?

A. I recall and tried to refresh my memory about the prior discussion that reference was made during the testimony on Exhibit No. 65 to the Exhibit No. 147 which is the Securities and Exchange release and I was asked a question as to whether I had been aware of the fact that certain offers had been made by bankers for a 4½ to 5 per cent preferred stock. In Exhibit No. 147, there is a statement on page 9 carrying that fact and I quote:

"In July, 1939, however, offers were made by banking groups to market a cumulative non-convertible, non participating preferred bearing dividends of 4½ to 5 per cent, the proceeds of which could be used to retire the Class A stock."

Then, as we were discussing that, I think I was asked what I thought this new preferred might sell for, whether or not it could come out at around 4½ per cent and, at the time of the hearing, the bids were opened but they were not opened when I was asked the question but it shows, since we now have the facts on the situation, what the actual cost is as against the presumption, that perhaps 4½ per cent preferred stock could have been sold.

Q. Well, I believe you made some statement at the time [fol. 10198] you were examined that you did not believe a 4½ could be sold?

A. That was my general statement, that I felt certain they could not sell a 4½ per cent preferred although I said that if there were sinking funds and so forth involved, it would make a different type of preferred than had been discussed before and those provisions might have some bearing but, even so, I did not think that it would be possible for this company to sell a 4½ per cent preferred stock.

Q. Now, isn't it a fact, Mr. Coffman, that this Chart No. 15 and the four or five subsequent charts in Exhibit No. 253 have been included in this exhibit largely in order to give to Mr. Littman all the facts about this preferred stock on which he was questioning you at the time which you mentioned?

A. Well, that is generally correct, because of the prior discussion and the fact that I did not know what the specific rate might be and thought it wise to wait until the bids were opened. We now have the actual history and, instead of making some conjecture about it, can determine exactly what happened.

* * * * * * * * * * * *

[fol. 10199] Q. Then you arrived, mathematically, at a cost of 5.86 per cent, did you, for this preferred stock?

A. That is correct.

Q. That is the cost to the company, is it, at the present time?

A. That will be the cost to the company over the years.

Q. All right.

Now, I take it from Chart No. 16 that that is merely a showing of the 1936-1942 items and the weighted average of historical costs of preferred stock capital, isn't that true? A. Yes, that is correct.

Q. It shows a weighted average of 7.46 per cent, is that correct?

A. That is what is shown in Chart No. 16 in Exhibit No. 253.

Q. Will you turn to Chart No. 17 in Exhibit No. 253 and state what is shown in that chart?

A. The information shown in Chart No. 17 in Exhibit No. 253 captioned, "Record of Sales of Panhandle Eastern Pipe Line Company 5.60 Per Cent Preferred Stock to Public—February 4 to March 30, 1942—Public Offering Price—$104 Per Share", is a new exhibit. There was no [fol. 10200] such data or similar data in Exhibit 65.

Q. It was not available then, was it?

A. It was not available so what I have shown on the one portion captioned, "Report to Dealers and Selling Group Members" is a memorandum which was circulated to the

participating group by Glore, Forgan & Company and Kidder, Peabody & Company as of March 30, 1942.

Q. Who were they?

A. They were the bankers who accepted the original offer to make to the public or rather had their bid accepted in order to secure the issue.

Q. In connection with this new preferred stock?

A. That is correct.

Q. Proceed.

A. This memorandum states:

"To Dealers and Selling Group Members:

"It has been our policy to keep you advised of sales progress and we have sent you reports covering certain dates. We again give you below the sales totals as reported to you previously together with the figure of this date"—

The bankers are there talking about how the sales of the 150,000 shares were going.

On February 4, which is the date of the sale, 74,000 shares were taken or sold.

[fol. 10201] Q. Out of 150,000 total?

A. All these figures relate to the 150,000.

Q. Yes.

Mr. Littman: Pardon me, may I interrupt to ask whether the firm of Glore, Forgan & Company and Kidder, Peabody & Company were the same firms that handled the bonds as well as the common stock?

The Witness: I think that is correct, both firms were in on it.

Mr. Wheat: I assume by that that you mean they bid on both bonds and the preferred stock and secured the bid?

Mr. Sperry: They were successful bidders.

Mr. Littman: The picture on the over all deal is not presented here?

The Witness: No, sir, this is the preferred stock only.

Mr. Wheat: We have already discussed the bonds, have we not?

The Witness: I have shown the facts on the bonds and the bonds were sold but the preferred stock is the question.

By Mr. Wheat:

Q. All right. Now, go ahead and tell us what is shown by Chart No. 17?

A. Well, on February 7, it is indicated by this report [fol. 10202] dated March 30, 1942, from Glore, Forgan & Company and Kidder, Peabody & Company to dealers and selling group members that an accumulated total of 83,000 shares had been sold;

On February 14, the total had increased to 93,000 shares;

On February 19, the total had increased to 97,000 shares;

On February 28, the accumulated total had reached 103,000 shares;

On March 14, the total was 110,000 shares, and

On March 30, it was 115,000 shares.

Q. Mr. Coffman, have you taken those figures and those dates and so broken them down by an analysis that you can tell us the average daily sales throughout the period that is covered?

A. Yes, I have. That is also shown on Chart No. 17 in Exhibit No. 253.

Q. What does that show?

A. Well, in the section captioned, "Analysis of Sales February 4, 1942, to March 30, 1942", I show a series of columns; one including the date; the next column showing the trading days, excluding Sundays and holidays; the next column showing shares sold during each period; and the fourth column showing daily average sales.

This shows that after the first initial sale of 74,000 shares, the average daily sales declined 3,000 shares.

Q. What do you mean "declined"? You mean it was [fol. 10203] 3,000 shares during the period February 5 to 7, do you not, Mr. Coffman?

A. I mean to say that, in computing the daily average, a decline in the average daily sales is shown from one period to the next in which these calculations were made.

Q. Yes. Fine.

A. And I want to make clear that the 74,000 shares really is not a daily average because that was the sum total that went out all at once at the opening of the offer, went out on the first day of the sale and then thereafter, the shares sold during each of these periods was taken to find out what the average daily sales would be and those average daily sales declined from 3,000 to 2,000, 1,000, 857, 583 until, as of March 30, the average daily sales had shrunk to 385.

Q. That is true for that fourteen-day period?

A. That is true for the period mentioned.

Q. How many shares were still unsold on the first of April?

A. The number of shares that remained unsold as of April 1, 1942, was 35,000 shares.

Q. Well, what happened on the second of April?

A. In Chart No. 18 in Exhibit No. 253 captioned, "Price to Public of Panhandle Eastern Pipe Line Company 5.6 Per Cent Preferred Stock Reduced on April 2, 1942—Former Price—$104 Per Share—New Price—$100 Per Share;". In other words, the bankers had dropped the [fol. 10204] price $4.00 per share and in this chart is a telegram which states:

"The following is a copy of wire sent to selling group dealers today—

"'You are hereby notified that selling agreement dated February 4, 1942, for Panhandle Eastern Pipe Line Company 5.6 per cent cumulative preferred stock is terminated effective close of business April 1, 1942 a limited amount of such stock has been made available by certain of the original purchasers for offering to approved dealers subject to confirmation by the undersigned as representatives and to your agreement that no such stock will be offered below the public offering price on and after April 2, 1942. The public offering price will be $100 flat—a concession of $1.50 per share will be allowed to you on stock confirmed to you provided such shares are not repurchased for the

account of the several purchasers in the market at or below the public offering price of $100 flat prior to May 15, 1942, or such earlier date as we may determine.

"Stickers for all prospectuses used hereafter may be obtained from the undersigned."

So that this chart shows that as of April 2, the bankers realizing and experiencing what is shown on Chart No. 17 in regard to this slowing up process in the sales in spite of all the effort they put on to sell the issue, decided that if [fol. 10205] they dropped the price $4 per share, it might be somewhat more attractive to the investing public.

Q. By the way, that telegram was signed by Glore, Forgan & Company and Kidder, Peabody & Company, is that true?

A. Signed by Glore, Forgan & Company and Kidder, Peabody & Company.

Mr. Littman: That did not cost the Panhandle Eastern anything, did it?

The Witness: To answer your question, that did cost the company something in this respect, not in dollars, but it is my firm conviction that if this company wishes to issue securities and has any more experiences like this, it is going to be an unpalatable type of security so far as the investing public is concerned.

Trial Examiner: Mr. Coffman, isn't it true that the market right now is the lowest in volume since 1933?

The Witness: I think, generally, that is correct, Mr. Crosby. I do not have the specific figure.

Trial Examiner: And there has been a rapid and alarming deterioration of that market from February 4 consistently to this date?

The Witness: The market, generally, has been declining over a period, including the February 4 period, down to date. That is true.

Trial Examiner: What you have said about the effect of [fol. 10206] this market on these securities would not then necessarily be confined to these securities?

The Witness: With this exception, Mr. Crosby, that here as I see it, we have a new issue and various banking groups bid for it on a closed or sealed bid basis and at the time they did and they certainly must have made some study, they felt that 5.60 per cent basis seemed to approximate what they could do in the way of selling this particular type of preferred stock but subsequent facts have indicated that they could not.

Now, I draw the distinction between a new issue and shares that you can go into the market and buy because these brokers and dealers went directly to their customers to sell the stock and the people bought it at $104 a share but before they have had this stock a month and a half, the bankers who originally sold it to them dropped the price $4. I [illegible] a banking group or a group of brokers on a new issue has very many experiences of that kind, they no longer hold their particular investment clientele as distinguished from being a broker where people call up and say for them to buy so many shares of this, shares already in the market. That is the distinction I want to draw between a new issue and a broker's office where people would call up and say for them to buy ten shares or twenty shares of General Motors or anything else.

Trial Examiner: Nevertheless, this is an abnormal market?

The Witness: That is true but this is part of the financing. We have to take the capital markets as we find them when we do the financing.

By Mr. Wheat:

Q. As a matter of fact, Mr. Coffman, even after the price was thus dropped by the bankers, all of those remaining 35,000 shares have not been sold, have they?

A. No. In Chart No. 19 in Exhibit No. 253 captioned, "Record of Sales of Panhandle Eastern Pipe Line Company 5.60 Per Cent Stock to Public—April 2 to April 10, 1942—Public Offering Price—$100 Per Share", I show that the number of shares unsold on April 1, 1942, when the price was reduced from $104 to $100, was 35,000 shares.

The shares sold from April 2 to April 10, 1942, at the reduced price of $100 were 20,000 shares so that the shares

unsold on April 11, 1942, after seven trading days at the reduced price of $100 was still 15,000 shares.

Q. Can you state any later data on that subject?

A. Yes, I asked to have a wire sent me this morning in regard to what the remaining shares were and I have a telegram dated April 17; 10:33, signed by Glore, Forgan & Company addressed to me which reads as follows:

"Response your inquiry most recent check indicates unsold balance of shares of Panhandle Eastern Pipe Line Company 5.60 per cent preferred set aside for dealers plus [fol. 10208] additional shares in hands of underwriters totals in excess of 12,500 shares";

So apparently it is about the same 15,000 shares at the time I checked it last.

Q. Now, have you shown on Chart No. 20 what the effect of these various changes is?

A. In Chart No. 20 in Exhibit No. 253 captioned, "Assumed Cost of Financing Panhandle Eastern Pipe Line Company 5.60 Per Cent Preferred Stock Based on Present Price to Public of $100 and Assumed Price to Company of $95.68" I have concluded that the original offering price was too high and presumably was too high by $4 so I have taken $100 as the price to the public. The underwriting conditions would have remained the same at $3.72; the other expenses of 60 cents would have remained the same, making the assumed net price to Panhandle $95.68 in comparison with the original price which was the actual amount to the company of $99.68 as shown in Chart No. 15. The retirement or call price would have remained the same at $105.

On this basis, making the same calculations as I did before in regard to the sinking fund requirements or calling the preferred stock at a premium, would indicate that 6.24 per cent comes closer to approximating the actual cost on that preferred stock today than did either the 5.60 per cent on which the bids were opened or the 5.86 per cent [fol. 10209] which I calculated in Chart No. 15.

235—12,466

Mr. Lee: Now, Mr. Coffin, will you pardon me if I interrupt here?

Mr. Wheat: I think this is a proper time. We have finished our general discussion on this preferred stock and I think it would be very well—

Mr. Littman: (Interposing) Mr. Lee, I just want to make this observation if I may, in connection with an alleged response by this witness to an alleged inquiry that I made with respect to the preferred stock.

I would like to state that we did not request any further information with respect to the history, the rather sordid history, I should say, of this preferred stock of Panhandle Eastern. We have at all times been in full possession of all the facts.

I would like to point out that the Securities and Exchange Commission in its opinion which is in evidence as Exhibit No. 147 at page 26 said:

"Since April of 1937, various proposals have been made to refinance this Class A stock, all of which is held by Columbia Oil. These proposals and attempts to put out such a refinancing have failed and the history of that failure is a significant indication of Columbia Oil's control over Panhandle Eastern."

[fol. 10210] Now, we have the situation here where this witness is now stating that it has cost Panhandle Eastern close to 6.24 per cent for the refinancing of its preferred stock. This, in the face of the Securities and Exchange Commission's statement at page 9 of its opinion which is Exhibit No. 147 in this case:

"In July, 1939, however, offers were made by banking groups to market a cumulative, non-convertible, non participating preferred bearing dividends of 4½ to 5 per cent, the proceeds of which could be used to retire the Class A stock."

In other words, we claim that it requires a great deal of gall to come in here and claim an extra 1½ per cent of cost for preferred stock and to saddle that 1½ per cent on the rate payer today when the evidence in this case clearly

shows that Panhandle Eastern could have, but for the misdeeds and sins of its parent, Columbia, refinanced this stock at least 1½ per cent below that cost.

Mr. Wheat: Mr. Littman, we certainly are not interested in arguing this case now. If you want to go ahead—but I will say this to you—you will not deny this cost, will you?

Mr. Littman: We certainly shall contend—

Mr. Wheat: (Interposing) You will not deny the dollars of cost, will you?

Mr. Littman: We certainly shall contend that this extra 1½ per cent of cost foisted upon this company by reason [fol. 10211] of the sins of its parent should not be borne by the rate-payer, as this witness contends.

Mr. Wheat: Do you deny this cost?

Mr. Littman: Yes, sir, for purposes of this proceeding.

Mr. Wheat: For purposes of any proceeding, do you deny these dollars are being paid and have to be paid?

Mr. Littman: It is being paid because of the sins of the parent.

Mr. Wheat: It is being paid, is it not?

Mr. Lee: It is right on that point—

Mr. Wheat: (Interposing) I am not going to argue this case now but I do not think we ought to have that kind of remarks in this proceeding at this stage.

Mr. Littman: Wherein have I not spoken the truth?

Mr. Wheat: You have not spoken the truth when you have intimated there has not been this cost and, only after many questions that I asked you, have you said there has been this cost.

Mr. Littman: Of course, there is this excessive cost which was occasioned by reason of the misdeeds of the parent company.

[fol. 10212] By Mr. Wheat:

Q. Mr. Coffman, will you turn to your Chart No. 21, in Exhibit No. 253, and first state whether this chart, in effect, brings down to date the respective Charts 19 and 20 which were included in Exhibit No. 65?

A. Yes, it does.

Q. What does it generally show?

A. Chart No. 21 in Exhibit No. 253 captioned, "Earnings—Price Ratios of Natural Gas Pipe Line Company Common Stocks—1937-1941" shows the earnings-price ratios for each of the years mentioned on the El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Northern Natural Gas Company, Southern Natural Gas Company and Panhandle Eastern Pipe Line Company.

Q. I believe you explained previously why you chose those particular companies; did you not?

A. That was explained in connection with the discussion of Chart No. 19 in Exhibit No. 65 and all I have done is proceeded to add on the full year 1941 which could not be done at the time Exhibit No. 65 was prepared.

At that time, as shown in Chart No. 20 in Exhibit No. 65, I had to use interim figures covering January 1 to August 31, 1941. In Chart No. 21 in Exhibit No. 253, I [fol. 10213] have the full year figures and there, because of questions that were asked before, I have shown both the simple average and the weighted average right in the chart so the figures would be available.

Q. Whether anyone asked you to do that or not, you have done it, haven't you?

A. That is correct.

Q. And you now show it both ways?

A. I show it both ways.

Q. Yes. What would you say with respect to what is shown by the data which you have been able now to include for the year 1941?

A. Chart No. 21 in Exhibit No. 253 shows, if you refer to the average figures, whether they be simple averages or weighted averages, that the common stocks are still showing 12 per cent. The figures for 1941 indicate that, for the individual companies, there was smoothing out of differences from one company to another as existed in some of

the prior years but the important thing is that, over the five-year period, these data indicate that, so far as the averages are concerned, they are running along the same levels.

Q. I think you were questioned before concerning something about Southern Natural Gas Company. That has come down, hasn't it?

A. Southern Natural Gas Company is bar No. 5 in each of these boxes and the figure has come down from a level of [fol. 10214] 21.60 per cent in 1939 to 14.73 per cent in 1941.

Q. Now you were also questioned, I believe, at some length about Interstate Natural Gas Company. What happened to that? And you were questioned about Memphis Natural Gas Company. What happened to that?

A. Interstate Natural Gas Company is the second bar in each of the boxes and that was at a low of 8.90 per cent in 1939 and increased so that, in 1941, it was 10 per cent.

Q. It was at a really lower low of 8.67 in 1940, wasn't it? A. That is correct.

Q. In other words, those extremes are apparently leveling out some, are they not?

A. That is what the box showing the 1941 figures would indicate.

Q. But I think you have said that although there is this general evening out, that 12 per cent remains as the investors' appraisal of risks in these stocks.

A. That is what the data on the averages here would indicate.

Q. And would you say, as you have already put it today, that this is what investors actually demand?

A. I have merely recorded here the earnings-price ratio which is an objective test, merely saying what the investors are saying about these common stocks of these companies [fol. 10215] listed.

Mr. Littman: Are those judgment figures?

The Witness: No, this is just arithmetic.

Mr. Littman: I meant the 12 per cent.

The Witness: The 12 per cent, I have just used a round figure based on these averages shown here which are either, depending on which average you use, above 12 or a little below it.

Mr. Littman: In other words, the 12 per cent, as I understand it, represents your judgment based upon these data shown in Chart No. 21?

The Witness: That is correct and I come to a chart in which I make that point.

Mr. Wheat: Well, but the simple average in 1941 was 12.70 per cent and the weighted average was 11.98 per cent, was it not?

The Witness: That is correct.

Mr. Lee: Pardon me, I would like to ask a question.

Mr. Wheat: Yes.

Mr. Lee: Is this 12 per cent, is that the average return earned on the common stock of these companies?

The Witness: That is the relationship of the price, the quoted market price to the earnings. In other words, it is the amount that the investors now are having by way of yield on the securities, the common stock.

Mr. Lee: And yet with that condition, you say you are [fol. 10216] claiming that the underwriters cannot dispose of the balance of the stock?

The Witness: Of course, we are talking about two different things. We were talking about the preferred stock and here we are talking about common.

Mr. Lee: Yes, but which is the better offer, the preferred or the common?

The Witness: Well, you cannot make a comparison of that kind because the 12 per cent may represent what the investor actually says he is willing to invest money at at this particular time and this particular risk but the investor, as I have shown in the preceding charts related to preferred, so far as 5.60 per cent preferred stock with sinking fund provisions, he does not like it so that means the 5.60 was too low. Otherwise, the preferred stock issue should have sold in a few days and certainly in not more than a couple of weeks.

By Mr. Wheat:

Q. Now, will you turn to Chart No. 22 and state what that shows and how that refers back to your Chart No. 21?

A. Chart No. 22 in Exhibit No. 253 captioned, "Average Earnings-Price Ratios of Natural Gas Pipe Line Company Common Stocks—1937-1941" merely summarizes the figures, the average figures which are shown in Chart No. 21. In other words, I merely wanted to make the average [fol. 10217] figures clear so that the weighted average on what would be termed the weighted average of simple averages shows 13.31 per cent for the five-year period, 1937-1941, both inclusive, and the weighted average shows 11.96 per cent for the same period.

Q. As a matter of fact, as we look across these two subcharts of Chart 22, there are relatively small fluctuations over the five-year period, is that not correct?

A. I would say that the fluctuations shown therein are very small. I think the widest one shown involves a point and a half, from one year to another.

Q. Do you consider that fact significant?

A. It indicates to me that the period 1937 to 1941 apparently has not had any peculiar circumstances surrounding it. I mean a five-year period in which the figures all fall within a point and a half of each other would indicate some degree of normaley about this particular phase of the problem.

Q. All right.

Now, turn to Chart No. 23 and state just what that shows.

A. Chart No. 23 in Exhibit No. 253 captioned, "Accepted Earnings-Price Ratio for Panhandle Eastern Pipe Line Company Common Stock" shows 12 per cent which is the figure I took to represent what the investors' appraisal is for common stocks of a natural gas pipe line company and that figure was accepted because of the data shown in Charts Nos. 21 and 22 which indicated that to be the round percentage representing the investors' appraisal of the [fol. 10218] risks connected with common stocks in the natural gas industry.

Q. As a matter of fact, Mr. Coffman, this does not include any amount for costs of financing common stocks, does it, or anything of that sort?

A. No, this is based upon the quoted market prices and the earnings and has not anything to do with new issues that came out or the cost thereof.

Q. You simply used the earnings price ratio and taken this directly from those?

A. That is correct.

Q. In this business during the past five year period?

A. In this industry during the past five year period.

Q. In this industry?

A. That is correct.

Q. Now, will you turn to Chart No. 24 and state what that shows?

A. Chart No. 24 in Exhibit No. 253 captioned, "Minimum Earnings Required for Common Stock of Panhandle Eastern Pipe Line Company" shows the total amount of common stock and surplus as of February 2[illegible]42, which is the consolidated figure in the amount of $28,574,090 and, to that, I have applied the 12 per cent ratio which shows that the amount of earnings required for the common stock and surplus would be $3,428,891.

[fol. 10219] Q. All right. Now, that is purely an arithmetical calculation?

A. That is merely multiplying the $28,574,090 which is taken from Mr. Watkins' exhibits by the 12 per cent which I have just secured from the preceding exhibits to give me this resulting figure of $3,428,891.

. . . . . .

Mr. Littman: (Interposing) Pardon me, Mr. Wheat, I would like to ask a clarifying question with respect to Chart No. 23.

Did I understand you to make a statement in connection with this 12 per cent, the earnings price ratio for Panhandle Eastern Pipe Line Company common stock, that it did not include the cost of financing or that it did include the cost?

The Witness: It did not. In other words, it is based on quoted market prices as given over the Exchanges in comparison with the earnings available. In other words, all these securities I am using, you see, are not new issues so I have no opportunity to calculate cost of financing. I am merely taking the stocks on the market and their prices.

Mr. Wheat: At least you did not calculate any cost of financing and add them on?

The Witness: I had no way to make such a calculation.

Mr. Littman: Do you show anywhere in your exhibits the cost of financing the common stock?

[fol. 10220] The Witness: The only one that I had available to me was the one that I showed in Exhibit No. 65 in regard to that Northern Natural issue.

Mr. Littman: I recall that.

The Witness: That is the only one.

Mr. Wheat: That is shown, is it not, on Chart No. 21 of Exhibit No. 65?

The Witness: Yes, that is correct, Chart No. 21 of Exhibit No. 65.

Mr. Littman: Apparently you do not consider it necessary to show the cost of financing of common stocks and the effect on the earnings requirement?

The Witness: I think it is very good if you have the figures to do it but, if you do not have the figures to do it, you cannot do it.

Mr. Wheat: At any rate, you have not done that and, therefore, you have not added anything in to your 12 per cent for that item?

The Witness: No, and the point must be true without calculations that if you took out costs of financing, the percentage would be higher rather than lower, obviously, because you would make the calculation then on the net price to the company.

Mr. Littman: Mr. Coffman, I would like to have you clear me up on this point. Is it or is it not necessary, for [fol. 10221] purposes of these studies which you have submitted, to take into account the cost of financing with respect to the common stock?

The Witness: If I could get the figures, I would make such calculations.

Mr. Wheat: But it would increase your 12 per cent to something higher than that, would it, not?

The Witness: That is correct. The point is that there have not been many new issues. The Northern Natural was the one most recent to the date of the case at the time we were having the last hearings and there is no way that I know of, until such issues come out, that you could make such calculations and I do not see, on an issue which came out many years ago, where it would be pertinent now. If you could get a new issue and make your calculations now, that would be the very best test you could get.

Mr. Littman: It seems to me it is my recollection when you testified when you were last on the stand under cross-examination, that your 12 per cent included the cost of financing the common stock. Is my recollection correct?

Mr. Wheat: I think, if you are going to ask him a question like that—I have no such recollection—you ought to cite chapter and verse because I am quite sure it is not in the record and I just now asked if he did it in this calculation and he has answered, "No".

[fol. 10222] The Witness: The earnings-price ratios are used throughout. There is no way that I have of making such calculations. Where there were issues available, new, such as this preferred or the common stock of Northern Natural, obviously with all facts available, I could do it.

Mr. Littman: The record speaks for itself. I merely wanted my recollection refreshed. Inasmuch as I have this impression, I thought perhaps he might clear me up on it.

The Witness: I do not believe I said anything like that. I would have to read the record myself.

By Mr. Wheat:

Q. Mr. Coffman, if you used earnings-price ratios, as such, and adopted your 12 per cent both before and now from earnings price ratios, as such, then clearly you did not include any cost of financing the common stock, did you?

A. That is a correct statement.

Q. Now, turn to Chart No. 25 of Exhibit No. 253 and state whether that is, in general, similar to Chart No. 26 in Exhibit 65 except, of course, that it applies to Panhandle Eastern Pipe Line Company as it now exists. Is that correct? A. Yes, that is correct.

Q. Would you say that the $5,325,677 which you have labeled, "Earnings Required to Maintain Credit Position" compares with the $5,077,648 marked or labeled, "Earnings Required to Maintain Quality" in the earlier chart?

[fol. 10223] A. Yes, I think it compares with that figure.

Q. How did you arrive at that figure of $5,325,677?

A. In Chart No. 25, Exhibit No. 253, captioned, "Minimum Earnings Required to Maintain Credit Position of Panhandle Eastern Pipe Line Company", I show, as of February 28, 1942, the total invested capital of $77,830,535. Included in that total invested capital were bonds in the amount of $33,256,445 and I had already shown that the cost was 2.88 percent for that portion of capital, so I merely took 2.88 per cent of the bond total to ascertain what was required for that part of the capital structure, so far as the investor was concerned. In the total invested capital was preferred stock in the amount of $16,000,000 and I applied the rate to that, the rate I have discussed, of 5.87 percent.

Q. What was that?

A. That is the cost of the preferred stock.

Q. To Panhandle Eastern Pipe Line Company, is that correct? A. That is correct.

Q. All right. What else did you do?

A. And then I applied the 12 per cent figure to the equity of $28,574,090 and took the sum of those three multiplications which gave me a total of $5,325,677 which I called the earnings required to maintain credit position on that basis.

Q. Now, how does Chart No. 26 in Exhibit No. 253 dif-

[fol. 10224] fer from Chart No. 25?

A. Chart No. 26 in Exhibit No. 253 captioned, "Minimum Earnings Required to Maintain Credit Position of Panhandle Eastern Pipe Line Company Based on Actual Cost of Bonds and Investors' Appraisal of Preferred and Common Stock" differs from the data in Chart No. 25 to the extent that I took the 6.23 per cent which is what the

current market conditions are evidencing in regard to the preferred stock and applied that as the investors' appraisal. The total earnings required by that change were $5,382,677 and that figure, in my opinion, represents the earnings that are required by the company to maintain the credit position.

Q. All right.

Now, will you turn to your Chart No. 27, Mr. Coffman, and state first why you included this and the succeeding five charts in Exhibit No. 253 and then state what Chart No. 27 shows?

A. In Exhibit No. 253, I present a series of charts covering, from Chart No. 27 through Chart No. 35, on money rates and the trend of money rates and the purpose of inserting these charts was to show that there has been, in the earlier years, a downward trend, a very substantial downward trend in money rates but that, in the last few years, such rates have been leveling off, going from what would be termed the shortest term and best money to longer term and more hazardous money through [fol. 10225] corporate financing.

Q. I believe you answered previously in this record, in response to a question by the Presiding Examiner, that there has been a reduction in money rates over the past several years, did you not?

A. Yes, I think I mentioned that.

Q. And these charts reflect in detail what those changes have been, do they not?

A. That is correct.

Q. And show, for all these types of use of money, what has actually been the experience?

A. That is correct.

Q. Now, will you turn to Chart No. 27 and tell us in some detail what that shows?

A. Chart No. 27 in Exhibit No. 253 captioned, "Prime Money Rates Monthly, 1930 to March, 1942" shows the money rates on 60 to 90 day time loans of the New York Stock Exchange, the call loan renewals of the New York Stock Exchange and four to six months prime commercial paper. These are what you might term the shortest term and highest grade money.

The chart shows that four to six months commercial paper (prime), was carrying a rate as of February, 1942, of 0.56 per cent and that call loan renewals of the New York Stock Exchange were carrying a rate of one per cent and that 60 to 90 day time loans were carrying a rate of 1.25 per cent.

[fol. 10226] Q. Does that, in itself, show an investors' appraisal?

A. That indicates that investors are drawing a distinction between the type of loans they are making.

Q. As a matter of fact, Mr. Coffman, the spread between the three different types of paper that are shown on this chart at the present time is greater, by a considerable amount, than the spread between a similar type of paper back in 1930?

A. Well, in January of 1930, the lowest rate there applying to call loans was 4.64 per cent and the highest rate, which applied to four to six months commercial paper, showed 4.85 per cent or approximately 0.20 per cent difference.

In February of 1942, the lowest rate was, four to six months commercial paper (prime) at 0.56 per cent and the highest was on 60 to 90 day time loans at 1.25 per cent or almost 0.70 per cent spread.

Q. As a matter of fact, although there have been large reductions in the interest rates on such so-called prime money, there has been a very definite leveling out over the past few years, has there not?

A. Yes, I think the exhibit shows that pretty clearly.

Q. Now, will you turn to Chart No. 28 and tell us whether somewhat similar facts are reflected by the chart there dealing with commercial loan rates?

A. In Chart No. 28 of Exhibit No. 253, I show commercial loan rates charged customers by banks in principal [fol. 10227] cities, by months, 1930 to and including 1942 to the date of this exhibit.

Q. This also shows that there has been a considerable drop in these rates, does it not, but that there has been, over the past several years, a very marked leveling out of such rates?

A. Generally that is true. Included in the rates are rates for seven cities, eleven southern and western cities, seven other northern and eastern cities and for New York City and in recent years, there has been more of a leveling out but it still shows that rates charged customers by banks vary in different parts of the country and there is a spread as of January 1942, from 1.88 per cent to 2.99 per cent.

Q. Well, otherwise, that chart seems to be self-explanatory, does it not?

A. I think so, and the detailed indexes or figures are all in the tables.

Q. Would you say that your Chart No. 29, which deals with yields on United States Government and high grade municipal bonds also shows a reduction in general interest rates on such paper but a somewhat general leveling out over the past three or four years and also a spread of investors' appraisal of such paper?

A. I think so. Chart No. 29, showing "Yields on U. S. [fol. 1022] Government and High Grade Municipal Bonds, Monthly, 1930 to March 1942", shows short term United States Government bonds which are about 3½ years maturity, intermediate term United States Government bonds which are about 7½ year maturity; long term United States Government bonds which are anything over 20 years, and municipal bonds and, aside from the trend which has been down, but leveling out in recent years, it shows very definitely that investors are appraising those different types of monies at different risk factors.

Q. As a matter of fact, the spread of investors' appraisal is here again much greater in February, 1942, than it was back in 1930, is that not correct?

A. That is correct. The shortest term money which presumably has the least risk shows the lowest rate and the municipal bonds, which the investors believe have the greatest risk, carry the highest rate.

Q. Will you turn to your Chart No. 30 which, I understand, deals with the highest grade of industrial or corporate bonds and state what is shown on that chart?

A. Chart No. 30, Exhibit No. 253, captioned, "Standard's Highest Grade (A1 plus) Corporate Bond Yields Monthly, March 1930 to March 1942", there is a comparison of high grade corporate yields between industrial

bonds, railroad bonds and public utility bonds and that shows in February of 1942 that industrial bonds carried [fol. 10229] the lowest rate, public utility bonds carried a higher rate and the railroad bonds carried the highest rate of those three. In other words, investors were continuing to exercise their appraisal as between these different types of investments as a class.

Q. Here again, do we find that the spread of that appraisal in 1942 was greater than it was in 1930?

A. Yes, it is.

Q. As a matter of fact, during such period as 1936, the spread was very, very slight, was it not?

A. Yes, it was less than since, beginning around 1938.

Q. On these highest grade A1 plus corporate bonds, is the composite figure now 2.88 per cent?

A. That is correct. That is just the composite index figure of the industrials, public utilities and railroad bonds.

Q. Here again do we find that, as Examiner Crosby pointed out when you were on the stand before, there has been a considerable drop in interest rates over the years?

A. That is shown here.

Q. But does it also appear that there has been a rather general leveling out of such rates over the past two or three years?

A. I think that is indicated in the chart.

Q. Now, will you turn to Chart No. 31 and state what is shown there?

[fol. 10230] A. In Chart No. 31 of Exhibit No. 253 captioned, "Standard's Corporate Bond Yields By Quality Rating Months, 1937 to March 1942", is shown the yields on various quality groups, Composite A1 plus, A1, A, B1 plus, B1 and B.

Q. What do you mean by those letters?

A. Those are the ratings that are assigned because of the peculiar situation of a bond, so far as a number of tests are concerned and the bond that is in the best position, from the standpoint of its relation to earnings, interest coverage and so forth, carries the highest quality rating, A1 plus, and so forth. They are graduated downward in the various quality rating scales as their position is less worthy than the higher grade bonds.

Q. Well, throughout this chart over all the years, have investors' appraisals of these various types of bonds followed very distinctly these very classes, classifications?

A. I think the chart makes that very clear. The lines have never crossed, for one thing. Secondly, the highest grade bond has always carried the lowest rate and the more speculative bond tends to get, as you approach a quality rating of B, a higher rate so that, in February and March of 1942, Composite A1 plus, corporate bonds were yielding 2.88 per cent and they graduate up the scale of per cent as the quality rating goes down so that bonds, carrying B quality ratings were demanding 6.79 per cent.

[fol. 10231] Q. In each instance, these are yields to maturity based on market prices, are they not?

A. That is correct.

Q. For every month of the chart?

A. That is correct.

Q. In other words, would it be fair to say that an average bond which, because of earnings or coverage would be classified as B1 would, in the present market, cost around 5½ per cent?

A. If the bond had no peculiar qualifications which might take it into some special class, you would assume that 5.32 per cent was approximating the type of rate the bond would have to carry if it were to find a market at the present time.

Q. And if it were so much more speculative that it would be classified as B, it would have to carry a rate of almost 7 per cent, wouldn't it?

A. As indicated here, the B quality rating carries 6.79 per cent so it would be somewhere between 6¾ and 7 per cent.

Q. Now, are similar investor appraisals of bonds in the public utility field also shown in your Exhibit No. 253?

A. Yes. Those are shown in Chart No. 32 captioned, "Standard's Public Utility Bond Yields—By Quality Rating Monthly, 1937 to March, 1942".

[fol. 10232] Q. And these carry the same types of quality rating; do they not?

A. That is correct.

Q. And the spread is between 2.77 per cent for A1 plus public utility bonds and, in February, 1942, to 6.45 per cent for Class B public utility bonds at that time?

A. That is correct.

Q. And the rest fall in between, as shown on the chart?

A. That is correct, and as the details are shown on the table.

Q. Will you turn to Chart No. 33 and state what that is and the source?

A. In Chart No. 33 of Exhibit No. 253 captioned, "Bonds, Debentures and Notes Issued by Natural Gas Companies—1936-1941", there is a tabulation taken from the Securities and Exchange Report in which they listed all of the bonds, debentures and notes issued by natural gas companies for the period mentioned. To that, in our analysis, we added certain securities which they had not included to make the list as complete as it could be made.

Q. Are those shown on Chart No. 34?

A. The list is shown in Chart No. 34.

Q. All right.

What does your Chart No. 33, in general, show?

A. Well, is shows that the average yield on bonds and [fol. 10233] debentures, based on price to public as represented by the green line, had showed a decline from 4.59 per cent, on the average in 1936, to 3.11 per cent in 1941.

Q. Is there anything you think you should state about that chart?

A. Not particularly. It indicates that the general rates have been down but even on these new issues in 1941, the rate was still a little above 3 per cent and when you look at the quality ratings for each of those issues, which I show on a later chart, you can find there are some rather wide variations in quality ratings and wide variations in investors' appraisal.

Q. You are referring, are you not, to your Chart No. 35?

A. That is correct.

Q. Will you now state what is shown on Chart No. 35?

A. In Chart No. 35 in Exhibit No. 253 captioned, "Yields on New Security Issues of Natural Gas Companies According to Quality Rating—1936-1941", I merely took the list of securities as reported by the Securities and Ex-

change Commission, added thereto some securities which were issued which they had not included and then analyzed them from the standpoint of their quality rating for each of the years.

Mr. Littman: Pardon me, Mr. Coffman, I would like to ask one question about Chart No. 34.

You have not included in that chart the Natural Gas Pipe Line Company of America notes secured by bonds [fol. 10234] issued in 1941. I wondered why you did not include those under your year 1941?

The Witness: The only answer I can give you at the moment, Mr. Littman, is that we went through all of our files and apparently we did not have the release of information on that at the time we made the study because I combed every particular copy we had in the file and I do not think I missed any so, if I do not have it, it is because we have not yet received any information on it.

Mr. Wheat: It is not in the list given by the S. E. C., is it?

Mr. Littman: I believe it was exempt from S. E. C.?

Mr. Wheat: That is what I thought, yes.

Mr. Littman: Would you please respond to this request? Will you please verify my understanding that Natural Gas Pipe Line Company of America issued, in the year 1941, something like seventeen and one-half million dollars of one and three-quarter per cent serial notes?

Mr. Wheat: We will be glad to check on that.

The Witness: We do not have it in the file. If they were privately sold, we would not have the information.

Mr. Littman: In other words, that information would not come to you through the ordinary and usual channels but will you please check and ascertain the facts?

[fol. 10235] The Witness: Yes, I will see if I can get the facts.

Mr. Littman: That is about as low a cost of financing funded debt as you know, is it not, for a natural gas pipe line company, 1¾ per cent?

The Witness: I would say that was.

By Mr. Wheat:

Q. Let's go back to Chart No. 35, Mr. Coffman. Will you go ahead and state what is shown on that chart?

A. I think I had already stated I took the list as shown in Chart No. 34 and broke it down according to quality ratings for each of the years. I do not think it is necessary to go through each year. If I explain one, you will get the idea of how the table is made up.

In 1936, this indicates that the securities which were issued, one issue carried an A rating, the per cent of which was 4.18 per cent and that is at the top of the box and the rating is below with the per cents shown at the top of the bar. There were four issues of B1 plus carrying a rate of 4.59 per cent. There were two issues carrying a rating of B1 and a per cent of 4.80 per cent and two issues carrying a rating of B and a per cent of 4.91 per cent.

In 1937, it is evident there were four issues but only one quality rating. The four issues that came out carried B1 plus and a per cent of 4.31 per cent so that, as you go through each of the years analyzing these new issues, not [fol. 10236] generally but more specifically as to their quality rating a person can then get a better idea of what the investor was saying about those particular securities.

Q. Are these quality ratings well recognized things in the financial markets?

A. Well, quality ratings are at least 25 years old, if not older and, secondly, banks are very definitely regulated in regard to bonds so that if they buy certain bonds which carry a rating of less than B, they are immediately classified as substandard and speculative and they do not qualify for bank investment so, for any bond to carry a quality rating for bank investment, it must be rated B1 plus or better so that gives a pretty good idea of the importance of ratings.

Q. That importance is clearly shown, is it not, for example, in 1941, in the difference in cost between the four B1 plus issues and the one B1 issue there?

A. That is correct.

Q. And the A1 issue in 1941 had the highest rating and, as was to be expected, the lowest in cost?

A. That is correct. The ratings are one measurement of the risk that is involved and the greater the risk, the greater the rate has to be.

Q. Now, will you turn to Chart No. 36 and state how that chart discloses, graphically, what you have just been [fol. 10237] saying with respect to ratings of bonds?

A. In Chart No. 36 of Exhibit No. 253 captioned, "Ideal Earnings Coverage Ratios for High Grade (A Group) Natural Gas Company Bonds as Submitted to the New York State Bankers Association for Qualifying High Grade Bonds", in 1939 at the annual meeting of the New York State Bankers Association, they were trying to refine their processes of classifying bonds to enable bankers to be better safeguarded in their investment and these ratios here shown in Chart No. 36 show two methods of checking the position of a bond, particularly as it relates to natural gas company bonds.

On the left-hand side, it shows the fixed charges times earned and there, we are not referring to a single year but, as shown in the note, considering an average for the last six years with latest year results at least as good as average. Retail distributors in the gas field, 3.5 times—

Q. (Interposing) This is for the A rating?

A. This is for the A group as shown in the caption.

For integrated companies, 4 times; for pipe line wholesalers, 4 times.

Another check is that made by considering the income available for fixed charges to par value of fixed debt, and here again, as explained in the note, it is the average for the last six years with latest year results at least as good as average.

[fol. 10238] Q. What are those particular percentages?

A. For retail distributors, 14 per cent; integrated distributors, 16 per cent; pipe line wholesalers, 16 per cent.

Q. Now, may I ask, Mr. Coffman, whether either one of these two tests of bonds carry a greater weight in the rating or are both important and essential?

A. No, the Association uses the ratings and the investors look at them or we use them to advise investors. We look at both.

Mr. Littman: Will you submit to us the source of the data and information shown in Chart No. 36?

The Witness: Well, I can give you one source now. The original discussion is in the Annual Proceedings of the New York State Bankers Association for 1939 but, in our own service, we have taken all of this out and I can leave this copy with you which is Standard's Corporation Records, Current News Edition T to Z, Special Table Section in which, on page 5, there is a section captioned, "Bond Quality Yardsticks" and this explanation:

"In the spring of 1939, the New York State Bankers Association pioneered a new approach to the problem of determining the relative suitability of individual bonds for inclusion in bank bond accounts. Standard & Poor's Corporation has had the privilege of working in close cooperation with the Bond Portfolio Committee of this Association in establishing, for this purpose, concrete meas-[fol. 10239] ures of bond quality", and then a detailed explanation of these items is given so I think that should answer your question.

Mr. Wheat: Does that show these figures that you have shown on Chart 36 of Exhibit No. 253?

The Witness: Yes, on page 9, the discussion begins on natural gas companies and runs over on to page 10 and the per cents shown in here are contained in the written matter on page 10.

Mr. Littman: Are you saying that the New York State Bankers Association specifically discussed pipe line wholesalers?

The Witness: No. At the Proceedings in 1939, they developed this method of ratios to test bonds and worked out a formula and that formula we have applied throughout all bonds. They did it on one series. We worked it out on all series for them.

Mr. Littman: By pipe line wholesalers, do you mean natural gas pipe line wholesalers or others?

The Witness: No, I would include all natural gas pipe lines.

Mr. Littman: But does that mean that it would include other pipe line wholesalers as well, such as oil?

The Witness: No, this is talking about natural gas here altogether.

Mr. Littman: In other words, the "Pipe line wholesalers" refers specifically to natural gas?

[fol. 10240] The Witness: Well, that is stated clearly in the caption there, Mr. Littman.

Mr. Littman: I see.

Now, what do you mean by "integrated"?

The Witness: That is where a pipe line might be performing two functions, part of it is wholesaling and some other portion of it retail distributing.

Mr. Littman: And the bankers do not show any difference in risk as between the "integrated" and "pipe line wholesalers" as you do in your study of investors' appraisal of risks?

The Witness: For integrated and pipe line wholesalers, so far as ratios are concerned, there is no distinction drawn, so far as this formula is concerned, that is true, but this is not the investors' appraisal that I have been talking about. This is merely a guide that they are using as to a quality yardstick that must be met to qualify a bond on a quality rating.

Mr. Wheat: May I suggest, Mr. Coffman, the retail distributors are given a different percentage and times earned, are they not, as compared to the pipe line wholesalers and the integrated companies?

The Witness: Yes, there is that difference but I said there was no difference between integrated and pipe line [fol. 10241] companies.

[fol. 10242] By Mr. Wheat:

Q. Mr. Coffman, will you turn now to your Chart No. 37 and state what that shows?

A. In Chart No. 37 in Exhibit No. 253 captioned, "Debt Coverage Ratios for El Paso Natural Gas Company Actual and Adjusted to a 6½ Percent Rate of Return", I have taken the El Paso Natural Gas Company and the total invested capital as shown by the books, which amounted to $23,748,010, invested capital here being computed on the basis of the net debt, preferred stock, common stock, and surplus.

In the second column, I show the actual dollar return on invested capital which amounted, according to the company's report, to $2,610,478. Then I applied 6½ percent to the total invested capital of $23,748,010, which gave an assumed return of $1,543,621. The bonds outstanding of the company carried actual fixed charges in the amount of $415,877.

Q. What were the ratios to be found from those figures?

A. In the second column, I show the actual computation of the ratios which would, on their reported earnings, show that fixed charges were earned 6.28 times and that the income available to par value of debt was 21.80 percent.

Q. Now, in your next group of two bars, I notice it is headed, "Actual Ratios." Didn't you mean "Ideal Ratios"?

A. Those were the ratios discussed in Chart No. 36 dealing with the New York State Bankers Association.

[fol. 10243] Mr. Littman: Should we correct our exhibit, Mr. Wheat?

Mr. Wheat: Yes.

. . . . . .

By Mr. Wheat:

Q. Now, you have shown those same ratios and times earnings in that group of two bars that you showed on Chart 36, haven't you?

A. Yes, that is correct.

Q. Now, what are the last two bars on this Chart No. 37?

A. Well, I have taken the assumed return on the 6½ percent basis of $1,543,621, used that for the basis of the calculation in which case the fixed charges would then be earned 3.71 times and the income available to par value of debt would then be 12.89 percent.

Q. What does that figure show you?

A. It would indicate that in that return both the times earned and the income available to par value of debt would be lower than the ideal ratio which would indicate [fol. 10244] that the ratings on the bonds would be lowered, and, as I have shown in the yield charts, whenever, the rating on bonds goes lower, the yield goes up.

Q. This does not assume anything about income tax changes, or anything of that sort, does it?

A. No, sir, this is just simple arithmetical calculations as I have indicated.

Q. Now, on Chart No. 38, have you gone through similar calculations with respect to Northern Natural Gas Company? A. Yes, I have.

Q. And does that show that with the same assumed return, those bonds would fall below these so-called ideal ratios?

A. Yes, it would show a substantial reduction from what they actually show now and, so far as the fixed charges times earned figure is concerned, although it would be lower on the assumed return than the actual return, it would still be a little higher than the ideal 4 times, but, looking at the income available to par value of debt, the figure would be 14.8 percent, which would be below the 16 percent on the ideal basis so that there would be the question of reduction of quality rating on that bond should these results become actualities.

Q. How about Chart No. 39 which I think deals with Southern Natural Gas Company?

A. In Southern Natural Gas Company, as shown in [fol. 10245] Chart No. 39 in Exhibit No. 253, the fixed charges times earned on their present reported earnings are below the 4 times on an ideal ratio basis and, if you assume a return of 6½ percent, the times earned would be reduced to 2.23 times and the income available to par value of debt would be 12.69 percent. In other words, that bond also would carry quite a reduction in rating if that assumed situation were to become real.

Q. Is that a similar result and similar reaction upon ratings which is shown on your Chart No. 40 with respect to Cities Service Gas Company?

A. Yes, the same result is shown there.

Q. Both the times charges earned and the income available to par value of debt are below the ideal ratio for a bond?

A. That is correct.

Q. How about Chart No. 41, Mississippi River Fuel Corporation?

A. The same thing holds true in the case of Mississippi River Fuel Corporation as shown on Chart No. 41 of Exhibit No. 253.

Q. I wish you would explain your Chart No. 42, please.

Before you do that, is it a fact, then, that as to each one of the companies considered in Charts 37 to 41, inclusive, should the rate of return be fixed at 6½ percent, the bonds would fall under the ideal ratio for A bonds?

A. Yes, they would.

[fol. 10246] Q. Now, what is shown on your Chart No. 42?

A. In Chart No. 42 of Exhibit No. 253, captioned, "Debt Coverage Ratios for Natural Gas Companies Adjusted to 6½ Percent Return on Net Property and Working Capital", I have gone through the same procedure to get at the effect of the 6½ percent return but have calculated invested capital as defined by the net property and net working capital instead of the capital structure which was used in the others.

Q. Did you find a somewhat similar result over all of these companies?

A. Yes, I did, and the figures are shown completely in that table.

Q. And from those figures, would you conclude that the rating on these bonds would have to be changed?

A. Yes, the same effect would work out here as worked out in the preceding charts that, in most instances, the ideal ratios would not be met, which would indicate that, should such condition become a reality, the quality rating would be lowered.

Q. And the cost, therefore, raised?

A. That is correct.

Q. Now, I wish you would turn to Chart No. 43, Mr. Coffman, and state what is shown on that chart.

A. On Chart No. 43 of Exhibit No. 253, captioned, "Debt Coverage Ratios of Panhandle Eastern Pipe Line [fol. 10247] Company at Various Levels of Net Operating Revenue", I have taken, in the first two columns, the actual results for the 12 months ended February 28, 1942, which is the consolidated company, and shows the net operating revenue as reported on a consolidated basis of $6,361,247 and, on the basis of the 1941 tax rates, shows that fixed charges would have been earned 7.19 times and that the income available to par value of debt was 19.13 per cent.

In the next group, I have made the same calculations except that I used the proposals made by Secretary of Treasury, Mr. Morgenthau, to see what effect, on the basis of operations ended for 12 months, February 28, 1942, such tax would have. The net operating revenue on that basis would then total $4,526,619 or about $1,800,000 less than on the basis of 1941 rates. On the $4,526,619 of net operating revenue, fixed charges would be earned 5.12 times and the income available to par value of debt would be 13.61 per cent.

Q. That would be under the ratio of the New York State Bankers' Association?

A. The income available to par value of debt would then be under that ratio.

Q. All right, proceed.

A. Then, in the next part of the exhibit, I show the minimum earnings necessary to maintain credit position which is the $5,382,677 which I have shown previously in [fol. 10248] Chart No. 26 and, on that basis, the fixed charges would be earned 6.09 times and the income available to par value of debt would be 16.19 percent, just about even with the ideal ratio.

Q. And, in that instance, should that net minimum earnings be actually earned, the bonds would not lose an A rating, would they?

A. No, the bonds on that basis, should that level be maintained, would still carry an A rating.

Q. But, on the figure of $6,361,247 in 1941, had the 1942 proposed rates been applied, they would have lost that rating, is that true?

A. Yes, there would have been a very definite question about reducing the quality rating.

Q. Will you turn to Chart No. 44 and state what is shown on that chart?

A. Chart No. 44 of Exhibit No. 253, captioned, "Debt Coverage Ratios of Panhandle Eastern Pipe Line Company at Various Levels of Net Operating Revenue", here assuming a 6½ percent return on the $77,830,535 which is the total invested capital of the consolidated company, the net operating revenue, using the 1941 tax rates, would amount to $5,058,985. On the basis of such earnings, the fixed charges would be covered 5.72 times and the income available to par value of debt would [—] 15.21 per cent.

Q. Slightly under the 16 percent?

[fol. 10249] A. That is slightly under the ideal figure of 16.

Q. What about the 1942 Morgenthau tax proposal?

A. Then, if you use the tax proposals as given by Secretary of the Treasury, Mr. Morgenthau, the net operating revenue would then be $3,541,749, on which basis of earnings the fixed charges would be covered 4.01 times and the income available to par value of debt would be 10.65 percent.

Q. That is well below the 16, isn't it?

A. Yes, that is very low.

Q. Where would that bond go in a rating on that basis?

A. I do not have any idea but it would certainly be considerably under A.

Q. All right. Now, turn to the right-hand portion of this Chart No. 44 and state what is shown thereon.

A. In the right-hand portion, I assumed a rate of 6½ percent of return on $66,935,894.

Q. Where did you get that figure?

A. That is invested capital. Mr. Dunn had made some calculations in a previous exhibit and I used that to find out the items that he had used in his calculations and applied the same principle as best I could to the consolidated company, and that showed an invested capital of $66,935,894. Then I assumed thereon the 6½ percent and, using the 1941 tax rates, the company would receive net oper-

ating revenue of $4,350,833 and, on such basis of earnings, [fol. 10250] the fixed charges would be covered 4.92 times and the income available to par value of debt would be 13.08 percent.

Q. Well below the 16?

A. Yes, well below.

Q. All right

A. Then, following the same procedure but using the proposal of Mr. Morgenthau, the net operating revenue would then amount to $3,134,250 and, on such earnings, the fixed charges would be earned 3.54 times and the income available to par value of debt would be 9.42 percent.

Q. Well, what would happen to the rating of the bonds under those circumstances?

A. The decline there is such, I do not know. The point is that if the figures get too far out of line, there are points where we just do not rate the bond if it falls within that category.

Q. It becomes too highly speculative, is that what you mean?

A. That is right.

Q. It falls under the B class?

A. It would certainly be in the very lowest B class or in the C.

Q. May I ask if these two figures, $77,000,000 odd and $66,000,000 odd, which you have used in this Chart 44 are merely for illustrative purposes?

[fol. 10251] A. Yes, that is the only purpose of the calculations.

Q. You are not suggesting those particular dollar figures for any particular purpose, are you? A. No, sir.

Q. Now, will you turn to Chart No. 45 and state what that chart shows?

A. In Chart No. 45 of Exhibit No. 253, captioned, "Effect of Increased Gross Revenue and Taxes upon Panhandle's Net Operating Revenue", I show, in the first bar, the earnings reported on the consolidated basis as of the year ended February 28, 1942, in the amount of $6,361,247, which was based on the 1941 tax rates, and that figure comes from one of Mr. Watkins' exhibits and I have the page number noted in the table.

In the second figure is the one already presented, which gives effect to Mr. Morgenthau's proposal, in which case the net operating revenue would then be $4,526,618.

Then, in the next three bars, I made assumptions of increases in gross and used figures determined in this fashion: The first bar, that is, the first one on the chart, I assumed an increase in gross revenue of $1,154,390 which figure I arrived at by taking the average annual increase as experienced by Panhandle Eastern Pipe Line Company in the years 1937-1941.

Q. 1937 to 1941, inclusive?

A. Inclusive, yes.

[fol. 10252] Q. What did you show in that connection?

A. On that basis, the net operating revenue would be $4,088,630 and, on such basis of earnings, the fixed charges would be earned 5.30 times and the income available to pay value of debt would be 14.10 percent.

Q. Well below the 16 which measures the ratings, is that true?

A. Yes, that is correct.

In the fourth bar, I assumed an increase in gross of $3,438,088—

Q. (Interposing) Pardon me; you mean an increase in gross revenue, do you not?

A. When I say "gross" that is what I mean, "gross revenue".

Q. During the year 1942, is that correct?

A. That is correct.

Q. Go ahead.

A. I assumed an increase in gross revenue of $3,438,088 and that assumed figure was the actual increase that took place in the gross revenue of Panhandle Eastern Pipe Line Company from 1939 to 1941 and, on that increased gross revenue, still applying Mr. Morgenthau's tax proposal—

Mr. Littman: (Interposing) Pardon me. Is this increase in gross revenue attributable to regulated or unregulated business of Panhandle Eastern?

[fol. 10253] The Witness: Well, what I have assumed is a total over-all dollar figure by which the gross revenue increased with no regard as to breakdown of the gross revenue.

By Mr. Wheat:

Q. Let's go on. What does this show?

A. On that basis, this would show that the net operating revenue would amount to $4,936,510 and, on such earnings, the fixed charges would be earned 5.58 times and the income available to par value of debt would be 14.84 percent.

Q. Still well below the 16, isn't it?

A. Yes, it is below the 16.

Q. All right. Now, what is your next to the last bar in Chart No. 45?

A. In the next to the last bar, I have assumed an increase in gross revenue of $5,771,948 which was the actual [fol. 10254] increase shown in Panhandle Eastern Pipe Line Company from 1937 to the end of 1941.

Q. Five full years?

A. Five full years; and applying again the tax proposal of the Secretary of Treasury, Mr. Morgenthau, the net operating revenue would be $5,190,437 and, on the basis of those earnings, the fixed charges would be covered 5.87 times and the income available to par value of debt would be 15.61 percent.

Q. Still under the 16?

A. Still under the 16. Then, in the last column, I merely repeat the figure that I had already given in Chart No. 26 of $5,382,677, which is the amount which I say is the minimum that is necessary to maintain credit position.

Q. What are the figures resulting from that? I think you have given them before, have you not?

A. I have given them before. The fixed charges would be earned 6.09 times and the income available to par value of debt would be 16.19 percent.

Q. Just over the 16 percent on the ideal basis?

A. That is correct.

Q. Now, Mr. Coffman, there is not anything magic, is there, about these three particular bars showing the various increases? You might just as well have taken $1,000,000, $2,000,000, $3,000,000, $4,000,000, or $5,000,000, might you not, to show your illustrations?

[fol. 10255]. A. Yes, that is correct. I just selected a basis where I could use actual figures as against taking a round figure out of the air.

Q. And even when you assume an increase in gross revenue, the total increase over the past five years, you were still under the minimum which you testified was necessary to maintain credit position?

A. That is, applying Secretary of Treasury, Mr. Morgenthau's tax proposal, yes.

Mr. Littman: I would like to ask a question for clarification.

Mr. Coffman, what operating expenses do you assume in connection with your assumed increase of operating revenue?

The Witness: I took the percentage relationship of cost on the consolidated basis, that is, the February 28, 1942, figures, and I assumed that the relationship existent then of operating cost to that gross would be the same percentage that would apply against the increase here. In other words, if the operating expenses were 40 percent of gross, then I applied 40 percent of the increase to get the cost calculations to arrive at net operating revenue.

Mr. Littman: Do you show those details anywhere in your exhibit?

The Witness: Yes, table to Chart No. 45 will give you the detailed figures.

[fol. 10256] Mr. Littman: Have you assumed any increase in investment would be necessary to produce this increase in gross revenue?

The Witness: No, I did not.

Mr. Littman: Does it make any difference, for the purposes of calculation, to what classes of customers this gas is sold, for purposes of your study?

The Witness: Well, for purpose of this study, it won't because I assumed a lump dollar amount added to the Feb-

ruary 28, 1942, figure, and then I have applied the percent of cost to that, so there was no need for talking about classes of service.

. . . . . .

By Mr. Wheat:

Q. Mr. Coffman, will you now turn to your Chart No. 46 and tell us what is shown on that chart?

A. In Chart No. 46 of Exhibit No. 253, captioned, "Calculation to Show Rate of Return Necessary to Produce $5,382,677—Assuming Various Rate Bases", I am merely here showing statistically what I said yesterday when I began to testify, namely, that once I directly compute the minimum earnings necessary to maintain credit position of $5,382,677, if I can find out or be told what the rate base is, then I can determine what the rate of return should be to produce those minimum earnings necessary to maintain the credit position so that here, if 6½ percent rate of return is to be used, then the assumed base would have to be $82,810,415 in order to produce $5,382,677.

Now, I have just worked out figures at intervals down the line to show that the figures or rate base go down as the rate of return on this base goes up.

Q. That is necessarily true since they must be in inverse ratio, mustn't they?

A. That is correct.

Q. If you are going to have this particular minimum earnings to maintain the credit position?

A. That is correct.

Q. And this chart is self-explanatory, is it not?

A. I think it is self-explanatory because the figure which I have determined which is of importance for my study is the $5,382,677 which I think has been fully covered and the application of that figure to assume rate bases was merely for the purpose of illustration to show concretely what I said verbally yesterday.

. . . . . .

[fol. 10258] Recross Examination

By Mr. Littman:

Q. Mr. Coffman, have you testified in any other proceedings since you were last on the witness stand here?

A. Yes, I believe I have. Well, the Philadelphia Transportation Company I am sure of. Do you mean before the Federal Power Commission.

Q. I mean any courts or commissions.

A. I testified in the case of the Philadelphia Transportation Company before the Public Utility Commission of Pennsylvania.

Q. On the subject of rate of return on the same material?

A. I do not recall just when I was down here last—how many months ago has it been?

Q. My recollection is that you left the witness stand on the 3rd or 4th of January.

Mr. Wheat: That is right. It was just when the new deal was coming in with respect to this financing, was it not?

[fol. 10259] Mr. Littman: That is right.

The Witness: That is the only one.

By Mr. Littman:

Q. How about the Carolina Power & Light Company proceeding before this Commission?

A. Yes; I believe that was before, wasn't it? Wasn't that before February?

Q. No, it was since.

A. Just a moment, let me check my memory—all right, it was just after. I did appear in the Carolina Power & Light Company proceeding before this Commission.

Q. Have you ever testified before on the subject of rate of return before this Commission or any other commission or court?

A. No, I do not believe so.

Q. Do you know how much common stock of any of the six natural gas companies referred to in your Chart No. 21 is sold on the market?

A. You mean just the volume?

Q. That is right.

A. Well, I would want to check that. I could not answer just now.

Q. You made no study of that?

A. Well, as to volume, what I have gotten in the market [fol. 10260] quotations. I have not listed volume in any case in any of these exhibits.

Q. You are not prepared at this time to state whether the markets are thin or otherwise?

A. No, the question here is one of market quotations.

Q. Whether it be for one share of stock or 100,000 shares of stock?

A. Except I am considering the average of the high and low price over a period of time, not on any single day, so it is hardly one single share if any shares were traded at all.

Q. So far as you know, the market for the common stocks of these six natural gas companies may be even thinner than was the market for the common stock of Carolina Power & Light Company in 1925?

A. I cannot answer that question.

Q. Then, so far as you know, it might be?

A. Well, it could be anything. If I do not know, I presume is could be anything.

Q. Well, if the market were thinner than that which I just described for the Carolina Power and Light Company in 1925, would they be reliable?

A. Well, when you are talking about market quotations and several shares change hands between a willing buyer and a willing seller, it is indicative of a price, certainly.

Q. As a matter of fact, you disregarded market quo- [fol. 10261] tations on the common stock in the Carolina Power & Light proceeding before this Commission, did you not, because of the fact the market was so thin?

A. As a matter of fact, Mr. Littman, if you want to ask me some questions, I would like to go over and see just exactly what I did say and what the figures are on Carolina Power & Light. I do not mind being interrogated but I would like to freshen my memory if I am going to be interrogated on it.

Mr. Wheat: If you do not remember, you are at perfect liberty to say so now, and then freshen your memory.

The Witness: That study was exactly like this, so far as volume was concerned, and I would certainly hate to be put to the test of relying on my memory as to this figure or that figure without having a chance to refer to it.

By Mr. Littman:

Q. You do not mean you submitted the same kind of a study in the Carolina case that you did here, do you?

A. I said as to volume, I think, talking about the quantity of work that was done.

Q. You mean volume of pages in the exhibits or volume of what?

A. Volume of work that was done.

Q. You would not want to rely upon the quotations of common stock in a thin market for any purpose, would you, Mr. Coffman?

[fol. 10262] A. So far as getting the investors' appraisal over a large group of companies, I would have no question about that. On a single company, if there was just one share, it would depend then on what you were talking about. I would say that the one-share transaction indicated the price that was necessary between the buyer and the seller for the one share. Now, what effect a great block of stock on the market might have is another question, as to what that price would be, so that questions of valuation on the one hand are entirely different than the questions that you have here.

Q. There are more data available with respect to electric companies than there are with respect to natural gas companies, isn't that a fact?

A. You mean there are more electric operating utility companies?

Q. Yes, and more information, more reliable market prices?

A. Generally, I would say that was true.

Q. But you disregard the market in the Carolina proceeding, didn't you?

A. In the case of the Carolina proceeding, I determined what I believed to be the fair market value of stock on a particular date.

Q. Was that more than twice as much as the market value?

A. I am sorry, I cannot remember that. I still say if [fol. 10263] you want to interrogate me on this, either produce the copies of the exhibits on this or let me send to New York and get them.

Q. You just testified there not more than 60 days ago.

A. That is right, and I am just like you told me you were at the recess, Mr. Littman, when you quit a case you forget it and go on to something new.

* * * * * * * *

Q. Have you made any effort to determine the volume of sales of Panhandle Eastern Pipe Line Company's common stock on the market?

A. Yes, I think I have, some figures on that someplace along. I think I could get them again. I do not remember what they were, but, over a period of some five years or a little longer, as I remember it, there was quite substantial trading.

Q. When was that?

A. I mean over the last five years, I will say about over the last five years up to the time I testified before.

[fol. 10264] Q. Was it as substantial as the Carolina Power & Light trading in 1925?

A. There again I do not recall what the trading was on Carolina Power & Light in 1925.

Q. As a matter of fact, when only something like 5 per cent or less of the common stock is being traded on the market, it is your opinion that the market price derived from those sales cannot be relied upon for any purpose?

A. Well, I think that we are getting somewhat confused on one issue. In this particular study I have made, I have made an analysis of all the companies that were available, which gives you, I would say, a reliable check.

Now, if you can come down to a particular company and a particular day, there is some question about that. You may find it necessary, depending upon the problem that is before [your] and particularly if it is a valuation problem, to look at other aspects of the price besides the market price.

Q. Are you saying that if you have unreliable data for six companies, you can add them up and divide by six and get something that is reliable?

A. I would say that it would have to be demonstrated that the data were unreliable for the six companies.

Q. You do not know right now whether these data for these six natural gas companies, to wit, El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Southern Natural Gas Company, [fol. 10265] Panhandle Eastern Pipe Line Company, and Northern Natural Gas Company, are reliable, do you, because you do not know what kind of a market there is with respect to their common stock?

A. No; the basis of the calculations that I made here was taking all companies upon which I could secure market quotations from reliable sources.

Mr. Wheat: May I ask a question there, if I may interrupt a minute?

You included, did you not, in your study, the very large sale of common stock by Northern Natural Gas Company to the public?

The Witness: I included that one, yes, in Exhibit No. 65.

By Mr. Littman:

Q. That was the time the stock was issued?

A. Well, it was the sale of a large block of common stock which was as good a test as any we have as to what the investor thinks of a particular security.

Q. Suppose you describe the market of Southern Natural Gas Company common stock.

A. What do you mean by "describe"? Do you want to know the number of shares over the last five years, the daily trading, monthly, or what?

Q. Give us any of those that you mentioned.

A. Well, as I have told you, I did not use them, so I [fol. 10266] do not have them. If you want the tabulations, I will prepare them for you.

Q. Didn't you make any study of that feature at all?

A. None whatsoever in this study. I have stated very clearly in the record, I believe, that I took every security upon which there was a reliable market quotation and used it. If there were no such figures, I did not include the company.

Q. How do you know whether it is reliable or not without first ascertaining the volume of the market?

A. I am talking about a reliable source.

Q. You testified in the Carolina Power & Light Company proceeding that a thin market was unreliable, didn't you?

A. For a single company, and I say that right here.

Q. Suppose it is unreliable for six single companies. Can you add them up and divide by six and get any more reliable information than the reliability of any one of those six companies?

A. We do not want to get too many issues confused here. At this point—

Q. (Interposing) I am not getting confused.

A. I think you are, very definitely. We have been talking about all the over-all risks of capital and, in that, I was taking into consideration bonds, preferred stocks, and common stocks. A good many of the bonds and a good many shares of the preferred stocks are outstanding in the [fol. 10267] hands of the public.

. . . . . .

[fol. 10270] PAUL B. COFFMAN a witness, having been previously sworn, resumed the stand and testified further as follows:

Recross Examination (Continued)

By Mr. Littman:

Q. Mr. Coffman, you were going to report this morning with respect to the Natural Gas Pipeline Company of America notes that were issued in 1941. Are you prepared to give us the information?

A. I have some information on the subject. The notes were serial notes, 1¾ per cent, 8 years, on a semiannual basis and they were secured, I think, with the first mortgage bonds on the property. At least, for all practical purposes, they were a very highly secured note and carried the rate of 1¾ per cent.

Q. What was the principal amount of these securities?

A. $17,500,000.

Q. Mr. Coffman, in connection with yesterday's cross-examination, you wanted to have me refer to your statement in the Carolina Power & Light Company proceeding

that dealt with the market of the common stock of that company. I hand you a copy of Exhibit No. 307 in that pro-[fol. 10271] ceeding entitled "Study Relative to Valuation of Common Stock of Carolina Power & Light Company (Old) as of April 6, 1926", and refer you to the text opposite Chart No. 6, a paragraph, which I shall read:

"It is obvious from this review of the market action of the common stock of Carolina Power & Light Company this year preceding the date of valuation that the market was an extremely thin affair with wide fluctuation occurring on only a small number of shares traded. In view of the thinness of the market and the fact that no quotations were available subsequent to December, 1925, I considered it necessary to approach the determination of a fair market value of the common stock of the Carolina Power & Light Company as of April 6, 1926, on the basis of earning power."

Have I correctly read from your exhibit?

A. Yes, you have.

Q. Mr. Coffman, you have submitted Exhibit No. 253 in this proceeding which exhibit is entitled, "Study Relative to Minimum Return Requirements of Panhandle Eastern Pipe Line Company (Giving Effect to Property Acquisitions)". Is this exhibit the same character of study as the one which you previously submitted in this proceeding as Exhibit No. 65?

A. So far as the earnings requirements are concerned, it is the same with the exception, as I explained in direct [fol. 10272] examination, I had added certain additional figures for earlier years and for the full year 1941. Also, I think I said that one difference is that in the time that I had to work upon this material, I did not find time to continue to deal with those figures which were considered in Exhibit No. 65 which led to an item which I captioned, "Total dollars needed". Otherwise, I would say that the two studies are identical.

Q. Your study which is identified as Exhibit No. 65 bore the title, "Study Relative to Rate of Return on Panhandle Eastern Pipe Line Company", whereas your new exhibit, No. 253, is entitled, "Study Relative to Minimum

Return Requirements for Panhandle Eastern Pipe Line Company".

I wonder if there is any significance in the fact that you have changed the title of your new exhibit?

A. I would not attach any significance to it. The fact is that, in Exhibit No. 65, the important figure, from my standpoint, was the so-called "end" figure, that is, the capital requirements figure which I referred to yesterday in Exhibit 65 on Chart No. 37 and that end figure was the one that I was trying to determine again as of February 28, 1942, taking into consideration the changed status of the company and showing the consolidated results.

* * * * * * * * *

By Mr. Littman:

[fol. 10273] Q. Were you referring to the end figure in Chart No. 37 of Exhibit No. 65 in the amount of $5,064,821 to which you refer in that chart, as "a fair return to investors" and "current capital requirements"?

A. That is correct.

Q. Am I correct in understanding that in Exhibit No. 253, your Chart No. 25 entitled, "Minimum Earnings Required to Maintain Credit Position of Panhandle Eastern Pipe Line Company" contains the same character of study in so far as the "current capital requirements" are concerned, sometimes called by you "a fair return to investors"?

A. That figure is the same.

Q. When you said "the figure is the same", you did not mean the dollar amounts were the same but that the figure was of the same character?

A. That is correct.

Q. In view of your testimony it would be proper, would it not, to refer to the figure of $5,325,677 which appears in Chart No. 25 of Exhibit No. 253 as "a fair return to investors"?

A. That is not exactly correct, as I outlined yesterday, because of the fact that I believe in this case, since the preferred stock facts are out, that evidence must be taken into consideration and, therefore, it seems to me that the [fol. 10274] figure shown in Chart No. 25, which is $5,382,677, is the proper figure.

Q. Well, is the $5,382,677 figure one which could properly be labeled "a fair return to investors"?

A. I would say that that was correct.

Q. Now, the figure in Chart No. 25 in the amount of $5,325,677 reflects, does it not, the actual present earnings requirement of the outstanding bonds and preferred stock of Panhandle Eastern?

A. Yes, that is correct.

Q. The reason you refer to the larger figure as the proper figure is because of the circumstances surrounding the sale of the preferred stock by the underwriters within recent weeks, is that correct?

A. Generally, that is correct. The point that I was making in regard to the preferred stock was that in the experience of the sale of the preferred stocks since February 4, it would rather prove to me that perhaps the original offering price was not quite in tune with the investors' appraisal. Therefore, investors have not purchased it. If that is true, then to get at a more accurate appraisal, it seems to me those facts must be taken into consideration and, therefore, I would use the 6.23 per cent as applied against the preferred stock instead of the 5.87 per cent.

Q. You label both figures "earnings required to main-
[fol. 10275] tain credit position", do you not?

A. Yes, I do.

Q. Is it correct to say that the amount of $5,325,677 which appears in Chart No. 25 represents, in truth and in fact, the earnings required to maintain the credit position of Panhandle Eastern Pipe Line Company and subsidiary companies as of February 28, 1942?

A. Based upon their actual experience at the time, that is correct. My point still remains, however, that looking at this matter from the investors' point of view, the 6.23 per cent has significance, particularly if further financing or need for financing should arise.

Q. Which one of the three figures, namely, $5,325,677 related to invested capital as of February 28, 1942, $5,382,677 related to invested capital as of February 28, 1942, and $5,064,821 related to invested capital as of June 30, 1941, is the amount required to attract capital?

A. Well, the answer to that can be only one, it seems to me—$5,382,677.

Q. That represents what percentage of the invested capital of Panhandle Eastern Pipe Line Company and subsidiary companies, including Michigan Gas, as of February 28, 1942, in the amount of $77,830,535?

Mr. Wheat: May I suggest, Mr. Littman, that is shown on Chart No. 46?

[fol. 10276] Mr. Littman: It is also shown on the table supporting Chart No. 25, I believe.

The Witness: 6.92 per cent.

By Mr. Littman:

Q. In other words, Mr. Coffman, as I understand your Chart No. 26 of Exhibit No. 253, the return required to attract capital to the enterprise as of February 28, 1942, is 6.92 per cent?

A. I think the better way to say it is that the amount that is needed is the $5,382,677. If you are going to use the rate base which you have mentioned of $77,830,535, all right. If there is going to be some other figure, as shown in the last chart, No. 46, why, the percentage would be different.

Q. Now, Mr. Coffman, in truth and in fact, Panhandle Eastern attracted the invested capital as of February 28, 1942, on an actual basis with a 6.84 per cent return, did it not, overall, as shown by your Chart No. 25?

A. That is correct because, as I have explained in Chart No. 25, I have applied the actual rate on the preferred stock but, when you consider the market, the actual market weight must be given to the fact that this preferred stock really has not sold on the basis originally offered.

Q. And that would simply raise the per cent, according to your theory, to 6.92 per cent?

[fol. 10277] A. That is correct, based upon the $77,830,535.

Q. In other words, it would require a return of 6.92 cents per annum for each dollar of capital required, according to Chart No. 26 of Exhibit No. 253?

A. That is correct.

Q. Is my understanding correct, Mr. Coffman, that when you last testified here the comparable percentage which you stated was necessary for the attraction of capital was 7.99 per cent as shown in your table for Chart No. 26 in Exhibit No. 65?

A. Yes, that is correct.

Mr. Culton: That was on the old Panhandle Eastern Pipe Line Company alone at that time, was it not?

The Witness: Yes, Exhibit No. 65 is based altogether on the old Panhandle Eastern.

By Mr. Littman:

Q. Mr. Coffman, I want you to again refer to Chart No. 25 in Exhibit No. 253 where you show the actual return required to maintain credit position in the amount of $5,325,677. Now, when you previously testified here, the comparable amount which you there labeled, "fair return to investors" was $5,077,648 as shown in your Chart No. 26 of Exhibit No. 65, is that correct?

A. That is correct.

Q. The additional capital requirements or return re- [fol. 10278] quired after the acquisition of Michigan Gas and the other properties acquired by the recent transaction in February of 1942 is represented by the difference between those figures, to-wit, $248,029, is that right?

A. Yes, the difference is $248,029.

Q. How much new capital was attracted by the financing in February of 1942? To shorten the matter, it is my understanding that it would be the difference between the $77,830,533 of invested capital per your Chart No. 25 in Exhibit No. 253—

Mr. Wheat: I think, Mr. Littman, that is not quite correct because the common stock amount in Chart No. 26 of Exhibit No. 65 and the common stock and surplus amount in Chart No. 25 in Exhibit No. 253 are not quite alike. Possibly you overlooked that. What you are getting at, is the difference between the preferred stock and bond amounts, isn't it? When you said, "how much capital was attracted" by the financial transactions, I just thought possibly you had overlooked that common stock difference there.

Mr. Littman: The figure I wanted, Mr. Wheat, was the difference between the invested capital as of June 30, 1941, and as of February 28, 1942.

Mr. Wheat: Yes, that is quite different. Thank you.

Mr. Littman: That is, as Mr. Coffman has defined the term "invested capital".

[fol. 10279] Trial Examiner: Your question was interrupted, Mr. Coffman. Do you understand what was desired?

The Witness: As I understand the question, Mr. Littman would like to know the amount of difference between the invested capital as of June 30, 1941, and the invested capital as of February 28, 1942, and that difference would be $14,305,000, approximately.

By Mr. Littman:

Q. In other words, you have got $14,304,696 more of invested capital as of February 28, 1942, than you had as of June 30, 1941. Is that correct?

A. Yes, that is correct.

Q. The additional capital requirements or return required to finance that additional amount of invested capital is how much, expressed in terms of per cent? We get 1.7 per cent. Does that check?

A. That is just about correct.

Q. Is that about right? A. Yes, sir.

Q. Mr. Coffman, I want you to assume, and we must necessarily make this assumption because we do not know what the rate base is going to be, that for each $1,000,000 of invested capital, $990,000 is allocable to regulated business and $10,000 is allocable to unregulated business. In other words, 99 per cent of the invested capital is properly [fol. 10280] allocable to regulated business and one per cent is properly allocable to unregulated business. Do you understand me so far? A. Yes.

Q. I want you to further assume that the unregulated portion of the business earns a modest return of at least 100 per cent per year or $10,000. What annual return would investors require on the regulated portion of the business in order to get an over-all annual return of 6.84 per cent on its invested capital or a return of $68,400, expressed in dollars?

A. Well, it would take me a few minutes to work that out but I might say—

Q. (Interposing) Won't the answer be, and I think you can very quickly follow my arithmetic, the over-all return of 6.84 per cent on $1,000,000 of invested capital is, of course, $68,400, isn't it, Mr. Coffman?

A. That is correct.

Q. Now, one portion, to wit, the unregulated portion, is earning $10,000 so you deduct that amount from the $68,400 to get the amount of $58,400 which is applicable or allocable to the regulated business, do you not?

A. That is correct.

Q. And that represents 5.8 per cent of the regulated business, does it not, by way of return, that is, of the [fol. 10281] investment in the regulated business. Is my arithmetic correct?

A. That arithmetic is correct but I still have some difficulty with the illustration you give because, so far as the investor is concerned and this return is concerned, he is not breaking the matter down between regulated and unregulated business.

Q. Let me make it clear upon the record.

The effect of my calculation which you have checked is, if 90 per cent of $1,000,000 of invested capital is properly allocable to the regulated portion of the business and one per cent is properly allocable to the unregulated portion of the business and if the unregulated portion of the business is earning a return of 100 per cent per year then, assuming a necessary over-all fair rate of return of 6.84 per cent, the division in per cent of return, as between the regulated and unregulated portions of the business would be, mathematically, 5.8 per cent return of the regulated portion of the business in order to produce the over all return of 6.84 per cent. Is that a correct summary?

A. Yes, using the hypothesis you gave, the arithmetic is as you have stated but I still say there are some further angles to it that should be considered.

Q. In other words, if the unregulated portion of the business produces a very high return, the investor would [fol. 10282] require a correspondingly low return on the regulated portion, wouldn't he, because he is interested, as you say, in the total over-all return?

A. He is interested in the total over-all return and he has no way to break the figure down as to component parts so that, so far as allocation is concerned, which you are talking about, it really does not affect him directly.

Q. Well, carrying the example further, so far as the investor is concerned, if the unregulated portion of the

business is enjoying so high a return as to make the over all return satisfactory to him, then the investor does not care how much is being earned on the regulated portion at all, does he?

A. Well, it is true that the investor is looking for return for the investment he has in the business. Now, I think it is also true, if he saw an investment in which a large portion of it were of a peculiar type, then he would give some consideration to his over-all return. What he will try to do, in looking at the company, to the best of his ability, is to see what the components of earnings are. He may not be able to refine it too much but, after knowing that, he will depend upon what he believes to be a required return without attempting mathematically to work each individual component out.

Q. You have not undertaken to make such a breakdown [fol. 10283] as between regulated and unregulated portions of the invested capital here, have you?

A. No, I have not.

. . . . . .

By Mr. Littman:

Q. Assume that a natural gas pipe line company is selling gas to wax industries at an annual profit of at least 100 per cent of its investment dedicated and allo [fol. 10284] cated to that business, would the investors be wary of such a company in view of present conditions?

A. I think I have made it pretty clear, Mr. Littman, right along that investors, to the best of their ability, will analyze all factors having a bearing upon the security and obviously, if they thought a business, that is, a company was engaged in a business which, although profitable at the moment might some place along the line discontinue because of the peculiar nature of the business, they would give that weight.

Q. And, therefore, they would require a higher rate of return than otherwise, wouldn't they?

A. They would require a higher rate of return.

Q. And, of course, if such a situation were present, it would unduly inflate the indicated over-all return?

A. It would. In so far as it was a proportionate part of total, it would have an influence to that proportionate extent.

Q. You have, in this new exhibit, undertaken to show the effect of Mr. Morgenthau's proposed tax law upon this company's operation but before taking up the subject of Mr. Morgenthau's proposal, I would like to ask whether you have or have not abandoned your opinion on the subject of amortization which are shown in your Exhibit No. 65 but which do not appear in your new Exhibit No. 253?

[fol. 10285] A. There is only one question and that is about that word "abandoned". I have not abandoned the matter as one of approach. The fact is in this particular study, Exhibit No. 253, I have not included any study on amortization because that item, along with operating expenses and so on, were determined prior to this earnings required to maintain credit position figure which is the only one which has been included in this study. I mean just because it is not included in this study you are not pinning me down to the statement I have abandoned an idea I had at one time but I still am willing to talk about amortization.

Q. Mr. Coffman, I want to be altogether fair about the matter. In other words, the mere fact that you do not include an amortization study in your new exhibit should not be taken or construed as any indication that you are abandoning your contentions with respect to amortization, is that right?

A. Yes, that is correct.

Q. Now, if you had had the time, as I understand your testimony, you would have made a similar study here, would you not?

A. Yes, I could if I had the time.

Q. In other words, you would still divide the total investment by 25 years, or 24 years to determine the annual amortization requirement, wouldn't you?

[fol. 10286] A. Well, I would not want to answer that question just at the moment until I had more time to see from that particular item the over-all picture on the consolidated basis as against Panhandle Eastern alone but, so far as the principle was concerned, I would continue that.

Q. And you, so far as the principle is concerned, still amortize cash in bank?

A. As long as it was invested capital and in the business, I contend and believe that the investor wants a return upon that just as well as other invested funds.

Q. I am not talking about return. I am talking about amortization, that is, the amortization of the investment or invested capital.

A. Well, I do not know as I can answer. If I were to work the problem out again obviously, if I thought I had made some error in my previous calculations, I should correct it. I have not made the calculations for the moment and I cannot give you a specific answer.

Q. You do not consider your previous amortization theories in error, do you?

A. Well, to date I have had no reason to.

Q. And you did amortize, as your previous exhibit shows, cash in the bank?

A. That is correct.

Q. And working capital?

[fol. 10287] A. That is correct.

Q. And any write ups, if any existed and were present in the amount of invested capital?

A. We amortized the invested capital as defined in that study.

Q. Which definition is simply the addition or total of the outstanding amount of bonds, preferred stock, common stock and surplus?

A. That is correct.

Q. Now, we will take up your treatment with respect to Mr. Morgenthau's proposed taxes.

You secured most of your book figures for purposes of your new study and I refer particularly to Chart No. 45 in Exhibit No. 253, from certain of Mr. Watkin's exhibits?

A. Yes, sir, that is correct.

Q. And that same situation is true with respect to Chart No. 43 of Exhibit No. 253?

Mr. Wheat: Which chart?

Mr. Littlejan: Chart No. 43 of Exhibit No. 253.

May we have an understanding that, unless designated, the chart numbers to which I refer, unless otherwise stated, will be the charts in Exhibit No. 253?

* * * * * * * * *

[fol. 10288] The Witness: Do I have a question pending?

(Whereupon, the pending question was read by the reporter.)

The Witness: Yes, that is correct also.

By Mr. Littman:

Q. I hand you a copy of Mr. Watkins' Exhibit No. 199 and ask you to state the net income shown on that exhibit in the consolidated column, pro forma, for the twelve months ended February 28, 1942, as adjusted to give effect to Federal income and Federal excess profits tax rates proposed in recommendation of Secretary of Treasury Morgenthau.

A. The net income reported in that exhibit is $3,710,634.26.

Mr. Wheat: Pardon me, Mr. Littman, you are referring to the net income on Exhibit No. 199, are you?

Mr. Littman: Yes.

Mr. Wheat: And not the net operating revenue?

Mr. Littman: Yes.

* * * * * * * * *

By Mr. Littman:

Q. Now, referring to Chart No. 43 of your new exhibit, you show net operating revenue for the twelve months [fol. 10289] ended February 28, 1942, based on Mr. Morgenthau's tax proposal in the amount of $4,526,619. Now, that is the net operating revenue as distinguished from net operating income in the smaller amount which you just read, is it not?

A. It is the net operating revenue as distinguished from the net income figure.

* * * * * * * * *

By Mr. Littman:

Q. Now, we will confine our discussion to net income for the moment, Mr. Coffman, as distinguished from net operating revenue. Of course, in your opinion, Mr. Coffman, both of the figures are reliable for our use here, are they not, as shown by Mr. Watkins' exhibit?

A. I believe so.

Q. Will you please turn to Mr. Watkins' Exhibit No. 198 and read into the record the net income, consolidated, as there shown for the twelve months ended February 28, 1942, which I believe reflects the 1941 actual tax rate?

A. Do you want the net income?

Q. Yes, the one at the very bottom of the exhibit.

A. That figure in Exhibit No. 198 is in the amount of $5,546,261.94. That is net income.

Q. Now, the effect of Mr. Morgenthau's tax proposal, according to the figures which you have just read, will be to [fol. 10290] reduce the net income by 33.1 per cent, isn't that correct?

A. That is approximately correct.

Q. Obviously, this new tax proposal is not directed solely at Panhandle Eastern Pipe Line Company but applies to all pipe line companies as well, does it not?

A. That is correct.

Q. Now, let's look at some of the other natural gas pipe line companies which are shown in your Chart No. 21. There you show earnings-price ratios of natural gas pipe line company stocks for the year 1941 for El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company, Northern Natural Gas Company and Southern Natural Gas Company, do you not? A. Yes, I do.

Q. Now, those companies are comparable, in your opinion, to Panhandle Eastern Pipe Line Company, generally?

A. Well, the matter of comparability is a little bit tough but they are pipe line companies, I will say that. They are in the same industry, conducting about the same kind of business.

Q. They are of sufficient comparability, in your opinion, are they not, to warrant their placement on this chart in close juxtaposition to each other for comparative purposes in so far as earnings-price ratios are concerned, are they not?

[fol. 10291] A. What I was doing was showing what was happening to all the companies in the industry. That is what the investor does, he looks at the industry and all the information he can get on the industry.

Q. Well, the effect of the Morgenthau tax proposal will be approximately the same on these natural gas pipe line companies as on Panhandle Eastern, will it not, generally?

A. Well, it will depend upon their taxable income positions. Obviously, in so far as, let us say, all these companies were in the same tax brackets, excess profits tax rates and so on, the effect would be about the same but, if they are in a different bracket, dollar-wise, obviously there will be considerable differences.

Q. What you mean to say is if Panhandle Eastern is earning more excess profits than the other companies, it will have to pay more taxes under Mr. Morgenthau's proposal than the other companies?

A. It has been stated in the record that this company is already in a certain tax bracket. If that tax bracket is different from some other company, naturally there will be a difference in the rate applied and in the dollars paid.

Q. I believe you said that certain differences applicable to individual companies would wash out if you considered them altogether, as a general theory. Is that correct?

A. I made that general application in regard to one point.

[fol. 10292] Q. Well, can we agree, as a general proposition, that the Morgenthau tax proposal will affect these six natural gas pipe line companies in more or less the same fashion?

A. Well, I am perfectly willing to say it will affect them but, until I have made calculations to know that the result was 33 per cent in each individual case, I would not go that far in my answer.

Q. You have not made a study to determine the precise effect on each of these natural gas pipe line companies?

A. Except dollar-wise, as I have shown, Mr. Littman. I did not go ahead and make a percentage calculation to see how much difference it means here and how much difference there, as you are now discussing the question.

Q. Let's assume for purposes of our discussion that the Morgenthau tax proposal will affect these six pipe line companies equally.

Now, please turn to your table supporting your Chart No. 21. There you show that the earnings available for

common stocks, that is, the net income for these six natural gas pipe line companies for the year 1941 totaled $13,921,893. Is that correct?

A. That is correct.

Q. And from that figure, you made a determination of earnings price ratio by applying those earnings to the aggregate market price of common stocks in the amount [fol. 10293] of $116,241,981 and you secured the weighted average earnings-price ratios for those companies of 11.98 per cent. Is that general characterization correct?

A. That is correct.

Q. Now, if the Morgenthau tax law were to affect these six companies in like fashion, the 1941 net earnings of those companies in the amount of $13,921,893 would be reduced by 33.1 per cent, is that correct?

A. That is correct.

Q. Will you please give us the resulting earnings available for common stocks of those companies on that basis?

A. It would be approximately $9,284,262.

Q. That is close enough for our purposes.

A. I took 33⅓ per cent instead of 33.1 per cent.

Q. Now, will you use those earnings available for common stocks in the amount that you have just read and apply it to the aggregate market value of common stocks and tell us what the weighted average indicated earnings-price ratio is for these companies, giving effect to the Morgenthau tax proposal?

* * * * * * * *

The Witness: It would just be approximately 8 per cent.

* * * * * * * *

[fol. 10294] Q. That checks close to our figure. It is your opinion, is it not, Mr. Coffman, that the investor is more interested, in fact much more interested, in the projected earnings of a company than in historical earnings?

A. The investor, if he is contemplating the purchase of a security where it is particularly an industrial security, is interested in what he thinks the earning capacity of the corporation is. He will try to determine that by its past record and then will make a calculation as to what he can expect if he should happen to make his investment in the

company. In other words, all past earnings have already been taken by some other person so that when he makes his investment, he is chiefly interested, so far as earnings are concerned, in the earnings to come.

Q. The informed investor would got through somewhat the same general calculation as we have just gone through, would he not, to ascertain the effect of the Morgenthou tax proposal upon the coming year's business?

A. Yes, I think he would very definitely make calculations to see what the effect was going to be.

Q. And calculations probably similar to those which we have made here for testing purposes?

[fol. 10295] A. I should think so.

Q. By the way, Mr. Coffman, what per cent of return, in your opinion, is required by Panhandle Eastern common stockholders? Now, by per cent of return, I am talking about dividends and I have in mind your Chart No. 5.

A. I cannot give a specific figure. My statement in regard to both Exhibit No. 65 and Exhibit No. 253 was to this effect: That certainly, if a common stockholder believes that, as a return on his common stock investment, he will receive on the average only 3.48 per cent. I know that he will not supply any more money because he can do better than that in preferred stock and even in some bonds so that some earning has to be allowed which would enable this company to make a return to the common stockholder which will bring that average up quite a bit. I do not know what it is. I have made no calculations in regard to what the figure might be.

I merely stated that so long as this average remained around 3.48 per cent, it was a pretty tough situation, so far as common stockholders were concerned. They were perfectly willing, when they invested money, to wait in the lean years, as I think I stated before, but they made their investment in the hope that when this company got on its feet and had its markets established, earnings would be sufficient to permit a return which would compensate them for their risk.

Q. Now, the common stockholders received no dividends, [fol. 10296] according to this chart, through the year 1936, is that right?

A. I do not know. I would not want to say quite that, Mr. Littman, because the only company figures I have are

those in Mr. Watkins' exhibit and I believe they started as of April, 1932. In other words, there were nine months of 1932 and the remaining years.

Q. I had reference to that date. I did not intend to be technical about the date of the actual commencement of operations.

A. Yes. Then no dividends on common stock were paid from April of 1932 until January 1 of 1937.

Q. Then the dividends were 1.66 per cent in 1937; 7.27 per cent in 1938; 4.19 per cent in 1939; 8.62 per cent in 1940, and 7.32 per cent in 1941. Is that correct?

A. Yes, that is correct.

Q. An over-all average for the 9¾ years of 3.48 per cent of dividends on common stock?

A. Yes, that is correct.

Q. Now, you have told us that the earnings-price ratio for common stock should be 12 per cent, have you not?

A. Yes, I have.

Q. Are you able to advise us how much of that, in your opinion, will be necessary to make the common stockholders satisfied? Simply advise us what portion of this 12 per cent is truly applicable to the common stockholders by [fol. 10297] way of dividends and by way of surplus or haven't you made any such study?

A. I do not have calculations on that at the moment, Mr. Littman, because, as you know, the earnings price ratio is talking about earnings whereas the ratio in Chart No. 3 is talking about dividends so, naturally, there are two different things to start with.

Now, the question comes down, so far as the dividends are concerned, as to what, in the management's opinion, can be paid by way of dividends on the common stock from one year to another. I mean I think the dividend payment is a managerial question. Estimates could be made on the matter. I just have not made them so I cannot answer your question right now as to what it is or should be.

Q. Well, you know that Panhandle Eastern was certainly able, if it had so desired, to pay more dividends, at least since 1937, since they actually paid, do you not?

A. Well, I do not know as I am prepared to say that. The Company has been expanding pretty rapidly. It is a question of whether the management feels that to protect

their position they should maintain their working capital position, as they did, or whether they would pay more of it out in dividends. I do not know as I would want to make the statement that you have just made.

Q. In other words, it was simply a matter of discretion with the company as to whether or not it wanted to pay its [fol. 10298] earnings out in dividends or apply a portion of them back into the business?

A. Yes, that is a matter of managerial policy. The management would have to decide that.

Q. Now, you have not seen any signs of these stockholders being dissatisfied with the returns on their common stocks which are shown historically on Chart No. 5, have you?

A. Well, that is a rather hard question to answer, Mr. Littman. I mean about the only way I know that you can tell whether a stockholder is dissatisfied is about on two counts. Either he just gets mad and sells his stock or he brings a lawsuit against the corporation to bring his bone of contention before the Court. He may form a stockholders' committee or something else to start a little agitation for this or that but, otherwise, I do not know how you can tell whether he is dissatisfied or not.

Q. Columbia Oil owns slightly more than 50 per cent of the common stock, does it not?

A. That is correct.

Q. You do not know of any efforts that have been made by Columbia Oil to voluntarily dispose of its common stock in Panhandle Eastern, do you?

A. I do not know of any, no.

Q. As a matter of fact, you know that certain gentlemen connected with Mo-Kan would be delighted to buy [fol. 10299] some of Columbia Oil's common stock, and pay a handsome premium. Don't you know that?

A. No, I really do not know that. I have heard gentlemen talk a lot of times but, if we are talking facts, I really do not know the facts.

. . . . . .

[fol. 10300] By Mr. Littman:

Q. Will you please turn to Chart No. 25, Exhibit 253; this chart shows that earnings of $5,325,677 are required to service the $77,830,535 of invested capital in Panhandle

Eastern and subsidiary companies as of February 28, 1942; is that correct?

A. Well, if we could use the terminology that I have used, it would be a little preferable to me. It is the amount of earnings required to maintain the credit position. "To service" is subject to some broad interpretations.

Q. Those are the requirements to maintain the credit position?

A. That is correct, not giving effect to the experience of the preferred stock sale.

Q. How much of this $77,830,535 represents net working capital?

A. Well, it is a little hard to answer your question just as you put it, because here we are talking about capital structure only. The most that I could say is that as of the date of the $77,830,535 the net working capital, including the amount received from the new financing was $6,576,743 which is shown on Chart No. 8 and which I have already explained has been committed to the estimated plant expenditures for the ten months, from February 28 to December 31, 1942.

[fol. 10391] Q. Well, roughly, for every dollar of net working capital which is included in your invested capital, the earnings required are 6.84 cents?

The Witness: May I have that read, please?

. . . . . .

A. Well, the 6.84 percent, that is percent of earnings required on the total invested capital, or $6.84, as you wish to put it, is the amount that I have stated in Chart No. 25 and table supporting Chart No. 25 in Exhibit 253.

Q. Will you please tell me how much in dollars of earnings is required per your Chart No. 25 for the net working capital which is in the amount of $6,576,743?

A. I just don't know how you can do that, Mr. Littman. The total invested capital, as computed in Chart No. 25 includes the bonds, the preferred stock, common stock, and surplus, and that is the total amount of invested capital computing invested capital on that basis.

Now, at the time of that computation there was, in working capital, the figure that we have just mentioned of $6,576,743, but I haven't talked in terms of earnings per work

ing capital; I am talking in terms of securities that are held by the investors.

Q. You are providing, however, sufficient earnings to cover an invested capital which reflects six and a half mil-
[fol. 10302] lion dollars of working capital; isn't that right?

A. The invested capital, as of February 28, 1942, does take into consideration the amount of working capital mentioned, that is true, but when the investor gets down to the particular security he holds, which is either a bond, a preferred stock, or a common stock, you can't talk about the earnings required on that particular section.

I can talk to you of the amount required on bonds, preferred stocks, and common stocks, but net working capital, in other words, is not sold as a security, and I can't tell you whether the working capital is so much in the bonds section and so much in the preferred section and so much in common stock. I don't believe anybody else can, unless you liquidate the company, and then the bonds come first.

Q. Well, wouldn't it be fair to say that the six and a half million dollars of net working capital was distributed as among the common stock, preferred stock, and bonds, in the same general ratio as is indicated in your Chart No. 25?

A. Well, I wouldn't want to make that statement because if some catastrophe should happen today, for example, where the company was going to liquidate, as I say, the bonds would be paid off first, and the first thing you use is cash which is working capital. If there wasn't enough cash to pay off the bonds, the preferred stockholders get nothing, and the common stockholders get
[fol. 10303] nothing, so I don't know how you can distribute one way or another.

Q. I think we can perhaps avoid these difficulties you have raised by putting the question this way: Assuming that the company did not have this $6,576,000 working capital, what would its investment be as of February 28, 1942?

A. The total invested capital excluding the net working capital, would be $71,253,792.

Q. And what would be your earnings required, if that were the invested capital?

A. The earnings required then would be approximately $4,663,467.

Q. What is that again? A. $4,663,467.

Q. Now, that is how much less of earnings required than you show in your Chart No. 25? A. $689,210.

Q. Now, we are agreed, are we not, that $689,210 of your "earnings required to maintain credit position" is required by reason of a six and one-half million dollar amount of net working capital as of February 28, 1942; isn't that right?

A. Making the calculations on the basis I have done; that is correct.

[fol. 10304] Q. Now, if this Commission were to allow, let us say, one million dollars of working capital as compared with the figure of six and a half million dollars there would be a substantial reduction in earnings required to maintain credit position, wouldn't there?

A. On that basis, it would be about $569,210.

Q. Less than the earnings required shown in Chart No. 25 of $5,325,677?

A. That is correct.

Q. Now, please refer to our Chart No. 8.

Now, there you show that the estimated plant expenditures for the next ten months, February 28 to December 31, 1942, are $6,530,900; is that right?

A. Yes, that is.

Q. And am I correct in understanding your testimony yesterday that the large amount of net working capital on hand on February 28, 1942, was occasioned by reason of the company having on hand moneys which it had received through its financing program for the purpose largely of financing new capital additions; is that correct?

A. Yes, a portion of it. I have tried to show that in Chart No. 8 in Exhibit 253, showing the decline from June 30, 1941, of $4,661,875 to $3,507,653, as of December 31, 1941, and $2,951,908, as of February 28, 1942, so the difference between the $2,951,508, as of February 28, 1942, [fol. 10305] and the $6,576,743 was the amount realized from the financing in February, 1942, to the amount of $3,624,835.

Q. Well, in other words, your return expressed in dollars and called by you "earnings required to maintain credit position" contemplates the return necessary on this large amount of six and a half million dollars of net working capital?

A. Well, I don't think that is quite an accurate statement.

What I am trying to observe in these data is this: that between June 30, 1941, and February 28, 1942, a matter of about eight months, the working capital had declined almost 50 percent. That is excluding the new financing, which means that the working capital, as of June, must have been needed in corporate business for one purpose or another; so that it automatically declined, was used in the business.

Now, when you come to February 28, 1942, and you have the $6,576,743 of working capital, it is evident, if the estimated plant expenditures and the program that is laid out works out to the estimated figures, that the working capital, as of February 28, 1942, has already been spent, for all practical purposes, so the company really hasn't any working capital.

Where it is going to replenish that supply will be from earnings, and the point I am trying to make there is that [fol. 10356] working capital, as such, must be determined by the needs of the corporation so that if it is converted from liquid form to fixed form, or goes out in the way of an expenditure, then the item in itself does not tell you much of anything, you have got to look at these other facts, and I find from these other facts that what seemed to be high when we last discussed this was actually needed in the business over those remaining eight months after February 28.

Q. You mean actually needed for capital additions, for instance?

A. Might have been capital additions or maybe it was meeting the sinking fund requirements, any corporate purpose, paying of wages, salaries, and so forth.

Q. Isn't your testimony, Mr. Coffman, that a rate payer should pay a return on estimated plant expenditures before they are even installed and in service?

A. There I think you are using a coincidence to prove a fact. I mean it is true, as shown right here in Chart No. 8, that the estimated plant expenditures are approximately six and a half million dollars. Those are to be paid during the remaining ten months of the year. Net working capital at the time was six and a half million dollars. I am just saying to operate any business as a going firm, you necessarily have to have moneys in the till to do the things that are necessary to maintain and provide the [fol. 10307] service and keep this company going.

Q. Now, the effect of that method, however, used by you, is to give the company a return upon that portion of its net working capital, which is yet unexpended for capital additions which have not as yet, of course, been installed; isn't that the effect of your method?

A. Well, to me, a business is a combination of fixed assets and working assets, and it takes the combination of the two to make the wheels go around to produce and render the service. Now, if it is shown, as I think these facts clearly indicate, that the working capital of a certain figure at a moment of time is already to be needed to maintain and render the service by this company to the consuming public, then those dollars are working just as effectively for the consumer as the pipe line company.

Q. And under your theory of rate making, the rate payer should pay a return upon those dollars before they are even converted to property in service?

A. As I stated, in connection with Exhibit 65—and I think it holds true here—people have just recently put in $15,000,000 or approximately that—in the plant through the preferred stock and bonds that the money is invested, and it is going to work and they expect to have a return, otherwise they would not have put the money in.

Q. In other words, your answer to my question is [fol. 10308] "Yes" with the amplification you have given?

A. I would say it was, yes. So long as it is a part of invested capital, it certainly has to have a return.

Q. I wanted to get on the record very clearly your theories, and I want you to tell me whether I am right in saying that it is your theory that the moment a dollar goes into the till of a utility, it then should earn a re-

turn, even though it is not yet expended for property in service.

A. I say that so far as the investor, the man who is putting in the money, is concerned, so long as that money stays in the business, he expects a return.

Now, at any time that you want to bring that investor's return to a conclusion, all you have to do is to just declare a dividend or a liquidating dividend or buy his stock or bonds.

Q. Now, your exhibits have been constructed upon that theory, have they not?

A. These exhibits altogether have been based upon the investor's point of view, the man who puts in the money.

Q. And, in effect, you utilize the invested capital as represented by the total of [outstanding] securities and surplus as representing the rate base?

A. Well, I wouldn't want to go quite that far. I have just taken the invested capital, as you have outlined it, and I am not talking about rate base.

[fol. 40309] The Commission, I assume, is going to determine the rate base, but if that rate base still involves the same amount of capital that is in the business now—that is, the moneys that have been put in—then it will take certain required earnings to maintain the credit position of the company.

Q. Well, suppose the Commission fixes a rate base that is, let us say, ten million dollars below your invested capital of $77,830,535 shown in your Chart No. 25. What, then, becomes of your earnings required figure of $5,325,077? Does that figure then go down correspondingly?

A. It will go down, yes, but if the Commission is going—

Q. (Interposing) Should it go down?

Mr. Wheat: Let the witness finish. I think he hadn't finished his answer.

A. (Continuing) It will go down, but I am just saying that the Commission will, I think, very definitely, in determining the rate base that you are talking about, consider what already is in this business.

Now, you can take the extreme case: suppose the Commission comes down with a rate base that is, let us say, twenty-eight million—suppose the Commission comes down with a rate base that is $28,574,000 less than the total invested capital. That just merely means that the Com- [fol. 10310] mission wiped out all the common stock and surplus. Well, there just isn't any. If that can be done and can be worked upon the investors with no difficulty and will stand, why, quite all right, but what you are really saying is that you are just wiping out a part of an investment and there are still some constitutional rights about what a man gets when he buys a security. At least, I think so.

Q. Do you think the constitutional rights of the investor are violated when the Commission uses actual original cost of the property devoted to public service less the depreciation reserves accumulated to date plus reasonable working capital?

A. That depends altogether on what the facts have shown with regard to that determination.

The only point I am trying to make here is that so far as the investors are concerned, if changes are going to be made so that the invested capital is changed to the extent that it actually creates a tangible loss to the investor, they do not believe that investors are going to continue to finance industrial enterprises in this country.

The financing will have to be done through other than public channels.

Q. Will you turn to Chart No. 46? There it appears that your "minimum earnings necessary to maintain credit position" in the amount of $5,382,000 is a very rigid figure. [fol. 10311] and remain constant regardless of the numerous and various assumed rate bases shown there.

Now, how do you reconcile that with your statement a moment ago that the minimum earnings necessary to maintain credit position will go down if the invested capital goes down?

A. Because here, as I have stated, at the present time the bondholder, the preferred holder and the common holder of this business $77,839,000—whatever that in

vested capital was—and that is the amount those various security holders say of their money is still in this business and that is what they expect to get a return on. Now, if we are going to agree that that is the case, then the $5,287,000 is necessary.

What I have just told you is that if some action is going to be taken so that you just wipe out a part of the investment, just take it away from the investor, then the figure I have given you is correct, but I say, if you go far enough along in that, the people that have bought these securities are, at least, going to find out what it is all about.

If you buy a preferred stock or bond, it says very definite things, and they believe there is value behind it, and these various items now are pretty closely checked with the Securities and Exchange Commission, and that is the only way I know that you can continue public financing. Other-
[fol. 16312] wise the people will refuse to finance any of these companies.

Q. Mr. Coffman, that takes us back to the illustration which we discussed when you were last on the stand for cross-examination, of a corporation having a balance sheet showing $60,000,000 of assets of which $30,000,000 was represented by property actually devoted to public use and $30,000,000 represented cash in the bank. According to your theory, you would allow, in determining the earnings required, a full return up on the $60,000,000 rather than upon the $30,000,000 of cost of property actually dedicated and devoted to public use, would you not?

A. I think I recall about what I said there, and my opinion hasn't changed one iota in regards to it.

The first thing is that I don't think you can find such a situation as that in a going business.

The second thing is that the investor put the money in and if the management wanted to follow a procedure whereby fixed assets are converted finally so that half remains in fixed and the other half in cash in the bank, the investor will tell the management any time or anybody else that he believes that he can use that cash in the bank just as well to make a return by another investment as by leaving it idle there, and, therefore, he is going to tell the manage-

ment, "I want a return on it whether you put it in plant [fol. 10313] or whether you leave it in the bank, because if you are not going to use it, give it back to me, and I will use it."

That is a perfectly sound investor point of view, it seems to me.

Q. And that is why you use as a base, in computing the amount of dollars of earnings required to maintain credit position, the invested capital as represented by the total outstanding securities and surplus?

A. Yes; and to be sure we are talking about the same thing, when you shift from a consideration of total invested capital, as I am defining it, which is the investor's point of view, to discussing the matter from the standpoint of a rate base, as the Commission and utility industry speak of it, we are talking about two different things at that point.

The Commission can determine the rate base as it finds it, considering all the facts, but I am saying, on the other hand, that the investor has put certain capital in here, and unless we can find that there are erroneous entries or other inaccuracies in the accounting, what the investor sees in audited and certified balance sheets, which are given to him, is what he relies upon; it is what he relies upon when he puts more money into it. That is the figure I am going by. Those two things are just different things.

[fol. 10314] Q. On that very subject, are you aware of the fact that there is testimony in this record to the effect that the plant accounts contain a writeup in the amount of approximately one million one hundred thousand dollars, ascribed to gas sales and purchase contracts?

A. Well, I don't know the specific record that you are referring to, but I am aware that there are some gas sales and purchase contracts in some amount. I have forgotten what it is, but on that point, Mr. Littman, I am perfectly willing to make my position clear, that I am using total invested capital here as I have found it from the most reliable figures I can get.

Now, if the Commission makes other findings which show that certain things were inaccurate or improper, then

I would be perfectly willing to use those figures and go forward.

Q. In other words, if there were a writeup of $1,100,000 in plant accounts, then the earnings required to maintain credit position, as that term is used by you, would be correspondingly less than as shown?

A. Would be correspondingly less, and for the reason that there the investors, it seems to me, cannot contend that either good money went in for the value or that earnings had accumulated to create the value.

Q. Now, will you please turn to Chart 3, and I am asking you to do that purely for illustrative purposes. You [fol. 10315] show on that chart certain operating income, do you not, for various years?

A. Yes, I do.

Q. And you have a number of other charts in this Exhibit 253 which show operating income for various years, do you not?

A. Yes, I do.

Q. Now, discussing those charts generally, without making specific reference to them, in arriving at those operating income figures you have accepted the figures as they appear on the company's books without adjustment, have you not?

A. No. In the case of Chart No. 3 and other charts you have referred to, so far as Exhibit 253 is concerned, those now come from Mr. Watkins exhibits, and in particular reference to Chart No. 3 come from Exhibits Nos. 172 and 173.

The percentage calculations I made, but the base figures come from Mr. Watkins' exhibit.

Q. Well, the point that I am driving at is: Neither you nor Mr. Watkins made any adjustments of the company's books in arriving at these net operating income figures?

A. Oh, no. No; that is correct.

Let me answer I don't want to answer for Watkins, but I didn't make any.

[fol. 10316] Q. Well, you don't know of any that he made?

A. No, I don't.

Q. Neither do we.

Now, do you know that there is testimony in this record, that the operating expenses of Panhandle Eastern Pipe Line Company have for the past few years included the amount of $290,000 of charge per year for amortization of a writeup in gas sales and purchase contracts?

. . . . . .

A. I don't believe I have the detailed figures here from which I can answer that question.

By Mr. Littman:

Q. Well, I merely asked you whether you know of such testimony.

A. No, I don't know of the testimony; no.

Q. Well, you know of no adjustment that has been made in any of your figures in this exhibit to eliminate such amortization of gas sales and purchase contracts, do you?

A. No, not unless Mr. Watkins made them, and if he did, then I have, because I have used his figures.

Q. Now, assuming that the company is charging $290,000 per year in its operating expenses for the purpose of [fol. 10317] amortizing a writeup, it is clear, is it not, that to that extent the net operating income is understated in those years; isn't that true?

A. Well, let me answer it in this way: If they had decided, if such item as existed as you were describing, to write it off directly, and had made the entry through surplus, then, obviously there would have been no annual amount to be taken care of; therefore, it wouldn't have existed in the profit and loss [account,] and the earnings would have been higher by that amount.

I merely want to make the point that there is a question in what you say as to the soundness or unsoundness of amortizing a figure on an annual basis. All I will say is that if you should charge an item off all at once to surplus, there would obviously be no annual charge.

Q. If an investor knew that the company was amortizing a writeup at the rate of $290,000 a year by direct charges to income through the medium of operating ex-

penses, would he know that the net income per books is understated to that extent?

A. Well, if he can read a statement intelligently, he can make his interpretation, certainly.

Q. If the facts are as I have stated them, then the net operating income figures that you have shown in your exhibits are subject to that adjustment, aren't they?

[fol. 10318] A. If it were decided in regard to that particular point that a change should be made, why, they are subject to that correction; that is right.

Q. Now, you have made no adjustment anywhere in your exhibit for any overaccruals of income taxes, have you?

A. No, sir.

Q. Have you investigated whether the company has recorded on its books larger accruals for Federal income taxes than was actually incurred for those years and paid for those years?

A. No. I have taken the exact figures used in Mr. Watkins' exhibits, and if such item was included there, it is included in my figure. I am not aware of it, but if it is in his figure, it is in my figure.

Q. Now, assuming that there are such overaccruals, according to the company's books for Federal income taxes, then to the extent of such overaccruals, the net operating income is understated?

A. Yes, that would be true, but I would venture a guess that such total, so far as the annual influence is concerned, would not be large.

Q. Well, for your information, Exhibit No. 222, which was presented by Mr. Duffy, shows that there have been overaccruals for charges in lieu of Federal income and excess profits taxes in the amount of $823,882 for State, [fol. 10319] local, and miscellaneous Federal taxes in the amount of $69,550, for Federal income taxes in the amount of $600,530, and for Federal excess profits taxes in the amount of $219,881, over the period April 1, 1932, to December 31, 1941. You wouldn't call those small amounts, would you?

A. What exhibit are you reading from?

Q. 222.

The lines aren't numbered, but you will find it in the column headed "Adjustment for Items Admittedly not Cost."

Well, those things are a matter of record. You, at any rate, did not delve into that problem or make any adjustments for such overaccruals, have you?

A. No, I used Mr. Watkins' figures.

Q. Now, will you please turn to Chart No. 45 which is entitled "Effect of Increased Gross Revenue and Taxes upon Panhandle's Net Operating Revenue."

Now, at the extreme left-hand side of this chart, you show net operating revenue in the amount of $6,361,247 pro forma for the 12 months ended February 28, 1942, do you not?

A. Yes, I do.

Q. By "pro forma" you mean that that amount reflects the acquisition of Michigan Gas Transmission Cor- [fol. 10320] poration and the other properties to which reference has been made from time to time in this proceeding?

A. Yes, that is correct, and with the one further qualification that the figure you have just read is on the 1941 tax rates.

Q. That is right. And it is that figure which you compare with other figures there shown under the assumption of Mr. Morgenthau's tax proposals?

A. That is correct.

Q. Now, over on the extreme right-hand side, you show that the "minimum necessary to maintain credit position" is $5,382,677, do you not?

A. Yes, I do.

Q. Well, now, on the basis then of the 1941 tax rates, it is apparent that the Panhandle Eastern and subsidiary companies had excess net operating revenue of one million dollars or, stated differently, had an excess profit of one million dollars over and above the "minimum necessary to maintain credit position"?

A. Yes, I very definitely show that, but I also show, Mr. Littman, that Mr. Morgenthau, so far as I can see, has really already done what the Commission had in mind to do by this proposed tax raise.

Q. Well, he hasn't done it yet, and the Commission [fol. 10321] hasn't done anything yet, either.

A. Well, I say, from his proposal, he contemplates just exactly taking care of that matter.

Q. I assure you I don't know what either are going to do, and I don't think anyone else here does.

A. Well, Mr. Morgenthau wasn't talking through his hat when he made his press release on March 3, I don't believe. At least he hasn't been given to that up to the present time.

Q. Well, now, we are clear, are we, that on the basis of the figures shown here, using the 1941 tax rates, Panhandle Eastern's net operating revenue or dollar return is approximately a million dollars in excess of the amount which you claim is necessary to maintain the credit position?

A. Yes, sir, that is correct.

Q. Now, I want you to do something for me. I want you to tell me how much of a rate reduction would have to be made on the basis of the 1941 income tax rates, in order to reduce the net operating income from the $6,361,000 to $5,382,000.

[fol. 10322] A. I have made a calculation, and this I would want to check very carefully.

Q. Let's see how close you come to our figure.

A. According to the result I get about two and a half million dollars.

Q. Well, according to our figures you are about one million dollars too low, but will you please calculate that?

A. I would like to check that more carefully; but that figure, once I determine it, is not taking into consideration any change in taxes.

Q. That is right. It is based upon the 1941 tax rate, we understand.

A. All right.

Q. Now you have introduced a number of charts in your new exhibit 253, which did not appear anywhere in your other exhibits previously presented.

Now, those deal with the Bankers' ratios—at least we will call them that for purposes of brevity. Am I correct in understanding that the sum and substance of the findings as you show them, of the New York State Bankers As-

sociation—well, perhaps I have misspoken myself there. Let me repeat:

The sum and substance of these charts is that interest must be earned four times, and the net available for charges must be equal to 16 per cent of the outstanding debt?

[fol. 10323] A. That is for the gas companies integrated, and pipe line also?

Q. Yes.

A. Yes.

Q. And such a status would have the effect of giving the securities of such pipe line company the very highest credit rating?

A. Or, to state it the other ways around what the New York State Bankers Association is saying: that in order for a gas bond to be in the A quality rating group it must have at least a times-earned of four, and an income available to par value of sixteen per cent.

Q. Now, assume that we have a natural gas pipe line company with a capitalization of $30 of debt represented by 3 per cent bonds and $70 of stock out of each $100 of capitalization.

. . . . . .

A. I missed a couple of points there. $30 of debt and 3 per cent bonds?

Q. Yes.

A. What next?

Q. $70 of stock for each $100 of capital. What is the cost of servicing the $30 of bonds?

A. That is three per cent on the $30—$9.

[fol. 10324] Q. You mean 90 cents?

A. 90 cents.

Q. Per $100?

A. That is right.

Q. And what is the cost required to service $70 of stock?

I beg your pardon; I skipped a point.

Assuming that this company was allowed an over-all rate of return of six per cent on its capitalization, what

would be the cost of servicing the $70 of stock on that basis?

A. $5.10.

Q. Now, how many times are charges earned?

A. About 6½ times.

Q. That is right. 6.66, is that right?

A. Yes. Well, I didn't figure it that close. By inspection of figures I said it was about 6½ times.

Q. What is the relation of the over-all net available to par value of debt?

A. You mean the total income to par value of debt?

Q. Yes.

A. It is six per cent. Have I got that wrong? Oh, to par value of debt, pardon me. Twenty per cent.

Q. 20 per cent is the figure we have too.

Now, does this situation meet the Bankers requirements for highest grade bonds?

[fol. 10325] A. Well, you have 6½ times charges, and you have 20 per cent, so that they are both above the ideal.

Q. And yet this company has an over-all return of six per cent?

A. On the basis of the assumption that you gave me.

Q. I would like to have you refer again to chart No. 45. I am afraid I left that chart a little bit too soon. You will recall this is the chart entitled "Effect of Increased Gross Revenue and Taxes upon Panhandle's Net Operating Revenue."

A. Yes, sir.

Q. Now, you not only show the figures to which we alluded a few moments ago of the net operating revenue on the basis of the 1941 tax rates, as compared with the "Minimum necessary to maintain credit position," but you show the effect of Mr. Morgenthau's proposed tax laws upon the net operating revenue, do you not, on the various assumptions?

A. Yes, on various assumed increases in gross revenue.

Q. Now, you show that if the gross revenue remained the same, then based on Mr. Morgenthau's proposal the net operating revenue would drop from $6,361,000 to $4,526,000; is that right?

A. That is correct.

Q. Next you show that if the gross revenue increased $1,154,000 the net operating revenue would go up to [10326] $4,688,000; is that right? A. That is right.

Q. And going to the next bar, you show that in order to raise the net operating revenue to $4,936,000 under Mr. Morgenthau's proposal, it would be necessary for Panhandle Eastern to earn an additional $3,438,000 of gross revenue; is that right? A. That is correct.

Q. And likewise in order for the company to earn net operating revenues of $5,190,000 Panhandle Eastern would have to have $5,771,000 of additional gross revenue?

A. Yes, that is correct.

Q. Each year? A. Each year.

Q. And I observe that even under that assumption—to-wit: the assumption, that Panhandle Eastern would earn an additional $5,771,000 of gross revenue—that even then your minimum necessary to maintain credit position would not yet be reached? A. That is correct.

Q. Will you advise us how much additional gross revenue would be required by Panhandle Eastern under the Morgenthau proposal to reach the minimum amount of net operating revenue required, according to your theory, to maintain credit position in the amount of $5,382,677? [fol. 10327] A. Well, I can't calculate that right here. I will have to have some time on that.

Q. Does $7,500,000 of additional gross revenue look about right to you?

You may check it, of course, and report back.

A. Well, offhand, by an inspection, that would sound like a close figure; but I would like to make some calculations.

Q. Let's accept it for purposes of discussion, subject to check. A. All right.

Q. Now, as I understand this chart No. 45, if Mr. Morgenthau's tax proposals go through, then according to your calculation, in order for Panhandle Eastern to even secure the bare-bones minimum necessary net operating revenue for the purposes of maintaining its credit position in the amount of $5,382,000 it will be necessary for Panhandle Eastern to earn 7½ million dollars of gross revenue in addition to that which it earned in the year

1941: is that correct, under the assumptions which we have made? A. That is correct.

Q. And that condition could only prevail and could only be met if Panhandle Eastern didn't spend any money for capital additions: isn't that true?

A. Well, I wouldn't want to say that. If I get your [fol. 10328] point—

Q. (Interposing) I think I could have stated my position more clearly.

Let me repeat it; I think we will be together on it. This chart does not reflect any amounts by you for capital additions, does it? A. No; that is correct.

Q. In other words, under the hypotheses that we have just made, the additional 7½ million dollars of gross revenues would be earned without the expenditure of any moneys for capital additions: is that right?

A. That is correct.

Q. Now, you don't have any thought in mind, do you, that Panhandle Eastern could earn another 7½ million dollars of additional gross revenue without spending any money for capital additions?

Mr. Wheat: Let me ask you, Mr. Littman: Are you assuming there that earnings are on the present rates of the company?

Mr. Littman: That is right.

Mr. Wheat: Present rates as now published?

Mr. Littman: That is right.

I am assuming precisely what the witness has assumed for purposes of chart 45.

[fol. 10329] Mr. Wheat: Without what seems to be indicated as probable necessity for a rate increase, I assume?

Mr. Littman: Yes. We want to get an idea of how much of an increase you people think you have to have, on this assumption.

As I understand it, the company, according to Mr. Biddison, is now earning a hundred per cent on its unregulated business.

We want to see how much more is going to be required each year to meet these requirements.

Mr. Wheat: Your understanding, of course, in that regard, is highly faulty, but go ahead with your procedure.

Mr. Littman: I don't remember whether you answered that last question.

The Witness: I don't remember the question.

Mr. Wheat: He hadn't answered when I asked you the question.

Mr. Littman: Was there an answer, Mr. Reporter?

The Reporter: No, sir.

Mr. Littman: Will you please read the question?

(Whereupon the pending question, as above recorded, was read by the reporter.)

A. I shouldn't think so.

By Mr. Littman:

Q. Well, about how much would have to be expended for [fol. 10330] capital additions to secure another 7½ million dollars of gross revenue?

A. I don't know. Along the general point I would like to say, Mr. Littman: So far as my chart 45 is concerned the only purpose at all in showing it is just one and that is to show that if Mr. Morgenthau's tax proposals do go through the alterations in net operating revenue are going to be rather substantial, and if one would then suppose that you could increase the gross revenue to offset a part I am just saying that if Mr. Morgenthau's proposals go through, or anything like his suggestions go through, it is going to take substantial increases of gross revenue to enable the company to have sufficient money to meet its minimum requirements to maintain credit position, or to have about the same earnings it has now would take substantial increases in gross revenue.

Now, so far as how much plant it is going to take to furnish such additional gross revenue, I haven't made any estimates.

I am not an engineer and I haven't even considered it.

Q. We would like to follow this thing through to its logical conclusion.

It may altogether be that this company is facing bankruptcy or something worse than that, and so we want to follow through.

[fol. 10331] Now, what is the present annual gross revenue of Panhandle Eastern?

A. The gross revenue, gross operating revenue, as contained in the statement for the year ended February 28, 1942, was $18,378,378.

Q. And the total invested capital was how much?

A. Total invested capital was seventy-seven million—

Q. (Interposing) —eight hundred thirty thousand five hundred thirty-five dollars?

A. Yes, that sounds correct. It is correct.

Q. Well, roughly the company has about four dollars of invested capital for each one dollar of gross revenue, has it not? A. Just about.

Q. Just roughly: A. Yes.

Q. In fact that is on the low side, if anything?

A. Well, or turning it the other way around, according to the gross revenue figure it is turning its capital about once in four years.

Q. Now, if the ratio of gross revenue to invested capital were to remain the same, obviously it would take about $30,000,000 of capital expenditures to produce the additional 7½ million dollars of gross revenue, would it not?

* * * * * * * * *

[fol. 10332] A. Whatever figures you use you can get the arithmetical result, but I have made no assumption at all as to increases in plant.

I was merely working on one point: namely, what would have to be done, if the tax increase is an equivalent of a million eight hundred thousand dollars, what has to be done by way of increase in gross to at least partially offset it, and I have made no calculations on the plant account at all.

By Mr. Littman:

Q. Let's see how unreasonable my assumptions are: [fol. 10333] You have increased your annual allowance for

amortization in direct proportion each year, have you not, to the increase in gross revenue; don't your calculations show that?

A. Which exhibit are you talking about now?

Q. I am talking about your chart No. 45, table supporting chart No. 45.

A. I don't follow your remark about amortization and so on. What is your point?

Q. Haven't you assumed, for purposes of chart No. 45, that your expenses are going to go up directly proportionately to your gross revenue?

A. What I assumed was that the ratio of operating expense to gross revenue, as existed February 28, 1942, that percentage would remain the same.

Q. And that includes depreciation and amortization, doesn't it? A. That is correct.

Q. In other words you were providing for amortization of sufficient invested capital to provide for this increase or these various increases in gross revenues under the various assumptions, were you not?

A. Well, that is generally correct. It would increase by the percent I have stated.

Q. And your increases for depreciation and amortization are in direct proportion to the gross revenue increases [fol. 10334] assumed by you, are they not?

A. Well, they are in proportion to the amount of the percent that is used, sure.

Q. Well, certainly that assumption presupposes that your plant and property account was going to increase in the same proportion, does it not?

A. Well, it isn't quite as good a case as you are making out, Mr. Littman, because amortization and depreciation is just one of the many items of operating expenses. In other words, the operating expenses, excluding the taxes, were about 61/2 million, so it isn't quite—when you say "direct proportion" I don't like to see you load it all on the amortization and depreciation: that is going a little too far, I would say.

. . . . . .

Q. Very well. That gets us up to something like $30,000,000 on that assumption of capital additions that would be required under my assumption.

Mr. Wheat: And under present rates for the service?

Mr. Littman: Yes.

[fol. 10335] By Mr. Littman:

Q. (Continuing) Under all the assumptions, and there are a great many of them under chart No. 45.

You would have about $30,000,000 of capital additions wouldn't you?

A. That would be about right.

Q. In order to produce the additional 7½ million dollars of gross revenue? A. That is right.

Q. Now, the minute you get into a situation like that and you have another $30,000,000 of capital additions, why, your "minimum necessary to maintain credit position"—or, differently stated, your return—has got to go up too, doesn't it?

A. Well, the capital additions can't come out of the air. They will have to have money to finance it, or earnings to finance it, one or the other.

. . . . . .

[fol. 10337] Mr. Wheat: We have succeeded in borrowing, through the courtesy of Commission's counsel, a copy of the exhibit of Mr. Coffman in the case involving valuation of common stock of Carolina Power and Light Company, to which Mr. Littman adverted this morning, and since this exhibit, I think, is from the files of the Trial Examiner in that case, we should like to be able to return it.

It will only take us one moment to ask the one question we would like to ask on that, if we may be allowed to do that.

. . . . . .

By Mr. Wheat:

Q. Mr. Coffman, you heard Mr. Littman read to you this morning a passage which included, I think, two sentences from your text which appears in the exhibit in question opposite chart No. 6, and I think that is exhibit 307 in [fol. 10338] Docket—

. . . . . .

Q. (Continuing) Well, in the case which has been pending, involving Carolina Power & Light Company.

Did you hear Mr. Liftman read those two sentences, Mr. Coffman?

A. Yes, I did.

Q. I should like to ask you whether those two sentences are a portion of the following text:—

Mr. Wheat: I don't think, Mr. Examiner, possibly, that I need to read this all into the record, if it may be quoted in the record.

It starts with the beginning of the chart—it will only take me a minute. I will read it.

By Mr. Wheat:

Q. (Continuing) "On Chart No. 6, captioned 'Carolina Power & Light Company Common Stock, Daily Price Range & Trading Volume—January 1, 1925 to April 6, 1926' I have reviewed the market action of the company's common stock during the year prior to the date of valuation.

"As noted on the chart, there was no trading in the stock on the New York Curb Market after December, 1925, [fol. 10339] at which time all of the common stock outstanding of the Carolina Power & Light Company had been acquired by the National Power & Light Company through an exchange offer of 15 new shares of National Power & Light Company common stock for each share of Carolina Power & Light Company common stock. Accordingly, my review covered the calendar year 1925.

It will be seen from the chart that at the beginning of 1925 the Carolina Power & Light Company common stock sold at a price of $319 per share.

"After the sale of few additional shares at 320 and 329 during the month of January, the stock declined to a low of 300 on the sale of only 10 shares on February 16. In March, however, the shares jumped to a high price of 360 on an increasing number of shares trades.

"The market was quiet during the month of April around the 340 level, but in May, the price soared to a high of 430, or an increase in value of some 26 percent.

"During the last six months of the year the stock fluctuated between a low of 375 reached both in June and September and a peak of 456½ attained on November 5. Volume of shares traded also reached the highest level on November 5, amounting to 1,220 shares.

"It is obvious from this review of the market action of the common stock of Carolina Power & Light Company the year preceding the date of valuation that the market was an [fol. 10340] extremely thin affair, with wide fluctuation occurring on only a small number of shares traded. In view of the thinness of the market, and the fact that no quotations were available subsequent to December, 1925, I considered it necessary to approach the determination of a fair market value of the common stock of the Carolina Power & Light Company as of April 6, 1926, on the basis of earning power." Does that represent the testimony which you gave in that case?

A. Yes, it does.

Q. And the part which I have read, which was also previously read by Mr. Littman, is that portion only following the words beginning "It is obvious that this review"; is that correct? A. That is correct.

. . . . . .

[fol. 10344]

PAUL B. COFFMAN having been heretofore duly sworn, resumed the stand and was examined and testified as follows:

Recross Examination (Resumed)

By Mr. Littman:

Q. Mr. Coffman, during the last session I asked you to check one or two figures in connection with Chart No. 45 of Exhibit No. 253 which chart was entitled "Effect of increased gross revenue and taxes upon Panhandle's net operating revenue."

The first one that I recalled dealt with the amount of gross reduction in rates that would be required to bring about the indicated reduction net to the company in order to reduce the net operating revenue from the $6,361,247 shown for the full year 1941 shown in the—

. . . . . .

[fol. 10345] By Mr. Littman:

Q. (Continuing)—which was computed on the basis of the 1941 tax rates to the figure of $5,382,677, which is the "minimum necessary to maintain credit position."

A. The figure which I calculated would show approximately $3,390,000. In that connection, however, I would like to say that in using some figures that Mr. Watkins had made showing a reduction of approximately a million dollars which is about the difference we are talking about that is, from the $6,300,000 down to the $5,300,000 which we are talking about, on his basis would indicate something slightly under $3,000,000, but the figure I have is $3,390,000 for checking your calculation.

Q. Now, Mr. Coffman, in order that there may be no confusion in the record, I want you to very briefly explain what this $3,300,000 figure represents. I want it stated in our own language so that there will be no misunderstanding.

A. Referring to Chart No. 45 in Exhibit 253, I show in the first column captioned "Pro forma 12 months ended February 28, 1942, based on 1941 tax rates," net operating revenue of Panhandle on the consolidated basis of $6,361,247.

On that same chart No. 45 in Exhibit 253, I show a last column captioned "minimum necessary to maintain credit position" of $5,382,677, which is the base figure as originally determined on Chart No. 26 in Exhibit 253.

[fol. 10346] The question was how much of a reduction in gross revenue would be made to bring the $6,361,247 down to $5,382,677 and the calculation, as I have made it, would indicate that gross revenue could be reduced $3,391,000 on that basis, although, as I have explained, calculations based upon Mr. Watkins' figures would indicate that a more correct figure was something slightly under $3,000,000, but I believe the difference there comes in the fact that I used a consolidated figure, whereas on his computations, I think he worked it out for Panhandle, for Michigan Gas Transmission, and so forth, because those various companies, as you know, have different tax bases, which would make a slight difference, but I used the overall figure and made the calculations.

Q. Will you please refer to Mr. Watkin's exhibits that led you to the slightly less than $3,000,000 figure, to which you just referred?

A. Well, his figure is not contained in a separate exhibit, as such, but working from figures that he had placed in his exhibit, so far as taxes and so on are concerned, he indicates that, based on 1941 tax rates, a reduction in gross income of $3,000,000 would show, taking into consideration excess profits tax of $1,514,000 and normal taxes of $461,000, that the reduction in net operating revenue based upon the 1941 Revenue Act would be a million twenty-five thousand dollars, and the difference between the [fol. 10347] $6,361,247 and the $5,382,677 equals $980,570, which is somewhat lower than his $1,025,000, so I have concluded from that that on his basis of calculation, the amount of reduction in gross revenue would be slightly under the $3,000,000, which was his original base of calculation.

Q. To summarize, if we use the 1941 tax rates in our calculation, the indicated rate reduction necessary to bring your net operating revenue down to your "minimum necessary to maintain credit position" is something between, about three million, according to Mr. Watkins, and $3,300,000-odd, according to you?

A. Well, say something less than $3,000,000, according to Mr. Watkins and $3,300,000-odd, according to me; that is correct.

Q. In connection with this same chart No. 45, Mr. Coffman, on last Saturday I gave you a figure of seven and a half million dollars of gross revenue increase over the gross revenue of Panhandle Eastern and subsidiary companies for the 12 months ended February 28, 1942, which we computed was, according to your assumptions in Chart No. 45, required to bring about the net operating revenue of $5,382,677, which you call "minimum necessary to maintain credit position" in Chart No. 45.

You stated that the figure sounded about right to you; that is, the seven and one-half million dollar amount of [fol. 10348] gross revenue increase, and I believe you

said that you were going to check that figure. Have you done so?

A. Yes, I have checked that, and seven and a half million dollars is the figure. That is, there are a few odd dollars, but in round figures seven and a half million is correct.

Q. Substantially correct? A. Yes, that is right.

Q. I would like to have you turn now to Chart No. 11 in Exhibit 253, which chart is entitled "Investors' Appraisal of Over-all Capital Risks, 153 Stable Industrial Companies." Is my understanding correct that in this chart you have summarized the data which is compiled in the rather voluminous exhibit for identification No. 254, Sections I, II, and III, this exhibit being entitled "Investors' Appraisal of Risks of Capital in 153 Stable Industrial Companies for the years 1937-1941, inclusive"?

A. Yes, that is correct. Of course, you are aware that in this same volume to which you refer is a section IV which gives the detailed information on Chart No. 10.

Q. Yes.

A. Just so that we account for the whole Exhibit 254.

Q. Yes. Well, I wanted for the present, to discuss your Chart No. 11 of Exhibit 253. A. Yes.

[fol. 10349] Q. Now, the upshot of your study in this connection is that the weighted average "Investors' Appraisal of risks of Capital" for these 153 stable industrial companies for the five years 1937-1941, inclusive, is 6.97 percent. A. That is correct.

Q. And for the year 1941, the investors' appraisal is 7.99; is that right? A. Yes, sir.

Q. For 1940, it is 7.14; for 1939, 6.25; for 1938, 5.36; and for 1937, 6.83? A. That is right.

Q. Have I read the figures correctly?

A. Yes, sir, you have.

Q. Mr. Coffman, I would like to read a portion of your testimony given on April 17, 1942, on direct examination at page 10152 of the transcript of testimony. I would like to read this so that we may discuss this part of your testimony:

"Question: Now you have told us what your eliminations were and given us the number of companies elim-

inated. Will you go ahead and discuss, briefly, the reasons behind these eliminations?"

You were, of course, here discussing your Exhibit No. 254, were you?

A. Yes.

Q. And Chart No. 11 of Exhibit 253? A. Yes.

[fol. 19350] Q. Is that right? A. That is correct.

Q. "Answer: I was principally interested in the common stock phase because the common stocks in any company are the ones which depend for their return on the type of risk involved. In other words, their bonds carry definite stipulations as to interest, sinking funds, and so forth, so that if any company should, some place along the line, run into difficulty, presumably the bondholders are the best protected of the various security holders of securities in a particular corporation."

I shan't read the balance of the answer unless you feel it is necessary as we discuss the problem.

Now, am I correct in understanding from that statement that in your judgment the investors' appraisal of risks of the common stock of these 153 stable industrial companies is important in connection with this proceeding?

A. No. If I understand your question correctly, the information shown in Chart No. 11 is the investors' appraisal of over-all capital risks, that is, taking into consideration the bonds, preferred stock, and common stock, but when it came to the process of elimination to arrive at the 153 companies, it seemed to me that if a company had paid a dividend on its common stock each year for a ten-

[fol. 19351] year period that was about as close a measurement of stability for an industrial corporation as I could find, so that I used the regularity and continuity of dividend payments, although the dividend payment might have varied from one year to another, of common stocks as the final test of arriving at whatever the resultant figure was, which was 153 industrial companies, but so far as the figures contained in Chart No. 11 of Exhibit 253 are concerned and the supporting data in Exhibit 254, it covers the over-all capital risks.

My point is that to determine whether an industrial company has any degree of stability, in my opinion, the best test is whether an industrial corporation has been able for a period of years—and here I said ten—to pay a dividend on its common stock each year.

Q. Well, is it true to say that the common stocks of natural gas pipe line companies, such as Panhandle Eastern, compete in the money market with the common stocks of companies such as these 153 stable industrial companies?

A. Yes, I should think all the securities of various companies are competing in the market for investment money.

Q. In other words, one type of security of one company competes in the money market with the same type of security of another company, generally speaking; isn't that true?

A. Well, I think that is refining it somewhat. What [fol. 10352] you mean by your question, I take it, is that a common stock of any company, let us say, in the utility field, would be competing against any common stock in the industrial field.

Well, I believe that is true, but I wouldn't want to confine myself quite so much, because an investor might well consider a common stock in one company or one industry, whereas if he went to another company in the same industry or a different industry, he might not consider a common stock, but would be more interested in a preferred, so there I suppose you would say that preferreds were competing with common, and the reason for that is that the investor is trying to the best of his ability to size up the possibilities of this one investment against another.

Q. Well, isn't it true that an investor who is interested in investing his money in common stocks surveys the common stock market and compares the risks and returns of industrials with those of utilities before making up his mind? Isn't that generally correct?

A. Yes. To make my answer complete: if we had a client who had a certain amount of funds for investment who said that he was interested only in common stock, then, obviously, he would, himself, look over all available common stocks or have us, his investment advisors, do it for him, and then recommend those common stocks we thought best.

Q. And is it true to say that your study of the 153 stable [fol. 10353] industrial companies represents your judgment of those companies whose common stocks are most comparable in stability with the common stock of natural gas pipe line companies?

A. Well, I don't believe one could quite say that from the information that is in Chart No. 11. At least, that wasn't what I had in mind.

What I set out to do was to study the over-all risks of capital in the industrial field. Well, obviously, there are thousands of industrial companies, so I couldn't possibly, in any short space of time, cover them all, nor did I think it was necessary.

In order to arrive at a list which would at least bring it into a number that I could handle within any reasonable length of time, I followed the procedure of elimination described and which is in the record and which finally gave me 153, and because I used as my principal guiding light at the end those companies which had paid a dividend on their common stock in each year, made these 153 companies, but my findings or conclusions, so to speak, cover the over-all investors' appraisal as against a common stock treatment.

The only reason we used the common stock was to try to get at this stability of one company against another.

Q. What you wanted to obtain was a list of the most stable industrial companies?

A. That is what I was trying to get at.

[fol. 10354] Q. And that was, I take it, because you felt that it was the most stable of the industrial companies that were most comparable with the securities of natural gas pipe line companies?

A. Generally, I think that is correct.

The Witness: May I just have that question and answer read so that I can be sure the common stocks are not mixed up?

(The record was read by the reporter.)

A. Well, I don't understand quite the "comparability." The word "comparability" in other words, bothers me there.

All I was trying to do was get the over-all risk of capital in the industrial field which was unregulated, and felt that if I took the companies that had these dividend payments over a period of time which indicated the stability, that I would get an idea of what investors for over-all capital required, and that figure weighted average for a five-year period was 6.97 percent.

Now, relating that to the utility field, it seemed to me that in a regulated industry where you also were to have, as I understand it, a degree of stability because of regulation and being allowed a fair return, that in a state of competition where you live or die depending upon management ability and other factors, the weighted average for a five-year period is approximately 7 percent. Then I concluded that in a regulated industry, certainly that 7 percent would more or less prescribe a minimum, and I did not go [fol. 10355] to any greater extent by way of talking in terms of comparability, because I don't see that there is comparability shifting from the industrial field to the utility field.

Q. Well, are you saying that these industrial companies are as stable as the utility industry?

A. I don't think I would put it quite that way, Mr. Littman, but what I am saying: If you go from a regulated industry to something outside that field because, as I understand it, there were statements in the Bluefield case which I think were read, and I couldn't quote but could read it again, of other industries outside the regulated field. I went into the industrial field and selected out of that field those that had the greatest stability, but naturally were unregulated and were facing competition, and it seemed to me that if, in the face of that competition, the investors over-all were appraising that risk at around 7 percent, and those companies had a degree of stability, although they were unregulated, so that such stability would begin to approach the stability in a regulated field, that there was there some guide to be used as one additional factor in a consideration of this over-all matter.

Q. Some of these "stable industrial companies" actually had deficits in some of the ten years, even though they paid dividends in those years; isn't that a fact?

[fol. 10356] A. Yes, that is a fact, but my point is that

that is no different, really, as I see it, than the public utility field. For example, I can't give the specific dates, but some place along in the depression years—1932 or 1933—American Telephone Company, for example, paid out in dividends more than it earned, but if from one year to another you can accumulate, even though you have a deficit one year, you can accumulate earnings so that over the ten-year period the dividends you earned were out of earnings and not out of capital, why, that is about as good as you can expect. I don't think you could say that a company should earn some money each year. That is asking too much with the business cycle coming on from time to time.

Mr. Wheat: When you say "some money each year," you mean some money available for dividends?

The Witness: Yes; some money available for dividends.

By Mr. Littman:

Q. You don't go any farther than 1937 in your study?

A. No, in my study I covered just the last five years, because it seemed to me that was the most recent information, and, therefore, the most pertinent.

Q. Then, are you or aren't you saying that these 153 industrial companies are more stable than the utility industry?

A. Well, I wouldn't want to word the answer that way, [fol. 10357] Mr. Littman, because that wasn't what I had in mind.

I feel that when I go from the utility industry to any other industry there are differences immediately so that you have to recognize those differences and you can't, therefore, say that they are comparable, but my whole point of view is that the 153 industrial corporations were, so far as I can see, as stable as any industrial companies you could find.

On the other hand, I had understood that regulation of the public utility industry, among other purposes, was to add some stability to that, so that there is some stability in each group, but to say that 153 are equally as stable as the utility industry, I wouldn't want to say that. It was the next closest thing I could find outside of the utility

field for whatever additional advantage it would have to these figures.

Q. The latter part of your statement is somewhat close to our understanding, namely, that the utility industry is over-all more stable than industrial companies, even the most stable industrial companies; isn't that true?

A. There again you are pinning me down to whether they are equally stable, which is difficult. I am looking at this, bear in mind, right along from the investor's point of view, and, as I see the investor, he is here on the outside with a thousand dollars or many thousand dollars looking for a place to place his money.

[fol. 10358] Now, if he finds over a period of time that the over-all risk of capital should be less in the utility field than he could find in 153 industrial companies with considerable stability, I should suppose he would begin to shift his investments from the utility field, generally to to these 153 industrial companies, let us say, because he finds there that putting a thousand dollars in gives him about the same stability that you have in the utility industry, but a higher return, and, therefore, from that, I had concluded that the 6.97 percent would more or less prescribe a minimum from the investor's point of view, because if he can fare better from another investment than he can from something in the utility field, he will make the investment on that basis.

Q. Mr. Coffman, isn't it a fact that the capital structure of utilities is considerably different from those of industrials in that utilities have a very much larger percentage of debt capital and preferred stock?

A. Yes, I think that is generally true.

Q. It is certainly true that Panhandle Eastern Pipe Line Company has a capital structure considerably different from the average of the industrials which you show, in that it has a much larger percentage of debt capital and preferred stock than these 153 industrials; isn't that correct?

[fol. 10359] A. Well, I haven't actually taken an average of these industrial companies, but it would seem to me that your statement was true, except that to make just a hide-bound answer, I would feel better to have made the cal-

culations, but it sounds very reasonable to me, knowing what I do about the industrial companies.

Q. Well, are we agreed, Mr. Coffman, that the actual cost of the securities of the Panhandle Eastern Pipe Line Company are to be used in determining the fair return under your approach?

A. Well, as I have shown in Chart No. 26 of Exhibit 253, I used the 2.88 percent for the bonds.

Q. Pardon me. That is actual, isn't it?

A. But that actual closely approximates the average for high grade corporation bonds, so that it is more or less in tune with the present day capital market conditions. However, when you come to the preferred stock, I feel that the 6.23 percent, which is not the actual, should be used for reasons that I had developed in connection with charts Nos. 17, 18, 19, and 20, in Exhibit No. 253.

Q. Well, the actual cost of the preferred stock is shown in Chart No. 25 of Exhibit 253, to be 5.87 percent; isn't that right? A. Yes.

[fol. 10360] Q. And you have adjusted that upward, as you have, I think, heretofore explained, and I think amply enlarged upon, you have increased that to 6.23 percent, as shown in Chart No. 26? A. Yes, that is correct.

Q. Now, with that one exception of that latter adjustment, you have used for the purpose of your study actual cost of the bonds and preferred stock for the purposes of this study and your approach, haven't you?

A. Yes; and the reason that I have done that is because it so happens that in this instance that both a new issue of bonds and a new issue of preferred stock have been made, so that you had what you might call the most pragmatic test.

In other companies where there have been no issue of bonds or preferred stock, then obviously I study what the market seems to indicate.

Q. Now, that leaves, does it not, for determination by way of judgment only the proper return applicable to the common stock and surplus?

A. Generally, that statement is correct.

Q. And you judge the proper return to be 12 percent for the common stock and surplus, as shown, I believe, in your Chart No. 26 and Chart No. 25 as well? A. Yes. [fol. 10361] Q. Now, what we then are very anxious to have in the record, what we are actually seeking is common stock comparability, aren't we?

A. Well, I had thought that the subject had been explored fairly fully so far as the common stocks in the utility industry go, which are the ones we must rely on to give us some indication about what the investor is saying about common stocks in the natural gas division of the public utility industry, and I thought in Exhibit No. 65 and in Exhibit No. 253 that had been developed.

Q. Well, Mr. Coffman, might it not be very helpful to the Commission, in assisting the Commission to estimate the proper return applicable to Panhandle Eastern's common stock, to determine the investors' appraisal of risks of common stocks of these 153 stable industrial companies? Don't you think that information would be helpful and important?

A. Well, such study could be made to see what the result is. I haven't any idea, as a matter of fact, what it might show, and I would be perfectly willing to get the figures together, but it would seem to me, even after the figure, that when we considered the Panhandle Eastern Pipe Line Company, we would still want to confine our attention fairly closely to the experience of other pipe line [fol. 10362] companies, and, in that regard, we already have the evidence in the record as to what the common stocks are doing.

Q. However, there is a rather limited number of natural gas pipe line companies for comparison that you have studied?

A. That is true, but, as I think I have stated in times past on the record, so far as I know, I have included all of the natural gas pipe line companies in the industry upon which investors' appraisals can be made, which would give you all of the coverage, even though the industry is small, that you could possibly produce.

Mr. Wheat: Just to make sure of what he is referring to, I wonder if I could ask this question: when you refer to these natural gas pipe line companies, you include all

of those that you used in making up the natural gas pipe line company portion of your Chart No. 10?

The Witness: Yes, that is correct. In other words, I say that all of the companies upon which an investors' appraisal of over-all risk of capital for all natural gas companies and natural gas pipe line companies, as contained in Chart No. 10 of Exhibit No. 253 and tables supporting such chart, to my knowledge, are all the companies in this industry upon which you can get an investor's appraisal or upon which there are figures available to make such calculations.

[fol. 10363] By Mr. Littman:

Q. When you speak of all the gas pipe line companies, you are speaking of all six of them, including Panhandle Eastern, aren't you?

A. That is true, there are six, but I am saying that those are all upon which figures are available for such calculations as I have described as investors' appraisal of over-all risk of capital.

Q. There is no way for you to include, for example, Natural Gas Pipe Line Company of America common stocks that you have testified as one of the most comparable pipe line companies to Panhandle Eastern?

A. That is true. If the various securities on the great bulk of securities contained in a company's capital structure are not held or a part of it held by the public so you can get a market quotation, then obviously it is not included in the study.

Q. Then naturally that had the effect of reducing the available number of companies for the purposes of your study down to five other than Panhandle Eastern?

A. Yes, that is correct.

Q. You couldn't include Colorado Interstate Company for that reason, could you?

A. For the same reason; that is correct.

Q. Now, you have stated that you have not made a [fol. 10364] study of the common stocks of these 153 stable industrial companies; is that correct?

A. Yes, that is correct.

Q. That, I take it, was simply because you didn't have sufficient time to make such a study?

A. That is correct. I was just able to get done, as you know, what I have here and very few copies of that.

Q. I understand you were very much pressed for time.

A. Yes, sir.

Q. But if you had had sufficient time, would you have made a study of the investors' appraisal of risks of the common stocks of these 153 stable industrial companies?

A. Yes, I would have, and beyond that, I think, if I had the time I would look at new issues over a period also to see how they were moving, such as I did in the case of Northern Natural on its September 10 offering.

Q. And such a study, to wit, study of the investors' appraisal of risks of common stocks of these 153 stable companies, would, in your opinion, be a pretty good guide to be used in determining the proper investors' appraisal of risk for natural gas pipe line company common stock?

A. Well, I wouldn't make a statement just like that, because, as I say, in the last analysis it seems that for the purpose of the main study; you still have to talk in terms of regulated industry, and, more particularly, in the divi- [fol. 10365] sion, the specific division that we are talking about, and what may be shown in 153 industrials is just additional information that may give a broader view, but I wouldn't want to get it any closer than that, by saying it would be the guide or a specific guide.

Q. But it would be a very helpful guide?

A. Well, I think it would certainly be an interesting figure. How much weight can be given to it, how much use can be made of it, I don't know. I would want to think that over and give some study to it.

Q. Well, it would be just as important, if not more so, would it not, than the investors' appraisal of risk of capital for these 153 stable industrial companies which you have shown in Chart No. 11 on an over-all basis, wouldn't it?

A. Well, it would carry the same weight, I would say, as this, but my point is that I haven't used the material in Chart No. 11 directly any place. It was just an additional item to have a look at, but when it got down to working out my actual results, as you know, I have confined my attention right along to the utility field, and,

more particularly, the natural gas division of the utility field.

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Redirect Examination

[fol. 10366] By Mr. Wheat:

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Q. Now, with respect to these questions that Mr. Littman has put to you which dealt with what he termed comparative stability, is it a fact or is it not that the investors' appraisal of natural gas pipe line company securities over all indicates that investors do not, as a matter of fact, appraise such securities of such companies, in general, as [fol. 10367] highly as they do those of the 153 stable industrial companies which you have studied?

* * * * * * * * * *

[fol. 10368] The Witness: Well, I still say that that question is confusing, because—appraised "as highly"—they actually appraise the gas companies more highly than they do the 153 industrials.

In other words the figures over all for gas companies are higher than the industrial companies.

By Mr. Wheat:

Q. That is the point I was asking you about. Would you say that if an investor demands a higher return from one company than he does another, that he appraises the one from which he demands a higher return as highly as he does the other?

That is the only point of my question.

A. Well, if you will let me answer it in my own language, perhaps I can get at it better.

Q. Yes.

A. The investor is saying, from these facts shown in charts Nos. 10 and 11, that so far as his investment and his requirements for securities in the natural gas companies and the natural gas pipe line companies, he demands more as an over-all return on capital than would be indicated that he was demanding on the 153 industrial companies.

Therefore, so far as my interpretation is concerned, the investor is saying that he believes there is more risk attaching to natural gas companies and natural gas pipe line companies than was the case in the 153 industrial [fol. 10369] companies.

Q. Mr. Coffman, looking at chart No. 10 covering those various divisions of utility industry which is there shown, does the same variance in investor appraisal clearly appear?

A. I think that the information shown in chart No. 10 of Exhibit 253 shows clearly that the investors confining their attention to the public utility industry have shown that water companies in their opinion were carrying a lesser risk than companies in the electric operating utility field, and those were less than the manufactured and mixed gas companies, and the latter in turn were less than all-natural gas companies, and the all-natural gas companies were less than the natural gas pipe line companies.

It seems to me that for a five-year period those figures indicate that conclusion pretty clearly.

Q. Mr. Coffman, Mr. Litzman questioned you yesterday about some possible adjustments in the investment figure shown on your chart No. 25 and 26, which were suggested in this record by Mr. Dunn of the Commission's staff. Let me just ask you this:

I think you stated, did you not, that any change in the $77,730,535 figure which might be made would affect your earnings required to maintain credit position by the same percentage that the latter figure bears to the invested [fol. 10370] capital figure?

A. Well, I recall that question, and I remember that my answer was rather long and perhaps somewhat involved.

But what I would like to get clear, so far as my own understanding of this matter is concerned, we are talking about two things:

In the first place, throughout Exhibit 65 and Exhibit 253 I have been taking the investor's point of view and have been using total invested capital per the books of the given company.

Now I say that unless it can be demonstrated that the book figures are in error, that the investors in the given company have placed in the company, or, by use of the assets they put in earnings, have accumulated or accumulated to a total of $77,830,535, and that is the amount that the investors believe they have invested in the business and is, therefore, the amount upon which they require a return.

Now, if we go over to a different consideration, namely, a rate base, and it is then found that some other figure than total invested capital may be determined, unless it can be shown that the total invested capital is actually not there so far as the securities outstanding are concerned, the investors will still require the $5,382,677 as shown in chart No. 26 which is a return upon the total invested capital of $77,830,535, irrespective of what the rate base may [fol. 10371] be, and I thought I had made my position clear by my last chart No. 46, in which, if the total invested capital represents what the investors have in this business, and the $5,382,677 is required to keep them in position to refinance or further finance this company, when it is needed, then you can select or determine any rate base you place, but you must allow a percent on such rate base as will give you $5,382,677.

Now, as I say, I don't recall just how I answered the question before, but I believe, in this answer, I have made my point of view clear, that I had hoped I had made clear before.

. . . . . .

[fol. 10372] Q. Mr. Coffman, if you will turn to your Chart No. 8 in Exhibit No. 253. Do you have that before you? A. Yes, I do.

Q. I think during the cross examination, Mr. Littman asked you to make a mathematical calculation of subtracting the $6,576,743 shown as net working capital on Chart No. 8 from the invested capital of this company. I think you made the mathematical calculation, didn't you?

A. Yes, I did.

Q. Do you consider that the reduction of invested capital by this net working capital figure involves a realistic

assumption of any sort in connection with the operations of this company and the investors' appraisal of its risks?

A. No, I do not because here again, in connection with the point I have already made, taking the investors' point of view, the total invested capital amounted to $77,830,535 as shown in Charts Nos. 25 and 26 in Exhibit No. 253 and that is as of February 28, 1942, the total invested capital, so that, as I think I have explained before, so far as my study is concerned, you cannot eliminate that because it actually exists.

[fol. 10373] Now, any assumption other than that, it seems to me, again is talking about this matter of the rate base, whatever the Commission may determine that to be as against the thing I am talking about, namely, the total invested capital. $6,576,743 actually exists. It is there. It is a live, tangible asset.

Q. Yes. Is there anything further you wish to say on that point?

A. Well, on that point, as far as the calculations were concerned that I made before, it then comes down to a question of managerial policy. If there is to be any reduction in working capital, in other words, the working capital can be used for a number of purposes and you cannot eliminate it, so far as my study is concerned from consideration unless you determine how it is to be used.

Q. You have shown one way in which it will be eliminated during the current year, haven't you?

A. Well, on the basis of the estimated plant expenditures, I have shown that provision has already been made for its use in the amount of $6,530,900.

Q. Well, if it were not used for that purpose, what other purposes fit within what you have mentioned just a moment ago as sound managerial policy?

A. Well, if it were determined by the management that the $6,576,743 of working capital were not needed for plant [fol. 10374] expenditures which development is now under way, then obviously, the management could use the working capital to reduce the debt which it would seem to me would be the procedure to follow in view of the fact that, of the total capital structure, the debt portion is the only portion in which trouble could develop in case there

was any default in meeting the serial note payments or in meeting maturities or interest payments on the bonds.

Therefore, if a portion or all of the working capital were going to be used, it would seem to me that any reduction thereof should be made on the basis that you were paying off your debt.

Q. What effect would that have on your minimum necessary earnings?

A. Well, I do not have the figure, but I can calculate it the same as I have made the other calculations.

Turning to table supporting Chart No. 26, it is shown therein that there are Serial Notes A, B, C and D coming in various maturities from November 1, 1942, to 1945, in the amount of $5,000,000 and first mortgage and trust lien A, in the amount of $6,250,000, maturing from 1946 to 1950 and, if I were to work out a schedule on those, taking the interest on the various items, I would find that, on the first series, there is 0.75 per cent—

Q. (Interposing) That is the serial notes?

[fol. 10375] A. Serial notes of the A, B, C and D group, carrying 0.75 per cent of interest; the next group one per cent; the next group 1.25 per cent; the next 1.50 per cent; and the next 1.65 per cent which would give you an average rate for the five pieces of debt of 1.25 per cent and, if you applied that to a figure of $6,250,000 which consumes most of the net working capital as existent on February 28, 1942—

Q. (Interposing) You could retire some of the 3's or some of the preferred stock, if you wished, couldn't you?

A. Yes, you could do that but first applying it to the debt, and I will tell you why I think that is a more realistic approach.

The total reduction from the standpoint of requirements would then be $78,125 which should come off or be subtracted from the $5,382,677 of earnings requirements on the new total invested capital which would be $77,830,535 less $6,250,000 of working capital so used, giving a resultant total invested capital then left in the business of

$71,580,535 and, on that basis under that procedure, the earnings requirements then would be $5,304,552 in contrast to the figure I show in Chart No. 26 of $5,382,647.

Now, so far as the other bonds or the preferred stock is concerned, looking at it from the managerial point of view, it seems to me that to assume that working capital is not needed in the business, the only approach then you can take [fol. 10376] to its reduction is applying it against the most important maturities which are the near term maturities which are the very issues that I have just used because the longer term debt does not mature until 1960 and 1962 so that there is no immediate pressure in regard to those issues and, so far as the preferred stock is concerned, even though it carries a sinking fund, it nevertheless is still a preferred stock so far as dividend requirements are concerned. In other words, there is no possibility of default there such as you would have if you failed to meet any of the maturities in your serial notes so that, so far as I can see the proper approach, if any is to be made in regard to the reduction of working capital should, in soundness of managerial policy, follow the course of procedure I have outlined which, if it were followed, would give the results I have just stated is the record.

Q. I wish you would turn now to your Chart No. 45 for a moment. I think you have already stated, Mr. Coffman, that the three bars showing various assumptions of increasing gross and net operating revenue were taken at the points you took them merely because you took certain actual figures as shown on that chart from the history of this company? A. Yes, I did that.

Q. And I think you have already also stated that the illustration could just as well have been made by assuming [fol. 10377] various increases in gross of an even million, two million, three million, et cetera, dollars, is that correct?

A. That is correct.

Q. Now, Mr. Littman asked you some questions on Saturday as to whether or not the capital invested in this company would have to be increased in proportion to such increases in gross revenue in order to handle the business. Did you entirely complete your explanation of that situation when you answered him Saturday?

A. Well, I do not recall just the answer but the point I was trying to develop was, in the first place, in my study I did not make any consideration of increased plant that would be necessary for any increased gross revenue and for the reason that it seems to me that the consuming market at the point of consumption, in the last analysis, will determine such additions to plants as are necessary to take care of any expansion of service and that to me is a separate study. I gave no attention to that.

The only purpose I had in mind in showing the facts as shown on Chart No. 45 of Exhibit No. 253 was that if anything like the proposals made by Secretary of the Treasury, Mr. Morgenthau, should finally become the new tax law then there will be such reduction automatically by virtue of the increased tax rates in the net operating revenue as to reduce the figure for the twelve months ended February 28, 1942, for net operating revenue of $6,361,247 [fol. 10378] based upon the 1941 tax rates to a figure approximating $4,526,618. That figure, as I answered before, is less than the figure I call minimum necessary to maintain credit position of $5,382,677 as also shown on Chart No. 45 of Exhibit No. 253. It would seem that if the tax rates are to have the effect already mentioned, then one of two things must be true if the company is going to reach this figure I caption "Minimum necessary to maintain credit position" of $5,382,677. Those two things would be either an increase in gross revenue, taking into consideration new tax rates, an increase in gross revenue sufficient, after the new tax rates, to allow a net operating revenue figure equal to $5,382,677 or an increase in rates to help compensate for that difference or a combination of the two, namely, an increase in rates plus some increase in gross revenue and the only purpose of Chart No. 45 in this exhibit was to indicate that Treasury proposals and the law as it is finally developed are already having a marked effect upon this company to reduce its net operating revenue below the minimum necessary to maintain credit position and, therefore, some action either by way of management to increase gross revenue through development of further business or some rate adjustment—

Q. (Interposing) Upward?

A. (Continuing) upward or a combination of the two.

Now, I had no thought in mind as to what plant expenditures, in addition to what have already been made [fol. 10379] might be, because, as I see it, that figure will be determined solely by the consuming market in the territory served by this company and certainly the management would not add to plant to any greater extent than they thought they had a market developed to require such service.

Now, so far as any assumption that increases in gross revenue worked in direct proportion to increases in plant account, I have made no such contention. I have not studied the matter. I am merely showing that the influence of these taxes is such as to create a real problem for this and all other companies. I have not made the calculation for all other companies. I have made it specifically on the company in question.

. . . . . .

[fol. 10380] Recross Examination.

By Mr. Littman:

Q. Well, let's see how accurate it is. You have not told us anything about the capital additions, have you?

A. With the exception of the $6,500,000 approximately that was estimated for the ten months from February 28, 1942, to December 31, 1942, as shown in Chart No. 8 of Exhibit No. 253.

Q. With that exception, you have not portrayed the actualities of the situation with respect to capital additions that may be required to produce this additional gross revenue, have you?

A. No, I made that clear in my answer.

Q. Now, you know, don't you, that such capital additions as may be required to produce such gross revenue will immediately have an effect upon the calculation of the taxes, wouldn't they?

The Witness: May I have that question read, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: Can we state that the other way around, that any increases in gross revenue will immediately have an effect upon the taxes?

By Mr. Littman:

Q. No, I am not talking about increases in gross revenue. I am talking about increases in your capital account. Doesn't the increase in your capital account change your [fol. 10381] taxes?

A. Well, so far as the revenue account is concerned, we are talking about the gross revenue and the excess profits and normal and surtaxes so you will have to develop your question a little further, it seems to me.

Q. We are talking about the extra allowance that the Treasury Department gives you by reason of your increased capital investment.

A. Assuming you use the invested capital credit as a basis for calculating taxes, is that right?

Q. Assuming you use either method, any method, as a matter of fact.

A. If you use the average earnings basis, I do not see that it has anything to do with it. You have got only two alternatives under the present revenue act and that is either to use your invested capital as a basis for taking your credit or else using the average earnings basis.

Mr. Wheat: You are speaking now of the excess profits tax laws, are you not?

The Witness: Yes, that is correct and also about normal and surtaxes.

By Mr. Littman:

Q. Is it your understanding, Mr. Coffman, that the Treasury Department makes no allowance for increased investment under the average earnings method? Is that your understanding of the tax laws?

[fol. 10382] A. No, that is not my present understanding but what I am saying is that, so far as any material difference is concerned, I believe it would come mostly on the basis, if you selected as your credit calculation the invested capital method, there will be some allowance, but I do not believe, although I have not made the calculations, that the amount of difference in tax would be so great.

Now, maybe I am wrong but I do not think I am.

Q. You have not made the calculations, have you?

A. No.

Q. How do you know whether you are right or wrong or how close to right or wrong you are?

A. From the calculations I have made heretofore in applying the various rates.

Q. Made where before?

A. That I have made in other connections which have given me some knowledge of how the tax actually works.

Q. Let's assume $6,000,000 of additional capital investment and tell us what the tax rate would be under the Morgenthau proposal?

A. I do not still get your point, Mr. Littman. Wherein will the calculations be any different than I have shown on page 3 of table supporting Chart No. 45 and on page 2 of table supporting Chart No. 45?

[fol. 10383] Q. Suppose you show us where on any of these tables you have given any credit by reason of capital additions. That will most certainly be required to produce this additional revenue and that will be required under your testimony.

The Witness: Will you read that question, please?

(Whereupon, the pending question was read by the reporter.)

The Witness: No, I have never said that I made any such allowance for capital additions. I answered that question very definitely in your last series of questions.

By Mr. Littman:

Q. But such an allowance would be made, wouldn't it, under the tax laws?

A. Yes, it would be but I think I answered your question on Saturday very directly and I believe the record will bear me out that I took these assumed increases in gross revenue without making any allowance for additional capital expenditures that might be necessary to create that additional gross revenue.

Q. Now, on your redirect examination, you made some references to Chart No. 26 on which is shown the invested capital as of February 28, 1942, in the amount of $77,830,535 and which also shows that the earnings required to maintain credit position, according to your testimony, amount to $5,382,677.

Now, I thought we understood each other at the conclusion of Saturday's session but the redirect examination, [fol. 10384] I am afraid, has confused me again. I would like to have you enlighten me whether this $5,382,677 figure would go down if the Commission were, for example, to find that there is a write-up on the company's books in the property accounts amounting to $1,100,000?

A. Yes, it would and that is not inconsistent with anything I have said here this morning, Mr. Littman, because, if you will recall, I said that if the $77,830,535 is an accurate figure, then that is what the investors have put into the business and would expect a return on.

Now, if there was a write-up in the books, then obviously they did not put in capital to that amount so we will make an adjustment and that will influence the figures downward. There is no inconsistency and I have not changed my statement at all.

Q. Now, your responses to some of Mr. Wheat's questions on redirect examination merely emphasized, did they not, what you believed [the] be the realistic approach, namely, for one, amortizing cash in the bank and giving a return on it provided it is reflected in invested capital, isn't that right?

A. Well, I would like to answer that a little differently than you put the question because amortization has a rather particular meaning and what I was trying to do, in answer to Mr. Wheat's question, was merely point out that if the $6,500,000, in round figures, of net working [fol. 10385] capital is to be nonexistent, we must then first find out how it is to be taken out of the total invested capital unless we could show that there was a write-up in exactly the same amount which had no justification then I can see that you would eliminate that amount.

Assuming for the moment that there is no inaccuracy in the total invested capital of $77,830,535 which includes the $6,500,000 of working capital, then I say that, from a managerial and sound business policy point of view, that the elimination or reduction of that working capital would be used to buy in the notes and early maturity bonds.

Q. Assuming that the excess working capital is paid out to the stockholders by way of dividends, then you would start reducing the earnings required from the top, namely, the 12 per cent capital rather than the bond capital, isn't that right?

A. I think I stated in my answer that, so far as sound business policy is concerned and a realistic point of view, you would first consider the funded debt because it has maturities and if they are not met or the interest on them is not met, you could be in default. It could be used for preferred stock purchase, for example, or it could be used for dividends on common stock but, if you are going to make such statements, I doubt very much whether the company could take 6½ million of dollars and distribute [fol. 10386] it as dividends, bringing its net working capital down to practically a negligible figure without having to encounter some difficulties from bond holders and preferred stockholders.

It just does not seem to me to be realistic to assume such basis. After all, there are $5,000,000 of maturities that are coming due in about the next 24 months and that is getting pretty close so it would seem to me, if you are going to use any of this working capital, you had better dispose of those things first.

Q. Mr. Coffman, suppose you tell me what happens when a company like Interstate Company, which has only common stock, suffers a reduction in over-all invested capital by reason of some of these matters that have been mentioned? Do you take it off the top or off the bottom or what is the effect?

Mr. Culton: We would like to know what is meant by "some of these matters"? The question is indefinite.

By Mr. Littman:

Q. Do you understand my question?

A. I think I understand what you are asking.

If you draw the distinction between companies that are financed by all common stock, there is no problem obviously, because common stock defines the entire capitalization so you have not any problem but, when you get to a company that has senior debt classified as to both bonds and

[fol. 10387] preferred stock, and particularly one that has near term maturities, you have got an entirely different situation.

Q. Mr. Coffman, I would like to have you turn to page 3 of section II of Exhibit No. 254 where you show a summary of your computations of investors' appraisal of risks of capital represented by the 153 stable industrial companies. Do you have that? A. Yes, I do.

Q. However, before discussing that page, I find that I have now located the chart in your Exhibit 253 which shows the working capital of the five natural gas companies.

A. What chart, please?

Q. Chart No. 42. A. Yes, I have that.

Q. Will you state from that chart the amount of net working capital of El Paso Natural Gas Company as of January 1, 1942? A. It is $8,781.

Q. Now, that is a solvent company, isn't it?

A. Yes, that is.

Q. Is it comparable to Panhandle Eastern?

A. Well, it is one pipe line company in the industry.

Q. Now, what is the comparable amount for Panhandle Eastern Pipe Line Company of net working capital? $6,000,000, isn't it?

[fol. 10388] A. It is $6,576,743 but, to get the comparable figure—well, it is half-way between December and February, so that is all right.

Q. It is close enough for our purposes? A. Yes.

Q. What was the net working capital of Northern Natural Gas Company as of December 31, 1941?

A. It had a deficit of working capital of $23,167.

Q. Less than nothing?

A. At that particular moment of time.

Q. And that is a solvent company, isn't it?

A. Yes, it is.

Q. Comparable to Panhandle Eastern?

A. It is another gas pipe line company in the industry.

Q. It is sufficiently comparable to be compared by you in these charts for purposes of determining and comparing investors' appraisals of risks?

A. Well, I think throughout I have drawn this distinction in regard to these companies.

I have said that an investor who was contemplating an investment in a given company in a given industry would look at the industry. I have done the same thing without saying that this company is exactly comparable or very nearly comparable or any other thing. I have just said I have gotten all of the companies in the industry upon [fol. 10389] which I could make a calculation.

Q. Now, I would like to have you refer again to page 3 of section II of Exhibit No. 254. Here you show the total indicated market value of capital with respect to these 153 stable industrial companies in total for each of the years 1937 to 1941, inclusive, do you not? A. Yes, I do.

Q. Now, what was the market value of the outstanding securities of these 153 stable industrial companies in 1937?

A. It was $22,692,237,000.

Q. Now, I note that for the year 1938, the amount is considerably less, isn't it, having gone down to $19,423,780,000. Is that correct? A. That is correct.

Q. Now, will you state the indicated market value of the capital in these 153 stable industrial companies for the year 1940? A. It was $19,871,449,000.

Q. Now, how much, in total, did the market value of those securities go down between 1937 and 1940? Give me the difference between the two figures.

A. It went down $2,820,788,000.

Q. Now, if one investor owned all of these securities and had purchased these securities in 1937 at the market value [fol. 10390] shown, then he would have lost, in market value, the amount of $2,820,788,000 had he held on to those stocks during those years?

A. Well, we would say that he had an indicated paper loss.

Q. Well, he would deduct it from his income tax, wouldn't he?

A. No, not unless he sold them, he wouldn't. He would like to.

Q. If he sold them in 1940, he would suffer that loss?

A. Yes, then he could take them or deduct them as a capital loss.

Q. What were the earnings available for capital, according to your chart, for the year 1937—withdraw that—what were the earnings available for capital during these same four year, 1937 to 1940?

A. For each year, you mean?

Q. No, I mean the total.

A. Well, for each of the years or just 1937 and 1940?

Q. Through—

A. (Interposing) All right. In 1937, the earnings available for capital amounted to $1,550,677,000; in 1938, $1,011,742,000; in 1939, $1,315,905,000; 1940, $1,418,677,000 and, in 1941—

Q. (Interposing) We are not going to include 1941 for [fol. 10391] our purposes here.

The total for the four years is $5,297,001,000 of earnings during those four years?

A. The total for the four years 1937-1940, both inclusive, of earnings available for capital was $5,297,001,000.

Q. Now, when you made your study of the earnings-price ratios of the securities of these companies as summarized in your Chart No. 11 of Exhibit No. 253, you did not take into account the loss in market value over this period of $2,820,788,000, did you?

A. Well, I do not quite follow that. I took the total indicated market value for each year and the total earnings available for capital for each year so that you have the relationship of earnings to price, whatever the price was, or, put it the other way around, earnings to indicated market value, whatever it was.

Q. What we are trying to get at here, Mr. Coffman, is the true earnings over this period, taking into the reckoning the loss by the investors over the four-year period in market value of $2,820,788,000. You have not made any calculation, have you, that reflects any such loss in market value?

A. I have not made any accumulated total for a four- or five-year period, no, but in Chart No. 11 of Exhibit No. 253, the section captioned, "Investors' Appraisal of Risks of Capital" is as shown for each of the years which is the [fol. 10392] relationship of the earnings available for capital to the indicated market value of capital.

Mr. Wheat: During those respective years?

The Witness: During those respective years.

By Mr. Littman:

Q. I know that is what you did. Now, suppose you deduct the $2,820,788,000 of loss in market value for the four years from the earnings for those four years of $5,297,001,000 and state the amount of the difference?

A. The difference would be $2,476,213,000.

Q. Now, that is slightly more than 10 per cent earnings over the four years on the original market value in 1937, is that right?

A. Well, yes, it would be over 10 per cent.

Q. Just a little over 10 per cent?

A. Well, it would be something over 10 per cent. I mean it is the relation of $2,476,000,000 to $44,692,000,000, so it is obvious that it is more than 10 per cent.

Q. With an indicated earnings of approximately 2½ per cent per year on the basis of the original market value in 1937, is that right?

A. That is the correct arithmetic.

. . . . . .

[fol. 10394] By Mr. Littman:

Q. It is apparent, Mr. Coffman, that the investor, even in these 153 stable industrial companies, has been taking it on the chin for the past four years, hasn't he, in so far as the market value of the securities is concerned, at least to [fol. 10395] the tune of $2,820,788,000?

A. The best indication, in my opinion, of what is happening is exactly as shown in Chart No. 11, if you will look at the indicated years, and that shows that the investors' appraisal of risks of capital has gone up so, in 1941, it was approximately 8 per cent.

Q. And one of the elements that brought this swing upward was the reduction in the market value of these securities, wasn't it?

A. You said one of the elements, did you?

Q. Yes, one of the elements.

A. That is correct. That was one of the elements. Another element, however, was that earnings showed a proportionately less decrease.

Q. There are two elements. I named one and you named the other?

A. That is correct. It takes the two of them to get at the result.

Q. Kind of fifty-fifty?

A. I do not know about the fifty-fifty but there are two elements.

. . . . . .

[fol. 10399]

P. McDONALD BIDDISON a witness, having been previously sworn, resumed the stand and testified further as follows:

. . . . . .

Recross Examination.

By Mr. Littman:

Q. Mr. Biddison, will you please turn to page 3 of Exhibit No. 251? I call your attention to lines 8, 9 and 10, which deal with the allocation of Account 759.112 under "Transmission Expenses-Operation", entitled, "Measuring and Regulating Stations Labor". This exhibit shows the pro forma consolidated expenses for 1941 adjusted for the full year's costs in Column B before allocation to be $60,230.64. Am I correct in understanding that your basis of allocation in this particular account is stated in Column C as follows:

"Expenses of equipment used exclusively for non-regulated sales allocated thereto and balance allocated to regulated sales".

[fol. 10400] Will you explain the meaning of that and tell us how those ratios were obtained?

A. The meaning of that is that since there [as] some of those stations which are used exclusively for the measurement of sales which are not subject to regulation, that the expense for measurement and regulating station labor attributable to those stations is to be allocated to non-regulated sales.

. . . . . .

Q. Briefly, how did you make your determination or segregation of the expenses of equipment which you claim are used exclusively for non-regulated sales?

A. Mr. Littman, I did not make it. I gave the directions under which the allocation was to be made. As has

been repeatedly explained, the work was done by Mr. Spacek.

Q. You gave him no further instructions with respect to this particular account than those which are set forth in Column C which I read, is that a correct statement?

A. No, sir, that is not a correct statement. He was furnished with a copy of my letter of April 8, 1942, which has been incorporated into the record in this case and, in connection with the testimony of Mr. Spacek, the instructions in my letter of April 8, 1942, embody completely and wholly all the instructions which I gave to Mr. Spacek. [fol. 10401] Those instructions are condensed in Column C of Exhibit No. 251.

. . . . . .

Q. Do you know what particular equipment is used exclusively for non-regulated sales or would that also be found in Mr. Spacek's working papers?

A. I know, in general, what it is but specifically, I couldn't enumerate it but the details of it are set out in Mr. Spacek's working papers.

Q. Suppose you state generally, then, your understanding of the particular equipment used exclusively for non regulated sales?

A. Now, the items we are referring to at lines 8, 9 and 10 on page 3 of Exhibit No. 251 relate to measuring and regulating station labor. The portion which I have instructed in my letter of April 8 to be assigned to be non regulated sales is that portion of measuring and regulating station labor required in the operation of the measuring and regulating stations used exclusively for servicing of non regulated sales. The customers to whom non regulated sales are made are listed in my letter of April 8. [fol. 10402] Q. Is it correct to say, generally, that the expenses that were allocated to non-regulated sales in connection with this account was the labor with respect to measuring and regulating the gas when it left the main line and was carried exclusively to the direct industrials. Is that a correct statement?

A. Well, it measures and regulates it upon delivery to these customers.

. . . . . .

Q. In other words, you did not intend to include any of the expenses of this character incurred in connection with measuring and regulating the gas during its flow from the well through the field lines and gathering lines and main lines until the point was reached where it was devoted exclusively to industrial sale?

A. No, sir, I did not. That is a very small fraction of total regulating and measuring station labor.

* * * * * * * * * * *

[fol. 10403] Q. Whatever the percentage is, you did not make any allocation during that part of the flow, did you?

A. No, sir, I did not.

Q. Now, you used the same description, to-wit, "Expenses of Equipment used exclusively for Non-Regulated Sales allocated thereto and the balance allocated to regulated sales", on page 3 of Exhibit No. 251 in connection with a number of other accounts, to wit, Account No. 759.122, "Measuring and Regulation Station Supplies and Expenses"; Account No. 761.2 "Measuring and Regulating Station Structures"; Account No. 762.22, "Measuring and Regulating Station Equipment."

Have I named all of the rest of the accounts on that pages that were allocated on the same basis?

A. Yes, sir.

Q. And your responses to my questions would apply equally to those accounts, would they not? A. Yes, sir.

Q. Now, let's look at page 5 of Exhibit No. 251—well, just a minute, before doing that, before leaving page 3, I call your attention to line 3, Account No. 758, "Supervision and Engineering". You have recommended that the basis of allocation be as follows, as shown in Column C, "Composite Percentages of Total Other Transmission Expenses as Allocated", have you not?

[fol. 10404] A. Yes, sir, that is correct, and that means that is to be allocated in the proportions that are found in line 33 after the items preceding that line in transmission expenses have been allocated.

Q. Now, the allocation of that particular account reflects the allocations of the other accounts under transmission expenses, does it not?

A. That is what I tried to say just previous to your question.

Q. And, therefore, of course reflects the same method which you have described with respect to these last three or four accounts we have discussed, it naturally follows, does it not?

A. As to the proportion assignable to them, yes.

Q. Yes. Now, will you please turn to page 5. In line 5 there is a very large expense account under the heading, "Depreciation, including amortization other physical depreciable property", in the amount before allocation of $2,238,589.81. Now, as is shown by this exhibit, you did not allocate any of that depreciation expense to the unregulated sales, did you?

A. Not of that particular figure but I have allocated some of the depreciation expense against non-regulated sales.

Q. Well, that, of course, appears in other lines, but I am talking about line 5, "Other physical depreciable [fol. 10405] property" in the amount of $2,238,589.81.

A. I directed that that be allocated to regulated sales as shown in Column C and it has been so done.

Q. Yes.

A. Now, I would like to point out, Mr. Littman, that what I have directed to be done in this Exhibit No. 251 is to allocate costs between two classes of business. I have done that because, in the Colorado case, that is, involving the three companies, the Commission, in substance, stated that it should be done and criticized some of the companies in that proceeding because they had not made an allocation of costs.

Now, all Exhibit No. 251 purports to be is an allocation of costs. It does not purport to be the final solution of this matter of the relative charges between the two classes of business but it is the allocation of costs which is a prelude to that determination and I think requisite for that determination.

Q. Well, Exhibit No. 251 reflects the manner in which you, in your opinion, believe the allocation of costs should be made, doesn't it?

A. Yes, when you go to allocating costs and that is all this purports to do, is to allocate the costs. I think there is another step necessary after you have allocated the costs. I have not carried out the other step but it is a [fol. 10406] matter of business judgment as to how much of profits of the one class of business ought to be paid to the other class, as a matter of fairness and equity, in business judgment.

Q. Let me see if I understand your last answer. Are you now referring to the allocation of return?

A. If you take some of the profits from the non-regulated business and credit to the costs of the other business considered as a rental charge for the privilege of using the facilities, you can consider that it has contributed to return and to depreciation.

Q. I am sorry. I do not quite follow what you have in mind, Mr. Biddison. Maybe if you would explain that in a little different way I might understand you better.

A. On page 1 of Exhibit No. 254 it is shown that before the modification from proposed new income tax rates at line 42, there is available from these non-regulated sales $651,766.70. Before the income tax of $349,062.28, there was available for income tax and return a little over $1,000,828.98. I think it would be entirely fair and just, in line with what Mr. Goodman commented last week, that some portion of that little over a million dollars should be made a charge against the non-regulated business and substantially paid to the regulated business as a fee for the privilege of using the equipment through which delivery of this non-regulated business is effected. In [fol. 10407] other words, I think you should first find out how much this non-regulated business is costing and then make some division of the profits from it.

Now, what that division should be, I think is a matter of business judgment but, in fairness, I think there ought to be some division of it in spite of the fact that the language in the Colorado case does not indicate that to be the view of the Commission.

Trial Examiner: What language is that?

The Witness: You will find that language in the decision with reference to the Colorado-Wyoming case, Mr. Examiner. I do not find this decision an easy one to understand.

Mr. Culton: You understand that the method which you have just described would be an allocation of return as return is understood by you?

The Witness: It would be an allocation of return and of depreciation.

. . . . . .

The Witness: In a rate case, I understand the earnings on rate base.

. . . . . .

Mr. Culton: (Interposing) That is the Opinion of the [fol. 10408] Commission?

The Witness: Of Opinion No. 73 involving Canadian River Gas Company, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company, page 59 with reference to the Colorado-Wyoming Gas Company, it appears that the Commission's staff had prepared an allocation which the Commission did not adopt with respect to this particular company. The Commission stated and I quote:

"The Colorado Portland Cement Company, the principal main line industrial user, is curtailed regularly during system peak days. Its demand on the system peak day is, in our opinion, a proper measure of its proportionate share of demand costs than its highest off peak demand."

I judge there is a word omitted there and I think it probably should have read, "a more proper measure."

Now, I gather from that, if it does not create demand on the peak day, it does not bear any proportion of demand charges.

Mr. Culton: That is, on the Commission's method?

The Witness: Yes, sir.

Now, it is indicated in that opinion that there were some other considerations and some other principles involved in connection with the situation on the Colorado Interstate Gas Company but I do not know whether the Commission has told us, in that opinion, what they did do [fol. 10409] in the premises and I do not know from the tabulations they show whether they did what they said they did or not. I cannot tell.

I should like to add in explanation of what I have previously said that when you make some division of this $1,000,828.98 available for income tax and earnings on the unregulated business, that that necessarily involves a reallocation of income tax between the two classes of business.

By Mr. Littman:

Q. Referring again to page 5 of Exhibit No. 251, is it true that these expenses of $2,238,589 shown in line 5 include the expense for depreciating company's wells?

A. I think not. That is taken care of in the charges for depletion, wells and leases.

Q. Is it your testimony that the depreciation applicable to wells should be allocated, in part, to the non-regulated sales? A. Yes.

Q. Mr. Spacek is not here but I am going to ask you whether you could make a further check for us during the coming recess and tell us for certain whether the depreciation on the gas wells is included in this $2,238,589 figure or not? Do you have sufficient information here to make a check on that?

A. I am not sure whether I have or not. I will try it, though.

Q. Very well.

[fol. 10410] A. You see, these figures are not my compilation but I think maybe I can get a check on that anyway.

Q. We have all of Mr. Watkins' exhibits here and perhaps, during the next recess, we can make sure of the facts.

What is your understanding as to well lines. Did you recommend that the depreciation applicable to the well

lines should or should not be allocated to non-regulated sales, in part?

A. I recommend that it be not allocated, in part, to non-regulated sales.

Q. Now, those well lines, of course, carry the gas that eventually reaches the direct industrials as well as the gas that reaches the regulated sales, don't they?

A. Yes, sir, they do. In that respect, they are like the main lines.

Q. Now, gathering lines fall in the same category, I take it? A. That is right.

Q. And I think it is abundantly clear now, in the record, that you have not allocated or you have not recommended that there be allocated, to the non-regulated sales any portion of the depreciation expense of main lines. Is that right? A. That is correct.

Mr. Culton: That is if the allocation is based on cost?

The Witness: That is correct and that is all I am allo- [fol. 10411] cating here, is cost.

By Mr. Littman:

Q. Now, naturally those mains carry all of the non-regulated gas as well as all of the regulated gas, do they not? A. Certainly, certainly.

Q. And, as a matter of fact, don't they carry the non-regulated gas on peak days to a certain extent?

A. There is no capacity provided in Panhandle Eastern's system for the carrying of any of these non-regulated sales and there has been no capacity available for them above the requirements for regulated sales, requirements and commitments.

Q. Isn't it a fact that on the peak day of the past winter, 1941-1942 winter, as well as on the peak days of previous winters, these main lines have, in fact, carried unregulated gas?

A. During January, 1942, the Panhandle Eastern system experienced its greatest peak day. The system has a capacity with 500 pounds maintained at the outlet of compressor stations of substantially 250 million cubic feet per day available for sales.

On January 7, 1942, the maximum sale in the history of Panhandle Eastern was experienced in the amount of about 254 million cubic feet. On this day, the input for sale was a little bit less than the 250 million cubic feet of capacity and the 500 pounds discharge pressure at com- [fol. 10412] pressor stations was not quite maintained. Sales to the direct industries were curtailed so that, upon this day, out of a total requirement for direct industrial sales including the Anchor-Hocking plant in Indiana of about 25 million cubic feet, slightly under 9 million feet was delivered, the figure for delivery was 9,860,000. As against this actual delivery on that peak day, there was a curtailment of non direct sales to interruptible consumers of 4,242,000 cubic feet; approximately 10 million cubic feet was taken out of line storage, an amount greater than the delivery to direct industrial consumers and the Detroit market curtailed its use below the 125 million cubic feet which Panhandle Eastern is obligated by contract to devote to their service, which is substantially the amount of their previous peak takings by 15 million feet, substantially—

Mr. Chamberlain: (Interposing) May I ask right there this question— You say that that was their previous peak, 125 million?

Mr. Culton: Previous peak take, I think he said.

Mr. Chamberlain: Yes, I thought he said that.

The Witness: On March 18, 1941, Detroit took, in therms, 1,273,888 therms of gas having a heat value on that day of 1,016 B.t.u.'s and that is the equivalent of just a trifle over 125 million cubic feet.

On the succeeding day—

[fol. 10413] Mr. Culton: (Interposing) That is, the January date?

The Witness: January 9 or, specifically, on January 8.

Mr. Wheat: 1942?

The Witness: 1942, there was served to direct sales, 7,619,000 M.c.f.'s. There was curtailment of indirect sales

to interruptible customers, 6,590,000 feet; an additional 5,000 feet was taken out of storage and Detroit again, upon that date, failed by about 15 million cubic feet to take the 125 million which Panhandle is obligated to place at their disposal.

Mr. Lee: May I interrupt you there, Mr. Witness, pardon me. When you say "Detroit failed to take the amount allowed under the contract," you do not infer that there was anything in the contract that allowed them to take that lesser amount, do you, or that prohibited them from taking that lesser amount?

Mr. Culton: No, he is just talking about required capacity, Mr. Lee.

Mr. Lee: I understand but the language he used failed to state that and I thought it might leave a different inference in the record.

Mr. Culton: I think, as a matter of fact, the company needed far more gas on those particular days and they exercised their rights under the contract to manufacture gas.

Mr. Lee: That is all I want to bring out, the fact that the word "failure" does not raise any issue—

[fol. 10414] Mr. Culton: (Interposing) By "company," of course I mean Michigan Consolidated.

Mr. Lee: Yes.

The Witness: No, I mean merely they were exercising their own judgment.

Mr. Lee: And their contractual rights?

The Witness: Yes, they did not take the amount of gas which, under those same contracts, Panhandle Eastern is obligated to have available for them.

Trial Examiner: Well, if they had taken the amount that they were entitled to take, could you have served Anchor Hocking and other industrials those days?

The Witness: No, sir, if they had taken the 15 million additional which they could have taken under their contract and which Panhandle Eastern is obligated to furnish, if

they desired it, that 15 million itself would have exceeded on the 7th, by about 6 million feet the amount that was delivered to the direct interruptible business and, on the 8th, that 15 million exceeds by about 7,400,000 the amount which was delivered to the direct interruptible business.

Now, taking the curtailment of the indirect interruptible customers on these two days, the amounts taken out of storage on these two days and the amount by which Detroit's use failed to reach the contractual obligations, we have 20,282,000 on January 7 and 18,971,000 on Janu- [fol. 10415] ary 8 by which Panhandle Eastern Pipe Line Company lacked any capacity for service to direct industrial customers.

Mr. Lee: May I ask another question, if you will pardon me for breaking in here but just to clarify this, is that last type of gas that you just spoke of, that last type of customers, rather, is that what is characterized as "dump" gas?

The Witness: No, Mr. Lee, that is not quite what you would call "dump" gas. I do not think Panhandle Eastern has any sales that you can truly call "dump" gas sales.

Mr. Lee: Isn't it true that the type of customers that you last mentioned there and the gas sold to them is gas that primarily is sold to other customers and sold to these customers last mentioned when the other customers fail to take their requirements under their contracts?

Mr. Culton: Suppose you give your own definition of interruptible gas. I think you are both looking at it along the same lines but I think the witness looks at it from an engineering viewpoint and you look at it from a lawyer's viewpoint.

The Witness: There are two classes of gas we are discussing here and it so happens, in this particular instance, the two classifications fit identically the same customers.

Gas is sold directly to the customer by Panhandle Eastern. It does not go through any intermediary. In that [fol. 10416] sense, it is a direct sale. All those contracts are on an interruptible bases, that is, whenever the ca-

pacity of the system is not such that gas can be made available to these customers, service to them is curtailed.

* * * * * * *

The Witness: It is a secondary service.

Mr. Lee: That is what I am getting at and that being true, let's take the reverse of the situation you are stating here. As I understand you, you are stating the situation where, because of the fact that the Detroit company, Michigan Consolidated Gas Company, did not take the maximum it was entitled to take under the contract, that you, therefore, had an excess of gas or you had 15 million cubic feet of gas which you could sell elsewhere.

Now, let's take the reverse of that. If the Detroit company had taken all they were entitled to take, you would not have had that gas to sell elsewere, would you?

The Witness: No, sir, and they would have to cut off 17 million feet additional on the 7th of January and nearly 19 million on the 8th.

Mr. Lee: So there is nothing contractually wrong with the Detroit company and it is always contemplated that the contractual customers shall have first call and these customers' contracts you are discussing now will be filled if and when the first call allows them to be filled, is that correct?

[fol. 19417] The Witness: That is correct.

By Mr. Littman:

Q. Would you say, Mr. Biddison, in view of your testimony thus far given that the direct industrial business of Panhandle Eastern is, in reality, a by-product of its main business, to-wit, its regulated business?

A. No, I do not think it is in any sense a by-product. It is a corrolary business but I do not think it is a by-product business.

Mr. Culton: It is more an incremental business, is it not?

The Witness: Yes.

By Mr. Littman:

Q. You have proceeded in your recommendation of allocation, have you on an incremental basis?

A. No, not entirely so, Mr. Littman.

Q. Well, is it something which fairly closely approximates the result that would be obtained by allocating the unregulated business on an incremental basis?

A. I do not know how closely it would approximate it, Mr. Littman. I did not attempt to do it in that fashion and, if you approached it in that fashion, I do not know how much different your answer would be when you got through. I did not think of it in that fashion when I gave the instructions.

Q. Well, if you had allocated on an incremental basis, you would not have allocated any part of the main line ex-
[fol. 10418] pense to the unregulated business as you have done here. I mean, you do the same thing there as you have done here.

A. I think I would allocate some of that transmission expense even if I approached it on an incremental basis. I do not believe, though, if I approached it on an incremental basis I would have as much cost assigned to this non-regulated sales as I do have as a result of Exhibit No. 251 but, not having gone into it, I cannot say how much different it might be.

Trial Examiner: I suppose counsel for the company will agree that, unless the Commission should determine that the Panhandle Eastern Pipe Line Company is making present earnings in excess of a fair return, that any allocation such as is contemplated by Exhibit No. 251 would be of no effect?

Mr. Culton: That is right.

Mr. Wheat: We would take it, Mr. Examiner, that it would be an entirely moot point and that the entire business problem, as between these customers, would be something to be handled by management.

By Mr. Littman:

Q. Well, let's look at line 8 of page 5 where you show the ad valorem taxes before allocation in the amount of $633,270.40 or perhaps I should say where that amount

is shown. Am I correct in understanding that it was your recommendation, as reflected here, that none of these [fol. 10419] ad valorem taxes applicable to any of the property other than that property which is used exclusively for non-regulated sales should be allocated to the non-regulated sales?

A. That is right. I think it so states in Column C.

Q. Now, aren't ad valorem taxes paid on wells and certain other production system property which property produces the gas which is sold to the unregulated market, as well as the gas which is sold to the regulated market?

A. There are production taxes in the nature of severance taxes which, in general, in producing fields have replaced the ad valorem taxes on property of that nature. As to the specific build up of this $6,270.40, if there be any of that which is a tax on wells, that portion should be allocated back against production property before making the allocation as between regulated and non-regulated sales.

Q. Don't you know whether any of these ad valorem taxes were actually levied against the wells?

A. No, I do not at this time.

Mr. Culton: You would have to know how many wells were needed to handle the interruptible over and above what was needed to handle the firm, wouldn't you?

The Witness: No, Mr. Culton. Whatever taxes were on these wells should be allocated against production property and then split between regulated and non-regulated business in a proportion that the quantities of sales bore to the total.

[fol. 10420] By Mr. Littman:

Q. In other words, it would be done on an M.c.f. sales basis as you allocated it on page 2, is that right, generally?

A. Yes, that portion of it would be so allocated.

* * * * * * * *

Trial Examiner: What is the total volume of non-regulated sales by percentage, Mr. Biddison, roughly?

The Witness: That is shown on page 1. The regulated sales constitute 86.8 per cent of the volume and the non-regulated sales 13.2 per cent of the volume.

Trial Examiner: You said early in your testimony, as I recall it, that there were various methods of allocation to deal with the factor that you have treated in Exhibit No. 251. Is that correct? I think you said that various experts might consider the problem and, by a different process, arrive at approximately the result that you had shown in Exhibit No. 251.

The Witness: Yes, I believe I stated I thought they could go through some variation in detail and get approximately the same result.

Trial Examiner: If you are selling 14 per cent of your output to a market that is not subject to the regulation of the Commission under the Natural Gas Act. How would [fol. 10421] it be to charge 14 per cent of the total capital investment in operating costs to that class of business?

The Witness: Well, in general, Mr. Examiner, the result of that would be that the natural gas pipe line companies would cease the sale of gas on these interruptible contracts which, in general, bring comparatively low prices and their earnings would thereby be reduced and there would be no profit from that business to use as a credit against the cost of transacting the regulated business. That would be the general trend of it.

Mr. Culton: Suppose these direct sales were firm sales? Then would there be a greater reason for allocation? Instead of the sales being interruptible sales, suppose a considerable portion of the sales were direct sales and on a parity with sales for resale?

The Witness: If they were firm sales, there would be, I think, just as much reason for an allocation of the cost also. You would not have the same costs if they were firm sales. Neither would you have the same low price, if they were firm sales.

Mr. Lee: Aren't they, to all intents and purposes which they are characterized as interruptible, in effect, firm sales?

The Witness: No, they are not and they have been interrupted.

[fol. 10422] Trial Examiner: You are talking about the Panhandle system, of course?

Mr. Lee: That is right.

Trial Examiner: Are you familiar with the iron works at Pueblo served by the Canadian River line?

The Witness: With which?

Trial Examiner: The Colorado Fuel & Iron Company works at Pueblo, Colorado?

The Witness: No, sir, I am not familiar with them, Mr. Examiner.

Trial Examiner: You probably noticed in Opinion No. 73 that more than half of the gas distributed by the Colorado Company goes to the Colorado Fuel & Iron Company, did you not?

The Witness: I noticed that a very large percentage was distributed so. I do not remember the percentage but I know it was a large percentage.

Trial Examiner: And you probably noticed also in the Opinion that the statement was made that a prerequisite to the construction of the line was a firm contract with the Colorado Fuel & Iron Company and with the Public Service Company of Colorado?

The Witness: Yes, sir, and I am also impressed with the fact that that pipe line has some capacity in it now and always has had that is useful for no other purpose than the delivery of gas to that customer.

[fol. 10423] Trial Examiner: And that that line specifically is a 16-inch main, going directly to the Fuel & Iron Company plant?

The Witness: I do not recall the size of the main going to their plant but, in the main line of the Colorado Interstate Company, it is my impression from what I have read of the record and what I have known of their

operations, they have capacity in their main line system for the delivery of gas on peak days to that customer.

Trial Examiner: So you recognize the broad distinction between the circumstances of the Panhandle system and the Canadian system?

The Witness: Yes because, in the Colorado Interstate system, their capacity is provided for that customer, not for his entire requirement but for at least a portion of it. In the Panhandle system, no capacity is provided. In the Panhandle system, no capacity was contemplated. In the Colorado system, capacity was contemplated and was provided.

Now, the Panhandle system, in that respect, is comparable, as I understand the case, to the Colorado Wyoming system. In the Colorado-Wyoming system, it is their practice to cut off that direct industrial sale and the Opinion recites the fact that they do it. That is the practice of Panhandle Eastern.

[fol. 10424] By Mr. Littman:

Q. Mr. Biddison, are you prepared now to give us the requested information with respect to the depreciation on wells and the ad valorem taxes on wells?

A. Yes. During the recess, I have refreshed my memory as to how this matter was handled and while the amount of depreciation, at line 5 on page 5 of Exhibit No. 251 includes the depreciation upon wells, I directed it to be applied entirely to regulated sales because, like the main lines of this company, the requirements for wells are fixed by the demand of the regulated business.

Now, as to the item of ad valorem taxes at line 8 on page 5 in the amount of $633,270.40, while there are included in that item some small amounts of taxes that might well be allocated upon a different basis, the investi-
[fol. 10425] gation that I made at the time these instructions were given indicated that the amounts of such taxes were trivial and that for a compilation of this sort, since exactness was not obtainable in any event, that substantial justice would be done by the application of the formula shown in Column C.

Q. Is my understanding of your answer correct, that you feel that the depreciation expense of wells is applicable entirely to regulated sales?

A. Yes, sir. The number of wells and, therefore, the value of wells and, therefore, the amount of depreciation on wells, is fixed by the peak day requirements. The peak day requirements are fixed by sales for resale which are the regulated sales.

Q. Aren't those wells used to furnish gas to the unregulated customers?

A. Yes, sir, those same wells furnish gas for unregulated customers. The same well lines transport gas for the unregulated customers. The same gathering lines transport gas for the unregulated customers. The same main line transports gas for the unregulated customers. The same field measuring stations measure the gas for both classes of customers. The same compressor stations handle gas for both classes of customers.

Q. It kind of looks like the non-regulated gas is getting a free ride all the way from the bottom of the well to [Col. 10426] the lateral line used to serve them exclusively, doesn't it?

Trial Examiner: In the preparation of your Exhibit No. 231, I suppose you bore in mind the Commission's distinction between fixed costs and variable costs?

The Witness: No, Mr. Examiner, I did not classify precisely on that basis. In this Opinion No. 73, the Commission spoke of classifying those costs which were variable costs as being commodity costs and those costs which were reasonable stable in amount, that is not variable, as being demand costs.

Now, I recognize that that is a common method by which to fix a schedule of rates. I differ from that scheme in the allocation of costs in some of the details because I know from experience that some costs which are variable are still attributable to demand and some costs which are not variable are still attributable to commodity so while the use of the two classifications of costs as between fixed and variable, may be right and proper in the design of a rate structure, it may fail to do justice in an allocation of costs because fixed costs are not necessarily all demand

costs and variable costs are not necessarily commodity costs.

By Mr. Littman:

Q. Mr. Biddison, is my understanding correct that what you have undertaken to do with respect to this allocation study is to submit your interpretation of the Commission's [fol. 10427] Opinion in the Canadian River case and apply it to the facts here in this proceeding?

A. That is pretty close to it, Mr. Littman.

Q. Well, suppose you restate it.

A. But I have to acknowledge that I cannot thoroughly understand the Commission's procedure in that Opinion No. 73. I have followed that Opinion, as I interpret it, as far as I think it be right and proper to follow it but I make the distinction between the two methods of allocating these costs as to whether they are fixed or variable. I did not try to follow the line of reasoning. If I thought an item of cost was attributable to the amount of gas produced and transported, I assigned it to that regardless of whether it was fixed or variable. If I thought an item of cost was attributable to the provision for capacity, the provision for peak load requirement, I allocated that to that division of cost, regardless of whether it was a fixed amount or a variable amount.

Q. Is this the kind of allocation study that you would have made had you been instructed or requested to make an allocation study which reflects your own views rather than one which undertakes to interpret the views of this Commission as reflected in the Canadian River case?

A. It is made to reflect my own views. It is prompted by the fact that in that case the lack of such an allocation [fol. 10428] was a matter of criticism.

It does, in general, with the exceptions I have named, follow my interpretation of that Opinion.

Q. Now, you mentioned something a while ago about a step which you think, in all fairness, should be taken beyond those that are shown in Exhibit No. 251.

Now, is my understanding of your testimony in that regard correct that this allocation, as reflected in Exhibit No. 251, has the effect of assigning too much cost to the

non-regulated sales and that, before the matter be closed, there should be a credit back to the regulated sales of a portion of the profit on the non-regulated sales? Do you get what I have in mind, Mr. Biddison?

A. I think I get what you have in mind.

Q. Suppose you state it in your own language.

A. But I would prefer my own expression on the situation to your wording of it.

Q. Very well.

A. In this allocation, the non-regulated business has the use of certain facilities of the company without any charge being made against that business for such use.

Q. That is, such is the effect of the study reflected in Exhibit No. 254? A. That is correct.

Mr. Culton: That is because there is no cost for it?

[fol. 10429] The Witness: That is right. That is because they have not caused any costs for such use. Now, I think there should be a charge of some sort made against that non-regulated business for the use of that property. There should be a charge made in addition to the costs which it has caused.

By Mr. Littman:

Q. In addition to the costs shown in Exhibit No. 254?

A. Yes.

Now, it is my idea in that connection that the place to start in handling that matter is to go back to page 1 of Exhibit No. 254 and, taking the net operating revenues at line 42, add back the $349,062.28 of Federal income taxes.

Q. (Interposing) And the Federal excess profits?

A. (Continuing) and the related taxes which will give you a sum of $1,000,828.98, available for tax and return or tax and earnings. Then, on some fair basis—

Mr. Culton: (Interposing) Is there any engineering basis for a division, from an engineering standpoint?

The Witness: Not as an engineering matter, I do not know of any basis. As a business matter, I think there are ways in which it could be fairly decided. I think it requires some judgment based upon business experience to

make a fair allocation of it but there is a little over a million dollars, some portion of which could, in all fairness, be set aside as a charge against operations on the [fol. 10430] non-regulated sales and a credit against operations on the regulated sales.

After doing that, it would be necessary to reallocate this amount of Federal taxes between the two classes of business to conform with the new allocation arrived at as to the revenues available for taxes and earnings.

By Mr. Littman:

Q. In other words, your statement contemplates a further allocation beyond Exhibit No. 251?

A. That is correct.

Q. Now, you used the term "some fair basis." Are you prepared to be a little more definitive about that and give us your idea as to what would be a fair basis?

A. Mr. Littman, I do not think I should be sitting in the Judge's bench on that matter. Before anybody could make a definite statement about what he thought was fair on that matter, he would have to know what the procedure was going to be in regard to the subsequent allocation of earnings between the two classes of business and, in any event—

Q. (Interposing) Pardon me, what do you mean by "subsequent earnings"? Do you mean in later years?

A. No, in the subsequent procedure in this case of allocating return as if it were an item of cost, one should know that and then, knowing that, I think that some compromise could be reached between whether the whole million dollars should be retained or what amount of it should [fol. 10431] be charged as a rental and credited to the regulated business as a reduction in expense.

Q. Now, Mr. Biddison, you have testified in many rate cases and I understand it is your opinion that the matter of this further allocation would be a matter of the exercise of enlightened judgment by those charged with the duty of making the decisions in this case. Is that right?

A. That is right, and I further think that they should have the opinion of the experienced management in coming to their final conclusions on that matter.

Trial Examiner: That is what you are here to give.

The Witness: Mr. Examiner, I am not the management of this property.

Trial Examiner: You are the expert engineer who has been advising them and testifying about allocations. That is what you are asked for right now.

The Witness: If the Examiner wants my opinion, I will give it. It is my opinion that that $1,000,828.98 should be divided fifty-fifty.

Trial Examiner: Why?

The Witness: It is just my judgment as a businessman that would be a fair allocation of it.

Mr. Littman: You mean fifty-fifty as between regulated and non-regulated business?

The Witness: That is correct. I think that would be [vol. 10432] a fair allocation.

Mr. Culton: That is a business judgment estimate, not a mathematical estimate?

The Witness: That is right. In that way, this non-regulated business has contributed half a million dollars a year towards the reduction in cost of the regulated business and if it does not contribute something, I do not think there is any justification for having the business.

Mr. Littman: Mr. Buldison, before I dismiss you, for my part, I do not think there is any evidence in this record that tells us the approximate rate at which the gas flows through the main line from Texas east and north to Detroit.

The Witness: You mean the speed per mile?

Mr. Littman: The approximate speed per mile per hour?

Mr. Culton: That would depend on how much gas is being used, wouldn't it, for one thing?

The Witness: Yes, and upon your relative pressures but, if we say that under peak day conditions—

Trial Examiner: (Interposing) On maximum day delivery?

Mr. Littman: Yes, let's take, for instance, January 7, 1942.

The Witness: I think I can give you an approximation on it.

The rate of flow would not be a constant velocity in any section of the line. To explain that, let's consider any [fol. 10433] one section between two compressor statjons. Say we have 500 pounds discharge pressure at one station and, at the next station, that pressure has declined to 300 pounds.

Now, the quantity of gas, in pounds, flowing past any point in that section for 250 million a day flow would be constant but the velocity, in feet per second, would vary from the low figure at the high pressure to a higher figure at the low pressure.

Now, the mean velocity between those two points would be fixed by the mean pressure which is not the average of the two but is two-thirds of the difference in cubes divided by the difference in squares of pressure. That will be somewhere close, however, to the average of the two pressures which were 500 discharge and 300 inlet which would give 400 pounds average pressure.

That 400 pounds average pressure, being gage pressure, is about 415 pounds absolute and in the size of atmospheres that Panhandle measures their gas, that is 14.73 pounds. That is about 28 1/2 atmospheres at the mean pressure and, at that mean pressure, you would have the mean velocity.

Now, if we consider this to be two 24-inch lines, we would have then, with 250 million cubic feet a day output, 125 million cubic feet per day in each line and, at the mean pressure, that would occupy a space of 4,400,000 cubic feet. This 24-inch line is about 23.44 inches inside

[fol. 10434] diameter and that is equal to about 1.94 feet in diameter and gives about 2.85 square feet of area.

That will give a mean velocity of about 1,550,000 feet per day or 64,500 feet per hour or about 12.2 miles per hour.

. . . . . .

[fol. 10435] Recross-Examination

By Mr. Chamberlain:

Q. Mr. Biddison, I understood you to say a short time ago that the peak day sales or, as I assume, the maximum day sales were fixed by the sales for resale. Do I quote you correctly?

A. No, the capacity to be provided to meet the peak day sales is fixed by direct sales.

. . . . . .

Q. By direct sales—what do you mean?

A. I mean by sales other than those made directly by Panhandle Eastern Pipe Line Company—

Mr. Culton: (Interposing) You mean sales for resale—

The Witness: (Interposing) I find I have misused a word. Let me start it over again, Mr. Chamberlain.

Mr. Chamberlain: Yes.

The Witness: The capacity required to meet the peak day is fixed by the sales for resale.

By Mr. Chamberlain:

Q. And you state that as an engineering matter or as the method that has been used in this case in preparing the exhibits?

A. Well, I state that as a matter of having studied [fol. 10436] the situation. I have studied the peak day situation. I have also, from time to time in the past, checked the calculations made by Panhandle Eastern in their estimates of additions and improvements to be made to meet expected demand and I know what the practice in that respect has been as regards the handling of direct sales and sales for resale.

Q. Then the capacity that is provided is only for the sales for resale? A. That is correct.

Q. Yes. Now, let us see if we can get this record clear on the different classes of industrial sales. You spoke about dump sales and suggested that there were few of those in the Panhandle system. Is that correct?

A. No, no. I was interrogated about some dump sales, and I said I did not think that the sales in this classification of direct sales, which were all interruptible, could properly be called "dump" sales.

Q. I understood you to say that the dump sales were few, if any. I may have been hearing incorrectly.

A. I do not think I said that, Mr. Chamberlain.

Q. In other words, you took the position than that all of the sales were what are known as interruptible sales rather than dump sales?

A. All of the direct sales by Panhandle Eastern.

Q. All of the direct sales?

[fol. 10437] A. Yes, sir.

Q. Then, do you have some indirect sales that are dump sales or does the company?

A. The company has some indirect sales which are, I understand, interruptible.

Q. Yes.

A. I do not know of any of those sales that could properly be classified as dump sales.

Q. Are there some boiler fuel contracts?

A. There are some direct sales for boiler fuel.

Q. And those are not dump sales?

A. I would not so class them, as dump sales.

Q. You would classify them all as interruptible sales?

A. They are interruptible sales no matter who classifies them.

Q. A dump sale is interruptible?

A. Yes, a dump sale is interruptible but an interruptible sale is not necessarily a dump sale.

Q. Let's have the definition of a dump sale and let's have a definition of an interruptible sale.

A. I consider a dump sale is one which is sold at a price far below the cost of any competing fuel, sold with a desire to make some very small margin of profit over the costs incurred in rendering service.

Q. Then it must be sold far below the cost of competing

[fol. 10438] fuel?

A. I would so consider it before I would class it as a dump sale.

Q. And you do not figure the dump sale one in which the vendee has the facilities for immediate change-over to another fuel?

A. It may or may not have it. I do not think that is what makes it a dump sale. My view of the dump sale is it is one which is interruptible but also one which you sell at almost any price in order to get rid of it.

Q. In other words, your conception of a dump sale is one that you are tossing on the market at a very low price?

A. Yes.

Q. The distinction between interruptible and the dump sale is more as to the price received than as to the other factors? A. Yes, sir.

Q. Now; what is the interruptible sale?

A. The interruptible sale is one in which the seller has the right to interrupt service when his facilities are required for the servicing of customers to whom he has a firm commitment.

Q. And is the interruption conditioned upon notice to the customer buying the gas?

A. Generally so. It is provided that he shall discon- [fol. 10439] tinue service when notified to do so. Quite often, however, provision is made that service may be discontinued without notification.

Q. Now, in such a contract as the Universal Atlas Cement Company or such as Anchor-Hocking, would it be possible to make those contracts so that the service might be interrupted without notice or without substantial notice?

A. I presume in the contract with a cement company or with an open-hearth outfit or with a glass company, that there would be requisite some provision about giving notice as far in advance as you possibly could.

Q. Will you please refer to your Exhibit No. 251.

. . . . . .

By Mr. Chamberlain:

Q. In line 4, you place the amount of industrial gas, Column B, which I understand to be direct sales, at 6,580,812 M.c.f., do you not?

. . . . . .

The Witness: No, that is the total of those industrial sales as they were classified but, of those industrial sales, 55,203 M.c.f. to North American Refractories is a sale for resale and so classified. The balance of 6,528,609 M.c.f. is direct.

. . . . . .

[fol. 10444] By Mr. Chamberlain:

Q. Mr. Biddison, is there any difference in the interruptible industrial contracts which are designated as special industrial contracts and those interruptible industrial contracts which you have listed as direct, other than the fact that they are made through the distributing agency?

A. Yes.

Q. What are they?

[fol. 10445] A. There is this difference: On those direct interruptible sales when Panhandle Eastern wants them interrupted, it is under Panhandle's physical control to effect the interruption.

. . . . . .

Q. In the formula which you have prepared for use in Exhibit No. 251, you have, in effect, taken the increment theory in determining the operating costs of selling the non-regulated gas, have you not?

A. No, I did not and I have explained that I did not although I will say that the results of using the increment theory probably would produce a result not very far from, what I have used. I do not know how much difference there would be because I have not worked it out under that theory.

Q. Now, there is no distinction, in so far as the direct interruptible contracts and the indirect interruptible con-[fol. 10446] tracts are concerned, in so far as the cost of selling and distributing that gas, is there?

A. I do not believe there is.

Q. No, and referring to your Exhibit No. 251 or Mr. Spacek's exhibit, to be exact, you have a profit of two thirds of the gross revenue received from the gas, do you not?

A. I do not know what you mean by "profit."

Q. Well, net operating income, if you want to phrase it that way, prior to Federal income and excess profit taxes?

A. Prior to the Federal income and excess profits taxes, the amount available for tax and earnings is about two thirds of the operating revenues.

. . . . . .

[fol. 10447] Q. Now, before I go to another matter, you gave some figures as to the contribution of the Detroit company on January 7 and January 8, 1942. I read from page 9462 of the testimony in this case, of Mr. Morton:

"Question: And how much did the Detroit Company add to that for customer distribution?"

[fol. 10448] This is a reference to the maximum day of January 7.

"Answer: The Detroit Company added approximately 28 million cubic feet."

Your figures were substantially less than that?

A. I did not say anything about what the Detroit company added. I said that they lacked about 15 million feet of taking the amount which Panhandle was under obligations to furnish to them, if they desired it.

Mr. Culton: He did not say what the send-out was, Mr. Chamberlain.

By Mr. Chamberlain:

Q. You gave no figures as to what they put into the lines?

A. I did not although I had them before me and have them before me now.

Q. All right. Then the fact is that the Detroit company put in some 28 million cubic feet on January 7, did it not?

A. It is really a trifle less than that. It is a trifle under 280,000 therms so, with gas of the heating value that was delivered on that day, the feet would be a little less than ten to one in proportion to that. It is a little less than 28 million but, for practical purposes, 28 million is close enough.

Q. Well, to be exact, the figure would be 27,926,000 therms?

A. I could work it out and see but I do not want to [fol. 10449] let it appear that that 28 million is the exact figure, is all. It is a little bit less than that.

Q. You referred to the 15 million as being an amount which assisted Panhandle in serving their other customers. Was not the 28 million the amount they were assisted by?

A. I think that could only be answered after a determination as to whether there is any obligation upon Panhandle Eastern to deliver in excess of 125,000,000 and I am not in a position to answer that matter. I am sure there is an obligation to deliver up to 125,000,000, but whether there is any obligation beyond that, I am not in a position to say.

Q. The question of contractual obligations has nothing to do with that. The question is as to whether or not the 28 million was not a contribution which enabled Panhandle Eastern to keep its other customers served to that extent.

Mr. Culton: We differ with counsel's construction of what the obligation was. Manifestly, there was no contribution at all as to any gas in excess of Panhandle Eastern's contribution under the contract. We agreed to contribute to their 125 million under the contract and, obviously, there is no obligation to furnish any more than 125 million.

Mr. Chamberlain: I am trying to say there is no claim of any obligation. I am trying to get out the fact that, instead of assisting Panhandle Eastern with 15 million feet, they assisted them with 28 million feet.

[fol. 10450] The Witness: Well, it is mentally true that, as compared to delivering 138 million when they only delivered 110 million, that is 28 million feet less than Detroit would have used if they had taken natural gas for all of their requirements.

[fol. 10452] LEITH V. WATKINS a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Recross-Examination

By Mr. Chamberlain:

Q. Mr. Watkins, will you please refer to Exhibit No. 179. Where, in Exhibit No. 179, will you find all of the direct industrial or interruptible industrial sales of natural gas?

A. For the period from April 1, 1932, to December 31, 1941, sir?

Q. Yes, or any part of that period.

[fol. 10453] A. The direct industrial sales made by Panhandle Eastern Pipe Line Company and any of its subsidiary companies during that period will be found in Columns H, I and J.

Q. And what were the direct industrial sales in M.c.f.'s for the year 1941?

A. As shown by this exhibit, 5,358,169 M.c.f.

That appears in Column H on line 12.

. . . . . .

Q. Now, what were the direct industrial sales in 1941 by Indiana Gas Distribution Corporation?

A. They, of course, are not shown in Exhibit No. 179.

Q. No?

A. I do not have the sales for Indiana Gas Distribution Corporation to Anchor Hocking for the year 1941 in any of the material I have with me, shown as a separate item.

Q. Do you have anything by which you can calculate what those sales were?

A. I can make a calculation, Mr. Chamberlain, which may give us the correct answer but I would not state that it was.

. . . . . .

[fol. 10454] Q. If you will get your figure, it will certainly be subject to correction if you find it is incorrect.

A. I have made no computation as to volume. I made a computation as to revenue in dollars which I find is $13,007.72 which is likewise an amount shown in pencil

on your copy of Exhibit No. 251 which may have been the amount you copied down as such sales.

Q. That is right.

A. The witness' remembrance is that Witness Spacek gave the exact amount of such sales.

Q. Yes, I think he was the one.

A. At page No. 9971 of the transcript of the proceedings in this matter for the session of April 15, 1942, at lines 23 and 24, Witness Spacek, in response to a question put by Mr. Chamberlain stated the following and I quote:

"The M.c.f. were 1,222,643, the dollars were $313,007.72."

* * * * * * * * *

Q. That would be at a price of about 25.6 cents per M.c.f.?

* * * * * * * * *

A. I have not calculated it, sir.

Q. I will waive that. Now, the direct industrial sales [fol. 10455] shown on your Exhibit No. 179 plus the sales to Anchor Hocking, as testified to by Mr. Spacek, total the amount which is found in line 4, Column B, of Exhibit No. 251, does it not?

A. I do not know, sir, I have made no computation with respect to this matter as to volume.

* * * * * * * * *

Q. Will you calculate it?

A. The difference between the volume of industrial sales, as shown by Exhibit No. 179 at Column H on line 13 and the volume of industrial sales shown opposite line 4 in Exhibit No. 251 is 1,122,643 M.c.f. which the witness believes is the volume stated by Witness Spacek at the point just referred to in the transcript of the preceding session in this matter as having been sales to Anchor-Hocking.

Q. Please refer to your Exhibit No. 55. Is it correct to say that this exhibit shows all of the direct and indirect interruptible industrial sales made by Panhandle Eastern during 1939, 1940, and the first half of 1941, where

the amounts of the accounts were $20,000 per year or [illegible] over?

A. This Exhibit No. 55 shows the sales and revenue from sales by Panhandle Eastern Pipe Line Company and subsidiary companies for those years to all direct and indirect customers whose annual purchases were in excess [fol. 10456] of the figure you state.

. . . . . .

Q. Now, Mr. Watkins, you have not filed in this case an exhibit showing the actual sales for 1941 in lieu of Exhibit No. 55, have you?

A. There has been no exhibit other than Exhibit No. 55 showing the exact data which it included, introduced in these proceedings.

Q. Do you have with you the total amount of sales and [fol. 10457] revenue of interruptible gas sold directly and indirectly during 1941?

A. I have the data from which the total amount of industrial sales for that year may be had which, however, would not be comparable to the information shown by Exhibit No. 55.

Q. And in what way would it not be comparable?

A. Exhibit No. 55 is a record which shows, in numerous instances, a portrayal of sales in a specified amount per annum. The information the witness has with respect to the total industrial sales for the year 1941 would include all industrial sales.

[fol. 10458] Trial Examiner: Perhaps counsel can clarify this matter. Mr. Biddison's testimony was positive and direct on that point, as I recall it.

Mr. Culton: Well, there is this distinction. Counsel interrogating the witness is referring to all of the sales, industrial sales. That includes indirect sales as well as direct sales. In other words, it includes the gas which is subject to regulation and that which is not subject to regulation. Mr. Biddison was only testifying with respect to the interruptible gas or the industrial gas which is sold directly by the company.

As I understand it now, he is attempting to find out how much industrial gas is sold and how much of it, sold indirectly, is interruptible. Is that correct, Mr. Chamberlain?

[fol. 10459] Mr. Chamberlain: You stated it very fair. I am trying to find out here, of course, the amount of industrial sales, direct and indirect.

Mr. Culton: Interruptible and non-interruptible?

Mr. Chamberlain: Interruptible and non-interruptible. It has been testified to here a time or two that these sales were all interruptible, as I understand it. If there happens to be two or three small ones, I do not think it would make a great deal of difference but if the company has this information, I would be glad to have it.

* * * * * * * * * *

The Witness: (Interposing) I have to withdraw my answer because I misunderstood the question entirely. I had no idea Mr. Chamberlain's question was directed to indirect industrial sales.

Panhandle Eastern would only be able to determine the indirect industrial sales made during the year 1941 by inquiry of its customers. Gas sold by Panhandle Eastern for resale under its rate schedules or its contracts may be sold by the distributing organization to industries without any knowledge on the part of Panhandle Eastern whatever.

Take the case of the Michigan Consolidated Gas Com-[fol. 10460] pany. If Michigan Consolidated Gas Company wishes to buy gas—

Mr. Chamberlain: (Interposing) I am sorry to interrupt but that has nothing to do with the sales whatever. I am asking for the sales of Panhandle Eastern.

The Witness: I cannot give it to you.

Mr. Chamberlain: You cannot give it to me?

The Witness: Not the way you ask the question, sir.

Trial Examiner: Do the company's records contain the information he wants?

Mr. Chamberlain: The witness can give it. The witness loves to play on words but the witness is wrong here. I am not asking you for the sales that a customer has made that you have nothing to do with. You have your special indus-

that contracts with your distributing utilities and I take it that all you have got in Exhibit No. 55 is that type of sales, those in which you participate—

The Witness: (Interposing) Let's see if we can understand what we are trying to get, Mr. Chamberlain.

By Mr. Chamberlain:

Q. We have got it already. All I want is a continuation in Exhibit No. 55 showing the sales to those taking less than $20,000 per year.

A. If that is all you want, the information will have to be prepared.

Q. You said you had it here a short while ago.

[fol. 10461] A. No, sir; I stated later I misunderstood your question.

Mr. Culton: I think counsel used the word "industrial", where I think he meant "interruptible".

The Witness: He used the word "interruptible" and he has used the word "industrial" until he has me in a fog.

If you want information exactly parallel to that included in Exhibit No. 55 and you want it for the year 1941, the only way we can furnish it is to obtain it. The witness does not have that information with him.

I do have the total amount of industrial sales which Panhandle Eastern made during the year 1941. That, however, as I have stated before, is not parallel information to Exhibit No. 55.

By Mr. Chamberlain:

Q. All right. What were the sales of Panhandle Eastern then in the year 1941, industrial sales?

A. You could not use February 28, could you?

Q. No, sir, I want the year.

A. I am sorry, I do not have the financial statement for December 31, 1941, with me.

Q. Well, what was the paper you were about to read from there a few moments ago?

. . . . . .

[fol. 10462] A. I do not remember, Mr. Chamberlain, anything that I was about to refer to for the industrial sales

for 1941 of Panhandle Eastern alone because most of my information has been supplied on the basis of Panhandle Eastern and subsidiary companies.

Q. Well, is it your delight now to separate them?

A. You asked for them separately, sir.

Q. That is, you interpreted my question that way.

A. No, sir, you asked for that.

Q. I am asking for comparative information to that on Exhibit No. 55.

A. I do not have it.

Q. Well, do you have it by subsidiaries, then?

A. I do not have it by subsidiaries.

Q. Do you have it for Panhandle?

A. No, sir.

Q. Do you recall a report having been made to your Board of Directors which gave that amount?

A. There no doubt were reports made to the Board of Directors which had such an amount but I do not know where your question is apropos here because very obviously, [fol. 10463] the witness would not have with him all of the matters that had been referred to the Board.

Q. I assumed perhaps you were present. Were those sales in excess of the estimate which you made in Exhibit No. 55 for the year 1941?

A. I do not know.

Q. Can you supplement Exhibit No. 55 by showing the actual sales to each of the customers indicated for 1941?

A. Each of the customers indicated, sir, or do you want Exhibit No. 55 supplemented for the year 1941 comparable to the information shown for the prior years even though there be other customers than those shown on Exhibit No. 55?

Q. Well, I am trying to find my way as to how to ask you for what I want.

Q. I was starting now with the customers indicated.

A. May I try to help you, sir?

Q. Yes, I would be most grateful.

A. Let the witness then suggest that there be reserved an exhibit number which may be used later for the introduction in the record of data for the year 1941 exactly similar to that furnished through Exhibit No. 55 with re-

spect to the years 1939 and 1940 and that, I believe, is exactly what you are trying to ascertain.

[fol. 10464] Q. That certainly is the first step.

A. Shall we have such a number then?

Q. Yes. If you will prepare that, that furnishes us with data which is contained in Exhibit No. 55 brought down to date.

Mr. Culton: What exhibit number will that be, Mr. Examiner, and we will show the exhibit number on it.

Mr. Chamberlain: I think we can include in this exhibit several other things which will save numbering a lot of exhibit.

Mr. Littman: Why not mark it Exhibit No. 55-A? It is supplemental thereto, isn't it?

Mr. Chamberlain: Yes.

Mr. Littman: I mean, that is similar to Exhibit No. 55 and, because of its supplemental nature, it could be marked Exhibit No. 55-A.

Trial Examiner: I think the suggestion is very proper and it will be agreeable to counsel, I assume, that that data, to be supplemental to Exhibit No. 55 and to be marked Exhibit No. 55-A, shall be sent to the Trial Examiner within one week for inclusion in the record with copies to every counsel?

The Witness: Mr. Examiner, I am afraid we could not do it within a week. We shall be very careful to do it as quickly as possible, sir. This exhibit requires rather minute examination of our records and may require our ascertaining some of the information from some of our customers.

[fol. 10465] Trial Examiner: That raises the question of just how important this is, Mr. Chamberlain? We have got an interminable record in this case and the Trial Examiner has no disposition to enlarge it one page.

Mr. Chamberlain: This is something that the Commission will have to have before it determines this rate case beyond any question.

Trial Examiner: What issue is the exhibit addressed to?

Mr. Chamberlain: Exactly this: Exhibit 58 or Exhibit 479 shows only direct industrial sales. The company, as I understand it, has a system of putting out special industrial sales contracts with its gas distributors. In these contracts, gas is sold usually on an interruptible basis for a given price of which the distributing utility gets a certain percentage or an agreed amount.

These sales are all made in a competitive way with other fuels. They are made now at a time when the price of competitive fuels has risen substantially. They are in a class by themselves. There would be no reduction of the price, in so far as these industrial sales contracts are concerned. As a matter of fact, there is a considerable question as to whether or not the public would not have a right to ask that they be gone over and the price raised with respect to them.

In any event, whether that be correct, or not, any reduction in the rates of this company would apply and should [fol. 10466] apply to those sales other than these special industrial contracts.

Now, the purpose of this is to segregate these contracts, get them by themselves. To make a concrete illustration, the exhibits in this case show that, in 1941, this company had revenues of, let us say, approximately—I do not have the information before me—of $14,800,000 and let us say that the gasoline extraction was $800,000, that may be a little large, but we have $14,000,000 to start with. These industrial contracts represent about $4,000,000 and this information was given in testimony by Mr. Neuner very recently.

Exhibit No. 55 shows about $3,690,000 without those contracts which produce $20,000 a year or under. The chances are that the estimates here were probably exceeded a little bit but, in any event, these contracts will be some $4,000,000.

* * * * * * * *

Mr. Chamberlain: In applying a reduction to the rates of Panhandle Eastern, the $4,000,000 would first be de-

ducted and the reduction applied to the remaining $10,000,000 for the simple reason that these contracts, taken on a competitive basis and an offset fuel basis, would not be in line for reduction.

Mr. Clifton: We do not concur in that statement of the law, Mr. Examiner.

Trial Examiner: Let me ask you this, Mr. Chamberlain.

[fol. 10467] Knowing that the proceeding is going to the Commission on a motion for an interim order, is not the question that you are now presenting a part of the question of how the reduction shall be made, if any is made?

Mr. Chamberlain: That is correct.

Trial Examiner: Following the precedents which the Commission has established in the same kind of proceedings, would not that properly be deferred until the final disposition of the case after the Commission has first determined whether or not the earnings of the defendant company are larger than the law contemplates?

Mr. Chamberlain: You could defer it any length of time you wanted to but, if they have it in the record, they do not need to defer it.

Furthermore, it is necessary here before I conclude my cross-examining of Mr. Biddison of the question of his allocations in Exhibit No. 251. He has stated here that the maximum day is dependent upon the sales for resale and that it is so determined. I must have the amount of these industrial sales which are made under the sales for resale so that I may add them to the other industrial sales to determine what capacity is necessary for these interruptible industrial contracts. His position is that there has been no construction here for the purpose of providing capacity for peak days.

[fol. 10468] Now, he interprets the matter to cover only the direct sales and states that the indirect sales are something different and apart. They are exactly the same thing only under color of a different form of contract. The price that they get for them is substantially the same and the amount of those sales is absolutely necessary to determine these capacities. It is going to be necessary, before I get

through with Mr. Biddison, that I have this information. I do not have to have it to the last thousand M.c.f. at all, but I must have it. There is no question that one-third of the total volume of this company is sold for industrial purposes. There is equally no question that they are getting about $4,000,000 for it.

Now, if we want to spar around here for hours as to whether or not it is $3,956,000 or $4,120,000, that is all right, but there is no necessity for it. This is a simple matter and it should have been done before concluding this case. It should have been given here—

Trial Examiner: (Interposing) The retort to that is, Mr. Chamberlain, you should have made your request much earlier.

Mr. Chamberlain: I have requested it a dozen times before.

Mr. Culton: I would like to have the page number shown where you made that request.

Trial Examiner: We will leave that for a moment. Have you other questions of Mr. Watkins, other than relating [fol. 10469] to this matter? If it is possible to excuse him today, I should like to do so. We can defer further discussion of this information that has just been requested until morning, perhaps.

The Trial Examiner's hesitancy is, of course, due to the fact we are trying to fix a terminal for this proceeding and when that is done, we will then set a time for briefs and we do not want to enlarge the period that we have more or less tacitly and otherwise assumed will constitute a limit for the completion and submission of the case.

Mr. Chamberlain: I had an agreement with Mr. Culton, not over twenty minutes ago, that this would be furnished. Now, the witness is on the stand—

Mr. Culton: (Interposing) That is not so. The statement is not so.

Trial Examiner: Let's get back to the merits of this. Have you other questions of Mr. Watkins?

Mr. Chamberlain: They are directed along this same line. If there is any question about this, we should take the time to consider it but we are going to have to have this information. It is directly in line with what the company itself has put in. Why, at this time, can they say it is not material when we are merely trying to bring down to date the very evidence they put in themselves? That is exactly what we are trying to do.

[fol. 10470] Trial Examiner: You say you have asked for this information before?

Mr. Chamberlain: I have asked for it many times.

Trial Examiner: I have no recollection of it and I think you should cite the page.

Mr. Chamberlain: I have not kept track of the page numbers.

Mr. Culton: When did you ask us for it?

Mr. Chamberlain: I asked you for it at various times.

Mr. Culton: You asked for it at recess.

Trial Examiner: Mr. Watkins has been on the stand many times and the Trial Examiner feels, if the matter is so important, it should have been brought before us much sooner because the witnesses have shown no reluctance to bring the material in that has been asked for.

Mr. Lee: I think Mr. Chamberlain is absolutely right. It is going to make a good deal of difference where this cut goes, if it is made, whether it goes to the householder or whether it goes to the industrialists. Of course, both of them will get some cut, if a cut is made, but it will make a good deal of difference in the proportion of the cut which goes to each class of customer and, if you will pardon me, I think it is really of major importance, Your Honor.

Trial Examiner: You will recall, however, Mr. Lee, that in the Natural Gas Pipeline Company case, the Commission [fol. 10471] first made a broad order and requested the company to file new schedules. I assume that before the matter is disposed of by the Commission as to the specific rates which shall be put into effect there may be much more opportunity for consideration of such matters as are

now presented and, incidentally, it might be remarked that the effect of War Production Board Order No. L-31 may present an entirely different problem before that final fixing of rates.

Mr. Lee: There is a great deal of truth in that, Your Honor, but, on the other hand, shouldn't this information be in the record that Mr. Chamberlain wants to get in?

Mr. Chamberlain: Mr. Examiner, you mentioned the Natural Gas Pipeline Company but you do not mention the Canadian River which is exactly in point with this one.

Trial Examiner: No, Mr. Chamberlain, the Canadian River case did not go in on an interim order.

Mr. Chamberlain: The Canadian case requires a reduction upon the first, the producing company. That would be passed on to the distributing company.

Trial Examiner: Yes, but the distinction I am making is this: The Canadian case was submitted and concluded and the Commission made a final order.

In the Natural Gas case, the motion for an interim order was presented just as we have been warned will happen here and the Commission has disposed of that case, in part, [fol. 10472] by its interim order.

Mr. Chamberlain: It had to take the evidence before it completed the Canadian case. In this case, you have first got to determine what the excessive return of Panhandle Eastern is. That has to be passed on to Michigan Gas Transmission to the extent that it buys gas. It performs the double function, one of transportation of gas for which it receives compensation and the other is the purchase of gas.

Until we get this information, we will be very poorly equipped to make figures for briefs. Furthermore, I feel it will be necessary, in Mr. Biddison's testimony, to have these figures, to have these quantities. You cannot examine him without them. You may say you can get along without the dollars, as far as Mr. Biddison is concerned, but you cannot get along without the quantities there.

[fol. 10477] Mr. Montgomery: Mr. Examiner, the Intervener wishes to offer in evidence an exhibit which, we understand, is without objection from counsel and which consists of a letter from Mr. Morton, a witness in this case, in reply to a request from Mr. Chamberlain, showing the difference in the demand charges for the calendar year 1941, the calendar year 1942 1943 and showing the increase in the cost of gas in 1942 over the cost of the same amount of gas in 1941 as being $1,005,316.

Trial Examiner: This will be marked for identification as Exhibit No. 255.

(The document referred to was marked Exhibit No. 255 for identification.)

Mr. Culton: As I understand it, that exhibit is a three-page document?

Mr. Montgomery: Yes.

Mr. Culton: May it be understood that the third page of this document is a document which had been prepared and exhibited by counsel to Mr. Morton when he was on the stand?

Mr. Montgomery: That is right.

Trial Examiner: Have you copies of this proposed exhibit?

Mr. Montgomery: Yes.

Mr. Examiner, we feel that this exhibit should be of [fol. 10478] great importance, both to the Examiner and the Commission for this reason: If it appears that on the Defendant's own testimony a reduction in rates of as high as 40 per cent or more is possible under their own showing, the Commission should take into further consideration the fact that this year the net income of Panhandle Eastern will be increased $1,000,000 over last year for the same quantity of gas and that that increase is in effect this next month. Michigan Consolidated Gas Company starts paying this higher rate, which will yield this million dollars extra, on the first of this next month.

(Exhibit No. 255 was received in evidence.)

Mr. Chamberlain: I am now presenting a copy of the contract of September 17, 1930, between Columbia Oil & Gasoline Corporation, the National City Company and Missouri-Kansas Pipe Line Company, which has been referred to in these proceedings on numerous occasions and concerning which I made an offer of the copy printed, I believe, in Volume 62 of the Federal Trade Commission Reports. It was suggested at that time that I prepare [fol. 10479] copies which could be distributed to counsel and I have included in those copies all of the supplements or amendments to that contract as they appear in that volume.

Trial Examiner: This will be marked for identification as Exhibit No. 256.

(The document referred to was marked for identification as Exhibit No. 256.)

Trial Examiner: You are offering that, Mr. Chamberlain?

Mr. Chamberlain: Yes, the Intervener offers in evidence Exhibit No. 256.

Trial Examiner: Is there any objection?

(Exhibit No. 256 was received in evidence.)

[fol. 10480] LEITH V. WATKINS, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Recross-Examination (Continued)

By Mr. Chamberlain:

Q. I have before me the transcript of yesterday's hearing and I am anxious to avoid the use of any more time than is absolutely necessary but I would like to ask the witness one or two questions with respect to the information which I wished, particularly with respect to Exhibit No. 55.

Would you refer to that exhibit, Mr. Watkins? Are the indirect sales listed in Exhibit No. 55 those arising out of what are known as special industrial contracts?

A. I think, in most instances, they are, Mr. Chamberlain, but I cannot necessarily answer your question without some qualification.

Q. Do you have any of those contracts, in which the settlement period is longer than one month?

A. I would not know that, sir, off the top of my head.

Q. Well, you mean you may have contracts in which the settlements are for the use of gas for a period longer than one month?

A. No, sir, I do not. I simply mean I cannot, by any stretch of the imagination, remember everything that is [fol. 10484] in every contract that the company has.

Q. Do you remember any contract of any kind of your company during any year that you have been an officer of it which extended credit to a company for more than one month's gas at one time?

A. My remembrance is that the settlement provision in most of the contracts is within a month's period. There are also certain provisions in those contracts, if I recall them correctly, that a purchaser of gas may not necessarily discharge that obligation within a month's period. If there be some differences as to the amount of the charge, there is a provision by which that may be arbitrated and, in certain instances, interest payments are required and so forth.

Q. There might be some exception whereby a company might not settle promptly at the first of the month, is that correct?

A. That is correct.

Q. Now, then, looking at the companies listed in Exhibit No. 55, do you recall any of those which are back on their payments two or three months?

A. Mr. Chamberlain, the witness would not have any information whatever with respect to the payments made to him by the customers shown on Exhibit No. 55 because they are not all direct customers of Panhandle Eastern or its subsidiary companies. I have no idea when the In- [fol. 10485] diana Steel & Wire Company, for instance, purchases its gas from the organization from which it

purchases and that answer would apply to many of the customers listed on this exhibit on lines 9 to 39, inclusive.

Q. But they are all made under contracts of which your company is a necessary party, are they not?

A. They are not.

Q. Is there contract there that your company does not participate in to the extent of the major part of the revenues derived from them?

. . . . . .

A. Panhandle Eastern does not have contracts directly with the indirect industrial customers. Let's get that straight.

Q. I understand that perfectly.

A. You do not ask your question as though you did, sir.

Q. Yes.

A. Now, Panhandle Eastern has certain contracts under which certain industrial customers may buy gas. The underlying contracts in such instances are not contracts between Panhandle Eastern and the user. Those are contracts between the user and the distributing organization.

[fol. 10483] Trial Examiner: Mr. Watkins, may I interrupt at that point?

The Witness: Certainly.

Trial Examiner: And refer you all to page 10465 which is a statement made by Mr. Chamberlain at the hearing yesterday. He refers to these special industrial sales contracts with the gas distributors to which you have just made reference. He then makes this statement:

"In these contracts, gas is sold usually on an interruptible basis for a given price of which the distributing utility gets a certain percentage or an agreed amount."

Is that statement correct?

The Witness: Generally it is, Mr. Examiner, but there are not a vast number of such contracts.

Trial Examiner: Is that form of contract included in the rate schedules which are on file with the Federal Power Commissioner?

The Witness: Yes, sir, it is. There is, if I recall correctly, one major contract under which such conditions exist. That is a contract dated as of August 1, 1936, between Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation. It is not a general or customary practice.

Trial Examiner: I assume counsel would agree that such sales would be regulated sales?

Mr. Culton: That is, indirect sales. Now, there is a dif-
[fol. 10484] ferent situation now as to a good many of these contracts from the situation which existed a year ago, as I understand it. Some of the sales that were formerly indirect sales may now be direct sales but we do fully agree that all indirect sales, whether they are interruptible or firm, if they are sales for resale, are subject to regulation by the Commission.

Mr. Littman: Hasn't Mr. Biddison given us and put into the record his list of all of the direct industrial customers?

Mr. Culton: That is right and we concede that all those others, which are reflected in last year's business, are sales for resale and subject to the Commission's regulation.

Trial Examiner: And have been made under prevailing rate schedules on file with the Commission?

Mr. Culton: Yes, sir.

. . . . . .

By Mr. Chamberlain:

Q. Now, do you know of any of the companies listed in Exhibit No. 55 which have failed to settle for their gas up to the end of 1941?

A. I have made no examination to determine that fact, sir. Consequently, I do not know.

Q. Have any been reported to you as having been in default?

A. They would not necessarily be reported to me.

[fol. 10485] Q. I am asking you if any of them have been reported to you.

A. No, they have not, but they would not necessarily be reported to me.

Q. You have closed the books of Panhandle Eastern for the year 1941, have you not?

A. Yes, the books have been closed.

Q. And you have prepared and distributed your Annual Report, have you not?

A. That has been done.

Q. And you have in your office determined the amount of industrial sales, both direct and indirect, made by Panhandle Eastern during the year 1941, have you not?

A. No, sir.

Q. That has not been done?

A. Not separated.

Q. What do you mean by separated?

A. We make no separation in our office, Mr. Chamberlain, of the direct and indirect industrial sales until and when the occasion arises.

Q. You did not separate them in Exhibit No. 55, did you?

A. We did not. We do not necessarily keep a running record of the annual indirect industrial sales because that information has to be obtained from other sources.

Q. Now, that opens two questions but first, I was un- [fol. 10486] aware that I asked you to separate your direct from your indirect industrial sales. I asked you, if I spoke what I intended to, whether you had the amount of your industrial sales for 1941?

A. You did not say that, sir.

Q. I am sorry. If I did not, I intended to.

A. That, sir, is included in Exhibit No. 251.

Q. Exhibit No. 251?

A. Yes, sir.

Q. And what is the figure then?

A. As shown by Column B, line 14 of Exhibit No. 251 by Witness Spacek, the total industrial sales of Panhandle Eastern Pipe Line Company and subsidiary companies expressed in revenue for the year 1941 amounted to $1,223,730.92.

Q. Now, you told me a moment ago that you did not have that separated. What does that figure you have given represent?

A. All direct industrial sales made by Panhandle Eastern.

Q. Then you did have it separated, didn't you?

A. We do not, sir.

Q. That represents, of course, your direct sales. I am asking you for your total industrial sales which would, of course, necessarily include that as you did include them in Exhibit No. 55.

A. Mr. Chamberlain, I do not believe we understand [fol. 10487] where we are trying to go. If you will observe line 17 of Exhibit No. 251, you will find there the total amount of gas that Panhandle Eastern sold during the year 1941 to gas utilities.

Q. That is right.

A. Included in those sales is certain revenue received by Panhandle Eastern Pipe Line Company from the utilities covering indirect industrial sales.

Now, we have no information assembled for the year 1941 with respect to the amount of those industrial sales by customer or otherwise.

Q. You are now referring to the indirect industrial sales made by the distributing utilities in which they sell the gas which they have purchased from you directly to their customers, are you not?

A. That is right.

* * * * * * *

[fol. 10489] Q. Now, Mr. Watkins, what I want is the amount of the industrial sales by Panhandle Eastern for 1941, including your direct and the indirect sales which, as Mr. Culton describes them, may be classified as sales by Panhandle Eastern or sales to the distributing utilities for which Panhandle Eastern receives a percentage of the sale price.

A. The witness has been trying, Mr. Chamberlain, to tell you for several hours that he does not know that amount. Our classification of accounts is such that we characterize, as industrial sales, the amounts shown on line 14 of Exhibit No. 251 which is the direct industrial sales that Panhandle Eastern makes. All of the sales that Panhandle Eastern and its subsidiary companies make to other organizations for resale are included in the amount shown opposite line 17 on this same exhibit.

Mr. Wheat: You are referring to Exhibit No. 251, aren't you?

The Witness: That is correct, sir.

Now, any segregation of the $15,725,780.73 shown in Column B opposite line 47 representing sales to gas utilities which includes the sales to them for resale for industrial purposes, will have to be developed.

[fol. 10490] By Mr. Chamberlain:

Q. Now, did you develop it for the years 1939 and 1940 with respect to these accounts of over $20,000 per year?

A. That was done, sir, and there is an exhibit in these proceedings that shows that that fact exists.

Q. All right. Now, to bring that to date, it would require you to set up in an exhibit the amount which each one of those companies purchased during the year 1941, would it not?

A. That is correct.

Q. And on your books you have every one of those figures, do you not?

A. We do not.

Q. You do not, sir?

A. We do not, sir.

Q. What account do you keep of your special industrial contracts?

A. Mr. Chamberlain, for the distributing organization to whom we sell gas for resale, we carry an account with that organization.

Q. Right.

A. We render a statement to that organization each month.

Q. Right.

A. Showing the amount of gas sold, for whatever purpose it was sold. We have no record whatever, as far as [fol. 10491] this witness knows at the moment for the year 1941 that gives us the total amount of gas sold, for instance, under a 'special industrial' contract to the Guide Lamp contract at Anderson, Indiana, which happens to be one of the organizations shown on Exhibit No. 55.

To get that information for the year 1941, we would have to compile it from twelve monthly statements. If we did not have it on those twelve monthly statements, we would then have to, in turn, go to the distributing or-

ganization to whom the gas was sold for resale and get the information.

Q. Will you state into the record how it would be possible for you to determine the amount which you would be entitled to receive on the contract with the Guide Lamp Company unless you had the figures of the volume and the sales price for each and every month?

A. I believe that has been done. It seems to me that I just finished giving you a recitation that would cover that.

Q. What you are trying to say is that you do not carry a single account in which you post the total year's results of those separate contracts and that you would have to take off twelve figures instead of one.

A. Nor do we carry a single account in which we post the monthly figure but we do have information in the office which shows the amount.

. . . . . .

[fol. 40492] A. The exhibit shows that, sir. It is not necessary to ask the witness that question.

Q. What you would be required to do would be to go to your files and take off the sales to each one of these companies for six months. Is that right?

A. That is right.

Q. All right. Then you can do that?

A. Mr. Chamberlain, we told you yesterday afternoon quite some hours ago that this could be done and at that juncture, we were about to reserve Exhibit No. 55-A to cover the development of this information for the year 1941. The record should not show any inclination on the part of the company not to supply the data.

Q. Really, I don't think it does. It shows a great disinclination to cooperate in furnishing exactly what we wish but here is the disturbing thing.

In response to the Examiner, you stated you were afraid you could not do it in a week.

A. I still say that.

Q. But all that would be required would be to take six figures off the monthly statement for each one of those

companies, add them together and add them to the six months that is already stated?

A. Of course, Mr. Chamberlain, the only thing we have [fol. 10493] to do is to answer questions with respect to this proceeding.

This witness is already, and the company too, accused of the lack of diligence with respect to our original cost studies. Day after tomorrow, I am meeting a portion of our staff in Chicago to go over our preliminary draft of the answer to the Commission's Order No. 73 which is the original cost filing. We can get this information and we will be very glad to get it but we cannot dish it up here like a short order for a hamburger.

Q. I have the greatest respect for your energy and your desire to do things but you cannot be a one-man army and this requires an ordinary bookkeeper to compile that exhibit and no one else. It does not require your time or require—

Mr. Culton: (Interposing) I want to ask counsel when, before yesterday, he has ever requested that data to be furnished. He stated on the record yesterday he had previously called for it and we asked for the page of the record but he did not give it. I again ask him when he ever asked for that information before yesterday.

Mr. Chamberlain: I told you I do not think I ever asked for it on the record.

Mr. Culton: When did you ask for it off the record?

Mr. Chamberlain: What difference does it make? We are trying to get a piece of factual information which you agreed to furnish to me.

[fol. 10494] Mr. Culton: You did not tell me then what you want now.

Mr. Chamberlain: Yes, I did. There is no use quarreling about it. This is ordinary factual information and can be compiled by a bookkeeper in an hour.

What I wish here is exactly what Mr. Watkins has stated he would furnish but the disagreements seem to keep coming. A week won't make a great deal of difference if

I get the approximate amount. I am sure that this has been already determined for the benefit of your operating committees. They could not get along without it.

The Witness: You had better let us say what has been determined and what has not and you had better let the company state how this data is to be prepared. It does not presume to tell you how to handle your law affairs.

By Mr. Chamberlain:

Q. The president of the company had practically determined what it was when he testified here some months ago and he must have had some information on which to base that testimony because he is a fairly accurate man. His testimony was it would be around $4,000,000 for industrial gas.

Now, do you recall that as being substantially the amount of industrial gas for 1941?

A. I have no opinion with respect to that.

. . . . . .

[fol. 10495] Q. Were you in the room when I read Mr. Neuner's testimony yesterday?

A. I was, but I paid no particular attention to it.

Q. All right. Mr. Neuner was asked in the proceeding known as Docket G-210 certain questions which appear on pages 505 and 506 of the transcript as follows:

"Question: Now, you have a total sales of about $14,000,000 a year?

"Answer: In dollars, our gross revenue, from all sources is somewhat in excess of $14,000,000, yes.

"Question: At the present time?

"Answer: At the present time."

This testimony was given October 21, 1941.

"Question: And your industrial sales amount to about $5,000,000?

"Answer: I do not have the exact figure in mind but I would judge from my knowledge of what our average

[fol. 10496] of industrial gas, I would say our industrial sales might account for as much as $4,000,000 a year, maybe slightly under that or it might be slightly over."

"Question: Then that would leave about $10,000,000 of sales from the gas utilities, such as Michigan Consolidated?"

Now, is it your judgment, as the chief financial and accounting officer or chief accounting officer, that the industrial sales were about 20 billion feet in 1941 and that the income or revenue from them was about $4,000,000?

A. I have no judgment with respect to that.

. . . . . .

Q. On page 506, it is stated:

"Our sales to special industrial interruptible and off peak dump industrial customers for the year will be [fol. 10497] slightly under $4,000,000."

. . . . . .

Q. (Interposing) Will you verify that and see if your industrial sales as described by Mr. Neuner were substantially as he indicated?

A. Does Mr. Neuner define his use of the words "industrial sales"?

Q. Shall I read it again?

A. You may if you wish. If that gives the description, I would like it, because the only industrial sales this witness knows of with respect to Panhandle Eastern are those shown in Exhibit No. 251 which are direct industrial sales and indirect industrial sales, for the year 1941, are included, as the witness has said several times, in the amount of gas sold for resale and is shown opposite line 17 in Column B on Exhibit No. 251.

[fol. 10498] Q. I am not concerned with what you have omitted to show. What I am getting at is a development of your Exhibit No. 55, as you know.

. . . . . .

Trial Examiner: Just a moment, gentlemen. If the data you are discussing is coming into this record, I suggest that it would be preferable to have it come in in an orderly way.

Mr. Chamberlain: I had hoped that it would

Trial Examiner: The issue, I assume, was raised by your request for an enlargement of the contents of Exhibit No. 55 which was discussed yesterday afternoon when you stated that would give you the exact information you desire if you could have it in time. The Trial Examiner then expressed a reluctance to extend the termination of this proceeding to permit that because the request has come in so late. I do not think that it is serving any useful purpose to discuss the record and the testimony in Docket C-210 which is not inclusive of exact data.

Mr. Chamberlain: I know of no reason in the world why we cannot have Exhibit No. 55 extended to the end of 1941 as all of the other exhibits have been extended. I know of no reason why we should not have the facts as to [fol. 10499] those customers coming plainly within the import of Exhibit No. 55 which had sales of less than $20,000 per year. Those are merely factual matters which appear on the books and records of this corporation.

Trial Examiner: You can raise the issue on the record if you want to and you will get a ruling.

Mr. Chamberlain: Further than that, the element of making it part of this record, even if it takes a week, is not going to be at all material because it is going to take time to file these motions and to file the briefs that must accompany them and I shall ask that the witness prepare and file an extension of Exhibit No. 55 which will show the results for the full year 1941 and that this exhibit shall be so extended as to include the sales coming within the purport and intent of Exhibit No. 55 from all of those customers whose industrial sales are under the $20,000 per year limit.

Trial Examiner: May I ask whether that $20,000 factor entered into the preparation of Exhibit No. 55, Mr. Watkins?

The Witness: Yes, sir, it did.

Trial Examiner: May I also ask how much time it would take to add these six months to the scope of your Exhibit No. 55?

The Witness: As an accommodation to the Examiner, we will bend every possible effort to have the extension ready sometime between the 26th and the 30th.

Trial Examiner: Today being the 21st.

[fol. 10500] Mr. Wheat: May I ask, Mr. Examiner, whether the [witn] that statement refers to the extension of Exhibit No. 55 alone and as such?

The Witness: That is correct.

Mr. Wheat: Yes.

The Witness: And that, of course, will interfere with our original cost work.

Mr. Wheat: It will include the companies which purchased industrial gas directly and indirectly and whose annual bill in 1941 was over $20,000?

The Witness: It will include the exact same information for the year 1941 as now shown in Exhibit No. 55 for the years 1939 and 1940 in the same manner.

Trial Examiner: Now, Mr. Chamberlain, will you please state just what importance you attach to this additional data in view of the expectation of us all that a petition for an order making an immediate reduction without final disposition of the case be presented to the Commission within a few days?

Mr. Chamberlain: I have already stated on the record the purpose of this evidence, the necessity of it. I have been asked here why I did not ask for it before.

When Mr. Watkins was on the stand before, the Examiner stated that we were not to cross-examine these witnesses except on the matter of clarity of the exhibits until they were recalled later and, to the best of my knowledge, [fol. 10501] he has not been recalled for cross-examination but he is here right at this time.

Trial Examiner: I am sorry this record fails to show the attendance of individual counsel in this proceeding but the Examiner will state for the record that Mr. Chamberlain has been absent many days during the proceeding but the Examiner has no knowledge whether Mr. Chamberlain was present during the cross-examination of Mr. Watkins which consumed several days.

Mr. Chamberlain: Mr. Chamberlain has not been absent any considerable length of time from this hearing and he has had the record when he has not been here.

Trial Examiner: Now, will you please deal with the merits of the question the Trial Examiner asked?

Mr. Chamberlain: Yes. We are faced here with an allocation that is placed in evidence by the Respondent. That has been motivated, as the record will indicate, by the decision of the Commission in the Canadian River or Colorado case. We are faced with the necessity—

Trial Examiner: (Interposing) You are referring now to Exhibit No. 251, are you?

Mr. Chamberlain: Yes, Exhibit No. 251. That is what has originated this cross-examination and the cross-examination of Mr. Biddison and the objection was made that I was asking the wrong witness.

[fol. 10502] I put this man on to get the evidence that they say he cannot furnish. Now, we are faced with the statement and I am unable to know how the Examiner can know that the Commission will make an order in this case as they did in any one case or in another case. That, to me, is not clear. In the one case—

Trial Examiner: (Interposing) Pardon, has the Trial Examiner made any such statement?

Mr. Chamberlain: I thought he did yesterday, yes. Your statement was, as I recall it, that you felt that the Commission would make an order such as was made in the Natural Gas Pipeline Company case which was and I am assuming, of course, in the event that a reduction should be ordered, that it would be of some specific amount on which later hearings could be had.

Trial Examiner: No, pardon, but the statement on the record of yesterday was that we have been apprized a motion will be submitted to the Commission for an interim order granting an immediate reduction and the Trial Examiner called attention to the nature of the order which the Commission had adopted in the Natural Gas Pipeline Company case.

That is immaterial, however. I am interested now in the merits of this pending question.

Mr. Chamberlain: Yes. I make no point of that, of course, but we must meet this thing as two companies. The [fol. 10503] evidence has been presented here now with later exhibits which would tend to show a consolidated statement of income of companies which are not consolidated and upon which they are asking, in these exhibits, for an allowance for taxes which are greater by reason of the changed ownership of the companies. These are being consolidated, as I say. Now, to determine and to allocate the revenues in this case, we must first have an allocation of Panhandle Eastern's business. We must then apply to that, to the business of Michigan Gas Transmission, such a reduction as would be necessary under the Panhandle Eastern setup. As I said yesterday, Michigan Gas Transmission has two functions, one is that of transporting gas for which it has a contract price. That is under the jurisdiction of the Commission. It sells gas. That is likewise under the jurisdiction but its costs are going to depend upon the costs and the proper return of Panhandle Eastern. Therefore, to follow this thing through as we have to do and as it was done in the Canadian River case, we must have first an analysis of Panhandle Eastern and, I think, we have a right to, if they come in with allocations of their own, we are entitled to cross examine on those allocations and we are entitled to know the facts that these are based upon. We must have them and that is what I am after here.

As far as the length of time is concerned, there seems to be no dispute about this thing except a big smoke screen [fol. 10504] is being raised right here at a time when we want to get it. The witness has just said it would take five days and, in Exhibit No. 55, there are 30 names and it will require an accountant to set down—

Trial Examiner: (Interposing) I do not think that is material, Mr. Chamberlain. We have the statement of the witness as to the time. Let's do not take the time on this record today with unnecessary discussion or argument.

Let's get to the merits of what we have to deal with.

Have other counsel remarks to make with reference to this desired information?

Mr. Montgomery: Just a moment, Mr. Examiner.

Trial Examiner: We will ask you, Mr. Watkins, to supply this data at your convenience within the dates indicated, sending through your attorneys copies to counsel, which exhibit will complete the data shown in Exhibit No. 55 to the end of the calendar year 1941. That is my understanding of what is requested.

Is that correct, Mr. Chamberlain?

Mr. Chamberlain: You mean to confine it only to those —

Trial Examiner: (Interposing) To extend the data included in Exhibit No. 55 to cover the full calendar year 1941.

Mr. Chamberlain: Plus the sales to the same type of customers who take less than $20,000 a year, the purpose being, of course, to get all of the industrial sales.

[fol. 10595] The Witness: I cannot do that in a week, sir.

Mr. Culton: That is a different matter entirely. That specific question was asked a while ago.

Trial Examiner: We will ask the witness to prepare the data to complete the calendar year 1941 on the same basis as the data which has been prepared in Exhibit No. 55 and on no other basis and to send that in, as indicated, within the time which the witness has stated would not be greatly inconvenient.

This information, it may be remarked, will ultimately be of interest and the work may be done now just as well as later but we will not retard any other matters connected

with this proceeding on account of the supplemental information.

The Witness: Will the supplemental information, Mr. Examiner, be numbered Exhibit No. 55-A?

Trial Examiner: It will and will be merely, as the Trial Examiner has endeavored to indicate, an extension of the data included in your Exhibit No. 55 to include the full calendar year 1941.

The Witness: Yes, sir.

Mr. Chamberlain: I do not know that it is necessary but may Intervener have an exception to the ruling?

Trial Examiner: Certainly, and the Trial Examiner will remark in that connection that had this request been made when Mr. Watkins was previously on the stand and under-[fol. 10596] going a general cross-examination, the request would have been honored in full.

* * * * * * * *

[fol. 10597] By Mr. Chamberlain:

Q. Mr. Watkins, have you put in evidence in this case any evidence of original cost of the Panhandle Eastern properties as defined by the present Classification of Accounts for natural gas companies by the Federal Power Commission?

A. I do not believe we have unless the fact that counsel for Panhandle Eastern stated in the record that Panhandle Eastern and its subsidiary companies would not contend for an original cost greater than the cost shown per its books could be considered as such evidence.

Q. Now, has the Panhandle Eastern accounted for the property as constructed since 1930 on the basis of cost?

A. As far as this witness knows, it has.

* * * * * * * *

[fol. 10598] Q. Well, you knew those examinations were being carried on by accountants of the Federal Trade Commission in the office of Panhandle Eastern, did you not?

A. Yes, sir, we knew they were being carried on but we were not making the studies for them, sir.

Q. Now, you studied with them, did you not?

A. No, not at all.

Q. You did not? A. No, sir.

Q. Who were the men who examined Panhandle Eastern accounts for the Federal Trade Commission?

[fol. 10509] A. I believe the examiners' names were Steele, Sternberg, perhaps a lad named Dalrymple, and some assistants whose names the witness does not recall.

* * * * * * * * *

Q. Do you have Exhibit No. 107 before you?

A. Exhibit No. 107, sir?

* * * * * * * * *

[fol. 10510] Mr. Chamberlain: This is a listing application of the $12,000,000 Panhandle Eastern Pipe Line Company 3 percent bonds.

The Witness: On the New York Stock Exchange?

* * * * * * * * *

Q. Now, on page 72 of that exhibit, which is, in effect, page 72 of the Prospectus, there is this statement:

"A (1). Property, plant and equipment is stated at cost except for $2,417,948.52 thereof assigned by the Board of Directors to assets acquired as of August 31, 1930, as a capital contribution and intangibles are stated at cost except for $2,398,402.19 thereof assigned by the Board of Directors to gas sales and purchase contracts acquired as of August 31, 1930, as a capital contribution."

* * * * * * * * *

[fol. 10511] Trial Examiner: The question was not completed. You may complete it.

By Mr. Chamberlain:

Q. (Continuing) What amount of write-up is contained in the item of $2,417,948.52?

A. Will you define "write-up," please, sir?

Q. Yes. I will define it as the increase in the ledger cost of the plant and equipment over and above the actual cost of that property.

A. This witness does not know what the actual cost was, Mr. Chamberlain, and if I may suggest, we went over

this in rather complete detail when this witness was under cross-examination by Mr. Gorman. You may recall Table No. 2 appearing on page 17 of the Federal Trade Commission report, for this same series of questions was brought into play then.

[fol. 10520] Recross Examination.

By Mr. Littman:

Q. Mr. Watkins, will you please turn to your Exhibit No. 250 which deals with the rate case expenses. I want to ask you one or two questions that I had forgotten to ask when you were last on the stand.

Calling your attention to the column headed, "Estimated To Complete," in the total amount of $135,101.05, can you advise us with respect to what is meant by the term "complete"? Does that mean to complete to the end of the present proceeding or to complete through any subsequent phases or proceedings that may or may not be contemplated?

A. It was the intention, Mr. Littman, when Exhibit No. 250 was prepared, that Column C carrying the heading, "Estimated To Complete," would portray our best judgment of the additional expenses not heretofore actually [fol. 10521] recorded necessary to carry the present proceeding to what now appears to be its final completion.

Q. Before the Commission?

A. There is no particular consideration given in these estimates, as far as the witness knows, and most of the estimates are of the witness, with respect to any side issues in the matter.

Q. How about Courts of Appeal? That might help bring to a head what I am driving at.

A. There may have been some slight consideration given to the possible matter of appeal but, if so, it is so slight that it hardly would be noticeable in this estimate.

Q. In other words, you are saying that you have not included in Exhibit No. 250 any estimated costs of carrying this cause through any appellate courts if any such occasion arise?

A. I might have been swayed to some extent by wishful thinking because certainly we and the Commission should avoid some such thing as that if it were possible at all to do it.

The answer to your question is no.

Trial Examiner: May I ask, Mr. Watkins, whether your subsidiaries include Michigan Gas Transmission Corporation?

The Witness: Yes, sir. This amount of $350,000 shown by Exhibit No. 250 includes the actual expenditures of Panhandle Eastern and Michigan Gas Transmission Corpo-
[fol. 10522] ration to February 28, 1942, and the estimate on behalf of not only those two companies but the expenditures of any of the other subsidiaries should there be such expenditures from that time to the completion date of the matter.

By Mr. Littman:

Q. Now, does the amount of $135,000-odd labeled "Estimated To Complete" cover all services estimated to be rendered subsequent to February 28, 1942, up to which latter date you have included the actual cost? Have I made myself clear, Mr. Watkins?

A. I am afraid not, sir.

Q. Well, perhaps I can state it a little differently. Does your Column B headed "Actual to February 28, 1942", in the amount of $214,898, cover all services that were rendered to that date?

A. No, it does not, but, to the extent that it does not, $135,101.05 shown as a total of Column C opposite line 13 does include any unpaid services at February 28, 1942, plus any we estimate that would be incurred subsequent to that date. The $350,000, therefore, would include such items.

Q. That helps me, in part, Mr. Watkins, but to be perfectly clear about it, can you give me some idea of the period of time covered by your estimated Column C, generally?

A. Well, my memory runs to this fact, that in the preparation of the estimate shown in Column C, at that time
[fol. 10523] we understood we were to come back here last week and clear up any further examination in the matter. There was then before us the necessity of briefing and whatever additional work of that nature had to be done be-

fore some final decision was rendered by the Commission, and our $135,101.05 contemplated substantially that program.

Q. Well, I want to be sure about this. Are you saying that the $135,000 covers substantially the services which you just described and none other?

A. Well, I have tried, in response to some of your questions, to cover probably more than the immediate answer did.

There are some charges and were some charges on February 28, 1942, that had not been presented to the company.

Q. Were they substantial?

A. Some of them, I think were, but, even if they were, they are not included in the $135,101.05, and, likewise, in the $350,000.

Q. And even if they were not substantial, they are still included in the $135,000 figure, is that right?

A. If they were not, that is to say, that any charges not actually presented at February 28, 1942, and, consequently, not included in the items shown in Column B, are included in the estimates shown opposite the respective line numbers and captions in Column C.

Q. Well, just this one further question which I think [fol. 10524] may clarify the matter a little further. Can you state approximately how much this estimated cost of $135,000 is attributable to services rendered in connection with this hearing subsequent to February 28, 1942?

A. That is to say, services to be rendered subsequent to that date?

Q. Yes. Now, if you want to give us an estimate and then check it later and supply the data in more exact detail, of course you may do so when you submit Exhibit No. 250-A. A. It will be a wild guess.

Q. Well, let's have it.

A. I should say that between $75,000 and $100,000 of the total opposite line 13, Column C, represented services yet to be rendered at the time the estimate was made.

Q. That is, yet to be rendered subsequent to February 28, 1942?

A. No, sir, I would have to change that because, if we are going to tie ourselves down to February 28, 1942, you

will recall that when this exhibit was presented, the witness stated that there had been some charges presented in the month of March, in the early part of the month of March, which had actually been recorded as a part of February work but had not actually been paid until in the month of March.

Now, there were likewise some charges which came in subsequent to the recordation of those charges which did [fol. 10525] not get in February work and consequently are in March work.

Q. Do you remember whether those amounts were substantial?

A. What I am trying to show, Mr. Littman, is that for services to be rendered, let's say, subsequent to February 28, it would be my judgment at the present time that of the $135,101.05, not more than $75,000 to $100,000 would represent charges covering services to be rendered.

Q. In [other] to assist in clarifying the matter of the estimated Column C, I am going to ask that you state, in connection with your estimated amounts, the same detail as that which you had planned to give us which was heretofore requested with respect to Column B contemplated to be submitted in Exhibit No. 250-A. Perhaps you already have that?

A. We had it in mind, sir, but our estimate will not relate to individuals. Exhibit 250-A, which is in the course of preparation, will, so far as the factual matter shown in Column B is concerned, relate itself to the person rendering the service and the type of service rendered, in the manner in which counsel heretofore asked for it. The estimates shown in Column C, for example, relate themselves to the general subject, such as other special services shown opposite line 6, and not necessarily relate themselves to the individual who performed the service.

Q. Didn't you estimate the amounts in Column C by [fol. 10526] individuals?

A. We may have approached it from that angle and then tempered it to some extent by our inability to correctly guess what charges might be rendered by one individual and what might be rendered by another individual.

Our judgment here was that these possibly were the limit, or maximum, rather, of the additional charges that

would be rendered. We might miss it a few thousand dollars as to one person and err on the short side as to another person.

Q. Will you give us a brief statement for the record at this time as to the manner, generally, in which you estimate the amounts in Column C?

A. Well, Mr. Littman, we have a rather complete record of the actual costs incurred to February 28.

Q. 1942?

A. That is correct. We have in our mind's eye a rather complete picture of the time and effort put forth with respect to such charges. We have gaged, to the best of our infirmities, what may be the time involved in the future by the various individuals and what might be their charges therefor. This estimate represents our best judgment of what future charges there might be to complete these proceedings.

Q. Am I correct in understanding that you made these estimates primarily?

A. Largely, yes, sir.

[fol. 10527] Q. Did you, in arriving at the estimated amount in Column C, ask your various experts to submit to you their estimates of the amount of their bills contemplated to be rendered in view of the services which remained subsequent to February 28, 1942?

A. No, sir, we did not and I did not personally because I knew we would not get any sort of an answer that we could use. You being an attorney would know pretty well, had we asked those dealing with this matter from the legal side, that they would have no basis upon which they could make such an estimate. The same thing is true with people rendering special services. If we could lay down in front of them the actual work they would have to do, and the time involved, they might be able to do it; but, to my judgment, it would be of no avail, it was expensive, and it would be a costly way to get nothing.

Q. In other words, this Column C represents your estimate—

A. (Interposing) No entirely mine, no, Mr. Littman. I am the prime mover behind the estimate but I did not put it in here alone. It has, I am sure, the complete concurrence of the organization, generally.

Q. Perhaps I should avoid the difficulty that you apparently have in mind by saying this estimate is the estimate of your organization, of you and your organization? A. Yes.

[fol. 10528] Q. And not the estimate of the individuals who rendered and will render the services subsequent to February 28, 1942, or thereabouts?

A. That is correct.

. . . . . .

[fol. 10529] Trial Examiner: The question the Trial Examiner asked was simply to ascertain whether we all understand this Exhibit No. 250-A which is in the course of preparation is to become a part of the record and available to all counsel.

Mr. Littman: That is right.

. . . . . .

[fol. 10530] The Witness: At page 9855 of the transcript of proceedings for April 15, counsel for the Commission asked that a reconciliation of an item of $7,350,000 and some similar amounts for the subsidiaries of Panhandle Eastern included in Exhibit No. 202, I believe, and possibly Exhibit No. 243, be prepared and submitted, and the witness was about to ask, before leaving the stand, whether or not it would expedite matters if an exhibit number was reserved for those items and we let them take the same procedure as Exhibit No. 250-A is about to take.

[fol. 10531] Mr. Littman: Yes, I think that is an excellent suggestion and I am going to ask that an exhibit number be reserved for these data.

Trial Examiner: That may be done.

Mr. Littman: One exhibit number will be sufficient, won't it, Mr. Watkins?

The Witness: Yes. If there is more than one sheet, we will tie them together.

. . . . . .

Trial Examiner: The exhibit which will be prepared in accordance with the specifications stated will be numbered

Exhibit No. 257 and it is understood it will be received in the record after the conclusion of the hearing.

* * * * * * * * *

(The Data Referred To, When Received, Will Be Marked Exhibit No. 257, And Will Be Received In Evidence.)

* * * * * * *

[fol. 10534] P. McDonald Biddison a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Recross-Examination (Resumed)

By Mr. Chamberlain:

Q. Now, Mr. Biddison, the basis of your Exhibit No. 251—

A. (Interposing) Mr. Spacek's exhibit, please, sir.

Q. Well, we will start over again.

Now, the method of allocation exemplified and reflected in Mr. Spacek's Exhibit No. 251, the plan for which was formulated by you, contemplated, does it not, that the direct industrial sales do not contribute to the requirement of the provision for capacity upon peak days?

A. That is correct.

Q. Now, I quote from the transcript of your testimony on page 10018, your answer being the first one on that page is as follows:

"No, nor have I so estimated any such thing as that."

Perhaps I had better read the question before that. The question immediately before is this:

[fol. 10535] "Is this a fair statement, then: that it is your thought in your testimony here that the pipe line company has a right to take such gas as it wishes to sell on direct industrial sales, and to utilize the entire transmission facilities of the company without any return upon them, and still have their income taxes paid at these high rates as a charge to the public for the gas they get through those same transmission facilities?

"Answer: No, nor have I so estimated any such thing as that. I do think that they are entitled to transmit gas for

direct sales without allocating part of their capacity against those direct sales, so long as those direct sales don't entail the construction of property. If they entailed a construction of capacity, they certainly ought to bear the cost of the capacity."

Following that, the question was:

"Question: A few months ago, did they not have to shut off some of their customers on account of a lack of capacity?

"Answer: Yes, sir, they did.

"Question: Well, then, somebody required some capacity, didn't they?

"Answer: Yes, sir, they did, and during that period of cutoff which I have studied, I reached the conclusion fortifying my knowledge that they don't build capacity for this class of business that they had then no capacity for this class of business, and have none now for this class of [fol. 10536] business."

Do you recall that?

A. Yes, sir.

Q. I wish, to clarify your position a bit, that you would elaborate a bit upon the fact that you have stated that they have now no capacity for this class of business. What do you mean by that?

A. Well, I mean the facts, as I related them in subsequent testimony along that same point the same day and time which you referred to in the record.

Q. Do you mean that they have no capacity now for direct industrial sales?

A. I mean that their capacity is required for indirect sales and that more capacity is required to meet the demands of indirect sales than they have in the system.

Q. Is it your thought that direct industrial sales require no provision for capacity and that the indirect sales made under the same conditions do require the provision of capacity?

A. No.

Q. Well, the interruptible sale, whether it be direct or indirect, is of the same general class, is it not, in respect to the matter of a provision for capacity?

A. Yes.

Q. And neither one should be sold provided that capacity has to be built for them, should they?

[fol. 10537] A. That is right.

Q. Now, did I understand that you made a study of this company to determine whether or not it had made any construction to take care of these industrial sales?

Mr. Wheat: You mean direct industrial sales?

Mr. Chamberlain: Direct and indirect, interruptible sales.

The Witness: I have checked over their capacity calculations in advance of making extensions and betterments to their system upon several occasions, beginning back, I believe, in 1937 and it is not their custom to make provision for capacity for the delivery of the interruptible gas upon peak days.

By Mr. Chamberlain:

Q. That is, it has not been their custom to do that?

A. That is right.

Q. Now, let me ask you a question, if I can, in a concrete way to get your theory of when these sales should be discontinued for a lack of capacity.

Let us assume that at the present time the capacity of the line, and I will have to use it as the entire line, is 250 million feet per day. The demand for firm gas is increasing. When and how should these sales be handled? Should new construction be made to provide for them or should they be discontinued?

A. Neither one.

[fol. 10538] Q. Well, all right. Now, what would you do?

A. I would just make such of those sales as I could make.

Q. In other words, you would discontinue all of those sales except those that you could handle without using your peak capacity, is that right?

A. I would sell all of the interruptible gas I could sell at a price that made an earning above its cost. I would

sell it at an interruptible basis and at a rate predicated upon interruption and I would interrupt it when the capacity required it for the firm business.

Q. Then you would get more nearly into what you described yesterday as a dump sale, would you not?

A. No, you would continue making sales just like Panhandle is making to these industries and just like most other gas companies I know of do make.

Q. Then you did make a study to see how much and how often Panhandle had interrupted these contracts they now have and which you have listed as direct industrial sales?

A. I have investigated the cut-offs on it, yes.

Q. And how many years did they run without a cut-off, that is, before the first cut-off?

A. I do not know.

Q. You did not investigate that?

A. No.

Q. What period did you investigate?

[fol. 10539] A. Well, I investigated, in this instance, the winters of 1940-'41 and 1941-'42.

Q. How many were cut off in the winter of '40-'41?

A. I haven't recorded that. I could not tell you now.

Q. It was not of any particular length of time, was it, that there was any cut-off?

A. Well, there was a material cut off in February, 1941.

Q. And what was that?

A. February, 1941.

Q. What was the cut-off, though? What company was cut off on your list?

A. Well, I haven't [it] tabulated it that way so I can not answer that question.

Q. Then you did not make a completed study, at least, of the length of time that these direct industrial customers had been cut off or the number of times?

A. That is right.

Q. Now, as a matter of practice, not only with this utility but others that you know of and to which you have referred, has it not been a practice to carry these interruptible sales very steadily, in other words, to rather give them service due to the fact that they are interruptible rather than to treat them as a sale which they cut off on days of great demand?

A. No, sir, that is not the case although I do believe [fol. 10540] that there have been instances where the right to cut off has not been enforced.

Q. And there are many of these businesses which would be unable to use gas if it was cut off frequently, is there not?

A. I think possible that is true.

Q. What study did you make to determine whether the company had expended any money for construction to carry these industrial sales, the interruptible sales?

A. Well, as I say, in the past, I have checked their calculations for capacity in advance of construction and know the peak loads for which they designed and the composition of those peaks and I know there was no provision in them for the interruptible sales to be carried through peaks.

Q. Well, when did you begin to make those checks, Mr. Biddison?

A. I began to make those checks in 1937.

Q. And what was the last one you made?

A. Sometime last year.

Q. In other words, you checked last year the contemplated construction expenditures of Panhandle Eastern?

A. I did.

Q. And there was nothing—

A. (Interposing) That is, I checked their estimates for capacity. I did not check the estimates of money.

[fol. 10541] Q. No, but you checked the question of the necessity of construction of additional construction, did you not?

A. I checked the estimates made of capacity to be provided for against the loads to be cared for.

Q. And in studying the load you had, of course, the amount of the industrial sales, did you not?

A. Yes, the peak loads on it.

Q. That is right. You would have to have the peak loads on the industrial customers, would you not?

A.

Q. And you had that?

A. Yes, sir.

Q. Do you have those files?

A. No, those files are the files of Panhandle Eastern Pipe Line Company in Kansas City.

Q. I see, and they show then what the contemplated need for the extensions and improvements of the line are, do they not?

A. Yes.

Q. Now, were you not here when Mr. Morton put in his exhibit early in the hearing in respect to the pipe line capacity and the future improvements that were contemplated?

A. I have been here when Mr. Morton testified on some matters but I do not think I was here when he testified on matters of that sort.

[fol. 10542] Q. Well, do you remember what the peak day was, the maximum day, and I mean the system day, in 1941?

Mr. Chamberlain: I am asking about the peak day of the system, not about the company contract.

The Witness: I think the peak day that year was 240,394,000 of sales.

Q. That is right. Now, what part of that capacity was reserved and used on that peak day for industrial sales?

A. I do not know. I do not have it tabulated.

Q. Do you have near you Exhibit No. 40?

A. This tabulation you placed before me does not bear on that.

Q. It doesn't? Line C of Exhibit No. 40 shows the actual maximum demand on the day of the system's maximum demand in 1941; does it not, and didn't Mr. Morton so testify in your presence?

A. I do not think he testified in regard to this exhibit in my presence. I do not remember anything about it and [fol. 10543] never saw it before.

Q. Well, this exhibit shows and I ask you to confirm, if I am not quoting it correctly, that the maximum day for the system in 1941 was, as you have indicated, 240,394 M. c. f.; that on that day, the maximum take of the Detroit area was 102,604 M. c. f.; that for domestic, commercial and other sales east of Dana, it was 1,384; that the industrial demand in Indiana and Ohio was 27,708 M. c. f.; that

the other use in Indiana and Ohio was 28,676 M. c. f.; Kentucky Natural Gas maximum was 7,608, making the total east of Dana of 167,980 M. c. f.

Then it shows that the maximum day's take of industrial gas west of Dana was 38,400 M. c. f.; that the domestic and commercial for that area was 34,014. Is that not correct?

A. You have read the figures correctly from the list.

Q. Yes. Then if the exhibit—or do you want to figure that?

A. What is the question that is pending?

(Whereupon, the pending question was read by the reporter.)

The Witness: That is correct.

Q. Then on the maximum day, the industrial loads in Indiana and Ohio and west of Dana amounted to 66,108 M. c. f., did they not, of the actual capacity of that line?

A. Well, it is 27,708 plus 38,400 M. c. f. which [—] 66,108 M. c. f. out of 240,394 total peak

[10544] Q. All right. Now, what per cent was used of capacity for industrial gas of the total peak load?

A. About 27½ per cent.

Q. Well, how do you account for the fact then that no construction was made to take care of this industrial load, if, as a matter of fact, it took 27½ per cent of the entire maximum demand?

A. Well, construction was made to meet the obligation of Panhandle Eastern Pipe Line Company for the Detroit market to the extent of 125 million feet [and] day and they did not use it on that day.

Mr. Culton: Does that exhibit make any difference in industrial between interruptible and firm?

The Witness: It does not.

Mr. Culton: Or between direct and indirect?

The Witness: No, sir.

By Mr. Chamberlain:

Q. Is there anything in the Detroit contract which contemplates that the Detroit company will take their maximum day on the day of the system's maximum day?

A. Not that I know of.

Q. Would there be any reason for you to think that it would necessarily be upon the same day?

A. Yes, ample reason for it. It is a normal expectation.

[fol. 10545] Q. You would normally expect that?

A. Yes.

Q. Has it ever happened?

A. I do not know whether it has ever happened or not. I know there have been occasions on a maximum day when they did not take their peak takings.

* * * * * * * * *

Q. Have you been called upon to check or pass upon the expenditures for the future for Panhandle Eastern Pipe Line Company? A. I have not.

Q. Now, will you check Exhibit No. 46 and give us the percentage that it is contemplated the industrial sales will take of the maximum capacity which is to be provided for by that date?

[fol. 10546] A. Well, I do not know what maximum capacity was being provided for that date.

Q. Assume the capacity provided for is that necessary to distribute the amount of gas and in the method indicated by Exhibit No. 40; the column being Column H and made up the same as Column C which you have just computed?

A. Well, Exhibit No. 40 shows a total maximum day of 305,200,000 which is 55,200,000 in excess of the capacity of the system so that amount of gas cannot be served during the year 1942 by Panhandle Eastern's system.

Q. I am not speaking about 1942 at all. I am asking you about the year 1946.

A. The year 1946, the maximum day shown at the bottom of Column H is 441,900 M.c.f. How much of that is proposed to be served or how much capacity they propose to build for it, I do not know.

Q. I am going to ask you to assume that it is proposed to build such extensions and additions of pipe line as will serve the amount of gas indicated in Column H of Exhibit No. 40 which is 97,589,200 M.c.f. with a maximum day of 441,900 and I would like to know the percentage of that that is evidently allocated to industrial sales?

A. Well, industrial sales shown are 10,040 M.c.f. east of Dana and 47,500 M.c.f. west of Dana or 47,540 M.c.f. out of 441,900 M.c.f. The ratio is about 13 per cent.

[fol. 10547] Apparently there is a figure omitted there. Did you get the 41,700 of industrials for Indiana and Ohio?

A. No, I did not and that adds 41,700 to the total, making 99,240 M.c.f. out of 441,900 or a ratio of about 22½ per cent.

Q. Then if in the exhibits in this case there is a showing of the amount necessary for construction for the sale and delivery of industrial gas to the extent of 22½ per cent, it is contrary to what you have understood their policy and history to be, is it not?

A. I will say that is absolutely contrary to what their previous policy and action has been.

Mr. Culton: Do you find anything there showing they expect to furnish that much interruptible gas on peak days?

The Witness: No.

Q. That is interesting. I would like to ask you to make another computation.

Let's take Column C and now refer first to Exhibit No. 55 and I shall ask you to assume that the gentlemen, in estimating the sales for 1941, were substantially correct and this includes only those sales to customers who take over $20,000 per year. The quantity is shown in Column L.

[fol. 10548] Now, will you deduct from that the amount of the direct industrial sales less the sale to Anchor-Hocking which is not included in that exhibit and see how much of those sales are indirect?

Mr. Wheat: Was that question clear, Mr. Biddison?

The Witness: I think I know what he wants.

Well, the direct industrial sales for the year ended December 31, 1941, shown by Exhibit No. 251 at line 6 was 6,525,609 M.c.f. If we deduct that from the 20,779,710 M.c.f. shown in Column L at line 40 of Exhibit 55, you

have a difference of 14,274,101 M.c.f. Now, I do not know what to label that.

By Mr. Chamberlain:

Q. Well, all right. Are we making any—

A. (Interposing) It is hardly fish nor fowl. It is the difference between two figures that are not compiled on the same basis.

Q. Well, now let us see, are we making any error in the Anchor-Hocking sales?

A. Well, Anchor-Hocking sales is included in the 6,525,609 M.c.f.

Q. Then the result of your computation is to ascertain those sales which are indicated on Exhibit No. 55 to be indirect sales after placing Anchor-Hocking in the direct sale class; is it not?

[fol. 10549] A. No, all I can say is that it just represents the diffefence between those two figures. The 6,525,609 M.c.f. of direct industrial sales, including Anchor Hocking, includes all direct industrial sales regardless of their size while the figure of 29,799,710 M.c.f. is, as I understand it, restricted to customers over a certain size.

Q. Of course, all of your direct industrial sales are far over that restricted size, are they not?

A. Well, I do not know on that.

Q. You do not know about that?

A. No, sir, I do not.

Q. Would you mind looking at them on Exhibit 55, all appearing in the first eight lines?

A. Evidently not.

Q. They are all very large ones, are they not?

A. Those that are listed are large but there are a number of those direct industrials that are not listed there.

Q. Small ones, aren't they?

A. Well, I do not know how small they are because I do not have their consumption before me.

Q. All right. Well, you have no question about the fact that there was sold in 1941 approximately 20,799,710 M.c.f. for industrial purposes all as set out in Exhibit No. 55, have you?

A. No, I do not question the figure.

[fol. 10550] Q. You have found the amount of direct industrial sales and, by subtracting that, you find 14,274,000 of indirect industrial sales, do you not?

A. No, sir, I do not at all. I just find the difference between two figures of 14,274,101 M.c.f. It is a difference between two figures. The two figures are not compiled on the same basis. The big figure does not contain some of the customers that are contained in the smaller figure and what the thing means when you get that kind of a difference, I do not know.

* * * * * * *

[fol. 10551] Q. Mr. Biddison, all of the industrial sales which you determined to be direct industrial sales and named in your letter of April 8, 1942, to Panhandle Eastern were sales which occurred west of Dana, were they not?

A. No, sir.

Q. With one exception? A. That is correct.

Q. And that was the Anchor Hocking sale made by the Indiana Gas Distribution Corporation, was it not?

A. That is right.

Q. Now, that is indicated in Exhibit No. 55 as an indirect sale, is it not?

A. Yes, sir, it is so shown in Exhibit No. 55.

Q. The reason for that was that until the last two or three months, Indiana Gas Distribution Corporation was not affiliated with Panhandle Eastern, is it not?

[fol. 10552] A. That is correct.

Q. And when you prepared your letter of April 8, 1942, that company was an affiliate of Panhandle Eastern?

A. That is true.

Mr. Calton: You mean a subsidiary, don't you?

* * * * * * *

By Mr. Chamberlain:

Q. Now, Mr. Biddison, I want to refer to Exhibit No. 162 which is the working papers of Mr. Morton and which show a division between the direct and the indirect industrial sales west of Dana. This is shown on page 8, working sheets W. S. No. 8. Now, that gives the indirect industrial sales for the year 1940 as approximately 7 million M.c.f., does it not?

A. It does.

Q. And 4 million of direct sales, direct industrial sales west of Dana, is that right? A. That is right.

Q. It also shows the actual sales for the first six months of 1941, does it not?

A. For those two classes of business, yes.

. . . . . .

[fol. 10553] By Mr. Chamberlain:

Q. And I am going to ask you to take the sales of industrial gas for 1941 indicated on Exhibit 55 and deduct from that the amount that you now find to be direct industrial sales. That computation you have already made and, if I took your figure correctly, it was about 14,700,000 M.c.f.

A. The difference between those figures is 14,774,101 M.c.f.

Q. That is right.

A. Now, that is a mere mathematical result from making the subtraction.

Q. That is right.

A. When you subtract 20 million horses from 6 million bananas, you have got 14 million something but you don't know what and I don't know what this 14 million plus is.

Q. No, I realize that and, furthermore, when I ask you to subtract horses from bananas, you will be older than you are now, but I am asking you to make a subtraction.

[fol. 10554] Now, will you, in order to find the contribution that would be caused by that amount of gas, assuming all of the direct industrial to be west of Dana except that of Anchor Hocking and determining the load factor, will you tell us what the contribution there to the maximum day of 1941 was of that amount of gas?

A. I cannot determine it from this figure. This is not the figure to use.

Q. Now, you can determine the mathematics of that, can't you not?

A. Well, we are dealing now with meaningless figures. I will add, multiply any of them you say and you label what you want to but I am going to have to say I do not know what they are.

Q. That is all right. You have said that before. I am merely asking you to make the computation, Mr. Biddison.

A. What computation am I to make, then?

Q. I would like to find the contribution of that industrial load of 14,274,101 to the maximum day of 1941.

A. I have no information available to me here from which I can make any such determination.

Q. You have the information in front of you to find the load factor of all of the industrial gas that is reflected in Column C of Exhibit 40, do you not?

A. I have before me information on which the load [fol. 10555] factor on the industrial sales listed in that column can be determined, yes.

Q. All right. Now, you can tell what the contribution of the maximum day was from that, can you not?

A. Yes, for that gas.

Q. All right. That is a start, isn't it?

A. Not towards what you asked for, it isn't.

Q. What did you say?

A. Not towards what you asked for, it isn't.

Q. Yes, it is. Now, the special industrial gas or the indirect industrial gas is all in the chart west of Dana, is it not?

A. Yes.

Q. All right.

A. Except for Anchor Hocking.

Q. That is right, except for Anchor Hocking. Now, the Anchor Hocking gas is one billion feet out of a total of 10½ billion feet, is it not?

A. Well, in 1941 it shows on Exhibit No. 55 to have been 1,267,974,000.

Q. That was the estimated figure which is now corrected by the actual figure which you have used but it is approximately right. You say you cannot make that computation?

A. No, I cannot take 14 million feet of gas, the classi- [fol. 10556] fication on which I do not know, and relate it to a peak on here that is specified to a particular character of gas.

No, I cannot do that and neither can anybody else.

By Mr. Chamberlain:

Q. Now, I want to inquire a moment about the allocation that you directed of the Federal income and excess profits taxes. You have taken substantially what you say is the increment cost of the gas. Why did you not use that increment cost of the Federal income and excess profits taxes?

A. Well, I did not use it because on the rest of it I did not approach it from an increment basis. That would be one reason for not applying an increment cost to Federal income taxes. Another reason for not applying increment cost to Federal income taxes is this: The amount of taxes is fixed by the amount of taxable dollars and I think its proper allocation is over those dollars regardless of source.

Q. And you did not think that the proper allocation [fol. 10557] of the taxes would be to charge to the non-regulated business the amount over and above the average tax on those dollars?

. . . . . .

The Witness: I do not know what that amount would be, Mr. Chamberlain. I do not understand you on that question at all.

. . . . . .

Q. Let me approach it this way, Mr. Biddison. You are allocating to the non-regulated business merely the costs that pertained to the production facilities plus those of the—well, I should not say as a matter of operating costs—you are apportioning operating costs but you are apportioning to the return only the proportionate part used of the operating facilities plus the small amount of laterals and regulating and metering equipment that is wholly owned.

Now, you allocate to that nothing for the use of the transmission facilities. Why do you not assume then that the revenues obtained from that gas are additional to the regulated business and apply to them the tax upon the last dollars earned or upon the higher brackets of this income?

A. Because they are not the last dollars earned. They are earned concurrently with the other dollars.

[fol. 10558] Q. And earned without expense for transmission?

A. No, not without expense for transmission.

Q. Earned without expense for return to the transmission facilities?

A. Well now, I have not proposed that, Mr. Chamberlain. I have made an allocation of the costs and I have suggested that there be a charge made.

Q. That is, your recent suggestion was that there be a charge made?

A. Yes, sir, for the use of those facilities on which the transmission and sale of this gas produced no costs.

Q. Well, conceding that you made a different allocation, would you still say, as you have in Mr. Spacek's Exhibit No. 251, that the Federal income and excess profits taxes should be allocated proportionately rather than that the higher brackets of the tax should be levied against the non-regulated business?

A. I would still think that that tax should be allocated in proportion to the amounts in the various classes of accounts subject to tax.

. . . . . .

[fol. 10559] J. D. CREVELING, a witness, having been previously duly sworn, resumed the stand and testified further as follows:

Redirect Examination

By Mr. Culton:

Q. Mr. Creveling, a few days ago Exhibits Nos. 223 and 224 were offered in connection with the testimony of Mr. Hinton relating to capital expenditures south and west of Liberal compressor station to meet peak day sales of 307,000 M. c. f. and a substitute estimate of additional capital expenditures required to meet peak day sales of 338,000 M. c. f.

Exhibits were also offered in that connection by Mr. Hinton which, I believe, were Exhibits Nos. 225, 226, 227 and 228 relating to the costs of operation and maintenance south and west of Liberal compressor station under differ-

[fol. 10560] ent capacities, the capacity factors being on the basis of 307,000 M. c. f. and 338,000 M. c. f. with some tables relating to the economic expense of operation and maintenance and some to less economic expense of operation and maintenance. In the same connection, Mr. Burnham offered Exhibits 229, 230 and 231 relating to estimated expenditures required on the system for these respective capacities and these gentlemen testified that they made their estimates under your instructions as president of Panhandle Eastern.

Will you explain to the Examiner, for the purpose of the record, the reason for directing that investigation and study to be made?

A. Normally by this time in the spring, we would have made and ready for consideration tentative construction programs for the coming season. Last year, we made such an estimate and were in a position to start work on that about the first of May. Because of inability to obtain material, which was no fault of our own, we were unable to start that construction work until late in the fall, the latter part of October, as I recall although contracts had been made for material, contracts had been awarded to successful bidders and contracts had been made for the sale of gas.

As a result of our inability to obtain materials in time to be of any assistance to us all in our 1941-1942 winter [fol. 10561] through which we have just passed, we were compelled as a matter of safety and precaution, in order to be able to render service to those of our customers to whom we are obligated to render a firm service, to discontinue or curtail certain of our services to industries. Certain of those industries were or considered themselves, at least, engaged in activities closely related to the war program.

When we saw that we were not going to be able to have these facilities in operating during the winter of 1941-1942, we sent a representative of the company to every one of the industries that it was at all probable we might have to interrupt service in the case of extremely cold weather. Certain of those industries were curtailed in the month of January and, although a representative of one industry that I have in mind, in particular, stated that he would

rather take a chance on having his fuel curtailed or completely interrupted for a few days rather than to put back into service his oil burning equipment, he was one to complain most loudly to O. P. M.

Mr. Wheat: You mean when there was a curtailment?

The Witness: When there was a curtailment.

This resulted in my being called to Washington to account for this curtailment of service which I think I did to the entire satisfaction of those to whom I talked.

Mr. Littman: Pardon me, may I interrupt to ask the name of this particular customer?

[fol. 10562] The Witness: The A. P. Greene Fire Brick Company of Mexico, Missouri.

Mr. Littman: Do they manufacture brick?

The Witness: Fire bricks in various shapes used largely in boiler and steel industries.

Mr. Littman: I see, thank you.

The Witness: Recognizing the fact that we were again, during the coming winter, going to be faced with a proposition much more acute than the one of the winter through which we have just passed and being desirous of being in a position at least to have said, in case a program outlined was not carried out, that we had outlined to the War Production Board or the proper Governmental authorities what we thought we could do if it was a real contribution to the war efforts of the country. Also, through rumors and piecing together such items as a questionnaire sent out by the Federal Power Commission and from comments and questions asked by at least one member of the staff of the Federal Power Commission and from conversations with various members of the W. P. B.—

Mr. Wheat: (Interposing) You refer to the War Production Board, do you?

The Witness: (Continuing) —the War Production Board, I came to the conclusion that Panhandle Eastern Pipe Line [fol. 10563] Company was going to be called up to make a contribution in the way of fuel that we had not yet been

told about. From various items I was able to gather, it appeared to me that we might be asked to curtail certain of our regular business and divert certain gas going into our regular channels to other markets east of the territory that we then served to the extent of possibly 75 million or 100 million cubic feet per day.

For all these reasons and being cautious through experience and not being anxious to be caught napping, in order to be in a position to promptly answer any proposition that might suddenly be put up to us as to what we might do in the way of a fuel contribution to the war industry, I asked that certain studies be prepared, first on the basis that we would normally do this expansion work if there were no limiting or hindering influence. This first study and the one that we would normally follow, called for about 60,000 tons of steel.

By Mr. Cullom:

Q. By steel, you mean pipe?

A. Steel in the form of pipe and certain compressors and other equipment.

From my continual discussions with the War Production Board representatives, I was fairly well satisfied, and also from what I read in the papers, that for a small company [fol. 10564] like Panhandle Eastern to go in and take away from the various war activities 60,000 tons of steel was probably out of the question even though we would thereby contribute fuel to the amount of possibly 90 to 100 million cubic feet per day additional.

Hoping that such a program would be approved but being quite certain in my own mind that it would not, I asked our engineers to prepare a study on the basis that the same peak day could be met but that would limit the amount of steel in the form of pipe to not to exceed half of the 60,000 tons or to 30,000 tons. I was first told by their looks, if not by their words, that I was crazy. I would not admit it for that reason, at least, because a study which is the so-called less economic study indicated by adding additional compressor facilities, by taking gas from the longer life reserves of our two fields, adding cost in excess of that from which we would first normally produce it, there-

by increasing our operating costs by three or four hundred thousand dollars—

Q (Interposing) Per year?

A. Per year, as a temporary expediency, such a program was within the realm of feasibility. We could be in a position to deliver to our markets, as we estimated they might exist, 338 million cubic feet per day with 30,000 tons of steel or less.

[fol. 10565] To be even surer that we had gone the limit in analyzing our possible expansion as a contribution to the war efforts, I asked our engineers to proceed with another study which would permit us to deliver daily 307 million cubic feet or gas to our markets as we then saw them to exist or to markets which we might be told to substitute for the potentially existing markets. This would permit us to deliver daily some 55 to 60 million cubic feet more than we can continuously at present do. That is the study No. 3 referred to as the 307 million study and consists simply in the looping of the balance of our main lines, adding some loops to the Michigan Gas Transmission Corporation and a small amount of pipe in the Hugoton Field but does not consist of the major item of looping that was contemplated in Study No. 1.

All these studies have been in the recent past discussed with the War Production Board. My surmise, if it were a surmise as to Study No. 1, apparently was correct because I was told that it was an impossibility or at least seemed very improbable that there was any chance of our getting 60,000 tons of steel for pipe but that the one involving 30,000 tons or less was a very realistic one, one in which the War Production Board was vitally interested and one on which conferences are now being held.

Mr. Littman: Pardon me, Mr. Creveling. You just re-[fol. 10566] ferred to Study No. 1. Will you please give us which one that is?

Mr. Culton: That is the economic method, is it not?

The Witness: If I refer to studies by number, in order to make the record clear, I shall call No. 1 the 338 million per day economic study—

Mr. Littman: (Interposing) Pardon me. I don't want to interrupt except for purposes of clarification—

The Witness: (Continuing)—for the load factor has nothing to do with the study.

Mr. Culton: That was No. 230.

I will state for Mr. Creveling's information that the study showing the 338,000 capacity, completely looped and economically powered main line system with economic production transmission expenditures is Exhibit No. 230.

The Witness: That is No. 1.

Mr. Culton: The same capacity with less economic production transmission expenditures is Exhibit No. 231.

The Witness: That I will refer to as Exhibit No. 2, if at all.

Mr. Culton: And the study showing the daily delivery capacity of 307,000 completely looped and economically powered main line system with economic production transmission expenditures is Exhibit No. 229.

The Witness: I should have used those numbers but I [fol. 10567] was not acquainted with them.

Mr. Littman: That is No. 3?

The Witness: That is correct.

For those principal reasons, I asked to have these studies made.

Mr. Littman: Do I understand you Nos. 1, 2 and 3 to be the order in which, in your opinion, there is likelihood that they will be adopted?

A. No, sir. Near the end of my statement, I said that I was of the opinion that there was no chance of the No. 1 study being carried out this year.

Mr. Littman: I see. I have them twisted a bit.

The Witness: Yes, but you are straight now. That is the one involving the 69,000 tons of steel or thereabouts.

Mr. Littman: Yes. In other words, these numbers do not bear any particular relationship to the likelihood of their being adopted?

The Witness: Not at all.

By Mr. Culton:

Q. Which was the one you thought there was a good chance that it could be carried out?

A. No. 2.

Q. Which is the study of the 338,000 capacity?

A. The less economic 338 million per day which involves an increase in our operating costs of some three [fol. 10568] to four hundred thousand dollars a year.

Q. You said, I believe, that you had answered a questionnaire and also you had gained the impression that there had been some consultations between some of the staff of the Power Commission and some of the staff of the W. P. B. relative to Panhandle Eastern's situation in connection with furnishing gas further east.

Can you tell us how you understand that possibility would be effected or could be effected?

A. Yes. Panhandle Eastern's system, as it now exists and I use that in order to include the Michigan Gas Transmission at this time and that small piece of Ohio Fuel Gas Company line which we acquired—

Mr. Littman: (Interposing) Which lateral line runs from Muncie, I believe?

The Witness: To the State line.

Mr. Littman: To the Ohio Indiana State line or thereabouts?

The Witness: That is right.

The main pipe line system of the Panhandle Eastern Pipe Line Company, as it now exists, connects with the Ohio Fuel Gas Company at a point near the Indiana-Ohio State line substantially due east of Muncie, Indiana. It is also in the northwestern part of the State of Ohio, comes within about 14 miles of three Ohio Fuel Gas Company [fol. 10569] lines just south of Toledo but there is no con-

nection between Panhandle Eastern's system and the Ohio Fuel system at that point.

One of the thoughts advanced is that this 14 mile—

By Mr. Culton:

Q. (Interposing) Was that thought advanced by you or was it advanced by somebody else?

A. It was not advanced by me. It was advanced by the War Production Board.

(Continuing) was to connect Panhandle Eastern system with the Ohio Fuel system at a point near Toledo, Ohio. Through these two points of delivery, if we could get the gas there, we should deliver 75 to 100 million feet of gas per day which would take the place of gas produced elsewhere, principally in Ohio and West Virginia, for those markets and making that gas available for markets in the Appalachian area, principally the Pittsburgh area where it seems that there is or is about to be a severe shortage of fuel.

Q. There has been something in this record about Order L-31 of the W. P. B. Are you able to give us any views as to how its operation can or might affect Panhandle Eastern?

A. All I can answer about Order L-31 as to how it will affect Panhandle Eastern is that I do not know except that it will affect it.

In Order L-31, one of the things that is suggested as [fol. 10570] possible is the exchange of gas between pipe line companies. The basis of exchange is not set out. We are certain of the fact our business is [stipped] from the standpoint of growth and by that I mean house heating sales. Our industrial sales—

Mr. Littman: (Interposing) You mean new house heating customers?

The Witness: That is correct. Our industrial sales are limited or have a book of rules written for them. It is my judgment that it would be impossible at this time to predict with any degree of exactness the effect of Order L-31 on the business or revenue of Panhandle Eastern Pipe Line Company other than to say that, from my recent talks with the War Production Board, I am convinced of the fact

that we are going to be asked to handle much more gas during the next twelve months than we had anticipated.

Mr. Littman: By Panhandle, you mean you are—

The Witness: (Interposing) Take it through our system for some place.

Mr. Littman: For sale, of course?

The Witness: Yes, that is right.

Mr. Littman: You are going to sell more gas?

The Witness: That is right.

By Mr. Culton:

Q. Do you have any idea as to what unit price you will be able to get out of that gas?

[fol. 10571] A. I have no idea.

Q. What is the present situation with respect to local gas in Michigan?

A. In connection with the possible development of more gas for war industries, consideration has been given to providing the Consumers Power Company with compressor station facilities which would permit them to handle, through their lines and ours now in process of construction—

Q. (Interposing) Who gave that consideration?

A. (Continuing)—not only gas for their peak requirements but possibly some gas in excess up to as much as 25 million feet per day.

Also, there has been drilled near Jackson, Michigan, one gas well by the Continental Oil Company which had an open flow of 10 million feet and, although a second well drilled by the Continental Oil Company on a block of acreage in this same territory was a dry hole, both of these items have been taken into consideration by the War Production Board in an effort they are now making to solve the fuel shortage in the Appalachian area and I am informed by staff members of the War Production Board and it has also been indicated to me by a staff member of the Federal Power Commission, that they have collaborated on these ideas.

Q. Have you understood there has been any written memorandum issued?

[fol. 10572] Mr. Littman: By whom to whom, Mr. Culton:

By Mr. Culton:

Q. By anyone to anyone, between those two Boards.

A. I have understood that one was in the process of preparation by the staff of the Federal Power Commission or certain members of it which will contain their ideas as to the solution of the fuel shortage in the Appalachian territory.

Q. Under these circumstances which you have related, do you think it is possible to look into the future and determine what Panhandle Eastern's operating problems will be over the next year or two such as would be possible under ordinary circumstances?

A. The only crystal gazing that I am willing to indulge in at this time is that Panhandle Eastern Pipe Line Company is going to be one of the favored few, from the standpoint of making a real contribution in the matter of fuel for war industries and that the book of rules is going to be written by the War Production Board.

Q. And do you expect to try to follow that book of rules?

A. I expect to not only try to follow it but to try to cooperate in every way so long as I am satisfied that Panhandle Eastern is not being singled out as the one company to make sacrifices at the expense of others.

[fol. 10573] Recross-Examination

By Mr. Goodman:

Q. Will you recapitulate, for the sake of convenient reference at this point, the principal regulated markets of your company?

A. All of the markets that we serve except those which we serve to direct sales.

Q. Well now, what are the most important ones? First, there is Detroit—

A. (Interposing) No, first there is Detroit.

First, there are the markets in Kansas which are small, insignificant. Then there are the markets in Missouri

some of which are quite important, principally direct industrial sales in the State of Missouri and principally they are those to brick plants.

Then we come to the State of Illinois in which we serve various territories including Springfield, Peoria, Decatur and others. Then we come to the State of Indiana in which we serve the various communities in the northwestern part of the State with the exception, possibly, of South Bend, including Fort Wayne and going on down as far south as Muncie. Then we come into Ohio and serve some small communities.

Then we finally, at the end of our line, serve Detroit.

. . . . . .

[fol. 10574] Q. Mr. Creveling, in Kansas, your regulated markets, you say, are insignificant?

A. That is right.

Q. Now, in Missouri, how significant are they?

A. Very important.

Q. Important, what are the major—

A. (Interposing) The records will show that. I do not have that in mind.

Q. Can you name any city in Missouri?

A. I do not carry in my mind the exact communities that we serve. I do not try to.

Q. I do not mean it that way. You say that the regulated markets in Missouri are very important.

A. I said the markets in Missouri are important.

Q. Well, limit it to the regulated markets. Are they a significant factor?

A. Yes, there are some there, Jefferson City is an [fol. 10575] important market. At least, the Missourians think so.

Q. That is the most important community in Missouri that you serve?

A. That is the most important one in Missouri, yes.

Q. Now, you serve Springfield and Decatur, you mentioned?

A. That is correct.

Q. And then you serve, did you say, northeastern Indiana or northwestern Indiana?

A. Well, we serve, if you will look at our map, you will see very definitely in connection with that map what we serve. Our line crosses near Terre Haute and we serve Muncie, Anderson, Richmond, Fort Wayne and Crawfordsville, Logansport, La Fayette, and other way stations.

Q. Now, in your opinion, Mr. Creveling, would you be able to say whether or not this rather large system is more advantageous to the separate communities that you serve than would be smaller companies adapted to serve their individual requirements?

A. You would have to write more in your book of rules before I can answer that. I would have to know where the source of supply was.

Q. Well, your company.

A. You asked me to as to this company compared with a lot of individual small companies?

[fol. 10576] Q. Yes, having the same source of supply.

A. I do not think I quite understand your question but, if I do, I do not see that the communities would care whether the gas came through a large pipe line or through a small one if it came from the same source of supply and the cost to them was the same.

Q. Yes. Does your organization, with the kind of pipe line you have and the markets you have, result in any great economy to the customers along the line, that is, the principal or major regulated customers, than would be the case if these principal customers were served by individual concerns from your source of supply?

A. There is no customer that we serve indirectly that theoretically is not benefited by the fact that we serve others.

Q. So that it is your opinion, I take it, that the fact that you have a large market of Detroit is a benefit to customers along your line?

A. Just as the fact we have customers along our line, is of benefit to Detroit.

Q. Yes. Now, Mr. Creveling, when you speak of that as a benefit, you mean that everybody along the line, through his demand, makes some contribution toward a mode of rendering service which is more economical than would be the case if those customers, in substantial [fol. 10577] amount, were not on the line. Is that right?

A. My answer to your surmise is that every individual customer can be served economically at a lower rate than each one could be individually.

Q. Yes. Would that be true if customers were grouped in some way? Naturally, you do not have in mind, do you, a separate concern to serve each individual customer?

A. No, you suggested that in one of your questions.

Q. You would have in mind a reasonable grouping of territory?

A. Most certainly, yes.

Q. But your pipe line and your business, taken as a whole, in your judgment is the most economical means of serving those customers, is that right, that you know of?

A. If I knew of any more economical way to serve with natural gas, I certainly would try to do it.

Q. Well, suppose that Detroit were eliminated?

A. Yes.

Q. From the line and ceased to be a customer.

A. As of today?

Q. As of today. Would your system then be as economic with respect to the remaining customers as it is with Detroit on the line?

A. It is my judgment that our system would be as economic if Detroit were cut off today as if it were not.

[fol. 10578] Q. It would?

A. Yes. We can get other markets today.

Q. Well, you mean that you would have some other market in substitution? A. Certainly.

Q. But you still would have a system of the same size serving the same amount of gas and you would still have the situation that it is the volume of demand that makes your system the most economic compared with a smaller system. Is that right?

A. That is right.

Recross-Examination

By Mr. Chamberlain:

Q. What has been the increase in sales for the first three months of this year as compared with the first three months of last year?

A. I do not know. The record, I believe, will show that.

[fol. 10579] Q. Do you know whether those facts have been furnished for the record, Mr. Creveling?

A. It is my judgment that they have. It is my remembrance that they have. If they have not, they are easily obtainable.

Mr. Littman: Do you gentlemen on the other side of the table know?

Mr. Culton: I do not think that exhibit was brought up to date—yes, it was, wasn't it?

Mr. Littman: To February 28, 1942?

Mr. Culton: My recollection is you requested that that be continued to date and that—

Mr. Littman: (Interposing) Not I.

Mr. Culton: If you did not, of course, we can do as we have always done.

The Witness: As a matter of fact, for the first three months of this year we probably would not have a complete record of yet. That usually runs to around the 20th, the 22nd of the month before our previous records are completed so you probably do not have in this record the first three months of this year. You have two months.

Mr. Littman: We have exhibits which reflect the result of two months' operation.

The Witness: That is right.

Mr. Littman: But I do not believe we have any com-[fol. 10580] parison, for instance, of the sales in January, 1941, as compared with the sales in January of 1942 and the same with February. We do not have that, so far as I know.

Mr. Wheat: Of course one month, Mr. Littman, would not be significant, just one month standing alone.

Mr. Chamberlain: No, but three months are quite significant.

Mr. Littman: I was speaking of a series of months.

Mr. Wheat: I understand.

The Witness: Mr. Chamberlain, I want to be constructive in helping you arrive at whatever point you wish. If you have in mind the development of the fact, if it is a fact, that we have sold more gas the first part of 1942 than we did in 1941, I can say, without recalling the exact figure, that we have.

Mr. Littman: Substantially more, Mr. Creveling?

The Witness: As I recall, it is not a lot more but some more but those are facts that can very easily be developed and there is no reason for any conjecture on that.

Mr. Littman: Do you know whether the increase has been due to weather conditions or due to increased volume of sales?

The Witness: Our increase, as I recall it, has been due primarily to the gradual growth of our industrial requirements.

[fol. 10581] Mr. Littman: That is a continuous growth?

The Witness: Which started last year.

By Mr. Chamberlain:

Q. Mr. Creveling, did you have brought up to the close of March such exhibits as have been offered here which would show the increase in sales, that is, in quantity as well as revenues?

A. Is March 31 the closing date of these records?

Trial Examiner: There has been no date set.

Mr. Culton: We will be glad to prepare those exhibits but, of course, the question of time comes in again.

The Witness: The item of time comes in and I am quite certain that we are just now getting to a point in our accounting where the records for March will first become available.

Mr. Chamberlain: I think that is right but this is the 21st.

The Witness: That is right. I think just now they have become available.

[fol. 10582] Mr. Littman: Yes. Mr. Wheat, it reminds me a little bit of some of your exhibits, starting with Exhibit No. 223, et seq., that give us the alleged increases in expenses and the capital additions but do not tell us any [fol. 10583] thing about the revenue.

. . . . . .

The Witness: Mr. Chamberlain, what you would like to have, as I understand it, is pertinent statistical data on our business for the first three months of this year compared with the first three months of last year. Is that right?

Mr. Chamberlain: That is right.

The Witness: We will be very glad to have that prepared at once.

Mr. Chamberlain: And that will break down your sales so we will know which type is improving and which is going down.

. . . . . .

The Witness: We shall be very glad to furnish promptly that information for the first three months of this year compared to the first three months of last year on the basis that we usually carry it.

By Mr. Chamberlain:

Q. Now, may I ask when the contract with the Hercules Powder Company comes on your lines?

[fol. 10584] A. You mean the one near Louisiana, Missouri?

Q. Yes.

A. Whenever the plant is completed.

Q. And when is that presumed to be?

A. The last date that I have heard is about August 1.

Q. Have you made any other recent contracts for the sale of industrial gas for defense purposes?

A. We have been approached by several other industries, the largest one of which was one requiring 35 million cubic feet of gas per day for a defense industry being built about nine miles east of Lawrence, Kansas.

We have, in all cases, said to those industries approaching us: "You first make your peace with the War Production Board as to the fuel you may use and then come back to us". Some of those small ones have done that. I have in mind, as an example of that, the Bohn Aluminum Company at or near Adrian, Michigan, which started out with a requirement of 200,000 cubic feet per day and the last advice I had it is now increased to 1,200,000 cubic feet per day and I was informed yesterday that the request for that additional amount of gas probably would be approved by the W.P.B.

Q. Are there others of that nature at the present time?

A. Yes, there are others of that nature. Mr. Batten of the Michigan Consolidated Gas Company, within the [fol. 10585] past week or ten days, has told me that the demands on the system of the Michigan Consolidated Gas Company for industrial gas were increasing very greatly and we were trying to see what we could do, he and I, in order to balance out the gas we might make available for Michigan Consolidated with the predicted increase in requirements of the Detroit area for this coming winter which, as I recall it, he estimated at about 170 million feet per day of which, to be safe, he was of the opinion we should be in position to deliver 140 million.

Q. And was a contract recently entered into there with the Monsanto Chemical Company?

A. That name almost registers.

Q. Do you know about that company near Trenton?

A. No, that has not been consummated, I recall now. It is the one that Mr. Batten and Mr. Neuner were talking about. It required a line from our main line. It is down near the Trenton Channel Plant of the Detroit Edison Company. That has not yet been consummated.

[fol. 10586] Recross-Examination

By Mr. Littman:

Q. Mr. Creveling, one of the first matters which you discussed in your direct examination was the matter of the curtailment of sales to industries during the past winter, that is, the 1941-1942 winter.

Did I correctly understand you to say that you were, in fact, compelled to curtail and even wholly interrupt sales to certain industries during the 1941-1942 winter?

A. We did.

Q. And that your curtailment included not only your so-called indirect sales which are made through other utilities but also direct sales, did it not?

A. That is correct.

Q. Is it a fact that, in previous winters, you have also curtailed direct industrials? A. Yes.

Q. To a larger or to a lesser extent than was true this past winter?

A. The direct sales, I would say, might possibly have been to substantially the same extent although I am not certain but the total curtailment was greater this winter than it has been in previous winters.

[fol. 10587] Does that answer your question?

Q. Yes.

A. The reason I answer it that way is this: We have certain direct industrial sales which are really, in effect, not on the line or are off during the months of January and February. Two of those are large sales, one of them is the cement plant near Quincy, Illinois, and the other is the powerhouse near Jefferson, Missouri. They have been completely cut off on previous winters.

Q. We would not call that a curtailment, would we?

A. That is a complete interruption. Outside of those two which would be the same, I would say, otherwise, the curtailment was greater this year than previous winters.

Q. And the curtailment has been successively greater over the past five winters, hasn't it? That is to say, in the winter of 1940-1941, the curtailment was less than this past winter?

A. I do not believe a study of the records would show that. It would show that the 1941-1942 curtailment was greater than 1940-1941, but, going back of that, I do not believe you would get a gradually ascending curve of curtailment.

Q. Is it a fact that you curtailed more of the industrial sales, that is, the direct industrial sales this past winter than ever before?

[fol. 10588] A. It is my judgment that there was one other time that we curtailed direct industrial sales to practically the same extent that we did this past winter. I say that because I recall that we cut off the cement plant, the powerhouse load, and we cut the Keystone Steel & Wire down materially, on one other occasion.

Q. What year was that?

A. I do not recall but probably 1937-1938.

Q. That is the winter of 1937-1938, approximately?

A. Yes that may be off a year but we did make such a curtailment and it is my judgment that would substantially equal the curtailment of industrials this last year.

Q. You have used the term, I believe, "compelled" in describing the fact that you were forced to curtail your direct industrial sales as well as the other direct industrial sales. Does the use of that term by you imply, as I believe it does, a regret on your part that you had to curtail?

A. It implies a recognition of an obligation on our part to first serve those customers whose health and comfort depend on the gas.

Q. Mr. Creveling, in discussing certain exhibits that were offered by Mr. Burnham and by Mr. Hinton, to-wit, Exhibits Nos. 223 to 231, inclusive, you did not mention anything, as I recall it, about the load factors which are [fol. 10589] mentioned in certain of Mr. Hinton's exhibits.

For instance, in Mr. Hinton's Exhibit No. 225, he shows the estimate of operation and maintenance costs south and west of Liberal compressor station on the basis of the 307,000 M.c.f. continuous daily sales capacity with an operation at 70 per cent capacity factor.

Also, in Exhibit No. 226, he uses the same 307,000 M.c.f. figure but reflects the figures on the basis of a 90 per cent capacity factor.

In Exhibit No. 227 presented by Mr. Hinton, he uses a 70 per cent load factor called by him capacity factor in connection with 338,000 M.c.f. and, in Exhibit No. 228, he shows similar figures based upon 338,000 M.c.f. continuous daily sales capacity as a 90 per cent load factor.

A. Might I say that those are all capacity factors.

Q. Very well, I think the record shows what they are and you correct me if I should read the wrong term in referring to those figures. A. Yes.

Q. Now, did you instruct Mr. Hinton to use those two capacity factors? A. I did.

Q. Why?

A. Because the 70 per cent capacity factor is pretty close to what our normal operations have been.

[fol. 10590] Q. Now, let's stop there and say that that is close certainly to what it has been for the full year 1941.

A. That is right. On the basis of conversations that have been had with those working on the fuel problem in connection with war industries, it was my judgment and is now my judgment that we are going to be called upon to operate Panhandle Eastern Pipe Line Company facilities during the next year and possibly longer on a 90 per cent load factor.

Q. Now, may I correct you—

A. (Interposing) Capacity factor.

Q. You mean capacity factor?

A. Yes, capacity factor.

Mr. Culton: Suppose you explain the difference between load factor and capacity factor.

The Witness: A pipe line might have 100 million of maximum capacity and if it operated, handled one million cubic feet of gas per day, the load factor would be 100 per cent, when the capacity factor would be one per cent.

By Mr. Littman:

Q. Now, in your previous answer, you used the term "next year". Were you referring to 1942 or 1943?

A. I do not know in what connection I used that.

Q. Let me refresh your recollection. You were talking about the 90 per cent capacity factor.

[fol. 10591] A. I mean the first year that the War Production Board has placed upon us this load that we are talking about, whether that starts in July or June or August, it is the first twelve months thereafter.

Q. You expect the 90 per cent capacity factor to come into play sometime this summer?

A. I should say if we are in a position to make a contribution in the matter of fuel for war industries, it should come into play this summer.

Q. What will be the character of the added load which will bring about this capacity factor?

A. That I do not know. No longer ago than yesterday, it was indicated to me that there was a probability that we would be called upon to deliver 10 million feet of gas during the present off-peak period, that is, from now on until the period of peak demand again, to go into pipelines east of the territory usually served by us, a part of which might go into storage for winter use and a part of it might supplant gas now being furnished from gas wells which would be closed in and allowed to rock up in order that they might be able to produce more gas during periods of peak demands.

Q. Would that 10 million load that you just referred to be an everyday affair except for peak days?

A. As a practical matter, it probably would work out [fol. 10592] that in the summer time we would put in varying amounts that we could from day to day, putting the maximum amount every day into storage or into other uses and, on the peak days, we would supply whatever we could above the requirements of our so-called essential market which could not be curtailed.

Q. Is that the only sale you know of?

A. I do not understand that question.

Q. Is that the only prospective sale you have in mind or do you have others?

A. That is not one that we have in mind. That is one we are told about.

Q. Do you have any others? A. Yes, sir.

Q. That fall in that category?

A. That fall in the category of supplying fuel for war industries?

Q. Yes.

A. We have. We have the one that Mr. Chamberlain mentioned.

Q. The Hercules Powder Company?

A. That will come on along the first of August, near Louisiana, Missouri. That starts out with a contract of

about 8 million a day and, in recent conversation with Mr. Batten, he indicates many industries in the Detroit area [fol. 10593] are importuning him for gas.

Q. Pardon me, before you continue, the Hercules Powder Company contract will be a firm contract?

A. It will be an interruptible sale, the same as our other interruptible sales.

[fol. 10594] Q. Will it be a direct sale?

A. It will be a direct sale.

Q. Very well. Now, you may continue with your list of companies.

A. Yesterday at the office of the War Production Board I was shown a stack of applications from industries in the areas served by our pipe line through distribution companies asking for the right to use gas as a fuel.

I do not recall those all, but since I had some conversations with one of them at Adrian I do recall that.

That is the Bohn Aluminum and Brass Company, which started out with 200,000 per day and is now built up to 1,200,000 per day.

In addition to that, as I previously testified today, we have been asked, as to industry, to supply upwards of 35 million a day for some war defense plant that is going to be built about nine miles east of Lawrence, Kansas.

We are constantly being asked by distributors to whom we sell gas wholesale how much additional gas will be available for their industries.

Q. Well, the gas business looks pretty good, doesn't it, for the future?

A. If you interpret "good" as meaning large volume regardless of the net returns therefor, yes.

[fol. 10595] Q. Well, your inability to answer the question as to return is merely a reflection of your inability to presently estimate the revenue: isn't that right?

A. Both exact volume and revenue. It is my judgment that we are going to be called upon, within the next year, to furnish every cubic foot of gas to someone, that we can possibly get through our lines, and I think, if we are called on, we should make that contribution.

Q. You are going to do your very best?

A. Absolutely, yes.

Q. To meet the demand? A. That is right.

Q. Now, is a 90 percent capacity factor approximately the highest workable capacity factor that could be put into effect on your system, from a practical viewpoint?

A. The highest known one that a long distance transmission pipe line has been operated is between 93 and 95, which is the Natural Gas Pipe Line Company of America.

I would say that, because of the wider diversity of our load their entire market, as I understand it, is at Joliet, where they sell to another pipe line company which distributes it in the Chicago area.

I would say that we could hardly hope to maintain quite as high a capacity factor as is maintained by the Chicago Pipe Line Company. I think 90 is a reasonable estimate.

[fol. 10596] If it can be 92, why, we want to make it 92.

Q. In order to operate the system at the 90 percent capacity factor is it your expectation that it will be necessary to install and operate the standby compressor engines shown by Mr. Burnham in his exhibit—

Mr. Culton (Interposing): It is in all three of Mr. Burnham's exhibits.

Mr. Littman: Yes, it is in all three. They are all about the same.

A. Because of the fact that we are already engaged in making out seasonal overhauls of compressing equipment, it is my judgment that we will not be taking an unusual chance in going through the next winter season without any spare equipment.

By Mr. Littman:

Q. You mean through the 1942-1943 winter?

A. That is correct. But by the spring of 1943 it is my judgment that, if we are operating at better than an 80 percent load factor, and are going to be asked to continue to operate on a high capacity factor, we must as a matter of being in a position to render reasonable service, have sufficient spare equipment so that we can conduct continuous overhauls.

Mr. Culton: Does that mean an extra unit in each station?

[fol. 10597] The Witness: That means an extra unit in each one of our compressor stations.

By Mr. Littman:

Q. As described by Mr. Burnham in each of his exhibits —to wit, Exhibits 229 to 231 inclusive? Page 3 in each exhibit?

A. It might be interesting to you, in passing, to know that the Chicago Pipe Line Company, because it was apparent that their capacity factor would be high, from the beginning, in the original installation, installed sufficient compressor capacity to have one spare unit in each station, and they have continued to maintain that position.

Q. Now, Mr. Creveling, do you expect that there will be one idle engine at each compressor station on the peak day?

A. Yes, sir.

Q. If they were installed?

A. Yes, sir. There will be one engine that will be down being overhauled, theoretically, every day in the year.

Q. Has that been the practice of other companies, if you know?

A. Substantially so, yes, operating at capacity factors approaching 90 percent.

Q. I see. Now, referring to Mr. Hinton's exhibit No. 224, he has estimated capital expenditures south and west of Liberal compressor station required to meet peak day [fol. 10598] sales of 338,000 M. c. f.

Now, on a 90 percent load factor, according to Mr. Hinton's testimony, that will amount to annual sales of 119,512,512 M. c. f. sales on the basis of the sale measurement?

A. That is right.

Q. Now, is that the annual load which you shortly expect to be required to carry and sell?

A. I expect, for the first year, first year of operation, after conditions indicated by the War Production Board become operative, that we shall deliver for market in excess of a hundred billion cubic feet.

I would say, therefore, that the 110 billion is a realistic figure.

Mr. Wheat: Did you say a hundred million cubic feet, Mr. Creveling?

The Witness: Billion.

Mr. Wheat: A hundred billion?

The Witness: Yes, sir.

Mr. Wheat: That is an annual figure, then?

The Witness: That is right.

By Mr. Littman:

Q. Then you fully expect the start of that to come sometime this summer—the summer of 1942?

A. That is my judgment, yes.

[fol. 10599] Q. Now, you are unable, as you have testified, to state which of the various alternatives will be adopted by the Panhandle Eastern System with respect to installation of capital additions to meet this load?

You can't state definitely at this writing what method will be used, can you?

A. Which one of three [three] we will be permitted to pursue: is that your question?

Q. That is right.

A. It is my very definite judgment, although it is only a judgment figure, that the first one requiring the approximate 60,000 tons of steel for pipe is out, although normally that is the one we should do.

Q. That is the one you would like to do?

A. That is correct.

Q. And that one, as we have already agreed, is the one that is contained in Exhibit No. 230?

A. That is right.

Q. Presented by Mr. Burnham?

A. That is correct.

Q. Now, in view of the present uncertainty as to which of the alternatives of capital installations will be adopted, I take it that the Board of Directors of Panhandle Eastern Pipe Line Company has not as yet acted upon or approved any of these methods here submitted.

[fol. 10600] A. That is correct.

However, I should be greatly surprised, especially in view of the fact that the past action of our Board of Directors, if they should not make every effort to make whatever contribution seems essential, from a standpoint of furnishing additional fuel to war industries.

Q. And the decision in that regard, of course, will largely depend upon what the War Production Board thinks and orders?

A. Putting it another way, which one of these two propositions I shall recommend to my board for approval depends on the final conclusion of the War Production Board as to which one they feel that they will be able to assist us in obtaining material for.

Q. Is there any question about your being able to get the approximately 30,000 tons of pipe and the additional compressor units required to put into effect Mr. Burnham's plan of capital additions for the main line, which is included in Exhibit No. 231?

A. My judgment, from recent conferences with representatives of the War Production Board is that that is a realizable project for this summer.

Mr. Culton: That basis is the 338,000,000 on the less economic basis, isn't it, Mr. Creveling?

The Witness: That is correct. It is the one involving [fol. 10601] substantially 30,000 tons of steel and compressors in the same study.

By Mr. Littman:

Q. Mr. Creveling, in your direct examination you made some mention of the possibility of being required to make an interconnection with other utilities, the interconnection to be at the intersection of the Ohio-Indiana state line or thereabouts, said gas to be carried to the market around Pittsburgh to relieve shortage.

In that connection, is there any doubt in your mind that the Federal Power Commission will have jurisdiction over the price at which you will sell that gas to other utilities?

A. Among other things—many other things—I am not an attorney. I do not wish to express a legal conclusion.

Q. Well, such a sale would be a resale to another utility, wouldn't it?

A. That is correct.

Mr. Wheat: Do you mean a sale for resale?

Mr. Littman: That is what I meant to say.

By Mr. Littman:

Q. It would be a sale to another utility for resale, wouldn't it?

A. That is right. Just as the sale to us at some other point where some other pipe line might cross us would be a sale to us for resale, which is also within the realm of [fol. 10602] Order L-31.

Q. Well, it is not your idea that Order No. L-31 of the War Production Board prescribes any prices at which gas shall be sold; if you have such a paragraph in mind I wish you would point it out to me.

A. Very unfortunately, there is no indication that, from our standpoint, it will be sold at a profit. What I meant, Mr. Littman is this: that in L-31 there is a provision for interconnection of main transmission systems.

We might be required—or, putting it a litttle differently, the Chicago Pipe Line Company or the Northern Natural Gas Company might be required to deliver gas to some place where their line crosses ours, which we might carry hundreds of miles, and deliver to some other utility.

L-31 is silent on the price at both ends, which is a little confusing to us.

Q. Well, if the Federal Power Commission has jurisdiction over the price, then of course we will set the price presumably on a reasonable basis; there is no doubt about that in your mind, is there?

A. Without saying Yes or No to that, I am not certain what the emergency power of the War Production board is.

Q. Now, Mr. Biddison has made a study of allocation, which is reflected in Exhibit No. 251.

According to Exhibit 251, and according to Mr. Biddison's testimony, it appears, as an upshot of that allocation, [fol. 10603] that your compnay is earning something like

—or something in excess of—one hundred percent on its property allocated to that direct industrial business. Does that comport with—

A. (Interposing) I hope my board of directors has their attention called to that.

Q. Well, does that one hundred per cent profit comport with your idea of the actual earnings that you are making on that portion of your property devoted and allocated to direct industrial sales?

A. I think Mr. Biddison's allocation is as fair and exact an allocation as can be made on the basis of a fair interpretation of Order No. 71.

Mr. Culton: 73.

The Witness: 73. That is the Colorado Interstate case.

By Mr. Littman:

Q. You mean the opinion?

A. The opinion. Well, we are beginning to think of these opinions as orders.

Mr. Littman: Well, they have orders that are issued in connection therewith.

The Witness: That is right.

Trial Examiner: That is a good attitude, Mr. Creveling.

The Witness: We hope that we shall not have to change it.

[fol. 10604] A. I think I know what you have in mind, Mr. Littman, and I might say to you frankly that I think that is a crazy idea.

By Mr. Littman:

Q. What is a crazy idea: Mr. Biddison's allocation or what?

A. No. The idea of taking two classes of business and trying to divide, as is tried in this proration.

I can't see how it is possible to not recognize both classes of business, when each business contributes something to the other.

Now, unfortunately that isn't apparently the position that some members of this Commission had in mind, but nevertheless it is my opinion.

I think each one contributes something to the other, and that should be recognized.

I have only been in the gas business since 1954, and up until recently we have always considered that to be the case.

. . . . . .

By Mr. Goodman:

Q. In your business, Mr. Creveling, do you make use of any allocation between regulated and nonregulated business—that is, allocation of jointly-used assets—in determining what you will charge your nonregulated customer? [fol. 10605] A. It may be heresy to say so but we try to charge our nonregulated customers all the traffic will bear.

Mr. Littman: You are in competition with other fuels there?

The Witness: We are in competition with other fuels, direct competition with other fuels, such as coal and oil.

Mr. Goodman: You answer the question that I asked you "No": is that right?

. . . . . .

A. I think the answer to that is No, Mr. Goodman.

By Mr. Goodman:

Q. You charge what you can get?

A. That is correct. So long as we do not discriminate between users in the same class of business.

Q. And so long as it gives you something above your out-of-pocket cost?

A. That is correct.

The Witness: Is that good business?

Mr. Goodman: In my opinion it is.

By Mr. Littman:

Q. In other words, in your opinion your company is not earning any such profit—

[fol. 10606] A. (Interposing) That is correct.

Q. (Continuing)—as one hundred percent on its unregulated business?

A. That is correct.

Q. And if you are filling out a questionnaire for any governmental agency, such as the War Production Board, or in response to any inquiries by the Truman Committee, you wouldn't say, would you, that you were earning anything like a hundred per cent on your direct industrial—

A. (Interposing) My answer would be: I do not know.

Q. And that is because you operate your business as one unit?

A. That is correct.

Q. I take it, from your responses here, that you consider these allocations as a somewhat unrealistic thing?

A. Your observation is correct.

Mr. Culton: You didn't mean that Mr. Biddison's attempt to allocate in accordance with the views of the Power Commission in the Colorado case was unrealistic?

The Witness: No. I simply mean that this was an unrealistic set-up.

. . . . . .

[fol. 10607] Mr. Culton: That is, any attempt to allocate return, as between regulated business and unregulated business: is that what you meant was unrealistsic?

The Witness: That is correct.

Mr. Littman: Well, you mean Mr. Biddison's entire theory?

The Witness: Mr. Biddison's theory was fine. If you are going to allocate it theoretically you should allocate it on the basis of the investment and the expenses incident to each part of the business.

By Mr. Littman:

Q. But it is theoretical?

A. That is correct.

Q. And not practical?

A. That is what I am trying to say.

. . . . . .

[fol. 10613] (The documents referred to were received in evidence as Exhibits Nos. 223 through 231.)

Mr. Littman: Now we take up Exhibit 249, which was presented by witness Watkins, entitled, "Pro Forma Consolidated Income Account for the year ended December 31, 1941, as Adjusted to Give Effect to Federal Income and Federal Excess Profits Tax Rates Proposed in Recommendation of Secretary of Treasury Morgenthau on March 3, 1942, Before House Ways and Means Committee."

We object to this exhibit simply because these proposed tax rates are, as the evidence clearly shows, not in effect, and the exhibit deals wholly with a hypothetical problem.

[fol. 10615] (The document referred to was received in evidence as Exhibit No. 249.)

Mr. Littman: We have an objection to Exhibit No. 250, entitled, "Panhandle Eastern Pipe Line Company and Subsidiary Companies, Statement of Rate Case Expenses in Connection with Federal Power Commission Consolidated Dockets G-200 and G-207, including actual cost to February 28, 1942, and estimated cost to complete."

[fol. 10617] (The document referred to was received in evidence as Exhibit No. 250.)

Mr. Littman: Mr. Culton, is my understanding correct that that takes us through from 223 to the end?

Mr. Wheat: Now there is 232 to 248 inclusive.

Mr. Culton: I understood that all of them were admitted except the ones that counsel specifically mentioned. He said he had no objection to the others.

Mr. Littman: I have no objection to any others in the series to which you alluded, Mr. Culton.

Trial Examiner: That commences with 233 and extends through—

Mr. Littman: No; 223.

Trial Examiner: Those have been received. The series from 223 to 231 have been received.

[fol. 10618] Mr. Culton: 232 to 248, there are no objections, and I assume they will be received.

(The documents referred to were received in evidence as Exhibits Nos. 233 to 248 inclusive.)

Mr. Wheat: You have received 249 and 250, and, I think, 251 is now without objection.

Trial Examiner: Noobjection, Mr. Littman, to Exhibit No. 251?

[fol. 10619] (The document referred to was received in evidence as Exhibit No. 251.)

Mr. Wheat: Now, Mr. Examiner, 253 and 254 have been received.

Trial Examiner: 252 was received on the 15th.

Trial Examiner: 255 and 256 have been received today and 257 has not.

Mr. Littman: 257 has been reserved for a response by Mr. Watkins to one of my requests.

Trial Examiner: I failed to take the designation for that. Will you give it to me, if you can, someone? Well, never mind.

[fol. 10620] Mr. Littman: Mr. Examiner, I think perhaps I can facilitate matters that will bring us up to Exhibit No. 223.

Now, with respect to all of the exhibits from No. 170 through Exhibit 217 we have objection to only one exhibit in that series.

Mr. Wheat: Well, Mr. Littman, those exhibits 170 to 195 are already admitted.

Mr. Wheat: Now, then, 196 has not yet been admitted, and 198 has not, but then there are a number of hiatuses. That is why I thought your general statement might not be as clear—

Trial Examiner (Interposing): They were received up to 196, and 196, 198, 199—

Mr. Wheat (interposing): 202, 206, 207, 208 and 210 to 217 inclusive, are offered but not yet received.

Trial Examiner: That accords with my record.

[fol. 10621] Mr. Littman: Then all I need to say about these exhibits is that we have objection to Exhibit 196, which deals with an adjustment giving effect to Secretary of Treasury Morgenthau's proposed tax laws?

Trial Examiner: That is a consolidated income statement?

Mr. Wheat: That is a pro forma consolidated income account for the year ended December 31, 1941.

(The document referred to was received in evidence as Exhibit No. 196.)

Mr. Littman: We have no objection to any exhibits subsequent to Exhibit 196, other than those we have already mentioned.

Trial Examiner: 198, 199 will be received.

Mr. Littman: Pardon me. May we have an objection to Exhibit 199—I am sorry—which also reflects the proposed tax law recommended by Mr. Morgenthau. I take it you will make the same ruling.

[fol. 10622] (The document referred to was received in evidence as Exhibit No. 199.)

Trial Examiner: The exhibits numbered 210 to 217, both inclusive, will be received.

(The documents referred to were received in evidence as Exhibits 210 through 217.)

Mr. Wheat: Was 202 received, Mr. Examiner?

(The document referred to was received in evidence as Exhibit No. 202.)

Trial Examiner: Just a moment. We are up to 206, 207, and 208.

[fol. 10626] Trial Examiner: The Trial Examiner will rely upon the privilege granted by the rule and will direct that [an] single copy of this exhibit be included in the original file of the Commission and that no other copies be made. This is in view of the statements of counsel, and with that condition, Exhibits 206, 207, and 208 will be received.

(The documents referred to were received in evidence as Exhibits 206, 207, and 208.)

Mr. Wheat: Mr. Examiner, with that understanding, may I turn now to some prior exhibits which I believe really have been left out of the formal admission by inadvertence? I refer, first, to Exhibits 19 to 31, inclusive, offered by Witness Smith. Those were identified back on pages 423 and 422 of the transcript.

[fol. 10627] Trial Examiner: These were not omitted by advertence, but we have through the record assumed they have not yet been ruled upon.

[fol. 10631] Trial Examiner: The Trial Examiner is aware that there will be at some future time further proceedings in connection with this matter, and in view of the possibility that there may be such future proceedings and further hearings in this proceeding, the exhibits to which objection is made will be included, and all from 19 through 36 will be received.

(The documents referred to were received in evidence as Exhibits 19 to 36, inclusive.)

[fol. 10632] Mr. Wheat: It is understood, Mr. Examiner, is it not, that Exhibits 42 to 46, inclusive, have been received in evidence?

Trial Examiner: The interruption was more serious than I supposed, and those exhibits will now again be received.

Mr. Littman: I think they should be so handled at this point, because the official reporter's index of that day's—or, table of contents—of that day's hearing did not carry those exhibits as having been admitted, and so perhaps it might be well to have it admitted here.

(The documents referred to were received in evidence as Exhibits 42 to 46, inclusive.)

Mr. Wheat: Now, Mr. Examiner, the next exhibit that my present record shows not to have been admitted is [fol. 10633] No. 61 of the Witness Friday.

Mr. Wheat: Mr. Littman, that is correct, everything up to 61 is admitted, from 47 down to 61. They are all in, as my record shows.

(The document referred to was received in evidence as Exhibit No. 61.)

[fol. 10635] Mr. Wheat: Now, then, we come to Exhibit 73 of Witness Watkins, which by some inadvertence, I did not offer when I was offering Exhibit 72 the other day.

(The document referred to was received in evidence as Exhibit No. 73.)

[fol. 10636] Trial Examiner: 73 and 74 and 76. If there is error in the Trial Examiner's record and they have not been received, they will now be received.

(The documents referred to were received in evidence as Exhibits 73, 74, and 76.)

Mr. Wheat: What about 75?

Trial Examiner: 75, Mr. Littman suggests he wishes to discuss.

Mr. Littman: Mr. Examiner, there are certain objectionable parts of Exhibit No. 75. I think I shall attack this exhibit by way of a motion to strike. I shall direct my motion to strike against those portions of Exhibit No. 75 which deal with reproduction cost sometimes called market value of lease. Here this market value is expressed as of February 1, 1937, which date is pretty much passe, so far as our immediate interests are concerned. I move to strike that part of page 16 which commences with the first paragraph: "The value of gas at the well" and so forth, down to the end of that page; I move to strike page No. 17, and the first full paragraph on page 18, and the last full paragraph on page 18. I also move to strike page 20, page 21, page 22, and page 32 of Exhibit No. 75.

Your Honor will recall that you have heretofore sus-
[fol. 10637] tained our objection to a similar exhibit which was offered by Mr. Wallace dealing with this same subject, to wit, market value, so-called, of natural gas leaseholds.

. . . . . .

Mr. Culton: No, sir, we don't care to be heard, Mr. Examiner, except to point out that this deals with real estate, and irrespective of whether or not it is the only value which is to be taken into consideration, our contention is that it is evidence of the fair value which we have a right to have considered by the Commission.

Trial Examiner: You do present it as evidence of some value not recorded on the books of the company?

Mr. Culton: That is right.

Trial Examiner: And the exhibit, as a whole, is addressed to that purpose?

Mr. Littman: No, your Honor.

Mr. Culton: No; just certain portions of it, Mr. Examiner.

Trial Examiner: I mean these portions that are objected to.

Mr. Culton: Those portions of it are a part of the report which Mr. Davis made in February, 1937. We offered his entire report. That report dealt both with his prediction of the amount of gas which might be produced and also with the value of the reserves.

[fol. 10638]

As I understand it, the objection is made to that portion which deals with the value of the reserves.

We say that that evidence is pertinent evidence proffered for the consideration of the Commission along with all other evidence in the case in arriving at the present value.

Now, obviously, if the only value which can be considered by the Commission is the original cost as reflected on the books, this does not purport to be that original cost, but we do not so understand any decision.

Therefore, we think that this evidence is admissible.

Mr. Littman: By the way, I might state again, your Honor, that aside from our very strenuous legal objection to any evidence of fair value of reserves, that this exhibit speaks as of February 1, 1937, which seems to be pretty much out of date and which was, of course, superseded if ever anything was superseded, by Mr. Wallace's treatment of this same subject, which your Honor has already ruled to be admissible.

Now, even if fair value were admissible, in this case, of what use would fair value, as of February 1, 1937, be to us here today? I submit, none whatever.

[fol. 10639] Mr. Wheat: Mr. Examiner, the next one that I have on my list may have been handled. I may be wrong in this. It is Exhibit 93, and along with that are Exhibits 96 and 97, which were offered by counsel for Michigan Gas Transmission Corporation.

. . . . . .

Mr. Littman: Exhibit No. 96, according to my records, was excluded at page 8232 of the transcript because it contained an estimate of the cost of rate case proceedings.

. . . . . .

Mr. Wheat: What about 93 and 97?

Mr. Littman: 97 was excluded at page 8332 of the transcript. That dealt with the purported variation in purchasing power of the dollar as related to gas plant.

Mr. Wheat: What about 93?

Mr. Littman: Your Honor will recall that Exhibit No. 97, in reality, was considered to be a reproduction cost [fol. 10640] study.

Mr. Littman: I beg pardon. 93?

. . . . . .

Trial Examiner: That was excluded, I think, on the 31st of March.

Mr. Wheat: Now, Mr. Examiner, the next one that I have—I think there were two offered by Commission's counsel, 106 and 107. I don't recall that those ever were admitted or offered for admission, but the next ones that we have on our list are 108, 109, 110, and 111, which are letters from Mr. Biddison to Panhandle Eastern Pipe Line Company in various years in respect to accruals for depreciation, depletion, and amortization.

These exhibits have been used by Mr. Smith in his study and by others. I offer them now for the record.

Mr. Littman: No objection.

Trial Examiner: The exhibits marked for identification as 106, 107, 108, 109, 110, and 111, will be received.

. . . . . .

Mr. Littman: Has your Honor ruled on Exhibits 106 and [fol. 10641] 107?

Trial Examiner: I admitted all of them, 106 to 111, both inclusive.

(The documents referred to were received in evidence as Exhibits 106 to 111, inclusive.)

. . . . . .

Mr. Wheat: Then Witness Watkins' Exhibits 153, 154, 155, and 156. Most of these, I may say, were offered either [fol. 10642] by Michigan Gas Transmission, Consolidated Gas Company, or by Commission's counsel. The only one I wish to offer now is 153, which is the statement of cost of business development period April 1, 1932, to June 30, 1941.

. . . . . .

[fol. 10643] Trial Examiner: I have just compared excluded Exhibit 39 and the exhibit marked for identification as 153, and I am wondering about the competency of 153.

Mr. Littman: As I explained, your Honor, Exhibit 153 contains costs which were capitalized by the company.

. . . . . .

(The document referred to was received in evidence as Exhibit No. 153.)

Mr. Wheat: Then, Mr. Examiner, may we go to—I think [fol. 10644] Commission's counsel offered Exhibits 154, 155, and 156, which are documents furnished at his request by Mr. Watkins.

. . . . . .

(The documents referred to were received in evidence as Exhibits 154, 155, and 156.)

Mr. Wheat: I have nothing to say, of course, about 157, 158, and 159. We are not particularly interested in whether they come in or not.

Mr. Littman: No objection.

Trial Examiner: By whom were those exhibits presented: Mr. Chamberlain.—157-A and B, 157-C, 158, 159. I think all were presented by Mr. Chamberlain.

Mr. Littman: No objection.

Trial Examiner: They will be received.

(The documents referred to were received in evidence as Exhibits 157-A, B, C, 158, 159.)

. . . . . .

[fol. 10645] Trial Examiner: Mr. Culton, did you and Mr. Wheat carefully follow the motion to strike which Mr. Littman made with reference to your proposed Exhibit 75?

Mr. Culton: I am familiar with it, yes.

. . . . . .

Trial Examiner: Do you agree with Mr. Littman that that does exclude the evidence of value other than book [fol. 10646] cost, other than as recorded on the books of the company?

Mr. Culton: Frankly, Mr. Examiner, and that is what we are trying to be with you all the time, the philosophy in support of his objection to those portions of that exhibit are exactly the same as the philosophy in support of his objection to Exhibit 37 and Exhibit 37-A.

Trial Examiner: Well, of course, I am in sympathy with his view. I am simply inquiring whether the motion to strike, which I did not follow carefully, does reach that and no other parts of the exhibit in which you are interested.

Mr. Culton: I am sure that is correct.

Mr. Littman: I tried to confine my motion to strike purely to those parts that dealt with value.

Mr. Culton: That is the way I understood it.

Mr. Littman: That is your understanding, is it?

Mr. Culton: That is right.

Trial Examiner: As to Exhibit 75 for identification, being the statement of Mr. Ralph Davis, the motion to strike

which Mr. Littman has made will be sustained, and the exhibit, as so revised, will be received.

(The document referred to was received in evidence as Exhibit 75.)

Mr. Littman: Are you going to instruct the reporter to make proper marks and notations on the exhibit physically?

[fol. 10647] Trial Examiner: That may be done.

* * * * * * * * * *

Mr. Culton: Now, Mr. Examiner, may I complete the record on some points by making a tender of proof which I understand is in accordance with appropriate procedure?

Trial Examiner: Certainly.

Mr. Culton: Relating to excluded exhibits.

Trial Examiner: Before you do that, Mr. Culton, the Trial Examiner has within recent days seen an order of the Securities and Exchange Commission which is included in the release of that agency No. 3415.

Because the record is replete in this proceeding with matters of similar character, I suggest that that order be included in our record and copies obtained for the files.

Mr. Wheat: What was the number?

* * * * * * * * * *

[fol. 10648] Trial Examiner: We will have it marked as Exhibit No. 258, and I am sure there can be no valid objection to its inclusion, so I will direct that it be received in evidence as soon as copies are furnished.

* * * * * * * * * *

Trial Examiner: Proceed, Mr. Culton.

Mr. Culton: Mr. Examiner, the Respondent companies make tender of proof of those portions of Exhibit 75, being the exhibit of Mr. Ralph Davis, which have just been excluded.

We offer each of those paragraphs separately.

We next make offer of proof of Exhibits 37 and 37-A of the Witness Wallace, 37-A being an exhibit containing certain correction sheets of Exhibit 37, and that exhibit purporting to show the market value of the leaseholds as of approximately the time this investigation commenced.

We point out in that connection that those leases represent real estate, and the language "reproduction cost" technically could not apply to that exhibit since the exhibit purports to reflect the then market value of the leaseholds, and the leaseholds not being physical property for which there is technically a reproduction cost, since it [fol. 10649] would take many millions of years to reproduce that gas.

Shall I proceed with the others, Mr. Examiner?

Trial Examiner: Surely.

Mr. Cultom: In order to get these in order, we offer four exhibits, make tender of proof of four exhibits in one tender, being Exhibit 39, representing Mr. Biddison's reproduction cost new of plant property and business as of June 30, 1941, with Exhibit 39-A being correction sheets for Exhibit 39, with which we offer Exhibit 62, representing deduction from reproduction cost new for depreciation, showing present value of plant, property, and business, as of June 30, 1941, and Exhibit 70, which reflected reproduction cost new of plant property and business as of June 30, 1941.

Also separately from those four we offer Exhibit 17 prepared by Mr. Biddison showing valuation of property, plant, and equipment as of September 30, 1938.

We also, separately from the foregoing, but together, offer Exhibits 83, 84, and 86 as to the portions which were heretofore stricken, and in connection with them further offer Exhibit 97 showing a valuation based on variation of purchase price of a dollar. That was prepared by Mr. Spitznagle, those four being related documents, and all of these documents which we have offered are prepared for the purpose of tendering proof with respect to the matters reflected in those documents.

[fol. 10650] Trial Examiner: 83, 84; 86 and 97 were all presented by Mr. Spitznagle?

Mr. Culton: Mr. Haberly presented some of them, but Mr. Spitznagle's testimony was related to them.

Trial Examiner: Our practice contemplates the exceptions which were, I believe, in each instance granted when the exhibits were excluded.

You are also, of course, entitled to offer proof. Your offer of proof is denied and an exception is, of course, noted on the denial of this ruling to apply separately to your several stated offers, and the exhibits to which reference has been made will be appropriately endorsed by the Trial Examiner to be included in the exhibits filed.

In other words, an exhibit which has been excluded and is followed by an offer of proof will go into the file which merely entitles you, of course, to preserve the evidence which has been rejected by the Trial Examiner.

Mr. Culton: It is made a part of our tender, in other words?

Trial Examiner: That is true. The reporter, if he has these exhibits, will please deliver them to the desk in the morning, because each exhibit should be endorsed in accordance with this ruling.

. . . . . .

[fol. 10651] Mr. Littman: Well, I haven't heard counsel say that they rest and have no further testimony to present.

Mr. Culton: This is an investigation, Mr. Examiner. We don't know that there is any reclining to take place. We stated that that is all of the testimony which we have.

Trial Examiner: You have no desire at this time, Mr. Culton or Mr. Wheat, to adduce any further evidence of any kind or character?

Mr. Wheat: Not at this time unless further evidence comes into the record which we feel should be properly rebutted.

Trial Examiner: On the record as it stands and as regards the defense which was contemplated by the order of the Commission in this matter, you do rest, do you not?

Mr. Wheat: Well, I think we stand silent, sir, before this bar.

Trial Examiner: You have concluded the presentation you desire to make?

Mr. Wheat: At this time, yes, sir.

Trial Examiner: Yes.

* * * * * * * *

[fol. 10659] SAMUEL JOSEPH a witness, called on behalf of the Federal Power Commission, being first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Littman:

Q. Will you please state your full name and present address?

A. My name is Samuel Joseph. I live in Arlington, Virginia.

Q. Will you state your education and experience?

A. I am a graduate of the Wharton School of the University of Pennsylvania. I received the degree of Bache-
[fol. 10660] lor of Science in Economics from that University in June, 1928. I then attended the Columbia University Graduate School of Business Administration and did some work towards a Master's degree.

After leaving Columbia University I was employed in the public accounting field. I hold a certified public accountant's certificate from the State of New York. I am a graduate of Brooklyn Law School and hold the degree of Bachelor of Law. I am a member of the New York Bar.

Since 1934, I have been engaged in the public utility rate regulatory field. I have worked on state-wide investigations of telephone rates in Louisiana, Alabama and West Virginia. I have also worked on investigations of other utility companies, including electric, water and gas

utilities, I have testified before the Louisiana and Alabama Public Service Commissions and before the Public Service Commission of West Virginia.

At present and since August, 1939, I have been employed by the Federal Power Commission. I was first employed as a senior examiner of accounts and was assigned to the investigation of the Natural Gas Pipeline Company of America and Texoma Natural Gas Company as accounting examiner in charge. Last summer I was promoted to the position of principal examiner, which position I now hold.

Q. By the way, you just referred to an investigation [fol. 10661] of the Natural Gas Pipeline Company of America and Texoma Natural Gas Company. Are you referring to the investigation which recently was the subject of an opinion by the United States Supreme Court predicated upon an interim order adopted by this Commission?

A. That is the same investigation and same proceeding.

Q. Will you proceed with your statement of your education and experience?

A. I have taken part in the investigation of the following companies:

Southern Bell Telephone and Telegraph Company in the states of Louisiana and Alabama; New Orleans Public Service Company; Louisiana Power and Light Company; Louisiana Public Utilities Company; Baton Rouge Water Company; Chesapeake and Potomac Telephone Company of West Virginia; Wheeling Electric Company; Appalachian Electric Power Company; and Natural Gas Pipeline Company of America and Texoma Natural Gas Company.

Q. What is the nature of your present position with the Commission, Mr. Joseph.

A. Well, among certain other things, I am responsible for making studies and conducting research on the subject of fair rate of return for public utilities.

Q. Have you prepared an exhibit for purposes of this proceeding?

[fol. 10662] A. I have.

Q. I hand you a single sheet entitled, "Weighted Average Earnings Price Ratios on Common Stocks 153 Stable Industrial Companies", and ask whether this is the exhibit which you prepared?

A. It is.

Mr. Littman: I ask, Mr. Examiner, that this exhibit be marked for identification with the next number.

Trial Examiner: It will be marked for identification as Exhibit No. 259.

(The document referred to was marked Exhibit No. 259 for identification.)

By Mr. Littman:

Q. Will you please describe Exhibit No. 259 which you prepared?

A. This exhibit has been compiled from material contained in Mr. Coffman's Exhibit No. 254 which he summarized on Chart No. 11 of Exhibit No. 253. The material is set forth in the same manner as that shown in the table supporting Chart No. 11 of Mr. Coffman's Exhibit No. 253.

The difference between the table supporting Chart No. 11 and the exhibit which I have prepared is that Mr. Coffman's table shows "Investors' appraisal of over-all capital risk 153 stable industrial companies" whereas my exhibit shows the earnings price ratios on the common stocks [fol. 10663] of these same companies.

The period covered is the same, namely, 1937 through 1941, both inclusive.

Q. Why did you make these calculations, the results of which are set forth in Exhibit No. 259?

A. I am of the opinion that to the extent that the "153 stable industrial companies" chosen by Mr. Coffman are comparable with utilities generally or with natural gas pipe line companies that comparability relates chiefly to the common stocks, rather than to the "over-all capital".

The capital structure of the 153 stable industrial companies consists very substantially of common stocks. Utility companies, including natural gas pipe line companies, have a very much larger percentage of their capital repre-

sented by funded and long term debt and by preferred stock.

The annual cost in interest and preferred stock dividends of securities senior to the common stock of Panhandle Eastern Pipe Line Company have been fixed by the recent refinancing.

Chart No. 11 of Exhibit 253 and the material supporting that chart would be of very little, if any, assistance in an attempt to determine the proper allowance on the senior securities.

It, therefore, seems to me that if this material is usable by the Commission in finding a proper rate of return [fol. 10664] for Panhandle Eastern Pipe Line Company and its subsidiaries, then the earnings-price ratios on the common stocks are a better aid or guide than are the overall ratios calculated by Mr. Coffman.

Q. Referring to your Exhibit No. 259 for identification, will you state what the weighted average earnings-price ratio is for these 153 stable industrial companies over the five years, 1937 to 1941, both inclusive, for the common stocks of those companies?

A. The weighted average shown on this exhibit is 7.43 per cent. I want to add that the weighting follows the method used by Mr. Coffman in his Chart No. 11 of his Exhibit No. 253.

Q. You mean the weighted average earnings-price ratio is 7.43 per cent? A. Yes.

Q. And you have followed the same method of weighting as was followed by Mr. Coffman in arriving at that percentage figure?

[fol. 10665] A. That is correct.

Q. There has been considerable evidence taken in this proceeding on the subject of earnings-price ratios. Will you comment briefly on the use of earnings-price ratios on common stocks in establishing a fair rate of return?

A. After earnings-price ratios on common stocks have been calculated the mathematical result cannot be used directly without the exercise of a considerable amount of judgment.

Your illustration, Mr. Littman, made during Mr. Coffman's cross-examination of the earnings-price ratio on brewery common stocks just before prohibition is to the point. The essential requirement is to determine, as accurately as possible, what rate the investor is demanding for the future.

The earnings price ratio relates to past earnings. It is calculated by dividing past earnings by market prices. What is sought, however, relates to the future and the earnings-price ratios must be adjusted to eliminate those factors which are being discounted by the market price of securities.

Q. Will you please give us an illustration of your last statement?

A. Yes. Assume a company's common stock is selling at $30 per share. Assume that earnings during the last [fol. 10666] reported years were $3.60. The earnings price ratio on this stock is 12 per cent.

Now, if the investor in this security thinks that prospective increases in taxes, or expenses, or the possibility of reduction in rates is such as to probably reduce future earnings to $2.70 then it seems clear that his true earnings requirement is 9 per cent; that is, $2.70 divided by $30, rather than the 12 per cent shown on the historical basis.

This discounting feature cannot be measured exactly, but an estimate of what has been discounted is nevertheless important.

. . . . . .

By Mr. Goodman:

Q. In plain language, Mr. Joseph, your last sentence means that the current profit realized in, say, the present year, cannot be taken as any measure of the future realization which the investor expects. That is an unknown, is that right?

A. You usually work from current earnings—

Q. (Interposing) Yes.

A. (Continuing) toward an estimate of what the investor actually requires for the future.

Q. I see.

[fol. 10667] A. In times like these, he probably has in mind that the earnings of the past will be reduced by prospective events such as increases in taxes.

Q. In other words, one cannot probe what is in the investor's mind merely by looking at the profit of the current accounting period. That is what you mean, isn't it, Mr. Joseph?

A. Well, the use of the unadjusted earnings-price ratio would not show what is in the investor's mind. Sometimes a very high earnings-price ratio would be a clearer indication that he expects a smaller profit, expects certain things to happen which will reduce that profit rather than that he expects a continuation of high earnings levels.

Q. Now, the matter can work conversely too, can't it?

A. At times it may.

Q. In other words, the current profit may be very small but the price at which the stock sells may be very high, indicating the prospective higher future earnings?

A. Situations like that have occurred, particularly before 1929.

Q. Well now, another thing, Mr. Joseph, logically, a long record of regular level profit yield is fairly generally accepted when conditions are normal and the outlook is normal as indicating the probable yield of the future.

Now, do you find anything in this particular evidence [fol. 10668] about which you testified that is consistent or inconsistent with that? In other words, do you have before you—

[fol. 10669] Mr. Littman: Mr. Joseph, let me ask you this, do you understand the question?

The Witness: I think the question has two parts.

Mr. Littman: Suppose you answer the question, part by part in your own way. Perhaps that would be the best way.

The Witness: The first part of it, a stable level of earnings, would indicate in normal times that it was an indication of that level of earnings. That would probably be true if there is nothing to make the investor believe that

these stable earnings would change one way or the other and I assume that is what Mr. Goodman means by saying that the normal times will continue. In effect, he is saying if there is no reason why earnings shall change, then they will probably remain the same. I think there cannot be any quarrel with that.

Now, the second part of your question relating to testimony that has gone in here, I did not quite follow.

By Mr. Goodman:

Q. Do you find any testimony here that is calculated to set forth some continued past stable earnings under con-
[fol. 10670] ditions that permit you to be able to say that such earnings will continue?

A. Well, if I understand your question, I think the testimony is quite to the contrary.

Q. That is right. In other words, really you criticize the conclusion or disagree with the conclusion because of the lack of any showing to the probable effect that the earnings are stable earnings.

Mr. Wheat: Are you referring to these 153 stable industrial companies?

Mr. Goodman: Not at all.

Mr. Wheat: That is what the witness testified on, I thought.

Mr. Goodman: Now, you see you have injected something in there that simply confuses the subject and takes everybody off the track.

Mr. Wheat: I have not confused anybody's trend of thought and you know it.

Mr. Littman: Is there a pending question?

(Whereupon, the pending question was read by the reporter.)

Trial Examiner: Do you care to make some comment on that statement?

The Witness: I think both as respects the 153 industrial companies and as to the testimony on earnings-price ratios for utilities and for natural gas pipe line companies,

[fol. 10671] the market unquestionably is discounting future events.

By Mr. Goodman:

Q. Does it appear to you from the action of the market in that respect and from your general knowledge of the factors involved that the investor is assuming that current yields will or are representative of future yields?

Mr. Littman: By "yields", you mean earnings-price ratios?

Mr. Goodman: No, earnings-price ratios, that is something you figured.

. . . . . .

The Witness: I think that the earnings-price ratios of these 153 stable industrial companies and the earnings-price ratios of utilities and natural gas companies submitted by Mr. Coffman are somewhat higher than the investor actually expects will be achieved in the near future.

Mr. Goodman: That answers.

. . . . . .

[fol. 10672] Cross-Examination.

By Mr. Wheat:

Q. Mr. Joseph, do you have before you Exhibit No. 153?

A. I have a copy here, yes, sir.

Q. And I wonder if you would turn to table supporting Chart No. 11? That table shows certain summary data, does it not, in connection with the study made by Mr. Coffman of these 153 stable industrial companies?

A. It summarizes the material submitted by Mr. Coffman in Exhibit No. 254.

Q. That is what I asked you. It does that, does it?

[fol. 10673] A. Yes, it does.

Q. And your Exhibit No. 259 has been made up in tabular form consistent with the table supporting Chart No. 11, so that we, if we wish to contrast the indicated market value of capital with what you have termed "indicated market value of common stock", we can ascertain the data

back and forth from the table supporting Chart No. 11 in Exhibit No. 253 and your Exhibit No. 259, can we not?

A. It is consistent in form, Mr. Wheat.

Q. That is what I asked.

A. It is not quite so consistent in theory.

Q. I have not asked you a thing about theory, have I?

Mr. Littman: Just a minute.

Mr. Wheat: I asked whether we could contrast, if we wanted to contrast these figures, Exhibit No. 259 with the table supporting Chart No. 11. That is similar in form to that of Exhibit No. 259, that is correct, is it not?

The Witness: Exhibit No. 259 is similar in form to table supporting Chart No. 11 in Exhibit No. 253, yes, sir.

By Mr. Wheat:

Q. Now, will you tell us what percentage the indicated market value of common stock for the year 1941 shown on your Exhibit No. 259, what percentage that figure bears to the indicated market value of capital for [fol. 10674] the year 1941 shown on Mr. Coffman's table supporting Chart No. 11 of Exhibit No. 253?

A. For the year 1941, the indicated market value of common stock is approximately 86 per cent of the indicated over all market value.

Q. What was the similar percentage for the year 1940?

A. About 86.6 per cent.

Q. And for the year 1939? A. 87.1 per cent.

Q. And for the year 1938? A. 87 per cent.

Q. And for the year 1937? A. About 89.6 per cent.

Q. Now, will you tell us the percentage which the earnings available for common stock shown in the second and third columns on your Exhibit No. 259 bore in 1941 to the earnings available for capital shown in a similar position on Mr. Coffman's table supporting Chart No. 11 in Exhibit No. 253?

. . . . . .

Mr. Wheat: You understand, Mr. Joseph, that what I want to contrast is your figure of $1,087,691 representing what you term "Earnings available for common stock" for

the year 1941 and Mr. Coffman's figure for the same year of $1,166,698 which he has under the caption, "Earnings [fol. 10675] available for capital". I would just like to have you tell us the percentage which the one bears to the other.

The Witness: I have not calculated those.

By Mr. Wheat:

Q. Would you mind doing that for us? It is a simple matter and I would like to have you do it for each of those five years, please.

Mr. Littman: For how many years are you going to want that?

Mr. Wheat: I said five years. There are five figures there, that is all. It is a simple mathematical calculation, isn't it?

The Witness: Rather simple. I would like to use a calculating machine to do the figuring, if I can.

Mr. Wheat: I have got some approximate figures if you wish me to give them to you.

Mr. Littman: Let's have your figures subject to check, Mr. Wheat. Perhaps it will save time.

By Mr. Wheat:

Q. For the year 1941, 93 per cent. That is the ratio of earnings available for common stock as stated by Mr. Joseph and earnings available for capital as stated by Mr. Coffman. Does that sound reasonable to you?

A. Yes, it does.

[fol. 10676] Q. And for 1940—93 per cent; for 1939—92 per cent; for 1938—90 per cent, and, for 1937—94 per cent.

Do those figures seem reasonable to you? Of course, they are subject to your check.

A. Yes, they appear to be reasonable.

The first figure I gave you, Mr. Wheat, when you asked about the relation of the indicated market value of common stock for 1941 related to the indicated market value of capital shown in Mr. Coffman's exhibit, I said was 86 per cent.

Q. I think that is correct.

A. I have it here 86.2 per cent. I gave you the place behind the decimal for the other figures and I give it to you on this figure.

. . . . . .

Mr. Littman: I have one or two matters that might well be disposed of at this time.

At page 4384 of the transcript, I requested Dr. Bartle to supply certain information with respect to the production in the Hugoton Field by the two largest producers in that field, to wit, by Panhandle Eastern Pipe Line Com- [fol. 10677] pany and Northern Natural Gas Company. He responded quite promptly to my request. However, I just did not get around to reporting his prompt reply to my request until today.

Now, his response is on a single sheet and contains data which may very well be copied into the record at this point. The substance of Mr. Bartle's response is that, for the year ended July 1, 1941, Panhandle Eastern produced 40.7 per cent of the total production from the Hugoton Field and Northern Natural produced 49.1 per cent, a total in percentage of the two companies of 89.8 per cent of the total production from the field. That would leave approximately 10 per cent produced by others.

For the year ended July 1, 1940, the comparable percentages are for Panhandle Eastern, 41 per cent and Northern Natural, 44.7 per cent, a combined percentage of 85.7 per cent.

For the year ended July 1, 1939, the percentage was, for Panhandle Eastern, 40.4 per cent and for Northern Natural 46.5 per cent, a combined percentage of 86.9 per cent.

This sheet contains the M.c.f. figures and appropriate titles and I am going to ask that the data be copied into the record as given to me by Mr. Bartle.

Trial Examiner: This statement of Dr. Bartle's, I assume, has been submitted to counsel for the company? [fol. 10678] Mr. Culton: We delivered it to counsel for the Commission, Mr. Examiner. We have no objection to it.

Trial Examiner: The reporter will copy this statement into the record as requested.

[10679]

Production from the Hugoton Field

Total metered production from Hugoton Field (Kansas and Oklahoma)	37,905,071 M. C. F.	36,896,130 M. C. F.	32,017,511 M. C. F.
Production which went into Panhandle Eastern Main Line system	15,442,651 M. C. F.	15,133,288 M. C. F.	12,960,792 M. C. F.
Production which went into Northern Natural Gas Company Main Line system	18,625,482 M. C. F.	16,497,542 M. C. F.	14,892,785 M. C. F.
Panhandle Percentage	40.7 %	41.0 %	40.4 %
Northern Natural Percentage	49.1 %	44.7 %	46.5 %
Combined Percentage	89.8 %	85.7 %	86.9 %

[fol. 19680] Mr. Littman: At pages 5931 to 5933 of the transcript for January 19, 1942, I requested Mr. Hinton to furnish certain information with respect to the status of his estimated proposed 1942 construction program and also for subsequent years which estimates are set forth from pages 27, et seq., of his Exhibit No. 42.

Now, Mr. Hinton has responded promptly to this request, I having received the response within a matter of a week or ten days after my request, and I do not want to charge Mr. Hinton with the delay. I simply did not get around to having these sheets marked for identification until today. It is my fault, not Mr. Hinton's.

I would, therefore, like to have marked for identification Mr. Hinton's response to that request, a document consisting of three pages, entitled, "Panhandle Eastern Pipe Line Company Status of Proposed 1942 Construction Program—Production and Gathering System South and West of Liberal Station (Pages 27 and 28 of Exhibit 42)".

. . . . . .

(The document referred to was marked Exhibit No. 260 for identification.)

Mr. Wheat: I take it, Mr. Littman, that you understand, as I do, that this Exhibit No. 260 for identification refers to the status of this construction program as of the date [fol. 19681] on which you asked your question or approximately that date?

Mr. Littman: Yes.

I would like to ask Mr. Culton whether I am correct in understanding that the reason no details of the status of the 1943 construction program and for the years subsequent thereto were not presented by Mr. Hinton in Exhibit No. 260 was simply because there is no status? In other words, that construction has not reached any stage of presentation to the Board of Directors?

Mr. Culton: My understanding is that there is no occasion to do those things that are scheduled for 1943 before 1943 comes around unless it is by reason of a change of plan which might result from the circumstances that Mr. Hinton and Mr. Creveling referred to and, obviously, there

would be no necessity to show any status as to the wells which are to be drilled in 1943. If you will look at the items mentioned for 1943, I think you will readily recognize that there could be at this time no status for those particular items.

Mr. Littman: Yes, I assumed as much but I wanted to make certain my understanding was correct.

I offer in evidence Exhibits Nos. 259 and 260.

* * * * * * * * * * *

[fol. 10682] (Exhibits Nos. 259 and 260 were received in evidence.)

* * * * * * * * * * *

[fol. 10698] Mr. Littman: Mr. Examiner, before asking Mr. Shattuck of our staff to take the stand, I would like to have two exhibits marked for identification.

The first document was supplied to us at our request by Mr. O. W. Merton of Panhandle Eastern Pipe Line Company. His letter of transmittal reads as follows, under date of April 9, 1942:

"Federal Power Commission
"Washington, D. C.

"Attention: Mr. Littman

"Gentlemen:

"Upon the occasion of your last visit to Kansas City, you requested certain data relative to coincidental and non-coincidental maximum days. You, no doubt, recall that the request originated out of a telegram from Mr. Zinder and that we discussed the request at some length with Mr. Shattuck.

"The attached data has been prepared in response to that request and in accordance with our conversation with Mr. Shattuck. It consists of one tabulation comprising four sheets entitled 'Approximate Coincidental Maximum Day Sales' and a single sheet entitled 'Direct Industrial Sales'. Two copies are enclosed.

[fol. 10699] "Please advise if further data or explanation is required.

"Sincerely

"(Signed) O. W. Morton"

I ask that the document referred to by Mr. Morton be marked for identification with the next exhibit number.

(The document referred to was marked Exhibit No. 261 for identification.)

Mr. Littman: I next wish to read into the record a letter dated April 11 from Mr. O. W. Morton regarding this same subject matter.

[fol. 10700] "Federal Power Commission
"Washington, D. C.

"Attention: Mr. Harry S. Littman

"Gentlemen:

"Supplementing our report of Maximum Day Sales sent to you under date of April 9, 1942, we enclose herewith a report which we prepared in January showing the quantity of gas curtailed during the period January 4 to 12, on the Panhandle Eastern main line system.

"You will note that total curtailments on the maximum day, January 7, were 20,210 MCF and that subsequently the amount curtailed increased daily until it rose to a maximum of 25,022 MCF on Saturday, January 10.

"We do not have the record of curtailments of Michigan Gas Transmission Corporation but are advised that there was no curtailment on the 7th of January and that curtailment of industrial customers started on January 8th and increased for several days thereafter to an amount roughly estimated at ten million cubic feet daily.

"Yours very truly

"(Signed) O. W. Morton"

I ask that the data referred to in Mr. Morton's letter of April 11, 1942, which consists of one page of tabulations be marked for identification as Exhibit No. 262.

Trial Examiner: It will be so identified.

* * * * * * * * * *

[fol. 10701] (Exhibits Nos. 261 and 262 were received in evidence.)

* * * * * * * *

J. G. Shattuck, a witness, called on behalf of Federal Power Commission, being first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Littman:

Q. Will you state your full name and address, please?

A. J. G. Shattuck, Washington, D. C.

Q. By whom are you employed, Mr. Shattuck?

A. By the Federal Power Commission.

Q. What is your present capacity with the Commission?

A. I am an engineer with the Bureau of Accounts, Finance and Rates.

Q. And how long have you been so employed?

A. I have been employed by the Bureau of Accounts, Finance and Rates for about 3½ years, first as an asso-

[fol. 10702] ciate engineer and then later as an engineer.

Q. Will you briefly state your education and experience, Mr. Shattuck?

A. I received my engineering education at Leland Stanford, Jr., University. I received an A. B. degree in Civil Engineering in 1928. I spent the following year in graduate study in the same university.

During my attendance at the University, I worked in its Corporation and Stores Department which handled all maintenance and new construction work for the University and for the residences situated near the University. This work included the development of additional residential sites, the construction of residences, the construction of new buildings and the extension of water, electricity and gas facilities to them. During this same period, I also

assisted engineers in the design and installation of street and utility construction for residential developments.

After leaving the University, I took charge of the engineering of a large community development near San Francisco, which work included design and construction of roads, water supply and small dams to provide recreational lakes. At the same time, I acted as consulting engineer and, in many cases, had direct charge of similar projects located near San Francisco.

In October, 1929, I became Assistant Engineer with the [fol. 10703] Department of Public Works of the City of Palo Alto. In this position, I handled the sewerage and water supply problems of the city, together with occasional work upon street improvements and the water, gas and electric utilities. Cost analysis and cost accounting and the study of operating costs with the end of reducing unit costs were an important part of my work.

In October, 1932, I became Gas Engineer for the City of Palo Alto, having charge of the receipt and distribution of natural gas in that city. I made a study and developed a method of reducing the amount of gas lost in operating this distribution system. I also made a study of the cost of production and transmission by the company which sold the city gas at wholesale.

Trial Examiner: Is that a municipal plant?

The Witness: That is a municipal plant, sir.

In connection with that work, I also studied the operations and costs of other California gas companies. While with the City of Palo Alto, I assisted in the design and had charge of the construction of an auxiliary gas plant. During my services with the city, major pipe line changes were necessary due to rerouting of the gas and existing inadequacy of capacity. These changes, additions and improvements were practically completed before I left the employ of the city in June, 1938. In addition to the specific work of Gas Engineer for the city, I also designed [fol. 10704] the methods and supervised the taking of an inventory of the gas plant and system and the electric system and supervised the preparation of plant system maps and records. My work for the city included studies

of the retail electric and gas rates and the design of new rates for each rate reduction given to the customers periodically.

In July, 1938, I became Field Engineer for California, Area 9, of the Works Progress Administration. In that capacity, I had direct charge of receiving and examining all proposals made in that area for construction projects. In addition, I had direct charge of all work being done in the area on construction projects, which entailed the planning of the programs, procedures and alterations in such specifications as necessary to continue the work of each project.

From graduation from the University until January, 1939, I also acted as consultant either separately or together with other engineers on numerous problems covering practically all phases of civil engineering, except large structural design, and on utility matters.

In January, 1939, I accepted an appointment as Associate Engineer with the Federal Power Commission and was assigned to the Bureau of Finance, Accounts and Rates. In this capacity, my work consisted of the study of rates, contracts, investigations and reports on new rates and rate changes filed by natural gas companies and electric public utilities. In November, 1941, I [fol. 10705] was given the position of Engineer with the same Bureau. In connection with my work for the Commission, I have assisted in the investigation of natural gas companies of which the principal ones are the Hope Natural Gas Company, the Peoples Natural Gas Company and the Panhandle Eastern Pipe Line Company and its subsidiaries.

By Mr. Littman:

Q. Mr. Shattuck, have you prepared an exhibit for presentation in this proceeding dealing with the subject of allocation of adjusted 1941 costs as between what has been characterized as "regulated and non-regulated sales"?

A. I have.

Q. I hand you an exhibit entitled "Panhandle Eastern Pipe Line Company and Subsidiaries — Allocation of Adjusted 1941 Costs between Regulated and Non-regulated Sales", and ask whether this is the exhibit to which you have just referred? A. It is.

(The document referred to was marked Exhibit No. 263 for identification.)

[fol. 10706] Q. Is my understanding correct, Mr. Shattuck, that page 1 of Exhibit No. 263 for identification contains a summary of your study with respect to allocation?

A. It does.

Q. Will you please briefly explain this exhibit?

A. In this study, I have taken the costs of service, which have been previously testified to in this case, which are summarized in Exhibit No. 195 presented by Witness Watkins, and have allocated those costs to two divisions or [fol. 10707] types of costs, those proportional to maximum day sales and those proportional to annual sales.

I have taken the result of that division of costs and the proportions of the so-called regulated sales and non-regulated sales as they were set forth and defined in Exhibit No. 251 and determined the portion of each of the costs, those proportional to maximum day sales and those proportional to annual sales which are appropriately allocated to regulated sales and the portions which are properly allocated to non-regulated sales.

Q. Will you explain what you mean by the terms "regulated sales" and "non-regulated sales"?

A. I have taken the division of the sales as shown in Exhibit No. 251 and have used the same words to designate each group as used by Mr. Spaeth. I understand the term "non-regulated sales" to refer to the direct industrial sales made from the Panhandle Eastern Pipe Line system and from the Illinois Natural Gas Company system and no others. I understand the "regulated sales" as defined to include all other sales made by Panhandle Eastern and its subsidiaries.

Q. And the last class of sales are sales for resale?

A. Yes—excuse me, not all of them are sales for resale. There are some sales to residential, commercial and rural customers included in that.

Q. I see, but these are of rather minor importance, are [fol. 10708] they not? A. They are very small.

Q. Will you please proceed with your explanation of Exhibit No. 263?

A. I think it will be more direct to begin on page 2 and follow the detail through and then go to the conclusion on page 1.

Q. Very well. You may explain Exhibit No. 263 in the fashion you deem will best expedite matters.

A. The identifications shown on pages 2 and 3 on the left-hand side are those used by the company in its exhibits presented by Mr. Watkins, Mr. Spacek and others in so far as I could use them so that the accounts may be followed from their exhibits to this directly.

The 1941 costs on page 2 in Column (A) and on page 3 in Column (A) down as far as line 5, are those expenses which are shown in Exhibit No. 203. The items in line 7, page 3, to line 14, page 3, Column (A), are taken, in the most part from and do conform exactly with similar items in Exhibit No. 195.

The total of taxes, as shown in Column (A), is the same as the total of taxes in Exhibit No. 195.

Q. Exhibit No. 195 was one of Mr. Watkins' exhibits, was it not?

A. It is Mr. Watkins' exhibit entitled "Pro Forma [fol. 10709] Consolidated Income Account for the Year Ended December 31, 1941".

Q. Will you proceed with your explanation of Exhibit No. 263?

A. The utility revenues which are stated in lines 32 and 33 of page 3 and credited against the 1941 costs are those shown in the right-hand column of Exhibit No. 195 as gasoline sales and miscellaneous sales.

In Column (B) of pages 2 and 3, I have entered certain adjustments.

Q. Will you explain the character of those adjustments, Mr. Shattuck?

A. In lines 12 and 13 with the total on line 14.

On page 2, Col. B, are the items of expense which apply to the transmission operating expenses as testified to by Mr. Watkins and shown in Exhibit No. 248 which are the increase in operation expenses resulting from the inclusion of certain authorized costs not fully included in the expense for the year 1941.

Q. I take it you have just read from the title of that exhibit, have you not?

A. I read from Note 1, page 3 of that exhibit.

Q. Very well. Does that complete your explanation of the transmission expense adjustments in Column (B), [fol. 10710] page 2?

A. No. In line 38, item $94,000 is the balance of the increased costs which total, in Exhibit No. 248, $389,000, and is also the result of the increased expenses not fully included in 1941 expenses.

On page 3, line 12, in Column (B), "Adjustment", is a deduction of the amortization charged for certain sales and purchase contracts. This deduction is made in accordance with the testimony of Mr. Dunn.

Q. Are you referring, Mr. Shattuck, to the deduction of the amount of $230,173.96 of annual expense shown in line No. 12? A. Yes, sir.

Q. Very well. Proceed with your explanation of page 3.

A. In line 13, Column (B), there is a deduction of $62,854.64, which is the amount of the amortization for other sales and purchase contracts as testified to be proper to be deducted from the 1941 costs by Mr. Dunn.

The total of those two adjustments to amortization of sales and purchase contracts amounts to $293,028.60.

Q. Are you referring to Mr. Dunn's testimony to the effect that this sum of $293,000-odd is being annually charged for the purpose of amortizing what Mr. Dunn has characterized as a "write-up"? A. Yes, sir.

[fol. 10711] In line 26, Column (B), and line 27, Column (B), are items making a total net deduction of $182,000 from Federal income and excess profits taxes. This amount is the result of taking the $100,000 adjustment shown in the line for total operating revenue deductions of Exhibit No. 195 as testified to by Mr. Watkins and the adjustment in line 18 of Exhibit No. 248 testified to by Mr. Watkins of $282,000, making a net deduction of $182,000.

The effect of these adjustments is to make the 1941 costs those costs which Mr. Watkins testified to in Exhibit No. 195 in the column entitled "Consolidated" with the ex-

ception of the deduction made in accordance with Mr. Dunn's testimony.

That finishes my discussion of adjustments.

Q. Now, what amount does that leave as the total expenses to be allocated after the adjustments which you have described? A. $10,443,338.53.

Q. Very well. Now, will you proceed with your explanation of how those expenses, after adjustment, are allocated in your Exhibit No. 263?

A. The total which I just read and the items which make up that total are shown in Column (C).

Q. On what page?

A. On pages 2 and 3. The amounts shown in Column (C) have been allocated in three groups: those costs which [fol. 10712] are considered to be proportional to maximum day sales shown in Column (D), those costs which are considered to be proportional to annual sales in Column (E) and certain other costs shown in Column (F). These other costs are the costs incurred by the Indiana Gas Distribution Corporation with the exception of a very small item of gas purchase expense and a credit to production expenses.

The costs placed wholly in the maximum day's sales column, Column (D), are transmission mains expense, line 12—$350,833.19; pumping station structures, maintenance expenses, line 17—$23,897.91.

Q. That is on page 2, is it?

A. Yes, sir.

Mains, maintenance expenses, line 18—$94,212.01.

Certain other expenses have had a portion allocated to maximum day's sales, Column (D). These are operation supervision and engineering; maintenance supervision and engineering; and, administrative and general expenses. The proportion of those three accounts which have been placed in the maximum day's sales column have been arrived at in accordance with the proportion of the supervised expenses under such supervision and engineering. For example, the supervision and engineering in line 11 of $134,205.46 has been prorated to the two columns, maximum day's sales and annual sales, in accordance with a

[fol. 10713] proportion of $350,833.19 to the item $1,319,812.99. Similarly, the supervision and engineering of $48,127.64 has been apportioned at the ratio of the sum of the items, $23,897.91 and $94,212.01 to the amount of $172,819.71.

The administrative and general expenses shown in line 38 of $941,847.69 have been divided between maximum day's sales column and annual sales column in proportion to all of the expenses which appear above that line on page 2.

Turning to page 3, the item, "Miscellaneous revenue deductions" shown in line 3 of $11,499.33 has been placed in Column (E) under "Annual sales".

I would like to call your attention to the fact that in line 33, the revenues comparable to those costs—I would like to correct my testimony. I misread.

Back in line 3, miscellaneous revenue deductions, the amount of $11,449.33 has been put in the column "Annual Sales" except for $462.39 which was incurred by the Indiana Gas Distribution Corporation. Similarly, in line 33 of the same page, the miscellaneous revenues comparable with those costs have been similarly placed. The total amount of $12,309.69 is divided between the "Annual Sales" column—$11,645.35, and the "Other" column which is the revenue received by the Indiana Gas Distribution Corporation of $663.74.

The division of depreciation, depletion and amortization [fol. 10714] expenses or charges has been broken down into separate parts so far as possible from the financial statements of the company and from the exhibits in the record. The depletion of the producing leaseholds was considered as proportional to annual sales. The amortization of non-producing leaseholds was considered as proportional to annual sales. The depreciation of gasoline plant has been considered as proportional to annual sales and the amortization of the portion of the sales and purchase contracts not eliminated, in accordance with Mr. Dunn's testimony, has also been placed in annual sales.

The remainder of that item is the depreciation of gas plant shown in line 10 of $2,242,521. From that has been

deducted $3,740.80 which is the depreciation shown for the property of the Indiana Gas Distribution Corporation and that amount was placed in Column (F). The remainder of depreciation of gas plant was proportioned between maximum day's sales and annual sales column in accordance with the proportion arrived at in this fashion.

From the total classified gas plant account of $78,216,584, there has been deducted as not properly a part of the depreciable property, the intangible plant, distribution plant, deducted because the depreciation on the Indiana corporation has been taken from the amount--

Q. (Interposing) And that is shown as included in [fol. 10715] Column (E), isn't it?

A. That is right, an item of approximately $20,000 undistributed fixed capital.

The item of leaseholds amounting to about $1,750,000 since the depletion and amortization of those leaseholds has been provided for elsewhere and the gasoline plant for the same reason.

That leaves an estimated depreciable property base of $75,308,521. To obtain a ratio between the maximum day's sales and the annual sales, I have further divided that estimated depreciable property amount by taking the amounts in the accounts for land rights, mains, pumping station structures, pumping station equipment and a portion of general plant as representing the proportion of depreciation to be included in maximum day's sales and the amount of plant in production less leaseholds and gasoline plant, transmission land, metering and regulating structures, other transmission structures, metering and regulating equipment, other transmission equipment and the remaining portion of general plant as representing the proportion of depreciation to be included in the annual sales Column (E). Those factors are for maximum day's sales column, 0.93549 and, for annual sales column, 0.06451.

The division of taxes has been done separately by character of taxes in so far as possible. Gross production [fol. 10716] and sales taxes have been allocated to the cost apportioned to annual sales. Ad valorem taxes have been divided by the same factors used in dividing depre-

ciation. Franchise taxes have been assigned to those costs proportional to annual sales. Capital stock taxes and income taxes, excess profits taxes and charges in lieu of income and excess profits taxes have been divided between maximum day's sales and annual sales, half and half.

Gasoline sales, as a credit against costs, have been placed in the annual sales Column (E). I would like to point out, in that connection, that all the operating expenses of the gasoline plant, all the depreciation, in fact all costs of the gasoline plant have also been placed in the annual sales column.

I have already described the disposal of the miscellaneous revenue item in line 33. The result of this allocation is to arrive at a total of $5,222,002.87 of costs proportional to maximum day's sales, a total of $5,177,647.77 of costs proportional to annual sales and an amount of $43,687.89 of other costs not assigned to either.

Q. Now, does that complete your detailed explanation of the detail of pages 2 and 3 of Exhibit No. 263?

A. I believe so.

Q. I think perhaps it might be well for you to dwell for a moment on page 1 of Exhibit No. 263 and briefly explain [fol. 10317] the figures shown there, if you will, Mr. Shattuck?

A. In Column A, lines 3 to 7, I have transferred the totals that I have just read of approximately $5,200,000 of costs proportional to maximum day's sales and $5,200,000 of costs proportional to annual sales, to assign a portion of the item, $5,222,003 to the so-called regulated sales and the so-called non-regulated sales. I have taken a proportion arrived at by comparing the peak day use on January 7, 1943 of the two characters of service. On that date, Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company, as described in Exhibit No. 261, sold and delivered from its system west of Dana 75,293,000 cubic feet of gas of which 6,748,000 cubic feet were delivered to the so-called non-regulated sales and 68,545,000 cubic feet to the so-called regulated sales.

In Exhibit 79-A, Witness Young, it is shown that east of Dana from the system of the Michigan Gas Transmission Corporation, that the total delivery on that date was

175,435,000 cubic feet, all of which was delivered to regulated sales. The total of these amounts show that the total sales from the combined system of Panhandle Eastern and its subsidiaries was 250,728,000 cubic feet on that day of which 6,748,000 were delivered to non-regulated sales and 243,980,000 to regulated sales. The fractions representing this proportion are, regulated sales—0.9731; and, non-regulated sales—0.0269.

[fol. 10718] Using these factors directly on the amount of $5,222,003, I have found an amount of $5,081,531 of costs proportional to maximum day's sales allocated to regulated sales and an amount of $140,472 allocated to non-regulated sales.

Q. That is shown in line 3 of page 1 of Exhibit No. 263, is it not? A. Yes, sir.

In line 4 of page 1 is shown the division of the costs proportional to annual sales. These costs have been divided in accordance with the division of sales shown in Exhibit 251 in line 10 and are represented by the fractions 0.8680 to regulated sales and 0.1320 to non-regulated sales. Applying these factors to the costs proportional to annual sales, I arrived at an amount of $4,494,198 allocated to regulated sales and $683,450 allocated to non-regulated sales.

Q. What are the totals of the costs shown in this exhibit allocated as between the regulated and the non-regulated sales?

A. The costs which are allocated between regulated sales and non-regulated sales are, in total, $10,399,651 and they are divided $9,575,729 to regulated sales and $823,922 to non-regulated sales.

Q. Now, to summarize, is my understanding correct, Mr. Shattuck, what you have done here is to start with the [fol. 10719] costs shown in certain of the company's exhibits and then make certain adjustments and then go on from there and allocate to the final figures which you have just read. Is that generally a correct summary of what you have done?

A. Yes, sir.

Q. And, of course, as the Commission may change the starting figures, the allocated figures would, of course, vary, accordingly?

A. Yes, sir.

Q. Now, nowhere, as yet, have you mentioned the subject of return. I take it you have not included in Exhibit No. 263 any allocation of return?

A. I have not included in the costs shown in this study any amount for return. I would have done so had I known the amount to have included, as I consider that one of the costs of service.

Q. Now, will you give us your best judgment as to the method properly, in your opinion, to be used for the allocation of return without reference to dollars because, as I understand it, we have no definite figure in the evidence, that is to say, we, as yet, do not know what the Commission will decide is the fair amount of return?

A. If I had had the amount of the return, I would have added another line, in fact two lines, to page 3 and I would have divided the amount of the return half and half be-

[fol. 10720] tween maximum day's sales, Column (D), and annual sales, Column (E), and I would have added that to line 36 to have arrived at a total cost.

Q. Then you would have taken the totals thus secured and divided them as shown on page 1 of Exhibit No. 263?

A. Yes, I would have used those new totals instead of the totals shown in lines 3 to 7, in Column (A), and would have proceeded in the same fashion from that point on.

Q. Have you completed your explanation of Exhibit No. 263, Mr. Examiner?

A. I believe so.

Mr. Littman: We have endeavored, if your Honor please, to make a full and complete explanation of this exhibit on direct examination. I hope we have succeeded in making the exhibit clear.

[fol. 10721] Mr. Littman: We offer in evidence Exhibit No. 263.

(Exhibit No. 263 was received in evidence.)

Mr. Littman, Mr. Examiner, I have threatened from time to time on the record to ask, with consent of counsel, to have incorporated in this record, by reference, all of the rate schedules of Illinois Natural Gas Company, Michigan Gas Transmission Corperation and Panhandle Eastern Pipe Line Company. I have found that there are a great many of such rate schedules on file with the Commission. Obviously, these rate schedules set forth the very rates that are in issue in this proceeding and, to my mind, those rates should be made a part of this record.

In order to facilitate the matter of incorporating into [fol. 10722] the record, by reference, these rate schedules, I have had prepared an index of each and every one of the rate schedules that was on file with the Commission as of February 1, 1942, so that ready identification is available from this list.

Perhaps it would be best to have the list, or the index of these rate schedules, marked for identification as an exhibit so that the detailed rate schedules may be readily identified as the ones which are incorporated in the record by reference but, before doing that, I would like to now formally request Your Honor to incorporate, by reference in the record, all of the rate schedules on file with this Commission as of February 1, 1942, of the three respondents, to-wit, Illinois Natural Gas Company, Michigan Gas Transmission Corporation and Panhandle Eastern Pipe Line Company, a list of which is contained in the schedule which I have in my hand and will ask to have identified as an exhibit, if you will permit the incorporation by reference.

Trial Examiner: This index will be marked for identification Exhibit No. 264.

(The document referred to was marked Exhibit No. 264 for identification.)

[fol. 10726] (Exhibit No. 264 was received in evidence.)

(The rate schedules listed in Exhibit No. 264 are received in the record, by reference.)

Mr. Littman: Mr. Examiner, I would also like to
incorporated into the record by reference certain
schedules which have been transmitted by Panhandle E
ern Pipe Line Company and Michigan Gas Transmis
Corporation to which numerous reference has been m
in this record.

[fol. 10727] These are the schedules which have not
come, as yet, effective.

Mr. Watkins referred to them on a number of occasi
There is some question at this moment as to the pre
status of these schedules. No formal action, as I un
stand it, has yet been taken with respect to them.

You understand the ones to which I am referring,
Culton, are the ones to which you just referred a mom
ago. Is that right?

Mr. Littman: I think, in order to have a complete r
ord, we ought to have these incorporated.

Now, if Your Honor sees fit to have these incorpora
by reference, I will prepare a list similar to the list wh
has been identified as Exhibit No. 264 and present it
your Honor as Exhibit No. 264-A within the next few da
I would like to reserve an exhibit number for these pa
ticular schedules. I think, in view of the testimony h
in evidence with respect to these proposed rate schedu
and with respect to the effect that these rate schedules m
have upon those which are now on file as shown in Exhi
No. 264, that, in order to make a complete record, the
ought to be incorporated.

I might say to Your Honor that if this case were, pe
chance, to go to an appellant court in the future then, I u
[fol. 10728] derstand counsel can agree as to what portio
of the record may be required to be printed and tran
mitted to the appellant court and it seems to me that
these documents are bulky and are too numerous to
transmitted and if there is no particular necessity at th
time, I am sure counsel will have little difficulty agreei
on what parts are necessary for printing and what par
are not. In other words, I think we can cross the bridge
to the reprinting of these documents for the later record
such occasion should arise when the time comes.

These documents, of course, will remain as they always have, in the Commission's own files and may be referred to. I see no particular inconvenience to anyone and, as a matter of fact, I see a great deal of merit in having all of these in.

* * * * * * * *

[fol. 10729] Trial Examiner: The pending offer contemplates the inclusion into evidence of six folders and the contents or parts of the contents including correspondence between the several companies involved and the Federal Power Commission, both letters received and copies of letters written. It will be very easy to make an obscure record [fol. 10730] at this point. The suggestion which counsel have made in which, apparently all concur, will be adopted.

Mr. Littman will be requested to file, within three days, an index specifying the exact documents or letters which are included in the ruling about to be made and furnish a copy of that index to all counsel.

Since you are all willing to rely on Mr. Littman's discretion in this regard, we will have that index, when it is filed with the Trial Examiner, marked for identification as No. 265 and the several letters and documents designated in that index to be prepared by Mr. Littman will then be received in evidence, by reference.

(The document referred to, when received, will be marked Exhibit No. 265 and received in evidence.)

(The data listed on Exhibit No. 265, to be submitted, will be received, by reference, in the record.)

Mr. Littman: Mr. Examiner: I now request that there be incorporated into the record by reference the 1939, 1940, and 1941 Annual Reports of each of the respondents, Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company.

Trial Examiner: You mean the Annual Reports to the Federal Power Commission?

Mr. Littman: Yes, those reports for the years 1939 and [fol. 10731] 1940 have been received and are on file. The 1941 reports, I understand, have not yet been received but will very shortly, I believe probably before the end of the month, be received and, in my judgment, I believe that

sworn statements of the companies with respect to their operations and matters shown in those Annual Reports should be made a part of the record so that reference to them may be made.

I might say that those Annual Reports are not very bulky.

* * * * * * * *

(The annual reports for the years 1939, 1940 and 1941 of respondents are received in the record, by reference.)

* * * * * * * *

[fol. 10738] Mr. Goodman: I present the joint motion of the City of Detroit and the County of Wayne for an order reducing rates of the Defendants forthwith and pending any further investigation by the Commission.

I hand to the Bench five copies and on one of the copies there is endorsed a certificate of service which I will now make.

Mr. Wheat: May I ask, Mr. Goodman, have these documents or any of them been filed with the Secretary of the Commission?

[fol. 10739] Mr. Goodman: No.

Mr. Wheat: As prescribed by the rules—I suppose that is going to be arranged?

Trial Examiner: The Trial Examiner will attend to those matters.

* * * * * * * *

[fol. 10747] Trial Examiner: Now, the other matter in which counsel are probably all interested is the matter of briefs. A trial balloon was released day before yesterday in this matter of briefs and since the remarks of the Trial Examiner, various discussions have occurred here, there and elsewhere and I am also myself under a firm commitment.

The City of Detroit seems quite anxious to have this case submitted and the Trial Examiner has definitely undertaken to file a report or to complete his report, at least, in this case, whether it is actually filed, by June 15. In view of that, the Trial Examiner will now fix the time for the concurrent principal briefs at May 20 and the reply briefs at June 1.

Mr. Culton: Mr. Examiner, you are putting an impossible situation on us there.

Trial Examiner: I want to remark this, gentlemen, that we cannot quite apply normal rules and normal procedures to a time like this. I want your briefs and I know you want to furnish them. If they are going to be any good to me in [fol. 10748] submitting this proceeding to the Commission on the present record, I must have them at the times indicated. It means that not only you but also I work continuously right through from now until, in my case, June 15, more or less day and night. It is a continuous assignment for all of us until we dispose of this.

The case is, after all, rather a simple case. We do not have to analyze and weight evidence to any great extent in it and certain of the questions of law, by which we were in doubt when the proceeding commenced, have been pretty definitely resolved. At least, the Commission has decided as to various points that it has now expresed itself about. The Supreme Court has affirmed various positions the Commission has taken so that I do not see why we should have very lengthy briefs.

You have some points of law to discuss, of course, and I am not attempting to suggest what you shall include in your briefs or what you shall not but I simply say, to me this case seems to involve a few clear-cut principal issues, and, in view of that, I have accepted this commitment that the report of the Trial Examiner will be completed June 15 and if the briefs are to be of help to the Examiner, they must come in by the dates indicated.

Mr. Culton: Mr. Examiner, may I point out our difficulty. Of course, it is going to take, as you suggest, day [fol. 10749] and night work. We have no objection to that. We have done it in getting ready for these hearings and will continue to do it in the preparation of briefs. Although it will press us rather hard, we can meet the assignment of May 20 for the opening brief, but the thing that gives us concern is the June 1 date for reply briefs, bearing in mind we will have to reply to three separate and distinct briefs and we will not have their position until we get their briefs on May 20.

[fol. 10750] Mr. Littman: Mr. Examiner, I have a matter that I have omitted to take up. I would like to have marked for identification with the next exhibit number a document entitled, "Indiana Gas Distribution Corporation—Financial Statement for Year Ending December 31, 1941".

(The Document Referred To Was Marked Exhibit No. 266 For Identification.)

[fol. 10751] (Exhibit No. 266 Was Received in Evidence.)

Trial Examiner: Have counsel for the Defendants any further testimony to present at this time?

Mr. Wheat: No, sir.

Mr. Littman: If Your Honor please, I would like to file with the Commission at this time and I do so by handing you herewith a copy of the instrument that I propose to file which is entitled, "Motion for an Immediate Order Reducing Rates".

I have nothing to present at this time.

Mr. Montgomery: Mr. Examiner, the Intervener wishes to file a motion with the Commission, a motion for an order reducing the rates of Defendants forthwith, pending any further investigation by the Commission, and I hand you [fol. 10752] copy of the original and five true copies.

In that connection, Mr. Examiner, we notice that in the last paragraph of our motion, we set forth the fact that we still have in the course of preparation, certain statistical data and analyses which counsel for the Respondents have very kindly consented to let us furnish them by not later than next Tuesday and it is our intention to file this data in the form of a supplemental motion, if it is agreeable to the Examiner.

Trial Examiner: I believe that may be permitted under the circumstances.

Mr. Wheat: Mr. Examiner, it is my understanding that the fixing of time for filing of briefs which you made this morning eliminates any necessity for formal replies to be

filed to these motions before the Commission. Is that correct?

Trial Examiner: That is true. We will take the record as it is closed today subject only to such enlargement of it as has been clearly placed in the record and the items which have been ruled to be filed after the conclusion must [fol. 10753] be filed at the time fixed. Otherwise, they will be disregarded as will briefs be if they are filed after the date set.

I will ask the reporter to extend into the record at this point first the petition of Commission counsel and next the petition of Michigan Consolidated Gas Company.

* * * * * * * *

[fol. 10768] Mr. Littman: I would like to make certain about one thing so that there may be no misunderstanding in the record.

[fol. 10769] It is my understanding that counsel for the Respondents have no further testimony to present on direct and have stated that they have no testimony to offer at this time with respect to the testimony which the Commission has thus far offered.

Now, that is my distinct understanding of the record at this point. Is that Your Honor's understanding and is that the understanding of counsel for the Respondents?

Mr. Culton: I may state in reply to that that I did not know that we were the moving parties in this proceeding and my understanding is that direct testimony means where you are the moving party. Now, so far as we are concerned, we are just like the old nigger I told about earlier—"We will 'drap' this whole thing right here."

Mr. Littman: Of course, the prima facie case was presented by the petitioner here and then Panhandle Eastern and Michigan Gas went on with their testimony. We want to give them every opportunity to present such testimony as they wish to present with respect to their case-in-chief.

Now, I see no occasion to be technical. I say "direct", I mean in their case-in-chief, and I would like to know whether they rest.

Mr. Culton: I should say we are as near through as you are, Mr. Littman.

Mr. Wheat: We do not intend to be "druy into no more [fol. 10770] holes."

Mr. Littman: I am going to ask, in view of the statements of counsel, that the court reporter be instructed to state at this point in the transcript that counsel for Respondents rest.

Mr. Culton: We do not.

Mr. Littman: That is the clear purport, they either do or do not.

Mr. Culton: We will not let you tell us what we shall say.

Mr. Wheat: And we do not intend, if we can possibly avoid it, having the court reporter saying anything in this record that we have not said.

Mr. Littman: I do not propose to have or give counsel an opportunity to rely upon what I think they are endeavoring to rely upon as a technicality or a basis or claim that they have not had an opportunity to present their entire case in chief. We went forward with our evidence in order to expedite this hearing before they had put in all of their direct case.

Now, they either have put in all their direct case or they have not and I am inquiring whether they have put in their direct case in chief to the resting point or whether they have not and I am entitled to know.

Mr. Culton: Nil dicit.

Mr. Littman: This may seem very humorous to some [fol. 10771] present. It is not the least bit humorous to me.

Mr. Wheat: We have stated our position several times. It is perfectly clear on the record.

Mr. Littman: You have stated it in so many different ways that it can be construed by you almost any way you like to construe it in argument later and I certainly am not going to be charged later that I have failed in my duty with respect to at least undertaking to ascertain what your position is. I would like to have you be frank about it.

Have you or have you not had every opportunity up to this point to complete your case in chief?

Now, if you cannot give me a courteous answer to a courteous question I, of course, cannot force you to answer that but I want to give you an opportunity to do it.

Mr. Culton: We thought you thought you could, Mr. Littman.

Mr. Wheat: We believe, Mr. Examiner, that the record is clear on our position.

Mr. Littman: Why not be frank about this? What are we doing, trying to play on words?

Mr. Culton: That is what I have been wondering about you ever since you started.

Mr. Littman: Have you rested or haven't you rested?

Mr. Culton: We do not have to adopt your language on anything. We have just tried one side of this case.

Mr. Littman: I think I know what you are trying to do [fol. 10772] but you are not going to get away with it.

Trial Examiner: Now, the Trial Examiner might remark that recently in the record, to-wit, at page 10651, the question was put squarely to the attorneys representing the Panhandle Eastern Pipe Line Company and its subsidiaries whether they had any desire at this time to adduce any further evidence of any kind of character and they replied that they did not at this time "unless further evidence comes into the record which we feel should be properly rebutted."

Today an opportunity has been given to present rebuttal testimony.

Mr. Culton: And we said we had no further testimony to offer.

Trial Examiner: And you replied you had none to offer.

Mr. Culton: That is right.

Trial Examiner: And your statement of record on April 21, which was just quoted, still stands, I assume?

Mr. Culton: That is right.

Trial Examiner: The Trial Examiner construes that as being what some lawyers designate as a "rest".

Mr. Culton: It may be we got a little tired right there.

Trial Examiner: We will proceed accordingly.

Mr. Culton: Counsel is unduly alarmed, Mr. Examiner, as to what our intentions may be in the future.

* * * * * * * *

[fol. 10773] Trial Examiner: Well, I think Mr. Lit
concern is to be assured, both across the table and
record, that the Panhandle Eastern Pipe Line Co
and its subsidiaries have not at any time or in any
been denied the requirements of due process in thi
ceeding.

Mr. Culton: That is right, Mr. Examiner, so far
phase of it is concerned. We will not make the cont
that we have not had an opportunity to put on add
testimony here if we had so desired.

Trial Examiner: Of course, we wish to be sure th
have had every opportunity contemplated by the re
ments of due process.

Mr. Culton: There is this we would say. We w
make it clear we think fundamental error was commit
[fol. 10774] the Commission in overruling a petitio
postponement relating to Order 31 and relating to t
situation. We want to make it clear we do not waive
motions and we think the same condition now exist
existed at that time but we recognize that this Exa
has no power over that phase of the case.

Trial Examiner: All other matters having bee
posed of, this hearing will now adjourn without dat
ject to such further action as the Commission may
proper in the premises.

[fol. 10775]

Exhibit 1

Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Operating Results
1938-1940

(000 Omitted)

	1938	1939	194
Utility plant, cost less reserves	$	$	$
Dec. 31 of year	61 848	59 778	63
Total, first and last of year		120 926	125
Average during year	61 148 1	60 363	62
Working capital	100	100	
Total	61 248	60 363	62

Utility Operating Income	4,874	6,416
Utility operating income of av. cost less reserves of utility plant plus working capital	7.96	10.59

Analysis of Depreciation Provision in Determination of Operating Income

Cost of utility plant		
Dec. 31 of year	68,173	69,151
Total first and last of year		137,326
Average during year	68,173(1)	68,662
Depreciation provision	2,150	2,393
Depreciation provision	3.17	3.49

(1) End of year amount used in place of average.

MKT 7-7-41
Corrected 7-18-41
19

(Ed. 10777) Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Cost and Cost Less Reserves, of Plant and Operating Resul
As of December 31, 1938

		A	B	
1	Utility plant	$58,044,047	$9,260,047	$
2	Reserve for amortization of gas sales and purchase contracts	879,086		
3	Total, cost new	58,923,133	9,260,047	
4	Construction work in progress	9,689		
5	Plant in service, cost new	58,913,444	9,260,047	
6	Reserves for			
	a Depreciation of gas plant	4,895,485	787,284	
	b Amort. and depletion of gas plant	463,730		
	c Amort. of gas sales and purchase contracts	879,086		
	d Total reserves	6,238,301	787,284	
7	Cost new less reserves	52,675,143	8,472,763	
8	Utility operating income	4,264,495	609,105	
9	Depreciation	1,105,516	275,576	(1)
10	Depletion	451,448		
11	Amort. Lim. Term. Util. Inv.	326,893		
12	Total	1,883,857	275,576	

13. Available for depreciation depletion, amortization and return	$6,148,382	884,681	7,033,063

A. Panhandle Eastern Pipe Line Co.
B. Michigan Gas Transmission Co.

Source: Annual Reports to Federal Power Commission.

(1) Designated as Provision for Retirement.

MKT 7-7-41

1b

[fol. 10778]

Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Cost and Cost Less Reserves of Plant and Operating Results
As of December 31, 1939

	A	B	Total
1. Utility plant	$58,632,902	$9,812,436	$68,445,338
2. Reserve for amortization of gas sales and purchase contracts	1,172,114	—	1,172,114
3. Total, cost new	59,805,016	9,812,436	69,617,452
4. Construction work in progress	466,042	—	466,042
5. Plant in service, cost new	59,338,974	9,812,436	69,151,410
6. Reserve for			
a. Depreciation of gas plant	6,526,415	1,057,725	7,584,140
b. Amort. and depletion of gas plant	616,686	—	616,686
c. Amort. of gas sales and purchase contracts	1,172,114	—	1,172,114
d. Total reserves	8,315,215	1,057,725	9,372,940
7. Cost new less reserves	51,023,759	8,754,711	59,778,470
8. Utility operating income	5,490,019	925,636	6,415,655
9. Depreciation	1,627,943	276,421 (1)	1,904,364
10. Depletion	159,317	—	159,317
11. Amort. Lim. Term Util. Inv.	329,300	—	329,300
12. Total	2,116,560	276,421	2,392,981
13. Available for depreciation, depletion, amortization and return	7,606,579	1,202,057	8,808,636

A. Panhandle Eastern Pipe Line Co.
B. Michigan Gas Transmission Co.

Source: Annual Reports to Federal Power Commission.

(1) Designated as Provision for Retirement.

MKT 7-7 41

1c

[fol. 19779] Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Cost, and Cost Less Reserves, of Plant and Operating Results
As of December 31, 1940

		A.	B.	Total
1	Utility plant	$63,654,119	$12,295,897	$75,950,016
2	Reserve for amortization of gas sales and purchase contracts	1,465,143	—	1,465,143
3	Total, cost new	65,119,262	12,295,897	77,415,159
4	Construction work in progress	673,905	5,076	678,981
5	Plant in service, cost new	64,445,357	12,290,821	76,736,178
6	Reserves for			
	a. Depreciation of gas plant	7,942,316	1,339,273	9,281,589
	b. Amort. and depletion of gas plant	710,545	—	710,545
	c. Amort. of gas sales and purchase contracts	1,465,143		1,465,143
	d. Total reserves	10,118,004	1,339,273	11,457,277
7	Cost new less reserves	54,327,353	10,951,548	65,278,901
8	Utility operating income	5,541,004	911,964	6,452,968
9	Depreciation	1,636,745	292,767 (1)	1,929,512
10	Depletion	160,145		160,145
11	Amort. Lim. Term Util. Inv.	329,110		329,110
12	Total	2,126,000	292,767	2,418,767
13	Available for depreciation, depletion, amortization and return	7,667,004	1,204,731	8,871,735

A. Panhandle Eastern Pipe Line Co.
B. Michigan Gas Transmission Co.

Source: Annual Reports to Federal Power Commission.

(1) Designated as Provision for Retirement.

MKT 7-7 41

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[fol. 10780]

Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Working Capital Estimate
Dec. 31, 1938-39-40

	Current and Accrued Assets	Current and Accrued Liabilities	Working capital	Adj. for increased cash	Operating working capital
1938					
Panhandle Eastern Pipe Line Co.	$2,532,852	$3,652,912			
Michigan Gas Transmission Co.	1,058,606	867,559			
Total	3,591,458	4,550,471	($ 959,013)	0	($959,013)
1939					
Panhandle Eastern Pipe Line Co.	6,674,561	2,964,971			
Mich. Gas Transmission Co.	1,443,490	1,025,000			
Total	8,118,051	3,989,074	5,028,977	4,242,008	786,969
1940					
Panhandle Eastern Pipe Line Co.	4,980,241	3,102,279			
Mich. Gas Transmission Co.	2,111,709	1,543,607			
Total	7,091,950	4,645,886	2,346,064	2,901,777	(555,713)

Cash	1938	1939	1940
Panhandle Eastern Pipe Line Co.	1,179,681	5,179,508	3,300,678
Mich. Gas Transmission Co.	181,206	423,387	961,986
Total	1,360,887	5,602,895	4,262,664
Increase above 1938	—	4,242,008	2,901,777

The adjustment is made on the assumption that the increased cash in 1939 and 1940 was required to meet construction programs.

MKT 7-7-41
Corrected 7-18-41

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[fol. 10782]

Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Working Capital Estimate
Approximate Payroll Basis
Dec. 31, 1940

	Panhandle Eastern Pipe Line Co.	Michigan Gas Transmission Co.	Total
Natural Gas Production			
Operation	$ 84,128		$ 84,128
Maintenance	22,182		22,182
Gasoline plant operation and maintenance	Not available		
Transmission			
Operation	474,152(1)	$ 62,820(3)	539,672
Maintenance	211,985	54,901	266,886
Customer's acct. and collecting	13,672		13,672
Sales promotion expense	11,754	4,020	15,774
Administrative and general	287,792(2)	42,045(4)	329,837
Total, year	1,105,665	163,786	1,269,451
Monthly average			105,787

(1) $981,462 less 3,170,605 M. cu. ft. of gas at 16¢ or $507,310 leaving $474,152.
(2) Taken at 1/2 of $575,584 on assumption that insurance, injuries and damages, etc., comprise an equal part of the account.
(3) $172,347 less company use gas of $109,527 or $62,820.
(4) One-half of $84,090 for reasons stated in (2).

MKT 7-7-41

1f

[fol. 10783] Exhibit 2

Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Determination of Possible Revenue Reduction
(000 Omitted)

		1938	1939	1940
1.	Cost of utility plant Av. during year	$68,173(1)	$68,662	$72,944
2.	Working capital	100	100	100
	Total	68,273	68,762	73,044
4.	Available for depreciation, depletion, amortization and return	7,033	8,869	8,872
5.	Percent of Line 3	10.30	12.82	12.15
	Annual requirement for depreciation, depletion, amortization of and return on utility plant (Note 1).			
	Annual rate of return / Requirement			
	5% / 6.51%	4,438	4,470	4,749
	6 / 7.26	4,949	4,985	5,296
	7 / 8.26	5,495	5,534	5,879
	8 / 8.88	6,054	6,097	6,477
	Return requirement on working capital at			
	5% per annum	5	5	5
	6 " "	6	6	6
	7 " "	7	7	7
	8 " "	8	8	8
	Total requirement at			
	5% per annum return	4,443	4,475	4,754
	6 " " "	4,955	4,991	5,302
	7 " " "	5,502	5,541	5,886
	8 " " "	6,062	6,105	6,485
	Excess of amount available over requirement for			
	5% per annum return	2,590	4,334	4,118
	6 " " "	2,078	3,818	3,570
	7 " " "	1,531	3,268	2,986
	8 " " "	979	2,704	2,387

Note 1. 1940 Estimate of life of gas supply 25 yrs.
1940 Age of property, 1940-1932 8 "
Total life 33 "

To allow for shorter life of additions since 1932 and for 10-year life being used for gas sales and purchase contracts a life of 30 years will be used in determining depreciation, depletion, amortization and return requirements.

MKT 7-15-41
2 Corrected 7-18-41

Extracts from Registration Statement of Panhandle Eastern Pipe Line Co.
Filed with Securities and Exchange Commission
Feb. 12, 1937 in File No. 2-2867-1-1
In re: Gas Reserves

The Issuer now owns or controls oil and gas leaseholds on approximately 267,800 acres of land, in the Panhandle of Texas, Southwestern Kansas and Texas County, Oklahoma, and in addition controls through gas purchase contracts approximately 44,500 acres of land in this territory. A part of the Issuer's gas supply is obtained from wells heretofore drilled on certain of these leaseholds, the remainder being purchased under contracts, either for the life of commercial production on the leases or for a fixed term, varying from eight to sixteen years, with other producers, in the same general territory. . .

In the opinion of Ralph E. Davis, Inc., consulting geologists and engineers, the combined reserves of the entire Amarillo and Hugoton fields, from which fields the Issuer obtains its supply of gas, are estimated as of February 1, 1937 at approximately 30 trillion cubic feet; it is estimated that gas is being produced in these two fields at the rate of approximately 665 billion cubic feet per year and that this rate of production will be increased considerably; the gas reserves which the Issuer itself controls under leases and gas purchase contracts in these two fields are estimated at approximately 1,874 billion cubic feet, and its delivery requirements, which have increased to a present annual total of approximately 20 billion cubic feet, are expected hereafter to increase as the demand for natural gas increases in the territory which it serves; during the past few years, there has been considerable wastage of the natural gas produced in the Amarillo field; in 1935 the State of Texas enacted a conservation statute which resulted in a substantial reduction of the gas wastage; the statute was attacked by two of the pipe line companies operating out of the Amarillo field, and on February 1, 1937, the Supreme Court of the United States held it to be unconstitutional insofar as it might be construed to permit certain proration orders entered by the Texas Railroad Commission; (*Thompson, et al. v. Consolidated Utilities Company*, No. 89, October Term, 1936), whatever the immediate effect of this decision may be it is probable that the normal operation of economic factors will prevent any gas wastage on a large scale for more than a limited period of time in the future; and after giving consideration to all of the known factors affecting the future supply and probable demand, the Issuer will be able to obtain supplies of natural gas sufficient for its market requirements for a period of not less than twenty-five years.

In the opinion of counsel, the natural gas transmission line operated by the Issuer and its subsidiary, Panhandle Illinois Pipe Line Company, which extends from the Texas Panhandle gas field through the states of Oklahoma, Kansas, Missouri and Illinois to a point near Dana, in Vermillion County, Indiana, is owned by the Issuer and said subsidiary, subject to certain mortgages hereinafter referred to, to farm mortgages on land covered by leases and rights of way owned by the Issuer, to which the Issuer is not a party, and to minor encumbrances and defects in title.

The main pipe line of the Issuer's transmission system, extending, as described in the preceding paragraph, from the Texas Panhandle gas field to Indiana, and so owned by the Issuer and its subsidiary, Panhandle Illinois Pipe Line Company, consists of approximately 351 miles of 24-inch diameter pipe line, 450 miles of 22-inch diameter pipe line, 58 miles of 20-inch diameter pipe line, and an aggregate of 43,300 horse power of gas engine driven compressor units installed in 10 stations.

In addition, meter stations, a dehydrating plant, a natural gasoline extraction plant, and other equipment and property used in the operation and maintenance of a high-pressure gas transmission system, are owned by the Issuer or its subsidiary companies.

In the opinion of The J. G. White Engineering Corporation the Issuer's main transmission system, as originally constructed, including pipe lines, compressor stations, and field and lateral lines, together with all other physical facilities, is of modern design and well constructed, operated and maintained, and the construction of its new transmission facilities reflects sound engineering practice and includes the latest available technical develop-

4021

RALPH E. DAVIS, INC.
ENGINEERS

Petroleum and Natural Gas
1710 Union Bank Building
Pittsburgh

New York
150 Broadway

November twelfth,
Nineteen forty.

Board of Directors,
Panhandle Eastern Pipe Line Company,
New York, New York.

EXHIBIT 4.

Gentlemen:

In accordance with your request, we have made a study as of September 30, 1940 of the natural gas supply available to your company. The gas produced and purchased by your company and the gas reserves available to it are located almost entirely in the Amarillo field of Texas and in the Hugoton field which includes portions of (a) southwestern Kansas, (b) the Oklahoma Panhandle, and (c) Sherman and Hansford Counties in northwest Texas. These fields together constitute one of the largest known reserves of natural gas.

The conclusions stated herein regarding the reserves of these fields are based upon engineering and geological studies we have made of both of these fields since they each became important as a source of supply of natural gas, including information made available to us in former detailed studies of your company's gas supply, and upon a recent study of both the Amarillo and Hugoton fields. Data regarding acreage controlled, wells owned or under gas purchase contracts, production of these wells and their pressure history have been furnished by officials of Panhandle Eastern Pipe Line Company.

Our most recent study of the Amarillo field indicates that the proven gas acreage covers an area of approximately 1,478,000 acres and that the recoverable gas reserves as of September 30, 1940 are not less than 17.0 trillion cubic feet. Your company owned on September 30, 1940 leases covering a total of 42,136 acres in the proven area of this field, this being approximately 2.85 per cent of the total proven area. Upon these lands there had been completed as of said date a total of 55 wells, 11 of which were completed subsequent to July 1939. The average closed pressure of 40 of these wells in June 1937 was 378.9 pounds. The closed pressure in July 1940 of these 55 wells was 358.9 pounds indicating an average pressure drop of 20.0 pounds in a three-year period. The production of these wells from January 23, 1937 to September 22, 1940, a period of 3 years and 8 months, totaled 55,093,000 M cubic feet or an average production of more than 2 billion cubic feet per pound drop in pressure.

Your company owned gas purchase contracts as of September 30, 1940 covering 23,393 acres in the proven area of the Amarillo field upon which there had been completed a total of 53 wells. Thirty-eight of these wells had an average pressure in June 1937 of 311 pounds and the average of the 53 wells in June 1940 was 308 pounds. During the period from January 23, 1937 to September 22, 1940 these wells had delivered a total of 49,928,000 M cubic feet.

It is evident from the very substantial production obtained with a modest decline in pressure that the acreage upon which your company controls its gas supply in the Amarillo field has a very substantial productive capacity. The total proven acreage controlled through leasehold and through gas purchase contracts, namely 65,529 acres, is equal to about 4.43 per cent of the total proven area of the Amarillo field. It is our judgment that your company thus controls approximately this percentage of the total recoverable reserve, that is, approximately 750 billion cubic feet. A

Of the company-owned leases held on September 30, 1940 covering a total of 42,136.30 acres of proven gas lands in the Amarillo field, 30,005.7 acres are classed as producing acreage, having a proven gas reserve which we estimate at 361,769,000 M cubic feet. The remaining owned proven leaseholds, totalling 12,130.6 acres are classed as unoperated, and have an estimated gas reserve which we estimate at 146,254,000 M cubic feet. The gas purchase contracts owned by your company September 30, 1940, covering gas purchases in the Amarillo field, control the gas under 23,393 proven acres, R

Extract from Registration Statement
of Panhandle Eastern Pipe Line Co.
Filed with Securities and Exchange Commission
Nov. 15, 1940 in File No. 2-4579-1-1
In re: Gas Reserves

4a

Our most recent study of the Hugoton field indicates the proven and semi-proven area to be not less than 2,000,000 acres and the total recoverable gas reserve as December 31, 1939 to be not less than 15 trillion cubic feet. In the proven or semi-proven portion of this field your company owns full-interest leases covering 175,030 acres, also one-half interest in an additional 18,428 acres. The gas supply from the unowned one-half interest is under contract to your company, hence the reserves under 193,458 acres are thus controlled.

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Your company owned as of September 30, 1940, 33 wells on its wholly-owned Hugoton leasehold acreage. The average pressure of 26 of these wells in June 1937 was 421 pounds and the average pressure of the 33 wells in July 1940 was 414 pounds. During the period from January 23, 1937 to September 22, 1940, these wells produced 11,384,000 M cubic feet.

On September 30, 1940 there had been completed 34 wells on the 18,428 acres in which your company owned one-half interest. Twenty-four of these wells had an average pressure in June 1937 of 415 pounds and the 34 wells had an average pressure in July 1940 of 411 pounds. During the period January 23, 1937 to September 22, 1940 these wells produced a total of 11,876,000 M cubic feet.

The company-owned full-interest leases covering a total of 175,030.25 acres in the proven or semi-proven portion of the Hugoton field, include 19,090.95 acres classed as operated, and have a proven gas reserve estimated by us at 126,189,000 M cubic feet. The remaining 155,939.30 acres of full-interest leases are classed as unoperated, and have gas reserves estimated by us at 1,030,739,000 M cubic feet. C D

The fifty per cent interest owned by your company in 18,428 acres of proven or semi-proven leasehold property includes a total of 17,320 acres classed as operated, and have a gas reserve estimated by us at 114,483,000 M cubic feet. The remaining 1,108 acres are classed as unoperated and have an estimated gas reserve of 7,324,000 M cubic feet. E F

Your company owned on September 30, 1940 gas purchase contracts controlling 33,475 acres in the Hugoton field upon which there had been completed 68 gas wells. Fifty of these wells had an average pressure in June 1937 of 420 pounds and 67 wells had an average pressure in July 1940 of 415 pounds. These wells produced during the period January 23, 1937 to September 30, 1940 a total of 24,919,000 M cubic feet. These 33,475 acres are classed as operated and have a proven reserve which we estimate at 221,265,000 M cubic feet. G

The total proven or semi-proven acreage controlled by your company in the Hugoton field through leasehold and gas purchase contracts on September 30, 1940 was 226,933 acres. This is more than 10 per cent of the total proven and semi-proven area as now defined. It is our judgment that your company thus controls gas reserves as of September 30, 1940 in the Hugoton field of not less than 10 per cent of the total reserve of said field, that is, not less than 1.5 trillion cubic feet.

Both the Amarillo and Hugoton fields constitute reservoirs of gas from which gas withdrawals will not necessarily be proportional to the reserves controlled by various producers. The reserves are, we believe, sufficient to meet the combined anticipated requirements for pipe line, carbon black and other uses for a period of more than 25 years.

The combined gas supply controlled by your company in the Amarillo and Hugoton fields is, in our judgment, adequate to supply its present markets and any reasonably anticipated increase in the gas requirements of said markets for a period of more than 25 years.

Very truly yours,

RALPH E. DAVIS, INC.

by RALPH E. DAVIS,
President

The Registrant also owns oil and gas leaseholds on (a) certain acreage outside proven limits of the Amarillo and Hugoton fields and (b) approximately 1,100 acres on which is located one well and a half interest in approximately 10,000 acres on which are located twelve wells in the Hugoton field the gas from which is sold under contract to the Argus Natural Gas Company, Incorporated.

[fol. 10788]

Exhibit 4-B.

Summary of Statement re Natural Gas Reserves
of Panhandle Eastern Pipe Line Company,

by Ralph E. Davis, President of Ralph E. Davis, Inc.

(Page 17, 18 of Registration Statement
Filed Nov. 13, 1940 in File 2-4579-1-1)

Amarillo Field

A. Contracts	750,000,000	M. cu. ft.
B. Owned Leases	241,977,000	" " "
	991,977,000	

Hugoton Field

C. Leases, Wholly-owned	126,189,000	
D. " " (1)	1,030,739,000	
E. Leases, Jointly-owned	114,483,000	
F. " " (1)	7,324,000	
G. Contracts	221,265,000	
	1,500,000,000	
Grand Total	2,491,977,000	M. cu. ft.
100% Leased Factor Annual Capacity of Pipe Line	91,250,000	" " "
Probable Life of Supply	27.4	yrs.

(1) Unoperated at date of registration statement.

MKT 7-11-41
4b

EXHIBIT 5

Extracts from Registration Statement of Panhandle Eastern Pipe Line Co. Filed with Securities and Exchange Commission Nov. 13, 1940 File No. 2-457-1-1 In re: Design, Construction and Maintenance of Property

pipe lines, in-
ing multiple lines, owned by the Registrant and by Illinois Natural Gas Company, of September 30, 1940

Nominal diameter inches	Main transmission lines	Branch or lateral lines	Gathering and well lines
24	733	—	—
22	534	—	—
20	83	—	8
18	72	—	13
16	39	68	35
12	10	53	25
10	33	52	76
Various Sizes 8 to 2	—	386	512
Total	1,504(1)	559(2)	669

(1) Includes 82 miles of 24" and 24 miles of 20" pipe line under construction at September 30, 1940 which are scheduled for completion prior to December 31, 1940.

(2) Includes 68 miles of 16", 32 miles of 12", 37 miles of 10", and 87 miles of various sizes from 8" to 2" pipe line owned by Illinois Natural Gas Company.

Lines owned by Central Distributing Company are used for retail distribution of al gas as set forth in Item 5, and are not included in the foregoing table.

The Registrant owned the following compressor stations, as of September 30, 1940

Station	Total rated horsepower
Sneed	5,200(1)
Hansford	3,000(2)
Liberal	10,000(3)
Greensburg	7,800
Haven	7,800
Olpe	7,800
Lousburg	7,000
Houstonia	6,500
Centralia	6,500
Pleasant Hill	6,500
Glenarm	6,000
Tuscola	5,100
Three small stations	860
Total	80,960

(1) Of the 5,200 total rated horsepower at Sneed Station, 1,300 was under construction at September 30, 1940 and is scheduled for completion prior to December 31, 1940.

(2) This station was under construction at September 30, 1940, and is scheduled for completion prior to December 31, 1940.

(3) The Registrant's natural gasoline extraction plant and this compressor station are located on the same site.

P. McDonald Biddison, consulting engineer, Dallas, Texas, has made an examina-n of the properties of the Registrant and its subsidiaries and submitted a letter ereon. Such letter follows:

P. McDONALD BIDDISON
CONSULTING ENGINEER
Dallas Gas Building
Dallas, Texas

November 2, 1940

oard of Directors
anhandle Eastern Pipe Line Company
entlemen:

On several occasions beginning in March, 1937, I have been engaged in studies and vestigations of the business and properties of your company and of its Subsidiary ompanies. These studies and investigations have included the reviewing of construc-on plans, determining safe operating pressures and system capacities, the prepara-on of property valuations, and studies of property depreciation.

I have examined a great deal of the property and have inspected plans and specifications under which it was constructed. The Company owns or controls under purchase contracts, gas reserves in the largest gas fields ever known, adequate, for the requirements now in prospect, for a term of at least twenty-five years. The compressor stations on the main system are carefully designed, their equipment is first class in all respects, they present a neat and attractive appearance and are maintained in excellent condition. All these features tend to produce reliability and economy of operation. The main transmission system has been constructed with a margin of safety as to pressure so that it may safely be operated at 500 pounds compressor station discharge pressure. Stream crossing locations have been carefully selected and multiple lines across streams so located and installed as to leave very slight probability of interruption at such locations. The transmission lines have been well located and well laid to secure stability and are carefully maintained. The main line loops completed in 1937 provide additional protection against service interruption and this protection will be enhanced by the loop extensions recently completed and by those now under construction. The Gasoline Plant at Liberal is of modern design and the dehydration plant in connection with it is an effective preventive of interruptions of service from freezing of lines. Measuring and Regulating Stations are of up to date equipment, are carefully maintained and the stations are neat and clean. Little evidence of deterioration in the main line property can be found. Pipe exposed in making connections for 1937 and 1940 additions did not indicate interior corrosion. Flow tests of the main lines in 1937 and 1938 showed some fouling, not corrosion, of the old lines westward from Olpe Station to Liberal Station. This condition has been effectively remedied as evidenced by subsequent flow tests and by capacity obtained under routine operations. Routine reports show little deterioration of protective coating and pitting of pipe except in a few very restricted areas. Such areas are being protected cathodically as they develop.

My studies of the system's capacity indicated a sales capacity of the main line system, including the deliveries at Dana and with the distribution of the deliveries west of Dana as they then existed, prior to the loop extensions of the 1940 construction program, to be in round numbers 200,000 M.C.F. per 24 hours, all of which capacity was used to render service during the past winter. Upon completion of the extensions of the loops by the 1940 construction program, now over 95 per cent completed, the corresponding capacity will be, in round numbers, 250,000 M.C.F. per 24 hours. Facilities for the delivery of this peak load will be fully adequate upon the completion of field compressor station construction now in progress and scheduled for completion prior to December 31, 1940.

Yours very truly,

P. McDONALD BIDDISON
Consulting Engineer

Character of Ownership

The statements in answer to this Item 7 with respect to ownership are made upon the authority of Glenn W. Clark, Esq., head of the Registrant's legal department. In his opinion, based in part upon opinions of various local counsel, the above mentioned production property and transmission property are owned by the Registrant or by its wholly owned subsidiary (Illinois Natural Gas Company) as indicated above, subject to certain mortgages hereinafter described, to farm mortgages (to which neither the Registrant nor Illinois Natural Gas Company is a party) on land covered by leases and rights-of-way owned by the Registrant and Illinois Natural Gas Company, and to minor encumbrances and defects in title. The compressor stations mentioned are located on land owned in fee by the Registrant. The pipe lines of the Registrant and Illinois Natural Gas Company are located either (1) under or over rivers, highways and other public places under permits referred to in Item 8 hereof, or (2) under or over private property by virtue of rights-of-way or easements obtained from the persons who, at the time such rights-of-way or easements were obtained, were the last grantees of record of the fee title to the land involved. Substantially all the pipe lines of the Registrant and of such subsidiary are located on lands over which rights-of-way or easements have been secured and at the time such rights-of-way or easements were secured inquiry was made as to the existence of farm mortgages upon the lands covered thereby and in many instances agreements were obtained from mortgagees sub-

[fol. 10791]

Exhibit 6

Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Operating Expenses and Taxes at 100% Load Factor Operation

	P.E.P.L.Co.	M.G.T.Co.	Total	Factor	100% Load Factor Operation
Natural gas production expense					
Operation	$84,128	$	$ 84,128	1.000	84,000
Maintenance	22,182		22,182	1.000	22,000
Gas well royalties	143,342		143,342	1.686	242,000
Rental on non-oper. leases	101,344		101,344	1.000	101,000
Net credit for residua's pro.	166,233		166,233	1.343(4)	223,000
Total natural gas production	184,763		184,763	—	226,000
Credit for gas used	616,610	76,692(2)	693,302	1.686	1,169,000
Total	(431,847)	(76,692)	(508,539)	—	(943,000)
Gas purchased	1,118,861	(1)	1,118,861	1.686	1,886,000
Total gas production expense	687,014	(76,692)	610,322	—	943,000
Transmission expense					
Gas	498,116	76,692(2)	574,808	1.686	969,000
Operation Other	483,346	62,822	546,168	1.000	546,000
Maintenance	211,985	54,901	266,886	1.000	267,000
Rents	—	2,615	2,615	1.000	3,000
Total transmission expense	1,193,497	197,030	1,390,477	—	1,788,000
Customers' acct. & coll. exp.	13,673	—	13,673	1.000	14,000
Sales promotion expense	11,754	4,019	15,773	1.686	27,000
Administrative or general exp.	575,584	84,090	659,674	1.000	660,000
Total	2,481,472	208,300	2,689,919	—	3,432,000
Taxes	2,536,788	492,741	3,029,529	1.000	3,030,000
Total	5,018,260	701,041	5,719,448	—	6,462,000

(1) $2,596,406 omitted to avoid duplication.

(2) Less $109,575 for 489,110 M cu. ft. gas used in operation, P. E. P. L. Co. figure of $616,610 for 3,932,527 M cu. ft. or 15.68¢ per M cu. ft. This represents a cost of $76,692, which is included as credit for gas used.

(3) Annual capacity at 100% load factor, 250,000x365 equals 91,250,000 M cu. ft.
1940 deliveries to mains 54,116,525 M cu. ft.
Ratio 1.686

(4) Only one-half of increase volume ratio used to allow for increased cost of residual production.

MKT 7-7-41

Corrected 7-18-41

[fol. 10793] Exhibit 7

Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Necessary Price per M cu. ft. at 100% Load Factor
(000 Omitted)

Operating costs and taxes	$6,462
Depreciation, depletion, amortization and return	
Requirements for	
5% per annum return	4,754
6% " " "	5,302
7% " " "	5,886
8% " " "	6,485
Revenue requirements for	
5% per annum return	11,216
6% " " "	11,764
7% " " "	12,348
8% " " "	12,947
Necessary price per M cu. ft. on basis of 91,250,000 M cu. ft. per year for	
5% per annum return	0.123
6% " " "	0.129
7% " " "	0.136
8% " " "	0.142

MKT 7-15-41
Corrected 7-18-41
7

[fol. 10795] Exhibit 8.

Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Effect of 100% Load Factor on Earning Power of System

At 100% Load Factor the Michigan Consolidated Gas Company rate results in the following charge per therm:

12x$0.38 per therm annual demand charge	$ 4.56
365x$0.015 commodity charge	5.475
or a total cost for 365 therms of	$10.035
which is at the rate of	$0.0275 per therm

and with 1,055 BTU per cu. ft. gas the gate rate is

$\frac{100,000}{1,055}$ x $0.0275, or $0.26 per M cu. ft.

A 100% load factor and 250,000 M cu. ft. per day capacity provide a load of 91,250,000 M cu. ft. per year. At 25¢ per M cu. ft. this will produce a revenue of $23,725,000. After deducting operating expenses and taxes (taxes not adjusted for increased income taxes and excess profit taxes from such revenue) of $6,473,000 there would remain $17,252,000 for depreciation, depletion, amortization and return on the average cost new during 1940 of $73,044,000, or at the rate of 23.6% per year.

[fol. 10796] Exhibit 9.

Factors Affecting the Nature and Magnitude of Reported Net Incomes

The net income or net operating income disclosed on the income statement of any company will depend on the manner of accounting for costs resulting from the "risks" previously referred to. If these costs are classified as operating expenses, relatively low net incomes or net operating incomes will appear on the income statement. If they are classified as deductions from income or appropriations of surplus, a larger net income will be shown. Before determining the rate of return applicable to an enterprise it is therefore necessary to determine the accounting treatment prevailing with respect to costs resulting from risks. There are certain particular costs with respect to which there still is substantial variation in practice as between companies and which therefore have a particular significance with respect to the relative magnitudes of income shown on income statements. These points are:

(1) The extent to which losses of various kinds are provided for through the purchase of insurance, through self-insurance reserves or by inclusion, when incurred, in current operating costs.

(2) The specific point of transition from the classification of costs as operating costs to capital costs. This involves primarily the distinction between repairs charged

directly as current operating costs and repairs involving replacement in kind charged through the depreciation reserve account. It also involves the use of more substantial, and usually more expensive, construction in place of cheaper construction subject to greater maintenance, repair and physical depreciation charges.

[fol. 10797] (3) The specific character of the depreciation accounting practices. Particularly the extent to which current depreciation charges reflect wear and tear, rot and decay, inadequacy, obsolescence, changes in the art, storms, floods and other disasters, and the requirements of civil authorities.

(4) The extent to which the cost of changes resulting from requirements of civil authorities are compensated for by specific payments.

(5) The extent to which infrequently recurring costs resulting from unforeseen retirements, i. e., from storm, flood, and similar disasters or unforeseen developments in the art or changes in public demand have been included either in (a) current operating costs, (b) provided for out of current or accrued surplus, or (c) guarded against by more substantial construction.

(6) The extent to which improvements in the art are acquired, either (a) by the conduct of a research department, the costs of which are included either in (1) the current operating costs, or (2) in the cost of fixed capital items, or (b) by the acquisition of patents from others, the costs of which are included either in (1) the current operating costs, or (2) in the cost of fixed capital items.

(7) The extent to which management costs, in many forms of investments necessarily met out of returns, are included in current operating costs.

(8) The nature and magnitude of risks peculiar and individual to the natural gas industry as conducted by the companies under discussion but not included in the preceding list and not common to all the business of the Nation as a whole. Among these would be the risk that,

during periods of prosperity natural gas use and profits would not increase as rapidly as business and business profits generally, and that during periods of depression the gas business and profits would decrease more rapidly than business and business profits generally. Conversely, this could be a benefit if the gas business and profits increased more rapidly during business prosperity and did not decrease as fast or as far during depression periods. In this class would also come the variation in probability of supersession by other means of heat energy supply as compared with the general probability of supersession of [fol. 10798] other tools of enterprise. (This, of course, relates only to that portion of the risk not previously provided for in (5) and (6) in connection with obsolescence and similar provisions.

(9) The relation between the price level at which a cost was incurred, the probable price levels at which various parts of the cost will be recovered, the price levels of other commodities at the same instances and the particular point during the investment period at which the rate of return under discussion is to apply.

(10) As between enterprises the practice differs with respect to the accounting treatment of bad debts. If a net income is calculated on the basis of total sales or billings without adjustment for uncollectible bills or bad debts, the costs incident to the incurrence of these must be met out of the income. On the other hand, if the income is determined on the basis of actual cash receipts or after allowance for bad debts in operating expenses, the reported income is exclusive of this risk and lower than it would be under the first condition.

(11) Certain investments, particularly state and government bonds, are partly or entirely exempt from taxation. In making comparisons between the returns on securities of this kind with returns on other investments, this factor must be properly reflected.

[fol. 10799]

Exhibit 10

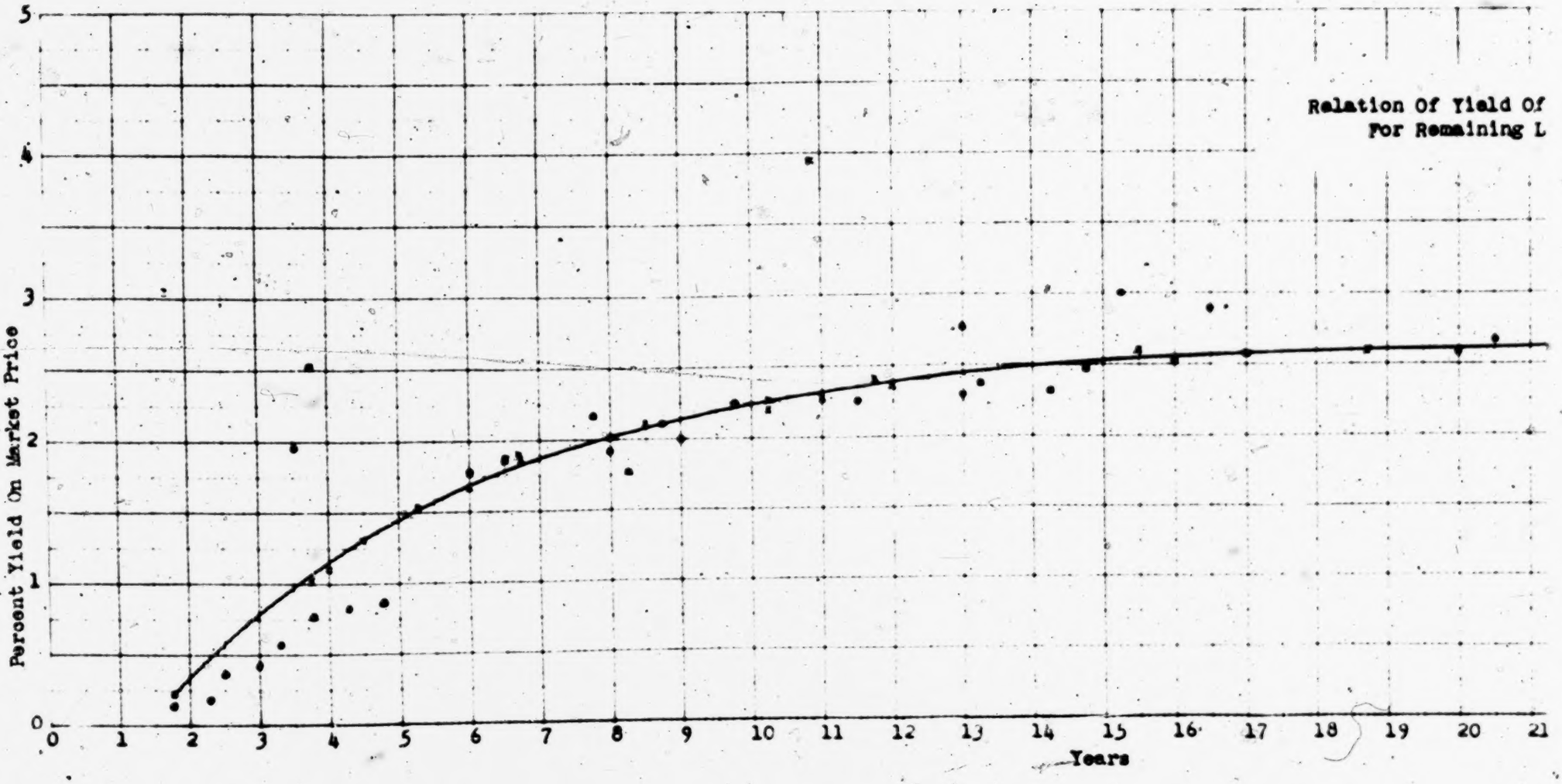
Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Company

Effect Of Variation In Accounting Practices
On Reported Incomes Of An Enterprise

	Plan A		Plan B	
Net Investment	$100,000		$100,000	
Revenues, per Annum		$30,000		$30,000
Materials & Wages	20,000		20,000	
Insurance, etc.	—		5,000	
Total Operating Expense		20,000		25,000
Gross Income		10,000		5,000
% Gross Income		10		5
Deduction from Gross Income account of injuries, damages, fires and other losses	5,000			
Net Income	5,000		5,000	
% Net Income	5		5	

MKT 7-10-41

B


Relation Of Yield Of
For Remaining L
Percent Yield On Market Price
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1
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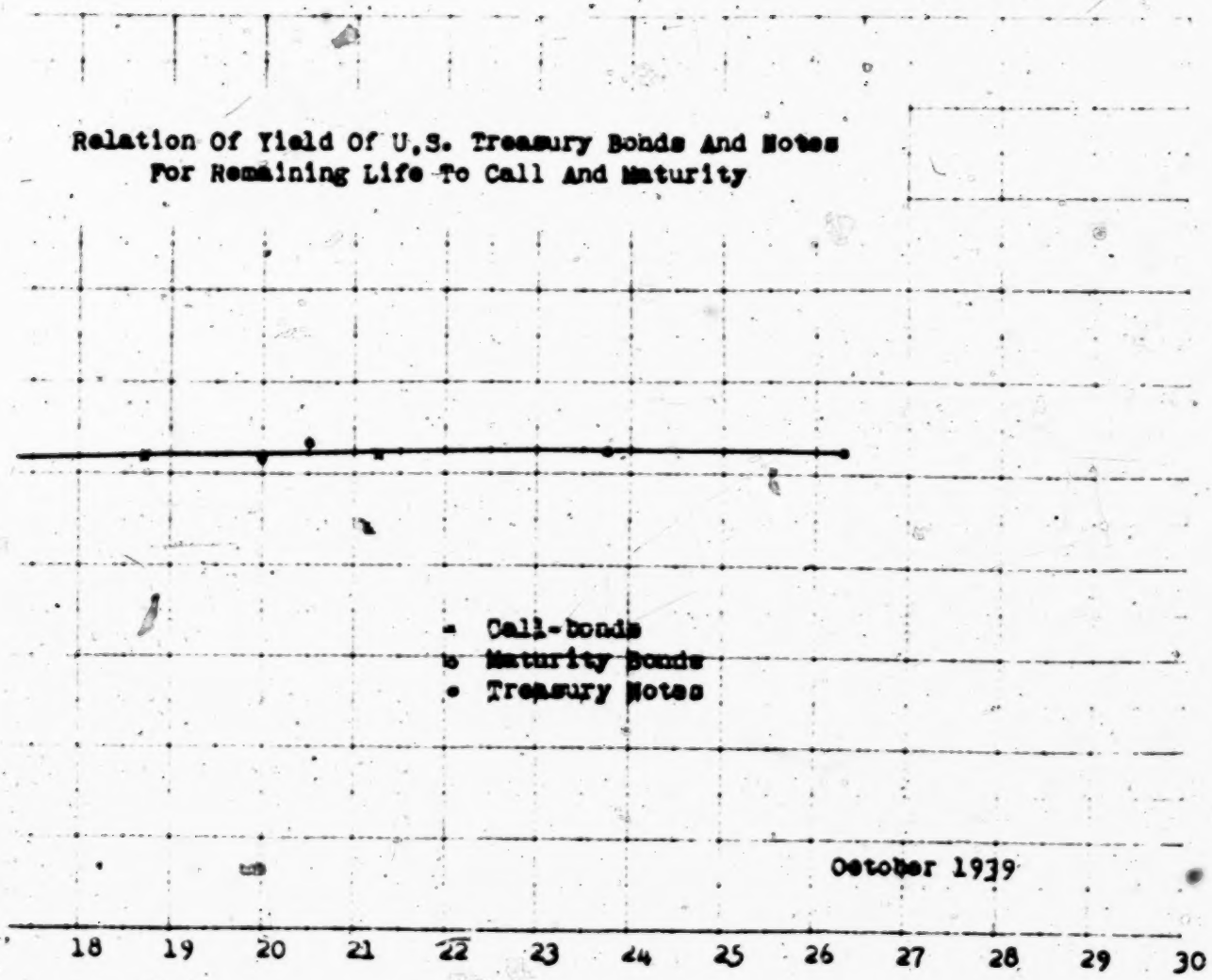
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Years

EXHIBIT 11


Relation Of Yield Of U.S. Treasury Bonds And Notes
For Remaining Life To Call And Maturity
- Call-bonds
- Maturity Bonds
- Treasury Notes
October 1939
18
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[fol. 10801] Exhibit 12

United States Treasury Bonds
Yields and Years to Call Date

(Based on Data in July 6, 1941 New York Times)

Issue		Yield to Call	Years to Call Date
3-1/4s	1941 (Aug. 1)	—	0.06
3-3/8s	1947-43 (June 15)	0.12	0.94
3-1/4s	1945-43 (Oct. 15)	0.19	2.28
3-1/4s	1946-44 (April 15)	0.33	2.78
4s	1954-44 (Dec. 15)	0.55	3.44
2-3/4s	1947-45 (Sept. 15)	0.67	4.19
2-1/2s	1945 (Dec. 15)	0.63	4.44
3-3/4s	1955-46 (March 15)	0.87	4.69
3s	1948-46 (June 15)	0.82	4.94
3-1/8s	1949-46 (June 15)	0.84	4.94
4-1/4s	1952-47 (Oct. 15)	1.07	6.28
2s	1947 (Dec. 15)	.94	6.44
2s	1950-48 Mach. (T)	1.45	6.69
2-3/4s	1951-48 (March 15)	1.17	6.69
2-1/2s	1948 (Sept. 15)	1.11	7.19
2s	1950-48 (Dec. 15)	1.08	7.44
3-1/8s	1952-49 (Dec. 15)	1.43	8.44
2-1/2s	1953-49 (Dec. 15)	1.46	8.44
2-1/2s	1952-50 (Sept. 15)	1.51	9.19
2-3/4s	1954-51 (June 15)	1.60	9.94
3s	1955-51 (Sept. 15)	1.59	10.19
2-1/4s	1953-51 (Dec. 15)	1.55	10.44
2-1/2s	1954-52 (T) (March 15)	1.94	10.69
3s	1955-53 (June 15)	1.54(1)	11.94
2-1/4s	1956-54 (June 15)	1.65	12.94
2-7/8s	1960-55 (March 15)	1.89	13.69
2-1/2s	1958-56 (T) (March 15)	2.16	14.69
2-3/4s	1959-56 (Sept. 15)	1.91	15.19
2-3/4s	1963-58 (June 15)	1.98	16.94
2-3/4s	1965-60 (Dec. 15)	2.02	19.44

(T) Subject to Federal Income Tax.
(1) Reported as 0.54, apparently typographical error.

MKT 7-9-41
L1

[fol. 10802]

United States Treasury Notes
Yield and Years to Call Date

(Based on Data in July 6, 1941 New York Times)

Issue	Rate	Yield	Years to Call Date
Dec. 1941	1-1/4%		0.44
March 1942	1-3/4		0.69
Sept. 1942	2		1.19
Dec. 1942	1-3/4	0.04	1.44
March 1943	3/4	0.04	1.69
June 1943	1-1/8	0.06	1.94
Sept. 1943	1	0.08	2.19
Dec. 1943	1-1/8	0.13	2.44
March 1944	1	0.25	2.69
June 1944	3/4	0.32	2.94
Sept. 1944	1	0.32	3.19
Sept. 1944 (T)	3/4	0.62	3.19
March 1945	3/4	0.41	3.69
Dec. 1945 (T)	3/4	0.69	4.44

(T) Subject to Federal Income Tax.

MKT 7-9-41
L2

BOND SALES ON THE STOCK EXCHANGE

SATURDAY, JULY 5, 1941

	U. S. Govt.	Domestic	Foreign	Total All
Day's sales	$8,400	$3,280,200	$136,000	$3,424,600
Previous day	22,350	6,751,200	475,600	7,249,550
Year to date	$9,805,775	$1,029,871,600	881,821,100	$1,121,498,475
1940	26,032,500	712,340,000	124,115,000	862,487,500

UNITED STATES GOVERNMENT BONDS

1941 High	1941 Low	Sales in 1000s	Issue	High	Low	Last	Net Change	Stock Excge. 3 P. M. Bid	Stock Excge. 3 P. M. Asked	Yield to Call Date	Dealers' 4 P. M. Bid	Dealers' 4 P. M. Asked
102 19	101 21	..	Treasury 3¼s 1941				..	100 6	....	*	100.6	....
107 25	106 12	..	Treasury 3¾s 1941-43				..	106.7	106.10	.12	106.6	106.8
108 6	106 26	1	Treasury 3¼s 1943-45	106 27	106 27	106 27	..	106 27	106.30	.19	106 27	106.29
109 9	107 29	1	Treasury 3¼s 1944-46	107 31	107 31	107 31	— 2	107 31	108.2	.33	108 00	108.2
109 4	109 4	1½	Treasury 3¼s 1946-66 reg.	107 28	107 28	107 28	Old					
111 18	111 19	17	Treasury 4s 1954-44	111 21	111 21	111 21	Old	111 21	111.24	.56	111 22	111 24
109 24	108	..	Treasury 2¾s 1947-45				..	108.16	108.19	.67	108.16	108.18
108 16	107 22	..	Treasury 2½s 1945				..	108.3	108.6	.63*	104.4	108.6
115 7	113 3	..	Treasury 3¾s 1955-46				..	113.4	113.7	.87	113.4	113.6
111 21	109 24	..	Treasury 3s 1946-46				..	110.15	110.18	.82	110.16	110.18
112 12	110 11	..	Treasury 3¼s 1949-46				..	110.31	111.2	.84	110.31	111.1
121 26	119 4	..	Treasury 4¼s 1952-47				..	119.3	119.6	1.07	119.3	119.5
106 28	104 28	..	Treasury 2s 1947				..	106.15	106.18	.94*	106.17	106.19
103 2	100 24	..	Treasury 2s 1950-48 March (T)				..	103.13	103.16	1.45	103.15	103.17
110 9	107 27	..	Treasury 2¾s 1951-48				..	109.31	110.2	1.17	110.1	110.3
109 22	107 16	..	Treasury 2½s 1948				..	109.16	109.19	1.11*	109.17	109.19
106 8	104 12	..	Treasury 2s 1950-48				..	106.16	106.19	1.08	106.17	106.19
114 9	112 15	..	Treasury 3¼s 1952-49				..	113.12	113.15	1.43	113.14	113.16
108 1	105 2	..	Treasury 2¾s 1953-49				..	108.4	108.7	1.46	108.6	108.8
108 8	105 4	..	Treasury 2½s 1952-50				..	108.12	108.15	1.31	108.14	108.16
110 14	107 2	2	Treasury 2¾s 1954-51	110 14	110 14	110 14	+ 1	110.14	110.17	1.60	110.16	110.18
111 6	108 4	..	Treasury 3s 1955-51				..	113.5	113.8	1.59	113.8	113.10
106 19	105 5	..	Treasury 2¼s 1953-51				..	106.20	106.23	1.35	106.21	106.23
105 9	103 8	..	Treasury 2½s 1954-52 (T)				..	105.11	105.14	1.94	105.12	105.14
105 3	103 24	..	Treasury 2s 1955-53				..	104.29	105.1	.54	104.30	105.00
106 26	104 5	..	Treasury 2¼s 1956-54				..	106.28	106.31	1.65	106.29	106.31
111 24	107 14	..	Treasury 2½s 1960-55				..	111.19	111.22	1.89	111.21	111.23
104 2	103 1	..	Treasury 2½s 1958-56 (T)				..	104.6	104.8	2.16	104.6	104.8
111	107 1	..	Treasury 2¾s 1959-56				..	110.30	111.1	1.91	110.31	111.1
110 31	106 31	..	Treasury 2¾s 1961-58				..	110.31	111.2	1.98	111.1	111.3
111 22	107 8	1	Treasury 2¾s 1965-60	111 20	111 20	111 20	+ 4	111.17	111.20	2.02	111.17	111.19
103 3	101 28	..	Federal Farm Mtge. 3s 1947-42				..	101.28	101.31	..	101.29	102.00
104	102 15	..	Federal Farm Mtge. 2¾s 1947-42				..	101.28	101.31	..	101.29	102.00
107 28	106 26	..	Federal Farm Mtge. 3¼s 1964-44				..	107	107.3	.57	107.1	107.3
108	106 28	..	Federal Farm Mtge. 3s 1949-44				..	107.4	107.6	.47	107.4	107.6
103	102 5	..	Home Owners Loan 2¼s 1944-42				..	102.4	102.6		102.5	102.7
107 26	106 17	..	Home Owners Loan 3s 1952-44				..	105.24	106.26	.57	106.24	106.26
103 2	101 29	..	Home Owners Loan 1¼s 1947-45				..	102.23	102.25	.77	102.23	102.25

*Yield to maturity. Quotations after decimals in the above table represent 32ds of a point. T Subject to Federal taxes.

U. S. GOVERNMENT A

TREASURY NOTES

Outstanding Millions		Rate	Bid	Asked	Yield
204	Dec., '41	1¼	101.29	101.31	..
426	Mar., '42	1¾	102.9	102.11	..
342	Sept., '42	2	103.12	103.14	..
232	Dec., '42	1¾	103.5	103.7	..
66†	Mar., '43	¾	101.3	101.6	0.04
629	June, '43	1⅛	102.1	102.3	0.04
279	Sept., '43	1	101.30	102	0.08
421	Dec., '43	1⅛	102.11	102.13	0 13
515	Mar., '44	1	101.30	102	0 25
416	June, '44	⅝	101.6	101.8	0.32
283	Sept., '44	1	102.2	102.5	0 32
635†	Sept., '44	¾	100.10	100.12	0.62
718	Mar., '45	¾	101.5	101.7	0 41
531†	Dec., '45	¾	100.5	100.7	0 69

†Subject to Federal taxes.

TREASURY BILLS

(Subject to Federal taxes)

For discount at purchase:

		Bid.	Asked.
400	July 9-16-23-30	0.13%	....
400	Aug. 6-13-20-27	0.13%	....
700	Sept. 3-10-17-24	0.13%	....
100	Oct. 1	0.13%	....

INSULAR BONDS

	Rate	Date	Bid.	Ask.
Hawaii	4½	Oct., 1956-46	115	116½
Philippines	4½	July, 1937	107	108½
Philippines	4½	Oct., 1959	107½	110½
Philippines	4½	July, 1952	107	109
Philippines	5	Feb., 1952	109	112
Philippines	5½	Aug., 1941	100½	100⅝
Puerto Rico	4½	Jan., 1956	122	124½
Puerto Rico	5	July, 1948-43	106½	107⅝

6, 1941.

GOVERNMENT AND AGENCY BONDS

EASURY NOTES

	Rate	Bid	Asked	Yield.
'41	1¼	101.29	101.31	..
'42	1⅜	102.9	102.11	..
'42	2	103.12	103.14	..
'42	1¼	103.5	103.7	..
'43	¾	101.3	101.6	0.04
'43	1⅛	102.1	102.3	0.04
'43	1	101.30	102	0.08
'43	1⅛	102.11	102.13	0 13
'44	1	101.30	102	0 25
'44	⅞	101.6	101.8	0.32
'44	1	102.2	102.5	0 32
'44	¾	100.10	100.12	0.62
'45	⅞	101.5	101.7	0.41
'45	¾	100.5	100.7	0 69

t to Federal taxes.

EASURY BILLS

ct to Federal taxes)
ount at purchase:

	Bid.	Asked.
9-16-23-30	0.13%	....
6-13-20-27	0.13%	....
3-10-17-24	0.13%	....
1	0.13%	....

SULAR BONDS

Rate.	Date.	Bid.	Ask.
4½	Oct., 1958-48	115	116⅜
4½	July, 1957	107	108⅜
4½	Oct., 1950	107⅜	110⅛
4½	July, 1952	107	109
5	Feb., 1952	109	112
5½	Aug., 1941	100½	100⅝
4½	Jan., 1956	122	124⅛
3	July, 1943-43	106⅛	107⅜

U. S. BONDS

	Bid.	Asked.
Panama 3s, 1961	125	126
Conversion 3s, 1947	112	112⅜
Conversion 3s, 1946	110⅝	111

FEDERAL LAND BANK BONDS

			Bid.	Asked.	Yld.
4s	July,	1946-44	110¼	110½	0 [illegible]
4s	July,	1944-44	109⅝	110¼	0 [illegible]
3½s	May,	1955-45	108 [illegible]	109 [illegible]	0 [illegible]
3s	July,	1955-45	108⅜	108¼	0 78
3s	Jan.,	1956-46	109⅜	109⅝	0 79
3s	May,	1956-46	110	110¼	0 83

FEDERAL HOME LOAN BANKS

Outst'g Millions	Rate			Bid.	Asked.	Yld.
52	⅜	Apr.	15, 1942	100.8	100.11	0 71
23.8	2	Apr.	1, 1943	102.20	103.24	0.41

RECONSTRUCTION FINANCE

200	⅛	Nov.	1, 1941	100.21	100.23	..
310	⅜	Jan.	15, 1942	100.20	100.22	..
274	1	July	1, 1942	101.	101.2	..
320	⅜	Oct.	15, 1942	100.22	100.24	0.29
344	1⅛	July	15, 1943	101.2	101.4	0.56
373	1	Apr.	15, 1944	100.21	100.23	0.78

† Subject to Federal taxes.

FEDERAL NAT. MORTG. ASSN.

29	2	May	16, '43-41	101.11	101.14	..
55	1⅝	Jan	3, '44-42	101.21	101.24	0.09

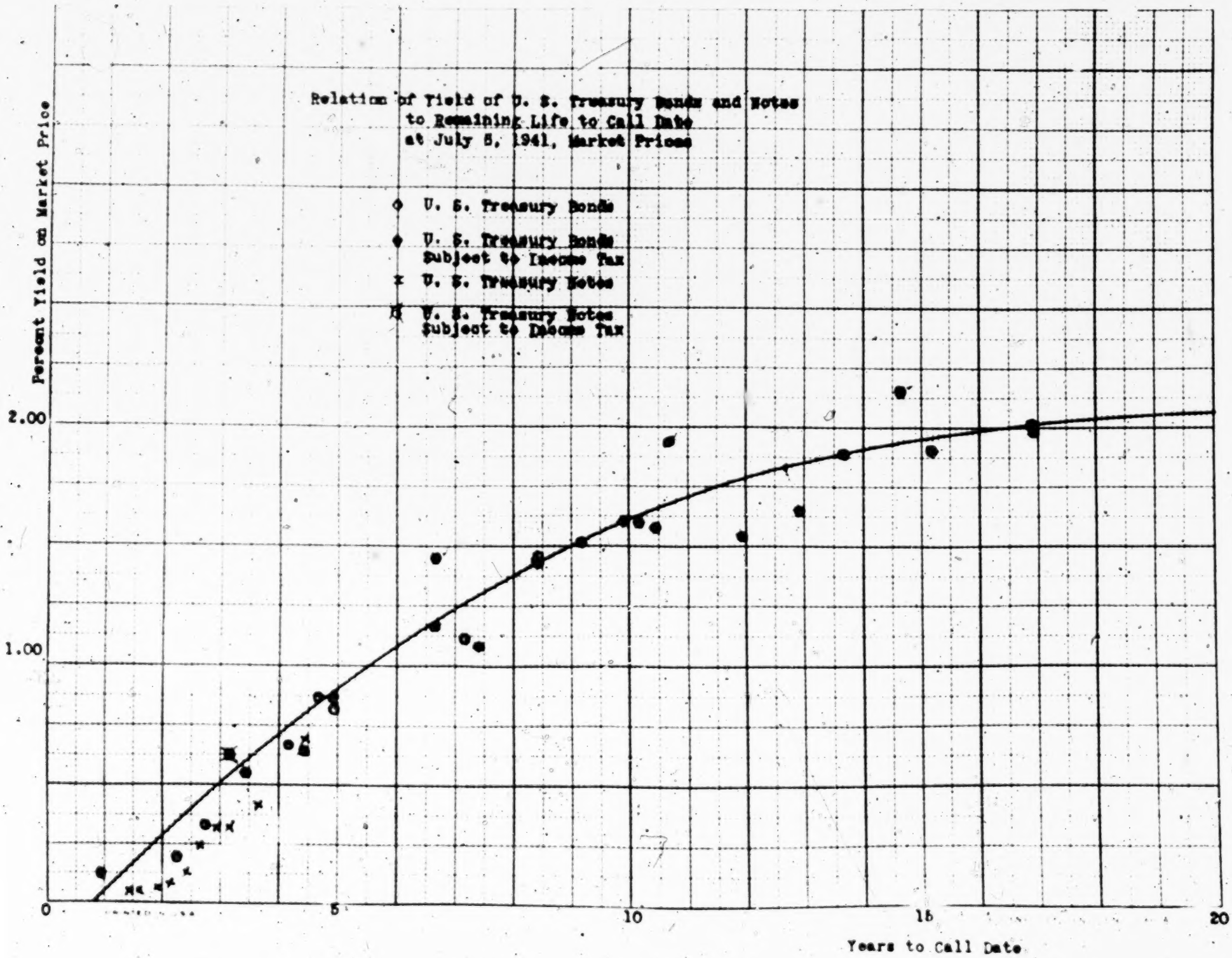
COMMODITY CREDIT CORP.

203	⅜	Aug	1, 1941	100.17	100.19	..
204	1	Nov	15, 1941	100.21	100.23	..
289	⅜	May	1, 1943	100.2[illegible]	100.[illegible]	0.25

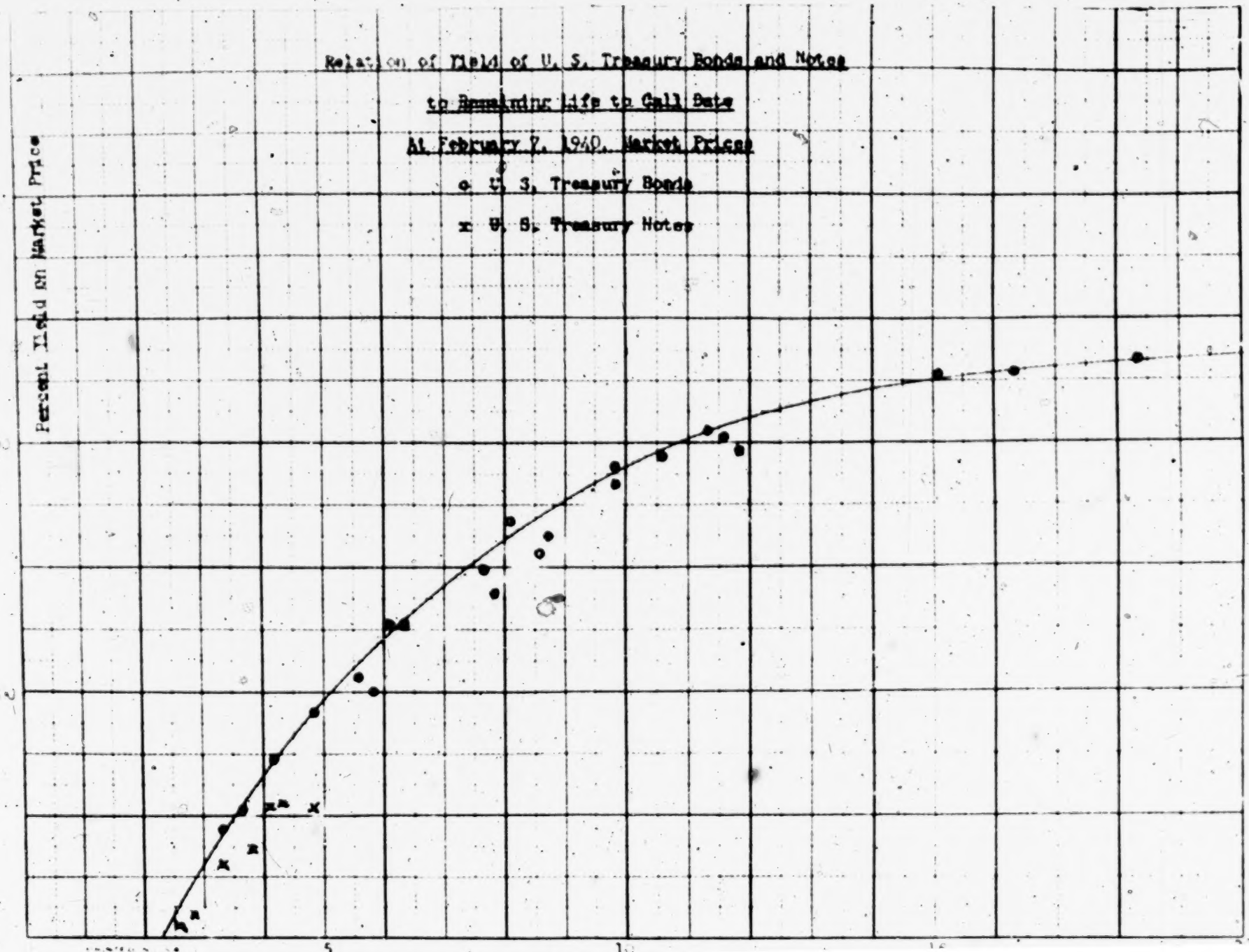
U. S. HOUSING AUTHORITY

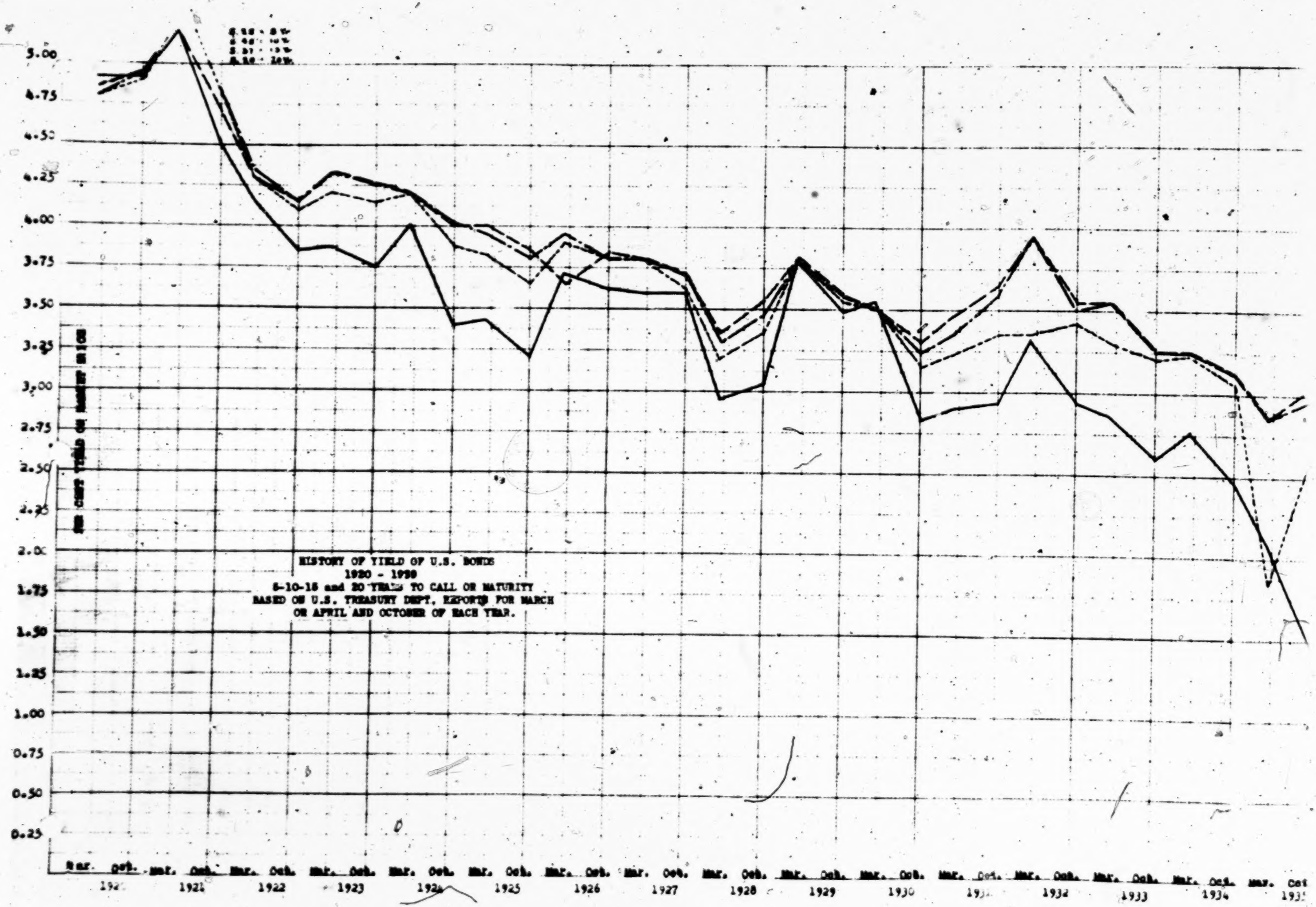
112	⅛	Nov.	1, 1941	100	100.2	0.05
114	1⅛	Feb.	1, 1944	102.12	102.14	0.43

PART OF EXHIBIT 12.



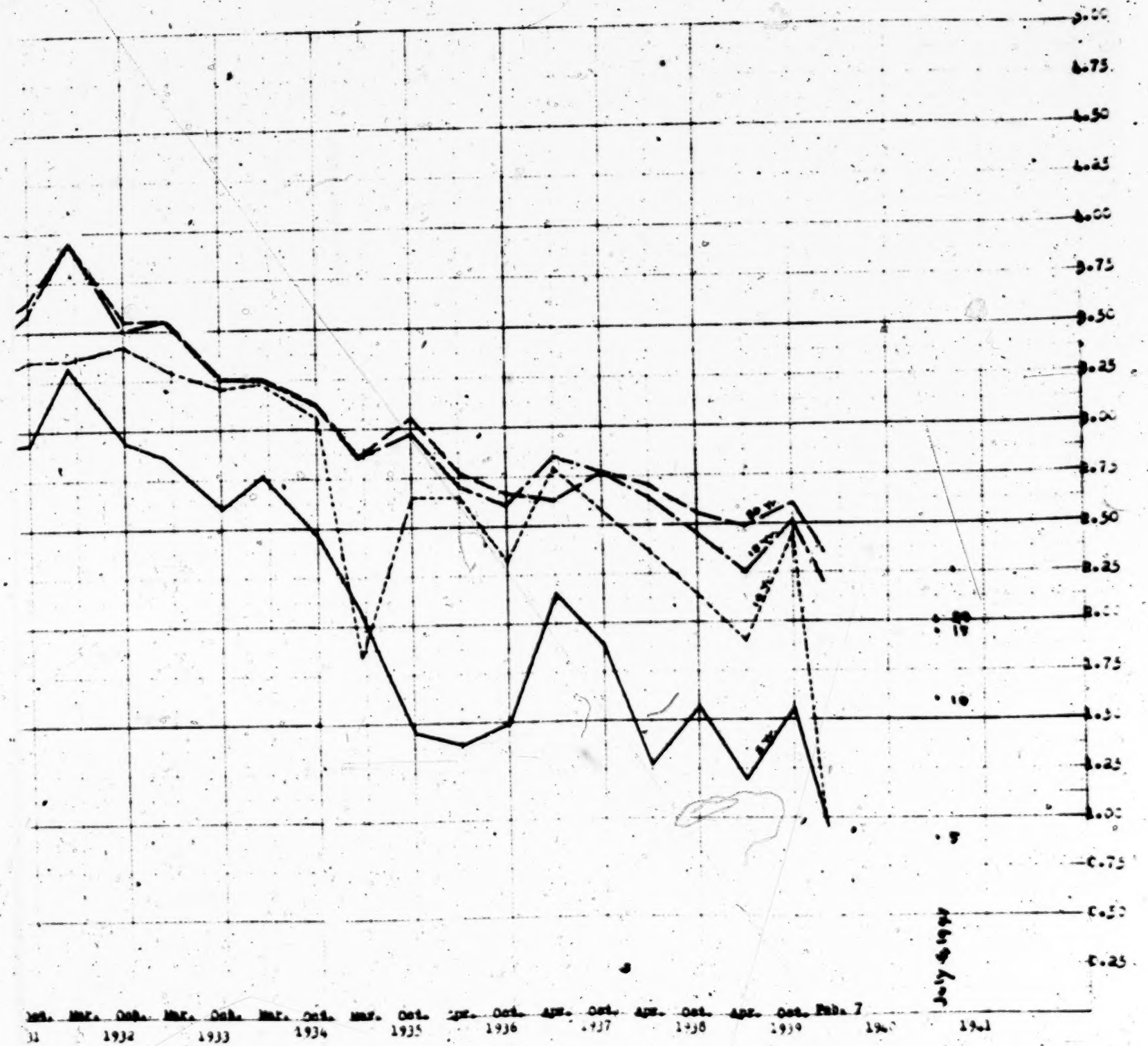
PART OF EXHIBIT 12.





HISTORY OF YIELD OF U.S. BONDS
1920 - 1939
6-10-15 and 20 YEARS TO CALL OR MATURITY
BASED ON U.S. TREASURY DEPT. REPORTS FOR MARCH
OR APRIL AND OCTOBER OF EACH YEAR.

EXHIBIT 13.


Oct. 1932
Mar. 1933
Oct. 1933
Mar. 1934
Oct. 1934
Mar. 1935
Oct. 1935
Apr. 1936
Oct. 1936
Apr. 1937
Oct. 1937
Apr. 1938
Oct. 1938
Apr. 1939
Oct. 1939
Feb. 7 1941
July 4 1941

[fol. 10807] Exhibit 14

Average Yield of Annually Maturing Investment with Yield of Each Maturity Equal to the Yield of U. S. Treasury Bonds or Notes of Equal Maturity

(Equal Annual Maturities)

Life years	Percent yield (1)	Life years	Percent yield (1)	Life years	Percent yield (1)
1	0.05	11	1.708	21	2.075
2	0.285	12	1.785	22	2.088
3	0.502	13	1.85	23	2.10
4	0.710	14	1.91	24	2.112
5	0.780	15	1.95	25	2.125
6	1.075	16	1.988	26	2.137
7	1.235	17	2.013	27	2.150
8	1.375	18	2.038	28	2.162
9	1.500	19	2.05	29	2.175
10	1.613	20	2.063	30	2.178
			Total		49.782
			Average		1.66

(1) Interpolation and exterpolation from July 6, 1941 yields of various issues of U. S. Treasury Bonds and Notes. Exterpolation also guided by consideration of yield records since 1920.

MKT 7-11-41

O

[fol. 10808] (Exhibit 14-A.)

For Release in Morning Newspapers of Wednesday, May 28, 1941.

Securities and Exchange Commission
Washington, D. C.

Holding Company Act

Release No. 2778

In the Matters of

Panhandle Eastern Pipe Line Company,

File Nos. 31-109, 31-493, 31-108

Columbia Oil & Gasoline Corporation,

File Nos. 31-107; 31-106

Columbia Gas & Electric Corporation,

File Nos. 31-422, 31-423

Public Utility Holding Company Act of 1935—Section 2(a) (8)

Findings and Opinion of the Commission.

Declaration of Status

Subsidiary Company

Applications filed pursuant to Section 2(a) (8) of the Act requesting orders declaring companies not to be subsidiary companies of specified holding companies owning more than 10 percent of applicants' outstanding voting securities, denied in part upon applicants' failure to show that their management and policies are not subject to a controlling influence by such holding companies within the meaning of Section 2(a) (8) of the Act, and granted conditionally insofar as it appears that one of such holding companies did not exercise such control or controlling influence over one of applicants.

Appearances:

William L. Glenn and Edward N. Goodwin for Panhandle Eastern Pipe Line Company.

Douglas M. Moffat and William Wemple, of Cravath, deGersdorff, Swaine & Wood, for Columbia Gas & Electric Corporation.

William H. Button and James B. Alley, for Columbia Oil & Gasoline Corporation.

[fol. 1080A] Robert J. Bulkley, Richard B. Hand, and Arthur G. Logan, for Missouri-Kansas Pipe Line Company.

Kenneth L. Sater, Assistant Attorney General, for the Public Utilities Commission of Ohio.

James H. Lee, for the City of Detroit.

Ambrose Selig and John Houser, for the Public Utilities Division of the Commission.

This proceeding arises out of a series of applications involving the status, under the Public Utility Holding

Company Act of 1935, of Columbia Oil & Gasoline Corporation and Panhandle Eastern Pipe Line Company. Both of these companies have filed applications under Section 2(a) (8) of the Act for orders declaring them not to be subsidiaries of Columbia Gas & Electric Corporation.[1] Columbia Gas & Electric Corporation, a registered holding company, has applied for orders declaring that neither of these companies is its subsidiary.[2]

The application of Panhandle Eastern Pipe Line Company, in addition, requests orders declaring it not to be a subsidiary of Columbia Oil & Gasoline Corporation or Missouri-Kansas Pipe Line Company.[3]

Panhandle Eastern has also applied for an order declaring it not to be a gas utility company within the meaning of Section 2(a) (4) of the Act,[4] and Columbia Oil has requested exemption for itself and its subsidiaries pursuant to Section 3(a) (3) of the Act.

[fol. 10810] On February 13, 1941, we ordered the hearings upon these applications consolidated.[5] We permitted intervention by the City of Detroit, and, because of an interest which will subsequently be commented upon, we permitted Mokan to participate in the proceeding to the extent of cross-examining witnesses, adducing evidence, filing briefs and presenting oral argument on matters involving Panhandle Eastern.

---

[1]The Columbia Oil & Gasoline Corporation application was finally amended on March 28, 1941, (File No. 31-107). The Panhandle Eastern Pipe Line Company application was finally amended on December 3, 1940, (File No. 31-109).

[2]These applications dated April 7, 1938, relate also to certain subsidiaries of both Columbia Oil & Gasoline Corporation and Panhandle Eastern Pipe Line Company (Files No. 31-422, 31-423).

[3]In the course of this opinion the various companies involved will be referred to as follows:

Panhandle Eastern Pipe Line Company—Panhandle Eastern
Columbia Oil & Gasoline Corporation—Columbia Oil
Columbia Gas & Electric Corporation—Columbia Gas
Missouri-Kansas Pipe Line Company—Mokan
Michigan Gas Transmission Corporation—Michigan Gas

All of these companies are Delaware corporations.

[4]File No. 31-108. The latest amendment to this application occurred on February 1, 1941.

[5]Holding Company Act Release No. 2554, February 13, 1941.

After due notice a hearing was held. After conference before us between counsel involved, counsel agreed to forego a trial examiner's report. Requests for findings and briefs were filed and we heard argument.

In our order of February 13, 1941, we provided for consolidation of the hearings with respect to all the applications noted above. This order expressly reserved our right, "if at any time it may appear conducive to an orderly and economic disposition of either proceeding, to order a separate hearing concerning either matter, to close the record with respect to either matter, or to take action on either matter prior to closing the record on said other matter." Thus far, the issues presented under Section 2(a) (8) have completely absorbed the attention of all parties to the proceeding. It has been suggested that it would be highly desirable to have our decision on the questions under Section 2(a) (8) at the earliest possible date; and we have been requested by counsel for the Public Utilities Division to defer consideration of the applications under Sections 2(a) (4) and 3(a) (3) until the staff shall have had more time to study and appraise them and prepare any further presentation of evidence or argument which may seem appropriate. We think it conducive to an orderly and economic disposition of this proceeding to grant this request, and we shall decide here only the questions arising under the Section 2(a) (8) applications. We expect, of course, that immediate steps will be taken for study of the problems presented in the Sections 2(a) (4) and 3(a) (3) applications with a view to their speedy determination.

The Applicants

Panhandle Eastern is a company engaged in the production, transmission and sale of natural gas. It taps fields in Texas and Kansas, and its lines run through Texas, Oklahoma, Kansas, Missouri and Illinois. It has outstanding:

$12,000,000 Series B 3% bonds due November 1, 1960

$6,250,000 Series A 6% bonds due serially November 1, 1946 to November 1, 1950

$5,000,000 of notes due serially November 1, 1942 to November 1, 1945

[fol. 10811]

Class A, $100 par preferred stock,* $6 cumulative, participating	100,000 shares
Class B, $100 par preferred stock, * $6 cumulative, non-participating	10,000 shares
Common stock, no-par	807,367 shares

* (Class A stock is redeemable, Class B is not)

All of Panhandle Eastern's preferred stock is held beneficially* for Columbia Oil, and Columbia Oil owns beneficially 404,326 shares, or 50.1% of Panhandle Eastern's common stock. 339,475 shares, or 42.0% of the common stock, is owned by Mokan. The remaining 7.9% is in the hands of over 1,700 holders. The bonds of Panhandle Eastern (many of which are bearer bonds) are stated to be held by interests unaffiliated with the Columbia companies.

All classes of Panhandle Eastern's stock vote share for share except in the election of directors. In such elections the Class A preferred has no vote; the Class B preferred as a class has the right to elect two out of a total of nine directors; and the common stock as a class, with the privilege of voting cumulatively, has the right to elect the other seven. Thus, subject to considerations to be discussed further on in this opinion, Columbia Oil has a substantial voice in Panhandle Eastern's affairs and is empowered to select a majority of its board.

Columbia Oil was formed by Columbia Gas in 1930 to acquire the securities of oil and gasoline subsidiaries of Columbia Gas. It has outstanding the following securities:

6% debentures due 1956	$21,000,000 principal amount
Preferred stock, participating	400,000 shares
Common stock, $1 par	2,336,826 shares

*The manner and occasion for this holding will be discussed subsequently

Columbia Gas holds all the preferred stock, which has full voting rights, and may elect the largest minority of the Columbia Oil board. Columbia Gas also holds all of the outstanding debentures. It holds none of the common stock. This stock, issued to Columbia Gas on the formation of Columbia Oil in 1930, was in the same year placed in a voting trust. The voting trust certificates were, in that year, distributed to the holders of Columbia Gas common stock as a dividend. The identity of record common stock ownership of Columbia Oil and Columbia Gas which existed by virtue of this distribution has decreased from the original 100% to about 72%. The voting trustees of this trust were at all times persons presently or previously connected with the Columbia Gas management. The trust was terminated on May 28, 1936, and the stock distributed to the beneficial owners.

[fol. 10812] Columbia Oil and Panhandle Eastern are thus subsidiaries of Columbia Gas, and Panhandle Eastern is a subsidiary of Columbia Oil under Section 2(a) (8). It is contended, however, that there is no chain of control or controlling influence making it necessary to subject either Columbia Oil or Panhandle Eastern to the requirements of the Act applicable to subsidiaries of registered holding companies.[7]

---

[7] Section 2(a) (8) defines the term "'subsidiary company' of a specified holding company" to mean "any company 10 per centum or more of the outstanding voting securities of which are directly or indirectly owned, controlled, or held with power to vote, by such holding company (or by a company that is a subsidiary company of such holding company by virtue of this clause or clause (B)), unless the Commission, as hereinafter provided, by order declares such company not to be a subsidiary company of such holding company."

Upon application, the Commission may declare that a company is not a subsidiary company of a specified holding company only if it finds that:

"(i) the applicant is not controlled, directly or indirectly, by such holding company (either alone or pursuant to an arrangement or understanding with one or more other persons) either through one or more intermediary persons or by any means or device whatsoever, (ii) the applicant is not an intermediary company through which such control of another company is exercised, and (iii) the management or policies of the applicant are not subject to a controlling influence, directly or indirectly, by such holding company (either alone or pursuant to an arrangement or understanding with one or more other persons) so, as to make it necessary or appropriate in the public interest or for the protection of investors or consumers that the applicant be subject to the obligations, duties and liabilities imposed in this title upon subsidiary companies of holding companies."

The Relationship Between Columbia Oil and Columbia Gas

Columbia Oil was used as a vehicle by Columbia Gas for investment in Panhandle Eastern, and Columbia Gas has been the sole source of capital for this investment.[8] [fol. 10813] We shall note later the effect of this investment on the affairs of Columbia Oil and Panhandle Eastern, for out of it Columbia Gas expected "a certain flow

[8]Columbia Oil's investment in Panhandle Eastern began in 1930. On September 17, 1930, Mokan, which then owned all of the common stock of Panhandle Eastern, sold 50% of that stock to Columbia Oil. Mokan then transferred the remaining half of Panhandle Eastern's stock to Panhandle Corporation, all of whose securities Mokan held. Mokan, which had issued notes for over $1,000,000 with 90% of Panhandle Corporation's stock pledged as security, lost 75% of that stock in 1933. This stock was subsequently on February 6, 1936, acquired by Columbia Oil which also acquired all of Panhandle Corporation's indebtedness.

On October 23, 1930, Columbia Oil purchased from the National City Bank Panhandle Eastern's first mortgage bonds in the principal amount of $20,000,000.

Early in 1931 Panhandle Eastern received capital from Columbia Oil for pipe line construction in the amount of $1,945,500 in exchange for which it issued to Columbia Oil that amount in 6% notes and 109,900 shares of its common stock. Mokan through Panhandle Corporation made an equal capital contribution and took an equal amount of notes and stock.

Columbia Gas, in order to enable Columbia Oil to invest in Panhandle Eastern, had advanced to it, by the end of 1935, $32,232,652.24. Columbia Oil in return gave its notes, secured by the pledge of the Panhandle Eastern's securities received by it. Columbia Gas also advanced to Columbia Oil $1,882,071.75 for investment in the securities of Indiana Gas Transmission Corporation in exchange for Columbia Oil 6% notes. On February 28, 1936, in a transaction which we shall subsequently discuss, Columbia Oil surrendered the securities of Indiana Gas to Columbia Gas in exchange for its notes secured by those securities.

In 1936 Columbia Oil transferred to Columbia Gas $14,574,500 of Panhandle Eastern mortgage bonds and in exchange Columbia Gas cancelled that amount of Columbia Oil's indebtedness to it. Columbia Gas sold these bonds to several insurance companies in July of 1936, at a profit of $722,895.

The present round figure of $21,000,000 of Columbia Oil debt held by Columbia Gas is accounted for by Columbia Gas' purchase of an additional $3,342,000 of debentures, $2,000,000 of which was used by Columbia Oil for the purchase of 80,000 additional shares of Panhandle Eastern common stock.

Between 1936 and 1939 the holdings of Mokan and Columbia Oil in the common stock of Panhandle Eastern were equalized. The present unequal division of the common stock between these companies results from the distribution by Mokan to its stockholders, in 1939, of a block of warrants for 80,000 shares. This transaction will be discussed further on in this opinion.

of earnings," and assurance of "future voting rights." Columbia Oil, although it is merely a means of administering assets placed in its hands by Columbia Gas nevertheless claims independence from that company.

There has been no serious attempt to negative the existence of control of Columbia Gas over Columbia Oil prior to June 7, 1934. The positions of officers and directors of both companies were concededly interlocking. It is asserted, however, that a reorganization of the relationships of these companies has resulted in a severance of control.

[fol. 10814] 1. The first step of severance is claimed to have occurred on June 7, 1934.[9] On that day with one exception, all persons who were officers or directors of Columbia Gas resigned their positions in Columbia Oil, and one, who held positions with both Columbia companies, resigned from Columbia Gas. Messrs. Harrop, Watkins, Philips and Munroe constituted the new Columbia Oil board.

The background of these new directors is significant. Harrop, it was asserted, had no prior connection with Columbia Gas. However, he joined the board of Columbia Oil at the invitation of Munroe who had been a Director and Vice-President of Columbia Gas and was a voting trustee for the Columbia Oil common stock.[10] Watkins had served with Panhandle Eastern as Assistant Secretary and Treasurer from 1931 to 1934. He had also been connected with various other Columbia Gas subsidiaries until 1932. Philips had been a director of Columbia Gas from 1926 to 1930. Munroe's affiliations have been stated.[11]

2. The next steps toward severance are alleged to have occurred as a result of a government suit for violation of the anti-trust laws.

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[9]It appears that at about this time Columbia Gas may have had some intimation of the imminence of an anti-trust suit and that this knowledge was one of the principal reasons for the changes in personnel and affiliations. The anti-trust suit will be discussed subsequently.

[10]Munroe resigned his connections with Columbia Gas on June 7, 1934.

[11]Messrs. W. A. Blind and C. A. Lavin were elected Assistant Secretaries of Columbia Oil at the June 7, 1934, meeting. Both had been, up to that time, in the personal employ of Munroe.

A. The Anti-Trust Suits

In March of 1935 the United States filed a petition naming as defendants Columbia Gas, Columbia Oil, G. H. Howard, P. G. Gossler, C. A. Munroe, T. B. Gregory, Edward Reynolds, Jr., Burt R. Bay and J. H. Hillman, Jr. The petition alleged domination of Panhandle Eastern by the defendants for the purpose of preventing it from competing with Columbia Gas. It requested an injunction against such domination and the divestiture of ownership by Columbia Oil of Panhandle Eastern securities.

In July of 1935 an action for treble damages was brought against the same defendants named in the government suit by H. T. Bush and C. Ray Phillips, receivers for Mokan, on allegations substantially similar to those made in the government suit. On January 29, 1936—a critical date in these proceedings, a stipulation was entered into between the United States and the defendants in its suit, and a consent decree was entered upon that stipulation. The applicants rely upon the operation of this decree for their claim that the current of control between them has been insulated.

[fol. 10815] B. The Terms of the Stipulation and Decree

The stipulation contained, among others, undertakings for:

1. A financial reorganization of Columbia Oil to effect partial liquidation of Columbia Oil's debt to Columbia Gas, conversion of the remainder into at least fifteen year obligations to be held by Columbia Gas, and conversion of the then outstanding classes of Columbia Oil's preferred stock into one class—to be held by Columbia Gas, and pursuant to which Columbia Gas might elect the largest minority of the Columbia Oil board.[12]

2. Assurance that the officers, and the majority of Columbia Oil directors were not to be officers, directors or employees of Columbia Gas.

[12]Columbia Oil was, prior to the time of the decree, in heavy default on its notes and in arrears of $22,000,000 in dividends on its preferred stock. Columbia Gas was, therefore, in a position to assert an immediate claim on the assets of Columbia Oil.

3. Dissolution of the voting trust with respect to Columbia Oil common stock, and granting to that stock cumulative voting rights.

4. Permission to Panhandle Eastern to make final commitments to carry out a contract which it had made with the Detroit City Gas Company to supply gas to Detroit,—a point east of the then terminus of its lines.

5. An offer of settlement to be made by Columbia Oil to the Mokan receivers, with respect to the claim made by Mokan against the Columbia companies, which settlement would permit Mokan to acquire one-half of Panhandle Eastern's common stock, subject to conversion rights of any preferred which Panhandle Eastern might issue, and "other conditions" of the offer which might "alter the proportionate interest of the various parties" in Panhandle Eastern.

The decree enjoins, in broad language, the exercise of domination or control of Panhandle Eastern, interference with its free action in the natural gas business, and exercising any influence over it, and it further purports to enjoin the defendants from ". . . holding, acquiring, voting or in any manner acting as the owners, directly or indirectly, of the whole or any part of the stock or other share capital, or bonds" of Panhandle Eastern or any company owning a substantial amount of Panhandle Eastern securities or assets of Panhandle Eastern.

Notwithstanding the foregoing provisions, the decree expressly permits:

[fol. 10816] 1. The defendants to own stock and bonds of Columbia Gas and Columbia Oil, and to act as officers and directors thereof;

2. Columbia Gas to acquire obligations with no present or potential voting rights, of Panhandle Eastern, (although it interdicts acquisition of Panhandle Eastern's physical assets by enforcing the obligations);

3. Columbia Oil to own and acquire stock or bonds of Panhandle Eastern and vote Panhandle Eastern's securities in accordance with the decree.

Vol. X

TRANSCRIPT OF RECORD

(Pages 4431 to 4852)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. X:

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION; ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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Securities Of Natural Gas Companies

Summary According To Class Of Holders

Company and Issues	Total Securities Outstanding	Public	Held by Institutions	Affiliates
El Paso Natural Gas Co. (June 30, 1941)				
Bonds and Notes:				
First Mtge. S.F. 3 1/2%, 1953	$ 6,000,000	$ —	$ 6,000,000	$ —
First Mtge. S.F. 3%, 1955	2,800,000	—	2,800,000	—
Notes, 2 1/2%, 1942-1946	1,215,000	—	1,215,000	—
Notes, 2 3/4%, 1942-1944	625,000	—	625,000	—
Notes, 3%, 1942-1945	1,037,500	—	1,037,500	—
	11,677,500	—	11,677,500	—
Preferred Stock, 7% Cum., 14,797 shs., Par $100	1,479,700	1,479,700	—	—
Common Stock, 601,594 shs., Par $3	5,301,994(d)	5,301,994	—	—
Total	$18,459,194	$ 6,781,694	$11,677,500	$ —

(d) Common Stock of $5,301,994 includes premium of $3,497,212.

Hope Natural Gas Co. (Dec. 31, 1940)				
Common Stock, 279,693 shs., Par $100	$27,969,300	$ —	$ —	$27,969,300
Houston Natural Gas Corp. (Dec. 31, 1940)				
First Mtge. S.F. 4%, 1955	$ 3,500,000	$ 3,500,000	$ (e)	$ —
Preferred Stock, 7% Cum. 10,000 shs., Par $50	500,000	500,000	—	—
Common Stock, 158,289 shs., No Par	1,425,484	1,425,484	—	—
Total	$ 5,425,484	$ 5,425,484	$ —	$ —

(e) Holdings by Institutions not available.

Interstate Natural Gas Co. (Dec. 31, 1940)				
Common Stock, 952,953 shs., No Par	$ 6,529,530	$ 1,893,564	$ —	$ 4,635,966
Kentucky West Virginia Gas Co. (Dec. 31, 1940)				
Preferred Stock:				
5% Cum. First, 29,375 shs., Par $100	$ 2,937,500	$ —	$ —	$ 2,937,500
7% Cum. Second, 54,075 shs., Par $100	5,407,500	—	—	5,407,500
	8,345,000	—	—	8,345,000
Common Stock, 100,000 shs., No Par	1,304,715	—	—	1,304,715
Total	$ 9,649,715	$ —	$ —	$ 9,649,715

*Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

Company and Issues	Total Securities Outstanding	Public	Held by Institutions	Affiliates
Lone Star Gas Corp. (Consolidated) (June 30, 1941)				
Long Term Notes 2 — 2 1/4%, 1941-1951	$23,700,000	$ —	$23,700,000	$ —
Common Stock (f), 5,508,681 shs., No Par	58,491,279	58,491,279	—	—
Total	$82,191,279	$58,491,279	$23,700,000	$ —
(f) Represents average number of shares for 12 months ended June 30, 1941				
*Manufacturers Light & Heat Co. (The) (Dec. 31, 1939)				
Common Stock, 450,608 shs., Par $50	$22,530,400	$ —	$ —	$22,530,400(g)
(g) Includes $6,300 par value of Common held by public.				
Memphis Natural Gas Co. (Dec. 31, 1940 — after adjusting for liquidation of promissory notes in Apr. 1941)				
Promissory Notes Payable due serially	$ 400,000	$ —	$ 400,000	$ —
Common Stock, 918,680 shs., Par $5	4,593,400	2,381,678	—	2,211,722
Total	$ 4,993,400	$ 2,381,678	$ 400,000	$ 2,211,722
*Michigan Gas Transmission Co. (Dec. 31, 1939)				
Advances	$ 6,470,500	$ —	$ —	$ 6,470,500
Common Stock, 44,800 shs., No Par	2,240,000	—	—	2,240,000
Total	$ 8,710,500	$ —	$ —	$ 8,710,500
Mississippi River Fuel Corp. (Dec. 31, 1940 — after adjusting for retirement of First 4's of 1952 on Jan. 31, 1941 with proceeds from bank loan)				
Bank Loan payable over period to Feb. 1, 1948 bearing 2 3/4% interest	$ 7,300,000	$ —	$ 7,300,000	$ —
Note, 2 3/4%, 1947	2,200,000	—	2,200,000	—
	9,500,000	—	9,500,000	—
Common Stock, 655,220 shs., Par $10	6,552,200	—	—	6,552,200(h)
Total	$16,052,200	$ —	$ 9,500,000	$ 6,552,200

(h) Includes 0.51% of outstanding Common Stock ownership of which is not accounted for.

* Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

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Securities Of Natural Gas Companies

Summary According To Class Of Holders

Company and Issues	Total Securities Outstanding	Public	Held by Institutions	Affiliates
Montana-Dakota Utilities Co. (June 30, 1941)				
Bonds and Notes:				
Serial Purchase Contracts	$ 16,004	$ 16,004	$	$
First Mtge. 2 1/2% Serial, 1942-1949	2,500,000	2,500,000		
First Mtge. 3 1/2% S.F., 1961	7,500,000	7,500,000	(1)	
Serial Notes 2 to 3 1/2%, 1942-1950	3,510,000		(1) 3,510,000	
	13,526,004	10,016,004	3,510,000	
Preferred Stocks:				
6% Preferred, Par $100 — 17,739 shs.	1,773,900	1,773,900		
5% Preferred, Par $100 — 59,592 3/5 shs.	5,959,260	5,959,260		
Common Stock, 676,652 3/6 shs., Par $10	6,766,522	6,766,522		
Total	$28,025,686	$24,515,686	$ 3,510,000	$
(1) Holdings by Institutions not available.				
Mountain Fuel Supply Co. (Dec. 31, 1940)				
Common Stock, 1,989,902.5 shs., Par $10	$19,879,025	$15,090,455	$	$ 4,808,570
National Fuel Gas Co. (Consolidated) (Dec. 31, 1940)				
Common Stock, 3,810,183 shs., No Par	$68,878,100(2)	$68,878,100	$	$
(2) Total of $68,878,100 includes surplus and premium.				
Natural Gas Company of West Virginia (Dec. 31, 1939)				
Advances	$ 2,400,000	$	$	$ 2,400,000
Common Stock, 29,972 shs., Par $100	2,997,200			2,997,200
Total	$ 5,397,200	$	$	$ 5,397,200

* Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

Securities Of Natural Gas Companies

Summary According To Class Of Holders

Company and Issues	Total Securities Outstanding	Held by Public	Held by Institutions	Affiliates
Natural Gas Pipeline Company of America (Dec. 31, 1940)				
Bonds, Debentures and Advances:				
First Mtge. S.F.A. 6's, 1946	$40,000,000	$	$	$40,000,000
Debentures, 6%, 1946	6,000,000			6,000,000
Advances	2,470,000			2,470,000
	48,470,000 (k)			48,470,000
Common Stock, 1,500,000 shs., Par $2	3,000,000			3,000,000
Total	$51,470,000	$/	$	$51,470,000
***New York State Natural Gas Corp. (Dec. 31, 1938) (l)**				
Income Notes, 6%, 1942	$ 4,500,000	$	$	$ 4,500,000
Common Stock, 20,000 shs., Par $100	2,000,000 (m)			2,000,000
Total	$ 6,500,000	$	$	$ 6,500,000
Northern Natural Gas Co. (June 30, 1941)				
Bonds and Notes:				
First Mtge. S.F.A. 3 1/4's, 1954	$16,000,000	$	$16,000,000	$
Notes, 2 1/8%, 1940-1946	4,000,000		4,000,000	
	20,300,000		20,000,000	
Common Stock, 1,015,000 shs., Par $20	20,300,000			20,300,000
Total	$40,300,000	$	$20,000,000	$20,300,000
***North Penn Gas Co. (Consolidated) (Dec. 31, 1940)**				
First Mtge. & Lien, 5 1/2's, 1957	$ 3,450,000	$ 2,845,000	$ 605,000	$
Preferred Stock:				
$7 Prior Pref., 6,111 shs., No Par	611,100	611,100		
$7 Cum. Pref. 13,160 shs., No Par	1,316,000			1,316,000
Common Stock, 100,000 shs., No Par	1,823,500			1,823,500
Total	$ 7,200,600	$ 3,456,100	$ 605,000	$ 3,139,500

(k) In 1941 company sold privately to a group of insurance companies an issue of $22,000,000 bonds. Proceeds will be used chiefly for new construction in the company's program to double its original capacity and to extend its lines. Meanwhile, company has been considering a plan to refund $40,000,000 first 6's A, 1946, which are owned by its stockholders.

(l) Adjusted to reflect reduction of $1,000,000 in note indebtedness in 1939, and extension of maturity date to 1942.

(m) Does not include Common Stock subscribed in amount of $310,000.

* Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

Securities Of Natural Gas Companies

Summary According To Class Of Holders

Company and Issues	Total Securities Outstanding	Public	Held by Institutions	Affiliates
*Ohio Fuel Gas Co. (Dec. 31, 1939)				
Notes and Advances:				
Notes, 4%, 1939-1946	$ 4,500,000	$ —	$ 4,500,000	$ —
Advances	6,075,000	—	—	6,075,000
	10,575,000	—	$ 4,500,000	6,075,000
Common Stock, 1,343,883 shs., Par $45	60,471,135	—		60,471,135
Total	$71,046,135	$ —	$ 4,500,000	$66,546,135
Oklahoma Natural Gas Co. (June 30, 1941)				
Bonds and Notes:				
First Mtge. S.F.B. 3 3 4%, 1955	$16,800,000	$ 7,946,000	$ 8,854,000	$
Notes Payable Serially to 1946	5,500,000	—	5,500,000	
	22,300,000	7,946,000	14,354,000	
Preferred — $5.50 Conv. Prior 58,000 shs., No Par	5,800,000	5,800,000	—	
— $3 Preferred 91,055 shs., Par $50	4,552,750	4,552,750		
Common — 550,000 shs., Par $15	8,250,000	8,250,000		
Total	$40,902,750	$26,548,750	$14,354,000	$
Pacific Lighting Corp. (Consolidated) (June 30, 1941)				
Bonds and Notes:				
Pacific Lighting Corp. Notes, 3%, 1940-1949	$ 5,500,000	$ —	$ 5,500,000	$
Southern Calif. Gas Co. First Mtge. S.F. 3 1/4%, 1970	35,000,000	35,000,000	(n)	
Southern Counties Gas Co. of Calif. First Mtge. S.F. 3%, 1971	11,500,000	11,500,000	(n)	
	52,000,000	46,500,000	5,500,000	
Preferred Stock:				
Pacific Ltg. Corp. $5 Pref. 200,000 shs., No Par	20,000,000	20,000,000		
Southern Calif. Gas Co. 6% Pref. 114,532 shs., Par $25	2,863,300	2,863,300		
Southern Calif. Gas Co. 6% Pref. A, 783,032 shs., Par $25	19,575,800	19,575,800		
Common Stock, 1,608,631 shs., No Par	29,937,924	29,937,924		
Total	$124,377,924	$118,877,924	$ 5,500,000	$

(n) Holdings by Institutions not available.

* Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

Securities Of Natural Gas Companies

Summary According To Class Of Holders

Company and Issues	Total Securities Outstanding	Public	Held by Institutions	Affiliates
Panhandle Eastern Pipe Line Co. (Consolidated) (June 30, 1941)				
Bonds and Notes:				
First Mtge. & First Lien A, 1.65—2.30%, 1946-50	$ 6,250,000	$ —	$ 6,250,000	$ —
First Mtge. & First Lien S.F. B. 3%, 1960	12,000,000	12,000,000	(o)	—
Notes 0.75 — 1.50%, 1942-45	5,000,000	—	5,000,000	—
Other Long Term Debt	17,544	17,544	(o)	—
	23,267,544	12,017,544	11,250,000	—
Preferred Stock:				
Class A $6, 100,000 shs., Par $100	10,000,000	—	—	10,000,000
Class B $6, 10,000 shs., Par $100	1,000,000	—	—	1,000,000
Common Stock, 807,367 shs., No Par	20,184,175	1,589,150	—	18,595,025
Total	$54,451,719	$13,606,694	$11,250,000	$29,595,025
(o) Holdings by institutions not available.				
*Peoples Natural Gas Company (Dec. 31, 1939)				
Notes	$ 3,750,000	$ —	$ —	$ 3,750,000
Common Stock, 132,000 shs., Par $100	13,200,000	—	—	13,200,000
Total	$16,950,000	$ —	$ —	$16,950,000
Pittsburg and West Virginia Gas Co. (Consolidated) (Dec. 31, 1940)				
Notes — Affiliated Company's	$14,587,633	$ —	$ —	$14,587,633
Common Stock, 344,000 shs., No Par	8,600,000	—	—	8,600,000
Total	$23,187,633	$ —	$ —	$23,187,633
Southern Natural Gas Co. (Consol.) (June 30, 1941)				
Bonds and Notes:				
First Mtge. S.F. 3 1/4%, 1956	$13,000,000	$13,000,000	$ —	$ —
Serial Notes, 2 1/2%, 1942-1947	4,500,000	—	4,500,000	—
Alabama Gas Co. First Mtge. 4 1/2%, 1951	1,381,000	940,000	441,000	—
Alabama Nat. Gas Corp. First Mtge. 5%, 1947	40,000 (p)	40,000	—	—
	18,921,000	13,980,000	4,941,000	—
Common Stock 1,297,447 153-1030 shs., Par $7.50	11,552,304 (q)	5,487,344	—	6,064,960 (r)
Total	$30,473,304	$19,467,344	$ 4,941,000	$ 6,064,960

(p) Represents City of Talladega (Ala.) bonds assumed.
(q) Includes premium of $1,821,450 on Capital Stock.
(r) Estimated at 52.5% of total.

* Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

Securities Of Natural Gas Companies

Summary According To Class Of Holders

Company and Issues	Total Securities Outstanding	Held by Public	Held by Institutions	Affiliates
*South Penn. Natural Gas Co. (Dec. 31, 1939)				
Common Stock, 100,000 shs., Par $100	$10,000,000	$ —	$ —	$10,000,000
Texoma Natural Gas Co. (Dec. 31, 1940)				
Gas & Pipeline Mtge. S.F. A, 6%, 1946	$18,950,000	$ —	$ —	$18,950,000
Common Stock, 10,000 shs., No Par	500,000	—	—	500,000
Total	$19,450,000	$ —	$ —	$19,450,000
*United Fuel Gas Co. (Dec. 31, 1939)				
Notes and Long Term Advances:				
Notes, 4%, 1939-46	$ 4,500,000	$ —	$ 4,500,000	$ —
Advances	14,535,000	—	—	14,535,000
	19,035,000	—	4,500,000	14,535,000
Common Stock, 300,000 shs., Par $1	300,000	—	—	300,000
Total	$19,335,000	$ —	$ 4,500,000	$14,835,000
United Gas Pipeline Co. (Consolidated) (Dec. 31, 1940)				
Bonds and Debentures:				
United Gas Pipeline Co. Debs., 6%, 1952	$23,000,000	$ —	$ —	$23,000,000
Houston Gulf Gas Co. 3 1/2% Serial Bank Loan	6,000,000	—	6,000,000	—
	29,000,000	—	6,000,000	23,000,000
Common Stock, 100,000 shs., No Par	96,772,535	—	—	96,772,535
Total	$125,772,535(s)	$ —	$ 6,000,000	$119,772,535

(s) Houston Gulf Gas Co. 7% Cum. Pfd. Stock (Par $100) — $10,800 Par Value, Series A and $1,000 Par Value, Series B — held by public but not included in above summary.

*Virginia Gas Transmission Corp. (Dec. 31, 1939)				
Advances	$ 4,113,000	$ —	$ —	$ 4,113,000
Common Stock, 10 shs., No Par	100	—	—	100
Total	$ 4,113,100	$ —	$ —	$ 4,113,100
*Warfield Natural Gas Co. (Dec. 31, 1939)				
Advances	$ 9,790,000	$ —	$ —	$ 9,790,000
Common Stock, 5,470 shs., Par $100	547,000	—	—	547,000
Total	$10,337,000	$ —	$ —	$10,337,000

* Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

Securities Of Natural Gas Companies

Summary According To Class Of Holders

Company and Issues	Total Securities Outstanding	Public	Held by Institutions	Affiliates
*West Texas Gas Co. (Dec. 31, 1939)				
Notes, 3%, 1940-45	$ 3,150,000	$ —	$ 3,150,000	$ —
Common Stock, 80,000 shs., Par $25	2,000,000	—	—	2,000,000
Total	$ 5,150,000	$ —	$ 3,150,000	$ 2,000,000
Grand Total	$1,181,773,511	$366,299,879	$183,253,197	$632,220,485
Grand Total by Type of Securities (All Companies)				
Bonds	$248,242,000	$96,771,000	$87,464,000	$64,007,000
Debentures	44,400,000	—	900,000	43,500,000
Notes	120,692,935	33,548	94,437,500	26,221,887
Advances	59,380,500	—	—	59,380,500
Total	472,715,435	96,804,548	182,801,500	193,109,387
Preferred Stock	98,776,810	63,115,810	—	35,661,000
Common Stock	610,281,266	206,379,521	451,697	403,450,048
Grand Total	$1,181,773,511	$366,299,879	$183,253,197	$632,220,435
Grand Total by Types of Securities — Companies Analyzed for Investors' Appraisal of Risks of Capital				
Bonds	$124,771,000	$93,926,000	$30,845,000	$ —
Debentures	900,000	—	900,000	—
Notes	51,021,048	33,548	50,987,500	—
Advances	—	—	—	—
Total	176,692,048	93,959,548	82,732,500	—
Preferred Stock	73,504,710	62,504,710	—	11,000,000
Common Stock	242,695,764	206,379,521	—	36,316,243
Grand Total	$492,892,522	$362,843,779	$82,732,500	$47,316,243

* Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

[fol. 13398]

Appendix C.

Working Papers Showing The Computation of Investors' Appraisal of the Risks of Capital

Water Companies ..... begin on page 1
Electric Operating Utility Companies.... begin on page 22
Manufactured and Mixed Gas Companies. begin on page 67
Natural Gas Companies ..... begin on page 97

Note: Unless otherwise indicated all market price ranges on bonds were obtained from Standard & Poor's Corp. (formerly Standard Statistics Company) Bond Guides dated September 5, 1941, January 1941, January 1940, January 1939 and January 1938; and all market price ranges on stocks were obtained from Moody's Public Utility Manuals for 1938-1941, both inclusive.

[fol. 13399]

Bridgeport Hydraulic Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($20 par)	325,000 shs.	39	32 1/2	35.75	$11,618,750	325,000 shs.	50	32	41.00	$13,325,000
(a) "E" 3 1/4's, 1970	$ 795,000			100.00	795,000					
(b) "F" 3 1/2's, 1965	695,000			100.00	695,000					
(c) "G" 3 1/2's, 1971	4,971,000			100.00	4,971,000	$4,971,000			102.00	5,070,420
(d) "H" 3 1/4's, 1968						1,490,000			100.00	1,490,000
Total Indicated Market Value					$18,079,750					$19,885,420
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$869,165					$552,233
Add: Interest and amortization on debt					234,922					231,142
Total Earnings Available for Capital					$904,087					$783,375
Investors' Appraisal Of Risks Of Capital					5.00%					3.94%

Notes: (a) Prices estimated — issued for retirement of Series B 4 1/2's, due June 1, 1945
(b) " " — issued to refund $698,000 first 4 1/2's — Series C, due 1961
(c) " " — sold privately in June 1936 by Lee Higginson Corp.
(d) " " — sold privately in June 1938 by Lee Higginson Corp.

[fol. 13400]

Bridgeport Hydraulic Company

	1939		1940	
	Outstanding	Price Range for Year	Outstanding	Price Range for Year

Bridgeport Hydraulic Company

	Outstanding Dec. 31, 1940	1944 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($20)	350,000 shs.	37	30	33.50	$11,725,000
(b) "H" 3 1/4s, 1968	$1,490,000			106.00	1,579,400
(c) "I" 3 3/8s, 1974	4,971,000			108.00	5,368,680
(d) "J" 3s, 1970	500,000			104.04	520,200
Total Indicated Market Value					$19,193,280
Earnings Available For Capital					
Net Income for year ended Dec. 31, 1940, as reported					$620,286
Add: Interest and amortization on debt					224,066
Total Earnings Available for Capital					$844,352
Investors' Appraisal Of Risks Of Capital					4.40%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price estimated. Sold privately in June, 1938 by Lee Higginson Corp. $106 is call price.
(c) Price estimated. Sold privately July 1, 1939.
(d) Sold privately in 1940 at $104.04.

[fol. 13402]

Appendix C
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Elizabethtown Water Company Consolidated

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Capital Stock ($100 par)	39,342 shs.	102	95	98.50	$3,875,187	39,342 shs.	95	85	90.00	$3,540,780
(b) Raritan Township Water, 5's, 1960	$104,000	103	100	101.50	105,560	$104,000	103	100 1/2	101.75	105,820
(c) Piscataway Water 5's, 1960	239,000	102 1/2	100	101.25	241,988	239,000	103	100	101.50	242,585
Total Indicated Market Value					$4,222,735					$3,889,185
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$276,535					$277,473
Add: Deductions from Gross Corporate Income (mainly bond interest)					20,115					20,128
Total Earnings Available for Capital					$296,650					$297,601
Investors' Appraisal Of Risks Of Capital					7.03%					7.65%

Notes: (a) 1937 quotations from Poor's Utility Manual
(b) 1937 quotations from National Quotation Bureau; 1938 quotations from Moody's Utility Manual
(c) 1937 and 1938 quotations from National Quotation Bureau

[fol. 13403]

Appendix C
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Elizabethtown Water Company Consolidated

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($100 par)	39,342 shs.	112	97	104.50	$4,111,239	39,342 shs.	114	110	112.00	$4,406,304
(a) Raritan Township Water 5's, 1960	$104,000	104	101	102.50	106,600	$104,000	105	102	103.50	107,640
Total Indicated Market Value					$4,217,839					$4,513,944
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$317,016					$353,866
Add Deductions from Gross Corporate Income (mainly bond interest)					11,320					6,799
Total Earnings Available for Capital					$328,336					$360,665
Investors' Appraisal Of Risks Of Capital					7.78%					7.99%

Note: (a) Quotations from Moody's Utility Manual

[fol. 13404]

Elizabethtown Water Company Consolidated

	Outstanding Dec. 31, 1940	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock ($100 par)	39,342 shs	114	105	109.50	$4,307,949
(a) Raritan Township Water 5s, 1960	$104,000	103	103	103.00	107,120
Total Indicated Market Value					$4,415,069
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported					$353,866
Add: Deductions from Gross Corporate Income (mainly bond interest)					6,799
Total Earnings Available for Capital					$360,665
Investors' Appraisal Of Risks Of Capital					8.17%

Note: (a) Quotations from National Quotation Bureau.

[fol. 13405]

Hackensack Water Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock	307,500 shs.	34 3/4	23 1/8	28.94	$8,899,050	307,500 shs.	30	24	27.09	$8,302,500
7% Preferred Stock — A	60,000 shs.	36	26 1/2	31.25	1,875,000	60,000 shs.	35	30	32.50	1,950,000
(a) Mtge. Bonds, Ser. A, 3 1/2's, 1968						$14,350,000			105.25	15,103,375
1st Mtge. 4's, 1952	$4,750,000	108	105 3/4	106.88	5,076,800					
General Ref. 5's, 1977	4,000,000	107	102	104.50	4,180,000					
" " 5's, 1977	5,262,900	109 1/2	105	107.25	5,643,495					
Total Indicated Market Value					$25,674,345					$25,355,875
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$ 935,464					$ 785,601
Add — Interest on Funded Debt					688,834					778,502
Amortization of Debt Discount, etc.					40,993					24,310
Taxes assumed on interest					5,798					5,346
Total Earnings Available for Capital					$1,671,089					$1,593,759
Investors' Appraisal Of Risks Of Capital					6.51%					6.29%

Note: (a) Sold privately in October, 1938 at $105.25

[fol. 13406]

Hackensack Water Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock	307,500 shs.	32 1/4	29	30.63	$9,418,725	307,500 shs.	34 1/4	29 1/4	31.75	$9,763,125
7% Preferred Stock — A	60,000 shs.	38	32	35.00	2,100,000	60,000 shs.	37	30	33.50	2,010,000
(a) Mtge. Bonds, Ser. A, 3 1/2's, 1968	$14,350,000			105.25	15,103,375	$14,350,000			105.25	15,103,375
Total Indicated Market Value					$26,622,100					$26,876,500
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$1,182,231					$ 968,301
Add — Interest on Funded Debt					562,955					502,250
Amortization of Debt Discount, etc.					24,493					24,365
Taxes assumed on interest					2,821					838
Total Earnings Available for Capital					$1,772,500					$1,495,754
Investors' Appraisal Of Risks Of Capital					6.66%					5.57%

Note: (a) Sold privately in October, 1938, at $105.25.

Hackensack Water Company

	1941				
	Outstanding Dec. 31, 1940	Price Range to August 31			
		High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($25 par)	307,500 shs.	33	28	30 50	$ 9,378,750
(a) 7% Cum. Pref. Stock - A ($25 par)	60,000 shs.	38	33	35 50	2,130,000
(b) Mtge. Bonds Ser. A 3 1/2s, 1968	$14,350,000			105 25	15,103,375
Total Indicated Market Value					$26,612,125
Earnings Available For Capital					
Net Income for year ended December 31, 1940					$968,301
Add: Interest on funded debt					502,250
Amortization of debt discount, etc.					24,365
Taxes assumed on interest					838
Total Earnings Available for Capital					$1,495,754
Investors' Appraisal Of Risks Of Capital					5 62%

Note (a) Listed on N. Y. Stock Exchange.
(b) Sold privately in October, 1938, at 105.25.

Middlesex Water Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Common Stock (no par)	23,500 shs.	60	50	55.00	$1,292,500	23,500 shs.	40	31	35.50	$ 834,250
(a) 7% Cum. Pfd. ($100 par)	2,500 shs.	118	105	111.50	278,750	2,500 shs.	108	100	104.00	260,000
(b) Cons. 5's, due 2/1/50	$ 32,000	106	102	104.00	33,280	$ 32,000	106 1/2	104	105.25	33,680
1st & Ref. 5 1/2's, 4/1/57	1,663,000	108	103	105.50	1,754,465	1,663,000	108	104 1/2	106.25	1,766,938
Total Indicated Market Value					$3,358,995					$2,894,868
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$ 98,682					$ 73,622
Add: Interest on Funded Debt					93,065					93,065
Amortization of Debt Discount					4,124					4,124
Total Earnings Available for Capital					$ 195,871					$ 170,811
Investors' Appraisal Of Risks Of Capital					5.83%					5.90%

Notes: (a) 1937 and 1938 quotations from National Quotation Bureau
(b) 1937 and 1938 quotations from Poor's Utility Manual

Middlesex Water Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Common Stock (no par)	23,500 shs.	45	39	42.00	$ 987,000	23,500 shs.	51 1/2	45	48.25	$1,133,875
(a) 7% Cum. Pfd. ($100 par)	2,500 shs.	115	103	109.00	272,500	2,500 shs.	117	112	114.50	286,250
(b) (d) Cons. 5's, due 2/1/50	$ 32,000	108	104	106.00	33,920	$ 32,000	106	104	105.00	33,600
1st & Ref. 5 1/2's, 5/1/57		Called 10/2/39 at 105								
(c) 1st & Ref. 3 3/4's, 1964	1,668,000			100.00	1,668,000	1,668,000			100.00	1,668,000
Total Indicated Market Value					$2,961,420					$3,121,725
Earnings Available For Capital										
Net Income for years ended December 31, as reported					102,220					113,543
Add: Interest on Funded Debt					85,959					64,150
Amortization of Debt Discount					3,731					2,555
Total Earnings Available for Capital					$ 192,010					$ 180,248
Investors' Appraisal Of Risks Of Capital					6.48%					5.77%

Middlesex Water Company

	Outstanding Dec. 31, 1940	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (no par)	23,500 shs.	51	46	48.50	$1,139,750
(a) 7% Cum. Preferred ($100 par)	2,500 shs.	120	112	116.00	290,000
(a) Cons. Mtge. 5s, 1950	$ 32,000	110	105	107.50	34,400
(c) 1st & Ref. 3 3/4s, 1964	1,668,000			100.00	1,668,000
Total Indicated Market Value					$3,132,150
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$132,033
Add: Interest on funded debt					64,155
Amortization of debt discount					2,555
Total Earnings Available for Capital					$198,743
Investors' Appraisal Of Risks Of Capital					6.35%

Notes: (a) Quotations from National Quotation Bureau.
(c) Price estimated. Sold privately to two insurance companies on October 2, 1939.

New Haven Water Co.

	1937 Outstanding December 31	1937 Price Range for Year High	1937 Low	1937 Average	1937 Value	1938 Outstanding December 31	1938 Price Range for Year High	1938 Low	1938 Average	1938 Value
Indicated Market Value Of Capital										
Common ($50 par)	140,000 shs.	85	74	79.58	$11,130,000	140,000 shs.	74 1/2	68	71.25	$9,975,000
1st & Ref. "B" 4 1/2's, 1970	$1,500,000	116	108 1/2	112.25	1,683,750	$1,500,000	116	110	113.00	1,695,000
1st & Ref. "C" 4 1/2's, 1981	550,000	116 1/2	109	112.75	620,125	550,000	116 1/2	112	114.25	628,375
(a) 1st & Ref. "D" 4 1/2's, 1983	400,000	116 1/2	109	112.75	454,000	400,000	116 1/2	113 1/2	115.00	460,000
(b) General Ref. Mtge. "A" 3 1/4's, 1962	4,125,000			100.00	4,125,000	4,083,000			100.00	4,083,000
Total Indicated Market Value					$18,069,875					$16,841,375
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$530,569					$466,360
Add: Interest on Long-Term Debt					258,453					243,334
Amortization of Debt Expense (obtained by comparing, as of year ends, balance sheet items included in income account as "Other Non-Operating Deductions")					12,000*					12,611
Total Earnings Available for Capital					$801,022					$722,305
Investors' Appraisal Of Risks Of Capital					4.45%					4.29%

Notes: (a) 1938 quotations from Moody's Utility Manual
(b) Price estimated — sold privately in June, 1937
* Estimated by Standard & Poor's Corp. Comparision of Unamortized Debt Discount on balance sheets is distorted for 1937 owing to refinancing

New Haven Water Co.

	1939 Outstanding December 31	1939 Price Range for Year High	1939 Low	1939 Average	1939 Value	1940 Outstanding December 31	1940 Price Range for Year High	1940 Low	1940 Average	1940 Value
Indicated Market Value Of Capital										
Common ($50 par)	140,000 shs.	75 1/2	64	69.75	$ 9,765,000	140,000 shs.	81 1/2	75 1/2	78.50	$10,990,000
1st & Ref. "B" 4 1/2's, 1970	$1,500,000	113	107	110.00	1,650,000					
1st & Ref. "C" 4 1/2's, 1981	550,000	117	111	114.00	627,000	$555,000	115	105	110.00	605,000
(a) 1st & Ref. "D" 4 1/2's, 1983	400,000	117	112	114.50	458,000	400,000	115	110	112.50	450,000
(b) General Ref. Mtge. "A" 3 1/4's, 1962	4,042,000			100.00	4,042,000	4,001,000			100.00	4,001,000
(c) General Ref. Mtge. "B" 3 1/4's, 1975						1,800,000			100.00	1,800,000
Total Indicated Market Value					$16,542,000					$17,846,000
Earnings Available For Capital										
Net Income for Years ended December 31, as reported					$554,523					$589,937
Add: Interest on Long-Term Debt					242,170					238,588
Amortization of Debt Expense (obtained by comparing, as of year ends, balance sheet items included in income account as "Other Non-Operating Deductions")					14,060					15,000*
Total Earnings Available for Capital					$790,753					$843,525
Investors' Appraisal Of Risks Of Capital					4.78%					4.73%

Notes: (a) Quotations from Moody's Utility Manual
(b) Price estimated — sold privately in June, 1937
(c) " " — sold privately in June, 1940

*Estimated by Standard & Poor's Corp. Comparison of Unamortized Debt Discount on balance sheets is distorted for 1940 owing to refinancing.

New Haven Water Company

1941

	Outstanding Dec. 31, 1940	Price Range to August 31 High	Low	Average	Value
Indicated Market Value of Capital					
(a) Common ($50 par)	140,000 shs.	80	64 1/2	72 25	$10,115,000
(b) 1st & Ref. "C" 4 1/2s, 1981	$550,000	109	106	107 50	591,250
(a) 1st & Ref. "D" 4 1/2s, 1983	400,000	112	110	111 00	444,000
(c) Gen. Ref. Mtge. "A" 3 1/4s, 1962	3,960,000*			100 00	3,960,000
(d) Gen. Ref. Mtge. "B" 3 1/4s, 1975	1,800,000			100 00	1,800,000
Total Indicated Market Value					$16,910,250
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported					$589,937
Add: Interest on long-term debt					238,588
Amortization of debt expense					15,000**
Total Earnings Available for Capital					$843,525
Investors' Appraisal Of Risks Of Capital					4.99%

Notes: (a) Quotations from National Quotation Bureau.
(b) Called for payment September 1, 1941, at 105 and interest. To be refunded by an issue bearing 3 1/8%.
(c) Price estimated. Sold privately in June, 1937.
(d) Price estimated. Sold privately in June, 1940.
* After giving effect to $41,000 sinking fund payment due March 1, 1941.
** Estimated by Standard & Poor's Corp.

[fol. 13414]

Plainfield-Union Water Co.

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Capital Stock (no par)	57,230 shs.	98	82	90.00	$5,150,700	57,230 shs.	83	71	77.00	$4,406,710
1st Mtge. "A" 5's, 1961	$1,250,000	108	104	106.00	1,325,000	$1,250,000	108	104	106.00	1,325,000
Total Indicated Market Value					$6,475,700					$5,731,710
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$294,068					$286,662
Add: Interest on Long-Term Debt					62,500					62,500
Amortization deductions					(193)					(193)
Total Earnings Available for Capital					$356,375					$348,969
Investors' Appraisal Of Risks Of Capital					5.50%					6.09%

Notes: (a) 1937 quotations from Poor's Utility Manual
Parentheses indicate red figures

[fol. 13415]

Plainfield-Union Water Co.

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock (no par)	57,230 shs.	91	85	88.00	$5,036,240	57,230 shs.	94	80 1/2	87.25	$4,993,318
1st Mtge. "A" 5's 1961	$1,250,000	108	104	106.00	1,325,000	$1,250,000	108	103	105.50	1,318,750
Total Indicated Market Value					$6,361,240					$6,312,068
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$305,845					$280,675
Add: Interest on Long-Term Debt					62,500					62,500
Amortization deductions					(193)					(193)
Total Earnings Available for Capital					$367,952					$342,982
Investors' Appraisal Of Risks Of Capital					5.78%					5.43%

Note: Parentheses indicate red figures

Plainfield-Union Water Company

	Outstanding Dec. 31, 1940	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock (no par)	57,230 shs.	92	75	83.50	$4,778,705
(b) 1st Mtge. Ser. A, 3 1/4s, 1971	$1,950,000			104.92	2,045,940
Total Indicated Market Value					$6,824,645
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$278,456
Add: Interest on long-term debt					62,646
Amortization deductions					(96)
Total Earnings Available for Capital					$341,006
Investors' Appraisal Of Risks Of Capital					5.00%

Notes: (a) Quotations from National Quotation Bureau.
(b) Entire issue sold privately on April 1, 1941, at 104.92 to three insurance companies. The proceeds were used to retire $1,250,000 1st Mtge., Series A 5s, due 1961.
Parentheses indicate red figure.

[fol. 13417]

Stamford Water Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Capital Stock ($20 par)	20,000 shs.	195	150	172.50	$3,450,000	100,000 shs.	39 1/2	30	34.75	$3,475,000
1st Mtge. 5's, 1952	$400,000	123 1/2	116	119.75	479,000	$400,000	121	115	118.00	472,000
Total Indicated Market Value					$3,929,000					$3,947,000
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$165,227					$177,240
Add — Interest requirements on bonds					20,000					20,000
Total Earnings Available for Capital					$185,227					$197,240
Investors' Appraisal Of Risks Of Capital					4.71%					5.00%

Note: (a) $100 par in 1937. 1937 quotations from National Quotation Bureau — 1938 quotations from Poor's Utility Manual.

[fol. 13418]

Stamford Water Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Capital Stock ($20 par)	100,000 shs.	44	39	41.50	$4,150,000	100,000 shs.	44	38	41.00	$4,100,000
1st Mtge. 5's 1952	$400,000	127	113	120.00	480,000	$400,000	120 1/2	117	25	493,000
Total Indicated Market Value					$4,630,000					$4,593,000
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$191,289					$185,268
Add — Interest requirements on bonds					20,000					20,000
Total Earnings Available for Capital					$211,289					$205,268
Investors' Appraisal Of Risks Of Capital					4.56%					4.47%

Note: (a) 1939 quotations from Poor's Utility Manual — 1940 quotations from National Quotation Bureau

Stamford Water Company

	Outstanding Dec. 31, 1940	1941 Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock ($20 par)	100,000 shs.	44 1/2	40	42.25	$4,225,000
1st Mtge. 5's, 1952	$400,000	129	123	126.00	504,000
Total Indicated Market Value					$4,729,000
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported					$185,268
Add: Interest requirements on bonds					20,000
Total Earnings Available for Capital					$205,268
Investors' Appraisal Of Risks Of Capital					4.34%

Note: (a) Quotations from National Quotation Bureau.

Bangor Hydro-Electric Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($25 par)	217,020 shs.	24 1/4	17	20 63	$4,477,123	217,020 shs.	21 1/2	16 1/4	18 88	$4,097,338
7% Cum. Pfd. ($100 par)	25,000 shs.	137 1/2	110	123 75	3,093,750	25,000 shs.	131	118	124 50	3,112,500
6% Cum. Pfd. ($100 par)	21,799 shs.	126	105	115 50	2,517,785	21,799 shs.	114	102	108 00	2,354,292
1st Mtge. 3 3/4's, 1966	$7,108,000	110	103	106 50	7,570,020	$7,108,000	109 1/2	105	107 25	7,623,330
(a) 1st Mtge. 3 1/2's, 1963						600,000			102 75	616,500
Total Indicated Market Value					$17,658,678					$17,803,960
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$681,917					$699,375
Add: Interest on Funded Debt					266,550					283,214
Amortization of Debt Discount, Premium and Expense — net					16,531					16,388
Total Earnings Available for Capital					$964,998					$998,977
Investors' Appraisal Of Risks Of Capital					5 46%					5.61%

Note: (a) Price estimated. Sold privately in March, 1938, at 102 3/4.

Bangor Hydro-Electric Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($25 par)	217,020 shs.	23	19	21 00	$4,557,420	217,020 shs.	22 1/2	18	20 25	$ 4,394,655
7% Cum. Pfd. ($100 par)	25,000 shs.	140	130	135 00	3,375,000	25,000 shs.	140	132	136 00	3,400,000
6% Cum. Pfd. ($100 par)	21,799 shs.	112	108	110 00	2,397,890	21,799 shs.	114	108	111 00	2,419,689
1st Mtge. 3 3/4's, 1966	$7,108,000	112 1/4	105	108 63	7,721,420	$7,108,000	113 1/2	108	110 75	7,872,110
(a) 1st Mtge. 3 1/2's, 1963	600,000			104 00	624,000	600,000			105 00	630,000
Total Indicated Market Value					$18,675,730					$18,716,454
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$672,185					$723,168
Add: Interest on Funded Debt					287,550					287,550
Amortization of Debt Discount, Premium and Expense — Net					16,394					16,448
Total Earnings Available for Capital					$976,129					$1,027,166
Investors' Appraisal Of Risks Of Capital					5.23%					5.49%

Note: (a) Prices estimated: Sold privately in March, 1938, at 102 3/4.

Bangor Hydro-Electric Company

1941

	Outstanding Dec. 31, 1940 Adjusted for 1941 financing	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($25 par)	217,020 shs.	21 7/8	18 3/4	20.31	$4,407,676
(a) 7% Cum. Pfd. ($100 par)	25,000 shs.	143	137	140.00	3,500,000
(a) 6% Cum. Pfd. ($100 par)	21,799 shs.	115	111	113.00	2,463,287
1st Mtge. 3 3/4's, 1966	$7,108,000	114	111	112.50	7,996,500
(b) 1st Mtge. 3 1/2's, 1963	600,000			105.00	630,000
(c) 1st Mtge. 3's, 1966	500,000			100.00	500,000
Total Indicated Market Value					$19,497,463
Earnings Available For Capital					
Net Income for year ended August 31, 1941, as reported					$740,988
Add: Fixed charges (includes amortization of debt discount, premium, and expense and small amounts of other additions and deductions not suggested in interim report)					315,091
Total Earnings Available for Capital					$1,056,079
Investors' Appraisal Of Risks Of Capital					5.42%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price used is call price. Sold privately in March, 1938, at 102 3/4.
(c) Price estimated. Sold privately in March, 1941

[fol. 13423]

Boston Edison Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($100 par)	617,161 shs.	160	115	137.50	$84,859,638	617,161 shs.	134	108	121.00	$74,676,481
1st Mtge. Ser. "A" 3 1/2's, 1965	$53,000,000	109	100 1/2	104.75	55,517,500	$53,000,000	111 1/2	106	108.75	57,637,500
Total Indicated Market Value					$140,377,138					$132,313,981
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$5,381,879					$5,171,963
Add: Interest on Bonds					1,855,000					1,855,000
Amortization of Bond Discount (net)					269,007					136,543
Total Earnings Available for Capital					$7,505,886					$7,163,506
Investors' Appraisal Of Risks Of Capital					5.35%					5.41%

[fol. 13424]

Boston Edison Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Capital Stock	617,164 shs.	159 3/4	127	143.38	$88,488,974	2,468,656 shs.	36 3/4	30 3/4	33.75	$83,317,140
1st Mtge. Ser. "A" 3 1/2's, 1965	$53,000,000	112 1/2	103 1/2	108.00	57,240,000					
" " 2 3/4's, 1970						$53,000,000	Offered 12/10/40 at 103.53			54,870,900
Total Indicated Market Value					$145,728,974					$138,188,040
Earnings Available For Capital										
Net Income for Years ended December 31, as reported					$5,466,890					$5,900,140
Add: Interest on Bonds					1,855,000					1,855,000
Less: Amortization of Bond Premium					(24,303)					(24,303)
Total Earnings Available for Capital					$7,297,587					$7,730,837
Investors' Appraisal Of Risks Of Capital					5.01%					5.59%

Note: (a) $100 par in 1939 — $25 par in 1940.
Parentheses indicate red figures.

[fol. 13425]

Boston Edison Company

	1941				
	Outstanding Dec. 31, 1940	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock ($25 par)	2,468,656 shs.	34 3/4	26 5/8	30.69	$75,763,053
1st Mtge. 2 3/4's, 1970	$53,000,000	104 3/8	101	102.69	54,425,700
Total Indicated Market Value					$130,188,753
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$5,873,049
Add: Interest on funded debt					1,855,000
Less: Amortization of Bond Premium					(24,303)
Total Earnings Available for Capital					$7,703,746
Investors' Appraisal Of Risks Of Capital					5.92%

Notes: (a) Listed on Boston Stock Exchange.
Parentheses indicate red figures.

Central Hudson Gas & Electric Corporation

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (No par)	1,500,000 shs.	19	11 3/4	15.38	$23,070,000	1,500,000 shs.	14 1/4	10 3/4	12.50	$18,750,000
4 1/2% Cum. Pref. ($100 par)	70,300 shs.	110 1/2	102 1/2	106.50	7,486,950	70,300 shs.	111	107	109.00	7,662,700
Mtge. 3 1/2's, 1965	$10,765,000	109	102	105.50	11,357,075	$10,765,000	109 7/8	107	108.44	11,673,566
(a) Mtge. 3 1/2's, 1967	2,500,000			105.50	2,637,500	2,500,000			108.00	2,700,000
Central Hudson Gas & Elec. Co. Mtge. 5's, 1941	975,000	113 1/2	103	108.25	1,055,437	957,000	111	106 1/2	108.75	1,040,737
Total Indicated Market Value					$45,606,962					$41,827,003
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$1,740,189					$1,595,452
Add: Interest on Bonds					451,386					512,250
Amortization of Discount, Expense, & premium on Bonds (Net)					13,000*					13,005
Total Earnings Available for Capital					$2,204,575					$2,120,707
Investors' Appraisal Of Risks Of Capital					4.83%					5.07%

Notes: (a) Sold privately during 1937 at 102 — Prices Estimated.
* Estimated. Breakdown not available in 1937 report.

Central Hudson Gas & Electric Corporation

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year Hi	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (No par)	1,500,000 shs.	15	13 1/2	14.25	$21,375,000	$,500,000 shs.	17 1/4	12 1/2	14.88	$22,320,000
4 1/2% Cum. Pref. ($100 par)	70,300 shs.	115 3/4	107	111.38	7,830,014	70,300 shs.	115 3/4	109 1/2	112.63	7,917,889
Mtge. 3 1/2s, 1965	$10,765,000	118 1/8	104 1/4	111.19	11,969,603	$10,765,000	109 3/4	106	107.88	11,613,282
(a) Mtge. 3 1/2s, 1967	2,500,000			111.00	2,775,000	2,500,000			107.50	2,687,500
(b) Mtge. 3s, 1970						2,200,000			101.00	2,222,000
Central Hudson Gas & Elec. Co. Mtge. 5s, 1941	955,500	110	103 1/2	106.75	1,019,996	955,500	105 1/2	101	103.75	986,554
Total Indicated Market Value					$44,969,613					$47,747,225
Earnings Available For Capital										
Net Income for years ending December 31, as reported					$1,634,696					$1,625,427
Add: Interest on Bonds					512,044					550,183
Amortization of Discount, Expense, & premium on Bonds (Net)					13,416					13,414
Total Earnings Available for Capital					2,160,156					2,189,024
Investors' Appraisal Of Risks Of Capital					4.80%					4.58%

Notes: (a) Sold privately during 1937 at 102. Prices Estimated.
(b) Sold privately during 1940 at 101. Prices Estimated.

Central Hudson Gas & Electric Corporation

1941

	Outstanding Dec. 31, 1940 Adjusted for 1941 financing	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (No par)	1,500,000 shs.	13 1/4	8 3/4	11.00	$16,500,000
(a) 4 1/2% Cum. Pfd. ($100 par)	70,300 shs.	115	111	113.00	7,943,900
(b) 1st Mtge. 3's, 1971	$13,265,000			105.00	13,928,250
(c) 1st & Ref. Mtge. 3's, 1970	2,200,000			105.00	2,310,000
Total Indicated Market Value					$40,682,150
Earnings Available For Capital					
Net Income for year ended June 30, 1941, as reported					$ 1,433,147
(d) Add. Bond interest, etc.					619,778
Total Earnings Available for Capital					$ 2,052,925
Investors' Appraisal Of Risks Of Capital					5.05%

Notes: (a) Quotations from National Quotation Bureau.

(b) Sold privately to seven institutional buyers on May 2, 1941, at 105. Proceeds were used to refund 3 1/2's due 1965 and 1967.

(c) Price estimated. Sold privately in 1940 at 101.

(d) Includes a small amount of interest charged to construction-credit and other interest deductions which were unsegregated in June 30, 1941, report.

[fol. 13429]

Appendix C
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Cleveland Electric Illuminating Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (No Par)	2,324,564 shs.	48 1/4	30 1/2	39.38	$ 91,541,330	2,324,564 shs	39 1/4	30 1/2	34.88	$81,080,792
$4.50 Cum. Pref. (No Par)	254,989 shs.	113	102 3/4	107.88	27,508,213	254,989 shs.	113	107 1/2	110.25	28,112,537
1st Mtge. 3 3/4's, 1965	$40,000,000	111 7/8	105 3/4	108.81	43,524,000	$40,000,000	112 1/4	107 1/2	109.88	43,952,000
Total Indicated Market Value					$162,573,543					$153,145,329
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$7,101,798					$6,825,924
Add: Interest on Funded Debt					1,500,000					1,500,000
Total Earnings Available for Capital					$8,601,798					$8,325,924
Investors' Appraisal Of Risks Of Capital					5.29%					5.44%

[fol. 13430]

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Cleveland Electric Illuminating Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	2,324,564 shs.	44 1/4	34 1/2	39.38	$91,541,330	2,324,564 shs.	43	37 1/2	40.25	$93,563,701
$4.50 Cum. Pref. (no par)	254,989 shs.	115	106 7/8	110.94	28,288,480	254,989 shs.	114 1/2	108	111.25	28,367,526
1st Mtge. 3 3/4's, 1965	$40,000,000	111 1/2	105 1/2	108.50	43,400,000					
1st Mtge. 3's, 1970						$50,000,000	110 1/8	106 1/4	108.19	54,095,000
Total Indicated Market Value					$163,229,810					$176,026,227
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$7,332,181					$8,316,287
Add: Interest on Funded Debt					1,500,000					1,500,000
Amortization of Bond Premium on Debt Retired										16,871
Total Earnings Available for Capital					$8,832,181					$9,833,158
Investors' Appraisal Of Risks Of Capital					5.41%					5.59%

Cleveland Electric Illuminating Company

1941

	Outstanding Dec. 31, 1940	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (No par)	2,321,564 shs.	41	35	38.00	$88,333,432
(b) $4.50 Cum. Pfd. (No par)	254,089 shs.	115	110	112.50	28,686,263
1st Mtge. 3's, 1970	$50,000,000	109 3/4	105	107.38	53,690,000
Total Indicated Market Value					$170,709,695
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$8,562,065
Add: Interest on funded debt					1,500,080
Amortization of bond premium					33,742
Total Earnings Available for Capital					$10,095,887
Investors' Appraisal Of Risks Of Capital					5.91%

Notes: (a) Listed on New York Curb Exchange
(b) Listed on New York Stock Exchange

Commonwealth Edison Company

Indicated Market Value Of Capital	1937 Outstanding December 31	1937 Price Range for Year High	1937 Low	1937 Average	1937 Value	1938 Outstanding December 31	1938 Price Range for Year High	1938 Low	1938 Average	1938 Value
Capital Stock ($25 par)	7,779,815 shs.	33 1/4	20 1/2	26.88	$209,121,427	8,301,370 shs.	28	22 1/8	25.06	$208,032,332
1st Mtge. "A" 5's, 1953	$14,980,000	113 3/4	110 1/2	112.13	16,797,074					
" " "B" 5's, 1954	15,000,000	113 1/2	110 1/2	112.00	16,800,000					
" " "C" 4 1/2's, 1956	15,000,000	112 1/2	107 3/4	110.13	16,519,500					
" " "D" 4 1/2's, 1957	15,000,000	112 1/4	107 3/4	110.00	16,500,000					
" " "F" 4's, 1981	84,955,000	108 5/8	102	105.31	89,466,111	$85,000,000	109 3/4	105	107.38	91,273,000
" " "H" 3 3/4's, 1965	29,500,000	107 3/8	100 1/4	103.81	30,623,950	29,500,000	109 1/8	102 3/4	105.94	31,252,300
" " "I" 3 1/2's, 1968						100,000,000	108 1/4	103 1/4	105.75	105,750,000
Conv. Debs. 3 1/2's, 1958						97,282,200	111 1/4	100	105.63	102,759,188
(a) West. Untd. G. & E. 6 1/2% pref. ($100 par)	63,758 shs.	106	93	99.50	6,343,921	49,776 shs.	113	94	103.50	5,151,816
(a) West. Untd. G. & E. $7 Jr. Pref. ($100 par)	60,430 shs.	105	92	98.50	5,952,355	46,539 shs.	113	93	103.00	4,793,517
(a) Ill. No. Ut. Co. 6% Cum. Pref. ($100 par)	42,204 shs.	111	92	101.50	4,283,706					
(b) Ill. No. Ut. $7 Jr. Cum. Pref. ($100 par)	6,454 shs.			100.00	645,400					
(b) Chic. Dist. Elec. Gen. Co. 6% Cum. Pref. (no par)	33,388 shs.			100.00	3,338,800					
Commonwealth Elec. Co. 5's, 1943	$ 604,000	114	110	112.00	676,480	$ 548,000	115	111	113.00	619,240
Pub. Serv. Co. of N. Ill. 1st Mtge. 3 1/2's, 1968						80,000,000	106	103	104.50	83,600,000
P. S. 1st & Ref. 5's, 1956	18,818,000	112 1/8	107 1/4	109.69	20,641,464					
" 1st Lien & Ref. "C" 5's, 1956	8,250,000	105 3/4	103 5/8	104.69	8,636,925					
" " "D"	11,284,000	105	100	102.50	11,566,100					
" " "E"	14,975,000	104 1/4	101	102.63	15,368,843					
" " "F"	39,974,000	104	100 1/2	102.25	40,873,415					
" " "I"	16,000,000	105 3/4	102	103.88	16,620,800					
Econ. L. & P. Co. 1st Mtge. 5's, 1956	243,000	114	106	110.00	267,300	228,000	120	108	116.00	264,480
Commonwealth Sub. Corp. Debs. "A" 5 1/2's, 1948	19,364,000	104-1/4	99 1/2	101.88	19,728,043					
West. Untd. G. & E. 1st Mtge. "A" 5 1/2's, 1955	24,300,000	105 1/2	102 1/4	103.88	25,242,840	24,300,000	105 3/4	103	104.38	25,364,340
West. Untd. G. & E. 1st Mtge. "B" 5's, 1957	1,500,000	105	103	104.00	1,569,000	1,500,000	105 1/4	100	102.63	1,539,450
Super-Pr. Co. of Ill. 1st Mtge. (1928), 4 1/2's, 1968	10,000,000	106 3/4	102	104.38	10,438,000					
Super-Pr. Co. of Ill. 1st Mtge. (1930), 4 1/2's, 1970	9,833,500	106 3/4	102 1/4	104.50	10,276,008					
Ill. No. Ut. Corp. 1st & Ref. 5's, 1957	9,704,000	108	106	107.00	10,383,280					
Chic. Dist. Elec. Gen. Co. "A" 4 1/2's, 1970	14,950,000	107	103 1/4	105.13	15,716,935					
Chic. Dist. Elec. Gen. Co. "B" 6's, 1961	2,250,000	107	104 1/2	105.75	2,379,375					
(b) Chic. Dist. Elec. Gen. Co. Ser. Deb. 5's, 1942	150,000			100.00	150,000					
Total Indicated Market Value					$626,918,052					$660,399,663
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$16,202,437					$19,701,625
Add: Interest on Funded Debt					17,557,842					16,751,563
Amortization of Debt Discount and Expense					1,412,524					1,397,198
Dividends on Preferred Stocks of Subsidiaries					2,170,176					1,127,324
(c) Public common stockholders interest in income of subsidiaries on stocks acquired (for periods prior to acquisition)					1,951,902					28,869
Total Earnings Available for Capital					$39,294,881					$39,906,579
Investors' Appraisal Of Risks Of Capital					6.27%					5.91%

Notes: (a) Quotations from National Quotation Bureau
(b) Prices estimated

Notes: (c) These amounts have been included in earnings available for capital inasmuch as capital stock issued for minority holdings has been included in outstanding capital as of the year-ends.

[fol. 12433]

Commonwealth Edison Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($25 par)	10,471,516 shs.	32 1/8	25 5/8	28 88	$302,417,382	12,565,140 shs.	33	25 7/8	29 44	$369,917,722
1st Mtge. "I" 3 1/2's, 1968	$100,000,000	111 3/8	100	105 69	105,690,000	$100,000,000	111 3/8	106 3/4	109 06	109,060,000
(a) " " "J" 3 1/4's, 1979	114,500,000			102 00	116,790,000	114,500,000			104 00	119,080,000
Conv. Debs. 3 1/2's, 1958	82,332,900	128 1/4	104 7/8	116 56	95,967,228	29,992,300	130 3/4	109 1/4	120 00	35,990,760
Public Service Co. of No. Illinois 1st 3 1/2's, 1968	80,000,000	110 1/4	99	104 63	83,704,000	80,000,000	110 1/2	106	108 25	86,600,000
(b) Commonwealth Elec. Co. 5's, 1943	210,000	120	109	114 50	240,450	155,000	115 1/2	109	112 25	173,987
(c) Economy Lt. & Pr. Co. 1st Mtge. 5's, 1956	228,000	126	115	120 50	274,740	228,000	126	115	120 50	274,740
Total Indicated Market Value					$705,083,800					$721,097,209
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$25,414,590					$29,170,756
Add: Interest on Funded Debt					14,104,585					11,196,028
Amortization of Debt Discount and Expense					1,525,899					1,500,000
Dividends on Preferred Stocks of Subsidiaries					209,020					
Total Earnings Available for Capital					$41,254,094					$41,866,784
Investors' Appraisal Of Risks Of Capital					5.85%					5.81%

Notes: (a) Sold privately in 1939 at 102. Prices Estimated.
(b) Quotations from Moody's Public Utility Manuals.
(c) 1940 " " " " " "

Commonwealth Edison Company

1941

	Outstanding Dec. 31, 1940 Adjusted for 1941 financing	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock ($25 par)	12,717,588 shs.	30 1/8	24 3/4	27 19.	$345,791,218
1st Mtge. Bonds, "I", 3 1/2's, 1968	$100,000,000	110 1/4	107 5/8	108 94	108,930,000
(b) 1st Mtge. Bonds, "J", 3 1/4's, 1979	114,500,000			103 60	117,935,000
Com. Deb. 3 1/2's, 1958	26,181,100	119 3/4	110 1/4	115 00	30,108,265
Pub. Serv. Co. of No. Ill. 1st 3 1/2's, 1968	84,000,000	119 3/4	108 3/8	109 56	87,648,000
(c) Commonwealth Elec. Co. 5's, 1943	155,000	108	107	107 50	166,625
Economy Lt. & Pwr. Co. 1st Mtge. 5's, 1956	228,000	125	120	124 00	282,720
Total Indicated Market Value					$690,871,828
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$30,249,385
Add: Interest on funded debt					11,023,455
Amortization of debt discount and expense					1,633,332
Total Earnings Available for Capital					$42,906,172
					6.20%

Investors' Appraisal Of Risks Of Capital

Notes: (a) Listed on New York Stock Exchange. 152,448 shares were issued upon conversion of $3,811,200 principal amount of Convertible Debentures, 3 1/2's, due 1958.
(b) Price estimated. Sold privately in 1939 at 102.
(c) Quotations from National Quotation Bureau.

[fol. 13435]

Connecticut Power Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($25 par)	662,791 shs.	57	39	48 00	$31,813,968	662,791 shs.	49	37	43 00	$28,500,013
(a) 1st Mtge. 5's 1956	455,000	128 3/4	118	123 38	561,379	455,000	127	120	123 50	561,925
(b) 1st Gen. "A" 3 3/4's 1965	2,476,000			104 00	2,575,040	2,452,000			104 00	2,550,080
(c) 1st Gen. "B" 3 1/4's 1967	2,000,000			102 00	2,040,000	1,981,000			102 00	2,020,620
Total Indicated Market Value					$36,990,387					$33,632,638
Income Available For Capital										
Net Income for years ending December 31 as reported					$1,782,159					$1,648,488
Add: Interest Charges, Amortization, etc.					175,986					189,958
Total Earnings Available for Capital					$1,958,145					$1,838,446
Investors' Appraisal Of Risks Of Capital					5.29%					5.47%

Notes: (a) Quotations from Moody's Public Utility Manual.
(b) Sold privately Oct. 1, 1935 to nine Hartford insurance companies at 102. Prices are Call Prices.
(c) Sold privately Jan. 1, 1939 to seven insurance companies at 101. Prices are Call Prices.

[fol. 13436]

Connecticut Power Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($25 par)	662,791 shs.	52 1/2	44	48 25	$31,979,666	662,791 shs.	56 1/2	40	48 25	$31,979,666
(a) 1st Mtge. 5's 1956	$ 455,000	127	120	123 50	561,925	$ 455,000	130	144	127 00	577,850
(b) 1st Gen. "A" 3 3/4's 1965	2,428,000			104 00	2,525,120	2,404,000			104 00	2,500,160
(c) 1st Gen. "B" 3 1/4's 1967	1,961,000			102 00	2,000,220	1,942,000			102 00	1,980,840
1st Gen. "C" 3 1/4's 1975						4,000,000	112	110	111 00	4,440,000
Total Indicated Market Value					$37,066,931					$41,478,516
Earnings Available For Capital										
Net Income for years ending December 31, as reported					$1,834,527					$1,708,351
Add: Interest Charges, Amortization, etc.					186,283					206,671
Total Earnings Available for Capital					$2,020,810					$2,005,022
Investors' Appraisal Of Risks Of Capital					5.45%					4.83%

Notes: (a) 1939 Quotations from Moody's Public Utility Manual.
(b) Sold privately Oct. 1, 1935 to nine Hartford insurance companies at 102. Prices used are Call Prices.
(c) Sold privately Jan. 1, 1937 to seven insurance companies at 101. Prices used are Call Prices.

Connecticut Power Company

1941

	Outstanding Dec. 31, 1940 Adjusted for 1941 financing	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($25 par)	662,791 shs.	54 3/4	37	45.88	$30,408,851
1st Mtge. 5's, 1956	455,000	133	127	130.00	591,500
(b) 1st & Gen. "A" 3 3/4's 1965	2,404,000			104.00	2,500,160
(c) 1st & Gen. "B" 3 1/4's, 1967	1,922,000			102.00	1,960,440
1st & Gen. "C" 3 1/4's, 1975	4,000,000	111	107	109.00	4,360,000
Total Indicated Market Value					$39,820,951
Earnings Available For Capital					
Net Income for year ended Dec. 31, 1940, as reported					$1,798,351
Add: Interest charges, amortization, etc.					206,671
Total Earnings Available for Capital					$2,005,022
Investors' Appraisal Of Risks Of Capital					5.04%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price used is call price. Sold privately Oct. 1, 1935, to nine Hartford Insurance Companies at 102.
(c) Price used is call price. $20,000 called July 1, 1941, at 102. These bonds were sold privately Jan. 1, 1937, to seven insurance companies at 101.

Consolidated Edison Company Of New York, Inc.

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	11,471,527 shs.	49 7/8	21 1/8	35.50	$407,239,209	11,471,527 shs.	34 1/4	17	25.63	$294,015,237
$5 Cum. Pref. Stock (no par)	2,181,915 shs.	108	92	100.60	218,191,500	2,185,311 shs.	104	88 7/8	96.44	210,751,393
20 Yr. Debs. 3 1/2's, 1956	$35,000,000	107 5/8	99 3/4	103.69	36,291,500	$35,000,000	105 5/8	97 3/8	101.50	35,525,000
20 Yr. Debs. 3 1/2's, 1958						39,000,000	105 7/8	99 1/2	102.69	30,807,000
10 Yr. Debs. 3 1/2's, 1948						60,000,000	107	103 1/2	105.06	63,036,000
10 Yr. Debs. 3 1/4's, 1946	35,000,000	106 3/4	102 1/4	104.50	36,575,000	35,000,000	106 7/8	100	103.44	36,204,000
N.Y. Edison 3 1/4's, 1965	54,990,000	105 1/2	97	101.25	55,677,375	54,990,000	108 1/2	101	104.75	57,602,025
" " " 3 1/4's, 1966	30,000,000	105 5/8	97 5/8	101.63	30,489,000	30,000,000	108 1/2	101 1/2	105.00	31,500,000
N.Y. Gas & Elec. Light, Heat & Power Co. 5's, 1948	15,000,000	125 1/2	116 3/4	121.13	18,169,500	15,000,000	125	121 1/2	123.25	18,487,500
N.Y. Gas & Elec. Light, Heat & Power Co. 4's, 1949	20,819,000	117 1/2	109 5/8	113.56	23,642,056	20,803,000	117 1/2	112 5/8	115.06	23,935,932
Edison Elec. Ill. Co. of N.Y. 5's, 1995	2,188,000	139 1/2	131	135.25	2,959,270	2,188,000	134 1/8	131 1/2	132.81	2,905,883
New Amsterdam Gas 5's, 1948	9,583,000	121 1/2	113	117.25	11,552,643	9,840,000	119	115 1/2	117.25	11,537,400
N.Y. East River Gas 5's, 1944	3,500,000	117 1/2	110	113.75	3,981,250	3,500,000	114	104	109.00	3,815,000
" " " " 5's, 1945	1,500,000	117	110	113.50	1,702,500	1,500,000	114	110	112.00	1,680,000
Consolidated Gas of N.Y. 4 1/2's, 1951	60,000,000	108 1/2	105 1/4	106.88	64,128,000					
N.Y. Steam 5's, 1956	8,700,000	107 1/2	98	102.75	8,939,250					
Westchester Lighting Co. 5's, 1950	8,684,000	127 1/8	116	121.56	10,556,270	8,684,000	123	121 1/4	122.13	10,605,769
" " " 3 1/2's, 1967	25,000,000	102 1/2	96 3/8	99.44	24,860,000	25,000,000	106 1/8	98 1/2	102.31	25,577,500
N.Y. & Westchester Ltg. Co. 4's, 2004	9,993,000	104 1/2	100	102.25	10,217,843	9,993,000	105 3/4	103 3/4	104.75	10,467,668
" " " " " 5's, 1954	2,500,000	113 1/2	110 1/2	112.00	2,800,000	2,500,000	114	110 5/8	112.31	2,807,750
N.Y. Steam Corp. 3 1/2's, 1963						27,982,000	102	110 3/4	101.38	28,368,152
(a) Yonkers Elec. Lt. & Pr. 3 1/2's, 1950						9,515,000			101.75	9,681,513
N.Y. Steam Corp. "A" 6's, 1947	5,605,500	108 5/8	102 1/4	105.44	5,910,439					
" " " 5's, 1951	12,758,000	107 3/8	98 3/4	103.06	13,148,395					
Kings Co. Elec. Lt. & Pr. Co. 6's, 1997	5,123,000	161	146 1/2	153.75	7,876,613	5,123,000	165	150	157.50	8,068,725
Edison Elec. Ill. Co. of Bklyn. 4's, 1939	4,240,000	107 1/2	103 1/8	105.31	4,465,144					
Brooklyn Edison 3 1/2's, 1966	55,000,000	105 3/4	97 3/4	101.75	55,962,500	55,000,000	108 3/4	101	104.88	57,684,000
(b) " " 3's, 1968						4,240,000			100.00	4,240,000
(c) N.Y. & Queens E.L. & P. Co. 3 1/4's, 1968						10,000,000			101.00	10,100,000
" " " 3 1/2's, 1965	24,970,000	109 1/8	101 3/8	105.25	26,280,925	24,970,000	109	106	107.50	26,842,750
White Plains Light 5's, 1938	335,000	106	100 1/2	103.25	345,888					
Total Indicated Market Value					$1,081,962,070					$1,016,256,197
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$35,662,563					$34,893,619
Less — Minority Interest					88,644					—
					35,573,919					34,893,619
Add: Interest on Funded Debt					16,269,576					17,961,912
Amortization of Debt Discount, Other Interest, etc.					953,651					1,037,674
Total Earnings Available for Capital					$52,797,146					$53,893,205
Investors' Appraisal Of Risks Of Capital					4.88%					5.30%

Notes: (a) Sold privately in August, 1938, to three insurance companies at 101 3/4. Prices estimated.
(b) Sold privately in December, 1938, to three insurance companies at 100 proceeds being used to retire an equal amount of Edison Electric Illuminating Co. of Brooklyn bonds on January 1, 1939.
(c) Sold privately in May, 1938, to insurance companies at 101. Prices estimated.

[fol. 13439]

Consolidated Edison Company Of New York, Inc.

Indicated Market Value Of Capital	1939 Outstanding December 31	1939 Price Range for Year High	1939 Price Range for Year Low	1939 Price Range for Year Average	1939 Value	1940 Outstanding December 31	1940 Price Range for Year High	1940 Price Range for Year Low	1940 Price Range for Year Average	1940 Value
Common Stock (no par)	11,471,027 shs.	35	27	31.00	$355,601,837	11,471,027 shs.	32 7/8	21 3/8	27.13	$311,208,963
$5 Cum. Pref. Stock (no par)	2,184,590 shs.	108 1/2	101 3/4	105.13	229,665,947	2,184,590 shs.	110 1/8	97 1/4	103.69	226,520,137
20 Yr. Debs. 3 1/2's, 1956	$35,000,000	108	98 3/4	103.38	36,183,000	$35,000,000	107 1/8	103	105.06	36,771,000
20 Yr. Debs. 3 1/2's, 1958	30,000,000	109 3/8	98 3/4	104.06	31,218,000	30,000,000	109 3/8	105 5/8	107.50	32,250,000
10 Yr. Debs. 3 1/2's, 1948	60,000,000	108 1/2	99	103.75	62,250,000	60,000,000	108 1/2	104 1/4	106.38	63,828,000
10 Yr. Debs. 3 1/4's, 1946	35,000,000	107 5/8	99 7/8	103.75	36,312,500	35,000,000	107 1/2	103 1/4	105.38	36,883,000
N.Y. Edison 3 1/4's, 1965	54,990,000	110 3/4	100	105.38	57,948,462	54,990,000	110 5/8	104 1/2	107.56	59,147,244
" " 3 1/4's, 1966	30,000,000	112 1/2	100	106.25	31,875,000	30,000,000	111	105	108.00	32,400,000
N.Y. Gas & Elec. Light, Heat & Power Co. 5's, 1948	15,000,000	126 3/4	116 1/8	121.44	18,216,000	15,000,000	126 1/2	120 5/8	123.56	18,534,000
N.Y. Gas & Elec. Light, Heat & Power Co. 4's, 1949	20,803,000	119 1/4	108 1/2	113.88	23,690,456	20,803,000	119 1/4	113 1/2	116.38	24,210,531
Edison Elec. Ill. Co. of N.Y. 5's, 1995	2,188,000	151	139	145.00	3,172,600	2,188,000	149 1/2	141	145.25	3,178,070
New Amsterdam Gas 5's, 1948	9,840,000	123 1/2	114	118.75	11,685,000	9,834,000	122 3/8	115	118.69	11,671,975
N.Y. East River Gas 5's, 1944	3,500,000	115 1/2	105 1/2	110.50	3,867,500	3,500,000	114 1/2	108	111.25	3,893,750
" " " " 5's, 1945	1,500,000	116	105 1/2	110.75	1,661,250	1,500,000	116 1/2	109	112.75	1,691,250
Westchester Ltg. Co. 5's, 1950	8,684,000	130	118	124.00	10,768,160	8,684,000	128 1/4	120	124.13	10,779,449
" " " 3 1/2's, 1967	25,000,000	110	100	105.00	26,250,000	25,000,000	110 1/4	104 1/8	107.19	26,797,500
N.Y. & Westchester Ltg. Co. 4's, 2004	9,993,000	106 1/2	101 1/2	104.00	10,392,720	9,993,000	106 5/8	102	104.31	10,423,698
" " " " " 5's, 1954	2,500,000	113 1/2	111 3/4	112.63	2,815,750	2,500,000	115 1/4	111 3/4	113.50	2,837,500
N.Y. Steam Corp. 3 1/2's, 1963	27,982,000	107 1/4	94 1/2	100.88	28,223,242	27,982,000	109 3/8	101	105.19	29,434,266
(a) Yonkers Elec. Lt. & Pr. 3 1/2's, 1950	9,515,000			102.00	9,705,300	9,515,000			102.00	9,705,300
Kings Co. Elec. Lt. & Pr. Co. 6's, 1997	5,123,000	170	150	160.00	8,196,800	5,123,000	168	157	162.50	8,324,875
Brooklyn Edison 3 1/4's, 1966	55,000,000	111	100 5/8	105.79	58,184,500	55,000,000	110 7/8	105	107.94	59,367,000
(b) " " 3's, 1968	4,240,000			101.00	4,282,400	4,240,000			102.00	4,324,800
(c) N.Y. & Queens E.L. & P. Co. 3 1/4's, 1968	10,000,000			101.00	10,100,000	10,000,000			102.00	10,200,000
" " " " " 3 1/2's, 1965	24,970,000	110 1/2	102 1/2	106.50	26,593,050	24,970,000	110 1/2	107	108.75	27,154,875
(d) Consol. Tel. & Elec. Subway Co. 3 1/4's, 1990						13,710,000			102.22	14,014,362
Total Indicated Market Value					$1,098,864,474					$1,075,554,545
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$36,428,119					$36,454,864
Add: Interest on Funded Debt					17,275,590					17,693,767
Amortization of Debt Discount, Other Interest, etc.					1,201,205					946,520
Total Earnings Available for Capital					$54,904,914					$55,095,151
Investors' Appraisal Of Risks Of Capital					5.00%					5.12%

Notes: (a) Sold privately in August, 1938, to three insurance companies at 101 3/4. Prices estimated.
(b) Sold privately in December, 1938, to three insurance companies at 100 proceeds being used to retire an equal amount of Edison Electric Illuminating Co. of Brooklyn bonds on January 1, 1939.
(c) Sold privately in May, 1938, to insurance companies at 101. Prices estimated.
(d) Sold privately in January, 1940, to insurance companies at a price to yield 3.10% or approximately 102.22.

Consolidated Edison Company Of New York, Inc.

	Outstanding Dec. 31, 1940	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (no par)	11,471,027 shs.	23 3/8	17 1/4	20.31	$232,976,558
(a) $5 Cum. Pref. Stock (no par)	2,184,590 shs.	107 3/8	95	101.19	221,058,662
20 Yr. Debs. 3 1/2's, 1956	$35,000,000	107 5/8	103 1/2	105.56	36,946,000
20 Yr. Debs. 3 1/2's, 1958	30,000,000	111 3/4	106 1/4	109.00	32,700,000
10 Yr. Debs. 3 1/2's, 1948	60,000,000	107	104 3/4	105.88	63,528,000
10 Yr. Debs. 3 1/4's, 1946	35,000,000	105 1/4	103 1/4	104.25	36,487,500
N. Y. Edison Co. 3 1/4's, 1965	54,990,000	110	106 3/4	108.38	59,598,162
" " " 3 1/4's, 1966	30,000,000	110 1/2	107 1/8	108.81	32,643,000
N. Y. Gas & Electric Light Heat & Power Co. 5's, 1948	15,000,000	125 3/8	120 1/4	122.81	18,421,500
N. Y. Gas & Electric Light Heat & Power Co. 4's, 1949	20,803,000	118 3/4	114 1/4	116.50	24,235,495
Edison Elec. Ill. Co. of N. Y. 5's, 1995	2,188,000	152	150	151.00	3,303,880
New Amsterdam Gas Co. 5's, 1948	9,834,000	121 1/2	117 1/4	119.38	11,739,829
N. Y. & East River Gas Co. 5's, 1944	3,500,000	112	108	110.00	3,850,000
" " " " " 5's, 1945	1,500,000	113	110	111.50	1,672,500
Westchester Lighting Co. 5's, 1950	8,684,000	128 1/2	124 1/8	126.31	10,968,760
" " " 3 1/2's, 1967	25,000,000	110 1/2	107 3/4	109.13	27,282,500
N. Y. & Westchester Light Co. 4's, 2004	9,993,000	106 1/2	103	104.75	10,467,668
" " " " 5's, 1954	2,500,000	115	114	114.50	2,862,500
N. Y. Steam Corp. 3 1/2's, 1963	27,982,000	108 3/4	105 1/2	107.13	29,977,117
(b) Yonkers Elec. Light & Power Co. 3 1/2's, 1950	9,515,000			102.00	9,705,300
Kings County Elec. Lt. & Power Co. 6's, 1997	5,123,000	170	161	165.50	8,478,565
Brooklyn Edison Co. 3 1/4's, 1966	55,000,000	110 3/4	103 1/4	107.00	58,850,000
(c) " " " 3's, 1968	4,240,000			102.00	4,324,800
(d) N. Y. & Queens E. L. & P. Co. 3 1/4's, 1968	10,000,000			102.00	10,200,000
" " " " 3 1/2's, 1965	24,970,000	111 1/2	108 1/2	110.00	27,467,000
(e) Consol. Tel. & Elec. Subway Co. 3 1/4's, 1960	13,710,000			102.22	14,014,362
Total Indicated Market Value					$993,759,658
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$34,590,306
Add: Interest on Funded Debt					17,720,577
Amortization of Debt Discount, Other Interest, etc.					813,277
Total Earnings Available for Capital					$53,124,160
Investors' Appraisal Of Risks Of Capital					5.35%

Notes: (a) Listed on New York Stock Exchange.
(b) Price estimated. Sold privately in August, 1938 to three insurance companies at 101 3/4.
(c) Price estimated. Sold privately in December, 1938 to insurance companies at 101.
(d) Price estimated. Sold privately in May, 1938 to insurance companies at 101.
(e) Price estimated. Sold privately in January, 1940 to insurance companies at a price to yield 3.10% or approximately 102.22.

Consolidated Gas, Electric Light & Power Company Of Baltimore

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (No par)	1,167,397 shs.	89 1/2	60	74.75	$87,262,926	1,167,397 shs.	74	55	64.50	$75,297,107
5% Pref. Series "A"	223,063 shs.	115	110	112.50	25,094,588	223,063 shs.	117	112 3/4	114.88	25,625,477
(a) 1st Ref. Mtge. S.F.-K-3 3/4's, 1964	18,000,000			105.00	18,900,000					
(b) 1st Ref. Mtge. S.F.-L-3 3/4's, 1960	10,440,000			106.00	11,066,400					
(c) 1st Ref. Mtge. S.F.-M-3 1/2's, 1965	7,076,000			106.00	7,500,560	7,076,000			106.00	7,500,560
1st Ref. Mtge. S.F.-N-3 1/4's, 1971	22,687,000	104 1/2	98 1/8	101.31	22,984,200	22,145,000	110 3/4	103 3/4	107.25	23,750,513
(d) 1st Ref. Mtge. S.F.-O-3 1/4's, 1968						28,440,000			107.00	30,430,800
Consol. Gas Co. of Balt. City 4 1/2's, 1954	6,100,000	125 5/8	118	121.81	7,430,410	6,100,000	125 1/2	120 3/4	123.13	7,510,930
Consol. Gas Co. of Balt. City 5's, 1939	3,400,000	109 3/4	105	107.38	3,650,920	3,400,000	106 7/8	102 1/8	104.50	3,553,000
(e) Indebtedness to Mayor, City Council of Laurel, Maryland	25,000			100.00	25,000	22,500			100.00	22,500
Total Indicated Market Value					$183,915,004					$173,690,887
Earnings Available For Capital										
Net Income for years ending December 31, as reported					$6,516,403					$5,853,140
Add: Interest & Amortization of Bonds					2,646,359					2,463,075
Total Earnings Available for Capital					$9,162,762					$8,316,215
Investors' Appraisal Of Risks Of Capital					4.98%					4.79%

Notes: (a) Sold privately in Nov. 1934 to a small group of insurance companies. Price used is call price.
(b) Sold privately in Apr. 1935 to a small group of insurance companies. Price used is call price.
(c) Sold privately in July 1935 to a small group of institutional investors. Price used is call price.
(d) Sold privately in June 1938 to a small group of insurance companies. Price used is call price.
(e) Prices Estimated.

Consolidated Gas, Electric Light & Power Company Of Baltimore

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (No par)	1,167,397 shs.	84 1/4	71	77.63	$90,625,029	1,167,397 shs.	83 5/8	65 1/2	74.56	$87,041,120
4 1/2% Pref. Series "B"	222,921 shs.	120 1/2	111	116.25	25,914,566	222,921 shs.	120	111	115.50	25,747,375
4% Pref. Series "C"						68,928 shs.	112 3/4	107 3/4	110.25	7,599,312
(a) 1st Ref. Mtge. S.F.-M-3 1/2's, 1965	$6,466,000			106.00	6,853,960	$5,850,000			106.00	6,201,000
1st Ref. Mtge. S.F.-N-3 1/4's, 1971	22,145,000	113	101 7/8	107.43	23,790,374	22,145,000	111 1/2	105	108.25	23,971,962
(b) 1st Ref. Mtge. S.F.-O-3 1/4's, 1968	28,440,000			107.00	30,430,800	28,440,000			108.00	30,715,000
1st Ref. Mtge. S.F.-P-3's, 1969	7,000,000	108	98	103.00	7,210,000	7,000,000	111 1/4	104 1/2	107.88	7,551,600
Consol. Gas Co. of Balt City 4 1/2's, 1954	6,100,000	131	120	125.50	7,655,500	6,100,000	130	124 1/2	127.25	7,762,250
(c) Indebtedness to Mayor, City Council of Laurel, Maryland	20,000			100.00	20,000	17,500			100.00	17,500
Total Indicated Market Value					$192,500,229					$196,607,319
Earnings Available For Capital										
Net Income for years ending Dec. 31, as reported					$6,805,831					$6,255,324
Add: Interest & Amortization on Bonds					2,361,548					2,345,310
Amortization of Capital Stock expense in connection with issuance of preferred stock					73,192					168,528

Consolidated Gas, Electric Light & Power Company Of Baltimore

	1937 Outstanding December 31	1937 Price Range for Year High	1937 Low	1937 Average	1937 Value	1938 Outstanding December 31	1938 Price Range for Year High	1938 Low	1938 Average	1938 Value
Indicated Market Value Of Capital										
Common Stock (No par)	1,167,397 shs.	89 1/2	60	74.75	$87,262,926	1,167,397 shs.	74	55	64.50	$75,297,107
5% Pref. Series "A"	223,063 shs.	115	110	112.50	25,094,588	223,063 shs.	117	112 3/4	114.88	25,625,477
(a) 1st Ref. Mtge. S.F.-K-3 3/4's, 1964	18,000,000			105.00	18,900,000					
(b) 1st Ref. Mtge. S.F.-L-3 3/4's, 1960	10,440,000			106.00	11,066,400					
(c) 1st Ref. Mtge. S.F.-M-3 1/2's, 1965	7,076,000			106.00	7,500,560	7,076,000			106.00	7,500,560
1st Ref. Mtge. S.F.-N-3 1/4's, 1971	22,687,000	104 1/2	98 1/8	101.31	22,984,200	22,145,000	110 3/4	103 3/4	107.25	25,750,513
(d) 1st Ref. Mtge. S.F.-O-3 1/4's, 1968						28,440,000			107.00	30,430,800
Consol. Gas Co. of Balt. City 4 1/2's, 1954	6,100,000	125 5/8	118	121.81	7,430,410	6,100,000	125 1/2	120 3/4	123.13	7,510,930
Consol. Gas Co. of Balt. City 5's, 1939	3,400,000	109 3/4	105	107.38	3,650,920	3,400,000	106 7/8	102 1/8	104.50	3,553,000
(e) Indebtedness to Mayor, City Council of Laurel, Maryland	25,000			100.00	25,000	22,500			100.00	22,500
Total Indicated Market Value					$183,915,004					$173,690,887
Earnings Available For Capital										
Net Income for years ending December 31, as reported					$6,516,403					$5,853,140
Add: Interest & Amortization of Bonds					2,646,359					2,463,075
Total Earnings Available for Capital					$9,162,762					$8,316,215
Investors' Appraisal Of Risks Of Capital					4.98%					4.79%

Notes: (a) Sold privately in Nov. 1934 to a small group of insurance companies. Price used is call price.
(b) Sold privately in Apr. 1935 to a small group of insurance companies. Price used is call price.
(c) Sold privately in July 1935 to a small group of institutional investors. Price used is call price.
(d) Sold privately in June 1938 to a small group of insurance companies. Price used is call price.
(e) Prices Estimated.

[fol. 13442]

Consolidated Gas, Electric Light & Power Company Of Baltimore

	1939 Outstanding December 31	1939 Price Range for Year High	1939 Low	1939 Average	1939 Value	1940 Outstanding December 31	1940 Price Range for Year High	1940 Low	1940 Average	1940 Value
Indicated Market Value Of Capital										
Common Stock (No par)	1,167,397 shs.	84 1/4	71	77.63	$90,625,029	1,167,397 shs.	83 5/8	65 1/2	74.56	$87,041,120
4 1/2% Pref. Series "B"	222,921 shs.	121 1/2	111	116.25	25,914,566	222,921 shs.	120	111	115.50	25,747,375
4% Pref. Series "C"						68,928 shs.	112 3/4	107 3/4	110.25	7,599,312
(a) 1st Ref. Mtge. S.F.-M-3 1/2's, 1965	$6,466,000			106.00	6,852,960	$5,850,000			106.00	6,201,000
1st Ref. Mtge. S.F.-N-3 1/4's, 1971	22,145,000	113	101 7/8	107.43	23,790,374	22,145,000	111 1/2	105	108.25	23,971,962
(b) 1st Ref. Mtge. S.F.-O-3 1/4's, 1968	28,440,000			107.00	30,430,800	28,440,000			108.00	30,715,000
1st Ref. Mtge. S.F.-P-3's, 1969	7,000,000	108	98	103.00	7,210,000	7,000,000	111 1/4	104 1/2	107.88	7,551,600
Consol. Gas Co. of Balt City 4 1/2's, 1954	6,100,000	131	120	125.50	7,655,500	6,100,000	130	124 1/2	127.25	7,762,250
(c) Indebtedness to Mayor, City Council of Laurel, Maryland	20,000			100.00	20,000	17,500			100.00	17,500
Total Indicated Market Value					$192,500,229					$196,607,319
Earnings Available For Capital										
Net Income for years ending Dec. 31, as reported					$6,805,831					$6,255,324
Add: Interest & Amortization on Bonds					2,361,548					2,345,310
Amortization of Capital Stock expense in connection with issuance of preferred stock					73,192					168,528
Total Earnings Available for Capital					$9,240,571					$8,769,162
Investors' Appraisal Of Risks Of Capital					4.80%					4.46%

Notes: (a) Sold Privately in July 1935 to a small group of institutional investors. Price used is call price.
(b) Sold privately in June 1938 to a small group of insurance companies. Price used is estimated.
(c) Prices estimated.

Consolidated Gas Electric Light & Power Company Of Baltimore

	Outstanding Dec. 31, 1940 Adjusted for 1941 financing	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (No par)	1,167,397 shs.	73	55 3/4	64 38	$75,157,019
(a) 4 1/2% Pfd. Series "B"	222,921 shs.	119 1/4	115	117 12	26,108,508
(a) 4% Pfd. Series "C"	68,928 shs.	116 1/4	105	107 62	7,418,031
(b) 1st Ref. Mtge. S.F. N 3 1/4's, 1971	$21,495,000	111 1/2	107 3/4	109 62	23,562,819
(d) 1st Ref. Mtge. S.F. O 3 1/4's, 1968	28,440,000			109 00	30,999,600
1st Ref. Mtge. S.F. P 3's, 1969	7,000,000	111	106	108 50	7,595,000
(c) 1st Ref. Mtge. S.F. Q 2 3/4s, 1976	12,000,000	105 1/8	101	103 06	12,367,200
Consol. Gas Co. of Balt. City 4 1/2's, 1954	6,100,000	128 1/4	122 5/8	125 44	7,651,840
(e) Indebtedness to Mayor, City Council of Laurel, Maryland	17,500			100 00	17,500
Total Indicated Market Value					$190,877,517
Earnings Available For Capital					
Net income for year ended June 30, as reported					$6,125,777
Add: Interest and amortization on bonds					2,424,963
(f) Other Deductions					185,298
Total Earnings Available for Capital					$8,736,038
Investors' Appraisal Of Risks Of Capital					4.58%

Notes: (a) Listed on New York Curb Exchange

(b) Company called for payment Sept. 10, 1941 at 107 and interest, $650,000 of its 1st Ref. Mtge. N 3 1/4's, 1971.

(c) Offered in Jan. 1941, $12,000,000 at 103 1/2 and interest. $5,850,000 of proceeds used to refund like principal amount of Series "M" 3 1/2's, 1965.

(d) Price estimated. Sold privately in June 1938 to a small group of insurance companies.

(e) Price estimated.

(d) Includes an undetermined amount of amortization, during the last six months of 1940, of Capital Stock Expense in connection with issuance of preferred stock. Amount is not set out in interim report.

[fol. 13444]

Detroit Edison Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($100 par)	1,266,985 shs.	146 1/2	88 5/8	117.56	$148,946,757	1,266,461 shs.	115 1/8	76	95.56	$121,023,013
Ref. Mtge. Series "D" 4 1/2's, 1961	$50,000,000	118 1/4	111 1/2	113.88	56,940,000	$50,000,000	114 1/4	111 3/8	112.81	56,405,000
" " " "F" 4's, 1965	49,000,000	111 1/2	105 7/8	108.69	53,258,100	49,000,000	112 1/4	107	109.63	53,718,700
" " " "G" 3 1/2's, 1966	20,000,000	109 1/2	101	105.25	21,050,000	35,000,000	111 1/4	103 1/2	107.38	37,583,000
" " " "E" 5's, 1952	15,000,000	110 5/8	106 1/4	108.44	16,266,000					
(a) Construction Notes 3 1/4's, 1945						7,500,000			100.00	7,500,000
Great Lakes Power Co. 5's, 1943	320,000	118	112	115.00	368,000	320,000	116	112	114.00	364,800
Total Indicated Market Value					$296,828,857					$276,594,513
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$ 9,950,937					$7,833,306
Add: Interest on Funded Debt and Construction Notes					5,679,200					5,733,883
Amortization of Debt Discount					268,828					273,910
Total Earnings Available for Capital					$15,898,965					$13,841,099
Investors' Appraisal Of Risks Of Capital					5.36%					5.00%

Note: (a) Price estimated

[fol. 13445]

Detroit Edison Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($100 par)	1,270,610 shs.	125 1/2	103	114.25	$145,167,193	1,269,904 shs.	125 1/8	98 1/2	111.81	$144,987,966
Ref. Mtge. Series "D" 4 1/2's, 1961	$50,000,000	115	108 1/8	110.56	55,280,000					
" " " "F" 4's, 1965	49,000,000	112 5/8	105 1/4	108.94	53,380,600	$49,000,000	111 1/2	107 1/2	109.50	53,655,000
" " " "G" 3 1/2's, 1966	35,000,000	113	105	109.00	38,150,000	35,000,000	113	108 3/8	110.69	38,741,500
" " " "H" 3's, 1970						50,000,000 Offered 12/19/40 at 107 25				53,625,000
(a) Construction Notes 3 1/4's, 1945	10,500,000			100.00	10,500,000	10,290,000			100.00	10,290,000
(b) Great Lakes Power Co. 6's, 1943	320,000	118	110	114.00	364,800	320,000	116	107 1/2	111.75	357,300
Total Indicated Market Value					$302,842,593					$298,657,066
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$ 9,640,295					$10,732,734
Add: Interest on Funded Debt and Construction Notes					5,714,471					5,828,783
Amortization of Debt Discount					330,961					407,006
Total Earnings Available for Capital					$15,685,727					$16,968,523
Investors' Appraisal Of Risks Of Capital					5.18%					5.68%

Notes: (a) Prices estimated
(b) Quotations from Moody's Public Utility Manual for 1940.

Detroit Edison Company

1941

	Outstanding Dec. 31, 1940 Adjusted for 1941 financing	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock ($20 par)	6,349,520 shs.	23 1/4	19 3/4	21.50	$136,514,680
Ref. Mtge. Series "F", 4's 1965	$49,000,000	112	108 1/2	110.25	54,022,500
Ref. Mtge. Series "G", 3 1/2's, 1966	35,000,000	112 3/8	109	110.69	38,741,500
Ref. Mtge. Series "H", 3's, 1970	50,000,000	107 3/8	103 1/4	105.31	52,655,000
(b) Construction Notes 2 1/4's, 1945	7,570,000			100.00	7,570,000
Great Lakes Power Co. 6's, 1943	320,000	108	105	106.50	340,800
Total Indicated Market Value					$289,844,480
Earnings Available For Capital					
Net Income for year ended July 31, as reported					$11,714,285
Add: Interest on funded debt and Construction notes					5,763,370
Amortization of debt discount and expense					686,363
Total Earnings Available for Capital					$18,164,018
Investors' Appraisal Of Risks Of Capital					6.27%

Notes: (a) Listed on New York Stock Exchange. Par value changed from $100 to $20 on March 25, 1941. Five new shares were issued for each old one.

(b) Price estimated. Principal payment of $2,720,000 made May 1, 1941, and interest rate reduced to 2 1/4% that date.

[fol. 13447]

Duke Power Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($100 par)	1,010,049 shs.	79	52	65.50	$66,158,210	1,010,049 shs.	67 3/4	54	60.88	$61,491,783
7% Cum. Pfd. ($100 par)	2,837 shs.	103	95	99.00	280,863	2,837 shs.	105	100	102.50	290,792
(a) 1st & Ref. 3 1/2's, 1967	$30,000,000			100.00	30,000,000	$30,000,000			102.00	30,600,000
(b) " " 4's, 1967	8,000,000			104.00	8,320,000	8,000,000			104.00	8,320,000
Total Indicated Market Value					$104,759,073					$100,702,575
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$4,660,474					$4,297,150
Add: Interest on Bonds as computed by Standard & Poor's Corp. (not shown separately in report)					1,370,000					1,370,000
Total Earnings Available for Capital					$6,030,474					$5,667,150
Investors' Appraisal Of Risks Of Capital					5.76%					5.63%

Notes: (a) Sold privately in Feb., 1936 at 100 to the Duke Endowment Trusts. Prices used are estimated.
(b) " " " July, 1935. Prices used are Call Prices.

[fol. 13448]

Duke Power Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($100 par)	1,010,049 shs.	79	61 1/4	70.13	$70,834,736	1,010,049 shs.	79 5/8	64	71.81	$72,531,619
7% Cum. Pfd. ($100 par)	2,837 shs.	105	105	105.00	297,885	2,837 shs.	105	105	105.00	297,885
(a) 1st & Ref. 3 1/2's, 1967	$30,000,000			104.00	31,200,000	$30,000,000			105.00	31,500,000
(b) 1st & Ref. 4's, 1967	8,000,000			104.00	8,320,000	8,000,000			104.00	8,320,000
Total Indicated Market Value					$110,652,621					$112,649,504
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$5,619,767					$5,997,101
Add: Interest on Bonds as computed by Standard & Poor's Corp. (not shown separately in report)					1,370,000					1,370,000
Total Earnings Available for Capital					$6,989,767					$7,367,101
Investors' Appraisal of Risks of Capital					6.32%					6.54%

Notes: (a) Sold privately in February, 1936, at 100 to the Duke Endowment Trusts. Prices are estimated.
(b) Sold privately in July, 1935. Price used is Call Price.

Duke Power Company

	Outstanding Dec. 31, 1940	1941 Price Range to August 31. High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($100 par)	1,010,049 shs.	74 1/2	74 1/2	74 50	$75,248,650
(a) 7% Cum. Pfd. ($100 par)	2,837 shs.	105	105	105.00	297,885
(b) 1st & Ref. Mtge. 3 1/2's, 1967	$30,000,000			107.00	32,100,000
(c) 1st & Ref. Mtge. 4's, 1967	8,000,000			104.00	8,320,000
Total Indicated Market Value					$115,966,535
Earnings Available For Capital					
Net Income for year ended Dec. 31, 1940, as reported					$5,997,101
Add: Interest on bonds as computed by S. & P. Corp. (not shown separately in report)					1,370,000
Total Earnings Available for Capital					$7,367,101
Investors' Appraisal Of Risks of Capital					6.35%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price used is call price. Sold privately in February, 1936, at 100 to the Duke Endowment Trusts.
(c) Price used is call price. Sold privately in July, 1935.

[fol. 13450]

Hartford Electric Light Company

	1937					1938				
	Outstanding December 31	Market Prices High	Low	Average	Value	Outstanding December 31	Market Prices High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($25 par)	840,000 shs.	69	51 1/2	60 25	$50,610,000	840,000 shs.	64	50	57 00	$47,880,000
(a) 30-Yr. Deb., 1937 Series, 3's, 1967	$3,500,000			100 75	3,526,250	$3,430,000			101 00	3,464,300
Total Indicated Market Value					$54,136,250					$51,344,300
Earnings Available For Capital										
Net Income for years ending Dec. 31 as reported					$2,698,614					$2,473,120
Add: Interest on bonds as computed by S. & P. Corp. (not shown separately in report)					78,750					103,425
Total Earnings Available for Capital					$2,777,364					$2,576,545
Investors' Appraisal Of Risks Of Capital					5.13%					5.02%

Notes: (a) Sold privately in 1937 at 100 3/4 to six insurance companies. Prices Estimated.

[fol. 13451]

Hartford Electric Light Company

	1939					1940				
	Outstanding December 31	Market Prices High	Low	Average	Value	Outstanding December 31	Market Prices High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($25 par)	840,000 shs.	69 1/2	61	65 25	$54,810,000	840,000 shs.	70 1/2	62	66 25	$55,650,000
(a) 30-Yr. Deb., 1937 Series, 3's, 1967	$3,360,000			101 00	3,393,600	$3,290,000			101 00	3,322,900
Total Indicated Market Value					$58,203,600					$58,972,900
Earnings Available For Capital										
Net Income for years ended Dec. 31 as reported					$2,765,060					$2,837,274
Add: Interest on bonds as computed by S. & P. Corp. (not shown separately in report)					101,325					99,225
Total Earnings Available for Capital					$2,866,385					$2,936,499
Investors' Appraisal Of Risks Of Capital					4.92%					4.98%

Notes: (a) Sold privately in 1937 at 100 3/4 to six insurance companies. Prices Estimated.

Hartford Electric Light Company

1941

	Outstanding Dec. 31, 1940 Adjusted for 1941 financing	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($25 par)	840,000 shs.	65 1/4	52	58.62	$49,240,800
(b) 30-Year 3 Debentures, Series 1937, 1967	$3,220,000			101.00	3,252,200
(c) 30-Year 3 1/4 Debentures, 1971	4,200,000	112	110	111.00	4,662,000
Total Indicated Market Value					$57,155,000
Earnings Available For Capital					
Net Income for year ended Dec. 31, 1940, as reported					$2,837,274
Add: Interest on bonds as computed by S. & P. Corp. (not shown separately in report)					99,225
Total Earnings Available for Capital					$2,936,499
Investors' Appraisal Of Risks Of Capital					5.14%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price used is call price. Sold privately in 1937 at 100 3/4 to six insurance companies.
(c) Registration statement effective July 15, 1941. Offered to stockholders of record July 15, 1941, at par in ratio of 100 principal for each 20 shares of Common held. Balance not subscribed by Sept. 2, 1941 to be sold at public or private sale.

[fol. 13453]

Pacific Gas & Electric Company

	1937					1938				
	Outstanding December 31.	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Parent Company										
Common ($25 par)	6,261,357 shs.	38	22	30.00	$187,840,710	6,261,357 shs.	30	22 3/4	26.38	$165,174,598
5 1/2% Cum. Pref. ($25 par)	1,149,303 shs.	29 1/2	25 3/8	27.44	31,536,874	1,173,163 shs.	29	25 1/2	27.25	31,968,692
6% " " ($25 par)	4,085,322 shs.	32 3/4	26 7/8	29.81	121,783,449	4,197,662 shs.	32 3/8	27	29.69	124,628,585
Series "B" 6's, 1941	$20,000,000	119	113 1/4	116.31	23,226,000	$20,000,000	116 5/8	113 3/8	115.00	23,000,000
" "G" 4's, 1964	92,965,000	111	103	107.00	99,472,550	92,282,000	112	106 5/8	109.31	100,873,454
" "H" 3 3/4's, 1961	118,249,000	107 7/8	99 5/8	103.75	122,683,338	117,317,000	109 5/8	102 3/4	106.19	124,578,922
" "I" 3 1/2's, 1966	35,000,000	101 1/8	94 3/4	97.94	34,279,000	50,000,000	107	98 1/4	102.63	51,315,000
Subsidiaries										
San Joquin Lt. & Pr. Corp. "B" 6's, 1952	9,199,500	132	125	128.50	11,821,358	9,160,000	131 1/8	128 1/2	129.81	11,890,596
7% Prior Pref.	25,070 shs.	122	109	115.50	2,895,585					
6% " "	5,868 shs.	106 5/8	100	103.31	606,223					
7% "A" "	3,625 shs.	106 5/8	106	106.31	385,374					
(a) 6% "B" "	286 shs.			100.00	28,600					
Predecessor Companies										
Standard Elec. of Cal. 5's, 1939	$795,000	108 1/2	105	106.75	848,663	$794,400	105 1/2	101	103.25	820,218
Blue Lake Water 6's, 1938	406,000	106 1/2	100	103.25	419,195					
Suburban Lt. & Pr. 6's, 1938	199,500	109	102	105.50	210,472					
Total Indicated Market Value					$638,037,391					$634,250,065
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$24,910,747					$23,430,288
Add: Interest on Funded Debt					11,479,338					11,598,788
Amortization of Bond Discount					942,128					935,942
Taxes assumed on Interest										15,171
					37,332,213					35,980,189
Less: Dividends on Minority Interest					9,055					824
Total Earnings Available for Capital					$37,323,158					$35,979,365
Investors' Appraisal Of Risks Of Capital					5.85%					5.67%

Note: (a) Prices estimated.

[fol. 13454]

Pacific Gas & Electric Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Parent Company										
Common Stock ($25 par)	6,261,357 shs.	34 3/4	27 1/2	31.13	$194,916,043	6,261,357 shs.	34 5/8	25 1/4	29.94	$187,465,029
5 1/2% Cum. Pref. ($25 par)	1,173,163 shs.	31 5/8	26 3/8	29.00	34,027,727	1,173,163 shs.	31 3/4	26 1/4	29.00	34,021,727
6% " " ($25 par)	4,197,662 shs.	35 1/2	28 1/2	32.00	134,325,184	4,197,662 shs.	34 7/8	28	31.44	131,974,493
Series "B" 6's, 1941	$20,000,000	114	108	111.00	22,200,000	$20,000,000	110 1/2	105	107.75	21,550,000
" "G" 4's, 1964	91,719,000	113 3/4	101	107.38	98,487,862	91,428,000	113 7/8	109 3/4	111.81	102,225,647
" "H" 3 3/4's, 1961	116,582,000	112 3/4	101 1/4	107.00	124,742,740	116,236,000	112 3/4	108	110.38	128,301,297
" "I" 3 1/2's, 1966	50,000,000	110	100	105.00	52,500,000	50,000,000	111 1/8	105 1/8	108.12	54,060,000
Subsidiaries										
San Joquin Lt. & Pr. Corp. "B" 6's, 1952	9,044,000	138	121 1/8	129.56	11,717,406	8,979,000	137 1/2	127	132.25	11,866,793

Pacific Gas & Electric Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Parent Company										
Common (\$25 par)	6,261,357 shs.	38	22	30.00	\$187,840,710	6,261,357 shs.	30	22 3/4	26.38	\$165,174,598
5 1/2% Cum. Pref. (\$25 par)	1,149,303 shs.	29 1/2	25 3/8	27.44	31,536,874	1,173,163 shs.	29	25 1/2	27.25	31,968,692
6% " " (\$25 par)	4,085,322 shs.	32 3/4	26 7/8	29.81	121,783,449	4,197,662 shs.	32 3/8	27	29.69	124,628,585
Series "B" 6's, 1941	\$20,000,000	119	113 1/4	116.31	23,226,000	\$20,000,000	116 5/8	113 3/8	115.00	23,000,000
" "G" 4's, 1964	92,965,000	111	103	107.00	99,472,550	92,282,000	112	106 5/8	109.31	100,873,454
" "H" 3 3/4's, 1961	118,249,000	107 7/8	99 5/8	103.75	122,683,338	117,317,000	109 5/8	102 3/4	106.19	124,578,922
" "I" 3 1/2's, 1966	35,000,000	101 1/8	94 3/4	97.94	34,279,000	50,000,000	107	98 1/4	102.63	51,315,000
Subsidiaries										
San Joquin Lt. & Pr. Corp. "B" 6's, 1952	9,199,500	132	125	128.50	11,821,358	9,160,000	131 1/8	128 1/2	129.81	11,890,596
7% Prior Pref.	25,070 shs.	122	109	115.50	2,895,585					
6% " "	5,868 shs.	106 5/8	100	103.21	606,223					
7% "A" "	3,625 shs.	106 5/8	106	106.31	385,374					
(a) 6% "B" "	286 shs.			100.00	28,600					
Predecessor Companies										
Standard Elec. of Cal. 5's, 1939	\$795,000	108 1/2	105	106.75	848,663	\$794,400	105 1/2	101	103.25	820,218
Blue Lake Water 6's, 1938	406,000	106 1/2	100	103.25	419,195					
Suburban Lt. & Pr. 6's, 1938	199,500	109	102	105.50	210,472					
Total Indicated Market Value					\$638,037,391					\$634,250,065
Earnings Available For Capital										
Net Income for years ended December 31, as reported					\$24,910,747					\$23,430,288
Add: Interest on Funded Debt					11,479,338					11,598,788
Amortization of Bond Discount					942,128					935,942
Taxes assumed on Interest					—					15,171
					37,332,213					35,980,189
Less: Dividends on Minority Interest					9,055					824
Total Earnings Available for Capital					\$37,323,158					\$35,979,365
Investors' Appraisal Of Risks Of Capital					5.85%					5.67%

Note: (a) Prices estimated.

Pacific Gas & Electric Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Parent Company										
Common Stock (\$25 par)	6,261,357 shs.	34 3/4	27 1/2	31.13	\$194,916,043	6,261,357 shs.	34 5/8	25 1/4	29.94	\$187,465,029
5 1/2% Cum. Pref. (\$25 par)	1,173,163 shs.	31 5/8	26 3/8	29.00	34,027,727	1,173,163 shs.	31 3/4	26 1/4	29.00	34,021,727
6% " " (\$25 par)	4,197,662 shs.	35 1/2	28 1/2	32.00	134,325,184	4,197,662 shs.	34 7/8	28	31.44	131,974,493
Series "B" 6's, 1941	\$20,000,000	114	108	111.00	22,200,000	\$20,000,000	110 1/2	105	107.75	21,550,000
" "G" 4's, 1964	91,719,000	113 3/4	101	107.38	98,487,882	91,428,000	113 7/8	109 3/4	111.81	102,225,647
" "H" 3 3/4's, 1961	116,582,000	112 3/4	101 1/4	107.00	124,742,740	116,236,000	112 3/4	108	110.38	128,301,297
" "I" 3 1/2's, 1966	50,000,000	110	100	105.00	52,500,000	50,000,000	111 1/8	105 1/8	108.12	54,060,900
Subsidiaries										
San Joquin Lt. & Pr. Corp. "B" 6's, 1952	9,044,000	138	121 1/8	129.56	11,717,406	8,973,000	137 1/2	127	132.25	11,866,793
Total Indicated Market Value					\$672,910,962					\$671,464,986
Earnings Available For Capital										
Net Income for Years ended December 31, as reported					\$25,678,151					\$24,672,908
Add: Interest on Funded Debt					11,596,671					11,512,900
Amortization of Bond Discount					932,247					917,120
Taxes assumed on Interest					8,747					11,047
					38,215,816					37,113,975
Deduct: Minority Interest					1,512					1,499
Total Earnings Available for Capital					\$38,214,304					\$37,112,476
Investors' Appraisal Of Risks Of Capital					5.68%					5.53%

Pacific Gas & Electric Company

	Outstanding Dec. 31, 1940 Adjusted for 1941 financing	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
Parent Company					
(a) Common Stock ($25 par)	6,261,357 shs.	28 7/8	22 1/4	25.56	$160,040,285
(b) 5% Cum. Pfd. ($25 par)	400,000 shs.			27.00	10,800,000
(c) 5 1/2% Cum. Pfd. ($25 par)	1,173,163 shs.	31 5/8	28 1/4	29.94	35,124,500
(c) 6% Cum. Pfd. ($25 par)	4,197,662 shs.	34 1/2	30 3/8	32.41	136,172,155
Series "B" 6's, 1941	$20,000,000	104 3/4	101 3/8	103.06	20,612,000
Series "G" 4's, 1964	91,428,000	113 1/4	110 3/4	112.00	102,399,360
Series "H" 3 3/4's 1961	116,238,000	111 3/4	110	110.88	128,882,477
Series "I" 3 1/2's, 1966	50,000,000	111 1/8	108 1/2	109.81	54,905,000
(d) Series "J" 3's, 1970	20,000,000	106 1/4	101 1/2	103.88	20,776,000
Subsidiaries					
San Joaquin Lt. & Pwr. Corp. "B" 6's, 1952	8,973,000	138 1/4	133	135.75	12,180,848
Total Indicated Market Value					$681,892,625
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$23,250,799
(e) Add: Interest on funded debt, amortization of bond discount, etc.					11,709,856
					$34,960,655
Deduct: Minority interest					1,649
Total Earnings Available for Capital					$34,959,006
Investors' Appraisal Of Risks Of Capital					5.13%

Notes: (a) Listed on N. Y. Stock Exchange.
(b) 400,000 shares offered by the Company in July, 1941 at $27.
(c) Listed on San Francisco Exchange.
(d) Sold in March, 1941 to supply funds for general corporate purposes and to finance in part a proposed construction program.
(e) Includes charges for miscellaneous interest and miscellaneous income, deductions and a credit for interest charged to construction. The amounts of these items are not reported for the interim period.

[fol. 13456]

Pennsylvania Water & Power Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	429,848 shs.	95	62	78.50	$33,743,068	429,848 shs.	75 1/2	59	67.25	$28,907,278
$5 Cum. Pref. (no par)	21,493 shs.	111 1/8	108	109.56	2,354,773	21,493 shs.	112 1/2	112 1/2	112.50	2,417,962
1st & Ref. Series B 4 1/2's, 1968	$11,057,000	109	105	107.00	11,830,990	$11,010,000	109	106 3/8	107.69	11,856,669
1st Mtge. S.F. 5's, 1940	10,998,000	111 1/8	107 1/4	109.19	12,008,716	10,998,000	108 1/2	104 1/4	106.38	11,699,672
Total Indicated Market Value					$59,937,547					$54,881,581
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$2,257,110					$2,494,237
Add: Interest on Funded Debt					1,053,416					1,048,759
Taxes assumed on interest					37,578					41,842
Total Earnings Available for Capital					$3,348,104					$3,584,838
Investors' Appraisal Of Risks Of Capital					5.59%					6.53%

[fol. 13457]

Pennsylvania Water & Power Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	429,848 shs.	84 3/4	66 1/4	75.50	$32,453,524	429,848 shs.	72 3/4	53	62.88	$27,028,842
$5 Cum. Pref. (no par)	21,493 shs.	113 1/2	113 1/2	113.50	2,439,455	21,493 shs.	112	112	112.00	2,407,216
1st & Ref. Ser. "B" 4 1/2's, 1968	$10,962,000	108 5/8	104 1/2	106.56	11,681,107					
Ref. & Coll. Tr. 3 1/4's, 1964	10,900,000	105 1/2	105 1/4	105.38	11,486,420	$10,900,000	109 1/2	103	106.25	11,581,250
" " 3 1/4's, 1970						10,962,000	109 1/2	103	106.25	1,647,125
Total Indicated Market Value					$58,060,506					$52,664,433
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$2,173,843					$2,115,501
Add: Interest on Funded Debt					1,048,468					767,000
Taxes assumed on interest					42,000					21,000
Amortization of debt Discount					(82)					134,617
Total Earnings Available for Capital					$3,244,229					$3,038,118
Investors' Appraisal Of Risks Of Capital					5.62%					5.77%

Note: Parentheses indicate red figures.

Pennsylvania Water & Power Company

	1941				
	Outstanding December 31, 1940 Adjusted for 1941 bond repayments	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (no par)	429,848 shs.	57 7/8	49 3/4	53 81	$23,130,121
(b) $5 Cum. Pref. (no par)	21,493 shs.	114	108	111 00	2,385,723
(c) Ref. & Coll. Tr. 3 1/4's, 1964	$10,797,000	110 1/2	105	107 75	11,633,768
(d) Ref. & Coll. Tr. 3 1/4's 1970	10,875,000	110 1/2	105	107 75	11,717,813
Total Indicated Market Value					$48,867,425
Earnings Available For Capital					
(e) Net income for year ended June 30 as reported					$ 2,116,673
Add. Interest on funded debt					709,870
Taxes assigned on interest					10,440
Amount of debt discount					163,172
Total Earnings Available for Capital					$3,000,155
Investors' Appraisal Of Risks Of Capital					6.14%

Notes: (a) Listed on N. Y. Curb Exchange
(b) Quotations from National Quotation Bureau
(c) Company called for payment September 1, 1941, at 105 and interest, $103,000 Ref. & Coll. Tr. 3 1/4's 1964
(d) Company called par payment May 1, 1941, at 106 and interest, $87,000 Ref. & Coll. Tr. 3 1/4's 1970
(e) Obtained by combining data for the six months ended June 30, 1941 as published, with data for the six months ended December 31, 1940.

[fol. 13459]

Southern California Edison Company, Ltd.

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($25 par)	3,182,805 shs.	32	17 3/4	24.88	$79,188,188	3,182,805 shs.	25	19 1/4	22.13	70,435,475
Original Part. Cum. Pref. ($25 par)	160,000 shs.	41	33 3/8	37.19	5,950,400	160,000 shs.	43	34 1/8	38.56	6,169,600
6% Pref. Series "B" ($25 par)	1,907,256 shs.	29 3/8	25 5/8	27.50	52,449,540	1,907,256 shs.	29	25 1/8	27.06	51,610,347
5 1/2% Pref. Series "C" ($25 par)	1,399,601 shs.	28	23 1/4	25.63	35,871,774	1,399,601 shs.	27 5/8	23 1/2	25.56	35,773,802
(a) Preferred Series "A"	369 shs.			25.00	9,225	196 shs.			25.00	4,900
Debenture 3 3/4's 1945	$14,500,000	107 1/2	103	105.25	15,261,250	$8,700,000	107	101 1/2	104.25	9,069,750
1st. Ref. 3 3/4's 1960	73,000,000	108	99 3/8	103.68	75,686,400	73,000,000	109 1/4	102 1/2	105.88	77,292,400
1st. Ref. Series "B" 3 3/4's 1960	35,000,000	108	99 1/4	103.63	36,270,500	35,000,000	109 1/4	102 1/8	105.69	36,991,500
1st. Ref. 4's 1960	30,000,000	110 3/4	104	107.38	32,214,000	30,000,000	111 7/8	106 5/8	109.25	32,775,000
Debenture 2 1/2's 1938	2,000,000	101 3/4	100	100.88	2,017,600					
Debenture 3 1/2's 1940	3,000,000	103	100	101.50	3,045,000					
Pacific Light & Power 5's 1942	4,527,000	117	111 1/2	114.25	5,172,098	4,448,000	115	113	114.00	5,070,720
Total Indicated Market Value					343,135,975					325,193,494
Earnings Available For Capital										
Net Income for years ending Dec. 31, as reported					12,058,469					11,815,470
Add: Interest on Funded Debt					6,197,974					6,048,000
Amortization Debt Discount					889,982					1,156,327
Total Earnings Available for Capital					19,146,425					19,019,797
Investors' Appraisal Of Risks Of Capital					5.58%					5.85%

Notes: (a) Prices Estimated.

[fol. 13460]

Southern California Edison Company, Ltd.

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($25 par)	3,182,805 shs.	29 1/4	23 1/8	26.19	$83,357,663	3,182,805 shs.	30 1/2	23 1/4	26.88	$85,553,798
Original Part. Cum. Pref. ($25 par)	160,000 shs.	41	36 1/4	41.13	6,580,800	160,000 shs.	48	35	41.50	6,640,000
6% Pref. Series "B" ($25 par)	1,907,256 shs.	30	27	28.50	54,356,796	1,907,256 shs.	31 3/4	27	29.38	56,035,181
5 1/2% Pref. Series "C" ($25 par)	1,399,601 shs.	29 5/8	25	27.31	38,223,103	1,399,601 shs.	30 1/8	24 1/4	27.19	38,055,151
1st & Ref. 3 3/4's, 1960	$73,000,000	111 3/4	102	106.88	78,022,400					
1st & Ref. Series "B" 3 3/4's, 1960	35,000,000	111 7/8	102	106.94	37,429,000					
(a) 1st & Ref. 3 1/4's, 1964	30,000,000			105.00	31,500,000	$30,000,000			105.00	31,500,000
1st & Ref. 3's, 1965						108,000,000	105 1/2	103 1/2	104.50	112,860,000
Pacific Light & Power 5's, 1942	4,134,000	113 1/2	109 1/4	111.38	4,604,449	4,124,000	112	106 5/8	109.31	4,518,875
Total Indicated Market Value					$334,074,211					$335,163,005
Earnings Available For Capital										
Net Income for years ending Dec. 31, as reported					$12,670,238					$12,368,722
Add: Interest on Funded Debt					5,636,602					5,917,538
Amortization of Debt Discount					1,173,589					840,619
Total Earnings Available for Capital					$19,480,429					$19,126,879
Investors' Appraisal Of Risks Of Capital					5.83%					5.71%

Notes: (a) Sold privately on Sept. 1, 1939, to five insurance companies at 104.37. Prices Estimated.

Southern California Edison Company, Ltd.

	Outstanding Dec. 31, 1940	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($25 par)	3,182,865 shs.	28 5/8	22 1/8	25.25	$80,365,826
(b) Original Part. Cum. Pfd. ($25 par)	160,000 shs.	46 1/2	38	42.25	6,760,000
(b) 6% Pfd. Series "B" ($25 par)	1,907,256 shs.	31 1/4	29	30.13	57,465,623
(b) 5 1/2% Pfd. Series "C" ($25 par)	1,399,601 shs.	29 7/8	28	28.94	40,504,453
1st & Ref. Mtge. 3's, 1965	$108,000,000	105 1/8	101	103.06	111,304,800
(c) 1st & Ref. Mtge. 3 1/4's, 1964	30,000,000			105.00	31,500,000
Pacific Lt. & Pwr. 1st Mtge. 5's, 1942	4,134,000	106 3/8	102 1/4	104.36	4,314,242
Total Indicated Market Value					$332,214,944
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$12,349,422
Add: Interest on funded debt and Amortization of debt discount (not segregated in report)					6,374,426
Total Earnings Available for Capital					$18,723,848
Investors' Appraisal Of Risks Of Capital					5.64%

Notes: (a) Listed on New York Stock Exchange.
(b) Listed on New York Curb Exchange.
(c) Price estimated. Sold privately on Sept. 1, 1939, to five insurance companies at 104.37.

[fol. 13462]

Tampa Electric Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	596,932 shs.	41	25 1/4	33 13	$19,776,357	597,867 shs.	36 1/2	26 3/8	31 44	$18,796,938
7% Cum. Pref. "A" ($100 par)	10,000 shs.	115	112	113 50	1,135,000	10,000 shs.	115	107	111 00	1,110,000
Total Indicated Market Value					$20,911,357					$19,906,938
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$1,458,155					$1,501,642
Investors' Appraisal Of Risks Of Capital					6.97%					7.54%

[fol. 13463]

Tampa Electric Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	597,867 shs.	36 1/2	28 1/2	32 50	$19,430,677	597,867 shs.	36 3/4	23	29 88	$17,864,266
7% Cum. Pref. "A" ($100 par)	10,000 shs.	115 1/2	113	114 25	1,142,500	10,000 shs.	114	109	111 50	1,115,000
Total Indicated Market Value					$20,573,177					$18,979,266
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$1,508,391					$1,474,266*
Investors' Appraisal Of Risks Of Capital					7.33%					7.77%

* Includes approximately $135,000 net income arising from rates in dispute.

[fol. 13464]

Tampa Electric Company

	1941				
	Outstanding Dec. 31, 1940	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (No par)	597,567 shs.	25	19 3/4	22.38	$13,380,263
(b) 7% Cum. Pfd. "A" ($100 par)	10,000 shs.	114 1/4	112	113.12	1,131,200
Total Indicated Market Value					$14,511,463
Earnings Available For Capital					
(c) Net Income for year ended July 31, as reported					$1,505,242
Investors' Appraisal Of Risks Of Capital					10.37%

Notes: (a) Listed on New York Curb Exchange.
(b) Quotations from National Quotation Bureau.
(c) Includes approximately $324,400 net income arising from rates in dispute.

[fol. 13465]

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Bridgeport Gas Light Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (No par)	181,500 shs.	36 1/4	31	33.63	$6,103,845	181,500 shs.	33	25	29.00	$5,263,500
1st Mtge. 4's, 1952	$1,000,000	114	106	110.00	1,100,000	$1,000,000	115	108	111.50	1,115,000
Total Indicated Market Value					$7,203,845					$6,378,500
Earnings Available For Capital										
Net Income for years ending Dec. 31 as reported					$391,757					$381,181
Add: Interest on Bonds					40,000					40,000
Total Earnings Available for Capital					$431,757					$421,181
Investors' Appraisal Of Risks Of Capital					5.99%					6.60%

[fol. 13466]

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Bridgeport Gas Light Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (No par)	181,500 shs.	36	33	34.50	$6,261,750	181,500 shs.	36	36	36.00	$6,534,000
1st Mtge. 4's, 1952	$1,000,000	116	106	111.00	1,110,000	$1,000,000	119	109	114.00	1,140,000
Total Indicated Market Value					$7,371,750					$7,674,000
Earnings Available For Capital										
Net Income for years ending Dec. 31 as reported					$397,728					$401,618
Add: Interest on Bonds					40,000					40,000
Total Earnings Available for Capital					$437,728					$441,618
Investors' Appraisal Of Risks Of Capital					5.94%					5.75%

Bridgeport Gas Light Company

	1941				
	Outstanding December 31	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (No par)	181,500 shs.	35	23	29.00	$5,263,500
1st Mtge. 4's, 1952	$1,000,000	121	115	118.00	1,180,000
Total Indicated Market Value					$6,443,500
Earnings Available For Capital					
Net Income for year ended Dec. 31, 1940, as reported					$401,618
Add: Interest on bonds					40,000
Total Earnings Available for Capital					$441,618
Investors' Appraisal Of Risks Of Capital					6.85%

Notes: (a) Quotations from National Quotation Bureau

[fol. 13468]

Brooklyn Union Gas Company

	1937 Outstanding December 31	1937 Price Range for Year High	1937 Price Range for Year Low	1937 Price Range for Year Average	1937 Value	1938 Outstanding December 31	1938 Price Range for Year High	1938 Price Range for Year Low	1938 Price Range for Year Average	1938 Value
Indicated Market Value Of Capital										
Common Stock (No par)	745,364 shs.	52 3/4	15 1/2	34.13	$25,439,273	745,364 shs.	23 3/8	10 1/8	16.75	$12,484,847
1st Consol. Mtge. 5's 1945	$14,736,000	122 1/8	106	114.07	16,809,355	$14,736,000	108 1/2	100	104.25	15,362,280
1st Lien & Ref. Mtge. "A" 6's 1947	6,000,000	132 1/4	100 3/4	116.58	6,990,000	6,000,000	107	95 1/2	101.25	6,075,000
1st Lien & Ref. Mtge. "B" 5's 1957	10,000,000	109	87	98.00	9,800,000	10,000,000	99	78 1/2	88.75	8,875,000
20 Yr. Debs. 5's 1950	18,000,000.	106	65	85.50	15,390,000	18,000,000	80 3/4	59 1/4	70.00	12,600,000
(a) Citizens Gas Light Co. 1st Cons. Mtge. 5's 1940	264,000	111	104	107.50	283,800	264,000	105	102 1/2	103.75	273,900
Total Indicated Market Value					$74,712,428					$55,671,027
Earnings Available For Capital										
Net income for years ending Dec. 31 as reported					$1,913,604					$1,679,853
Add: Interest on Long Term Debt.					2,510,000					2,510,000
Amortization of Bond Discount					28,427					28,427
					4,452,031					4,218,280
Deduct Amortization of Bond Premium					4,800					4,800
Total Earnings Available for Capital					$4,447,231					$4,213,480
Investors' Appraisal Of Risks Of Capital					5.95%					7.57%

Notes: (a) Quotations from Moody's Utility Manual

[fol. 13469]

Brooklyn Union Gas Company

	1939 Outstanding December 31	1939 Prices Range for Year High	1939 Prices Range for Year Low	1939 Prices Range for Year Average	1939 Value	1940 Outstanding December 31	1940 Price Range for Year High	1940 Price Range for Year Low	1940 Price Range for Year Average	1940 Value
Indicated Market Value Of Capital										
Common Stock (no par)	745,364 shs.	30 1/8	13 5/8	21.88	$16,308,564	745,364 shs.	25 1/2	12 3/4	19.13	$14,258,818
1st Cons. Mtge. 5's 1945	$14,736,000	113 3/4	106	109.88	16,191,917	$14,736,000	113 7/8	108 5/8	111.25	16,393,800
1st Lien & Ref. Mtge. "A" 6's 1947	6,000,000	115 3/8	103 1/4	109.31	6,558,600	6,000,000	115 1/2	111	113.25	6,795,000
1st Lien & Ref. Mtge. "B" 5's 1957	10,000,000	105 7/8	93	99.44	9,944,000	10,000,000	107 7/8	102	104.94	10,494,000
20 Yr. Debs. 5's 1950	18,000,000	99 1/2	72 1/2	86.00	15,480,000	18,000,000	98 1/2	84	91.25	16,425,000
Citizens Gas Light Co. 1st Cons. Mtge. 5's 1940	264,000	103 1/2	100 1/2	102.00	269,280					
Total Indicated Market Value					$64,752,361					$64,366,613
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$1,802,591					$1,802,426
Add: Interest on Funded Debt					2,510,000					2,497,900
Amortization of Debt Discount					28,427					28,427
					4,341,018					4,328,753
Deduct Amortization of Debt Premium					4,800					4,800
Total Earnings Available for Capital					$4,336,218					$4,323,953
Investors' Appraisal Of Risks Of Capital					6.70%					6.72%

Brooklyn Union Gas Company

	Outstanding December 31, 1940	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (no par)	745,364 shs.	14 1/8	10	12.06	$ 8,989,090
1st Cons. Mtge. 5's 1945	$14,736,000	111 1/2	108 5/8	110.06	16,218,442
1st Lien & Ref. Mtge. "A" 6's 1947	6,000,000	113 5/8	108 3/4	111.19	6,671,400
1st Lien & Ref. Mtge. "B" 5's 1957	10,000,000	107 1/2	103 1/2	105.50	10,550,000
20 Year Debs. 5's 1950	18,000,000	95 1/8	90	92.56	16,660,806
Total Indicated Market Value					$59,089,732
Earnings Available For Capital					
Net Income for year ended June 30, 1941 as reported					$1,709,805
Add: Interest on funded debt					2,496,800
(b) Amortization of debt discount					28,427
					$4,235,042
(b) Deduct Amortization of debt premium					4,800
Total Earnings Available for Capital					$4,230,242
Investors' Appraisal Of Risks Of Capital					7.16%

Notes: (a) Listed on N. Y. Stock Exchange.
(b) Amounts estimated by S. & P. Corp. Amounts not segregated in interim report.

[fol. 13471]

Elizabethtown Consolidated Gas Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Capital Stock ($100 par)	38,716 shs.	215	200	207.50	$8,033,570	38,716 shs.	200	185	192.50	$7,452,830
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$590,455					$569,472
Investors' Appraisal Of Risks Of Capital					7.35%					7.64%

Note: (a) 1937 quotations from Poor's Utility Manual.

[fol. 13472]

Elizabethtown Consolidated Gas Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock (no par)	38,716 shs.	215	190	202.50	$7,839,990	38,716 shs.	216	209 1/2	212.68	$8,232,483
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$599,152					$548,277
Investors' Appraisal Of Risks Of Capital					7.64%					6.66%

Elizabethtown Consolidated Gas Company

	1941				
	Outstanding Dec. 31, 1940	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock (no par)	38,716 shs.	205	180	192.50	$7,452,830
Earnings Available For Capital					
Net income for year ended December 31, 1940, as reported					$ 548,277
Investors' Appraisal Of Risks Of Capital					7.36%

Note: (a) Quotations from National Quotation Bureau.

[fol. 13474]

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Hartford Gas Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($25 par)	150,000 shs.	41	20	30.50	$4,575,000	150,000 shs.	32	24	28.00	$4,200,000
8% Pref. ($25 par)	30,000 shs.	54	41	47.50	1,425,000	30,000 shs.	45	41	43.00	1,290,000
Total Indicated Market Value					$6,000,000					$5,490,000
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$392,260					$366,943
Investors' Appraisal Of Risks Of Capital					6.54%					6.68%

[fol. 13475]

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Hartford Gas Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($25 par)	150,000 shs.	36	31	33.50	$5,025,000	150,000 shs.	35	33	34.00	$5,100,000
8% Pref. ($25 par)	30,000 shs.	47	45	46.00	1,380,000	30,000 shs.	49	47	48.00	1,440,000
Total Indicated Market Value					$6,405,000					$6,540,000
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$387,306					$425,918
Investors' Appraisal Of Risks Of Capital					6.05%					6.51%

[fol. 13476]

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Hartford Gas Company

	Outstanding Dec. 31, 1940	1941 Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($25 par)	150,000 shs.	35	27	31.00	$4,650,000
(a) 8% Cum. Pref. ($25 par)	30,000 shs.	50	49	49.50	1,485,000
Total Indicated Market Value					$6,135,000
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported					$425,918
Investors' Appraisal Of Risks Of Capital					6.94%

Note: (a) Quotations from National Quotation Bureau

[fol. 13477]

Laclede Gas Light Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($100 par)	107,000 shs.	27 7/8	6	16.94	$1,812,580	107,000 shs.	18	8	13.00	$1,391,000
5% Preferred Cum. ($100 par)	25,000 shs.	41 1/2	8	24.75	618,750	25,000 shs.	30	15	22.50	562,500
Ref. & Ext. 5's 1939	$9,985,000	101	84 1/2	92.63	9,249,106	$9,985,000	90 1/2	69 5/8	80.06	7,993,991
(a) Not Extended	15,000			92.63	13,895	15,000			80.06	12,009
1st Mtge. Coll. Ref. "C" 5 1/2's 1953	17,500,000	70 5/8	53 7/8	62.25	10,893,750	17,500,000	61 1/4	42 1/8	51.69	9,045,750
1st Mtge. Coll. Ref. "D" 5 1/2's 1960	5,500,000	70 1/2	54	62.25	3,423,750	5,500,000	60	40 5/8	50.31	2,767,050
Coll. Trust 6's 1942 "A"	2,344,000	68 1/4	43	55.63	1,303,967	2,345,000	53 5/8	38	45.81	1,074,245
Coll. Trust 6's 1942 "B"	653,000	70	49	59.50	388,535	654,000	49 7/8	42	45.94	300,448
(a) 10 Yr. Conv. Notes 5%	3,000			100.00	3,000	1,000			100.00	1,000
Total Indicated Market Value					$27,707,333					$23,147,693
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$123,593					($226,446)
Add: Interest on Funded Debt					1,944,987					1,944,989
Amortization of Debt Discount					187,097					187,345
Taxes on Bonds & Interest					17,139					16,189
Total Earnings Available for Capital					$2,272,816					$1,922,077
Investors' Appraisal Of Risks Of Capital					8.20%					8.30%

Notes: (a) Prices Estimated
Parentheses Indicate Red Figures

[fol. 13478]

Laclede Gas Light Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($100 par)	107,000 shs.	13 1/2	7	10.25	$1,096,750	107,000 shs.	9 1/2	4	6.75	$ 722,250
5% Cum. Pref. ($100 par)	25,000 shs.	23 1/2	12 1/2	18.00	450,000	25,000 shs.	21 1/2	8 1/4	14.88	372,000
Ref. & Ext. 5's, 1942	$8,471,000	90	77 7/8	83.94	7,110,557	$8,820,000	95 1/2	79 7/8	87.69	7,734,258
" " 5's, 1939	1,520,000	91 1/2	78	84.75	1,288,200	1,173,000	97 1/4	80	88.63	1,039,630
(a) Not extended	9,000			84.75	7,628	7,000			88.63	6,204
1st & Coll. Ref. "C" 5 1/2's, 1953	17,500,000	58 3/4	43	50.88	8,904,000	17,500,000	62 1/2	38	50.25	8,793,750
" " " "D" 5 1/2's, 1960	5,500,000	58 1/2	42	50.25	2,763,750	5,500,000	61 3/4	38	49.88	2,743,400
Coll. Trust Notes 6's, Ser. A, 1942	2,345,000	51	40	45.50	1,065,975	2,345,000	60 1/2	33	46.75	1,096,287
" " " 6's Ser. B, 1942	655,000	50 1/4	41	45.63	298,877	655,000	61 3/4	39	50.38	329,989
Total Indicated Market Value					$22,986,737					$22,837,768
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$ (134,779)					$ 224,874
Add: Interest on Funded Debt					1,945,002					1,945,000
Amortization of Debt Discount					150,528					144,881
Taxes on Bonds and Interest					15,771					15,984
Total Earnings Available for Capital					$1,976,522					$2,330,739
Investors' Appraisal Of Risks Of Capital					8.60%					10.21%

Notes: (a) Prices estimated.
Parentheses indicate red figures.

Laclede Gas Light Company

	Outstanding Dec. 31, 1940	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($100 par)	107,000 shs.	16 1/4	5 1/4	11.75	$1,257,250
(a) 5% Cum. Pref. ($100 par)	25,000 shs.	45 1/2	17 1/4	31.38	784,500
Ref. & Ext. 5's 1942	$8,820,000	98 1/4	92 1/4	95.25	8,401,050
Ref. & Ext. 5's 1939	1,173,000	99 1/2	94	96.75	1,134,878
(b) Ref. & Ext. 5's 1934 (not extended)	7,000			96.75	6,773
1st & Coll. Ref. "C" 5 1/2's 1953	17,500,000	85	56 1/4	70.63	12,360,250
1st & Coll. Ref. "D" 3 1/2's 1960	5,500,000	85	57 1/2	71.25	3,918,750
Coll. Trust Notes 6's Ser. A 1942	2,345,000	76 3/8	49	62.69	1,470,081
Coll. Trust Notes 6's Ser. B 1942	655,000	89	50	69.50	455,225
Total Indicated Market Value					$29,788,757
Earnings Available For Capital					
Net Income for year ended June 30 as reported					$491,958
Add: Interest on funded debt.					1,945,000
Amortization of debt discount					144,469
Taxes on bonds and interest					16,993
Total Earnings Available for Capital					$2,598,420
Investors' Appraisal Of Risks Of Capital					8.72%

Notes: (a) Listed on N. Y. Stock Exchange
(b) Price estimated.

[fol. 13480]

Peoples Gas Light & Coke Company

	1937 Outstanding December 31	1937 Price Range for Year High	1937 Price Range for Year Low	1937 Price Range for Year Average	1937 Value	1938 Outstanding December 31	1938 Price Range for Year High	1938 Price Range for Year Low	1938 Price Range for Year Average	1938 Value
Indicated Market Value Of Capital										
Capital Stock (par $100)	664,425 shs.	65 1/2	22	43.75	$29,068,594	656,112 shs.	42	22 1/8	32.06	$21,034,951
1st Cons. Mtge. 6's, 1943	$4,798,000	121 5/8	116 1/4	118.94	5,706,741	$4,798,000	117	113 1/4	116.13	5,523,937
Ref. Mtge. 5's, 1947	20,386,000	117 1/2	108 1/2	113.00	23,036,180	20,386,000	114 5/8	107	110.81	22,589,727
1st & Ref. Mtge. "B" 4's, 1981	15,000,000	100	76	88.00	13,200,000	15,000,000	94 1/2	78 3/4	86.63	12,994,500
" " " "D" 4's, 1961	22,000,000	99 5/8	87	93.31	20,508,200	22,000,000	96 1/2	82 3/4	89.63	19,718,600
Mutual Fuel Gas Co. 1st Mtge. 5's, 1947	4,864,000	119	112 3/4	115.88	5,636,403	4,864,000	116	112	114.00	5,542,960
Ogden Gas Co. 1st Mtge. 5's, 1945	5,635,000	111 3/4	101 1/4	106.50	6,001,275	5,416,000	108 1/4	103 3/4	106.00	5,740,960
(a) Kokoma Gas & Fuel Co. Gen'l & Ref. 5's, 1957	39,000	95	85	90.00	35,100	39,000	95 1/2	85	90.25	35,198
Promissory Notes Payable to Banks										
Secured — 2 1/4% 1940	1,500,000			100.00	1,500,000	1,000,000			100.00	1,000,000
3 % 1941	1,500,000			100.00	1,500,000	1,000,000			100.00	1,000,000
3 % 1942	1,500,000			100.00	1,500,000	1,500,000			100.00	1,500,000
2 % 1939	1,000,000			100.00	1,000,000					
Total Indicated Market Value					$108,712,493					$96,682,833
Earnings Available For Capital (b)										
Net Income for years ended December 31, as reported					$2,424,725					$1,947,568
Add: Interest on Long Term Debt					3,474,934					3,416,088
Amortization of Debt Discount					237,266					237,904
Total Earnings Available for Capital					$6,136,925					$5,601,560
Investors' Appraisal Of Risks Of Capital					5.65%					5.79%

Notes: (a) Quotations from National Quotation Bureau.
(b) 1938 figures restated in 1940 report to eliminate the effect of higher rates charged between February 5, 1938 and March 31, 1940 and also to adjust for settlement of tax litigation regarding the company's personal property taxes.

[fol. 13481]

Peoples Gas Light & Coke Company

	1939 Outstanding December 31	1939 Price Range for Year High	1939 Price Range for Year Low	1939 Price Range for Year Average	1939 Value	1940 Outstanding December 31	1940 Price Range for Year High	1940 Price Range for Year Low	1940 Price Range for Year Average	1940 Value
Indicated Market Value Of Capital										
Capital Stock ($100 par)	656,119 shs.	45	30 1/2	37.75	$24,768,492	656,000 shs.	43	23	33.00	$21,648,000
1st Consol. Mtge. 6's, 1943	$4,798,000	117 5/8	110	113.81	5,460,604	2,090,000	116	110 1/2	113.25	2,366,925
Ref. Mtge. 5's, 1947	20,386,000	117 1/2	108	112.75	22,985,215	20,386,000	118 1/4	111	114.62	23,366,433
1st & Ref. Mtge. "B" 4's, 1981	15,000,000	100	90	95.00	14,250,000	15,000,000	104 1/2	91	97.75	14,662,500
" " " "D" 4's, 1961	22,000,000	100 7/8	92 3/4	96.81	21,298,200	22,000,000	105	95	100.00	22,000,000
Mutual Fuel Gas Co. 1st Mtge. 5's, 1947	4,864,000	117 1/4	111	114.13	5,551,283	4,864,000	120	112 1/4	116.12	5,648,077
Ogden Gas Co. 1st Mtge. 5's, 1945	5,355,000	111 1/2	104	107.75	6,770,013	5,214,000	113 1/2	107 1/2	110.50	5,761,479
Total Indicated Market Value					$100,083,807					$95,453,405
Earnings Available For Capital (a)										
Net Income for years ended December 31, as reported					$2,707,672					$3,035,606
Add: Interest on Long Term Debt					3,349,985					3,210,658
Amortization of Debt Discount and Expense					237,893					120,013
Total Earnings Available for Capital					$6,295,550					$6,366,277
Investors' Appraisal Of Risks Of Capital					6.29%					6.67%

Note (a) 939 figures restated on 1940 report to eliminate the effect of higher rates charged between February 5, 1938 and March 31, 1940 and also to adjust for settlement of tax litigation regarding company's personal property taxes.

Peoples Gas Light & Coke Co.

	1941				
	Outstanding Dec. 31, 1940 adjusted for 1941 financing	Price Range to August 31 High	Low	Average	Value
Indicated Market Value of Capital					
(a) Capital Stock ($100 par)	656,000 shs.	51 5/8	36 3/4	44 19	$28,988,640
1st Consol. Mtge. 6's 1943	$2,090,000	111	107	109.00	2,278,100
Ref. Mtge. 5's 1947	20,386,000	118 1/4	114 3/4	116.50	23,749,690
(b) Ref. Mtge. 5's "E" 3 1/4's 1966	22,000,000			100.00	22,000,000
(b) Ref. Mtge. 5's "F" 3's 1956	15,000,000			100.00	15,000,000
Mutual Fuel Gas Co. 1st Mtge. 5's 1947	4,864,000	117	115	116.00	5,642,240
Ogden Gas Co. 1st Mtge. 5's 1945	5,214,000	113 1/2	109 3/8	111.44	5,810,482
Total Indicated Market Value					$103,469,152
Earnings Available For Capital					
Net Income for year ended June 30 as reported					$3,705,514
Add: Interest on long-term debt.					3,143,183
Amortization of debt discount and expense.					120,011
Total Earnings Available for Capital					$6,968,708
Investors' Appraisal Of Risks Of Capital					6.74

Notes: (a) Listed on N. Y. Stock Exchange.
(b) Prices estimated. Sold privately in August, 1941 to five insurance companies at par. Proceeds were used to retire 1st & Ref. Mtge. "B" 4's of 1981 and "D" 4's of 1961.

[fol. 13483]

Providence Gas Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock (no par)	1,074,028 shs.	11 1/2	7 1/2	9 50	$10,203,266	1,074,028 shs.	7 1/2	6 1/4	6 88	$7,389,313
1st Mtge. "B" 4's 1963	$3,250,000	108 1/2	101	104 75	3,404,375	$3,250,000	107 1/2	105 1/2	106 50	3,461,250
Total Indicated Market Value					$13,607,641					$10,850,563
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$804,358					$651,968
Add: Deductions from Gross Income					140,753					138,128
Total Earnings Available for Capital					$945,111					$790,096
Investors' Appraisal Of Risks Of Capital					6.95%					7.28%

[fol. 13484]

Providence Gas Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock (no par)	1,074,028 shs.	8 3/8	7	7 69	$8,259,275	1,074,028 shs.	9 7/8	8 1/8	9 00	$9,666,252
1st Mtge. "B" 4's 1963	$3,250,000	107	103	105 00	3,412,500	$3,250,000	108	103	105 50	3,428,750
Total Indicated Market Value					$11,671,775					$13,095,002
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$742,079					$755,475
Add: Deductions from Gross Income					137,940					137,952
Total Earnings Available for Capital					$880,019					$893,427
Investors' Appraisal Of Risks Of Capital					7.54%					6.82%

[fol. 13485]

Appendix C
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Providence Gas Company

	Outstanding Dec. 31, 1940	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital.					
(a) Capital Stock (no par)	1,074,028 shs.	8 3/4	7 5/8	8.19	$8,796,289
1st Mtge. "B" 4's 1963	3,250,000	107	104	105.50	3,428,750
Total Indicated Market Value					$12,225,039
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported.					$755,475
Add: Deductions from Gross Income					137,952
— Total Earnings Available for Capital					$893,427
Investors' Appraisal Of Risks Of Capital					7.31%

Notes: (a) Listed on N. Y. Curb Exchange.

Seattle Gas Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	23,825 shs.	3 1/4	1/8	1.69	$ 40,264	23,825 shs.	1 1/4	1/4	0.75	$ 17,869
$5 1st Pref. (no par)	47,250 shs.	26	5	15.50	732,375	47,250 shs.	16 1/2	7	11.75	555,188
$5 2nd Pref. ($25 par)	27,556 shs.	9	1	5.00	137,780	27,556 shs.	4 5/8	3/4	2.69	74,126
1st Ref. 5's, 1954	$4,725,000	96	53	74.50	3,520,125	$4,725,000	67 1/2	45	56.25	2,657,813
(a) Seattle Lighting Co. 5's, 1944	291,000	108 1/4	101 1/2	104.88	305,201	258,000	107	90 1/2	98.75	254,775
Total Indicated Market Value					$4,735,745					$3,559,771
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$ (58,733)					$ (63,657)
Add: Bond Interest					252,751					249,825
Amortization of Reorganization Expense applicable to Funded Debt					2,388					2,388
Total Earnings Available for Capital					$196,406					$188,556
Investors' Appraisal Of Risks Of Capital					4.15%					5.30%

Notes: (a) Quotations from Moody's Utility Manual.
Parentheses indicate red figures.

Seattle Gas Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	23,825 shs.	1/2	1/8	0.31	$ 7,386	23,825 shs.	5/8	1/8	0.38	$ 9,054
$5 1st Pref. (no par)	47,250 shs.	15	7 1/4	11.12	525,420	47,250 shs.	21	12 3/4	16.88	797,580
$5 2nd Pref. ($25 par)	27,556 shs.	3	1	2.00	55,112	27,556 shs.	4	1	2.50	68,890
1st & Ref. 5's, 1954	$4,725,000	70 1/2	43 1/2	57.00	2,693,250	$4,725,000	82	67	74.50	3,520,125
(a) Seattle Lighting Co. 5's, 1944	246,000	105	97	101.00	248,460	191,000	107	99 1/2	103.25	197,208
Total Indicated Market Value					$3,529,628					$4,592,857
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$113,342					$100,525
Add: Interest on Funded Debt					249,076					247,378
Amortization of Reorganization Expenses applicable to Funded Debt					2,388					2,388
Total Earnings Available for Capital					$364,806					$350,291
Investors' Appraisal Of Risks Of Capital					10.34%					7.63%

Note: (a) Quotations from Moody's Utility Manual.

Seattle Gas Company

	1941			
	Outstanding Dec. 31, 1940 Adjusted for 1941 Sinking Fund Payment	Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (no par)	23,825 shs.	.25	.05	0.15	$ 3,574
(a) $5 1st Pref. (no par)	47,250 shs.	14	8 1/2	11.25	531,563
(a) $5 2nd Pref. ($25 par)	27,556 shs.	1 1/2	1/4	0.88	24,249
1st & Ref. 5's, 1954					
(b) Seattle Lighting Co. 5's, 1944	$4,725,000	82	72	77.00	3,638,250
	156,000	109	104	106.50	166,140
Total Indicated Market Value					$4,363,776
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$103,947
Add: Interest on Funded Debt					246,066
Amortization of Reorganization Expense applicable to Funded Debt					2,388
Total Earnings Available for Capital					$352,401
Investors' Appraisal Of Risks Of Capital					8.08%

Notes: (a) Quotations from National Quotation Bureau.
(b) After application of sinking fund payment of $35,000 due April 1, 1941.

[fol. 13489]

Springfield Gas Light Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($25 par)	214,404 shs.	14 1/2	6 1/2	10.50	$2,251,242	214,404 shs.	10	7	8.50	$1,822,434
(a) 10 Year Notes 3's, 1946	$500,000			100.00	500,000	$500,000			100.00	500,000
(a) 10 Year Notes 3 1/2's, 1947	300,000			100.00	300,000	300,000			100.00	300,000
Total Indicated Market Value					$3,051,242					$2,622,434
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$236,744					$230,219
Add: Interest, etc.					33,786					29,784
Total Earnings Available for Capital					$270,350					260,003
Investors' Appraisal Of Risks Of Capital					8.87%					9.91%

Note: (a) Prices estimated.

[fol. 13490]

Springfield Gas Light Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($25 par)	214,404 shs.	14	9 1/2	11.75	$2,519,247	214,404 shs.	15 1/2	13	14.25	$3,055,257
(a) 10 Year Notes 3's, 1946	$500,000			100.00	500,000	$500,000			100.00	500,000
(a) 10 Year Notes 3 1/2's, 1947	300,000			100.00	300,000	300,000			100.00	300,000
Total Indicated Market Value					$3,319,247					$3,855,257
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$274,342					$250,710
Add: Interest, etc.					28,593					27,908
Total Earnings Available for Capital					$302,935					$278,618
Investors' Appraisal Of Risks Of Capital					9.13%					7.23%

Note: (a) Prices estimated.

Springfield Gas Light Company

	1941				
	Outstanding Dec. 31, 1940	Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock ($25 par)	214,404 shs.	13 1/2	12	12.75	$2,733,651
(b) 10 Year Notes 3's, 1946	$500,000			100.00	500,000
(b) 10 Year Notes 3 1/2's, 1947	300,000			100.00	300,000
Total Indicated Market Value					$3,533,651
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported					$250,710
Add: Interest, etc.					27,908
Total Earnings Available for Capital					$278,618
Investors' Appraisal Of Risks Of Capital					7.88%

Notes: (a) Quotations from National Quotation Bureau.
(b) Prices estimated.

[fol. 13492]

Washington Gas Light Company

	1937 Outstanding December 31	1937 Price Range for Year High	1937 Price Range for Year Low	1937 Price Range for Year Average	1937 Value	1938 Outstanding December 31	1938 Price Range for Year High	1938 Price Range for Year Low	1938 Price Range for Year Average	1938 Value
Indicated Market Value Of Capital										
(a) Common Stock (no par)	390,000 shs.	27 1/2	19 1/2	23.50	$ 9,165,000	390,000 shs.	23 3/8	23	23.19	$ 9,044,100
$4.50 Cum. Pref. (no par)	20,000 shs.	100	97	98.50	1,970,000	35,600 shs.	106	97	101.50	3,613,400
Gen. Mtge. 5's, 1960	$5,199,500	128	112	120.00	6,239,400	$5,199,500	124	105	114.50	5,953,428
Ref. Mtge. 5's, 1958	8,500,000	108	104 1/4	106.12	9,020,200					
(b) " " 4's, 1963						8,500,000			100.00	8,500,000
(c) " " 4 1/4's, 1956	2,940,000			100.00	2,940,000	2,880,000			100.00	2,880,000
(d) Georgetown Gaslight 5's, 1961	1,000,000	125	111	118.00	1,180,000	1,000,000	118	113	115.50	1,155,000
Total Indicated Market Value					$30,514,600					$31,145,928
Earnings Available For Capital										
Net Income for Years ended December 31, as reported					$ 760,207					$1,005,983
Add: Interest on Funded Debt					860,350					916,847
Amortization of Debt Discount and Expense (Includes small amount of other interest and miscellaneous deductions)					94,202					85,023
Total Earnings Available for Capital					$1,714,759					$2,007,853
Investors' Appraisal Of Risks Of Capital					5.62%					6.45%

Notes: (a) 1937 prices adjusted to reflect 3 for 1 split in June 1937.
(b) Offered privately in November 1938 to six insurance companies at 101 and accrued interest.
(c) Offered privately in 1936 to Metropolitan Life Insurance Co., New York.
(d) Quotations from Moody's Utility Manual.

[fol. 13493]

Washington Gas Light Company

	1939 Outstanding December 31	1939 Price Range for Year High	1939 Price Range for Year Low	1939 Price Range for Year Average	1939 Value	1940 Outstanding December 31	1940 Price Range for Year High	1940 Price Range for Year Low	1940 Price Range for Year Average	1940 Value
Indicated Market Value Of Capital										
Common Stock (no par)	425,000 shs.	30 1/4	27 1/4	28.75	$12,218,750	425,000 shs.	28 3/4	20	24.37	$10,357,250
$4.50 Cum. Pref. (no par)	35,600 shs.	108 3/8	99	103.69	3,691,364	60,000 shs.	109	99	104.00	6,240,000
Gen. Mtge. 5's, 1960	$5,199,500	130 1/2	112	121.25	6,304,394	$5,199,500	132 1/2	123	127.75	6,642,361
(a) Ref. Mtge. 4 1/4's, 1956	2,720,000			100.00	2,720,000	2,560,000			105.00	2,688,000
(b) " " 4's, 1963	8,500,000			100.00	8,500,000	8,500,000			105.00	8,925,000
(c) Georgetown Gaslight 5's, 1961	1,000,000	130	116 1/2	123.25	1,232,500	1,000,000	128	116	122.00	1,220,000
Total Indicated Market Value					$34,667,008					$36,072,611
Earnings Available For Capital										
Net Income for years ended December 31, as reported					$1,231,797					$1,313,942
Add: Interest on Long Term Debt					766,708					759,998
Amortization of Debt Discount and Expense (Includes small amount of other interest and miscellaneous deductions)					51,392					58,111
Total Earnings Available for Capital					$2,049,897					$2,131,961
Investors' Appraisal Of Risks Of Capital					5.91%					5.91%

Notes: (a) Offered privately in 1936 to Metropolitan Insurance Co., New York. Price used in 1940 is call price.
(b) Offered privately in 1938 to six insurance companies at 101 and accrued interest. Price used in 1940 is call price.
(c) Quotations from Moody's Utility Manual.

Washington Gas Light Company

	Outstanding March 31	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (no par)	425,000 shs.	24	18 1/2	21.25	$ 9,031,250
(b) $4.50 Cum. Pref. (no par)	60,000 shs.	106	102	104.00	6,240,000
Gen. Mtge. 5's, 1960	$5,199,500	132	125	128.50	6,681,358
(c) Ref. Mtge. 4 1/4's, 1956	2,400,000			105.00	2,520,000
(d) " " 4's, 1963	8,500,000			105.00	8,925,000
Georgetown Gaslight Co. 5's, 1961	1,000,000	125	121	123.00	1,230,000
Total Indicated Market Value					$34,627,608
Earnings Available For Capital					
Net Income for year ended March 31, as reported					$1,296,247
Add: Interest on Long Term Debt, amortization of Debt Discount and Expense, etc.					783,621
Total Earnings Available for Capital					$2,079,868
Investors' Appraisal Of Risks Of Capital					6.01%

Notes: (a) Listed on N. Y. Stock Exchange.
(b) Quotations from National Quotation Bureau.
(c) Price is 1941 call price. Offered privately in 1936 to Metropolitan Life Insurance Co., New York.
(d) Price is 1941 call price. Offered privately in 1938 to six insurance companies at 101.

Consolidated Gas Utilities Corp.

	1937					1938				
	Outstanding October 31	Price Range for Year High	Low	Average	Value	Outstanding October 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($1 par)	872,175 shs.	4 1/4	5/8	2.44	$2,128,107	878,026 shs.	1 1/4	9/16	0.91	$ 799,004
Consol. Gas Utilities Co. 1st & Col. "A" 6's, 1943	$7,772,000	93 1/4	60	76.63	5,955,684	$7,746,500	65 1/2	53 3/8	59.44	4,604,520
(a) Larutan Gas Corp. 1st 5 1/2's 1940	324,000	100	100	100.00	324,000	204,000			100.00	204,000
(b) Five Year 6% Notes due 1940	234,897			100.00	234,897	180,297			100.00	180,297
Total Indicated Market Value					$8,642,688					$5,787,821
Earnings Available For Capital										
Net Income for years ended October 31 as reported					$ 74,542					$ (412,681)
Add Bond and Note Interest					508,303					492,366
Total Earnings Available for Capital					$ 582,845					$ 79,685
Investors' Appraisal Of Risks Of Capital					6.74%					1.38%

(a) 1938 prices estimated
(b) 1937-1938 prices estimated
Note: Parentheses indicate red figures

Consolidated Gas Utilities Corp.

	1939					1940				
	Outstanding October 31	Price Range for Year High	Low	Average	Value	Outstanding October 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($1 par)	878,026 shs.	1 3/8	1/2	0.94	$ 825,344	878,026 shs.	2 1/4	1 1/8	1.69	$1,483,864
Consol. Gas Utilities Co. 1st & Col. "A" 6's 1943	$7,691,500	77 3/4	58 1/2	68.13	5,240,219	$7,400,000	99	75	87.00	6,438,000
(a) Larutan Gas Corp. 1st 5 1/2's 1940	84,000			100.00	84,000					
(a) Five Year 6% Notes due 1940	93,522			100.00	93,522					
Total Indicated Market Value					$6,243,085					$7,921,864
Earnings Available For Capital										
Net Income for years ended October 31 as reported					$ 98,965					$ 262,225
Add: Bond and Note Interest					480,094					453,944
Refund of State taxes paid by security holders					6,425					7,437
Federal Income Taxes paid under bond covenants					5,691					5,925
Total Earnings Available for Capital					$ 591,175					$ 729,531
Investors' Appraisal Of Risks Of Capital					9.47%					9.21%

(a) Prices estimated

	Outstanding July 31	1941 Price Range to August 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($1 par)	886,026 shs.	1 3/4	1 1/4	1.50	$1,329,039
(b) 1st Mtge. Sinking Fund 4's, 1945	$6,500,000			100.00	6,500,000
(c) Ten Year 5's, 1951	900,000			100.00	900,000
Total Indicated Market Value					$8,729,039
Earnings Available For Capital					
Net Income for year ended July 31 as reported					$318,705
Add: Interest on funded debt					443,464
Refund of State taxes paid by security holders					6,749
Federal income taxes paid under bond covenants					3,290
Total Earnings Available for Capital					$772,208
Investors' Appraisal Of Risks Of Capital					8.85%

Notes: (a) Listed on N. Y. Curb Exchange
(b) Prices estimated — sold privately in April, 1941 at 100 to a group of institutional investors
(c) Prices estimated — sold privately in April, 1941 at 100 to individual buyers

[fol. 13498]

El Paso Natural Gas Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($3 par)	593,743 shs.	29	14 1/2	21 75	$12,913,910	600,853 shs.	29 7/8	17	23.44	$14,083,994
(a) Pref. $7 Cum.	14,797 shs.	107 1/4	99	103.13	1,526,015	14,797 shs.	108	100	104.00	1,538,888
1st Mtge. "A" 4 1/2's 1951	$6,985,000	106 1/2	100 1/2	103.50	7,229,475					
(b) 1st Mtge. "B" 4's 1952	1,200,000			97.75	1,173,000					
Conv. Debs. 4 3/4's 1946	135,000	172 1/2	140	156.25	210,938					
(c) 1st Mtge. 3 1/2's 1953						$6,000,000			98.50	5,910,000
(d) 3% Serial Notes 1940-5						4,000,000			100.00	4,000,000
Total Indicated Market Value					$23,053,338					$25,532,882
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$1,886,004					$2,083,689
Add — Interest					381,574					395,465
Amort. of Debt Discount					33,372					31,658
Total Earnings Available for Capital					$2,300,950					$2,510,812
Investors' Appraisal Of Risks Of Capital					9.98%					9.83%

Notes: (a) Quotations from National Quotation Bureau
(b) Prices estimated — Privately sold Oct. 1, 1937 to four Insurance Companies at 97 3/4
(c) " " " " Dec. 15, 1938 to six Institutions at 98 1/2
(d) " " " " Dec. 15, 1938 to a New York Bank

[fol. 13499]

El Paso Natural Gas Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($3 par)	691,594 shs.	42 3/4	28	35 38	$21,284,396	601,594 shs.	41 7/8	26	33.94	$20,418,109
(a) Pref. 7% Cum. ($100 par)	14,797 shs.	111 1/2	105	108.25	1,601,775	14,797 shs.	111 1/2	101	106.25	1,572,181
(b) 1st Mtge. 3 1/2's 1953	$6,000,000			98.50	5,910,000	$6,000,000			102.00	6,120,000
(c) 1st Mtge. 3's 1955						2,900,000			98.50	2,856,500
(d) 2 1/2% Notes Payable due 1941	800,000			100.00	800,000					
(e) 3% Serial Notes due 1940-1945	3,480,000			100.00	3,480,000	1,445,000			100.00	1,445,000
(f) 2 3/4% Serial Notes due 1941-1944						1,000,000			100.00	1,000,000
Total Indicated Market Value					$33,076,171					$33,411,781
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$2,358,198					$2,360,538
Add: Interest					344,193					373,608
Amort. of Debt Discount					8,374					14,941
Total Earnings Available for Capital					$2,710,765					$2,749,087
Investors' Appraisal Of Risks Of Capital					8.20%					8.23%

Notes: (a) Quotations from National Quotation Bureau
(b) Prices estimated — Privately sold Dec. 15, 1938 to six Institutions at 98 1/2
(c) " " " " June 1940 " " " " 98 1/2
(d) " " " " Sept. 1939 to a N. Y. Bank
(e) " " " " Dec. 1938 " " " " "
(f) " " " " Feb. 1940 " " " " "

El Paso Natural Gas Co.

	1941				
	Outstanding June 30	Price Range to August 31			
		High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($3 par)	601,594 shs.	36	26 1/8	31.06	$18,685,510
(b) Pref. 7% Cum. ($100 par)	14,797 shs.	111 1/2	110	110.75	1,638,768
(c) 1st Mtge. 3 1/2's, 1953	$6,000,000			102.00	6,120,000
(d) 1st Mtge. 3's 1955	2,800,000			98.50	2,758,000
(e) 3% Serial Notes due 1940–1945	1,312,500			100.00	1,312,500
(f) 2 3/4% Serial Notes due 1941–1944	875,000			100.00	875,000
(g) 2 1/2% Serial Notes due 1942–1946	1,350,000			100.00	1,350,000
Total Indicated Market Value					$ 32,739,778
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$2,277,236
Add: Interest					389,769
Amortization of Debt Discount and Expense					21,598
Total Earnings Available for Capital					$2,688,603
Investors' Appraisal Of Risk Of Capital					8.21%

Notes: (a) Listed on N. Y. Stock Exchange
(b) Quotations from National Quotation Bureau
(c) Prices estimated — Privately sold Dec. 15, 1938 to six institutions at 98 1/2
(d) " " " " June, 1940 to six institutions at 98 1/2
(e) " " " " Dec., 1938 to a N. Y. Bank
(f) " " " " Feb., 1940 to a N. Y. Bank
(g) Prices estimated

Houston Natural Gas Corporation

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Common Stock (no par)	158,289 shs.	22 1/2	10 3/4	16.63	$2,632,346	158,289 shs.	10 1/4	6 3/4	8.50	$1,345,457
(a) Pref. 7% ($50 par)	10,000 shs.	53	50	51.50	515,000	10,000 shs.	49	45	47.00	470,000
1st Mtge. 6's 1948	$2,680,500	104 3/4	98	101.38	2,717,491	$2,715,500	104	98	101.00	2,742,655
Total Indicated Market Value					$5,864,837					$4,558,112
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$307,585					$228,776
Add: Bond Interest					150,845					160,322
Amort. of Bond Discount					18,701					19,066
Refunds to bondholders on account of taxes on bond interest, etc.					4,436					4,944
Total Earnings Available for Capital					$ 481,567					$ 413,108
Investors' Appraisal Of Risks Of Capital					8.21%					9.06%

Note: (a) Quotations from Poor's Utility Manual

Houston Natural Gas Corporation

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Common Stock (no par)	158,289 shs.	11 3/4	6	8.88	$1,405,606	158,289 shs.	15	7	11.00	$1,741,179
(a) Pref. 7% ($50 par)	10,000 shs.	52 1/2	47	49.75	497,500	10,000 shs.	55	50	52.50	525,000
1st Mtge. 6's 1943	$2,815,500	105	98	101.50	2,857,733					
1st Mtge. 4's 1955						$3,500,000	105	100	102.50	3,587,500
Total Indicated Market Value					$4,760,839					$5,853,679
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$ 324,954					$ 492,067
Add — Bond Interest					166,697					160,059
Amort. of Bond Discount					17,579					14,383
Refunds to bondholders on account of taxes on bond interest, etc.					5,282					3,941
Total Earnings Available for Capital					$ 514,512					$ 670,450
Investors' Appraisal Of Risks Of Capital					10.81%					11.45%

Note: (a) Quotations for 1939 from Poor's Utility Manual — for 1940 from National Quotation Bureau

Houston Natural Gas Corp.

	1941				
	Outstanding Dec. 31, 1940	Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (no par)	158,289 shs.	15	9	12.00	$1,899,468
(a) Pref. 7% ($50 par)	10,000 shs.	56	55	55.50	555,000
1st Mtge. S. F. 4's, 1955	$3,500,000	105	103	104.00	3,640,000
Total Indicated Market Value					$6,094,468
Earnings Available For Capital					
Net Income for year ended December 31, 1940 as reported					$492,067
Add: Bond Interest					160,059
Amortization of bond discount					14,383
Refunds to bondholders on account of taxes on bond interest, etc.					3,941
Total Earnings Available for Capital					$670,450
Investors' Appraisal Of Risks Of Capital					11.00%

Note: (a) Quotations from National Quotation Bureau

[fol. 13504]

Interstate Natural Gas Company, Inc.

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock (no par)	952,953 shs.	33 1/2	17	25 25	$24,062,063	952,953 shs.	25	17 1/2	21.25	$20,250,251
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$2,383,513					$2,032,488
Investors' Appraisal Of Risks Of Capital					9.91%					10.04%

[fol. 13505]

Interstate Natural Gas Company, Inc.

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock (no par)	952,953 shs.	26 1/2	21	23 75	$22,632,634	952,953 shs	27 3/4	20	23 88	$22,756,518
Earning, Available For Capital										
Net Income for years ended December 31 as reported					$2,014,221					$1,972,286
Investors' Appraisal Of Risks Of Capital					8.90%					8.67%

[fol. 13506]

Interestate Natural Gas Co., Inc.

		1941			
	Outstanding Dec. 31, 1940	Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock (no par)	952,953 shs	25	19	22.00	$20,964,966
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported					$1,972,286
Investors' Appraisal Of Risks Of Capital					9.41%

Note: (a) Quotations from National Quotation Bureau

[fol. 13507]

Lone Star Gas Corporation

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	5,533,747 shs.	14 1/4	5 1/4	9.75	$53,954,033	5,529,747 shs.	10 1/2	6 5/8	8.56	$47,334,334
Cum. Pref. 6 1/2% ($100 par)	79,755 shs.	112	110	111.00	8,852,805					
Deb. 3 1/2's 1953						$20,000,000	107	101 3/4	104.38	20,876,000
(a) Serial Notes 2 3/8's due to Aug. 1, 1945						11,300,000			100.00	11,300,000
(b) Mortgage Note Payable	$267,900			100.00	267,900	170,900			100.00	170,900
(b) Bank Loan Notes	16,000,000			100.00	16,000,000					
(b) Dallas Gas Co. 7% Pref. ($100 par)	1,079 shs.			100.00	107,900					
" " " 1st Mtge. 6's 1941	$1,774,000	104 1/2	102 1/2	103.50	1,836,090					
County Gas Co. 1st Mtge. 5's 1946	1,595,000	106 1/2	104	105.25	1,678,738					
Council Bluffs Gas Co. 5's 1948	929,000	91 1/2	85	88.25	819,843					
Texas City Gas Co. 5's 1948	3,761,000	93	88	91.50	3,441,315					
Total Indicated Market Value					$86,958,624					$79,681,534
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$6,820,788					$5,304,104
Add—Interest on Debentures					745,840					511,676
" " Notes Payable to Banks					468,755					455,989
Amortization of Debt Discount, etc.					64,172					38,620
Refunds of taxes to security holders					43,585					29,465
Total Earnings Available for Capital					$8,143,140					$6,339,854
Investors' Appraisal Of Risks Of Capital					9.36%					7.96%

Notes: (a) Sold privately in August 1938 to various banks
(b) Prices estimated

[fol. 13508]

Lone Star Gas Corporation

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	5,518,347 shs.	10 1/2	7 1/8	8.81	$48,616,637	5,507,975 shs.	10 3/4	7 5/8	9.19	$50,618,290
Deb. 3 1/2's 1953	$20,000,000	111 1/8	102 1/2	106.81	21,362,000	$20,000,000	110	105	107.50	21,500,000
(a) Serial Notes 2 3/8's due to Aug. 1, 1945	8,750,000			100.00	8,750,000	6,200,000			100.00	6,200,000
(b) Mortgage Note Payable	67,700			100.00	67,700					
Total Indicated Market Value					$78,796,337					$78,318,290
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$5,402,871					$6,453,731
Add — Interest on Debenture Bonds					700,000					700,000
" " Bank Notes Payable					281,115					169,069
Amortization of Debt Discount, etc.					31,537					31,537
Refunds of taxes to security holders					13,363					12,299
Total Earnings Available for Capital					$6,408,886					$7,366,636
Investors' Appraisal Of Risks Of Capital					8.13%					9.41%

Notes: (a) Sold privately in Aug. 1938 to various banks
(b) Prices estimated

Lone Star Gas Corp.

	1941				
	Outstanding June 30	Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (no par)	5,505,275 shs.	10 1/8	8 3/8	9.25	$50,923,794
(b) Serial Notes 2's, due to Aug. 1, 1950	$21,850,000			100.00	21,850,000
(b) Notes, 2 1/4's, due Feb. 1, 1951	4,150,000			100.00	4,150,000
Total Indicated Market Value					$76,923,794
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$6,813,937
Add: Interest on Debentures					408,333
Interest on Bank Notes Payable					316,214
Amortization of Debt Discount, etc.					18,396
Taxes assumed on Interest					12,617
Total Earnings Available for Capital					$7,569,497
Investors' Appraisal Of Risks Of Capital					9.84%

Notes: (a) Listed on Pittsburgh Exchange. Carrying value of Common Stock at June 30, 1941, was lower than at Dec. 31, 1940, indicating that approximately 2,700 shares had been reacquired.

(b) Prices estimated — sold privately on Jan. 29, 1941 to eight commercial banks

[fol. 13510]

Memphis Natural Gas Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($5 par)	918,680 shs.	7	2 1/4	4.63	$4,253,488.	918,680 shs.	4 7/8	3	3.94	$3,619,599
(a) Pref. $7 Cum. (no par)	3,835 shs.			100.00	383,500					
(a) Promissory Notes to banks	$1,431,600			100.00	1,431,600	1,700,000			100.00	1,700,000
Total Indicated Market Value					$6,068,588					$5,319,599
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$ 744,635				(Revised)	$ 610,217
Add — Interest Paid					40,444					49,593
Amort. of Debt Discount					—					1,211
Total Earnings Available for Capital					$ 785,079					$ 661,021
Investors' Appraisal Of Risks Of Capital					12.94%					12.43%

Note: (a) Prices estimated

[fol. 13511]

Memphis Natural Gas Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($5 par)	918,680 shs.	5	3 1/4	4.13	$3,794,148	918,680 shs.	5 1/4	3 1/2	4.38	$4,023,818
(a) Promissory Notes to banks	$1,610,000			100.00	1,610,000	$2,100,000			100.00	2,100,000
Total Indicated Market Value					$5,404,148					$6,123,818
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$ 601,185					$ 636,710
Add — Interest Paid					49,336					53,756
Amort. of Debt Discount					6,481					11,387
Total Earnings Available for Capital					$ 657,002					$ 701,853
Investors' Appraisal Of Risks Of Capital					12.16%					11.46%

Note: (a) Prices estimated

Memphis Natural Gas Co.

	1941				
	Outstanding Dec. 31, 1940 After Adjustment for 1941 Financing	Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($5 par)	918,680 shs.	5 1/8	4	4.57	$4,198,368
(b) Promissory Notes to Banks	$400,000			100.00	400,000
Total Indicated Market Value					$4,598,368
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported					$636,710
Add: Interest Paid					53,756
Amortization of Debt Discount					11,387
Total Earnings Available for Capital					$701,853
Investors' Appraisal Of Risks Of Capital					15.26%

Notes: (a) Listed on N. Y. Curb Exchange

(b) Price estimated. On April 1, 1941, the collateral securing the promissory notes payable to banks was sold and the proceeds applied to the reduction of the notes, leaving the balance of $400,000 outstanding.

4583

[fol. 13513]

Montana – Dakota Utilities Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($10 par)	676,658 shs.	17	5	11 00	$7 443,238	676,653 shs.	7 1/2	4 1/2	6 00	$4,059,918
(a) Cum. Pref. 6% ($100 par)	17,739 shs.	81 1/2	59	70 25	1,246,165	17,739 shs.	65	51	59 50	1,055,470
(a) " " 5% ($100 par)	59,593 shs.	69	52	60 50	3,605,376	59,593 shs.	60 1/2	44	52 25	3,113,734
(b) Unsecured Serial 4 1/4% Bank Notes to 1945	$1,500,000			100 00	1,500,000	$1,200,000			100 00	1,200,000
10 Year Conv. Debs. 4 1/2's 1946	1,812,000	100	70	85 00	1,540,200	1,812,000	86	66	76 00	1,377,120
(b) Purchase Contract Obligations	38,008			100 00	38,008	32,507			100 00	32,507
(a) 1st Mtge. 5 1/2's 1944	6,674,000	100 1/2	91	95 75	6,390,355	6,713,000	100	86	93 00	6,243,090
Minn. Northern Pr. Co., Montana-Dakota Util. Co., & Gas Development Co. 1st 6's 1944	3,250,000	101 1/4	95	98 13	3,189,225	3,100,000	101 1/4	98	99 63	3,088,530
(a) Consolidated Utilities Co. 1st 6's 1946	211,000	100	96	98 00	206,780	209,000	101	99	100 00	209,000
(c) Bowdoin Utilities Co. 1st 6's 1945	136,000			100 00	136,000	132,000	99	97	98 00	129,360
Total Indicated Market Value					$25,295,347					$20,508,729
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$840,330					$809,569
Add — Interest on 1st Mortgage Bonds					601,018					583,412
Other Interest					172,678					151,958
Amortization of Debt Discount and Expense					78,532					73,128
Total Earnings Available for Capital					$1,692,558					$1,618,067
Investors' Appraisal Of Risks Of Capital					6.69%					7.89%

Notes: (a) Quotations from Poor's Utility Manuals
(b) Prices estimated
(c) 1937 prices estimated — 1938 quotations from Poor's Utility Manual

[fol. 13514]

Montana - Dakota Utilities Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($10 par)	676,652 shs.	7 1/4	5 1/4	6 25	$4,229,075	676,652 shs.	9 1/2	6	7 75	$5,244,053
(a) Cum. Pref. 6% ($100 par)	17,739 shs.	88 1/2	64	76 25	1,352,599	17,739 shs.	106	83	91 50	1,623,118
Cum. Pref. 5% ($100 par)	59,593 shs.	78 1/2	56	67 25	4,007,629	59,593 shs.	90 1/4	73	81 63	4,864,577
1st Mtge. S.F. 4 1/2's 1954	$9,000,000	106 1/4	100	103 13	9,281,700	$8,800,000	107	104	105 50	9,284,000
(b) Unsecured Serial 4 1/4% Bank Notes to 1945	2,100,000			100 00	2,100,000					
10 Year Conv. Debs. 4 1/2's 1946	1,812,000	98	81 1/2	89 75	1,626,270					
(b) Purchase Contract Obligations	27,006			100 00	27,006	21,505			100 00	21,505
(c) 1st Mtge. S.F. 4 1/2's 1956						1,200,000			100 00	1,200,000
(c) Serial Notes 1 1/2% to 3 1/2% 1941-50						3,900,000			100 00	3,900,000
Total Indicated Market Value					$22,624,279					$26,137,253

Earnings Available For Capital

	December 31	Height				December 31	Height			
Indicated Market Value Of Capital										
Common Stock ($10 par)	676,658 shs.	17	5	11 00	$7,443,238	676,653 shs.	7 1/2	4 1/2	6 00	$4,059,918
(a) Cum. Pref. 6% ($100 par)	17,739 shs.	81 1/2	59	70 25	1,246,165	17,739 shs.	65	51	59 50	1,055,470
(a) " " 5% ($100 par)	59,593 shs.	69	52	60 50	3,605,376	59,593 shs.	60 1/2	44	52 25	3,113,734
(b) Unsecured Serial 4 1/4% Bank Notes to 1945	$1,500,000			100 00	1,500,000	$1,200,000			100 00	1,200,000
10 Year Conv. Debs. 4 1/2's 1946	1,812,000	100	70	85 09	1,540,200	1,812,000	80	66	76 00	1,377,120
(b) Purchase Contract Obligations	38,008			100 00	38,008	32,507			100 00	32,507
(a) 1st Mtge. 5 1/2's 1944 Minn. Northern Pr. Co., Montana-Dakota Util. Co., & Gas Development Co. 1st 6's 1944	6,674,000	100 1/2	91	95 75	6,390,355	6,713,000	100	86	93 00	6,243,090
	3,250,000	101 1/4	95	98 13	3,189,225	3,100,000	101 1/4	98	99 63	3,088,530
(a) Consolidated Utilities Co. 1st 6's 1946	211,000	100	96	98 00	206,780	205,000	101	99	100 00	209,000
(c) Bowdoin Utilities Co. 1st 6's 1945	136,000			100 00	136,000	132,000	99	97	98 00	129,360
Total Indicated Market Value					$25,295,347					$20,508,729
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$840,330					$809,569
Add — Interest on 1st Mortgage Bonds					601,018					583,412
Other Interest					172,678					151,958
Amortization of Debt Discount and Expense					78,532					73,128
Total Earnings Available for Capital					$1,692,558					$1,618,067
Investors' Appraisal Of Risks Of Capital					6.69%					7.89%

Notes: (a) Quotations from Poor's Utility Manuals
(b) Prices estimated
(c) 1937 prices estimated — 1938 quotations from Poor's Utility Manual

[fol. 13514]

Montana - Dakota Utilities Company

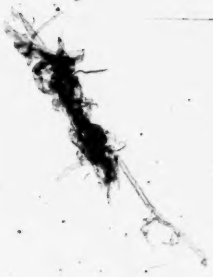
	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($10 par)	676,652 shs.	7 1/4	5 1/4	6 25	$4,229,075	676,652 shs.	9 1/2	6	7 75	$5,244,053
(a) Cum. Pref. 6% ($100 par)	17,739 shs.	88 1/2	64	76 25	1,352,599	17,739 shs.	100	83	91 50	1,623,118
Cum. Pref. 5% ($100 par)	59,593 shs.	78 1/2	56	67 25	4,007,629	59,593 shs.	90 1/4	73	81 63	4,864,577
1st Mtge. S.F. 4 1/2's 1954	$9,000,000	106 1/4	100	103 13	9,281,700	$8,800,000	107	104	105 50	9,284,000
(b) Unsecured Serial 4 1/4% Bank Notes to 1945	2,100,000			100 00	2,100,000					
10 Year Conv. Debs. 4 1/2's 1946	1,812,000	98	81 1/2	89 75	1,626,270					
(b) Purchase Contract Obligations	27,006			100 00	27,006	21,505			100 00	21,505
(c) 1st Mtge. S.F. 4 1/2's 1956						1,260,000			100 00	1,200,000
(c) Serial Notes 1 1/2% to 3 1/2% 1941-50						3,900,000			100 00	3,900,000
Total Indicated Market Value					$22,624,279					$26,137,253
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$ 769,698					$1,009,924
Add — Interest on 1st Mortgage Bonds					593,430					
Interest on Funded Debt										591,842
Other Interest					171,847					
Amortization of Debt Discount and Expense					42,504					52,578
" " Premium on Debt										(688)
Total Earnings Available for Capital					$1,577,479					$1,653,656
Investors' Appraisal Of Risks Of Capital					6.97%					6.33%

Notes: (a) Quotations for 1939 from Poor's Utility Manual and 1940 from National Quotation Bureau
(b) Prices estimated
(c) " " — sold privately in November-December, 1940 at 100 to five institutions
Parentheses indicate red figures

Montana-Dakota Utilities Co.

	1941				
	Outstanding June 30	Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($10 par)	676,652 shs.	11 1/2	7 7/8	9 69	$6,556,758
(a) Cum. Pref. 6% ($100 par)	17,739 shs.	102 1/2	93	97 75	1,733,987
(a) Cum. Pref 5½ ($100 par)	59,593 shs.	95 3/4	86	90 88	5,415,812
1st Mtge. 3 1/2's, 1961	$7,500,000	107	102 7/8	104 94	7,870,500
1st Mtge. Serial 2 1/2's, 1942 to 1949	2,500,000	101	100	100 50	2,512,500
(b) Serial Notes 2 to 3,1/2 1942 to 1950	3,510,000			100 00	3,510,000
(c) Serial Purchase Contracts	16,004			100 00	16,004
Total Indicated Market Value					$27,615,561
Earnings Available For Capital					
(d) Net Income for year ended June 30, as reported					$1,011,485
Add: Interest on first mortgage bonds					425,411
Interest on Other Funded Debt					138,800
Amortization of Debt Discount and Expense					33,362
Amortization of Premium on Debt					(4,090)
Total Earnings Available for Capital					$1,604,968
Investors' Appraisal of Risks Of Capital					5.81%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price estimated — sold privately in Nov.-Dec., 1940 at $100 to five institutions
(c) Price estimated
(d) After deduction of provision for income tax of $200,000 as estimated by Standard & Poor's Corporation.
Parentheses indicate red figures



[fol. 13516]

Mountain Fuel Supply Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($10 par)	1,989,902 shs.	12 7/8	3 7/8	8.38	$16,675,379	1,989,902 shs.	6 5/8	4 1/4	5.44	$10,825,067
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$654,141					$758,027
Investors' Appraisal Of Risks Of Capital					3.92%					7.00%

[fol. 13517]

Mountain Fuel Supply Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock ($10 par)	1,989,902 shs.	5 1/2	4	4.75	$9,452,034	1,989,902 shs.	6 1/2	4 7/8	5.69	$11,322,342
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$902,055					$950,069
Investors' Appraisal Of Risks Of Capital					9.54%					8.39%

[fol. 13518]

Mountain Fuel Supply Co.

	Outstanding Dec. 31, 1940	1941 Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital:					
(a) Capital Stock ($10 par)	1,989,902 shs.	6	5 1/8	5.56	$11,063,855
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported					$950,069
Investors' Appraisal Of Risks Of Capital					8.59%

Note: (a) Listed on Pittsburgh Exchange

[fol. 13519]

National Fuel Gas Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock (no par)	3,810,183 shs.	19 1/2	12	15.75	$60,010,382	3,810,183 shs.	14 5/8	11 1/2	13.06	$49,760,990
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$3,660,300					$3,179,213
Investors' Appraisal Of Risks Of Capital					6.19%					6.39%

[fol. 13520]

National Fuel Gas Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Capital Stock (no par)	3,810,183 shs.	14	11 1/4	12.63	$48,122,611	3,810,183 shs.	13 1/8	10	11.56	$44,045,715
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$3,601,477					$4,283,237
Investors' Appraisal Of Risks Of Capital					7.48%					9.72%

[fol. 13521]

National Fuel Gas Co.

	1941			
	Outstanding Dec. 31, 1940	Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Capital Stock (no par)	3,810,183 shs.	11 1/4	10	10.62	$40,464,143
Earnings Available For Capital					
Net Income for year ended December 31, 1940, as reported					$4,283,237
Investors' Appraisal Of Risks Of Capital					10.59%

Note: (a) Quotations from National Quotation Bureau

Oklahoma Natural Gas Company

	1937					1938				
	Outstanding November 30	Price Range for Year High	Low	Average	Value	Outstanding November 30	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($15 par)	549,986 shs.	14 3/4	6 5/8	10.68	$5,873,850	549,986 shs.	14 1/4	6 3/4	10.50	$5,774,853
Pref. $3 Cum. ($50 par)	91,050 shs.	32 5/8	19 1/2	26.06	2,372,763	91,050 shs.	41 1/2	21 1/2	31.50	2,868,075
Prior Pref. 6% Conv. ($100 par)	22,200 shs.	106	85	95.50	2,120,100	22,200 shs.	105 3/4	89	97.38	2,161,836
1st Mtge. Ser. "A" 4 1/2's 1951	$17,971,000	100 3/8	92	96.19	17,286,305	$17,709,000	106	96	101.00	17,886,090
Conv. Debs. 5's 1946	10,000,000	108 1/2	79	93.75	9,375,000	10,000,000	106	83	94.50	9,450,000
Total Indicated Market Value					$37,028,018					$38,140,854
Earnings Available For Capital										
Net Income for years ended November 30 as reported					$1,578,437					$1,426,595
Deduct — Prov. for taxes on undist. profits					40,000					85,000
					1,538,437					1,341,595
Add — Interest on Funded Debt					1,330,040					1,301,568
Amort. of Debt Discount					113,669					110,883
Taxes on tax free covenant securities					9,947					12,367
Total Earnings Available for Capital					$2,992,093					$2,766,413
Investors' Appraisal Of Risks Of Capital					8.08%					7.25%

Oklahoma Natural Gas Company

	1939					1940				
	Outstanding August 31	Price Range for Year High	Low	Average	Value	Outstanding August 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock ($15 par)	549,986 shs.	19 7/8	8 7/8	14.38	$7,908,799	550,000 shs.	21 3/4	13 1/4	17.50	$9,625,000
Pref. $3 Cum. ($50 par)	91,050 shs.	49	35	42.00	3,824,100	91,055 shs.	54	39	46.50	4,234,058
Prior Pref. Conv. $5.50 (no par)	58,000 shs.	113	106	109.50	6,351,000	58,000 shs.	117	100	108.50	6,293,000
1st Mtge. Ser. "B" 3 3/4's 1955	$17,000,000	107 7/8	91 1/4	99.56	16,925,200	$16,800,000	109	104 1/8	106.56	17,902,080
Bank Loans — Serially to 1946	8,000,000			100.00	8,000,000	6,400,000			100.00	6,400,000
Total Indicated Market Value					$43,009,099					$44,454,138
Earnings Available For Capital										
Net Income for years ended August 31 as reported					$1,554,868					$2,612,744
Deduct — Prov. for taxes on undist. profits					85,000					—
Amort. of Bond Premium					—					1,776
					1,469,868					2,610,968
Add — Interest on Funded Debt					1,283,498					865,925
Amort. of Discount					110,592					—
Taxes on Tax Free Covenant Securities					15,014					13,244

[fol. 13524]

Oklahoma Natural Gas Co.

	1941				
	Outstanding July 31	Price Range to Aug. 31			
		High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($15 par value)	550,000 shs.	21 3/4	18	19 88	$10,934,000
(a) Prior Preferred Com. $5.50 (no par)	58,000 shs.	116 1/2	107 1/2	112 00	6,496,000
(a) Preferred $3 Cum. ($50 par value)	91,055 shs.	54	48	51 00	4,643,805
1st Mtge. Series B, 3 3/4's, due 1955	$16,800,000	109	106 1/4	107 62	18,080,160
(b) 1st Mtge. Series C, 3's, due 1942	4,500,000			100 00	4,500,000
(c) Bank Loans, 2 3/4, Serially to 1946	5,500,000			100 00	5,500,000
Total Indicated Market Value					$50,153,965
Earnings Available For Capital					
Net Income for year ended July 31, as reported					$2,490,173
Deduct: Amortization of Bond Premium					9,526
					2,480,647
Add: Interest on Funded Debt					790,522
Total Earnings Available for Capital					$3,271,169
Investors' Appraisal Of Risks Of Capital					6.52

Notes: (a) Listed on N. Y. Curb Exchange

(b) Price estimated. These bonds were sold and the proceeds used to acquire the gas properties of Central States Power & Light Corporation, effective July 31, 1941. The properties acquired had annual gross earnings of approximately $1,396,000, but no part of net income is included in earnings for the twelve months ended July 31, 1941

[fol. 13525]

Pacific Lighting Corporation

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock	1,608,631 shs.	53 3/4	34 3/4	44 25	$71,181,922	1,608,631 shs.	43 1/8	32 1/4	37 69	$60,629,302
$6 Preferred	196,665 shs.	107 3/8	98	1 102 69	20,195,529	196,665 shs.	109	98 1/4	103 63	20,380,394
S. F. Debs. 4 1/2's 1945	$7,000,000	105 1/2	103	104 25	7,297,500	$7,000,000	106	102	104 00	7,280,000
So. Cal. Gas Co. 6% Pref. ($25 par)	902,894 shs.	31	27 3/4	29 38	26,527,026	901,504 shs.	32	27 1/2	29 75	26,819,744
" " " " 1st & Ref. 4 1/2's 1961	$12,500,000	108 1/2	105	106 75	13,343,750	$12,500,000	108 1/4	106 1/2	107 38	13,422,500
" " " " 1st & Ref. 4's 1965	15,000,000	107 1/2	101 5/8	104 56	15,684,000	15,000,000	110 1/4	106 3/4	108 50	16,275,000
So. Counties Gas Co. of Cal. 1st 4 1/2's 1968	11,500,000	105 1/2	102 1/2	104 00	11,960,000	11,500,000	106 1/2	103 1/2	105 00	12,075,000
Total Indicated Market Value					$166,189,727					$156,881,940
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$9,237,154					$9,250,295
Add — Interest on Funded Debt					2,165,939					1,995,000
Amort. of Bond Discount					596,767					298,869
					11,999,860					11,544,164
Deduct — Dividends on Subsidiary Common Stock					132					154
Total Earnings Available for Capital					$11,999,728					$11,544,010
Investors' Appraisal Of Risks Of Capital					7 22%					7 36%

[fol. 13526]

Pacific Lighting Corporation

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock	1,608,631 shs.	50 7/8	41	45 94	$73,900,508	1,608,631 shs.	50	33	41 50	$66,758,186
$5 Preferred	200,000 shs.	109 3/8	99	104 19	20,838,000	200,000 shs.	108 3/4	100	104 38	20,876,000
(a) Long Term Bank Loans 3% 1941-1949	$6,500,000			100 00	6,500,000	$6,000,000			100 00	6,000,000
So. Cal. Gas Co. 6% Pref. ($25 par)	899,289 shs.	34 1/2	28 1/2	31 50	28,327,603	897,564 shs.	35	28 1/2	31 75	28,497,657
" " " " 1st & Ref. 4 1/2's 1961	$12,500,000	109 1/8	103 3/4	106 44	13,305,000					
" " " " 1st & Ref. 4's 1965	15,000,000	110 3/4	105	107 88	16,182,000					
" " " " 1st 3 1/4's 1970						$30,000,000	107 3/4	104 1/2	106 13	31,839,000
So. Counties Gas Co. of Cal. 1st 4 1/4's 1968	11,500,000	106	103 1/2	104 75	12,046,250	11,500,000	105 5/8	102 5/8	104 13	11,974,950
Total Indicated Market Value					$171,099,361					$165,945,793
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$8,238,205					$7,380,059
Add — Interest on Funded Debt					1,917,417					1,828,750
Amort. of Bond Discount					599,885					191,633
					10,755,507					9,400,442
Deduct — Dividends on Subsidiary Common Stock					154					119
Total Earnings Available for Capital					$10,755,353					$9,400,323
Investors' Appraisal Of Risks Of Capital					6.29%					5 66%

Note: (a) Prices estimated

Pacific Lighting Corp.

	1941				
	Outstanding June 30	Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock	1,608,631 shs.	40	32 1/2	36.25	$ 58,312,874
(b) $5 Preferred	200,000 shs.	107 3/4	101 1/2	104.62	20,924,000
(c) Long-Term Bank Loans, 3%, 1941-1949	$ 5,500,000			100.00	5,500,000
(d) So. Cal. Gas Co. 6% Pfd. ($25 par)	897,564 shs.	33 3/4	33 3/4	33.75	30,292,785
" " " " 1st Mtge. 3 1/4's, 1970	$35,000,000	108	104 1/2	106.25	37,187,500
(e) So. Counties Gas Co. of Cal. 1st 3's, 1971	11,500,000	104 3/4	101	102.88	11,831,200
Total Indicated Market Value					$164,048,359
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$8,000,079
Add: Interest on Funded Debt					1,671,146
Amortization of Bond Discount and Expense					55,677
					9,726,902
Deduct: Dividends on Subsidiary Common Stock					108
Total Earnings Available for Capital					$9,726,794
Investors' Appraisal Of Risks Of Capital					5.93%

Notes: (a) Listed on N. Y. Stock Exchange
(b) Listed on San Francisco Stock Exchange
(c) Prices estimated
(d) Listed on Los Angeles Exchange
(e) Issued in January, 1941, the proceeds of which were used to redeem the 4 1/2's of 68

[fol. 13528]

Panhandle Eastern Pipe Line Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
Common Stock (no par)	807,367 shs.	40 3/4	38 3/4	39.75	$32,092,838	807,367 shs.	41 3/8	17 1/2	29.44	$23,768,884
Pref. $6 Cum. (no par)										
(a) Class A part. and redeemable	100,000 shs.			100.00	10,000,000	100,000 shs.			100.00	10,000,000
(a) Class B Non-part. and non-redeemable	10,000 shs.			100.00	1,000,000	10,000 shs.			100.00	1,000,000
1st Mtge. & 1st Lien "A" 4's 1952	$23,000,000	105 3/4	99	102.38	23,547,400	$22,500,000	105	102 5/8	103.81	23,357,250
(a) Leasehold Purchase Obligations	41,436			100.00	41,436	30,149			100.00	30,149
Total Indicated Market Value					$66,681,674					$58,156,283
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$4,363,399					$4,548,324
Add — Interest on Funded Debt					923,333					903,333
Amort. of Bond Discount and Expense					314,853					310,029
Total Earnings Available for Capital					$5,601,585					$5,761,686
Investors' Appraisal Of Risks Of Capital					8.40%					9.91%

Note: (a) Prices estimated

Panhandle Eastern Pipe Line Company

1941

	Outstanding June 30	Price Range to Aug. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock (no par)	807,367 shs.	40	33	36 50	$29,468,896
Pref. $6 Cum. (no par):					
(b) Class A Part. and Redeemable	100,000 shs.			100 00	10,000,000
(b) Class B Non-Part. and Non-Redeemable	10,000 shs.			125 00	1,250,000
1st Mtge. & 1st Lien S. F. "B" 3's, 1960	$12,000,000	104 1/8	99 3/4	101 94	12,232,800
(c) 1st Mtge. & Trust Lien "A" 1.65-2.30%, 1946-1950	6,250,000			100 00	6,250,000
(c) Serial Notes A, B, C & D 0.75-1.50%, due 4/1/42-45	5,000,000			100 00	5,000,000
(d) Other Long Term Debt	17,544			100 00	17,544
Total Indicated Market Value					$64,219,240
Earnings Available For Capital					
Net Income for 12 months ended June 30, as reported					$4,784,971
Add: Interest on Funded Debt					751,924
Amortization of Debt Discount and Expense					306,535
Total Earnings Available for Capital					$5,843,430
Investors' Appraisal Of Risks Of Capital					9 10%

Notes: (a) Quotations from National Quotation Bureau
(b) Prices estimated. Amounts used are the prices at which redemption of the stocks is contemplated.
(c) Prices estimated — sold privately in January, 1941 at 100 to several banking institutions and one insurance company.
(d) Prices estimated

[fol. 13530]

Southern Natural Gas Company

	1937					1938				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Class A Stock (no par)	554,501 shs.	16 3/4	8 3/4	12.75	$7,069,888	554,501 shs.	11 3/4	8 1/2	10.13	$5,617,095
(a) Class B Stock (no par)	274,939 shs.	7 1/2	3 3/4	5.63	1,547,907	274,939 shs.	5 5/8	3 1/4	4.44	1,220,729
1st Mtge. 4 1/2's 1951	$14,206,000	101 1/2	94 1/2	98.00	13,921,880	$12,939,000	102	90	96.00	12,421,440
(b) 1st Mtge. 4 1/2's 1952	650,000			98.00	637,000	616,000			96.00	591,360
Adj. Mtge. 6's 1960	5,771,577	95	71	83.00	4,790,409	5,771,523	91 1/2	70 1/2	81.00	4,674,934
(c) Collateral Notes (N. Y. Trust Co.)	1,825,000			100.00	1,825,000	1,475,000			100.00	1,475,000
Alabama Gas Co. 1st 4 1/2's 1951	1,440,000	99 1/4	79 1/2	89.38	1,287,072	1,385,000	97	79 1/4	88.13	1,220,600
(d) Alabama Nat. Gas Co.— City of Talladega 5's 1947	40,000			100.00	40,000	40,000			100.00	40,000
Total Indicated Market Value					$31,119,156					$27,261,158
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$1,392,184					$1,033,665*
Add — Interest on Funded Debt					1,159,598					1,132,389
Amort. of Bond Discount					94,165					90,028
Total Earnings Available for Capital					$2,645,947					$2,256,082
Investors' Appraisal Of Risks Of Capital					8.50%					8.28%

Notes: (a) Quotations from Poor's Utility Manuals
(b) Prices estimated — privately sold Dec. 1937 to an insurance company at 97 3/4
(c) " "
(d) " "

* After extraordinary deduction of $226,326 for cost and expenses of natural gas exploration.

[fol. 13531]

Southern Natural Gas Company

	1939					1940				
	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
Indicated Market Value Of Capital										
(a) Common Stock ($7.50 par)	691,970 shs.	16 1/8	7 1/2	11.81	$8,172,166	691,970 shs.	19 1/2	12	15.75	$10,898,527
1st Mtge. 4 1/2's 1951	$12,408,000	106 3/8	100 3/4	103.56	12,849,725	$11,374,000	107 1/4	104	105.63	12,014,356
(b) 1st Mtge. 4 1/2's 1952	572,000			103.50	592,020	528,000			105.50	557,040
Adj. Mtge. 6's 1960	5,771,523	100 1/2	90	95.25	5,497,376	5,771,523	102 1/2	90	96.25	5,555,091
(c) Collateral Notes (First Nat. Bk Birmingham)	800,000			100.00	800,000	600,000			100.00	600,000
Alabama Gas Co. 1st 4 1/2's 1951	1,385,000	101 1/2	91 1/2	96.50	1,338,525	1,381,000	104 1/2	100 1/2	102.50	1,415,525
(d) Alabama Nat. Gas Corp. — City of Talladega 5's 1947	40,000			100.00	40,000	40,000			100.00	40,000
Total Indicated Market Value					$29,287,812					$31,080,539
Earnings Available For Capital										
Net Income for years ended December 31 as reported					$1,765,412					$2,194,126
Add — Interest on Funded Debt					1,056,340					1,000,622
Amort. of Debt Discount and Expense					85,656					80,889
Total Earnings Available for Capital					$2,907,408					$3,275,637
Investors' Appraisal Of Risks Of Capital					9.93%					10.54%

Notes: (a) Quotations — 1939 Poor's Utility Manual — 1940 National Quotation Bureau
(b) Prices estimated — privately sold Dec. 1937 to an insurance company at 97 3/4
(c) " "
(d) " "

Southern Natural Gas Co

	1941				
	Outstanding June 30	Price Range to Dec. 31 High	Low	Average	Value
Indicated Market Value Of Capital					
(a) Common Stock ($7.50 par)	1,297,447 shs.	13 1/8	10 1/2	11.81	$15,322,849
1st Mtge. Pipe Line S. F. 3 1/4's, 1956	$13,000,000	104 1/2	103	103.75	13,487,500
(b) Serial Notes 2 1/2's, 1942 to 1947	4,500,000			100.00	4,500,000
Alabama Gas Co. 1st Mtge. 4 1/2's, 1951	1,381,000	105	101	103.00	1,422,430
Alabama Natural Gas Corp.					
(c) City of Talladega 5's, 1947	40,000			100.00	40,000
Total Indicated Market Value					$34,772,779
Earnings Available For Capital					
Net Income for year ended June 30, as reported					$2,646,108
Add: Interest on Funded Debt					999,668
Amortization of Debt Discount and Expense					74,396
Total Earnings Available for Capital					$3,720,172
Investors' Appraisal Of Risks Of Capital					10.70%

Notes: (a) Listed on N. Y. Stock Exchange
(b) Prices estimated — sold privately in May, 1941 to four banking institutions
(c) Price estimated

[fol. 13533] (Exhibit 65.)

Study Relative to Rate of Return on Panhandle Eastern Pipe Line Company.

Prepared By

Paul B. Coffman, Vice President
Standard & Poor's Corporation

Dated October 6, 1941.

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[fol. 13537] Determination of Economic Return Requirement For Panhandle Eastern Pipe Line Company.

By Paul B. Coffman

Statement Of Experience And Qualifications

1. Name, Address and Age

Paul B. Coffman, 222 Sylvania Place, Westfield, N. J., Age 40.

2. Education

Graduate of Ohio State University, 1923, with degree of Bachelor of Science; graduate of Harvard University Graduate School of Business Administration, 1926, with degree of Master of Business Administration.

3. Present Position

Vice President, in charge of Research and Valuation, and Director, of Standard & Poor's Corporation (recently

formed as a consolidation of Standard Statistics Company, Inc. and Poor's Publishing Company), a corporation engaged, among other things, in gathering, collating, analyzing and disseminating statistical and general information on all phases of business, industry and investments and offering professional, industrial consulting, valuation and research services.

4. Experience and Qualifications

Upon graduation in 1926 from Harvard University I became Professor of Economics and Accounting at the College of William and Mary, Williamsburg, Virginia. In September 1927, I returned to the Harvard Graduate School of Business Administration, where I joined the Faculty and became an assistant professor and tutor and remained until the end of 1936. The particular subjects I taught were accounting, corporate management and business policy.

While teaching at the Graduate School of Business Administration at Harvard University, I also served as consulting economist for a number of industrial and financial advisory corporations, including both Standard Statistics Company, Inc., with which I became associated in 1928, and Poor's Publishing Company, publisher of Poor's Manuals, with which I became associated in 1931, and which are the predecessor companies of the present Standard & Poor's Corporation. During 1931 and 1932 I served as Executive Vice President and General Manager of Poor's Publishing Company. Also, I was collaborator on several books of accounting and business policy and author of several articles.

Over a period of years I have been retained to make investigations upon a large number of diversified situations, many of which required that I present my analysis and testify as to my conclusions before the courts, the Internal Revenue Department, the Board of Tax Appeals, and several regulatory bodies, such as, the Civil Aeronautics Authority, State Public Utility Commissions and the Federal Power Commission.

[fol. 13538] Analysis Leading To Determination of Economic Return Requirement For Panhandle Eastern Pipe Line Company.

Synopsis Of History And Development Of Company.

History

Panhandle Eastern Pipe Line Co., (hereinafter sometimes referred to as Panhandle Eastern) was incorporated in Delaware, December 23, 1929, as the Interstate Pipe Line Co. and adopted its present title on May 9, 1930. Illinois Natural Gas Co., a wholly-owned subsidiary, was organized January 19, 1938 and in July, 1938, acquired from Panhandle Illinois Pipe Line Co. its facilities devoted exclusively to service of customers in Illinois. Main transmission facilities of the latter were conveyed in liquidation to the parent company.

Panhandle Eastern formerly owned the entire outstanding stock of Central Distributing Co., selling gas at retail in Kansas and Missouri, but disposed of such stock on January 25, 1941, by distributing it to stockholders as a dividend.

Corporate Background

Panhandle Eastern does a large wholesale business in natural gas. It purchases about half its requirements and produces the remainder. About 93% of total supply is sold to companies engaged in the distribution of natural gas for general purposes, and most of remaining 7% finds its way to industrial concerns.

The largest single customer is Michigan Consolidated Gas Company, which purchases about 40% of the total M. C. F. sold by Panhandle Eastern Pipe Line Co. and resells it in Detroit and Ann Arbor, Michigan, and environs. Natural gas is delivered to this customer through the pipeline system of Michigan Gas Transmission Corp. (a wholly-owned subsidiary of Columbia Gas & Electric Corp.).

Panhandle Eastern also sells gas to Michigan Gas Transmission Corp. for resale to certain distributing companies and municipalities in Indiana, more important of which include Northern Indiana Public Service Co., Kokomo Gas

and Fuel Co., Public Service Co. of Indiana, Indiana Gas Distribution Corp. and Central Indiana Gas Co. Such sales in M. C. F. to Michigan Gas Transmission Corp. amount to about 22% of Panhandle Eastern's total sales.

Company also sells Kentucky Natural Gas Corp. certain of its gas requirements.

Illinois Natural Gas Co. (wholly-owned subsidiary) sells natural gas purchased from company to certain distributing companies and industrial customers in Illinois, including Central Illinois Light Co., Illinois Iowa Power Co. and Central Illinois Public Service Co.

The more important distributing companies in Missouri obtaining natural gas from Panhandle Eastern are Missouri Power & Light Co., Citizens Gas Co. of Hannibal and Missouri Utilities Co.

[fol. 13539] Central Distributing Co. (former subsidiary) distributes gas purchased from company to about 4,200 customers in 29 communities in Kansas & Missouri.

It is estimated that about 696,000 gas customers are supplied directly and indirectly with gas from the Panhandle Eastern system, of whom about 430,000 are customers of Michigan Consolidated Gas Co.

Property

Leaseholds—

Panhandle Eastern owns or controls, subject to farm mortgages existing prior to acquisition thereof, gas rights on 49,417 acres of operated and 179,549 acres of unoperated land and a 50% working interest in 22,679 acres of operated and 6,017 acres of unoperated land, in the Panhandle of Texas, southwestern Kansas and Texas County, Okla., and in addition controls through gas purchase contracts approximately 76,896 acres of land in this territory. About half of the gas supply is obtained from wells heretofore drilled on certain of these leaseholds. The remainder is purchased from other producers. As of December 31, 1940, there were 135 wells owned, (including 46 in which Panhandle Eastern had only a 50% working interest) and 121 wells controlled by gas purchase contracts. The total connected open flow of these wells was 4,423,000 M.C.F.

Gas Reserves—

Ralph E. Davis, Inc., Engineers, in report on Panhandle Eastern's natural gas supply, stated in part: "The combined gas supply controlled by your company in the Amarillo and Hugoton fields is, in our judgment, adequate to supply its present markets and any reasonably anticipated increase in the gas requirements of said markets for a period of more than 25 years".

Transmission System—

Principal natural gas transmission system, which was placed in operation in 1932, is shown on the following map. Such system extends from the Amarillo gas field in Texas Panhandle and from the Hugton gas field in southwestern Kansas through Oklahoma, Kansas, Missouri and Illinois, to a point near Dana, Indiana, where connection is made with the transmission system of Michigan Gas Transmission Corp. Panhandle Eastern also operates, as a separate unit, a minor transmission system located in the general vicinity of Kansas City, Mo.

Transmission system embraces 2,374 miles of gathering, main and lateral lines (all sizes) and 12 compressor stations with gas driven compressor units having aggregate installed capacity of 80,100 hp.

In addition, meter stations, a dehydrating plant, a natural gasoline extraction plant, and other equipment and property used in the operation and maintenance of a high-pressure gas transmission system, are owned directly or by the Illinois Natural Gas Co.

Acquisition of the Michigan Gas Transmission Corp. facilities is under consideration and, if consummated, would [fol. 13540] give Panhandle Eastern ownership of a complete natural gas transmission system from the Texas and Kansas fields to Detroit, Mich.

Contracts

Michigan Consolidated Gas Co. (formerly Detroit City Gas Co.)

Contract dated August 31, 1935, between Panhandle Eastern and Detroit City Gas Co. (now Michigan Consolidated

Gas Co.) provides for sale of natural gas for resale in Detroit, Michigan, for a term of 15 years from January 1, 1937, and thereafter until canceled by either party on 18 months' notice.

The maximum amount of gas which Panhandle Eastern is obligated to deliver in any one day, as provided in amendment dated June 29, 1940 is 125,000,000 cu. ft. Under terms of amendment dated September 29, 1939, which provided, among other things, that the minimum obligation of Michigan Consolidated Gas Co. to take and pay for gas was to increase proportionately with any increase in company's maximum obligation to deliver gas, Michigan company is presently obligated to take and pay for 190,125,000 therms of gas per year. (One therm represents an amount of gas having a heating value of 100,000 British thermal units). Deliveries under this contract were begun July 9, 1936.

In the event that an adequate supply of natural gas sufficient to meet requirements of Michigan Consolidated Gas Co., is developed by parties other than Panhandle Eastern and made available at lower rates, company must meet such lower rates within six months after notice from Michigan Consolidated Gas Co. Contract may be terminated for breach of this or certain other provisions.

The following (relating to rates payable under this contract) is taken from the report of Stone & Webster Engineering Corp. (contained in Registration Statement covering Detroit City Gas Co. bonds), dated Jan. 30, 1937.

Panhandle Eastern undertakes to furnish and Michigan Consolidated Gas Co. agrees to purchase gas to be used for residential, commercial and industrial customers at a price of 38¢ per month per therm of maximum daily demand, as defined in contract, plus 1.5¢ per therm as a commodity charge for gas delivered.

Michigan Consolidated Gas Co. will sell gas to its customers on the basis of "Detroit Gas Units" or "DGU" equivalent in heating value to 1,000 cu. ft. of gas of 530 B. t. u. Converting the therms to DGU it appears that Michigan Consolidated Gas Co. will pay for natural gas with a heating value of 1,014 B. t. u. $24.17 per year per DGU of maximum demand, as defined in contract, plus a commodity

charge of 7.95¢ per DGU. Under this form of rate, the cost of gas varies with the load factor. Gas purchased at an 80% load factor would cost Michigan Consolidated Gas Co. 16.20¢ per DGU, while gas purchased at a 20% load factor would cost 41.0¢ per DGU. This illustrates the importance to Michigan Consolidated Gas Co. of maintaining control over the maximum demands on Panhandle Eastern and obtaining as favorable a load factor as possible. [fol. 13541] The cost of natural gas purchased for distribution to house heating customers depends upon a formula set forth in the contract, taking into account the difference between the monthly averages of prevailing temperatures and 65 degrees F., and an assumed consumption per customer per degree of temperature difference. We estimate that the Michigan Consolidated Gas Co. will pay between 21¢ and 22¢ per DGU for house heating gas.

Michigan Gas Transmission Corp.

Panhandle Eastern has a number of contracts with Michigan Gas Transmission Corp. The most important of these cover the terms, conditions and provisions under which the latter company receives, transmits and delivers gas to Michigan Consolidated Gas Co. Another contract covers the terms under which the Transmission Company receives, transmits and delivers gas to certain special industrial customers in Indiana. Another contract covers the terms under which the Transmission Company receives, transmits and delivers gas to Public Service Co. of Indiana, Northern Indiana Public Service Co. and Kokomo Gas and Fuel Co.

Kentucky Natural Gas Corp.

In July, 1938, Panhandle Eastern entered into a fifteen-year contract with Kentucky Natural Gas Corp. providing for a minimum firm delivery of 2,500,000 cu. ft. of gas daily during the first year and increasing thereafter to a firm daily delivery of 10,000,000 cu. ft. in the sixth year and thereafter. In addition to firm deliveries agreement also provides for sale of additional gas on an interruptible basis. Initial delivery under this contract was made September 1, 1938.

Phillips Petroleum Co.

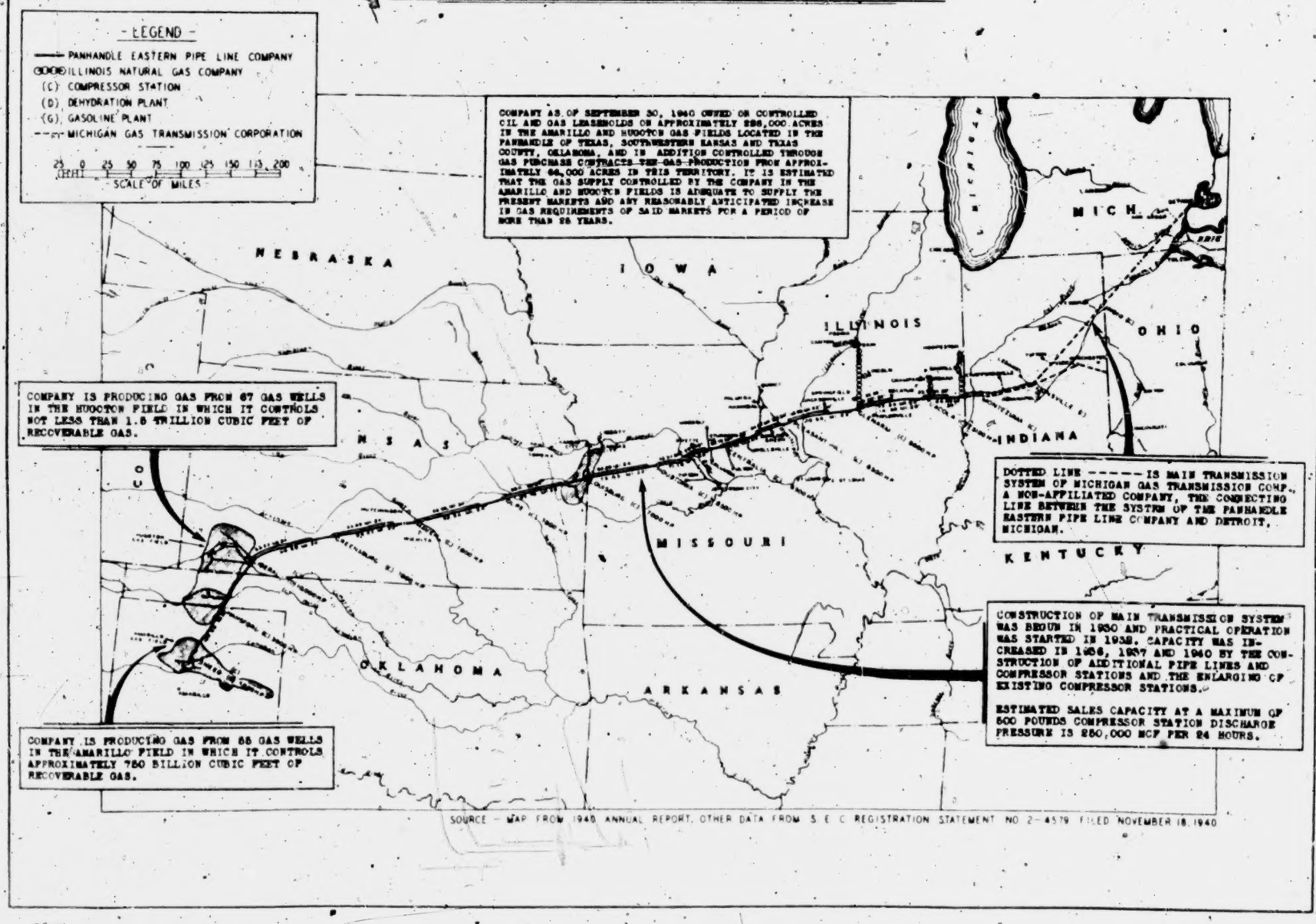
Panhandle Eastern has a contract with Phillips Petroleum Company under which it agrees to sell and deliver and Phillips Petroleum Co. agrees to purchase and receive all merchantable natural gasoline that may be produced, manufactured and saved by company at its natural gasoline plant located near Liberal, Kansas. Contract became effective October 1, 1940 and continues for an indefinite period thereafter unless cancelled by either party upon 12 months' notice.

Acquisition of Contract by Assignment

During 1939, Panhandle Eastern acquired by assignment from Michigan Gas Transmission Corp. its contract with Michigan Consolidated Gas Co. covering the sale and delivery of gas to that company for resale in the City of Ann Arbor, Michigan.

- CHART NO. 1 -

MAIN TRANSMISSION SYSTEM OF PANHANDLE EASTERN PIPE LINE CO. & SUBSIDIARY



SOURCE - MAP FROM 1940 ANNUAL REPORT, OTHER DATA FROM S. E. C. REGISTRATION STATEMENT NO. 2-4579 FILED NOVEMBER 18, 1940

[Fol. 1543] Approach To Determination of Fair Return and My Point of View

On September 3, 1941, the Panhandle Eastern Pipe Line Company retained Standard & Poor's Corporation, through me, to make a study from which I could determine the investors' appraisal of the risks of capital in various divisions of the public utility field and the relative appraisal of risks of natural gas pipe line companies. A summary of such analyses is presented in Volume I, entitled, "Summary of Analyses," which is supported by Volume II, containing statistical data, both of which volumes are presented as supplements to this study.

Having completed the above analyses, which are purely factual, I was asked to explore further statistical data which was directly related to Panhandle Eastern Pipe Line Company and which would be helpful to the Federal Power Commission in determining a fair return of compensation for that company.

Some time before receiving this assignment, I had undertaken a study for the Pennsylvania Power & Light Company, the results of which indicated that the management of that company would need a certain irreducible minimum of compensation return to discharge properly its public duties and maintain its credit position. Admittedly, this aproach was somewhat different from those heretofore used, but I felt I was following precisely the factors underlying such determination of a fair rate of return by the Pennsylvania Supreme Court in the Solar Electric Case, 137 Pa. Sup. Court Rep. 325, wherein it was stated:

"The courts have held that the return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to pay all expenses of operation, provide for depreciation, payment of interest and reasonable dividends, and for a reasonable amount to be applied to a surplus account, thus insuring the maintenance of credit and enable it to raise money necessary for proper discharge of its public duties: Bluefield Water Works & Improve. Co. vs. P. S. C., 262 U. S. 679, 692; United Rwy. & Elec. Co. vs. West, supra."

The above study was presented before the Public Utility Commission of Pennsylvania in the latter part of September, 1941, and from my experience in testifying before the Commission I was led to believe that the data I had assembled gave the Commissioner additional facts upon which to determine a fair return for that company. I was retained by the Panhandle Eastern Pipe Line Company to make a similar study for it.

The problem of "Rate of Return" has always been one of the most important, as well as one of the most subtle and complex issues with which the Commissions and courts have had to cope. Over a period of years many cases have been tried and many rulings have been made upon the subject. In most decisions, however, in spite of its importance, it appeared to me that the subject of "rate of return" has been subordinated to such other rate making elements as "valuation," "going concern value," and "depreciation." As a part of my preparation of this study, I reviewed generally the more important Commission rulings and court decisions, not as an attorney might read them, nor with the idea of ascertaining the final particular decision as to rate, but rather with the idea of discovering what such bodies believed to be the underlying factors which should be considered in any rate of return study. Over the years, a rather considerable body of discussion has been built upon this general subject, and it is possible to discover from the decisions a number of basic factors which courts and Commissions have at various times asserted that they had "considered" in arriving at the rates of return finally allowed or adopted.

[fol. 13544]

Upon a review of such factors, I concur in the opinion that the proper rate of return (percentage) or the rate (compensation) is a flexible concept and not a static rule. Moreover, that what is termed proper necessitates the exercise of "enlightened judgment." Current conditions carry greater weight but general conditions affecting all business should be considered. Also, the rate should be sufficient to assure confidence, in the financial soundness of the utility, to maintain its credit and to attract the required capital. The propriety of the allowed return depends largely upon the circumstances, the locality, and the risks of the utility enterprise. Furthermore, the return should be equal

to that generally being made at the same time and in the same general region on investments of other enterprises that have corresponding risks. The historical cost of money to the utility and the current cost of money must be considered, as well as the utility's capital structure, financial history and past operations. The return should accomplish, among other things, due recognition of efficiency or lack of efficiency in management. In addition, the future prospects of the utility, its taxes and development, the potential stimulation of reduced rates and the character of service, should be considered.

From my experience, I have gained the impression that although these factors have been considered in one form or another in the various rate of return cases which have come before the Commissions and the courts, experts preparing evidence on the subject have generally fallen into two classes, namely, those who made extensive studies to establish the figures from which a proper rate base could be established, and those who prepared evidence from which a fair rate of return could be established. However, as I have considered the various Commission and court decisions I have felt that one further type of analysis might contribute much to a study of rate of return; that is, [an analysis to determine the irreducible minimum of dollar income or gross revenue needed by the management of a particular utility company to discharge properly its service obligation to the public and at the same time maintain its credit position. This study is in essence an examination of economically required return, as such, rather than of a "rate" of return to be applied to some selected "rate base."]

In the following analysis I have attempted to provide such information for the Panhandle Eastern Pipe Line Company.

In last analysis, as I understand the problem, the issue really comes down to such determination for when a fair rate base and a reasonable rate of return are multiplied together the resulting figure is presumed to be the revenue [fol. 13545] sufficient to enable the management to carry out the function mentioned above. If this is an accurate statement of the situation, and I believe that it is, it oe

curred to me that one might well start a study of the problem of return by determining what the money income requirements were in the first place. Such final figure could then be used as a check against the application of a fair rate of return to a fair rate base to see whether in last analysis those two figures did provide the utility with the money income that was necessary to render efficient service to the public and at the same time maintain its credit position.

So far as I know, the decisions rendered in the Bluefield Water Works and Improvement Co. vs. Public Service Commission of West Virginia, 262 U. S. 679, and United Railways vs. West, 280 U. S. 234, still represent the law so far as rate of return is concerned. The general rule, as stated in the Bluefield case, was as follows:

"What annual rate will constitute just compensation depends upon circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevent facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and and in the same general part of the country on investments in other business undertakings which are attended by corresponding risk and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally."

Following the factors mentioned above, and particularly those underlying a study of rate of return as outlined in the Bluefield Water Works and Improvement Company vs. Public Service Commission of West Virginia, I gave attention to such topics as type of service rendered; the territory served, the efficiency of management, current conditions of the particular business and general business, the financial

structure, the circumstances, locality and risks of the particular utility company, historical and current costs of money, future prospects of the utility, its taxes and development. Charts showing data on these topics are presented in the following pages, in about the order mentioned. All the factual data presented on the various exhibits were obtained from the annual reports of the Panhandle Eastern Pipe Line Company, and the companies with which data on it were compared. Gas industry data has been taken from the records of the Bureau of Mines, Standard Corporation Records, Commercial & Financial Chronicle and other sources, all of which are available to the public and are recognized as reasonably reliable sources of information for the data taken therefrom.

My study, following the approach outlined above, leads to the conclusion that the Panhandle Eastern Pipe Line Company must have as an irreducible minimum annual gross revenue of $15,459,545 assuming that the present preferred stock is refinanced, or $15,520,857 assuming no change in the present capital structure, such sums to be available to meet operating expenses, taxes, current capital [fol. 13546] requirements and provide a reserve to restore invested capital after the gas reserves of the company are exhausted.

In my analysis, I did not attempt to determine a rate base or the specific rate of return, but rather attempted, as already explained, to determine that amount of earnings (return) which would be considered the irreducible minimum required by the management to maintain the efficiency of its operations, its credit position and discharge its public obligations. This required the determination of the amount of return needed rather than the return which the company might be entitled to earn. There is no conflict between these two points of view—a public utility appears "entitled" to earn only the return that it "needs" to maintain its credit position. The determination of the rate base was properly left to the Commission.

Admittedly, or at least so far as I am apprised, this approach is somewhat different from any heretofore used, yet, as I have already stated, I believe it follows the factors underlying a study of rate of return as outlined in the

various Commission and court opinions and it avoids certain difficulties that have arisen in prior studies where, so far as I understand it, the rate base and the rate of return were each treated as separate entities, when as a matter of fact, the two are interrelated when one comes face to face with the issue of what earnings a particular utility is to be allowed.

With this preliminary explanation of the approach I have followed in this particular study, I present a series of charts in the following pages which graphically protray my thesis and the conclusions drawn therefrom.

[fol. 13547] Growth of Natural Gas Industry in U. S. A. 1906-1940

In Chart No. 2, captioned "Growth of Natural Gas Industry in U. S. A., 1906-1940," the solid blue line represents the natural gas production in terms of billion M. C. F., and the light grey line represents domestic and commercial customers in terms of million customers, for the period mentioned.

Interpreting these lines, it can be seen that the natural gas industry for the country as a whole, in terms of production and domestic and commercial customers, enjoyed a very modest growth from 1906 to 1920. From 1921, however, there was a setback in the trend because of the post war depression, but this was soon over and from 1922 to 1930 there was a much sharper increase in production and number of domestic and commercial customers, except that the number of the latter increased considerably more rapidly from 1928 than it did in any of the years prior thereto.

Natural gas production fell off in 1931 and 1932 and did not begin to recover again until 1933, when it showed a substantial uptrend again until 1937. The number of commercial and domestic customers continued to show an increase after 1931 through 1939, although this particular growth trend was not as sharp as that recorded in the period 1928-1930, both inclusive.

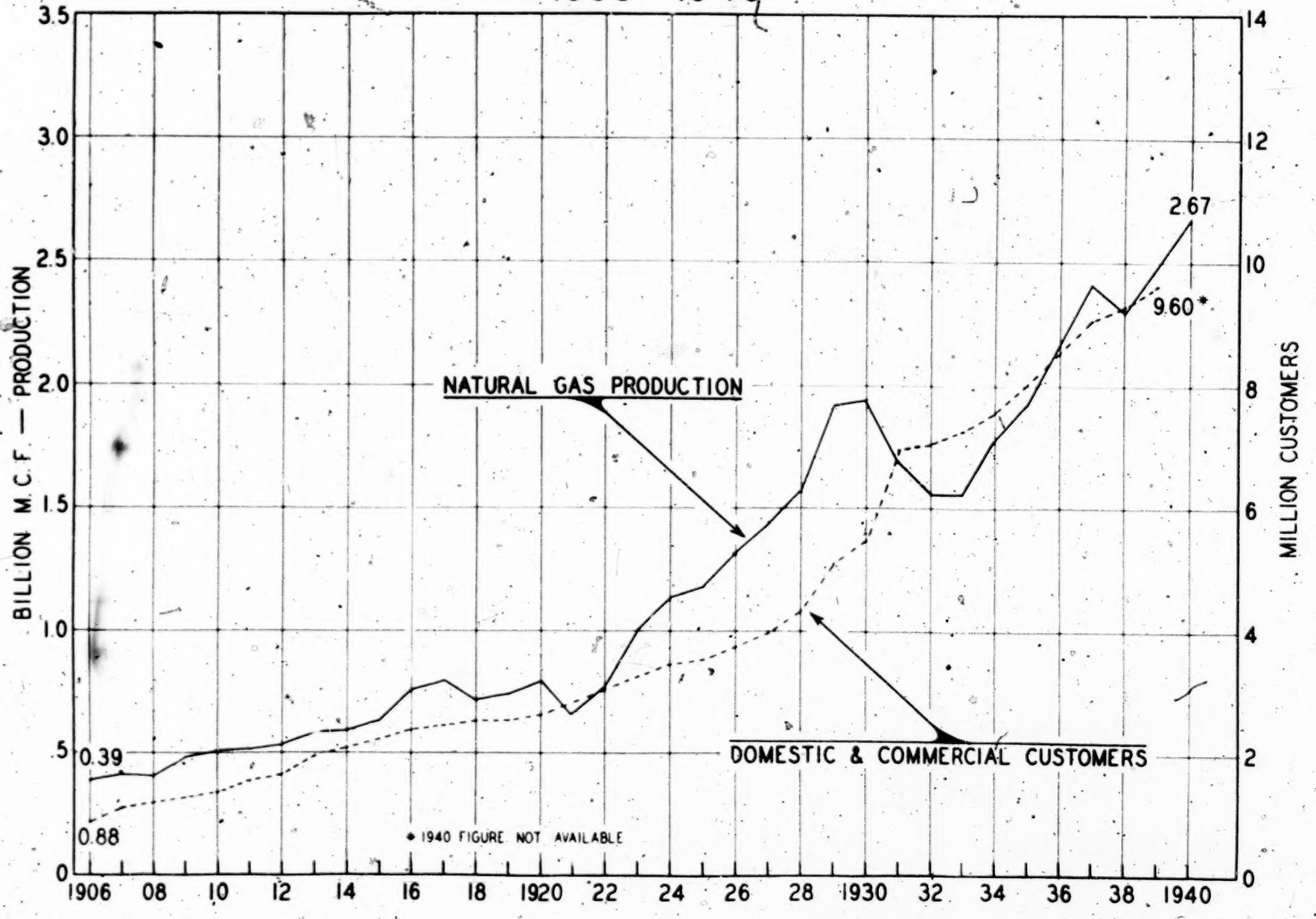
The production of natural gas fell off in 1938, but showed recovery in 1939 and then continued its sharp uptrend.

Actually, according to Moody's Public Utility Manual, 1941, Page a 42, the number of domestic and commercial customers increased from 884,018 in 1906 to 9,603,000 in 1939 (1940 figures were not available at the time this report was written) and according to U. S. Bureau of Mines—Minerals Yearbook: 1937, p. 1062; and 1941, p. 1030) natural gas production increased from 388,843,000 M. C. F. in 1906 to 2,672,000,000 in 1940.

It is evident from the accompanying chart that natural gas production is subject to cyclical fluctuations in business. This is particularly noted on the declines that were shown in production in 1921, 1931, 1932, 1933 and in 1938, and this factor must be considered in any study that is made of the natural gas industry.

- CHART NO. 2 -

GROWTH OF NATURAL GAS INDUSTRY IN U. S. A.
1906 – 1940



[fol. 13549] Consumption of Natural Gas in U. S. A.

1919-1940

In Chart No. 3, captioned "Consumption of Natural Gas in U. S. A., 1919-1940," the consumption according to usage is shown in the left hand box and consumption of natural gas vs. industrial production in relatives 1935-1939 equal 100 is shown in the right hand box.

As can be seen, consumption is shown as to its principal uses, namely, domestic and commercial, miscellaneous industrial, field use and carbon black. All of these divisions, if one follows the bands carefully, indicate that they are subject to fluctuations in general business. Moreover, it is clear that the greatest growth from 1919 to 1940 was in the miscellaneous industrial and field use classifications.

From 1919 to 1940 domestic and commercial increased from 255,743,000 M. C. F. to 574,000,000 M. C. F., miscellaneous industrial increased from 270,490,000 M. C. F. to 1,024,010,000 M. C. F., field use increased from 169,787,000 M. C. F. to 700,000,000, and carbon black increased from 49,896,000 M. C. F. to 369,000,000 M. C. F. The grand total therefore increased from 745,916,000 M. C. F. to 2,667,010,000 M. C. F.

In the right hand box, the solid brown line represents the Federal Reserve Board Index of Industrial Production in relatives 1935-1939 equal 100, the [sold] green line represents the total consumption of natural gas in relatives 1935-1939 equal 100, and the solid green line represents the consumption of natural gas (excluding field use and carbon black) in relatives of 1935-1939 equal 100.

The lines shown in the right hand box indicated that the trend of consumption of natural gas was the same as the Federal Reserve Board Index of Industrial Production in the period 1919 through 1929, although the figures were on different levels. After the 1931-1932 depression, however, all three lines are very close together. The chart indicates that the Federal Reserve Board Index of Industrial Production is estimated for the present year at 155, which is substantially higher than any level reached in the history to this time and would indicate that so long as the arma-

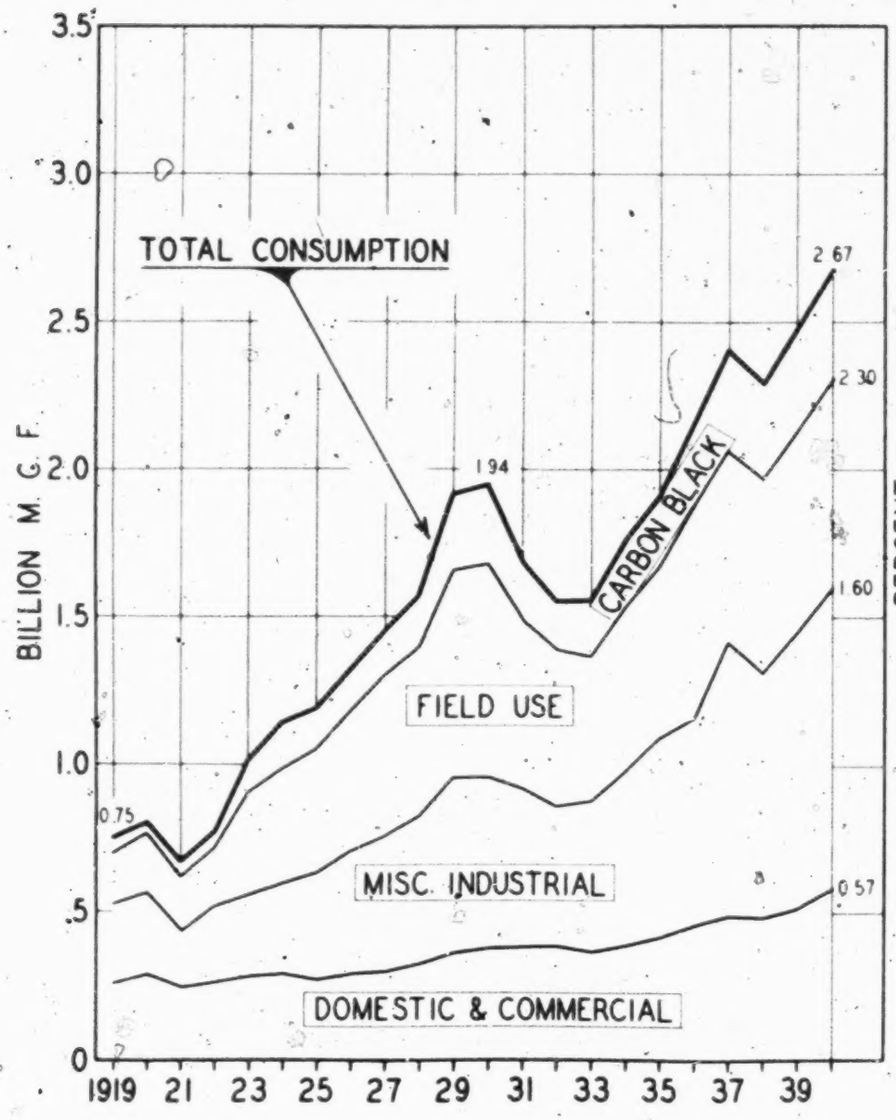
ment boom continues the natural gas consumption will continue to show a substantial uptrend following the general trend of business.

Detailed statistics on this graph are shown in the Appendix on the sheet marked "Table for Chart No. 3."

- CHART NO. 3 -

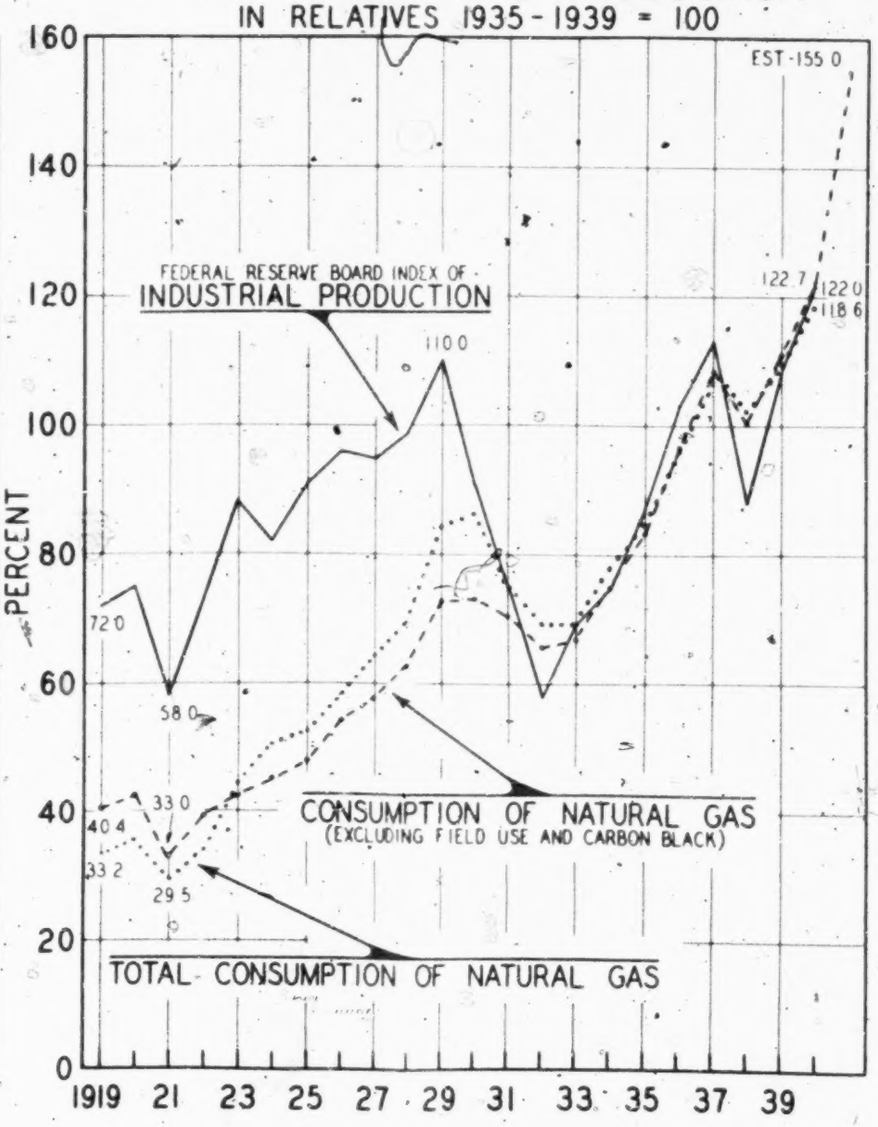
CONSUMPTION OF NATURAL GAS IN U. S. A. 1919 - 1940

CONSUMPTION ACCORDING TO USEAGE



CONSUMPTION OF NATURAL GAS — vs — INDUSTRIAL PRODUCTION

IN RELATIVES 1935 - 1939 = 100



[fol. 13551] Revenue From Natural Gas Consumed in U. S. A. 1919-1940.

In Chart No. 4, captioned "Revenue from Natural Gas Consumed in U. S. A., 1919-1940," the total revenue according to usage at points of consumption is shown in the left hand box, and the average value per M. C. F. is shown in the right hand box. The figures in the left hand box are again broken down as to domestic and commercial, miscellaneous industrial, field use and carbon black. The figures on the latter two items, however, were not available for 1940, and no figures were available on the breakdown basis for the years 1919-1921, both inclusive.

The left hand box indicates the tremendous growth factor in the period 1921-1940, both inclusive. Domestic and commercial increased from $110,337,000 to $387,604,000, miscellaneous industrial from $40,558,000, to $155,754,000 in 1939, field use from $21,649,000 in 1921 to $28,610,000 in 1939 and carbon black increased from $2,073,000 to $3,263,000 in 1939. The total therefore increased from $160,888,000 in 1919 to $590,626,000 in 1940.

Dividing the M. C. F. consumption figures as shown in Chart No. 3 by the total revenue according to usage, as shown in this chart, the average value per M. C. F. as represented by the green line is determined. It will be noted that whenever industrial production and gas production declined because of fluctuations in the business cycle, the average value per M. C. F. went up. This is naturally to be expected. The result is that there was a tremendous rise in 1920 and 1921, again in 1930, 1931 and 1932, but no noticeable change took place in 1937 and 1938 although there was a recession in business in these two years.

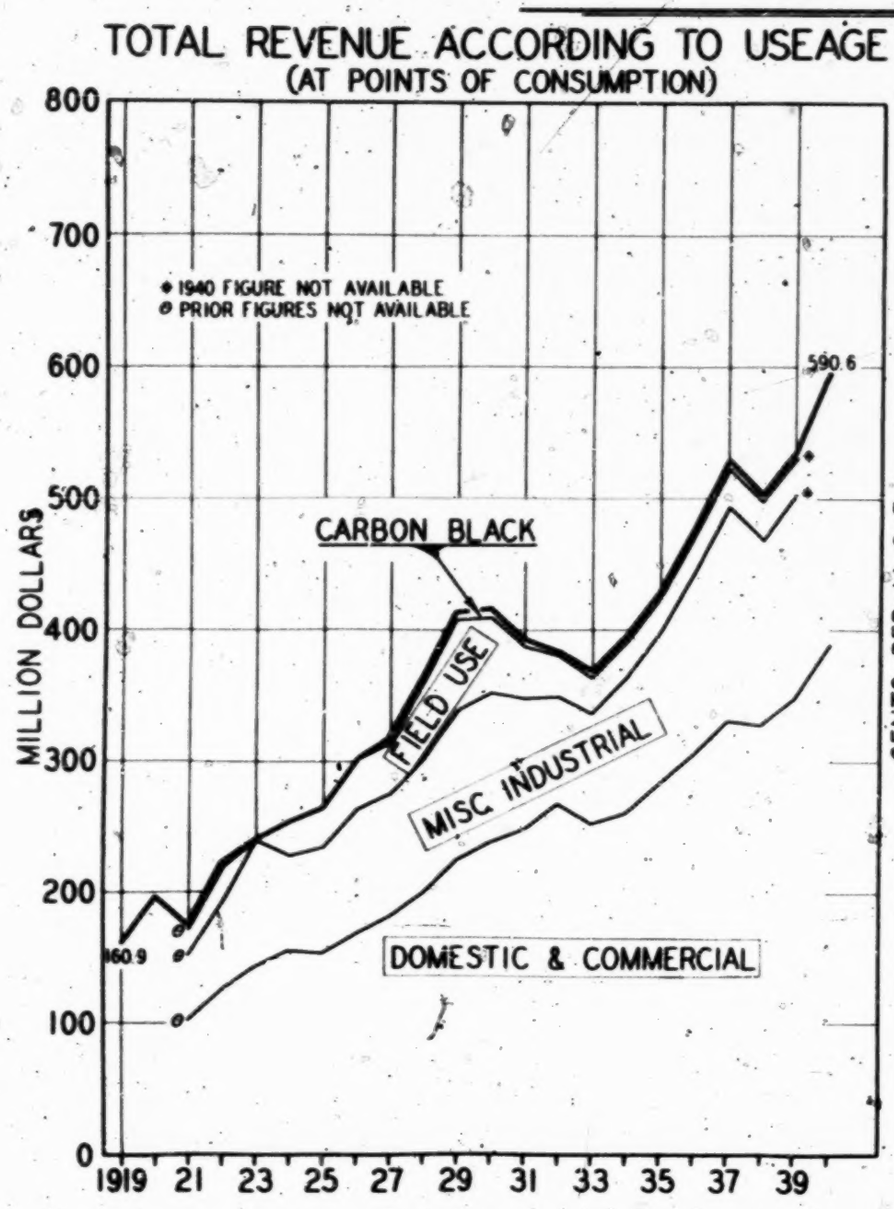
The average value per M. C. F. fluctuated in the period 1919-1939, both inclusive, from 21.6¢ per M. C. F. which compared with the low for the period of 21.4¢ per M. C. F. in 1930, and the high of 29.1¢ per M. C. F. in 1932, and 22.1¢ per M. C. F. in 1940.

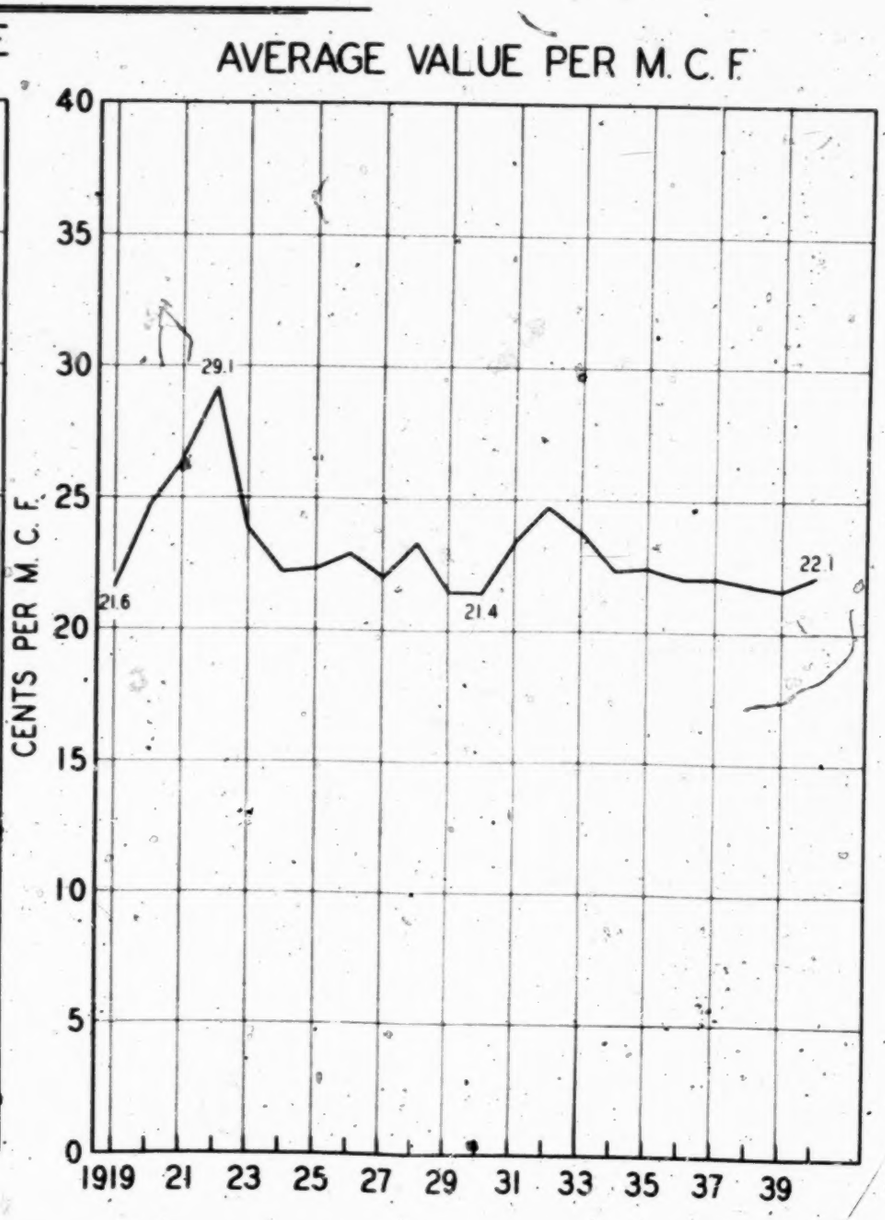
Data shown in the right hand box would indicate that the supply and demand for natural gas in the U. S. A. was such as to be farily well balanced, with the result that there were no striking variations in price except in the 1920-1921 and 1930-1932 periods, which were accounted for by depressed business conditions.

EXHIBIT 65

-CHART NO. 4-

REVENUE FROM NATURAL GAS CONSUMED IN U. S. A. 1919 – 1940





[fol. 13553] Average Revenue Per M. C. F. 1929-1940

In Chart No. 5, captioned, "Average Revenue Per M. C. F., 1929-1940," the average industry revenue from natural gas consumed in the U. S. A., at point of consumption is shown in the left hand box, and the average revenue of Panhandle Eastern Pipe Line Company vs. industry is shown in the right hand box.

The data in the left hand box relate again to the various types of consumption, namely, domestic, commercial, miscellaneous industrial, field use and carbon black. All such figures are presented in terms of cents per M. C. F.

From 1929 to 1939, both inclusive, miscellaneous industrial showed a decline from 19.7¢ to 16.6¢ per M. C. F., field use from 9.7¢ to 4.2¢ per M. C. F. and carbon black from 1.9¢ to 0.9¢ per M. C. F. Domestic and commercial, on the other hand, showed an increase in the period 1930-1932, both inclusive, and then only minor declines from 74.8¢ and 50.4¢ per M. C. F. respectively in 1932 to 73.0¢ and 49.2¢ per M. C. F. respectively in 1940.

In the right hand box, the figures are presented for the total industry, excluding field use and carbon black, at the point of consumption, as represented by the green line, and rose from 35.7¢ per M. C. F. in 1929 to 40.7¢ per M. C. F. in 1932, and declined to 34.7¢ per M. C. F. in 1939. Data on the Panhandle Eastern Pipe Line Company covering the average wholesale rate, as represented by the red line, showed an increase from 21.1¢ per M. C. F. in 1934 to 23.4¢ per M. C. F. in 1940. No figures on the company were available prior to 1934 and the figures on the industry were not available for 1940.

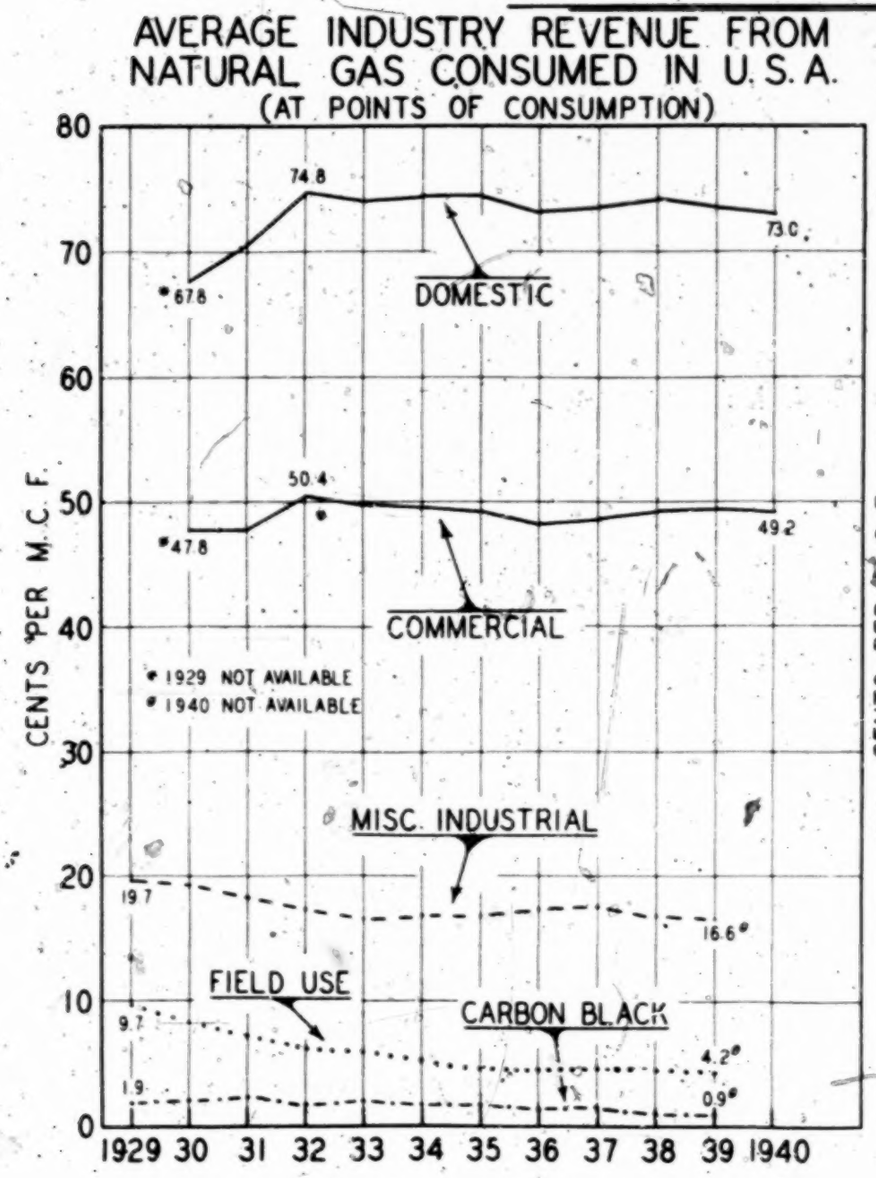
It must be remembered that, in comparing Panhandle Eastern Pipe Line Company figures with total industry figures, one is making a comparison of a wholesale price with a retail price.

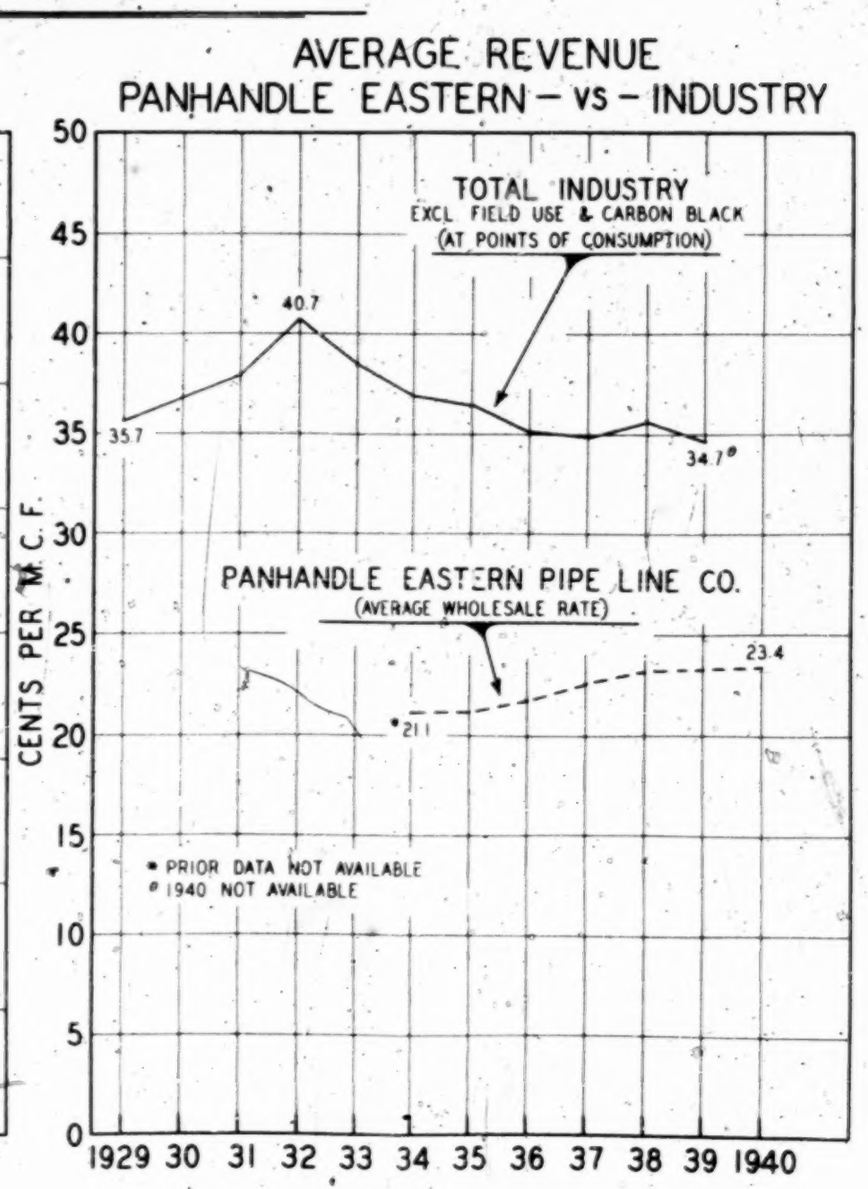
The increases in the Panhandle Eastern Pipe Line Company figures from 1934 to 1940 are principally explained by the fact that the company in this period was growing rather rapidly, as domestic and commercial business, which is shown in the left hand side of the chart, carried higher rates than did the industrial classification.

EXHIBIT 65

- CHART NO. 5 -

AVERAGE REVENUE PER M. C. F.
1929 - 1940





[fol. 13555] Panhandle Sales By States vs. Industry Consumption of Natural Gas—1934-1940

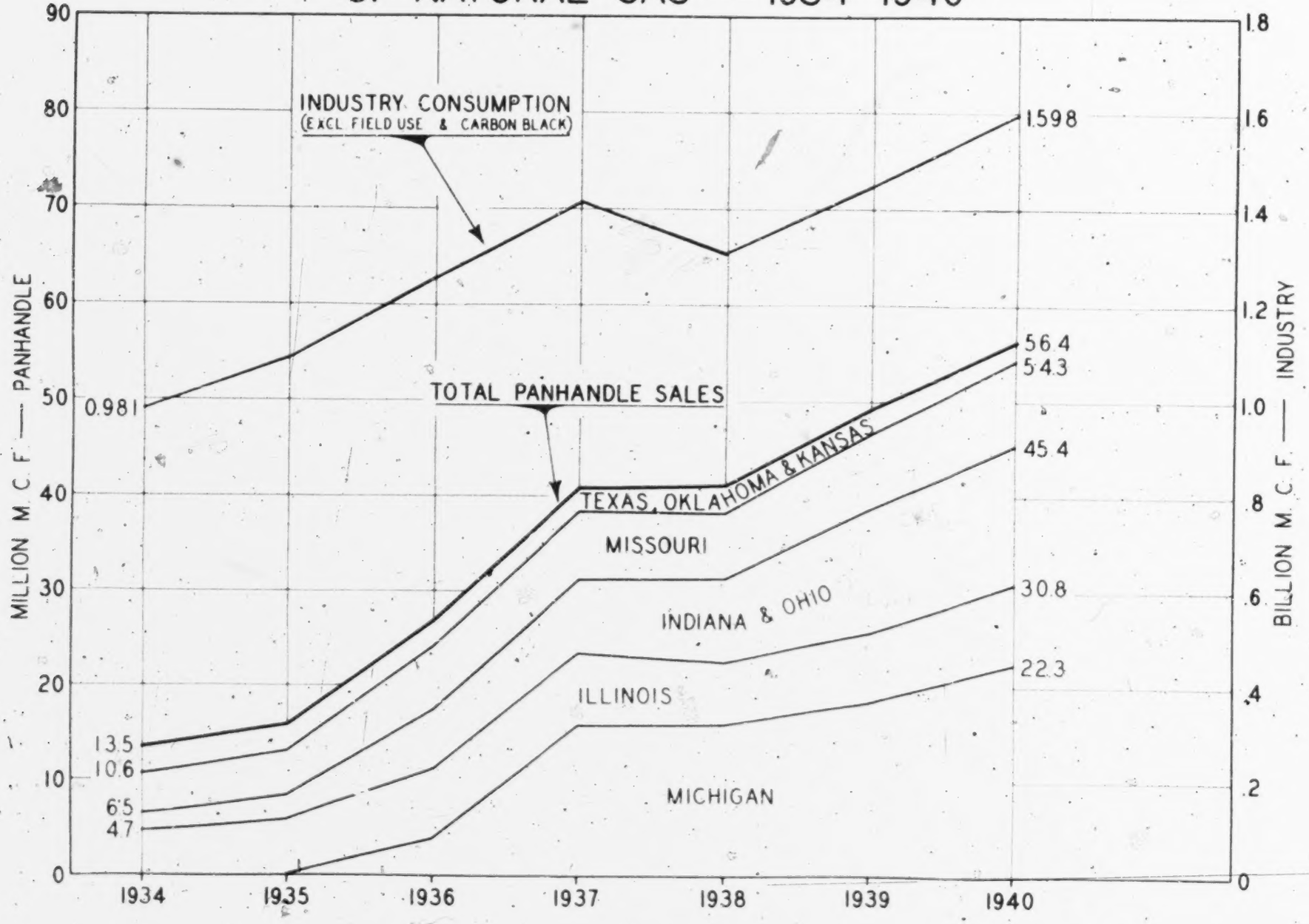
In Chart No. 6, captioned "Panhandle Sales by States vs. Industry Consumption of Natural Gas, 1934-1940," it is clear that the company distributes gas all along its line from the Amarillo and Hugoton fields to Dana, Indiana. Although the addition of Detroit as a market for gas increased aggregate sales of Panhandle Eastern Pipe Line Company substantially by 1937, nevertheless it should be observed that the sales in Indiana and Ohio have shown a greater growth from 1937 than have the sales in Michigan.

Moreover, the exhibit indicates clearly that Michigan contributed in 1940 about 41% of the total Panhandle sales and that Illinois, Indiana and Ohio contributed approximately an equal amount, and the remainder was sold in Missouri, Texas, Oklahoma and Kansas.

The chart further shows that the total sales of Panhandle Eastern Pipe Line Company increased from 13,497,649 M. C. F. in 1934 to 56,394,762 M. C. F. in 1940, and that the rate of increase for the period was greater than the industry consumption of natural gas, excluding gas used in the fields and for the manufacture of carbon black.

- CHART NO. 6 -

PANHANDLE SALES BY STATES -VS- INDUSTRY CONSUMPTION OF NATURAL GAS — 1934-1940



[fol. 13557] Trends of Gross Revenue—1934-1940

Panhandle vs. Other Pipe Line Cos. & Industry.

In Chart No. 7, captioned "Trends of Gross Revenue—1934-1940—Panhandle vs. Other Pipe Line Cos. & Industry," all data compared had been reduced to relatives in terms of 1934 equals 100. This indicates that Panhandle Eastern Pipe Line Company has shown a much more rapid growth than that shown by either the total industry or by the total for other pipe line companies.

Panhandle Eastern Pipe Line Company increased 344% from 1934 to 1940, while the total industry increased 38.68% from 1934 to 1939 and the total of all other pipe line companies increased 91.30% from 1934 to 1940.

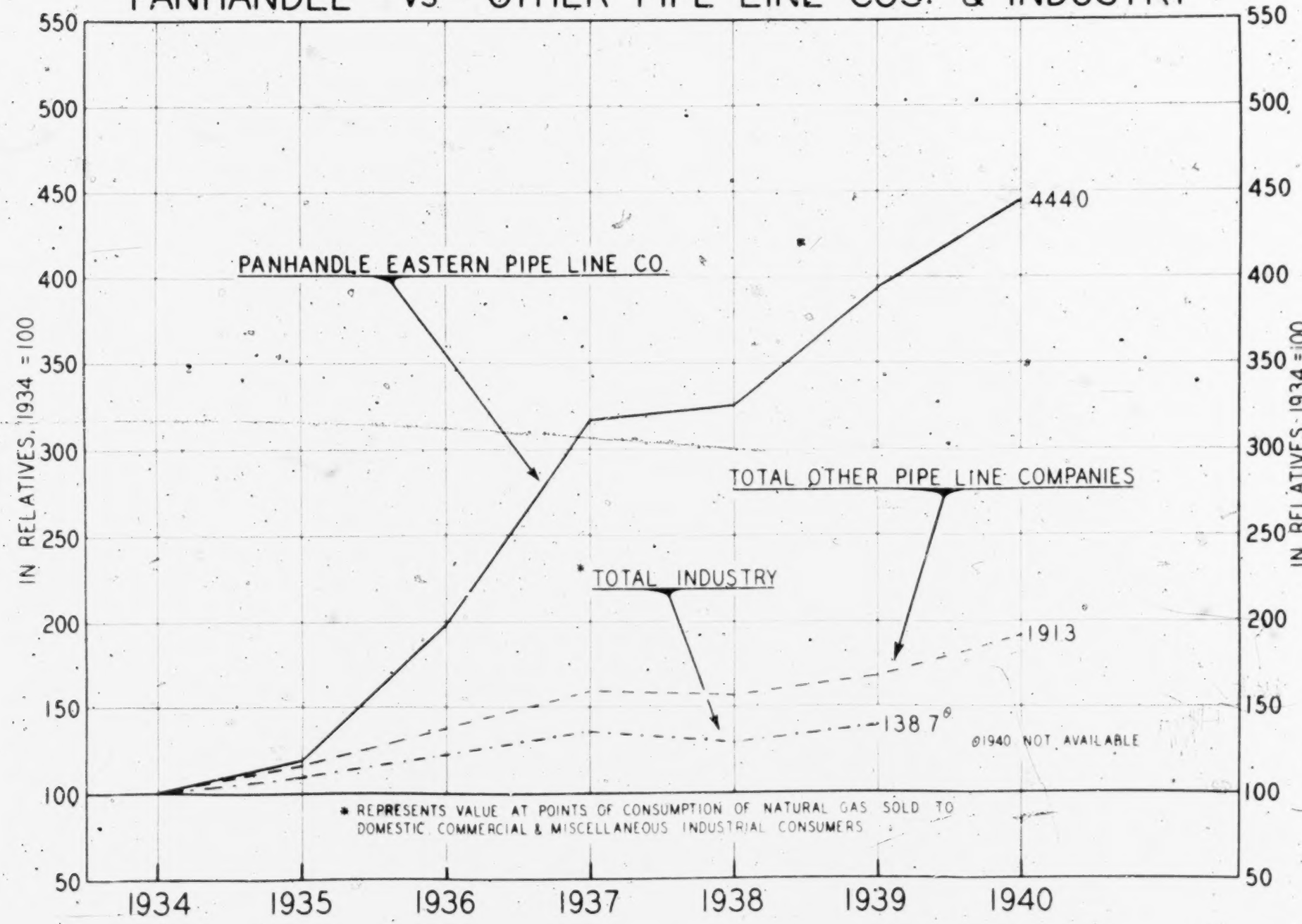
As shown in the supporting table in the Appendix at the end of this report, in the same period of time Cities Service Gas Company increased 44.32%, El Paso Natural Gas Company increased 214.34%, Interstate Natural Gas Company, Inc. increased 71.29%, Memphis Natural Gas Company increased 87.15%, Mississippi River Fuel Corporation increased 85.03%, Northern Natural Gas Company increased 100.84% and Southern Natural Gas Company increased 200.88%.

It certainly can be said from these data that Panhandle Eastern Pipe Line Company has been a useful and rapidly growing company and recent trends indicate that such growth is to continue for several years to come.

EXHIBIT 65

- CHART NO. 7 -

TRENDS OF GROSS REVENUE — 1934-1940
PANHANDLE - vs - OTHER PIPE LINE COS. & INDUSTRY



[fol. 13559] Operating Ratio Of Panhandle Compared With Other Pipe Line Companies—1934-1940.

In Chart No. 8, captioned "Operating Ratio of Panhandle Compared with Other Pipe Line Companies—1934-1940," a comparison is made of the operating ratios (the percent of gross revenue consumed by operating expenses) of Panhandle Eastern Pipe Line Company with those of Other Pipe Line Companies on two bases, i. e., operating ratios before taxes as shown in the first box and the ratios after taxes appearing in the other box. The red lines in both of these divisions represent data of Panhandle while the grey lines cover data on Other Pipe Line Companies, which are the same companies discussed previously.

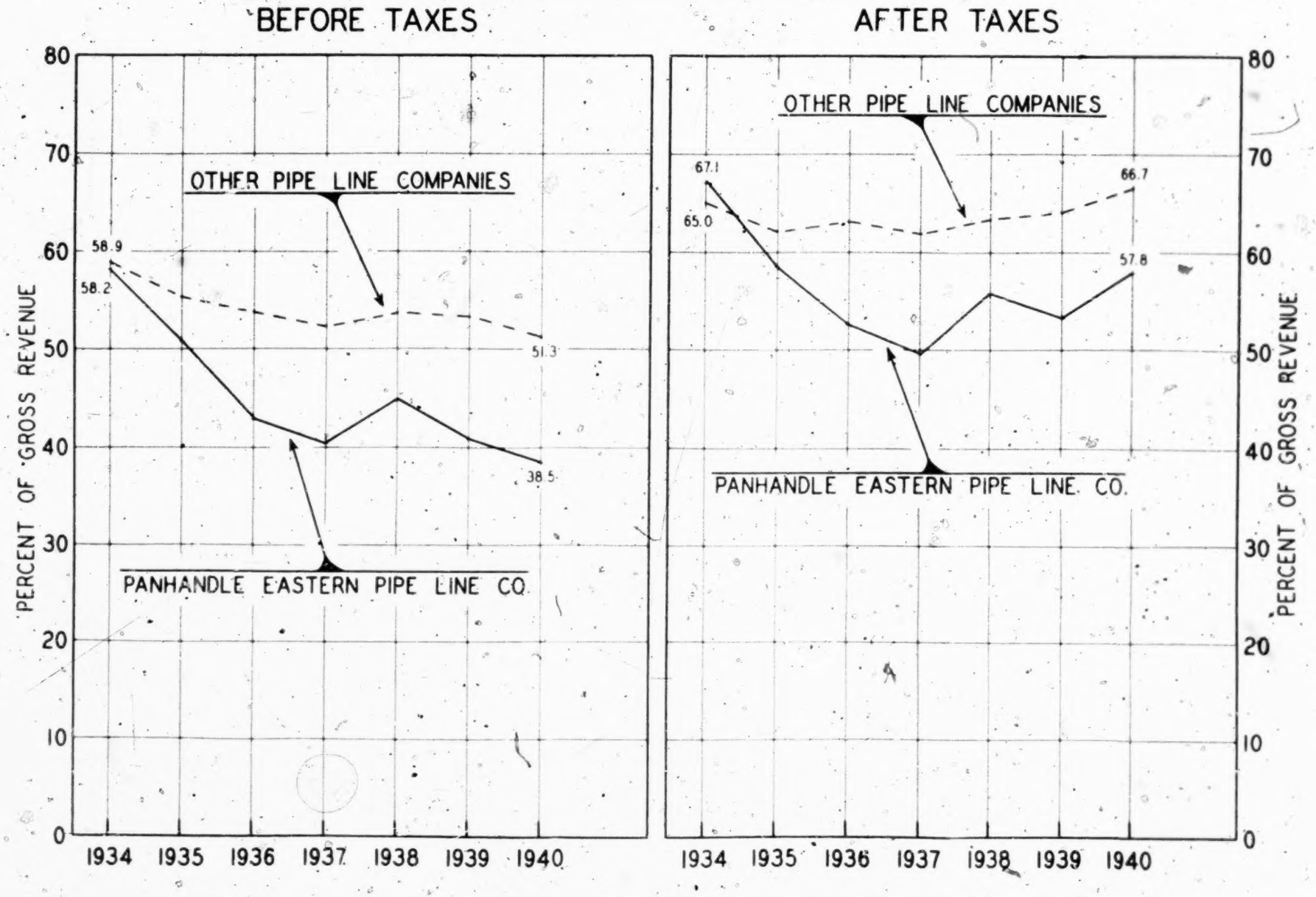
As will be seen in the first box, the trend of these ratios in both cases was steadily downward during the period 1934 through 1940. The decrease, however, for Panhandle, from 58.2% to 38.5% was much greater than the decrease from 58.9% to 51.3% for Other Pipe Line Companies. Thus, on the surface, Panhandle showed a much more favorable picture than the average company in the industry.

The second box on this chart definitely points out the effect the increasing tax load has had on the operating ratios. In the case of Panhandle, the operating ratio after taxes declined from 67.06% in 1934 to 49.71% in 1937 but, thereafter, the trend was reversed rising to 57.78% in 1940. It is obvious that the rising tax burden is tending to offset benefits of efficient operation. Moreover, it is known that taxes for 1941 will be considerably higher than for 1940. It is of interest to note that in 1940 the ratio after taxes for Other Pipe Line Companies was at the highest point for the seven year period studied.

EXHIBIT 65

- CHART NO. 8 -

OPERATING RATIO OF PANHANDLE COMPARED WITH OTHER PIPE LINE COMPANIES — 1934-1940



[fol. 13561] Trend of Revenue and Expenses of Panhandle Eastern Pipe Line Co.—1934-1940.

In Chart No. 9, captioned "Trend of Revenue and Expenses of Panhandle Eastern Pipe Line Co.—1934-1940," is shown the trends of the principal items making up Net Operating Income—after Taxes for the years 1934 through 1940. The columns, in the various boxes, represent the actual dollar amounts for each year while the line shows the percent each item is of gross revenue.

In the first box, I have shown the trend of gross revenues over the seven year period. This trend has been definitely upward for the entire period increasing from slightly more than $3,000,000 in 1934 to over $13,500,000 in 1940.

Operating Expenses—Before Taxes as portrayed in box 2, likewise have trended upward increasing from less than $1,800,000 in 1934 to over $5,200,000 in 1940. In relation to gross revenue, however, the trend has been sharply downward falling from 58.20% in 1934 to 38.50% in 1940. This fact clearly indicates a steady increase in operating efficiency.

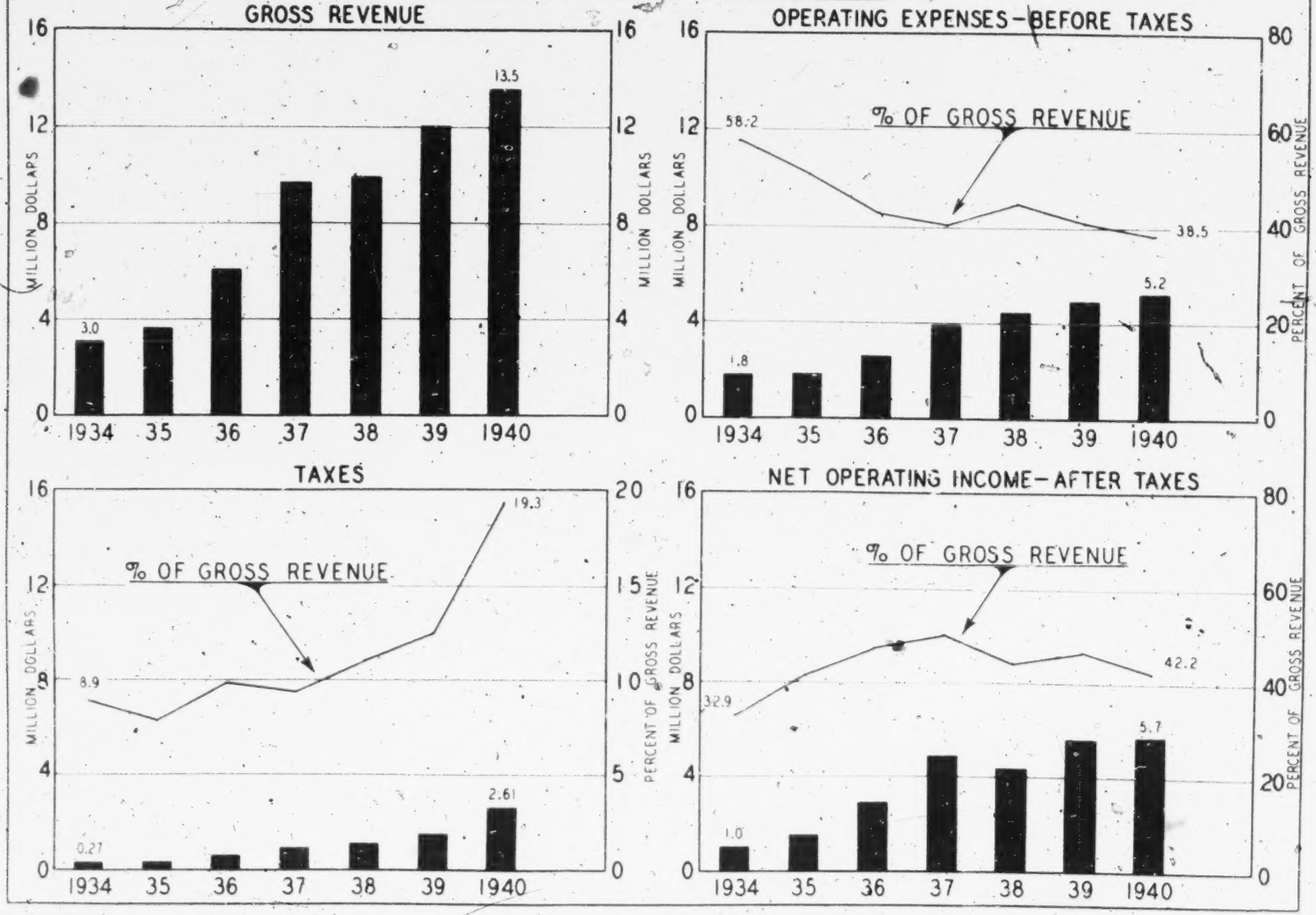
In the lower left hand corner of the chart, in box 3, I have shown data on taxes. This item over the period has recorded a large increase rising from $270,204 in 1934 to $2,610,470 in 1940 or otherwise an increase of almost nine hundred percent. On the basis of percent of gross revenue, the increase was from 8.9% to 19.3%. As pointed out in the previous chart, this adverse trend has tended to offset the favorable trend in the operating expense ratio.

The final box presents net operating income after taxes for the period studied. While the trend of such income has been generally upward, the actual increase between 1939 and 1940 amounted to only approximately $112,000 despite the increase of approximately $1,539,000 in gross revenues. In other words, because of increased costs and particularly increased taxes, the company has reached the point that, despite a sharply increasing gross revenue, there is little prospect of much, if any, increase in net operating income after taxes.

EXHIBIT 65

- CHART NO. 9 -

TREND OF REVENUE AND EXPENSES OF PANHANDLE EASTERN PIPE LINE CO. — 1934-1940



[fol. 13563] Percent Earned on Invested Capital of Panhandle Based Upon Capital Structure.

In Chart No. 10, captioned "Percent Earned on Invested Capital of Panhandle Based Upon Capital Structure," I have given a breakdown of invested capital on the first half of the chart and operating income expressed in dollars and also as percent earned on invested capital on the other half.

As shown by the legend on the invested capital section of the chart, the solid red portions of the bars represent common stock and surplus, the spotted sections cover preferred stock and the striped portions represent net debt. In the Operating Income section, the bars show the dollar amount of net operating income for the various years and the line reflects the ratio of the operating income to invested capital.

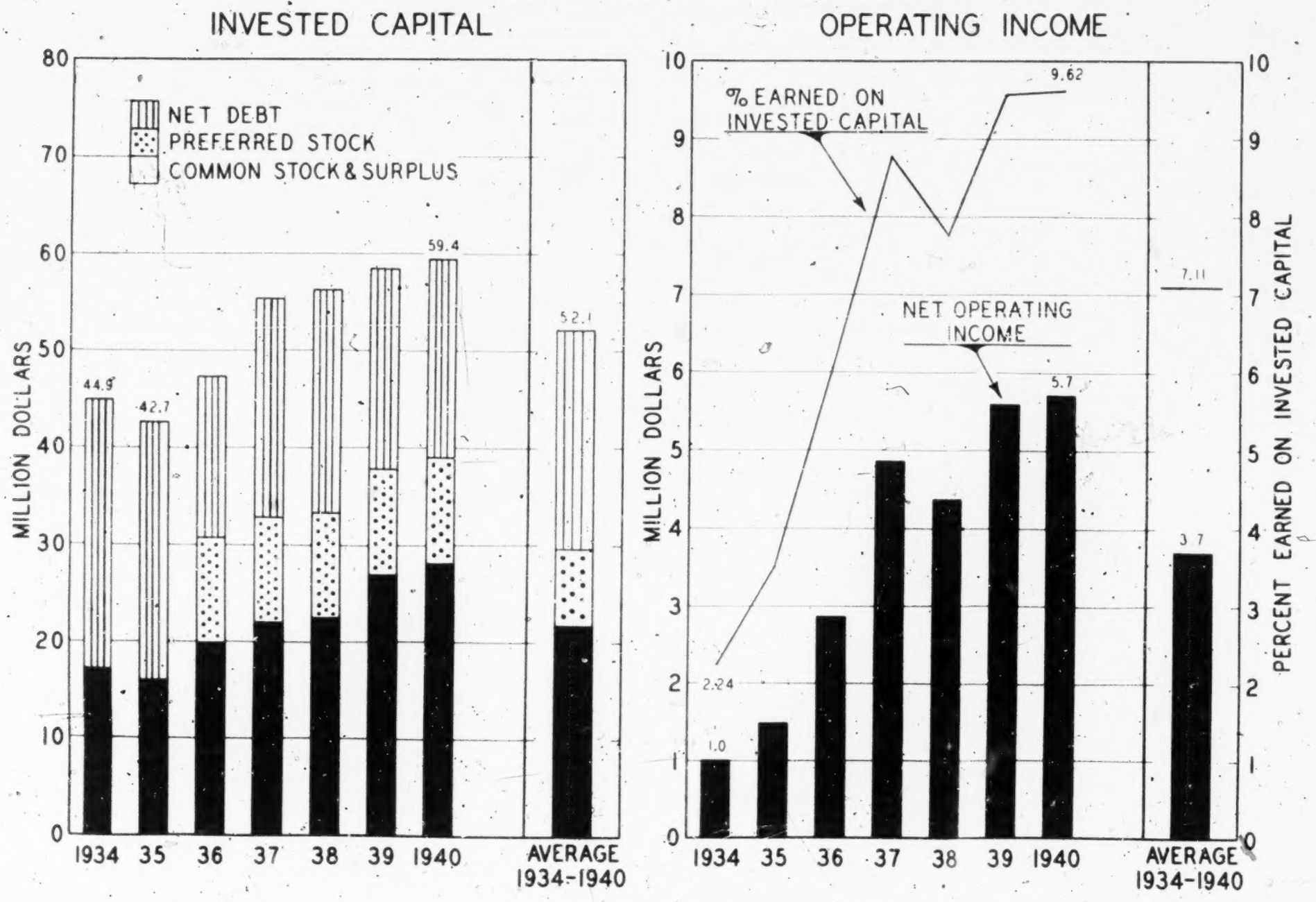
It will be seen that the total invested capital which was $44,910,598 at the end of 1934 decreased slightly to $42,569,166 in 1935 and thereafter increased steadily to $59,407,968 at the end of 1940. The average for the period as shown by the bar on the extreme right of the first section amounted to $52,057,377. In 1936, preferred stock was issued in exchange for 6% promissory notes and thereafter the capital structure of the company was composed of bonds, preferred stock and common stock.

On the second half of the chart, I have repeated the net operating income as shown on the previous chart plus a bar showing the average which amounted to $3,701,058 for the seven year period. Based on these income figures and the invested capital as shown on the first section, I have computed the percent earned on invested capital. This ratio shown by a red line on the chart reflects an increase from 2.24% in 1934 to 9.62% in 1940 and an average of 7.11% for the period.

EXHIBIT 65

- CHART NO. 10 -

PERCENT EARNED ON INVESTED CAPITAL OF PANHANDLE BASED UPON CAPITAL STRUCTURE



[fol. 13565] Percent Earned on Invested Capital of Panhandle Based Upon Net Property, Intangibles and Working Capital.

Chart No. 11, captioned "Percent Earned on Invested Capital of Panhandle Based upon Net Property, Intangibles and Working Capital," shows invested capital from the standpoint of assets rather than on securities outstanding. The percent return on assets is also shown.

The box on the left half of the chart, shows the net property of the company for the years 1934-1940, inclusive, as indicated by the red portion of the bars. The dotted portion represents working capital and intangibles in each of the years covered.

The total invested capital, as portrayed by such assets, amounted to $43,625,441 in 1934. A slight decline to $42,681,582 occurred in 1935, however, this was followed by a gradual rise to a high of $59,921,986 in 1940. For the seven year period, as a whole, invested capital based on net property, intangibles and working capital averaged $52,070,680.

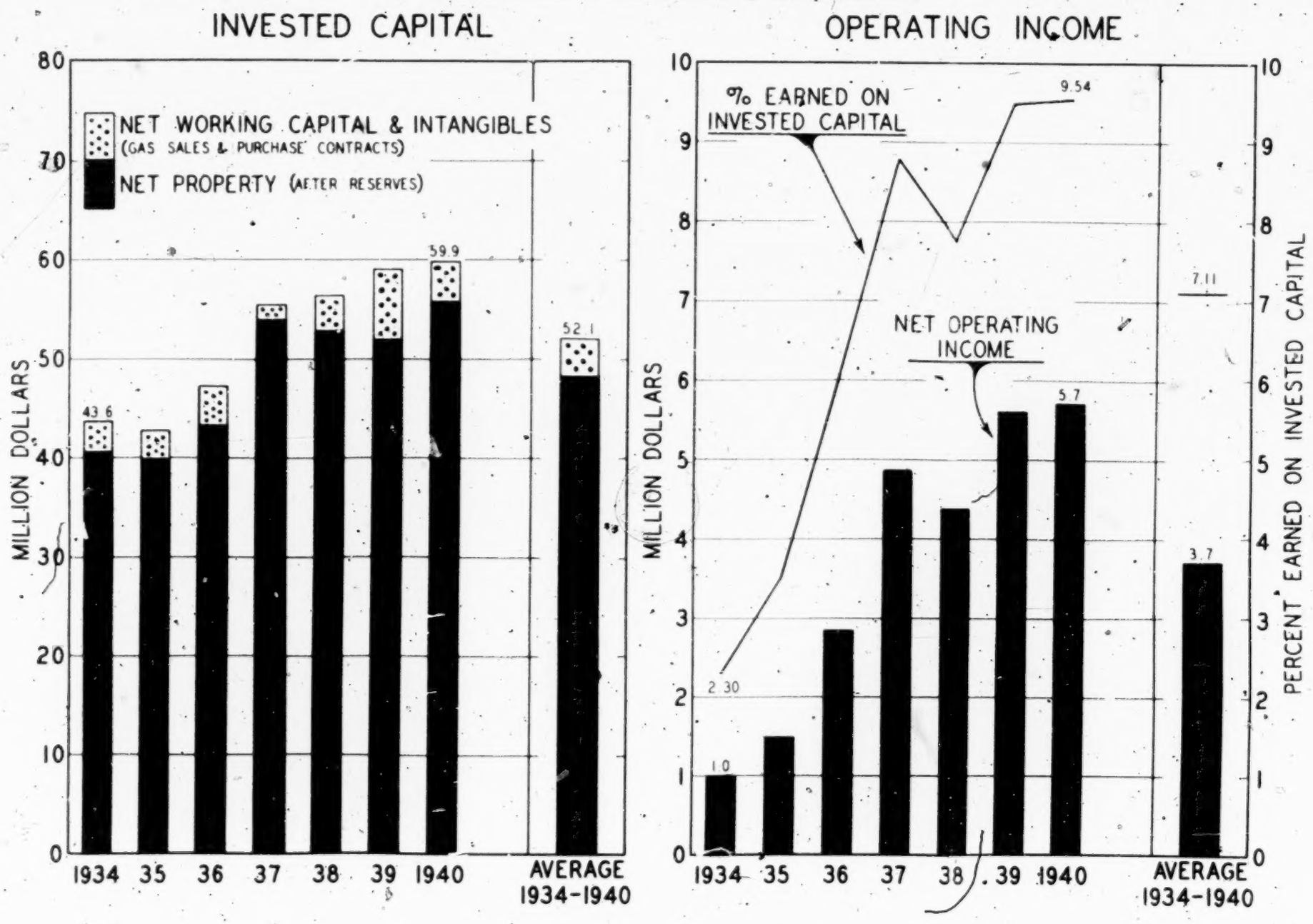
As in the case of the previous chart, the right half of the chart shows the net operating income of the Panhandle Eastern Pipe Line Company for the years, 1934-1940, inclusive, and the percent return that such income shows on the invested capital.

It will be seen that on the basis of net property, intangibles and working capital, net operating income showed a return ranging from 2.30% in 1934 to a high of 9.54% for 1940. Average annual net operating income for the period showed a return of 7.11% on the net property, intangibles and working capital.

EXHIBIT 65

- CHART NO. 11 -

PERCENT EARNED ON INVESTED CAPITAL OF PANHANDLE BASED UPON NET PROPERTY, INTANGIBLES & WORKING CAPITAL



[fol. 13567] Return to Common Stockholders of Panhandle Eastern Pipe Line Company—1934-1940.

Chart No. 12, captioned "Return to Common Stockholders of Panhandle Eastern Pipe Line Company—1934-1940" covers the total investment represented by common stock and surplus and the return on that investment in the form of dividends paid.

As shown in box 1 of the chart, total common stock and surplus which amounted to $17,130,094 in 1934, decreased to $15,984,852 in 1935 and then steadily increased to $25,107,142. Over the seven year period, this item averaged $21,818,994 per year.

The next box, "Dividend Return to Common Stockholders," indicates the total common dividends paid each year and the average for the period. As clearly evident from this graph, the company paid no dividends until 1937 when a total of $364,326 was paid. Subsequently larger amounts were paid, reaching the peak of $2,422,051 in 1940. This amount, however, included a special dividend of $1,211,051 declared early in January of that year out of 1939 earnings. If the data were adjusted to reflect that amount as a 1939 dividend payment, the peak would have been $2,343,387 in 1939 and only $1,211,000 for 1940. Considering the period as a whole, dividend payments averaged $794,026 per year.

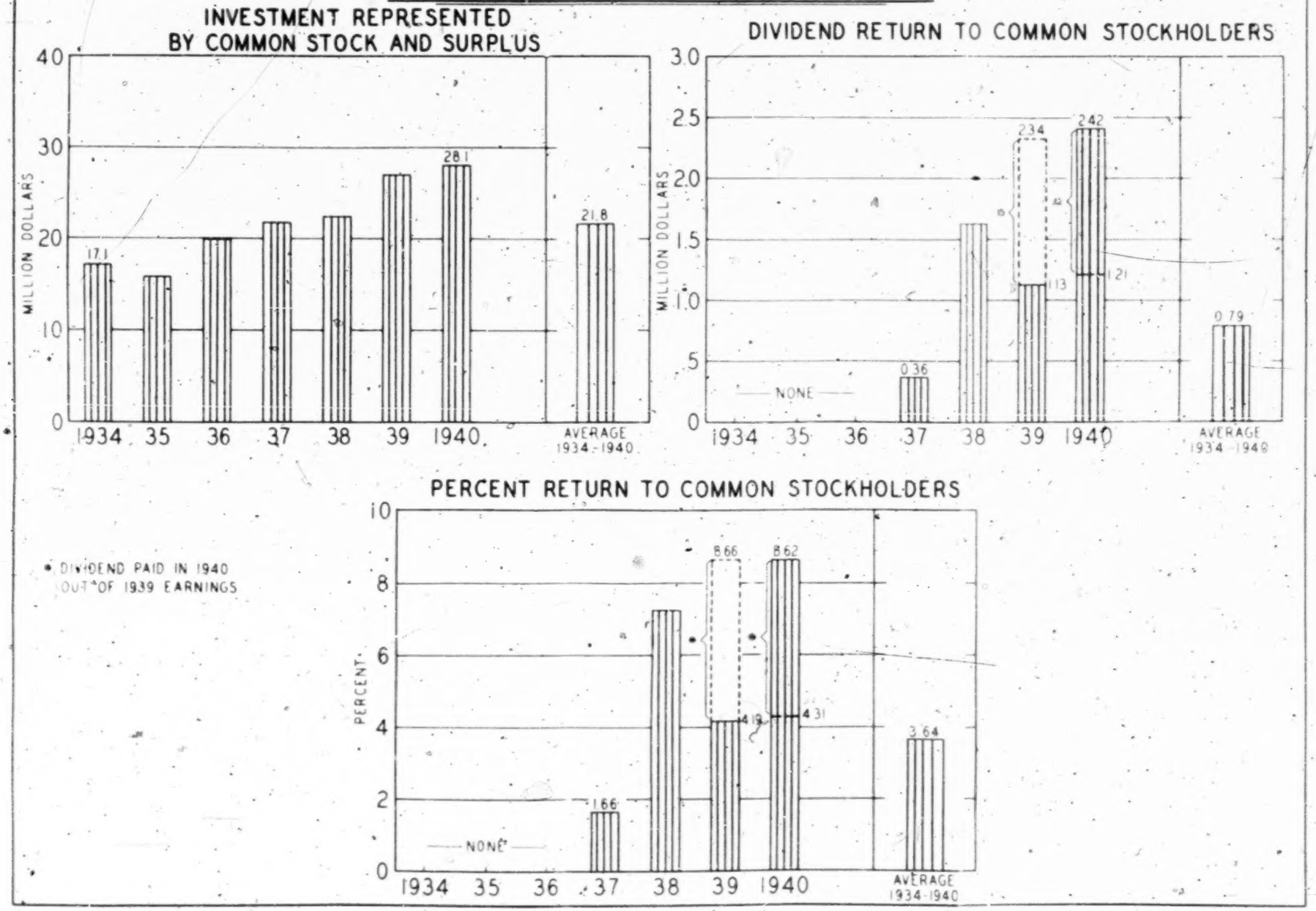
Based upon the data in the first two boxes, the percent return to common stockholders averaged 3.64% for the seven years reviewed.

This and data for the several years individually appear in the third box.

EXHIBIT 65

- CHART NO. 12 -

RETURN TO COMMON STOCKHOLDERS OF PANHANDLE EASTERN PIPE LINE COMPANY – 1934-1940



[fol. 13569] New Tax Bill Will Reduce Income Sharply. Computations Based on Operations—12 Mos. Ended June 30, 1941.

Chart No. 13, captioned "New Tax Bill will Reduce Income Sharply" shows the approximate effect of the recently-enacted tax bill, Revenue Act of 1941, on the earnings of Panhandle Eastern Pipe Line Company. The computations appearing on this exhibit are based on the operations for the twelve months ended June 30, 1941.

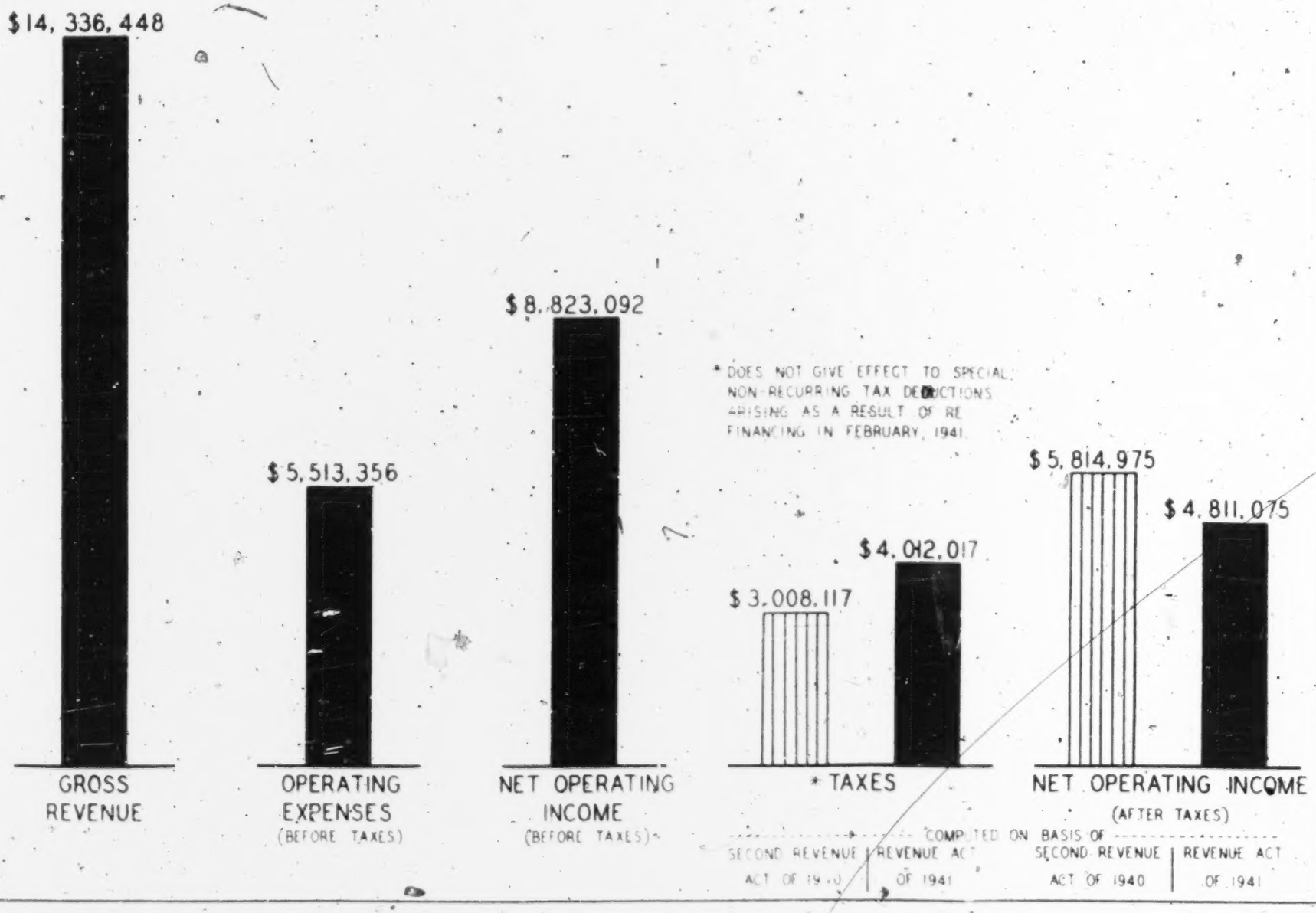
For this period the gross revenue amounted to $14,336,448, Operating expenses (before taxes) $5,513,356 and Net operating income (before taxes) $8,823,092. Based on these data, I estimated that taxes would amount to $4,012,017 under the provisions of the new act as compared with $3,008,117 under the Second Revenue Act of 1940. This comparison is clearly shown by the fourth and fifth bars on the chart.

The last two bars show the net effect of this increased tax liability of $1,003,900 on the net operating income of the company.

EXHIBIT 65

- CHART NO. 13 -

NEW TAX BILL WILL REDUCE INCOME SHARPLY
COMPUTATIONS BASED ON OPERATIONS - 12 MOS. ENDED JUNE 30, 1941



[fol. 13571] Percent Earned on Invested Capital of Panhandle Eastern Pipe Line Co.—As of June 30, 1941.

In Chart No. 14, captioned "Percent Earned on Invested Capital of Panhandle Eastern Pipe Line Co.—As of June 30, 1941," I show the present rate of return on invested capital (net property, net working capital and intangibles) as indicated by the earnings reported for the twelve months ended June 30, 1941.

The invested capital, as based on the net property, net working capital and intangibles, amounted to $61,216,031 on June 30, 1941. This is shown by the bar on the left side of the chart. Of the total, net property accounted for $54,690,594, net working capital $4,661,875 and intangibles $1,863,563.

The rate of return has been based not only on the earnings actually reported by the company for the twelve months ended June 30, 1941, but also on an adjusted basis, adjusting for the increased taxes under the Revenue Act of 1941. Net operating income, as shown in the center bars on the chart, amounted to $5,814,975, before adjusting for the new tax rates. Such earnings, however, were reduced to $4,811,075 after adjustment was made for the new 1941 levies.

On the right side of the chart, it will be seen that the Panhandle Eastern Pipe Line Company showed a return of 9.50% on invested capital as based on net property, net working capital and intangibles and the earnings actually reported for the twelve months ended June 30, 1941. After adjusting for the increased taxes, under the Revenue Act of 1941, the rate of return was reduced to 7.86%.

MICRO CARD 22
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MATTHEW BENDER & COMPANY
MB
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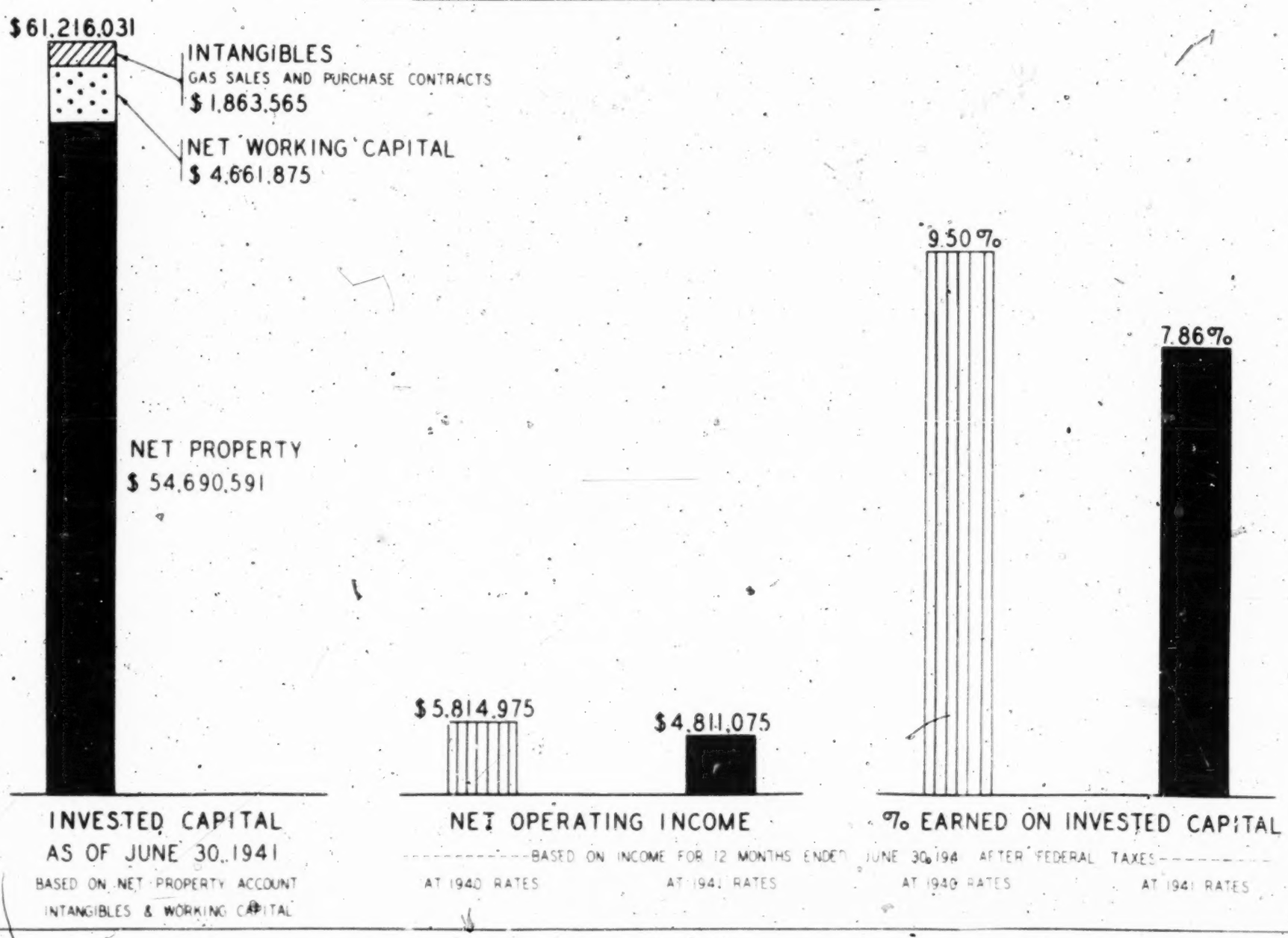
EXHIBIT 65

-CHART NO. 14-

PERCENT EARNED ON INVESTED CAPITAL OF PANHANDLE EASTERN PIPE LINE CO. – AS OF JUNE 30, 1941



[fol. 13573] Percent Earned On Invested Capital Of Panhandle Eastern Pipe Line Co.—As of June 30, 1941.

Chart No. 15, captioned "Percent Earned on Invested Capital of Panhandle Eastern Pipe Line Co.—As of June 30, 1941," shows, as in the case of the previous chart, the rate of return on invested capital. In the present instance, however, invested capital is represented not by net property, net working capital and intangibles but by the capital securities outstanding.

As shown by the bar on the left side of the chart, invested capital, as based on the capital securities outstanding, amounted to $61,423,853. Of the total, net long term debt (less discount and expenses) accounted for $21,165,558, preferred stock $11,000,000 and common stock and surplus $29,258,295.

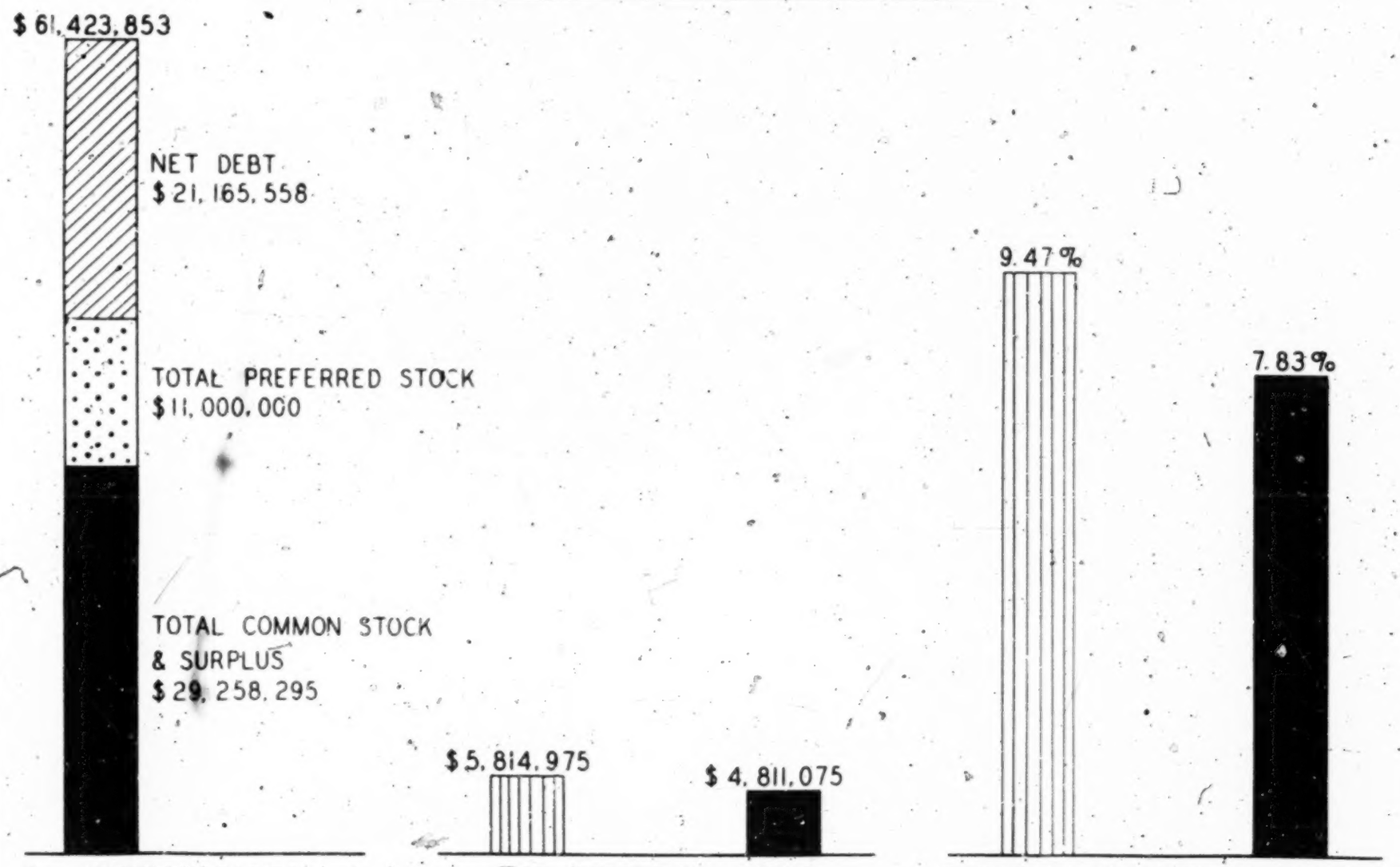
Also, as in the previous case, the rate of return has been based on the earnings actually reported by the company for the twelve months ended June 30, 1941, and on an adjusted basis, giving effect to the increased taxes under the Revenue Act of 1941. Such earnings, as shown by the bars in the center of the chart, amounted to $5,814,975 before the tax adjustment and $4,811,075 after the tax adjustment.

It will be seen, by the bars on the right side of the chart, that the Panhandle Eastern Pipe Line Company showed a return of 9.47% on invested capital as based on the capital securities outstanding, and the earnings before adjusting for taxes. A 7.83% return was shown by the earnings after the tax judgment.

EXHIBIT 65 1595

-CHART NO. 15-

PERCENT EARNED ON INVESTED CAPITAL OF PANHANDLE EASTERN PIPE LINE CO. — AS OF JUNE 30, 1941



[fol. 13575] Historical Costs of Debt Capital of Panhandle Eastern Pipe Line Co.—1930-1941.

In Chart No. 16, captioned "Historical Costs of Debt Capital of Panhandle Eastern Pipe Line Co.—1930-1941," the solid red bars represent the annual cost, expressed in percentage, of the company's debt capital since its inception.

The first bond issue was sold by the company in October, 1930, at a price of 90 for 6% mortgage bonds due October 1, 1950. These bonds carried a sinking fund provision designed to retire more than 50% of the outstanding amount of maturity, the sinking fund prices being at the rate of 105% of face value of the greater part of the period, and thereafter dropping by degrees to 100% of face amount. The average cost of this issue, giving weight to the sinking fund premium and the length of time the capital would be available to the company, was 7.29% annually as shown on the chart for the year 1930 and supported by Appendix Table for Chart No. 16, Page 4 of 5, at the end of this report.

The issuance in 1931 and 1932 of 6% promissory notes due in 1950 and sold at par served to lower the overall cost of debt capital somewhat for the ensuing years of 1931 to 1935 while such notes were outstanding.

In 1937, the 20-year mortgage 6's of 1950 were refunded with the proceeds of the sale of 1st mortgage and 1st lien series A sinking fund 4's of 1952. The net price received by the company was 95.02% of face value and this issue carried a sinking fund designed to retire the entire outstanding amount at maturity. The average yield, again giving weight to the actual length of time the money was available to the Panhandle Eastern Pipe Line Company, was computed at 4.66%, which represented a substantial reduction in capital costs accomplished through refunding. In January, 1941, owing to exceedingly favorable money market conditions, another refunding program was accomplished which allowed retirement of the previously outstanding mortgage bonds through the proceeds of $5,000,000 serial notes carrying interest coupons varying from 0.75%

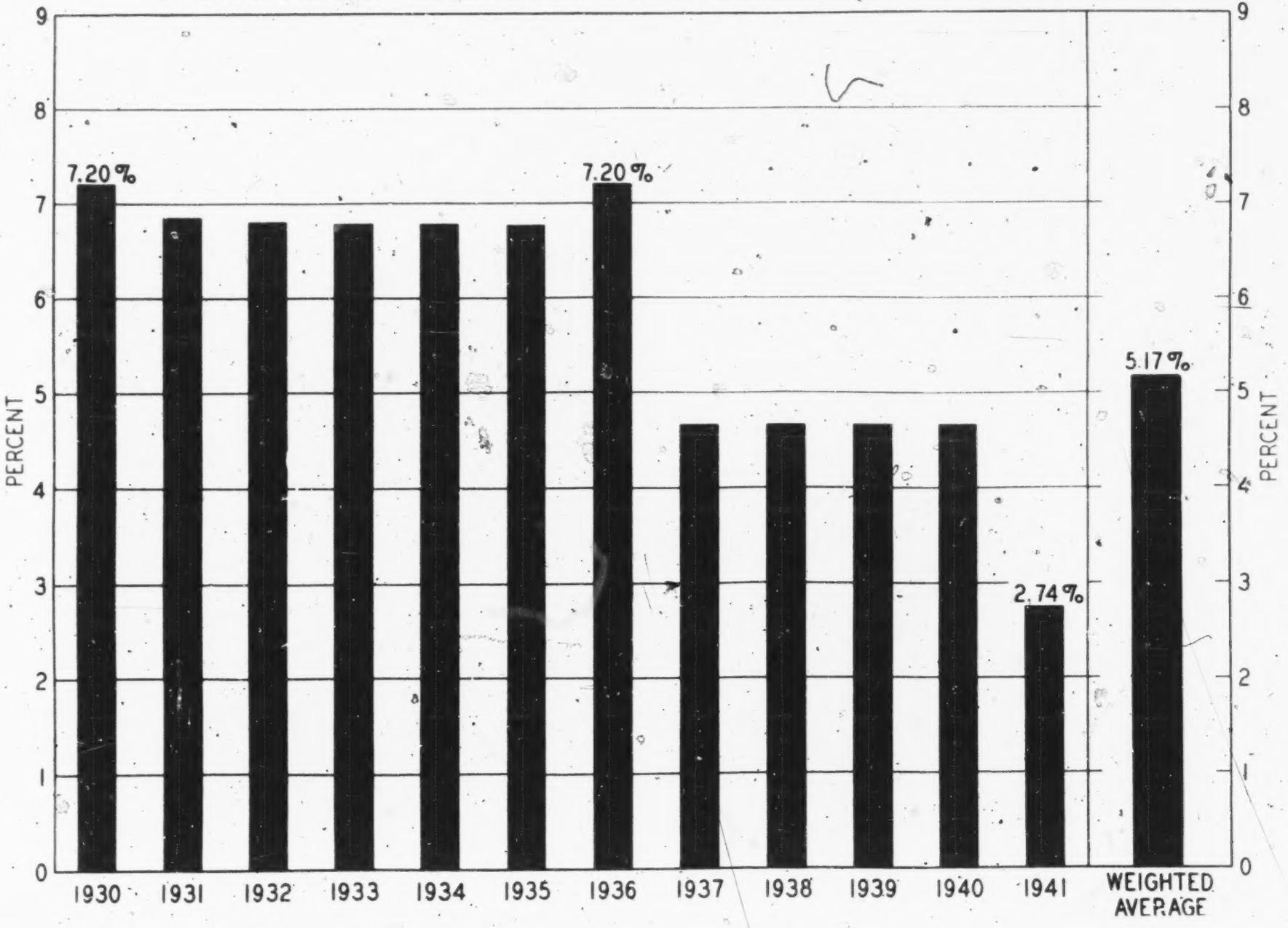
to 1.50% and due $1,250,000 annually from November 1, 1942 to November 1, 1945, $6,250,000 first mortgage and first lien series A bonds carrying interest coupons varying from 1.65% to 2.30%, due $1,250,000 annually from November 1, 1946 to November 1, 1950, and $12,000,000 first mortgage and first lien series B, sinking fund 3's of 1960, carrying sinking fund provisions designed to retire $1,200,000 annually, November 1, 1951 to and including November 1, 1960. The average interest cost of this financing, again giving weight to the length of time the capital would be available to the company, was 2.74%. This rate compares very favorably with the rates paid by other companies in the field and is the lowest that could reasonably be expected.

Despite this fact, however, the historical cost of debt capital to the Panhandle Eastern Pipe Line Company has averaged 5.17% from the inception of the company to and including 1941. Such average is conservatively computed by giving greatest weight to the most recent figures and least weight to the earliest costs which were established late in 1930.

EXHIBIT 65

- CHART NO. 16 -

HISTORICAL COSTS OF DEBT CAPITAL OF PANHANDLE EASTERN PIPE LINE CO. — 1930-1941



[fol. 13577] Effect of 1941 Refinancing of Panhandle Eastern Pipe Line Company

On Chart No. 17, captioned "Effect of 1941 Refinancing of Panhandle Eastern Pipe Line Company," details of present funded debts are shown, together with the schedules of debt retirement, debt outstanding and the average annual interest cost of debt.

In February 1941, the company sold $12,000,000 principal amount of First Mortgage and First Lien 3% Bonds Series B, due November 1, 1960, $6,250,000 principal amount of First Mortgage and First Lien Bonds, Series A, due serially November 1, 1946 to November 1, 1950, inclusive and $5,000,000 principal amount of Serial Notes due November 1, 1942 to November 1, 1945 inclusive. From the proceeds the company retired as of March 5, 1941 its First Mortgage and First Lien Bonds, Series A, 4%, due March 1, 1952, outstanding in the amount of $22,500,000, at 102 and accrued interest.

In the upper left hand corner of the chart, I have listed the present funded outstanding, according to the amount that is due on the various maturity dates. Also, maturity yields have been computed on the different maturities on the basis of the prices received by the company. It will be seen that the maturity yields on the Serial Notes varied from a low of 0.75% on the 1942 maturity to a high of 1.50% on the 1945 maturity. On the First Mortgage and First Lien, Series A Bonds, the yield varied from a low of 1.65% on the 1942 maturity to 2.30% for the 1950 maturity. The maturity yield on the First Mortgage & First Lien, Series B Bonds varied from a high of 3.11% for the 1951 maturity to a low of 3.07% which was shown for the maturities of 1958, 1959 and 1960.

In the upper right hand corner, I have portrayed the schedule of debt retirement. For the nine year period through 1942-1950, both inclusive, debt retirement will amount to $1,250,000 annually, representing the retirement of the Serial Notes through 1945 and the First Mortgage and First Lien Series A Bonds for the remainder of the period. Thereafter, through 1960, the annual retirement of the First Mortgage and First Lien Bonds will amount to $1,200,000.

Thus, as shown in the schedule of outstanding debt in the lower left hand corner, a propressive downward trend will be witnessed and by 1960, the entire debt now outstanding in the amount of $23,250,000 will be eliminated.

The general effect of the 1941 refinancing was to lower the interest rate on the company's long term debt. As shown in the lower right hand corner, the average annual interest cost of debt averages 2.74%. In addition to the lowering of interest, the refinancing extended the final maturity of debt to twenty years, and changed sinking fund provisions so as to make available added amounts of cash over the next few years.

- CHART NO. 17 -

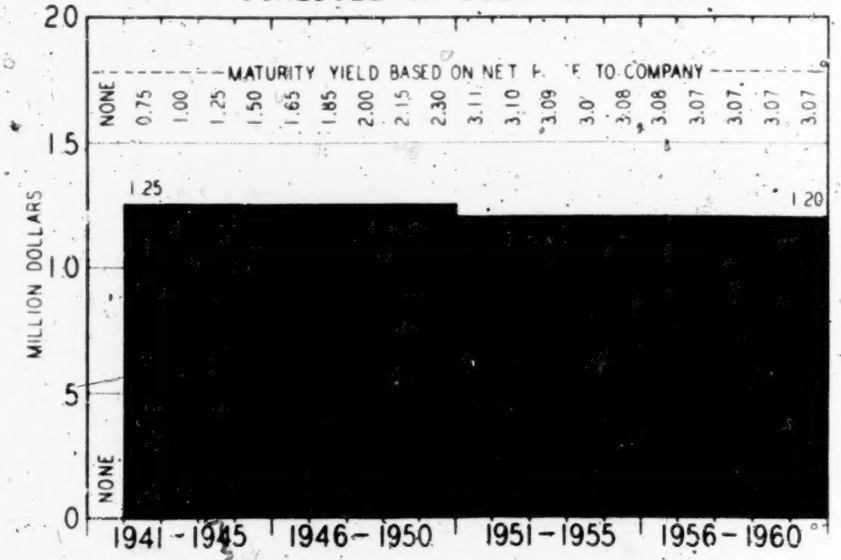
EFFECT OF 1941 REFINANCING OF PANHANDLE EASTERN PIPE LINE CO.

* PRESENT FUNDED DEBT

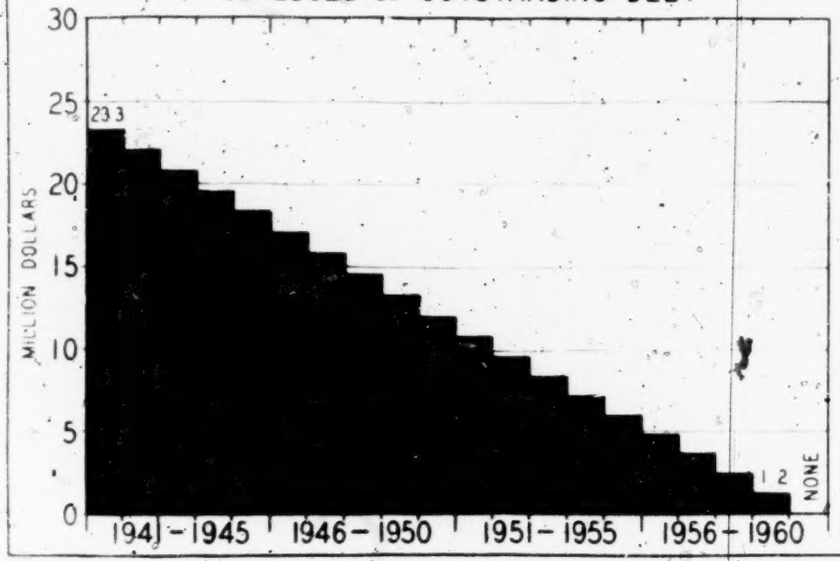
ISSUE	NET PRICE TO COMPANY	MATURITY YIELD
$1,250,000 Serial Notes A 0.75%, due Nov. 1, 1942	100	0.75%
1,250,000 Serial Notes B 1.00%, due Nov. 1, 1943	100	1.00
1,250,000 Serial Notes C 1.25%, due Nov. 1, 1944	100	1.25
1,250,000 Serial Notes D 1.50%, due Nov. 1, 1945	100	1.50
1,250,000 1st Mtg. & 1st Lien E 1.65%, due Nov. 1, 1946	100	1.65
1,250,000 1st Mtg. & 1st Lien F 1.85%, due Nov. 1, 1947	100	1.85
1,250,000 1st Mtg. & 1st Lien G 2.00%, due Nov. 1, 1948	100	2.00
1,250,000 1st Mtg. & 1st Lien H 2.15%, due Nov. 1, 1949	100	2.15
1,250,000 1st Mtg. & 1st Lien I 2.30%, due Nov. 1, 1950	100	2.30
12,000,000 1st Mtg. & 1st Lien A 3s, due Nov. 1, 1960 with sinking fund as follows:		
1,200,000 due Nov. 1, 1951	99.02	3.11
1,200,000 due Nov. 1, 1952	99.02	3.10
1,200,000 due Nov. 1, 1953	99.02	3.09
1,200,000 due Nov. 1, 1954	99.02	3.09
1,200,000 due Nov. 1, 1955	99.02	3.08
1,200,000 due Nov. 1, 1956	99.02	3.08
1,200,000 due Nov. 1, 1957	99.02	3.07
1,200,000 due Nov. 1, 1958	99.02	3.07
1,200,000 due Nov. 1, 1959	99.02	3.07
1,200,000 due Nov. 1, 1960	99.02	3.07

Note: * Excludes $17,844 Leasehold Purchase Obligations

SCHEDULE OF DEBT RETIREMENT



SCHEDULE OF OUTSTANDING DEBT



AVERAGE ANNUAL INTEREST COST OF DEBT

[fol. 13579] Historical Costs of Preferred Stock Capital of Panhandle Eastern Pipe Line Co.—1937-1941

In Chart No. 18, captioned "Historical Costs of Preferred Stock Capital of Panhandle Eastern Pipe Line Co. —1937-1941," the percent costs of Panhandle's two classes of preferred stock are shown.

Class A stock participates with the common in any further distribution after the common stock has received $1.50 per share. Both Class A and Class B are entitled to a $6 cumulative dividend.

In 1937 the percent cost is shown at 6%. The rate increases in 1938 and 1939 to 7.66% and 9.67% respectively. This increase is due to participation dividends being paid on the Class A preferred stock. The rate shown for 1940 is again 6%.

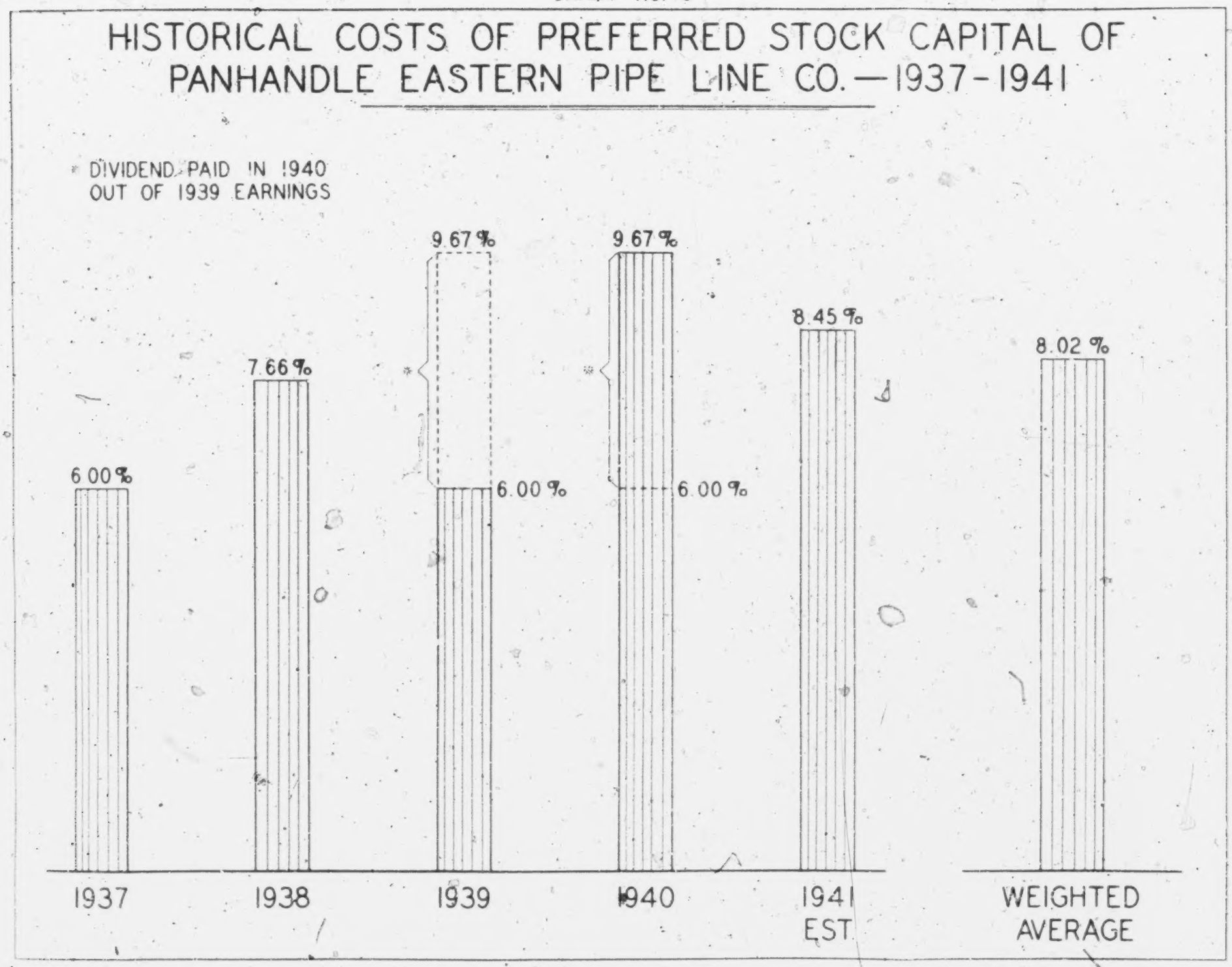
For the year 1941 we have estimated that a $2.50 total dividend will be paid on the common stock and on this basis the costs of the preferred stocks would be 8.45%.

The weighted average for the entire period 1937 to 1941 both inclusive, giving weight to recency of figures was 8.02%.

EXHIBIT 65

- CHART NO. 18 -

HISTORICAL COSTS OF PREFERRED STOCK CAPITAL OF PANHANDLE EASTERN PIPE LINE CO. — 1937-1941



fol. 13581] Earnings—Price Ratios of Natural Gas Pipe Line Common Stocks—1937-1940

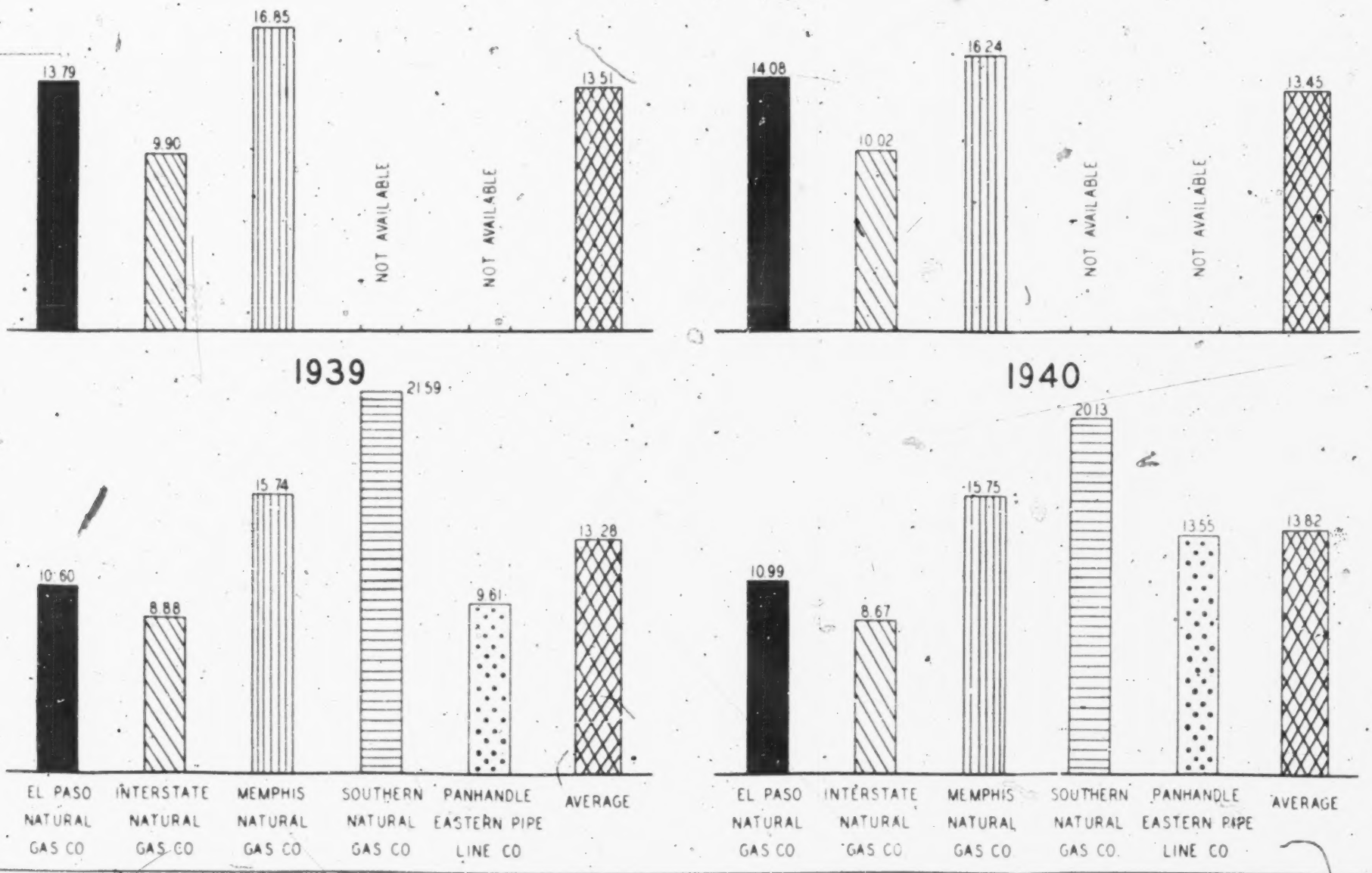
In Chart No. 19, captioned "Earnings—Price Ratios of Natural Gas Pipe Line Common Stocks—1937-1940," a comparison of the earnings-price ratios of various companies are shown. In 1937 and 1938 these companies were El Paso Natural Gas Company, Interstate Natural Gas Company, Memphis Natural Gas Company. In 1939 and 1940 Southern Natural Gas Company and Panhandle Eastern Pipe Line Company have been added to this group.

The ratios of the individual companies show a wide spread in each year while the average of all the company's remains constant.

No common stock of Panhandle Eastern was held by the public prior to September, 1939. For the year 1940 Panhandle Eastern's ratio of 13.55 compares with the average of 13.82 for all the companies.

- CHART NO. 19 -

EARNINGS – PRICE RATIOS OF NATURAL GAS PIPE LINE COMMON STOCKS – 1937-1940



[fol. 13583] Current Earnings—Price Ratios of Natural Gas Pipe Line Common Stocks

In Chart No. 20, captioned "Current Earnings—Price Ratios of Natural Gas Pipe Line Common Stocks," the four boxes show earnings per share, average market price —Jan. 1 to August 31, 1941, earnings—price ratio, and % of earnings available for common stock of Panhandle Eastern compared with four natural gas companies.

The upper left hand box shows Panhandle's earnings of $4.21 per share for the 12 months period ended June 30, 1941 compared with the earnings of $3.61 of El Paso Natural Gas Co. and $2.04 for Southern Natural Gas Co. during the same period. Interstate Natural Gas company earned $2.07 per share and Memphis Natural Gas Co. earned $0.69 during the calendar year ended December 31, 1940.

The upper right hand box compares the average market prices of these same companies for the period Jan. 1 to August 31, 1941.

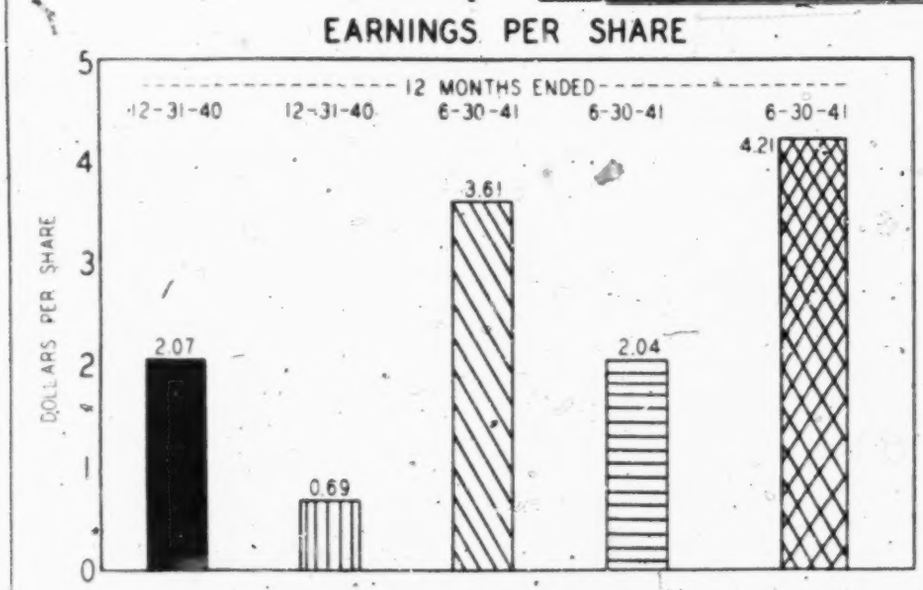
Earnings—Price Ratio of Memphis Natural Gas Co. and Southern Natural Gas Co. are much higher than Panhandle, 15.10 and 17.27 as against 11.53. El Paso is approximately the same as Panhandle with 11.62 and Interstate Natural Gas Co. is considerably lower with 9.41.

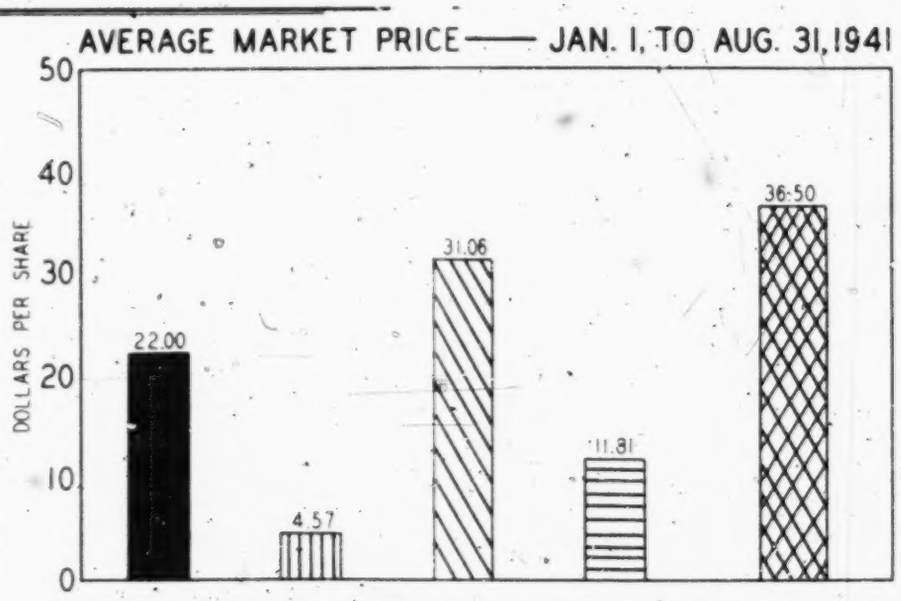
The percentage of earnings available for distribution to common holders of each of the companies as shown in the lower right hand box as follows:

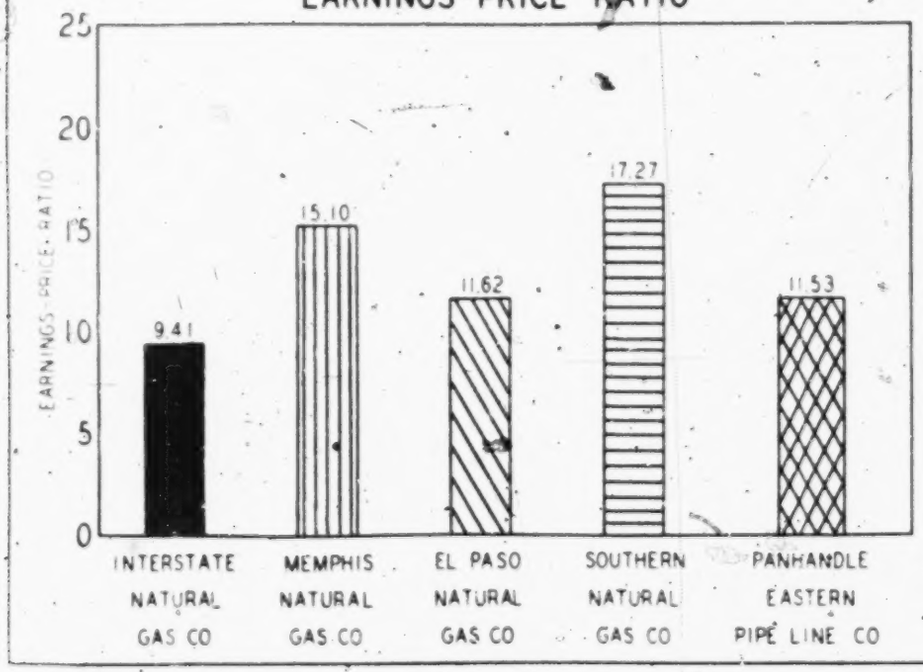
Interstate Natural Gas Co.	100.00%
Memphis Natural Gas Co.	91.99%
El Paso Natural Gas Co.	80.85%
Southern Natural Gas Co.	71.22%
Panhandle Eastern Pipe Line Co.	58.41%

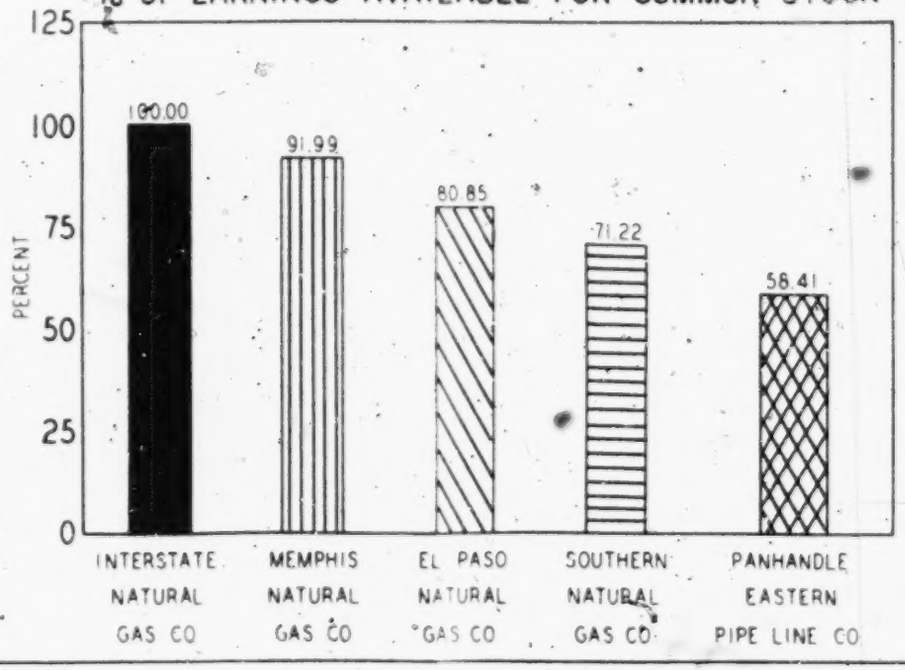
- CHART NO. 20 -

CURRENT EARNINGS - PRICE RATIOS OF NATURAL GAS PIPE LINE COMMON STOCKS









[fol. 13585] Cost of Financing Northern Natural Gas Company Common Stock—Offered to Public on September 10, 1941

In Chart No. 21 captioned "Cost of Financing Northern Natural Gas Company Common Stock—Offered to Public on September 10, 1941," the prices, commissions and expenses per share are shown in the left hand box of the chart. The earnings per share for the twelve months ended June 30, 1941, before and after adjusting for the tax increase under the Revenue Act of 1941, and the earnings-price ratio, as based on the price to the public and the net price to the seller are shown in the two boxes on the right side of the chart.

The data shown on this chart affords a concrete and typical example of costs involved in equity financing of an established natural gas pipe line company under prevailing market conditions. Also, it portrays clearly the rate of return demanded by investors on seasoned natural gas pipe line company common stocks.

On September 10, 1941, 355,250 shares of the Northern Natural Gas Company common stock, representing 35% of the total common stock outstanding, were offered to the public. As shown in the box on the left side of the chart, the price to the public (ex-dividend) was $31.40 per share. The underwriting commissions and expenses to the seller totalled $2.67 per share. Such costs represented 8.50% of the public offering price of $31.40. On the basis of the net price to the seller of $28.73 per share, the indicated current cost of financing of an established natural gas pipe line company's common stock was 9.29%.

As shown in the upper right hand box, the Northern Natural Gas Co. reported earnings of $3.68 for the twelve months ended June 30, 1941. However, such were before giving effect to the increased corporate taxes under the Revenue Act of 1941. The company estimated that increased taxes under the new law would reduce the earnings shown for the period to $3.26 per share.

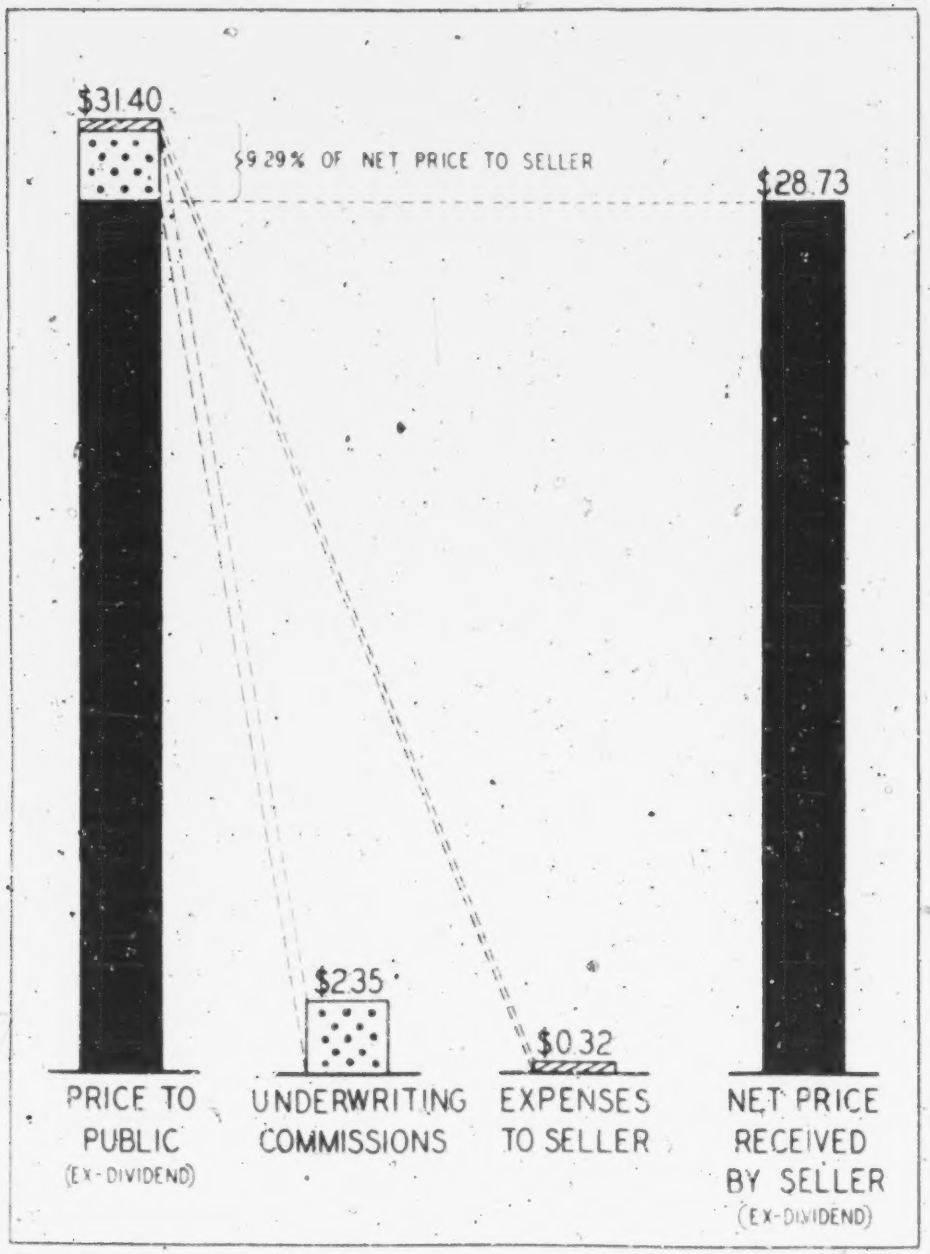
In order to gauge investors' demands, the earnings-price ratio was computed both on the adjusted and unadjusted bases and on the prices to the public and to the seller.

These ratios are shown in the lower right hand box. It will be seen that, on the basis of the price to the public, a ratio of 11.72% was shown on the earnings actually reported for twelve months ended June 30, 1941. After adjusting for increased taxes, a ratio of 10.38% was shown. Based on the net price to the seller, a ratio of 12.81% was shown on the earnings before the tax adjustment and 11.35% after the tax adjustment.

- CHART NO. 21 -

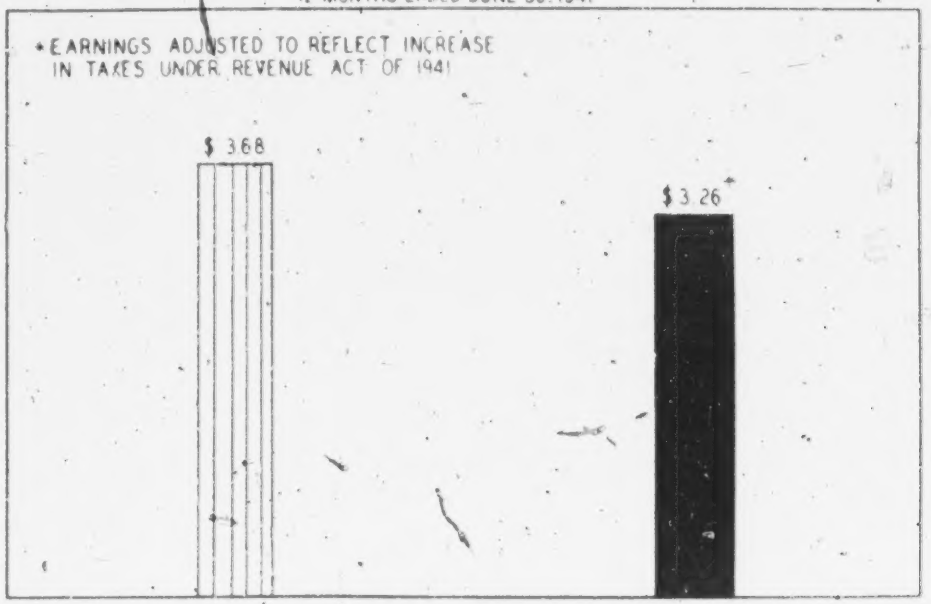
COST OF FINANCING NORTHERN NATURAL GAS CO. COMMON STOCK – OFFERED TO PUBLIC ON SEPTEMBER 10, 1941

PRICES, COMMISSIONS & EXPENSES PER SHARE

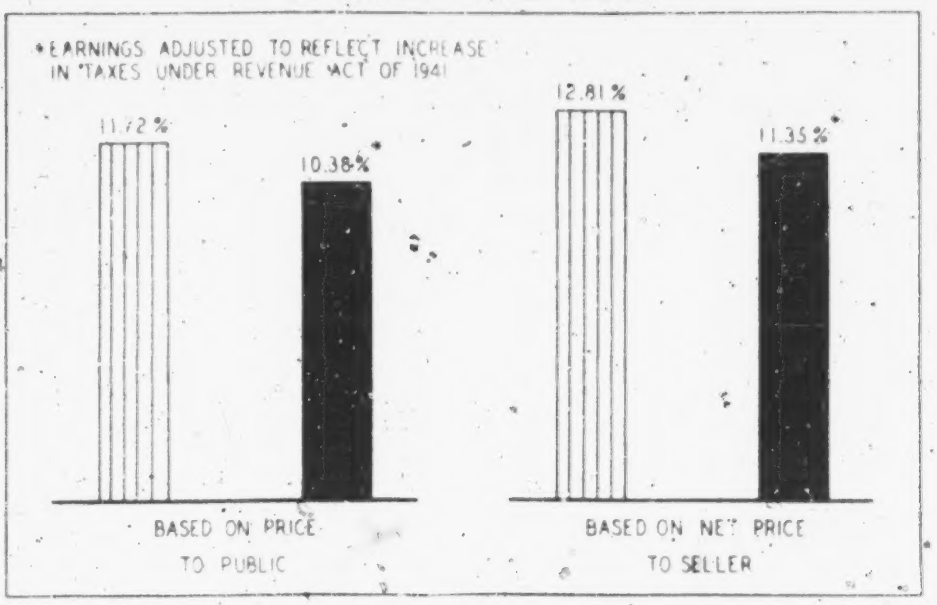


EARNINGS PER SHARE

12 MONTHS ENDED JUNE 30, 1941



EARNINGS-PRICE RATIO



[fol. 13587] Estimated Current Cost of Financing Common Stock of Panhandle Eastern Pipe Line Co.

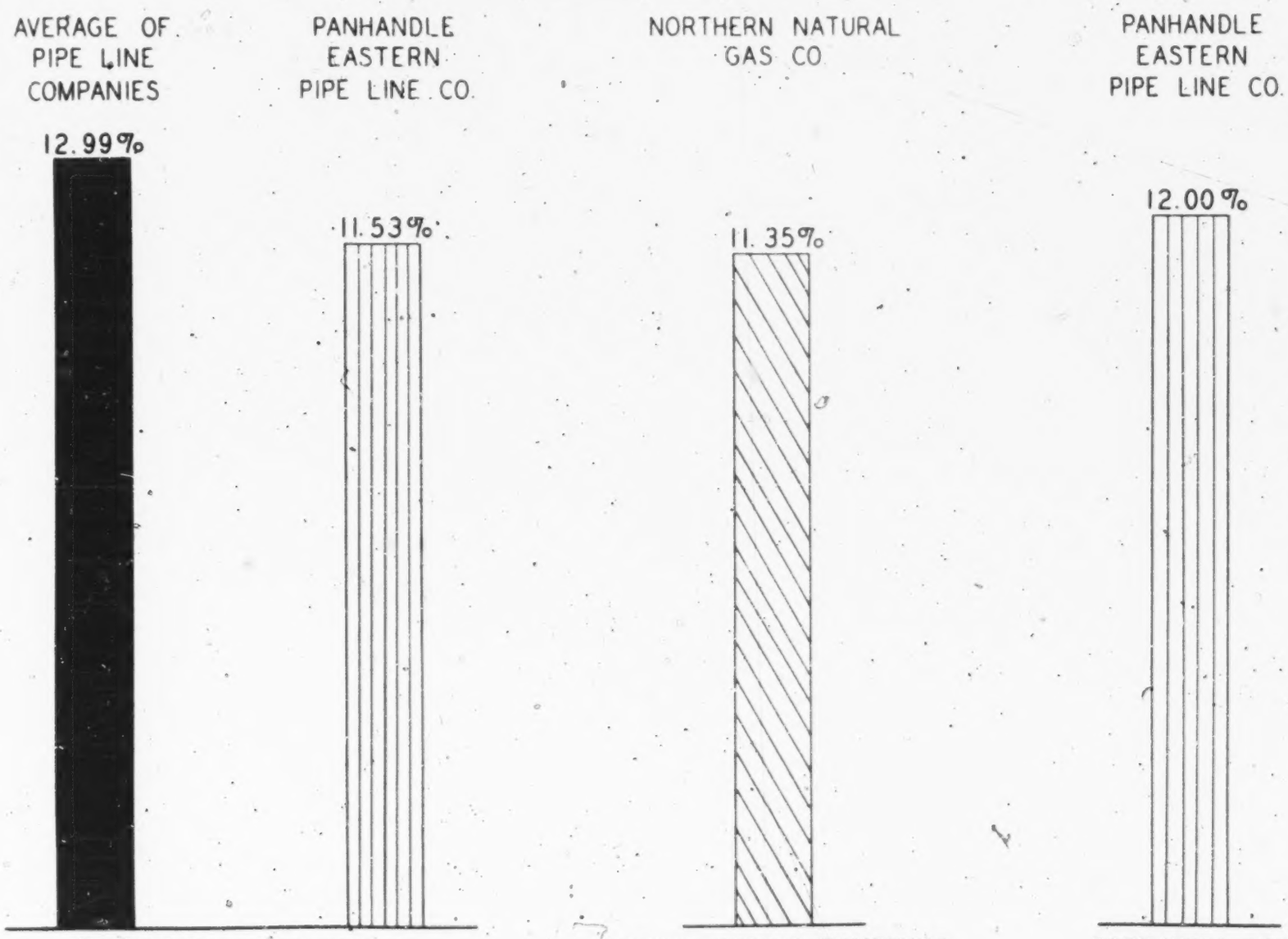
Chart No. 22, captioned "Estimated Current Cost of Financing Common Stock of Panhandle Eastern Pipe Line Company" summarizes the earnings-price ratios for pipe line companies as a group, the Panhandle Eastern Pipe Line Company, and Northern Natural Gas Company for purposes of comparison in determining a rate that would be considered representative and fair so far as the current cost of new common stock financing for the Panhandle Eastern Pipe Line Company is concerned.

The green bar shows an average ratio of 12.99% for pipe line companies as a group, as based on 1941 market prices. The red bar on the left side of the chart shows an earnings-price ratio of the Panhandle Eastern Pipe Line Company of 11.53%, on the same basis. The yellow bar, which shows an earnings-price ratio of 11.35%, represents the actual current cost of common stock financing for the Northern Natural Gas Company, as based on the adjusted earnings for the twelve months ended June 30, 1941, and the net price to the seller.

After a consideration of all factors, it was concluded that 12% was a representative and fair rate of the current cost of new common stock financing for the Panhandle Eastern Pipe Line Company.

- CHART NO. 22 -

ESTIMATED CURRENT COST OF FINANCING COMMON STOCK OF PANHANDLE EASTERN PIPE LINE CO.



[fol. 13589] Continuing Growth of Panhandle System Indicates Future Needs for New Capital

In Chart No. 23, captioned "Continuing Growth of Panhandle System Indicates Future Needs for New Capital," the two upper boxes show the growth of Panhandle Eastern's transmission system from December 31, 1936 to December 31, 1940.

In the upper left hand box, the solid red bars represent the number of miles of gathering, main and lateral pipe line in the company's transmission system. Pipe line miles increased in each year, from 1,651 miles at December 31, 1936 to 2,374 miles at December 31, 1940. The largest increases were in 1937 and 1940.

In the upper right box the bars represent the installed capacity, expressed in thousand horsepower, of the compressor stations in the company's system.

Installed horsepower increased from 43,300 at December 31, 1936, to 86,100 at December 31, 1940. Again, the greatest increases were in 1937 and 1940.

The bars in the lower left box represent, in million dollars, the gross property of Panhandle Eastern at December 31 of each of the years 1936 through 1940. Gross property increased from $46,643,078 at December 31, 1936 to $64,854,956 at December 31, 1940.

The bars in the lower right box represent, in million dollars, the amount of the increase in gross property in each of the five years 1936 through 1940. As was the case with pipe line miles and installed horsepower, the largest increases were in 1937 ($11,416,937) and 1940 ($5,375,228).

In the five years, 1936 through 1940, the average annual demand for new capital, as represented by the increase in gross property, plant and equipment, was $4,500,916.

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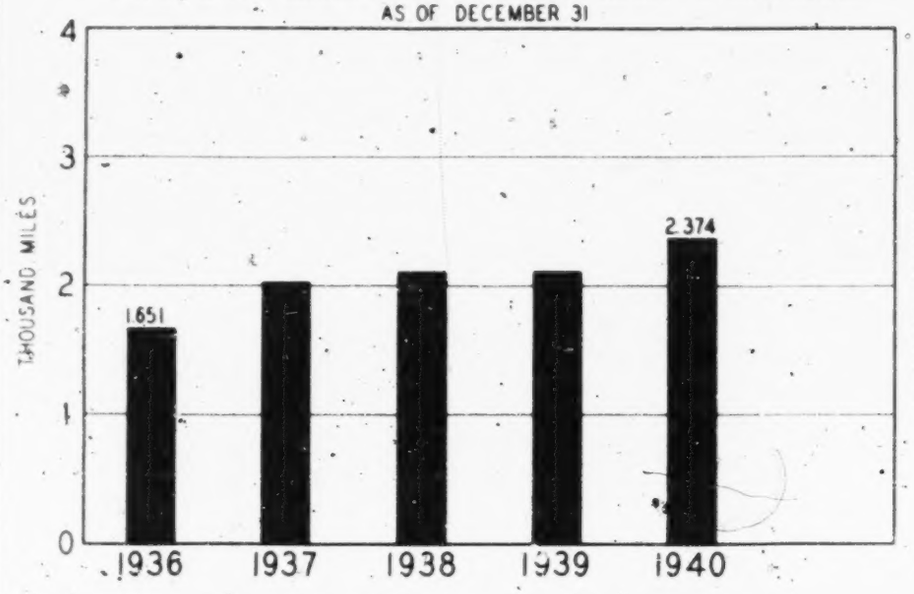
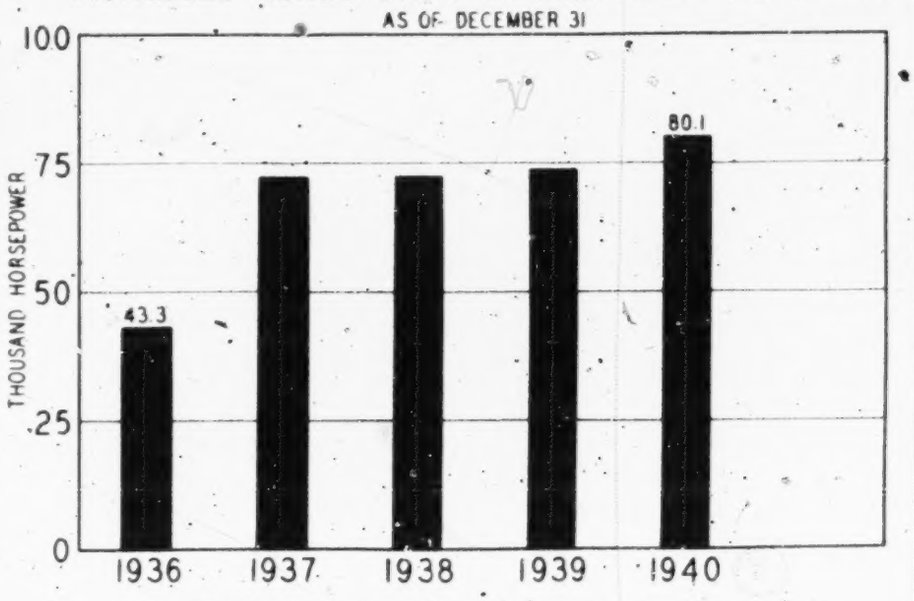
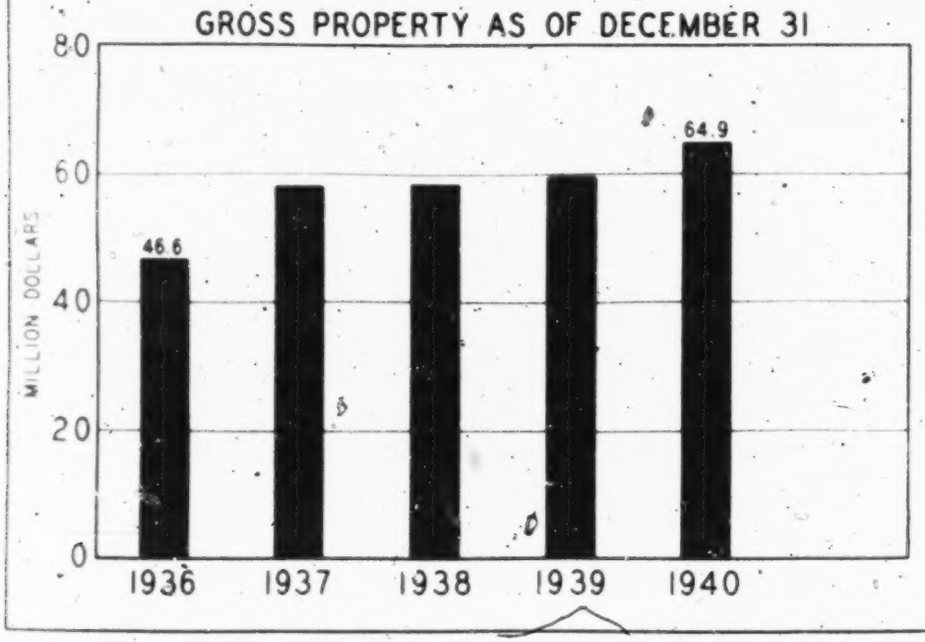
EXHIBIT 65

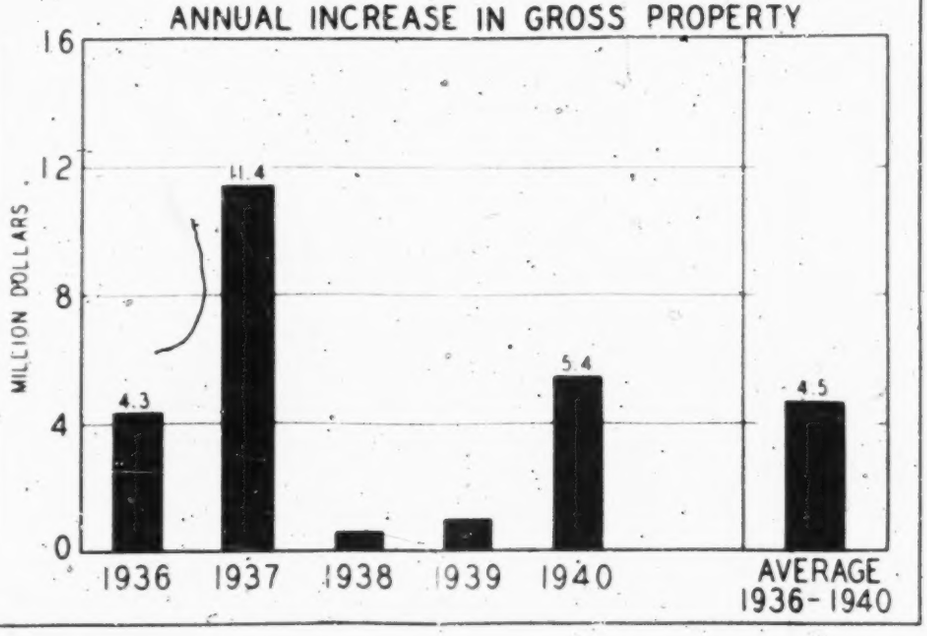
- CHART NO. 23 -

CONTINUING GROWTH OF PANHANDLE SYSTEM INDICATES FUTURE NEEDS FOR NEW CAPITAL









[fol. 13591] Panhandle Eastern Pipe Line Company Invested Capital as of June 30, 1941

In Chart No. 24, captioned "Panhandle Eastern Pipe Line Company Invested Capital as of June 30, 1941," the company's invested capital is shown in detail, first, on the basis of book value and second, on the basis of market value:

It will be seen that total invested capital of the company, on the basis of book value, amounted to $61,423,853 on June 30, 1941. Of this total, net long term debt, after deducting debt discount and expense, amounted to $21,165,538 or 34.46%. Preferred stock, as represented by 100,000 shares of Class A participating preferred stock, $100 par, and 10,000 shares of Class B preferred stock, par $100, accounted for $11,000,000, or 17.91% of the total. Common stock, as represented by 807,367 shares of no par value, was carried at a book value of $20,184,175. Earned surplus amounted to $9,074,120. Combined common stock and surplus of $29,258,295 represented 47.63% of the total invested capital on June 30, 1941.

Total invested capital, on the basis of market value, amounted to $64,219,240, or moderately above the stated book value. Market prices, wherever available, represent the averages of the high and low prices witnessed for the period January 1 to August 31, 1941. Actual market prices were available only on the $12,000,000 First Mortgage and First Lien "B" Bonds, due 1960 and the common stock. The average market price for the bonds for the period was 101.94, while the average market price for the common stock was 36.50. In the case of the First Mortgage and First Lien "A" Bonds, due 1946-50 and the Serial Notes, prices were estimated at 100, inasmuch as these issues were sold privately at 100 to several banking institutions and one insurance company.

The preferred stocks, which are owned by the Columbia Oil & Gasoline Corporation, were valued on the prices at which redemption of the stocks is contemplated, namely $100 for the preferred A and $125 for the preferred B stock.

The percentage relationship of the various capital obligations on the basis of market value, were only slightly different from the ratios shown on the basis of book value, due the proximity of market values to book values. As shown, the market value of long term debt amounted to $23,500,344, or 36.50% of the total invested capital. The value of the preferred stocks, at redemption prices amounted to $11,250,000 or 17.52% of the total, while common stock and surplus of $29,468,896 accounted for 45.89% of the total.

EXHIBIT 65

- CHART NO. 24 -

PANHANDLE EASTERN PIPE LINE COMPANY
INVESTED CAPITAL AS OF JUNE 30, 1941

	PRINCIPAL AMOUNT OR SHARES	BOOK VALUE	PER CENT OF TOTAL	(1) MARKET PRICE	MARKET VALUE	PER CENT OF TOTAL
LONG-TERM DEBT						
1ST MTGE. & 1ST LIEN S.F. "B" 3's, 1960	$12,000,000	$12,000,000		101.94	$12,232,800	
1ST MTGE. & TRUST LIEN "A", 1.65-2.30%, 1946-60	6,250,000	6,250,000		(2) 100.00	6,250,000	
SERIAL NOTES A, B, C & D, 0.75-1.50%, DUE 11/1/42-45	5,000,000	5,000,000		(2) 100.00	5,000,000	
LEASEHOLD PURCHASE OBLIGATIONS	17,544	17,544		(3) 100.00	17,544	
TOTAL DEBT		23,267,544			23,500,344	
LESS: DEBT DISCOUNT AND EXPENSE		2,101,988			-	
NET DEBT		21,165,556	34.48%		23,500,344	36.59%
PREFERRED STOCKS						
$6 CUM. PFD. CLASS A, PARTICIPATING AND REDEEMABLE	100,000 shs.	10,000,000		(4) 100.00	10,000,000	
$6 CUM. PFD. CLASS B, NON-PARTICIPATING AND NON-REDEEMABLE	10,000 shs.	1,000,000		(4) 125.00	1,250,000	
TOTAL PREFERRED STOCKS		11,000,000	17.91		11,250,000	17.52
COMMON STOCKS AND SURPLUS						
COMMON STOCK (NO PAR)	807,367 shs.	20,184,175		(5) 36.50	29,468,896	
EARNED SURPLUS		9,074,120			-	
TOTAL COMMON STOCK AND SURPLUS		29,258,295	47.63		29,468,896	45.89
TOTAL INVESTED CAPITAL		$61,423,851	100.00%		$64,219,240	100.00%

NOTES: (1) BASED UPON AVERAGE OF HIGH AND LOW MARKET PRICES FOR THE PERIOD JANUARY 1 TO AUGUST 31, 1941.

(2) PRICES ESTIMATED. SOLD PRIVATELY IN JANUARY 1941 AT 100 TO SEVERAL BANKING INSTITUTIONS AND ONE INSURANCE COMPANY.

(3) PRICE ESTIMATED.

(4) PRICES ESTIMATED. AMOUNTS USED ARE THE PRICES AT WHICH REDEMPTION OF THE STOCKS IS CONTEMPLATED.

(5) PRICE FROM NATIONAL QUOTATION BUREAU.

[fol. 13593] Preferred Stock Unusual in Natural Gas Pipe Line Companies

In Chart No. 25, captioned "Preferred Stock Unusual in Natural Gas Pipe Line Companies," the solid bars represent the percent (based on book figures as of December 31, 1940) borne by the preferred stock of each of eight natural gas pipe line companies to the total book value of invested capital (net debt, preferred stock, common stock and surplus) of the respective companies.

As can be seen from the chart, Panhandle Eastern Pipe Line Company, with the exception of El Paso Natural Gas Company, is the only one of the companies which has preferred stock outstanding. The 14,797 shares of preferred stock of El Paso, representing only 6.85% of total capitalization at December 31, 1940, are a carry-over from the company's original financing, and judging by quoted market price could easily be refunded if the issue were of such size to make such a program feasible.

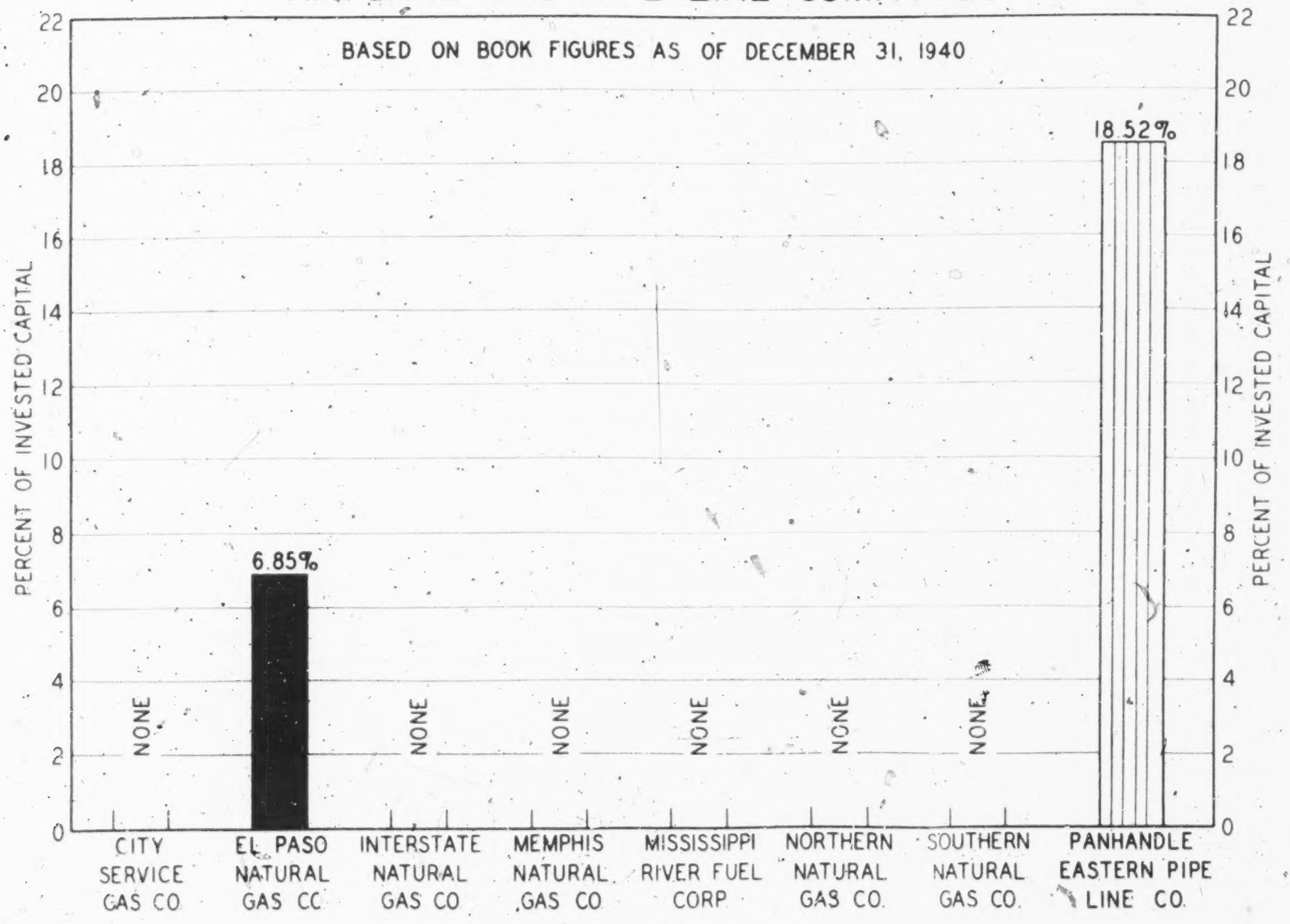
The proportion of Panhandle Eastern's total capitalization made up of preferred stock at December 31, 1940 was 18.52%.

The significance attached to this chart, in my opinion, is that a preferred stock is difficult to justify in the capital structure of a natural gas pipe line company, or, for that matter, the capital structure of any company connected with a wasting industry in which the product sold will ultimately be exhausted.

EXHIBIT 65 4628

– CHART NO. 25 –

PREFERRED STOCK UNUSUAL IN NATURAL GAS PIPE LINE COMPANIES



[fol. 13595] Earnings Necessary to Maintain Credit Position of Panhandle Eastern Pipe Line Co.

In Chart No. 26, captioned "Earnings Necessary to Maintain Credit Position of Panhandle Eastern Pipe Line Co.," I show the amount of earnings required to maintain quality of the company's presently outstanding securities.

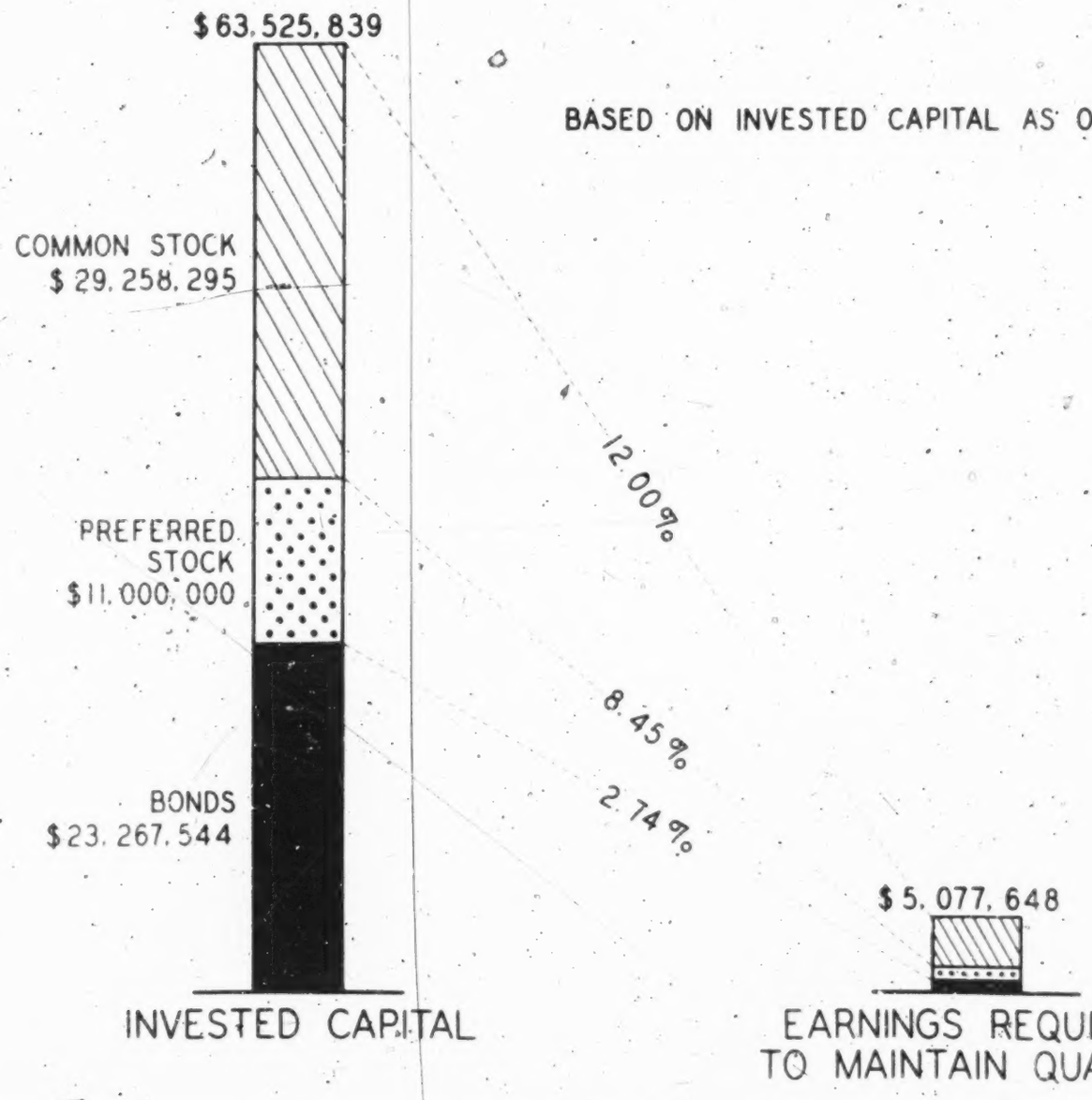
The bar on the left side of the chart shows in detail the total invested capital of the company on June 30, 1941. The solid red portion of the bar represents the total amount of long term debt outstanding, or $23,267,544. The dotted portion represents the preferred stock outstanding in the amount of $11,000,000, while the diagonally lined portion represents the common stock equity of $29,258,295. Total invested capital, it will be seen, amounted to $63,525,839.

In the center of the chart are shown the rates that were used in computing the earnings required to maintain the quality on the various components of invested capital. In the case of the bonds, a rate of 2.74% was used, which rate represents the average annual cost of senior capital raised in the 1941 refinancing. The rate of 8.45% used in the case of the preferred stock was based on the annual dividend requirements on the Class A and B issues, the former being computed on the basis of the regular $6 dividend plus a participation of $2.50 per share, and the latter being taken at the regular $6 annual dividend. In the case of the common stock, the rate of 12% was used, which rate was considered representative of the cost of common stock financing for an established natural gas pipe line company.

The bar on the right hand side of the chart shows the earnings required to maintain the quality of capital securities outstanding, as computed on the book value of invested capital and the rates mentioned above. For the bonds, the 2.74% rate figures out at the amount of $637,531 needed to maintain service charges on this portion of invested capital. The earnings required to meet the dividend requirements on the preferred A and B stocks amounted to $929,122, while on the common stock equity, earnings of $3,510,995 were required to cover the indicated 12% rate on this type of capital. Thus, earnings necessary to maintain credit position of the Panhandle Eastern Pipe Line Company, on the basis of the presently outstanding securities, amounted to $5,077,648.

- CHART NO. 26 -

EARNINGS NECESSARY TO MAINTAIN CREDIT POSITION OF PANHANDLE EASTERN PIPE LINE CO.



[fol. 13597] Earnings Necessary to Maintain Credit Position of Panhandle Eastern Pipe Line Co.

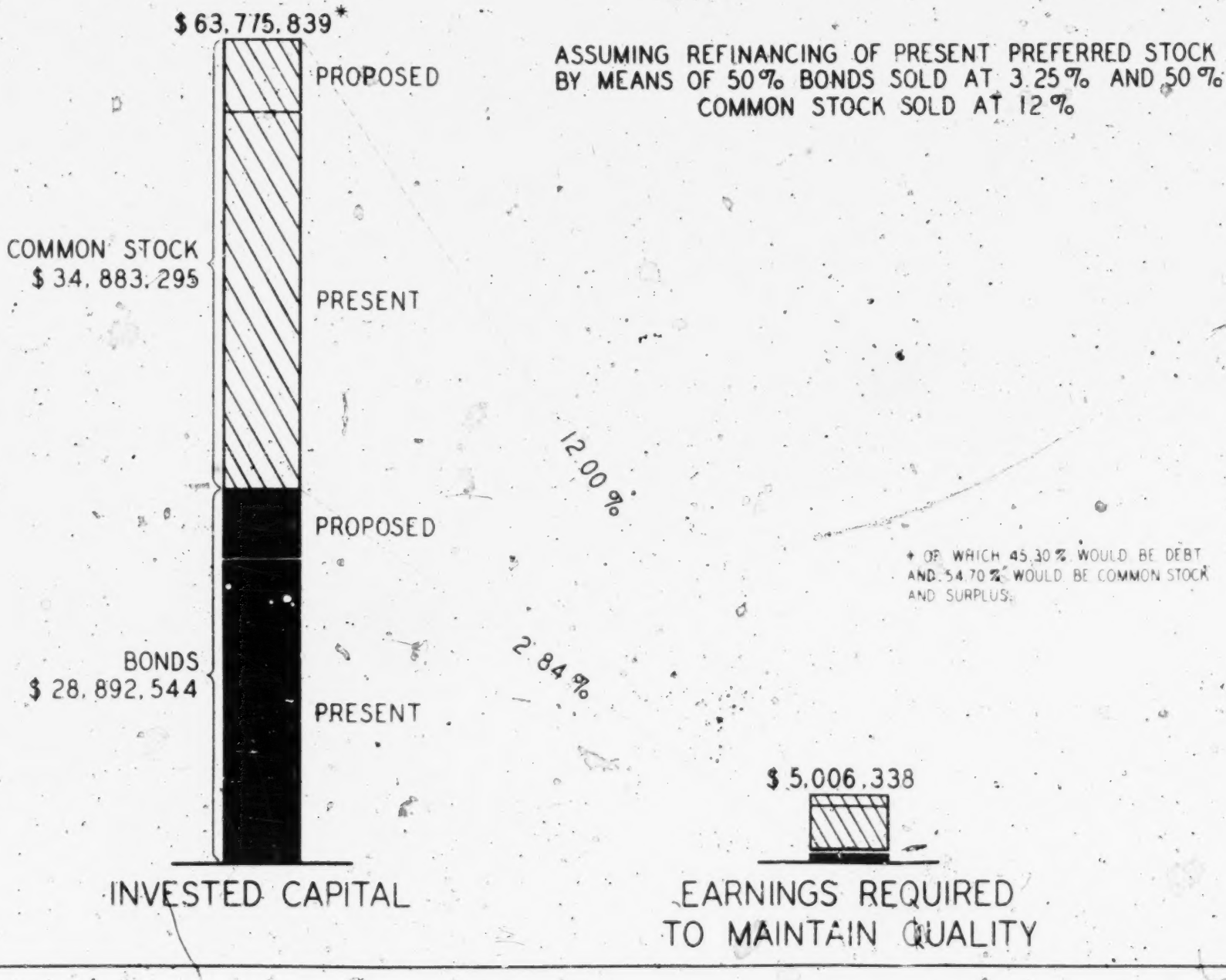
In Chart No. 27, captioned "Earnings Necessary to Maintain Credit Position of Panhandle Eastern Pipe Line Co.," the tall bar at the left represents the total capitalization of Panhandle Eastern (assuming that the present preferred stock is refinanced 50% by means of bonds sold to yield 3.25% and 50% by means of common stock sold on a 12% earnings-price ratio). The short bar at the right represents earnings required to maintain the credit position of Panhandle Eastern.

Of the total proposed capitalization of $63,775,839, bonds represented by the solid red portion of the bar, would be $28,892,544 and would require, at an overall rate of 2.84%, $820,343 annually. Common stock, represented by the diagonally lined portion of the bar, would be $34,883,295 and would require, at an earnings-price ratio of 12%, $4,185,995. The total annual earnings requirement, therefore would be $5,005,338 to maintain the credit position of Panhandle Eastern Pipe Line Company.

The computation of overall yield rates and proposed capitalization appear in the Appendix on the sheet marked "Table for Chart No. 27."

- CHART NO. 27 -

EARNINGS NECESSARY TO MAINTAIN CREDIT POSITION OF PANHANDLE EASTERN PIPE LINE CO.



ASSUMING REFINANCING OF PRESENT PREFERRED STOCK BY MEANS OF 50% BONDS SOLD AT 3.25% AND 50% COMMON STOCK SOLD AT 12%

* OF WHICH 45.30% WOULD BE DEBT AND 54.70% WOULD BE COMMON STOCK AND SURPLUS.

[fol. 13599] Overall Cost of Capital to Panhandle Eastern Based on Ideal Capital Structure

In Chart No. 28, captioned "Overall Cost of Capital to Panhandle Eastern Based on Ideal Capital Structure," I show the overall cost of capital to the company, as based on a so-called ideal capital structure, composed of 40% bonds and 60% common stock.

In arriving at an ideal capital structure for the Panhandle Eastern Pipe Line Company I eliminated preferred stock entirely on the basis that such type of security is not a particularly good medium with which to finance natural gas pipe line companies. By the very nature of their operations, natural gas pipe lines must be placed in the category of wasting assets. Although a preferred issue which carried a sinking fund feature might be justified, such a security would more or less have the characteristics of a bond.

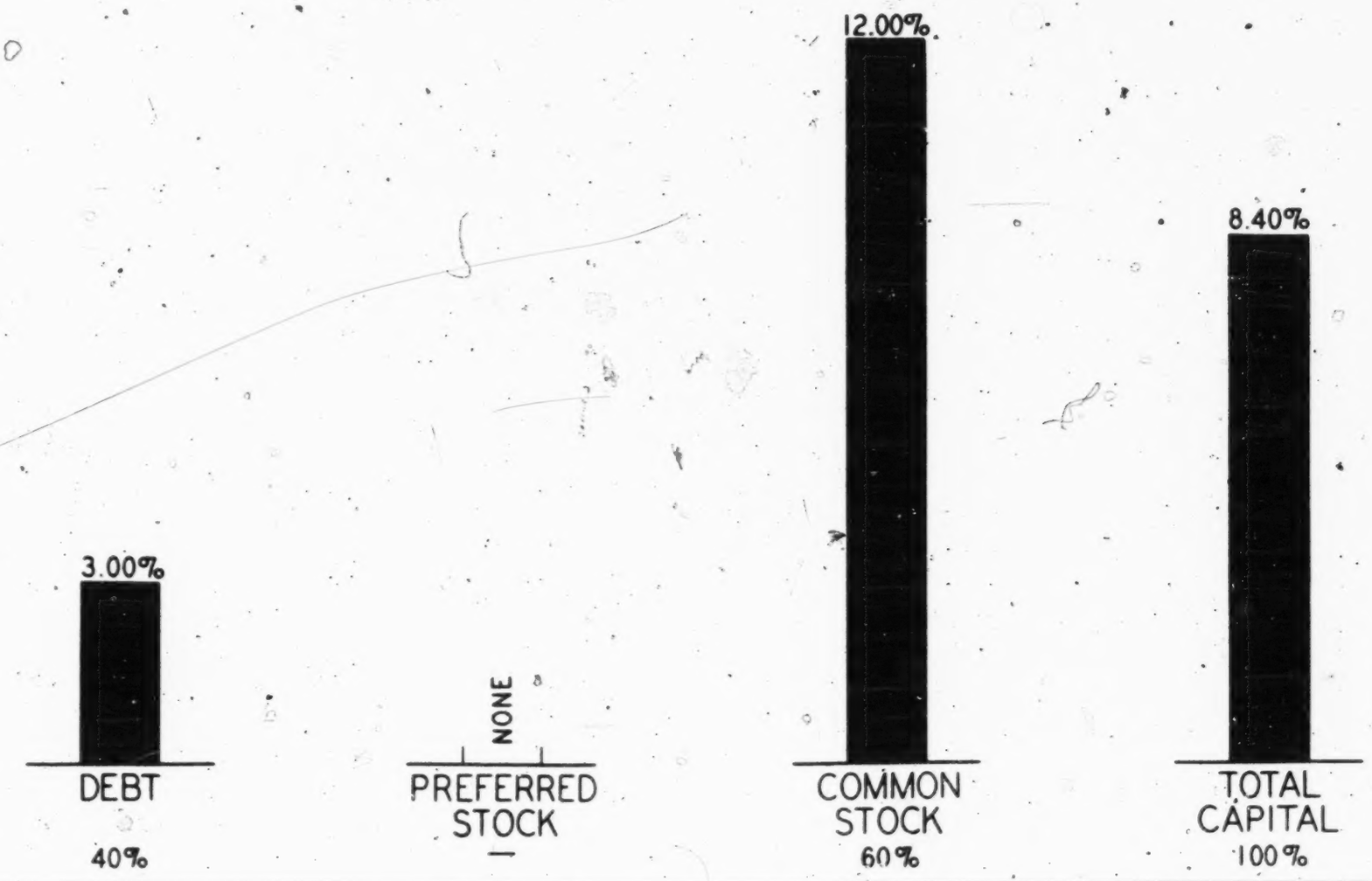
Under this ideal capital structure of 40% bonds and 60% common stock I have concluded, after a careful study of all pertinent factors, that the company could issue bonds on a 3.00% basis. This rate is indicated by the bar on the left side of the chart. In the case of the common stock, the cost of financing has been placed at 12.00%.

On the basis of such a capital structure, and the above financing costs, the overall cost of capital to the Panhandle Eastern Pipe Line Company would be 8.40%.

- CHART NO. 28 -

OVERALL COST OF CAPITAL TO PANHANDLE EASTERN BASED ON IDEAL CAPITAL STRUCTURE

CAPITAL STRUCTURE COMPOSED OF
40% BONDS & 60% COMMON STOCK



[fol. 13601] Dollars Needed Annually by Panhandle For Operations & Maintenance

Having determined the dollar earnings on invested capital necessary to maintain the credit position of Panhandle Eastern Pipe Line Company and the overall cost of capital based upon an ideal capital structure of 40% bonds and 60% common stock, I next proceeded to determine the irreducible minimum annual gross revenue that would be necessary over the next few years, in the light of current and prospective business conditions, to operate the pipe line and provide efficient and adequate service to customers, a reasonable return to investors, and to restore invested capital when the gas reserves of the company were exhausted.

In Chart No. 29, captioned "Dollars Needed Annually by Panhandle for Operations & Maintenance," the bar at the left shows the actual expenditures made during the 12 months ended June 30, 1941 for operations and maintenance and the bar on the right shows my projected estimate as to the minimum amount that will be needed for such expenditures over the next few years, based on cost trends that are rather clearly evident at the present time.

As shown in the left hand bar, actual cost of operations was $2,902,353 and of maintenance, $294,444, in the 12 months ended June 30, 1941. Included in the first figure were such items as the cost of gas produced and purchased, the wage and material costs necessary to operate the pipe line system, and the general overhead comprised of office salaries and other expenses. The maintenance figure includes the cost of wages and materials necessary to maintain the pipe line, the compressor stations and all other physical equipment.

While I gave careful consideration to the various items of expense pertaining to a company such as Panhandle Eastern Pipe Line Company, I did not actually examine the detailed records of the company nor did I attempt to project the amount of dollars that would be needed annually in the next few years for each individual item of expense. However, from a general knowledge of trends of raw material costs and wage rates, and realizing fully the

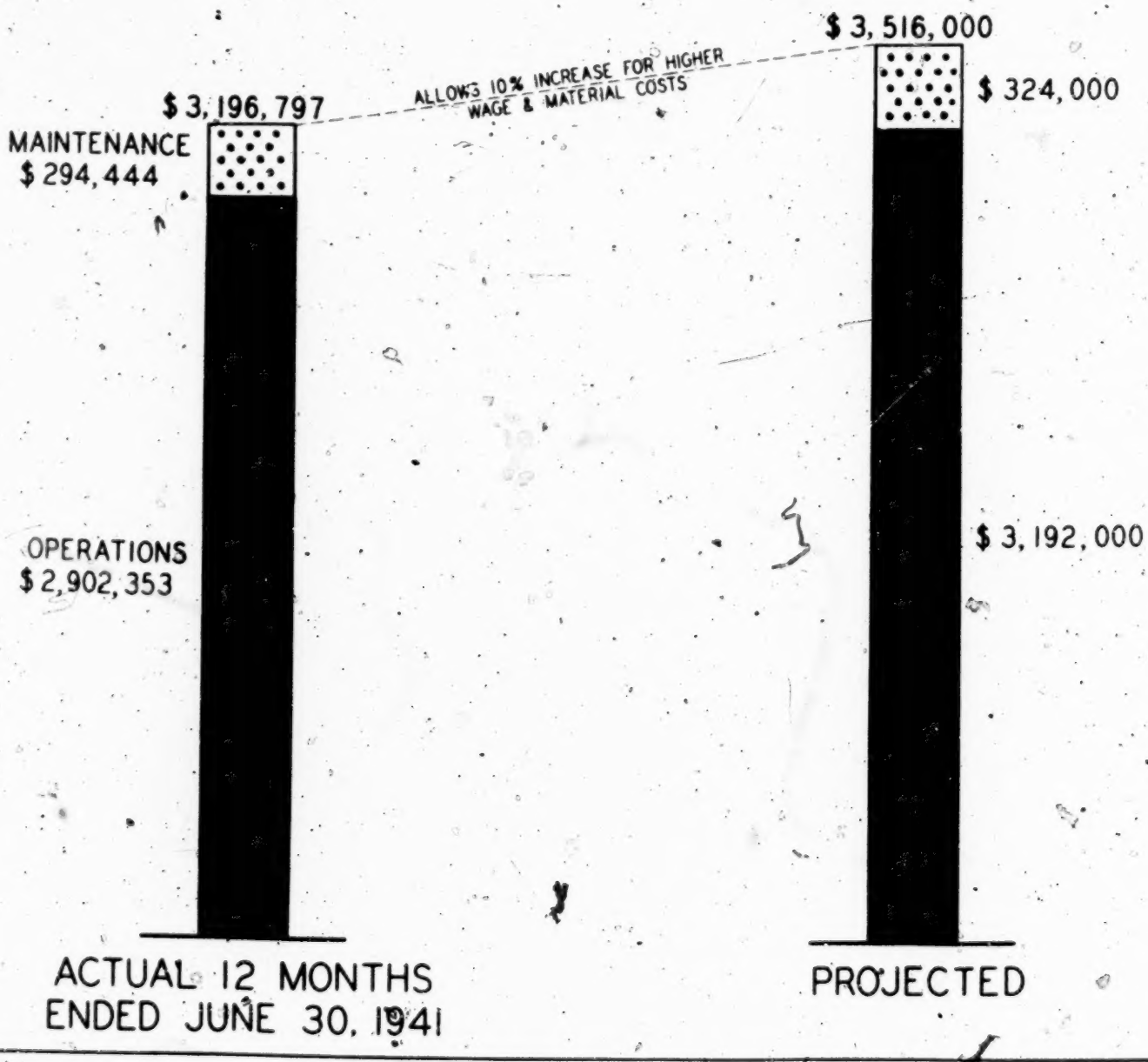
seriousness of the problem of precluding a serious inflation in this country during the next two years, I estimated that the minimum amount of dollars necessary to operate and maintain the Panhandle Eastern Pipe Line Company over the next year or so would average at least 10% higher than the actual expenses incurred in the twelve months ended June 30, 1941.

On such basis, it was determined that the company would need annually $3,192,000 for operations and $324,000 for maintenance, or a total of $3,516,000 for such costs over a reasonable period in the future. I feel quite strongly that if this estimate ultimately proves in error, the error will be toward understatement of future costs rather than overstatement.

EXHIBIT 65
4633

- CHART NO. 29 -

DOLLARS NEEDED ANNUALLY BY PANHANDLE FOR OPERATIONS & MAINTENANCE



[fol. 13603] **Dollars Needed Annually by Panhandle for Taxes**

In Chart No. 30, captioned, "Dollars Needed Annually by Panhandle for Taxes," the left hand bar represents the amount of taxes shown in the report of the company for the 12 months ended June 30, 1941, and the right hand bar shows a reasonable projection of the amount that will be payable by the company on average over the next few years.

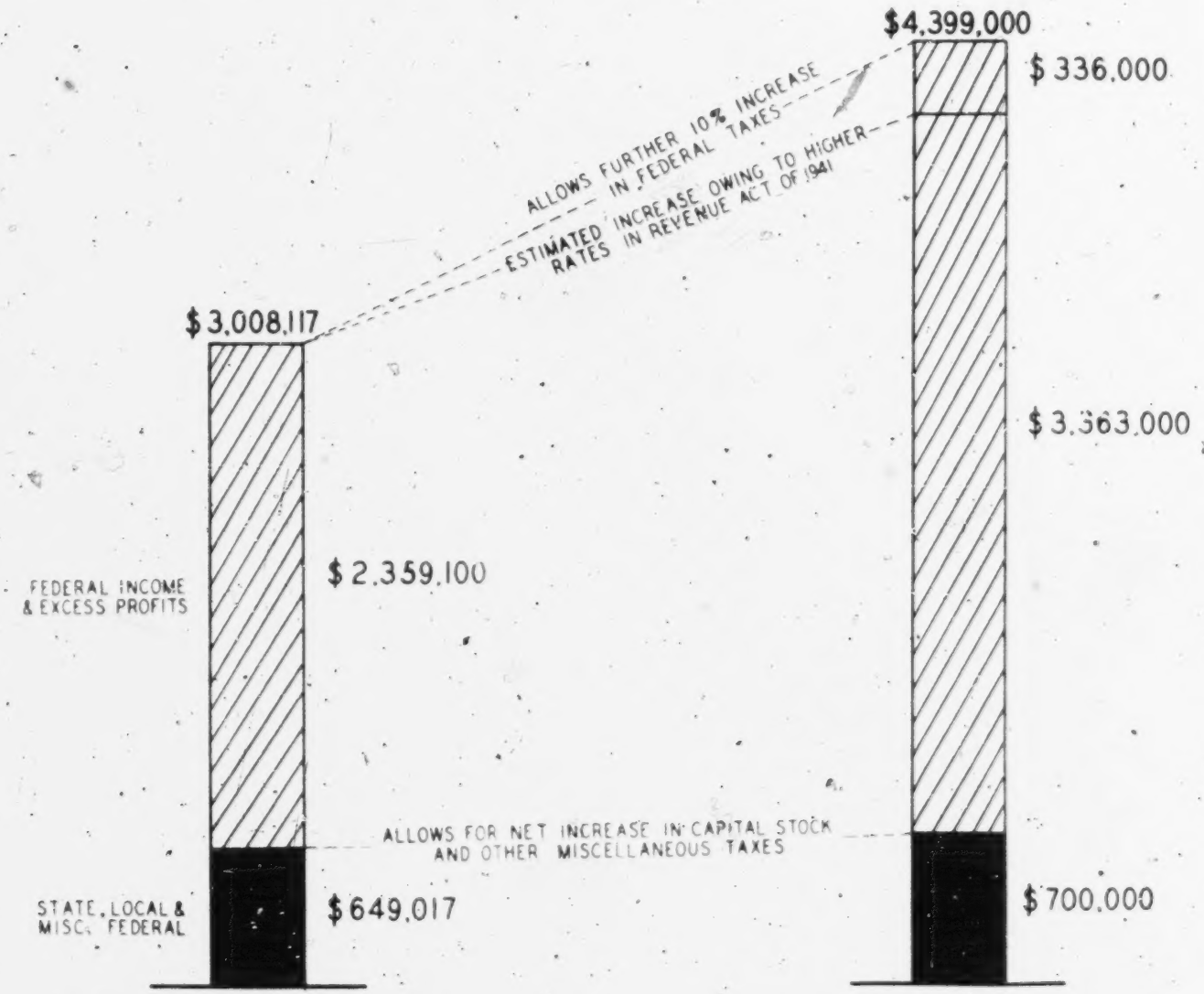
In the report for the 12 months ended June 30, 1941 as published by the company, State, local and miscellaneous Federal taxes were deducted in the amount of $649,017, and Federal income and excess profits taxes were deducted in the amount of $2,359,000. As was clearly indicated, this latter amount was "computed without regard to special taxes resulting from the refinancing consummated during February, 1941, and without making provision for possible increases in rates or otherwise during 1941." In other words, such taxes were computed at the rates prescribed in the "Second Revenue Act of 1940."

As is well known, however, this Act is now a matter of history and has been superseded by the "Revenue Act of 1941," which establishes, among other things, considerably higher tax rates for corporations. On the basis of such rates, an amount of income which was actually earned in the 12 months ended June 30, 1941, I have computed that the company's tax liability for Federal income, surtax and excess profits tax would be slightly more than $1,000,000 higher than the amount shown in the report for that period, or a total of $3,363,000, as shown in the right hand bar of the accompanying chart. Moreover, as is generally anticipated, the tax rates established in the Revenue Act of 1941 are likely to be increased again in 1942 in order to finance the unsual expenditures of the present war efforts. In order to give some weight to such additional tax prospects, I have assumed a further 10% increase in Federal taxes in 1942, or an increase of $336,000. I have also allowed for a modest increase in the capital stock and other miscellaneous taxes from $649,017 as actually incurred in the 12 months ended June 30, 1941 to $700,000 as a reasonable estimate of future needs.

In total, therefore, I arrived at the figure of $4,399,000 as being a minimum estimate of the annual needs of the Panhandle Eastern Pipe Line Company for taxes over a reasonable period in the future. This estimate is, of course, considerably in excess of the $3,008,117 of total taxes computed in the report for the 12 months ended June 30, 1941.

- CHART NO. 30 -

DOLLARS NEEDED ANNUALLY BY PANHANDLE FOR TAXES



[fol. 13605] Dollars Needed Annually by Panhandle to Return Capital to Investors When Gas Reserves Are Exhausted.

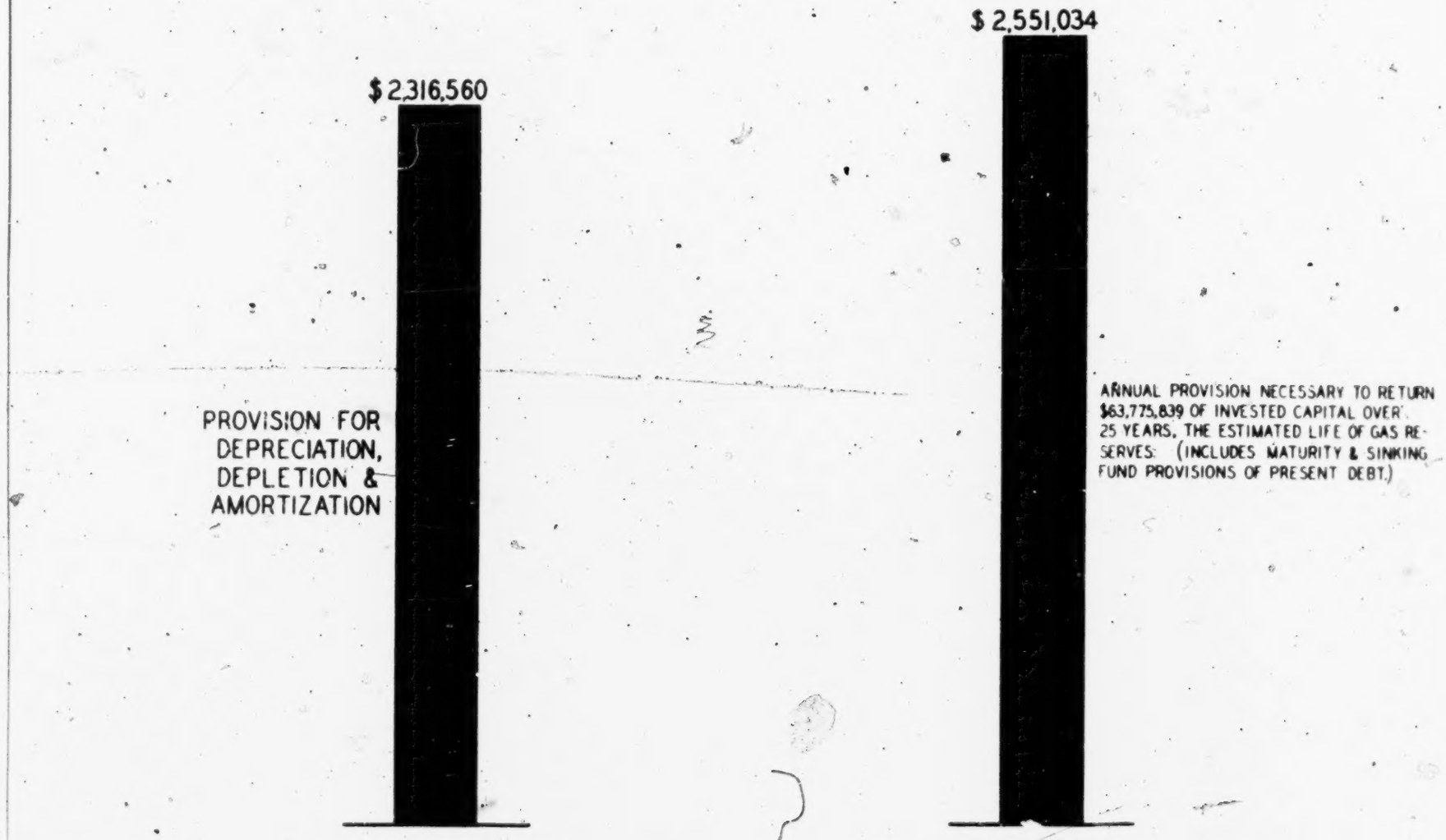
In Chart No. 31, captioned "Dollars Needed Annually by Panhandle to Return Capital to Investors When Gas Reserves Are Exhausted," the right hand bar shows the actual amount charged to earnings as a provision for depreciation and depletion and amortization of gas purchase contracts—a total of $2,346,560 for the twelve months ended June 30, 1941. This reserve of course represents the earmarking of a portion of earnings to cover the depreciation of the plant and amortization of other tangible and intangible assets over the period of their expected life.

I made no actual survey of the properties, nor do I question the adequacy or inadequacy of the annual provision for depreciation, depletion and amortization. However, in order to determine the dollar amount that would be necessary to return capital to investors when the company's reserves are exhausted, I accepted the assumption that the company's reserves would last for an additional 25 years as indicated by Mr. Ralph E. Davis in Registration Statement No. 2-4579, filed November 18, 1940, and computed by a straight line method the annual provision necessary to return $63,775,839 of invested capital over such a period. On such basis, I arrived at the estimate of $2,551,034 as the annual amount necessary to restore capital to investors when the reserves are exhausted. This amount, of course, includes maturity and sinking fund provisions of the present debt.

EXHIBIT 65

- CHART NO. 31 -

DOLLARS NEEDED ANNUALLY BY PANHANDLE TO RETURN CAPITAL TO INVESTORS WHEN GAS RESERVES ARE EXHAUSTED



[fol. 13607] Dollars Needed Annually by Panhandle for Current Capital Requirements—Bonds

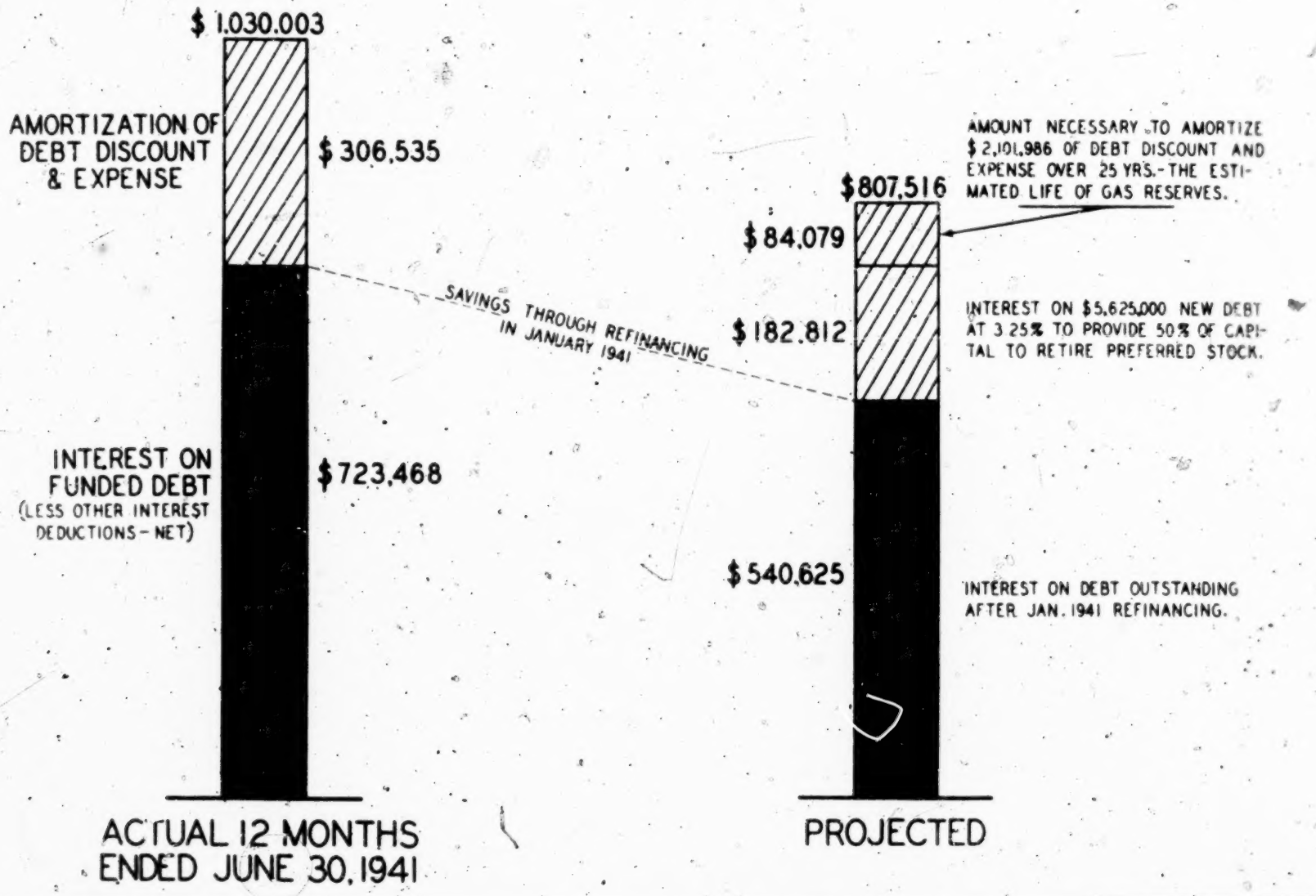
In Chart No. 32, captioned "Dollars Needed Annually by Panhandle for Current Capital Requirements—Bonds," the left-hand bar shows actual figures for the 12 months ended June 30, 1941, of interest on funded debt (less other interest deductions—net) of $723,468 and amortization of debt discount and expense of $306,535, or a total capital requirement for bonds of $1,030,003.

My projection of future capital requirements on bonds gave weight to the interest savings accomplished in the January, 1941, refinancing. I estimated annual interest requirements on the debt outstanding at $545,625. I assumed further that the existing $11,000,000 of preferred stock would be retired at prices of $100 per share and $125 per share respectively for the Class A and Class B preferred stock, or a total of $11,250,000, and that such funds would be raised through the proceeds of $5,625,000 of new debt sold on a 3.25% net yield basis and $5,625,000 of new common stock.

I projected interest requirements on such additional debt at $182,812. Having established the interest cost of bond capital, I investigated and found that the unamortized debt discount and expense on the books of the company was $2,101,986 as of June 30, 1941. Again adopting the straight line method of amortizing such capital costs for 25 years, the estimated life of the company's reserves, I determined that the annual requirement for such purpose would be $84,079, making a total projected amount of $807,516 as the amount needed annually for current capital requirements on bonds. This estimate represented a substantial reduction from the $1,030,003 actually shown for the 12 months ended June 30, 1940.

- CHART NO. 32 -

DOLLARS NEEDED ANNUALLY BY PANHANDLE FOR CURRENT CAPITAL REQUIREMENTS — BONDS



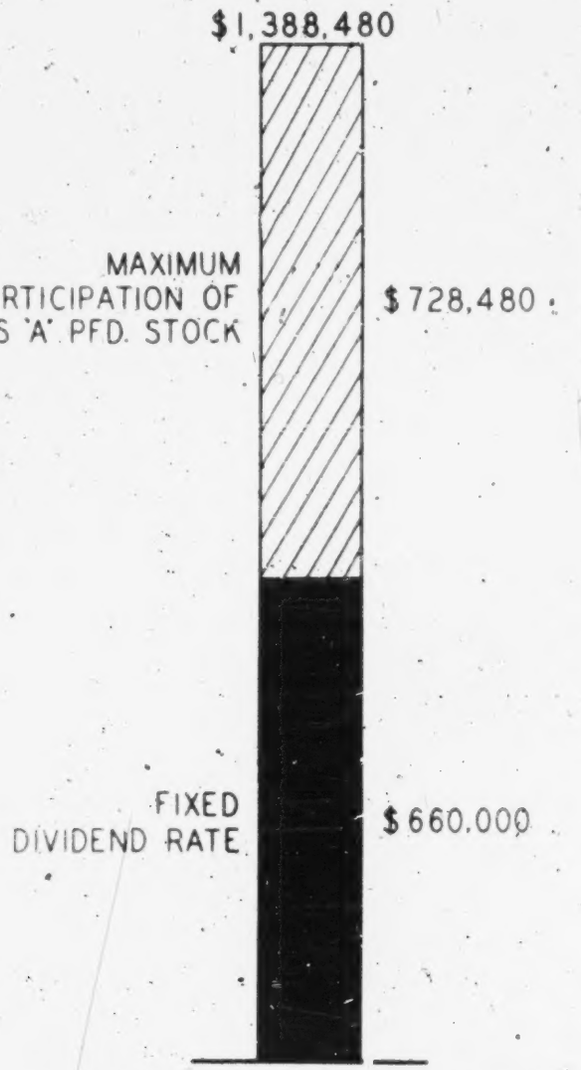
[fol. 13609] **Dollars Needed Annually by Panhandle for Current Capital Requirements—Preferred Stock.**

In Chart No. 33, captioned "Dollars Needed Annually by Panhandle for Current Capital Requirements—Preferred Stock," the left hand bar shows the dividend requirements and participation of the preferred stock as computed on the basis of earnings for the twelve months ended June 30, 1941. As shown, the fixed dividend rate on the 100,000 shares Class A preferred and the 10,000 shares Class B preferred stock total $660,000. In addition, however, the Class A preferred stock carries a participating feature whereby after $1.50 per share is paid on the common stock, any further dividends are distributed 25% to the Class A preferred stock and 75% to the common stock. The maximum participation of the Class A preferred stock on the basis of the net income as reported for the twelve months ended June 30, 1941, was computed at $728,480. On such basis, the total earnings applicable to the preferred stock were $1,388,480, as shown on the chart.

I have projected that the Panhandle Eastern Pipe Line Company will have no requirements for preferred stock in the future on the assumption that such stock will be retired with capital raised 50% by sale of additional debt and 50% by sale of additional common stock.

-CHART NO. 33-

DOLLARS NEEDED ANNUALLY BY PANHANDLE FOR CURRENT CAPITAL REQUIREMENTS – PREFERRED STOCK



ACTUAL 12 MONTHS ENDED JUNE 30, 1941

– NONE –

ASSUMING PREFERRED STOCK IS RETIRED WITH CAPITAL RAISED 50% BY SALE OF ADDITIONAL DEBT ON A 3.25% YIELD BASIS AND 50% BY SALE OF ADDITIONAL COMMON STOCK ON A 12.00% EARNINGS PRICE RATIO

PROJECTED

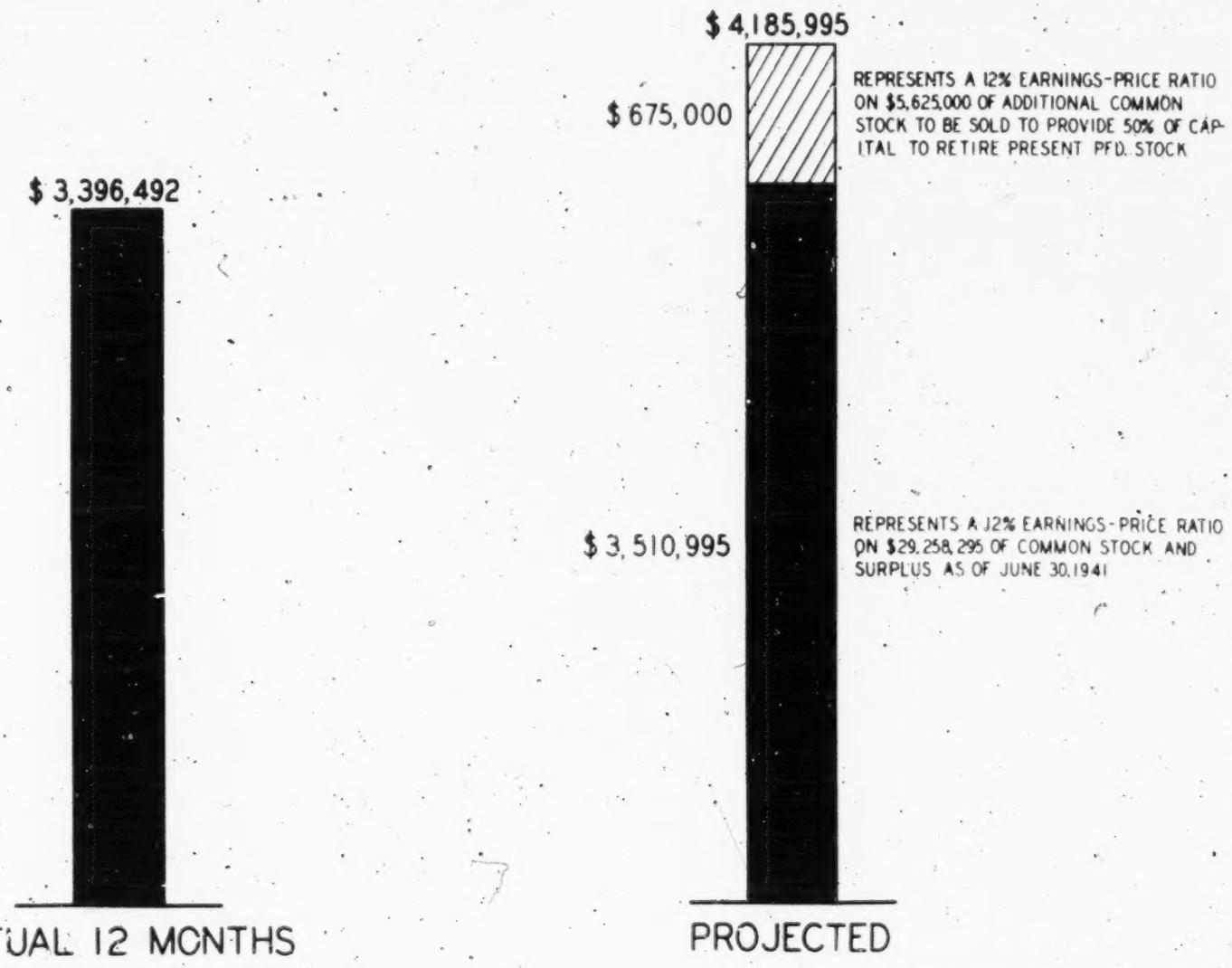
[fol. 13611] Dollars Needed Annually by Panhandle for Current Capital Requirements—Common Stock.

In Chart No. 34, captioned "Dollars Needed Annually by Panhandle for Current Capital Requirements—Common Stock," the left hand bar shows that there was $3,396,492 available for the common stock, after allowing for the maximum participation of the Class A preferred stock, in the twelve months ended June 30, 1941.

In the right hand bar I have projected the amount needed to cover capital requirements on the common stock for a reasonable period in the future. As shown in the chart, a 12% earnings-price ratio on $29,258,295 of common stock and surplus as of June 30, 1941, will require earnings of $3,510,995, a 12% earnings—price ratio on $5,625,000 of additional common stock, which, it is assumed, will be sold to provide 50% of the capital to retire the present preferred stock, would require $675,000. The total of these two amounts is $4,185,995, which I estimate is the amount that will be needed to pay common dividends and provide a reasonable addition to surplus.

- CHART NO. 34 -

DOLLARS NEEDED ANNUALLY BY PANHANDLE FOR CURRENT CAPITAL REQUIREMENTS - COMMON STOCK



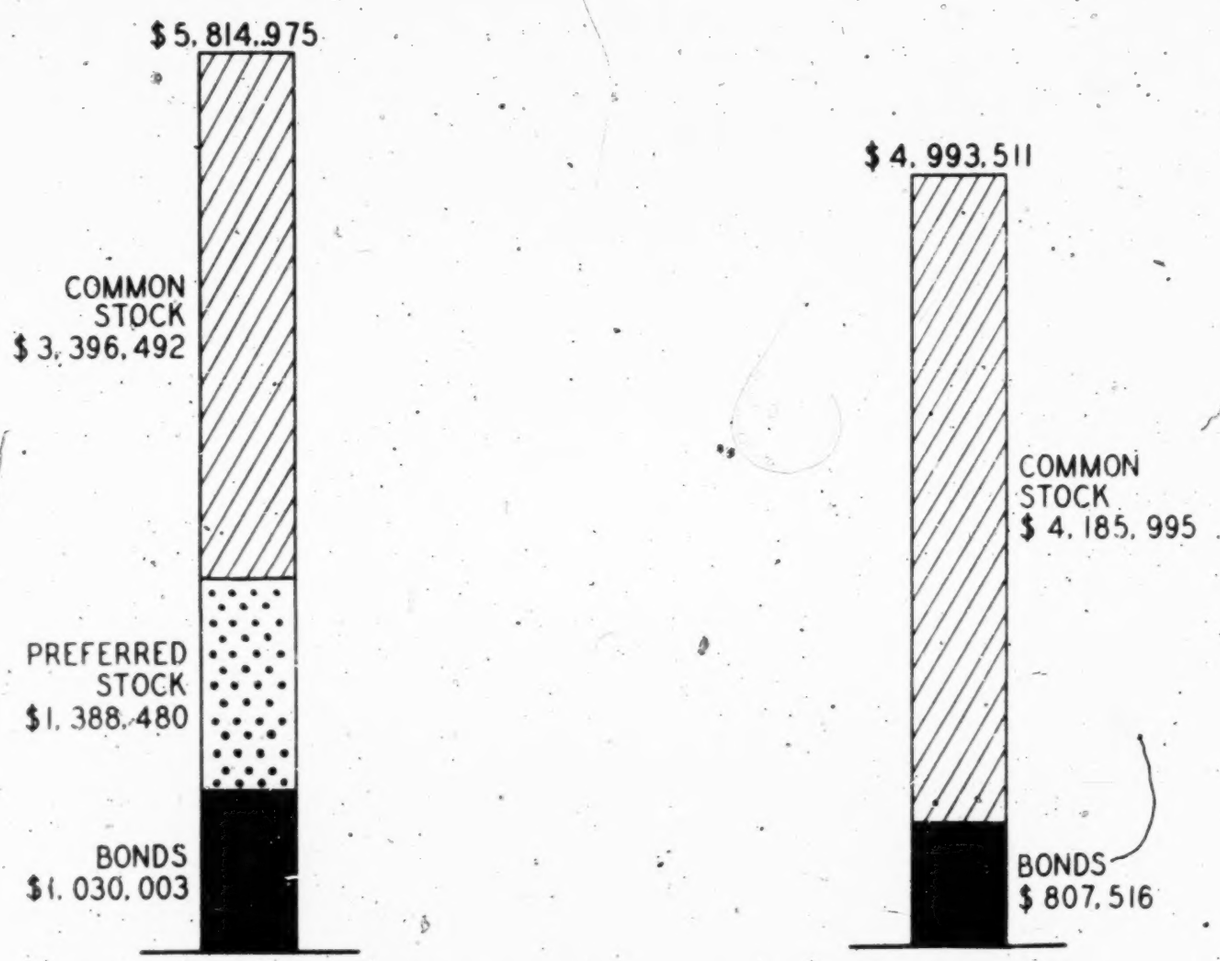
[fol. 13613] Dollars Needed Annually by Panhandle for Total Current Capital Requirements—Total Invested Capital.

In Chart No. 35, captioned "Dollars Needed Annually by Panhandle for Total Current Capital Requirements—Total Invested Capital," I have summarized the data from the preceding three charts. As shown in the left hand bar, the total dollars earned toward capital requirements in the twelve months ended June 30, 1941, were $5,814,975. Of this amount, as has already been shown in preceding charts, $1,030,003 was applicable to bonds, $1,388,480 to preferred stock and $3,396,492 to common stock. As shown in the right hand bar, the total dollars that I have projected as being needed by Panhandle Eastern Pipe Line Company for current capital requirements on the total invested capital is $4,993,511, assuming that the present preferred stock is retired through the proceeds of the sale of additional bonds and common stock. The component estimates making up the total figure are $807,516 for bonds and $4,185,995 for common stock.

EXHIBIT 65

- CHART NO. 35 -

DOLLARS NEEDED ANNUALLY BY PANHANDLE FOR TOTAL CURRENT CAPITAL REQUIREMENTS — TOTAL INVESTED CAPITAL



ACTUAL 12 MONTHS ENDED JUNE 30, 1941

PROJECTED

ASSUMING PRESENT PREFERRED STOCK IS RETIRED

[fol. 13615] Dollars Needed Annually by Panhandle to Provide Service to Customers, a Fair Return to Investors & Restore Invested Capital When Gas Reserves Are Exhausted—Based on Refinancing Preferred Stock

In Chart No. 36, captioned "Dollars Needed Annually by Panhandle to Provide Service to Customers, a Fair Return to Investors & Restore Invested Capital When Gas Reserves are Exhausted—Based on Refinancing Preferred Stock," I have added together all the amounts that will be needed by the Panhandle Eastern Pipe Line Company over a reasonable period in the future. The method of arriving at such dollar figures was covered in the comments on Charts No. 29 to 35, both inclusive.

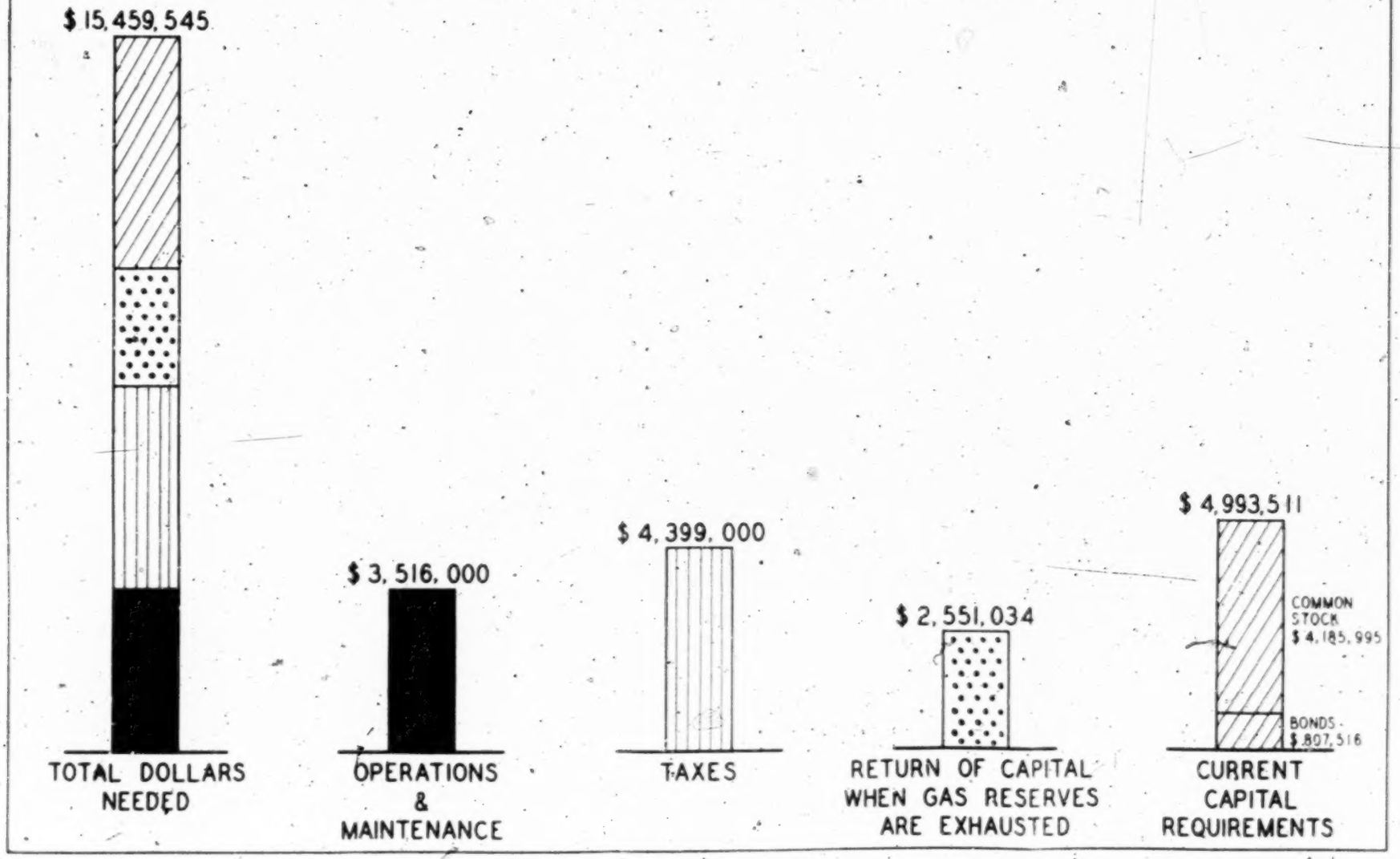
As shown on the accompanying chart, I feel that the company will require $3,516,000 for operations and maintenance, $4,399,000 for taxes, $2,551,034 for the return of invested capital when gas reserves are exhausted and $4,993,511 for current capital requirements on bonds and common stocks, giving effect to refinancing of the preferred stock.

The total of these amounts, as shown by the extreme left hand bar, is $15,459,545, which represents the minimum number of dollars which, in my opinion, will be needed annually by the Panhandle Eastern Pipe Line Company to provide adequate service to customers, a fair return to investors and restore the invested capital when gas reserves are exhausted.

- CHART NO. 36 -

DOLLARS NEEDED ANNUALLY BY PANHANDLE TO PROVIDE SERVICE TO CUSTOMERS, A FAIR RETURN TO INVESTORS & RESTORE INVESTED CAPITAL WHEN GAS RESERVES ARE EXHAUSTED

BASED ON REFINANCING PREFERRED STOCK



[fol. 13617] Dollars Needed Annually by Panhandle to Provide Service to Customers, a Fair Return to Investors & Restore Invested Capital When Gas Reserves Are Exhausted—Based on Present Capital Structure

In Chart No. 37, captioned "Dollars Needed Annually by Panhandle to Provide Service to Customers, a Fair Return to Investors & Restore Invested Capital When Gas Reserves Are Exhausted—Based on Present Capital Structure," I show the total amount of dollars that will be needed by the company if it is unable to consummate the refinancing of its preferred stock.

The amounts needed for operations and maintenance, and taxes, are exactly the same as shown on the preceding chart. The amount needed to return the invested capital when gas reserves are exhausted is slightly less at $2,541,034 as compared with $2,551,034. The reason for this slight reduction in requirements is that the present invested capital is slightly smaller than it would be if a refunding program were consummated owing to the fact that such program would call for the payment of a $250,000 premium on Class B preferred stock.

Current capital requirements on the basis of the present capital structure would total $5,964,821. As shown on the Table for Chart No. 37 at the end of this report, such amount includes interest and amortization on the present debt of $824,704, preferred dividend requirements of $629,122 (including a participation for the Class A preferred stock computed on the basis of a $2.50 annual dividend on 807,367 common shares) and $3,510,995 required for the amount of common stock and surplus as of June 30, 1941 based on a 12% earnings-price ratio.

As shown in the accompanying chart, based on the present capital structure the Panhandle Eastern Pipe Line Company would require a total of $15,520,855 annually to provide service to customers, a fair return to investors and restore invested capital when gas reserves are exhausted. This is slightly more than would be required if the present preferred stock is refunded.

- CHART NO. 37 -

DOLLARS NEEDED ANNUALLY BY PANHANDLE TO PROVIDE SERVICE TO CUSTOMERS, A FAIR RETURN TO INVESTORS & RESTORE INVESTED CAPITAL WHEN GAS RESERVES ARE EXHAUSTED

BASED ON PRESENT CAPITAL STRUCTURE

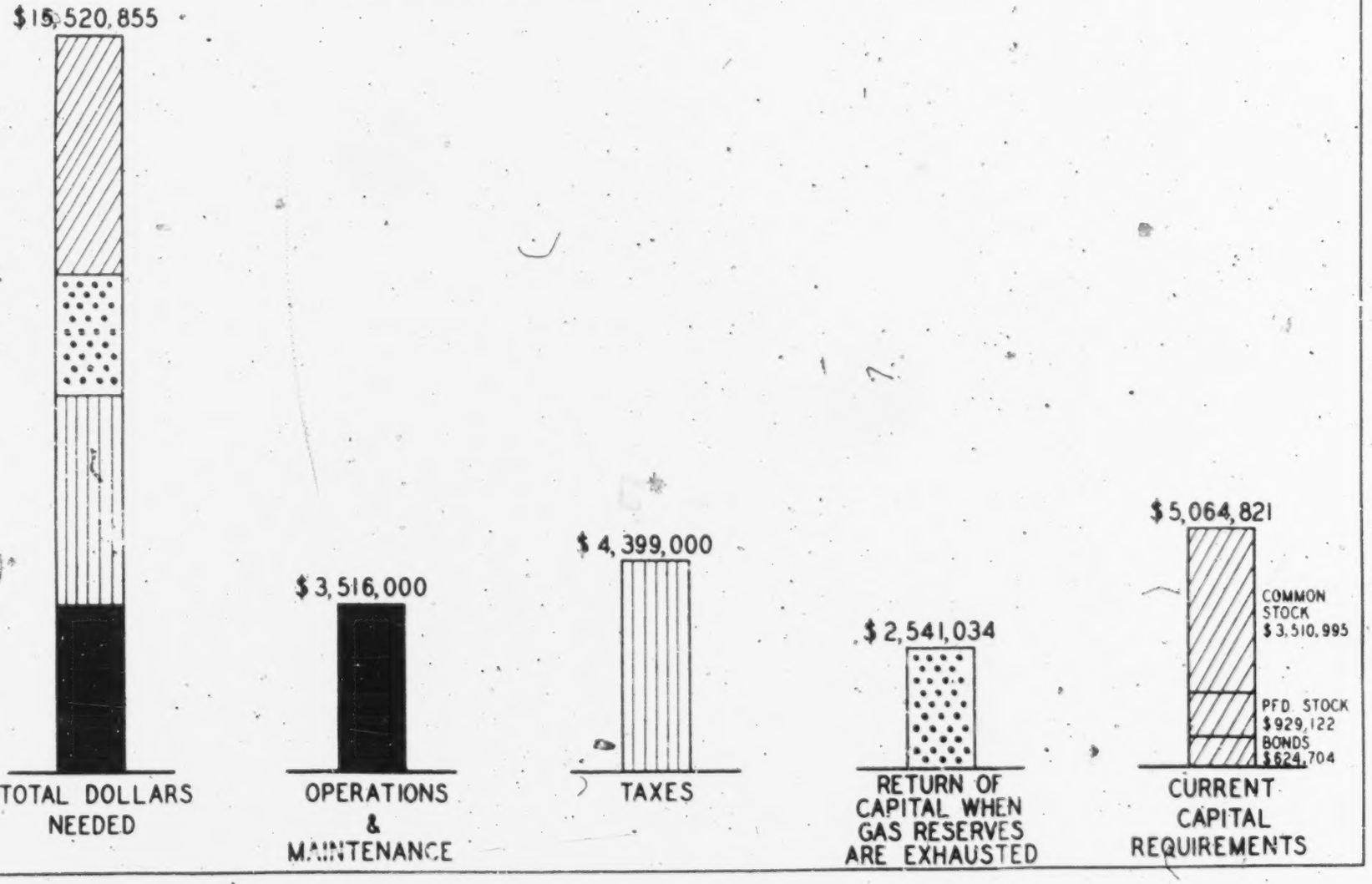


Table for Chart No. 2

GROWTH OF NATURAL GAS IN THE U. S. A.

FOR THE YEARS 1906 TO 1940, INCLUSIVE

	(1) Domestic and Commercial Customers	(2) Natural Gas Production (1000 M.C.F)
1906	834,018	388,843
1907	1,068,186	406,622
1908	1,177,973	402,141
1909	1,240,697	480,706
1910	1,345,989	509,155
1911	1,512,224	512,993
1912	1,637,493	562,203
1913	1,934,071	581,898
1914	2,090,985	591,667
1915	2,213,439	626,579
1916	2,380,772	753,170
1917	2,449,895	795,110
1918	2,525,124	721,001
1919	2,525,849	745,916
1920	2,635,968	798,210
1921	2,651,904	662,052
1922	3,014,600	762,546
1923	3,234,000	1,006,976
1924	3,443,000	1,141,521
1925	3,508,000	1,188,571
1926	3,731,000	1,313,019
1927	3,984,000	1,445,428
1928	4,344,000	1,568,139
1929	5,098,000	1,917,693
1930	5,448,000	1,943,421
1931	6,961,000	1,686,436
1932	7,037,000	1,555,990
1933	7,232,000	1,555,474
1934	7,566,000	1,770,721
1935	8,004,000	1,916,595
1936	8,674,000	2,167,602
1937	9,028,000	2,407,620
1938	9,265,000	2,295,562
1939	9,603,000	2,426,756
1940	Not Available	2,672,000

Source: (1) Moody's Public Utility Manual 1941 page a 42.
(2) U.S. Bureau of Mines - Minerals Yearbooks: 1937, p. 1062;
1941, p. 1030.

4655

13620

Table for Chart No. 3

CONSUMPTION OF NATURAL GAS IN U. S. A.

FOR THE YEARS 1919-1940, INCLUSIVE

	Domestic	Commercial	Domestic and Commercial	Miscellaneous Industrial	Total Domestic, Commercial and Misc. Ind. (1)	In Relatives 1935-39 = 100	Field Use (2)	Carbon Black	Grand Total	In Relatives 1935-39 = 100 (1)	F.R.B. Index of Industrial Production 1935-39 = 100 (3)
			----------Thousand M.C.F.----------				----------Thousand M.C.F.----------				
1919			255,743	270,490	526,233	40.40	169,787	49,896	745,916	33.18	72
1920			286,001	269,502	555,503	42.65	202,108	40,599	798,210	35.50	75
1921			248,334	180,848	429,182	32.95	182,305	50,565	662,052	29.45	58
1922			254,413	256,654	511,067	39.24	197,850	53,629	762,546	33.92	73
1923			277,050	277,745	554,795	42.59	343,076	109,096	1,006,967	44.79	88
1924			285,152	306,379	591,531	45.41	393,437	156,514	1,141,482	50.77	82
1925			272,146	352,403	624,549	47.95	423,524	140,366	1,188,439	52.86	91
1926			289,175	415,169	704,344	54.07	478,188	130,321	1,312,853	58.39	98
1927			296,036	455,666	751,702	57.71	549,455	144,087	1,445,244	64.28	95
1928			320,877	498,267	819,144	62.89	573,898	175,137	1,567,979	69.74	99
1929			359,853	591,408	951,261	73.03	705,083	261,107	1,917,451	85.29	110
1930	295,700	80,707	376,407	575,447	951,854	73.08	723,165	266,625	1,941,644	86.36	91
1931	294,406	86,491	380,897	536,591	917,488	70.44	570,365	195,396	1,684,249	74.91	75
1932	298,520	87,367	385,887	470,833	856,720	65.77	529,378	168,237	1,554,335	69.13	58
1933	283,197	85,577	368,774	503,385	872,159	66.96	491,159	190,081	1,553,399	69.09	69
1934	288,236	91,261	379,497	601,016	980,513	75.28	554,542	229,933	1,764,988	78.50	75
1935	313,498	100,187	413,685	674,213	1,087,898	83.52	580,414	241,589	1,909,901	84.95	87
1936	343,346	111,623	454,969	803,660	1,258,629	96.63	618,468	283,421	2,160,518	96.10	105
1937	371,684	117,390	489,234	921,492	1,410,636	108.30	651,320	341,085	2,403,041	106.88	113
1938	363,772	114,296	482,068	827,876	1,309,944	100.57	659,203	324,950	2,294,097	102.04	88
1939	391,153	118,334	509,487	936,124	1,445,611	110.98	680,884	347,270	2,473,765	110.03	108
1940	442,000	132,000	574,000	1,024,010	1,598,010	122.68	700,000	369,000	2,667,010	118.63	122

Source: (1) Computed by Standard & Poor's Corporation.
(2) U. S. Bureau of Mines - Mineral Yearbooks.
(3) Standard Trade & Securities - Statistical Section.

Table for Chart No. 4

REVENUE FROM NATURAL GAS CONSUMED IN U.S.A.

FOR THE YEARS 1919-1940 INCLUSIVE

	Domestic	Commercial	Domestic & Commercial	Misc. Industrial	Total Dom. & Com. & Misc. Ind.	Field Use	Carbon Black	Total	Average Value Per M.C.F.	Total Dom., Com., Misc. Ind., & Field Use
					-In 1,000 Dollars-					
1919			88,414	N/A	N/A	N/A	N/A	160,886	21.8	N/A
1920			109,302	N/A	N/A	N/A	N/A	195,194	24.6	N/A
1921			110,337	40,858	150,895	21,649	2,073	174,617	26.4	172,544
1922			126,902	65,255	192,157	27,444	1,934	221,535	29.1	219,601
1923			142,317	97,678	239,995	*	*	239,995	23.8	239,995
1924			154,075	72,236	226,311	27,519	*	253,830	22.2	253,830
1925			152,494	81,417	233,911	31,273	*	265,184	22.3	265,184
1926			168,870	94,535	263,405	36,660	*	300,065	22.9	300,065
1927			180,018	94,909	274,827	38,912	4,064	317,803	22.0	313,739
1928			198,806	102,146	300,954	58,356	4,321	363,631	23.2	359,310
1929			223,172	116,521	339,693	68,382	5,108	413,183	21.5	408,045
1930	200,615	38,588	239,173	111,226	350,399	59,118	6,002	415,519	21.4	409,517
1931	208,262	41,347	249,609	98,030	347,639	40,469	4,048	392,156	23.3	388,108
1932	223,377	44,000	267,377	81,268	348,645	32,588	2,893	384,123	24.7	381,230
1933	209,699	42,582	252,281	83,166	335,447	28,651	3,821	368,119	25.7	364,298
1934	215,029	45,287	260,316	101,569	361,885	28,356	4,016	394,257	22.3	390,241
1935	233,940	49,386	283,326	113,736	397,062	27,225	3,787	428,074	22.4	424,287
1936	251,617	53,693	305,310	138,061	443,361	28,397	3,681	475,439	22.0	471,758
1937	273,577	57,161	330,738	161,298	492,036	31,199	4,294	527,529	22.0	523,235
1938	273,070	56,247	329,317	138,713	468,030	29,628	2,892	500,550	21.8	497,658
1939	287,600	58,494	346,094	185,784	501,848	28,610	3,263	533,721	21.6	530,458
1940	322,660	64,944	387,604	N/A	N/A	N/A	N/A	590,826	22.1	N/A

Note: * Included with Misc. Industrial figures.

Source: U. S. Bureau of Mines - Minerals Yearbooks.

Table for Chart No. 5

AVERAGE PRICES

AVERAGE REVENUE PER M.C.F. FROM NATURAL GAS CONSUMED IN U.S.A. AT POINTS OF CONSUMPTION

	Domestic	Commercial	Domestic & Commercial	Miscellaneous Industrial	Domestic, Commercial & Misc. Industrial	Field Use	Carbon Black	Average of all Consumption
	----------	----------	----------	Cents per M.C.F.	----------	----------	----------	----------
1929	N/A	N/A	62.0	19.7	35.7	9.7	1.9	21.6
1930	67.8	47.8	63.5	19.3	36.8	8.2	2.0	21.4
1931	70.7	47.8	65.5	18.3	37.9	7.1	2.3	23.3
1932	74.8	50.4	69.3	17.3	40.7	6.2	1.7	24.7
1933	74.0	49.8	68.4	16.5	38.5	5.9	2.0	23.7
1934	74.6	49.6	68.6	16.8	36.9	5.1	1.7	22.3
1935	74.6	49.5	68.5	16.8	36.5	4.7	1.6	22.4
1936	73.3	48.1	67.1	17.2	35.2	4.6	1.3	22.0
1937	73.6	48.7	67.6	17.5	34.9	4.8	1.3	21.9
1938	74.2	49.2	68.3	16.8	35.7	4.5	0.9	21.8
1939	73.5	49.4	67.9	16.6	34.7	4.2	0.9	21.6
1940	73.0	49.2	67.5	N/A	N/A	N/A	N/A	22.1

AVERAGE PRICE PER M.C.F. RECEIVED BY PANHANDLE EASTERN PIPE LINE COMPANY

	Total Gas Sales M.C.F.	Gross Revenue $	Cents per M.C.F.
1934	13,497,649	2,844,935	21.08
1935	15,979,390	3,371,883	21.10
1936	26,747,031	5,815,682	21.74
1937	40,806,962	9,212,822	22.58
1938	41,185,762	9,540,968	23.17
1939	49,233,072	11,461,588	23.28
1940	56,394,762	13,167,242	23.35

Source - Compiled by Standard & Poor's Corp. from Moody's Public Utility Manual.

Table for Chart No. 6

PANHANDLE EASTERN PIPE LINE COMPANY

NATURAL GAS SALES BY STATES

FOR THE YEARS 1934 TO 1940, INCLUSIVE

	Michigan	Illinois	Indiana and Ohio	Missouri	Texas Oklahoma & Kansas	(1) Total	Industry Consumption excluding Field use and Carbon Black
				M.C.F.			
1934	None	4,738,430	1,726,349	4,134,458	2,798,412	13,397,649	980,513,000
1935	None	5,896,948	2,389,634	4,785,446	2,924,942	15,979,390	1,087,890,000
1936	3,957,058	7,257,283	5,229,747	6,803,511	2,504,332	25,751,931	1,258,629,000
1937	15,969,598	7,554,821	7,639,485	7,276,270	2,366,788	40,806,962	1,420,636,000
1938	16,032,297	6,601,142	8,739,715	6,857,223	2,955,385	41,185,762	1,309,944,000
1939	18,391,984	7,398,929	12,463,121	8,009,919	2,479,149	49,233,072	1,445,611,000
1940	22,281,273	8,557,633	14,574,370	8,980,840	2,820,646	56,394,762	1,598,010,000

Note: * Sales of gas in Ohio commenced in year 1939 and amounted to 50,018 M.C.F. for 1939 and 150,693 M.C.F. in 1940.

Sources: (1) S.E.C. Re Taxation Statements, filed July 7, 1939 (page 5) and November 18, 1940 (amended) (page 7).
(2) Bureau of Mines - Minerals Yearbook.

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Table for Chart No. 7

TREND OF GROSS REVENUE

PANHANDLE EASTERN PIPE LINE COMPANY VS. OTHER PIPE LINE COMPANIES

AND THE NATURAL GAS INDUSTRY

1934-1940 BOTH INCLUSIVE

	Panhandle Eastern Pipe Line Co.	Cities Service Gas Co.	El Paso Natural Gas Co.	Interstate Natural Gas Co., Inc.	Memphis Natural Gas Co.	Mississippi River Fuel Corp.	Northern Natural Gas Co.	Southern Natural Gas Co.	Total Other Pipe Line Cos.	(6) * Total Industry
1934	3,048,516(1)	12,074,448	2,029,770(2)	3,777,198	1,726,392	3,674,780	6,401,623(1)	3,307,973(4)	32,992,184	361,885,000
1935	3,611,965	12,673,921	2,327,209(2)	4,549,567	1,993,404	4,545,055	7,952,377(1)	4,203,837(4)	38,245,370	397,062,000
1936	6,037,868	14,195,519	3,234,197	5,275,337	2,389,943	5,576,618	9,037,906(3)	5,650,083	45,359,603	443,361,000
1937	9,662,909	16,104,846	4,684,083	5,860,224	2,740,909	6,218,134	9,775,336(3)	7,096,763	52,480,295	492,036,000
1938	9,907,129	16,432,397(1)	4,923,900	5,561,494	2,780,307	5,230,670	9,959,978(3)	6,899,348(5)	51,788,094	468,030,000
1939	11,996,769	15,069,685	5,879,466	5,860,040	3,124,171	5,976,843	11,194,470(3)	8,267,289(5)	55,374,964	501,848,000
1940	13,536,453	17,425,302(1)	6,380,311	6,469,792	3,230,883	6,799,470	12,857,003(3)	8,952,889(5)	63,115,650	N/A
	----------In Relatives 1934 = 100----------									
1934	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1935	118.48	104.98	114.65	120.45	115.47	123.68	124.22	127.08	115.92	109.72
1936	198.06	117.57	159.34	139.66	138.44	151.75	141.18	170.80	137.49	122.51
1937	316.97	133.38	230.77	155.15	158.77	169.21	152.70	214.54	159.07	135.96
1938	324.98	136.09	242.58	147.24	161.05	142.34	155.59	208.57	156.97	129.33
1939	393.53	124.81	289.66	155.14	180.97	162.73	174.87	249.92	167.84	138.68
1940	444.00	144.32	314.34	171.29	187.15	185.03	200.84	300.88	191.30	N/A

Source: Companies' annual reports except as indicated:
(1) Moody's Public Utility Manual, 1941
(2) S.E.C. Registration Statement, filed 1936 (Form A-2)
(3) " " " " 1941 (Form A-2)
(4) " " " " 1936 (Form A-1)
(5) " " " " 1941 (Form A-2)
(6) U.S. Bureau of Mines - Minerals Yearbook

Note: * Represents value at points of consumption of natural gas sold to domestic, commercial and miscellaneous industrial consumers (excluding gas consumed in field operations and in carbon-black manufacture).

OPERATING RATIO OF PANHANDLE EASTERN PIPE LINE COMPANY

COMPARED WITH OTHER PIPE LINE COMPANIES

EXCLUSIVE OF TAXES

1934 - 1940

	Panhandle Eastern Pipe Line Co.	Cities Service Gas Co.	El Paso Natural Gas Co.	Interstate Natural Gas Co., Inc.	Memphis Natural Gas Co.	Mississippi River Fuel Corp.	Northern Natural Gas Co.	Southern Natural Gas Co.	Total Other Pipe Line Cos.
Gross Revenues									
1934	3,048,518 (1)	12,074,448	2,028,770 (2)	3,777,186	1,726,392	3,674,780	6,401,623 (1)	3,307,873 (4)	32,992,184
1935	3,811,665	12,673,921	2,327,209 (2)	4,549,567	1,993,404	4,540,055	7,952,377 (1)	4,203,837 (4)	38,245,470
1936	6,037,868	14,195,518	3,234,187	5,275,337	2,369,943	5,576,618	9,037,806 (1)	5,650,063	45,359,603
1937	8,662,809	16,104,845	4,684,083	5,868,224	2,740,809	6,216,134	9,775,336 (3)	7,096,763	52,460,295
1938	8,807,128	16,432,389 (1)	4,923,800	5,561,494	2,760,307	5,230,870	9,358,978 (3)	6,848,348 (5)	51,766,094
1939	11,996,769	15,069,685	5,879,466	5,860,040	3,124,171	5,978,843	11,194,470 (3)	8,267,289 (5)	55,374,964
1940	13,535,493	17,425,302 (1)	6,380,311	6,468,782	3,230,683	6,799,470	12,867,003 (3)	8,952,889 (5)	63,115,650
Operating Expenses, Exclusive of Taxes									
1934	1,774,210 (1)	5,909,974	872,186 (2)	2,585,491	1,223,244	2,867,342	4,[illegible] (1)	1,431,152 (4)	19,442,600
1935	1,832,606	5,834,861	1,061,163 (2)	2,803,916	1,538,000	3,165,710	4,890,834 (1)	1,815,573 (4)	21,178,667
1936	2,588,722	6,842,860	1,387,287	2,806,784	1,632,518	3,871,371	4,973,634 (3)	3,128,895	24,445,150
1937	3,898,876	8,162,517	1,969,125	2,704,286	1,784,160	3,971,128	5,099,821 (3)	3,742,794	27,447,829
1938	4,442,002	8,251,639 (1)	2,066,187	2,680,740	1,823,510	3,885,871	5,312,114 (3)	3,715,263 (5)	27,835,584
1939	4,898,910	7,402,863	2,475,829	2,857,674	2,260,536	4,387,080	5,732,667 (3)	4,376,936 (5)	29,583,636
1940	5,210,765	7,802,783 (1)	2,673,112	3,288,070	2,304,765	4,830,033	6,228,579 (3)	5,197,947 (5)	32,388,219
Operating Ratios									
1934	58.20%	48.95%	42.97%	67.66%	70.86%	80.75%	70.03%	43.26%	58.93%
1935	50.74	46.04	45.60	62.73	77.15	70.09	61.50	43.19	55.38
1936	42.86	48.21	42.89	53.14	68.81	69.04	55.03	53.60	53.89
1937	45.00	50.68	42.04	46.11	65.46	63.93	52.17	52.74	52.30
1938	44.84	50.22	41.96	48.20	66.06	74.28	53.33	53.25	53.75
1939	40.84	49.12	42.11	50.47	72.36	73.36	51.21	52.94	53.44
1940	38.50	44.76	41.90	50.82	71.33	72.51	48.42	51.82	51.21

Source: Companies' annual reports except as indicated:
(1) Moody's Public Utility Manual, 1941
(2) S.E.C. Registration Statement, filed 1936 (Form A-2)
(3) " " " " 1941 (" A-2)
(4) " " " " 1936 (" A-1)
(5) " " " " 1941 (" A-2)

OPERATING RATIO OF PANHANDLE EASTERN PIPE LINE COMPANY

COMPARED WITH OTHER PIPE LINE COMPANIES

INCLUDING TAXES

1934 - 1940

	Panhandle Eastern Pipe Line Co.	Cities Service Gas Co.	El Paso Natural Gas Co.	Interstate Natural Gas Co., Inc.	Memphis Natural Gas Co.	Mississippi River Fuel Corp.	Northern Natural Gas Co.	Southern Natural Gas Co.	Total Other Pipe Line Cos.
Gross Revenues									
1934	3,048,518 (1)	12,074,448	2,029,770 (2)	3,777,198	1,726,392	3,674,780	6,401,623 (1)	3,307,973 (4)	32,992,384
1935	3,611,865	12,673,921	2,327,209 (2)	4,549,567	1,993,404	4,545,055	7,952,377 (1)	4,203,837 (4)	38,245,370
1936	6,037,868	14,195,519	3,234,197	5,275,337	2,389,943	5,576,618	9,037,906 (3)	5,650,983	45,359,603
1937	9,662,909	16,104,846	4,684,083	5,860,224	2,740,909	6,218,134	9,775,336 (3)	7,096,763	52,480,295
1938	9,907,129	16,432,397 (1)	4,923,900	5,561,494	2,760,307	5,230,670	9,959,978 (3)	6,899,348 (5)	51,768,094
1939	11,996,769	15,069,685	5,879,466	5,860,040	3,724,171	5,979,843	11,194,470 (3)	8,267,289 (5)	55,374,964
1940	13,535,453	17,425,302 (1)	6,380,311	6,469,792	3,230,883	6,799,470	12,857,003 (3)	9,952,889 (5)	63,115,850
Operating Expenses, Including Taxes									
1934	2,044,414 (1)	7,008,488	983,949 (2)	2,904,825	1,382,426	2,967,342	4,558,281 (1)	1,637,950 (4)	21,443,221
1935	2,117,204	6,843,551	1,167,182 (2)	3,345,985	1,701,732	3,487,234	5,170,624 (1)	2,029,647 (4)	23,745,895
1936	3,178,427	8,200,644	1,560,732	3,528,537	1,880,750	3,988,291	6,063,059 (3)	3,417,391	26,627,404
1937	4,803,637	9,584,852	2,371,950	3,480,313	2,077,374	4,365,473	6,156,352 (3)	4,458,659	32,494,973
1938	5,533,316	9,512,317 (1)	2,542,233	3,522,024	2,202,198	4,220,365	6,456,429 (3)	4,421,548 (5)	32,877,134
1939	6,394,674	8,936,428	3,183,464	3,854,230	2,563,069	4,787,579	6,901,996 (3)	5,285,725 (5)	35,512,481
1940	7,821,235	10,426,061 (1)	3,639,288	4,499,424	2,862,715	5,535,077	8,518,878 (3)	6,785,977 (5)	42,067,410
Operating Ratios									
1934	67.06%	58.04%	48.48%	76.90%	80.08%	80.75%	71.20%	49.52%	64.98%
1935	58.62	54.00	50.15	73.55	85.37	76.72	65.02	48.28	62.09
1936	52.64	57.77	48.26	66.85	78.69	71.52	66.97	60.48	63.11
1937	49.71	59.52	50.64	59.39	75.79	70.21	62.98	62.83	61.92
1938	55.86	57.89	51.63	63.32	79.21	80.69	64.82	64.09	63.46
1939	53.30	59.30	54.15	65.77	82.04	80.06	61.66	63.94	64.13
1940	57.78	59.83	57.04	69.55	82.41	81.40	66.26	68.16	66.65

Source: Companies' annual reports except as indicated:
(1) Moody's Public Utility Manual, 1941
(2) S.E.C. Registration Statement, filed 1936 (Form A-2)
(3) " " " " 1941 (" A-2)
(4) " " " " 1936 (" A-1)
(5) " " " " 1941 (" A-2)

Table for Chart No. 9

PANHANDLE EASTERN PIPE LINE COMPANY

TREND OF REVENUE AND EXPENSES

	Gross Revenues	Operating Expenses (Excluding Taxes)	Taxes: State, Local & Misc. Federal	Taxes: Federal Income	Taxes: Federal Excess Profits	Taxes: Total Taxes	Net Operating Income
	(IN DOLLARS)						
1934	3,048,818	1,774,810	270,204	-	-	270,204	1,004,104
1935	3,611,866	1,832,606	284,598	-	-	284,598	1,494,661
1936	6,037,868	2,888,138	360,294	230,000	-	590,294	2,859,441
1937	9,662,909	3,898,876	412,961	492,000	-	904,961	4,859,072
1938	9,907,129	4,442,002	577,888	513,426	-	1,091,314	4,373,813
1939	11,996,769	4,898,910	676,478	820,286	-	1,496,764	5,602,095
1940	13,536,483	5,210,768	612,872	1,436,598	561,000	2,610,470	5,714,218
	(% OF GROSS REVENUE)						
1934	100.00%	58.20%				8.86%	32.94%
1935	100.00	50.74				7.88	41.38
1936	100.00	42.86				9.78	47.36
1937	100.00	40.36				9.37	50.28
1938	100.00	44.84				11.02	44.14
1939	100.00	40.84				12.47	46.69
1940	100.00	38.50				19.29	42.21

Source - 1934 figures from Moody's Public Utility Manual 1941
subsequent years from Company's Annual Reports to Stockholders

Table for Chart No. 10

PANHANDLE EASTERN PIPE LINE COMPANY

PERCENT EARNED ON INVESTED CAPITAL (BASED UPON CAPITAL STRUCTURE)

	1934	1935	1936	1937	1938	1939	1940	Average 1934-1940
Invested Capital Based upon Capital Structure								
Debt:								
20 Year S. F. Mtge. "A" 6s, 1950	19,400,000	18,200,000	17,589,000	-	-	-	-	7,884,143
Promissory Notes, 6s, 1950	9,891,000	9,891,000	-	-	-	-	-	2,826,000
Leasehold Purchase Obligations	90,595	-	-	-	62,664	41,436	30,149	32,120
1st Mtge. & 1st Lien "A" 4s, 1952	-	-	-	23,646,000	23,500,000	23,000,000	22,500,000	13,220,857
Bank loans, due 1939	-	-	-	2,000,000	2,000,000	-	-	571,429
Total Debt	29,381,595	28,091,000	17,589,000	25,646,000	25,562,664	23,041,436	22,530,149	24,534,549
Less: Debt Discount & Expense	1,601,091	1,406,686	1,267,226	3,173,881	2,854,205	2,639,358	2,229,323	2,153,109
Net Debt	27,780,504	26,684,314	16,321,774	22,372,119	22,708,459	20,402,084	20,300,826	22,381,440
Preferred Stock:								
$6 Cum. Class A, Part. & Redeemable (No par)	-	-	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	7,142,857
$6 Cum. Class B, Non-Part. & Non-Redeemable (No par)	-	-	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	714,286
Total Preferred Stock	-	-	11,000,000	11,000,000	11,000,000	11,000,000	11,000,000	7,857,143
Common Stock & Surplus:								
Common Stock (No par)	1,199,000	1,199,000	18,216,300	18,216,300	18,216,300	20,184,178	20,184,178	13,916,464
Capital Surplus	29,285,867	18,582,942	46,365)	3,768,817	(46,365	-	-	5,960,622
Earned Surplus	(3,354,773)	(3,797,090)	1,672,455)		(4,289,364	6,860,428	7,922,987	1,941,908
Total Common Stock & Surplus	17,130,094	15,984,852	19,935,120	21,979,117	22,552,029	27,044,603	28,107,142	21,818,994
Total Invested Capital	44,910,598	42,669,166	47,256,894	55,351,236	56,260,488	58,546,687	59,407,968	52,057,577
Net Operating Income	1,004,104	1,4[illegible],661	2,859,441	4,859,072	4,373,813	5,602,095	5,714,818	3,701,088
Percent Earned on Invested Capital	2.24%	3.50%	6.08%	8.78%	7.77%	9.57%	9.62%	7.11%

Source - 1934 figures from Moody's Public Utility Manual 1941.
Subsequent years from Company's Annual Report to Stockholders.

Table for Chart No. 11

PANHANDLE EASTERN PIPE LINE COMPANY

PERCENT EARNED ON INVESTED CAPITAL (BASED UPON NET PROPERTY, INTANGIBLES AND WORKING CAPITAL)

	(2) 1934	(1) 1935	(2) 1936	(2) 1937	(2) 1938	(2) 1939	(2) 1940	Average 1934-1940
Invested Capital Based upon Net Property Account, Intangibles and Working Capital								
Property, Plant and Equipment:	42,562,757	42,350,377	46,643,078	58,060,015	58,547,870	59,479,728	64,854,956	53,214,112
Less: Retirement, Renewal, Depreciation & Amortization Reserves	1,915,871	2,560,560	3,296,640	4,104,956	5,736,427	7,598,278	9,189,501	4,914,605
Net Property, Plant and Equipment	40,646,886	39,789,817	43,346,438	53,955,059	52,811,443	51,881,450	55,666,455	48,299,507
Intangibles (Gas Sales & Purchase Contracts)	3,053,392	3,268,092	3,516,175	2,917,171	2,666,927	2,358,883	2,051,434	2,833,721
Working Capital:								
Current Assets	1,260,627	1,645,360	2,110,052	2,764,217	2,675,261	6,919,327	5,377,003	3,235,978
Less: Current Liabilities	1,335,464	1,921,687	1,696,970	4,158,583	1,694,977	2,105,892	3,171,906	2,297,925
Net Working Capital	(74,837)	(376,327)	413,082	(1,394,366)	980,284	4,813,435	2,205,097	938,052
Total Invested Capital	43,625,441	42,681,582	47,275,695	55,477,864	56,458,654	59,053,538	59,921,986	52,070,680
Net Operating Income	1,004,104	1,494,661	2,859,441	4,859,072	4,373,813	5,602,095	5,714,218	3,701,058
Percent Earned on Invested Capital	2.30%	3.50%	6.05%	8.76%	7.75%	9.49%	9.54%	7.11%

Source: (1) Moody's Public Utility Manual 1941.
(2) Company's Annual Reports.

Parentheses indicate red figures.

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Table for Chart No. 12

PANHANDLE EASTERN PIPE LINE COMPANY

RETURN TO COMMON STOCKHOLDERS 1934 TO 1940 BOTH INCLUSIVE

	1934	1935	1936	1937	1938	1939	1940	Average 1934-1940
Common Stock	1,199,000	1,199,000	18,216,300	18,216,300	18,216,300	20,184,175	20,184,175	13,916,464
Surplus, Capital and Earned	15,931,094	14,786,852	1,718,820	3,762,817	4,335,728	6,860,428	7,983,967	7,902,530
Total Common Stock and Surplus	17,130,094	15,984,852	19,935,120	21,979,117	22,552,028	27,044,603	28,167,142	21,818,994
Dividend Return to Common Stock	None	None	None	364,328	1,699,447	1,132,236	2,427,051*	794,026
Return on Book Value of Common Stock and Surplus	None	None	None	1.66%	7.27%	4.19%	8.62%	3.64%

* Of this amount, $1,214,051 was paid on January 31, 1940 to holders of record January 18, 1940 as a special dividend out of 1939 earnings. If this amount is included in 1939 the % return would be 5.68% for that year and 4.31% for 1940.

Note: Data for 1934 and 1935 taken from Moody's Public Utility Manuals; subsequent years, from published annual reports.

Table for Chart No. 13

PANHANDLE EASTERN PIPE LINE COMPANY

CONSOLIDATED STATEMENT OF PROFIT & LOSS FOR THE 12 MONTHS ENDED JUNE 30, 1941

	As reported by Company	As adjusted by S. & P. Corp. to Estimate Federal Taxes at rates levied in Revenue Act of 1941
Gross Revenues	14,336,448	14,336,448
Operating Expenses (excluding taxes):		
Operations	2,902,352	2,902,352
Maintenance	294,444	294,444
Provision for Depreciation, Depletion and Amortization	2,316,560	2,316,560
Total Operating Expenses (excluding taxes)	5,513,356	5,513,356
Net Operating Income (Before Taxes and Fixed Charges)	8,823,092	8,823,092
Taxes:		
State, Local and Miscellaneous Federal	649,017	649,017
Federal Normal Income and Surtax	(A) 1,602,200	(B) 1,486,000
Federal Excess Profits	(A) 756,900	(B) 1,878,000
Total Taxes	3,008,117	4,012,017
Net Operating Income (After Taxes and Before Fixed Charges)	5,814,975	4,811,075
Fixed Charges:		
Interest on Funded Debt	751,924	751,924
Other Interest Deductions (net)	(28,456)	(28,456)
Amortization of Debt Discount and Expense	306,536	306,536
Total Fixed Charges	1,030,004	1,030,004
Net Income	4,784,971	3,781,071

Notes:- (A) Computed without regard to special deductions resulting from the refinancing consummated during February 1941 and without making provision for possible increases in rates or otherwise during 1941.
(B) Computed without regard to special deductions resulting from the refinancing consummated during February 1941 but allowing for Federal income, surtax and excess profits tax at rates levied in Revenue Act of 1941.

Parentheses indicate red figures.

Source: Company's Report of June 30, 1941.
Estimated Figures by Standard & Poor's Corp.

Table for Chart No. 14

PANHANDLE EASTERN PIPE LINE COMPANY

PERCENT EARNED ON INVESTED CAPITAL - 12 MONTHS ENDED JUNE 30 1941

	As of June 30 1941
	$
Invested Capital based on Net Property, Intangibles and Working Capital	
Net Property:	
Property, Plant and Equipment	64,826,108
Less - Retirement renewal, depreciation and amortization reserves	10,135,514
Net Property	54,690,593
Working Capital:	
Current assets	9,810,986
Current liabilities	5,149,111
Net working capital	4,661,875
Intangibles:	
Gas Sales and Purchase Contracts	1,863,565
Total Invested Capital	61,216,031
Net Operating Income (12 months ended June 30 1941)	
Based on Federal Income and Excess Profits Tax computed at rates levied by Second Revenue Act of 1940	5,814,975
Based on Federal Income and Excess Profits Tax computed at rates levied by Revenue Act of 1941	4,811,073
Percent Earned on Invested Capital	
Based on Earnings computed with taxes at 1940 rates	9.50%
Based on Earnings computed with taxes at 1941 rates	7.86%

* Does not give effect to special non-recurring deductions allowable as a result of refinancing in February 1941.

Source: Company's Report of June 30 1941
Estimated figure by Standard & Poor's Corp.

Table for Chart No. 15

PANHANDLE EASTERN PIPE LINE COMPANY

PERCENT EARNED ON INVESTED CAPITAL IN THE TWELVE MONTHS ENDED JUNE 30 1941

	As of June 30 1941
Invested Capital based upon Capital Structure	
Debt:	
1st Mtg & 1st Lien S.F. "B" 3's, 1960	12,000,000
1st Mtg & Trust Lien "A" 1.65-2.30%, 1946-50	6,250,000
Serial Notes "A", "B", "C" & "D" 0.75-1.50%, 1942-45	5,000,000
Other Long-term Debt	17,544
Total Debt	23,267,544
Less - Debt discount and expense	2,101,986
Net Debt	21,165,558
Preferred Stock - $6 Cumulative (no par):	
Class A - participating and redeemable	10,000,000
Class B - nonparticipating and nonredeemable	1,000,000
Total Preferred Stock	11,000,000
Common Stock and Surplus:	
Common stock (no par)	20,184,175
Earned surplus	9,074,120
Total Common Stock and Surplus	29,258,295
Total Invested Capital	61,423,853
* NET OPERATING INCOME (12 months ended June 30 1941):	
Based upon Federal Income and Excess Profits Taxes computed at rates levied by Second Revenue Act of 1940	5,814,978
Based upon Federal Income and Excess Profits Taxes computed at rates levied by Revenue Act of 1941	4,811,075
PERCENT EARNED ON INVESTED CAPITAL:	
Based upon Earnings computed with Taxes at 1940 rates	9.47%
Based upon Earnings computed with Taxes at 1941 rates	7.83%

NOTES: (*) Does not give effect to special non-recurring deductions allowable as a result of refinancing in February 1941.

Source: Company's Report of June 30 1941.
Estimated figures by Standard & Poor's Corp.

Table for Chart No. 1b
Page 1 of 2

PANHANDLE EASTERN PIPE LINE COMPANY

COMPUTATION OF WEIGHTED AVERAGE COST RATE OF ALL BOND ISSUES 1920 - JUNE 30, 1941

Year	Average Rate %	Weight	Weighted Percent %
1920	7.20	1	7.20
1921	6.66	2	13.32
1922	6.80	3	20.40
1923	6.79	4	27.16
1924	6.79	5	33.95
1925	6.78	6	40.68
1926	7.20	7	50.40
1927	4.68	8	37.44
1928	4.68	9	41.94
1939	4.68	10	46.80
1940	4.66	11	51.26
1941	2.3[illegible]	12	32.88
Totals		76	403.47
Average Percent			5.17

Source: Compiled by Stardard and Poor's Corp. from data appearing in Moody's Manuals, Company's Published Annual Reports and Bond Indentures.

PANHANDLE EASTERN PIPE LINE COMPANY

INDICATED CAPITAL COSTS ON ALL BOND ISSUES

1930 - 1940

	Yield to Maturity Based Upon Net Price to Co.	1930 $	1931 $	1932 $	1933 $	1934 $	1935 $	1936 $	1937 $	1938 $	1939 $	1940 $
Bonds Outstanding December 31												
20 Yr. S.F. Mtge. Gold Series A 6's, 1950	7.20	20,000,000	20,000,000	20,000,000	19,400,000	19,400,000	18,200,000	17,589,000				
6% Promissory Notes, due 1950	6.00		7,920,000	9,891,000	9,891,000	9,891,000	9,891,000					
6% Promissory Notes 1st Mtge. & 1st Lien Series A S.F. 4's, 1952	4.66								23,546,000	23,500,000	23,000,000	22,500,000
Total		20,000,000	27,920,000	29,891,000	29,291,000	29,291,000	28,091,000	17,589,000	23,546,000	23,500,000	23,000,000	22,500,000
Annual Interest Requirement Based on Yield to Maturity												
20 Yr. S.F. Mtge. Gold Series A 6's, 1950		1,440,000	1,440,000	1,440,000	1,396,800	1,396,800	1,310,400	1,266,408				
6% Promissory Notes, due 1950			475,200	593,460	593,460	593,460	593,460					
6% Promissory Notes 1st Mtge. & 1st Lien Series A S.F. 4's, 1952									1,097,244	1,095,100	1,071,800	1,048,500
Total		1,440,000	1,915,200	2,033,460	1,990,260	1,990,260	1,903,860	1,266,408	1,097,244	1,095,100	1,071,800	1,048,500
Average Cost of Capital		7.20%	6.86%	6.80%	6.79%	6.79%	6.78%	7.20%	4.66%	4.66%	4.66%	4.66%

Source: Compiled by Standard & Poor's Corp. from data appearing in Moody's Manuals, Company's Published Annual Reports and Mortgage Trust Indentures.

PANHANDLE EASTERN PIPE LINE COMPANY

PROJECTION OF AVERAGE INTEREST COST, DEBT RETIREMENT AND AMOUNTS TO BE OUTSTANDING OF DEBT ISSUED IN THE 1941 REFINANCING

Issue	Interest Rate	Scheduled Par Amount	Retirement date Nov. 1	Effective Yield Price on which Based	Effective Yield Rate	Funds available to Company: Amount	Length of Time	Equivalent Amount for 1 year (5 x 8)	Total Cost of Capital Based on Effective Yield Rate (10-9 x 8)		Schedule of Debt Retirements: Amount due on Nov. 1	Maturity Yield based on Price to Company	Schedule of Outstanding Debt as of Nov. 1
1	2	3	4	5	6	7	8	9	10				
1st Mtge A 1st Lien B SF 3s 1960	3.00%	1,200,000	1951	99.02	3.11%	1,188,240	11 yrs.	13,070,640	406,497	1941			23,280,000
		1,200,000	1952		3.10	1,188,240	12	14,258,880	442,028	1942	1,280,000	0.78%	22,000,000
		1,200,000	1953		3.09	1,188,240	13	15,447,120	477,316	1943	"	1.00	20,720,000
		1,200,000	1954		3.09	1,188,240	14	16,635,360	514,033	1944	"	1.28	19,500,000
		1,200,000	1955		3.08	1,188,240	15	17,823,600	548,987	1945	"	1.50	18,250,000
		1,200,000	1956		3.08	1,188,240	16	19,011,840	585,585	1946	"	1.68	17,000,000
		1,200,000	1957		3.07	1,188,240	17	20,200,080	620,142	1947	"	1.88	15,750,000
		1,200,000	1958		3.07	1,188,240	18	21,388,320	656,621	1948	"	2.00	14,500,000
		1,200,000	1959		3.07	1,188,240	19	22,576,560	693,100	1949	"	2.18	13,250,000
		1,200,000	1960		3.07	1,188,240	20	23,764,800	729,579	1950	"	2.30	12,000,000
										1951	1,200,000	3.11	10,800,000
										1952	"	3.10	9,600,000
										1953	"	3.09	8,400,000
										1954	"	3.09	7,200,000
										1955	"	3.08	6,000,000
										1956	"	3.08	4,800,000
										1957	"	3.07	3,600,000
										1958	"	3.07	2,400,000
										1959	"	3.07	1,200,000
										1960	"	3.07	
		12,000,000				11,882,400	155	184,177,200	5,673,848				
Average Annual Interest Cost of above issue									3.08%				
1st Mtge A 1st Lien A 1.65 2.50% due 1946 to 1960	1.65%	1,250,000	1946	100	1.65%	1,250,000	6 yrs.	7,500,000	123,750				
	1.88	1,250,000	1947		1.88	1,250,000	7	8,750,000	261,875				
	2.00	1,250,000	1948		2.00	1,250,000	8	10,000,000	200,000				
	2.18	1,250,000	1949		2.18	1,250,000	9	11,250,000	241,875				
	2.30	1,250,000	1950		2.30	1,250,000	10	12,500,000	287,500				
		6,250,000				6,250,000	40	50,000,000	1,015,000				
Serial Notes 0.78% to 1.80% due 1942 to 1946	0.78%	1,250,000	1942	100	0.78%	1,250,000	2	2,500,000	19,750				
	1.00	1,250,000	1943		1.00	1,250,000	3	3,750,000	37,500				
	1.28	1,250,000	1944		1.28	1,250,000	4	5,000,000	64,000				
	1.50	1,250,000	1945		1.50	1,250,000	5	6,250,000	93,750				
		5,000,000				5,000,000	14	17,500,000	215,000				
		23,250,000				23,132,400		251,677,200	6,903,348				
Average Annual Interest Cost of Long Term Capital									2.74%				

Source: Compiled by Standard & Poor's Corp.

PANHANDLE EASTERN PIPE LINE COMPANY

COST OF FINANCING AS INDICATED BY SALE OF $20,000,000 TWENTY-YEAR SINKING FUND MORTGAGE GOLD BONDS SERIES A, 6'S, DUE OCTOBER 1, 1950

DATE SOLD - OCT. 1, 1930 - PRICE RECEIVED 90.

SINKING FUND: DESIGNED TO RETIRE $500,000 PAR AMOUNT SEMI-ANNUALLY @ 105 FROM FEB. 1, 1933 TO AND INCLUDING AUG. 21, 1945, AND THE SAME PAR AMOUNT THEREAFTER AT PRICES OF 104 FOR 1946, 103 FOR 1947, 102 FOR 1948, 101 FOR 1949, AND 100 for 1950

Scheduled Retirements			Effective Yield Rate Based upon Price of 90.	Funds Available to Company			Total Cost of Capital Based on Effective Yield Rate
Par Amount	Date	Price		Amount	Length of Time	Equivalent Amount for 1 yr.	
1	2	3	4	5	6	7=5x6	8=7x4
500,000	Apr. 1, 1933	105	12.88%	270,000	2½ yrs.	675,000	84,918
500,000	Oct. 1, 1933	105	11.47	270,000	3	810,000	92,907
500,000	Apr. 1, 1934	105	10.73	270,000	3½	945,000	101,399
500,000	Oct. 1, 1934	105	10.15	270,000	4	1,080,000	109,620
500,000	Apr. 1, 1935	105	9.71	270,000	4½	1,215,000	117,977
500,000	Oct. 1, 1935	105	9.36	270,000	5	1,350,000	126,360
500,000	Apr. 1, 1936	105	9.07	270,000	5½	1,485,000	134,690
500,000	Oct. 1, 1936	105	8.83	270,000	6	1,620,000	143,046
500,000	Apr. 1, 1937	105	8.63	270,000	6½	1,755,000	151,457
500,000	Oct. 1, 1937	105	8.46	270,000	7	1,890,000	159,894
500,000	Apr. 1, 1938	105	8.31	270,000	7½	2,025,000	168,278
500,000	Oct. 1, 1938	105	8.18	270,000	8	2,160,000	176,688
500,000	Apr. 1, 1939	105	8.07	270,000	8½	2,295,000	185,207
500,000	Oct. 1, 1939	105	7.97	270,000	9	2,430,000	193,671
500,000	Apr. 1, 1940	105	7.88	270,000	9½	2,565,000	202,182
500,000	Oct. 1, 1940	105	7.80	270,000	10	2,700,000	210,600
500,000	Apr. 1, 1941	105	7.73	270,000	10½	2,835,000	219,146
500,000	Oct. 1, 1941	105	7.66	270,000	11	2,970,000	227,502
500,000	Apr. 1, 1942	105	7.60	270,000	11½	3,105,000	235,980
500,000	Oct. 1, 1942	105	7.54	270,000	12	3,240,000	244,296
500,000	Apr. 1, 1943	105	7.49	270,000	12½	3,375,000	252,788
500,000	Oct. 1, 1943	105	7.45	270,000	13	3,510,000	261,495
500,000	Apr. 1, 1944	105	7.41	270,000	13½	3,645,000	270,095
500,000	Oct. 1, 1944	105	7.37	270,000	14	3,780,000	278,586
500,000	Apr. 1, 1945	105	7.33	270,000	14½	3,915,000	286,970
500,000	Oct. 1, 1945	105	7.30	270,000	15	4,050,000	295,650
500,000	Apr. 1, 1946	104	7.23	270,000	15½	4,185,000	302,576
500,000	Oct. 1, 1946	104	7.20	270,000	16	4,320,000	311,040
500,000	Apr. 1, 1947	103	7.14	270,000	16½	4,455,000	318,087
500,000	Oct. 1, 1947	103	7.12	270,000	17	4,590,000	326,808
500,000	Apr. 1, 1948	102	7.06	270,000	17½	4,725,000	333,585
500,000	Oct. 1, 1948	102	7.05	270,000	18	4,860,000	342,630
500,000	Apr. 1, 1949	101	7.00	270,000	18½	4,995,000	349,650
500,000	Oct. 1, 1949	101	6.98	270,000	19	5,130,000	358,074
500,000	Apr. 1, 1950	100	6.94	270,000	19½	5,265,000	365,391
9,500,000	Oct. 1, 1950	100	6.93	8,580,000	20	171,000,000	11,850,300
Total 20,000,000				18,000,000		274,950,000	19,789,480

Average Cost of Financing 7.20%

Source: Compiled by Standard & Poor's Corp. from data contained in the Mortgage Trust Indenture.

PANHANDLE EASTERN PIPE LINE COMPANY

COST OF FINANCING AS INDICATED BY SALE OF $24,000,000 FIRST MORTGAGE AND FIRST LIEN SERIES G, S.F. 4'S, 1962

DATE SOLD MARCH 1, 1937 - PRICE RECEIVED 95.02 - SINKING FUND: SEE * BELOW

Date 2/20	Carry Over From Previous Year	Contribution Flat Payment	Based on Interest	Total	Scheduled Retirements: Par Amount	Date 3/1	Retired to Date Since 1/1/41	Effective Yield Rate Based on Price of 95.02	Funds Available to Company: Amount	Length of Time	Equivalent Amount for 1 Yr.	Total Cost of Capital Based on Effective Yield Rate
	↓	↓	↓	↓	↓		↓		↓		↓	↓
	1=4-5	2	3	4	5	6	7	8	9	10	11=9x10	12=11x8
1938	-	500,000	-	500,000	500,000	1938	-	9.33%	475,100	1 yr.	475,100	44,327
1939	-	500,000	-	500,000	500,000	1939	-	6.70	475,100	2	950,200	63,663
1940	-	500,000	-	500,000	500,000	1940	-	5.83	475,100	3	1,425,300	83,095
1941	-	1,498,000	-	1,498,000	1,498,000	1941	1,498,000	5.40	1,423,400	4	5,693,600	307,454
1942	-	1,498,000	59,920	1,557,920	1,557,000	1942	3,055,000	5.14	1,479,461	5	7,397,305	380,221
1943	920	1,498,000	122,200	1,621,120	1,621,000	1943	4,676,000	4.97	1,540,274	6	9,241,644	459,310
1944	120	1,498,000	187,040	1,685,160	1,685,000	1944	6,361,000	4.85	1,601,087	7	11,207,609	543,569
1945	160	1,498,000	254,440	1,752,600	1,752,000	1945	8,113,000	4.76	1,664,750	8	13,318,000	633,937
1946	600	1,498,000	324,520	1,823,120	1,823,000	1946	9,936,000	4.68	1,732,215	9	15,589,935	729,609
1947	120	1,498,000	397,440	1,895,560	1,895,000	1947	11,831,000	4.63	1,800,699	10	18,006,990	833,691
1948	560	1,498,000	473,240	1,971,800	1,971,000	1948	13,802,000	4.58	1,872,844	11	20,601,284	943,539
1949	800	1,498,000	552,080	2,050,880	2,050,000	1949	15,852,000	4.54	1,947,910	12	23,374,920	1,061,221
1950	880	1,498,000	634,080	2,132,960	2,132,000	1950	17,984,000	4.51	2,025,826	13	26,335,738	1,187,742
1951	960	1,498,000	719,360	2,218,320	2,218,000	1951	20,202,000	4.48	2,107,544	14	29,505,616	1,321,852
1952	320	1,498,800	808,080	2,306,400	2,298,000	1952	22,500,000	4.46	2,163,560	15	32,753,400	1,460,802
Totals	5,440	19,476,000	4,532,400	24,013,840	24,000,000				22,804,600		215,675,941	10,064,032

Average Cost of Financing 4.66%

* Sinking Fund - Provides that company deposit with Corporate Trustee on or before the 20th day of February in each of the years 1938, 1939 and 1940 an amount of cash sufficient to redeem at their principal amount on next succeeding interest date $500,000 bonds of Series A and on or before the 20th day of February in each year thereafter, cash sufficient to redeem at their principal amount on next succeeding interest date (or, in the case of cash to be deposited on 20th day of February, 1952, sufficient to pay on March 1st, 1952) (1) $1,498,000 bonds of Series A and (2) principal amount of bonds of Series A equal to one year's interest on all Series A bonds theretofore required to be retired by operation of said sinking fund subsequent to the year 1940.

Source: Compiled by Standard & Poor's Corp. from data appearing in Moody's Manuals.

Table for Chart No. 17

PANHANDLE EASTERN PIPE LINE COMPANY

PROJECTION OF AVERAGE INTEREST COST, DEBT RETIREMENT AND AMOUNTS TO BE OUTSTANDING OF DEBT ISSUED IN THE 1961 REFINANCING

Issue	Interest Rate	Scheduled Par Amount	Retirement date Nov. 1	Effective Yield Price on which Based	Effective Yield Rate	Funds Available to Company: Amount	Length of Time	Equivalent Amount for 1 year (6-7 x 8)	Total Cost of Capital Based on Effective Yield Rate (10-9 x 6)		Schedule of Debt Retirements: Amount due on Nov. 1	Maturity Yield based on Price to Company	Schedule of Outstanding Debt as of Nov. 1
1	2	3	4	5	6	7	8	9	10				
1st Mtge A 1st Lien B SF 3s 1960	3.00%	1,200,000	1951	99.02	3.11%	1,188,240	11 yrs.	13,070,640	406,497	1941			23,250,000
		1,200,000	1952		3.10	1,188,240	12	14,258,880	442,028	1942	1,250,000	0.78%	22,000,000
		1,200,000	1953		3.09	1,188,240	13	15,447,120	477,316	1943	"	1.00	20,750,000
		1,200,000	1954		3.09	1,188,240	14	16,635,360	514,033	1944	"	1.25	19,500,000
		1,200,000	1955		3.08	1,188,240	15	17,823,600	548,967	1945	"	1.50	18,250,000
		1,200,000	1956		3.08	1,188,240	16	19,011,840	585,568	1946	"	1.65	17,000,000
		1,200,000	1957		3.07	1,188,240	17	20,200,080	620,162	1947	"	1.85	15,750,000
		1,200,000	1958		3.07	1,188,240	18	21,388,320	656,621	1948	"	2.00	14,500,000
		1,200,000	1959		3.07	1,188,240	19	22,576,560	693,100	1949	"	2.15	13,250,000
		1,200,000	1960		3.07	1,188,240	20	23,764,800	729,579	1950	"	2.30	12,000,000
										1951	1,200,000	3.11	10,800,000
										1952	"	3.10	9,600,000
		12,000,000				11,882,400	155	184,177,200	5,673,845	1953	"	3.09	8,400,000
										1954	"	3.09	7,200,000
Average Annual Interest Cost of above issue								3.06%		1955	"	3.08	6,000,000
										1956	"	3.08	4,800,000
1st Mtge & 1st Lien A 1.65 2.30% due 1946 to 1950										1957	"	3.07	3,600,000
										1958	"	3.07	2,400,000
	1.65%	1,250,000	1946	100	1.65%	1,250,000	6 yrs.	7,500,000	123,750	1959	"	3.07	1,200,000
	1.85	1,250,000	1947		1.85	1,250,000	7	8,750,000	161,875	1960	"	3.07	0
	2.00	1,250,000	1948		2.00	1,250,000	8	10,000,000	200,000				
	2.15	1,250,000	1949		2.15	1,250,000	9	11,250,000	241,875				
	2.30	1,250,000	1950		2.30	1,250,000	10	12,500,000	287,500				
		6,250,000				6,250,000	40	50,000,000	1,015,000				
Serial Notes 0.75% to 1.80% due 1942 to 1945	0.75%	1,250,000	1942	100	0.75%	1,250,000	2	2,500,000	18,750				
	1.00	1,250,000	1943		1.00	1,250,000	3	3,750,000	37,500				
	1.25	1,250,000	1944		1.25	1,250,000	4	5,000,000	62,500				
	1.50	1,250,000	1945		1.50	1,250,000	5	6,250,000	93,750				
		5,000,000				5,000,000	14	17,500,000	212,500				
		23,250,000				23,132,400		251,677,200	6,901,345				
Average Annual Interest Cost of Long Term Capital								2.74%					

Source: Compiled by Standard & Poor's Corp.

PANHANDLE EASTERN PIPE LINE COMPANY

PREFERRED STOCK

Issue	1937	1938	1939	1940	Est. 1941
$6 Class A pfd. stock, participating and redeemable ($100 par)	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
$6 Class B pfd. stock, non-participating and non-redeemable ($100 par)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Total	11,000,000	11,000,000	11,000,000	11,000,000	11,000,000
Dividend Requirements					
$6 Class A pfd. - Regular	(a) 600,000	600,000	600,000	600,000	600,000
- participating		182,165		403,684	* 269,122
$6 Class B pfd.	(a) 60,000	60,000	60,000	60,000	60,000
Total	660,000	842,165	660,000	1,063,684	929,122
Percent Cost	6.00%	7.68%	6.00%	9.67%	8.45%

Weighted Average

Year	%	Weight	Total
1937	6.00	1	6.00
1938	7.68	2	15.36
1939	6.00	3	18.00
1940	9.67	4	38.68
1941	8.45	5	42.25
		15	120.28

Weighted Average 8.02%

(a) Paid May 3, 1937.
(e) Estimated on basis total common dividend of $2.50 on 807,367 common shares.
(**)This amount was paid on Jan. 31, 1940 to holders of record Jan. 19, 1940 as a special dividend out of 1939 earnings. If this amount is included in 1939 the % cost would be 9.67% for that year and 6.00% for 1940.

Source: Compiled by Standard & Poor's Corp.

Table for Chart No. 19

HARNISCH - PRICE RATIOS ON NATURAL GAS PIPE LINE COMMON STOCKS

1937 - 1940

	Earnings Per Share (1)				Average High and Low Prices (2)				Earnings - Price Ratios				
	1937	1938	1939	1940	1937	1938	1939	1940	1937	1938	1939	1940	Average
El Paso Natural Gas Co.	3.00	3.30	3.75	3.75	21.75	23.44	35.38	33.94	13.79	14.08	10.60	10.99	12.37
Interstate Natural Gas Co.	2.50	2.13	2.11	2.07	25.25	21.25	23.75	23.88	9.90	10.02	8.88	8.67	9.37
Memphis Natural Gas Co.	0.78	(a) 0.64	0.65	0.69	4.63	3.94	4.13	4.38	16.85	16.24	15.74	15.75	16.15
Southern Natural Gas Co. (b)	2.01	1.69	2.55	3.17	(b)	(b)	11.81	15.75	-	-	21.59	20.13	20.86
Panhandle Eastern Pipe Line Co.	3.57	2.84	3.82	3.99	(c)	(c)	39.75	29.44	-	-	9.61	13.55	11.58
Average									13.51	13.45	13.28	13.82	13.58

(a) Earnings for 1938 revised to give effect to compromise settlement under city-gate contract with Memphis Power & Light Co.
(b) Prior to May 1939 there were two classes of common outstanding, Class A and B. Earnings of the four years based on 691,970 shares which were exchanged for former Class A and B shares.
(c) No stock held by public prior to September, 1939.

Sources: (1) Standard Corporation Records.
(2) Computed by Standard and Poor's Corp. from Moody's Public Utility Manuals, 1938 to 1941, both inclusive.

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Table for Chart No. 20

CURRENT EARNINGS - PRICE RATIOS ON NATURAL GAS PIPE LINE COMMON STOCKS

Name of Company	Period	Earnings Data: Available for Total Capital $	Available for Common Stock $	% of Total Earnings available for Common Stock	Common Earnings per Share $	Average Market Price Jan.1-Aug.31 1941 $	Earnings Price Ratio %
Interstate Natural Gas Co., Inc.	Calendar year ended Dec. 31, 1940	1,972,286	1,972,286	100.00	2.07	22.00	9.41
Memphis Natural Gas Co.	Calendar year ended Dec. 31, 1940	692,173	638,710	91.89	0.69	4.57	15.10
El Paso Natural Gas Co.	12 mos. ended June 30, 1941	2,688,603	2,173,657	80.85	3.61	31.06	11.62
Southern Natural Gas Co.	12 mos. ended June 30, 1941	3,715,282	2,646,108	71.22	2.04	11.81	17.27
Panhandle Eastern Pipe Line Co.	12 mos. ended June 30, 1941	5,814,975	3,396,491	58.41	4.21	36.50	11.53
Northern Natural Gas Co.	12 mos. ended June 30, 1941	4,364,220	3,737,260	85.63	3.68	(a)31.40	11.72

(a) Price to public on Sept. 10, 1941, less $0.60 dividend declared Sept. 4, 1941, payable to stockholders of record Sept. 24, 1941.

Source: Compiled by Standard & Poor's, Inc. from Annual Reports of Stockholders and N. Y. Times

Table for Chart No. 21

DATA REGARDING PUBLIC OFFERING OF 355,250 SHARES
NORTHERN NATURAL GAS COMPANY COMMON STOCK

355,250 shares of Northern Natural Gas Co. common stock, representing 5% of the total common stock outstanding, were publicly offered on September 10, 1941 by Blyth & Co., Inc. This transaction did not represent new financing but was the stock which had previously been owned by The United Light & Railways Co. The price to public was $32.00 per share, but this amount included payment of a $0.60 per share dividend declared on September 4, 1941 and payable on September 30, 1941 to stockholders of record September 24, 1941. The public offering price on an ex-dividend basis was $31.40 per share. Data regarding the expenses of financing are shown in the following table:

	Per Share	Total for 355,250 Shares
Price to Public (ex-dividend basis)	$31.40	$11,225,900
Underwriting Commissions	2.35	834,838
Expenses to Seller	0.32	115,000
Net Proceeds to Seller (ex-dividend basis)	28.73	10,206,012

The underwriting commissions and expenses to the seller totaling $2.67 per share represented 8.50% of the price to the public and 9.29% of the net proceeds to the seller, indicating the current cost of financing an established natural gas pipe line company's common stock.

The latest reported earnings of the Northern Natural Gas Co. covered the twelve months ended June 30, 1941 and amounted to $3,737,260, equal to $3.68 per share. However, in the prospectus covering the public sale, it was stated that the new tax law under consideration would reduce net earnings considerably. An estimate by Northern Natural Gas Co., on the basis of the bill as passed by the House of Representatives, was that income and excess profits taxes for 1941 would increase by approximately $691,000 on a consolidated basis, approximately $431,000 of which would be applicable to the first six months of 1941. This would reduce net income for the twelve months ended June 30, 1941 to $3,306,260, equal to $3.26 per share. On the basis of these earnings and the prices above, the following earnings-price ratios are indicated:

	Earnings-Price Ratios	
	Based on Earnings Before Tax Adjustment	Based on Earnings After Tax Adjustment
Price to Public (ex-dividend basis) $31.40 per sh.	11.79%	10.38%
Net Proceeds to Seller (ex-dividend basis) $28.73 per sh.	12.81%	11.35%

Source: Data taken from S.E.C. Holding Company Act Release No. 2661.

Table for Chart No. 23

PANHANDLE EASTERN PIPE LINE COMPANY

STATISTICS OF GROWTH 1938-1940

As of December 31	Gross Property, Plant & Equipment — As of Dec. 31	Gross Property, Plant & Equipment — Annual Increase	Pipe Line Miles - Gathering, Main & Lateral (as of Dec. 31)	Installed Horsepower of Generating Stations (as of Dec. 31)
1938	42,350,377	-	-	-
1936	46,643,078	4,292,701	1,681	43,360
1937	58,060,016	11,416,937	2,080	72,700
1938	58,547,870	487,855	2,100	72,700
1939	59,479,728	931,858	2,116	73,900
1940	64,854,966	5,375,228	2,374	80,100
Average for 1936-1940		4,600,916		

Source: Company's Annual Reports.

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Table for Chart No. 29

RATIO OF PREFERRED STOCK TO TOTAL CAPITALIZATION IN NATURAL GAS PIPE LINE COMPANIES

AS OF DECEMBER 31, 1940

	% Preferred to Total Capitalization
Cities Service Gas Co. (Del.)	none
El Paso Natural Gas Co.	8.45%
Interstate Natural Gas Co., Inc.	none
Memphis Natural Gas Co.	none
Mississippi River Fuel Corp.	none
Northern Natural Gas Co.	none
Southern Natural Gas Co.	none
Panhandle Eastern Pipe Line Co.	14.52%

	El Paso		Panhandle Eastern	
	$	%	$	%
Net Debt	10,680,848	49.46	20,506,826	34.47
Preferred	1,479,700	6.85	11,000,000	18.52
Common Stock & Surplus	9,496,033	43.95	28,107,142	47.31
Total	21,608,581	100.00	59,403,968	100.00

Source: Compiled by Standard & Poor's Corp. from annual reports to stockholders.

Table for Chart No. 28

PANHANDLE EASTERN PIPE LINE COMPANY

EARNINGS NECESSARY TO MAINTAIN CREDIT POSITION

BASED ON INVESTED CAPITAL AS OF JUNE 30, 1941

Invested Capital	Principal Amount	Yield Rate	Earnings Requirements
Long-Term Debt			
1st Mtge & 1st Lien S. F. "B" 3's, 1960	12,000,000		
1st Mtge & Trust Lien "A" 1.65-2.30%, 1946-50	6,250,000		
Serial Notes A, B, C & D 0.75-1.50%, 11/1/42-46	5,000,000		
Leasehold Purchase Obligations	17,544		
Total Long-Term Debt.	23,267,544	(a) 2.73%	637,531
Preferred Stock			
$6 Cum. Pfd., Class A (100,000 shs.)	10,000,000	(b) 8.69%	869,122
$6 Cum. Pfd., Class B (10,000 shs.)	1,000,000	6.00%	60,000
	11,000,000	8.45%	929,122
Common Stock & Surplus (807,367 shs.)	29,258,295	(c) 12.00%	3,510,995
Total Invested Capital	63,525,839	7.99%	5,077,648

(a) Based upon average annual cost of senior capital raised in 1941 financing.
(b) Participation of the Class A preferred stock computed on the basis of a $2.50 annual dividend on 807,367 common shares.
(c) Based upon estimated cost of common stock financing.

Source: Compiled by Standard & Poor's Corp. from Company's Balance Sheet June 30, 1941.

Table for Chart No. 27

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PANHANDLE EASTERN PIPE LINE COMPANY

EARNINGS NECESSARY TO MAINTAIN CREDIT POSITION

(ASSUMING REFINANCING OF PRESENT PREFERRED STOCK BY MEANS OF 50% BONDS SOLD AT 3.25% AND 50% COMMON STOCK SOLD AT 12.00%)

Invested Capital	Principal Amount	Yield Rate	Earnings Requirements
Present Long-Term Debt:			
2½% Mtge & 1st Lien S.F. "B" Bds, 1950	$12,000,000		
1st Mtge & Trust Lien "A" 1.85-2.50%, 1946-1950	6,250,000		
Serial Notes A, B, C & D 0.75-1.50%, 1/1/42-46	5,000,000		
Leasehold Purchase Obligations	17,844		
Total Present Long-Term Debt	23,267,844	(a) 2.74%	637,851
Proposed Long-Term Debt:			
Assuming issuance of a new 3¼% bond due after 1960, to net the company par, in an amount sufficient to provide 50% of funds necessary to retire present preferred stock	5,625,000 (b)	3.25	182,812
Total Proposed Debt	28,892,844	2.84	820,343
Present Common Stock and Surplus (80,367 shares)	29,258,298	(c) 12.00	3,510,996
Proposed Common Stock and Surplus:			
Assuming sale of sufficient common stock at price per share equivalent to present equity in common stock and surplus ($56.24 per share) to provide 50% of funds to retire present preferred stock	5,625,000 (b)	12.00	675,000
Total Proposed Common Stock and Surplus	34,883,298	12.00	4,185,996
* Total Proposed Capitalization	63,776,832	7.88%	5,006,338

* Of which 45.30% would be debt and 54.70% would be common stock and surplus.

(a) Based upon average annual cost of senior capital raised in 1941 financing.
(b) 100,000 shs. of Class A at $100; 10,000 shs. of Class B at $125.
(c) Based upon estimated cost of common stock financing.

Source: Present capital figures compiled by Standard & Poor's Corporation from Company's balance sheet at June 30, 1941.

Table for Charts Nos. 29 to 36, incl.

PANHANDLE EASTERN PIPE LINE COMPANY

DOLLARS NEEDED ANNUALLY TO PROVIDE SERVICE TO CUSTOMERS, A FAIR RETURN TO INVESTORS AND RETURN OF INVESTED CAPITAL WHEN RESERVES ARE EXHAUSTED

	Actual 12 months ended June 30, 1941		Projected (assuming present preferred stock is retired)		Remarks
Cash Expenses (exclusive of Capital Requirements):					
Operations	2,902,353		3,192,000		Allows 10% increase for higher wage and material costs.
Maintenance	294,444		324,000		
Total Operations and Maintenance		3,196,797		3,516,000	
Taxes:					
State, Local and Miscellaneous Federal	849,017		700,000		Allows for some increase in capital stock and other miscellaneous taxes.
Federal Income and Excess Profits:					
Computed on basis of Second Revenue Act of 1940	2,359,100		-		
Computed on basis of Revenue Act of 1941	-		3,363,000		
Allowance for increase in 1942	-		336,000		Allows for a further 10% increase in Federal Taxes in 1942
Total Taxes		3,008,117		4,399,000	
Total Cash Expenses (exclusive of Capital Requirements)		6,204,914		7,915,000	
Capital Requirements:					
Interest on Funded Debt	751,924		723,437		Includes $540,625 present annual interest plus $182,812 requirement on $5,625,000 new bonds sold @ 3.25% to provide 50% of capital to retire present preferred stock.
Less - Other Interest Deductions (net)	28,456		-		
	723,468		723,437		
Amortization of Debt Discount and Expense	306,535		84,079		Represents amount needed to amortize $2,101,986 of Debt Discount and Expense in process of amortization as of June 30, 1941 over a period of 25 years, the estimated life of gas reserves.
Preferred Dividend Requirements (Based on maximum participation of Class A Pfd. stock)	1,388,480		-		
Balance for Common Stock (after participation of A Pfd. stock)	3,396,492		4,185,995		Represents 12% earnings-price ratio on common stock and surplus as of June 30, 1941 of $29,258,295, or $3,510,995; plus 12% requirement on $5,625,000 to be raised by common stock financing to provide 50% of capital to return present preferred stock, or $675,000.
Total Capital Requirements	5,814,975		4,993,511		
Amount necessary to return capital to investors when reserves are exhausted:					
Provision for Depreciation, Depletion and Amortization	2,316,560		2,551,034		Annual provision necessary to return $63,776,839 of invested capital over 25 years - includes sinking fund and maturity provision of present debt.
Total Dollars Needed	14,336,449		15,459,545		

Source: Compiled by Standard and Poor's Corp.

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Table for Chart No. 37

PANHANDLE EASTERN PIPE LINE COMPANY

DOLLARS NEEDED ANNUALLY TO PROVIDE SERVICE TO CUSTOMERS, A FAIR RETURN TO INVESTORS AND RETURN OF INVESTED CAPITAL WHEN RESERVES ARE EXHAUSTED

	Actual 12 months ended June 30, 1941		Projected (assuming present preferred stock remains outstanding)		Remarks
Cash Expenses (exclusive of Capital Requirements):					
Operations	2,902,383		3,192,000		
Maintenance	294,444		324,000		Allows 10% increase for higher wage and material costs.
Total Operations and Maintenance		3,196,799		3,516,000	
Taxes:					
State, Local and Miscellaneous Federal	649,017		700,000		Allows for some increase in capital stock and other miscellaneous taxes.
Federal Income and Excess Profits:					
Computed on basis of Second Revenue Act of 1940	2,358,100				
Computed on basis of Revenue Act of 1941	-		3,363,000		
Allowance for increase in 1942	-		336,000		Allows for further 10% increase in federal taxes in 1942.
Total Taxes		3,008,117		4,399,000	
Total Cash Expenses (exclusive of Capital Requirements)		6,204,916		7,915,000	
Capital Requirements:					
Interest on Funded Debt		751,924		540,625	Present annual interest requirement
Less - Interest deductions (net)		28,486		-	
		723,468		540,625	
Amortization of Debt Discount and Expense		306,835		84,979	Represents amount needed to amortize $2,101,981 of Debt Discount and Expense in process of amortization as of June 30, 1941 over a period of 25 years, the estimated life of gas reserves
Preferred Dividend Requirements (based on maximum participation of Class A Pfd. stock)		1,388,480		929,122	Participation of the Class A preferred stock computed on the basis of a $2.50 annual dividend on 807,367 common shares
Balance for Common Stock (after participation of A Preferred stock)		3,396,492		3,510,995	Represents 12% earnings-price ratio on common stock and surplus as of June 30, 1941 of $29,258,296.
Total Capital Requirements		5,814,975		5,064,721	
Amount necessary to return capital to investors when reserves are exhausted:					
Provision for Depreciation, Depletion and Amortization		2,316,560		2,541,034	Annual provision to return $63,525,839 of invested capital over 25 years - includes sinking fund and maturity provision of funded debt.
Total Dollars Needed		14,336,449		15,520,855	

Source - Compiled by Standard and Poor's Corp.

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Amount Of Depreciation On Book Cost Of Property
As Of June 30, 1941

Line No.	Account Number (A)	Item (B)	As Per Books (C)	Deduct for Depreciation (D)	Book Cost Less Depreciation (E)
1		Undistributed Intangible Fixed Capital			
2	200	Organization	$ 115 172 86	$ —	$ 115 172 86
3	203	Misc. Intangible Capital	64 427 72	—	64 427 72
4		Total Undistributed			
5		Intangible Fixed Capital	179 600 58	—	179 600 58
6		Production System Property			
7	205	Land	299 00	—	299 00
8	208	Leaseholds	1 745 207 39	—	1 745 207 39
9	211	Gas Wells	2 620 290 94	216 232 61	2 404 058 33
10	213	Other Production System			
11		Structures	46 808 76	6 230 39	40 578 37
12	230	Drilling & Cleaning			
13		Equipment	20 376 46	5 169 11	15 207 35
14	231	Other Production System			
15		Equipment	399 08	99 77	299 31
16	209	Production System Rights			
17		of Way	665 13	—	665 13
18	214	Field Measuring Station			
19		Structures	1 985 22	198 52	1 786 70
20	228	Gathering Lines	58 707 45	18 957 70	39 749 75
21	229	Field Measuring Station			
22		Equipment	13 229 99	661 50	12 568 49
23		Total Production System			
24		Property	4 508 269 42	247 549 60	4 260 719 82
25		Transmission System Property			
26	235	Land	118 659 15		118 659 15
27	237	Rights of Way	1 181 039 97		1 181 039 97
28	238	Compressor Station			
29		Structures	1 314 758 79	57 773 53	1 256 980 26
30	239	Transmission Measuring			
31		Station Structures	69 576 90	7 802 70	61 774 20
32	240	Other Transmission			
33		Structures	409 186 09	41 217 72	367 968 37
34	241	Compressor Station Equipment	8 436 264 23	622 777 63	7 813 486 60
35	242	Transmission Measuring			
36		Station Equipment	519 172 09	50 674 31	468 497 78
37	243	Transmission Mains	46 511 611 72	2 741 396 81	43 770 214 91
38	244	Other Transmission Equipment	9 173 92	658 39	6 515 53
39	244-1	Cathodic Protection			
40		Equipment	39 776 44	6 486 65	33 289 79
41		Total Transmission System			
42		Property	$58 609 214 30	$3 530 787 74	$55 078 426 56

Exhibit

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Amount Of Depreciation On Book Cost Of Property
As Of June 30, 1941
(Continued)

Line No.	Account Number (A)	Item (B)	As Per Books (C)	Deduct for Depreciation (D)	Book Cost Less Depreciation (E)
1		General Property			
2	276	Office Equipment	$ 78 082 36	$ 11 712 35	$ 66 370 01
3	280	Garage Equipment	109 226 87	21 687 28	87 539 59
4	281	Laboratory Equipment	6 550 71	1 310 14	5 240 57
5	282	Communication Equipment	371 355 85	37 451 61	333 904 24
6	283	Tools and Implements	40 251 96	10 062 97	30 188 99
7		Total General Property	605 467 75	82 224 35	523 243 40
8		Other Undistributed Fixed Capital			
9	299	Undistributed Fixed			
10		Capital	19 730 34	—	19 730 34
11		Construction Work in Progress	383 115 93	—	383 115 93
12		Gas Sales & Purchase Contracts			
13		(Less 1,611,657.30 Reserves)	1 318 629 10	—	1 318 629 10
14		Other Gas Sales and Purchase			
15		Contracts	365 334 99	—	365 334 99
16		Total Plant Property and			
17		Equipment — Gas	65 989 362 41	3 860 561 69	62 128 800 72
18		Gasoline System Property			
19	725	Extraction Plant Land	3 812 98	—	3 812 98
20	726	Extraction Plant Structures	53 991 41	2 560 22	51 431 19
21	727	Extraction Plant Equipment	589 099 94	37 878 54	551 221 40
22	730	Extraction Plant Storage			
23		Tanks	45 631 13	1 368 93	44 262 20
24	734	Other Gasoline Plant			
25		Equipment	7 330 81	733 08	6 597 73
26		Construction Work in			
27		Progress	440 89	—	440 89
28		Total Plant Property and			
29		Equipment — Gasoline	700 307 16	42 540 77	657 766 39
30		Total Plant Property and			
31		Equipment	$66 689 669 57	$3 903 102 46	$62 786 567 11

[fol. 13711] (Exhibit 70.)

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Reproduction Cost New Of Plant Property And Business
As Of June 30, 1941

Determined from valuation of September 30, 1938 by addition of net property additions, plus items of Working Capital, Value of Gas Purchase Contracts and Cost of Business Development from Valuation of June 30, 1941.

Line No.	(A)	(B)
1	Total Fixed Property September 30, 1938	$64 544 104 58
2	Less Construction Work in Progress	63 215 38
3		64 480 889 20
4	Net Additions to June 30, 1941	6 380 886 03
5	Total Fixed Property June 30, 1941	70 861 775 23
6	Working Capital, valuation of June 30, 1941	1 569 000 00
7	Value of Gas Purchase Contracts, Valuation of June 30, 1941	1 585 914 00
8	Cost of Business Development, Valuation of June 30, 1941	6 053 992 48
9	Reproduction Cost New Plant, Property and Business	$80 070 681 71

[fol. 13713] (Exhibit 71.)

P. McDonald Biddison,
Consulting Engineer
Dallas Gas Building
Dallas, Texas

October 14, 1938.

Panhandle Eastern Pipe Line Company,
90 Broad Street,
New York, N. Y.

Attention: Mr. J. D. Creveling, President.

Gentlemen:

I have made an appraisal of the consolidated Plant, Property and Equipment of Panhandle Eastern Pipe Line Company and its Subsidiary Companies, Central Distributing Company, and Illinois Natural Gas Company, as of September 30, 1938. For the Plant, Property and Equipment, I find a Reproduction Cost New of $64,724,344.93 and a Present Value of $63,248,549.57, as summarized on Pages

1 to 3 hereof. The values for leases used in the estimate are the values from the report of Ralph E. Davis of February 1, 1937, for leases and wells of that date less acreage surrendered since February 1, 1937, plus acreage acquired (at values determined from the Davis report) less my estimate of cost and value of wells included in his report.

The items Material and Supplies and Construction Work in Progress have been taken from the books. These values shown do not include any sums for Cash Working Capital, or Going Concern Value, all of which items are proper elements of the value to be used in fixing rates. The business of this company is still in the development stage and Going Concern Value is being created, but I have not made any estimate of its present amount.

I have examined a great deal of the property and have inspected plans and specifications under which it was constructed. The two gas fields from which the system draws its supply are the largest ever known. The compressor stations on the main system are carefully designed; their equipment is first class in all respects, they present a neat [fol. 13714] and attractive appearance and are maintained in excellent condition. All these features and tend to produce reliability and economy of operation. The main transmission system has been constructed with a margin of safety as to pressure so that it may safely be operated at 500 pounds compressor station discharge. River crossings locations have been selected so as to secure the greatest degree of stability obtainable and multiple lines across streams so located and installed as to leave very slight probability of interruption from such causes. The lines have been well located and well laid to secure stability and are carefully maintained. The main line loops completed in 1937 provide additional protection against service interruption. The Gasoline Plant at Liberal is of the most recent design and the dehydration plant in connection with it is an effective insurance against interruption of service from freezing of lines. Measuring and Regulating Stations are of up to date equipment, carefully maintained and the stations are neat and clean. Little evidence of deterioration in the property can be found except in that relatively small portions in the local fields near Kansas City. Pipe exposed in making connections for 1937 additions

show no interior corrosion. Later tests have disclosed light interior encrustation (mostly sand) on the original line westward from Olpe to Liberal. This is not pitting nor active corrosion. Steps are being taken to clean the interior of the section affected. Inspection of routine reports on condition of protective coating show little deterioration of protective coating and pitting only in a few very restricted areas. Such areas are being protected cathodically as they develop.

Yours very truly,

P. McDONALD BIDDISON,
Consulting Engineer.

PMcDB/1

[fol. 13719] Panhandle Eastern Pipe Line Company

Appraisal of Property as of September 30, 1938

Recapitulation

Item	Reproduction Cost — New	Present Value
Production System Property		
Production System Land	$ 964 69	$ 964 69
Production System Leaseholds	4,592,116 01	4,592,116 01
Gas Wells and Equipment	1,882,830 00	1,826,345 10
Production System Structures	36,624 58	34,643 10
Drilling and Cleaning Equipment	29,018 49	23,214 79
Total — Production System	$ 6,541,553 77	$ 6,477,283 69
Transmission System Property		
Transmission System Land	$ 51,853 46	$ 51,853 46
Transmission System Right of Way	1,109,781 45	1,106,322 71
Transmission Measuring and Regulating Station Structures	83,090 19	76,729 57
Other Transmission System Structures	211,893 94	205,824 00
Transmission Measuring and Regulating Equipment	543,746 23	532,186 68
Transmission Mains	36,021,922 64	34,984,276 53
Compressor Stations	8,779,357 31	8,518,704 54
Other Transmission System Equipment	19,540 85	18,954 62
Total — Transmission System	$46,820,686 12	$45,494,852 11

Distribution System Property		
Distribution System Right of Way	$ 652 93	$ 652 93
District Regulator Structures	3,064 64	2,991 08
Other Distribution Structures	346 08	242 26
District Regulator Equipment	6,887 56	6,749 81
Distribution Mains	299,900 96	280,902 18
Services	49,678 84	47,194 90
Meters	53,200 09	50,625 58
Meter Installations and Connections	14,882 92	14,138 77
House Regulators	11,865 12	10,678 61
Other Distribution System Equipment	476 36	428 72
Total — Distribution System	$ 441,045 53	$ 414,604 84
Gasoline Production System Property		
Liberal Gasoline Plant	$ 591,143 81	$ 585,232 37
Total — Gasoline Production System	$ 591,143 81	$ 585,232 37

[fol. 13720] Panhandle Eastern Pipe Line Company

Appraisal of Property as of September 30, 1938

Recapitulation

Item	Reproduction Cost — New	Present Value
General System Property		
General Office Equipment	$ 66,372 38	$ 56,416 52
General Garage Equipment	92,482 00	76,760 06
General Laboratory Equipment	6,869 88	6,182 89
General Communication Equipment	454,789 68	432,050 20
General Tools and Implements	21,174 33	16,939 46
Total — General Property	$ 641,688 27	$ 588,349 13
Sub-Total	$55,036,417 50	$53,590,322 14
Intangible Fixed Capital		
Preliminary and Organization Expense	$ 502,271 20	$ 502,271 20
Sub-Total	$55,538,388 70	$54,092,593 34
Undistributed Construction Expenditures		
Engineering and Superintendence	$ 2,200,220 39	$ 2,200,220 39
Administrative Expense	1,062,303 58	1,062,303 58
Law Expense	125,567 80	125,567 80
Taxes During Construction	502,271 20	502,271 20
Interest During Construction	3,929,833 95	3,929,833 95
Miscellaneous Construction Expenditures and Omissions	1,062,303 58	1,062,303 58
Sub-Total	$ 8,942,500 50	$ 8,942,500 50

Construction Work in Progress	$ 63,215 38	$ 63,215 38
Total Fixed Property	$64,544,104 58	$63,068,309 22
Material and Supplies	$ 180,240 35	$ 180,240 35
Total	$64,724,344 93	$63,248,549 57

[fol. 14178] Exhibit 72

Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Net Additions To Gas Plant — Per Books
From October 1, 1938 To June 30, 1941

Line No.	(A)	Amount (B)
1	Production System Property	
2	Production System Leaseholds	$ 44 334 44
3	Gas Wells and Equipment	398 621 24
4	Production System Structures	16 473 27
5	Drilling and Cleaning Equipment	7 563 23
6	Total Production System	363 196 84
7	Transmission System Property	
8	Transmission System Land	10 778 03
9	Transmission System Right of Way	71 914 56
10	Transmission Measuring and Regulating Station Structures	11 267 58
11	Other Transmission System Structures	79 024 32
12	Transmission Measuring and Regulation Station Equipment	61 423 00
13	Transmission Mains	4 976 333 78
14	Compressor Stations	773 775 27
15	Other Transmission System Equipment	34 065 36
16	Total Transmission System	6 018 581 90
17	Distribution System Property	
18	Distribution System Right of Way	652 93
19	District Regulator Structures	1 135 18
20	Other Distribution Structures	1 311 67
21	District Regulator Equipment	7 402 85
22	Distribution Mains	295 462 96
23	Services	42 682 97
24	Meters	46 880 69
25	Meter Installations	4 482 80
26	House Regulators and Installations	12 820 29
27	Other Distribution System Equipment	476 36
28	Total Distribution System	413 315 90

29	Gasoline Production System Property	
30	Liberal Gasoline Plant	76 026 30
31	Total Gasoline Production System	76 026 30
32	General System Property	
33	General Office Equipment	11 709 98
34	General Garage Equipment	16 898 70
35	General Laboratory Equipment	319 17
36	General Communication Equipment	3 371 52
37	General Tools and Implements	19 077 53
38	Total General Property	50 738 56
39	Intangible Fixed Capital	
40	Preliminary and Organization Expense	34 683 11
41	Construction Work in Progress	320 341 44
42	Total	$6 380 886 03

[fol. 14198] (Exhibit 74.)

Table I

Total Additional Necessary
Materials And Supplies
By Departments

(Figures as Quoted on Page 467,
Lines 13 to 20, Inclusive)

Transmission Department, including Gas Measurement	$138,976 80
Production Department	29,037 76
Compressor Department, including Gasoline Plant and Auxiliary Equipment	188,700 35
Communications Department and Cathodic Protection Department	15,662 06
Transmission Department (Automotive Equipment)	2,015 68
	$374,392 65

[fol. 14199]

Table II

Additional Necessary Materials And Supplies
By Departments
Classified To Show The Aggregate Supplies

(1)
Now on Hand and on Order

(2)
Now on Hand, Now on Order, and Those
Which are to be Ordered within the Next Ninety Days

Department	(1)	(2)	(3) Now on Hand, Now on Order, Those Which will be Ordered within the Next Ninety Days, and Those Which will be Ordered Thereafter
Transmission and Gas Measurement	$189,730.97	$249,074.01	$297,270.24
Production Department	49,464.59	65,288.50	66,779.50
Compressor Department and Gasoline Plant, etc.	120,331.63	169,213.53	247,188.33
Communications and Cathodic Protection Departments	2,862.98	9,877.80	18,525.04
Transportation Department	3,700.47	3,700.47	5,716.15
Totals	$366,090.64	$497,154.31	$635,479.26

(Figures as Quoted on Page 467, Line 21, through Page 469, Line 17)

[fol. 14200]

Table III

Summary Of Minimum Reasonable Amounts Of Working Capital Currently Needed

(Figures as Quoted on Page 471, Lines 5 through 17)

1.	Normal cash fund for operating expenses	$ 470,000.00
2.	Cash for emergencies	100,000.00
3.	Minimum bank balances	200,000.00
4.	Prepayments	130,000.00
5.	Materials and supplies	635,000.00
6.	Line Pack	34,000.00
	Total	$1,569,000.00

[fol. 14201]

Table IV

Total Cash, Prepayments, And Materials And Supplies Actually Maintained By The Company At Certain Dates In The Past

(Figures as on Page 472, Lines 20 through 24, Inclusive)

June 30, 1937	$3,070,960.52
December 31, 1937	1,889,574.34
June 30, 1938	1,672,443.61
December 31, 1938	1,646,111.52
June 30, 1939	3,233,425.49
December 31, 1939	5,731,934.85
June 30, 1940	6,190,999.35
December 31, 1940	4,030,616.16
June 30, 1941	7,446,667.39

[fol. 14202] (Exhibit 75.)

Panhandle Eastern Pipe Line Company
Natural Gas Supply

Value of Gas Reserves and Wells

February 1, 1937.

Ralph E. Davis, Inc.
Engineers
Pittsburgh and New York

[fol. 14203]

Ralph E. Davis, Inc.
Engineers

New York
150 Broadway

Petroleum and Natural Gas
1710 Union Bank Building
Pittsburgh

February 10, 1937

Panhandle Eastern Pipe Line Company
Kidder Peabody & Co. and the other several Underwriters

Dear Sirs:

We submit herewith report covering our recent study of the natural gas supply, also value of gas reserves and wells of Panhandle Eastern Pipe Line Company.

Yours very truly,

RALPH E. DAVIS, INC.,
Engineers.

By Ralph E. Davis,
President.

[fol. 14207] Panhandle Eastern Pipe Line Company
Natural Gas Supply

Value of Gas Reserves and Wells

February 1, 1937

We have made an investigation and study of the supply of natural gas available to Panhandle Eastern Pipe Line Company and submit the following report, in which we have

endeavored to cover everything of importance to prospective investors in reaching conclusions as to the adequacy of the Company's gas supply.

The gas produced and purchased by this Company and the gas reserves available to it are located almost entirely in the Amarillo and Hugoton gas fields.

The Amarillo Field

Description and Development

The Amarillo Field contains the largest known gas reserve in the world. The proven gas area extends for a distance of some 125 miles through the Panhandle of Texas, varies from less than 10 to almost 40 miles in width, and covers approximately 1,400,000 acres. Gas was discovered in this field in December, 1918 as a result of exploration for oil. Subsequent development was very slow until the discovery of oil in 1925 led to more active drilling, which in 1926 and 1927 demonstrated the existence of extensive deposits of oil and gas. In November 1936 there were 1277 producing gas wells and 2907 oil wells in the oil producing area of the field, and drilling of both oil and gas wells continues actively.

The greater part of the gas produced in the Amarillo Field is "sweet" gas, containing practically no sulphur. However, along the northern flanks of the field there is a large area in which the gas produced is "sour", that is, it contains noticeable proportions of sulphur and sulphur compounds, to an extent rendering it undesirable without purification for ordinary commercial distribution or utiliza- [fol. 14208] tion; it is suitable, however, for burning in the carbon black manufacturing plants operating in this field. The location of the sweet gas and sour gas areas and the properties controlled by the Company are shown upon an appended map. The oil producing area of the Amarillo Field lies in a relatively narrow band extending for more than 90 miles along the northern flank of the field, from Hutchinson to Wheeler Counties, and located in general in the sour gas area.

The oil produced is accompanied by considerable casing-head gas, so that the early rapid development for oil led to the construction of many natural gasoline plants for

the extraction of gasoline from the casinghead gas available from the oil wells and the wells producing both oil and gas. After the extraction of gasoline from the casinghead gas, the residue gas discharged from the gasoline plants was blown into the air for lack of market.

This led to the erection of carbon black plants in the field to take advantage of the large supply of cheap gas. Prior to 1930 the principal seat of the carbon black industry was in the Monroe Gas Field of Louisiana. The trend of this industry since about 1930 has been marked by a reduction in the number of plants operating and quantities of black produced in Louisiana, coincident with the construction of many large plants in the Amarillo Field, which has now become the principal source of carbon black in the world. There are now 30 carbon black plants in the latter field which consumed, during the twelve months ending July 31, 1936, an average of approximately 500,000 M cubic feet* of gas per day.

It was also found that the dry gas produced from wells making gas only, contained 250 or more gallons of gasoline per million cubic feet of gas; and that this relatively small gasoline content could be extracted with profit when treated in large volumes, even though there was no market for the residue gas after the gasoline was extracted. Hence, numerous natural gasoline plants were constructed for extracting or "stripping" the gasoline from this dry gas, allowing the residue from such "stripper" plants to be blown into the air. This wasteful practice of "stripping" was [fol. 14209] practically eliminated during the summer of 1935, by State regulation. There are now 44 natural gasoline plants in the Amarillo Field which consumed an average of approximately 1,083,000 M cubic feet per day during the 12 months ending July 31, 1936.

During the period from 1926 to 1931, 9 major pipe lines were constructed from the Amarillo Field to important, distant markets. These pipe lines derive their supply of gas from the sweet gas wells and the residue gas discharged from several of the gasoline plants which treat casinghead gas.

*All volumes in this report are at a pressure base of 16.4 pounds per square inch, absolute pressure.

The large pipe line companies secured extensive blocks of leases for their individual requirements and in certain instances made contracts to purchase gas from other gas producers. A large number of gas wells were completed as a result of exploration for oil and many of these independent gas producers found themselves unable to sell gas or to make any profitable use of their wells. Some of these producers sought a quick outlet for their production through sales to the stripper gasoline plants.

The State of Texas has had general oil and gas conservation laws for many years (since 1899). In 1931, a State law was passed classifying the gas pipe line companies as common purchasers and requiring them to take gas ratably from all wells in any field based upon open flow capacity. This law was declared unconstitutional. A subsequent law was passed limiting the field output to the market demand, but this law was also declared invalid. At first the use of gas for gasoline plants which had no market for their residue was limited to the casinghead gas produced from combination oil and gas wells, as distinguished from dry gas wells. Early in 1933, certain gasoline plants were granted special permits for processing dry gas and soon a number of new gasoline plants of large capacity were constructed for this purpose and many of the existing plants previously treating only casinghead gas, began processing dry gas and blowing the residue to the air. By the Spring of 1935, the quantities of gas being blown to the air in this field exceeded one billion cubic feet per day. This tre- [fol. 14210] mendous waste of natural resources attracted national attention. If it had been permitted to continue, it would have seriously affected the future life of this great gas field supplying gas to consumers from Denver to Chicago and from Dallas to Minneapolis.

In 1935, the State of Texas enacted a comprehensive conservation statute (House Bill No. 266) which among other things, prohibited the escape to the air of gas produced from any gas well, before or after processing for gasoline extraction and prohibited the use of sweet gas produced from any gas well for carbon black manufacture. The market requirements for gas from the field were to be deter-

mined each month by the Railroad Commission and prorated between producers on the basis of acreage and open flow capacity of the wells. Under this law and the regulations of the Texas Railroad Commission, the gas blown to the air from gasoline plants has been reduced to 100,000 or 150,000 M cubic feet per day.

The above statute was attacked in the courts by two of the pipe line companies operating out of the Amarillo field, and on February 1, 1937, the Supreme Court of the United States held it to be unconstitutional insofar as it might be construed to permit certain proration orders entered by the Texas Railroad Commission. Whatever the immediate effect of this decision may be it is probable that the normal operation of economic factors will prevent any gas wastage on a large scale for more than a limited period of time in the future.

Gas Reserves—Entire Amarillo Field

The Amarillo Field is located in an area where thick, marine, sedimentary beds were deposited in ancient times upon older rocks, known as the buried Amarillo Mountains. This buried mountain ridge underlies and forms the core of the field; while the sedimentary strata were laid down about it and over it like layers of blankets, arched upward along its flanks, thus forming a long anticlinal structure. The gas production is obtained from the Gray Lime and dolomitic Big Lime and from the Granite Wash, the latter being formed of detrital deposits washed down from the older mountains. These formations are of considerable thickness and have high porosity and permeability, as indicated by the large open flow capacity of the wells. The [fol. 14211] initial rock pressure of the wells was uniformly 430 pounds per square inch throughout the principal portion of the field, which is recognized to be a continuous, connected unit reservoir. The exception to this original pressure was found in the wells in Potter County to the south of the fault separating that area from the main part of the field, where initial pressures of 720 pounds were observed. The depths of the wells vary from 2000 feet in the east end of the field to approximately 3000 feet in the western portion. The rock pressure in gas fields is generally found to be closely related to the depth of the

gas sand below the permanent water level in the vicinity. In the Amarillo Field the water table is deeply submerged below the ground surface, and as a result, the original rock pressure, although less than would be expected for wells of such depth, is normal with respect to the submerged water table.

The early estimates of gas reserves in the Amarillo Field, made before any considerable metered production had occurred, and prior to the time when reliable rock pressure records for the large number of wells were available, were necessarily based upon estimates of thickness and porosity of the producing horizons, considered in conjunction with the initial pressure and acreage involved. Estimates by such methods ranged from 5 to 16 trillion cubic feet.

The gas production from this field was at first not metered and many large wells blew open to the air for considerable periods of time. After 1933, however, practically all of the gas produced has been metered, and considered together with the most reliable estimates of the previous unmetered quantities, the total production to the end of the year 1935 is estimated to have been approximately 5 trillion cubic feet. See the attached Table No. 10.

The average rock pressure of the entire field weighted with respect to acreage, has been computed by us to be 357 pounds per square inch, as of January 1936. This weighted average pressure is independently confirmed by the Texas Railroad Commission's estimate of 355 pounds for July 1936. The pressure remaining January 1936, compared with the average initial rock pressure of 430 pounds, shows a total average pressure drop of 73 pounds; this [fol. 14212] results in a calculated withdrawal per pound drop in pressure of approximately 68.5 billion cubic feet. Theoretically, and supposing the reservoir to be of uniform thickness, porosity and content per acre, this withdrawal would indicate a future reserve as of January 1936, down to atmospheric pressure, of 24.4 trillion cubic feet. The reservoir is not uniform throughout, however, as indicated by the differences in the open flow, thickness of sand encountered and productive history generally. Past production to a large extent has come from the wells of larger

than average capacity, and it is reasonable to assume that the ultimate reserves of the portions of the field where the wells are larger will be greater per acre than in those portions where the wells' capacity are smaller. In practically 50% of the total acreage of the field, the remaining rock pressure is still more than 400 pounds per square inch. The ultimate rock pressure of the field to be reached at the time of final abandonment is also a factor which cannot be foreseen with exactness, but in any case not all of the present gas in place can be recovered. Making allowances for the condition of lack of uniformity of the reservoir rocks and for the portion of the reserves that will be unrecoverable, we have arrived at an estimate of the future recoverable gas production from the entire Amarillo Field as of January 1, 1936, of 20 trillion cubic feet. The reasonableness of this reduction from the theoretical result first arrived at may be tested by the following assumptions. If the final abandonment pressure should average 30 pounds instead of atmospheric pressure, then the 24.4 trillion cubic feet mentioned above would be reduced to 22.4 trillion. A further decrease of approximately 10% of this adjusted figure to 20 trillion cubic feet is equivalent to assuming that as much as 300,000 acres in the undepleted portion of the field will be found to contain an ultimate reserve of only 60% of the average content per acre in the main part of the field, in which practically all of the production and pressure decline have occurred up to the present time. Production data for the field for the full year 1936 are not yet available but it is estimated that the quantity of gas produced during the period from January [fol. 14213] 1, 1936 to February 1, 1937, was approximately 700 billion cubic feet. Taking into account this production, the remaining reserves of the field on February 1, 1937, are here estimated at 19.3 trillion cubic feet.

Company Gas Reserves in Amarillo Field

The location of the acreage under lease and controlled by the company under gas purchase contracts is shown on the appended map. This map also presents the average rock pressures remaining in January 1936 in various parts of the field. On November 1, 1936, the Company had leases covering 37,390 acres in the proven area, including 10,589

acres developed by gas wells, and 26,801 acres which were proven but undeveloped. The Company controlled 9,496 proven acres through gas purchase contracts. We at that time estimated the gas reserves for the entire Amarillo Field at 19.5 trillion cubic feet, representing an average of 13,900 M cubic feet per acre. However, as shown in Table No. 11, the Company's wells have higher open flow capacities and higher average rock pressures than the average for the entire field, whereas the wells controlled under gas purchase contracts show lower than average open flow and rock pressure tests. The Company is in position to take as much gas from the field as it is entitled to produce from the acreage it controls, and guided by these comparisons, we estimated future reserves for its leases as of November 1, 1936, at 15,000 M cubic feet per acre, and for the properties under contract at 11,000 M cubic feet per acre. The combined gas reserves controlled by the Company in the Amarillo Field, as of November 1, 1936, were thus estimated at 665 billion cubic feet.

During the period from November 1, 1936 to February 1, 1937, new properties have been added to the system and some gas has been produced, resulting in a net addition to the Company's proven reserves as shown by the following:

[fol. 14214]

	Proven Reserves—Amarillo Field	
	November 1, 1936	February 1, 1937
Company Acreage, acres	37,390	38,070
Reserves at 15 million per acre, in billions of cubic feet	561	571
Purchase Contract Acreage, acres	9,496	22,964
Reserves at 11 million per acre, in billions of cubic feet	104	253
Total Acres Owned or Controlled	46,886	61,034
Total Reserves, Billions of cubic feet	665	824
Production, November 1, 1936 to February 1, 1937		6
Reserves Owned or Controlled, Billions of cubic feet		818

Hugoton Field

Description

The Hugoton Field contains the second largest known natural gas reserve. It centers in Stevens County in southwestern Kansas but the proven area extends north into Finney County and south through Texas County, Oklahoma into the northernmost part of the Panhandle of Texas, as shown on the accompanying map.

Several gas wells were drilled in this general area in 1922 in the search for oil. The region was far from any large gas line or gas market and it was not developed extensively until 1929, 1930 and 1931. During this period approximately 150 gas wells were completed, proving up an immense natural gas reservoir.

The proven and probable gas area of the Hugoton Field, as bounded by the circumscribing line on the map, is approximately 110 miles long, or a width ranging up to 32 miles, and contains more than 1,700,000 acres. Within this area, however, there are many townships that have not yet been tested, although all of the wells drilled to the pay in this field have been found productive. It is possible that parts of the area included within the border line, showing the probable limits of the field as we now see it, may be found to be non-productive or to contain gas in quantities [fol. 14215] smaller than commercially profitable. It is also possible that considerable areas outside of this border line may eventually be found to contain gas in substantial quantities.

The Hugoton Field is located on a broad arch, dipping gently to the southeast. The gas deposit is encountered in the dolomitic Big Lime of Permian Age at a depth of approximately 2800 feet. This stratum is also an important gas-bearing horizon in the Amarillo Field, some 100 miles south of the producing area at Hugoton. The initial rock pressure of the Hugoton gas wells was uniformly 430 pounds per square inch or slightly higher, practically the same as in the Amarillo Field. This similarity of reservoir pressures in the closely related strata in these two fields has led many to believe that the fields are connected, forming one large connected natural gas reservoir.

The Hugoton Field is purely a dry gas field, no oil having to date been discovered either in the gas producing formations or below them. The Hugoton gas is entirely a "sweet" gas, containing some 300 gallons of gasoline per million cubic feet of gas, or about the same gasoline content as the dry gas at Amarillo. There has been one casinghead gasoline plant operating in the Hugoton Field for several years and the Panhandle Eastern Pipe Line Company is now completing a gasoline plant at Liberal, Kansas, to treat the gas from Hugoton, as well as that from Amarillo. There is one small carbon black plant in the Hugoton Field in Grant County. Two of the major carbon companies have extensive acreage in the north part of the Hugoton Field.

Gas Reserves—Entire Hugoton Field

Two of the major pipe line companies, the Northern Natural Gas Company and the Panhandle Eastern Pipe Line Company, have been withdrawing gas from the Hugoton gas field. The total production handled by these pipe lines and the smaller local lines and gas used for field purposes up to the present time has approximated 100 billion cubic feet. The reduction in pressure caused by this withdrawal is surprisingly small,—the average rock pressure of the 59 wells from which the Company withdraws gas [fol. 14216] having been reduced from an average of 432 pounds initially to a present average pressure of 418 pounds per square inch. The past production and reduction in rock pressure in this field have been of too small proportions to form a basis for accurately estimating reserves. However, in so far as the productive history is subject to interpretation, the gas content per acre is indicated to be substantial. Several careful pressure tests made upon wells in the vicinity of wells from which large volumes of gas had been produced showed very little reduction in rock pressure. If we consider that the 100 billion cubic feet has been produced from an area within a mile of the producing wells, amounting to some 175,000 acres, the decline in rock pressure to date would indicate an ultimate production of at least 15,000 M cubic feet per acre, for this productive area.

Considerable weight, however, must be given to comparison of the size of the wells at Hugoton with those in the

Amarillo Field, where we have enough productive history to more accurately estimate reserves. The initial open flow capacity of the wells at Hugoton averaged 5,000 or 6,000 M cubic feet per day per well, compared with an average of 25,000 to 30,000 M cubic feet in the Amarillo Field. We have estimated the ultimate production in the entire Amarillo Field at 25 trillion cubic feet, or an average of approximately 18,000 M cubic feet per acre, and it is reasonable to assume, from present indications, that the average acreage content in the Hugoton Field will be considerably less than at Amarillo.

In estimating the recoverable gas per acre at Hugoton by the method of computing the porous volume of the gas-bearing reservoir, it may be assumed that the productive zone averages at least 50 feet in thickness and has a porosity of 20%, indicating recoverable reserves down to an estimated abandonment pressure of 50 pounds per square inch, of 10,000 M cubic feet per acre.

Considering all of the known factors, we feel that the present productive portion of the Hugoton Field will provide a future recoverable production of at least 10 million cubic feet per acre. It should be recognized that within the [fol. 14217] limits of this immense field, as now indicated by the outlying scattered wells, there are large areas still untested by the drill that may readily be found to contain less than 10 million cubic feet per acre, also that the size and limits of the field as it will eventually be developed can now be only generally anticipated. Hence, we estimate the present known gas reserves of the entire Hugoton Field at not less than 10 trillion cubic feet. This is equivalent to 1,000,000 acres at 10,000 M cubic feet per acre, or 1,250,000 acres at an average of 8,000 per acre, that may now be classified as proven, while further development may readily disclose substantially greater quantities.

Company Reserves at Hugoton

The location of the Panhandle Eastern Pipe Line Company's leases and acreage controlled under gas purchase contracts in the Hugoton Field is shown on the accompanying map. The Company's net interest in gas leases covers 112,243 proven and probable acres, of which 9,660

acres have been drilled and are producing. The Company controlls 7,140 acres through gas purchase contracts and is obligated to deliver gas locally to Argus Pipe Line Company under gas sales contracts covering 12,108 acres. As shown in Table No. 7, we estimate the Company's reserves at 10,000 M cubic feet per acre for leases in this producing area, and 8,000 M cubic feet per acre within the proven and probable zone outside of the producing area. The Company's combined interest in leases and purchase and sales contracts enables it to control, for the supply of its main pipe line system, a total known gas reserve in excess of 1 trillion cubic feet. See Table No. 7.

The Amarillo and Hugoton Fields as a Unit

These two great fields are situated close together and the main pipe lines of the Panhandle Eastern Pipe Line Company and Northern Natural Gas Company are already connected to both fields. The Cities Service Gas Company holds important acreage in the Hugoton Field, which is also within ready connection distance to the Chicago line from Amarillo. The two fields taken together thus form a common source of supply for the long distance transmission lines to the east and northeast. The Amarillo Field [fol. 14218] is at present the larger of the two; it contains larger wells, it was developed first and during the period when so much gas was wastefully blown into the air in this field, it was more practical and economical to utilize the cheap Amarillo gas. However, the waste gas has now become less available, and further production of gas in the Amarillo Field will reduce the remaining pressure and available acreage to a point where more of the supply of gas for the large pipe lines will need be drawn from the Hugoton Field which is almost 100 miles nearer the distant markets.

The total production for these two fields for the twelve months ending July 31, 1936 is estimated as shown in Table No. 12 to approximate 664 billion cubic feet. Of this quantity, the pipe lines used 187 billion, the carbon black plants burned 184 billion, smaller quantities were utilized in oil field operations and shrinkage by gasoline extraction and the remainder was wasted by blowing to the air in the Amarillo Field. In addition to the Panhandle Eastern

Pipe Line Company's 22" line connecting with its main 24" pipe line system which transports gas eastward, finally reaching Detroit, the major pipe lines withdrawing gas from the Amarillo-Hugoton Fields include the Colorado Interstate Gas Company line to Denver, the Chicago line, the Northern Natural Gas Company line to Omaha and to Minneapolis and St. Paul, the Cities Service Gas Company line to Kansas City, the Consolidated Gas Utilities Company line to Wichita, the Lone Star Gas Company line to Fort Worth, the Northern Texas Utilities Company line to Wichita Falls, the lines to Amarillo and Lubbock, Texas. Several of these pipe lines are already operating at near maximum capacity. The pipe line systems are subject to further material increase in capacity, however, by the addition of compressor equipment and by partial looping of the pipe lines themselves, while it is not unlikely that in time additional lines may be built.

The carbon plants in Amarillo have been substantially increasing their gas requirements in recent years, as shown in Table No. 10. Several of the carbon companies are developing gas reserves in the Hugoton Field. While only one small carbon black plant has as yet been constructed [fol. 14219] in Kansas, the State Conservation Act of 1935 specifically permits the use of gas for carbon black manufacture and it is likely that the carbon black industry will further expand operations in the Amarillo-Hugoton area.

The Texas Conservation Act of 1935 has been held unconstitutional in so far as it might be construed to permit certain proration orders entered by the Texas Railroad Commission. Regardless of this, it is not reasonable to expect that an unnecessarily large wastage of gas will be permitted to continue for any considerable time.

As shown in Table No. 12, after adjusting actual production figures to give effect to the reduction during the past year in the quantities of gas wasted, as well as to the continually increasing utilization of gas, we estimate that the total present production of the Hugoton and Amarillo Fields taken together, is at the rate of approximately 600 billion cubic feet per year. Future expansion of pipe line and carbon black operation will no doubt materially in-

crease this figure to an extent that cannot be very accurately forecast, although it may readily reach a total of 750 or 800 billion cubic feet per year. Such an ultimate total production of gas may be compared with the combined recoverable reserves of these two fields, here estimated at approximately 30 trillion cubic feet. The reserves of the Amarillo-Hugoton Fields are thus sufficient to provide a supply of gas for all reasonably expected future requirements for many years to come,—at least 25 years.

Company's Gas Supply

We have estimated that Panhandle Eastern Pipe Line Company now controlls proven gas reserves for the supply of its main pipe line system, aggregating 1,874 billion cubic feet, of which 1,559 billion cubic feet are in the Company's own gas producing properties and 324 billion are in properties controlled under contract. The Company's gas wells and producing properties have previously been owned and operated by its producing subsidiary, Texas Interstate Pipe Line Company, which we are informed, has recently transferred all of its properties and operations to Panhandle Eastern Pipe Line Company. The total natural gas produced and purchased by Panhandle Eastern Pipe Line [fol. 14220] Company and subsidiaries for the twelve months ending September 30, 1936, amounted to 20.4 billion cubic feet. Sales of gas transported through the Company's main line have been increasing rapidly and substantial further improvement is anticipated, by reason of the completion during the past year of 22" pipe line to Detroit which will be supplied with gas passing through the Panhandle's main line system. The market for natural gas at Detroit is large, the market for industrial gas for heat treating and special industrial processes involved in the manufacture of automobiles and automobile accessories being one of the important potential markets for natural gas in the United States. The quantities of gas required for the Panhandle system after the development of the load at Detroit will depend upon the availability of gas in the field at reasonably low prices, the capacity of the system and the market for gas at satisfactory delivered prices. The market and the gas supply seem assured. The capacity of the pipe line, as increased by construction during the past year, is in the neighborhood of 120 million

cubic feet per day (all volumes at 16.4 pound base), or 25 to 28 billion feet per year, at the probable load factors. This capacity can be increased considerably by the addition of compressor equipment and could be further increased by the partial looping of the line, while total gas handled may be increased by improving the load factor. Engineers for the Company have estimated a gas requirement of 30 billion cubic feet (16.4 base) for the year 1937, with further expected growth of the market, estimated to require a supply of 43 billion cubic feet per year by 1941. Even with such a greatly expanded load, assuming that it may be attained, comparison with the estimated gas reserves controlled by the Company, indicates that it has an available supply of gas sufficient for more than 25 years.

Other Possibilities in Western Kansas

The Company's main transmission line passes through southwest and south-central Kansas, a region which is generally favorable for the future development of additional gas production. Petroleum and natural gas have been produced in the older fields in the southeastern por- [fol. 14221] tion of Kansas for the past 30 years. The underlying formations of southern Kansas are sedimentaries ranging in age from Pennsylvanian to Pre-Mississippian and are sufficiently undulating to afford numerous areas which structurally are favorable for the accumulation of natural gas.

Extensive natural gas developments have occurred during the past several years in the vicinity of Wichita and to the northwest along the Barton Arch. Several important new fields have recently been discovered including the Burrton Field near Hutchinson and the Rush County Gas Field. The opportunity for discovery of similar structures is favorable and there is much of western Kansas which still remains to be explored. In the final analysis, all of the major pipe lines withdrawing gas from the Amarillo-Hugoton area will have about the same ultimate life, since each draws from the common reservoir available to all; hence any additional fields that may be discovered near the source of supply of the major pipe lines will add to the common supply and ultimate life of all of them.

The Company has been producing and purchasing small quantities of gas in the old depleted shallow gas fields south of Kansas City, which are here estimated to provide a reserve of 10 billion cubic feet.

Valuation of Company's Gas Producing Properties and Leaseholds.

Properties in Producing Areas

These valuations are detailed in Tables No. 2 and 3. In the Amarillo Field we have estimated that the Company's leases in the actively producing area within ready connection distance from the Company's gathering lines contain gas reserves totalling 489 billion cubic feet and that its leases of the same classification in the Hugoton Field contain 310 billion, or a total reserve of 799 billion cubic feet. The Company also has considerable proven acreage, especially at Hugoton, in outlying areas, although not so readily subject to connection to its present pipe line system. Furthermore, it purchases large quantities of gas, under many purchase obligations covering substantial acreage, and will be subject to general programs of pro- [fol. 14222] ration and regulation whereby the major pipe lines are to some extent required to provide a market for independent producers. We have given consideration to the probable proportion between the future supply to be withdrawn from the Company's own acreage and that from its gas purchase contract acreage, comparing open flow capacity, reserves per acre, extent of acreage and costs of production and purchasing, as well as the position of the main pipe line system with respect to each of the two important fields, line capacity, and probable future markets. As a result of this study, we feel that for the purpose of judging the value of these properties, it is reasonable to anticipate a future production from this particular acreage over the next 25 years of 600 billion cubic feet, of which 375 billion will be from Amarillo and 225 billion from the Hugoton Field. Production may, and probably will, continue from these properties after 25 years, but so far as their present value is concerned we disregard profits which may accrue thereafter.

The value of gas at the well in the Amarillo Field is taken at $.04 per M cubic feet and the Hugoton Field at

$.045. We have estimated operation, taxes and general expenses at $.008 per M cubic feet for both fields, from a consideration of the Company's actual costs, as presented in Table No. 13, as well as of costs generally in these fields. The estimated expenses are intended to allow for a decreased cost per M cubic feet upon the immediate increase in production per well, for an increased expense when future production declines some years hence, and for a proper provision for overheads and contingencies. Royalties are computed at 1/8 of $.04 in Amarillo and 1/8 of $.05 in the Hugoton Field, as paid. Rentals are estimated at $50,000 per year in each field, approximately equivalent to the present rate. Future development costs for the undrilled properties in the proven area are estimated at $25,000 per well on the basis of about 440 acres per future well, a somewhat wider spacing than at present, and resulting in total estimated development costs of $1,250,000 in each field.

The total net future returns from the Amarillo proper- [fol. 14223] ties and leases are estimated at $7,625,000, the present value of which, including present wells and well equipment, we place at $3,000,000. The factor by which to discount expected future returns to arrive at their present value is a matter of judgment. In this case the future returns are estimated to accrue at a slightly increasing rate over the next 25 years. We have estimated the present value thereof at approximately 40%, which is equivalent to discounting the net future returns at 8% per year compound discount.

The estimated total net future returns of the Company's Hugoton properties in the producing area amount to $4,418,750, the present value of which is placed at $1,750,000.

Value of Company Acreage Outside of Producing Areas

In the Amarillo Field the Company has leases covering 5,490 acres in the proven sweet gas portion of the field but outside of the area we have classified as actively producing. We value this acreage at approximately $10 per acre, or a total of $55,000.00.

In the Hugoton Field the Company has a large number of scattered leases throughout the area classified as proven and probable but outside of the present producing area. While much of this acreage should ultimately prove to con

tain 8,000 M cubic feet per acre, or more, the costs of constructing gathering lines necessary to collect gas throughout this large field will be a serious obstacle, which will probably lead to the release of much of the acreage in scattered areas and the accumulation of more concentrated blocks in localities favorable to the Company's gathering line system. We appraise the value of the Company's 81,231 acres in this classification at around $3 per acre, or a total of $244,000.00.

The Company also has leases covering 6,025 acres outside of the proven sweet gas area in the Amarillo Field, which we value at $6,000. In the Hugoton Field the Company holds 51,445 acres outside of the proven and probable area, which we value at about $.50 per acre, or $25,000.00.

[fol. 14224] Total Valuation

As summarized in Table No. 1, we have estimated the total value of Panhandle Eastern Pipe Line Company's gas producing properties (including wells and well equipment) and gas leaseholds at $5,080,000.00.

Summary and Conclusions

The Panhandle Eastern Pipe Line Company obtains its supply of gas from the Amarillo and Hugoton Fields, the combined reserves of which we estimate at approximately 30 trillion cubic feet. Gas is being produced in these two field at the rate of approximately 600 billion cubic feet per year, and while this will no doubt increase considerably, these fields provide a supply sufficient for all probably uses for a period of more than 25 years.

The Company itself controls gas reserves under leases and gas purchase contracts estimated at 1,374 billion cubic feet. Its delivery requirements, which have increased to a present annual total approximating 20.4 billion cubic feet are expected to soon reach 30 billion and may thereafter increase to the order of 40 billion cubic feet per year.

After giving consideration to all of the known factors affecting the future supply and probable demand, it is our judgment that Panhandle Eastern Pipe Line Company will be able to obtain, at reasonable costs, supplies of natural gas sufficient for its market requirements for a period of not less than 25 years.

We have estimated the value of the Company's producing properties and proven leases in the actively producing areas of these two fields at $4,750,000, and the value of its other leases at $330,000.00, arriving at a total value of gas producing properties and leaseholds of $5,080,000.00.

—RALPH E. DAVIS, INC.,
Engineers.
By Ralph E. Davis.

February 8, 1937.

[fol. 14227]

Table No. 2

Panhandle Eastern Pipe Line Company

Valuation of Producing and Proven Leases

in Producing Area of Amarillo Field

Estimated Reserves			
Total	489,000,000 M cubic feet		
Estimated Production during next 25 years	375,000,000 M cubic feet		
Estimated Revenue	Per M Cu Ft Produced		
375,000,000 M cubic feet	$ .04		$15,000,000
Expenses			
Operating, Taxes and General Expense	.008	$3,000,000	
Royalties, 1/8 of $ .04	.005	1,875,000	
Rentals, $50,000 per year		1,250,000	
Total			6,125,000
Net Future Operating Revenue			8,875,000
Less Development Costs 50 Wells at $25,000			1,250,000
Net Future Returns			7,625,000
Present Value, Including Present Wells and Well Equipment			$ 3,000,000

[fol. 14228]

Table No. 3

Panhandle Eastern Pipe Line Company

Valuation of Producing and Proven Leases in Producing Area of Hugoton Field

Estimated Reserves			
Total Estimated Production during next 25 years	310,000,000 M cubic feet 225,000,000 M cubic feet		
		Per M Cu. Ft. Produced	
Estimated Revenue			
225,000,000 M cubic feet		$ .045	$10,125,000
Expenses			
Operating, Taxes and General Expense		.008	$1,800,000
Royalties 1/8 of $.05		.00625	1,406,250
Rentals, $50,000 per Year			1,250,000
Total			4,456,250
Net Future Operating Revenue			5,668,750
Less Development Costs			1,250,000
Net Future Returns			4,418,750
Present Value, Including Present Wells and Well Equipment			$ 1,750,000

[fol. 14233]

Table No. 8

Panhandle Eastern Pipe Line Company

Classification of Acreage Under Lease

February 1, 1937

County	Number of Acres			
	Proven Producing	Proven and Probable Non-Producing	Outside of Proven Area	Total
Amarillo Field				
Texas				
Moore	1,646	23,451	960	29,057
Carson	3,000	1,060	3,386	8,046
Potter	2,080	2,650		1,730
Hutchinson	263	320	1,679	2,262
Total	10,589	27,481	6,025	44,095

Hugoton Area				
Texas				
Sherman		2,160	5,445	7,605
Hansford		6,465	11,520	17,985
Oklahoma				
Texas		10,937	20,000	60,937
Kansas				
Haskell		5,400	—	5,400
Stevens	* 12,480	17,814	11,520	41,814
Seward		15,360	960	16,320
Morton	* 3,200	4,475	2,000	9,675
Grant		18,400	—	18,400
Total	15,680	111,011	51,445	178,136
Less 1/2 Interest	* 6,020	8,428	—	14,448
Total Net Interest	9,660	102,583	51,445	163,688
Total Acreage — Net	20,249	130,064	57,170	207,782

*Note: The Company owns a 1/2 interest under 28,896 acres, 12,040 producing and 16,856 non-producing.

Of the 12,480 acres producing in Stevens Co., 9,160 acres are 1/2 int.
Of the 3,200 " " " Morton Co., 2,880 " " " "

Total 12,040 " " " "

Net Company Interest 6,020 acres

[fol. 14243] (Exhibit 76)

Panhandle Eastern Pipe Line Company

Natural Gas Supply

September 30, 1940

Ralph E. Davis, Inc.
Engineers
Pittsburgh and New York

[fol. 14244] Ralph E. Davis, Inc.
Engineers

New York
150 Broadway

Petroleum and Natural Gas
1710 Union Bank Building
Pittsburgh

November twelfth,

Nineteen forty.

Board of Directors,
Panhandle Eastern Pipe Line Company,
New York, New York.

Gentlemen:

In accordance with your request, we have made a study as of September 30, 1940 of the natural gas supply available to your company. The gas produced and purchased by your company and the gas reserves available to it are located almost entirely in the Amarillo field of Texas and in the Hugoton field which includes portions of (a) southwestern Kansas, (b) the Oklahoma Panhandle, and (c) Sherman and Hansford Counties in northwest Texas. These fields together constitute one of the largest known reserves of natural gas.

The conclusions stated herein regarding the reserves of these fields are based upon engineering and geological studies we have made of both of these fields since they each became important as a source of supply of natural gas, including information made available to us in former detailed studies of your company's gas supply, and upon a recent study of both the Amarillo and Hugoton fields. Data regarding acreage controlled, wells owned or under gas purchase contracts, production of these wells and their pressure history have been furnished by officials of Panhandle Eastern Pipe Line Company.

Our most recent study of the Amarillo field indicates that the proven gas acreage covers an area of approximately 1,478,000 acres and that the recoverable gas reserves as of September 30, 1940 are not less than 17.0 trillion cubic feet. Your company owned on September [fol. 14245] 30, 1940 leases covering a total of 42,136 acres in the proven area of this field, this being approximately 2.85 per cent of the total proven area. Upon these lands there had been completed as of said date a total of 55 wells, 11 of which were completed subsequent to July 1939. The average closed pressure of 40 of these wells in June 1937 was 378.9 pounds. The closed pressure in July 1940 of these 55 wells was 358.9 pounds indicating an average pressure drop of 20.0 pounds in a three-year

period. The production of these wells from January 23, 1937 to September 22, 1940, a period of 3 years and 8 months, totaled 55,093,000 M cubic feet or an average production of more than 2 billion cubic feet per pound drop in pressure.

Your company owned gas purchase contracts as of September 30, 1940 covering 23,393 acres in the proven area of the Amarillo field upon which there had been completed a total of 53 wells. Thirty-eight of these wells had an average pressure in June 1937 of 311 pounds and the average of the 53 wells in June 1940 was 308 pounds. During the period from January 23, 1937 to September 22, 1940 these wells had delivered a total of 49,908,000 M cubic feet.

It is evident from the very substantial production obtained with a modest decline in pressure that the acreage upon which your company controls its gas supply in the Amarillo field has a very substantial productive capacity. The total proven acreage controlled through leasehold and through gas purchase contracts, namely 65,529 acres, is equal to about 4.43 per cent of the total proven area of the Amarillo field. It is our judgment that your company thus controls approximately this percentage of the total recoverable reserve, that is, approximately 750 billion cubic feet.

Of the company owned leases held on September 30, 1940 covering a total of 42,136.30 acres of proven gas lands in the Amarillo field, 30,005.7 acres are classed as producing acreage, having a proven gas reserve which we estimate at 361,769,000 M cubic feet. The remaining owned proven leaseholds, totalling 12,130.6 acres are classed as unoperated, and have an estimated gas reserve [fol. 14246] which we estimate at 146,254,000 M cubic feet. The gas purchase contracts owned by your company September 30, 1940, covering gas purchases in the Amarillo field, control the gas under 23,393 proven acres, all classed as operated and having a proven reserve which we estimate at 241,977,000 M cubic feet.

Our most recent study of the Hugoton field indicates the proven and semi-proven area to be not less than 2,000,000

acres and the total recoverable gas reserve as of December 31, 1939 to be not less than 15 trillion cubic feet. In the proven or semi-proven portion of this field your company owns full-interest leases covering 175,030 acres, also one-half interest in an additional 18,428 acres. The gas supply from the unowned one-half interest is under contract to your company, hence the reserves under 193,458 acres are thus controlled.

Your company owned as of September 30, 1940, 33 wells on its wholly-owned Hugoton leasehold acreage. The average pressure of 26 of these wells in June 1937 was 421 pounds and the average pressure of the 33 wells in July 1940 was 414 pounds. During the period from January 23, 1937 to September 22, 1940, these wells produced 11,384,000 M cubic feet.

On September 30, 1940 there had been completed 34 wells on the 18,428 acres in which your company owned one-half interest. Twenty-four of these wells had an average pressure in June 1937 of 415 pounds and the 34 wells had an average pressure in July 1940 of 411 pounds. During the period January 23, 1937 to September 22, 1940 these wells produced a total of 11,876,000 M cubic feet.

The company owned full-interest leases covering a total of 175,030.25 acres in the proven or semi-proven portion of the Hugoton field, include 19,090.95 acres classed as operated, and have a proven gas reserve estimated by us at 126,189,000 M cubic feet. The remaining 155,939.30 acres of full-interest leases are classed as unoperated, and have gas reserves estimated by us at 1,030,739,000 M cubic feet.

The fifty per cent interest owned by your company in [fol. 14247] 18,428 acres of proven or semi-proven leasehold property includes a total of 17,320 acres classed as operated, and have a gas reserve estimated by us at 114,483,000 M cubic feet. The remaining 1,108 acres are classed as unoperated and have an estimated gas reserve of 7,324,000 M cubic feet.

Your company owned on September 30, 1940 gas purchase contracts controlling 33,475 acres in the Hugoton field upon which there had been completed 68 gas wells. Fifty of these wells had an average pressure in June 1937 of 420 pounds and 67 wells had an average pressure in July 1940 of 415 pounds. These wells produced during the period January 23, 1937 to September 30, 1940 a total of 24,919,000 M cubic feet. These 33,475 acres are classed as operated and have a proven reserve which we estimate at 221,265,000 M cubic feet.

The total proven or semi-proven acreage controlled by your company in the Hugoton field through leasehold and gas purchase contracts on September 30, 1940 was 226,933 acres. This is more than 10 per cent of the total proven and semi-proven area as now defined. It is our judgment that your company thus controls gas reserves as of September 30, 1940 in the Hugoton field of not less than 10 per cent of the total reserve of said field, that is, not less than 1.5 trillion cubic feet.

Both the Amarillo and Hugoton fields constitute reservoirs of gas from which gas withdrawals will not necessarily be proportional to the reserves controlled by various producers. The reserves are, we believe, sufficient to meet the combined anticipated requirements for pipe line, carbon black and other uses for a period of more than 25 years.

The combined gas supply controlled by your company in the Amarillo and Hugoton fields is, in our judgment, adequate to supply its present markets and any reasonably anticipated increase in the gas requirements of said markets for a period of more than 25 years.

Very truly yours,

RALPH E. DAVIS, INC.,
By Ralph E. Davis,
President.

PANHANDLE EASTERN PIPE LINE COMPANY

SUMMARY OF ACREAGE - AMARILLO AND HUGOTON FIELDS

Leases Owned 100% By Panhandle Eastern Pipe Line Company
Leases Owned 50% By Panhandle Eastern Pipe Line Company and 50% By Associated Leases
Leases Covered By Gas Purchase Contract

	September 30, 1940				
	Proven			Other	Total
	Operated	Unoperated	Total	Acreage	Acres
LEASES OWNED BY PANHANDLE EASTERN PIPE LINE COMPANY					
AMARILLO FIELD					
Texas - 100% Owned					
Moore County	16,697.79	*11,474.60	28,172.39	-	28,172.39
Carson County	7,762.50	396.00	8,158.50	320.00	8,478.50
Potter County	5,282.81	180.00	5,462.81	-	5,462.81
Hutchinson County	262.60	80.00	342.60	-	342.60
TOTAL AMARILLO FIELD	30,005.70	12,130.60	42,136.30	320.00	42,456.30
HUGOTON FIELD	Proven and Semi-Proven				
Kansas - 100% Owned					
Seward County	-	13,360.00	13,360.00	1,280.00	14,640.00
Stevens County	13,650.95	21,440.00	35,090.95	-	35,090.95
Haskell County	-	3,480.00	3,480.00	-	3,480.00
Morton County	960.00	1,120.00	2,080.00	-	2,080.00
Grant County	4,480.00	25,320.00	29,800.00	-	29,800.00
	19,090.95	64,720.00	83,810.95	1,280.00	85,090.95
Oklahoma - 100% Owned					
Texas County	-	76,434.00	76,434.00	160.00	76,594.00
Texas - 100% Owned					
Sherman County	-	320.00	320.00	5,091.00	5,411.00
Hansford County	-	14,465.30	14,465.30	3,520.00	17,985.30
		14,785.30	14,785.30	8,611.00	23,396.30
Total Hugoton Field - 100% Owned	19,090.95	155,939.30	175,030.25	10,051.00	185,081.25
Kansas - 50% Owned and 50% Under Gas Purchase Contract					
Stevens County	8,120.00	308.00	8,428.00	-	8,428.00
Morton County	2,880.00	480.00	3,360.00	-	3,360.00
Grant County	6,320.00	320.00	6,640.00	-	6,640.00
Total Hugoton Field - 50% Owned	17,320.00	1,106.00	18,428.00		18,428.00
TOTAL HUGOTON AREA	36,410.95	157,047.30	193,458.25	10,051.00	203,509.25
TOTAL LEASEHOLD ACREAGE, AMARILLO AND HUGOTON FIELDS	66,416.65	169,177.90	235,594.55	10,371.00	245,965.55

LEASES COVERED BY GAS PURCHASE CONTRACT TO PANHANDLE EASTERN PIPE LINE COMPANY

	Proven				
AMARILLO FIELD					
Texas					
Moore County	15,979.00	-	15,979.00	-	15,979.00
Carson County	2,007.00	-	2,007.00	-	2,007.00
Carson and Hutchinson Counties	5,407.00	-	5,407.00	-	5,407.00
Total - Amarillo Field	23,393.00		23,393.00		23,393.00

Texas - 100% Owned					
Sherman County	-	320.00	320.00	5,091.00	5,411.00
Hansford County	-	14,465.30	14,465.30	3,520.00	17,985.30
		14,785.30	14,785.30	8,611.00	23,396.30
Total Hugoton Field - 100% Owned	19,090.95	155,939.30	175,030.25	10,051.00	185,081.25
Kansas - 50% Owned and 50% Under Gas Purchase Contract					
Stevens County	8,120.00	308.00	8,428.00	-	8,428.00
Morton County	2,880.00	480.00	3,360.00	-	3,360.00
Grant County	6,320.00	320.00	6,640.00	-	6,640.00
Total Hugoton Field - 50% Owned	17,320.00	1,108.00	18,428.00		18,428.00
TOTAL HUGOTON AREA	36,410.95	157,047.30	193,458.25	10,051.00	203,509.25
TOTAL LEASEHOLD ACREAGE, AMARILLO AND HUGOTON FIELDS	66,416.65	169,177.90	235,594.55	10,371.00	245,965.55

LEASES COVERED BY GAS PURCHASE CONTRACT
TO PANHANDLE EASTERN PIPE LINE COMPANY

	Proven			
AMARILLO FIELD				
Texas				
Moore County	15,979.00	-	15,979.00	- 15,979.00
Carson County	2,007.00	-	2,007.00	- 2,007.00
Carson and Hutchinson Counties	5,407.00	-	5,407.00	- 5,407.00
Total - Amarillo Field	23,393.00		23,393.00	23,393.00

	Proven and Semi-Proven			
HUGOTON FIELD				
Kansas				
Stevens County	12,400.00	-	12,400.00	- 12,400.00
Morton County	2,040.00	-	2,040.00	- 2,040.00
Seward County	640.00	-	640.00	- 640.00
Grant County	18,395.00	-	18,395.00	- 18,395.00
Total - Hugoton Field	33,475.00		33,475.00	33,475.00
TOTAL PURCHASE CONTRACT ACREAGE, AMARILLO AND HUGOTON FIELDS	56,868.00		56,868.00	56,868.00

* Includes 640 acres which have expired but which are to be renewed.

4751 14248

[fol. 14251] Exhibit 77

Michigan Gas Transmission Corporation,
Description of Physical Property.

[fol. 14252] Statement of Qualifications and Experience of George S. Young.

1. Name, address, and age:

George S. Young, Detroit, Michigan; age 42.

2. Present position:

Vice-President, Michigan Gas Transmission Corporation.
Director, Michigan Gas Transmission Corporation.

3. Education:

1920—Graduated from the United States Naval Academy.
1927—Graduated from Columbia University with a degree of Master of Science.

4. Business experience:

1920 to 1930—After graduation from the United States Naval Academy in 1920, I was engaged in the performance of various duties, mostly of a technical nature, in various types of naval vessels until 1925 when I was given an opportunity to take post-graduate work in engineering which was completed in 1927. Thereafter and until 1930, when I left the Navy, I performed engineering duties on board a battleship.

1930 to 1934—I entered the employment of the Columbia Engineering and Management Corporation, a subsidiary of the Columbia Gas & Electric Corporation, and continued in its employ until 1933, when the Columbia Engineering Corporation, also a Columbia Gas and Electric Corpor-

ation subsidiary, was organized and replaced the Columbia Engineering and Management Corporation. While in the [fol. 14253] employment of these Corporations, I was engaged chiefly in making engineering studies of natural gas projects and in the design, construction and operation of natural gas transmission facilities.

1934 to 1936—Upon the liquidation of the Columbia Engineering Corporation in 1934, I was transferred to the United Fuel Gas Company, Charleston, West Virginia, also a subsidiary of the Columbia Gas & Electric Corporation. I was engaged, while in the employment of the United Fuel Gas Company, in the same type of work, that is, making engineering studies of natural gas projects and in the design, construction and operation of natural gas transmission facilities.

1936—In 1936, I was employed by the Panhandle Eastern Pipe Line Company, Kansas City, Missouri, temporarily to assist in the design and construction of compressing stations which were built in 1936 between the Texas Panhandle Gas Field and the Illinois-Indiana State Line to increase the capacity of the Panhandle Eastern Pipe Line Company's system to deliver gas to the Indiana and Detroit Markets, which had been acquired by the Panhandle Eastern Pipe Line Company.

1936 to 1941—Upon completion of my temporary employment by the Panhandle Eastern Pipe Line Company, I was employed by the Michigan Gas Transmission Corporation, a subsidiary of Columbia Gas & Electric Corporation, as General Manager and established offices in Detroit on June 1,

1936. Except for a brief tour of duty in the United States Navy in 1941, I have [fol. 14254]. been employed by Michigan Gas Transmission Corporation since June 1, 1936. In December 1936, I was elected Vice President of the Michigan Gas Transmission Corporation and in May 1940, a Director. During this period of employment, I had some responsibility in connection with the construction of 231.23 miles of 22" O. D. pipe line and river crossings between Zionsville, Indiana, and Melvindale, Michigan. I have been responsible for the construction of all other additions to the Michigan Gas Transmission Corporation's property, for its operation and have personally conducted sales negotiations.

[fol. 14255] Preliminary Statement:

This exhibit is intended to present a general description of the physical properties of the Michigan Gas Transmission Corporation, its sources of supply, and the markets served. The description and schedules presented herewith cover only the major items installed as of June 30, 1941, and do not constitute an inventory of the Corporation's property.

General Description.

In 1931 Panhandle Eastern Pipe Line Company extended its main transmission line to the east bank of Raccoon Creek in the State of Indiana. The Indiana Gas Transmission Corporation was organized February 8, 1931, and as of September 15, 1931 acquired from Panhandle Eastern Pipe Line Company the pipe line in the State of Indiana which consisted of 25.89 miles of constructed 20" pipe line and 1.12 miles of $10\frac{3}{4}$" O. D. multiple crossings under the Wabash River and Raccoon Creek. At the same time, the Indiana Gas Transmission Corporation acquired 20.5 miles of 20" pipe and other materials with which to extend the pipe line which it acquired from Panhandle Eastern Pipe Line Company.

As of November 25, 1931, Indiana Gas Transmission Corporation acquired from the Ohio Fuel Gas Company services for the completion of approximately 20.5 miles of pipe line (the pipe and materials for which were acquired from Panhandle Eastern Pipe Line Company, as previously described in this statement), 23.70 miles of 20" pipe line, and 52.08 miles of 18" pipe line. This pipe line was still under construction when taken over by Indiana Gas Transmission Corporation but was completed shortly thereafter. The 20" pipe line belonging to the Indiana Gas Transmission Corporation then extended 71.21 miles from the Illinois-Indiana State Line to a point south of Zionsville, In- [fol. 14256] diana, and from this point, the 18" pipe line extended to Muncie, a distance of 52.08 miles.

Connections were made by Indiana Gas Transmission Corporation in the ensuing years to supply certain Public Utilities with natural gas for resale to Indiana communities in the vicinity of the pipe line.

In 1936 the Michigan Gas Transmission Corporation acquired through consolidation and merger all of the assets of Indiana Gas Transmission Corporation and constructed 228.78 miles of 22" O. D. pipe line and 2.47 miles of $12\frac{3}{4}$" O. D. multiple river crossings from Zionsville, Indiana to Melvindale, Michigan, to deliver gas for the account of Panhandle Eastern Pipe Line Company to the Detroit City Gas Company, now Michigan Consolidated Gas Company, for distribution in the Detroit area.

Subsequently:

1. Lateral pipe lines were constructed to deliver gas purchased from Panhandle Eastern Pipe Line Company to the Northern Indiana Public Service Company, Public Service Company of Indiana, and Kokomo Gas and Fuel Company for resale in Indiana communities.

2. Connections were made to deliver gas for the account of Panhandle Eastern Pipe Line Company to Toledo Edison Company, Ohio Gas, Light and Coke Company, Central States Natural Gas Company, Incorporated for resale in Ohio communities and to the Michigan Consolidated Gas Company for resale in Ann Arbor, Michigan.

Seventy-one communities in Indiana having a population of nearly one-half millions are served with gas pur-
[fol. 14257] chased by Michigan Gas Transmission Corporation and sold to Public Utilities for distribution in those communities. Gas is delivered by Michigan Gas Transmission Corporation for the account of Panhandle Eastern Pipe Line Company to Public Utilities for distribution in forty communities in Ohio and Michigan having a population of nearly two millions.

The Michigan Gas Transmission Corporation system today, including lateral pipe lines, consists of four hundred and ninety-six miles of pipe of various sizes, has three compressor stations, forty-five regulating and measuring stations, as well as necessary warehouses and auxiliary structures. The Corporation also operates and maintains approximately thirty-one miles of 16" O. D. main pipe line and fifty-five miles of lateral pipe line in the states of Indiana and Ohio, which are the property of customers and affiliated companies, to transport natural gas for distribution in certain communities in Indiana and Ohio.

Source of Supply:

Michigan Gas Transmission Corporation secures its supply of natural gas from the Panhandle Eastern Pipe Line Company at the terminus of its present pipe line system at the Illinois-Indiana State Line in the vicinity of Dana, Indiana.

Description of Main Line:

Michigan Gas Transmission Corporation's main pipe line system extends from the terminus of the Panhandle Eastern Pipe Line in a generally easterly direction to the vicinity of Zionsville, Indiana, at which point two pipe lines diverge, one extending generally northeasterly to Melvindale, Michigan, and one in a general easterly di-
[fol. 14258] rection to Muncie, Indiana. The original and loop lines are described in sections as follows:

1. Illinois-Indiana State Line to Montezuma Compressing Station.

2. Montezuma Compressing Station to Zionsville Compressing Station.

3. Zionsville Compressing Station to Muncie, Indiana.

4. Zionsville Compressing Station to Edgerton Compressing Station.

5. Edgerton Compressing Station to Melvindale, Michigan.

State Line to Montezuma:

The original pipe line from the Illinois-Indiana State Line to the west header of the Wabash River crossing consists of 8.15 miles of 20" O. D. x 5/16" wall, single random length, lapwelded pipe, welded and coupled. The submerged river crossing consists of five 10¾" O. D. lines, each 4,473 feet long, solid welded from header to header. The distance between headers is .84 miles. The original pipe line extends 1.28 miles from the east bank of the Wabash River to Montezuma Compressing Station and this section consists of 20" O. D. x 5/16" wall, single random length, lapwelded pipe, welded and coupled.

The loop pipe line from the Illinois-Indiana State Line to the west header of its crossing of the Wabash River consists of 4.19 miles of 24" O. D. x ⅜" wall and 3.97 miles of 24" O. D. x 5/16" wall, double random length, seamless pipe with a coupling at approximately every second joint. The submerged river crossing is .84 miles in length between headers and consists of two lines between headers. The two lines in the river bed consist of a total of [fol. 14259] 6,695 feet of 16" O. D. x ⅜" wall and 2,221 feet of 16" O. D. x ½" wall, double random length, seamless pipe solid welded from header to header and buried under the bed of the river.

The 1.27 miles of loop line extending from the east bank of the Wabash River to Montezuma Compressing Station consists of .23 miles of 24" O. D. x 9/32" wall and 1.04 miles of 24" O. D. x 5/16" wall, double random length, seamless pipe with coupling at approximately every second joint.

Montezuma to Zionsville:

The original pipe line extending from Montezuma Compressing Station to the west header of the Raccoon Creek Crossing consists of 16.46 miles of 20" O. D. x 5/16" wall, single random length, lapwelded pipe, welded and coupled. The Raccoon Creek multiple crossing is .28 miles in length between headers and consists of four 10¾" O. D. x ½" wall lines, each 1,490 feet long, double random length, seamless pipe completely welded from header to header. Check valves are installed on the east bank in each of the four lines. The original pipe line between the east header of the Raccoon Creek crossing and Zionsville Compressing Station consists of 20.5 miles of 20" O. D. x 5/16" walls and 23.42 miles of 20" O. D. x 9/32" wall, double random length, seamless pipe, welded and coupled.

The 60.70 miles of loop pipe line between the Montezuma and Zionsville Compressing Stations consists of 5.92 miles of 24" O. D. x 9/32" wall and 54.78 miles of 24" O. D. x 5/16" wall, double random length, seamless pipe with a coupling at approximately every second joint.

Zionsville to Muncie:

The main pipe line extending from Zionsville Com- [fol. 14260] pressing Station to the west bank of the White River consists of .28 miles of 20" O. D. x 9/32" wall, and 11.22 miles of 18" O. D. x 9/32" wall, double random length, seamless pipe, welded and coupled. The submerged White River crossing is .11 miles in length between headers and consists of four lines, each 566 feet long of 10¾" O. D. x ½" wall, double random length, seamless pipe completely welded from header to header. From the east header of the White River crossing to Muncie, the line consists of 40.75 miles of 18" O. D. x 9/32" wall, double random length, seamless pipe, welded and coupled.

Zionsville to Edgerton:

The main pipe line extending from Zionsville Compressing Station to Edgerton Compressing Station consists of 107.56 miles of 22" O. D. x 5/16" wall, double random length seamless pipe with a coupling at approximately

every second joint and 1.07 miles of river crossing, each crossing consisting of four lines of 12¾" O. D. double random length, seamless pipe, completely welded between headers.

The distance from Zionsville to the south header of the Mississinewa River crossing is 53.10 miles.

The Mississinewa River crossing is .26 miles in length between headers and there are 1,036 feet of 12¾" O. D. x ⅜" wall and 357 feet of 12¾" O. D. x ½" wall pipe in each of the four lines. Check valves were installed in each line adjacent to the north header.

There are 27.38 miles of 22" O. D. pipe between the north header of the Mississinewa and south header of the Wabash River crossings.

The Wabash River crossing is .36 miles in length between [fol. 14261] headers. There are 1,653 feet of 12¾" O. D. x ⅜" wall and 240 feet of 12¾" O. D. x ½" wall pipe in each of the four lines.

There are 13.34 miles of 22" O. D. pipe between the north header of the Wabash River crossing and the south header of the St. Marys River crossing.

The St. Marys River crossing is .45 miles in length between headers. There are 2,435 feet of 12¾" O. D. x ⅜" wall and 248 feet of 12¾" O. D. x ½" wall pipe in each of the four river crossing lines.

There are 13.74 miles of 22" pipe between the north header of the St. Marys river crossing and Edgerton Compressing Station.

Edgerton To Melvindale:

The main pipe line between Edgerton Compressing Station and its terminus in Melvindale, Michigan, consists of 121.22 miles of 22" O. D. x 5/16" wall, double random length, seamless pipe with coupling at approximately every second joint, and 1.40 miles of river crossings, each crossing consisting of four lines of 12¾" O. D. double random length, seamless pipe, completely welded between headers. Of the 22" O. D. main line, .36 miles were laid in Indiana, 66.95 miles in Ohio, and 53.91 miles in Michigan.

There are 24.51 miles of 22" O. D. pipe between Edgerton Compressing Station and the south header of Maumee River crossing, .36 miles of which are in Indiana and 24.15 miles in Ohio.

The Maumee River crossing is .25 miles in length between headers and there are 1,071 feet of 12¾" O. D. x ⅜" wall and 240 feet of 12¾" O. D. x ½" wall pipe in each of the four river crossing lines.

[fol. 14262] There are 3.72 miles of 22" O. D. pipe between the north header of the Maumee River crossing and the south header of the Tiffin River crossing.

The Tiffin River crossing is .40 miles in length between headers and each of the four river crossing lines consists of 1,763 feet of 12¾" O. D. x ⅜" wall and 320 feet of 12¾" O. D. x ½" wall pipe. Check valves are installed in each of the river crossing lines adjacent to the north header.

There are 62.82 miles of 22" O. D. pipe between the north header of the Tiffin River crossing and the south header of the Raisin River crossing, 39.08 miles of which are in Ohio and 23.74 miles in Michigan.

The Raisin River crossing is .58 miles in length between headers and each of the four lines consists of 2,566 feet of 12¾" O. D. x ⅜" wall and 508 feet of 12¾" O. D. x ½" wall pipe. Check valves are installed in each of the river crossing lines adjacent to the north header.

There are 14.36 miles of 22" O. D. pipe between the north header of the Raisin River crossing and the south header of the Huron River crossing.

The Huron River crossing is .17 miles in length between headers and each of the four river crossing lines consists of 717 feet of 12¾" O. D. x ⅜" wall pipe and 183 feet of 12¾" O. D. x ½" wall pipe.

There are 10.85 miles of 22" O. D. pipe from the north header of the Huron River crossing to the Detroit Regulator Station in Allen Park, Michigan, and 4.96 miles of [fol. 14263] 22" O. D. pipe line from this point to the terminus of the line at the Detroit Measuring Station in Melvindale, Michigan.

Compressing Stations:

As previously stated, Michigan Gas Transmission Corporation owns three compressing stations and Schedule 1 attached hereto lists those stations, shows the dates of the initial construction and additions, and the compressing horsepower installed.

Distance Between Stations:

The pipe line mileages between the compressing stations and other points are as follows:

	Original Line	Loop Lines
1. State line to Montezuma	10.27	10.27
2. Montezuma to Zionsville	60.66	60.70
3. Zionsville to Muncie	52.36	—
4. Zionsville to Edgerton	108.63	—
5. Edgerton to Melvindale	122.62	—

River Crossings:

As already stated and described, multiple pipe line submerged crossings are used where the pipe line passes under principal creeks and rivers. The multiple pipe lines are installed at these points to avoid, so far as possible, lengthy interruption of service which might result if a single line was installed. Each river crossing pipe line is provided with valves at each header to be used to isolate the line in event of a break. If required, the pipe lines are [fol. 14264] fitted with river clamps to prevent the pipe from floating. As already stated, check valves are installed near the downstream headers at certain crossings to bottle as much of the gas as possible in the line in event of a pipe line break.

Lateral Lines:

In addition to the main pipe line system, the Michigan Gas Transmission Corporation owns and operates 57.98 miles of lateral pipe lines of various sizes and lengths, 57.91 miles in Indiana, .05 miles in Ohio, and .02 miles in Michigan. The Corporation also operates and maintains approximately fifty-five miles of lateral lines in Indiana and Ohio which are the property either of the public utilities to whom it sells gas or to whom it delivers gas for the

account of Panhandle Eastern Pipe Line Company, or the Ohio Fuel Gas Company.

The lateral pipe lines owned vary in size from two to six inches in diameter and from a few feet to over nineteen miles in length. Some of these lateral lines are equipped with a main line regulator setting to control the pressure in the lateral line itself. At each delivery point additional equipment is installed to effect further pressure regulation and to measure deliveries to the customers.

Protective Measures:

The 20" O. D. main pipe line from the Illinois-Indiana State Line to Raccoon Creek is protected against corrosion for its entire length by a paint coating. Between Raccoon Creek and Zionsville 2.06 miles of protective coating was applied to the 20" O. D. main pipe line where the pipe was laid in soil shown to be of a corrosive nature. Between [fol. 14265] Zionsville and Muncie 2.38 miles of the 18" main pipe line was similarly protected. The entire length of the 24" O. D. loop between the Illinois-Indiana State Line and Zionsville is covered with a protective coating of paint. The 22" O. D. main pipe line between Zionsville and Melvindale, Michigan, is coated for 186.90 miles of its length. All of the lateral pipe lines constructed since 1936 have been covered with a protective paint coating.

A minimum cover of 30" has been employed in the construction of the pipe lines. To avoid sharp pipe bends, the pipe is laid deeper at necessary locations at river and creek banks and in rough country. To protect the soil covering against erosion where the terrain is rough, numerous breakers and spillways of stone and concrete have been constructed.

The pipe lines through creeks, rivers and wet ground are weighted with weight clamps or concrete to prevent the pipe from floating to the surface. At locations where the pipe is bent, concrete blocks have been installed to balance the pipe thrust.

Valves were installed in the main lines at an average interval of approximately six miles. Each such valve setting is equipped with by-pass and blow-off connections.

These valves are used for sectionalizing the pipe line, a procedure normal to the operation and maintenance of gas transmission pipe lines.

Advantages of Loop Lines:

The original pipe line between the Illinois-Indiana State Line and the Zionsville Compressing Station, a distance of approximately seventy-one miles, is completely looped with a 24" O. D. pipe line to increase capacity. At each of the sectionalizing valves and on both banks of the Wabash [fol. 14266] River crossing, crossover connections are provided, thus making it possible to operate the lines with one or more sections of either pipe line isolated, which aids greatly in the maintenance of uninterrupted service.

Route of Gas:

Natural gas, from which the natural gasoline has been extracted and which has been dehydrated, is received by the Michigan Gas Transmission Corporation from the Panhandle Eastern Pipe Line Company at the Illinois-Indiana State Line. The gas moves eastward to Montezuma Compressing Station where, in part, it is compressed and transported to the Zionsville Compressing Station. Gas distributed in the Muncie area is transmitted past the Zionsville Compressing Station without recompression. At Zionsville the deliveries made from the 22" O. D. pipe line extending to Melvindale, Michigan, are recompressed and transported, in part, to Edgerton Compressing Station. At Edgerton the gas is again recompressed into the line extending to its terminus in Melvindale, Michigan.

Communication System:

The Michigan Gas Transmission Corporation does not own a communication system but depends on Western Union, Postal Telegraph, and the Bell Telephone System for communication.

Communities Served:

Schedule 2 attached hereto lists the principal communities served directly by the Michigan Gas Transmission

Corporation in Indiana with gas purchased from Panhandle Eastern Pipe Line Company and the principal communities in Ohio and Michigan to which gas is delivered for the account of Panhandle Eastern Pipe Line Company. [fol. 14267] Communities to be Served Soon:

Contracts have been signed by the Panhandle Eastern Pipe Line Company with public utilities owning distribution systems in Richmond and Greenfield, Indiana, to supply gas for these communities. The Michigan Gas Transmission Corporation will transport this gas for the account of Panhandle Eastern Pipe Line Company from the Illinois-Indiana State Line to the point of delivery in each case.

In addition, the Panhandle Eastern Pipe Line Company has contracted with public utilities owning distribution systems in Adrian, Albion, Battle Creek, Flint, Jackson, Kalamazoo, Owosso, Marshall, Pontiac, and more than eighty small communities in Michigan. Michigan Gas Transmission Corporation will transport this gas for the account of Panhandle Eastern Pipe Line Company from the Illinois-Indiana State Line to the point of junction with a pipe line system in Michigan to be constructed by the Panhandle Eastern Pipe Line Company.

Special Industrial Sales:

Contracts covering the sale of gas on an interruptible basis for industrial use are in force for sale to four public utilities for ultimate resale to sixteen special industrial consumers. Schedule 3 attached hereto is a list of these public utilities and shows the name and location of the special industrial consumers.

Compressing Station Equipment:

The size, type and capacity of the equipment in the different compressing stations varies to some extent, depending upon the requirements of the individual station, but is generally uniform. The attached Schedule 4 lists

the principal structures and the principal items of equipment in each of these stations.

[fol. 14268] Gas Measurement Equipment:

It is necessary in connection with the operation and maintenance of its forty-five regulating and measuring stations that the Corporation have equipment and tools especially suited to this work. A list of such equipment and tools is presented in Schedule 5.

Warehouses and Equipment:

The Transmission Department must at all times have on hand at strategic and convenient points along its pipe line system adequate quantities of emergency equipment, material, and supplies to maintain uninterrupted service to its customers. Such emergency equipment, material, and supplies together with automotive equipment is stored in four warehouses. Schedule 6 is a list and description of these warehouses and the major items of equipment located at each.

Automotive Equipment:

The Corporation owns and operates a total of twenty-five trucks and automobiles. A list and description of these cars and the departments by which they are used is given in Schedule 7.

Classifications of Pipe:

The attached Schedule 8 is a summary of the pipe in the lines of the Michigan Gas Transmission Corporation system. This includes only the pipe laid and in use in main lines and laterals and does not include pipe or other material in stock. The Schedule classifies the pipe according to use and size.

Photographs:

Schedule 9 is a collection of photographs showing typical structures and equipment in use by the Corporation. A notation on each photograph is self-explanatory.

[fol. 14269] Pipe Line Breaks:

At about 2:40 A. M. Eastern Standard Time, January 8, 1937, the 20" pipe line, which Michigan Gas Transmission Corporation had acquired through merger from the Indiana Gas Transmission Corporation, broke at a point 23.93 miles east of Montezuma Compressing Station. The pipe pulled out of a coupling located four feet from a mitre weld at the break of a bank. The pressure at Montezuma Compressing Station, when the break occurred, was 440 pounds per square inch guage. Repairs were completed at 12:55 P. M. Eastern Standard Time, January 10, 1937. The time required to repair the break was 58 hours and 15 minutes.

At 7:45 Eastern Standard Time, January 14, 1937, another break occurred at the break of a bank 2.33 miles east of the first break and, as in the case of the first break, the pipe pulled out of a coupling located four feet from a mitre weld. The pressure at Montezuma when this break occurred was 375 pounds per square inch guage. Repairs were completed at 11:00 P. M. Eastern Standard Time, January 15, 1937. The time required to repair the break was 27 hours and 15 minutes. In the case of each of these breaks, several hours were required after repairs were completed to purge the pipe line, start the compressing stations and raise pressures to the point where normal service could be resumed.

It became apparent, in view of the type of construction which had been employed, that this pipe line would not stay in the ground under all weather conditions when operated at a pressure of approximately 450 pounds per square inch guage. The Construction Superintendent in charge of the construction of the 20" pipe line east af [fol. 14270] Raccoon Creek, with whom the construction was discussed at a later date, stated that the pipe line had been constructed for an operating pressure of from 325 to 350 pounds per square inch guage.

Immediately after the first break, reinforcement of the pipe line was undertaken by placing sacks filled with a mixture of one part cement and six parts sand at points where overbends occurred. About 50,000 sacks were

placed. While this work was being done and after the second break occurred, the line pressure was not permitted to exceed 300 pounds and the necessary additional gas requirements during this period over and above the line capacity at an operating pressure of 300 pounds per square inch guage were obtained from the Ohio Fuel Gas Com- [fol. 14270] pany.

On January 23, 1937, pressure was raised to 325 pounds per square inch guage and on January 30, 1937, to 375 pounds per square inch guage, which was not exceeded during the balance of the winter period of 1936-37.

In order to permit operation of the line at a pressure of 450 pounds per square inch guage, it was decided to weld straps over the couplings which were located near bends in the pipe line and to place additional weight in the form of concrete at points where there were sharp overbends.

It was found also that where the 20" pipe line crossed Walnut Creek, it had been laid on the bed of the creek and there were two couplings under water. Split welding sleeves were welded over these two couplings and the line was anchored to the bed of the creek with straps and concrete anchors.

Since reinforcement of the line was completed, no further difficulty has been experienced with it when operating [fol. 14271] at a pressure of 450 pounds per square inch guage.

The following are approximate costs of each of the four operations beforementioned which were charged to Fixed Capital:

1. Weighting with sacks filled with a mixture of one part cement and six parts sand	$39,800
2. Strapping Couplings	14,060
3. Weighting with concrete	10,400
4. Reinforcing Walnut Creek Crossing	14,900
Total	$79,160

The cost of repairing the breaks was charged to operating expenses in the amount of $7,052.64.

During the period that these breaks occurred, the Detroit City Gas Company, now Michigan Consolidated Gas Company, produced 873,846 therms of 980 B.t.u. carbureted water gas and Michigan Gas Transmission Corporation paid Michigan Consolidated Gas Company $71,443.35 which was represented as the increment cost to Michigan Consolidated Gas Company of manufacturing gas during the emergency period. This amount was charged to operating expense.

[fol. 14272]

Schedule 1

Michigan Gas Transmission Corporation

Compressor Stations

Line No.	Name (A)	Initial Installation (B)	First Addition (C)	Second Addition (D)	Horsepower as of 6-30-41 (E)
1	Montezuma	2600HP — 1936	2600HP — 1937	2600HP — 1940	7,800
2	Zionsville	5200HP — 1937	1300HP — 1940		6,500
3	Edgerton	3900HP — 1940	2600HP — 1941*		3,900

Note: *Construction Work in Progress

Line No.	Public Utility (A)	Ownership (B)	Community Served (C)	Approximate Population (D)	LIST UT CO EA	Estin Numbe Custo (E)
1	State of Indiana					
2	Central Indiana Gas Company	Consolidated Electric and Gas Company	Albany	1,623)		
			Alexandria	4,801)		
			Anderson	41,572)		
			Chesterfield	581)		
			Dunkirk	2,942)		
			Eaton	1,453)		
			Elwood	10,913)		
			Fairmount	2,382)		
			Farmland	914)		
			Frankton	824)		
			Gas City	3,488)		
			Gaston	677)		
			Hartford City	6,946)		
			Jonesboro	1,791)		30,3
			Marion	26,767)		
			Middletown	1,520)		
			Muncie	49,720)		
			Parker	786)		
			Redkey	1,538)		
			* Selma	424)		
			Summitville	991)		
			Upland	900)		
			Yorktown	906)		
				164,459		30,3
3	Indiana Gas Distribution Corporation	Columbia Gas and Electric Corporation	Brownsburg	1,136)		
			Carmel	771)		
			Dana	845)		
			Danville	2,093)		1,7
			North Salem	511)		
			Rockville	2,208)		
			Zionsville	1,314)		
				8,878		1,7
4	Indiana-Ohio Public Service Company	United Public Utilities Corporation	Portland	6,362)		
			Winchester	5,303)		3,33
			Union City	3,535)		
				15,200		3,33

* Resale to Selma Gas Company for distribution in Selma, Indiana

LIST OF COMMUNITIES RECEIVING SERVICE FROM PUBLIC UTILITIES TO WHOM MICHIGAN GAS TRANSMISSION CORPORATION SELLS GAS PURCHASED FROM PANHANDLE EASTERN PIPE LINE COMPANY, POPULATION AND NUMBER OF CUSTOMERS AS OF JUNE 30, 1941

Approximate Population (D)	Estimated Number of Customers (E)	Date of First Delivery (F)
1,623)		
4,801)		
41,572)		
581)		
2,942)		
1,453)		
10,913)		
2,382)		
914)		
824)		
3,488)		
677)		
6,946)		
1,791)	30,360	~~10/26/31~~
26,767)		
1,520)		
49,720)		
786)		
1,538)		
424)		
991)		
900)		
906)		
164,459	30,360	
1,136)		8/15/32
771)		8/19/32
845)		Oct.'32
2,093)	1,744	9/11/34
511)		7/28/34
2,208)		10/17/32
1,314)		8/8/32
8,878	1,744	
6,362)		
5,303)	3,333	11/7/34
3,535)		
15,200	3,333	

Line No.	Public Utility (A)	Ownership (B)	Community Served (C)	Approximate Population (D)	Esti Numb Cust (
1	Kokomo Gas and Fuel Company	Independent	Kokomo	33,795	6
2	Lynn Natural Gas Company	United Public Utilities Corporation	Lynn	1,014	—
3	Northern Indiana Public Service Co.	Midland Utilities Company	Bluffton	5,417	
			Columbia City	4,219	
			Decatur	5,861	
			Fort Wayne	118,410	
			* Huntington	13,903	
			Kingsland	114	
			New Haven	1,872	29
			Ossian	784	
			Preble	125	
			Roanoke	808	
			South Whitley	1,118	
			Tocsin	217	
			Yoder	264	—
				153,112	29,
4	Pendleton Natural Gas Company	Independent	Huntsville	175	
			Pendleton	1,681	
				1,856	
5	Public Service Company of Indiana	Midland United Company	Atlanta	479	
			* Attica	3,760	8
			Cicero	943	
			Crawfor ville	11,089	
			Elsto	125	
			Frankfort	13,706	
			Lafayette	28,798	
			Lebanon	6,529	22,(
			Linden	580	
			Mechanicsburg	119	
			New Castle	16,620	
			Noblesville	5,575	
			Romney	216	
			Tipton	5,101	
			Ulen	99	
			West Lafayette	6,270	
			* Williamsport	1,222	—
				101,231	22,(

* Resale to Northern Indiana Power Company for distribution in Attica, Huntington and Williamsport, Indiana

LIST OF COMMUNITIES RECEIVING SERVICE FROM PUBLIC UTILITIES TO WHOM MICHIGAN GAS TRANSMISSION CORPORATION SELLS GAS PURCHASED FROM PANHANDLE EASTERN PIPE LINE COMPANY, POPULATION AND NUMBER OF CUSTOMERS AS OF JUNE 30, 1941

Approximate Population (D)	Estimated Number of Customers (E)	Date of First Delivery (F)
33,795	6,110	~~7/3/36~~ 11/2/37
1,014	286	~~11/8/37~~
5,417)		10/12/37
4,219)		10/24/38
5,861)		10/14/37
118,410)		10/22/37
13,903)		10/24/38
114)		10/14/37
1,872)	29,457	10/22/37
784)		10/14/37
125)		10/14/37
808)		10/22/37
1,118)		10/24/38
217)		10/14/37
264)		10/14/37
153,112	29,457	
175)	606	12/4/34
1,681)		
1,856	606	
479)		5/3/37
3,760)		6/16/37
943)		5/3/37
11,089)		6/7/37
123)		6/19/37
13,706)		5/17/37
28,798)		6/19/37
6,529)	22,002	5/17/37
580)		6/7/37
119)		5/17/37
16,620)		10/23/31
5,575)		5/3/37
216)		6/7/37
5,101)		5/3/37
99)		5/17/37
6,270)		6/19/37
1,222)		6/16/37
101,231	22,002	

† Indiana

LIST OF
UTILI
CORPORA
EASTERN

Line No.	Public Utility (A)	Ownership (B)	Community Served (C)	Approximate Population (D)	Estimated Number of Customers (E)
1	Town of Lapel	Town of Lapel	Lapel	1,146	182
2	Town of Montezuma	Town of Montezuma	Montezuma	1,366	65
3	Town of Pittsboro	Town of Pittsboro	Pittsboro	510	91
4	Town of Roachdale	Town of Roachdale	Roachdale	736	107

LIST OF COMMUNITIES RECEIVING SERVICE FROM PUBLIC UTILITIES TO WHOM MICHIGAN GAS TRANSMISSION CORPORATION SELLS GAS PURCHASED FROM PANHANDLE EASTERN PIPE LINE COMPANY, POPULATION AND NUMBER OF CUSTOMERS AS OF JUNE 30, 1941

Approximate Population (D)	Estimated Number of Customers (E)	Date of First Delivery (F)
1,146	182	8/25/36
1,366	65	5/22/34
510	91	4/6/36
736	107	9/30/36

Line No.	Public Utility (A)	Ownership (B)	Community Served (C)	Approximate Population (D)
1	State of Michigan			
2	Michigan Consolidated Gas Company	American Light and Traction Company	Ann Arbor	43,000
			Detroit	1,900,000
				1,943,000
3	National Utilities Company of Michigan	National Gas & Electric Corporation	Monroe	18,478)
			Dundee	1,699)
			Carlton	864)
			Maybee	390)
				21,431
4	State of Ohio			
5	Central States Natural Gas Company, Inc.	Independent	Paulding	1,903
6	Ohio Gas, Light and Coke Company	Great Lakes Utilities Company	Archbold	1,185
			Bryan	4,670
			Delta	1,777
			Edgerton	982
			Montpelier	3,667
			Napoleon	4,539
			Pettisville	307
			Stryker	817
			Wauseon	2,880
				20,825
7	The Toledo-Edison Company	The Toledo Light and Power Company	Defiance	8,768

8 The Kentucky Natural Gas Corporation purchases gas from the Panhandle Eastern Pipe Line Company at the Illinois-Indiana State L transports this gas under the terms of a contract with Kentucky Natural Gas Corporation to the junction with the Kentucky Natur Montezuma Compressor Station.

LIST OF COMMUNITIES RECEIVING SERVICE FROM PUBLIC UTILITIES TO WHOM MICHIGAN GAS TRANSMISSION CORPORATION DELIVERS GAS FOR THE ACCOUNT OF PANHANDLE EASTERN PIPE LINE COMPANY, POPULATION AND NUMBER OF CUSTOMERS AS OF JUNE 30, 1941

	Approximate Population (D)	Estimated Number of Customers (E)	Date of First Delivery (F)
	43,000	8,761	8/17/39
	1,900,000	442,017	7/9/36
	1,943,000	450,778	
	18,478)		
	1,699)	3,700	5/19/41
	864)		
	390)		
	21,431	3,700	
	1,903	280	7/5/39
	1,186	334)	
	4,670	1,237)	
	1,777	230)	
	982	116)	6/12/39
r	3,667	776)	
	4,539	802)	
le	307	60)	
	817	201)	
	2,880	606)	
	20,825	4,362	
	8,768	1,378	4/11/40

t the Illinois-Indiana State Line and the Michigan Gas Transmission Corporation
nction with the Kentucky Natural Gas Corporation's pipe line on the site of

[fol. 14277] Schedule 3 Page 1

List Of Industrial Consumers Receiving Service
On An Interruptible Basis Indirectly From
Michigan Gas Transmission Corporation System
June 30, 1941

Line No.	Customer Rendering Service (A)	Consumer (B)	Gas Used For (C)
1	Central Indiana Gas Company	Armstrong Cork Co.– Hart Glass Division, Dunkirk, Indiana	Manufacture of Glass Products.
2	Central Indiana Gas Company	Ball Bros., Muncie, Indiana	Manufacture of Glass Containers.
3	Central Indiana Gas Company	Eaton Canning Company, Eaton, Indiana	Canning of Vegetables.
4	Central Indiana Gas Company	Foster-Forbes Glass Co. Marion, Indiana	Manufacture of Glass Products.
5	Central Indiana Gas Company	General Motors Corp. Guide Lamp Division Anderson, Indiana	Boiler Fuel.
6	Central Indiana Gas Company	Johns-Manville Products Corporation Alexandria, Indiana	Manufacture of Glass Products.
7	Central Indiana Gas Company	Owens-Illinois Glass Co. Muncie and Gas City, Ind.	Manufacture of Glass Products.
8	Central Indiana Gas Company	Slick Glass Corporation Gas City, Indiana	Manufacture of Glass Products.
9	Central Indiana Gas Company	Sneath Glass Company Hartford City, Indiana	Manufacture of Glass Products.
10	Central Indiana Gas Company	Warfield Company Sterling Glass Division Lapel, Indiana	Manufacture of Glass Products.
11	Indiana Gas Distribution Corporation	Anchor-Hocking Glass Corp. Winchester, Indiana	Manufacture of Glass Containers.
12	Kokomo Gas and Fuel Company	Continental Steel Corp. Kokomo, Indiana	Manufacture of Steel.
13	Public Service Company of Indiana	Chrysler Corporation New Castle, Indiana	Manufacture of Automotive Parts.

[fol. 14278] Schedule 3 Page 2

List Of Industrial Consumers Receiving Service
On An Interruptible Basis Indirectly From
Michigan Gas Transmission Corporation System
June 30, 1941 (Cont'd.)

Line No.	Customer Rendering Service (A)	Consumer (B)	Gas Used For (C)
14	Public Service Company of Indiana	Ingersoll Steel and Disc Division Borg-Warner Corporation New Castle, Indiana	Manufacture of Steel Products.
15	Public Service Company of Indiana	Ingram-Richardson Manufacturing Company Frankfort, Indiana	Manufacture of Enameled Steel Products.
16	Public Service Company of Indiana	Mid-States Steel and Wire Company Crawfordsville, Indiana	Manufacture of Steel Products.

Line No.	Location (A)	2" I.D. (B)	3" I.D. (C)	4" I.D. (D)	6" I.D. (E)	10" I.D. (F)	12" I.D. (G)	16" O.D. (H)	18
1	Indiana								
2	Main Line					5.79	4.29		
3	Loop Lines				.07	.10	.01	1.69	
4	Lateral Lines	.98	.01	13.29	43.63				
5	Ohio								
6	Main Line						2.57		
7	Lateral Lines	.02	.03						
8	Michigan								
9	Main Line						3.01		
10	Lateral Lines			.02					
11	Total for System	1.00	.04	13.31	43.70	5.89	9.88	1.69	5

SCHEDULE 8

14295

MICHIGAN GAS TRANSMISSION CORPORATION

Summary of Miles of Pipe by Sizes
June 30, 1941

I.D.)	16" O.D. (H)	18" O.D. (I)	20" O.D. (J)	22" O.D. (K)	24" O.D. (L)
29		51.97	70.08	107.92	
01	1.69				70.10
57				66.95	
01				53.92	
88	1.69	51.97	70.08	228.79	70.10

MICHIGAN GAS TRANSMISSION CORPORATION

Line No.	Distributing Company (A)	Connection (B)	Winter Period 1936-37 Provided Daily Capacity to Deliver Firm Gas - MCF (C)	Winter Period 1936-37 Max. Daily Delivery of Firm Gas MCF (D)	Winter Period 1937-38 Provided Daily Capacity to Deliver Firm Gas - MCF (E)	Winter Period 1937-38 Max. Daily Delivery of Firm Gas MCF (F)	Winter Period 1938-39 Provided Daily Capacity to Deliver Firm Gas - MCF (G)	Winter Period 1938-39 Max. Daily Delivery of Firm Gas MCF (H)	Wi Provi Capac Deli Gas
1	Michigan								
2	Michigan Consolidated Gas Co.	Detroit	58,000	51,695	84,000	64,006	84,000	77,954	90
3	Michigan Consolidated Gas Co.	Ann Arbor							1
4	Ohio								
5	Central States Natural Gas Co.	Paulding							
6	Ohio Gas, Light and Coke Co.	Wauseon							
7	Toledo Edison Company	Defiance							
8	Western Ohio Public Service Co.	Hollandsburg				7 a			
9	Western Ohio Public Service Co.	New Paris				28 a			
10	Indiana								
11	Central Indiana Gas Co.	Fairmount							2,
12	Central Indiana Gas Co.	Muncie	10,000	13,701 a	13,000	12,468	13,000	15,045	13,
13	Indiana-Ohio Public Service Co.	Winchester	500	367 a	500	361	500	572	
14	Kokomo Gas and Fuel Co.	Kokomo			1,800	518	1,800	854	2,
15	Northern Ind. Public Service Co.	Fort Wayne			4,500	3,131	4,500	3,517	6,
16	Public Service Co. of Indiana	Crawfordsville			1,500	1,215	1,500	1,175	2,
17	Public Service Co. of Indiana	Lebanon			800	349	800	586	1,
18	Public Service Co. of Indiana	New Castle	1,500	1,900 a	2,000	1,172	2,000	1,417	2,
19	Public Service Co. of Indiana	Tipton			300	268	300	389	
20	Small Towns and Rural Customers:								
21	Indiana Gas Distribution Corp.	Brownsburg		(21 a		(30 a		(29 a	
22	Indiana Gas Distribution Corp.	Carmel		(15 a		(26 a		(31 a	
23	Indiana Gas Distribution Corp.	Dana		(16 a		(18 a		(21 a	
24	Indiana Gas Distribution Corp.	Danville		(53 a		(71 a		(79 a	
25	Indiana Gas Distribution Corp.	North Salem		(20 a		(24 a		(22 a	
26	Indiana Gas Distribution Corp.	Rockville		(47 a		(61 a		(62 a	
27	Indiana Gas Distribution Corp.	Zionsville	600	(37 a	600	(61 a	600	(62 a	
28	Indiana Gas Distribution Corp.	Rural Customers		(25 a		(41 a		(61 a	
29	Lynn Natural Gas Co.	Lynn		(35 a		(42 a		(43 a	
30	Ohio Fuel Gas Co.	Rural Customers		(26 a		(49 a		(44 a	
31	Pendleton Natural Gas Co.	Pendleton		(73 a		(92 a		(47 a	
32	Town of Lapel	Lapel		(17 a		(45 a		(26 a	
33	Town of Montezuma	Montezuma		(3 a		(3 a		(3 a	
34	Town of Pittsboro	Pittsboro		(4 a		(6 a		(8 a	
35	Town of Roachdale	Roachdale		(4 a		(6 a		(16 a	
36	Total		70,600	68,059	109,000	84,098	109,000	102,063	123,
37	Date of Maximum Delivery			12-7-36		12-8-37		12-27-38	

38 Note: Provided Capacity calculated as of December 1 except for December 15, 1940.
39 a- Daily Deliveries not available - estimated from weekly and monthly charts.
40 b- Daily Delivery not available for one interruptible customer. Amount for January 18, 1940 estimated from reported total delivery for th

EXHIBIT 19

CORPORATION

WITNESS Young

COMPARISON OF DAILY PROVIDED CAPACITY TO DELIVER FIRM GAS WITH MAXIMUM DAILY DELIVERY OF FIRM GAS FROM SYSTEM OF MICHIGAN GAS TRANSMISSION CORPORATION

ily of s	Winter Period 1938-39 Provided Daily Capacity to Deliver Firm Gas - MCF (G)	Winter Period 1938-39 Max. Daily Delivery of Firm Gas MCF (H)	Winter Period 1939-40 Provided Daily Capacity to Deliver Firm Gas - MCF (I)	Winter Period 1939-40 Max. Daily Delivery of Firm Gas MCF (J)	Winter Period 1940-41 Provided Daily Capacity to Deliver Firm Gas - MCF (K)	Winter Period 1940-41 Max. Daily Delivery of Firm Gas MCF (L)
	84,000	77,954	90,000	95,945	125,000	125,383
			1,500	1,258	2,000	1,314
			100	46	100	43
			700	406	1,200	552
					350	94
			2,000	1,567	2,500	1,277
	13,000	15,045	13,000	9,035 b	8,200	9,619
	500	572	600	439	600	466
	1,800	854	2,200	993	2,200	1,122
	4,500	3,517	6,800	5,023	9,000	6,411
	1,500	1,175	2,200	2,367	3,900	3,009
	800	586	1,300	692	1,300	619
	2,000	1,417	2,200	1,599	2,000	1,424
	300	389	300	566	800	425
a		(29 a		(45 a		(40 a
a		(31 a		(57 a		(54 a
a		(21 a		(59 a		(21 a
a		(79 a		(139 a		(98 a
a		(22 a		(32 a		(23 a
a		(62 a		(100 a		(70 a
a	600	(62 a	700	(107 a	700	(84 a
a		(61 a		(100 a		(92 a
a		(43 a		(68 a		(55 a
a		(44 a		(41 a		(47 a
a		(47 a		(137 a		(90 a
a		(26 a		(27 a		(31 a
a		(3 a		(7 a		(6 a
a		(8 a		(19 a		(14 a
a		(16 a		(13 a		(12 a
	109,000	102,063	123,600	120,887	159,850	152,495
1		12-27-38		1-18-40		3-18-41

(Exhibit 79-A.)

MICHIGAN GAS TRANSMISSION CORPORATION

COMPARISON OF DAILY PROVIDED CAPACITY TO DELIVER FIRM GAS WITH MAXIMUM DAILY DELIVERY OF FIRM GAS AND TOTAL DELIVERY OF GAS FROM THE PIPE LINES OWNED OR OPERATED BY MICHIGAN GAS TRANSMISSION CORPORATION FOR THE WINTER PERIOD OF 1941-1942 TO DATE
FEBRUARY 27, 1942

Line No.	Distributing Company (A)	Connection (B)	Provided Dafly Capacity to Deliver Firm Gas - MCF (C)	Maximum Daily Delivery of Firm Gas MCF. (D)	Maximum Total Delivery of Gas MCF (E)
1	Michigan				
2	Michigan Consolidated Gas Co.	Detroit	125,000	109,343	109,343
3	Michigan Consolidated Gas Co.	Ann Arbor	2,000	1,575	1,575
4	National Utilities Co. of Michigan	Monroe	700	891	1,673
5	Ohio				
6	Central States Natural Gas Co.	Paulding	100	67	67
7	Ohio Gas, Light and Coke Co.	Wauseon	1,200	1,010	1,010
8	Toledo-Edison Co.	Defiance	500	184	184
9	Western-Ohio Public Service Co.	Hollandsburg	20	16*	16*
10	Western-Ohio Public Service Co.	New Paris	50	45*	41*
11	Indiana				
12	Central Indiana Gas Co.	Elwood	1,000	796	2,110
13	Central Indiana Gas Co.	Fairmount	1,500	2,507	4,995
14	Central Indiana Gas Co.	Muncie	8,200	11,248	21,345
15	Greenfield Gas Co., Inc.	Greenfield	400	178	178
16	Indiana Gas Distribution Corp.	Winchester			2,212
17	Indiana-Ohio Public Service Co.	Winchester	600	765	765
18	Kentucky Natural Gas Corp.	Montezuma			4,432
19	Kokomo Gas and Fuel Co.	Kokomo	2,200	1,142	1,713
20	Northern Indiana Public Service Co.	Fort Wayne	9,000	9,756	9,756
21	Public Service Co. of Indiana	Crawfordsville	3,900	5,188	5,418
22	Public Service Co. of Indiana	Lebanon	1,300	1,123	1,746
23	Public Service Co. of Indiana	New Castle	2,000	1,490	3,970
24	Public Service Co. of Indiana	Tipton	800	771	771
25	Richmond Gas Corp.	Richmond	1,070	1,147	1,147
26	Small Towns and Rural Customers:				
27	Indiana Gas Distribution Corp.	Brownsburg		60*	60*
28	Indiana Gas Distribution Corp.	Carmel		78*	78*
29	Indiana Gas Distribution Corp.	Dana		27*	27*
30	Indiana Gas Distribution Corp.	Danville		136*	136*
31	Indiana Gas Distribution Corp.	North Salem		27*	27*
32	Indiana Gas Distribution Corp.	Rockville		93*	93*
33	Indiana Gas Distribution Corp.	Zionsville	700	109*	109*
34	Indiana Gas Distribution Corp.	Rural Customers		112*	112*
35	Lynn Natural Gas Co.	Lynn		72*	72*
36	Ohio Fuel Gas Co.	Rural Customers		44*	44*
37	Pendleton Natural Gas Co.	Pendleton		122*	122*
38	Town of Lapel	Lapel		42*	42*
39	Town of Montezuma	Montezuma		8*	8*
40	Town of Pittsboro	Pittsboro		22*	22*
41	Town of Roachdale	Roachdale		16*	16*
42	Totals		162,240	150,210	175,435

43 Note: Maximum deliveries for winter period 1941-42 to date were made on Jan. 7, 1942.
44 *Daily deliveries not available, quantities estimated from total deliveries for month of January, 1942.

(Exhibit 79-B.)

MICHIGAN GAS TRANSMISSION CORPORATION

TOTAL DELIVERY OF GAS FROM PIPE LINES OWNED AND OPERATED BY MICHIGAN GAS TRANSMISSION CORPORATION ON DAYS ON WHICH THE DELIVERY OF FIRM GAS FROM SYSTEM WAS THE MAXIMUM

Line No.	Distributing Company (A)	Connection (B)	Date of Maximum Delivery of Firm Ga: Dec. 7, 1936 (C)	Dec. 8, 1937 (D)	Dec. 27, 1938 (E)	Jan.
1	Michigan					
2	Michigan Consolidated Gas Co.	Detroit	51,695	64,006	77,954	9
3	Michigan Consolidated Gas Co.	Ann Arbor				1
4	Ohio					
5	Central State Natural Gas Co.	Paulding				
6	Ohio Gas, Light and Coke Co.	Wauseon				
7	Toledo Edison Co.	Defiance				
8	Western-Ohio Public Service Co.	Hollandsburg		7*		
9	Western-Ohio Public Service Co.	New Paris		28*		
10	Indiana					
11	Central Indiana Gas Co.	Fairmount				2
12	Central Indiana Gas Co.	Muncie	13,701*	12,468	15,673	17
13	Central Indiana Gas Co.	Lapel				
14	Indiana Gas Distribution Corp.	Winchester	3,604	3,522	2,608	2
15	Indiana-Ohio Public Service Co.	Winchester	367*	361	572	
16	Kentucky Natural Gas Corp.	Montezuma			5,373	6
17	Kokomo Gas and Fuel Co.	Kokomo		518	854	1
18	Northern Indiana Public Service Co.	Fort Wayne		3,131	3,517	5
19	Public Service Co. of Indiana	Crawfordsville		1,215	1,405	2
20	Public Service Co. of Indiana	Lebanon		603	664	1
21	Public Service Co. of Indiana	Tipton		268	389	
22	Public Service Co. of Indiana	New Castle	1,900*	2,478	3,784	4
23	Small Towns and Rural Customers:					
24	Indiana Gas Distribution Corp.	Brownsburg	21*	30*	29*	
25	Indiana Gas Distribution Corp.	Carmel	15*	26*	31*	
26	Indiana Gas Distribution Corp.	Dana	16*	18*	21*	
27	Indiana Gas Distribution Corp.	Danville	53*	71*	79*	
28	Indiana Gas Distribution Corp.	North Salem	20*	24*	22*	
29	Indiana Gas Distribution Corp.	Rockville	47*	61*	62*	
30	Indiana Gas Distribution Corp.	Zionsville	37*	61*	62*	
31	Indiana Gas Distribution Corp.	Rural Customers	25*	41*	61*	
32	Lynn Natural Gas Co.	Lynn	35*	42*	43*	
33	Ohio Fuel Gas Co.	Rural Customers	26*	49*	44*	
34	Pendleton Natural Gas Co.	Pendleton	73*	92*	47*	
35	Town of Lapel	Lapel	17*	45*	26*	
36	Town of Montezuma	Montezuma	3*	3*	3*	
37	Town of Pittsboro	Pittsboro	4*	6*	8*	
38	Town of Roachdale	Roachdale	4*	6*	16*	
39	Totals		71,663	89,180	113,347	142,

40 Note: *Daily Deliveries not available, quantities estimated from weekly and monthly charts.

D BY
CH

m Delivery of Firm Gas

. 27, 1938 (E)	Jan. 18, 1940 (F)	Mar. 18, 1941 (G)
77,954	95,945	125,383
	1,258	1,314
	46	43
	406	552
		94
	2,585	3,521
15,673	17,263	20,659
		472
2,608	2,484	4,128
572	439	466
5,373	6,385	5,738
854	1,319	1,598
3,517	5,023	6,411
1,405	2,636	3,284
664	1,152	1,161
389	566	425
3,784	4,262	3,706
29*	45*	40*
31*	57*	54*
21*	59*	21*
79*	139*	98*
22*	32*	23*
62*	100*	70*
62*	107*	84*
61*	100*	92*
43*	68*	55*
44*	41*	47*
47*	137*	90*
26*	27*	31*
3*	7*	6*
8*	19*	14*
16*	13*	12*
113,347	142,720	179,692

[fol. 14314] Exhibit 80.

Report of Inspection by H. C. Lehn* of Equipment in the Compressor Stations of the Michigan Gas Transmission Corporation.

The Worthington Pump and Machinery Corporation received a request from the Michigan Gas Transmission Corporation to furnish the services of an engineer for an inspection of the equipment in their compressor stations to determine the ratio between the value of the equipment when installed and its value as of June 30, 1941. The writer having been selected, visited the stations, inspected the equipment, and examined the station records on September 26th, 1941.

The main compressor equipment on this pipe line consists of horizontal, double acting, four cycle, twin tandem gas engines direct connected to the compressor cylinders, and in units of 1300 rated B.H.P. each. This is the standard type of equipment used generally in the main line compressor stations throughout the country.

There are three stations on the line which in the order of the dates of their construction and of their sequence in the direction of gas flow are located as follows:

#1—Near Montezuma, Indiana

#2—Near Zionsville, Indiana

#3—Near Edgerton, Indiana

It happened to be convenient to visit the stations in the reverse order, and the results of the inspection will be given in the latter order.

*Consulting Engineer, Worthington Pump and Machinery Corporation, Buffalo, N. Y.

[fol. 14315] The procedure used in making the inspection was as follows: The external parts of the engines and other equipment were examined for evidence of defects or deterioration, and the character of operation of those units in service carefully noted. The station records

were then examined for hours of operation and amount of wear of the moving parts.

Before describing the detail findings, attention must be brought to some general conditions applying equally to all of the stations. While all are comparatively new, and Edgerton in particular has only been in operation eight months, so that normally no great physical deterioration should be observable, the condition of all of the equipment was remarkable in its lack of visible evidence of the actual length of service. While carefully searched for, no leaks of gas, water or oil were discovered on the main floors or in the basements. Frequent protective painting, some of which was in progress at the time of the inspection has contributed to maintaining the original condition and all parts scrupulously clean. In the writer's thirty-five years of experience he has not seen stations superior to these, in general fine appearance and evidence of careful and continuous maintenance. The staff is to be highly commended for producing and maintaining the conditions found.

Proceeding to the detail findings, it is evident from the foregoing that few definite or specific items of deterioration can be recorded.

[fol. 14316] Edgerton Station: The main compressing equipment consists of three 1300 H.P. units in service as required, and two duplicate units in process of installation. This station was put in operation December 17, 1940, and on the date of inspection the station records showed that the units had operated the following number of hours:

#1—1084

#2—1094

#3—1062

None were in operation at the time of the inspection, not being required. This station is for all intents and purposes new. The total hours of operation are insufficient to develop appreciable wear of the moving parts, or to dismantle for the customary routine periodic inspection and overhaul. Nothing was found to mark down as deterioration at this station.

The auxiliary equipment consists of two 180 H.P. vertical six cylinder, four cycle gas engines with direct connected generators for station electric power, and the usual motor driven pumps, gas fired boiler for station heating, etc.

Some wear has developed in the main bearings of the power units, otherwise the units are in their original condition. No deterioration observable, or on the station records on the remainder of the auxiliary equipment.

Zionsville Station: The main compressor equipment consists of five 1300 H.P. units, four of which were installed in 1937, and one in 1940. As of the date of inspection the station records showed the following operating hours:

[fol. 14317]

#1—11908
#2—14382
#3—13166
#4— 9708
#5— 3581

Two units were in operation at the time of inspection. These were running quietly, no noise being detected at any of the bearings, indicating correct bearing clearance.

Cylinder liner wear on all units as shown by the station records was normal for the hours of operation, and showed the usual decrease in rate after the first few hours.

Piston rod wear recorded was also normal for the operating period and negligible in amount.

Auxiliary equipment: There are three gas engine-electric units, duplicate of those at Edgerton stations, two installed in 1937 and one in 1940. Some main bearing wear recorded and one piston and liner worn and replaced. Some valve guards and inserts worn and replaced. On the power pumps sleeves and collars were worn.

Montezuma Station: The main compressor equipment consists of six 1300 H.P. units of which two were being installed in 1936, two in 1937, and two in 1940, these lat-

ter being #1 and #6. As of the date of inspection, the station records show the following total operating hours:

[fol. 14318]

#1—2508
#2—21283
#3—21810
#4—20168
#5—19125
#6—3927

Three units were in operation at the time of inspection. The same conditions of quite operation indicative of correct bearing adjustment were found as at Zionsville station. The periodic overhaul on this station had recently been completed. It was not necessary to take up any of the bearings. The total bearing take up on any engine in four years is 2 '1000".

With one exception, liner and piston rod wear is, like Zionsville Station, normal for the period of operation. The exception is one cylinder, which shows greater wear, but not sufficient yet to require a new liner.

Auxiliary Equipment: This is practically a duplicate of that at Zionsville. The recent overhaul showed normal wear on bearings. One set of piston rings was replaced in power unit #2. Unit #3 was in process of overhaul at the time of inspection.

Outside Equipment: At all of the stations including exhaust mufflers, gate valves and piping above ground, cooler piping, showed no signs of deterioration.

From the foregoing it is evident that physical deterioration has caused little or no depreciation.

[fol. 14319] The power of the main compressor units is developed by horizontal, reciprocating, moderate speed, prime movers, and the principal features of their design were established in the first gas engine compressor units built forty years ago. In comparison with some other types the horizontal unit, in addition to its high economy and its being peculiarly adapted to the service, is of great

durability and corresponding low cost of maintenance. This is evidenced by the fact that the original three engines of the type built in 1901-02 are still in service as well as many others built in the early years. Since these first few units were built there has been considerable improvement in detail design and materials used and at the present time the type has reached a high degree of excellence as to detail but there has been no change in the principal features of design and little increase in efficiency. Reasons for the long useful life lie in the comparatively low speed, and in the fact that a great percentage of the weight and initial cost is in parts not subject to stress fatigue or wear, compared to more recent higher speed units. For example, in these units the moving parts are approximately 12% of the total weight, while in a modern length speed vertical diesel or gas engine they are approximately 21%. These weights of moving parts do not include the flywheels.

The company which I am connected with has built in the past forty years over 550 units of this type, totalling over 500,000 H.P. With few exceptions, these engines are all running at the present time. Some are out of service by reason of the gas becoming exhausted at their original location and not being required elsewhere. A number have been moved to different locations, in some cases two [fol. 14320] or three times. To my knowledge none have been abandoned due to their being worn out.

From my personal knowledge of the long life of this type of engine, and from the condition of the units inspected, and their total hours of service, I estimate the ratio of their present to their initial value as follows:

Edgerton: This station has had too few hours of operation to consider depreciation. In fact its value might be said to have increased since its initial start as its efficiency is higher, and at least part of the running in time and expense has been incurred. However, the station will not endure forever, and time has passed, so this station will be depreciated to 99%.

Zionsville: 97%

Montezuma: 96%

Auxiliary Equipment: in which is included all equipment other than the main units. This equipment is of a different type; of shorter life, and I estimate its present value ratio as follows:

Edgerton: As in the case of the main equipment and for the same reasons, 99%

Zionsville: 96%

Montezuma: 95%

Submitted by:

H. C. LEHN

[fol. 14321] Exhibit 81

Michigan Gas Transmission Corporation

Depreciation Study

Lines A, B, and C

C-1350

1941

[fol. 14322] Columbia Engineering Corporation

Address Reply To
99 North Front Street
Columbus, Ohio

November 10, 1941

Mr. G. S. Young, Vice President
Michigan Gas Transmission Corporation
1316 United Artists Building
Detroit, Michigan

Dear Mr. Young:

Enclosed herewith is a copy of the pipe inspection report covering 37 locations where the pipe was exposed for inspection on the property of the Michigan Gas Transmission Corporation in Ohio, Indiana, and Michigan.

This report is complete except for the strip maps of Lines, A, B, and C on which the pipe exposure locations were identified. I remain,

Yours very truly,

H. S. RIDDLE
Gas Engineering Department

HSR:GLA
Enc.

[fol. 14323] Michigan Gas Transmission Corporation

Depreciation Study—Lines A, B, and C

C-1350

Summary of Inspection Data

All Transmission Lines Inspected

(1) Average Overall Percent Condition—Main Pipe Lines	97.7%
(2) Average Overall Percent Condition—Lateral Pipe Lines	99.7%
(3) Average Overall Depth of Cover	42.9"

[fol. 14324] Line A

Average Percent Condition—Coated Pipe	100.0%
Average Percent Condition—Pipe Not Coated	92.2%
Average Depth of Cover	39.8"

Line B

Average Percent Condition	86.7%
Average Depth of Cover	33.3"

Line C

Average Percent Condition—Coated Pipe	99.4%
Average Percent Condition—Pipe Not Coated	98.8%
Average Depth of Cover	46.4"

[fol. 14369]

Exhibit 82

Michigan Gas Transmission Corporation

Accrued Depreciation

on

Compressor Station Structures

Measuring and Regulating Station Structures and Equipment

Other Transmission System Structures

and

General Equipment

as of

June 30, 1941

Francis S. Haberly
Consulting Engineer
Chicago

[fol. 14370] Michigan Gas Transmission Corporation.

Accrued Depreciation

Compressor Station Structures

Measuring and Regulating Station Structures and Equipment

Other Transmission System Structures

General Equipment

The following is an explanation of the procedure followed in determining the extent of existing accrued depreciation on the property of the Michigan Gas Transmission Corporation included in the following accounts:

Account 352.1—Compressor Station Structures and Improvements

Account 352.2—Measuring and Regulating Station Structures and Improvements

Account 352.3—Other Transmission System Structures

Account 354.1—Compressor Station Equipment
Water Tanks and Foundations (only)
Cooling Towers and Foundations (only)

Account 354.2—Measuring and Regulating Station Equipment

Account 372 —Office Furniture and Fixtures

Account 373 —Transportation Equipment

Account 374 —Stores Equipment

Account 377 —Tools and Work Equipment

Inspections of the property were made by the witness, accompanied by his principal assistant, on August 13 and 14, and by the witness on September 26, 1941. On both occasions Mr. C. D. Alsfadt, Superintendent of Transmission, Michigan Gas Transmission Corporation, accompanied the inspection party.

The buildings and structures at Montezuma, Zionsville, and Edgerton were inspected in detail. These structures comprise all of the compressor station and miscellaneous transmission system structures on the property. In addition, measuring and regulating station structures and equipment were inspected, aggregating in excess of 75 per cent of the investment in structures and 65 percent of the [fol. 143711] investment in equipment. In the course of these inspections, and as a result of considerable time spent in the company's offices both at Detroit, Michigan and Fort Wayne, Indiana, practically all of the general equipment, such as furniture, was seen or examined.

Virtually all of the structures have been built or installed since 1936 and, therefore, are comparatively new and of the most modern type of construction. Montezuma compressor station was constructed in 1936 and important extensions and additions were made in both 1937 and 1940; Zionsville compressor station was constructed in 1937, with important extensions and additions in 1940; and Edgerton compressor station was constructed in 1940 and additions and extensions are now under construction.

The witness has inspected many properties, including street railway, electric light and power, and artificial and natural gas properties, and has never seen an entire property in an equally high state of maintenance. Signs of age, wear, weathering, or deterioration were practically nonexistent. The entire property was clean and orderly, well painted, in excellent repair, well arranged, and gave evidence of exceptionally fine housekeeping.

Structures at Compressor Stations

In the inspection of the property at the compressor stations, little could be found indicating depreciation due to physical deterioration. The only evidences of depreciation were minor cracks in foundations and floors which could be repaired readily and which have little or no detrimental effect.

The structural steel framework, steel sash, glazing transite and steel siding and roofs, lighting, and, in fact, all [fol. 14372] other parts of the structures were physically in substantially 100 percent condition.

In arriving at condition percents for these structures, and for other property discussed below, consideration was given to the effect of wear and tear, action of the elements, the degree of serviceability, the state of maintenance, and obsolescence, as well as to the age and probable future life in use.

The high standard of maintenance obtaining on this property results in an almost complete lack of wear or deterioration. The condition of the property offers strong evidence supporting the fact that well maintained property deteriorates less rapidly in its early life than in later years.

The condition percents as set forth below give substantial consideration to age and are materially lower than could be justified by a consideration of physical condition alone.

The condition percents for the various stations are as follows:

	Condition Percent
Account 352.1 — Compressor Station Structures and Improvements.	
Montezuma	
1936 Construction	94.8
1937 Construction	96.0
1940 Construction	98.1
Zionsville	
1937 Construction	96.0
1940 Construction	97.9
Edgerton	
1940 Construction	97.7
Account 352.3 — Other Transmission System Structures	
Montezuma	86.0
Zionsville	93.0
Edgerton	98.0
[fol. 14373] Account 354.1 — Compressor Station Equipment	
Montezuma	
Water Tank and Foundation	96.0
Cooling Tower and Foundation	94.0
Zionsville	
Water Tank and Foundation	97.6
Cooling Tower and Foundation	93.0
Edgerton	
Water Tank and Foundation	99.0
Cooling Tower and Foundation	97.0

Measuring and Regulating Station Structures and Equipment

The measuring and regulating station structures and the equipment, piping, valves, gauges, meters, etc. housed therein, showed little or no visible signs of deterioration and were found to be in the same high state of maintenance and excellent physical condition as was found for the compressor station structures.

The condition percents for the stations erected in various years are as follows:

Account 352.2 — Measuring and Regulating Station Structures	

Account 354.2—Measuring and Regulating Station Equipment

	Condition Percent	
	Structures	Equipment
Fort Wayne Measuring and Regulating Station, 1937	80.0	93.0
Detroit Measuring Station, 1936	96.0	91.0
Detroit Regulating Station, 1937–1940	97.7	96.0
All Other Locations		
1931	77.0	77.0
1932	80.0	80.0
1934	86.0	86.0
1935	89.0	89.0
1936	91.0	91.0
1937	93.0	93.0
1938	95.0	95.0
1939	97.0	97.0
1940–1941	99.0	99.0

[fol. 14374] General Equipment

The property included under this heading consists of office furniture and fixtures, storeroom equipment, automobiles, trucks, tractors, concrete mixers, portable pumps, and small tools. Such property has relatively short life. This equipment was found to be in very good physical condition, well maintained and repaired, and, for the most part, of recent purchase. In placing condition percents on much of this property, such as automobiles, trucks, calculating machines, typewriters, etc., consideration was given to the salvage or trade-in value which would probably be realized when the property was replaced or retired.

The condition percents for the general equipment accounts are as follows:

	Condition Percent
Account 372—Office Furniture and Equipment	78.0
Account 373—Transportation Equipment	71.0
Account 374—Stores Equipment	90.0
Account 377—Tools and Work Equipment	79.0

[fol. 14375] Exhibit 83.

Michigan Gas Transmission Corporation

Reproduction Cost New
of
Plant and Property
As Of
June 30, 1941
Exclusive Of
Working Capital, Materials and Supplies,
Cost of Developing Business or Going Value

Francis S. Haberly
Consulting Engineer
Chicago

[fol. 14377] Francis S. Haberly,
Engineer
122 South Michigan Avenue
Chicago

October 27, 1941

Mr. G. S. Young, Vice President
Michigan Gas Transmission Corporation
1616 United Artists Building
Detroit, Michigan

Dear Mr. Young:

Pursuant to your request, I have made an estimate of the cost of reproduction new of the plant and property of the Michigan Gas Transmission Corporation as of June 30, 1941.

This cost is exclusive of Working Capital, Materials and Supplies, Cost of Developing Business, and Going Value. Land and land rights are included at original costs as furnished to me by the company.

Reproduction costs were obtained by the application of cost indexes (prepared with especial reference to the vari-

ous items of this property) to the costs of such items at the time of installation.

In my opinion, the reproduction cost new as above outlined is $14,168,481. An explanation of the method used in the determination of this cost, together with details by accounts, is enclosed.

Yours very truly,

FRANCIS S. HABERLY.

FSH:LE

[fol. 14378] Michigan Gas Transmission Corporation

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Account 354.2—Measuring and Regulating Station Equipment

General Equipment:

Account 372 —Office Furniture and Fixtures
Account 373 —Transportation Equipment
Account 374 —Stores Equipment
Account 377 —Tools and Work Equipment

[fol. 14379] Education and Experience.

My name is Francis S. Haberly. I live in Chicago, Illinois, and my profession is that of a consulting engineer. My offices are at 122 South Michigan Avenue, Chicago.

I was educated in grade and high schools at Fort Wayne, Indiana, completing the latter in 1914. This schooling was supplemented by intensive engineering study on my own part, together with extension courses in engineering and business administration. I was further benefited by practical experience as an apprentice in the student course of the General Electric Company at Fort Wayne, Indiana.

In 1916, following my student training, I entered the Engineering Department in the Fort Wayne and Northern Indiana Traction Company (now Indiana Service Corporation). After a summer spent as a laborer on construction and maintenance work, I became a draftsman and general assistant to the Engineer of Way and Structures and to the Superintendent of Overhead Construction. Later I became an assistant engineer, my duties consisting of design, surveys, and engineering for construction and maintenance of the track, structures and overhead. In 1917, under the personal direction of the President of the company, the late Robert M. Feustel, I made an appraisal of a large part of the company's street and interurban railway property.

Following two years in the Army as an officer of artillery, I joined the consulting engineering staff of Robert M. [fol. 14380] Feustel and was employed by him until he disbanded his organization in 1924, my duties being principally in connection with valuation and appraisal work. Such work included the following:

Indiana Service Corporation at Fort Wayne, Indiana in 1919. This was a repricing and bringing down to date of the appraisal which I had made in 1917 prior to my entry into the Army. This work was done largely by the use of indexes.

Nashville Railway and Light Company in Nashville, Tennessee in 1920. This was an inventory and unit cost appraisal of railway and light and power property. The original cost was also determined, partly upon the basis of book analysis and partly by the use of indexes.

Great Northern Paper Company, Millinocket, Maine in 1920. This was an inventory and unit price appraisal for tax purposes.

Philadelphia Rapid Transit Company, Philadelphia, Pennsylvania, in 1921 and 1922. This was an inventory and unit price reproduction cost appraisal with original cost being determined by detailed indexes. Mr. Feustel in this case represented the City of Philadelphia.

Frankford Elevated Company, Philadelphia, Pennsylvania in 1922. This work consisted of setting up property costs of the city-owned elevated.

Tennessee Electric Power Company, Chattanooga, Tennessee in 1923 and 1924. This was an inventory and unit price appraisal of street railway, light and power, and [fol. 14381] hydro-electric property. Reproduction costs at various other price levels were obtained by indexes.

In April, 1924 I took a temporary assignment as special assistant to the General Manager of the Tennessee Electric Power Company in matters connected with rate analysis, valuation and preparation of technical exhibits for court cases involving rates and valuation.

In December, 1924 I was employed by Mr. William E. Sloan, of Chicago, on valuations of the New England Telephone and Telegraph Company with property in five of the six New England States; the Cincinnati & Suburban Telephone Company and the Ohio Bell Telephone Company.

In May, 1926, following my work with Mr. Sloan, I was employed by the late Albert S. Richey and remained with him, first, as an employee and, later, as an associate, until his death in June, 1936. Mr. Richey was Professor of Electrical Engineering at Worcester Polytechnic Institute, at Worcester, Massachusetts, as well as a nationally-known engineering consultant.

During my association with Mr. Richey I was actively connected with or in responsible charge of the following appraisals:

United Traction Company, Albany, New York in 1926. This work consisted of checking an appraisal made by the

company and determining costs at various price levels by indexes. Mr. Richey, in this case, represented the City of Albany.

Nashville Railway and Light Company, Nashville, Tennessee in 1926 and 1927. This was an inventory and unit price appraisal of street railway and light and power prop-
[fol. 14382] erty on which I had worked in 1920 under Mr. Feustel. In this case Mr. Richey represented the State Commission.

The Tennessee Electric Power Company in 1927 and 1928. This was an inventory and unit price appraisal of property on part of which I had worked in 1923 under Mr. Feustel. The property included one street railway system, considerable hydro-electric property, electric generating, transmission, and distribution systems covering more than one-half of the state, and several water companies. It is this property which was sold to the T. V. A. and is now operated by it. Indexes were used on minor parts of this work. Mr. Richey, in this case, again represented the State Commission.

The Southern Public Utilities, in North and South Carolina, in 1929. This was an inventory and unit price appraisal of street railway, light and power, and gas property. For this work I took leave of absence from Mr. Richey and was employed by Jackson and Moreland, of Boston, Massachusetts.

In 1930 I returned to Mr. Richey's employ and made an inventory and unit price appraisal of that part of the Third Avenue Railway System located in Westchester County, New York. In 1931 this appraisal was repriced and brought down to date by means of indexes.

Other jobs of lesser importance during the period 1931 to 1935 included the following:

[fol. 14383] Toledo, Bowling Green and Southern Traction Company; Conestoga Traction Company, Conestoga,

Pennsylvania; Omaha and Council Bluffs Street Railway Company; Chicago, North Shore and Milwaukee Railroad Company; Ottawa Electric Railway Company; and Sioux City Gas and Electric Company. My work in this latter case consisted of the development of indexes for the gas property.

In 1933, an appraisal of the Louisville Gas and Electric Company, in Louisville, Kentucky, was made by the use of indexes. This work covered electric light and power, natural gas fields and gas transmission lines, artificial gas plants and the attendant distribution system.

Public Service Company of Northern Illinois in 1933. This was a valuation of light, power and gas property made by the use of indexes. An appraisal made by the application of unit prices to the same property, as of the same date, by other independent engineers, produced results differing by five percent.

Commonwealth Edison Company, Chicago District Electric Generating Corporation and Super-Power Company of Illinois, in Chicago, in 1934 to 1936. This was an appraisal of the electric light and power property in the City of Chicago in which reproduction cost was obtained by the application of detailed indexes to the original cost. An appraisal made by the application of unit prices to the Commonwealth Edison property, as of the same date, by other independent engineers, produced results differing by 1.7 percent.

[fol. 14384] Chicago Rapid Transit Company, Chicago, Illinois, in 1936. This was an appraisal made by the use of indexes for tax purposes.

The Peoples Gas Light and Coke Company in 1935 to 1938. This was an appraisal of the gas property in Chicago in which reproduction cost was obtained by the application of detailed indexes to the original cost. Here, again, an appraisal made by the application of unit prices to the same property, as of the same date, by other independent engineers, produced results differing by 1.6 percent.

In June, 1936 Mr. Richey died suddenly and I have since carried on the business under my own name. I continued such work of Mr. Richey's as was then in progress. This work consisted of presenting the testimony in The Peoples Gas Light and Coke Company case and of making a revaluation as of a later date.

Valuation work done by me since that time has included a tax valuation of a part of the Third Avenue Railway System in New York, in 1938; an inventory, including the setting up of property records, for the Montreal Light, Heat and Power Consolidated in Montreal, Quebec, in 1939 and 1940; and, in the same two years, an inventory and unit price appraisal of the properties of the Pittsburgh Railways Company for purposes of reorganization.

At the present time I am engaged in making appraisals of the property of the Chicago Rapid Transit Company, the Chicago Surface Lines, and the Chicago Motor Coach Company, all in Chicago. These last three named valua-
[fol. 14385] tions are being prepared by the application of indexes to previous appraisals or to original cost.

There are currently prepared in my office construction cost indexes of electric light and power, artificial gas, and electric railway properties which reflect the variation in construction costs of typical properties, exclusive of land, on a nation-wide basis.

I am a member of the American Institute of Electrical Engineers and a member of the American Transit Association.

[fol. 14386] Michigan Gas Transmission Corporation

Purpose of Exhibit and Methods Used

This exhibit is an estimate of the cost of reproduction new of the plant and property of the Michigan Gas Transmission Corporation as of June 30, 1941, exclusive of working capital, materials and supplies, cost of developing business, or going value.

The method used in arriving at the reproduction cost has been by the application of specific indexes of equipment, materials, labor and other installation costs to the

original costs as obtained from an analysis of the company's records.

Cost of reproduction new is taken as the amount in dollars necessary to be expended to reproduce the existing plant under the original conditions of weather, soil and grade, and predicated upon the same contingencies as were actually encountered during the construction of the property. Trending by means of index numbers involves no estimates of labor performance other than reflection of improvements in methods of construction; nor does it involve percentage allowances for warehousing, loss and breakage, supervision, use of tools and equipment, or contingencies. These items form an integral part of the original cost constituting the inventory of dollars which has been repriced by the application of indexes.

Land and Land Rights were furnished by the company and are included at original cost.

The original costs used for trending purposes were obtained by an analysis of company records, including property records, construction ledgers, vouchers, bills, contrac- [fol. 14387] tors' final estimates, payrolls, etc. The purpose of the analysis was to obtain costs in such form as to permit the application of indexes to individual items of property installed in the various years. Unit costs of pipe per ton, labor per hour or per foot of pipe, etc. were also investigated.

Basic data for the development of the indexes were obtained from manufacturers of equipment and machinery, from current price quotations as shown in trade publications, from catalogs and price lists, from government publications, and from contractors, and were checked wherever possible with actual costs incurred during the construction of the property.

Building material trends were established for basic commodities, such as cement, sand, stone, lumber, structural steel, etc., and were weighted in proper proportion for application to the original costs of concrete, carpentry, steel work, etc.

Equipment indexes for the main compressors and auxiliary engines were computed from the actual prices paid for such equipment by the company. The trends for other items of equipment were based upon information from manufacturers or from data in our files.

The indexes of labor for construction of the station buildings and for the installation of station equipment were developed largely from actual rates paid at the various periods of construction compared with those currently being paid for construction work now in progress. Much of the earlier construction was done with non-union labor, whereas today it probably would have to be done by union labor.

[fol. 14388] The indexes for steel pipe were developed from analysis of vouchers showing the prices actually paid by the company and from a consideration of all available information relating to the price at which pipe could be purchased as of June 30, 1941. It is my considered opinion that $65 per ton, based on Lorain freight, is the probable average price at which steel pipe of 16" diameter and larger could have been purchased as of June 30, 1941. For sizes below 16", the manufacturers' carload lists and discounts were used.

The indexes for the installation costs of mains and laterals were based upon the relation of actual costs of construction to recent construction costs and a consideration of current bids for comparable sizes of pipe in comparable territory.

On page 12 is shown a reconciliation of the original cost before reclassification with the original cost as reclassified. The analysis made for trending purposes excluded such items as transfers, adjustments, and minor additions and retirements. The effect of the reclassification and the extent of such property not analyzed are set forth on this sheet, both as they affect original and reproduction cost.

On page 11 is shown a summary by accounts setting forth the original cost and the reproduction cost new as finally determined after reclassification.

[fol. 14389] Michigan Gas Transmission Corporation

Reproduction Cost New As Of June 30, 1941

Summary

Cost of "Gas Plant", exclusive of Working Capital, Materials and Supplies, Cost of Developing Business or Going Value

Account No.	Name of Account	Original Cost	Reproduction Cost June 30, 1941
301	Organization	$ 10,332 75	$ 10,333
303	Miscellaneous Intangible Plant	73,667 47	73,667
351.1	Land	26,145 95	26,146
351.2	Land Rights	241,467 33	241,467
352.1	Compressor Station Structures and Improvements	446,260 40	507,891
352.2	Measuring and Regulating Station Structures and Improvements	48,566 40	54,990
352.3	Other Transmission System Structures and Improvements	27,992 58	30,402
353	Mains	9,275,438 65	10,784,327
354.1	Compressor Station Equipment	1,812,593 71	2,122,398
354.2	Measuring and Regulating Station Equipment	125,826 02	142,751
354.3	Other Transmission System Equipment	121 09	121
372	Office Furniture and Fixtures	14,879 76	14,880
373	Transportation Equipment	33,837 47	35,445
374	Stores Equipment	1,609 47	1,610
377	Tools and Work Equipment	13,454 07	12,985
100.3	Construction Work in Progress	109,157 73	109,158
	Totals	$12,261,260 55	$14,168,481
	Total Reproduction Cost New, June 30, 1941		$14,168,481

Michigan Gas Transmission Corporation

RECONCILIATION OF ORIGINAL COST AND OF REPRODUCTION COST
(BOTH AS OF JUNE 30, 1941) TO REFLECT CHANGES DUE TO RECLASSIFICATION

Account No.	Name of Account	ORIGINAL COST					REPR	
		Before Classification					Before Classification	
		As Analyzed for Trending Purposes	Transfers, Adjustments, and Items Not Analyzed	Items Reclassified	Net Change	Original Cost after Reclassification	As Trended from Analysis	Transfers, Adjustments, and Items Not Analyzed
301	Organization	$ 10,333	$	$	$	$ 10,333	$ 10,333	$
303	Miscellaneous Intangible Plant	73,667				73,667	73,667	
351.1	Land	26,099		47	47	26,146	26,099	
		5,320(3)		5,320*(3)	5,320*(3)			
351.2	Land Rights	242,539		1,072*	1,072*	241,467	242,539	
352.1	Compressor Station Structures	420,766	33,028*	58,522(1)	25,494(1)	446,260	475,017	33,028*
352.2	Measuring and Regulating Station Structures	47,679	2,795	1,908*	887	48,566	54,103	2,795
352.3	Other Transmission System Structures	66,023	19,297	57,328*(1)	38,031*(1)	27,992	75,723	19,297
353	Mains	9,223,167	50,691	1,581	52,272	9,275,439	10,732,055	50,691
		136,304(3)		136,304*(3)	136,304*(3)			
354.1	Compressor Station Equipment	1,807,072	3,541	1,891	5,432	1,812,504	2,116,966	3,541
354.2	Measuring and Regulating Station Equipment	122,861	3,362	397*	2,965	125,826	139,786	3,362
354.3	Other Transmission System Equipment		121		121	121		121
372	Office Furniture and Equipment	16,179		1,299*	1,299*	14,880	16,179	
373	Transportation Equipment	33,861		24*	24*	33,837	35,469	
374	Stores Equipment	1,646		36*	36*	1,610	1,646	
377	Tools and Work Equipment	13,431		23	23	13,454	12,962	
100.3	Construction Work in Progress	109,158				109,158	109,158	
	Sub-totals	$12,356,105	$46,779	$141,624*	$ 94,845*	$12,261,260(2)	$14,121,702	$46,779
107	Gas Plant Adjustments			141,624(3)	141,624(3)	141,624(3)		
	TOTALS	$12,356,105	$46,779	-0-	$ 46,779	$12,402,884(2)	$14,121,702	$46,779

* Indicates red figure

(1) Includes $46,591 covering cost of dwellings, garages and outside lighting transferred from account 352.3 to account 352.1.

(2) Includes $1,934.46 of reclassifications developed as transferable to expense and other balance sheet accounts, which were not reclassified because no reaccounting items were considered in the original cost reclassification.

(3) Represents engineering fee of $139,424 charged by an affiliated construction company and interest during construction estimated at $2,200 responsive to said amount, the aggregate amount of which, or a substantial portion thereof, in the opinion of the company is properly includible in original cost. However, for the purpose of the present rate proceeding this amount is ignored in the determination of the value of "Gas Plant" for the reason stated in the preliminary report of the original cost of "Gas Plant", submitted in this case, as Exhibit ____.

poration

REPRODUCTION COST
DUE TO RECLASSIFICATION

Original Cost after Reclassification	REPRODUCTION COST NEW					
	Before Classification					Reproduction Cost after Reclassification
	As Trended from Analysis	Transfers, Adjustments, and Items Not Analyzed	Items Reclassified	Net Change		
10,333	$ 10,333	$	$	$		$ 10,333
73,667	73,667					73,667
26,146	26,099		47	47		26,146
241,467	242,539		1,072*	1,072*		241,467
446,260	475,017	33,028*	65,812(1)	32,784(1)		507,801
48,566	54,103	2,795	1,908*	887		54,990
27,992	75,723	19,297	64,618*(1)	45,321*(1)		30,402
9,275,439	10,732,055	50,691	1,581	52,272		10,784,327
1,812,504	2,116,966	3,541	1,891	5,432		2,122,398
125,826	139,786	3,362	397*	2,965		142,751
121		121		121		121
14,880	16,179		1,299*	1,299*		14,880
33,837	35,469		24*	24*		35,445
1,610	1,646		36*	36*		1,610
13,454	12,962		23	23		12,985
109,158	109,158					109,158
12,261,260(2)	$14,121,702	$46,779	-0-	$46,779		$14,168,481
141,624(3)						
12,402,884(2)	$14,121,702	$46,779	-0-	$46,779		$14,168,481

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ginal cost reclassification.

and interest during construction
ubstantial portion thereof,
the purpose of the present rate
r the reason stated in the preliminary

[fol. 14391] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures And Improvements

Summary — All Stations

Location	Original Cost	Reproduction Cost June 30, 1941
Montezuma Compressor Station		
1936 Construction	$ 58,402	$ 79,386
1937 "	42,142	49,349
1940 " (1st Addition)	28,455	29,842
1940 " (2nd ")	21,951	22,065
Zionsville Compressor Station		
1937 Construction	110,585	126,934
1940 "	27,774	29,108
Edgerton Compressor Station		
1940 Construction	132,357	138,363
Cost of dwellings, garages, and outside lighting included in Account 352.3 in this exhibit but included in Account 352.4 in "Original Cost" statement	46,591	53,881
Reclassified, transferred, or not analyzed	21,097*	21,097*
Total, Account 352.1, All Stations	$446,200	$507,801

* Indicates red figures

[fol. 14392] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures And Improvements

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1936 Construction		
Main Compressor Building		
Material		
Foundation	$ 3,963	$ 4,229
Floor	1,781	2,171
Superstructure	8,033	9,632
Lighting	782	725
Heating		
Unit heaters	670	804
Other material	350	387
Miscellaneous	4	4
Labor	7,756	14,116
Construction overheads	3,185	3,933
Total, Main Compressor Building	$ 26,524	$36,001

Auxiliary Building		
Material		
Foundation	$ 653	$ 697
Floor	2,315	3,822
Superstructure	4,389	5,262
Lighting	705	654
Heating		
Unit heaters	1,006	1,207
Other material	658	727
Plumbing	526	570
Partitions	1,100	1,190
Miscellaneous	72	72
Labor	6,358	11,572
Construction overheads	2,427	2,997
Total, Auxiliary Building	$20,209	$27,770

[fol. 14393] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures And Improvements

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1936 Construction — contd.		
Land Improvements		
Material		
Grading and fill	$ 620	$ 593
Walks and roadways	322	526
Fence	3,658	3,658
Labor	1,580	3,018
Construction overheads	871	1,076
Total, Land Improvements	$ 7,251	$ 8,871
Meter and Regulator House		
Material		
Foundation and floor	$ 118	$ 121
Superstructure	578	817
Lighting	29	26
Heating and Plumbing	227	272
Labor	602	1,159
Construction overheads	212	262
Total, Meter and Regulator House	$ 1,766	$ 2,657
Well Pump House	726	1,225
Sump and Hotwell	1,676	2,490
Cistern	250	372
Total, 1936 Construction	$58,402	$79,386

[fol. 14394] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures And Improvements

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction		
Main Compressor Building		
Material		
Foundation	$ 3,656	$ 3,791
Floor	2,531	2,718
Superstructure	5,547	5,974
Lighting	839	734
Heating		
Unit heaters	699	730
Other material	69	70
Labor	9,105	12,638
Use of construction equipment	1,175	1,152
Construction overheads	5,940	6,884
Total, Main Compressor Building	$29,561	$34,691
Auxiliary Building	$ 147	$ 170
Land Improvements		
Material		
Grading and fill	820	825
Walks and roadways	3,730	3,775
Fence	108	108
Labor	2,825	4,028
Use of construction equipment	200	196
Construction overheads	1,918	2,223
Total, Land Improvements	$ 9,601	$11,155
Outside Lighting	$ 735	$ 788
Sump and Hotwell	1,798	2,146
Miscellaneous	300	399
Total, 1937 Construction	$42,142	$49,349

[fol. 14395] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures And Improvements

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — 1st Addition		
Main Compressor Building		
Material		
Excavation and backfill	$ 231	$ 231
Foundation	2,091	2,216

Floor	689	727
Superstructure	3,206	3,376
Roofing	597	605
Lighting	252	251
Heating		
Unit heater	353	403
Other material	62	63
Labor	7,813	8,157
Use of construction equipment	599	599
Construction overheads	4,331	4,587
Total, Main Compressor Building	$20,224	$21,215
Auxiliary Building		
Material		
Foundation	$ 79	$ 84
Floor	360	380
Superstructure	910	958
Roofing	281	285
Lighting	73	73
Labor	2,530	2,641
Use of construction equipment	57	57
Construction overheads	1,318	1,396
Total, Auxiliary Building	$ 5,608	$ 5,874

[fol. 14396] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures And Improvements

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — 1st Addition — contd.		
Land Improvements		
Material		
Walks and roadways	$ 182	$ 187
Service and drain lines	152	154
Labor	1,190	1,228
Use of construction equipment	61	61
Construction overheads	550	582
Total, Land Improvements	$ 2,135	$ 2,212
Sump Pump House	488	511
Total, 1940 Construction — 1st Addition	$28,455	$29,812

[fol. 14397] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures And Improvements

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — 2nd Addition		
Main Compressor Building		
Material		
Excavation and backfill	$ 251	$ 251
Foundation	1,976	2,095
Floor	572	603
Superstructure	3,149	3,316
Roofing	622	630
Lighting	251	259
Heating		
Unit heater	353	403
Other material	136	139
Labor	7,579	7,912
Use of construction equipment	339	339
Construction overheads	4,442	4,704
Total, Main Compressor Building	$19,670	$20,612
Land Improvements		
Material		
Grading and filling	$ 113	$ 113
Walks and roadways	125	128
Service lines, drain lines	138	139
Labor	587	606
Use of construction equipment	100	100
Construction overheads	318	337
Total, Land Improvements	$ 1,381	$ 1,423
Total, 1940 Construction — 2nd Addition	$21,051	$22,065
Total, Account 352.1, Montezuma Compressor Station	$150,050	$180,612

[fol. 14398] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures and Improvements

Zionville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction		
Main Compressor Building		
Material		
Foundation	$ 6,463	$ 6,702
Floor	5,242	5,630
Superstructure	14,052	15,134
Lighting	1,271	1,112
Heating		
Unit heaters	1,397	1,458
Water softener	3,321	3,899
Other material	709	718
Plumbing	19	20
Labor	9,830	13,644
Use of construction equipment	2,175	2,132
Construction overheads	10,699	12,400
Total, Main Compressor Building	$55,178	$62,849
Auxiliary Building		
Material		
Foundation	$ 1,683	$ 1,745
Floor	1,150	1,235
Superstructure	9,170	9,876
Lighting	1,156	1,012
Heating		
Unit heaters	993	1,037
Insulation	164	173
Other material	642	650
Plumbing	758	800
Labor	7,321	10,162
Use of construction equipment	1,025	1,005
Construction overheads	5,887	6,823
Total, Auxiliary Building	$29,949	$34,518

[fol. 14399] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures and Improvements

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction — contd.		
Land Improvements		
Material		
Grading and fill	$ 850	$ 855
Walks and roadways	2,064	2,089
Fence	1,718	1,718
Labor	3,213	4,582
Use of construction equipment	648	635
Construction overheads	2,041	2,366
Total, Land Improvements	$ 10,534	$ 12,245
Meter and Regulator House		
Material		
Foundation	$ 290	$ 259
Floor	45	46
Superstructure	1,344	1,572
Lighting	197	167
Heating	1,060	1,068
Plumbing	59	62
Labor	451	643
Construction overheads	829	961
Total, Meter and Regulator House	$ 4,275	$ 4,778
Well and Pump Houses	$ 3,072	$ 4,041
Sump and Hotwell	2,738	3,169
Cistern	520	568
Main Drainage System	33	35
Water Well	4,286	4,731
Total, 1937 Construction	$110,585	$126,934

[fol. 14400] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures and Improvements

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction		
Main Compressor Building		
Material		
Foundation	$ 2,239	$ 2,373
Floor	1,609	1,697

Superstructure	3,497	3,682
Lighting	294	293
Heating		
Unit heater	353	403
Other material	116	118
Plumbing	35	35
Miscellaneous	26	26
Labor	7,160	7,475
Use of construction equipment	810	810
Construction overheads	4,412	4,672
Total, Main Compressor Building	$ 20,551	$ 21,584
Auxiliary Building		
Material		
Foundation	$ 123	$ 130
Floor	334	352
Superstructure	1,131	1,191
Lighting	70	70
Labor	1,836	1,917
Use of construction equipment	130	130
Construction overheads	1,093	1,157
Total, Auxiliary Building	$ 4,717	$ 4,947

[fol. 14401] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures and Improvements

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — contd.		
Land Improvements		
Material		
Grading and fill	$ 333	$ 333
Walks and roadways	185	190
Service lines and drains	402	406
Labor	988	1,020
Use of construction equipment	77	77
Construction overheads	521	551
Total, Land Improvements	2,506	$ 2,577
Total, 1940 Construction	$27,774	$ 29,108
Total, Account 352.1, Zionsville Compressor Station	$138,359	$156,042

[ol. 14402] Michigan Gas Transmission Corporation

Account 352.1 -- Compressor Station Structures And Improvements

Edgerton Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction		
Main Compressor Building		
Material		
Foundation	$ 7,674	$ 8,134
Floor	3,181	3,356
Superstructure	9,341	9,836
Roofing	1,795	1,818
Lighting	900	897
Heating		
Unit heaters	1,028	1,175
Other material	210	214
Plumbing	234	236
Labor	20,268	21,160
Use of construction equipment	1,182	1,182
Construction overheads	10,718	11,350
Total, Main Compressor Building	$56,531	$ 59,358
Auxiliary Building		
Material		
Foundation	$ 3,305	$ 3,503
Floor	2,524	2,663
Superstructure	4,879	5,138
Roofing	1,487	1,506
Lighting	483	482
Heating		
Unit heaters	685	783
Boilers	1,916	1,916
Other material	1,446	1,476
Plumbing	508	512
Partitions	1,432	1,432
Labor	18,035	18,829
Use of construction equipment	1,345	1,345
Construction overheads	9,116	9,654
Total, Auxiliary Building	$47,161	$49,239

[fol. 14403] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures And Improvements

Edgerton Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — contd.		
Land Improvements		
Material		
Walks and roadways	$ 1,391	$ 1,426
Fence	3,253	3,253
Labor	2,136	2,204
Use of construction equipment	569	569
Construction overheads	1,492	1,580
Total, Land Improvements	$ 8,841	$ 9,032
Meter and Regulator House		
Material		
Foundation	$ 138	$ 144
Floor	123	129
Superstructure	693	726
Roofing	375	380
Lighting	17	17
Heating		
Unit heater	342	391
Other material	135	139
Plumbing	4	4
Labor	1,335	1,386
Use of construction equipment	226	226
Construction overheads	758	803
Total, Meter and Regulator House	$ 4,146	$ 4,345
Well Pump Houses	$ 2,202	$ 2,301
Hotwell	3,786	3,949
Sump House	4,171	4,347
Cistern	449	479
Water Wells and Equipment	5,070	5,322
Total, 1940 Construction	$132,357	$138,363
Total, Account 352.1, Edgerton Compressor Station	$132,357	$138,363

[fol. 14404] Michigan Gas Transmission Corporation

Account 352.2 — Measuring And Regulating Station Structures And Improvements

Item	Original Cost	Reproduction Cost June 30, 1941
Ann Arbor Measuring and Regulating Station	$ 622	$ 659
Attica-Williamsport Measuring and Regulating Station	267	283
Bluffton Measuring and Regulating Station	755	945
Brownsburg Measuring and Regulating Station	166	244
Carmel Measuring and Regulating Station	143	210
Crawfordsville Tap Measuring and Regulating Station	382	419
Crawfordsville Town Border Measuring and Regulating Station	302	319
Dana Measuring and Regulating Station	216	318
Danville Measuring and Regulating Station	213	285
Decatur Measuring and Regulating Station	761	967
Detroit Measuring Station	16,978	19,824
Detroit Regulating Station	17,840	19,051
Fairmount Measuring and Regulating Station	336	357
Ft. Wayne Measuring and Regulating Station	2,071	2,242
Kokomo Measuring and Regulating Station	1,108	1,372
Lafayette Measuring and Regulating Station	280	292
Lapel Measuring and Regulating Station	167	208
Lebanon Town Border Measuring and Regulating Station	580	649
Lebanon Tap Measuring and Regulating Station	317	353
Montezuma Measuring and Regulating Station	265	370
New Castle Measuring and Regulating Station	620	791
Noblesville Measuring and Regulating Station	511	567
North Salem Measuring and Regulating Station	170	228
Paulding Measuring and Regulating Station	635	727
Pendleton Measuring and Regulating Station	237	306
Pittsboro Measuring and Regulating Station	198	268
Rockville Measuring and Regulating Station	267	303
Tipton Measuring and Regulating Station	241	253
Wauseon Measuring and Regulating Station	626	663
Winchester Measuring and Regulating Station	269	341
Zionsville Measuring and Regulating Station	136	199
Not analyzed	887	887
Total, Account 352.2 — Measuring and Regulating Station Structures and Improvements	$48,566	$54,990

[fol. 14405] Michigan Gas Transmission Corporation

Account 352.3—Other Transmission System Structures And Improvements

Summary — All Locations

Location	Original Cost	Reproduction Cost June 30, 1941
Montezuma Compressor Station 1936 Construction	$ 9,033	$12,402
Zionsville Compressor Station 1937 Construction	36,133	41,041
Edgerton Compressor Station 1940 Construction	20,857	22,239
Cost of dwellings, garages, and outside lighting included in Account 352.3 in this exhibit but included in Account 352.1 in "Original Cost" statement	46,591*	53,881*
Reclassified, transferred, or not analyzed	8,560	8,560
Total, Account 352.3 — All Locations	$27,992	$30,402

* Indicates red figures

[fol. 14406] Michigan Gas Transmission Corporation

Account 353.3 — Other Transmission System Structures And Improvements

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1936 Construction		
Dwelling		
Material		
Excavation and backfill	$ 62	$ 62
Foundation	331	345
Superstructure	1,747	2,206
Lighting	144	132
Heating	245	245
Plumbing	334	365
Labor	2,855	4,913
Use of construction equipment	5	5
Construction overheads	781	965
Total, Dwelling	$ 6,504	$ 9,238

Garage	$ 724	$ 1,103
Outside Lighting	1,805	2,061
Total, 1936 Construction	$ 9,033	$ 12,402
Total, Account 352.3, Montezuma Compressor Station	$ 9,033	$ 12,402

[fol. 14407] Michigan Gas Transmission Corporation

Account 352.3 — Other Transmission System Structures And Improvements

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction		
Warehouse		
Material		
Foundation	$ 158	$ 165
Floor	248	251
Superstructure	5,176	5,456
Lighting	45	42
Heating	271	283
Miscellaneous	198	198
Labor	1,790	2,443
Construction overheads	1,995	2,312
Total, Warehouse	$ 9,880	$11,150
Dwelling		
Material		
Foundation	$ 1,104	$ 1,144
Superstructure	3,042	3,772
Lighting	176	152
Heating	53	39
Plumbing	483	478
Labor	4,150	5,420
Use of construction equipment	304	298
Construction overheads	2,246	2,603
Total, Dwelling	$11,529	$13,906
Garage	$ 1,094	$ 1,334
Outside Lighting	4,078	3,959
Miscellaneous	9,552	10,692
Total, 1937 Construction	$36,133	$41,041
Total, Account 352.3, Zionsville Compressor Station	$36,133	$41,041

[fol. 14408] Michigan Gas Transmission Corporation

Account 352.3 — Other Transmission System Structures And Improvements

Edgerton Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction		
Dwelling		
Material		
Foundation	$ 585	$ 614
Floor and superstructure	3,138	3,781
Roofing	445	451
Lighting	195	194
Heating	187	187
Plumbing	355	359
Labor	4,490	4,647
Use of construction equipment	330	330
Construction overheads	2,264	2,398
Total, Dwelling	$11,988	$12,961
Garage	$ 1,452	$ 1,583
Outside Lighting	2,535	2,642
Service and drain lines	4,882	5,094
Total, 1940 Construction	$20,857	$22,280
Total, Account 352.3, Edgerton Compressor Station	$20,857	$22,280

[fol. 14409] Michigan Gas Transmission Corporation

Account 353 — Mains

Summary — All Years

Year	Original Cost	Reproduction Cost June 30, 1941
1930 Construction	$1,030,450	$ 1,158,798
1931 "	1,106,849	1,336,101
1936 "	4,774,132	5,601,298
1937 "	437,947	467,554
1939 "	505,077	563,750
1940 "	1,368,712	1,604,554
Not analyzed	52,272	52,272
Total, Account 353, Mains — All Years	$9,275,439	$10,784,327

[fol. 14410] Michigan Gas Transmission Corporation

Account 353 — Mains

Item		Original Cost	Reproduction Cost June 30, 1941
1930 Construction			
Material			
Pipe — 20" O.D., 59.23#	245,573 ft.	$531,964	$ 518,878
" — 10-3/4" O.D., 54.73#	29,480 "	32,180	58,439
" — 26" O.D., (casing)	591 "	1,506	1,469
" — 24" O.D., (casing)	1,110 "	2,829	2,759
" — 16" O.D., (casing)	312 "	483	471
Freight on pipe		49,226	54,099
Valves		7,016	11,134
Paint		20,257	20,743
River Clamps		9,478	10,558
Couplings and sleeves (Dayton)		38,332	34,959
Freight (other than on pipe)		5,845	6,447
Damages		5,829	5,829
Pipe inspection		3,462	3,462
Storage		1,263	1,263
Hauling		226	238
Miscellaneous		10,305	10,305
Installation — labor and equipment		228,342	321,394
Construction overheads		81,907	96,351
Total, 1930 Construction		$1,030,450	$1,158,798

[fol. 14411] Michigan Gas Transmission Corporation

Account 353 — Mains

Item		Original Cost	Reproduction Cost June 30, 1941
1931 Construction			
Material			
Pipe — 20" O.D., 59.23#	125,349 ft.	$203,609	$ 240,625
" — 18" O.D., 53.22#	273,865 "	392,493	454,585
" — 10-3/4" O.D., 54.73#	10,035 "	12,110	19,914
" — 24" O.D., 79.05# (casing)		3,038	4,937
Freight on pipe		58,741	64,556
Couplings (Dresser)		27,617	25,654
" (Dayton)		8,499	9,323
Gate Valves		11,266	18,904
Chill rings		3,463	4,426
Miscellaneous pipe-fittings		1,897	1,946
Damages		51,336	51,336
Freight (other than on pipe)		5,567	6,140

Demurrage and storage	396	396
Hauling	1,087	1,199
Expenses in clearing	10,205	10,205
Miscellaneous	24,559	24,559
Installation — labor and equipment	221,632	313,126
Use of automobiles	889	982
Construction overheads	68,445	73,288
Total, 1931 Construction	$1,106,849	$1,336,101

[fol. 14412] Michigan Gas Transmission Corporation

Account 353 — Mains

Item		Original Cost	Reproduction Cost June 30, 1941
1936 Construction			
Material			
Pipe — 22" O.D.	1,212,442 ft.	$2,512,217	$2,791,324
" — 12-3/4" O.D.	53,121 "	76,728	95,319
" — 26" O.D. (casing)		12,778	14,198
" — other sizes		794	920
Freight on pipe		207,639	228,880
Valves — 22"		23,652	31,575
" — 12-3/4"		15,388	20,543
" — other sizes		10,832	14,558
Couplings and sleeves (Dresser)		92,159	107,715
" " " (Dayton)		58,716	61,851
Chill rings		5,190	7,612
River clamps		2,211	2,330
Tile		9,718	10,758
Welding sleeves		7,375	8,372
Claims paid		82,363	82,363
Concrete		2,178	3,017
Gas used		7,777	7,777
Paint		69,648	71,306
Pipe inspection		10,567	10,567
Freight on other than pipe		24,873	27,418
Miscellaneous pipe fittings		3,170	3,563
" steel items		8,494	9,642
Other miscellaneous costs		48,425	48,425
Workman's Compensation Insurance		12,008	16,304
Installation — labor and equipment		1,240,496	1,672,850
Use of automobiles		5,975	6,519
Construction overheads		222,761	285,592
Total, 1936 Construction		$4,774,132	$5,601,298

[fol. 14413] Michigan Gas Transmission Corporation

Account 353 — Mains

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction		
Material		
Pipe — 4-1/2" O.D., 8.63#	$ 17,809	$ 18,817
" — 6-5/8" O.D., 12.89#	102,979	108,705
" — 8-5/8" O.D., (casing)	1,291	1,370
" — 10-3/4" O.D., (casing)	547	578
Freight on pipe	10,458	11,493
Freight	2,847	3,140
Valves	8,831	9,670
Paint	9,290	9,511
Damages	7,763	7,763
Concrete	5,956	7,451
Lumber	316	440
Tile	281	300
Miscellaneous steel items	3,210	3,525
" pipe and fittings	3,162	3,361
Welding sleeves	1,352	1,285
Burlap bags	3,149	3,149
Scrubbers and accessory equipment	21,307	23,745
Miscellaneous	36,050	36,050
Installation — labor and equipment	182,516	198,004
Use of automobiles	530	530
Construction overheads	18,303	18,667
Total, 1937 Construction	$437,947	$467,554

[fol. 14414] Michigan Gas Transmission Corporation

Account 353 — Mains

Item		Original Cost	Reproduction Cost June 30, 1941
1939 Construction			
Material			
Pipe — 24" O.D.	81,181 ft.	$136,576	$164,397
" — 16" O.D.	8,929 "	15,900	19,139
" — sizes other than above		1,759	2,074
Freight on pipe		23,168	23,168
Couplings and sleeves		12,982	12,982
Valves		7,724	8,311
River clamps		4,458	4,699

Welding sleeves and saddles	4,161	4,161
Chill rings	942	1,040
Gas used	2,310	2,310
Miscellaneous pipe fittings	7,242	7,727
Paint	13,648	13,973
Damages	6,279	6,279
Concrete (in place)	25,475	30,213
Riprap (in place)	45,162	47,375
Miscellaneous	438	438
Installation — labor and equipment	179,504	197,193
Use of automobiles	2,183	2,183
Construction overheads	15,166	16,091
Total, 1939 Construction	$505,077	$563,750

[fol. 14415] Michigan Gas Transmission Corporation

Account 353 — Mains

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction		
Material		
Pipe — 24" O.D.	$ 523,659	$ 728,043
" — sizes other than 24"	4,216	4,921
Freight on pipe	70,867	70,867
Couplings and sleeves	45,474	45,474
Valves	19,334	20,803
Drips	1,221	1,698
Welding sleeves and saddles, chill rings	13,984	14,278
Side gate valves, blowoffs, etc.	2,328	2,496
Tar felt	4,824	4,824
Concrete anchors	5,163	5,762
Riprap and breakers	31,817	32,422
Farm taps	371	375
Cathodic protection	42	42
Stiles and line markers	1,386	1,386
Miscellaneous pipe, fittings, etc.	14,089	14,258
Cross-over lines	2,148	2,758
Miscellaneous	31,763	31,763
Paint	36,609	36,609
Installation — labor and equipment	494,949	518,747
Use of automobiles	2,034	2,034
Construction overheads	62,434	64,994
Total, 1940 Construction	$1,368,712	$1,604,554

[fol. 14416] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Summary — All Stations

Item	Original Cost	Reproduction Cost June 30, 1941
Montezuma Compressor Station		
1936 Construction	$ 270,615	$ 346,989
1937 "	202,418	250,473
1940 " (1st Addition)	118,853	131,428
1940 " (2nd ")	111,470	123,262
Zionsville Compressor Station		
1937 Construction	506,068	814,147
1940 "	124,686	137,576
Edgerton Compressor Station		
1940 Construction	472,962	513,091
Not analyzed	5,432	5,432
Total, Account 354.1 — All Stations	$1,812,504	$2,122,398

[fol. 14417] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1936 Construction		
Material		
2—24"x36" Worthington 1300 BHP horizontal, twin tandem, double acting gas engines with 15"x36" feather-valve type gas compressors, designed for a working pressure of 500# sq. in.	$94,820	$125,162
2—9"x10½" Worthington 180 HP, four-cycle, single-acting, six cylinder, vertical gas engines each with a 125 kw. Westinghouse electric generator, 5kw. direct-connected exciter, and field rheostats	15,581	20,162

2—Fluor #B-45-24-30 muffler and air duct units complete	4,114	6,570
3—Worthington motor-driven, horizontally-split case, single-stage, centrifugal jacket water circulating pumps, 700 g.p.m. capacity	1,074	1,204
3—Worthington motor-driven, horizontally-split case, single-stage, centrifugal cooling tower circulating pumps, 700 g.p.m. capacity	1,074	1,204
1—Worthington motor-driven, vertical-type, two-stage air compressor, actual capacity 54 c.f.m.	673	837
1—Worthington vertical, angle-type, two-stage air compressor driven by 10 HP model NNU Novo gas engine, actual capacity 32 c.f.m.	712	889
3—36" I.D.x20'0" long air receivers, 250 lbs. W.P.	1,052	1,328

[fol. 14418] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1936 Construction — contd.		
Material		
1—Fluor #6XA12 Aerator type cooling tower-erected	$ 3,387	$ 4,325
6—Griscom-Russell type #C-240 single pass atmospheric type Bentube gas cooling coils	3,963	4,359
2—Coppus #FC-6 air filters	115	115
4—Coppus #FD-4 air filters	884	884
1—ITE six panel "Multimite" totally-steel-enclosed, generator and distribution switchboard	4,924	4,924
Storage battery, charging equipment, rack and switches	209	212

1—DeLaval #45-15 Uni-Matic lubiri-ing oil purifier unit complete with pumps and automatically controlled 6 kw. heater	851	1,013
Gauge board, gauges, and thermometers	508	508
2—1000 gallon oil storage tanks	116	146
2—Wayne #364C oil measuring pumps and two-barrel kerosene outfit	146	140
Electrical control equipment, power and ignition circuits	2,738	2,611
Station piping	33,976	37,333
1—Euclid double-girder, hand-operated traveling crane, 12-ton capacity, 69'6" span, 17' lift	2,247	3,890

[fol. 14419] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June, 30, 1941
1936 Construction — cont'd:		
Material		
2—Yale and Towne model BH, 2-ton spur-geared chain hoists	$ 220	$ 239
4—Yale and Towne model T, 2-ton roller-bearing trolleys	151	164
1—Kewanee #71S4 Type "C" Hi-fire-box steam heating boilers complete with burner equipment, insulation, stack and breaching	1,917	2,183
1—Jennings #61520 condensate pump	183	226
1—Myers #902 AT self-oiling, automatic, motor-driven cistern water pump	103	127
1—75,000-gallon elevated water tank—erected	4,915	7,200
1—Myers #V913M motor-driven water line agitator pump	124	153
1—Permutit water softening plant	2,913	3,901

2—Water wells drilled, 300 g.p.m. capacity	5,400	5,940
1—Goulds #3048 1½" duplex, vertical, motor-driven sump pump unit	593	713
2—#250 B, 75 lb. iron case meters	360	390
2—12" recording differential gauges	230	238
1—Emco 2" high-pressure, balanced-valve regulators	360	391
2—Low-pressure, balanced-valve regulators	256	278

[fol. 14420] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1936 Construction — contd.		
Material		
Shop machinery		
1—Boye and Emmes 16"x10" geared-head lathe	$ 2,699	$ 4,351
1—Morris 3'9" light duty drill press	2,092	3,372
1—Cincinnati type FLA grinder	86	139
General equipment (Shelves, bins, lockers, desks, washers, thermometers, wall partitions, small tools, etc.)	1,775	1,944
Miscellaneous		
Main unit incidental costs	2,629	2,881
" " foundations	4,897	5,203
Economizer incidental costs	78	84
Generator foundations	543	571
Gas cooler "	840	918
Water tank "	428	451
Water line (approximately 2000' — 6-5.87 pipe)	1,668	1,882
Drain line	723	785
Other miscellaneous items	4,990	4,990
Labor	23,826	41,934

Use of construction equipment	64	63
Construction overheads	32,388	37,462
Total, 1936 Construction	$270,615	$346,989

[fol. 14421] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction		
Material		
2—24"x36" Worthington 1380 BHP horizontal, twin-tandem, double-acting gas engines with 15"x36" feather-valve type, gas compressors, designed for 500#/sq. in.	$ 94,524	$126,379
2—Fluor type #B-45-24-30 muffler and air duct units	1,530	2,087
2—Buffalo #3½ type CL motor-driven exhaust fans	395	402
1—Fluor model #7XA12 cooling tower and extension to existing #6XA12 tower	4,361	4,993
6—Griscom-Russell type #C-240 single pass Bentube gas cooling coils	5,466	6,013
4—Coppus FD-4 air filters complete with louvres	720	720
2—Blaw-Knox 60" diameter gas scrubbers, capacity 2,750 MCF/hr.	5,725	6,549
1—2" semi-steel head and welded steel sump complete with Cuno Auto-Klean filter	412	412
2—G.E. Tungar rectifiers, 12 amp. rate	159	159
Electrical control equipment, power and ignition circuits	512	442
Station piping	17,818	17,966

[fol. 14422] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction — contd.		
Material		
1—Edlund #4B1 spindle ball bearing, round column drilling machine	$ 1,110	$ 1,734
General equipment (Washing machine, steel lockers, thermometers, etc.)	199	213
Miscellaneous		
Main unit incidental costs	332	364
" " foundations	5,366	5,871
Gas cooler "	246	231
Other foundations and miscellaneous items	2,515	2,480
Labor	17,870	23,874
Use of construction equipment	2,629	2,576
Construction overheads	40,559	47,008
Total, 1937 Construction	$202,418	$250,473

[fol. 14423] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — 1st Addition		
Material		$ 63,845
1—24"x36" Worthington 1300 BHP horizontal, twin-tandem, double-acting gas engines with 15"x36" feather valve type gas compressors, designed for a working pressure of 500# sq. in.	$ 55,134	

1—9"x10½" Worthington 180 HP four-cycle, single-acting, six cylinder vertical gas engine with 125 kw. Westinghouse electric generator and a 5 kw. direct-connected exciter	9,411	10,136
1—Fluor air-cooled muffler and air duct assembly complete with blower	2,760	3,505
1—Worthington type 6-Ls-1 motor-driven, double-suction, single-stage, centrifugal cooling tower circulating pump, 700 g.p.m. capacity	507	539
1—Worthington type 6-LS-1 motor-driven, double-suction, single-stage, centrifugal jacket water circulating pump, 700 g.p.m. capacity	530	563
Coppus air filters complete		
2—"FD-4, 3200 CFM capacity	372	372
1—"FC-6, 660 CFM "	56	56
1—Fluor cooling tower extension, model "2XA12 consisting of two 6' bays	2,528	2,841
Addition to generator and distribution switchboard in auxiliary building	2,746	2,746

[fol. 14424] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — 1st Addition — contd		
Material		
Electrical control equipment, power and ignition circuits	$ 266	$ 264
Station piping	5,252	5,388
General equipment (Steel partitions)	765	765

296—12,466

Miscellaneous		
Main unit incidental costs	157	162
" " foundations	2,377	2,437
Generator "	175	182
Miscellaneous "	73	77
Other miscellaneous items	1,113	1,113
Labor	15,782	16,555
Use of construction equipment	1,308	1,308
Construction overheads	17,539	18,574
Total, 1940 Construction, 1st Addition	$118,853	131,428

[fol. 14425] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — 2nd Addition		
Material		
2—24"x36" Worthington 1300 BHP horizontal, twin-tandem, double-acting gas engines with 15"x36" feather valve type gas compressors, designed for a working pressure of 500# sq. in.	$ 55,225	$ 63,619
1—Fluor air-cooled muffler and air duct assembly	2,728	3,465
1—Worthington type 6-LS-1 motor-driven, double-suction, single-stage, centrifugal cooling tower circulating pump, 700 g.p.m. capacity	459	488
1—Worthington type 6-LS-1 motor-driven, double-suction, single-stage, centrifugal jacket water circulating pump, 700 g.p.m. capacity	481	511
2—Coppus air filters, #FD-1	360	360
1—Griscom-Russell size #C-240 Bentube single pass gas cooling coils	3,056	3,362
1—Weinman salt brine pump	77	84
Electrical control equipment, power and ignition circuits	420	417
Station piping	7,667	7,865
1—Concrete salt storage basin	463	487

[fol. 14426] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Montezuma Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — 2nd Addition — contd.		
Material		
Miscellaneous		
Main unit incidental costs	$ 174	$ 179
" " foundations	2,533	2,597
Miscellaneous "	97	99
Other miscellaneous items	237	237
Labor	13,282	13,933
Use of construction equipment	1,371	1,371
Construction overheads	22,840	24,188
Total, 1940 Construction, 2nd Addition	$111,470	$ 123,262
Total, Account 354.1, Montezuma Compressor Station	$703,356	$ 852,152

[fol. 14427] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction		
Material		
4—24"x36" Worthington 1300 BHP horizontal, twin-tandem, double-acting gas engines with 13-1/8"x36" feather-valve type, gas compressor cylinders, designed for a working pressure of 800# sq. in.	$203,449	$ 265,501
2—9"x10-1/2" Worthington 180 HP four-cycle, single-acting, six-cylinder, vertical gas engines each with a 125 kw. Westinghouse electric generator, 5 kw. direct connected exciter, and field rheostats	17,678	20,206

4—Fluor #B345-24-30 muffler and air duct units	3,061	4,175
1—Buffalo #3 1/2 type CL motor driven exhaust fans	789	802
3—Worthington motor-driven, horizontally-split case, double-suction, single-stage, centrifugal cooling tower circulating pumps, 700 g.p.m. capacity	1,262	1,352
3—Worthington motor-driven, horizontally split case, double-suction, single-stage, centrifugal jacket water circulating pumps, 700 g.p.m. capacity	1,330	1,424
1—Worthington type VA-2, motor-driven starting air set complete, actual capacity 32 c.f.m.	741	831
1—Worthington type VA-2, starting air set driven by 10HP Novo gas engine, actual capacity 54 c.f.m.	816	941

[fol. 14428] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction — contd.		
Material		
3—36" I.D x20'0" long air receivers	$ 1,341	$ 1,470
2—Fluor #7XA12 Aerator type cooling towers — erected	7,889	9,033
12—Griscom-Russell type #C-240 single pass-Bentube gas cooling coils	12,900	14,190
8—Coppus #FD-4 air filters complete	1,440	1,440
2—Coppus #FC-6 air filters complete	129	129
1—Westinghouse six-panel, cubicle type switchboard	4,876	4,876
1—235 amp. storage battery, Westinghouse battery charging rack, and Rectox and Tungar battery chargers	572	572
Gauge-board, gauges and thermometers	908	908
2—Metric 250 B, 75# iron case meters	360	383
1—DeLaval #45-15 Uni-Matic oil purifier unit complete with two pumps	863	1,027

2—1000 gallon lubricating oil storage tanks, 48" diameter x 10'8" long, with oil	513	562
2—Wayne #364C oil measuring pumps and kerosene outfit	146	140
Electrical control equipment, power lines, power and ignition circuits	3,481	3,006

Account 354.1 — Compressor Station Equipment

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction — contd.		
Material		
Station piping	$ 50,234	$ 50,651
1—Euclid double-girder, hand-operated traveling crane, 42-ton capacity, 69'6" span, 15'6" lift	2,820	3,875
2—Yale and Towne model BB, 2-ton spur-geared chain hoists	232	252
4—Yale and Towne model T, 2-ton roller-bearing trolleys	156	169
1—Kewanee #71.84 type "C" 4-lift firebox steam heating boilers complete with burner equipment, insulation, stack and breeching	1,986	2,105
1—Jennings #61520 condensate pump	220	241
1—#V-913 AMT Myers automatic cistern water pump complete	205	228
1—75,000-gallon elevated water tank erected	5,975	7,803
1—Permutit "Super Zeo-Dur" water softening unit, 19 cu. ft. (including salt)	300	352
Water well pumps, 300 g.p.m. capacity	2,325	2,558
1—Goulds #3048, 1 1/2" duplex, vertical, motor-driven sump pump unit	556	610
Shop machinery		
1—27"x20'0" heavy duty, geared head lathe	7,215	11,270
1—Morris 3'9" light duty drill press	2,092	3,268
1—Cincinnati type FLA grinder	116	181

[fol. 14430] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1937 Construction — contd.		
Material		
General equipment (Shelves, bins, lockers, desks, washer, thermometers, wall partitions, small tools, etc.)	$ 4,625	$ 4,944
Miscellaneous		
Main unit incidental costs	2,206	2,418
Main unit foundations	9,432	10,320
Economizer incidental costs	1,356	1,333
Generator foundations	504	507
Gas cooler "	834	892
Water tank "	152	164
Air " "	83	87
Drain line	1,161	1,217
Other foundations and miscellaneous items	3,180	3,135
Labor	39,841	53,228
Use of construction equipment	4,620	4,528
Construction overheads	99,008	114,750
Total, 1937 Construction	$506,068	$614,147

[fol. 14431] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction		
Material		
1 — 24"x36" Worthington 1300 BHP horizontal, twin-tandem, double-acting gas engine with 13-18"x36" feather-valve type, gas compressor cylinders, designed for a working pressure of 800# sq. in.	$ 57,870	$ 66,782

1—Worthington 180 HP four-cycle, single-acting, six-cylinder vertical gas engine with a 125 kw. electric generator and a 5 kw. direct-connected exciter	9,375	10,097
1—Fluor air-cooled muffler and air duct assembly	2,760	3,505
1—Worthington type 6-LS-1 motor-driven, single-stage, double-suction, centrifugal cooling tower circulating pump, 700 g.p.m. capacity	507	539
1—Worthington type 6-LS-1 motor-driven, single-stage, double-suction, centrifugal jacket water circulating pump, 700 g.p.m. capacity	530	563
1—Extension to cooling tower, model #2XA12 consisting of two 6' bays	2,528	2,841
Coppus air filters		
2—#FD-4, 3200 CFM capacity	371	371
1—#FC-6, 660 CFM "	56	56
1—Switchboard generator panel to control 125 kw. generator	2,248	2,248

(fol. 14432) Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Zionsville Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — cont'd.		
Material		
Electrical control equipment, power and ignition circuits	$ 727	$ 723
Station piping	7,356	7,546
Miscellaneous		
Main unit incidental costs	938	965
" " foundations	2,788	2,858
Generator foundations	333	345
Miscellaneous foundations	103	105
Other miscellaneous items	334	334
Labor	16,318	17,118

Use of construction equipment	1,988	1,988
Construction overheads	17,556	18,592
Total, 1940 Construction	$124,686	$137,576
Total, Account 354.1, Zionsville Compressor Station	$630,754	$751,723

[fol. 14433] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Edgerton Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction		
Material		
3—24"x36" Cooper-Bessemer 1300 BHP horizontal, twin-tandem, double-acting gas engines with 13¼"x36" compressor cylinders	$175,074	$198,359
2—9"x10½" Worthington 180 HP, four-cycle, single-acting, six cylinder vertical gas engines, each with a 125 kw. Westinghouse electric generator, 5 kw. direct-connected exciter, and field rheostats	18,798	20,208
3—Fluor air-cooled main engine exhaust mufflers complete with air ducts and Buffalo #3½ "Limit Load" exhaust fan	4,713	5,086
2—Worthington motor-driven, single-stage, double-suction, centrifugal cooling tower circulating pumps, 700 g.p.m. capacity	1,068	1,112
3—Worthington motor-driven, single-stage, double-suction, centrifugal jacket water circulating pumps, 700 g.p.m. capacity	1,134	1,188
1—Worthington type HB-2 motor-driven, horizontal, tandem, two-stage starting air compressor, 67 c.f.m. actual capacity	1,715	1,905
1—Worthington type VA-2 starting air set driven by 10 HP, 1200 RPM Novo gas engine	795	857
3—36" I.D. x 20'0" long air receivers	1,305	1,378

[fol. 14434] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Edgerton Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — contd.		
Material		
1—Fluor model #7XA Aerator type cooling tower — erected	$ 4,368	$ 4,910
8—Griscom-Russell type #C-240 single pass Bentube gas cooling coils	7,965	8,762
Coppus air filters complete		
6 — Size #FD-4, 3200 CFM	1,109	1,109
2 — " #FC-6, 660 CFM	112	112
1—7-panel generator and distribution switchboard complete with accessories	6,312	6,312
Storage batteries and charging equipment	291	291
Gauges, gauge boards, and thermometers	1,029	1,029
Meters and regulators	1,559	1,662
1—Goulds motor driven Hydroil oil purifier model 335, Type SHVA	1,196	1,196
2—Wayne #48 lubricating oil storage tanks	145	145
1—12' vertical-lift, floor-type oil measuring pump, one 120-gallon kerosene dispensing pump, and hand operated kerosene pump	153	141
Electrical power and ignition circuits	4,665	4,637
Station piping	45,518	46,602

[fol. 14435] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Edgerton Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — contd.		
Material		
1—Euclid double-girder, hand-operated traveling crane, 12-ton capacity, 69'6" span, 15'6" lift	$ 2,965	$ 3,881

2—Yale and Towne model BB, 2-ton spur-geared chain hoists	232	232
2—Yale and Towne model T, 2-ton roller-bearing trolleys	163	163
1—Westco model VC-340 motor-driven, single-stage, double-suction, boiler feed pump, 30 g.p.m. capacity	175	190
1—75,000 gallon elevated water tank on steel tower — erected	6,725	7,801
1—Permutit single-unit water softener, 50,000-gallon capacity, complete with brine pump	5,725	6,109
2—Worthington motor-driven, vertical, single-stage sump pumps, 1000 g.p.m. capacity	1,168	1,261
1—Buffalo $1\frac{1}{2}$" motor-driven duplex sump pump, 100 g.p.m. capacity	491	538
Concrete salt storage tank	445	468
2—Water well pumps	1,475	1,546
Shop machinery		
1—Lathe	3,689	4,010
1—Drill press	1,273	1,384
1—Grinder	119	129
Miscellaneous equipment (steel desks, lockers, shelving, bins, etc.)	1,282	1,294

[fol. 11436] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Edgerton Compressor Station

Item	Original Cost	Reproduction Cost June 30, 1941
1940 Construction — contd.		
Material		
Miscellaneous		
Main Unit incidental costs	$ 2,910	$ 2,994
" " foundations	10,866	11,149
Economizer incidental costs	59	60
Generator foundations	936	971
Gas cooler	228	240
Cooling tower	1,045	1,099

Wafer tank "	655	679
Air " "	25	26
Miscellaneous "	380	389
Other miscellaneous items	4,235	4,235
Labor	63,894	67,025
Use of construction equipment	7,280	7,280
Construction overheads	75,495	79,949
Total, 1940 Construction	$472,962	$513,091
Total, Account 354.1, Edgerton Compressor Station	$472,962	$513,091

[fol. 14437] Michigan Gas Transmission Corporation

Account 354.2 — Measuring And Regulating Station Equipment

Item	Original Cost	Reproduction Cost June 30, 1941
Ann Arbor Measuring and Regulating Station	$ 4,082	$ 4,344
Attica-Williamsport Measuring and Regulating Station	1,724	1,935
Bluffton Measuring and Regulating Station	1,610	1,773
Brownsburg Measuring and Regulating Station	759	899
Carmel Measuring and Regulating Station	779	980
Crawfordsville Tap Measuring and Regulating Station	960	1,079
Crawfordsville Town Border Measuring and Regulating Station	3,639	4,035
Dana Measuring and Regulating Station	766	1,045
Danville Measuring and Regulating Station	1,179	1,353
Decatur Measuring and Regulating Station	1,847	2,024
Detroit Measuring Station	23,142	28,361
Detroit Regulating Station	37,359	41,079
Fairmount Measuring and Regulating Station	3,650	3,850
Ft. Wayne Measuring and Regulating Station	7,806	8,475
King Measuring and Regulating Station	464	488
King (Miscellaneous equipment stored at King Station)	157	174
Kokomo Measuring and Regulating Station	2,587	2,837
Lafayette Measuring and Regulating Station	2,536	2,799
Lapel Measuring and Regulating Station	657	766
Lebanon Tap Measuring and Regulating Station	777	873
Lebanon Town Border Measuring and Regulating Station	2,823	3,157

Montezuma Measuring and Regulating Station	824	1,102
New Castle Measuring and Regulating Station	3,251	4,618
Noblesville Measuring and Regulating Station	2,510	2,776
North Salem Measuring and Regulating Station	881	1,033
Paulding Measuring and Regulating Station	1,526	1,611
Pendleton Measuring and Regulating Station	1,138	1,306
Pittsboro Measuring and Regulating Station	550	669
Roachdale Measuring and Regulating Station	660	784
Rockville Measuring and Regulating Station	1,045	1,380
Tipton Measuring and Regulating Station	2,471	2,614
Wauseon Measuring and Regulating Station	3,167	3,342
Winchester Measuring and Regulating Station	1,902	1,884
Zionsville Measuring and Regulating Station	871	958
Zionsville (Calorimeter Equipment	2,098	2,365
Zionsville (Meter for Fuel)	156	165
Miscellaneous Additions	808	852
Not analyzed	2,965	2,965
Total, Account 354.2 — Measuring and Regulating Station Equipment	$125,826	$142,751

[fol. 14438] Michigan Gas Transmission Corporation

General Equipment

Summary

Account No.	Name of Account	Original Cost	Reproduction Cost June 30, 1941
372	Office Furniture and Fixtures	$ 16,179	$ 16,179
373	Transportation Equipment	33,861	35,469
374	Stores Equipment	1,646	1,646
377	Tools and Work Equipment	13,431	12,962
	Difference due to reclassifications	1,336*	1,336*
	Total, General Equipment	$63,781	$ 64,920

*Indicates red figures

[fol. 14439] Michigan Gas Transmission Corporation

Account 372 — Office Furniture And Fixtures

Item	Original Cost	Reproduction Cost June 30, 1941
Furniture — desks, chairs, tables, and other furniture	$ 9,337	$ 9,337

Machines — calculators, typewriters, integrators, adding machines, etc.	6,842	6,842
Total, Account 372, Office Furniture and Fixtures	$16,179	$16,179

[fol. 14440] Michigan Gas Transmission Corporation

Account 373 — Transportation Equipment

Item	Original Cost	Reproduction Cost June 30, 1941
Passenger automobiles	$16,536	$17,547
Trucks	7,969	8,213
Fire extinguishers	476	476
Trailers	2,028	2,140
Battery Chargers and bench	133	133
Caterpillar tractors	6,202	6,443
Wood river barge	517	517
Total, Account 373, Transportation Equipment	$33,861	$35,469

[fol. 14441] Michigan Gas Transmission Corporation

Account 374 — Stores Equipment

Item	Original Cost	Reproduction Cost June 30, 1941
Pipe racks	$1,646	$1,646
Total, Account 374, Stores Equipment	$1,646	$1,646

[fol. 14442] Michigan Gas Transmission Corporation

Account 377 — Tools And Work Equipment

Item	Original Cost	Reproduction Cost June 30, 1941
Lincoln electric welding machines	$ 2,448	$ 1,979

Other equipment — concrete mixers, chain hoists, portable pumps, tapping machines, and other small tools	10,983	10,983
Total, Account 377, Tools and Work Equipment	$13,431	$12,962

[fol. 14443] (Exhibit 84.)

Michigan Gas Transmission Corporation

Reproduction Cost New Less Depreciation

as of

June 30, 1941

(Exclusive of

Working Capital, Materials and Supplies,

Cost of Developing Business, or Going Value)

Francis S. Haberly
Consulting Engineer
Chicago

[fol. 14444] Michigan Gas Transmission Corporation

Reproduction Cost New Less Accrued Depreciation As Of June 30, 1941

Summary

Cost of "Gas Plant", exclusive of Working Capital, Materials and Supplies, Cost of Developing Business or Going Value

Account No.	Name of Account	Reproduction Cost New June 30, 1941	Reproduction Cost Less Depreciation
301	Organization	$ 10,333	$ 10,333
303	Miscellaneous Intangible Plant	73,667	73,667
351 1	Land	26,146	26,146
351 2	Land Rights	241,467	241,467
352 1	Compressor Station Structures and Improvements	507,801	489,406

352 2	Measuring and Regulating Station Structures and Improvements	54,990	52,088
352 3	Other Transmission System Structures and Improvements	30,402	28,342
353	Mains	10,784,327	10,345,685
354 1	Compressor Station Equipment	2,122,398	2,052,768
354 2	Measuring and Regulating Station Equipment	142,751	132,434
354 3	Other Transmission System Equipment	121	119
372	Office Furniture and Fixtures	14,880	11,606
373	Transportation Equipment	35,445	25,166
374	Stores Equipment	1,610	1,449
377	Tools and Work Equipment	12,985	10,258
100 3	Construction Work in Progress	109,158	109,158
	Total Gas Plant Property	$14,168,481	$13,810,092

[fol. 14445] Michigan Gas Transmission Corporation

Account 352.1 — Compressor Station Structures And Improvements

Item	Reproduction Cost New June 30, 1941	Condition Percent	Reproduction Cost Less Depreciation
Montezuma Compressor Station			
1936 Construction	$ 79,386	94.8	$ 75,258
1937 Construction	49,349	96.0	47,375
1940 Construction	51,877	98.1	50,891
	$180,612		$173,524
Zionsville Compressor Station			
1937 Construction	$126,934	96.0	$121,857
1940 Construction	29,108	97.9	28,497
	$156,042		$150,354
Edgerton Compressor Station			
1940 Construction	$138,363	97.7	$135,181
Not analyzed	21,097*		20,380*
Cost of dwellings, garages, and outside lighting included in Account 352 3 in this exhibit but included in Account 352 1 in "Original Cost" statement			
Montezuma Station	$ 12,402	89.0	$ 11,038
Zionsville Station	19,199	93.0	17,855
Edgerton Station	22,280	98.9	21,834
	$ 53,881		$ 50,727
Total, Account 352 1—All Stations	$507,801		$489,406

*Indicates red figure

[fol. 14446] Michigan Gas Transmission Corporation

Account 352.2 — Measuring And Regulating Station Structures

Item	Reproduction Cost New June 30, 1941	Condition Percent	Reproduction Cost Less Depreciation
Ft. Wayne Regulating Station	$ 2,242	80.0	$ 1,794
Detroit Measuring Station	19,824	96.0	19,031
Detroit Regulating Station	19,051	97.7	18,613
Other Measuring and Regulating Stations			
1931	791	77.0	609
1932	1,364	80.0	1,091
1934	1,224	86.0	1,053
1935	366	89.0	272
1936	476	91.0	433
1937	5,922	93.0	5,507
1938	414	95.0	393
1939	2,489	97.0	2,414
1940–41	887	99.0	878
Total, Account 352.2 — All Locations	$54,990		$52,088

[fol. 14447] Michigan Gas Transmission Corporation

Account 352.3 — Other Transmission System Structures

Item	Reproduction Cost New June 30, 1941	Condition Percent	Reproduction Cost Less Depreciation
Montezuma Compressor Station	$12,402	89.0	$11,038
Zionsville Compressor Station	41,041	93.0	38,168
Edgerton Compressor Station	22,280	98.0	21,834
Not analyzed	8,560		8,029
Cost of dwellings, garages, and outside lighting included in Account 352.3 in this exhibit but included in Account 352.1 in "Original Cost" statement			
Montezuma Station	12,402*	89.0	11,038*
Zionsville Station	19,199*	93.0	17,855*
Edgerton Station	22,280*	98.0	21,834*
	$53,881*		$50,727*
Total, Account 352.3 — All Stations	$30,402		$28,342

*Indicates red figure

Vol. IX

TRANSCRIPT OF RECORD

(Pages 4057 to 4429)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. IX.

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

United States Circuit Court of Appeals

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PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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	Original	Print
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The decree permits Columbia Oil, on application, to be exempted from the terms of the decree when Columbia Gas has divested itself of control of Panhandle Eastern by divesting itself of voting securities of Columbia Oil.

Pursuant to the decree Gano Dunn was appointed trustee to hold all securities of Panhandle Eastern with present or potential voting rights owned, or to be acquired by Columbia Oil. The decree defines the trustees' powers as follows:

1. He may vote the stock for the election of directors of Panhandle Eastern—one of which shall be himself.

2. The directors elected by the trustee are to be recommended by Columbia Oil, which may not, however, without approval of the court and the trustee recommend any of the defendants in the action or any of the officers, directors, employees or agents of Columbia Gas.

3. The trustee is permitted to remove and replace directors, if necessary for the purposes of the decree, subject to control of the court.

4. The trustee is to vote Panhandle Eastern's stock as directed by the beneficial owners "except when such directions are inconsistent with the purposes of this decree."[13]

The decree provides for termination of the trust upon the following conditions:

1. That Columbia Gas divest itself of control over Panhandle Eastern by divestiture of ownership of the voting securities of Columbia Oil, or

[fol. 10817] 2. That Columbia Oil divest itself of all of its stock in Panhandle Eastern, or

3. That the trust is no longer essential to carry out the terms of the decree.

[13] In addition the trustee is required to pay to Columbia Oil all dividends except stock dividends, which are subject to the terms of the decree; and he must exercise all rights to subscribe to any securities as Columbia Oil may direct. Specific power to approve any underwriting necessary to finance Panhandle Eastern's performance of its contract

C. Effect of the Decree on the Relationship Between Columbia Gas and Columbia Oil

We do not think that the changes required by the decree[14] has the effect of freeing Columbia Oil from the control or controlling influence of Columbia Gas within the meaning of Section 2(a)(8) of the Act. We do not mean to intimate any opinion as to whether the decree has or has not had the effect of enforcing compliance with the anti-trust laws; that question is not in issue before us. We need only determine the status of the applicants under Section 2(a)(8).

First, it is doubtful whether we could, in any case, hold that an applicant for a declaratory order under Section 2(a)(8) has satisfied its burden of demonstrating the absence of controlling influence by showing merely, that the owner of 10% or more of the outstanding voting securities has only a minority on its board. Secondly, we are not satisfied, on the basis of the record before us, that Columbia Gas representation on the Columbia Oil board has been limited to a minority.

By virtue of its ownership of Columbia Oil's preferred stock, Columbia Gas elects three out of a total of seven directors of Columbia Oil. The common stock elects the remaining four but, as will be seen, most of the directors elected by the common stock have been persons who at some time in the past, were closely identified with Columbia Gas.

Pursuant to the undertaking contained in the stipulation described above, the by-laws of Columbia Oil were amended to include the following provisions:

[14] Partial liquidation of Columbia Oil's debt to Columbia Gas;

2. Conversion of remainder to long term obligations;

3. Conversion of Columbia Oil classes of preferred into a single class to be held by Columbia Oil having the right to elect the largest minority of directors;

4. Assurance that the majority of the Columbia Oil board and all of its officers are not to be contemporaneously connected with Columbia Gas; and

5. Dissolution of the voting trust for Columbia Oil common stock

[fol. 18818] "Except for the Directors (constituting a minority of the whole Board) elected by the holders of the Preferred Stock, no person shall be elected a Director of the Corporation who is a director, officer or employee of Columbia Gas & Electric Corporation or any of its subsidiaries;

"No person shall be elected or appointed an officer of the corporation who is a director, officer or employee of Columbia Gas & Electric Corporation or any of its subsidiaries." (Emphasis supplied)

The use of the present tense in these provisions was apparently advised, as a resume of the management of Columbia Oil will reveal. The Columbia Oil board consists at the present time of seven directors: W. C. Beckjord, J. A. Bruce, R. H. Delafield, W. M. Falion, W. P. Philips, H. A. Wallace and Don M. Wilson.

Beckjord is Chairman of the Executive Committee, a Director and Vice-President of Columbia Gas.

Delafield is a Director and Vice-President of Columbia Gas.

Wallace is a Director and Vice-President of Columbia Gas.

Philips was, between 1926 and 1930, a Director of Columbia Gas. In 1934 he was chosen to succeed T. B. Gregory, a defendant in the anti-trust suit, and a Director and Vice-President of Columbia Gas, as a voting trustee for the common stock of Columbia Oil. Philips served as such until the termination of the trust in 1936.

Wilson, who joined the Columbia Oil board in 1937, had, but eleven days prior to that time, resigned as Director and President of the Atlantic Seaboard Corporation, a subsidiary of Columbia Gas. He had held that position since 1933.

There is no evidence that Messrs. Bruce or Falion (who were elected in 1938 and 1939 respectively) had any connection with Columbia Gas.

From the date of its organization to the present twenty different persons have served as directors of Columbia Oil.

All but three of these persons have at some time been either officers or directors of Columbia Gas. There have been twenty-five officers of Columbia Oil (including the voting trustees). Of these all but four have had some official connection with Columbia Gas. And two of the allegedly independent officers (W. A. Blind and C. H. Lavin) were personal employees of Munroe, who was a Director of Columbia Gas between 1929 and 1934, and a Director and President of Columbia Oil between 1931 and 1939.

We do not think, upon these facts, that it has been demonstrated that Columbia Gas and Columbia Oil have ever severed the avenue of influence by representation in management. Indeed, were we required to find affirmatively that Columbia Gas has been sedulous to insure continuous rep-[fol. 10819] resentation on the board of Columbia Oil, it would be difficult, on the basis of this evidence, not to make such a finding. The affiliations of three of the seven directors afford an admitted tie with Columbia Gas and this in itself is probably sufficient to negative applicants' case; in addition, with respect to two of the other directors, there is, at the very least, a strong link of historical relationship.

We cannot be asked to shut our eyes to "actualities in . . . intercorporate relationships" in determining the existence of control or controlling influence; Rochester Telephone Corp. vs. United States, et al., 307 U. S. 125 (1939); nor can we be expected to ignore the fact that "historical ties and associations often serve as a substitute for, or a potent auxiliary of, the more obvious modes of control." American Gas and Electric Company, 9 S. E. C. . . . . (1941), Holding Company Act Release 2749. We must conclude that the affiliations of the Columbia Oil board membership, from the date of its creation, indicate that its management and policies have always been subject to the controlling influence of Columbia Gas.

Columbia Gas and Columbia Oil, from the date of formation of Columbia Oil have had their offices at the same address.[15] And the affiliation between the two companies

[15] Up to 1932 Panhandle Eastern held its board meetings in the Columbia Gas board room at this address—61 Broadway. After that time its meetings were held in the board room of the Columbia Engineering

has, even since the date of the decree, been demonstrated by even more than the relationships through security holdings, directors and officers, and offices at the same address. In this connection, it becomes relevant to examine (1) a series of negotiations between Columbia Oil, Columbia Gas and the Mokan receivers for settlement of the Mokan claim for treble damages, and (2) certain transactions relating to the financing and construction of the so-called Detroit Extension for Panhandle Eastern.

(1) Negotiations Between Columbia Gas and Mokan Receivers

On January 31, 1936, Columbia Oil and Columbia Gas submitted an offer of settlement of the claims of the Mokan receivers. Its terms involved a recapitalization of Panhandle Eastern, a reallocation of the Panhandle Eastern securities as between Columbia Oil and Mokan, and an undertaking by Columbia Gas to finance the extension of Panhandle Eastern's lines to enable Panhandle Eastern to fulfill its contract with the Detroit City Gas Company.[16] The offer contemplated the issue by Panhandle Eastern of convertible preferred stock which would be taken by Columbia Oil,[17] the issuance of common stock, one-half of which [fol. 10820] would go to Mokan, and one-half to the Columbia interests; and the issuance of additional subscription rights to 160,000 shares of common stock, half of which would be taken by the Columbia interests and the remainder by Mokan, under an agreement by Mokan to distribute the warrants to its stockholders and to permit the Columbia interests to subscribe to any common stock not taken under the warrants distributed to Mokan stockholders.[18]

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[16] This contract is discussed below.

[17] The agreement refers to $11,000,000 par value of preferred stock which "we are to receive . . .". The "we" refers to Columbia Oil and Columbia Gas.

[18] It is apparent that the offer intended no relinquishment of the Columbia control of Panhandle Eastern. The provision for convertible preferred stock—all of which was to go to Columbia Oil, and the requirement of distribution to Mokan stockholders of additional common stock would have had the clear effect of making any original equal division of common stock highly temporary.

The proposal served the purpose of placing Columbia Gas and Columbia Oil in the position of having made an offer—a token satisfaction of

The Mokan receivers refused to accept this offer. Negotiations, however, proceeded in an attempt to reach adjustment. Much correspondence and at least ten conferences were had in the course of arriving at a final settlement. In none of these conferences was Panhandle Eastern or Columbia Oil independently represented. Reynolds, who had been since 1934 a Director of Columbia Gas, who became its President during the course of the negotiations and who was not during their pendency connected with Columbia Oil in any official capacity, was the exclusive representative of Columbia Gas, Columbia Oil and Panhandle Eastern.

The fact that in significant negotiations vitally affecting the interests of Columbia Oil and involving extremely important changes in the capital structure of Panhandle Eastern, no independent representation was had for Columbia Oil or Panhandle Eastern is, we believe, highly indicative of the relationship between Columbia Gas and Columbia Oil and between Columbia Gas and Panhandle Eastern.

The inference is strengthened by the result of the negotiations: the present capital structure of Panhandle Eastern. At present Columbia Oil is the beneficial holder of all of Panhandle Eastern's preferred stock, and over half of its common. The rights for which Columbia Gas negotiated in the settlement with the Mokan receivers have been substantially preserved. The Mokan receivers agreed to distribution of the block of rights to 80,000 shares of Panhandle Eastern—which eventually reduced Mokan's common stock participation to 42%. In the exchange for the convertible preferred stock Columbia Gas procured for Columbia Oil all of the Class B unredeemable preferred stock giving it the right to select two out of Panhandle Eastern's nine directors. By virtue of Columbia Oil's holdings in the common stock, it selects an additional four directors; and although one of these must be the trustee, the remainder chosen constitute the majority of Panhandle Eastern's board. Columbia Gas bargained for a preferred stock redeemable after 1936 at 110%, and it was successful in procuring for Columbia Oil Panhandle Eastern's Class A pre- [fol. 10821] ferred, which is redeemable after July 1, 1941, at a $10 premium. The original bargain for full voting rights for Panhandle Eastern preferred stock has been

modified, but without prejudice, for Columbia Oil has retained the right to select a majority of the Panhandle Eastern board. A "certain flow of earnings" and "future voting rights" were assured.

These negotiations indicate that when the stakes were high Columbia Gas did not resort to the intermediacy of Columbia Oil in its relations with Panhandle Eastern. Another instance of this direct relationship is found in the transaction relating to the so-called Detroit Extension.

(2) The Detroit Extension

On August 31, 1935, Panhandle Eastern entered into a contract with the Detroit City Gas Company[19] to supply gas to that company for resale in the Detroit area.[20] At that time, as now, Panhandle Eastern's own pipe line extended to the Indiana-Illinois border, whence its lines met the lines of Indiana Gas Transmission Corporation, a subsidiary of Columbia Oil. To fulfill the contract, Panhandle Eastern was required, by its terms, to satisfy the Detroit City Gas Company by February 1, 1936—six months after the contract date—that it had arranged for the financing of an extension of its lines in order to connect with the Detroit Company, and that it had made satisfactory arrangements for financing additional construction on its own lines.

There appears never to have been any question in the minds of the Columbia group but that Columbia Oil or Columbia Gas would build and own the extension necessary to meet the Detroit requirements. Yet it was necessary, pursuant to agreements with the Department of Justice made prior to the entry into the stipulation and consent decree in the anti-trust suit, that Panhandle Eastern be given an opportunity to secure outside financing for the building of the Detroit extension. Accordingly, in an agreement dated January 31, 1936, Panhandle Eastern was

[19] This company is now known as Michigan Consolidated Gas Company.

[20] W. C. Beckjord was instrumental in negotiating this contract. Beckjord has been a Director of Columbia Gas from 1934 until the present time. From 1936 until the present, he has also been a Director of Columbia Oil, chosen by the preferred stock held by Columbia Gas.

given a twenty-day option to accept or reject an offer made by Columbia Gas to build the Detroit extension.[21]

[fol. 10822] The option like other transactions we have discussed appears to have been merely a token. Panhandle Eastern undertook no negotiations to secure outside financing.[22]

Columbia Gas promptly undertook to inform Detroit City Gas Company that it had offered the necessary financing to satisfy the requirements of the contract of August 31, 1935. The Detroit Company thereupon bound itself under the contract.

Columbia Oil, unless it could procure financial aid, was unable to finance the Detroit extension. The result was patent. On November 4, 1935, Columbia Gas formed the Michigan Gas Transmission Corporation with Beckjord as President for the purpose of building the Detroit extension.

The machinery for complete ownership by Columbia Gas of the lines meeting Panhandle Eastern's lines and extending into Detroit, was effected in the space of four days by the acquisition by Columbia Gas from Columbia Oil of all of the securities of Indiana Gas Transmission Corporation.[23] These transactions took from February 28 to March

[21]Under this contract, which was dated two days after the consent decree, Columbia Oil undertook to purchase one-half of an additional issue of common stock of Panhandle Eastern to provide it with necessary funds for additions to its lines to enable adequate service under the Detroit contract. This is the block previously referred to in connection with the Mokan settlement, which increased Columbia Oil's common stock participation in Panhandle Eastern to 50.1% as against Mokan's 42%.

[22]It probably could not have done so successfully. It had outstanding, at that time, bonds and notes. Although the interest requirements of its bonds had been met, Columbia Oil was in a position to put Panhandle Eastern into bankruptcy by reason of its ownership of these bonds. They were in default because of a provision in the indenture which made a default in the notes an act of default with respect to the bonds, and the notes were in default. The provision referred to was the result of an amendment to the indenture authorized by the Panhandle Eastern board at a meeting held on March 26, 1931. Present at that meeting were Messrs. Crawford, Gossler, Gregory, Munroe and Howard, each one of whom was a Director of Columbia Gas.

It is noteworthy that at the time that Columbia Oil and Columbia Gas were negotiating the offer of financing, Columbia Oil and Panhandle Eastern were represented by the same attorneys.

[23]Columbia Gas had merely to forgive Columbia Oil its indebtedness upon extensions made to it to acquire Indiana Gas in order to get Columbia Oil to surrender the securities of Indiana Gas.

3, 1936.[24] Thus, Columbia Gas, through its completely controlled subsidiaries, Michigan Gas and Indiana Gas Transmission Corporation, controls the eastern outlet of the Panhandle Eastern lines. Michigan Gas' pipe lines are the medium for the sale of at least 65% of the gas sold by Panhandle Eastern.

[fol. 10823] On March 17, 1936, Panhandle Eastern contracted to supply gas to Michigan Gas to satisfy the requirements of the Detroit City Gas Company. Payments for gas supplied on contracts negotiated by Panhandle Eastern in the territory were to be impressed with a charge in favor of Michigan Gas which would put it in the same position as though Michigan Gas had sold the gas to its own customer—the Detroit Company. Although Michigan Gas bound itself to assign to Panhandle Eastern contracts in this territory which Michigan negotiated, the same charge was to be exacted.[25] The terms of sale of gas to "Special Industrial Customers" were to be negotiated through individual contracts between Michigan Gas and Panhandle Eastern.

The contract envisaged a continuous inter-company relationship of vital importance to the well-being of Panhandle Eastern. Thus the ownership of the Detroit extension becomes still a further link in the chain between the applicants.[26] There exist no external guarantees which would warrant a holding that economic control as vital as

[24]Indiana Gas Transmission Corporation owned lines which touched Panhandle Eastern's lines at the western Illinois border and extended to the Illinois-Indiana border.

[25]The contract provided that if Panhandle should refuse to accept such an assignment, Michigan Gas might call upon it to supply sufficient gas to satisfy the contract, so as to yield the stated benefit to Michigan Gas. Although, conversely, Michigan undertook to accept Panhandle Eastern's additional gas, it conditioned the contract so that it was not liable to accept beyond that point at which its capacity to supply its own commitments would be prejudiced. Significantly, Michigan Gas held itself free to accept as much as 500,000,000 cubic feet of gas per annum from sources other than Panhandle Eastern.

[26]In the case of Hartford Gas Company, 8 S. E. C. ..... (1941), Holding Company Act Release No. 2618, we treated as material to a denial of an application under Section 2 (a) (8) the fact that the applicant was dependent for the bulk of its gas requirements upon a subsidiary of the applicant's holding company. We there distinguished the Lehigh Power Securities Corporation case, 5 S. E. C. 143 (1939) on the ground that no guarantees of misuse of such an avenue of control ex-

[fol. 10824] that held by Columbia Gas cannot be used as a lever for other forms of domination.[37]

In a recent opinion affirming an order of this Commission denying an application under Section 2 (a) (8), the Circuit Court of Appeals for the Sixth Circuit expressly recognized the importance in such cases of factors indicating continuity of relationships between holding companies and subsidiaries. The Court, speaking through Judge Hamilton, said:

"The Statute contemplates action prospectively. It is a preventive measure intended to regulate action before the interests of those concerned are adversely affected. The prime factors in determining statutory exemption are the size and extent of the company involved, the inter-company relationship, the distribution of its securities and the opportunity presented because of the relationship between the parent and subsidiary for excessive charges for services, construction work, equipment and materials and the transactions entered into in which evil may result, because of the absence of arms-length bargaining or restraint of free and independent competition." Detroit Edison Company vs. Securities and Exchange Commission, decided May 12, 1941.

The Strategic Position of Columbia Oil's Preferred Stock

Columbia Oil's preferred stock is not only entitled to elect the largest minority of directors and to have equal

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isted there. In the Lehigh case we noted, of a relationship of dependency for requirements that

"such relationship might, unless mitigated by other circumstances, be used to exercise some control or at least a controlling influence over applicant."

The fact that this case involves access to markets rather than dependency for requirements is not itself a ground for distinction. Both forms of control may involve the power of economic strangulation.

[37] "The pendency of the consent decree is, itself, of little significance as a guarantee against use of the Detroit extension for control purposes. As will be shown, the Federal Court which issued the decree has interpreted it as operating only in the realm of restraint of trade. There exists no machinery for continuous policing of the affairs of these companies and the judicial settlement of any disputes that may arise concerning the effect of the decree on their relationship will, in all probability, be effected against the background of this limitation. The Department of Justice itself in a supplemental complaint in the anti-trust suit has alleged that by reason of its control over the extension "Columbia Gas increased its control over Panhandle Eastern."

voting rights with the common on all other matters, but it has certain important veto powers in the affairs of Columbia Oil. By reason of its ownership of that stock Columbia Gas may prevent (inter alia) the creation or issuance [fol. 10825] of any shares of stock, other than common, or any merger, consolidation, sale, lease or other transfer of all or the greater part of the assets of Columbia Oil.

Taken together with other factors the existence of this power—although occasion for its use may not have arisen in the past—is significant in indicating the existence of a controlling influence. Columbia Oil, in its annual report for 1940 has scheduled its assets at $62,435,561.46. Its investment in Panhandle Eastern is carried at $23,278,509.99. Its assets other than investment in Panhandle Eastern are carried at $34,788,196.04. On the basis of these figures the value of the Panhandle Eastern investment is less than half of the total assets. However, in an opinion attached to Columbia Oil's 1940 report to its stockholders, Price, Waterhouse & Company stated that experts had valued the properties other than Panhandle Eastern at between $12,000,000 and $20,000,000, the latter figure being fixed by a director of Columbia Oil in hearings before the Federal District Court. Should these figures be taken as approximately representative, the Panhandle Eastern investment is more than half of Columbia Oil's total assets. Columbia Oil could not in this event sell the Panhandle Eastern investment without Columbia Gas' consent, in view of the provision already mentioned regarding the sale of the greater part of Columbia Oil's assets.

When other factors indicate the absence of control or controlling influence within the meaning of Section 2 (a) (7) or 2 (a) (8), it may be that the possession of veto power over corporate changes is not exclusively determinative. See Allied Chemical & Dye Corporation, 5 S. E. C. 151 (1939). This does not mean, however, that we can ignore the cumulative effect of such a veto power when other factors of control exist, as they do in this case.

Upon the basis of the foregoing, we hold that applicants have not demonstrated that Columbia Oil is not subject to the control or controlling influence of Columbia Gas. Cf. Detroit Edison Company vs. Securities and Exchange Com-

mission, (C. C. A. 6th, decided May 12, 1941), Rochester Telephone Corporation vs. United States, 307 U. S. 125 (1939); American Gas and Electric Company, 9 S. E. C. ..... (1941); Holding Company Act Release No. 2749; H. M. Byllesby & Company, 6 S. E. C. 639 (1940); The Hartford Gas Company, 8 S. E. C. ..... (1941), Holding Company Act Release No. 2613. Indeed, we think that the record affirmatively shows the existence of such control and controlling influence.

Relationship between Columbia Oil and Panhandle Eastern[27]

Whatever the relationship between Columbia Oil and Panhandle Eastern may have been prior to January 29, 1936, both companies claim that date—the day of entry of [fol. 10826] the consent decree in the government anti-trust suit—as of primary significance in their history. On that day, it is claimed, the interposition of Gano Dunn as trustee under the decree to hold all of the voting securities of Panhandle Eastern owned by Columbia Oil insulated Panhandle Eastern from Columbia Oil control. We do not believe that this, in fact, occurred and it may well be doubted that the decree attempted to provide for it—at least with respect to the question as it is presented under Section 2 (a) (8) of the Act.

It will be recalled that although the decree directed Gano Dunn to take possession of Columbia Oil's holdings of Panhandle Eastern's stock, Gano Dunn was nevertheless subjected by the terms of the decree to the exercise of Columbia Oil's will in the voting of these securities in extremely important respects. By reason of Columbia Oil's ownership of Panhandle Eastern's securities it is able to elect six out of nine directors. The trustee votes for these directors, and one of them must be himself. Columbia Oil cannot recommend any of the defendants in the anti-trust action or any person "who after January 1, 1931, has been or hereafter becomes an officer, director,

[27] Many of the facts and transactions already discussed have a material bearing on the relationship between Columbia Oil and Panhandle Eastern and have also been considered by us from that point of view.

agent or employee of Columbia Gas."[29] Except for this limitation, however, the consent decree gives Columbia Oil complete freedom to recommend a panel to Gano Dunn from which he must select the majority of the Panhandle Eastern board.

In all other respects Gano Dunn must vote the stock of Panhandle Eastern as Columbia Oil directs "except when such directions are inconsistent with the purposes of this decree." Mr. Dunn has expressly stated that he has never declined to follow any instruction given him by Columbia Oil respecting the voting of the stock.

In the proceedings before the trial examiner repeated colloquies took place with respect to the proper interpretation of the decree. It was contended by the applicants that the decree had as its purpose the complete quarantine of Panhandle Eastern from Columbia Gas. It was contended on behalf of the Public Utilities Division that the decree was addressed solely toward assuring that the control of Panhandle Eastern shall not be used for the purpose of restraint of trade.

The decree itself is open to construction on this point. Among its recitals appear the following:

". . . and it further appearing from said stipulation that the petitioner and the defendants have agreed that provision against domination for control, direct or indirect, in the affairs of Panhandle Eastern Pipe Line Company by the defendant Columbia Gas and Electric Corporation and the maintenance of said Panhandle Eastern Pipe Company in a position of free and independent action in the production, transmission, sale and distribution of natural gas in competition with others constitutes the proper basis for the entry of this decree;"

[fol. 10827] Although the decree purports to enjoin the defendants from "interfering in any manner with the free and independent action of said Panhandle Eastern in the production, transportation, sale or delivery of natural gas to any person, corporation, community or section of the United States" it also purports to enjoin defendants

[29] Such persons may, however, be recommended with the approval of the court and the trustee.

"from exercising, or attempting, individually or collectively, directly or indirectly, to exercise any domination or control over Panhandle Eastern : . ." and "from participating in any way directly or indirectly, or from exercising any control, direction, supervision, or influence, in the management and control of Panhandle Eastern;"

We do not believe it necessary to construe the decree. The evidence is more than sufficient to satisfy us that in respect of at least the selection of the management of Panhandle Eastern, and the supervision of its financing, the trustee has abided by the terms of the decree, as he has understood it, and has considered himself bound by the wishes of Columbia Oil.[30] We cannot and do not desire to explore the question of whether the history of the applicants in these proceedings since the date of the decree indicates any violation of its terms. We have, on the basis of the record before us, concluded that the decree has not operated to negate the existence of control or a controlling influence within the meaning of Section 2(a) (8) of the Public Utility Holding Company Act, and our findings are limited exclusively to the issues arising under that Section.[31]

[fol. 10828] The Consent Decree And The Origin of Panhandle Eastern's Capital Structure

The history and the results of the negotiations between the Columbia companies and the Mokan receivers in settle-

[30] Mr. Dunn stated, in the hearing before the trial examiner that he could veto instructions of Columbia Oil only when he thought that fulfilling them would result in restraint of trade.

[31] In a decision refusing to take Federal jurisdiction over a suit brought by Mokan to compel Columbia Oil to permit the refinancing of Panhandle Eastern's Class A preferred stock (which will be commented on herein) Judge Kirkpatrick, of the Delaware District Court held that an action in the State Court for this purpose did not constitute an attack upon Federal jurisdiction. It was his view that the decree was not intended as a means of supervision of the relationship between the Columbia companies but that:

"The decree was, by its express terms and by all the implications arising from its background, primarily designed to prevent Columbia Oil and its affiliates from dominating and controlling Panhandle Eastern in such a manner as to eliminate competition between it and other companies and so monopolize interstate commerce in natural gas in certain sections of the country." (Missouri-Kansas Pipe Line vs. Columbia Oil & Gasoline Corp. et al., Civil Action No. 172, District Court of Delaware, 1941).

ment of the receivers' claims for treble damages indicate the lack of merit in the claim that the decree insulated control between the Columbia companies and Panhandle Eastern.

At the commencement of negotiations on January 31, 1936, Columbia Oil owned 50% of Panhandle Eastern's common stock, all of its outstanding bonds in the amount of $18,200,000 and 50% of its promissory notes in the amount of $4,945,500. 50% of Panhandle Eastern's common stock and 50% of its promissory notes were held by Panhandle Corporation. As has been noted, the stipulation entered into, in connection with the consent decree, on January 29, 1936, required Columbia Gas to make an offer of settlement of the Mokan receivers' claim. Accordingly, on January 31, 1936, the Columbia companies made an offer which contained (inter-alia) proposals to recapitalize Panhandle Eastern by having its 6% promissory notes converted into 6% convertible preferred stock[32] and by having Panhandle Eastern issue warrants for an additional 160,000 shares of common stock. It was proposed, in the original offer of settlement, that Columbia Oil receive rights to 80,000 shares, and that a distribution of the remaining rights would be made to Mokan stockholders.

On the same day, before there was any indication that the offer would be accepted—and in fact with every probability that it would be rejected (as it was in fact, because of the proposal to give Columbia Oil a convertible preferred stock enabling it to increase its participation in Panhandle Eastern's common stock), Panhandle Eastern's Certificate of Incorporation was amended to provide for the issue of convertible preferred stock and to authorize an increase in its common stock. On March 24, 1936, Panhandle Eastern authorized the offering of rights to the common stock, and on April 1, 1936, Columbia Oil exercised its option and acquired an additional 80,000 shares of Panhandle Eastern common stock.

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[32] The ability to make such an offer was unquestioned. Although Columbia Oil held, directly, 50% of the notes, it had, on June 19, 1935 entered into agreements to purchase 75% of the stock of Panhandle Corporation, and it received that stock, in fact, on February 6, 1936, before the complete negotiation of settlement. On the same day, it acquired all of the outstanding indebtedness of Panhandle Corporation.

In April of 1936 the Columbia companies and the Mokan receivers agreed upon a settlement. This settlement formed the basis for the present structure of Panhandle Eastern. Columbia Oil acquired all of the preferred stock. Although the bargain for a convertible issue of preferred was given up, Columbia Oil retained indefinite- [fol. 10829] ly the right to elect two directors by reason of its ownership of the Class B preferred which is not subject to redemption, and by virtue of its ownership of the common stock it may select another four—one of whom must be the trustee. The Columbia companies were eventually successful in scattering Mokan's block of 80,000 shares of common stock by requiring distribution of this stock to Mokan's shareholders. This has resulted in a 50.1% ownership of common stock by Columbia Oil as against a 42% ownership by Mokan. At a special meeting of stockholders of Panhandle Eastern, Gano Dunn voted in favor of amending the Certificate of Incorporation to effectuate the terms of the settlement.

Panhandle Eastern was supine during this critical period. On appropriate occasions it undertook the formal acts which it was called upon to perform in order to effectuate the will of the Columbia companies. Unrepresented in the negotiations, it did as it was bidden. The interposition of a trustee for its voting stock had no effect on the result, for the trustee construed the decree not to permit him to interfere with the settlement.

The Effect of The Interposition of The Trustee on The Management of Panhandle Eastern

The stock of Panhandle Eastern held by the trustee is entitled to elect the majority of its board, and since this stock consists of all the preferred and 50.1% of the common stock its voting power on other corporate matters (amounting to 56.1%) is decisive. The cumulative voting of the common stock gives Mokan (a 42% common stockholder) the right to select three of a board of nine members.[33]

[33] The relations between the Mokan and Columbia directors of Panhandle Eastern are, to say the least, acrimonious. Repeatedly during the period from the consent decree to the present the Mokan directors have attempted to induce Panhandle Eastern to offer active resistance to Columbia domination. On one occasion an unsuccessful attempt was

[fol. 10830] The dominant position of Columbia Oil in Panhandle Eastern, in spite of the interposition of the trustee, has been illustrated in at least two critical instances which merit particular consideration. The first concerns a transaction whereby Columbia Oil assured itself a veto power over future bond financing of Panhandle Eastern as long as it controlled a majority of stock entitled to vote for directors; the second relates to the blocking of the refinancing of Panhandle Eastern's Class A preferred Stock.

(1) The Stockholders Consent Clause:

On October 4, 1940, the directors of Panhandle Eastern authorized its officers to report on a plan for the refunding of an issue of Panhandle Eastern's outstanding bonds.[34] A report was made after conference with Kuhn, Loeb & Co. which proposed, among other things, an open-end indenture. That proposal was made in direct contemplation of future financing for the purchase, if opportunity presented, of the securities of Michigan Gas.[35] Kuhn, Loeb & Co. were suggested as the refunding underwriter.[36] The plan proposed by the officers was accepted by the board.

On November 15, 1940, the President of Panhandle Eastern reported to the board that between meetings of the

made to challenge votes at a stockholders' meeting cast by the trustee and to take over control of the meeting. On another occasion Mokan charged continuation of "illegal control" of Panhandle Eastern, and demanded unsuccessfully that Panhandle Eastern institute various suits for damages for violation of the anti-trust laws and contempt of the consent decree. The position of Mokan in the proceedings before us has been adversary to that of the Columbia companies. Two of the present directors of Panhandle Eastern elected by Mokan holdings have filed on their own behalf a request that we disapprove of the application of Panhandle Eastern not only on the ground of Columbia control, but on the further ground that the application was filed in bad faith.

[34]This was an issue of $22,500,000 of 4% first mortgage bonds.

[35]Such a purchase would result in Panhandle Eastern's ownership of pipe lines from its southern fields directly to ultimate purchasers in the Detroit region.

[36]At a meeting of the Panhandle Eastern board on November 8, 1940, the Mokan directors suggested invitation of bids from other houses and acceptance of the lowest bid. Mr. Dunn, and the directors elected by the Columbia Oil stock defeated the resolution.

Board, a change had been made in the indenture which was to underlie the refunding bonds. It would contain a provision which conditioned any further financing under the indenture upon the approval of the majority stockholder—Columbia Oil.[37]

Columbia Oil had interdicted approval of the indenture unless this clause were inserted. Some protest was made by Panhandle Eastern to Columbia Oil that the restriction was an "unusual" one, but to no avail. The trustee [fol. 10831] was instructed to vote in favor of the consent clause, and he informed the Panhandle Eastern board that the terms of the consent decree required him to obey these instructions.[38]

With one exception, the Columbia Oil directors, including the trustee, voted in favor of the amendment. J. A. Bowers was the exception. A short time after the meeting J. A. Bowers resigned. The amendment was approved by the Panhandle Eastern board, and at the following stockholders' meeting the trustee voted the stock he held in its favor.[39]

The clause is of vital significance. At a later point we will discuss a so-called "Plan of Divestiture" whereby the Columbia companies propose to effectuate the elimination of chain holdings. Under this plan Columbia Oil will retain its holdings in Panhandle Eastern. It proposes, however, to secure the resignation of every member of its board in favor of persons not objectionable to the Depart-

[37]The amendment provided that if at any time 50% or more of the outstanding shares of all classes entitled to vote for the election of directors shall be held of record by one person, partnership or corporation, the registrant shall not execute any such additional bonds (except bonds issued upon the basis of cash deposited with the corporate trustee) without the formal approval, either in writing or at a meeting of the stockholders of the registrant called for the purpose of considering such approval.

[38]At this meeting of the board (November 15, 1940) the Mokan directors of Panhandle Eastern introduced a resolution—which was tabled against their vote—to the effect that the application of Panhandle Eastern then pending in this proceeding be withdrawn. The grounds of the resolution were that the forcing of the amendment indicated the existence of control and that, therefore, the application was not in good faith.

[39]Counsel for Columbia Oil justified the clause on the ground that without it "they (Panhandle Eastern) could mortgage our property without our consent."

ment of Justice. The members will be its representatives on the Panhandle Eastern Board. By securing the consent clause Columbia Oil was attempting to bind the freedom of Panhandle Eastern—so that no plan of divestiture affecting the external relationship of Columbia Oil with Panhandle Eastern could disturb Columbia Oil's grip on the security of its investment.[40]

Columbia Oil's success in procuring the insertion of the consent clause is illustrative of the degree to which the majority of the directors of Panhandle Eastern regarded themselves as bound by the will of Columbia Oil. The Certificate of Incorporation of Panhandle Eastern, as amended to May 1, 1938, contains the following provision:

"No vote, consent or assent of stockholders of the corporation shall be required to authorize the issuance of bonds, notes or other obligations of any maturity, secured or unsecured, or to authorize a mortgage upon or pledge of all or any part of the assets of the corporation including good will, corporate franchises, and after acquired property, but the issue of such obligations and the creation of such mortgage or pledge may be authorized by the Board of Directors upon such terms and conditions as they may at any time or from time to time determine."

[fol. 10832] There is no evidence that this clause was amended or deleted at the time the preparation of the indenture was being undertaken. If the terms of this provision were determinative of the relative powers of the directors and stockholders of Panhandle Eastern with respect to the bonding of its property, the subjection of Panhandle Eastern's directors to the will of Columbia Oil cannot be said to have derived solely from Columbia Oil's stock position. It must be inferred either that the directors were ill advised as to their own powers or that they regarded themselves as obliged to follow the directions of Columbia Oil whether or not Columbia Oil had the power to require compliance with its wishes.

We have no concern in this proceeding with the legitimacy of the consent clause, or the business wisdom behind it. It is important for our purpose because it indicates the

[40]This was substantially the explanation offered by the trustee.

ease with which Columbia Oil has been able to direct the management and policies of Panhandle Eastern in accordance with its own wishes.[41]

It has been urged upon us that the Department of Justice "had no objection" to inclusion of the stockholders' consent clause. But even the express approval of the Department would be of no relevancy to the issue here. As we have already stated, we are not concerned with the construction of the consent decree. The only question we have to decide is whether the evidence before us demonstrates a lack of control or controlling influence as those terms are used in Section 2(a) (8) of the Holding Company Act.

(2) Refinancing of the Preferred Class A

The $10,000,000 of Panhandle Eastern's Class A preferred stock was one of the successful features of the bargain driven by Columbia Gas in its settlement with the Mokan receivers. This preferred stock is entitled to preferential dividends of $6 per share, and is cumulative to the extent of net earnings available for preferential dividends (not exceeding $6). In addition, after certain reserve [fol. 10833] requirements have been met, and dividends on the common stock to the extent of $1.50 per share have been declared or paid, the Class A stock participates in any additional dividends to the extent of 25%. Columbia Oil has received dividends on this stock as high as 10%.

The Panhandle Eastern Certificate of Incorporation contains the following provision:

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[41] The testimony regarding the consent clause brought to light the weakness of Mokan's position in Panhandle Eastern. On Oct. 15, 1940, Wilson, Vice President of Columbia Oil had occasion to suggest to the trustee that he observe discretion with regard to disclosing too many of the details of Panhandle Eastern's negotiations with Kuhn, Loeb & Co. Wilson wrote to the trustee: "Sperry (treasurer of Panhandle Eastern) is very anxious that it not be known that they have the figures at the present time, his reason being that Mr. Maguire (one of the Mokan representatives on the Panhandle Eastern board) would in all likelihood take them to Glore Forgan and complicate the set-up." It will be recalled in this connection that Mokan was attempting to secure competitive bidding for the issue.

Sperry admitted that no more than a skeleton proposal was submitted to the Panhandle Eastern board—and that they were not presented with detailed figures until the figures had been submitted to the Columbia Oil management.

"The Class A Preferred Stock at any time outstanding may be redeemed at any time by the corporation, at its election expressed by resolution of the Board of Directors, in whole or in part from time to time, upon not less than thirty nor more than sixty days' notice to the holders of record of the Class A Preferred Stock to be redeemed, . . . by the payment in cash for each share of the said stock so to be redeemed of One Hundred Dollars ($100) if redeemed on or before July 1, 1941, or One Hundred and Ten Dollars ($110) per share if redeemed thereafter, and in each case in addition thereto an amount which together with the aggregate of the preferential dividends paid upon such shares during the period from January 1, 1936, will be equal to their full cumulative preferential dividends for the calendar year 1936 plus six dollars ($6.00) per share per annum from January 1, 1937 to the date of redemption."

Since April of 1937 various proposals have been made to refinance this Class A stock, all of which is held by Columbia Oil. These proposals and attempts to put through such a refinancing have failed—and the history of that failure is a significant indication of Columbia Oil's control over Panhandle Eastern.

Proposals to refinance the preferred stock made in 1937 were met by Columbia Oil's insistence that the refinancing take place simultaneously with the refunding of Panhandle Eastern's bonds.[42] During 1937 and 1938 it was believed by some of Panhandle Eastern's officers that the condition of the market made necessary a convertible issue of preferred to refinance the outstanding preferred. The Mokan interests refused to make any attempts to secure waivers from the minority common stockholders of pre-emptive rights to new common. This, it was claimed, made impossible the issuance of convertible preferred stock—and dampened efforts at refinancing.[43] There was, however, no indication that Columbia Oil would consent to even a convertible issue during the early stages of the refinancing proposal.

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[42]This refunding has been referred to herein in connection with the stockholders consent clause.

[43]Undoubtedly the Mokan interests were resisting an attempt to dilute their already sub-dominant interests.

[fol. 10834] It will be recalled that pursuant to the settlement with the Mokan receivers, rights to 80,000 shares of Panhandle Eastern's common stock were to be distributed to Mokan stockholders. During the early part of 1939 hearings in the Delaware Chancery Court were being held on the question of this distribution.[44] Because of the pendency of this proceeding the Panhandle Eastern Board, on January 25, 1939, abandoned plans for selling convertible preferred stock. The alleged reason was that the outcome of the proceedings "had a vital bearing on the type of financing which it was possible to do at that time."[45]

On June 21, 1939, the Delaware Chancellor ordered a distribution of the 80,000 shares of Panhandle Eastern's common stock to Mokan stockholders. The tension was broken. A substantial block of stock in the hands of an adversary had been smashed, and in July of 1939 the Finance Committee of Panhandle Eastern was ready to recommend continuation of negotiations with Kuhn, Loeb & Co. for a 4½% cumulative preferred stock without a conversion feature.

It is apparent that up to this time the dominant factor in the timing of the action of the Panhandle Eastern Board was the relative control positions of Columbia Oil and Mokan. The distribution of a strategic block of stock was the "vital" factor in "the type of financing which it was possible to do at that time". When the block was broken it became "apparent", according to the testimony of Sperry, treasurer of Panhandle Eastern, "that we could sell an issue without the conversion privilege attached".

But a new barrier was presented. On August 7, 1939, Creveling, president of Panhandle Eastern and chairman of its board, reported that Columbia Oil had determined

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[44] Although Sperry, treasurer of Panhandle Eastern testified that hearings on the plan of divestiture (filed in the anti-trust suit) pursuant to which Columbia Gas was to give up its voting interest in Columbia Oil, were in progress at the same time, this is apparently an error. Panhandle Eastern's application states the filing of the plan to have occurred "on or about June 20, 1939." At a meeting of the Panhandle Eastern board on January 11, 1939, reference was made to proceedings in the Federal Court which would commence on January 12, 1939. The reference is apparently to the filing of the government's amended complaint.

[45] Testimony of Sperry, treasurer of Panhandle Eastern.

that the pendency of the plan of divestiture before the Federal Court made plans for refinancing "premature".

Panhandle Eastern tried again, in what was deemed a reviving market, in November of 1939. This time negotiations were undertaken for a joint refunding of the bonds and refinancing of the preferred (the action previously recommended by Columbia Oil) with Kidder, Peabody & Company and Glore, Forgan & Company. On December 28, 1939, the Panhandle Eastern directors recommended to Gano Dunn a program of refunding and retirement. On [fol. 10835] January 19, 1940, Gano Dunn conveyed to the board of Panhandle Eastern the sentiments of Columbia Oil: Columbia was unwilling to consider, at that time, the refinancing of the preferred stock. This ended Panhandle Eastern's efforts at refinancing. Panhandle Eastern, in the face of a market which it appears would have absorbed a refinancing at 4½% is still saddled with a 6% cumulative, participating preferred stock which paid in 1940 a dividend of 10%, and which, according to its terms, after June 1, 1941, would cost the company a premium of $1,000,000 should it attempt a refinancing.

Here again we are not concerned with the validity of Columbia Oil's reasons for withholding its assent to the refinancing. Our concern is the evidence as it relates to control. On the record before us, we think it is eminently clear that applicants have not demonstrated that Panhandle Eastern is not controlled by or subject to the controlling influence of Columbia Oil.

Relationship Between Panhandle Eastern and Mokan

Our discussion to this point indicates that Mokan's position in the affairs of Panhandle Eastern has been in direct opposition to that of the Columbia companies;[46] and that Mokan, at least to date, has not been able to exercise any "controlling influence" (as that term is used in the statute) in the affairs of Panhandle Eastern.

The record shows consistent attempts by the Mokan interests to affect the affairs of Panhandle Eastern. The coexistence of the dominant holdings of Columbia Oil

[46] See notes 33 and 41, supra.

have rendered these attempts futile. So long as Columbia Oil retains its relative position, it is difficult to see how Mokan can succeed in exercising control or a controlling influence in the affairs of Panhandle Eastern. There is no occasion for now holding Panhandle Eastern to be a subsidiary of Mokan and we believe that Panhandle Eastern's application to be declared not to be a subsidiary of Mokan must therefore be granted. The subdominant position of Mokan, however, depends directly on the maintenance intact of the Columbia Oil block. Should this block be broken, it may well be that Mokan would obtain control of Panhandle Eastern. In view of this possibility, we will expressly condition our order, as the statute contemplates, to provide that we may, upon appropriate notice and opportunity for further hearing, reopen the proceeding to examine the effect of any changes in the ownership of Panhandle Eastern's securities upon the issues here presented; and, if the additional evidence warrants such action, revoke our order granting the application.[47]

[fol. 10836] The Plan of Divestiture and The Young Suit

In the course of the hearing before the trial examiner a dispute arose as to the admissibility of certain evidence proffered on behalf of Columbia Oil and excluded by the trial examiner. We are requested to review this ruling. In order to define the issues presented by the ruling it is necessary to comment on certain further proceedings in the anti-trust suit relating to the so-called plan of divestiture.

On or about June 20, 1939, a motion was made on behalf of the Columbia companies for modification of the consent decree in order to implement the provisions of an agreement between those companies allegedly designed to effectuate a divorce of Columbia Gas control over Columbia Oil and Panhandle Eastern.

[47] Section 2(a) (8) provides in part:

". . . The Commission, upon its own motion or upon application, shall revoke the order declaring such company not to be a subsidiary company whenever in its judgment any condition specified in clause (i), (ii), or (iii) is not satisfied in the case of such company . . ."

The events immediately preceding the filing of this plan are pertinent. On January 12, 1939, pursuant to leave of court the government filed a supplemental complaint in the anti-trust suit based on the theory that "The course of events since the entry of said (consent) decree has, however, made it increasingly clear that said decree has been and is ineffectual toward the accomplishment of this specific purpose . . ." i. e., the termination of the "domination or control, direct or indirect, in the affairs of Panhandle Eastern Pipe Line Company by the defendant Columbia Gas & Electric Corporation."

The plan suggested by the Columbia companies includes the following provisions:

1. Columbia Oil will transfer to Columbia Gas all of its properties except for its interest in Panhandle Eastern (this will consist of the outstanding securities of five oil and gasoline subsidiaries),

2. Columbia Gas will surrender to Columbia Oil the preferred stock of Columbia Oil which it holds,

3. "Columbia Oil will agree to use its best efforts to dispose of the $10,000,000 Class A preferred stock of Panhandle Eastern owned by it, at not less than par, to a purchaser who has no connection or interest, direct or indirect, with or in Columbia Gas or through the refinancing thereof by Panhandle Eastern from the sale of a new preferred stock to such a purchaser, and Columbia Oil will apply the monies thus raised to reduce the total of debentures[48] outstanding by at least the amount of $10,- [fol. 10837] 000,000,[49]

4. "All officers and directors of Columbia Oil shall resign upon entry of the order (of the Federal Court approving the plan of divestiture) and the approval of the plan by the Securities and Exchange Commission to the

[48]This refers to debentures of Columbia Oil in the amount of $21,000,000, all held by Columbia Gas.

[49]Upon such a reduction in the outstanding debentures, Columbia Gas will reduce the interest on the remainder to 3%. In addition, certain sinking fund adjustments with respect to the outstanding debentures will be made. Columbia Gas waives any right to acquire ownership of Panhandle Eastern securities owned by Columbia Oil in the event of any default on the outstanding debentures of Columbia Oil held by Columbia Gas.

extent required by law and be replaced by officers and directors not objectionable to the Department of Justice, such directors to own no stock or securities of Columbia Gas. Such directors shall not include anyone who is now, or ever has been, an officer, director or employee of Columbia Gas or any of its subsidiary companies."

It is provided that the representatives of Columbia Oil on the board of directors of Panhandle Eastern shall be directors of Columbia Oil, and it is provided further that "As early as practicable after the entry of the final order approving the plan, the directors of Panhandle Eastern, who now represent Columbia Oil shall resign and be succeeded by persons who shall have been elected as directors of Columbia Oil under this plan."[50]

5. Subject to the approval of the Securities and Exchange Commission, if required by law, Columbia Gas shall sell the stock and indebtedness of the Indiana Gas Distribution (sic) Corporation[51] and the Michigan Gas Transmission Corporation owned by it to Panhandle Eastern at any time within one year from the date of the entry of the order, if said company wishes to buy the same, for a price equal to the actual investment of Columbia Gas therein, provided, Panhandle Eastern also purchases at [fol. 10838] the same time the gas pipe line in Indiana belonging to the Ohio Fuel Gas Company for the price of $355,191 this being calculated by Columbia Gas as the fair value thereof on the basis of a sale by it during the current year of part of this line to an independent company. However, if, during said year, Columbia Gas receives from other sources, not connected directly or indirectly with Columbia Gas, an offer satisfactory to it to purchase said stock and indebtedness, Columbia Gas will give Panhandle Eastern written notification of the proposed terms of sale and give Panhandle Eastern ninety days within which to meet such terms. If, during such

[50] For a period of five years from the date of the entry of the order approving the plan "no person shall be qualified to be elected and serve as a director of Columbia Oil who shall be objectionable to the Department of Justice."

[51] The reference is apparently to Indiana Gas Transmission Corporation. This company it will be recalled owns part of the lines extending eastward from the terminus of Panhandle Eastern's lines toward Detroit

ninety-day period, Panhandle Eastern does not meet the terms of the said outside offer, then Columbia Gas shall be free to accept said offer.

"If, at the expiration of said year, no such sale shall have been made, Columbia Gas will stand ready to sell such stock and indebtedness of said companies on the same conditions as above, subject to the approval of the Securities and Exchange Commission, if required by law, to others. To effectuate such sale, a trustee shall be appointed by the court to sell such properties:

"Provided, that such trustee shall not, unless Columbia Gas consents, accept any bid for such properties at a price amounting to less than its actual investment therein and provided, further, that such property shall not be sold to any purchaser who is in any way connected or interested, directly or indirectly, with or in Columbia Gas."

Columbia Oil, Gano Dunn and others who have testified on the question have attempted to explain Columbia Oil's reluctance to permit the refunding of the Class A preferred stock on the ground of the pendency of this plan of divestiture.

Soon after its filing, a stockholders' suit, known as the Young suit, was brought against the Columbia companies on the theory that effectuating the plan would be unfair to Columbia Gas. An injunction was sought in that suit against consummation of the plan. It was the position of Columbia Oil counsel that the Young suit delayed consideration of the plan, and hence delayed steps by Columbia Oil in the refinancing of the preferred stock. In order to show that the Mokan interests were aiding in the conduct of the Young suit, counsel for Columbia Oil attempted to elicit testimony from W. G. Maguire, President of Mokan and a Director of Panhandle Eastern, relating to conferences and other negotiations between himself and the plaintiff in the Young suit.

Our trial examiner, upon objection, rejected the proffer and refused to permit the line of questioning. The proffered evidence does not tend in any way to dispute the fact that Columbia Oil exercised its influence to prevent the refinancing of the Panhandle Eastern preferred.

But Columbia Oil's action in this respect is important and [fol. 10839] has been cited only because it is a significant illustration of Columbia Oil's power over Panhandle Eastern; the reason for Columbia Oil's exercise of its influence in this transaction is not material here.

The plan of divestiture was approved by the Federal Court on January 18, 1941, in United States vs. Columbia Gas & Electric Corporation, et al., 36 F. Supp. 488. The government requested as a condition of approval of the plan that certain of the holders of common stock of both Columbia Gas and Columbia Oil dispose of their holdings in Columbia Oil. Among these was Philip G. Gossler who, excluding the United Corporation, is the largest single holder of Columbia Oil common stock and is a substantial holder of Columbia Gas common and chairman of the Columbia Gas board. It was also requested that the other officers and directors of Columbia Gas divest themselves of their holdings in Columbia Oil. The court granted both requests and its approval of the plan was conditioned upon the disposition to disinterested persons of the Columbia Oil holdings of Gossler and the other officers and directors of Columbia Gas. By the terms of the plan its consummation is also subject to our approval "if required by law."

It is urged that the pendency of this plan should be taken into consideration "as an element in favor of granting the applications of Columbia Gas with respect to Columbia Oil and Panhandle Eastern." There is cited to us as a "precedent" to be followed the International Paper & Power Company case, 4 S. E. C. 873 (1939).

The difference between the instant case and the Paper & Power case is material. In the Paper & Power case effective steps were taken, prior to the granting of the application, to deposit the shares of statutory subsidiaries with three liquidating trustees who were to proceed immediately with the liquidation. In this case the situation remains unchanged until certain conditions are satisfied. These involve the disposition of personal holdings of individuals interested in the Columbia companies. No machinery has been set in motion for such a disposition, and we have received no guarantees or assurances as to when such a disposition will take place. In the Paper & Power case the

entire plan of liquidation was put before us as a plan pursuant to Section 11 (e) of the Act. That Section provides that the Commission may, upon request of a company filing a plan, apply to a court to enforce and carry out its terms and the court may appoint a trustee for that purpose. In the Paper & Power case the plan contained a request to the Commission to seek the aid of a court if the liquidating trustees were unable to dispose of the assets of the trust estate. It included also a provision depriving the beneficiaries of any right to control the disposition of the trust estate upon such an application by the Commission. These factors were specifically relied upon by us in our order disposing of that case.

Comparable factors do not exist here. For an indeterminate period following our disposition, the relationship of the companies involved will remain unaltered. We cannot, therefore, accept the pendency of the plan of divestiture as a determinant factor in favor of granting the applications herein filed.

[fol. 10840] Conclusions

The applicants have asked for orders declaring certain companies to be outside the scope of a statute designed to prevent the reoccurrence of evils which in the past have occurred in the public utility holding company—subsidiary relationship. Not only their status as applicants, but the fact that they seek exemption from the automatic operations of the definition of the term "subsidiary" in Section 2 (a) (8), and the fact that such exemption would relieve companies from the operation of remedial legislation, places upon the applicants the burden of proving the non-existence of control, controlling influence, or intermediacy in the control relationship.[52]

We cannot find that the applicants have demonstrated that Columbia Oil and Panhandle Eastern are not controlled by Columbia Gas, or that their management or poli-

[52] Detroit Edison Company vs. Securities and Exchange Commission, (C. C. A. 6th, decided May 12, 1941); Securities and Exchange Commission vs. Sunbeam Gold Mines Company, 95 F. (2d) 699 (C. C. A. 9th, 1938); Piedmont & Northern Railway vs. Interstate Commerce Commission, 286 U. S. 299, 76 L. Ed. 1115 (1932); Schlemmer vs. Buffalo, etc., 205 U. S. 1, 51 L. Ed. 681 (1907); Grand Trunk Railway vs. United States, 229 Fed. 116 (C. C. A. 7th, 1916).

cies are not subject to a controlling influence by Columbia Gas within the meaning of Section 2 (a) (8) of the Act. Nor can we find that Panhandle Eastern is not controlled by Columbia Oil, or that its management or policies are not subject to a controlling influence by Columbia Oil within the meaning of such section. On the contrary, we are of the opinion that such controlling influences have been shown to exist as to make it necessary and appropriate in the public interest and for the protection of investors and consumers that both Panhandle Eastern and Columbia Oil, in respect of Columbia Gas, and that Panhandle Eastern in respect of Columbia Oil, be subject to the obligations, duties, and liabilities imposed in the Act upon subsidiary companies of registered holding companies. Cf. Detroit Edison Company vs. Securities and Exchange Commission, (C. C. A. 6th, decided May 12, 1941); Rochester Telephone Corporation vs. United States, 307 U. S. 125 (1939); American Gas and Electric Company, 9 S. E. C. ..... (1941), Holding Company Act Release No. 2749; H. M. Byllesby & Company, 6 S. E. C. 639 (1940); The Hartford Gas Company, 8 S. E. C. .....: (1941), Holding Company Act Release No. 2613.

However, we do find that Panhandle Eastern has demonstrated that it is not now controlled, directly or indirectly, by Mokan (either alone or pursuant to an arrangement or understanding with one or more other persons) either through one or more intermediary persons or by any means or device whatsoever; that it is not an intermediary company through which such control of another company is exercised; and that its management and policies are not subject to a controlling influence, directly or indirectly, by Mokan (either alone or pursuant to an arrangement or understanding with one or more other persons) so as to make [fol. 10841] it necessary or appropriate in the public interest or for the protection of investors or consumers that Panhandle Eastern, in respect of Mokan, be subject to the obligations, duties, and liabilities imposed in the Act upon subsidiary companies of holding companies.

An appropriate order will issue conditionally granting the application with respect to the relationship between Panhandle Eastern and Mokan, and in all other respects denying the applications under Section 2 (a) (8).

By the Commission (Chairman Eicher, Commissioners Healy, Henderson, and Pike).

FRANCIS P. BRASSOR,
Secretary.

[fol. 10842] United States of America.

Before The Securities and Exchange Commission.

At a regular session of the Securities and Exchange Commission, held at its office in the City of Washington, D. C., on the 27th day of May, A. D., 1941.

Order Denying Applications In Part and Granting Applications In Part.

In the Matters of

Panhandle Eastern Pipe Line Company,

File Nos. 31-109, 31-493, 31-108.

Columbia Oil & Gasoline Corporation,

File Nos. 31-107, 31-106.

Columbia Gas & Electric Corporation,

File Nos. 31-422, 31-423.

Public Utility Holding Company Act of 1935—
Section 2 (a) (8)

Panhandle Eastern Pipe Line Company having applied under Section 2(a) (8) of the Public Utility Holding Company Act of 1935 for an order declaring it not to be a subsidiary of Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation or Missouri-Kansas Pipe Line Company; Columbia Gas & Electric Corporation having applied under the same section for an order declaring that neither Columbia Oil & Gasoline Corporation nor Panhandle Eastern Pipe Line Company is its subsidiary; and Columbia Oil & Gasoline Corporation having applied for an order under the same section declaring it not to be a subsidiary of Columbia Gas & Electric Corporation, and a hearing on said applications having been duly held; briefs having been filed and oral argument heard; and the Commission having this day issued its Findings and Opinion;

It Is Ordered that the said applications, except for the application of Panhandle Eastern Pipe Line Company re-

questing an order declaring it not to be a subsidiary of the Missouri-Kansas Pipe Line Company, be, and the same hereby are, denied; and that the application of Panhandle Eastern Pipe Line Company for an order declaring it not to be a subsidiary of the Missouri-Kansas Pipe Line Company, be, and it hereby is, granted, upon condition, however, that if at any time it appears to the Commission that [fol. 10843] the material facts and circumstances stated in its Findings and Opinion herein are changed, the Commission may reopen these proceedings and, in that event, if after notice and opportunity for further hearing, Missouri-Kansas Pipe Line Company, or Panhandle Eastern Pipe Line Company, shall fail to sustain the burden of proving that Panhandle Eastern Pipe Line Company is not controlled, as intermediary through which control is exercised, or subject to a controlling influence by Missouri-Kansas Pipe Line Company within the meaning of Section 2 (a) (8) of the Public Utility Holding Company Act of 1935, so much of this order as grants the application of Panhandle Eastern Pipe Line Company to be declared not to be a subsidiary of Missouri-Kansas Pipe Line Company may be revoked.

By the Commission.

(Seal) FRANCIS P. BRASSOR,
Secretary.

[fol. 10844] For Immediate Release Saturday, June 21, 1941.

Securities and Exchange Commission,
Washington.

Holding Company Act

Release No. 2834

United States of America.

Before The Securities and Exchange Commission.

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 21st day of June, A. D., 1941.

Supplemental Order Amending Findings and Opinion.

In the Matters of

Panhandle Eastern Pipe Line Company,
File Nos. 31-109, 31-493, 31-108.

Columbia Oil & Gasoline Corporation,
File Nos. 31-107, 31-106.

Columbia Gas & Electric Corporation,
File Nos. 31-422, 31-423.

Public Utility Holding Company Act of 1935—
Section 2 (a) (8)

It appearing to the Commission after further consideration that certain portions of its findings and opinion issued herein on May 27, 1941 (Holding Company Act Release No. 2778), which findings are attached to the Commission's Order of the same date, should be amended;

It Is Ordered that there be substituted for the figure "$4,945,500," in line 5 of that part of footnote 8 which appears on page 6 of the said Release, the figure "$5,495,000," and that there be deleted from line 6 of the said portion of footnote 8 the words "that amount in"; and

That there be deleted the words "and Vice-President" from line 11 of page 7 of the said Release; and

That there be deleted from lines 1 and 2 of footnote 12, appearing at page 8 of the said Release, the words "in heavy default on its notes and," and that there be further deleted from the said footnote the entire last sentence thereof; and

That there be substituted for the words "Columbia Oil" appearing in the second line of paragraph 3 of footnote 14 at page 10 of the said Release, the words "Columbia Gas"; and

That there be deleted from line 18 of page 11 of the said Release, in reference to R. H. Delafield, the words "Director and"; and

[fol. 10845] That there be deleted from lines 2 and 3 of footnote 24, appearing at page 15 of the said Release, the

words "western Illinois border and extended to the Illinois-Indiana border," and substituted therefor the words "Illinois-Indiana border and extended eastward to a point near Muncie, Indiana"; and

That there be deleted from line 13 of the text, at page 21 of the said Release, the words "Columbia Gas" and substituted therefor the words "Columbia Oil"; and

That there be deleted the word "(sic)" and the designation of a footnote [51] from line 25 of page 30 of the said Release; and

That there be deleted the footnote designated as footnote [51] which appears on page 30 of the said Release; and

That the footnote designated as footnote [52] which appears at page 33 of the said Release be designated as footnote [51].

By the Commission.

(Seal) FRANCIS P. BRASSOR,
Secretary.

[fol. 10848] Exhibit 17

Schedule 1

Panhandle Eastern Pipe Line Company System
Compressor Stations

Line Number	Name (A)	Year Constructed (B)	Present Horsepower (C)
1	Sneed	1936	5 200
2	Hansford	1940	3 900
3	Liberal	1930	10 000
4	Haven	1936	7 800
5	Greensburg	1936	7 800
6	Olpe	1936	7 800
7	Louisburg	1930	7 000
8	Houstonia	1936	6 500
9	Centralia	1936	6 500
10	Pleasant Hill	1936	6 500
11	Glenarm	1931	6 000
12	Tuscola	1937	5 100

[fol. 10849]

Exhibit 17.

Schedule 2
Page 1

List Of Communities Receiving Service Directly Or Indirectly From Panhandle Eastern Pipe Line Company Including Population And Number Of Customers As Of June 30, 1941

Line No.	Customer (A)	Ownership (B)	Community Served (C)	Approximate Population (D)	Estimated Number of Customers (E)	Date of First Delivery (F)
1	Panhandle Eastern Pipe Line Company					
2	State of Texas —					
3	Panhandle Power and Light Company	Continental Gas & Electric Corporation	Gruver	350	76	3/17/31
4	State of Kansas —					
5	The American Gas Company	Independent	Hartford	516	82	5/27/31
			Waverly	593	43	5/ 6/31
			Williamsburg	367	92	5/13/31
				1 476	217	
6	Argus Natural Gas Company, Inc.	Northern Natural Gas Company	Garden City	6 282	1 238	6/ 1/30
			14 Communities	18 238	4 060	6/ 1/30
				24 520	5 298	
7	Central Distributing Company	Independent	16 Communities	6 569	1 366	Various
8	Gas Service Company	Cities Service Company	Osawatomie	4 440)		9/22/28
			Paola	3 763)	2 319	9/ -/28
			Paola Rurals	75)		9/ -/28
			Rantoul	224)		9/ -/28
				8 502	2 319	
9	Kansas Gas and Fuel Company	Independent	Kincaid	400		8/26/31
			Mildred	146		8/26/31
				546	100	
10	Louisburg Gas Company	Independent	Louisburg	616	192	7/30/28
11	State of Missouri —					
12	Bowling Green Gas Company	Independent	Bowling Green	18 53	397	5/14/31
13	Central Distributing Company	Independent	13 Communities	15 477	3 104	Various
14	Central West Utility Company	Stern Bros. and Company	Liberty	3 588)		1/ 3/36
			Smithville	771)	1 439	1/ 3/36
			Rural	3 700)		1/ 3/36
				8 059	1 439	
15	Citizens Gas Company of Hannibal	Interstate Gas and Electric Company	Hannibal	19 863	4 003	9/25/31

[fol. 10850]

Exhibit 17.

Schedule 2
Page 2

List Of Communities Receiving Service Directly Or Indirectly From Panhandle Eastern Pipe Line Company Including Population And Number Of Customers As Of June 30, 1941
(Continued)

Line No.	Customer (A)	Ownership (B)	Community Served (C)	Approximate Population (D)	Estimated Number of Customers (E)	Date of First Delivery (F)
1	State of Missouri — (Cont.)					
2	City of Fulton	City of Fulton	Fulton	6 103	640	5/13/36
3	Cities Service Gas Company	Cities Service Company	Kansas City	(Portion Indeterminable)		9/22/28
4	Interstate Gas Company	Independent	Harrisonville	2 306	458	1/ 2/34
5	Lee's Summit Gas Company	Independent	Lee's Summit	2 254	473	1/ 7/31
6	Missouri Edison Company	Indland Power & Light Corporation	Louisiana	4 657	826	8/31/31
7	Missouri Power and Light Company	North American Light and Power Co.	Boonville	6 433		6/10/31
			Centralia	2 009		7/14/31
			Excelsior Springs	4 891		1/ 4/36
			Farber	385		5/19/31
			Hallsville	232		5/27/31
			Jefferson City	24 233		5/20/31
			Laddonia	587		5/19/31
			Martinsburg	422	11 681	3/28/32
			Mexico	8 290		10/10/32
			Moberly	12 897		9/11/35
			New Franklin	1 210		5/ 7/31
			New London	1 001		11/ 3/31
			Sturgeon	571		5/26/31
			Vandalia	2 450		2/ 8/32
			Wellsville	1 310		3/ 1/32
				66 921	11 681	
8	Missouri Utilities Company	Community Power and Light Company	Columbia	18 239	3 677	7/23/32
9	State of Indiana —					
10	Kentucky Natural Gas Corporation	Independent		Indeterminable		9/ 1/38
11	Michigan Gas Transmission Corporation	Columbia Gas and Electric Corporation	70 Communities	467 794	97 545	Various
12	State of Michigan —					
13	Michigan Consolidated Gas Company	American Light and Traction Company	Ann Arbor	43 000	8 761	8/17/39
			Detroit	1 900 000	442 017	7/ 9/36
				1 943 000	450 778	

[fol. 10851]

Exhibit 17.

Schedule 2
Page 3

List Of Communities Receiving Service Directly Or Indirectly From Panhandle Eastern Pipe Line Company Including Population And Number Of Customers As Of June 30, 1941
(Continued)

Line No.	Customer (A)	Ownership (B)	Community Served (C)	Approximate Population (D)	Estimated Number of Customers (E)	Date of First Delivery (F)
1	State of Michigan — (Cont.).					
2	National Utilities Co., of Michigan	National Gas and Electric Corporation	Monroe	18 478		
			Dundee	1 699	3 700	5/19/41
			Carlton	864		
			Maybee	390		
				21 431	3 700	
3	State of Ohio —					
4	Central States Natural Gas Company	Independent	Paulding	1 903	280	7/ 5/39
5	Ohio Gas Light and Coke Company	Great Lakes Utilities Company	Archbold	1 186	334	
			Bryan	4 670	1 237	
			Delta	1 777	230	
			Edgerton	982	116	
			Montpelier	3 667	776	
			Napoleon	4 530	802	6/12/39
			Pettisville	307	60	
			Stryker	817	201	
			Wauseon	2 880	606	
				20 825	4 362	
6	The Toledo Edison Company	The Toledo Light and Power Company	Defiance	8 768	1 378	4/11/40
7	Illinois Natural Gas Company					
8	State of Illinois —					
9	Central Illinois Electric and Gas Co.	Consolidated Electric and Gas Company	Lincoln	12 443	1 683	9/ 7/34
10	Central Illinois Light Company	The Commonwealth and Southern Corporation	Bartonville			
			Creve Coeur	105 003		
			Peoria		54 473	
			E. Peoria			
			Washington	2 456		4/18/41
			Pekin	13 324		2/29/32
			Springfield	75 393		1/16/32
				196 176	54 473	

[fol. 10852]

Exhibit 17.

Schedule 2
Page 4

List Of Communities Receiving Service Directly Or Indirectly From Panhandle Eastern Pipe Line Company Including Population And Number Of Customers As Of June 30, 1941
(Continued)

Line No	Customer (A)	Ownership (B)	Community Served (C)	Approximate Population (D)	Estimated Number of Customers (E)	Date of First Delivery (F)
1	State of Illinois—(Cont.)					
2	Central Illinois Public Service Company	Middle West Corporation	Canton	11 583		
			Cuba	1 484		
			Havana	3 614	4 992	1/ 3/34
			Lewiston	2 358		
			Macomb	6 714		
			Hoopeston	5 613	925	12/ 1/33
			Quincy	40 521	8 750	5/15/32
			Owaneco	325		
			Pana	6 000		
			Shelbyville	3 568	2 900	7/20/32
			Taylorville	7 316		
			Tower Hill	642		
				89 738	17 567	
3	Citizens Gas Company	Independent	Arthur	1 600	200	6/ 2/41
			Atwood	883	80	6/ 9/41
			Chrisman	1 100	118	11/23/38
			Newman	1 075	121	10/ 6/39
			Tuscola	2 600	372	11/12/38
			Villa Grove	2 001	208	8/ 1/40
				9 259	1 099	
4	City of Pittsfield	City of Pittsfield	Pittsfield	3 851	398	7/ 6/38
5	City of Roodhouse	City of Roodhouse	Roodhouse	2 928	305	6/ 2/38
6	City of White Hall	City of White Hall	White Hall	2 954	276	9/ 7/38
7	Illinois Iowa Power Company	North American Light and Power Co.	Champaign	25 000	9 823	1/18/32
			Urbana	13 060		
			Danville	36 865	7 659	2/24/32
			Decatur	59 129	13 469	4/ 5/32
			Jacksonville	17 747	3 355	1/ 2/32
				151 801	34 306	
8	Village of Morton	Village of Morton	Morton	2 241	175	1/21/41
9	Totals			3 123 526	704 591	

[fol. 10853]

Schedule 3
Page 1

List Of Industrial Customers Receiving Service Direct
From Panhandle Eastern Pipe Line Company System
June 30, 1941

Line No.	Customer (A)	Gas Used For (B)	Date of First Service (C)
1	Panhandle Eastern Pipe Line Company		
2	Edwards-Conley Brick and Tile Company Columbia, Missouri	Manufacture of Ceramics	5/14/31
3	Fayette Brick and Tile Company Fayette, Missouri	Manufacture of Ceramics	5/28/31
4	Freiling Greenhouses Hannibal, Missouri	Heating of Greenhouses	11/28/33
5	Harbison-Walker Refractories Company Pittsburgh, Penn.	Manufacture of Ceramics at: Fulton, Mo. Vandalia, Mo.	12/28/31
6	Mexico Refractories Company Mexico, Missouri	Manufacture of Ceramics	9/ 6/31
7	Missouri Power and Light Company Jefferson City, Missouri	Fuel for Boilers in Power Plants at Jefferson City, Mo. Boonville, Mo. Mexico, Mo. Moberly, Mo.	10/18/31
8	Phillips Petroleum Company Bartlesville, Oklahoma	Fuel for Pumping Stations at: Harrisonville, Mo. Jefferson City, Mo. Leeton, Mo. Paola, Kans. Sharpe, Kans.	11/13/35
9	W. J. Small Co., Inc. Neodesha, Kansas	Manufacture of Dehydrated Alfalfa meal at: Liberty, Mo. Boonville, Mo.	 4/26/40 5/ 2/41
10	State of Kansas Topeka, Kansas	Fuel at: State Hospital, Osawatomie, Kans.	4/30/40

[fol. 10854]

Schedule 3
Page 2

List Of Industrial Customers Receiving Service Direct
From Panhandle Eastern Pipe Line Company System
June 30, 1941
(Continued)

Line No.	Customer (A)	Gas Used For (B)	Date of First Service (C)
1	United Brick and Tile Company Kansas City, Missouri	Manufacture of Ceramics at: Vale, Missouri	7/14/31
2	Universal Atlas Cement Company New York, N. Y.	Manufacture of Cement at: Hannibal, Mo.	3/ 3/33
3	Walsh Refractories Corporation St. Louis, Missouri	Manufacture of Ceramics at: Farber, Mo.	12/29/31
4	Wellsville Fire Brick Company Chicago, Illinois	Manufacture of Ceramics at: Wellsville, Mo.	1/31/41
5	Illinois Natural Gas Company		
6	Black White Lime Company Quincy, Illinois	Manufacture of Lime	5/ 6/33
7	Marblehead Lime Company Chicago, Illinois	Manufacture of Lime at: Quincy, Ill. Manufacture of Lime and Rock Wool at: Marblehead, Ill.	5/27/35 12/14/38
8	Meneke Stone and Lime Company Quincy, Illinois	Manufacture of Lime	5/ 6/33

[fol. 10926]

(Exhibit 17.)

Schedule 11

Panhandle Eastern Pipe Line Company System Summary, Miles Of Pipe By Sizes June 30, 1941

Line No.	Location (A)	2" I.D. (B)	3" I.D. (C)	4" I.D. (D)	5" I.D. (E)	6" I.D. (F)	8" I.D. (G)	10" I.D. (H)	12" I.D. (I)	16" O.D. (J)	18" O.D. (K)	20" O.D. (L)	22" O.D. (M)	24" O.D. (N)	Total Miles (O)
1	Panhandle Eastern Pipe Line Company														
2	Main Line System														
3	Texas												55.91		55.91
4	Main Line														126.02
5	Gathering Lines			16.51		25.07	23.81	15.76	10.60	12.95	13.32	7.98	.02		2.83
6	Lateral Lines	2.83													
7	Oklahoma												38.38		43.43
8	Main Line							5.05							
9	Kansas														
10	Main Line							14.91			8.22		15.96	345.11	384.20
11	Loop Lines							.96			9.11			253.79	263.86
12	Gathering Lines	3.44		68.00		30.15	26.86	21.86	22.47	59.62	25.12				257.52
13	Lateral Lines	26.71		7.41			31.86								65.48
14	Missouri														
15	Main Line							8.24	.71	1.31			202.74		213.00
16	Loop Lines							.72	5.86		10.05		50.83	104.97	172.43
17	Lateral Lines	24.36	20.16	37.80		62.03	84.95	14.85	22.62						266.77
18	Illinois														
19	Main Line							3.45	1.27		19.65	58.72	123.03		206.12
20	Loop Lines							.37				23.80	47.13	29.42	100.72
21	Lateral Lines						1.28								1.28
22	Indiana											.04			.04
23	Main Line														
24	Totals Main Line System	57.34	20.16	129.72		117.25	168.26	86.17	63.53	73.88	85.47	90.54	534.00	733.29	2 159.61
25	Local Area														257.35
26	Kansas	94.53	1.86	51.21	20.75	47.26	19.28	22.46							110.13
27	Missouri	21.40	.32	26.66	7.26	18.13	16.20	20.16							
28	Totals Local Area	115.93	2.18	77.87	28.01	65.39	35.48	42.62							367.48
29	Total Panhandle Eastern Pipe Line Company	173.27	22.34	207.59	28.01	182.64	203.74	128.79	63.53	73.88	85.47	90.54	534.00	733.29	2 527.09
30	Illinois Natural Gas Company														
31	Lateral Lines	16.79	24.18	34.34		38.43	10.86	36.59	31.50	68.20	.25				261.14
32	Totals Illinois Natural Gas Company	16.79	24.18	34.34		38.43	10.86	36.59	31.50	68.20	.25				261.14
33	Totals Entire System	190.06	46.52	241.93	28.01	221.07	214.60	165.38	95.03	142.08	85.72	90.54	534.00	733.29	2 788.23

[fol. 10958] (Exhibit 30.)

Written Testimony of Witness Rufus M. Smith.

[fol. 10959] Statement of Qualifications and Experience of Rufus M. Smith.

1. Name, address, and age.

Rufus M. Smith, Kansas City, Missouri, age 38.

2. Present position:

Geologist, Panhandle Eastern Pipe Line Company.

3. Education:

May 1929—Graduated from Colorado School of Mines, with degree of Geological Engineer.

4. Business Experience:

1926 to 1927—Instrument man, scout and torsion balance assistant with Midwest Refining Company, Denver, Colorado.

1929 to 1930—Geologist, Gulf Production Company, Houston, Texas.

1930 to 1932—Engineer and Geologist for Panhandle Eastern Pipe Line Company.

1932 to 1934—Assistant construction superintendent, Phillips Petroleum Company, Kansas City, Missouri.

1934 to 1936—Agricultural Engineer, Department of Agriculture, headquartering at Kahoka, Missouri.

1936 to 1941—Geologist, Panhandle Eastern Pipe Line Company, Kansas City, Missouri.

[fol. 10960] 5. Duties:

My duties as geologist for Panhandle Eastern Pipe Line Company have required me at all times to keep in close touch with development and producing conditions in the areas in which Panhandle Eastern owns reserves; to watch the performance of the wells in these fields; and advise the management with respect to its producing operations.

[fol. 10961] Written Testimony of Rufus M. Smith.

I came with the Panhandle Eastern Pipe Line Company organization in April 1930 as a geologist, and have been well acquainted with the development operations of that company in the Texas and Hugoton Fields during the entire period of my connection with the company. I am familiar with its gas reserves, the condition and productivity of its wells and those belonging to other producers with whom it has gas purchase contracts, and with the formations underlying the acreage from which said company now takes gas. During my service, I have had occasion to continuously study the producing conditions in the areas from which the company obtains its gas supply.

In the testimony which follows, I shall deal primarily with the Panhandle Eastern gas reserves located in the State of Texas.

In my work, it has been necessary for me to keep in close touch with the developments in those portions of the field in which Panhandle Eastern Pipe Line Company has interests and, in a more general way, to keep advised concerning developments in other portions of the field. I have, from time to time, carefully studied the Annual Reports of the Railroad Commission of Texas, and these reports have materially assisted me in reaching the views which I now have with respect to conditions in that field.

Description of the Field:

It is recognized by geologists generally that the Panhandle oil and gas field overlies a part of a buried chain of granite mountain peaks which extends in a Southeasterly course through this field. It is believed my many that an extension of these mountains comes to the surface as the Wichita Mountains in Oklahoma, at an elevation of approximately 1,000 feet above sea level. The Panhandle oil and gas field extends in a Southeast-Northwest direction, [fol. 10962] cutting across portions of Collingsworth, Wheeler, Gray, Carson, Hutchinson, Potter and Moore Counties, into Hartley County, Texas. The field is approximately 125 miles in length and has an average width of approximately 20 miles. As classified by the Railroad Commission, 1,085,270 acres produce sweet gas and 372,437 acres produce sour gas. Sour gas is gas containing sulphur, and is not suitable for ordinary pipe line purposes

unless the sulphur content is removed. The Texas Railroad Commission also recognizes as proven, or semi-proven, for oil an area of approximately 250,000 acres. Approximately 40% of the producing acreage is included in the gas producing areas referred to, due to the fact that above the oil are horizons from which free gas is produced. The oil production in the field is confined to a series of some 30 pools extending along the North flank of the field for a distance of about 90 miles.

Producing Formations:

Four formations or zones in the Panhandle Field are productive. These zones are: (1) Brown dolomite, (2) gray dolomite, (3) gray lime, (4) granite wash. The granite wash formation is an eroded and disintegrated granite accumulation which formed along the lower flanks or slopes of the granite ridge. The lime and dolomite are marine sedimentary formations which were deposited on the sides and over the axis of the granite ridge in later geologic times.

Development:

In 1918, while the area was being explored for oil, gas was discovered in Northern Potter County. Following the completion of the discovery well, several other wells were drilled into the gas pay but oil was not discovered until 1921 when the Burnett well, drilled by Gulf Production Company was completed in Northern Carson County with an initial daily production of approximately 200 barrels. Development of the field was rather slow and the total [fol. 10963] daily oil production in the entire field at the end of 1925 was not more than 5,500 barrels.

In the early part of 1926, the Borger oil pool in Hutchinson County was discovered and immediately thereafter an intensive drilling program was carried on. Within a few years, drilling operations progressed to such an extent as to enable those studying the field to reach a reasonable conclusion as to the probable extent of the field. Oil pools were discovered in Moore, Hutchinson, Carson, Gray and Wheeler Counties and, as a result of the drilling

of other wells in a search for oil, substantial portions of the area now known as the Panhandle Field were found to contain no oil but to contain large volumes of gas.

Many oil wells located in various portions of the field were drilled through several gas containing strata before entering the oil horizon and, in many instances, the wells were completed in such a manner that gas from the gas strata was produced along with the oil from the lower oil strata. As a result, a quantity estimated by the Texas Railroad Commission to be in excess of two trillion cubic feet of gas, most of which came from the free gas strata above the oil, was produced with the oil and wasted into the air.

Panhandle Eastern Activities:

Panhandle Eastern Pipe Line Company entered the Panhandle oil and gas field by purchasing acreage in February 1930. The purchases were made through the activities of its then wholly owned subsidiary (later dissolved) corporation, Texas-Interstate Pipe Line Company. In further testimony given by me, the two will be treated as the Panhandle Eastern project.

When Panhandle Eastern commenced to assemble its acreage reserves in the Panhandle Field, the general extent of the field was fairly well known, but the information obtained by the drilling theretofore done was not adequate to justify definite conclusions with respect to the produc- [fol. 10964] ing possibilities of the various portions of the field. At that time, other companies who desired to produce gas from the Panhandle Field were also seeking reserves in that field and it was impossible definitely to determine the areas in which Panhandle Eastern would build up the backbone of its gas reserves. It was necessary, therefore, that leases be purchased in various portions of the field in the general area from which Panhandle Eastern expected to market gas.

1932 Acreage:

Exhibit 19 is a map prepared under my direction from the records of the company, showing in red color the acreage on which Panhandle Eastern Pipe Line Company had leases as of March 31, 1932. Certain tracts are shown

on this map as belonging to Panhandle Eastern which are no longer a part of its reserves. Some of these tracts were, by later developments, found to be outside the producing area; some were found to be located in sour gas territory; some located in areas which later were subjected to excessive drainage; and some were found to be in areas of small open flow capacities. Most of the leases, however, which were acquired at the inception of the project, were, by later development by Panhandle Eastern as well as by drilling operations of other owners of oil and gas leases, proven to be located in choice gas producing areas, and constituted the nucleus for the company's present Texas gas reserve.

Building Reserves:

This method of building a reserve in a new field is not an unusual one. A purchaser of leases in an undeveloped area knows that the choice locations can only be determined after a considerable development is carried on that some of the leases may later be found to be of little or no value to it. Therefore, when selecting and purchasing leases the policy of checkerboarding, or purchasing in several apparently favorable spots, is frequently followed with a view of later selecting the tracts which will be re- [fol. 10965] tained, consolidating positions in the area found most prolific, and disposing of those leases which are not believed to be of sufficient economic value to justify drilling by the particular company which has made the investment. Such disposition is accomplished by selling or exchanging the less desirable leases or, if no other disposition can be made, by surrendering such leases and thus obtaining relief from the burdens of delay rentals, taxes and other carrying charges.

It is often the case that a lease which, because of its location, is of little economic value to one company will be of great value to another, and that exchanges of leases can be effected to the advantage of both exchanging parties. It also is frequently possible to arrange with lessors where tracts are small to effect consolidations of separate leases into an agreement covering at least a section, which is considered an economic drilling unit in this area. This enables the lessee to save substantial drilling and producing expense without in the least dam-

aging the value of either consolidated lease as a gas reserve, and such consolidations are also to the advantage of the respective lessors.

Thus, by consolidating acreage and positions and by a culling process, a company, after selecting general areas, can improve its position in selected areas and round out its reserves so as to have a more favorable position than would be the case if its reserve were represented by only the separate leases as originally acquired.

Panhandle Eastern's Original Policy:

In assembling its original leases, Panhandle Eastern made its principal purchases in Moore County and in Northwestern Carson and Northeastern Potter Counties and constructed its gathering lines to serve that general area. It was at that time known that the area was one of high gas content, but the boundaries of the field had not been determined, the exact location of the boundary line [fol. 10966] between the sour gas and the sweet gas areas had not been established, and the best producing portions of the general area could not, with exactness, be located. In acquiring its leases in that area, Panhandle Eastern spread its purchases over the selected area to the best of its ability under existing conditions so as to be certain that it would have good producing properties when, as a result of further development in the general area, the locations of the best producing portions could be determined.

The Company's Development Policy:

During the years which have passed since the company first commenced taking gas from the field, it has kept in close touch with conditions in the field, and when selecting the acreage which it desired to retain as a part of its reserves, has applied the information thereby acquired. It has been my duty, as an employee of the company, during all this period to keep informed concerning developments in the area and to communicate that information to the management.

In the process of culling, the company has exchanged some leases, sold others, and released some which were thought not to fit into its program. Many additional leases also have been acquired. Lease consolidations

either with other old leases or with acreage more recently acquired have been effected. Substantial portions of the reserves now held by the company are held on renewal and consolidation agreements, rather than under the terms of the original leases. The presently owned reserves of Panhandle Eastern, on which are now 57 producing wells, are principally located in the areas first selected in 1930—in Southern Moore County, Northwestern Carson County and Northeastern Potter County.

Gas Purchase Contracts:

In addition to its owned leases, Panhandle Eastern holds gas purchase contracts covering the production from other wells located in the same general areas as its [fol. 10967] own. These contracts, except one with Northern Natural Gas Company, covering production from two wells, run for the lives of the leases covered. Since they are located in the same areas as its own producing properties, the company can construct and operate its gathering lines more economically than if the wells served were in different parts of the field. There are now 53 producing wells on leases covered by such gas purchase contracts.

1941 Acreage Map:

Exhibit 20 is a map prepared under my supervision, showing in colors on the lower section the tracts which constitute the present reserves (owned and held by gas purchase contracts) of Panhandle Eastern in the Panhandle Field. The tracts constituting such reserves are shown on said map in three classifications:

(a) those marked in pink are tracts which the company owns both oil and gas rights;

(b) those shown in pink with yellow border being those on which it owns gas rights only; and

(c) those shown in green being those tracts on which it holds gas purchase contracts.

The locations of Panhandle Eastern's wells and the wells of other producers with whom it holds gas purchase contracts are shown on the Exhibit.

The Panhandle Structure:

Exhibit 21 is a map, prepared under my direction, showing the structure of the west portion of the Panhandle

Field as that structure is recognized generally by geologists. The contours shown thereon are based on elevations above sea level of the top of what is locally known as the "Panhandle Lime." This structure map shows that the properties, in the general area in which Panhandle Eastern's reserves are located, are favorably located for the production of gas.

[fol. 10968] The line marked "A-A'", shown on this structure map, is the approximate location of the cross-section portrayed on the cross-section map next referred to.

Typical Cross Section:

Exhibit 22 was prepared by me for the purpose of illustrating the geologic formation existing in the general area in which Panhandle Eastern's Texas reserves are located. It represents the typical condition existing on a line extending from North Central Potter County to Northwest Hutchinson County along the general course indicated by line A-A', shown on Exhibit 21. The portions marked in red illustrate typical areas in which gas is found. The portions marked in green represent typical areas in which oil is found and the portion marked in blue represents typical areas in which water is found.

The "granite wash" was first formed as accumulations of disintegrated granite, washed down along the slopes and into the valleys near the mountains. This disintegrated granite is usually very porous and permeable. Subsequently the dolomite and lime formations were laid down as marine sedimentary deposits over the peaks and extending out from the mountains. It is generally believed that the area was submerged and uplifted several different times, resulting in the interbedding of "granite wash" deposits with the lime and dolomite formations.

Beds of anhydrite and other impervious formations form a cap rock over the underlying porous and permeable formations represented by the granite wash, lime and dolomite.

It is generally believed by geologists that subsequent to the time these porous formations were laid down, oil and gas migrated into the area from source beds at some other point, possibly the Anadarko Basin. Thereupon,

the oil, gas and water assumed their natural positions with relation to each other, that is the water being the [fol. 10969] heaviest, at the bottom, then the oil and then the gas.

As clearly appears from Exhibit 22, the different producing formations are interconnected. This is true in practically all instances. Necessarily, therefore, production from any of the horizons shown has a direct effect on all other producing formations in the reservoir. It will also be noted that the same producing formation will at some points produce gas only; at other points gas and oil; at other points, gas, oil and water; at others oil and water; and at still others only water, depending on the elevation at which the particular formation is encountered in a particular well.

Formations Encountered In Drilling Wells:

The well shown on Exhibit 22 is intended to represent a typical well. It will be noted that after passing through the cap rock the well pierces several formations producing only gas; then one producing oil; and finally one bearing water only. Unless this water is controlled by plugging operations, the reservoir pressure will force it into the well bore and a mixture of oil and water will result. Upon depletion of the oil near the well bore, there is danger that the water will be forced into the producing formations which originally contained oil and thus seriously damage the oil producing ability of that formation. There is also a danger that water will also be forced into and damage some of the upper gas producing formations.

In the early history of the Panhandle Field, operators frequently adopted the practice of completing their wells without sealing off the free gas in the formations above the oil. In many instances this was done for the purpose of utilizing the gas as an aid in the recovery of the oil. In some instances, casings were split or the casing seats were damaged so as to permit the entry of gas from the gas bearing strata to assist in the recovery of the oil. As a result of such operations, tremendous volumes of gas, [fol. 10970] estimated by the Texas Railroad Commission at two trillion cubic feet, have been produced from oil wells and in most instances have been permitted to waste into the air.

In some areas of the field, oil is found, with no free gas encountered in the formations above the oil zone. This is especially true in certain areas north of Borger, Texas, where the amount of gas produced with the oil has been negligible.

Gas only is found in the greater part of the Panhandle field where the producing formations occur at the higher elevations. The Texas Railroad Commission has estimated that while the field, as a whole, covers approximately one and one-half million acres, the oil producing portion covers only approximately 250,000 acres of which approximately 40% contains free gas in formations above the oil.

Effect of Production:

It will be readily recognized, from an inspection of Exhibit 22 that production of gas at any point in the reservoir will result in gas moving toward the well bore from which the production is taken, and that such migration of gas will result in lowered pressures and less content in the areas from which the gas has migrated, since gas moves from an area of high pressure to one of lower pressure, as water runs down hill.

It will be noted that production of oil or gas is not limited to any particular zone in the lime series, but may occur at any of the zones where the proper porosity and permeability exist.

Division of Panhandle Field:

As has been stated, the Panhandle field extends in length approximately 125 miles and has an average width of approximately 20 miles. The Railroad Commission has, for purposes of administration, divided the gas producing portions of the field into three zones, described as the East Field, the West Field and the Sour Field. At [fol. 10971] a point in the East part of Gray County, where a low pressure area and a structural restriction exist, the Commission has placed a dividing line between the East Field and the West Field. The East Field produces oil and sweet gas. Most of the gas produced in that field is marketed at points in Oklahoma, Kansas and North Texas. The gas producing section of the field lying West of this line is divided into two fields, one being

known as the West Gas Field and the other as the Sour Gas Field. The sour gas field is that portion of the Panhandle Field West of the West boundary line of the East field, from which gas with sulphur content is produced. Oil is produced from pools in each field. The West Gas Field is the area in which the properties of Panhandle Eastern Pipe Line Company are located and my studies have been largely confined to this field.

Reservoir Pressure:

The initial pressure of the Panhandle Gas Field was approximately 430 pounds per square inch at the wellhead, corresponding to a pressure in the producing horizon of approximately 471 pounds per square inch. This pressure is subnormal when compared with reservoir pressures at similar depths found in most other fields. Many geologists attribute this subnormal pressure to an assumption that the pressure is the result of past or present interconnections with the formations outcropping in the Wichita Mountains in Oklahoma, which have an elevation of approximately 1,000 feet above the producing horizon in this field, and water entering the outcroppings there, and exerting pressure on formations at this elevation would produce a hydrostatic head, creating a pressure of approximately 471 pounds.

Continued production of oil and gas from this field has resulted in substantial reductions in pressure. The extent and effect of this pressure drop will be discussed in connection with a presentation of a series of rock pressure maps.

[fol. 10972] Rock Pressure Map 1932:

I have already pointed out that when the field was first discovered, the wel head pressures were approximately 430 pounds per square inch. As a result of withdrawals prior to 1932, the pressures had commenced to drop materially in the areas along the North flank of the structure. Exhibit 23 has been prepared for the purpose of showing the pressure condition existing that year. The area colored yellow represents those portions of the field which still had pressures above 400 pounds. That band then covered the greater portion of the free gas producing area. Other colored bands shown on the map represent areas having pressures from 300 to 400 pounds, from 200 to 300 pounds

and below 200 pounds. It will be noted that the areas close to oil production were those affected most seriously by the pressure drops. This was due to the circumstance that most of the gas which had been theretofore taken from the field had been produced with the oil in the manner already pointed out. At that time very small quantities of gas had been taken from the West field by Natural Gas Pipe line companies.

Gas Pipe Lines:

By 1933, several lines had been constructed into the field for the purpose of transporting large volumes of gas out of the West sweet gas field to distant markets. Panhandle Eastern's line was completed in 1932. Lines were also constructed by Texonia Natural Gas Company and Natural Gas Pipeline Company of America for the purpose of furnishing gas to Chicago and other Northern markets, by Canadian River Gas Company and Colorado Interstate Pipe Line Company for the purpose of furnishing gas to Denver and other points, by Northern Natural Gas Company for the purpose of furnishing gas to Omaha, Minneapolis and other points by South Plain Pipe Line Company for the purpose of furnishing gas to points in the South plains of Texas, and by the Empire Companies for the purpose of furnishing gas to Kansas City and other points in Kansas and Missouri.

[fol. 10973] Rock Pressure Map 1938:

Exhibit 24 reflects the rock pressure pattern in the West Field in 1938, and it will be noted by comparing this map with Exhibit 23 that during the intervening six years substantial changes had come about as a result of withdrawals.

The map for 1938, as well as maps which will be presented by me illustrating the conditions existing in 1939, 1940 and, so far as known, 1941, are contoured on 50 pound pressure bands instead of 100 pound pressure bands, as was the case with the 1932 map. The 1932 map was prepared by me from one in our files, the source of which I do not now know. The maps for 1938, 1939 and 1940 are all taken from official rock pressure maps issued by the Railroad Commission of Texas and present the Commission's views as to the locations of the various pressure bands in the field. The incomplete map for 1941 is based on official

Railroad Commission tests which were incomplete at the time the map was made and it portrays only the Commission's tests of some of the wells from which Panhandle Eastern produces gas.

It is shown by the 1938 map that some portions of the field nearest the oil producing areas, had dropped to a pressure below 150 pounds; however still a small area in the field had pressures above 400 pounds. Most of the Panhandle Eastern properties and the wells of other producers from which it purchases gas are located in areas where pressures were then 350 to 400 pounds.

Rock Pressure Map 1939:

Exhibit 25 is a rock pressure map showing the pressure condition in the West Field in 1939. It will be noted that, as shown on that map, most of the properties constituting Panhandle Eastern's reserves are located in the areas where pressures were still from 350 to 400 pounds and that the yellow, or highest pressure area, is considerably reduced from that shown on the 1938 map.

[fol. 10974] Rock Pressure Map 1940:

Exhibit 26 reflects the pressure situation in the West Field which was found to exist as a result of the tests made by the Railroad Commission in 1940. A comparison of that map with the map for 1939 shows that the pressure band representing presures of 300 to 350 pounds has extended at some points further into the area in which Panhandle Eastern's reserves are located, but the overall picture does not reflect a very great encroachment. This map shows that there had been a further reduction of the area containing pressures above 400 pounds and that all pressures were gradually being lowered to the West and South.

Sour Gas Line:

On Exhibit 26, in heavy dashed lines, is shown the generally recognized sour gas line as now recognized by the Railroad Commission. The wells drilled generally North of that line produce sour gas only, while gas wells drilled South of the line produce sweet gas. Because of the presence in the sour gas of sulphur compounds in appreciable amounts, it is not suitable for use for light, heat and fuel purposes unless first subjected to a processing

for the removal of the sulphur. To date, it has not been found economically advisable by any producer taking gas from the field for ordinary pipe line purposes to process the sour gas. As a result, the sour gas is used only for the manufacture of carbon black. The Texas Legislature has, by statute, prohibited the use of sweet gas for that purpose but has expressly permitted the use of sour gas. Approximately 80% of the carbon black manufactured in the world is manufactured in the Panhandle of Texas. The demand for sour gas for the manufacture of carbon black has been such that the owners of gas producing properties in the sour gas area have been able to produce gas from that area in a much greater proportion to their reserves in place than those holding gas properties in the sweet gas areas could produce. Of necessity, the result of [fol. 10975] production of gas from the smaller sour gas area in a greater proportion than those holding gas reserves in the sweet gas area are able to produce and market their gas will result in continued drainage from the sweet gas area to the sour gas area.

Rock Pressure Map 1941:

Exhibit 27 is a rock pressure map showing the pressures existing in a portion of the wells in Panhandle Eastern's reserves, reflected by tests of the field now being taken. The portions of the reserves colored are only a portion of Panhandle Eastern's reserves, and lie principally within the pressure bands 300 to 350 pounds. Some of the other leases immediately adjoining that band and constituting a substantial part of Panhandle Eastern's reserves will be found to still lie within the 350 to 400 pound pressure bands when reports adequate to permit drawing of contour lines are available for completion of the rock pressure tests of 1941.

Sand Thickness and Porosity:

Numerous qualified geologists have reached the conclusion that the average "pay thickness" in the better portion of the gas producing area in the Panhandle field is approximately 70 feet and that the average porosity of such pay formations is approximately 20%. From these determinations, they have estimated the average content in that area to have been approximately 17.7 million cubic feet per acre. I concur in that conclusion.

Exhibits 28 and 29:

Irrespective of what the average sand thickness and the average porosity of the field may be, it is unquestionably true that in different portions of the field great variations are found as to thickness of pay or percentage of porosity, or both such factors. This obvious situation is reflected in and evidenced by, the varying initial potential producing capacities of the wells heretofore drilled.

[fol. 10976] I have caused to be prepared two series of graphs which clearly demonstrate the variability in both pay thickness and porosity. These graphs are based on information obtained from a close study of the logs of 34 wells, all of which are located in the West Panhandle Field and in or near the areas where Panhandle Eastern's reserves have been selected. These two series of graphs are Exhibits 28 and 29.

Wells Used for Graphs:

On Schedule 1 of Exhibit 30, I have shown the wells used as a basis for this study, their locations, the pay thicknesses as indicated from the well logs, and the initial open flows in millions of cubic feet. The well numbers shown on that schedule correspond to the figures appearing at the top of Exhibits 28 and 29 and to the right of the graphs shown thereon.

Explanation of Graphs:

The vertical scale on these graphs represents the thickness of pay in feet, while the horizontal scale reflects the initial volume in millions of cubic feet. The dots shown on each graph indicate the thickness of pay plotted against the open flow volume at the time that amount of gas pay had been drilled. For example, it appears from Graph 1 that when 10 feet of gas pay had been drilled two million open flow volume had been obtained, but when 25 feet of pay had been drilled an aggregate of 6.5 million cubic feet had been obtained. Also, on Graph 2 when 35 feet of pay had been drilled an open flow volume of 17.5 million had been developed, when 51 feet of pay had been drilled, 25 million cubic feet of potential had been developed, and when 76 feet of pay had been drilled an aggregate of 123.4 million cubic feet potential had been developed.

These graphs clearly demonstrate that the productivity of the wells does not always increase in the same proportions as the increases in aggregate pay thickness, which necessarily means that in the different pays encountered varying percentages of porosity exist.

[fol. 10977] Productivity Map:

That portion of Exhibit 31, which represents the West Panhandle Field, was prepared for the purpose of showing the varied productivity existing in the Panhandle Field, as reflected by the varying initial potentials at virgin pressure. The legend shows the classification of the productivity bands. This map has been, under my direction, made from one compiled several years ago by C. Don Hughes, a geologist of Amarillo, Texas, who has been familiar with the Panhandle Field since development first began. A few slight changes have been made by me, as a result of information not available at the time the Hughes map was prepared.

It will be noted that this productivity map shows that most of the properties in the area where Panhandle Eastern's reserves are located are in the bands of high productivity.

Gas Content in Panhandle Eastern's Reserves:

I have made a study with respect to the reserves originally contained in the Texas acreage on which Panhandle Eastern holds gas leases and the reserves in the Texas acreage covered by gas purchase contracts belonging to that company.

It is recognized by geologists generally that, based on an average sand thickness of 70 feet and an average porosity of 20%, the average original content in the better portion of the field was approximately 17.7 million cubic feet per acre at virgin pressure. It is also recognized generally by geologists that the average original content in the poorer class of acreage (in which I include wells having less than 5 million cubic feet potential open flow at virgin pressure) was approximately 5 million per acre.

One of the earliest complete studies of the field was that by Cottner & Crum in the spring of 1932, based on the best data then available. They at that time estimated that for acreage having initial open flow capacities of 10

[fol. 10978] million cubic feet or more, the average thickness of pay was 65 feet and the average porosity was 20% resulting in an average content of 15.289 million cubic feet per acre. They then estimated a content of 6 million cubic feet for the additional poorer class of acreage. Since their study was made, the size of the recognized field has been somewhat increased so as to take in additional acreage, additional data has indicated that thicker pay exists than had been originally assumed, and further developments have caused most geologists to believe that the average pay thickness in the better areas of the field is at least 70 feet. As pointed out in connection with my discussion of Exhibits 28 and 29, it is also now clearly proven that the producing formations in the field vary greatly in percentage of porosity.

In making my study, I thought it reasonable to use an original content of 17.7 million cubic feet per acre for the better class of acreage (which I classify as Class I) and a content of 5 million cubic feet per acre for the acreage with initial open flows at virgin pressure of 5 million feet or less (which I classify as Class II).

After adopting these figures (which I think are conservative), I have classified the acreage in the Panhandle field held by Panhandle Eastern under owned leases and the acreage on which it holds gas purchase contracts, so as to determine the amount of acreage included within its reserves having original open flow capacities at virgin pressure of 5 million cubic feet daily and above and the acreage having initial potentials at virgin pressure below 5 million cubic feet. After applying to these classes the original per acre content which I thought appropriate, I reached the conclusion that the original gas content in the 65,429 acres constituting Panhandle Eastern's present gas reserves computed on a pressure base of 16.4 pounds absolute, was approximately 1,133,709,300,000 cubic feet. The results of the computation just described are reflected in Schedule 2, Exhibit 30. The schedule is, I think, self-explanatory. Column [fol. 10979] C shown thereon is informative and is not used in reaching the results shown in Column E.

Remaining Gas Content in Texas Reserves:

After determining the original gas content of the reserves of Panhandle Eastern in the Panhandle field, including both that under owned leases and that covered by gas purchase contracts, I calculated the gas remaining as of July 1, 1941, in the respective classes described in Schedule 2 of Exhibit 30. In making this computation, I used abandonment pressures for the acreage involved at 150, 125, 100, 75, 50, 30, 25 and 0 pounds. I calculated the remaining reserves to those different abandonment pressures, both on the basis of a 100% recovery and on the basis of a 90% recovery of the gas in place. In my judgment the use of even a 90% recovery factor is very liberal, and there is a greater probability that the actual recovery in a field of the type of the Panhandle field will be less than 90% than that the recovery will be in excess thereof. The Panhandle Field is affected by many conditions which will militate against as great a percentage of recovery of gas as would be the case with a field not having those conditions. Some of the conditions are the effect of the oil producing section of the field, the varying differences in depth of pay, the varying differences in porosity and permeability, the irregular pattern under which wells have been drilled, the irregularity in production taken from the different wells, the irregularities found in the accumulations of gas in the reservoir, and the damage to some of the producing formations resulting from the infiltration of water to the upper sands, caused by improper drilling and production practices. Even the size of the field will affect ultimate recovery because of the distance some of the gas will have to move in order to reach an outlet.

[fol. 10980] Schedule 3 Exhibit 30:

I have indicated on Schedule 3 of Exhibit 30 the results of the calculations just referred to, showing the amount of gas now in place in Panhandle Eastern's acreage and in that covered by its gas purchase contracts, as of July 1, 1941, at the varying abandonment pressures referred to. In Column B of that Schedule, I have shown the original amounts of gas in place for the different classes. In Columns C, E, G, and I, appear the amounts against which

the 90% recovery factor should be applied at the respective pressure abandonment figures used, and in Columns D, F, H, and J, I show the amounts now recoverable from said reserves at the abandonment pressures shown, after applying a 90% recovery factor and after deducting the gas known to have been withdrawn from the reserves in question.

Page 1 of said Schedule 3 shows the results obtained at abandonment pressures of 150 pounds, 125 pounds, 100 pounds and 75 pounds.

Page 2 of Schedule 3 shows the results obtained at abandonment pressures of 50 pounds, 30 pounds, 25 pounds and 0 pounds.

In reaching my estimate of the present reserves of Panhandle Eastern, I have deducted the metered production from this acreage, shown in Column C of Schedule 2 of Exhibit 30 to have been 176,909,587,000 cubic feet, and have estimated the unmetered production from the wells heretofore drilled on said acreage.

Schedule 4 Exhibit 30:

Schedule 4 of Exhibit 30 is a tabulation showing my estimate of unmetered gas. I estimate that the unmetered gas, so far as it has been used for drilling wells, conditioning wells and testing wells has been 46,583,875,000 cubic feet. There had also been production from the 22 wells belonging to Huber Petroleum Company prior to the time Panhandle Eastern entered into a gas purchase contract with that company. I have used as production [fol. 10981] from the Huber wells prior to that date a production of 33,876,021,000 cubic feet taken from the best available information. Therefore, in preparing Pages 1 and 2 of Schedule 3, I have deducted from the original content, known and estimated production to date in the aggregate of 256,472,325,000,000 cubic feet. A few other wells now connected to Panhandle Eastern's system had also produced small quantities of gas prior to such connection which production I have not deemed of sufficient amount to make any appreciable difference in the total.

The computation shown on Pages 1 and 2 of Schedule 3 does not take into consideration any underground drainage from the Panhandle Eastern reserves to the other portions of the field.

Panhandle Eastern's Reserves Are Above the Average:

My estimates of Panhandle Eastern's reserves are based on the average gas content of the various parts of the field in which they are located. I consider this a very conservative basis. A study of the potential producing capacities of the wells connected to Panhandle Eastern's line shows that their average potential production is far in excess of the average for the entire field and that this condition has existed for some time. Prior to the time the Shamrock Oil and Gas Company properties were connected to the line, the average producing capacities of the gas purchase wells were only approximately average potentials of the entire field, but when the 25 wells in Moore County belonging to Shamrock Oil and Gas Company were connected the average potential producing capacities of the gas purchase wells was raised to approximately that of Panhandle Eastern's own wells.

Explanation of Schedule 5 Exhibit 30:

Schedule 5 of Exhibit 30 reflects for the years 1935 to 1940, inclusive, the average potentials of the gas wells [fol. 10982] in the Panhandle Field as a whole, those in the West sweet gas field, those drilled on Panhandle Eastern's own properties and those drilled on acreage held under gas purchase contracts. This exhibit shows at the time of the last test (1940) the average potential of wells in the West sweet gas field was 16,019, the average potential of gas wells in the entire field was 16,294, the average of wells belonging to Panhandle Eastern Pipe Line Company was 25,025, the average of wells under gas purchase contract was 25,651. The average of all wells connected to Panhandle Eastern Pipe Line Company was 25,332, more than 50% above the average for the Panhandle Field as a whole or the average for the West sweet field. This difference in potential producing capacity reflects a very substantial difference in porosity, sand thickness, or both.

Tyes of Additional Data Presented:

I have assembled from the company records certain statistical data relating to the gas acreage owned and under gas purchase contract and the production from both the Panhandle and Hugoton fields. This data is set out in the schedules which now will be discussed.

Gas Acreage:

Schedule 6 of Exhibit 30 is a correct statement of the acreage owned by Panhandle Eastern Pipe Line Company and that held by it under gas purchase contracts. The schedule segregates the tracts, drilled and undrilled, and also segregates the tracts in which the company owns an entire interest from those in which it owns only a 50% interest. The schedule is self-explanatory.

Argus Production:

As shown on Schedule 6 of Exhibit 30, Panhandle Eastern owns certain acreage from which it supplies gas to Argus Natural Gas Company. On Schedule 7, I show the leases from which this production is delivered to Argus Natural Gas Company, the rock pressures and potentials as of July, 1940, the production for the month of [fol. 10953] June, 1941, and the cumulative production to June 30, 1941.

Texas Production:

Schedule 8 of Exhibit 30 shows, separately, the production from both company owned wells and gas purchase wells located in the State of Texas. The production from the company's owned wells is segregated as to the leases from which the production is taken. The production from gas purchase wells is separated according to the metering station at which the purchased gas enters the pipe line. The Schedule shows the rock pressures and potentials as of July, 1940, the production for the fiscal month of June, 1941, and the cumulative production to June 22, 1941, for the company owned wells. It shows the 1940 pressures and potentials for the gas purchase wells and the production for the fiscal month of June, 1941, but the total production shown with respect to such gas purchase wells is only the cumulative production since such wells were connected to Panhandle Eastern's line. We

have no information with respect to any former production from those wells.

Hugoton Main Line Production:

Schedule 9 is a table showing the production of the wells in the Hugoton Field belonging to Panhandle Eastern Pipe Line Company or the wells in which it has an interest, and which are connected to its main line. It is prepared in the same manner as that part of Schedule 8, dealing with the production in Texas from wells belonging to Panhandle Eastern Pipe Line Company.

Hugoton Gas Purchase Production:

Schedule 10 of Exhibit 30 shows the production from the wells in the Hugoton Field which are connected to Panhandle Eastern Pipe Line Company's main line, showing the pressures of the wells and their potentials in July, 1940, the production for the fiscal month of June, 1941, [fol. 10984] and the cumulative production to June 22, 1941. This cumulative table does not include such production, if any, as was had from any of those wells prior to the time they were connected to Panhandle's line.

Analysis of Cumulative Production:

Schedule 11 of Exhibit 30 is an analysis of the production to the main line system from the Panhandle Eastern owned properties and the wells on which it holds gas purchase contracts, which are connected to the main line. The tabulation is as to districts and states, showing the total cumulative production to June 22, 1941. The lower section of said Schedule shows the apportionment or division of the production during the first six months of the fiscal year 1941.

Comparative Statement of Production and Purchases:

Schedule 12 is a comparative statement of production and purchases for the two year period ending June 22, 1941. Comparisons are made for each month and between districts. This tabulation also shows the volumes of production sold Argus Natural Gas Company during the two year period referred to.

[fol. 10984a] Schedules Presented in Connection with the Testimony of Rufus M. Smith.

[fol. 10986]

Schedule 2

Estimated Original Gas Content In The Texas Panhandle Field Under Acreage Constituting Reserves Of Panhandle Eastern Pipe Line Company As Of July 1, 1941
Pressure Base 16.4# Absolute

Line No.	(A)	Acreage (B)	Cumulative Production to 6/22/41 (C)	Original Amount of Gas MCF per Acre (D)	Original Amount of Gas MCF (E)
1	Company Owned and Drilled — Class I	30 546	100 102 842	17 700	540 664 200
2	Company Owned and Drilled -- Class II	740	—	5 000	3 700 000
3	Total Company Owned and Drilled	31 286			544 364 200
4	Company Owned and Undrilled -- Class I	9 490		17 700	167 973 000
5	Company Owned and Undrilled — Class II	1 180		5 000	5 900 000
6	Total Company Owned and Undrilled	10 670			173 873 000
7	Total Panhandle Eastern Pipe Line Company Drilled and Undrilled	41 956			718 237 200
8	Under Gas Purchase Contract — Class I	23 473	75 909 587	17 700	415 472 100
9	Total Controlled by Panhandle Eastern Pipe Line Company	65 429	176 012 429		1 133 709 300

[fol. 10987]

Schedule 3
Page 1

Estimated Remaining Gas Content In The Texas Panhandle Field Under Acreage Constituting Reserves Of Panhandle Eastern Pipe Line Company As Of July 1, 1941
Pressure Base 16.4# Absolute

Line No.	(A)	Original Amount of Gas (B)	Abandonment Pressures — MCF: 150#		125#		100#		75#	
			63.1% (C)	90% (D)	68.8% (E)	90% (F)	74.5% (G)	90% (H)	80.0% (I)	90% (J)
1	Company Owned and Drilled — Class I	540 664 200	341 159 110	307 043 199	371 976 970	334 779 273	402 794 829	362 515 346	432 531 360	389 278 224
2	Company Owned and Drilled — Class II	3 700 000	2 334 700	2 101 230	2 545 600	2 291 040	2 756 500	2 480 850	2 960 000	2 664 000
3	Total	544 364 200		309 144 429		337 070 313		364 996 196		391 942 224
4	Deduct — Production to 6/22/41			100 102 842		100 102 842		100 102 842		100 102 842
5	Deduct — Unmetered to 6/22/41			16 701 750		16 701 750		16 701 750		16 701 750
6	Net			192 339 837		220 265 721		248 191 604		275 137 632
7	Company Owned and Undrilled — Class I	167 973 000	105 999 963	95 391 867	115 565 424	104 008 882	125 139 885	112 625 897	134 378 400	120 940 560
8	Company Owned and Undrilled — Class II	5 900 000	3 722 900	3 350 610	4 059 200	3 653 280	4 395 500	3 955 950	4 720 000	4 248 000
9	Total	173 873 000		98 742 477		107 662 162		116 581 847		125 188 560
10	Total Net Panhandle Eastern Pipe Line									
11	Drilled and Undrilled	718 237 200		291 082 314		327 927 883		364 773 451		400 326 192
12	Under Gas Purchase Contract — Class I	415 472 100	262 162 895	235 946 606	285 844 805	257 260 325	309 526 715	278 574 044	332 377 680	299 139 912
13	Deduct — Production to 6/22/41			75 909 587		75 909 587		75 909 587		75 909 587
14	Deduct — Unmetered to 6/22/41			29 882 125		29 882 125		29 882 125		29 882 125
15	Deduct — Production to Others to 6/22/41			33 876 021		33 876 021		33 876 021		33 876 021
16	Net			96 278 873		117 592 592		138 906 311		159 472 179
17	Total	1 133 709 300	715 370 568	643 833 512	779 991 999	701 992 800	844 613 429	760 152 087	906 967 440	816 270 696
18	Deduct — Production & Unmetered to 6/22/41			256 472 325		256 472 325		256 472 325		256 472 325
19	Net			387 361 187		445 520 475		503 679 762		559 798 371

[fol. 10988]

Schedule 3

Page 2

Estimated Remaining Gas Content In The Texas Panhandle Field Under Acreage Constituting Reserves Of Panhandle Eastern Pipe Line Company As Of July 1, 1941
Pressure Base 16.4# Absolute

Line No.	(A)	Original Amount of Gas (B)	Abandonment Pressures — MCF: 50# 85.8% (C)	50# 90% (D)	30# 90.2% (E)	30# 90% (F)	25# 91.3% (G)	25# 90% (H)	0# 97.0% (I)	0# 90% (J)
1	Company Owned and Drilled — Class I	540 664 200	463 889 884	417 500 896	487 679 108	438 911 197	493 626 415	444 263 774	524 444 274	471 999 847
2	Company Owned and Drilled — Class II	3 700 000	3 174 600	2 857 140	3 337 400	3 003 660	3 378 100	3 040 290	3 589 000	3 230 100
3	Total	544 364 200		420 358 036		441 914 857		447 304 064		475 229 947
4	Deduct — Production to 6/22/41			100 102 842		100 102 842		100 102 842		100 102 842
5	Deduct — Unmetered to 6/22/41			16 701 750		16 701 750		16 701 750		16 701 750
6	Net			303 553 444		325 110 265		330 499 472		358 425 355
7	Company Owned and Undrilled — Class I	167 973 000	144 120 834	129 708 751	151 511 646	136 360 481	153 359 349	138 023 414	162 935 810	146 640 429
8	Company Owned and Undrilled — Class II	5 909 000	5 062 200	4 555 980	5 321 800	4 789 620	5 386 700	4 848 030	5 723 000	5 150 700
9	Total	173 873 000		134 264 731		141 150 101		142 871 444		151 791 129
10	Total Net Panhandle Eastern Pipe Line									
11	Drilled and Undrilled	718 237 200		437 818 175		466 260 366		473 370 916		510 216 484
12	Under Gas Purchase Contract — Class I	415 472 100	356 475 062	320 827 556	374 755 834	337 280 251	379 326 027	341 393 424	403 007 937	362 707 143
13	Deduct -- Production to 6/22/41			75 909 587		75 909 587		75 909 587		75 909 587
14	Deduct — Unmetered to 6/22/41			29 882 125		29 882 125		29 882 125		29 882 125
15	Deduct — Production to Others to 6/22/41			33 876 021		33 876 021		33 876 021		33 876 021
16	Net			181 159 823		197 612 518		201 725 691		223 039 410
17	Total	1 133 709 300	972 722 580	875 450 323	1 022 605 788	920 345 209	1 035 076 591	931 568 932	1 099 698 021	989 728 219
18	Deduct — Production and Unmetered									
19	to 6/22/41			256 472 325		256 472 325		256 472 325		256 472 325
20	Net			618 977 998		663 872 884		675 096 607		733 255 894

[fol. 10990]

Schedule 5

Comparison Of Open Flow Potentials In Texas Panhandle Gas Field

Line No.	(A)	Number of Wells (B)	Open Flow Potential—MCF 1940 Total (C)	Average (D)
1	Total — Panhandle Field	1 654	26 950 094	16 294
2	Total — West Sweet Panhandle Field	752	12 046 167	16 019
3	Panhandle Eastern Pipe Line Company	55	1 376 362	25 025
4	Under Gas Purchase Contract	53	1 359 479	25 651
5	Total Connected to Panhandle Eastern			
6	Pipe Line Company	108	2 735 841	25 332
7			1939	
8	Total — Panhandle Field	1 572	25 829 848	16 431
9	Total — West Sweet Panhandle Field	692	11 897 607	17 193
10	Panhandle Eastern Pipe Line Company	51	1 280 107	25 100
11	Under Gas Purchase Contract	49	1 239 365	25 293
12	Total Connected to Panhandle Eastern			
13	Pipe Line Company	100	2 519 472	25 195
14			1938	
15	Total — Panhandle Field	1 498	26 282 787	17 545
16	Total — West Sweet Panhandle Field	635	10 662 275	16 791
17	Panhandle Eastern Pipe Line Company	44	1 051 590	23 900
18	Under Gas Purchase Contract	43	1 105 474	25 709
19	Total Connected to Panhandle Eastern			
20	Pipe Line Company	87	2 157 064	24 794
21			1937	
22	Total — Panhandle Field	1 374	23 874 256	17 376
23	Total — West Sweet Panhandle Field	624	10 153 657	16 272
24	Panhandle Eastern Pipe Line Company	37	900 970	24 351
25	Under Gas Purchase Contract	38	825 251	21 717
26	Total Connected to Panhandle Eastern			
27	Pipe Line Company	75	1 726 221	23 016
28			1936	
29	Total — Panhandle Field	1 210	20 194 857	16 690
30	Total — West Sweet Panhandle Field	555	9 200 113	16 577
31	Panhandle Eastern Pipe Line Company	30	623 136	20 771
32	Under Gas Purchase Contract	30	419 236	13 975
33	Total Connected to Panhandle Eastern			
34	Pipe Line Company	60	1 042 372	17 373
35			1935	
36	Total — Panhandle Field	1 109	18 606 868	16 778
37	Total — West Sweet Panhandle Field	537	8 804 095	16 395
38	Panhandle Eastern Pipe Line Company	27	536 638	19 875
39	Under Gas Purchase Contract	26	356 337	13 705
40	Total Connected to Panhandle Eastern			
41	Pipe Line Company	53	892 975	16 849
42			Initial	
43	Panhandle Eastern Pipe Line Company	57	1 717 733	30 136
44	Under Gas Purchase Contract	53	1 532 632	28 918
45	Total Connected to Panhandle Eastern			
46	Pipe Line Company	110	3 250 365	29 549

[fol. 10991]

Schedule 6

Gas Acreage Owned And Under Gas Purchase Contracts Held By Panhandle Eastern Pipe Line Company As Of June 30, 1941

Line No.	State (A)	County (B)	100% Owned (C)	Drilled (D)	Undrilled (E)	50% Owned (F)	Drilled (G)	Undrilled (H)
1	Panhandle Eastern Pipe Line Company Acreage							
2	Texas	Moore	28 092 39	17 978 39	10 114 00			
3	"	Carson	8 478 50	7 762 50	716 00			
4	"	Potter	5 462 81	5 282 81	180 00			
5	"	Hutchinson	342 60	262 60	80 00			
6	"	Sherman	5 411 00		5 411 00			
7	"	Hansford	17 985 30		17 985 30			
8	Total Texas		55 772 60	31 286 30	34 486 30			
9	Oklahoma	Texas	79 224 00		79 224 00			
10	Kansas	Seward	14 640 00		14 640 00			
11	"	Stevens	37 707 35	13 730 95	23 976 40	8 120 00	8 120 00	
12	"	Haskell	3 480 00		3 480 00			
13	"	Morton	2 560 00	960 00	1 600 00	2 880 00	2 880 00	
14	"	Grant	31 880 00	4 480 00	27 400 00	6 320 00	6 320 00	
15	Total Kansas		90 267 35	19 170 95	71 096 40	17 320 00	17 320 00	
16	Sub-Total		235 263 95	50 457 25	184 806 70	17 320 00	17 320 00	
17	Panhandle Eastern Pipe Line Company Acreage Under Gas Purchase Contract to Argus Natural Gas Company, Inc.							
18	100% Panhandle Eastern Pipe Line Company		1 200 00	400 00	800 00			
19	50% P.E.P.L. Co. 50% Stevens Co. O&G Co.					640 00	640 00	
20	50% P.E.P.L. Co. 25% Stevens, 25% S.W. Kansas O&G Co.					1 440 00	800 00	640 00
21	50% P.E.P.L. Co. 50% S.W.Ks. O&G Co.					7 467 91	3 839 41	3 628 50
22	Total to Argus Natural Gas Company, Inc. (Stevens Co. Ks.)		1 200 00	400 00	800 00	9 547 91	5 279 41	4 268 50
23	Total Acreage		236 463 95	50 857 25	185 606 70	26 867 91	22 599 41	4 268 50
24	Grand Total — 100% Owned Plus 50% Owned		263 331 86					

25 Acreage owned by others under Gas Purchase Contract to Panhandle Eastern Line Company

26	Stevens County, Kansas	14 000	Moore County, Texas	15 979
27	Morton County, Kansas	2 040	Carson County, Texas	2 087
28	Seward County, Kansas	640	Carson & Hutchinson Counties Texas	5 407
29	Grant County, Kansas	18 395		
30	Total Kansas	35 075	Total Texas	23 473

[fol. 10992]

Schedule 7

Hugoton Production To Argus Natural Gas Company, Inc. By Panhandle Eastern Pipe Line Company Et Al.

Line No.	Well No. (A)	Lease (B)	No. of Acres (C)	R.P. July 1940 (D)	Volume July 1940 MCF (E)	Production from 5/31/41 to 6/30/41 MCF (F)	Total Production to 6/30/41 MCF (G)
1		50% Panhandle Eastern Pipe Line Company — 50% Southwest Kansas O. & G. Co.					
2	5489C 1-1	Bane (Loflin)	640	400	10 336	12 279	1 289 199
3	5465C 1-10	Gaskill (Ham)	160	403	1 619	37 878	975 308
4	5487C 1-2	Guyer	320	400	20 080	6 016	1 206 634
5	5466C 1-11	Ramey	158	415	2 147	4 721	1 144 616
6	5492C 1-7	Renfro	640	388	7 152	20 179	1 011 161
7	5493C 1-2	Spikes	320	404	2 147	5 948	1 004 629
8		Total — 6 Wells	2 238	Av. 401 66	43 481	57 021	6 631 547
9		50% Panhandle Eastern Pipe Line Company — 50% Stevens County Oil And Gas Co.					
10	5468C 1-15	Kelley	320	401	5 136	3 271	1 897 502
11	5462C 1-16	"	320	406	1 587	4 768	693 280
12		Total — 2 Wells	640	Av. 403 50	6 723	8 039	2 590 782
13		50% Panhandle Eastern Pipe Line Co.—25% Southwest Kansas O&G Co.—25% Stevens County O&G Co.					
14	5464C 1-31	Crawford	160	408	4 192	4 075	1 790 427
15	5458C 1-32	"	160	410	2 589	2 764	1 182 043
16	5467C 1-36	"	160	410	2 589	2 987	1 162 837
17	5484C 1-12	Stuart	160	398	23 842	4 830	1 719 528
18		Total — 4 Wells	640	Av. 406 50	33 212	14 656	5 854 835
19		100% Panhandle Eastern Pipe Line Company					
20	5483C 1-12	Greenwood	320	394	17 984	7 890	1 057 025
21	Total P.E.P.L. Co., Et Al — 13 Wells		3 838	Av. 402 85	101 400	87 606	16 134 189*

*Includes gas produced and sold to P.E.P.L. Co. for resale as drilling gas.

[fol. 10993]

Schedule 8

Page 1

Texas Production To Panhandle Eastern Pipe Line Company

Note 1. The number of acres shown represents only the number of acres in the particular lease used for proration purposes in connection with the well described. Many of the leases on which the wells are drilled have proven acreage in excess of that shown.

Note 2. The MCF volume shown hereon represents the potentials determined by back pressure tests.

(Company Owned Wells)

Line No.	Well No. (A)	Lease (B)	No. of Acres (C)	R.P July 1940 (D)	Volume July 1940 MCF (E)	Production from 5/23/41 to 6/22/41 MCF (F)	Total Production to 6/22/41 MCF (G)
1		100% Panhandle Eastern Pipe Line Company					
2	1006A 1-9	Bost	120	327	15 000	7 789	2 351 383
3	1011A 1-14	"	63	336	16 000	15 613	2 154 986
4	Total — 2 Wells		183	Av. 331.50	31 000	23 402	4 506 369
5	1030A 1-22	Brown	640	356	45 000	40 321	3 439 279
6	1051A 1-34	"	640	359	89 000	30 016	977 393
7	1034A 1-36	"	640	359	32 000	47 271	2 651 663
8	1052A 1-64	"	640	374	16 400	16 154	656 895
9	Total — 4 Wells		2 560	Av. 362.00	182 400	133 762	7 725 230
10	1017A 1-51	Barnett	80	363	35 900	20 701	2 498 458
11	1022A 1-60	"	640	359	11 400	17 202	3 207 788
12	1008A 1-77	"	640	363	14 900	34 084	3 380 320
13	1029A 1-79	"	320	356	9 300	30 755	1 467 868
14	1031A 1-81	"	480	345	15 000	24 142	2 377 813
15	1013A 1-84	"	100	351	18 900	17 371	2 893 569
16	1018A 1-86	"	80	353	14 800	13 125	2 286 188
17	1023A 1-97	"	480	341	21 000	24 036	2 357 060
18	1001A 1-99	"	560	359	31 700	22 994	2 542 698
19	1021A 1-108	"	100	255	3 800	—	368 441
20	1037A 1-119	"	520	261	20 000	29 001	1 297 279
21	Total — 11 Wells		4 000	Av. 336.91	196 700	233 411	24 677 482
22	1002A 1-37	Mastersen	640	379	22 000	44 004	3 708 750
23	1042A 1-38	"	640	376	18 300	30 985	1 588 311
24	1009A 1-85	"	640	388	4 700	33 883	1 423 618
25	Total — 3 Wells		1 920	Av. 381.00	45 000	108 872	6 720 679
26	1032 1-100	McBride	640	378	23 500	35 941	2 765 281
27	1047A 1-104	"	640	390	26 000	31 125	1 577 303
28	Total — 2 Wells		1 280	Av. 384.00	49 500	67 066	4 342 584

[fol. 10994]

Texas Production To Panhandle Eastern Pipe Line Company

(Company Owned Wells)
(Continued)

Line No.	Well No. (A)	Lease (B)	No. of Acres (C)	R.P. July 1940 # (D)	Volume July 1940 MCF (E)	Production from 5/23/41 to 6/22/41 MCF (F)	Total Production to 6/22/41 MCF (G)
1		100% Panhandle Eastern Pipe Line Company					
2	1000A 1-4	Sanford	640	332	2 500	7 192	705 294
3	1046A 1-12	"	640	359	14 700	67 439	1 066 889
4	1043A 1-13	"	640	366	25 000	37 988	1 743 020
5	1045A 1-14	"	640	369	25 300	45 158	1 661 365
6	1044A 1-16	"	640	367	17 600	24 115	1 586 340
7	Total — 5 Wells		3 200	Av. 358.60	85 100	181 892	6 762 908
8	1053A 1-20	Sneed Estate	640	354	15 400	20 810	651 081
9	1025A 1-33	" "	640	359	12 300	26 324	2 556 210
10	1055A 1-37	" "	640	361	27 500	47 496	889 961
11	1012A 1-48	" "	640	365	14 800	31 075	2 503 041
12	1054A 1-50	" "	320	361	260 000	148 431	2 082 010
13	Total — 5 Wells		2 880	Av. 360.00	330 000	274 137	8 682 303
14	1049A 1-3	J. T. Sneed Est.	640	343	17 800	20 397	712 184
15	1014A 1-6	" " "	320	372	8 300	11 891	1 386 865
16	1060A 1-9	" " "	640	348*	11 000*	23 811	23 811
17	1008A 1-23	" " "	640	365	9 900	19 112	2 254 365
18	1057A 1-23A	" " "	640	362	30 900	30 631	398 277
19	1050A 1-24	" " "	640	350	7 200	27 690	532 020
20	1048A 1-25	" " "	640	339	13 000	11 019	1 119 984
21	1056A 1-26	" " "	640	362	10 200	18 477	310 709
22	1036A 1-27	" " "	640	347	9 800	36 950	1 604 917
23	1035A 1-28	" " "	640	334	5 180	8 792	1 147 418
24	1038A 1-43	" " "	640	352	15 900	27 544	1 500 148
25	1039A 1-44	" " "	640	354	18 900	13 928	1 842 994
26	1007A 1-45	" " "	640	350	7 700	23 188	1 998 578
27	Total — 13 Wells		8 000	Av. 351.38	165 780	273 430	14 832 270
28	1041A 1-25	Thompson	640	362	23 000	34 755	1 450 202
29	1033A 1-63	"	640	357	14 500	36 605	1 835 385
30	Total — 2 Wells		1 280	Av. 359.50	37 500	71 360	3 285 587

*Unofficial Test.

[fol. 10995]

Texas Production To Panhandle Eastern Pipe Line Company

(Company Owned Wells)
(Continued)

Line No.	Well No. (A)	Lease (B)	No. of Acres (C)	R.P. July 1940 # (D)	Volume July 1940 MCF (E)	Production from 5/23/41 to 6/22/41 MCF (F)	Total Production to 6/22/41 MCF (G)
1		100% Panhandle Eastern Pipe Line Company					
2	1005A 1-55	Zofness	160	364	9 600	15 855	1 981 542
3	1023A 2-55	"	160	364	77 500	66 892	6 385 549
4	Total — 2 Wells		320	Av. 364.00	87 100	82 747	8 367 091
5	1010A 1-6	Bennett	320	367	8 600	21 485	1 404 272
6	1058A 1-22	"	640	364	22 600	52 689	346 913
7	1015A 1-91	Bivins	80	300	14 000	—	948 546
8	1040A 1-18	Nield	640	360	118 000	109 099	3 067 476
9	1016A 1-102	Rockwell	320	380	5 000	19 856	1 474 541
10	1004A 1-5	State	640	397	13 200	20 601	2 571 082
11	1059A 1-5	Walker	640	357	35 750	28 243	387 509
12	Total — 7 Wells		3 280	Av. 360.71	217 150	251 973	10 200 339
13	Total Connected P.E.P.L. Co. — 58 Wells		28 903	Av. 354.66	1 427 230	1 702 052	100 102 842
14		Unconnected Wells					
15	1061A 1-15	Massay	640	358*	42 400*	—	—
16	Total P.E.P.L. Co. — 57 Wells		29 543	Av. 354.72	1 469 630	1 702 052	100 102 842

*Unofficial Test Completed June 1941.

[fol. 10996]

Schedule 8
Page 4

Texas Production To Panhandle Eastern Pipe Line Company
(Continued)
(Gas Purchase Wells)

Line No.	Number of Wells (A)	Meter Station (B)	No. of Acres (C)	R.P. July 1940 (D)	Volume July 1940 MCF (E)	Production from 5/23/41 to 6/22/41 MCF (F)	Total Production to 6/22/41 MCF (G)
1		**Other Producers**					
2	3 Wells 1-8	Huber-Johnson	800	Av. 292.00	44 500	41 622	3 607 349
3	19 " 1-11	" -Sanford	4 376	" 238.58	203 860	240 308	16 371 652
4	Total — 22 Wells		5 176	Av. 245.86	248 360	281 930	19 979 001
5	2 Wells 2-MR	King-Sneed	720	Av. 271.50	28 600	39 874	1 774 111
6	1 Well 1-22	Navajo-Poling	640	371.00	12 800	34 268	6 212 973
7	1 " 3-22	" -Poling	640	371.00	15 900	29 519	6 040 816
8	Total — 2 Wells		1 280	Av. 371.00	28 700	63 787	12 253 789
9	1 Well 1-93	No. Nat. Gas-Bivins	160	350.00	17 200	23 928	1 339 801
10	1 " 1-24	" " " -Poling	240	369.00	9 300	7 185	2 227 432
11	Total — 2 Wells		400	Av. 359.50	26 500	31 113	3 567 233
12	2 Wells 1-32	Shamrock-A. Sneed	1 280	Av. 358.50	91 400	77 384	4 603 924
13	1 Well JG	" -J. T. Sneed Estate	640	367.00	33 200	28 014	2 455 939
14	4 Wells 15-1	" -J. T. Sneed "	2 560	Av. 345.25	63 980	116 289	2 079 270
15	3 " 11-29	" -J. T. Sneed "	1 920	" 361.00	65 700	65 374	3 814 178
16	3 " 5-40	" -J. T. Sneed "	1 920	" 348.67	46 380	70 359	4 257 824
17	1 Well 7-43	" -J. T. Sneed "	640	363.00	14 900	34 445	1 187 942
18	2 Wells 10-49	" -J. T. Sneed "	640	Av. 367.00	246 500	228 620	5 261 454
19	2 " 3-55	" -J. T. Sneed "	960	" 364.00	210 000	146 478	6 083 458
20	3 " 12-Snow	" -J. T. Sneed "	1 920	" 306.67	96 000	12 852	1 244 502
21	3 " 1-23	" -Thompson	1 920	" 366.00	128 500	141 354	6 951 133
22	1 Well 3-60	" -Thompson	640	" 372.00	35 500	55 289	395 829
23	Total — 25 Wells		15 040	" 352.08	1 032 060	976 458	38 335 453
24	Total Other Producers — 53 Wells		22 616	Av. 305.94	1 364 220	1 393 162	75 909 587
25	Total P.E.P.L. Co., et al (Page 3) — 57 Wells		29 543	Av. 354.72	1 469 630	1 702 052	100 102 842
26	Grand Total — Texas — 110 Wells		52 159	Av. 331.22	2 833 850	3 095 214	176 012 429

[fol. 10997]

Schedule 9
Page 1

Hugoton Production To Panhandle Eastern Pipe Line Company

Note: The number of acres shown for each well represents only the acreage used by the company for proration purposes. Many of the leases cover acreage in excess of that shown. The volume shown represents the potentials determined by Pitot tube tests in the summer of 1940.

100% Panhandle Eastern Pipe Line Company

Line No.	Well No. (A)	Lease (B)	No. of Acres (C)	R.P. July 1940 # (D)	Volume July 1940 MCF (E)	Production from 5/23/41 to 6/22/41 MCF (F)	Total Production to 6/22/41 MCF (G)
1		**Hugoton 16" Main Line**					
2	5525C 1-25	Armstrong	640	415	20 208	10 287	474 946
3	5480C 1-22	Howell-Rhinehart	420	415	8 131	—	1 887 796
4	5470C 1-23	" "	420	418	6 598	—	921 245
5	5473C 1-34	Hull	480	393	7 973	5 498	1 819 224
6	5474C 1-28	Liberty Life	480	411	25 764	15 049	1 039 394
7	5482C 1-6	Moorhead (Johnson)	320	409	4 714	1 489	1 110 724
8	5505C 1-27	Morgan	640	402	4 485	12 044	605 241
9	5516C 1-35	"	640	384	24 188	31 519	488 425
10	5534C 1-3	Nix	640	387	7 381	13 268	192 270
11	5478C 1-1	Phillips	160	402	6 142	4 976	1 490 242
12	5479C 1-2	Shirley	640	402	22 560	11 181	1 315 427
13	5490C 1-16	Simmons	320	425	13 408	—	515 498
14	5508C 1-26	Stecher	640	405	13 408	7 769	596 896
15	5475C 1-34	Stone	400	391	8 787	4 882	1 872 072
16	5509C 1-8	Younggren	640	419	13 024	5 957	450 846
17	5506C 1-11	"	640	427	15 136	—	442 675
18	5507C 1-18	"	640	422	27 137	11 637	525 352
19	5463C 1-24	"	560	417	1 940	453	435 271
20	5535C 1-32	"	640	407	5 568	10 464	240 551
21	Total — 19 Wells		9 960	Av. 407.95	236 552	116 423	16 424 005
22		**Grant County 18" Main Line**					
23	5528C 1-33	Cavner	640	396	9 648	11 765	386 592
24	5529C 1-16	Howell	640	428	16 272	17 788	523 306
25	5524C 1-17	Ill. Banker's Life	640	429	6 142	7 841	357 019
26	5530C 1-17	Kilgore	640	431	9 160	5 722	355 470
27	5519C 1-2	Light	640	414	11 696	3 527	478 365
28	5512C 1-36	McClelland	640	428	7 181	6 628	408 130
29	5518C 1-34	McClure	640	411	13 216	9 510	523 160
30	5511C 1-30	Neese	640	437	10 941	1 410	458 947
31	5527C 1-27	Newby	640	428	5 418	6 512	319 593
32	5517C 1-16	Riverview State Bank	640	416	4 342	13 179	345 229
33	5526C 1-20	Spikes	640	422	23 120	12 507	449 593

[fol. 10998]

Hugoton Production To Panhandle Eastern Pipe Line Company
100% Panhandle Eastern Pipe Line Company
(Continued)

Line No.	Well No. (A)	Lease (B)	No. of Acres (C)	R.P. July 1940 # (D)	Volume July 1940 MCF (E)	Production from 5/23/41 to 6/22/41 MCF (F)	Total Production to 6/22/41 MCF (G)
1		Grant County 18" Main Line (Continued)					
2	5520C 1-24	Stevesson	640	415	3 232	15 384	320 039
3	5513C 1-11	Taggart	640	428	7 323	874	303 135
4	5522C 1-35	Zimmerman	640	412	6 848	12 995	388 874
5	Total — 14 Wells		8 960	Av. 421.07	134 539	125 642	5 617 452
6	Total P.E.P.L. Co. — 33 Wells		18 920	Av. 413.52	371 091	272 065	22 041 457
7		50% Panhandle Eastern Pipe Line Company					
8		And 50% Saturn Oil And Gas Company					
9		Hugoton 16" Main Line					
10	5498C 1-19	Bane	320	401	17 792	11 168	513 145
11	5504C 1-26	Buddenburg	640	394	9 779	13 073	1 140 579
12	5476C 1-32	Costley	640	413	15 888	6 382	1 183 331
13	5499C 1-6	Greening	640	412	12 464	4 735	501 040
14	5491C 1-13	Gregory	560	393	5 600	1 362	1 651 264
15	5497C 1-18	"	320	405	1 192	4 683	386 305
16	5460C 1-19	"	320	395	8 787	2 507	740 667
17	5501C 1-30	"	640	398	7 864	20 814	928 808
18	5471C 1-31	"	560	398	3 035	9 221	994 797
19	5503C 1-23	Light	640	392	12 653	7 176	1 115 511
20	5495C 1-9	Phillips	640	395	6 506	20 466	994 740
21	5472C 1-16	"	480	400	5 488	1 951	1 480 403
22	5459C 1-5	Rickart	640	400	4 094	15 310	1 074 057
23	5496C 1-8	"	480	395	8 859	16 726	562 379
24	5539C 1-36	Sharp	640	407	30 885	17 170	139 997
25	Total — 15 Wells		8 160	Av. 399.87	153 886	152 744	13 407 023
26		Grant County 18" Main Line					
27	5542C 1-28	Dappert	640	427	18 717	1 127	91 974
28	5541C 1-33	Joyce	640	433	22 532	1 978	119 990
29	5531C 1-36	"	640	426	22 126	7 068	418 079
30	5514C 1-8	Mason	640	422	10 315	10 642	476 217
31	5523C 1-35	McCandless	560	424	15 888	2 375	541 575
32	5540C 1-15	McClaren	640	430	14 368	14 392	149 120
33	5538C 1-4	McClure	640	410	19 312	11 512	302 242
34	5515C 1-3	Parsons	640	423	9 318	10 436	462 767
35	5461C 1-4	"	640	422	21 600	2 053	497 110

[fol. 10999]

Schedule 9
Page 3

Hugoton Production To Panhandle Eastern Pipe Line Company
50% Panhandle Eastern Pipe Line Company And 50% Saturn Oil And Gas Company
(Continued)

Line No.	Well No. (A)	Lease (B)	No. of Acres (C)	R.P. July 1940 # (D)	Volume July 1940 MCF (E)	Production from 5/23/41 to 6/22/41 MCF (F)	Total Production to 6/22/41 MCF (G)
1		Grant County 18" Main Line (Continued)					
2	5521C 1-9	Parsons	640	428	7 973	13 859	443 194
3	5523C 1-25	"	640	428	13 984	15 826	380 745
4	5537C 1-34	"	640	427	43 940	4 049	382 217
5	5532C 1-20	Towler	640	420	15 320	1 152	328 850
6	5536C 1-21	"	640	410	13 600	711	181 216
7	5510C 1-26	"	640	392	5 291	6 384	339 938
8	Total — 15 Wells		9 520	Av. 421 47	254 284	103 564	5 115 234
9	Total — 50% P.E.P.L.Co. And						
10	50% Saturn O&G Co. —						
11	30 Wells		17 680	Av. 410 67	408 170	256 308	18 522 257
12		50% Panhandle Eastern Pipe Line Company					
13		And 50% Southwest Kansas Oil And Gas Company					
14		Hugoton 16" Main Line					
15	5488C 1-15	Gracey	160	410	3 990	12 137	1 054 671
16	5469C 1-34	Crawford	160	415	5 600	998	687 614
17	5494C 1-3	Ham	320	412	13 984	3 914	765 714
18	5502C 1-16	Hamilton	480	410	14 560	8 015	564 363
19	Total 50% P.E.P.L. Co. —						
20	50% S.W. Kansas O&G Co.						
21	4 Wells		1 120	Av. 411 75	38 134	25 064	3 072 362
22	Total 50% P.E.P.L. Co. —						
23	50% Saturn O&G Co.						
24	30 Wells		17 680	Av. 410 67	408 170	256 308	18 522 257
25	Total 50% P.E.P.L. Co. —						
26	50% Others						
27	34 Wells		18 800	Av. 410 79	446 304	281 372	21 594 619

[fol. 11000]

Schedule 10
Page 1

Hugoton Production To Panhandle Eastern Pipe Line Company

Gas Purchase Wells

Line No.	Well No. (A)	Producer (B)	Lease (C)	No. of Acres (D)	R.P. July 1940 # (E)	Volume July 1940 MCF (F)	Production from 5/23/41 to 6/22/41 MCF (G)	Total Production to 6/22/41 MCF (H)
1			Hugoton 16" Main Line					
2	1-3	Benedum	Brecheisen	160	425	2 507	1 163	269 496
3	1-3	"	Grandy	160	417	4 094	2 253	476 480
4	1-2	"	Kramer	320	405	4 294	1 719	366 512
5	1-4	"	Lowry	160	420	4 094	1 425	345 285
6	1-10	"	Meyers	160	420	4 294	1 141	373 655
7	1-27	"	B. Meyers	160	408	5 944	2 590	683 397
8	1-3	"	Mitchell	160	419	4 342	1 474	423 618
9	Total — 7 Wells			1 280	Av. 416.29	29 569	11 765	2 938 443
10	1-10	Kinney	Baldridge	320	393	20 464	6 244	1 547 451
11	1-16	Kuhn	Armstrong	600	399	13 984	7 159	482 274
12	1-33	"	Kendall	640	400	11 696	4 216	578 276
13	1-33	"	Light	640	394	13 408	13 180	695 540
14	1-2	"	Nix	640	390	16 832	5 281	484 421
15	1-14	"	Young	160	401	15 320	1 801	459 549
16	1-1	"	Younggren	640	428	5 864	—	407 494
17	Total — 6 Wells			3 320	Av. 402.00	77 104	31 637	3 107 554
18	1-1	Pioneer	Beaver	160	425	3 903	1 250	389 572
19	1-16	"	Eby	480	421	7 058	3 039	731 930
20	1-29	"	Morris	160	424	21 968	3 194	302 814
21	Total — 3 Wells			800	Av. 423.33	32 629	7 483	1 424 316
22	1-10	Sidwell	Jenkins	160	399	20 080	2 468	1 282 114
23	1-9	"	Snare	160	400	9 605	2 587	1 101 475
24	Total — 2 Wells			320	Av. 399.50	29 685	5 055	2 383 589
25	1-36	S.W. Kansas	Hallock	160	388	4 719	7 157	525 972
26	2-36	" "	"	160	—*	—*	—	527 171
27	Total — 2 Wells			320	388	4 719	7 157	1 053 143

*No July 1940 test — Well being reconditioned.

[fol. 11001]

Hugoton Production To Panhandle Eastern Pipe Line Company
Gas Purchase Wells
(Continued)

Line No.	Well No. (A)	Producer (B)	Lease (C)	No. of Acres (D)	R P. July 1940 # (E)	Volume July 1940 MCF (F)	Production from 5/23/41 to 6/22/41 MCF (G)	Total Production to 6/22/41 MCF (H)
1			Hugoton 16" Main Line (Continued)					
2	1-23	Stevens O&G	Beavers	640	407	18 544	13 932	302 335
3	1-27	" "	Brown	160	425	31 120	3 644	596 287
4	1-34	" "	Brubaker	640	414	21 408	7 521	317 009
5	1-22	" "	Burrows	640	413	11 888	10 192	355 565
6	1-13	" "	Finch	160	415	18 544	3 339	442 049
7	1-35	" "	Slease	160	389	25 792	4 613	398 366
8	1-4	" "	Spikes	160	417	19 504	1 891	351 770
9	1-11	" "	Young	160	398	21 216	3 462	674 721
10	Total — 8 Wells			2 720	Av. 409.75	168 016	48 594	3 438 102
11	5 Wells United Prod.		Christopher	3 160	Av. 394.00	86 096	44 517	3 442 911
12	Total Hugoton 16" Main Line — 34 Wells*			12 240	Av. 406.79	448 282	162 452	19 335 509
13	*Includes Southwest Kansas — Hallock 2-36. 33 Wells used for acreage.							
14			Grant County 18" Main Line					
15	10 Wells Columbian		Stevesson	6 353	Av. 428.00	163 248	87 212	5 205 145
16	1-16	F. P. Parish	Bohnstengel	640	418	5 637	2 990	331 617
17	1-18	" " "	Burnham	602	419	3 603	2 835	289 760
18	1-20	" " "	Grant Co. St. Bk.	640	420	3 360	2 739	303 754
19	1-26	" " "	Sullivan	640	432	6 270	6 075	558 175
20	1-17	" " "	Whitson	640	421	5 418	3 632	386 342
21	Total — 5 Wells			3 162	Av. 422.00	24 288	18 271	1, 869 648
22	1-3	Stevens O&G	Leonard	640	409	19 696	7 729	148 583
23	1-16	" "	McClure	640	417	19 312	5 442	145 294
24	1-34	" "	Palmer	640	426	13 972	6 547	6 547
25	1-25	" "	Smith	640	427	25 363	13 169	13 169
26	1-21	" "	Spikes	600	423	14 752	7 827	448 091
27	Total — 5 Wells			3 160	Av. 420.40	93 095	40 714	761 684

[fol. 11002]

Hugoton Production To Panhandle Eastern Pipe Line Company
Gas Purchase Wells
(Continued)

Line No.	Well No. (A)	Producer (B)	Lease (C)	No. of Acres (D)	R.P. July 1940 (E)	Volume July 1940 MFC (F)	Production from 5/23/41 to 6/22/41 MCF (G)	Total Production to 6/22/41 MCF (H)
1			Grant County 18" Main Line (Continued)					
2	1-13	Sullivan	Stevens	640	421	3 936	10 822	347 551
3	2 Wells	United Prod.	Grigsby	1 200	Av. 419.00	21 830	3 616	833 454
4	4 "	" "	Harper	2 560	Av. 424.50	45 274	18 924	2 018 498
5	2 "	" "	McClelland	1 280	" 412.00	16 208	5 200	790 400
6	2 "	" "	Stevens	1 280	" 415.00	15 461	26 579	821 392
7	Total — 10 Wells			6 320	Av. 419.00	98 773	54 319	4 463 744
8	1-22	R. K. Wilson Est.	Helmly	640	420.00	4 485	3 266	377 448
9	1-25	" " "	Patterson	640	415.00	5 568	4 440	394 551
10	2 Wells	" " "	Sledd Farm Corp.	1 280	Av. 420.00	16 045	5 749	867 016
11	1-36	" " "	Smith	640	425.00	5 717	3 922	427 206
12	Total — 5 Wells			3 200	Av. 420.00	31 815	17 377	2 066 221
13	Total — Grant County 18" Main Line — 36 Wells			22 835	Av. 422.31	415 155	228 715	14 713 993
14			Summary Of Totals					
15	Total — Other Producers — 70 Wells			35 075	Av. 414.88	863 437	391 167	34 049 502
16	Total 50% P.E.P.L. Co. — 50% Sat. O&G Co. — 30 Wells			17 680	Av. 410.67	408 170	256 308	18 522 257
17	Total 50% P.E.P.L. Co. — 50% S.W. Kansas — 4 Wells			1 120	Av. 411.75	38 134	25 064	3 072 362
18	Total 100% P.E.P.L. Co. — 33 Wells			18 920	Av. 413.52	371 091	272 065	22 041 457
19	Grand Total — Hugoton District 137 Wells			72 795	Av. 413.53	1 680 832	944 604	77 685 578

[fol. 11003]

Schedule 11

Analysis of Cumulative Production To Main Line To And Including Fiscal Month of June, 1941

Line No.	Ownership (A)	No. of Wells (B)	Production MCF (C)	% of Total District Production (D)	% of Total Main Line Production (E)	Total Cumulative Production to 6/22/41 (F)	% of Total Cumulative Production to 6/22/41 (G)
1			Texas District				
2	P. E. P. L. Co.	56	1 702 052	54.99	41.71	100 102 842	39.10
3	Gas Purchase	53	1 393 162	45.01	34.14	75 909 587	29.65
4	Total Texas	109	3 095 214	100.00	75.85	176 012 429	68.75
5			Oklahoma District				
6	Gas Purchase	(Contract)	40 633	100.00	1.00	2 304 187	0.90
7	Total Texas & Oklahoma		3 135 847	100.00	76.85	178 316 616	69.65
8			Hugoton District				
9	P. E. P. L. Co.	50	412 751	43.70	10.12	32 838 766.5	12.83
10	Gas Purchase	87	531 853	56.30	13.03	44 846 811.5	17.52
11	Total Kansas	137	944 604	100.00	23.15	77 685 578.0	30.35
12			Total — All Districts				
13	P. E. P. L. Co.	106	2 114 803		51.83	132 941 608.5	51.93
14	Gas Purchase	140	1 965 648		48.17	123 060 585.5	48.07
15	GRAND TOTAL	246	4 080 451		100.00	256 002 194	100.00
16			Division Of Production				
17			First Six Months of Fiscal Year 1941				
18			(From 12/23/40 to 6/22/41)				

19 20 21	(A)	Produced MCF (B)	% of Total District (C)	% of Total Main Line (D)	Purchased MCF (E)	% of Total District (F)	% of Total Main Line (G)	Purchased and Produced MCF (H)	% of Total Main Line (I)
22	Texas District	11 914 524	54.96	39.97	9 765 653	45.04	32.77	21 680 177	72.74
23	Oklahoma District				313 324	100.00	1.05	313 324	1.05
24	Kansas District	3 013 551.5	38.57	10.11	4 799 201.5	61.43	16.10	7 812 753	26.21
25	Total Main Line	14 928 075.5		50.08	14 878 178.5		49.92	29 806 254	100.00

[fol. 11004]

Schedule 12

Comparative Statement Of Production And Purchases From Each District For The Two Years Ended June 22, 1940 And June 22, 1941

M C F

Line No.	Month (A)	Texas District		Oklahoma District		Hugoton District		To Argus Natural Gas Co., Inc.		Totals	
		Year Ended 6/22/41 (B)	Year Ended 6/22/40 (C)	Year Ended 6/22/41 (D)	Year Ended 6/22/40 (E)	Year Ended 6/22/41 (F)	Year Ended 6/22/40 (G)	Year Ended 6/30/41 (H)	Year Ended 6/30/40 (I)	Year Ended June 1941 (J)	Year Ended June 1940 (K)
1	July	2 010 693	1 942 600	20 316	26 937	1 155 920	880 023	103 045	109 812	3 289 974	2 959 372
2	August	2 817 175	2 251 236	14 555	33 639	480 061	766 795	100 178	114 256	3 411 969	3 165 926
3	September	2 840 330	2 643 597	37 240	40 908	848 995	720 497	102 366	111 063	3 828 931	3 516 065
4	October	3 093 930	2 527 644	44 728	46 699	1 122 329	1 239 687	162 500	114 965	4 423 487	3 928 995
5	November	3 361 547	3 307 878	32 674	46 972	1 491 274	1 070 952	193 217	220 963	5 078 712	4 646 765
6	December	3 300 109	2 628 432	36 978	52 091	2 081 504	1 797 352	236 399	184 017	5 604 990	4 661 892
7	January	3 616 663	3 149 104	60 354	43 988	1 730 545	2 150 690	241 817	207 057	5 649 379	5 550 839
8	February	3 793 856	3 172 470	70 307	55 619	1 985 058	2 047 930	221 774	183 058	6 070 995	5 459 077
9	March	3 545 103	3 120 122	41 778	60 957	1 640 907	1 475 786	184 924	157 524	5 412 712	4 814 029
10	April	4 039 092	3 275 813	57 165	18 589	783 497	1 200 985	106 851	100 227	4 986 605	4 595 614
11	May	3 590 249	3 023 914	43 087	33 329	728 142	885 329	77 904	87 946	4 439 382	4 030 518
12	June	3 095 214	3 005 785	40 633	29 600	944 604	408 294	87 606	78 229	4 168 057	3 521 908
13	Total	39 103 961	34 048 595	499 815	489 328	14 942 836	14 644 320	1 818 581	1 669 117	56 365 193	50 851 000

[fol. 11010] Exhibit 36.

Written Testimony of Witness Glenn G. Bartle.

[fol. 11011] Statement of Qualifications and Experience of Glenn G. Bartle.

1. Name, address, and age.
Glenn G. Bartle, Kansas City, Missouri, age 42.

2. Present position:
Professor of Geology and Dean of Liberal Arts, University of Kansas City.

3. Education:
1921—A.B. in Geology, Indiana University.
1923—A.M. in Geology, Indiana University.
1924-25—Graduate Student, University of Chicago.
1932—Ph.D. in Geology (Stratigraphic and Economic) Indiana University.

4. Professional Experience:

(a) As Instructor:

1925 to 1933—Instructor in Geology, Junior College of Kansas City.

1933 to 1938—Chairman, Department of Geology, University of Kansas City.

1938 to Present—Professor of Geology and Dean of Liberal Arts, University of Kansas City.

(b) As Consultant:

1932 to Present—Consulting Geologist, Missouri Valley Oil and Gas Company, Independence, Missouri.

[fol. 11012] 1935 to Present—Consulting Geologist, Missouri Western Gas Company, Butler, Missouri.

1936 to 1938—Consulting Geologist, Phoenix Joint Stock Land Bank, Kansas City, Missouri.

Employed by Panhandle Eastern Pipe Line Company or affiliates as Consulting Geologist 1929 to 1933, 1935, 1936, and 1941.

Numerous other temporary geological projects.

5. Publications:

I am author of eleven geological publications, including four concerned with the geology of natural gas.

[fol. 11013] Written Testimony of Glenn G. Bartle.

Preliminary Statement:

I have been acquainted with the properties of Panhandle Eastern Pipe Line System since 1928. I did my first work for this System in June, 1929, as a Consulting Geologist, working at first in the gas fields near Kansas City at Paola, Kansas, and Blue Springs and Excelsior Springs, Missouri.

I first went to the Hugoton Field in 1931. Since that time I have been consulted frequently by the management of this Company and have represented them both in the field and in their own office. Also I have advised the field superintendents on the setting of pipe, the proper correlation on geological formations and related geological problems. I have estimated the reserves in various portions of the Hugoton Field for the management. I am the author of several scientific papers, including two dealing with the Hugoton Field, in which two papers I collaborated with Mr. Rufus Smith, the Company Geologist, using data, much of which came from the files of the Panhandle Eastern Pipe Line Company. In general, I have kept in constant contact with the operations of this Company and the producing conditions in the area of the Hugoton Field.

In the testimony which follows, I shall deal with geological and production conditions in the general area commonly known as the Hugoton Gas Field.

[fol. 11014] Description of Field:

The ultimate limits on the Hugoton Field are not as yet definitely known. I have indicated the probable boundaries on all sides, on the rock pressure and open flow maps, hereafter discussed, by a broken line. No dry hole has been drilled within this area. The field as indicated includes an area:

(a) In Kansas:
About 65 miles long North and South;
from 25 to 40 miles wide East and West.

(b) In Oklahoma:
About 35 miles long North and South and
from 30 to 40 miles wide East and West, and

(c) In Texas:
About 30 miles long North and South and
from 12 to 30 miles wide East and West.

This makes a total field, as shown on exhibits, about 130 miles long North and South and from 12 to 40 miles wide East and West.

The total area within the broken line is approximately 2,540,000 acres.

No oil in commercial quantities has been found. Within this area there are now approximately 278 producing gas wells connected to pipe lines and about 40 other wells which showed gas in their drilling records but which were drilled for oil or are remote from pipe lines and are not now connected.

[fol. 11015] The producing formations are composed of limestones and shales of the Big Blue Series of the Permian System, found at depths between 2400 and 2900 feet below the surface of the ground or at an elevation of 100 to 800 feet above sea level.

Discoveries of Gas:

Gas was found:

(a) near Liberal in Seward County, Kansas, in 1922;

(b) near Texhoma in Texas County, Oklahoma, in 1923;

(c) near Guymon in the same County in 1925;

(d) near Hugoton in Stevens County, Kansas, in 1927;

(e) near Santa Fe in Haskell County, Kansas, in 1931, and

(f) near Holcomb in Finney County, Kansas, in 1932.

These six areas were at first thought to be separate gas fields and were named for those nearby communities. These various areas are now recognized as being parts of a common pool known as the Hugoton Gas Field.

The development of the field has been slow, its growth dependent largely on the development of far distant markets. Small pipe lines were built

by the Argus Pipe Line Company to Dodge City, Kansas, in 1931;

by the Tri-County Gas Company to Scott City, Kansas, in 1937, and

by the Central Gas Utilities to Lamar, Colorado, in 1928.

The two chief markets, however, since 1932 are provided by the Northern Natural Gas Company, which transports gas to Omaha, Minneapolis and other communities principally in Iowa and Nebraska, and the Panhandle Eastern Pipe Line Company with its various mar- [fol. 11016] ket outlets in Kansas, Missouri, Illinois, Indiana, Ohio and Michigan.

Panhandle Eastern Activities:

Panhandle Eastern started buying leases in the Hugoton Field early in 1928. Over the period of the last 11½ years it has gradually built up its acreage reserve through leasehold and gas purchase contracts to that shown on the 1941 acreage map, Exhibit 20 hereafter referred to.

The first drilling in the Hugoton Field was on an individual farm basis with drilled tracts usually not larger than 160 acres per well. Convinced that economic development of the territory did not require the drilling of a well on such small tracts, the Company in 1932 inaugurated the policy of drilling itself and recommending under

prospective gas purchase contracts the drilling of not more than one well per section. This policy is still being followed. Through this more land-owners have shared in the royalty return and the economic development of the field will require the drilling of fewer wells.

Consolidations of leases to carry out this policy have been made by the Company and by other operators with whom it holds gas purchase contracts. While a few tracts have been dropped from the lease portfolio because of inability to perfect such agreements, the amount of acreage under control of the Company has consistently grown. The Company's acreage thus selected is recognized as favorably located. Very little acreage has been dropped because of poor prospects for gas.

[fol. 1017] At present this Company has under its control:

1. In Kansas:

(a) 19,170.95 acres, which it owns 100% leasehold interest and on which it has drilled wells;

(b) 71,096.40 acres which it owns 100% leasehold, but which is as yet undrilled;

(c) 17,320.00 acres which is 50% Company-owned and entirely covered by gas purchase contracts, and on which it has drilled wells, and

(d) 35,075.00 acres owned by other producers covered by gas purchase contracts for the life of commercial production.

2. In Oklahoma:

79,224.00 acres leasehold interest.

3. In Texas:

23,396.30 acres.

This makes a total controlled by this Company in the Hugoton Field of 245,282.65 acres.

Producing Wells:

Panhandle Eastern's main gathering system is now connected to 137 wells in the Kansas part of the Hugoton Field, of which 33 are 100% Company-owned; 34 are 50% Company-owned but entirely covered by gas purchase contracts and 70 owned by other producers are under gas purchase contract to Panhandle Eastern for the life of commercial production.

[fol. 11018] Discussion of Acreage Map:

On the 1941 acreage map, Exhibit 20, this acreage is shown in the following classifications:

(a) Those tracts marked in pink are 100% Company owned;

(b) those tracts marked in pink below and yellow above are 50% Company owned with gas purchase contracts covering the entire production;

(c) those tracts marked in green are under gas purchase contracts;

(d) those tracts owned in whole or in part by Panhandle Eastern but which are under contract to the Argus Pipe Line Company marked as follows:

(1) those in yellow below and pink above are 50% Company owned and 50% owned by others;

(2) those in green with a pink border are 100% Company owned.

Hugoton Structure:

Exhibit No. 32 shows the structural geological conditions in that part of the Hugoton Field located in the nine southwestern counties of Kansas and in Texas County, Oklahoma. I prepared this map with the assistance of Mr. Rufus M. Smith, Geologist with the Panhandle Eastern Pipe Line Company, early in 1939. It was published

in connection with an article entitled "The Hugoton Gas Field of Oklahoma and Kansas" written by us, which was printed in the Mines Magazine in August and September, 1940. This map shows accurately the structural conditions in this field as we knew them to exist in 1939 [fol. 11019] through a study of 322 wells. Drilling since that date confirms the accuracy of this study.

On this map contours are drawn on the top of the Herington limestone and all elevations are based on a sea level datum. The Herington limestone is the uppermost gas bearing formation in the Hugoton field and is readily identified by its lithologic characteristics so that it makes an ideal horizon marker for comparison of formations from one well to another.

As may be seen on this Exhibit, the Herington limestone is found at an elevation of over eleven hundred feet in a well in Western Morton County but it is only about three hundred feet above sea level near Liberal in Seward County or Sublette in Haskell County. The wells east of Hardesty in Texas County are still lower on the structure with the Herington found as low as 200 feet in elevation above sea level.

The structure shown by the contour lines on this map is a monocline dipping eastward at the rate of about 15 feet per mile. There are minor irregularities of this general eastward dip, as shown by the closure of the eight hundred foot contour line near Rolla, Kansas, and a slight nosing of the four hundred foot contour near Lawson, but these structural irregularities are unimportant in comparison with the definite general structure.

The structural contours on this map are quite different from those found over most oil and gas fields, where structural contours close around sharp anticlinal folds. It is quite evident that in the Hugoton field the entrapment of gas has not been caused by the folding of the formations.

[fol. 11020] Geologic Cross Section:

Exhibit No. 33 shows the cross section of the producing formations and the known formations below the same in

the Hugoton field. The formations above the Herington limestone are not shown. The top of the cross section is the top of the Herington limestone, not the surface of the ground.

The formations above the Herington in this area consist of highly colored shales and sandstones, and salt and gypsum beds which are interesting and important to a geologist but are not important in a consideration of the gas reserves. At the surface of the ground loose gravels and sands obliterate all other geological formations, leaving no outcropping ledges whatsoever. It is impossible therefore to determine the geological conditions by direct observation, except by correlation after careful study of the well cuttings.

The formations immediately below the Herington limestone consist of alternating limestones and shales also of the Big Blue Series of the Permian System. In their order below the Herington they are known as the Krider, the Winfield, the Towanda, the Fort Riley and the Florence limestones. They have been correlated from well to well using the names adopted by the United States Geological Survey and the Kansas Geological Survey for the outcropping formations of this age in south central Kansas. It is not claimed that these formations in the wells are exact time equivalents to those on the outcrop, near Wichita. It is my belief, however, that they are approximately equivalent to the outcropping formations and that [fol. 11021] they are accurately correlated with respect to each other, from well to well, which is the purpose of this study.

The cross sections therefore show a picture of a great slice through the producing formations of the Hugoton Field. The North-South Cross Section A-A' is taken from a point near Lakin in Kearney County, Kansas, to a point near Texhoma in Texas County, Oklahoma. It shows the actual record of the formations encountered in thirty-one wells. The West-East Cross Section B-B' is taken from a point in Western Morton County to a point in Central Seward County, Kansas. It shows the actual record of the formations encountered in eighteen wells.

The location of these two cross sections is shown on the Structure Contour Map—Exhibit 32.

The gas record of the wells on these cross sections is given whenever such record is available. Red dots indicate the spots where the drillers' log shows gas to have been encountered. At the base of the drawing of each drilled well a figure is given showing the thickness of the gas pay and the initial open flow of the well. The name and the location of each well is indicated just above the cross section.

In some cases only the first important gas was shown on the drillers' log and therefore only one red spot appears on the cross section. In many of these wells, however, other substantial volumes of gas were encountered at lower elevations. These are not shown because we do not have the record of the same.

Most wells have a showing of gas in the Herington limestone and an increase in the Krider and Winfield lime- [fol. 11022] stones. Many wells show important production in the Towanda, Fort Riley and Florence limestones but it is rare to find important gas below the Florence. It will be noticed that some increases of gas are to be found at the contact of the limestones and the intervening shales.

Some wells encounter salt water at horizons below the Florence and this deeper drilling of wells may make it necessary to plug back the hole to a point just below the lower-most important gas.

The presence of gas in this field is not due to an anticlinal fold but to conditions of porosity in various members of the Big Blue Series,—sometimes one, sometimes another. In general the formations west of the Hugoton Field are less porous and composed more often of substantially impervious shales and red beds, instead of limestones. Within the field itself there are variations in porosity, possibly due to the dissolving action of underground water in previous geological ages. The porous phases of the limestones at the point of contact with shales is indicative of this type of geological history.

It is improbable that the gas was formed from the limestones and pink shales which make up its present reservoir. Since dark bituminous shales are more probable sources of gas, most geologists believe that the gas originated in the Anadarko Basin of Oklahoma, toward the southeast, or the Dodge City Basin of Kansas, toward the northeast and migrated up dip into such formations as were porous in the Hugoton area. This migration of gas was stopped by the impervious formations at the same horizons towards the west.

[fol. 11023] The cross sections show the formations encountered in a few deep wells, there has been no effort to correlate these lower formations. Deeper drilling has not been successful in the Hugoton field.

Open Flow and Pay Thickness:

The "pay thickness" is not the whole amount of the formation shown on the cross section. It is an accumulation of relatively small amounts which are porous and actually contain gas as shown by the drillers' logs. This pay thickness is sometimes difficult to estimate by an experienced driller when there is a large quantity of gas in the hole as drilling is progressing. I have estimated this actual pay thickness by adding the total amounts of formations which cause increases in the open flow of the drilling well.

A curve has been constructed under my direct supervision showing the relation of gas pay thickness to initial open flow for wells in the Hugoton Gas Field. This curve is Exhibit No. 34. Prior to the preparation of this curve, a careful study was made of the logs of forty-five wells in the Hugoton Field. The wells selected are those in which the drillers' record was most carefully kept regardless of the ownership of the wells. Each of these forty-five wells has been spotted on the graph with the gas pay thickness shown as the vertical coordinate and the initial natural open flow volume as the horizontal coordinate.

It will be observed that these wells so plotted fall along a fairly constant curved line, demonstrating that a very close relationship exists between the initial open flow and [fol. 11024] the gas pay thickness.

I have also had prepared under my direct supervision a productivity chart showing the relation of gas pay thickness to initial natural open flow for representative wells in the Hugoton Field. This productivity chart, Exhibit No. 35, shows individual records of twenty-eight wells plotted with the gas pay thickness as the vertical coordinate and the initial natural open flow volume as the horizontal coordinate for each well. While some variations may be observed, yet when compared with variations on a similar chart of the Panhandle Field presented by Mr. Smith, a more general uniformity is observed in the Hugoton Field. This chart and graph make it clear that there is a more general uniformity in porosity and permeability in the Hugoton Field than in the Texas-Panhandle Field.

As heretofore stated, the production in the Hugoton Field comes only from limestones and limestone-shale contact formations. There is no granite wash or other highly variable formation in the Hugoton Field.

Reserve Pressure Reservoir:

The original pressure in the Hugoton Field varied from 432 to 440 pounds per square inch well-head pressure. We have used 435 pounds as an average pressure for this field. I have prepared a series of maps showing the decline of rock pressure in this area since 1932. I have used in all of these maps the present boundary line of the field as we now know it, not as it was known as of those previous dates. In the area which has not been drilled I am showing the pressure as above 430 pounds.

[fol. 11025] The upper portion of Exhibit No. 23 shows the rock pressure as known in the Hugoton Field in 1932. It is a part of the same exhibit used in the Texas-Panhandle Field and the same general coloring system has been used. Since it is possible to contour these pressure bands in Hugoton on a 10 pound differential, shades of the colors used on the Panhandle pressure maps have been used. In 1932 all of the Hugoton area was above 410 pounds, but as corresponding to the yellow color on the Panhandle map I have used one shade of yellow on the Hugoton map for the area above 430 pounds, an-

other for the area between 420 and 430 and still another for the area between 410 and 420.

It must be understood that these three shades of yellow taken together correspond to the yellow area shown on the Panhandle map and that the blue, green and gray colors of the lower pressure bands on the Panhandle map are not represented in any way on the Hugoton map since no such pressures then existed there.

An analysis of the gas pressure decline on the 1932 rock pressure map shows that there then was an area of 53,756 acres having pressures below 435 pounds. The average pressure of that area weighted with respect to group acreage was on July 1, 1932, 426.43 pounds per square inch well-head pressure.

Accumulated withdrawals of gas up to July 1, 1932, was 11,264,879,000 cubic feet of metered gas. The estimated amount of unmetered gas withdrawals up to July 1, 1932, is 4,038,198,000, making a total withdrawal from the Hugoton Field to that date of 15,303,077,000 cubic of gas. This indicates a withdrawal per pound decline in pressure of 1,785,657,000 cubic feet of gas, and a total initial reserve in the area of withdrawal of 77,760,795,000 [fol. 11026] cubic feet. It further indicates that the wells were withdrawing gas as if they were producing from a calculated initial reserve per acre of 14,450,000 cubic feet.

1938 Pressure Map:

The rock pressure map of the Hugoton Field for 1938 is shown on the upper portion of Exhibit No. 24. The pressures shown thereon are those existing at the expiration of six years from the date used for Exhibit No. 23. By that time pressures had declined to less than 400 pounds in eight small areas, which are shown in blue color. The areas between 400 and 410 pounds, between 410 pounds and 420 pounds, and between 420 and 430 pounds had extended materially beyond those shown on the 1932 map.

359,872 acres were in the region showing withdrawals.

The pressures in the areas of withdrawals when weighted as in 1932, averaged 417.68 pounds per square

inch. This made an average decline from virgin pressure of 17.32 pounds. The cumulative withdrawals by July 1, 1938, were 138,002,621,600 cubic feet of metered gas with an estimated withdrawal of 8,955,827,000 cubic feet of unmetered gas, making a total of 146,958,448,000 cubic feet of withdrawals during the period of the pressure decline of 17.32 pounds. This made an estimated yield per pound drop of 8,484,899,000 cubic feet for the withdrawn area and a total calculated initial reserve of 3,690,931,065,000 cubic feet for the area. The wells were behaving as if they were withdrawing gas from the initial reserve of 10,256,000 cubic feet per acre.

[fol. 11027] This calculated reserve is somewhat less than that calculated on the basis of the information available in 1932.

1939 Pressure Map:

The rock pressure map for the Hugoton Field for 1939 is shown on the upper portion of Exhibit No. 25. The map reflects withdrawals from a wider area than that shown on Exhibit 24. Two new low pressure areas below 390 pounds are shown on this map and they are indicated by a different shade of blue. Pressures were also further reduced generally throughout the area of withdrawal below those shown on the 1938 map.

Based on the pressures existing in July, 1939, the average pressure weighted with respect to acreage as for former years was 418.27 pounds per square inch. This was in fact slightly higher than the average pressures existing in the areas of withdrawal used in preparing the map of 1938. This was due to the circumstance that as a result of additional development the area of withdrawal was extended during the twelve month period.

The cumulative withdrawals as of July 1, 1939, were 170,040,132,000 cubic feet of metered gas and 9,504,022,000 cubic feet of unmetered gas, making a total withdrawal of 179,544,154,000 cubic feet. The tests of July 1, 1939, showed that pressures had declined an average of 16.73 pounds. There was therefore a production of 10,731,868,000 cubic feet per pound decline in pressure, representing a total calculated initial reserve of 4,668,362,-

580,000 cubic feet and a calculated initial reserve per acre of 10,241,000 cubic feet for the areas of withdrawal.

[fol. 11028] 1940 Pressure Map:

The 1940 pressure map of the Hugoton Field is shown on the upper portion of Exhibit 26. The blue areas are shown to be increasing in size and number and the pressures in the other producing portions of the field are shown to be further declining. The average pressure in the areas of withdrawal, weighted as for the previous years, was 416.32 pounds. This represented a pressure decline of 18.68 pounds. During the period of decline in pressure there was a cumulative withdrawal of 206,936,262,000 cubic feet of metered gas and an estimated withdrawal of 10,263,154,000 cubic feet of unmetered gas, making a total withdrawal of 217,199,416,000 cubic feet. This represents an estimated production per pound drop in pressure of 11,627,378,000 cubic feet and a total calculated initial reserve of 5,057,909,430,000 cubic feet for the area of withdrawal. The wells were behaving as if they were withdrawing gas from the initial reserve of 9,568,000 cubic feet per acre.

1941 Pressure Map:

The 1941 pressure map of the Hugoton Field is shown on the upper portion of Exhibit 27. The blue area has been enlarged from that shown on the 1940 map. (there being now four shades of blue). Pressures in other producing areas have likewise further declined.

The average pressure (weighted as in the other years) was on July 1, 1941, 410.53 pounds. The cumulative withdrawals of metered gas were 244,841,333,000 cubic feet and the unmetered gas 10,909,355,000 cubic feet, making [fol. 11029] a total withdrawal of 255,750,688,000 cubic feet.

This indicates a withdrawal per pound decline in pressure of 10,451,601,000 cubic feet, a total calculated reserve in the area of withdrawal of 4,546,446,435,000 cubic feet, and a calculated reserve per acre in the area of withdrawal of 9,722,000 cubic feet.

Thus it appears that after a period of time the calculated per acre reserve is now more nearly stabilized as

a result of including in the computations a larger producing area and the use of cumulative withdrawals and cumulative average pressure declines over longer periods of time.

On Exhibit 36, Schedule 1, Pages 1, 2, and 3, I have shown the data forming the basis of calculated per acre reserves as indicated from the information available on July 1, 1932, 1938, 1939, 1940, and 1941, respectively.

Porosity and Sand Thickness:

I have calculated the reserves of the Hugoton Field using as a basis for that calculation my judgment as to the average sand thickness and average porosity of the producing formations in the field. In this computation I have used 40.4 feet as the average thickness of pay and 18.6% as the average porosity. The use of 40.4 as average thickness of pay is supported by the well logs to which I have had access. A careful check of those logs covering the wells in the field which contain good records of the producing formations, shows that the approximate average thickness of pay is 40.4 feet.

[fol. 11030] In studying the producing history of 183 wells in the field and their logs, I reached the conclusion that wells having the pay thickness found in the logs of those wells would produce as those wells had produced with an average porosity of approximately 18.6%.

The studies made by me since that determination have confirmed that view.

Using 18.6% as the porosity factor and 40.4 feet as the average pay thickness and 478 pounds as the initial reservoir pressure at the sand face, I arrived at the amount of gas in place under the areas of withdrawals in the Hugoton Field at 9,541,000 cubic feet per acre. Since the size and limits of the Hugoton Field have not been determined, I have made no estimate of the original content of the field.

Panhandle Eastern Reserves:

On Exhibit 36, Schedule 3, Page 1, I show my estimate of the original content in those portions of Panhandle Eastern's reserves in the Hugoton Field other

than the reserves on which Argus Natural Gas Company has first call. This content computed at 9,541,000 cubic feet per acre, was 2,340,241,763,000 cubic feet. The content has on said schedule been segregated as to States in which the acreage is located and according to ownership and gas purchase contracts.

Remaining Reserves:

On Exhibit 36, Schedule 3, Pages 2 and 3, I show my estimate of the gas remaining in the reserves of Panhandle Eastern Pipe Line Company (other than the acreage on which Argus Natural Gas Company has first call) [fol. 11031] as of July 1, 1941. The information shown on that page is self-explanatory. Due account has been taken of all prior production, metered and unmetered, and calculations have been made at abandonment pressures of 150 pounds, 125 pounds, 100 pounds, 75 pounds, 50 pounds, 30 pounds, 25 pounds, and 0 pounds, respectively, and on Pages 2 and 3 of Exhibit 2 the gas remaining at each of these pressures is shown on the basis of both a 100% recovery and on the application of a 90% recovery factor.

Unmetered Gas:

Exhibit 36, Schedule 2, is an estimate of the unmetered gas which has been produced from the wells connected to Panhandle Eastern's pipe line. It does not show the unmetered gas produced from Panhandle Eastern's lines which are connected to the pipe line of Argus Natural Gas Company.

Exhibit 36, Schedule 4, Page 1, is my estimate of the unmetered gas which has been produced from Panhandle Eastern's lines which are connected to Argus National Gas Company.

Content of Argus Acreage:

On Exhibit 36, Schedule 4, Page 2, is my estimate of the original content of the acreage constituting reserves of Panhandle Eastern from which gas is furnished to Argus Natural Gas Company. This original content is estimated at 102,545,809,000 cubic feet on the basis of 9,541,000 cubic feet per acre.

Remaining Content Argus Acreage:

Exhibit 36, Schedule 4, Pages 3 and 4, is my estimate of the gas remaining on July 1, 1941, in the acreage con-
[fol. 11032] stituting the reserves of Panhandle Eastern Pipe Line Company for which gas is furnished to Argus Natural Gas Company, computed at abandonment pressures of 150 pounds, 125 pounds, 100 pounds, 75 pounds, 50 pounds, 30 pounds, 25 pounds, and 0 pounds, respectively. This tabulation shows the reserves remaining at those abandonment pressures both at a 100 percent recovery and on the application of a 90 percent recovery factor. It is my opinion that the estimated remaining gas content under the acreage constituting the reserves of Panhandle Eastern Pipe Line Company shown on Pages 2 and 3 of Schedule 3, and Pages 3 and 4 of Schedule 4, is reasonable as an estimate for the content at the respective pressures shown on those schedules.

[fol. 11033] Schedules Presented in Connection With The Testimony Of Glenn G. Bartle

Schedule 3

Page 1

Estimated Original Gas Content In The Hugoton Field (Kansas, Oklahoma And North Texas Panhandle) Under Acreage Constituting Reserves Of Panhandle Eastern Pipe Line Company As Of July 1, 1941, Press. Base 16.4# Abs.

Line No.	(A)	Acreage (B)	Number of Wells (C)	Cumulative Prod. to 6/22/41 MCF (D)	Unmetered Withdrawal to 6/22/41 MCF (E)	Original Amount of Gas at 0# - 9,541 MCF Per Acre (F)
1	Kansas					
2	100% Company Owned and Drilled	19 170 95	33	22 041 457	1 082 083	182 910 034
3	100% Company Owned but Undrilled	71 096 40	—	—	—	678 330 752
4	50% Company Owned and Drilled and					
5	50% Purchased	17 320 00	34	21 594 619	1 080 583	165 250 120
6	Acreage Under Gas Purchase Contracts	35 075 00	70	34 049 502	2 228 651	334 650 575
7	Oklahoma					
8	100% Company Owned but Undrilled	79 224 00	—	—	—	755 876 184
9	Texas (Sherman and Hansford Counties)					
10	100% Company Owned but Undrilled	23 396 30	—	—	—	223 224 098
11	Total	245 282 65	137	77 685 578	4 391 317	2 340 241 763

Note:—No. 1

This tabulation does not include reserves from which gas purchased from Cimarron Utilities Company is delivered to Panhandle Eastern Pipe Line Company at a point near Baker, Oklahoma. Panhandle Eastern Pipe Line Company has little information with respect to those reserves.

No. 2

This tabulation does not include reserves of Panhandle Eastern Pipe Line Company [illegible] for delivery to Argus

[fol. 11039]

Estimated Remaining Gas Content In The Hugoton Field (Kansas, Oklahoma and North Texas Panhandle) Under Acreage Constituting Reserves Of Panhandle Eastern Pipe Line Company As Of July 1, 1941. Press. Base 16.4# Abs.

Line No.	(A)	Original Amount of Gas	Abandonment Pressures—MCF						
			150#		125#		100#		
			63.6%	90.0%	69.2%	90.0%	74.7%	90.0%	
		(B)	(C)	(D)	(E)	(F)	(G)	(H)	
1	Kansas								
2	100% Company Owned and Drilled	182 910 034	116 330 782	104 697 704	126 573 744	113 916 370	136 633 795	122 970 416	1
3	Deduct — Production to June 22, 1941			22 041 456		22 041 456		22 041 456	
4	Deduct — Unmetered to June 22, 1941			1 082 083		1 082 083		1 082 083	
5	Net Amount			81 574 165		90 792 831		99 846 877	
6	100% Company Owned but Undrilled	678 330 752	431 418 358	388 276 522	469 404 880	422 464 392	506 713 072	456 041 765	5
7	50% Company Owned and Drilled and								
8	50% Purchased	165 250 120	105 099 076	94 589 168	114 353 083	102 917 775	123 441 840	111 097 656	13
9	Deduct — Production to June 22, 1941			21 594 619		21 594 619		21 594 619	
10	Deduct — Unmetered to June 22, 1941			1 080 303		1 080 303		1 080 303	
11	Net Amount			71 914 246		80 242 853		88 422 734	
12	Acreage Under Gas Purchase Contract	334 650 575	212 837 766	191 553 989	231 578 198	208 420 378	249 983 980	224 985 582	2
13	Deduct — Production to June 22, 1941			34 049 502		34 049 502		34 049 502	
14	Deduct — Unmetered to June 22, 1941			2 228 651		2 228 651		2 228 651	
15	Net Amount			155 275 836		172 142 225		188 707 429	
16	Total Amount — Kansas	1 361 141 481	865 685 982	697 040 769	941 909 905	765 642 301	1 016 772 687	833 018 805	1 0
17	Oklahoma								
18	100% Company Owned but Undrilled	755 876 184	480 737 253	432 663 528	523 066 319	470 759 687	564 639 509	508 175 558	6
19	Texas (Sherman and Hansford Counties)								
20	100% Company Owned but Undrilled	223 224 098	141 970 526	127 773 473	154 471 076	189 023 968	166 748 401	150 073 561	1
21	Totals	2 340 241 763	1 488 393 761	1 257 477 770	1 619 447 300	1 375 425 956	1 748 160 597	1 491 267 924	1 8
22	Total — Company Owned — Drilled and Undrilled			1 339 554 384		1 457 502 570		1 573 344 538	
23	Deduct — Total Production to June 22, 1941			77 685 577		77 685 577		77 685 577	
24	Deduct — Total Unmetered to June 22, 1941			4 391 037		4 391 037		4 391 037	
25	Net Total Amount			1 257 477 770		1 375 425 956		1 491 267 924	

Schedule 3

'onstituting Reserves Of Panhandle

Pressures—MCF.

100#		75#	
74.7%	90.0%	80.3%	90.0%
(G)	(H)	(J)	(J)
136 633 795	122 970 416	146 876 757	132 189 081
	22 041 456		22 041 456
	1 082 083		1 082 083
	99 846 877		109 065 542
506 713 072	456 041 765	544 699 594	490 229 635
123 441 846	111 097 656	132 695 846	119 426 261
	21 594 619		21 594 619
	1 080 303		1 080 303
	88 422 734		96 751 339
249 983 980	224 985 582	268 724 412	241 851 971
	34 049 502		34 049 502
	2 228 651		2 228 651
	188 707 429		205 573 818
016 772 687	833 018 805	1 092 996 609	901 620 334
564 639 509	508 175 558	606 968 576	546 271 718
166 748 401	150 073 561	179 248 951	161 324 056
1 748 160 597	1 491 267 924	1 879 214 136	1 609 216 108
	1 573 344 538		1 691 292 722
	77 685 577		77 685 577
	4 391 037		4 391 037
	1 491 267 924		1 609 216 108

[fol. 11040]

Estimated Remaining Gas Content In The Hugoton Field (Kansas, Oklahoma And North Texas Panhandle) Under Acreage Const
Eastern Pipe Line Company As Of July 1, 1941. Press. Base 16.4# Abs.

Line No.	(A)	Original Amount of Gas	Abandonment Pressures—MCF					
			50#		30#		25#	
			86.0%	90.0%	90.4%	90.0%	91.4%	90.0%
		(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Kansas							
2	100% Company Owned and Drilled	482 910 034	157 302 629	141 572 366	165 350 671	148 815 604	167 179 771	150 461 794
3	Deduct — Production to June 22, 1941			22 041 456		22 041 456		22 041 456
4	Deduct — Unmetered to June 22, 1941			1 082 083		1 082 083		1 082 083
5	Net Amount			118 448 827		125 692 065		127 338 255
6	100% Company Owned but Undrilled	678 330 752	583 364 447	525 028 002	613 211 600	551 889 900	619 994 307	557 994 876
7	50% Company Owned and Undrilled and							
8	50% Purchased	165 250 120	142 115 103	127 903 593	149 386 108	134 447 497	151 038 610	135 934 749
9	Deduct — Production to June 22, 1941			21 594 619		21 594 619		21 594 619
10	Deduct — Unmetered to June 22, 1941			1 080 303		1 080 303		1 080 303
11	Net Amount			105 228 671		111 772 575		113 259 827
12	Acreage Under Gas Purchase Contract	334 650 575	287 799 495	259 019 546	302 524 120	272 271 708	305 870 626	275 283 563
13	Deduct — Production to June 22, 1941			34 049 502		34 049 502		34 049 502
14	Deduct — Unmetered to June 22, 1941			2 228 651		2 228 651		2 228 651
15	Net Amount			222 741 393		235 993 555		239 005 410
16	Total Amount — Kansas	1 361 141 481	1 170 581 674	971 446 893	1 230 471 899	1 025 348 095	1 244 083 314	1 037 598 368
17	Oklahoma							
18	100% Company Owned but Undrilled	755 876 184	650 053 518	585 048 166	683 312 070	614 980 863	690 870 832	621 783 749
19	Texas (Sherman and Hansford Counties)							
20	100% Company Owned but Undrilled	223 224 098	191 972 724	172 775 452	201 794 585	181 615 127	204 026 826	183 624 143
21	Totals	2 340 241 763	2 012 607 916	1 729 270 511	2 115 578 554	1 821 944 085	2 138 980 972	1 843 006 260
22	Total — Company Owned — Drilled and Undrilled			1 811 347 125		1 904 020 699		1 925 082 874
23	Deduct — Total Production to June 22, 1941			77 685 577		77 685 577		77 685 577
24	Deduct — Total Unmetered to June 22, 1941			4 391 037		4 391 037		4 391 037
25	Net Total Amount			1 729 270 511		1 821 944 085		1 843 006 260

xas Panhandle) Under Acreage Constituting Reserves Of Panhandle
base 16 4 Abs.

ressures — M C F

25%		0%	
91.4%	90.0%	97.1%	90.0%
(G)	(H)	(I)	(J)
167 179 771	150 461 794	177 605 643	159 845 079
	22 041 456		22 041 456
	1 082 083		1 082 083
	127 338 255		136 721 540
619 994 307	557 994 876	658 659 360	592 793 244
151 038 610	135 934 749	160 457 867	144 412 080
	21 594 619		21 594 619
	1 080 303		1 080 303
	113 259 827		121 737 158
305 870 626	275 283 563	324 945 708	292 451 137
	34 049 502		34 049 502
	2 228 651		2 228 651
	239 005 410		256 172 084
1 244 083 314	1 037 598 368	1 321 668 378	1 107 424 926
690 870 832	621 783 749	733 955 775	660 560 199
204 026 826	183 624 145	216 750 599	195 075 539
2 138 980 972	1 843 006 260	2 272 374 752	1 963 060 663
	1 925 082 874		2 045 137 277
	77 685 577		77 685 577
	4 391 037		4 391 037
	1 843 006 260		1 963 060 663

[fol. 11041]

Schedule 4

Page 1

Estimated Unmetered Gas From Panhandle Eastern Pipe Line Company
Wells In The Hugoton Field Kansas
Connected To Argus Natural Gas Company, Inc.
As Of July 1, 1941
Pressure Base 16.4# Absolute

Line No.	(A)	Number Producing Wells (B)	Unmetered — MCF Drilling In @ 24,500 (C)	Conditioning @ 1,167 Per Year (D)	Testing @ 140 Per Year (E)	Total (F)
1	Kansas					
2	50% Owned	12	294 000	112 032 (1)	13 440 (1)	419 472
3	50% Owned	6		14 004 (2)	1 680 (2)	15 684
4	Total — 50% Owned	12	294 000	126 036	15 120	435 156
5	100% Owned	1	24 500	11 670 (3)	1 400 (3)	37 570
6	Total — Estimated					
7	Unmetered Gas	13	318 500	137 706	16 520	472 726
8	(1) 8 years					
9	(2) 2 years					
10	(3) 10 years					

[fol. 11042]

Schedule 4

Page 2

Estimated Original Gas Content In The Hugoton Field Kansas
Under Acreage Constituting Reserves Of
Panhandle Eastern Pipe Line Company Furnishing Gas To
Argus Natural Gas Co., Inc. As Of July 1, 1941
Pressure Base 16.4# Absolute

Line No.	(A)	Acreage (B)	Number of Wells (C)	MCF Cumulative Production To 6/30/41 (D)	Estimated Unmetered to 6/30/41 (E)	Original Amount at Or (9,541 Per Acre) (F)
1	Kansas					
2	100% Owned and Drilled	400	1	1 057 025	37 570	3 816 400
3	100% Owned but Undrilled	800	—	—		7 632 800
4	50% Owned and Drilled	5 279.41	12	15 077 164	435 156	50 370 850
5	50% Owned but Undrilled	4 268.50	—	—		40 725 759
6	Totals	10 747.91	13	16 134 189	472 726	102 545 809

[fol. 11043]

Schedule 4
Page 3

Estimated Remaining Gas Content In The Hugoton Field Kansas Under Acreage Constituting Reserves Of Panhandle Eastern Pipe Line Company Furnishing Gas To Argus Natural Gas Company, Inc., As Of July 1, 1941. Pressure Base 16.4# Absolute

Line No.	(A)	Original Amount of Gas MCF (B)	Abandonment Pressures—MCF 150# 63.6% (C)	150# 90.0% (D)	125# 69.2% (E)	125# 90.0% (F)	100# 74.7% (G)	100# 90.0% (H)	75# 80.3% (I)	75# 90.0% (J)
1	Kansas									
2	100% Company Owned and Drilled	3 816 400	2 427 230	2 184 507	2 640 949	2 376 854	2 850 851	2 565 766	3 064 569	2 758 112
3	Deduct — Production to June 30, 1941			1 057 025		1 057 025		1 057 025		1 057 025
4	Deduct — Unmetered to June 30, 1941			37 570		37 570		37 570		37 570
5	Net Amount			1 089 912		1 282 259		1 471 171		1 663 517
6	100% Owned but Undrilled	7 632 800	4 854 461	4 369 015	5 281 898	4 753 708	5 701 702	5 131 532	6 129 138	5 516 224
7	50% Owned and Drilled	50 370 850	32 035 861	28 832 275	34 856 628	31 370 965	37 627 025	33 864 323	40 447 793	36 403 014
8	Deduct — Production to June 30, 1941			15 077 164		15 077 164		15 077 164		15 077 164
9	Deduct — Unmetered to June 30, 1941			435 156		435 156		435 156		435 156
10	Net Amount			13 319 955		15 858 645		18 352 003		20 890 694
11	50% Owned but Undrilled	40 725 759	25 901 583	23 311 425	28 182 225	25 364 003	30 422 142	27 379 928	32 702 784	29 432 506
12	Totals	102 545 809	65 219 135	42 090 307	70 961 700	47 258 615	76 601 720	52 334 634	82 344 284	57 502 941
13	Total Drilled and Undrilled			58 697 222		63 865 530		68 941 549		74 109 856
14 15	Deduct — Total Production to June 30, 1941			16 134 189		16 134 189		16 134 189		16 134 189
16 17	Deduct — Total Unmetered to June 30, 1941			472 726		472 726		472 726		472 726
18	Total Net Amount			42 090 307		47 258 615		52 334 634		57 502 941

Estimated Remaining Gas Content In The Hugoton Field Kansas Under Acreage Constituting Reserves Of Panhandle Eastern Pipe Line Company Furnishing Gas To Argus Natural Gas Company, Inc., As Of July 1, 1941. Pressure Base 16.4# Absolute

Line No.	(A)	Original Amount of Gas MCF (B)	Abandonment Pressures—MCF 50# 86.0% (C)	50# 90.0% (D)	30# 90.4% (E)	30# 90.0% (F)	25# 91.4% (G)	25# 90.0% (H)	0# 97.1% (I)	0# 90.0% (J)
1	Kansas									
2	100% Company Owned and Drilled	3 816 400	3 282 104	2 953 894	3 450 026	3 105 023	3 488 190	3 139 371	3 705 724	3 335 152
3	Deduct — Production to June 30, 1941			1 057 025		1 057 025		1 057 025		1 057 025
4	Deduct — Unmetered to June 30, 1941			37 570		37 570		37 570		37 570
5	Net Amount			1 859 299		2 010 428		2 044 776		2 240 557
6	100% Owned but Undrilled	7 632 800	6 564 208	5 907 787	6 900 051	6 210 046	6 976 379	6 278 741	7 411 449	6 670 304
7	50% Owned and Drilled	50 370 850	43 318 931	38 987 038	45 535 248	40 981 723	46 038 957	41 435 061	48 910 095	44 019 086
8	Deduct — Production to June 30, 1941			15 077 164		15 077 164		15 077 164		15 077 164
9	Deduct — Unmetered to June 30, 1941			435 156		435 156		435 156		435 156
10	Net Amount			23 474 718		25 469 403		25 922 741		28 506 766
11	50% Owned but Undrilled	40 725 759	35 024 153	31 521 738	36 816 086	33 134 477	37 223 344	33 501 010	39 544 712	35 590 241
12	Totals	102 545 809	88 189 396	62 763 542	92 701 411	66 824 354	93 726 870	67 747 268	99 571 980	73 007 868
13	Total Drilled and Undrilled			79 370 457		83 431 269		84 354 183		89 614 783
14	Deduct — Total Production to									
15	June 30, 1941			16 134 189		16 134 189		16 134 189		16 134 189
16	Deduct — Total Unmetered to									
17	June 30, 1941			472 726		472 726		472 726		472 726
18	Total Net Amount			62 763 542		66 824 354		67 747 268		73 007 868

* * * * * * * * *

[fol. 11047] (Exhibit 37.)

Introduction Market Value of Leases For Panhandle Eastern Pipe Line Company

My name is R. J. WALLACE. I reside in Dallas, Texas. I am Vice President of the Republic Natural Gas Company in charge of land and leaseholds and also in charge of gas production for the Hugoton District in Kansas. I was elected Vice President on October 1, 1940. Prior to October 1940, I have been operating independently as a producer of oil and gas and for many years past have conducted a brokerage business for the purchase and sale of oil and gas properties and leases in many parts of the Mid-Continent area.

In 1907, I went to work in the Osage reservation oil fields for the Lahoma Oil and Gas Company as a roustabout and night pumper.

In 1908 and 1909, I was employed by the Prairie Oil and Gas Company in their civil engineering department on tank construction and pipe line construction.

In 1909 until 1911, I attended college in winters and in summers worked at surveying, general oil field work and as a tool dresser on drilling wells.

In 1912, I was elected Register of Deeds for Washington County, Oklahoma, the county seat being Bartlesville. This county, at that time was one of the most active in oil and gas development and by far the largest percentage of instruments recorded consisted of all types of oil and gas leases, stipulations and contracts for leases.

In October 1913, I resigned as Register of Deeds and ac-
[fol. 11048] cepted the position of assistant superintendent of land and leaseholds of the Quapaw Gas Company and Associated Companies. This was the first large gas company operated at that time from northern Oklahoma. Later, these companies became the Empire Companies. My work consisted of acquiring and supervising the taking and purchase of oil and gas leases direct from landowners and brokers. As the company expanded, we acquired leaseholds in the States of Alabama, Mississippi, Arkansas, Louisiana, Texas, Oklahoma, Kansas, Colorado, Wyoming and Montana under my supervision.

In 1915 and until the latter part of 1919, I was attached to the production department of the gas division of the Empire Companies, and during that period was made superintendent of gas pipe lines in the Cushing Field, Oklahoma. At that time, this was the largest gas reserve in Oklahoma. In addition to this work, I purchased oil and gas production and acquired gas leases for the gas division.

In 1919 and through 1920, I was made manager of oil and gas operations in Louisiana for the joint account of the Empire Companies, the Barnsdall Oil Company and the H. V. Foster interests. My work consisted of the supervision of drilling wells and purchasing leases and selling leases to help finance the ventures. During the operations in Louisiana, the Empire Companies withdrew from the joint venture, leaving me with the Barnsdall and Foster interests, and in January 1921, I was transferred to Billings, Montana, as manager of oil and gas operations in the Rocky Mountain states. They formed a corpora- [fol. 11049] tion named the Barnsdall-Foster Company and I was general manager of that company until the latter part of the year of 1924. I sold a 60% interest in the properties of Barnsdall-Foster Company to the Midwest Refining Company and they took over the operations and management of the properties.

The latter part of 1924, I resigned from the Barnsdall-Foster Company and organized a corporation named the Record Petroleum Company, in which I owned a substantial interest. This company operated in Montana as a leasing company, drilled wells on its own account and as drilling contractors. We sold an interest in a portion of the properties of the Record Petroleum Company to the Midwest Refining Company.

In 1926 and until 1928, I secured oil and gas leases and oil and gas permits on the Federal and State lands in the states of Montana, Wyoming and New Mexico for my own account. Also, during this period, the Texas Panhandle Field became quite active and I made several trips into that field, known as the Amarillo District, to acquaint myself with this activity and the value of leases.

In 1928, I disposed of a portion of my interests in the Rocky Mountain states and moved to Tulsa, Oklahoma, to

engage more actively in the brokerage business and in valuation and appraisal of oil and gas leases and oil and gas producing properties.

During the year 1929, I devoted practically the entire year to consummating two transactions. One was the sale of one-half interest in all of the undeveloped oil and gas leases, being approximately 492,000 acres in Oklahoma and Kansas, owned by Amarada Petroleum Company to [fol. 11050] the Dixie Oil Company. The consideration for this one-half interest was $10,000,000.00. Also, I effected the merger of the McMann Oil Company to the Dixie Oil Company. This was a stock merger and the value set up at that time was approximately $12,000,000.00.

In 1930 to 1932, I conducted a general brokerage business and also developed a new gas field on the eastern edge of Kansas City, Missouri. I drilled a number of gas wells and constructed a pipe line system and sold the gas to the American Pipe Line Company.

In 1932 to 1935, I sold the gas properties near Kansas City, Missouri, and in addition to my brokerage business I was elected Vice President and General Manager of the Signal Oil Company and the Foster Oil Company, representing a bank. These companies were producing oil and gas in Kansas and Oklahoma and, as they had become indebted to the bank, it was necessary that they put the management under their direction.

In 1936, after drilling some additional wells and the farming out of leases of these companies on which wells were drilled that proved acreage retained, I sold the production and some of the undeveloped leases for enough to pay the bank's indebtedness, and then turned the companies back to their owners.

In 1936 and to 1938, I drilled a number of oil and gas wells in the Burton Field, Kansas, in which I owned a one-fourth interest. These wells were combination oil and gas wells and resulted in our building a casinghead gasoline plant on the property. The latter part of 1938, I sold my interest in the oil and gas properties and have retained the interest in the gasoline plant.

[fol. 11051] From 1938 until October 1, 1940, I was engaged entirely in the brokerage business and in valuation of oil and gas properties and leases.

During the years I was employed by various companies and operating independently as a broker, I have had occasion to acquire leases in the Texas Panhandle Gas Field and also in the Hugoton Gas Field in Kansas and Oklahoma. I first became acquainted with the Texas Panhandle Field during the early discovery of that field, and many thousands of acres of leases in the Texas Panhandle Field and in areas generally surrounding that field were acquired.

I have been requested to make a report setting forth the present market value of leases owned by the Panhandle Eastern Pipe Line Company, the same being located in the counties of Moore, Potter, Hutchinson and Carson of the Texas Panhandle Field, and in the counties of Sherman and Hansford, Texas, in an area lying between the generally accepted proven area of the Hugoton Field and the Texas Panhandle Field. Also, I have been requested to make a report setting out the market value of leases owned by the Panhandle Eastern Pipe Line Company in what is known as the Hugoton Gas Field located in the counties of Stevens, Morton and Grant, Kansas, and the Texas County, Oklahoma portion of the proven area of the Hugoton Gas Field.

It was necessary, in the preparation for this valuation of leases, for the writer to spend many weeks in the office of the company in Kansas City, Missouri, and in the field. The status of each lease, the consolidations of leases, the development requirements of each lease and the relationship to other leases, the subjection to outside drainage, [fol. 11052] the large amount of acreage held under one leasehold, the location as to the particular gas productive areas as indicated by wells drilled within those areas, the rock pressures, and the location of the acreage within the generally accepted proven sweet gas area have been some of the factors considered in arriving at the market value of these leases.

A very important factor shown in the leaseholdings, which is favorable to their value, is the result of a process of elimination and state of evolution the leases have gone

through, and the favorable contracts and consolidations whereby the construction costs or drilling costs have been reduced to a minimum.

The Texas Panhandle Field is recognized to be a proven gas field within a boundary line generally accepted. The field contains what is known as the sweet gas area and what is known as the sour gas area. The boundary line of the entire field is as follows:

Beginning near the Southeast corner of Hartley County, Texas, running in a Northwest circular direction to a point about 10 miles North of the Southwest corner of Moore County; thence running in a Northeasterly direction to a point near the Northeast corner of Moore County in Section 37, H. & G. N. R. R. Company Survey; thence in a general Southeasterly direction through Hutchinson County to a point near the Southeast corner of Hutchinson County; thence in a general Southeasterly direction through Carson, Gray and Wheeler Counties to a point [fol. 11053] about 8 miles East of the Town of Shamrock, Wheeler County, Texas; thence South and then running Northwest about 3 miles South of the Town of Shamrock, through Wheeler, Gray and Carson Counties to a point about 7 miles South of the Northeast corner of Potter County; thence in an irregular West, South and Southwest direction to a point near the center of Section 25, Block 5, of Gunter and Munson Survey where it follows what is assumed to be a fault in a Northwesterly direction through Potter County and a small portion of the Northeast corner of Oldham County and into Hartley County to the place of beginning.

The present defined limits contain approximately 1,450,000 acres of oil and gas lands. There is a generally accepted boundary within the proven area of approximately 1,000,000 acres of sweet gas lands, the balance being oil producing lands along the Northern boundary of said field and the sour gas lands located within the oil area, and also in the north and western part of the proven gas area in Hutchinson, Moore and Hartley Counties, Texas.

The leases of the Panhandle Eastern Pipe Line Company in the Panhandle Field, as valued in this report, fall

within the sweet gas area, with the exception of the leases in Sherman and Hansford Counties, Texas, which lie to the north of the proven field and are not yet fully proven for gas production but fall within a trend that has become very active in acquiring leases, for the reason that it is believed by many that this area will also be productive if the Hugoton Field and the Texas Panhandle Fields are found to be connected.

[fol. 11054] The Texas Panhandle Gas Field has passed through periods of great wastage of gas. Conservation legislation by the State of Texas and the serious efforts of the Texas Railroad Commission to enforce the legislation prohibiting waste has now resulted in substantially reducing the waste of gas blown to the air. At this time, less than 50,000,000 cubic feet of gas per day is being wasted, whereas, during the years of stripping gas for its gasoline content, it was estimated that in excess of 1,000,000,000 cubic feet per day was being blown to the air. The leases of Panhandle Eastern Pipe Line Company, however, were generally not within the area where stripping took place and, consequently did not suffer the immediate loss of rock pressure and open flow suffered by some other parts of the field.

From the beginning of active development of the oil pools in the Texas Panhandle Field in the year 1926, there was an excessive waste of gas. In the early days, of course, there was not an appreciable market for gas for light and fuel. Consequently, the gas at that time was of little or no value. Likewise, the market value of leases was very low. It was what was termed a "wild cat" area and the producing extent or boundaries of the field had not been determined.

Beginning about 1927, when some of the major gas transmission lines were being planned, the market value of leases in the gas area increased very rapidly. In the purchases of large amounts of acreage, prices were paid in excess of those paid for smaller individual tracts for the reason that the leases on the large tracts and well blocked leases were more attractive to the operators who had provided themselves with a market outlet. These original values paid were in the form of cash per acre, as [fol. 11055] well as certain definite obligations to drill and

develop many wells and to build pipe lines which constituted the major consideration for many leases.

In 1933, the Texas Legislature enacted a statute, commonly known as the "Stripping" law, under the operation of which the owners of gas wells were permitted to extract the gasoline content therefrom and blow the residue to the air. This had the effect of lowering the value of the leases for the reason that by 1934 it was estimated that in excess of 1,000,000,000 cubic feet of gas per day was being blown to the air. A large percentage of this gas was from the sweet gas area and from tracts adjacent to leases held by the gas pipe line companies.

In 1935, the Texas Legislature repealed the stripping law by the passage of House Bill No. 266, which prohibited the blowing into the air of any gas other than that gas which was produced with oil. Later, Senate Bill No. 407 was passed, authorizing the use of sour gas for the manufacture of gasoline, provided the residue was consumed in the manufacture of carbon black.

In studying the withdrawals over the past few years, although the increased use for carbon black has offset to a considerable extent the decrease in waste of gas to the air, present withdrawals of gas for carbon black manufacture are limited to sour gas and casinghead gas. This gas is produced in the sour gas area and in the oil producing area along the north boundary of the field.

Conservation legislation, as administered by the Texas Railroad Commission, has materially increased the mar- [fol. 11056] ket value of leases within the sweet gas area. Legislative and Railroad Commission policy has undoubtedly resulted in the creation of higher values, for the reason that a purchaser will now feel more confident of recovering a greater proportion of the gas underlying the land than would have been possible under former conditions.

In placing the Texas leases of the Panhandle Eastern Pipe Line Company in several classifications, consideration has been given the proximity to wells of certain open flows and rock pressures, the producing history of the wells and the locations of the leases with respect to the leaseholds of other companies with gas pipe lines. Con-

sideration also is given to the unusually favorable leases and the favorable contracts effecting a consolidation of leases. These factors, as well as others, were used in determining the value and classifications adopted herein.

With respect to consolidations of leases, special recognition must be given to the advantage of owning leases under this form of contract as compared to the value of separate and individual leases for the reason that under the consolidation contract the lessee is relieved from the uneconomic drilling of additional wells not necessary in order to obtain the gas, which additional wells might be required under the terms of each individual lease or be required by the implied covenants requiring development that have been read into the leases by our courts.

When a gas field is discovered or when it is suspected a gas field might exist in a certain area, many operators and brokers rush into that area and secure leases from the landowners. Ordinarily, each lease requires the drilling of a well or wells upon the lease or a payment of delay [fol. 11057] rentals which defers the drilling of the first well for a period of a year and during the primary term of said lease. An obligation is read into the lease by implication requiring lessee to protect the property against drainage, and to adequately develop the property. Therefore, in the absence of consolidations, if one company secures many separate leases it is faced with the obligation of drilling a well or wells on each separate lease or the payment of large sums of money as delay rentals, in order to hold or perpetuate the leased reserve. Consolidation of leases eliminates this large expenditure for drilling and delay rentals to a certain extent, and, therefore, adds substantial value to the leaseholds. It also permits the withdrawals to be made on a more equitable basis and thereby assures the landowner a more equitable return from the wells and, ultimately, a larger recovery and income from the field.

Many of the Panhandle Eastern leases have been consolidated. In other words, the leases have lost their original identity and the rights of the parties are determined by the provisions of the consolidation agreement, rather than by the provisions of the original leases.

It was necessary, in evaluating the leases of the Panhandle Eastern Pipe Line Company, to prepare the exhibit attached hereto which was prepared by me and entirely under my direction.

I have made a take-off of each separate lease. On it I have shown the date of the lease, the number of the lease, corresponding to the records of the Panhandle Eastern Pipe Line Company, the lessors' names and the name of the present owner. The county and state is shown; also a description of the lands covered by the lease, the number [fol. 11058] of acres, the royalty to be paid to the landowner and the terms and amount of delay rentals. In the event the lease has been consolidated with other leases, I have shown the lease numbers corresponding to those consolidated.

As to the drilled leases, I have shown the number of each well, the date completed, the original open flow, and the original rock pressure. Under "current gauge", I have shown the number of each well and the latest open flow test and rock pressure test, and the amount of gas (in MCF's) marketed from each well, as obtained from the records of the Panhandle Eastern Pipe Line Company.

I have reviewed each lease separately, and on the take-off sheets have made notations as to the productive area and pressure area in which the lands are located. This information I have acquired from being in the field and from the records and maps of the Panhandle Eastern Pipe Line Company and records which I have accumulated over a period of several years. I have placed each lease in a certain classification, or classifications, and have so noted on each sheet, and the value of each classification as that which, in my opinion, represents the present market value of leases from a willing seller to a willing buyer.

I have shown in this exhibit a summary or recapitulation of the total acreage in each classification and the total market value of leases in each classification and their totals.

I have included with those leases that have been consolidated, a brief of the consolidation contract.

[fol. 11059] The Oklahoma and Kansas leases owned by Panhandle Eastern Pipe Line Company were given the

same character of study as were its Texas leases, taking into account the different conditions existing.

The Hugoton Gas Field is located in the States of Kansas, Oklahoma, and possibly extends into Texas. It is an area which has not yet been completely defined, but from the gas wells now drilled, it has been proven the largest gas reserve, in total acres, discovered.

The Kansas portion of the Hugoton Gas Field consists of gas producing portions of Kearney, Finney, Grant, Haskell, Morton, Stevens, and Seward Counties; also, approximately the east two-thirds portion of Texas County, Oklahoma is included within the field. It is believed by many that portions of the Counties of Sherman and Hansford, Texas are part of the same field, however, the limits and extent of that field have not as yet been defined and determined.

The Hugoton Field is an enormous reservoir of natural gas, generally accepted as containing proven gas bearing acreage as follows:

Kansas	1,727,360 acres
Oklahoma	939,200 "
Texas	705,280 "
Total	3,371,840 "

The discovery well in the Hugoton Field was the Crawford No. 1, drilled by W. L. Sidwell of Winfield, Kansas, and located in Township 33, Range 37, Stevens County, Kansas. The original early development of the Hugoton Field was carried on by Mr. W. L. Sidwell and Mr. W. M. McKnab. At the time of this early development, there were no pipe lines in this area and the nearest production of natural gas was from what is now known as the Texas Panhandle Field, approximately one hundred miles to the [fol. 11060] south.

During the years 1927 to 1930, inclusive, about 88 gas wells were drilled in the field and the only gas produced therefrom was used to serve local markets. Since that time, many additional gas wells have been drilled and, although the limits of the field are not yet defined, it is generally accepted as covering an area from North to South at least 105 miles to or beyond the Texas State Line and 40 miles from East to West at the widest part.

The gas produced in the Hugoton Field is encountered at an average depth of from 2700 to 2800 feet. The producing horizons are lime bodies, separated by impervious shale beds. The thickness of the gas producing formations or pays varies from three to six streaks of porous lime and will range from 17 feet to 135 feet in aggregate thickness. Gas producing zones vary greatly over short distances. It is a field that is generally described as having low permeability and wells drilled within one mile of each other do not materially affect one another by pressure or delivery rates.

In studying the original open flow of the wells drilled, we find that there is a very definite trend from Northeast to Southwest and which generally conforms to the trend or boundaries of the field.

The Kansas and Oklahoma portions of the field are divided into many small tracts, usually 160 acre tracts. This is due to the fact that the lands were acquired by homesteading by the landowners from the Public Domain lands of the Government. Therefore, it has developed that the oil and gas leases acquired by the gas companies are mostly on 160 acre tracts. There are very few leases owned by [fol. 11061] one company that can be termed blocked leases. However, due to the peculiar condition in the Hugoton Field, it is generally accepted that blocking is not as necessary as in the Texas Panhandle Field because, being of low permeability, underground drainage is not so great and the movement of gas is very slow.

There has been a very definite policy of development established by the producers and also the state Corporation Commissions that a unit for drilling shall be one well to 640 acres. This has, therefore, required that the producers communitize separate leases under one lease or unit agreement, whereby one well perpetuates the leases under such agreement.

This is a factor of value because the producer is relieved from drilling as many as three additional wells to hold the separate leases perpetually, and has reduced to a minimum the construction or drilling costs. These leases have, therefore, lost their original identity.

Most leases of the Panhandle Eastern Pipe Line Company in Kansas and Oklahoma, valued in this report, are situated within the proven gas area of the Hugoton Field and the remaining leases are favorably located according to indicated trends.

Due to their locations, most of them fall within certain areas of estimated productivity, based on a study of the wells now drilled and their original open flows. This has made it necessary that they be divided into several classifications as indicated by these areas. Consideration has been given the proximity of wells of certain open flow, the past producing history of the wells, and the location of [fol. 11062] Panhandle Eastern leases to those wells. The consolidations of the leases were given special consideration, based on favorable terms of the consolidations.

The summary or recapitulation attached to my exhibit shows a total acreage in each classification and the market value of leases in the various classifications with respect to the Hugoton acreage, as well as the Panhandle acreage.

In valuing the leases of Panhandle Eastern Pipe Line Company, I have not considered as a value factor the fact that the wells drilled thereon are connected to pipe lines; nor have I attempted to place a value upon the wells or equipment used in connection therewith. The values shown in the tabulations reflect merely the present market value of the leases, according to my judgment. It is my opinion that if this acreage reserve owned by the Panhandle Eastern Pipe Line Company in the two fields was available, it could unquestionably secure an outlet for its gas, exclusive of any pipe line now in the fields and could be sold at the valuation fixed by me.

It is my judgment that the leases would have no value from a standpoint of the oil rights covered thereby and I have placed on said leases no valuation, based on the circumstance that some or all of such leases authorize the lessee to produce oil.

Dated this August 25th, 1941.

R. J. WALLACE.

[fol. 11064]

Panhandle Eastern Pipe Line Company

Summary
Market Value Of Leases
By R. J. Wallace

Line No.	(A)	Class A1		Class A2		Class A3		Class B1		Class B2	
		Acres (B)	Value (C)	Acres (D)	Value (E)	Acres (F)	Value (G)	Acres (H)	Value (I)	Acres (J)	Value (K)
1	Moore County, Texas										
2	Drilled Leases	18 773 19	$ 1 877 319 00	504 80	$ 37 860 00	480	$ 24 000 00	160	$ 4 000 00		
3	Undrilled Leases	3 680	368 000 00	2 234 80	167 610 00	160	8 000 00	480	12 000 00	1 299 60	$ 19 494 00
4	Carson County, Texas										
5	Drilled Leases			6 200	465 000 00	360	18 000 00				
6	Undrilled Leases			1 202 50	90 187 50					716	10 740 00
7	Potter County, Texas										
8	Drilled Leases			480	36 000 00	3 382 81	169 140 50				
9	Undrilled Leases			120	9 000 00	400	20 000 00	220	5 500 00	220	3 300 00
10	Hutchinson County, Texas										
11	Drilled Leases					120	6 000 00	142 60	2 965 00		
12	Undrilled Leases										
13	Sherman County, Texas										
14	Undrilled Leases										
15	Hansford County, Texas										
16	Undrilled Leases										
17		22 453 19	$ 2 245 319 00	10 742 10	$ 805 657 50	4 902 81	$ 245 140 50	1 002 60	$ 24 465 00	2 235 60	$ 33 534 00
18											
19											

Classification
Texas Leases

A1	$ 100 00 per acre
A2	75 00 " "
A3	50 00 " "
B1	25 00 " "
B2	15 00 " "
B3	10 00 " "
C	5 00 " "

npany

Class B1		Class B2		Class B3		Class C		Total	
s)	Value (I)	Acres (J)	Value (K)	Acres (L)	Value (M)	Acres (N)	Value (O)	Acres (P)	Value (Q)
	$ 4 000 00							19 917 99	$ 1 943 179 00
	12 000 00	1 299 60	$ 19 494 00					7 854 40	575 104 00
								6 560	483 000 00
		716	10 740 00					1 918 50	100 927 50
								3 862 81	205 140 50
	5 500 00	220	3 300 00	640	$ 6 400 00			1 600	44 200 00
60	2 965 00							262 60	8 965 00
				80	800 00			80	800 00
						5 411	$ 27 055 00	5 411	27 055 00
				17 665 30	176 653 00	320	1 600 00	17 985 30	178 253 00
60	$ 24 465 00	2 235 60	$ 33 534 00	18 385 30	$ 183 853 00	5 731	$ 28 655 00	65 452 60	$ 3 566 624 00
						Hugoton Field Leases		199 519 26	5 128 900 00
						Grand Total		264 971 86	$ 8 695 524 00

Panhandle Eastern Pipe Line Company

Summary
Market Value Of Leases
By R. J. Wallace

Line No.	(A)	Class A1 Acres (B)	Class A1 Value (C)	Class A2 Acres (D)	Class A2 Value (E)	Class A3 Acres (F)	Class A3 Value (G)	Class B1 Acres (H)	Class B1 Value (I)	Class B2 Acres (J)	Class B2 Value (K)
1	Texas County, Oklahoma										
2	Undrilled Leases	47 314	$ 1 655 990 00	25 950	$ 648 750 00	7 440	$ 111 600 00				
3	Stevens County, Kansas										
4	Drilled Leases	16 170 95	565 983 25	6 401 41	160 035 25	5 038	75 570 00				
5	Undrilled Leases	10 084 90	352 971 50	11 040	276 000 00	7 200	108 000 00	640	$ 3 200 00		
6	Grant County, Kansas										
7	Drilled Leases	1 200	42 000 00	3 280	82 000 00	6 880	103 200 00				
8	Undrilled Leases	2 160	75 600 00	6 720	168 000 00	18 440	276 600 00				
9	Morton County, Kansas										
10	Drilled Leases	2 400	84 000 00	800	20 000 00	640	9 600 00				
11	Undrilled Leases	480	16 800 00	640	16 000 00	480	7 200 00				
12	Seward County, Kansas										
13	Undrilled Leases					13 200	198 000 00	1 440	7 200 00		
14	Haskell County, Kansas										
15	Undrilled Leases			1 240	31 000 00	2 240	33 600 00				
16		79 809 85	$ 2 793 344 75	56 071 41	$1 401 785 25	61 558	923 370 00	2 080	$ 10 400 00		
17											
18											

Classification
Hugoton Leases

A1	$35 00 per acre
A2	25 00 " "
A3	15 00 " "
B1	5 00 " "

mpany

Class B1		Class B2		Class B3		Class C		Total	
s	Value (I)	Acres (J)	Value (K)	Acres (L)	Value (M)	Acres (N)	Value (O)	Acres (P)	Value (Q)
								80 704	$ 2 416 340 00
	$ 3 200 00							27 610 36	801 588 50
								28 964 90	740 171 50
								11 380	227 200 00
								27 320	520 200 00
								3 840	113 600 00
								1 800	40 000 00
	7 200 00							14 840	205 200 00
								3 480	64 600 00
	$ 10 400 00							199 519 26	$ 5 128 900 00
						Texas Leases		65 452 60	3 566 624 00
						Grand Total		264 971 86	$ 8 695 524 00

[fol. 12159]

(Exhibit 38)

Panhandle Eastern Pipe Line Company and Subsidiary Companies

Basic Statistics Used in Calculating Interest, Ad Valorem Taxes and Operating Expense Attributable To Unused Capacity

Line No.		Apr. 1, 1932 Dec. 31, 1932 (A)	Jan. 1, 1933 Dec. 31, 1933 (B)	Jan. 1, 1934 Dec. 31, 1934 (C)	Jan. 1, 1935 Dec. 31, 1935 (D)	Jan. 1, 1936 Sept. 30, 1936 (E)	Oct. 1, 1936 Sept. 30, 1937 (F)
1	Investment						
2	Total	$ 42 607 277	$ 42 605 641	$ 42 596 977	$ 42 563 917	$ 44 211 016	$ 46 926 202
3	Argus, Local Area and						
4	portion used in Transportation	$ 4 585 826	$ 5 142 187	$ 4 994 764	$ 4 847 106	$ 4 101 613	$ 2 904 032
5	Total less Argus, Local and Transportation	$ 38 021 451	$ 37 463 454	$ 37 602 213	$ 37 716 811	$ 40 109 403	$ 44 022 170
6	Gross Revenues						
7	Total	$ 1 427 494	$ 2 585 397	$ 3 048 548	$ 3 611 865	$ 3 786 273	$ 9 318 459
8	Argus, Local Area and						
9	portion used in Transportation	$ 498 394	$ 701 321	$ 665 870	$ 708 285	$ 393 371	$ 365 376
10	Total less Argus, Local and Transportation	$ 929 100	$ 1 884 076	$ 2 382 648	$ 2 903 580	$ 3 392 902	$ 8 953 083
11	MCF Sold or Transported						
12	Total	12 139 010	23 891 891	25 983 690	28 652 895	23 008 968	39 219 025
13	Argus, Local Area and						
14	Transported	8 554 250	15 430 787	15 289 723	25 510 846	7 496 787	2 057 116
15	Total less Argus, Local						
16	and Transportation	3 584 760	8 461 104	10 693 967	13 142 049	15 512 181	37 161 909
17	Maximum Day Sales — MCF	32 424	52 567	48 299	44 168	82 157	121 455
18	Maximum Line Capacity — Daily MCF	80 000	80 000	80 000	80 000	80 000	125 000
19	Interest Charges	$ 1 335 289	$ 1 771 852	$ 1 760 425	$ 1 451 385	$ 813 694	
20	Ad Valorem Taxes	$ 209 668	$ 256 884	$ 246 425	$ 260 374	$ 211 099	
21	Operating Expense, Partial *	$ 481 290	$ 566 685	$ 557 257	$ 568 135	$ 539 631	
22	Total Interest, Ad Valorem Taxes and Operating Expense	$ 2 026 247	$ 2 595 421	$ 2 564 107	$ 2 279 894	$ 1 564 424	
23	Total Interest, Ad Valorem Taxes and Operating Expense						
24	allocable to Argus, Local and Transportation	$ 218 024	$ 313 267	$ 300 770	$ 259 680	$ 145 179	
25	Total Interest, Ad Valorem Taxes and Operating Expense						
26	after allocation to Argus, Local and Transportation	$ 1 808 223	$ 2 282 154	$ 2 263 337	$ 2 020 214	$ 1 419 245	

* Includes only operating expenses that vary with MCF sold.

[fol. 12160]

(Exhibit 38)

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Five Different Methods Of Calculating Interest, Ad Valorem Taxes and Operating Expense Attributable To Unused Capacity

Line No		April 1, 1932 Dec. 31, 1932 (A)	Jan. 1, 1933 Dec. 31, 1933 (B)	Jan. 1, 1934 Dec. 31, 1934 (C)	Jan. 1, 1935 Dec. 31, 1935 (D)	Jan. 1, 1936 Sept. 30, 1936 (E)	Oct. 1, 1936 Sept. 30, 1937 (F)	Total (G)
27	Direct Investment — Volume Method							
28	Investment per MCF (Line 5 * Line 16)	$ 10 61	$ 4 43	$ 3 52	$ 2 87	$ 2 59	$ 1 18	
29	Percent used capacity (Line 28, Col. F * Cols. A,B,C,D,E)	14 83	26 64	33 52	41 11	60 74	100 00	
30	Percent unused capacity (1.00 - Line 29)	85 17	73 35	66 48	58 89	39 26		
31	Charges Unused Capacity (Line 26 x Line 30)	$1 540 064	$1 673 960	$1 504 666	$1 189 704	$ 557 196		$6 465 590
32	Direct Investment — Revenue Method:							
33	Investment per $1.00 Revenue (Line 5 * Line 10)	$ 40 92	$ 19 88	$ 15 78	$ 12 99	$ 11 82	$ 4 92	
34	Percent Used Capacity (Line 33, Col. F * Cols. A,B,C,D,E)	16 03	24 75	31 17	37 88	55 50	100	
35	Percent Unused Capacity (1.00 — Line 34)	83 97	75 25	68 83	62 12	44 50	0	
36	Charges Unused Capacity (Line 26 x Line 35)	$1 518 365	$1 717 321	$1 557 855	$1 254 957	$ 631 564		$6 680 062
37	Direct Investment — Max. Day — Method							
38	Investment per MCF on Max. Day (Line 5 * Line 17)	$ 1 173	$ 713	$ 779	$ 854	$ 488	$ 362	
39	Percent Used Capacity (Line 38, Col. F * Cols. A,B,C,D,E)	30 86	50 77	46 47	42 39	74 18	100	
40	Percent Unused Capacity (1.00 — Line 39)	69 14	49 23	53 53	57 61	25 82	0	
41	Charges Unused Capacity (Line 26 x Line 40)	$1 250 205	$1 123 504	$1 211 564	$1 163 845	$ 366 449		$5 115 567
42	Adjusted Base Year — Volume Method							
43	Basic Loaded Year (Line 16, Col. F x 80/125)						23 783 622	
44	Percent Used Capacity (Line 16, Cols. A,B,C,D,E, * Line 43, Col. F)	20 10	35 58	44 96	55 26	86 96	100	
45	Percent Unused Capacity (1.00 — Line 44)	79 90	64 42	55 04	44 74	13 04	0	
46	Charges Unused Capacity (Line 26 x Line 45)	$1 444 770	$1 470 164	$1 245 741	$ 903 844	$ 195 070		$5 249 589
47	Adjusted Base Year — Revenue Method							
48	Basic Loaded Year (Line 10, Col. F. x 80/125)						$5 729 973	
49	Percent Used Capacity (Line 10, Cols. A,B,C,D,E, * Line 48, Col. F)	21 62	32 88	41 58	50 67	78 95	100	
50	Percent Unused Capacity (1.00 — Line 49)	78 38	67 12	58 42	49 33	21 05	0	
51	Charges Unused Capacity (Line 26 x Line 50)	$1 417 285	$1 531 782	$1 322 241	$ 996 572	$ 298 751		$5 566 631

[fol. 12162] (Exhibit 39.)

Panhandle Eastern Pipe Line Company and Subsidiary Companies Reproduction Cost New of Plant Property and Business As Of June 30, 1941.

P. McDonald Biddison, Consulting Engineer Dallas, Texas

[fol. 12163]

P. McDonald Biddison
Consulting Engineer
Dallas Gas Building
Dallas, Texas

Kansas City, Missouri, August 29th, 1941.

Panhandle Eastern Pipe Line Company
90 Broad Street
New York, N. Y.

Attention: Mr. J. D. Creveling, President.

Gentlemen:

I have made an estimate of the Cost of Reproduction New of the consolidated Plant, Property and Business of Panhandle Eastern Pipe Line Company and Subsidiary Companies of June 30, 1941.

The Cost of Reproduction-New, in the amount of $85,262,766.09 is detailed in the subsequent pages hereof.

Yours very truly,

P. McDONALD BIDDISON,
Consulting Engineer.

PMcDB/IF
(Seal)

[fol. 12164]

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Plant, Property And Business

Reproduction Cost — New

June 30, 1941

Line No.	Item (A)	Reproduction Cost — New (B)	Total (C)
1	Production System Property		
2	Land	$ 971 02	$
3	Leaseholds	8 395 524 00	
4	Gas Wells and Equipment	2 053 884 39	
5	Other Production System Structures	42 188 75	
6	Drilling and Clean-out Equipment	20 676 46	
7	Total — Production System Property		10 813 244 62
8	Transmission System Property		
9	Land	$ 55 909 84	
10	Right of Way	1 278 521 36	
11	Measuring and Regulating Structures	104 475 27	
12	Other Transmission System Structures	382 920 59	
13	Measuring and Regulating Equipment	491 685 32	
14	Transmission Mains	43 025 965 41	
15	Compressor Stations	9 792 271 60	
16	Other Transmission System Equipment	128 657 49	
17	Total — Transmission System Property		55 260 406 88
18	Gasoline Production System Property		
19	Liberal Gasoline Plant	$ 621 510 23	
20	Total — Gasoline System Property		621 510 23
21	General System Property		
22	General Office Equipment	$ 78 082 36	
23	General Transportation Equipment	109 971 90	
24	General Laboratory Equipment	6 550 71	
25	General Communication Equipment	492 708 29	
26	General Tools and Implements	40 251 86	
27	Total — General System Property		727 565 12
28	Total — Direct Construction Costs		$ 67 422 726 85
29	Intangible Fixed Capital		505 670 45
30	Undistributed Construction Expenditures		7 781 764 69
31	Construction Work in Progress		149 669 62
32	Total — Fixed Property		$ 75 859 831 61
33	Working Capital		9 000 00
34	Value of Gas Purchase Contracts		5 942 00
35	Cost of Business Development		6 053 992 48
36	Reproduction Cost New, Plant, Property And Business		$ 85 262 766 09

[fol. 12165]

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Production System Property

Summary

Line No.	Item (A)	Reproduction Cost — New (B)
1	Production System Land	$ 971 02
2	Production System Leaseholds	8 695 524 00
3	Production System Gas Wells and Equipment	2 053 884 39
4	Other Production System Structures	42 188 75
5	Drilling and Clean-out Equipment	20 676 46
6	Total — Production System Property	$ 10 813 244 62

[fol. 13130] (Exhibit 39-A.) Corrected Sheets.

P. McDonald Biddison
Consulting Engineer
Dallas Gas Building
Dallas, Texas

Kansas City, Missouri, August 29th, 1941.

Panhandle Eastern Pipe Line Company
90 Broad Street
New York, N. Y.

Attention: Mr. J. D. Creveling, President

Gentlemen:

I have made an estimate of the Cost of Reproduction New of the consolidated Plant, Property and Business of Panhandle Eastern Pipe Line Company and Subsidiary Companies of June 30, 1941.

The Cost of Reproduction New, in the amount of $83,833,448.54 is detailed in the subsequent pages hereof.

Yours very truly,

P. McDONALD BIDDISON,
Consulting Engineer.

PMcDB/IF
(Seal)

Reproduction Cost — New

June 30, 1941

Line No.	Item (A)	Reproduction Cost — New (B)	Total (C)
1	Production System Property		
2	Land	$ 971 02	$
3	Leaseholds	8 695 524 00	
4	Gas Wells and Equipment	2 053 884 39	
5	Other Production System Structures	42 188 75	
6	Drilling and Clean-out Equipment	20 676 46	
7	Total — Production System Property		10 813 244 62
8	Transmission System Property		
9	Land	$ 55 909 84	
10	Right of Way	1 278 521 36	
11	Measuring and Regulating Structures	104 475 27	
12	Other Transmission System Structures	382 920 59	
13	Measuring and Regulating Equipment	491 685 32	
14	Transmission Mains	41 960 870 15	
15	Compressor Stations	9 764 148 60	
16	Other Transmission System Equipment	128 657 49	
17	Total — Transmission System Property		54 167 183 62
18	Gasoline Production System Property		
19	Liberal Gasoline Plant	$ 621 510 23	
20	Total — Gasoline System Property		621 510 23
21	General System Property		
22	General Office Equipment	$ 78 082 36	
23	General Transportation Equipment	109 971 90	
24	General Laboratory Equipment	6 550 71	
25	General Communication Equipment	492 708 26	
26	General Tools and Implements	40 251 86	
27	Total — General System Property		727 565 12
28	Total — Direct Construction Costs		$ 66 329 503 59
29	Intangible Fixed Capital		497 471 27
30	Undistributed Construction Expenditures		7 647 897 58
31	Construction Work in Progress		149 669 62
32	Total — Fixed Property		$ 74 624 542 06
33	Working Capital		1 569 000 00
34	Value of Gas Purchase Contracts		1 585 914 00
35	Cost of Business Development		6 053 992 48
36	Reproduction Cost-New, Plant, Property And Business		$ 83 833 448 54

• • • • • • • • •

ol. 13133

Corrected

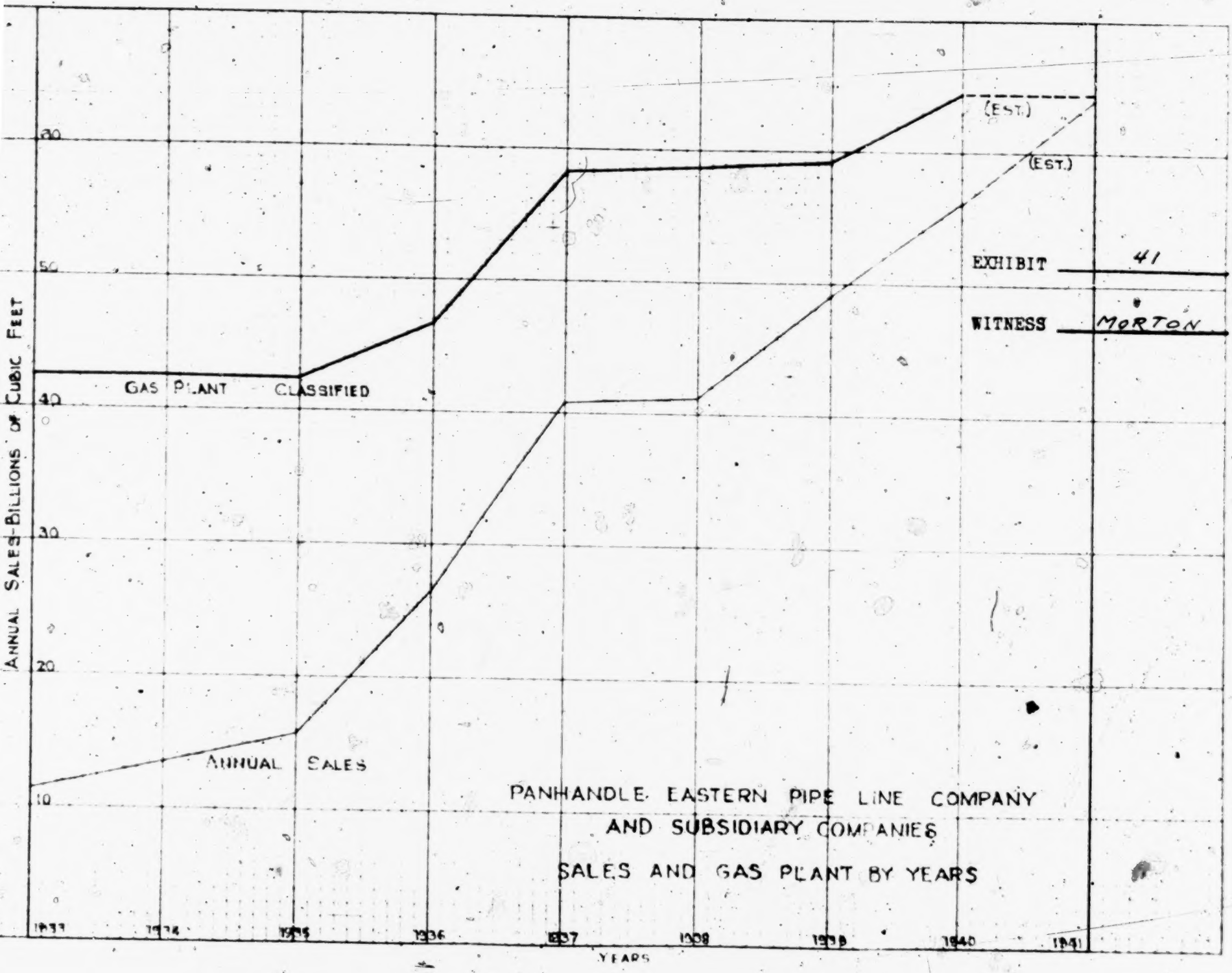
Panhandle Eastern Pipe Line Company And Subsidiary Companies

Transmission System Property

Summary

Line No.	Item (A)	Reproduction Cost — New (B)
1	Transmission System Land	$ 55 909 84
2	Transmission System Right of Way	1 278 521 36
3	Transmission System Measuring and Regulating Structures	104 475 27
4	Other Transmission System Structures	382 920 59
5	Transmission System Measuring and Regulating Equipment	491 685 32
6	Transmission Mains	41 960 870 15
7	Compressor Stations	9 764 143 60
8	Other Transmission System Equipment	128 657 49

EXHIBIT 41.


(EST.)
(EST.)
EXHIBIT 41
WITNESS MORTON
GAS PLANT CLASSIFIED
ANNUAL SALES
ANNUAL SALES-BILLIONS OF CUBIC FEET
60
50
40
30
20
10
1933
1934
1935
1936
1937
1938
1939
1940
1941
YEARS
PANHANDLE EASTERN PIPE LINE COMPANY
AND SUBSIDIARY COMPANIES
SALES AND GAS PLANT BY YEARS

6

. 13153]
ril 1930 to
y 1930

Was employed by Ford, Bacon and Davis in the construction of an oil pipe line from Glen Pool, Oklahoma, to Wood River, Illinois.

y 1930 to
e 1931

Was employed as Chief Field Engineer for Ajax Pipe Line Company, principally in further construction of the line which had been started by Ford, Bacon and Davis.

e 1931 to
e

Employed by Panhandle Eastern Pipe Line Company, except for a period of about twenty months in 1936 and 1937. During that time, I was working for myself on projects relating to sound control and general construction. During the period of my service with Panhandle Eastern Pipe Line Company, I have kept in touch with various features of the Company's business, including its construction activities and its production activities. Commencing in October 1937 and continuing to date, my official title has been Production Engineer. As such, the drilling of wells, the reconditioning of wells, the testing of wells, and other problems related to production have been under my general jurisdiction.
It has also been one of my duties to

. 13154]

advise the management relative to additions to gathering facilities, including additional gathering lines

and increased power in the compressor stations, in order that such gas as is needed might be promptly gathered and delivered into the main line. When advising of the amounts of gas which will probably be required to satisfy the markets of Panhandle Eastern, it has been one of my duties to recommend the drilling of such additional wells and the providing of such additional facilities and power in the gathering system as will result in the delivery of gas to satisfy peak day requirements.

[fol. 13155] Written Testimony Of C. H. Hinton.

Subject Matter Of Testimony:

Under direction of the management, I have made a careful study of the future capital expenditures which will probably be incurred by Panhandle Eastern Pipe Line Company in its production and gathering activities West and South of Liberal, Kansas. This study has also included a consideration of the increased operating expenses which necessarily will result from the circumstance that as the properties become older, the pressures lowered, and the reserves further depleted, the unit costs for producing and gathering the gas will be substantially higher than those heretofore existing.

This study has also included a determination of the amount of gas which the Company will probably be able to take from its reserves (both owned and held by gas purchase contracts) in the Panhandle Field within the present indicated economic life of those reserves and in making the study, I have considered (a) present market requirements, and (b) anticipated increases in such requirements.

In my references hereafter made to the Hugoton Field, I include all those portions of Kansas, Oklahoma and Texas which lie within the Hugoton Field, as outlined in Exhibit 26 and other maps presented in connection with the testimony of Messrs. Burnham, Bartie, and Smith.

[fol. 13151] Exhibit 42.

Written Testimony of
Witness C. H. Hinton

[fol. 13152] Statement of Qualifications and Experience of C. H. Hinton

1. Name, address, and age.
C. H. Hinton, Kansas City, Missouri; age, 36.

2. Present position:
Production Engineer, Panhandle Eastern Pipe Line Company.

3. Education:
Attended University of Illinois from September 1924 to February 1928, taking courses in the School of Mechanical Engineering.

4. Business experience:

June 1924 to February 1928

During vacations and for part of the time while attending school, I worked in the office of supervising architect of the University of Illinois.

February 1928 to February 1929

Worked in the Acoustical Engineering Department of the Celotex Company, out of Chicago and Champaign, Illinois.

February 1929 to to April 1929

Was employed by Engineering Service Corporation, Houston, Texas.

April 1929 to April 1930

Was employed by Mississippi River Fuel Corporation as Division Engineer, working out of Pine Bluff, Arkansas, during a portion of the time and out of St. Louis, Missouri, the remainder of the time.

Principles Recognized:

In my investigation, I have recognized the following principles and assumptions:

1. Panhandle Eastern will, so long as economically advisable, continue to apportion its takes between the Panhandle Field and the Hugoton Field on approximately the present basis.

Panhandle Eastern now produces and transports for main line purposes gas from two fields—the Hugoton [fol. 13156] Field and the Panhandle Field. In apportioning its withdrawals between those fields, it takes into consideration the differences in conditions which exist in the two fields, with the hope that (a) it will by production eliminate the probability of drainage from its producing properties in the Hugoton Field, and (b) it will have been able, by the time it is forced to discontinue operations in the Panhandle Field, to produce an amount of gas substantially equivalent to its reserves in that field.

It is shown from Exhibit 30, Schedule 11, presented in connection with the testimony of Rufus M. Smith, that of the main line production to June 22, 1941, 68.75% was taken from the Panhandle Field. For the month of June 1941, the percentage was 65.85% and for the first six months of 1941 it was 72.74%. It is now estimated that the total requirements for 1941 will be 61 billion cubic feet on a 16.4# pressure base and that 45 billion cubic feet, or 73.77%, will be taken from the Panhandle Field. I, therefore, assume that until pressures and volumes decline to the point where it is not economical to do so, the Company will continue to take from its reserves in the Panhandle Field as great a percentage as can be taken without doing inequity to its producers and royalty owners in the Hugoton Field.

2. It will continue to apportion its production between its own leaseholds and its gas purchase contract acreage on the basis now existing.

While the present apportionment may be changed, it is clear that no fair method of apportioning withdrawals from the Panhandle reserves would result in a smaller

percentage being taken from the Company leaseholds than is taken under the present allocation of 50% to acreage and 50% to open flow potentials, with 640 acres as the [fol. 13157] minimum drilling unit. I have, therefore, assumed a continuance of that policy by this Company in the Panhandle Field.

3. Additional wells in Panhandle Eastern's reserves in the Panhandle Field will be drilled on only its own leaseholds.

Except for one location, no more wells are required for full development of the lands covered by the gas purchase contracts. There are, however, fifteen locations on the leaseholds in the Panhandle Field belonging to Panhandle Eastern Pipe Line Company, and I assume that these locations will be drilled. Therefore, as additional gas supplies are required from the Panhandle reserves to furnish additional market requirements or to maintain present loads under reduced pressures and potentials, such additional gas must be obtained from wells to be hereafter drilled by the Company on its own leaseholds in that field. The time for drilling these wells will be determined by the demands for additional gas and the obligations of existing lease contracts.

4. As volumes increase and as pressures decline, additional gathering facilities must be provided for.

This will, of course, not be denied. In some instances, the additional capacity will be furnished by field power or booster stations; in others by looping sections of the gathering lines; and in others by the addition of equipment to the regular compressor stations. In my estimates, I have anticipated the use of each of those methods.

5. As the Panhandle Field declines, the Company must look more and more to its reserves in the Hugoton Field.

Looking forward to the time when it will not be economi- [fol. 13158] cal to supply a very large percentage of its market requirements from its reserves in the Panhandle Field, the Company must be pursuing a policy of developing its reserves in the Hugoton Field so that adequate production will be at all times available to supply the

EXHIBIT 40.

EXHIBIT

WITNESS MORTON

ESTIMATED MAIN LINE SALES
YEARS 1941 - 1946, INCLUSIV

PANHANDLE EASTERN PIPE LINE COMPANY SYSTEM

(A)	(B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)
EAST OF DANA							
Michigan							
Detroit	MCF	24 000 000	27 000 000	29 150 000	30 950 000	32 750 000	34 700 000
	Max-Day	102 604	142 000	164 500	176 000	189 000	201 000
Other							
Industrial	MCF		1 040 000	1 423 000	1 588 000	1 718 000	3 323 000
	Max-Day		2 890	3 940	4 850	5 270	10 040
Dom. Comml. & Other	MCF	407 500	4 051 870	4 697 200	5 060 000	5 451 000	10 296 200
	Max-Day	1 384	9 110	14 660	17 350	18 730	42 760
Indiana and Ohio							
Industrial	MCF	10 250 000	11 300 000	12 100 000	12 700 000	13 200 000	13 700 000
	Max-Day	27 708	34 400	36 800	38 700	40 250	41 700
Other (Lacl. Co. use)	MCF	5 200 000	5 600 000	6 000 000	6 400 000	6 800 000	7 200 000
	Max-Day	28 676	28 000	30 000	32 000	34 000	36 000
Kentucky Natural Gas Co.	MCF	2 200 000	1 720 000	1 690 800	2 002 500	2 500 000	2 920 000
	Max-Day	7 608	5 200	5 200	6 100	7 600	8 900
TOTAL EAST OF DANA	MCF	42 057 500	50 711 870	55 061 000	58 700 500	62 419 000	72 139 200
	Max-Day	167 980	221 600	255 100	275 000	294 850	340 400
WEST OF DANA							
Industrial	MCF	13 000 000	14 000 000	14 300 000	14 850 000	15 300 000	15 600 000
	Max-Day	38 400	42 600	43 600	45 200	46 600	47 500
Domestic and Commercial	MCF	7 000 000	7 500 000	8 100 000	8 700 000	9 300 000	9 850 000
	Max-Day	34 014	41 000	44 300	47 600	51 000	54 000
TOTAL WEST OF DANA	MCF	20 000 000	21 500 000	22 400 000	23 550 000	24 600 000	25 450 000
	Max-Day	72 414	83 600	87 900	92 800	97 600	101 500
TOTAL MAIN LINE	MCF	62 057 500	72 211 870	77 461 000	82 250 500	87 019 000	97 589 200
	Max-Day	240 394	305 200	343 000	367 800	392 450	441 900

35	Cost of Business Development	6 053 992 48
36	Reproduction Cost New, Plant, Property And Business	$ 83 833 448 54

[fol. 13133]

Corrected

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Transmission System Property

Summary

Line No.	Item (A)	Reproduction Cost — New (B)
1	Transmission System Land	$ 55 909 84
2	Transmission System Right of Way	1 278 521 36
3	Transmission System Measuring and Regulating Structures	104 475 27
4	Other Transmission System Structures	382 920 59
5	Transmission System Measuring and Regulating Equipment	491 685 32
6	Transmission Mains	41 960 870 15
7	Compressor Stations	9 764 143 60
8	Other Transmission System Equipment	129 657 49
9	Total — Transmission System Property	$ 54 167 183 62

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market. The Panhandle Field will not be a "one-horse shay". It will not suddenly cease producing but, in my opinion, its decline in productivity will be at an ever increasing rate. The Company must maintain its reserves in the Hugoton Field and do such drilling as is necessary to keep its leases in force and construct such gathering lines as are necessary to serve the areas from which it expects to produce gas, providing such additional power and other facilities as may be required from time to time to handle the gas taken. These facilities must be prepared in advance of actual necessity therefor. Gathering lines of substantial sizes must be laid so that with additions by looping and the use of more power, the ultimate needs of the areas served will be provided for.

6. The Panhandle Field is a highly competitive one and one of varied producing characteristics.

This fact must be recognized in any attempt to estimate future conditions. A production engineer, charged with the duty of obtaining from his Company's reserves production of given volumes at given times, is faced with many major problems. Particularly is this true in the Panhandle Field. If the problem were merely a matter of dividing the amount of gas required each year into the estimated gas content of the reserves, the arithmetic involved would be simple.

This, if the reserves of Panhandle Eastern in the Panhandle Field were, as assumed by Mr. Toeppen, 750 billion [fol. 13159] cubic feet as of November 1, 1940, (this being the amount estimated by Mr. Davis in Toeppen's Exhibit 4) and if Panhandle Eastern's requirements from the Panhandle Field are 60 billion cubic feet annually, the supply would be exhausted in 12½ years from November 1, 1940, or on May 1, 1953. Or, on the basis of present requirements of 45 billion cubic feet annually, they would be exhausted in 16⅔ years from November 1, 1940, or on July 1, 1957.

Or, if its reserves were, on July 1, 1941, the 733 billion cubic feet at zero pounds, as estimated by Mr. Smith, and they could be produced to a 50 pound abandonment pressure with a 90% recovery factor, they would last 10½ years, or to November 1, 1951, on an average take of 60 bil-

lion annually; or they would last 13¼ years, or to November 1, 1954, on an average take of 45 billion annually. Even if the estimated content could be produced to zero pounds at 100% recovery factor, the reserves would be produced in 12¼ years with an annual outlet of 60 billion cubic feet, or 16⅓ years with the present annual outlet of 45 billion cubic feet.

But the problem facing the production engineer is not that simple a problem in arithmetic. The reserve of gas belonging to a company is not "boxed in" separate and distinct from the reserves belonging to other competitive interests producing gas from the same reservoir. He cannot withdraw his company's required gas from the stock on hand as the housewife would withdraw for a meal potatoes from her storehouse in the cellar. Withdrawals of gas must be provided for with recognition of the fact that other competitive producers are at the same time taking gas from the same reservoir. Those producing gas know that the production by others will lessen the ability of one producer to take his own gas, unless he produces concur- [fol. 13160] rently with other producers, and that the taking by all producers results in lowered pressures and increased unit production costs.

The operating problems of the production engineer are further complicated by the circumstance that the gas with which he is dealing is not a perfect gas. For this reason, Boyle's law does not exactly apply to field performance. Certain corrective factors must be taken into consideration in any attempt to apply that law. We also know that great differences exist in the field as to gas content and as to producing characteristics of the wells. We know the sand thickness, porosity, permeability and potentials vary widely. There are rich areas and poor areas (sometimes close together). Some production is from granite wash formations, some from dolomite formations, and some from apparently cavernous conditions. Some wells and nearby formations have been damaged by "salting" conditions, while other areas are, so far, not affected thereby. The effect on pressure conditions in the gas areas resulting from the production of oil from the same formations at lower elevations has not been determined. It is doubtful whether the true equilibrium pressure has

ever been ascertained at any date subsequent to the time production was first commenced.

These and many other elements make necessary an allowance for corrective factors in the Panhandle Field. So far as I know, no one has determined with accuracy just what allowances should be made.

That some such corrective factors must be used (in any [fol. 13161] attempt to apply Boyle's law to the Panhandle Field) becomes at once apparent when an attempt is made to determine the gas content in the field at virgin pressure, by a consideration of the production per pound loss in pressure. We find that when the production per pound drop is multiplied by the virgin pressure, we get indicated contents which will differ for each time period considered, and that if accurate figures are available with respect to drops in pressure and production during the periods of such drops, the production per pound drop becomes less and less as the years go by.

In the following table, production figures used have been taken from what I consider to be the most reliable sources and the pressure drops shown are those reflected in the reports of the Texas Railroad Commission.

Period	Production MCF	Pressure Loss (Pounds)	Production Per Pound Loss (MCF)	Indicated Virgin Content (Trillion)
Beginning to 8/1/35	5,197,693,413	67 49	77,014,270	33 166
8/1/35 to 7/1/36	556,485,654	7 51	74,099,288	31 862
7/1/36 to 7/1/37	552,281,402	7 95	69,544,830	29 904
7/1/37 to 8/1/38	622,925,161	9 39	66,339,208	28 525
8/1/38 to 8/1/40	1,152,418,747	19 35	59,556,524	24 609

Thus, it is clear that on the basis of the figures used, the [fol. 13162] indicated virgin content, calculated through the use of production per pound drop in pressure, becomes less and less as the years go by—that the production per pound loss in pressure becomes progressively less as pressures are lowered and that the indicated virgin content, as

calculated on the curve of declining production per pound loss in pressure, will be far less than the content calculated on the basis of average pressure drops in the past.

Disproportionate Production:

Another problem which faces the production engineer in the Panhandle Field is the disproportionate taking of gas—not only as between producers but also as between areas. Large pipe lines carry enormous volumes of gas from the Panhandle Field to Denver, Minneapolis, St. Paul, Omaha, Chicago, Kansas City, Detroit, and many other cities and communities located hundreds of miles from the field. In addition, smaller lines carry gas to various market points in Texas, Oklahoma and Kansas. For use of these pipe lines, 316 billion cubic feet of gas was produced during the year ended July 1, 1940, from an area containing 1,085,270 acres.

During that same period, sour gas for carbon black manufacture was produced from an area of 372,437 acres in the amount of 248 billion cubic feet. This area is located in the same reservoir as that from which the pipe line gas was taken. From that portion of the same reservoir from which oil also is produced, 92 billion cubic feet of so-called casinghead gas was produced, most of which came from the free gas formations above the oil.

[fol. 13163] In all, during the 12 month period, there was a total production of approximately 656 billion cubic feet of metered sweet gas, sour gas, and casinghead gas from approximately 1,450,000 acres. This does not include gas used for lease purposes, including the gas lost in drilling in wells and in testing or reconditioning operations.

The size of the field and the disproportionate taking by individual producers and by areas from which production is taken makes it extremely difficult to evaluate with certainty the effect which production from the reservoir as a whole will have on the pressures hereafter existing with respect to a particular tract or the loss from drainage which one tract may suffer as a result of disproportion-

ate production from other tracts. Panhandle Eastern's reserves are well located for protection against excessive drainage, but it will be noted from an examination of the 1940 rock pressure map (Exhibit 26) that low pressure areas are now encroaching on Panhandle Eastern's reserves from the North and from the East.

While many factors make it difficult to determine with the desired degree of accuracy, the pressures and operating conditions which will occur in future years, yet, through a study of well performances and area performances in the past few years, a good idea may be obtained of what may be expected during future years.

Necessity For Future Planning:

Manifestly, a natural gas company transporting large volumes of gas to distant markets and serving many communities must continuously plan for the future and exercise its best judgment in determining whether additional capital expenditures will be required, so that it will, at all [fol. 13164] times, have available adequate supplies of gas and be able to deliver that gas when and as needed. Thus, as estimates of future requirements are made, the Engineering Department must see that transportation facilities adequate to deliver those requirements are available. If existing facilities are inadequate, additions must be arranged for. Likewise, the Production Department must see to it that the Company at all times has available a supply of gas sufficient to meet market requirements as they arise.

All such facilities, production or transportation must be provided in advance of need. Additional wells and gathering lines must be completed by the time additional transportation facilities are finished and those facilities must be finished before the customer's actual need for service arises.

Comparison With Ordinary Utilities:

While other companies of the nature of utilities must, of necessity, look to the future, none is required to do that to such an extent as the natural gas company. An electric utility or a manufactured gas company can rather

quickly construct additional units to manufacture its products. Not so with the natural gas company. Its supply of gas is stored in a reservoir located hundreds of miles from its markets and the reservoir is located several thousand feet below the surface. Many other producers are taking gas from that same reservoir and pressures are constantly declining. Therefore, some representative of a gas pipe line company are constantly study-[fol. 13165] ing its market and market requirements to determine how much gas will be required if the markets are to be adequately served; other representatives keep closly in touch with the transportation facilities, to see that they are adequate promptly to deliver the volumes of gas required; and other representatives keep advised of the market requirements so that the production and gathering facilities will be adequate to deliver the required amount of gas to the main line when needed.

Opportunities Of Witness To Learn Production Conditions:

During the period of my employment by Panhandle Eastern Pipe Line Company, I have had opportunity, and it has been my duty, to observe field performance and well performance, insofar as the properties of Panhandle Eastern in the Panhandle Field are concerned. In conjunction with other representatives of the Production Department, I have made recommendations as to the drilling of wells and their locations and the construction of gathering lines required to gather the gas and deliver it to the main line at Liberal, Kansas. During this period, I have kept in close touch with well performances and familiarized myself with the declines in pressures, potentials, and gas deliverability. It has been necessary for me to do this in order that supplies of gas could be made available for Company requirements as needed and additional wells could be drilled as required, in order to keep the proportion of gas taken from the Hugoton and Panhandle Fields in the desired relation.

In studying well performances, I have noted the effect of acidizing different types of producing formations, the effect of water and cave-ins on the producing capacities of the wells as pressures declined, the effect of salting up of wells and producing formations, as well as many

[fol. 13166] other operating conditions in the field. I have noted the different pressure declines in the different limited areas from which Panhandle Eastern takes gas.

As a result of my experience and studies, I feel qualified to estimate within fairly reasonable limits the length of time Panhandle Eastern will be able economically to continue to produce gas from the Panhandle Field, assuming a continuance of existing conditions except as they may be changed by Panhandle Eastern's own operations. I have made such a study and related the results to the necessary expenditures for both capital and operation over the next 5½ years.

Estimated Requirements:

Prior to making this study, I obtained from Mr. O. W. Morton, Budget and Rate Engineer of Panhandle Eastern Pipe Line Company, his estimates of the gas required for main line purposes from January 1, 1941, to January 1, 1947. This estimate was the same as that contained in Exhibit 40, presented in connection with his testimony, and when adjusted to gas at a 16.4± base with an addition for the gas required for power and loss due to line leakage, the estimated requirements are as follows:

1941	60,000,000 MCF
1942	68,101,459 "
1943	73,951,804 "
1944	77,568,683 "
1945	82,065,748 "
1946	92,034,276 "

The estimate also included the maximum days require-
[fol. 13167] ment for each of those years, since it was necessary for that element to be taken into account in my calculations.

Apportionment To Panhandle Field:

After obtaining these estimates, I allocated the estimated requirements between the Panhandle Field and the Hugoton Field, on the basis of the present approximate allocation between those fields and then allocated the Panhandle Field portion between Panhandle Eastern's own wells and the wells covered by gas purchase contracts. In this allocation, I used my best judgment concerning the

probable pressures and potentials over the period considered and took into consideration the well drilling program which I expect to be carried on during that period. On this basis, the total takes from the Panhandle Field during the period will, in my judgment, be approximately as follows:

	From Panhandle Eastern's Wells MCF	From Gas Purchase Wells MCF
1941 (6 mos. only)	11,811,800	10,182,000
1942	27,635,000	22,365,000
1943	30,909,600	23,090,400
1944	32,455,500	22,544,500
1945	36,036,000	23,964,000
1946	36,024,000	23,976,000

Well Drilling Program:

Of course, it would be possible, when first commencing to produce gas from a reserve for a company to at once [fol. 13168] drill the entire area. Such a practice, however, would necessitate the spending of large sums for drilling purposes and for gathering facilities in advance of need therefor; and it is standard practice in the industry to assemble reserves and then carry on drilling operations if production and market conditions justify. In this way, it is possible to plan future operations intelligently and still save carrying charges on substantial capital investments.

That has been Panhandle Eastern's policy. It has been drilling its wells as economies of the project and lease obligations required.

Wells Drilled 1937-1941:

During the period from January 1, 1937, to June 30, 1941, Panhandle Eastern has drilled 63 wells as follows:

Year	Panhandle Field	Hugoton Field
1937	8	19
1938	4	10
1939	7	5
1940	4	4
1941	2	
Total	25	38

that represented by the estimate of future requirements given me by Mr. Morton.

It will be noted from the tabulations hereinafter presented that, except for some gathering line expense, practically the same additional investments will be required for the same amount of gas. The principal differences are that the particular expenditures will be required at an earlier date to care for anticipated requirements than the dates such expenditures would be required if the load were to remain static on the basis of the present market requirements. These estimated expenditures in some detail, year by year, are as follows:

[fol. 13172]

a. Basic Load

Last Six Months of 1941

a.	Construct and install specially designed liquid separator between Sneed and Hansford Stations in Texas (now being installed), costing	$ 26,300
b.	Construct 2 individual well compressors at Burnett Well No. 108 and Bivins Well No. 91 in Panhandle Field (now being constructed), costing	2,100
c.	Construct warehouse at Zofness Camp (completed in August 1941), costing	500
d.	Drill well near Guymon, Oklahoma, in Hugoton Field, costing	18,851
e.	Purchase new automobile for use of field forces in Hugoton Field, costing	919
f.	Construct Cimarron River jetties to protect present river crossing from high water, costing	6,500
	Total	55,170

1942

a.	Drill 5 wells in Panhandle Field, including acidization and liners, at cost of	106,463
b.	Install liners in 2 old wells in Panhandle Field, at a cost of	910
c.	Install tubing in two old wells in Panhandle Field, costing	4,202
d.	Acidize 4 old wells in Panhandle Field, costing	6,200
e.	Lay well lines for 5 new wells in Panhandle Field, costing	15,395
f.	Construct 5 measuring stations for new wells in Panhandle Field, costing	3,450
g.	Increase capacity of gathering line from Zofness to Sneed by looping existing line between those points and constructing additional gathering line to serve new wells, costing	422,464
h.	Construct 12 additional dwellings for employees, including 3 at Zofness, 3 at Hansford and 6 at Sneed, one of the Hansford dwellings being a 10-room hotel for single employees, at a cost of	81,000

[fol. 13173] i. Build 3 garages, a 3-car garage at Hansford, a 3-car garage at Sneed, and a 6-car garage at Zofness, costing $ 2,760

j.	Drill 13 wells in Texas County, Hugoton Field, including liners and acidization, at a cost of	245,063
k.	Install liners in 2 old wells in Hugoton Field, at a cost of	762
l.	Acidize 10 old wells in Hugoton Field (of which 6 will be 50% owned), at a cost of	15,500
m.	Construct well lines for 14 new wells (including one drilled in 1941), all in Hugoton Field, at a cost of	36,040
n.	Construct and install 10 well dehydrators, at cost of	2,500
o.	Construct 14 measuring stations, at cost of	9,660
p.	Construct trunk gathering line from Liberal toward Hansford, looping existing line approximately 32 miles at cost of	850,048
q.	Construct Cimarron River Crossing for loop line, costing	220,384
r.	Construct gathering line from Section 31, Township 4, to near Optima in Texas County, Oklahoma, costing	324,180
s.	Construct gathering line in Oklahoma, connecting with the Optima line, at cost of	369,267
t.	Construct telephone line to serve at Optima gathering line, costing	10,830
u.	Construct 3 houses for employees at Optima Camp, costing	18,000
v.	Construct office building at Hugoton Camp, costing	7,000
w.	Construct warehouse at Optima Camp, costing	1,000
x	Construct one 6-car garage at Optima Camp, costing	1,380
y.	Install 2-way radio station to serve area within 50 mile radius of Hugoton, costing	3,030
z.	Purchase 3 automobiles (coupes) for serving portions of Hugoton Field, costing	2,755
[fol. 13174]	z-1. Purchase 1-ton truck for Oklahoma area, costing	$ 1,073
	Total	2,761,382
	Less contribution of joint owner on capital expenditures	4,650
	Net expenditures	2,756,732

1943

a.	Drill 5 wells in Panhandle Field, including acidization and liners, costing	110,631
b.	Install liners in 3 old wells in Panhandle Field, costing	1,746
c.	Install tubing in 2 old wells in Panhandle Field, costing	4,528
d.	Acidize 5 old wells in Panhandle Field costing	7,750
e.	Construct well lines for 5 new wells in Panhandle Field, costing	23,335
f.	Construct 5 measuring stations in Panhandle Field, costing	3,450
g.	Construct additional gathering lines in Panhandle Field to serve new wells, costing	7,815
h.	Drill 7 wells in Hugoton Field (5 in Oklahoma and 2 in Kansas), including acidization and liners, costing	132,037
i.	Install liners in 2 old wells in Hugoton Field, costing	796
j.	Acidize 8 old wells in Hugoton Field (4 being 50% owned), costing	12,400
k.	Construct well lines to connect new wells in Hugoton Field, costing	11,311
l.	Construct and install 10 well dehydrators, costing	2,500
m.	Construct 5 measuring stations in Hugoton Field, costing	3,450

During this period of time, the Company has also connected to its gathering system a large number of wells, in both the Panhandle Field and the Hugoton Field (72 wells in all), belonging to those with whom it holds gas purchase contracts. This was an aggregate of 135 wells for 4½ years, or an average of 30 for each 12 months period. [fol. 13169] As pressures decline and lease obligations require further drilling, such additional wells will be drilled by Panhandle Eastern as are required to satisfy its market requirements and to protect the Company's gas reserves.

Gathering Facilities:

It has also been the policy of the Company to construct gathering lines and install power and other facilities in connection therewith as such additional lines and power are needed. Of course, when laying lines into particular areas, it is economical to provide some excess capacity over and above that immediately required, in order to decrease eventual overall costs, but the lines are constructed to serve the future production from the general area in such a way that by the addition of more power or the looping of lines, a larger number of wells may eventually be served. The Company, in order to gather the increased volumes of gas needed to supply its increasing markets and in order to care for the same volumes of gas at reduced pressures and potentials, will from time to time be required to further add to its gathering facilities in both fields through increases in length of gathering lines and increases in power.

As pressures and potentials of the wells decline, it is obvious that the same volumes of gas must be obtained from a greater number of wells. It is also obvious that to transport this lower pressure gas there must be either (a) more or larger gathering lines, (b) more field compressors, or (c) more power in the field compressor stations. It is my judgment that all three of these methods will be used [fol. 13170] by Panhandle Eastern Pipe Line Company in connection with the future operation of its gathering lines.

Of course, as additional wells are drilled, it will also be necessary to connect those wells to the gathering system. In the case of wells drilled in areas not now served by

gathering lines of Panhandle Eastern, it will be necessary to construct new gathering lines connecting with the trunk gathering line. These new lines will, of course, be constructed in the light of probable later requirements of other wells to be drilled in later years of the project.

Future Capital Expenditures.

Much of my time for several years has been spent in a study of the conditions existing in the two fields from which Panhandle Eastern takes gas, in an effort to assist the management in plans for necessary future expenditures in those fields. Practically all of my time for several weeks past has been spent in a study of the expenditures, both capital expenditures and operating expenses, which will be required within the next few years. Special attention has been given to the next 5½ years.

In this study, I have estimated the amount of drilling which will be required and the cost thereof, the cost of increased gathering facilities and such other capital expenditures as are related to the production and gathering of gas. This study has been made on two bases:

(a) The Basic Load.

I have estimated the capital expenditures which would be required each year if annual requirements of gas remain static at the present level. I have determined what addi- [fol. 13171] tional investments would be required if there were to be no increase in production—in other words, the additional capital investments which would be required to produce and gather the same volumes of gas which the Company is now marketing. This study was not made with an idea that the load will remain static. We know that it will not do so. The present production was used as a base so that proper additions could be made for the increasing loads which the Company anticipates.

(b) The Anticipated Load.

After estimating the capital expenditures which will be required for the basic load each year (considering the present production as the basic load), I then estimated the additional investments which will be required each year to take care of the anticipated load. The anticipated load is

n.	Construct additional gathering lines to serve new wells in Hugoton Field, costing	151,887
	Total	473,636
	Less credit on acid treatment from joint owner of 4 wells	3,100
	Net expenditures	470,536

[fol. 13175

1944

a.	Drill 5 wells in Panhandle Field, including acidization and liners, costing	$ 103,967
b.	Install liners in 4 old wells in Panhandle Field, costing	2,079
c.	Install tubing in 4 old wells in Panhandle Field, costing	9,756
d.	Acidize 6 old wells in Panhandle Field, costing	9,300
e.	Lay well lines connecting 5 new wells in Panhandle Field, costing	15,071
f.	Construct 5 measuring stations in Panhandle Field, costing	3,450
g.	Construct additional gathering lines serving new wells in Panhandle Field, costing	27,450
h.	Drill 4 wells in Hugoton Field (3 in Oklahoma and 1 in Kansas), costing	75,441
i.	Install liners in 2 old wells in Hugoton Field (both 50% owned), costing	1,018
j.	Construct well lines to connect 3 Oklahoma wells (the new Kansas well to be served by Argus), costing	2,593
k.	Construct 3 measuring stations in Hugoton Field, costing	2,070
l.	Construct additional gathering lines to serve new wells in Hugoton Field, costing	269,570
	Total	521,768
	Less credit on liners paid by joint owner	509
	Net expenditures	521,259

1945

a.	Install liners in 4 old wells in Panhandle Field, costing	2,519
b.	Install tubing in 2 old wells in Panhandle Field, costing	4,400
c.	Acidize 5 old wells in Panhandle Field, costing	7,750
[fol. 13176] d.	Install 2 additional 1300 H.P. units at Sneed Station with additional scrubber, cooling tower and auxiliary engine, costing	$ 362,800
e.	Drill 4 wells in Hugoton Field (2 in Kansas and 2 in Oklahoma), costing	75,360
f.	Install liners in 3 old wells in Hugoton Field (one 50% owned), costing	1,490
g.	Install tubing in 2 old wells in Hugoton Field (50% owned), costing	3,854
h.	Acidize 4 old wells in Hugoton Field (50% owned), costing	6,200
i.	Construct well lines to connect 4 new wells in Hugoton Field, costing	11,279
j.	Construct 4 measuring stations in Hugoton Field, costing	2,760

k.	Construct additional gathering lines to serve new wells in Hugoton Field, costing	85,800
	Total	564,278
	Less credit for contribution by joint owner for acidization, liners and tubing	5,185
	Net expenditures	559,093

1946

a.	Install liners in 2 old wells in Panhandle Field, costing	1,320
b.	Install tubing in 2 old wells in Panhandle Field, costing	4,556
c.	Acidize 3 old wells in Panhandle Field, costing	4,650
d.	Construct one additional dwelling Zofness Camp, costing	6,000
e.	Drill 15 wells in Hugoton Field (10 in Oklahoma and 5 in Kansas, costing	282,485
f.	Construct well lines to connect 15 new wells in Hugoton Field, costing	46,865
g.	Construct 15 measuring stations in Hugoton Field, costing	10,350
[fol. 13177]	b. Construct additional gathering lines to serve 15 wells in the Hugoton Field, costing	264,407
	Total expenditures	$ 620,633

The foregoing tabulations, aggregating $4,983,423, represent the capital expenditures which would be required by the end of 1946 for additional facilities in the wells and gathering lines of Panhandle Eastern Pipe Line Company, if its load were not increased beyond the present annual demand. I have used that estimate as a base for determining the capital expenditures which will probably be required over that same period of time by way of additions to the production and gathering facilities, in order to permit the Company to deliver to its main pipe line the volumes of gas which Mr. Morton has estimated will be required during that same period. I now present tabulations based on such estimates.

b. Anticipated Load

Last Six Months of 1941

a.	Construct and install specially designed liquid separator between Sneed and Hansford Stations in Texas (now being installed), costing	$ 26,300
b.	Construct 2 individual well compressors at Burnett Well No. 108 and Bivins Well No. 91 in Panhandle Field (now being constructed), costing	2,100
c.	Construct warehouse at Zofness Camp (completed in August 1941), costing	500
d.	Drill well near Guymon, Oklahoma, in Hugoton Field, costing	18,851

j.	Construct well lines connecting 5 Oklahoma wells and 5 Kansas wells, costing	16,820
k.	Construct 10 measuring stations in Hugoton Field, costing	6,900
l.	Construct additional gathering lines serving new wells in Hugoton Field, costing	207,951
m.	Construct and install 5 well dehydrators in Hugoton Field, costing	1,250
	Total	612,365
	Less credit contribution by joint owner on liners	509
	Net expenditures	611,856

1945

a.	Install liners in 4 old wells in Panhandle Field, costing	2,512
b.	Install tubing in 2 old wells in Panhandle Field, costing	4,406
c.	Acidize 5 old wells in Panhandle Field, costing	7,750
d.	Drill 10 wells in Hugoton Field (5 in Kansas and 5 in Oklahoma), costing	188,230
e.	Install liners in 3 old wells in Hugoton Field (one 50% owned), costing	1,490
f.	Install tubing in 2 old wells in Hugoton Field (both 50% owned), costing	3,854
g.	Acidize 4 old wells in Hugoton Field (all 50% owned), costing	6,200
h.	Construct well lines to connect 10 new wells in Hugoton Field, costing	36,234
[fol. 13182]	i. Construct 10 measuring stations in Hugoton Field, costing	6,900
j.	Construct additional gathering lines to serve new wells in Hugoton Field, costing	135,257
	Total	392,900
	Less credit contribution for joint owner account acidization, liners and tubing	5,185
	Net expenditures	387,715

1946

a.	Install liners in 2 old wells in Panhandle Field, costing	1,320
b.	Install tubing in 2 old wells in Panhandle Field, costing	4,536
c.	Acidize 3 old wells in Panhandle Field, costing	4,650
d.	Construct 1 additional dwelling at Zotness Camp, costing	6,000
e.	Drill 20 wells in Hugoton Field (10 in Kansas and 10 in Oklahoma), costing	376,800
f.	Construct well lines to connect 20 new wells in Hugoton Field, costing	63,943
g.	Construct 20 measuring stations in Hugoton Field, costing	13,800
h.	Construct additional required gathering lines in Hugoton Field, costing	149,291
i.	Construct new compressor station near town of Hugoton serving areas West of Hugoton, at cost of	362,398

i.	Construct dehydration plant in connection with new compressor station, costing	70,000
k.	Construct 4 dwellings for employees—1 at Optima and 3 at new Hugoton Compressor Station, costing	24,000
l.	Construct 2 garages, a 3-car garage at Hugoton and a 2-car garage at Optima, costing	1,190
m.	Purchase 2 additional automobiles, one for use in the Hugoton area and the other for use in the Optima area, at a cost of	1,837
[fol. 13183] n.	New main station radio unit and eight 2-way radio units, costing	3,690
	Total	1,083,445
	Total expenditures under anticipated load	$7,147,219

Thus, even if no gas were required over the next 5½ years in excess of the volumes now being marketed by the Company, additional capital expenditures in at least the sum of $4,983,423 will be required by the end of 1946.

But, we know that larger volumes of gas will be required and that such increases, in large part, will be beyond the control of the Company. To serve present markets and the anticipated increases, capital expenditures in a more realistic figure will be required. To serve the existing markets, as well as anticipated increases, the capital expenditures required will be at least the sum of $7,147,219.

Statistical Schedule:

Schedule 1 of Exhibit 43 is a recapitulation of the additional capital expenditures required each year during the period referred to in order to care for the basic load. Schedule 2 of the same exhibit is a similar recapitulation of the expenditures which will be required to care for the estimated loads. These estimates only relate to the additional capital expenditures required South and West of Liberal Compressor Station.

Prices Used:

The unit costs used by me for material required in con- [fol. 13184] nection with these expenditures are either those used in Mr. Biddison's 1941 Reproduction New Report, Exhibit 39, or the prices for similar units paid by the Company under its last purchase orders. Labor charges have been computed on the schedules now current. None of the estimates takes into consideration the indicated future price advances.

Operation And Maintenance Expenses.

In addition to future capital expenditures, Panhandle Eastern will, in the future, be required to increase its operation and maintenance expenses, even to produce the same volumes of gas which it now produces. This necessity will result from lowered pressures and potentials in the gas fields, the increasing age of the physical properties, and the circumstance that the expenses incurred in connection with the Hugoton Field are greater in proportion to the volumes of gas produced than those now current in the Panhandle Field.

Schedules Discussed:

On Schedule 3, Pages 1, 2 and 3 of Exhibit 43, I have shown my estimate of operation and maintenance expenses which will be incurred in the Panhandle Field and in the Hugoton Field, respectively, over the period already described in order for the Company to produce and deliver to the main pipe line at Liberal Compressor Station the "basic load", that is, an amount of gas equivalent to the volumes now being so produced and delivered.

On Schedule 4, Pages 1, 2 and 3 of the same exhibit, I [fol. 13185] show the operation and maintenance expenses in those fields which I estimate will be required to so produce and deliver the anticipated requirements, that is, the volumes of gas which Mr. Morton has estimated will be needed to fulfill Panhandle Eastern's market requirements over the same period.

It will be noted that these schedules show the expenses incurred during 1940 and 1941 for comparison with those which are expected during the years 1942 to 1946. The 1940 figures are the expenses actually incurred by the Company during 1940. The 1941 figures reflect the actual expenses incurred during the first six months of the year and the estimated expenses during the last six months. These expenses so shown in Schedules 2 and 3 do not reflect any administrative or other general overhead Company expense. The general office expenses included are only those directly applicable to the activities of the production and gathering system.

Rising Price Levels:

I recognize that rising price levels will materially increase the cost of equipment heretofore purchased, but, since I have made no study with respect to the amount of such increased prices, I have not taken future price levels into consideration, but have assumed a continuance of present prices with respect to both material and labor. No consideration has been given probable increases in tax rates. All add valorem taxes have been computed on the assumption that the average rates over the past five years will continue.

Aggregate Future Production From Texas Leases.

In connection with my study of the Panhandle Field, I have estimated the volumes of gas which Panhandle Eastern will be able to take from its owned leases in the Pan- [fol. 13186] handle Field through the year 1956. In arriving at this estimate, I have taken into consideration the requirements of the main line through 1946 and have assumed that the Company will continue to take from the reserves in the Panhandle Field the same proportion of the market outlet which it now takes, so long as the wells drilled in that field will deliver such proportions. Under this apportionment, the maximum amount to be taken by Panhandle Eastern from the Panhandle Field during any one year would be 60 billion cubic feet.

I have then apportioned the withdrawals between wells belonging to Panhandle Eastern and wells belonging to other producers with whom it holds gas purchase contracts, on approximately the same percentage as is now being used in determining well allowables.

Following 1946, I made no allowance for increasing production from the Panhandle Field, but recognized that as the years go by the volumes in that field will become less and less irrespective of the increases which Panhandle Eastern may have in its aggregate market requirements. I also recognized that as the years go by a greater percentage of aggregate volumes taken from the Panhandle Field will be produced by Panhandle Eastern's own wells, with

e.	Purchase new automobile for use of field forces in Hugoton Field, costing	919
f.	Construct Cimarron River jetties to protect present river crossing from high water, costing	6,500
	Total	55,170

[fol. 13178] 1942

a.	Drill 5 wells in Panhandle Field, including acidization and liners, at a cost of	$ 106,463
b.	Install liners in 2 old wells in Panhandle Field, at a cost of	916
c.	Install tubing in 2 old wells in Panhandle Field, costing	4,262
d.	Acidize 4 old wells in Panhandle Field, costing	7,750
e.	Lay well lines for 5 new wells in Panhandle Field, costing	15,395
f.	Construct 5 measuring stations for new wells in Panhandle Field, costing	3,459
g.	Construct trunk gathering line, looping present line from Hansford Station South 31.1 miles, costing	672,133
h.	Increase capacity of present gathering line by looping existing lines and additional gathering lines, costing	422,464
i.	Install 2,600 additional H.P. at Sneed Station and increase cooling tower capacity, 1 additional auxiliary engine and one scrubber, costing	362,800
j.	Install 1300 H.P. at Hansford Station, costing	121,200
k.	Construct 12 additional dwellings for employees, including 3 at Zofness, 3 at Hansford and 6 at Sneed, one of the Hansford dwellings being a 10-room hotel for single employees, at a cost of	81,000
l.	Build 3 garages, a 3-car garage at Hansford, a 3-car garage at Sneed and a 6-car garage at Zofness, costing	2,760
m.	Drill 19 wells in Texas County, Hugoton Field, including liners and acidization, at a cost of	358,169
n.	Install liners in 2 old wells in Hugoton Field, at a cost of	762
o.	Acidize 4 old wells in Hugoton Field, costing	15,500
p.	Construct Cimarron River Crossing for loop line, costing	220,384
q.	Construct trunk gathering line from Liberal toward Hansford, looping existing line approximately 32 miles, at cost of	850,048
[fol. 13179] r.	Construct gathering line from Section 31, Township 4, to near Optima in Texas County, Oklahoma, costing	$ 324,180
s.	Construct gathering line in Oklahoma, connecting with the Optima line, at cost of	856,606
t.	Construct well lines for 20 new wells, costing	47,610
u.	Construct and install 10 well dehydrators, at cost of	2,500
v.	Construct 20 measuring stations, at cost of	13,800
w.	Construct 3 houses for employees at Optima Camp, costing	18,000
x.	Construct office building at Hugoton Camp, costing	7,000
y.	Construct warehouse at Optima Camp, costing	1,000
z.	Construct one 6-car garage at Optima Camp, costing	1,380
z-1	Construct telephone line to serve at Optima gathering line, costing	10,836
z-2.	Install 2-way radio station to serve area within 50 mile radius of Hugoton, costing	3,030

z-3 Purchase 3 automobiles (coupes) for serving portions of Hugoton Field, costing	2,756
z-4 Purchase 1-ton truck for Oklahoma area, costing	1,072
Total	4,535,220
Less credit on acid treatment from joint owner	4,650
Net expenditures	4,530,570

1943

a. Drill 5 wells in Panhandle Field, including acidization and liners, costing	110,631
b. Install liners in 3 old wells in Panhandle Field, costing	1,746
c. Install tubing in 2 old wells in Panhandle Field, costing	4,528
d. Acidize 5 old wells in Panhandle Field, costing	7,750
[fol 13180] e. Construct well lines for 5 new wells in Panhandle Field, costing	$ 23,335
f. Construct 5 measuring stations in Panhandle Field, costing	3,450
g. Construct additional gathering lines to serve new wells in Panhandle Field, costing	7,815
h. Drill 12 wells in Hugoton Field (10 in Oklahoma and 2 in Kansas), costing	226,292
i. Install liners in 2 old wells in Hugoton Field, costing	796
j. Acidize 8 old wells in Hugoton Field (4 being 50% owned) costing	12,400
k. Construct well lines connecting 10 Oklahoma wells (2 Kansas well lines being built by Argus), costing	20,710
l. Construct 10 measuring stations in Hugoton Field, costing	6,900
m. Construct and install 10 well dehydrators, costing	2,500
n. Construct additional gathering lines serving new Hugoton wells, costing	52,710
Total	481,563
Less credit on acid treatment by joint owner	3,100
Net expenditures	478,463

1944

a. Drill 5 wells in Panhandle Field, including acidization and liners, costing	103,967
b. Install liners in 4 old wells in Panhandle Field, costing	2,079
c. Install tubing in 4 old wells in Panhandle Field, costing	9,756
d. Acidize 6 old wells in Panhandle Field, costing	9,309
e. Lay well lines connecting 5 new wells in Panhandle Field, costing	15,071
f. Construct 5 measuring stations in Panhandle Field, costing	3,450
[fol. 13181] g. Construct additional gathering lines serving new wells in Panhandle Field, costing	$ 27,450
h. Drill 11 wells in Hugoton Field (5 in Oklahoma and 6 in Kansas), costing	207,353
i. Install liners in 2 old wells in Hugoton Field (both 50% owned), costing	1,018

lesser percentages produced from gas purchase wells, due to differences in probable pressures and potentials and to the further circumstance that the economics of its project might permit Panhandle Eastern to install well booster stations in connection with its wells, whereas the economics of some others holding gas purchase contracts might not justify such expenditure. Allowing for these various elements, I have estimated the volumes of gas which Panhandle Eastern will probably be able to produce from its [fol. 13187] own wells and wells under gas purchase contracts during the period ending December 31, 1956. That estimate is presented on Schedule 5 of Exhibit

Abandonment Of Panhandle Field

Panhandle Eastern must face the fact that the time will come when it will not be economically advisable for it to attempt to continue its production operations in the Panhandle Field. When that time will come cannot, with certainty, be determined. The many competitive interests producing from that field, the probabilities of the future requirements of all of such competitive interests, the irregularity in the existing pressure and production patterns, and many other elements make a definite determination of the necessary abandonment point impossible. While this is true, it is also true that past and present trends indicate within a reasonable degree of certainty what may be expected in the future. I have, for several years, been carefully watching and considering these trends and their effect in the areas from which Panhandle Eastern is taking gas. My duties make it necessary for me continuously to study existing trends in arriving at the recommendations which I make to the management with respect to further and future operations in that field. We must, of course, plan for the future with the hope of producing the most gas which we can economically take from the field and yet we cannot afford to make expenditures in the field which will not be justified by the volumes of the gas which we may reasonably expect to thereafter produce. It has been necessary, therefore, in my estimates of future production from the field to take into consideration all known factors which would in any way have an influence on the point at which it will not become economic for this Company longer to utilize its facilities in the Panhandle Field.

[fol. 13188] While it is frequently the case that reserves in a field or reserves under particular leases are computed on assumed abandonment pressures and with allowances of assumed recovery percentages, such a rule cannot be applied with certainty to this field, or, in my opinion, to any particular company in this field in determining the point at which it ceases to produce gas. Different companies will be differently situated. Some may be able to produce at a much lower abandonment pressure than the economics of other companies will justify. This is especially true with respect to pipe lines which serve local areas or pipe lines whose operating pressures can be substantially lower than those which may be required by the economics of other companies. Also, those producing gas for manufacture of carbon black or other products do not require gas at high pressures, since the plants are located in the field, and may be able to take gas at very low pressures.

After a careful study of Panhandle Eastern's reserves, its gathering lines and its operating problems, I have reached the conclusion that it may be able to continue to produce some of its wells down to approximately 50 pounds wellhead pressure. The probability is that many wells owned by this Company may be abandoned at substantially higher pressures, since the deliverability of gas from gas wells varies even at the same pressures, and a determination of the amount of gas which the Company can actually take from a well at a given time is of greater importance than a determination of the existing pressure at that particular well.

In making my study of the point at which it will probably not be economic for Panhandle Eastern to further operate in the Panhandle Field, I first divided the area from which [fol. 13189] it takes gas into seven producing areas. Exhibit 46 is a map showing those separate areas. I did this so that a careful and detailed study might be made of the various areas from the standpoint of past pressures, potentials and gas deliverability. I also took into consideration the gathering lines which Panhandle Eastern now has in the Panhandle Field serving those different areas.

I then determined the pressure record and rates of withdrawal of each area, giving consideration to the rate of de-

velopment during the past six years, the number of undrilled units remaining in each area and estimates of geologists with respect to the acre gas content, on the assumption that the average per acre gas content of the better area of the field is approximately that of Panhandle Eastern's reserves.

I then developed a pressure decline curve for each of the group areas and determined the deliverability of gas at various operating pressures from the wells located in those areas. This gave me a good idea of the volumes of gas which might be expected from the various wells at such well pressures as may hereafter exist. This was, of course, on the assumption that the physical condition of the wells would not change.

After having made this study of each individual area, I developed a pressure trend curve for the field as a whole, based on past performances and on the assumption that the pressure reports of the Texas Railroad Commission are accurate. I obtained the best information I could with respect to the volumes of gas which have been produced [fol. 13190] from the field during various pressure periods and applied that information in developing the pressure trend curve.

I realilzed that an average trend curve for the field as a whole could not be applied directly to all the areas involved, but felt that it would exert a substsantial influence on the declining pressures in each of the areas. I recognized that the rate of production would be different in the different areas and that similar amounts of production from each area would not result in the same pressure drops. Therefore, taking the pressure trend curve for the field as a whole as a base, I prepared my own estimate of the pressure trends in the seven producing areas referred to, thus reaching a conclusion as to the pressures which will probably exist in each of those areas at different times, based on my best judgment with respect to the production which will be taken from those areas.

I reached the conclusion that the pressures in these areas will probably reach the approximate pressure of 50 pounds at different periods during the years 1956 to 1960 and, therefore, that if 50 pounds be the actual abandonment

pressure, it would not be economic for the Company to continue to produce from those areas after those dates.

Considering the areas as a whole, I reached the conclusion that during 1957 the Company probably will not be able to produce more than 5 billion cubic feet from both the gas purchase reserves and the owned reserves, of which approximately 3,453,000 cubic feet will be taken from its own reserves. These probable limits will continue to decrease, so that by 1960 it would probably not be able to produce more than approximately 2 billion cubic feet, all of which will probably be taken from its own wells.

[fol. 13191] Whether it will be economical for this Company to continue to produce gas after the deliverability declines to 7 billion cubic feet in 1956 is problematical. At that time it probably cannot take more than approximately 4.8 billion cubic feet from its own wells annually, or an average of approximately 181 MCF daily from each of its 72 wells. Whether it can at that time continue further to utilize its facilities in the Panhandle Field is doubtful. Certainly any further reductions in the volumes it can expect to produce from its wells will make it less and less advisable to continue to incur the necessary operation and maintenance expenses required to operate in that field.

Therefore, it is my judgment that Panhandle Eastern will not be justified in further producing gas from its reserves in the Panhandle Field longer than 15 years from the present.

Exhibit 44 is a map, prepared by me, showing the development program as to both new wells and gathering facilities which will be required by the end of 1946, if the market requirements of Panhandle Eastern remain at their present level—in other words, without giving consideration to increased market requirements.

Exhibit 45 is a similar map, prepared by me, showing the development program which will be required in connection with the drilling of wells and furnishing gathering facilities to meet the added market requirements estimated by Mr. Morton.

The legends on these maps, found in the lower right hand corner of each, are self-explanatory. A different color is used to indicate the development required each year. Acreage under lease by the Company which will be [fol. 13192] drilled in later years of the project is also show on these maps and acreage under gas purchase contracts is also appropriately shown.

[fol. 13193] Exhibit 43.

Schedules Presented in Connection With the Testimony of C. H. Hinton.

[fol. 13194] Schedule 1

Additional Capital Expenditures Required To Produce And Gather Basic Load, Or Present Requirements

Line No.	Period (A)	Amount (B)
1	1941 (last 6 months)	$ 55 170
2	1942	2 756 732
3	1943	470 536
4	1944	521 259
5	1945	559 093
6	1946	620 633
7	Total	$4 983 423

[fol. 13195] Schedule 2

Additional Capital Expenditures Required To Produce And Gather Anticipated Increased Load

Line No.	Period (A)	Amount (B)
1	1941 (Last 6 months)	$ 55 170
2	1942	4 530 570
3	1943	478 463
4	1944	611 856
5	1945	387 715
6	1946	1 083 445
7	Total	$7 147 219

[fol. 13196]

Estimate Of Operation And Maintenance Costs Wes
(Note: 1940 actual, 1941 six months ac

Line No.	Department (A)	1940 (B)	1941 (C)	194 (D
1	Transmission			
2	Operation	$18 912	$23 132	$24 9
3	Maintenance	6 369	9 649	12 0
4	Total	24 281	32 781	37 0
5	Measurement			
6	Company Operation	9 290	7 075	8 4
7	Company Maintenance	1 313	1 072	1 2
8	Purchase Operation	5 945	5 610	6 3
9	Purchase Maintenance	413	450	5
10	Total	16 961	14 207	16 5
11	Compressor			59 4
12	Operation — Hansford	—	51 498	73 3
13	Maintenance — Hansford	—	11 395	11 9
14	Operation — Sneed	71 882	87 333	103 2
15	Maintenance — Sneed	11 857	12 471	12 7
16	Total	83 739	162 397	187 4 201 1
17	Production			
18	Operation	22 239	21 657	21 5
19	Maintenance	11 821	7 990	9 0
20	Total	34 060	29 647	30 5
21	Land and Lease			
22	Operation	5 699	3 810	3 8
23	Royalties	101 182	132 882	139 9
24	Rents	325	325	3
25	Delay Rentals	12 544	9 411	11 0
26	Renewal-Bonus	8 000	4 873	—
27	Total	127 750	151 301	153 6

Schedule 3
Page 1
Witness Hinton

Of Liberal Panhandle Field — Basic Load
ual and six months estimated)

	1943 (E)	1944 (F)	1945 (G)	1946 (H)	Total 5 years 1942 - 1946 (I)
2	$25 970	$26 283	$26 290	$26 290	$ 129 815
0	12 485	12 685	13 085	13 085	63 390
2	38 455	38 968	39 375	39 375	193 205
4	11 564	12 217	12 749	13 306	58 250
1	1 794	1 886	1 932	1 981	8 887
6	6 586	6 868	7 162	7 470	34 402
2	534	557	581	606	2 790
6	20 478	21 528	22 424	23 363	104 329
9	59 861	60 271	60 710	61 207	301 528
0	78 511	79 651	85 510	86 007	409 878
4	12 563	13 191	13 850	14 543	66 111
7	108 604	112 987	126 884	132 348	584 080
0	13 419	14 089	14 794	15 534	70 616
0	194 447	200 538	216 238	223 632	1 022 335
0	213 097	219 938	241 038	248 432	1 123 685
0	22 800	24 500	26 300	27 100	122 200
0	10 300	11 750	13 300	14 100	58 500
0	33 100	36 250	39 600	41 200	180 700
0	3 800	3 800	3 800	3 800	19 000
2	144 889	149 369	152 027	174 074	760 261
5	325	325	325	325	1 625
1	6 861	4 932	3 097	3 097	29 018
		800	2 050	800	3 650
8	155 875	159 226	161 299	182 096	813 554

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Estimate Of Operation And Maintenance Costs West O

(Note: 1940 actual, 1941 six months actual

Line No.	Department (A)	1940 (B)	1941 (C)	1942 (D)
1	Transmission			
2	Operation	$ 20 339	$ 27 074	$ 32 075
3	Maintenance	5 923	7 943	12 474
4	Total	26 262	35 017	44 549
5	Measurement			
6	Company Operation	7 807	8 238	11 603
7	Company Maintenance	1 314	1 611	2 421
8	Purchase Operation	6 380	6 255	6 833
9	Purchase Maintenance	749	764	829
10	Total	16 250	16 868	21 686
11	Compressor			
12	Operation			
13	Maintenance			
14	Operation			
15	Maintenance			
16	Total			
17	Production			
18	Operation	14 042	16 573	17 373
19	Maintenance	3 492	5 470	6 450
20	Total	17 534	22 043	23 823
21	Land and Lease			
22	Operation	7 447	7 712	7 500
23	Royalties	41 698	42 072	45 775
24	Rents			
25	Delay Rentals	76 514	80 314	91 504
26	Renewal Bonus	4 286	5 641	15 075
27	Total	129 945	135 739	159 852
28	Taxes			
29	Ad Valorem		59 022	60 308
30	Gross Production		3 937	5 528
31	Total		62 960	65 836
32	Grand Total	$189 991	$272 627	$315 746

f Liberal Hugoton Field — Basic Load

and six months estimated.)

	1943 (E)	1944 (F)	1945 (G)	1946 (H)	Total 5 Years 1942-1946 (I)
	$ 32 235	$ 35 195	$ 35 195	$ 35 490	$ 170 190
	12 755	16 485	16 135	16 410	74 259
	44 990	51 680	51 330	51 900	244 449
	12 878	14 338	15 964	18 662	73 445
	2 662	2 941	3 264	3 804	15 092
	7 124	7 218	7 525	7 845	36 545
	862	896	931	968	4 486
	23 526	25 393	27 684	31 279	129 568
	20 223	21 823	21 673	21 008	102 100
	6 900	7 500	7 950	8 300	37 100
	27 123	29 323	29 623	29 308	139 200
	8 000	8 500	8 500	8 500	41 000
	47 979	49 223	50 556	55 353	248 884
	89 426	87 466	86 266	85 146	439 808
	49 111	6 360	2 143	27 439	100 128
	194 516	151 549	147 465	176 438	829 820
	83 166	85 924	90 493	92 604	111 895
	6 810	7 520	7 909	9 775	37 242
	89 976	93 444	98 402	101 779	449 437
	$380 131	$351 389	$354 504	$390 704	$1 792 474

[fol. 13202] Schedule 5

Witness Hinton

Probable Production From Panhandle Eastern's Own Wells And Wells Under Gas Contracts (Panhandle Field) During The Period July 1, 1940 To December 31, 1956

Line No.	Period (A)	M C F Panhandle Eastern Wells (B)	Gas Purchase Wells (C)
1	1941 (Last 6 months)	11 811 800	10 182 000
2	1942	27 635 000	22 365 000
3	1943	30 909 000	23 100 000
4	1944	32 455 000	22 545 000
5	1945	36 036 000	23 964 000
6	1946	36 024 000	23 976 000
7	1947	36 024 000	23 976 000
8	1948	36 186 000	23 814 000
9	1949	33 363 000	21 637 000
10	1950	30 505 000	19 495 000
11	1951	27 612 000	17 388 000
12	1952	24 984 000	15 016 000
13	1953	20 339 000	11 611 000
14	1954	14 225 000	7 775 000
15	1955	6 576 000	3 424 000
16	1956	4 834 200	2 166 000

[fol. 13206] Exhibit 47

Panhandle Eastern Pipe Line Company And Subsidiary Company
Future Capital Requirements Gas Transmission Facilities
Liberal Station And Eastward

Line No.	(A)	(B)
1	1941	
2	Additions to Main Lines	$ 4 292 500
3	Additions to Compressor Stations	344 100
4	So. Michigan North Line	3 893 300
5	Lateral Lines	463 800
6		8 993 700
7	1942	
8	Additions to Main Lines	2 526 900
9	Additions to Compressor Stations	1 593 900
10	Additions to Gasoline and Dehydration Equipment	120 000
11	S. Michigan West Line	1 766 000
12	Telephone Line East	522 800
13	Lateral Lines	254 200

Schedule 4
Page 1
Witness Hinton

Estimate Of Operation And Maintenance Costs — West Of Liberal Panhandle Field — Estimated Future Load
(Note: 1940 actual; 1941 six months actual and six months estimated)

Line No.	Department (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)	Total 5 years 1942—1946 (I)
1	Transmission								
2	Operation	$18 612	$ 23 131	$ 26 235	$ 26 770	$ 27 078	$ 27 078	$ 27 078	$ 134 239
3	Maintenance	6 369	9 649	12 741	13 365	13 530	13 920	13 920	67 476
4	Total	24 281	32 780	38 976	40 135	40 608	40 998	40 998	201 715
5	Measurement								
6	Company Operation	9 289	7 075	8 414	11 564	12 217	12 749	13 306	58 250
7	Company Maintenance	1 313	1 072	1 294	1 794	1 886	1 932	1 981	8 887
8	Purchase Operation	5 945	5 609	6 316	6 586	6 868	7 162	7 470	34 402
9	Purchase Maintenance	413	449	512	534	557	581	606	2 790
10	Total	16 960	14 205	16 536	20 478	21 528	22 424	23 363	104 329
11	Compressor			73 179	78 511	79 671	85 510	86 007	402 878
12	Operation — Hansford	—	51 498	~~59 479~~	~~59 861~~	~~60 274~~	~~60 710~~	~~61 207~~	~~301 528~~
13	Maintenance — Hansford	—	11 305	11 964	12 563	13 191	13 850	14 543	66 111
14	Operation — Sneed	71 881	87 332	117 150	129 307	136 249	153 007	160 125	695 928
15	Maintenance — Sneed	11 856	12 171	12 779	13 418	14 089	14 794	15 534	70 614
16	Total	83 737	162 396	215 072	233 889	243 200	267 161	276 209	1 235 531
				~~201 472~~	~~215 269~~	~~229 688~~	~~242 861~~	~~251 409~~	~~1 140 701~~
17	Production								
18	Operation	22 238	21 657	21 500	22 800	24 500	26 300	27 100	122 200
19	Maintenance	11 821	7 989	9 050	10 300	11 750	13 300	14 100	58 500
20	Total	34 059	29 646	30 550	33 100	36 250	39 600	41 200	180 700
21	Land and Lease								
22	Operation	5 699	3 809	3 800	3 800	3 800	3 800	3 800	19 000
23	Royalties	101 182	132 882	155 447	173 867	182 562	202 703	232 099	946 678
24	Rents	325	325	325	325	325	325	325	1 625
25	Delay Rentals	12 544	9 411	11 030	6 860	4 932	3 097	3 097	29 016
26	Renewal Bonus	8 000	4 873	—	—	800	2 050	800	3 650
27	Total	127 750	151 300	170 602	184 852	192 419	211 975	240 121	999 969

ol. 13201]

Schedule 4
Page 3
Witness Hinton

Estimate Of Operation And Maintenance Costs West Of Liberal Hugoton Field — Estimated Future Load
(Note: 1940 Actual, 1941 six months actual and six months estimated.)

Line No.	Department (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)	Total 5 Years 1942 - 1946 (I)
1	Transmission								
2	Operation	$ 20 339	$ 27 074	$ 37 260	$ 38 450	$ 39 550	$ 42 250	$ 44 350	$201 860
3	Maintenance	5 923	7 943	12 545	13 085	13 555	15 590	16 740	71 515
4	Total	26 262	35 017	49 805	51 535	53 105	57 840	61 090	273 375
5	Measurement								
6	Company Operation	7 807	8 238	12 200	13 973	15 633	17 357	20 057	79 220
7	Company Maintenance	1 314	1 611	2 544	2 887	3 264	3 530	4 070	16 295
8	Purchase Operations	6 380	6 255	6 851	7 124	7 218	7 525	7 845	36 563
9	Purchase Maintenance	749	764	829	862	878	931	968	4 468
10	Total	16 250	16 868	22 424	24 846	26 993	29 343	32 940	136 546
11	Compressor								
12	Operation — Hugoton	—	—	—	—	—	—	23 832	23 832
13	Maintenance — Hugoton	—	—	—	—	—	—	6 250	6 250
14	Total	—	—	—	—	—	—	30 082	30 082
15	Production								
16	Operation	14 045	16 572	16 223	18 983	21 283	21 343	20 143	97 975
17	Maintenance	3 492	5 470	6 450	6 900	7 500	7 950	8 300	37 100
18	Total	17 537	22 042	22 673	25 883	28 783	29 293	28 443	135 075
19	Land and Lease								
20	Operation	7 447	7 712	7 500	8 000	8 500	8 500	8 500	41 000
21	Royalties	41 698	42 072	53 207	59 860	74 035	76 498	115 147	378 747
22	Rents	—	—	—	—	—	—	—	—
23	Delay Rentals	76 514	80 314	91 504	87 827	84 707	81 107	77 707	422 852
24	Renewal Bonus	4 286	5 641	10 791	46 292	6 360	2 143	26 660	92 246
25	Total	129 945	135 739	163 002	201 979	173 602	168 248	228 014	934 845
26	Taxes								
27	Ad Valorem	—	59 022	60 309	91 665	93 046	96 688	99 483	441 191
28	Gross Production	—	3 937	7 722	10 379	13 742	14 675	23 387	69 905
29	Total	—	62 959	68 031	102 044	106 788	111 363	122 870	511 096
30	Grand Total	$189 994	$272 625	$325 935	$406 287	$389 271	$396 087	$503 439	$2 021 019

Schedule 3
Page 2
Witness Hinton

Estimate Of Operation And Maintenance Costs West of Liberal Panhandle Field — Basic Load
(Continued)
(Note: 1940 actual, 1941 six months actual and six months estimated)

Line No.	Department (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)	Total 5 years 1942 - 1946 (I)
1	Dehydration Plant								
2	Sneed								
3	Operation	$ —	$ 4 756	$ 4 878	$ 4 878	$ 4 878	$ 4 878	$ 4 878	$ 24 390
4	Maintenance	—	611	642	674	708	743	780	3 547
5	Total	—	5 367	5 520	5 552	5 586	5 621	5 658	27 937
6	Taxes								
7	Ad Valorem	—	25 146	25 631	29 935	30 748	31 835	31 835	149 984
8	Gross Production	—	37 614	39 601	41 013	42 281	43 033	49 274	215 202
9	Total	—	62 754	65 232	70 948	73 029	74 868	81 109	365 186
10	Grand Total	$286 791	$458 454	497 408 ~~$511 108~~	518 855 ~~$307 505~~	535 125 ~~$554 525~~	559 425 ~~$576 225~~	596 433 ~~$621 243~~	2 707 246 ~~$2 808 606~~

Schedule 4
Page 2
Witness Hinton

ıate Of Operation And Maintenance Costs — West Of Liberal Panhandle Field — Estimated Future Load
(Continued)

(Note: 1940 actual, 1941 six months actual and six months estimated)

1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)	Total 5 years 1942 – 1946 (J)
$ —	$ 4 756	$ 5 404	$ 5 836	$ 5 945	$ 6 485	$ 6 485	$ 30 155
—	611	725	787	804	874	878	4 068
—	5 367	6 129	6 623	6 749	7 359	7 363	34 223
—	25 140	25 161	29 406	30 278	31 365	31 365	147 635
—	37 614	44 001	49 215	51 677	57 378	65 698	267 969
—	62 754	69 162	78 681	81 955	88 743	97 063	415 604
$286 787	$458 448	547 027 ~~$533 327~~	597 758 ~~$570 108~~	622 709 ~~$603 309~~	678 200 ~~$653 400~~	726 317 ~~$701 517~~	3 172 071 ~~$3 070 721~~

14	Warehouse Paola	7 500
15		6 791 300
16	1943	
17	Additions to Compressor Stations	3 482 800
18	Additions to Gasoline and Dehydration Equipment	286 000
19		3 768 800
20	1944	
21	Additions to Main Lines	6 228 600
22	Additions to Compressor Stations	455 500
23		6 684 100
24	1945	
25	Additions to Main Lines	6 329 600
26	Additions to Compressor Stations	637 500
27	Additions to Gasoline and Dehydration Equipment	120 000
28		7 087 100
29	1946	
30	Additions to Main Lines	2 388 100
31	Additions to Compressor Stations	1 229 500
32		3 617 600
33	Total	$36 942 600

Panhandle Eastern Pipe Line Company and Subsidiary Companies

Assets

December 31

Line No.	Item (A)	1930 (B)	1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)	1937 (I)	1938 (J)
1	Gas Plant	$44 432 256 86	$55 414 134 62	$45 606 714 20	$45 625 712 23	$45 525 157 54	$45 495 363 07	$49 863 521 83	$60 977 186 19	$61 214 797 0
2	Investments and Fund Accounts									
3	Other Investments	200 169 09	200 169 09	190 784 68	187 724 68	180 240 68	1 00	150 146 84	199 430 77	225 898 0
4	Current and Accrued Assets									
5	Cash	713 599 28	430 459 43	456 864 60	494 528 10	498 968 73	726 495 15	963 219 16	1 546 962 47	1 396 964 8
6	Special Deposits	8 772 563 72	909 00	423 997 72	660 75	630 689 07	854 07	1 527 31	6 038 25	4 758 2
7	Working Funds (Petty Cash									
8	and Advances)	21 268 54	8 747 46	3 109 93	2 215 79	2 505 13	2 234 12	5 261 77	4 416 14	4 997 1
9	Notes Receivable	57 500 00	1 051 338 64	1 051 843 40	300 953 36	150 847 80	150 706 20	12 532 38	3 991 75	14 854 8
10	Accounts Receivable	181 501 89	365 109 83	364 238 03	373 714 29	383 272 01	489 507 74	996 229 66	971 532 85	1 126 143 5
11	Interest and Dividends									
12	Receivable	—	108 43	116 81	6 35	5 65	4 70	7 565 93	6 492 87	5 959 4
13	Material and Supplies	235 221 44	496 381 01	409 308 39	269 574 03	264 929 92	228 070 68	215 387 53	257 963 63	165 267 5
14	Prepayments	9 276 79	31 133 58	37 492 72	34 499 61	39 725 23	40 685 07	41 296 84	80 232 10	78 881 9
15	Total Current and Accrued Assets	9 990 931 66	2 384 187 38	2 746 971 60	1 476 152 28	1 970 943 54	1 638 557 73	2 243 020 58	2 877 630 06	2 797 827 5
16	Deferred Debits									
17	Unamortized Debt Discount and									
18	Expense	2 026 261 70	1 968 010 43	1 860 157 13	1 702 747 90	1 601 091 34	1 406 686 22	1 267 225 96	3 173 881 35	2 854 201 8
19	Extraordinary Property Losses	—	—	279 538 39	358 095 27	409 467 63	11 752 17	11 752 17	—	—
20	Clearing Accounts	—	—	—	—	—	—	—	3 122 21	—
21	Retirement Work in Progress	—	73 880 86	3 320 48	10 106 56	6 931 20	6 964 81	146 11	—	—
22	Other Work in Progress	—	12 897 13	2 027 56	1 353 03	1 163 45	6 199 85	10 793 16	29 447 87	30 898 9
23	Other Deferred Debits	8 744 85	9 997 02	46 274 98	48 997 03	43 315 85	35 618 40	21 093 06	14 624 98	13 311 3
24	Total Deferred Debits	2 035 006 35	2 064 785 44	2 191 318 54	2 121 299 79	2 061 969 47	1 467 221 45	1 311 010 46	3 212 076 41	2 898 415 1
25	Reacquired Securities									
26	Reacquired Long-Term Debt	—	—	—	—	—	—	—	454 000 00	—
27	Total Assets and Other Debits	$56 658 364 16	$60 063 276 53	$50 735 789 02	$49 410 888 98	$49 738 311 23	$48 601 143 25	$53 567 699 71	$67 720 323 43	$67 136 937 8

Balance Sheets — Per Books

ry Companies

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	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	June 30, 1941 (M)
3 07	$49 863 521 83	$60 977 186 19	$61 214 797 04	$61 838 380 91	$66 906 389 76	$66 689 669 51
1 00	150 146 84	199 430 77	225 898 06	228 791 91	235 598 10	214 298 25
5 15	963 219 16	1 546 962 47	1 396 964 87	5 479 321 37	3 744 194 06	7 032 361 41
4 07	1 527 31	6 038 25	4 758 25	5 028 25	9 125 75	1 489 127 23
4 12	5 261 77	4 416 14	4 997 18	8 419 45	9 189 00	10 330 24
6 20	12 532 38	3 991 75	14 854 84	16 020 60	2 150 63	—
7 74	996 229 66	971 532 85	1 126 143 55	1 280 529 32	1 445 442 03	1 053 701 35
4 70	7 565 93	6 492 87	5 959 40	5 237 70	3 801 78	1 423 87
0 68	215 387 53	257 963 63	165 267 50	159 321 97	212 314 42	268 861 88
5 07	41 296 84	80 232 10	78 881 97	84 806 27	64 918 68	135 113 86
7 73	2 243 020 58	2 877 630 06	2 797 827 56	7 038 684 93	5 491 136 35	9 990 919 84
6 22	1 267 225 96	3 173 881 35	2 854 204 85	2 539 351 98	2 229 322 74	2 101 985 62
2 17	11 752 17	—	—	—	—	—
	—	3 122 21	—	—	—	4 341 28
4 81	146 11	—	—	—	—	11 345 68
9 85	10 793 16	20 447 87	30 898 92	59 79	2 975 91	643 791 98
8 40	21 093 06	14 624 98	13 311 38	6 00	837 08	1 537 47
1 45	1 311 010 46	3 212 076 41	2 898 415 15	2 539 417 77	2 233 135 73	2 763 002 03
	—	454 000 00	—	—	—	—
3 25	$53 567 699 71	$67 720 323 43	$67 136 937 81	$71 645 275 52	$74 866 259 94	$79 657 889 69

Panhandle Eastern Pipe Line Company and Subsidiary Companies

Liabilities

December 31

Line No.	Item (A)	1930 (B)	1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)
1	Capital Stock										
2	Common Capital Stock	$ 100 000 00	$ 980 000 00	$ 1 199 000 00	$ 1 199 000 00	$ 1 199 000 00	$ 1 199 000 00	$18 216 300 00	$18 216 300 00	$18 216 300 00	$20 184 175
3	Preferred Capital Stock	—	—	—	—	—	—	11 000 000 00	11 000 000 00	11 000 000 00	11 000 000
4	Total Capital Stock	100 000 00	980 000 00	1 199 000 00	1 199 000 00	1 199 000 00	1 199 000 00	29 216 300 00	29 216 300 00	29 216 300 00	31 184 175
5	Long-Term Debt										
6	Bonds	20 000 000 00	20 000 000 00	20 000 000 00	19 400 000 00	19 400 000 00	18 200 000 00	17 589 000 00	24 000 000 00	23 500 000 00	23 000 000
7	Miscellaneous Long-Term Debt	—	7 920 000 00	9 891 000 00	9 993 500 00	9 981 594 75	9 976 670 24	172 244 41	2 158 848 83	2 062 664 20	41 436
8	Total Long-Term Debt	20 000 000 00	27 920 000 00	29 891 000 00	29 393 500 00	29 381 594 75	28 176 670 24	17 761 244 41	26 158 848 83	25 562 664 20	23 041 436
9	Current and Accrued Liabilities										
10	Notes Payable	4 012 000 00	—	—	—	—	—	400 000 00	2 625 000 00	—	—
11	Accounts Payable	2 394 496 69	168 669 71	70 058 14	91 691 52	91 168 32	101 847 05	579 220 46	309 825 00	174 172 16	523 121
12	Dividends Declared	—	—	—	—	—	—	—	165 000 00	165 000 00	165 000
13	Matured Long-Term Debt	—	—	—	—	—	—	—	2 110 00	1 582 50	1 582
14	Matured Interest	—	—	—	—	593 460 00	1 186 920 00	540 00	2 352 50	2 290 00	890
15	Customers' Deposits	6 839 00	2 050 00	2 262 00	2 198 00	1 990 00	1 943 00	2 276 00	2 370 00	2 840 00	3 415
16	Taxes Accrued	19 359 69	219 628 43	179 091 53	167 745 72	159 487 83	160 533 10	445 175 74	736 680 20	1 036 992 32	1 105 545
17	Interest Accrued	303 614 56	457 379 32	496 472 90	487 264 41	487 239 10	469 222 85	263 877 20	316 168 83	315 694 47	306 666
18	Other Current and Accrued Liabilities	1 860 80	1 053 53	1 763 81	1 954 41	4 108 80	3 164 49	8 156 11	5 909 35	3 117 66	3 085
19											
20	Total Current and Accrued Liabilities	6 729 170 74	848 780 99	749 648 38	750 854 06	1 337 454 05	1 923 630 49	1 699 245 51	4 165 415 88	1 701 689 11	2 109 306
21											
22	Deferred Credits										
23	Customers' Advances for Construction	—	—	—	57 00	1 135 00	1 075 00	1 195 00	1 553 00	5 964 58	8 241
24	Other Deferred Credits	19 767 24	17 104 10	51 241 12	32 325 25	19 528 26	20 796 67	70 310 96	108 461 94	27 830 62	63 874
25											
26	Total Deferred Credits	19 767 24	17 104 10	51 241 12	32 382 25	20 663 26	21 871 67	71 505 96	110 014 94	33 795 20	72 115
27	Reserves										
28	Reserve for Depreciation of Gas Plant	53 097 66	190 318 12	543 336 41	1 066 349 96	1 648 572 85	2 184 909 83	2 746 714 26	3 731 763 48	5 272 697 52	6 981 592
29											
30	Reserve for Amortization and Depletion of Producing Natural Gas Land and Land Rights	—	—	9 407 08	23 378 95	43 020 03	67 827 41	108 106 52	160 634 78	211 533 71	277 251
31											
32											
33	Reserve for Abandoned Leases	—	19 100 00	52 423 04	79 524 32	133 286 98	184 717 93	150 789 04	212 557 63	252 196 26	339 434
34	Reserve for Uncollectible Accounts	3 946 05	2 907 60	6 096 44	7 245 27	12 220 09	14 459 60	13 909 80	15 405 64	21 367 93	29 523
35	Injuries and Damages Reserve	—	3 300 00	8 764 18	19 568 18	30 364 18	41 164 18	51 964 18	60 664 18	75 064 18	88 914
36	Other Reserves	36 002 66	36 002 66	36 002 66	36 002 66	—	—	—	96 800 94	424 800 94	624 800
37	Total Reserves	93 946 37	249 628 38	656 029 81	1 232 065 34	1 867 464 13	2 493 078 95	3 071 483 80	4 277 826 65	6 257 660 54	8 341 517
38	Contributions in Aid of Construction	—	—	—	1 040 32	1 040 32	1 040 32	29 100 32	29 100 32	29 100 32	36 296
39	Surplus										
40	Capital Surplus	29 643 581 17	29 652 338 25	19 294 624 55	19 294 624 55	19 285 867 47	15 582 941 56	46 364 54	46 364 54	46 364 54	—
41	Earned Surplus	72 798 64	395 424 81	1 105 754 84*	2 492 577 54*	3 354 772 75*	3 797 089 98*	1 672 455 19	3 716 452 27	4 289 363 90	6 860 427
42	Total Surplus	29 716 379 81	30 047 763 06	18 188 869 71	16 802 047 01	15 931 094 72	14 785 851 58	1 718 819 71	3 762 816 81	4 335 728 44	6 860 427
43	Total Liabilities and Other Credits	$56 658 364 16	$60 063 276 53	$50 735 789 02	$49 410 888 98	$49 738 311 23	$48 601 143 25	$53 567 699 71	$67 720 323 43	$67 136 937 81	$71 645 275
44											
45	*Denotes red figures										

Reference is made to the appended notes which are an integral part of the above balance sheet.

Balance Sheets — Per Books

ıe Company and Subsidiary Companies

ıbilities

ember 31

1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	June 30, 1941 (M)
199 000 00	$18 216 300 00	$18 216 300 00	$18 216 300 00	$20 184 175 00	$20 184 175 00	$20 184 175 00
—	11 000 000 00	11 000 000 00	11 000 000 00	11 000 000 00	11 000 000 00	11 000 000 00
199 000 00	29 216 300 00	29 216 300 00	29 216 300 00	31 184 175 00	31 184 175 00	31 184 175 00
200 000 00	17 589 000 00	24 000 000 00	23 500 000 00	23 000 000 00	22 500 000 00	18 250 000 00
976 670 24	172 244 41	2 158 848 83	2 062 664 20	41 436 10	30 149 00	5 017 543 80
176 670 24	17 761 244 41	26 158 848 83	25 562 664 20	23 041 436 10	22 530 149 00	23 267 543 80
—	400 000 00	2 625 000 00	—	—	—	—
101 847 05	579 220 46	309 825 00	174 172 16	523 121 52	363 523 48	226 249 25
—	—	165 000 00	165 000 00	165 000 00	165 000 00	165 000 00
—	—	2 110 00	1 582 50	1 582 50	—	1 482 524 23
186 920 00	540 00	2 352 50	2 290 00	890 00	2 420 00	5 875 80
1 943 00	2 276 00	2 370 00	2 840 00	3 415 00	3 885 00	—
160 533 10	445 175 74	736 680 20	1 036 992 32	1 105 545 25	2 333 878 95	3 176 774 41(1)
469 222 85	263 877 20	316 168 83	315 694 47	306 666 68	300 000 00	90 104 18
3 164 49	8 156 11	5 909 35	3 117 66	3 085 58	3 199 01	2 584 66
923 630 49	1 899 245 51	4 165 415 88	1 701 689 11	2 109 306 53	3 171 906 39	5 149 111 73
1 075 00	1 195 00	1 553 00	5 964 58	8 241 29	9 339 48	—
20 796 67	70 310 96	108 461 94	27 830 62	63 874 60	44 351 74	43 333 69
21 871 67	71 505 96	110 014 94	33 795 20	72 115 89	53 691 22	43 333 69
184 909 83	2 746 714 26	3 731 763 48	5 272 697 52	6 981 592 47	8 478 956 45	9 345 403 01
67 827 41	108 106 52	160 634 78	211 533 71	277 251 34	356 987 61	403 389 43
184 717 93	150 788 04	212 557 63	252 196 26	339 434 61	353 557 18	386 721 48
14 459 60	13 909 80	15 405 64	21 367 93	29 523 89	40 088 66	44 819 88
41 164 18	51 964 18	60 664 18	75 064 18	88 914 18	107 408 37	93 123 74
—	—	96 800 94	424 800 94	624 800 94	624 800 94	624 800 94
493 078 95	3 071 483 80	4 277 826 65	6 257 660 54	8 341 517 43	9 961 799 21	10 898 258 48
1 040 32	29 100 32	29 100 32	29 100 32	36 296 83	41 571 91	41 346 91
582 941 56	46 364 54	46 364 54	46 364 54	—	—	—
797 089 98*	1 672 455 17	3 716 452 27	4 289 363 90	6 860 427 74	7 922 967 21	9 073 120 08(2)
1 785 851 58	1 718 819 71	3 762 816 81	4 335 728 44	6 860 427 74	7 922 967 21	9 974 120 08
601 143 25	$53 567 699 71	$67 720 323 43	$67 136 937 81	$71 645 275 52	$74 866 259 94	$79 657 889 69

ed notes which are an integral part of the above balance sheet.

[fol. 13209] Exhibit 48

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Notes To Balance Sheets

Line No.		
1	(1)	Including Federal income and Excess
2		Profits Taxes computed without regard
3		to special deductions resulting from
4		the refinancing consummated during
5		February, 1941, and without making
6		provision for possible increase in
7		rates or otherwise during 1941.
8	(2)	Surplus is restricted in the amount
9		of $4,113,952.58 by Mortgage and Deed
10		of Trust dated November 1, 1940, as to
11		payment of dividends.

[fol. 13210]

Exhibit 49

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Income Statement — Per Books
Period From April 1, 1932 To December 31, 1941

Line No.	Item (A)	1932 April 1 to December 31 (B)	Year Ended December 31 1933 (C)	1934 (D)	1935 (E)	1936 (F)	1937 (G)	1938 (H)	1939 (I)	1940 (J)
1	Income									
2	Operating Revenues									
3	Gas	$1 346 228 99	$2 416 397 62	$2 844 934 63	$3 371 882 80	$5 815 682 31	$9 212 821 95	$9 540 967 85	$11 461 388 31	$13 167 241 73
4	Gasoline	—	—	—	—	46 318 74	429 051 48	353 128 71	513 940 99	355 722 01
5	Pipe Line Rentals	67 018 27	154 911 25	189 938 39	221 276 31	102 872 18	—	—	—	—
6	Miscellaneous	14 246 32	14 087 92	13 944 83	18 705 92	72 994 76	21 035 99	13 032 46	21 439 93	12 489 05
7	Total Operating Revenues	1 427 493 58	2 585 396 79	3 048 517 85	3 611 865 03	6 037 867 99	9 662 909 42	9 907 129 02	11 996 769 23	13 535 452 79
8	Operating Revenue Deductions									
9	Operation and Maintenance Expenses	787 282 03	999 108 75	1 009 569 44	1 064 408 69	1 503 536 46	2 193 924 05	2 386 502 03	2 698 910 34	3 000 764 52
10	Depreciation (Including Amortization)	321 196 03	624 052 98	629 017 13	630 539 44	672 400 19	1 217 882 94	1 577 158 67	1 711 382 62	1 720 744 97
11	Amortization and Depletion of Producing									
12	Natural Gas Land and Land Rights	6 908 30	13 971 87	19 641 08	24 807 38	40 279 11	52 528 26	50 898 93	65 747 63	79 736 27
13	Abandoned Leases	73 683 14	85 580 30	82 092 00	79 560 90	75 010 26	113 976 77	100 549 56	93 599 61	80 408 63
14	Amortization of Other Limited Term									
15	Gas Investments	26 761 93	33 289 68	33 289 68	33 289 68	296 906 58	320 565 16	326 892 54	329 300 14	329 110 13
16	Taxes									
17	State, Local and Miscellaneous									
18	Federal	216 130 27	262 375 23	270 204 00	284 598 03	360 293 90	412 961 36	577 888 16	675 477 83	612 871 48
19	Federal Income	—	—	—	—	230 000 00	492 000 00	513 426 21	820 286 12	1 436 598 47
20	Federal Excess Profits	—	—	—	—	—	—	—	—	561 000 00
21	Total Operating Revenue Deductions	1 431 961 70	2 018 374 51	2 044 413 35	2 117 204 12	3 178 426 50	4 803 837 64	5 533 316 40	6 394 674 29	7 821 234 47
22	Net Operating Revenue	4 468 12*	567 022 28	1 004 104 52	1 494 660 91	2 859 441 49	4 859 071 78	4 373 812 62	5 602 094 94	5 714 218 32
23	Other Income									
24	Interest Revenues	15 008 44	8 234 75	4 055 81	3 011 75	7 605 71	17 737 82	13 172 56	13 884 90	13 427 53
25	Miscellaneous Nonoperating Revenues	6 375 00	—	—	—	—	—	—	—	—
26	Total Other Income	21 383 44	8 234 75	4 055 81	3 011 75	7 605 71	17 737 82	13 172 56	13 884 90	13 427 53
27	Gross Income	16 915 32	575 257 03	1 008 160 33	1 497 672 66	2 867 047 20	4 876 809 60	4 386 985 18	5 615 979 84	5 727 645 85
28	Income Deductions									
29	Interest on Long-Term Debt	1 334 607 09	1 770 760 00	1 760 158 18	1 725 397 26	1 137 387 05	987 030 42	944 233 34	923 333 32	903 333 32
30	Amortization of Debt Discount and									
31	Expense	78 653 23	102 702 87	149 741 62	98 250 56	93 679 98	285 107 13	319 676 56	314 852 87	310 029 24
32	Other Interest Charges	682 35	1 091 79	267 37	78 87	1 934 49	34 383 06	65 129 11	14 394 31	2 787 11
33	Interest Charged to Construction	5 332 60*	—	—	—	77 139 75*	189 238 82*	1 277 51*	—	36 827 80*
34	Total Income Deductions	1 408 609 98	1 874 554 66	1 880 167 09	1 823 726 69	1 155 861 77	1 117 281 79	1 327 761 44	1 252 580 50	1 179 321 87
35	Net Income	$1 391 694 66*	$1 299 297 63*	$ 872 006 76*	$ 326 054 03*	$1 711 185 43	$3 759 527 81	$3 059 223 74	$ 4 363 399 34	$ 4 548 323 98

36 *Denotes red figures.

37 Note: (1) 6 months actual, 6 months estimated.

38 (2) Computed without regard to special deductions resul financing consummated during February, 1941, but adjusted for increases in rates and other changes contemplated in the 1941 Revenue

y Companies

Schedule 1

Witness Watkins

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r 31

	1938 (H)	1939 (I)	1940 (J)	Cumulative Total (K)	Average 1932-1940 (8-3/4 Yr.) (L)	1941 (1) January 1 to December 31, (M)
95	$9 540 967 85	$11 461 388 31	$13 167 241 73	$59 177 546 19	$6 763 148 13	$14 786 022 00
48	353 128 71	513 940 99	355 722 01	1 698 161 93	194 075 65	614 556 00
	—	—	—	735 716 40	84 081 87	—
99	13 032 46	21 439 93	12 489 05	201 977 18	23 083 11	8 809 00
42	9 907 129 02	11 996 769 23	13 535 452 79	61 813 401 70	7 064 388 76	15 409 387 00
05	2 386 502 03	2 698 910 34	3 000 764 52	15 644 002 31	1 787 885 98	3 342 501 00
04	1 577 158 67	1 711 382 62	1 720 744 97	9 104 374 07	1 040 499 89	1 912 955 00
26	50 898 93	65 717 63	79 736 27	354 488 83	40 513 01	84 301 00
77	100 549 56	93 599 61	80 408 63	785 060 87	89 721 24	80 915 00
15	326 892 84	329 300 14	329 110 13	1 729 405 82	197 646 38	336 486 00
36	577 888 16	675 477 83	612 871 48	3 672 800 26	419 748 60	731 903 00
00	513 426 21	820 286 12	1 436 598 47	3 492 310 80	399 121 23	1 875 000 00(2)
	—	—	561 000 00	561 000 00	64 114 29	1 800 000 00(2)
34	5 533 316 40	6 394 674 29	7 821 234 47	35 343 442 96	4 039 250 62	10 164 081 00
78	4 373 812 62	5 692 094 94	5 714 218 32	26 469 958 74	3 025 138 14	5 245 326 00
82	13 172 56	13 884 90	13 427 53	96 139 27	10 987 34	13 833 00
	—	—	—	6 375 00	728 57	—
82	13 172 56	13 884 90	13 427 53	102 514 27	11 715 91	13 833 00
30	4 386 985 18	5 615 979 84	5 727 645 85	26 572 473 01	3 036 854 05	5 259 159 00
42	944 233 34	923 333 32	903 333 32	11 486 239 89	1 312 713 13	572 224 00
13	319 676 50	314 852 87	310 029 24	1 722 694 00	196 879 31	299 313 00
06	65 129 11	14 394 31	2 787 11	120 748 38	13 799 82	3 917 00
82*	1 277 51*	—	36 827 80*	309 816 48*	35 407 60*	—
79	1 327 761 44	1 252 580 50	1 179 321 87	13 019 805 79	1 487 984 66	875 454 00
81	$3 059 223 74	$ 4 363 399 34	$ 4 548 323 98	$13 552 607 22	$1 548 869 39	$ 4 383 705 00

in rates and other changes contemplated in the 1941 Revenue Act.

[fol. 13211]

Exhibit 49

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Net Income Adjusted For Depreciation
(Including Amortization) Computed At 3%
For Period From April 1, 1932 To December 31, 1941

Line No.	Item (A)	1932 April 1 to December 31 (B)	Year Ended December 31 1933 (C)	1934 (D)	1935 (E)	1936 (F)	1937 (G)	1938 (H)	1939 (I)	1940 (J)
1	Net income per Schedule 1, Line 30	$1 391 694 66*	$1 299 297 63*	$ 872 006 76*	$ 326 054 03*	$1 711 185 43	$3 759 527 81	$3 059 223 74	$4 363 399 34	$4 548 323 98
2	Add									
3	Depreciation per Schedule 1, Line 10	321 196 03	624 052 98	629 017 13	630 539 44	672 400 19	1 217 882 04	1 577 158 67	1 711 382 62	1 720 744 97
4		1 070 498 63*	675 244 65*	242 989 63*	304 485 41	2 383 585 62	4 977 409 85	4 636 382 41	6 074 781 96	6 269 068 95
5	Deduct									
6	Depreciation computed at 3%	905 843 71	1 220 847 24	1 222 952 40	1 224 563 46	1 282 510 15	1 514 935 50	1 698 519 63	1 715 579 73	1 800 529 31
7	Net income as adjusted	$1 976 342 34*	$1 896 091 89*	$1 465 942 03*	$ 920 078 05*	$1 101 075 47	$3 462 474 35	$2 937 862 78	$4 359 202 23	$4 468 539 64
8	*Denotes red figure									

Schedule 2

Witness Watkins

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31 937 (G)	1938 (H)	1939 (I)	1940 (J)	Cumulative Total (K)	Average 1932–1940 (8 3/4 Yrs.) (L)	1941 January 1 to December 31 (M)
9 527 81	$3 059 223 74	$4 363 399 34	$4 548 323 98	$13 552 607 22	$1 548 869 39	$4 383 705 00
7 882 04	1 577 158 67	1 711 382 62	1 720 744 97	9 104 374 07	1 040 499 89	1 912 955 00
7 409 85	4 636 382 41	6 074 781 96	6 269 068 95	22 656 981 29	2 589 369 28	6 296 660 00
4 935 50	1 698 519 63	1 715 579 73	1 800 529 31	12 586 281 13	1 438 432 13	1 886 308 24
2 474 35	$2 937 862 78	$4 359 202 23	$4 468 539 64	$10 070 700 16	$1 150 937 15	$4 410 351 76

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Earned Surplus — Per Books

Period From Commencement Of Operations To June 30, 1941

Line No.	Item (A)	1930 September 1 to December 31 (B)	Year Ended December 31 1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)	1937 (I)	193 (J
1	Earned surplus, beginning of year	$ —	$ 72 798 64	$ 395 424 81	$1 105 754 84*	$2 492 577 54*	$3 354 772 75*	$3 797 089 98*	$1 672 455 17	$3 716
2	Credits									
3	Credit balance transferred from									
4	income account	72 798 64	342 321 35			—	—	1 711 185 43	3 759 527 81	3 059
5	Miscellaneous credits to surplus:									
6	Transfer of unused balance of reserve for									
7	income taxes previously provided for by									
8	a subsidiary company					36 002 66				
9	Nominal value assigned to investment in									
10	subsidiary company					1 00				
11	Adjusted earned deficit at December 31,									
12	1935 combined with capital surplus:									
13	Adjusted earned surplus deficit of									
14	Panhandle Eastern Pipe Line Com-									
15	pany at December 31, 1935 combined									
16	with capital surplus as authorized by							1 247 365 50		
17	Board of Directors									
18	Provision for reserve for loss on in-									
19	vestments in subsidiary companies									
20	as of December 31, 1935 combined									
21	with capital surplus as authorized by									
22	Board of Directors							2 232 009 04		
23	Surplus arising from readjustment of									
24	funded debt and cancellation of ac-									
25	crued interest thereon to February 6,									
26	1936 ($274,091.50 applicable to period									
27	prior to December 31, 1935)							331 789 00		
28	Discount on reacquired bonds							4 064 37		
29	Deficit of a subsidiary company (dissolved)									
30	transferred to Capital Surplus						39 891 36			
31	Miscellaneous direct credits			7 679 83				2 859 90		
32	Total Credits	$ 72 798 64	$ 342 321 35	$ 7 679 83	$ —	$ 36 003 66	$ 39 891 36	$5 529 273 24	$3 759 527 81	$3 06
33	* Denotes red figure.									

Exhibit 50

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December 31					1941 January 1 to June 30
1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	(M)
$3 797 089 98*	$1 672 455 17	$3 716 452 27	$4 289 363 90	$6 860 427 74	$7 922 967 21
1 711 185 43	3 759 527 81	3 059 223 74	4 363 399 34	4 548 323 98	2 653 937 50
1 247 365 50					
2 232 009 04					
331 789 00					
4 064 37		7 806 25			
2 859 90		386 61			
$5 529 273 24	$3 759 527 81	$3 067 416 60	$4 363 399 34	$4 548 323 98	$2 653 937 50

[fol. 13213]

Exhibit 50

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Earned Surplus — Per Books

Period From Commencement Of Operations To June 30, 1941

Line No.	Item (A)	1930 September 1 to December 31 (B)	Year Ended December 31 1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)	1937 (I)	1
1	Debits									
2	Debit balance transferred from income account	$ —	$ —	$1 341 579 39	$1 299 297 63	$ 872 006 76	$ 326 054 03	$ —	$ —	$
3	Dividend appropriations — Preferred Stock:									
4	Ordinary								1 320 000 00	66
5	Participating									18
6	Dividend appropriations — Common Stock:									
7	Ordinary								364 326 00	1 09
8	Participating									54
9	Miscellaneous debits to surplus:									
10	Reduction of interest capitalized by amount									
11	of interest earned during 1930.		18 334 42							
12	Reduction of investment in subsidiary									
13	company			5 904 41						
14	Capitalization of net income from operations									
15	during construction period for certain									
16	subsidiary companies			53 551 88						
17	Provision for additional depreciation and									
18	amortization for period from April 1, 1931									
19	to December 31, 1931.			107 823 80						
20	Earned surplus balance of a subsidiary									
21	company transferred to retirement and de-									
22	pletion reserve				2 818 71					
23	Unamortized debt discount and expense									
24	applicable to bonds retired				54 706 36		96 154 56	45 780 28		
25	Premium on bonds retired				30 000 00		60 000 00	13 947 81		
26	Loss sustained on investment in dissolution or									
27	disposal of subsidiary companies					23 488 80			30 829 71	
28	Provision for uncollectible account due									
29	from receivers of Missouri-Kansas Pipe									
30	Line Company					2 703 31				
31	Miscellaneous direct debits		1 360 76						375 00	1
32	Total Debits	$ —	$ 19 695 18	$1 508 859 48	$1 386 822 78	$ 898 198 87	$ 482 208 59	$ 59 728 09	$1 715 530 71	$2 49
33	Earned Surplus, End Of Year	$ 72 798 64	$ 395 424 81	$1 105 754 84*	$2 492 577 54*	$3 354 772 75*	$3 797 089 98*	$1 672 455 17	$3 716 452 27	$4 28
34	* Denotes red figure									

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ded December 31

	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 January 1 to June 30 (M)
54 03	$ —	$ —	$ —	$ —	$ —	$ —
		1 320 000 00	660 000 00	660 000 00	660 000 00	330 000 00
			182 163 00		403 683 51	
		364 326 00	1 092 978 00	1 132 335 50	1 211 050 50	1 146 461 14
			546 489 00		1 211 050 50	
54 56	45 780 28					
00 00	13 947 81					
		30 829 71				26 323 49
		375 00	12 874 97			
18 59	$ 59 728 09	$1 715 530 71	$2 494 504 97	$1 792 335 50	$3 485 784 51	$1 502 784 63
49 98*	$1 672 455 17	$3 716 452 27	$4 289 363 90	$6 860 427 74	$7 922 967 21	$9 074 120 08

[fol. 13214]

Exhibit 51

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Capital Surplus Per Books
Period From September 1, 1930 To June 30, 1941

Line No.	Item (A)	1930 September 1 to December 31 (B)	Year Ended December 31 1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)	1937 (I)
1	Balance beginning of year	$ —	$29 643 581 17	$29 652 338 25	$19 294 624 55	$19 294 624 55	$19 285 867 47	$18 582 941 56	$46 364 54
2	Credits								
3	Capital surplus arising from assets donated								
4	and indebtedness cancelled by Missouri-Kansas								
5	Pipe Line Company as of August 31, 1930.	19 335 867 47							
6	Capital surplus arising from sale of 5,100								
7	shares of no par value common stock donated								
8	to the Treasury. $50 000 00								
9	Less — write-off value assigned to								
10	gas lease 1 000 00	49 000 00							
11	Capital surplus arising from revaluation								
12	of Gas Sales and Purchase Contracts, re-								
13	versed March 31, 1932.	10 357 713 70							
14	Excess value per books over cost on acquired								
15	capital investment in subsidiary company, re-								
16	versed in year 1934.		8 757 08						
17	Total Credits	29 742 581 17	8 757 08	—	—	—	—	—	—
18	Debits								
19	Additional value assigned to no par value								
20	common stock in accordance with a resolution								
21	of the Board of Directors on October 28, 1930	99 000 00							
22	Reversal of capital surplus arising from re-								
23	valuation of Gas Sales and Purchase Contracts			10 357 713 70					
24	Reversal of excess value per books over cost on								
25	acquired capital investment in subsidiary company					8 757 08			
26	Loss sustained on the liquidation of investment								
27	in dissolution of subsidiary companies.						702 925 91		
28	Adjusted earned deficit at December 31, 1935								
29	combined with capital surplus:								
30	Adjusted earned surplus deficit of Panhandle								
31	Eastern Pipe Line Company at December								
32	31, 1935 combined with capital surplus as								
33	authorized by Board of Directors							1 247 365 50	
34	Provision for reserve for loss on investments								
35	in subsidiary companies as of December 31,								
36	1935 as authorized by Board of Directors.							2 232 009 04	
37	Claims against receivers of Missouri-Kansas								
38	Pipe Line Company written-off.							39 902 48	
39	Capital surplus assigned to stock dividend paid								
40	by the issuance of 646,354 shares of common stock							15 017 300 00	
41	Capital surplus transferred to reserve for depre-								
42	ciation, as authorized by the Board of Directors								
43	Total Debits	99 000 00	—	10 257 713 70	—	8 757 08	702 925 91	18 536 577 02	—
44	Balance End Of Year	$29 643 581 17	$29 652 338 25	$19 294 624 55	$19 294 624 55	$19 285 867 47	$18 582 941 56	$ 46 364 54	$46 364 54

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	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 January 1 to June 30 (M)
47	$18 582 941 56	$46 364 54	$46 364 54	$46 364 54	$ —	$ —
91						
	1 247 365 50					
	2 232 009 04					
	39 902 48					
	15 017 300 00					
				46 364 54		
491	18 536 577 02	—	—	46 364 54	—	—
456	$ 46 364 54	$46 364 54	$46 364 54	$ —	$ —	$ —

Exhibit 52

Gas Plant

Panhandle Eastern Pipe Line Company and Subsidiary Companies

Line No.	Item (A)	December 31 1930 (B)	1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)	1937 (I)	
1	Intangible Plant									
2	Organization	$ 24 746 20	$ 110 647 63	$ 115 834 83	$ 115 834 83	$ 115 986 15	$ 116 707 57	$ 116 820 90	$ 116 291 98	$
3	Franchises and consents	2 191 34	58 934 48	117 385 32	—	—	—	—	—	
4	Miscellaneous intangible plant	618 80	—	19 671 95	98 005 11	98 005 11	97 991 71	97 991 71	97 991 71	
5	Totals Intangible Plant	27 556 34	169 582 11	213 548 20	213 839 94	213 991 26	214 699 28	214 812 61	214 283 69	
6	Production Plant									
7	(a) Natural Gas Production									
8	Plant									
9	Natural Gas Producing									
10	leaseholds — drilled	453 354 93	420 930 76	394 111 17	376 594 80	387 238 81	369 633 09	472 776 10	749 406 55	
11	Natural gas producing									
12	leaseholds — not drilled	1 203 901 45	1 499 090 43	1 455 299 39	1 387 510 67	1 348 237 06	1 293 219 55	1 191 969 57	1 049 128 94	
13	Other land and land rights	—	299 00	299 00	299 00	299 00	299 00	299 00	299 00	
14	Other production system									
15	structures	—	79 015 90	38 094 06	38 588 63	38 588 63	38 887 13	38 899 88	44 262 39	
16	Producing gas wells —									
17	well construction	345 227 18	118 060 68	969 926 43	948 284 81	948 704 40	917 717 40	1 038 775 03	1 553 917 31	1
18	Producing gas wells —									
19	well equipment	101 158 57	334 480 02	311 703 66	309 874 19	302 299 28	309 541 68	345 723 21	454 395 16	
20	Drilling and cleaning									
21	equipment	250 00	53 557 70	54 701 88	48 801 31	48 780 53	42 512 52	39 234 85	52 932 74	
22	Purification and residual									
23	refining equipment	—	—	—	—	—	—	2 383 04	699 814 73	
24	Other production equipment	—	—	—	—	—	—	—	—	
25	Totals Natural Gas Production									
26	Plant	2 103 892 13	3 505 434 49	3 224 135 59	3 109 953 41	3 074 147 71	2 971 810 36	3 130 160 68	4 514 156 82	4
27	(b) Manufactured Gas									
28	Production Plant	—	30 112 02	30 112 02	30 112 02	30 112 02	30 112 02	30 112 02		
29	Totals Production Plant	2 103 892 13	3 535 546 51	3 254 247 61	3 140 065 43	3 104 259 73	3 001 922 38	3 160 272 70	4 514 156 82	4
30	Transmission Plant									
31	Land	1 940 75	41 372 32	42 021 68	42 121 68	42 212 31	42 212 31	46 432 82	72 335 42	
32	Land rights	16 341 27	819 942 01	900 965 73	900 405 76	915 476 41	917 541 62	930 838 27	1 071 122 10	1
33	Pumping station structures	—	208 399 61	218 459 25	218 459 25	218 459 25	219 424 84	719 516 36	1 059 117 40	1
34	Measuring and regulating									
35	station structures	9 793 95	22 404 82	30 099 51	35 298 05	35 945 19	33 685 50	35 747 52	55 746 14	
36	Other transmission structures	—	114 333 08	179 121 24	180 808 73	184 339 30	181 929 64	187 328 11	313 548 07	
37	Mains	2 759 107 93	31 231 403 05	31 551 884 52	31 547 742 59	31 700 129 66	31 651 527 54	31 936 602 82	41 362 290 02	41
38	Pumping station equipment	270 534 33	1 995 864 84	2 035 172 59	2 028 831 40	2 029 554 36	2 030 212 87	4 968 614 55	7 970 551 89	7
39	Measuring and regulating									
40	station equipment	52 681 48	236 965 68	352 739 89	346 690 57	358 362 14	362 097 17	382 314 16	445 560 01	
41	Other transmission equipment	—	—	842 46	842 46	2 454 36	3 096 35	2 788 09	8 327 95	
42	Totals Transmission Plant	$ 3 110 399 71	$34 670 685 41	$35 311 306 87	$35 301 200 49	$35 483 932 98	$35 441 727 84	$39 210 182 70	$52 358 599 00	$52

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	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	June 30, 1941 (M)
7	$ 116 820 90	$ 116 291 98	$ 116 291 98	$ 116 291 98	$ 116 291 98	$ 115 172 86
1	97 991 71	97 991 71	97 991 71	97 991 71	97 991 71	64 427 72
8	214 812 61	214 283 69	214 283 69	214 283 69	214 283 69	179 600 58
8	472 776 10	749 406 55	834 269 49	949 880 70	998 613 19	1 010 996 84
	1 191 969 57	1 049 128 94	955 795 59	865 472 36	759 239 20	734 210 55
	299 00	299 00	299 00	299 00	299 00	299 00
3	38 899 88	44 262 39	46 166 15	46 768 78	46 426 96	46 808 76
	1 038 775 03	1 553 917 31	1 756 980 43	1 937 811 04	2 023 739 02	2 027 024 28
	345 723 21	454 395 16	515 138 02	565 682 80	592 983 63	593 266 66
	39 334 85	52 932 74	29 140 00	19 971 18	20 762 34	20 678 46
	2 383 04	609 814 73	624 609 15	629 652 34	658 355 27	699 866 27
					399 08	399 08
	3 130 160 68	4 514 156 82	4 762 397 83	5 015 538 25	5 098 817 69	5 133 547 90
	30 112 02					
	3 160 272 70	4 514 156 82	4 762 397 83	5 015 538 25	5 098 817 69	5 133 547 90
	46 432 82	72 335 42	114 133 36	116 568 95	117 014 44	118 659 15
	930 838 27	1 071 122 10	1 109 602 67	1 114 333 56	1 179 121 65	1 181 705 10
	719 516 36	1 059 117 40	1 070 378 29	1 986 920 88	1 181 411 39	1 314 753 79
	35 747 52	55 746 14	61 089 74	65 890 22	89 511 69	71 562 12
	187 328 11	313 548 07	334 519 47	355 915 32	359 500 13	409 186 09
	31 936 602 82	41 362 290 02	41 671 595 35	41 774 443 45	46 534 673 30	46 570 319 17
	4 968 614 53	7 970 551 89	7 900 306 61	7 890 354 95	7 973 458 74	8 436 264 23
	382 314 16	445 560 01	487 393 11	513 370 73	528 960 46	532 402 08
	2 788 09	8 327 95	23 766 17	42 562 38	51 893 85	48 950 36
	$39 210 182 70	$52 358 599 00	$52 772 784 77	$52 960 360 44	$57 995 545 65	$58 683 802 09

Exhibit 52

[fol. 13216]

Gas Plant

Panhandle Eastern Pipe Line Company And Subsidiary Companies

December 31

Line No.	Item (A)	1930 (B)	1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)	1937 (I)	1938 (J)	
1	Distribution Plant										
2	Land and land rights	$ —	$ 588 13	$ 665 53	$ 677 03	$ 700 63	$ 700 63	$ 700 63	$ 647 93	$ 674 18	$
3	Structures and improvements	1 365 79	1 866 82	1 991 91	1 991 91	1 991 91	1 999 11	2 345 19	2 345 19	1 999 11	
4	Mains	37 944 50	280 539 74	315 206 41	318 490 95	323 069 04	324 670 23	325 894 89	288 802 85	296 897 70	3
5	Pumping and regulating										
6	equipment	2 075 04	6 843 98	7 763 73	7 822 37	7 898 63	7 544 52	7 544 52	7 354 55	7 556 60	
7	Services	5 351 65	27 108 43	33 137 49	35 686 47	39 446 66	41 398 50	43 932 23	42 682 97	44 653 58	
8	Meters	9 608 89	40 798 15	35 422 33	36 225 76	39 786 29	43 393 85	45 860 84	46 817 97	49 583 62	
9	Meter installations	1 444 00	2 234 55	3 186 70	3 542 27	3 831 47	4 094 96	4 330 42	4 492 85	4 710 56	
10	House regulators and										
11	installations	1 533 10	10 984 13	8 966 50	9 639 58	10 234 56	11 000 45	12 211 98	12 927 25	14 016 80	1
12	Other distribution equipment	476 36	476 36	476 36	476 36	476 36	476 36	476 36	476 36	476 36	
13	Totals Distribution Plant	59 799 33	371 440 29	406 815 96	414 552 70	427 435 55	435 278 61	443 297 06	406 547 92	420 568 51	4
14	General Plant										
15	General office structures	5 141 26	9 284 51	9 284 51	9 292 64	9 292 64	8 901 86	3 797 17	—	—	
16	Office furniture and equipment	42 508 91	57 701 46	58 091 32	56 006 70	52 972 79	52 561 23	57 478 18	65 681 96	67 375 68	7
17	Transportation equipment	68 195 83	103 422 68	87 072 04	84 203 41	82 896 12	78 278 85	83 450 23	96 527 78	97 172 16	1
18	Shop equipment	—	530 66	56 86	56 86	56 86	56 86	56 86	—	—	
19	Laboratory equipment	2 608 48	4 512 49	7 254 72	7 104 72	7 104 72	7 081 92	7 552 48	6 869 88	6 869 88	
20	Tools and work equipment	4 021 32	28 647 13	28 970 62	18 444 93	17 868 28	17 824 02	18 126 58	19 773 44	21 293 40	2
21	Communication equipment	—	381 802 69	366 804 16	367 205 26	367 205 26	364 843 57	368 723 10	369 634 26	368 757 10	36
22	Miscellaneous equipment	—	101 86	101 86	101 86	101 86	101 86	101 86	101 86	101 86	
23	Totals General Plant	122 475 80	583 803 48	557 636 09	542 416 38	537 498 53	529 650 17	539 286 46	558 589 18	561 570 08	57
24	Undistributed Construction										
25	Expenditures										
26	Engineering and superintendence										
27	during construction	—	62 825 67	125 60	125 60	125 60	125 60	125 60	—	—	
28	Law expenditures during										
29	construction	—	84 749 64	104 868 19	104 868 19	104 868 19	104 868 19	104 868 19	—	—	
30	Interest during construction	7 617 38*	1 926 972 76	2 381 718 19	2 381 718 19	2 386 153 55	2 386 153 55	2 387 453 97	—	—	
31	Taxes during construction	—	281 409 98	291 854 91	290 100 93	290 100 93	290 100 93	290 100 93	—	—	
32	Miscellaneous construction										
33	expenditures	5 653 33*	101 862 59	16 779 32	16 779 32	16 943 63	16 943 63	16 943 63	—	—	
34	Totals Undistributed										
35	Construction Expenditures	13 270 71*	2 457 820 64	2 795 346 21	2 793 592 23	2 798 191 90	2 798 191 90	2 799 492 32	—	—	
36	Other Undistributed Gas Plant										
37	Undistributed gas plant	2 160 998 51	26 902 93	29 381 97	29 381 97	29 381 97	19 730 34	19 730 34	19 730 34	19 730 34	1
38	Total Gas Plant Classified	7 571 851 11	41 815 781 37	42 568 282 91	42 435 049 14	42 594 691 92	42 441 200 52	46 387 074 19	58 071 906 95	58 751 336 22	59 22
39	Construction work-in progress	23 462 003 56	188 808 94	11 801 69	196 147 89	309 70	156 121 03	503 061 42	2 022 391 84	10 818 15	467
40	Gas sales and purchase contracts	13 398 402 19	13 409 544 31	3 053 391 53	3 053 391 53	3 053 391 53	3 053 391 53	2 930 286 40	2 930 286 40	2 930 286 40	2 93
41	Reserve for amortization of										
42	gas sales and purchase contracts	—	—	26 761 93*	58 876 33*	96 990 73*	123 105 13*	295 731 30*	586 057 20*	879 085 80*	1 17
43	Other gas sales and purchase										
44	contracts	—	—	—	—	—	—	371 076 00	358 658 20	401 443 07	38
45	Consolidation reduction in invest										
46	ment in subsidiary company	—	—	—	—	32 244 88*	32 244 88*	32 244 88*	—	—	
47	Gas Plant	$44 432 256 86	$55 414 134 62	$45 606 714 20	$45 625 712 23	$45 525 157 54	$45 495 363 07	$49 863 521 83	$60 977 186 19	$61 214 797 04	$61 83
48	* Denotes red figure										

ies

1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	June 30, 1941 (M)
700 63	$ 647 93	$ 674 18	$ 674 18	$ 634 44	$ —
2 345 19	2 345 19	1 999 11	1 999 11	1 999 11	—
325 894 89	288 802 85	296 897 70	305 304 37	315 171 01	—
7 544 52	7 354 55	7 556 60	7 946 87	7 976 42	—
43 932 23	42 682 07	44 653 58	47 448 19	51 003 90	—
45 860 84	46 817 97	49 583 62	53 060 05	56 777 98	—
4 330 42	4 492 85	4 710 56	4 877 65	5 102 59	—
12 211 98	12 927 25	14 016 80	14 872 20	16 113 72	—
476 36	476 36	476 36	476 36	476 36	—
443 297 06	406 547 92	420 568 51	436 658 98	455 255 53	—
3 797 17	—	—	—	—	—
57 478 18	65 681 96	67 375 68	71 564 19	80 018 95	78 082 36
83 450 23	96 527 78	97 172 16	102 939 59	108 097 47	109 226 87
56 86	—	—	—	—	—
7 552 48	6 869 88	6 869 88	6 619 88	6 619 88	6 550 71
18 126 58	19 773 44	21 293 40	29 179 13	32 591 73	40 251 96
368 723 10	369 634 26	368 757 10	369 088 82	369 365 07	371 355 85
101 86	101 86	101 86	101 86	101 86	—
539 286 46	558 589 18	585 570 08	579 493 47	596 794 96	605 467 75
125 60	—	—	—	—	—
104 868 19	—	—	—	—	—
2 387 453 97	—	—	—	—	—
290 100 93	—	—	—	—	—
16 943 63	—	—	—	—	—
2 799 492 32	—	—	—	—	—
19 730 34	19 730 34	19 730 34	19 730 34	19 730 34	19 730 34
46 387 074 19	58 071 906 95	58 751 335 22	59 226 065 17	64 380 427 86	64 622 148 66
503 061 42	2 022 391 84	10 818 15	467 946 74	688 812 12	383 556 82
2 930 286 40	2 930 286 40	2 930 286 40	2 930 286 40	2 930 286 40	2 930 286 40
295 731 30*	586 057 20*	879 085 80*	1 172 114 40*	1 465 143 00*	1 611 657 30*
371 076 00	358 658 20	401 443 07	386 197 00	372 006 38	365 334 99
32 244 88*	—	—	—	—	—
19 863 521 83	$60 977 186 19	$61 214 797 04	$61 838 380 91	$66 906 389 76	$66 689 669 57

Exhibit 53

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Panhandle Eastern Pipe Line Company

Statement Of Dividends Paid On Class A And Class B Preferred Stocks
From Beginning To September 1, 1941

Line No.	Period to Which Applicable (A)	Date Paid (B)	Amount Paid Ordinary (C)	Participating (D)	Total (E)
1	Class A Preferred Stock—				
2	January 1, 1936 to March 31, 1937	May 3, 1937	$ 750 000 00	$ —	$ 750 000 00
3	Quarter ended June 30, 1937	July 1, 1937	150 000 00	—	150 000 00
4	Quarter ended September 30, 1937	Oct. 1, 1937	150 000 00	—	150 000 00
5	Quarter ended December 31, 1937	Jan. 1, 1938	150 000 00	—	150 000 00
6	Quarter ended March 31, 1938	Apr. 1, 1938	150 000 00	—	150 000 00
7	Quarter ended June 30, 1938	July 1, 1938	150 000 00	—	150 000 00
8	Quarter ended September 30, 1938	Oct. 1, 1938	150 000 00	—	150 000 00
9	Quarter ended December 31, 1938	Jan. 1, 1939	150 000 00	—	150 000 00
10		Dec. 21, 1938	—	182 163 00	182 163 00
11	Quarter ended March 31, 1939	Apr. 1, 1939	150 000 00	—	150 000 00
12	Quarter ended June 30, 1939	July 1, 1939	150 000 00	—	150 000 00
13	Quarter ended September 30, 1939	Oct. 1, 1939	150 000 00	—	150 000 00
14	Quarter ended December 31, 1939	Jan. 1, 1940	150 000 00	—	150 000 00
15	Quarter ended March 31, 1940	Apr. 1, 1940	150 000 00	—	150 000 00
16	Quarter ended June 30, 1940	July 1, 1940	150 000 00	—	150 000 00
17		July 12, 1940	—	134 561 17	134 561 17
18		July 12, 1940	—	134 561 17	134 561 17
19	Quarter ended September 30, 1940	Oct. 1, 1940	150 000 00	—	150 000 00
20		Oct. 28, 1940	—	134 561 17	134 561 17
21	Quarter ended December 31, 1940	Jan. 1, 1941	150 000 00	—	150 000 00
22	Quarter ended March 31, 1941	Apr. 1, 1941	150 000 00	—	150 000 00
23	Quarter ended June 30, 1941	July 1, 1941	150 000 00	—	150 000 00
24	Total dividends paid on Class A Preferred Stock		$3 300 000 00	$ 585 846 51	$3 885 846 51
25	Class B Preferred Stock —				
26	January 1, 1936 to March 31, 1937	May 3, 1937	$ 75 000 00	$ —	$ 75 000 00
27	Quarter ended June 30, 1937	July 1, 1937	15 000 00	—	15 000 00
28	Quarter ended September 30, 1937	Oct. 1, 1937	15 000 00	—	15 000 00
29	Quarter ended December 31, 1937	Jan. 1, 1938	15 000 00	—	15 000 00
30	Quarter ended March 31, 1938	Apr. 1, 1938	15 000 00	—	15 000 00
31	Quarter ended June 30, 1938	July 1, 1938	15 000 00	—	15 000 00
32	Quarter ended September 30, 1938	Oct. 1, 1938	15 000 00	—	15 000 00
33	Quarter ended December 31, 1938	Jan. 1, 1939	15 000 00	—	15 000 00
34	Quarter ended March 31, 1939	Apr. 1, 1939	15 000 00	—	15 000 00
35	Quarter ended June 30, 1939	July 1, 1939	15 000 00	—	15 000 00
36	Quarter ended September 30, 1939	Oct. 1, 1939	15 000 00	—	15 000 00
37	Quarter ended December 31, 1939	Jan. 1, 1940	15 000 00	—	15 000 00
38	Quarter ended March 31, 1940	Apr. 1, 1940	15 000 00	—	15 000 00
39	Quarter ended June 30, 1940	July 1, 1940	15 000 00	—	15 000 00

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Witness Watkins

Panhandle Eastern Pipe Line Company

Statement Of Dividends Paid On Class A And Class B Preferred Stocks
From Beginning To September 1, 1941

Line No.	Period to Which Applicable (A)	Date Paid (B)	Amount Paid Ordinary (C)	Participating (D)	Total (E)
1	Class B Preferred Stock — (Continued)				
2	Quarter ended September 30, 1940	Oct. 1, 1940	$ 15 000 00	$ —	$ 15 000 00
3	Quarter ended December 31, 1940	Jan. 1, 1941	15 000 00	—	15 000 00
4	Quarter ended March 31, 1941	Apr. 1, 1941	15 000 00	—	15 000 00
5	Quarter ended June 30, 1941	July 1, 1941	15 000 00	—	15 000 00
6	Total dividends paid on Class B Preferred Stock		$ 330 000 00	—	$ 330 000 00

[fol. 13219] Exhibit 54

Witness Watkins

Panhandle Eastern Pipe Line Company

Statement Of Dividends Paid On Common Stock
From Beginning To September 1, 1941

Line No.	Date Paid (A)	Amount Paid Ordinary (B)	Participating (C)	Total (D)
1	December 16, 1937	$ 364 326 00	—	$ 364 326 00
2	July 21, 1938	546 489 00	—	546 489 00
3	December 21, 1938	546 489 00	—	546 489 00
4	December 21, 1938	—	$ 546 489 00	546 489 00
5	May 4, 1939	364 326 00	—	364 326 00
6	July 21, 1939	364 326 00	—	364 326 00
7	November 10, 1939	403 683 50	—	403 683 50
8	January 31, 1940	1 211 050 50	—	1 211 050 50
9	July 12, 1940	—	403 683 50	403 683 50
10	July 12, 1940	—	403 683 50	403 683 50
11	October 26, 1940	—	403 683 50	403 683 50
12	January 25, 1941	339 094 14(1)	—	339 094 14
13	March 20, 1941	403 683 50	—	403 683 50
14	June 9, 1941	403 683 50	—	403 683 50
15	Total Dividends Paid-			
16	on Common Stock	$4 947 151 14	$1 757 539 50	$6 704 690 64(2)

17 (1) In January, 1941, Panhandle Eastern Pipe Line Company distributed
18 to the company's common stockholders in payment of a dividend,
19 807,367 shares of common stock of a par value of 42 cents each,
20 of Central Distributing Company (a wholly owned subsidiary).
21 The concurrent charge to earned surplus was $339,094.14.

22 (2) On March 24, 1936, the Board of Directors authorized a dividend
23 to be paid by the issuance of 646,354 shares of common stock
24 and fixed the price at which such shares were deemed to have
25 been issued at $15,017,300 to be charged to capital surplus.

Panhandle Eastern Pipe Line Company And Subsidiaries

Statement Showing Comparison Of Sales And Revenue
Principal Industrial Customers
Years 1939, 1940 And 1941

Line No.	Customers (A)	Location (B)	Direct "D" Indirect "I" (C)	1939 MCF (D)	1939 Revenue (E)	1940 MCF (F)	1940 Revenue (G)	6 Months Actual MCF (H)	6 Months Actual Revenue (I)	Ye 6 Mo MCF (J)
1	Harbison-Walker Refractories Co.	Fulton, Mo.	D	243 776	$ 50 492 20	306 455	$ 66 387 65	226 734	$ 49 989 48	240 0
2	Harbison-Walker Refractories Co.	Vandalia, Mo.	D	524 482	108 140 01	636 022	136 943 19	345 240	76 060 80	370 0
3	Mexico Refractories Co.	Mexico, Mo.	D	446 588	91 913 49	463 161	99 878 55	284 848	62 774 56	285 0
4	Phillips Pipe Line Co.	Pump Stations	D	289 395	49 224 60	329 640	56 779 86	196 286	34 477 27	200 0
5	United Brick and Tile Co.	Vale, Mo.	D	139 570	24 119 20	147 339	25 362 24	52 534	9 028 80	90 0
6	Universal Atlas Cement Co.	Hannibal, Mo.	D	1 771 677	204 239 49	1 722 192	197 991 59	859 685	97 350 83	1 250 0
7	Walsh Refractories Corporation	Farber, Mo.	D	128 107	26 500 04	124 590	26 965 99	83 481	18 473 82	90 0
8	Marblehead Lime Co.	Quincy and Marblehead, Ill.	D	72 067	14 413 40	46 057	9 211 40	66 842	13 368 40	70 0
9	A. P. Green Fire Brick Co.	Mexico, Mo.	I	844 480	157 013 90	894 540	165 890 28	590 477	108 119 42	700 0
10	Marblehead Lime Co.	Hannibal, Mo.	I	119 470	23 531 44	114 195	22 011 16	55 176	10 484 41	65 0
11	Missouri Power & Light Co. Power Plants	Jefferson City, Mo.	I	1 203 414	134 775 16	1 310 718	145 901 73	675 722	73 381 82	750 0
12	Missouri Power & Light Co. Power Plants	Boonville, Mo.	I	257 607	29 092 96	220 239	24 737 50	104 577	11 510 24	120 0
13	Caterpillar Tractor Co.	Peoria, Ill.	I	273 835	50 664 30	337 141	60 597 33	206 627	36 257 47	210 0
14	Commercial Solvents Co.	Peoria, Ill.	I	502 517	91 750 75	518 [illegible]	92 032 34	265 383	46 250 10	270 0
15	International Harvester Co.	Canton, Ill.	I	114 387	21 963 66	224 154	40 754 16	118 153	21 026 21	120 0
16	Keystone Steel and Wire Co.	Bartonville, Ill.	I	1 789 060	304 554 94	1 906 541	318 902 11	1 045 805	172 807 38	1 080 0
17	Ball Bros.	Muncie, Ind.	I	2 138 991	332 409 61	2 025 116	337 642 84	1 148 145	190 975 95	1 350 0
18	Banner Rock Div. of Johns-Manville	Alexandria, Ind.	I	140 041	22 296 40	243 594	40 428 86	203 193	36 021 65	210 0
19	Delco-Remy Corp. — Plant #1	Anderson, Ind.	I	209 834	44 500 21	257 945	52 867 59	159 902	31 470 48	180 0
20	Delco-Remy Corp. — Div. of General Motors	Muncie, Ind.	I	242 472	49 891 36	317 508	62 275 36	209 142	39 486 30	210 0
21	Guide Lamp Corp.	Anderson, Ind.	I	102 054	23 696 43	109 033	23 897 12	88 399	19 190 55	100 0
22	Armstrong Cork Co. — Hart Glass Div.	Dunkirk, Ind.	I	73 626	17 389 95	240 311	42 961 40	239 789	42 458 58	300 0
23	Indiana Glass Co.	Dunkirk, Ind.	I	99 597	20 514 10	78 811	18 274 55	50 853	11 709 73	60 0
24	Indiana Steel and Wire Co.	Muncie, Ind.	I	163 856	36 474 45	171 157	37 887 25	109 725	23 303 37	110 0
25	The National Tile Co.	Anderson, Ind.	I	199 837	43 018 82	159 188	34 942 49	86 661	19 188 14	90 0
26	Owens-Illinois Glass Co.	Muncie & Gas City, Ind.	I	745 046	129 036 61	698 544	123 605 74	423 207	74 061 01	480 0
27	Warner Gear Co.	Muncie, Ind.	I	123 975	28 366 97	122 281	27 976 40	86 304	19 140 94	90 0
28	Chrysler Corp.	New Castle, Ind.	I	364 026	75 381 57	423 144	87 738 44	259 737	53 749 28	275 0
29	Ingram-Richardson Co.	Frankford, Ind.	I	123 106	29 485 30	130 763	31 368 41	77 090	18 501 74	87 0
30	Anchor-Hocking Glass Corp.									
31	formerly General Glass Corp.	Winchester, Ind.	I	1 203 066	241 728 55	1 221 849	241 495 26	607 974	113 400 75	660 0
32	Ingersoll Steel & Disc Div. of Borg-Warner	New Castle, Ind.	I	70 084	16 772 51	76 377	18 318 46	60 460	14 506 13	63 0
33	Slick Glass Co.	Gas City, Ind.	I	220 219	41 440 27	264 276	47 831 88	148 453	26 312 65	160 0
34	Mid-States Steel & Wire Co.	Crawfordsville, Ind.	I	67 114	16 065 88	69 496	16 655 86	42 261	10 135 75	42 0
35	Foster-Forbes Glass Co.	Marian, Ind.	I	472 015	79 006 91	396 755	67 687 90	227 020	40 248 92	250 0
36	Heath Glass Co.	Hartford City, Ind.	I	192 949	31 609 42	224 222	37 345 71	139 540	23 362 37	150 0
37	Stephens College	Columbia, Mo.	I	92 077	17 746 63	112 610	21 429 83	68 502	12 780 45	40 0
38	Clifford Jacobs Forging Co.	Champaign, Ill.	I	30 679	5 751 22	190 579	34 763 99	107 721	19 236 66	120 0
39	Continental Steel Corp.	Kokomo, Ind.	I	10 288	448 02	102 351	24 371 79	69 062	15 994 80	72 0
40	Totals			15 805 414	$2 687 483 73	16 938 003	$2 921 514 15	9 790 710	$1 696 897 21	11 009 0
41	# Denotes red figures									

ne Company And Subsidiaries

parison Of Sales And Revenue
strial Customers
1940 And 1941

Exhibit 55
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Witness Watkins

940	Year—1941						Increase Year 1940 Over 1939		Increase Year 1941 Over 1939	
	6 Months Actual		6 Months Estimated		Total					
Revenue (G)	MCF (H)	Revenue (I)	MCF (J)	Revenue (K)	MCF (L)	Revenue (M)	MCF (N)	Revenue (O)	MCF (P)	Revenue (Q)
$ 66 387 65	226 734	$ 49 989 48	240 000	$ 52 800 00	466 734	$ 102 789 48	62 679	$ 15 895 45	222 958	$ 52 297 28
136 943 19	345 240	76 060 80	370 000	81 400 00	715 240	157 460 80	111 540	28 803 18	190 758	49 320 79
99 878 55	284 848	62 774 56	285 000	62 700 00	569 848	125 474 56	16 573	7 965 06	123 260	33 561 07
56 779 86	196 286	34 477 27	200 000	35 000 00	396 286	69 477 27	40 245	7 555 26	106 891	20 252 67
25 362 24	52 534	9 028 80	90 000	15 390 00	142 534	24 418 80	7 769	1 243 04	2 964	299 60
197 991 59	859 685	97 350 83	1 250 000	141 500 00	2 109 685	238 850 83	49 185#	6 247 90#	338 008	34 611 34
26 965 99	83 481	18 473 82	90 000	19 800 00	173 481	38 273 82	3 517#	465 95	45 374	11 773 78
9 211 40	66 842	13 368 40	70 000	14 000 00	136 842	27 368 40	26 010#	5 202 00#	64 775	12 955 00
165 890 28	590 477	108 119 42	700 000	128 100 00	1 290 477	236 219 42	50 090	8 876 38	445 997	79 205 52
22 011 10	55 176	10 484 41	65 000	12 350 00	120 176	22 834 41	5 275#	1 520 34#	706	397 03#
145 901 73	675 722	73 681 82	750 000	81 750 00	1 425 722	155 431 82	107 304	11 126 57	222 308	20 656 66
24 737 50	104 577	11 510 24	120 000	13 200 00	224 577	24 710 24	37 368#	4 355 46#	33 030#	4 382 72#
60 597 33	206 627	36 257 47	210 000	36 750 00	416 627	73 007 47	63 306	9 933 03	142 792	22 343 17
92 032 34	265 383	46 250 10	270 000	46 980 00	535 383	93 230 10	16 292	281 59	32 866	1 479 35
40 754 16	118 153	21 026 21	120 000	21 240 00	238 153	42 266 21	109 767	18 790 50	123 766	20 302 55
318 902 11	1 045 805	172 807 38	1 080 000	178 200 00	2 125 805	351 007 38	117 481	14 347 17	336 745	46 452 44
337 642 84	1 148 145	190 975 95	1 350 000	224 500 00	2 498 145	415 475 95	113 875#	5 233 23	359 154	83 066 34
40 428 86	203 193	36 021 65	210 000	37 170 00	413 193	73 191 65	103 553	18 129 46	273 152	50 892 25
52 867 59	159 902	31 470 48	180 000	35 280 00	339 902	66 750 48	48 111	8 367 38	139 068	22 250 27
62 275 36	209 142	39 486 30	210 000	39 630 00	419 142	79 116 30	75 036	12 383 00	176 670	29 224 94
23 897 12	88 399	19 190 55	100 000	21 700 00	188 399	40 890 55	6 949	200 69	86 315	17 194 12
42 961 40	239 789	42 458 58	300 000	53 100 00	539 789	95 558 58	136 685	25 571 45	466 163	78 168 63
18 274 55	50 853	11 709 73	60 000	13 800 00	110 853	25 509 73	20 786#	2 239 55#	11 256	4 995 63
37 887 25	109 725	23 303 37	110 000	23 320 00	219 725	46 623 37	7 301	1 412 80	55 869	10 148 92
34 942 49	86 661	19 188 14	90 000	19 890 00	176 661	39 078 14	40 649#	8 076 33#	23 176#	3 940 68#
123 005 74	423 207	74 061 01	480 000	84 000 00	903 207	158 061 01	46 502#	6 030 87#	158 161	29 024 40
27 976 40	86 304	19 140 94	90 000	19 890 00	176 304	39 030 94	1 694#	390 57#	52 329	10 663 97
87 738 44	259 737	53 749 28	275 000	56 920 00	534 737	110 669 28	59 118	12 356 87	170 711	35 287 71
31 368 41	77 090	18 501 74	87 000	20 880 00	164 090	39 381 74	7 657	1 883 11	40 984	9 896 44
241 495 26	607 974	113 400 75	660 000	123 090 00	1 267 974	236 490 75	18 783	233 29#	64 908	5 237 80#
18 318 46	60 460	14 506 13	63 000	15 060 00	123 460	29 566 13	6 293	1 545 95	53 376	12 793 62
47 831 88	148 453	26 312 65	160 000	28 320 00	308 453	54 632 65	44 057	6 391 61	88 234	13 192 38
16 655 86	42 261	10 135 75	42 000	10 080 00	84 261	20 215 75	2 382	589 98	17 147	4 149 87
67 687 90	227 020	40 248 92	250 000	44 250 00	477 020	84 498 92	75 260#	11 319 01#	5 005	5 492 01
37 345 71	139 540	23 362 37	150 000	25 110 00	289 540	48 472 37	31 273	5 676 29	96 591	16 802 95
21 429 83	68 502	12 780 45	40 000	7 600 00	108 502	20 380 45	20 533	3 683 20	16 425	2 633 82
34 763 99	107 721	19 236 66	120 000	21 360 00	227 721	40 596 66	159 900	29 012 77	197 042	34 845 44
24 371 79	69 062	15 994 80	72 000	16 630 00	141 062	32 624 80	92 003	21 923 77	130 774	30 176 78
$2 921 514 15	9 790 710	$1 696 897 21	11 009 000	$1 882 740 00	20 799 710	$3 579 637 21	1 132 589	$ 234 039 42	4 994 296	$ 892 153 48

[fol. 13221]

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement Showing Comparison Of Sales And Revenue
Principal Industrial Customers
Years 1939, 1940 And 1941

Line No.	Customer (A)	Location (B)	Direct "D" Indirect "I" (C)	1939 MCF (D)	1939 Revenue (E)	1940 MCF (F)	1940 Revenue (G)	1941 MCF (H)	1941 Revenue (I)
1	Harbison-Walker Refractories Co.	Fulton, Mo.	D	243 776	$ 59 492 20	306 455	$ 66 387 65	479 182	$ 103 881 44
2	Harbison-Walker Refractories Co.	Vandalia, Mo.	D	524 482	108 140 01	636 022	136 943 19	745 006	161 344 28
3	Mexico Refractories Co.	Mexico, Mo.	D	446 588	91 913 49	463 161	99 878 55	615 736	133 384 38
4	Phillips Pipe Line Co.	Pump Stations	D	289 395	49 224 60	329 640	56 779 86	414 233	73 549 22
5	United Brick and Tile Co.	Vale, Mo.	D	139 570	24 119 20	147 339	25 362 24	126 934	22 289 49
6	Universal Atlas Cement Co.	Hannibal, Mo.	D	1 771 677	204 239 49	1 722 492	197 991 59	2 197 092	257 773 58
7	Walsh Refractories Corporation	Farber, Mo.	D	128 107	26 500 04	124 590	26 965 99	191 825	41 664 59
8	Marblehead Lime Co.	Quincy and Marblehead, Ill.	D	72 067	14 413 40	46 057	9 211 40	139 130	27 826 00
9	A. P. Green Fire Brick Co.	Mexico, Mo.	I	844 480	157 013 90	894 540	165 890 28	1 316 155	240 491 04
10	Marblehead Lime Co.	Hannibal, Mo.	I	119 470	23 531 44	114 195	22 011 10	135 564	25 349 82
11	Missouri Power & Light Co. Power Plants	Jefferson City, Mo.	I	1 203 414	134 775 16	1 310 718	145 901 73	1 408 304	155 695 94
12	Missouri Power & Light Co. Power Plants	Boonville, Mo.	I	257 607	29 092 96	220 239	24 737 50	171 619	18 794 55
13	Caterpiller Tractor Co.	Peoria, Ill.	I	273 833	50 664 30	337 141	60 597 33	401 526	70 395 40
14	Commercial-Solvents Co.	Peoria, Ill.	I	502 517	91 750 75	518 809	92 032 34	539 348	93 798 22
15	International Harvester Co.	Canton, Ill.	I	114 387	21 963 66	224 151	40 754 16	250 787	44 476 17
16	Keystone Steel and Wire Co.	Bartonville, Ill.	I	1 789 060	304 554 94	1 906 541	318 902 11	2 066 051	340 944 99
17	Ball Bros.	Muncie, Ind.	I	2 138 991	332 409 61	2 025 116	337 642 84	2 783 027	460 265 37
18	Banner Rock Div. of Johns-Mansville	Alexandria, Ind.	I	140 041	22 209 50	243 594	40 428 86	403 615	71 477 30
19	Delco-Remy Corp. — Plant #1	Anderson, Ind.	I	209 834	44 500 21	257 945	52 867 59	322 525	63 392 97
20	Delco-Remy Corp. — Div. of General Motors	Muncie, Ind.	I	242 472	49 891 36	317 508	62 275 36	424 659	82 516 55
21	Guide Lamp Corp.	Anderson, Ind.	I	102 084	23 696 43	109 033	23 897 12	176 022	38 621 89
22	Armstrong Cork Co. — Hart Glass Div.	Dunkirk, Ind.	I	73 626	17 389 95	240 311	42 981 40	552 481	97 102 73
23	Indiana Glass Co.	Dunkirk, Ind.	I	99 597	20 514 10	78 811	18 274 55	103 340	23 842 63
24	Indiana Steel and Wire Co.	Muncie, Ind.	I	163 956	36 474 45	171 157	37 887 25	217 618	46 314 93
25	The National Tile Co.	Anderson, Ind.	I	199 837	43 018 82	159 188	34 942 49	167 731	37 277 16
26	Owens-Illinois Glass Co.	Muncie & Gas City, Ind.	I	745 046	129 036 61	698 544	123 005 74	1 086 136	187 362 71
27	Warner Gear Co.	Muncie, Ind.	I	123 975	28 366 97	122 281	27 976 40	194 140	42 143 75
28	Chrysler Corp.	New Castle, Ind.	I	364 026	75 381 57	423 144	87 738 44	503 328	104 249 96
29	Ingram-Richardson Co.	Frankford, Ind.	I	123 106	29 485 30	130 763	31 368 41	160 140	38 390 41
30	Anchor-Hocking Glass Corp. formerly General Glass Corp.	Winchester, Ind.	I	1 203 086	241 728 55	1 221 849	241 495 26	1 222 643	227 869 61
31	Ingersoll Steel & Disc Div. of Borg-Warner	New Castle, Ind.	I	70 084	16 772 51	76 377	18 318 46	129 147	30 955 20
32	Slick Glass Co.	Gas City, Ind.	I	220 219	41 440 27	264 276	47 831 88	339 566	66 127 04
33	Mid-States Steel and Wire Co.	Crawfordsville, Ind.	I	67 114	16 065 88	69 496	16 655 86	82 607	19 797 76
34	Foster-Forbes Glass Co.	Marian, Ind.	I	472 015	79 006 91	396 755	67 687 90	485 328	85 946 38
35	Sneath Glass Co.	Hartford City, Ind.	I	192 949	31 669 42	224 222	37 345 71	276 256	46 336 39
36	Stephens College	Columbia, Mo.	I	92 077	17 746 63	112 610	21 429 83	102 851	19 257 03
37	Clifford Jacobs Forging Co.	Champsign, Ill.	I	30 679	5 751 22	190 579	34 763 99	232 970	41 420 26
38	Continental Steel Corp.	Kokomo, Ind.	I	10 288	2 448 02	102 351	24 371 79	138 453	32 023 90
39	Totals			15 805 414	$2 087 483 73	16 938 003	$2 921 514 15	21 303 075	$3 668 353 04

40 ¢ Denotes red figures.

Exhibit 55-A

Page 1

Witness Watkins

panies								
e								
1940		1941		Increase Year 1940 Over 1939		Increase Year 1941 Over 1939		
	Revenue (G)	MCF (H)	Revenue (I)	MCF (J)	Revenue (K)	MCF (L)	Revenue (M)	
455	$ 66 387 65	479 182	$ 103 881 44	62 679	$ 15 895 45	235 406	$ 53 389 24	
022	136 943 19	745 006	161 344 28	111 540	28 803 18	220 524	53 204 27	
161	99 878 55	615 736	133 384 38	16 573	7 965 06	169 148	41 470 89	
640	56 779 86	414 233	73 549 22	40 245	7 555 26	124 838	24 324 62	
339	25 362 24	126 934	22 289 49	7 769	1 243 04	12 636*	1 829 71*	
492	197 991 59	2 197 092	257 773 58	49 185*	6 247 90*	425 415	53 534 09	
590	26 965 99	191 825	41 664 59	3 517*	465 95	63 718	15 164 55	
057	9 211 40	139 130	27 826 00	26 010*	5 202 00*	67 063	13 412 60	
540	165 890 28	1 316 155	240 491 04	50 060	8 876 38	471 675	83 477 14	
195	22 011 10	135 564	25 349 82	5 275*	1 520 34*	16 094	1 818 38	
718	145 901 73	1 408 304	155 695 94	107 304	11 126 57	204 890	20 920 78	
239	24 737 50	171 619	18 794 55	37 368*	4 355 46*	85 988*	10 298 41*	
141	60 597 33	401 526	70 395 40	63 306	9 933 03	127 691	19 731 10	
809	92 032 34	539 348	93 798 22	16 292	281 59	36 831	2 047 47	
154	40 754 16	250 787	44 476 17	109 765	18 790 50	136 400	22 512 51	
541	318 902 11	2 066 051	340 944 99	117 481	14 347 17	276 991	36 390 05	
116	337 642 84	2 783 027	460 265 37	113 875*	5 233 22	644 036	127 855 76	
594	40 428 86	463 615	71 477 30	103 553	18 429 46	263 574	49 177 90	
945	52 867 59	322 525	65 392 97	48 111	8 367 38	112 691	18 892 76	
508	62 275 36	424 659	82 516 55	75 036	12 38 00	182 187	32 625 19	
033	23 897 12	176 022	38 621 89	6 949	200 69	78 938	14 925 46	
311	42 961 40	552 481	97 102 73	166 685	25 571 45	478 855	79 712 78	
811	18 274 55	103 340	23 842 63	20 786*	2 239 55*	3 743	3 328 53	
157	37 887 25	217 618	46 314 93	7 301	1 412 80	53 762	9 840 48	
188	34 942 49	167 731	37 277 16	40 649*	8 076 33*	32 106*	5 741 66*	
544	123 005 74	1 086 136	187 362 71	46 502*	6 030 87*	341 090	58 326 10	
281	27 976 40	194 140	42 143 75	1 694*	390 57*	70 165	13 776 78	
144	87 738 44	503 328	104 249 96	59 118	12 356 87	139 302	28 868 39	
763	31 368 41	160 140	38 390 41	7 657	1 883 11	37 034	8 905 11	
849	241 495 26	1 222 643	227 869 61	18 783	233 29*	19 577	13 858 94*	
377	18 318 46	129 147	30 955 20	6 293	1 545 95	59 063	14 182 69	
276	47 831 88	339 566	60 127 04	44 057	6 391 61	119 347	18 686 77	
496	16 655 86	82 607	19 797 76	2 382	589 98	15 493	3 731 88	
755	67 687 90	485 328	85 946 38	75 260*	11 319 01*	13 313	6 939 47	
222	37 345 71	276 256	46 336 39	31 273	5 676 29	83 307	14 666 97	
610	21 429 83	102 831	19 257 03	20 533	3 683 20	10 774	1 510 49	
579	34 783 99	232 970	41 420 26	159 900	29 012 77	202 291	35 669 04	
351	24 371 70	138 453	32 025 90	92 063	21 923 77	128 165	29 577 88	
903	$2 921 514 15	21 303 075	$3 668 353 04	1 122 589	$234 030 42	5 497 661	$980 869 31	

Received in Evidence after Adjournment of Hearing Pursuant to Ruling, T 10505

E. H. CROSBY, Trial Examiner.

[fol. 13222] Exhibit 56

Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement of Gas Produced
Period From April 1, 1932 to June 30, 1941

Line No.	Year (A)	"Panhandle" MCF: Amarillo Field (B)	Hugoton Field (C)	Other (D)	Totals (1) and (2) (E)
1	1932 (3)	1 225 165	1 077 602	247 042	2 549 809
2	1933	2 541 947	2 115 348	272 371	4 929 666
3	1934	4 465 133	2 177 399	204 973	6 787 503
4	1935	5 816 410	2 452 716	117 513	8 386 639
5	1936	9 057 076	4 359 663	110 974	13 527 713
6	1937	11 919 905	5 498 206	93 423	17 511 624
7	1938	12 457 776	4 342 590	58 636	16 859 002
8	1939	16 176 715	5 679 973	49 188	21 905 876
9	1940	19 743 030	6 796 044	39 683	26 578 757
10	Cumulative Totals	83 343 247	34 499 541	1 193 803	119 036 591
11	Average (8-3/4 yr)	9 524 942	3 942 805	136 435	13 604 182
12	194 (4)	11 914 524	3 536 924	15 823	15 467 271

13 (1) As measured (16.4 Absolute pressure base)
14 (2) Includes royalty gas subsequent to November 1, 1936
15 (3) 9 Months — April 1 to December 31, 1932
16 (4) 6 Months — January 1 to June 30, 1941

[fol. 13723]

Exhibit 57
Witness Watkins

Panhandle Eastern Pipe Line Company and Subsidiary Companies

Statement Of Gas Purchased

Period From April 1, 1932 To June 30, 1941

("Panhandle") Field

Line No.	Year (A)	Amarillo MCF (B)	Amarillo Average Cost Per MCF (C)	Amarillo Amount (D)	Hugoton MCF (E)	Hugoton Average Cost Per MCF (F)	Hugoton Amount (G)	Other MCF (H)	Other Average Cost Per MCF (I)	Other Amount (J)	Totals (1) and (2) MCF (K)	Totals (1) and (2) Average Cost Per MCF (L)	Totals (1) and (2) Amount (M)
1	1932 (3)	612 266	3.64	$ 22 302 59	484 553	5.00	$ 24 227 70	1 830 198	8.03	$ 147 039 97	2 927 015	6.61	$ 193 570 26
2	1933	1 861 430	3.60	66 957 24	1 153 149	4.89	56 437 21	2 160 632	8.03	173 600 42	5 175 211	5.74	296 994 87
3	1934	2 611 228	3.62	94 553 37	1 066 427	4.86	51 878 80	1 978 784	8.02	158 741 56	5 656 439	5.40	305 173 73
4	1935	2 861 540	3.65	104 317 84	1 326 558	4.88	64 770 46	2 031 941	8.04	163 364 92	6 220 039	5.34	332 453 22
5	1936	6 546 660	3.56	233 193 31	3 343 376	4.73	158 242 11	1 499 565	8.09	121 010 22	11 389 601	4.50	512 445 64
6	1937	11 031 392	3.46	381 636 55	9 326 824	4.37	407 196 45	1 263 958	8.06	101 852 51	21 622 174	4.12	890 685 51
7	1938	12 137 053	3.47	421 552 29	7 809 441	4.18	326 219 92	1 920 786	8.03	154 155 65	21 867 280	4.12	901 927 86
8	1939	14 862 274	3.48	517 454 31	8 630 176	4.22	364 516 64	1 450 541	7.99	115 901 98	24 942 991	4.00	997 872 93
9	1940	16 427 962	3.48	571 248 06	9 891 450	4.26	421 395 43	1 218 356	8.00	97 463 34	27 537 768	3.96	1 090 106 83
10	Cumulative												
11	Totals	68 951 805	3.50	$2 413 215 56	43 031 954	4.36	$1 874 884 72	15 354 759	8.03	$1 233 130 57	127 338 518	4.34	$5 521 230 85
12	Average												
13	(8-3/4 yr.)	7 880 206	3.50	$ 275 796 06	4 917 938	4.36	$ 214 272 54	1 754 830	8.03	$ 140 929 21	14 552 974	4.34	$ 630 997 81
14	1941 (4)	9 765 653	3.47	$ 338 829 09	5 112 526	4.26	$ 217 673 91	569 089	8.02	$ 45 654 66	15 447 268	3.90	$ 602 157 66

15 (1) As measured (16.4# Absolute pressure base)
16 (2) Includes royalty gas prior to November 1, 1936
17 (3) 9 Months April 1 to December 1, 1932
18 (4) 6 Months January 1 to June 30, 1941

[fol. 18224]

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement of Gas Revenue
Period From April 1, 1932 To June 30, 1941

Line No.	Year (A)	Residential			Commercial			Industrial			Sales to Gas Utilities			Othe	
		MCF (B)	Average Per MCF (C)	Amount (D)	MCF (E)	Average Per MCF (F)	Amount (G)	MCF (H)	Average Per MCF (I)	Amount (J)	MCF (K)	Average Per MCF (L)	Amount (M)	MCF (N)	Average Per MCI (O)
1	1932 (1)	68 710	72 86	$ 50 062 15	44 240	47 96	$ 21 216 11	471 706	17 91	$ 84 483 86	5 465 608	21 78	$ 1 190 466 87	—	—
2	1933	120 789	73 51	88 797 13	76 174	47 64	36 288 26	1 978 129	13 96	276 078 89	9 275 286	21 71	2 013 711 39	13 037	11 67
3	1934	133 856	73 30	98 110 55	86 596	47 81	41 399 29	2 227 730	14 00	311 800 72	10 983 472	21 73	2 386 428 87	65 995	10 90
4	1935	161 494	72 54	117 149 15	109 977	46 55	51 193 60	2 205 048	15 08	332 444 94	13 394 691	21 35	2 859 427 43	108 180	10 79
5	1936	184 970	69 92	129 336 48	128 406	45 18	58 013 01	3 480 449	16 46	573 015 64	22 646 017	22 18	5 021 821 23	308 089	10 87
6	1937	206 259	69 69	143 748 69	142 103	45 30	64 371 17	3 145 623	17 50	550 506 69	36 973 685	22 76	8 415 974 84	339 292	11 26
7	1938	195 191	71 55	139 653 30	126 361	45 86	57 952 18	2 975 257	15 75	468 461 94	37 675 240	23 48	8 847 855 14	213 713	12 65
8	1939	213 383	71 01	151 525 26	136 298	45 92	62 586 92	3 759 850	15 95	599 835 37	44 975 941	23 64	10 631 445 06	147 600	10 84
9	1940	278 037	66 90	186 018 44	172 617	44 32	76 497 50	4 039 833	16 66	673 091 89	51 841 845	23 58	12 222 934 95	62 430	13 93
10	Cumulative Totals	1 562 689	70 67	$1 104 401 15	1 022 772	45 91	$469 518 04	24 283 625	15 94	$3 869 719 94	233 231 785	22 98	$53 590 065 78	1 258 336	11 43
11	Average (8¾ Yr.)	178 593	70 67	$ 126 217 28	116 888	45 91	$ 53 659 21	2 775 272	15 94	$ 1442 253 71	26 655 061	22 98	$ 6 124 578 94	143 810	11 43
12	1941 (2)	8 358	65 20	$ 5 449 71	349	52 91	$ 184 66	2 307 895	17 35	$ 400 342 43	30 080 226	23 80	$ 7 158 969 43	757	10 00

(1) 9 Months — April 1, to December 31, 1932.
(2) 6 Months — January 1 to June 30, 1941.

Exhibit 58
Schedule 1
Witness Watkins

y Companies

1

Sales to Gas Utilities			Other			Totals		
	Average Per MCF (L)	Amount (M)	MCF (N)	Average Per MCF (O)	Amount (P)	MCF (Q)	Average Per MCF (R)	Amount (S)
608	21.78	$ 1 190 466 87	—	—	$ —	6 050 264	22.25	$ 1 346 228 99
286	21.71	2 013 711 39	13 037	11.67	1 521 95	11 463 415	21.08	2 416 397 62
472	21.73	2 386 428 87	65 995	10.90	7 195 80	13 497 649	21.08	2 844 934 63
691	21.35	2 859 427 43	108 180	10.79	11 667 68	15 979 390	21.10	3 371 882 80
017	22.18	5 021 821 23	308 089	10.87	33 495 95	26 747 931	21.74	5 815 682 31
685	22.76	8 415 974 84	339 292	11.26	38 220 56	40 806 962	22.58	9 212 821 95
240	23.48	8 847 855 14	213 713	12.65	27 045 29	41 185 762	23.17	9 540 967 85
941	23.64	10 631 445 06	147 600	10.84	15 995 70	49 233 072	23.28	11 461 388 31
845	23.58	12 222 934 95	62 430	13.93	8 698 95	86 394 762	23.35	13 167 241 73
785	22.98	$53 590 065 78	1 258 336	11.43	$143 841 28	261 359 207	22.64	$59 177 546 19
061	22.98	$ 6 124 578 94	143 810	11.43	$ 16 439 60	29 869 624	22.64	$ 6 763 148 14
226	23.80	$ 7 158 969 43	757	10.00	$ 75 70	32 397 585	23.35	$ 7 565 021 93

Exhibit 58
Schedule 2 4289
Page 1
Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Detail Of Sales To Gas Utilities
Years 1939 And 1940

Line No.	Company (A)	Point of Delivery (B)	Year 1939 MCF (C)	Year 1939 Average Revenue per MCF (D)	Year 1939 Revenue (E)	Year 1940 MCF (F)	Year 1940 Average Revenue per MCF (G)	Year 1940 Revenue (H)
1	Sales to Gas Utilities							
2	Texas —							
3	Panhandle Power and Light Company	Gruver	7 909	33.37	$ 2 638 85	8 733	33.30	$ 2 907 85
4	Kansas —							
5	American Gas Company	Hartford, Waverly and Williamsburg	9 728	33.14	3 224 10	11 328	33.06	3 745 60
6	Argus Natural Gas Company, Inc.	(15) Towns	872 003	6.23	54 330 06	960 184	6.16	59 148 63
7	Cities Service Gas Company	Near Kansas City	942 506	19.79	186 523 54	473 090	20.00	94 618 00
8	Gas Service Company	Osawatomie, Paola and Rantoul	212 098	21.84	46 317 40	259 656	22.16	57 528 75
9	Kansas Gas and Fuel Company	Kincaid and Mildred	3 703	33.07	1 224 45	4 964	31.97	1 586 93
10	Louisburg Gas Company	Louisburg	8 403	25.00	2 100 75	13 697	25.00	3 424 25
11	Prairie Pipe Line Company	Stanley	863	25.00	215 75	918	25.00	229 50
12	Total Kansas		2 049 304	14.34	293 936 05	1 723 837	12.78	220 281 66
13	Missouri —							
14	Bowling Green Gas Company	Bowling Green	43 197	33.94	14 661 68	53 051	28.61	15 175 77
15	Central West Utility Company	Liberty	112 462	32.36	36 390 07	133 460	28.15	37 565 14
16	Citizens Gas Company	Hannibal	373 401	27.59	103 010 88	410 468	27.00	110 807 81
17	City of Fulton	Fulton	31 729	38.89	12 338 58	49 091	35.17	17 265 72
18	Cities Service Gas Company	Near Kansas City	8 587	19.93	1 711 06	16 533	20.00	3 306 60
19	Interstate Gas Company	Harrisonville	53 732	30.75	16 523 91	52 798	31.94	16 862 40
20	Lee's Summit Gas Company	Lee's Summit	54 889	33.55	18 416 43	67 509	32.43	21 893 02
21	Missouri Edison Company	Louisiana	88 389	29.13	25 745 03	94 610	31.16	29 478 40
22	Missouri Power and Light Company	(15) Towns	3 218 528	18.20	585 913 20	3 526 682	18.04	636 260 95
23	Missouri Utilities Company	Columbia	314 106	32.13	100 935 81	405 287	30.79	124 772 14
24	Total Missouri		4 299 020	21.30	915 646 65	4 809 489	21.07	1 013 387 95
25	Illinois —							
26	Central Illinois Electric and Gas Co.	Lincoln	97 323	30.89	30 060 59	105 104	29.67	31 188 11
27	Central Illinois Light Company	Bartonville, Pekin, Peoria and Springfield	5 004 423	24.63	1 232 571 25	5 662 709	23.40	1 325 215 08
29	Central Illinois Public Service Co.	Canton, Hoopeston, Quincy and Taylorville	692 668	31.58	218 735 64	891 325	28.05	250 052 65
31	Citizens Gas Company	Chrisman, Newman, Tuscola and Villa Grove	14 021	35.08	4 919 17	44 619	34.96	15 596 74
33	City of Pittsfield	Pittsfield	11 400	33.20	3 785 05	17 581	34.19	6 010 55
34	City of Roodhouse	Roodhouse	8 127	35.26	2 865 70	13 364	34.29	4 583 10
35	City of White Hall	White Hall	6 123	32.24	1 974 12	10 773	33.27	3 583 89
36	Illinois Iowa Power Company	Champaign — Urbana, Danville, Decatur and Jacksonville	1 440 548	30.36	437 287 97	1 698 668	28.00	475 685 61
38	Total Illinois		7 274 633	26.56	$1 932 199 49	8 444 143	25.01	$ 2 111 915 73

[fol. 13226]

Exhibit 58
Schedule 2
Page 2
Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Detail Of Sales To Gas Utilities
Years 1939 And 1940

Line No.	Company (A)	Point of Delivery (B)	Year 1939 MCF (C)	Year 1939 Average Revenue per MCF (D)	Year 1939 Revenue (E)	Year 1940 MCF (F)	Year 1940 Average Revenue per MCF (G)	Year 1940 Revenue (H)
1	Sales to Gas Utilities.							
2	Indiana —							
3	Kentucky Natural Gas Corporation	Near Dana	1 706 635	20.96	$ 357 763 32	2 112 080	21.36	$ 451 121 15
4	Michigan Gas Transmission Corporation	Near Dana	11 191 471	20.50	2 294 229 35	12 311 597	21.08	2 595 809 96
5	Total Indiana		12 898 106	20.56	2 651 992 67	14 423 677	21.12	3 046 931 11
6	Michigan —							
7	Michigan Consolidated Gas Company	(Detroit) Melvindale	18 364 737	26.22	4 814 330 44	21 976 727	25.99	5 710 820 17
8	Michigan Consolidated Gas Company	(Ann Arbor) Near Carlton	27 217	27.29	7 427 61	304 546	25.56	77 846 40
9	Total Michigan		18 391 954	26.22	4 821 758 05	22 281 273	25.98	5 788 666 57
10	Ohio —							
11	Central States Natural Gas Company	Near Paulding	4 766	24.85	1 184 39	13 088	26.39	3 453 53
12	Ohio Gas Light and Coke Company	Near Wauseon	50 249	24.06	12 088 91	119 062	25.86	30 789 21
13	Toledo Edison Company	Defiance	—	—	—	18 543	24.81	4 601 34
14	Total Ohio		55 015	24.13	13 273 30	150 693	25.78	38 844 08
15	Total Sales to Utilities		44 975 941	23.64	$10 631 445 06	51 841 845	23.58	$12 222 934 95

[fol. 13227]

Exhibit 58

Schedule 3
Page 1
Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Detail Of Sales To Industrial Customers
Years 1939 And 1940

Line No.	Name (A)	Gas Used For (B)	Year 1939 MCF (C)	Year 1939 Average Revenue Per MCF (D)	Year 1939 Revenue (E)	Year 1940 MCF (F)	Year 1940 Average Revenue Per MCF (G)	Year 1940 Revenue (H)
1	Sales to Industrial Customers							
2	Kansas —							
3	Phillips Petroleum Company	Fuel for Pumping	155 719	15.47	$ 24 097 14	159 871	15.68	$ 25 064 88
4	Bartlesville, Oklahoma	Stations at:						
5		Paola and Sharpe, Kansas						
6	State of Kansas	Fuel at State Hospital,						
7	Topeka, Kansas	Osawatomie, Kansas	—	—	—	35 753	16.06	5 740 32
8	Total Kansas		155 719	15.47	24 097 14	195 624	15.75	30 805 20
9	Missouri —							
10	Edwards-Conley Brick & Tile Company							
11	Columbia, Missouri	Manufacture of Ceramics	62 572	20.81	13 018 47	41 508	21.95	9 109 89
12	Fayette Brick and Tile Company							
13	Fayette, Missouri	Manufacture of Ceramics	29 658	21.38	6 341 87	21 993	22.26	4 896 39
14	Freiling Greenhouses							
15	Hannibal, Missouri	Heating of Greenhouses	1 245	34.92	434 70	1 738	34.04	591 70
16	Harbison-Walker Refractories Company	Manufacture of Ceramics at						
17	Pittsburgh, Pennsylvania	Fulton and Vandalia, Missouri	768 258	20.65	158 632 21	942 477	21.57	203 330 84
18	Mexico Refractories Company							
19	Mexico, Missouri	Manufacture of Ceramics	446 588	20.58	91 913 49	463 161	21.56	99 878 55
20	North American Refractories Company	Manufacture of Ceramics at						
21	Cleveland, Ohio	Farber, Missouri	—	—	—	64 032	21.92	14 038 56
22	Phillips Petroleum Company	Fuel for Pumping						
23	Bartlesville, Oklahoma	Stations at Harrisonville,						
24		Jefferson City and Leeton, Mo.	133 676	18.80	25 127 46	169 769	18.68	31 714 98
25	W. J. Small Company, Inc.	Manufacture of Dehydrated Alfalfa						
26	Neodasha, Kansas	Meal at Liberty, Missouri	—	—	—	33 711	16.50	5 561 76

[fol. 13228]

Exhibits 58

Schedule 3

Page 2

Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Detail Of Sales To Industrial Customers
Years 1939 And 1940

Line No.	Name (A)	Gas Used For (B)	Year 1939 MCF (C)	Year 1939 Average Revenue Per MCF (D)	Year 1939 Revenue (E)	Year 1940 MCF (F)	Year 1940 Average Revenue Per MCF (G)	Year 1940 Revenue (H)
1	Sales to Industrial Customers							
2	Missouri — (Continued)							
3	United Brick and Tile Company	Manufacture of Ceramics						
4	Kansas City, Missouri	at Vale, Missouri	139 570	17.28	$ 24 119 20	147 339	17.21	$ 25 362 24
5	Universal Atlas Cement Company	Manufacture of Cement						
6	New York, N. Y.	at Hannibal, Missouri	1 771 677	11.53	204 239 49	1 722 492	11.49	197 991 59
7	Walsh Refractories Corporation	Manufacture of Ceramics						
8	St. Louis, Missouri	at Farber, Missouri	128 107	20.69	26 500 04	124 590	21.64	26 965 99
9	Total Missouri		3 481 351	15.81	550 326 93	3 732 810	16.59	619 442 49
10	Illinois —							
11	Black White Lime Company							
12	Quincy, Illinois	Manufacture of Lime	23 912	20.00	4 782 40	30 412	20.00	6 082 40
13	Heckenkamp Florist, Inc.							
14	Quincy, Illinois	Heating of Greenhouses	8 032	30.65	2 461 70	5 349	30.55	1 634 20
15	Marblehead Lime Company	Manufacture of Lime						
16	Chicago, Illinois	at Quincy, and Lime and Rock Wool						
17		at Marblehead, Illinois	72 067	20.00	14 413 40	46 057	20.00	9 211 40
18	Mencke Stone and Lime Company							
19	Quincy, Illinois	Manufacture of Lime	18 769	20.00	3 753 80	29 581	20.00	5 916 20
20	Total Illinois		122 780	20.70	25 411 30	111 399	20.51	22 844 20
21	Total Sales to Industrial Customers		3 759 850	15.95	$ 599 835 87	4 039 833	16.66	$ 673 091 89

[fol. 13229]

Panhandle Eastern Pipe Line Company and Subsidiary Companies
Statement Of Gas Revenue By States
Period From April 1, 1932 To December 31, 1941

Line No.	Period (A)	Texas		Oklahoma		Kansas		Missouri		Illinois		India	
		MCF (B)	Amount (C)	MCF (D)	Amount (E)	MCF (F)	Amount (G)	MCF (H)	Amount (I)	MCF (J)	Amount (K)	MCF (L)	
1	1932 (1)	6 161	$ 2 503 44	—	$ —	1 876 199	$ 280 091 16	1 601 225	$ 387 926 63	1 371 294	$ 460 538 46	1 195 385	$
2	1933	17 620	4 232 62	—	—	2 690 596	430 111 09	3 903 073	771 313 49	3 240 689	920 651 76	1 611 437	
3	1934	37 149	6 624 59	—	—	2 845 106	449 272 17	4 160 615	819 274 06	4 738 430	1 259 020 99	1 726 349	
4	1935	58 429	8 779 01	—	—	2 866 513	468 871 27	4 785 846	965 842 26	5 898 948	1 501 852 54	2 369 654	
5	1936	122 866	15 684 22	10 538	1 053 80	2 396 928	398 186 44	6 806 318	1 375 477 12	7 254 476	1 853 085 13	6 229 747	
6	1937	94 356	12 484 40	4 299	429 90	1 400 042	215 662 62	8 144 361	1 674 233 20	7 554 821	1 966 080 17	7 639 485	
7	1938	62 319	10 248 55	4 028	604 20	1 326 677	198 894 60	8 419 584	1 664 090 85	6 601 142	1 799 224 12	8 739 715	
8	1939	105 887	13 587 36	—	—	2 373 262	391 645 04	8 009 919	1 610 196 14	7 398 929	1 958 935 75	12 898 106	
9	1940	11 168	4 429 10	—	—	2 199 478	336 712 70	8 860 840	1 815 299 29	8 557 633	2 136 358 88	14 423 677	
10	Accumulative.												
11	Totals	515 955	$ 78 573 29	18 865	$ 2 087 90	19 854 801	$ 3 169 447 09	54 681 781	$11 083 683 04	52 616 362	$13 855 747 80	56 833 555	$1
12	Average (8-3/4 Yr.)	58 966	$ 8 979 81	2 156	$ 238 62	2 269 120	$ 362 222 53	6 249 346	$ 1 266 706 63	6 013 299	$ 1 583 514 03	6 495 264	$
13	1941 (2).	7 091	$ 2 847 92	74	$ 43 68	1 091 159	$ 157 836 45	4 940 178	$ 993 491 96	4 824 233	$ 1 235 107 07	8 534 021	$

14 (1) 9 Months — April 1 to December 31, 1932
15 (2) 6 Months — January 1 to June 30, 1941

Exhibit 59
Witness Watkins

pe Line Company and Subsidiary Companies
ent Of Gas Revenue By States
April 1, 1932 To December 31, 1941

	Illinois		Indiana		Michigan		Ohio		Total	
nt	MCF (J)	Amount (K)	MCF (L)	Amount (M)	MCF (N)	Amount (O)	MCF (P)	Amount (Q)	MCF (R)	Amount (S)
26 63	1 371 294	$ 460 538 46	1 195 385	$ 215 169 30	—	$ —	—	$ —	6 050 264	$ 1 346 228 99
43 49	3 240 689	930 651 76	1 611 437	290 058 66	—	—	—	—	11 463 415	2 416 397 62
74 06	4 738 430	1 259 020 99	1 726 349	310 742 82	—	—	—	—	13 497 649	2 844 934 63
42 26	5 898 948	1 501 852 54	2 369 654	426 537 72	—	—	—	—	15 979 390	3 371 882 80
77 12	7 254 476	1 853 085 13	6 229 747	1 206 799 40	3 957 058	965 396 20	—	—	26 747 931	5 815 682 31
33 20	7 554 821	1 966 080 17	7 639 485	1 512 673 60	15 969 598	3 831 258 06	—	—	40 806 962	9 212 821 95
90 85	6 601 142	1 799 224 12	8 739 715	1 844 611 96	16 032 297	4 023 293 57	—	—	41 185 762	9 540 967 85
96 14	7 398 929	1 958 935 75	12 898 106	2 651 992 67	18 391 954	4 821 758 05	55 015	13 273 30	49 233 072	11 461 388 31
99 29	8 557 633	2 136 858 88	14 423 677	3 046 931 11	22 281 273	5 788 666 57	150 693	38 844 08	56 394 762	13 167 241 73
83 04	52 616 362	$13 835 747 80	56 833 555	$11 505 517 24	76 632 180	$19 430 372 45	205 708	$ 52 117 38	261 359 207	$59 177 546 19
06 63	6 013 299	$ 1 583 514 03	6 495 264	$ 1 314 916 25	8 757 963	$ 2 220 614 00	23 510	$ 5 956 27	29 869 624	$ 6 763 148 14
91 96	4 824 233	$ 1 235 107 07	8 534 021	$ 1 811 221 81	12 905 811	$ 3 339 483 23	95 018	$ 24 989 81	32 397 585	$ 7 565 021 93

[fol. 13230]

Exhibit 60

Page 1

Panhandle Eastern Pipe Line Company

Witness Watkins

Sales Agreements With Other Gas Companies
As At June 30, 1941

Line No.	Customer (A)	Territory Served (B)	Agreement or FPC Rate Schedule: Date (C)	Agreement or FPC Rate Schedule: Term or Expiration (D)
1		**Firm Service**		
2 3	Argus Natural Gas Company, Inc. Omaha, Nebraska	15 towns in Southwestern Kansas	1/18/29	1/17/49 (Intrastate Sale)
4 5 6	American Gas Company Bartlesville, Oklahoma	Hartford, Waverly and Williamsburg, Kansas	5/ 5/41	Cancellable 5/5/42 or thereafter on anniversaries (Rate Schedule FPC Number 37)
7 8 9 10 11	Battle Creek Gas Company Battle Creek, Michigan	Battle Creek, Michigan	6/ 9/41	Cancellable 15 years after first delivery or thereafter on 6 months' notice. (Deliveries not commenced nor agreement filed with FPC at 6/30/41
12 13 14	Bowling Green Gas Company Bowling Green, Missouri	Bowling Green, Missouri	5/13/41	Cancellable 5/13/42 or thereafter on anniversaries (Rate Schedule FPC Number 33)
15 16	Central Distributing Company Kansas City, Missouri	Approximately 8 towns in Kansas and Missouri	12/22/32	Cancellable at will of either party. (Rate Schedule FPC Number 11)
17 18	Central Distributing Company Kansas City, Missouri	Approximately 22 towns in Kansas and Missouri	5/18/40	Cancellable 5/21/42 or thereafter on anniversaries (Rate Schedule FPC Number 34)
19 20	Central Distributing Company Kansas City, Missouri	Schools and Churches in Kansas and Missouri	5/15/40	Cancellable at will of either party. (Rate Schedule FPC Number 34)
21 22 23	Central States Natural Gas Co., Inc. Paulding, Ohio	Paulding, Ohio	6/12/39	Cancellable 12/31/51 or thereafter on anniversaries (Rate Schedule FPC Number 24)
24 25 26	Central West Utility Company Kansas City, Missouri	Liberty, Smithville and Avondale, Missouri	11/ 4/35	Cancellable 1/2/46 or thereafter on anniversaries (Rate Schedule FPC Number 32)
27 28	Cities Service Gas Company Bartlesville, Oklahoma	Kansas City, Missouri	Day to day basis while agreement is under negotiation	
29 30 31	Citizens Gas Company of Hannibal Hannibal, Missouri	Hannibal, Missouri	4/ 2/31	Cancellable 9/24/41 or thereafter on anniversaries (Rate Schedule FPC Number 29)

[fol. 13231]

Exhibit 60

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Witness Watkins

Panhandle Eastern Pipe Line Company

Sales Agreements With Other Gas Companies
As At June 30, 1941

Line No.	Customer (A)	Territory Served (B)	Agreement or FPC Rate Schedule: Date (C)	Agreement or FPC Rate Schedule: Term or Expiration (D)
1		Firm Service (Cont.)		
2	City of Fulton		11/30/35	Cancellable 5/12/46 or thereafter on anniversaries. (Rate Schedule FPC Number 30)
3	Fulton, Missouri	Fulton, Missouri		
4				
5	Consumers Power Company	Pontiac, Flint, Owosso, Jackson, Kalamazoo and	4/30/41	Cancellable 15 years after first de-
6	Jackson, Michigan	other nearby towns and villages in Michigan		livery or thereafter on 6 months'
7				notice. (Deliveries not commenced
8				nor agreement filed with FPC at
9				6/30/41).
10	Gas Service Company			Month to month basis
11	Kansas City, Missouri	Osawatomie, Paola and Rantoul, Kansas		(Intrastate Sale)
12	Illinois Natural Gas Company	For resale to utilities, municipalities and	6/30/38	Cancellable 6/30/43 or thereafter on
13	Kansas City, Missouri	industrial customers in Illinois		12 months' notice.
14	Interstate Gas Company		5/ 1/38	Cancellable 4/30/42 or thereafter on
15	Harrisonville, Missouri	Harrisonville, Missouri		anniversaries.
16				(Rate Schedule FPC Number 31)
17	Kansas Gas and Fuel Company		3/ 5/31	Cancellable 8/25/41 or thereafter on
18	Kansas City, Missouri	Kincaid and Mildred, Kansas		anniversaries.
19				(Rate Schedule FPC Number 27)
20	Kentucky Natural Gas Company		6/17/38	Expires 9/1/53.
21	Owensboro, Kentucky	Kentucky and Indiana		(Rate Schedule FPC Number 21)
22	Lee's Summit Gas Company		2/24/40	Cancellable 2/24/42 or on anniversaries.
23	Lee's Summit, Missouri	Lee's Summit, Missouri		(Intrastate Sale)
24	Louisburg Gas Company		5/ 9/28	While local gas is available.
25	Louisburg, Kansas	Louisburg, Kansas		(Intrastate Sale)
26	Michigan Consolidated Gas Company		8/31/35	Cancellable 1/1/52 or thereafter on
27	Detroit, Michigan	Detroit, Michigan		anniversaries.
28				(Rate Schedule FPC Number 12)
29	Michigan Consolidated Gas Company		4/20/37	Cancellable 1/1/52 or thereafter on
30	Detroit, Michigan	Ann Arbor, Michigan		anniversaries.
31				(Rate Schedule FPC Number 25)

[fol. 13232]

Exhibit 60

Panhandle Eastern Pipe Line Company

Sales Agreements With Other Gas Companies
As At June 30, 1941

Line No.	Customer (A)	Territory Served (B)	Agreement or FPC Rate Schedule: Date (C)	Agreement or FPC Rate Schedule: Term or Expiration (D)
1		**Firm Service (Cont.)**		
2	Michigan Gas Transmission Corporation			
3	Detroit, Michigan	Approximately 40 towns in Indiana	7/31/36	7/31/41 (Rate Schedule FPC Number 16)
4	Michigan Gas Transmission Corporation			
5	Detroit, Michigan	Approximately 30 towns in Indiana	10/ 1/36	10/ 1/51 (Rate Schedule FPC Number 18)
6	Michigan Gas Transmission Corporation	Industries in a group of towns in Northern and		
7	Detroit, Michigan	Central Indiana	8/ 1/36	7/31/41 (Rate Schedule FPC Number 17)
8	Missouri Edison Company			
9	Louisiana, Missouri	Louisiana, Missouri	9/20/30	Cancellable 8/30/41 or thereafter on anniversaries. (Rate Schedule FPC Number 38)
10				
11	Missouri Power & Light Company			
12	Jefferson City, Missouri	14 towns in Central Missouri	5/19/30	Cancellable 5/6/51 or thereafter on anniversaries. (Rate Schedule FPC Number 28)
13				
14	Missouri Power & Light Company			
15	Jefferson City; Missouri	Part of Excelsior Springs, Missouri	9/28/33	Life of Local well. (Intrastate Sale)
16	Missouri Utilities Company			
17	Columbia, Missouri	Columbia, Missouri	3/17/31	Cancellable 7/22/42 or thereafter on anniversaries. (Rate Schedule FPC Number 35)
18				
19	National Utilities Company of Michigan			
20	Monroe, Michigan	Monroe, Dundee, Carleton and Maybee, Michigan	3/ 1/41	Cancellable 12/31/51 or thereafter on anniversaries. (Rate Schedule FPC Number 36)
21				
22	The Ohio Gas, Light & Coke Company			
23	Bryan, Ohio	9 towns in Northwestern Ohio	3/25/39	Cancellable 12/31/51 or thereafter on anniversaries. (Rate Schedule FPC Number 23)
24				
25	Panhandle Power & Light Company			
26	Borger, Texas	Gruver, Texas	12/23/30	Cancellable on 90 days' notice. (Intrastate Sale)
27				
28	The Toledo Edison Company	Defiance, Ohio	12/22/39	Cancellable 12/31/51 or thereafter on anniversaries. (Rate Schedule FPC Number 26)
29	Toledo, Ohio			
30				

[fol. 13233]

Exhibit 60

Panhandle Eastern Pipe Line Company

Sales Agreements With Other Gas Companies
As At June 30, 1941

Line No.	Customer (A)	Territory Served (B)	Agreement or FPC Rate Schedule: Date (C)	Agreement or FPC Rate Schedule: Term or Expiration (D)
1		**Non-Firm Service**		
2	Of the above utilities, the following also purchase gas on an interruptible basis			
3	for certain of their customers under those parts of Panhandle Eastern Pipe Company Therm Rate			
4	Schedules known as Rates T-2 and T-3, which purchases may be terminated at any anniversary:			
5	Bowling Green Gas Company, Bowling Green, Missouri			
6	Central Distributing Company, Kansas City, Missouri			
7	Central West Utility Company, Kansas City, Missouri			
8	Citizens Gas Company of Hannibal, Hannibal. Missouri			
9	City of Fulton, Missouri, Fulton, Missouri			
10	Interstate Gas Company, Harrisonville, Missouri			
11	Missouri Edison Company, Louisiana, Missouri			
12	Missouri Power & Light Company, Jefferson City, Missouri			
13	Missouri Utilities Company, Columbia, Missouri			

[fol. 13234]

Exhibit 60

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Witness Watkins

Panhandle Eastern Pipe Line Company

Sales Agreements With Industrial Customers
As At June 30, 1941

Line No.	Customer (A)	Gas Used For (B)	Agreement Date (C)	Agreement Term of Expiration (D)
1	Edwards, Conley Brick and Tile Company			
2	Columbia, Missouri	Manufacture of Ceramics	6/30/41	6/30/42
3	Fayette Brick and Tile Company			
4	Fayette, Missouri	Manufacture of Ceramics	6/30/41	6/30/42
5	Freiling Greenhouses			
6	Hannibal, Missouri	Heating Greenhouses	8/21/39	10/31/41
7	Harbison-Walker Refractories Company			
8	Pittsburgh, Pennsylvania	Manufacture of Ceramics	6/30/41	6/30/42
9	Mexico Refractories Company			
10	Mexico, Missouri	Manufacture of Ceramics	6/30/41	6/30/42
11	Missouri Power and Light Company			
12	Jefferson City, Missouri	Fuel for Boilers in producing electric current	10/30/40	10/31/41
13	Phillips Petroleum Company			
14	Bartlesville, Oklahoma	Power at 5 pumping stations	10/31/40	10/31/41
15	The W. J. Small Company			
16	Neodesha, Kansas	Alfalfa Dehydration	3/18/40	4/19/43
17	The W. J. Small Company			
18	Neodesha, Kansas	Alfalfa Dehydration	4/ 2/41	4/29/43
19	State of Kansas			
20	Topeka, Kansas	Fuel for Osawatomie State Hospital	6/ 3/40	
21				Cancellable on 30 days' notice
22	United Brick and Tile Company			
23	Kansas City, Missouri	Manufacture of Ceramics	5/26/33	
24				Cancellable on 30 days' notice
25	Universal Atlas Cement Company			
26	New York, N. Y.	Manufacture of Cement	10/31/40	10/31/41
27	Walsh Refractories Company			
28	St. Louis, Missouri	Manufacture of Ceramics	6/30/41	6/30/42
29	Wellsville Fire Brick Company			
30	Wellsville, Missouri	Manufacture of Ceramics	10/31/40	6/30/42

[fol. 13235]

Exhibit 60

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Illinois Natural Gas Company

Witness Watkins

Sales Agreements With Other Gas Companies
As At June 30, 1941

Line No.	Customer (A)	Territory Served (B)	Agreement or FPC Rate Schedule: Date (C)	Agreement or FPC Rate Schedule: Term or Expiration (D)
1		**Firm Service**		
2	Central Illinois Electric and Gas Co.	Lincoln, Illinois	5/24/40	Cancellable 5/26/42 or thereafter
3	Lincoln, Illinois			on anniversaries
4				(Rate Schedule FPC Number 9)
5	Central Illinois Light Company	Bartonville, Pekip, Peoria and Springfield, Illinois	5/13/40	Cancellable 5/26/42 or thereafter
6	Peoria, Illinois			on anniversaries
7				(Rate Schedule FPC Number 4)
8	Central Illinois Light Company	Washington, Illinois	4/10/41	Cancellable 5/30/42 or thereafter
9	Peoria, Illinois			on anniversaries
10				(Supplement No. 1 to Rate Schedule FPC No. 4)
11	Central Illinois Public Service Co.	Canton, Hoopeston, Quincy and Taylorville, Illinois	5/18/40	Cancellable 5/26/42 or thereafter
12	Springfield, Illinois			on anniversaries
13				(Rate Schedule FPC Number 7)
14	Citizens Gas Company	Chrisman, Newman and Tuscola, Illinois	5/ 9/40	Cancellable 5/26/42 or thereafter
15	Kansas City, Missouri			on anniversaries
16				(Rate Schedule FPC Number 2)
17	Citizens Gas Company	Villa Grove, Illinois	6/ 7/40	Cancellable 8/4/42 or thereafter
18	Kansas City, Missouri			on anniversaries
19				(Supplement No. 1 to Rate Schedule FPC No. 2)
20	Citizens Gas Company	Arthur and Atwood, Illinois	3/17/41	Cancellable 5/30/42 or thereafter
21	Kansas City, Missouri			on anniversaries
22				(Supplement No. 2 to Rate Schedule FPC No. 2)
23	Illinois Iowa Power Company	Champaign, Urbana, Danville, Decatur and Jacksonville,	5/15/40	Cancellable 5/26/42 or thereafter
24	Decatur, Illinois	Illinois		on anniversaries
25				(Rate Schedule FPC Number 5)
26	Illinois Iowa Power Company	Clinton, Illinois	3/26/41	Cancellable 5/30/42 or thereafter
27	Decatur, Illinois			on anniversaries
28				(Supplement No. 1 to Rate Schedule FPC No. 5)
29	Illinois Iowa Power Company	Galesburg, Monmouth, Abingdon and Knoxville, Illinois	4/21/41	Deliveries not commenced nor agree-
30	Decatur, Illinois			ment filed with FPC at 6/30/41

[fol. 13236]

Exhibit 60

Illinois Natural Gas Company

Sales Agreements With Other Gas Companies
As At June 30, 1941

Line No.	Customer (A)	Territory Served (B)	Agreement or FPC Rate Schedule: Date (C)	Agreement or FPC Rate Schedule: Term or Expiration (D)
1		**Firm Service (Cont.)**		
2 3 4	Morton, Village of Morton, Illinois	Morton, Illinois	1/23/41	Cancellable 1/20/42 or thereafter on anniversaries (Rate Schedule FPC Number 10)
5 6 7	Pittsfield, City of Pittsfield, Illinois	Pittsfield, Illinois	5/13/40	Cancellable 5/26/40 or thereafter on anniversaries (Rate Schedule FPC Number 3)
8 9 10	Roodhouse, City of Roodhouse, Illinois	Roodhouse, Illinois	5/15/40	Cancellable 5/27/42 or thereafter on anniversaries (Rate Schedule FPC Number 6)
11 12 13	White Hall, City of White Hall, Illinois	White Hall, Illinois	5/23/40	Cancellable 5/26/42 or thereafter on anniversaries (Rate Schedule FPC Number 8)
14		**Non-Firm Service**		
15 16 17 18		Of the above utilities, the following also purchase gas on an interruptible basis for certain of their customers under those parts of Illinois Natural Gas Company Therm Rate Schedules known as rates T-2 and T-3, which purchases may be terminated at any anniversary.		
19		Central Illinois Electric and Gas Company	Lincoln, Illinois	
20		Central Illinois Light Company	Peoria, Illinois	
21		Central Illinois Public Service Company	Springfield, Illinois	
22		Citizens Gas Company	Kansas City, Missouri	
23		Illinois Iowa Power Company	Decatur, Illinois	
24		Morton, Village of	Morton, Illinois	

[fol. 13237]

Exhibit 60

Illinois Natural Gas Company

Sales Agreements With Industrial Customers
As At June 30, 1941

Line No.	Customer (A)	Gas Used For (B)	Agreement: Date (C)	Agreement: Term or Expiration (D)
1 2	Black White Lime Company Quincy, Illinois	Manufacture of Lime	3/ 1/35	Cancellable 3/1/42 or on anniversaries
3 4	Marblehead Lime Company Chicago, Illinois	Manufacture of Lime	5/ 4/35	Cancellable 5/26/42 or on anniversaries
5 6	Marblehead Lime Company Chicago, Illinois	Manufacture of Lime and Rock Wool	1/23/40	12/31/41
7 8	Menke Stone and Lime Company Quincy, Illinois	Manufacture of Lime	3/ 1/35	Cancellable 3/1/42 or on anniversaries

[fol. 13238] (Exhibit 61.)

Current and Future Trends In Commodity Prices and Wages

By David Friday

I have prepared the following report on the probable future course of prices of commodities and of wages in the United States during the year beginning July 1, 1941, and for the period subsequent thereto.

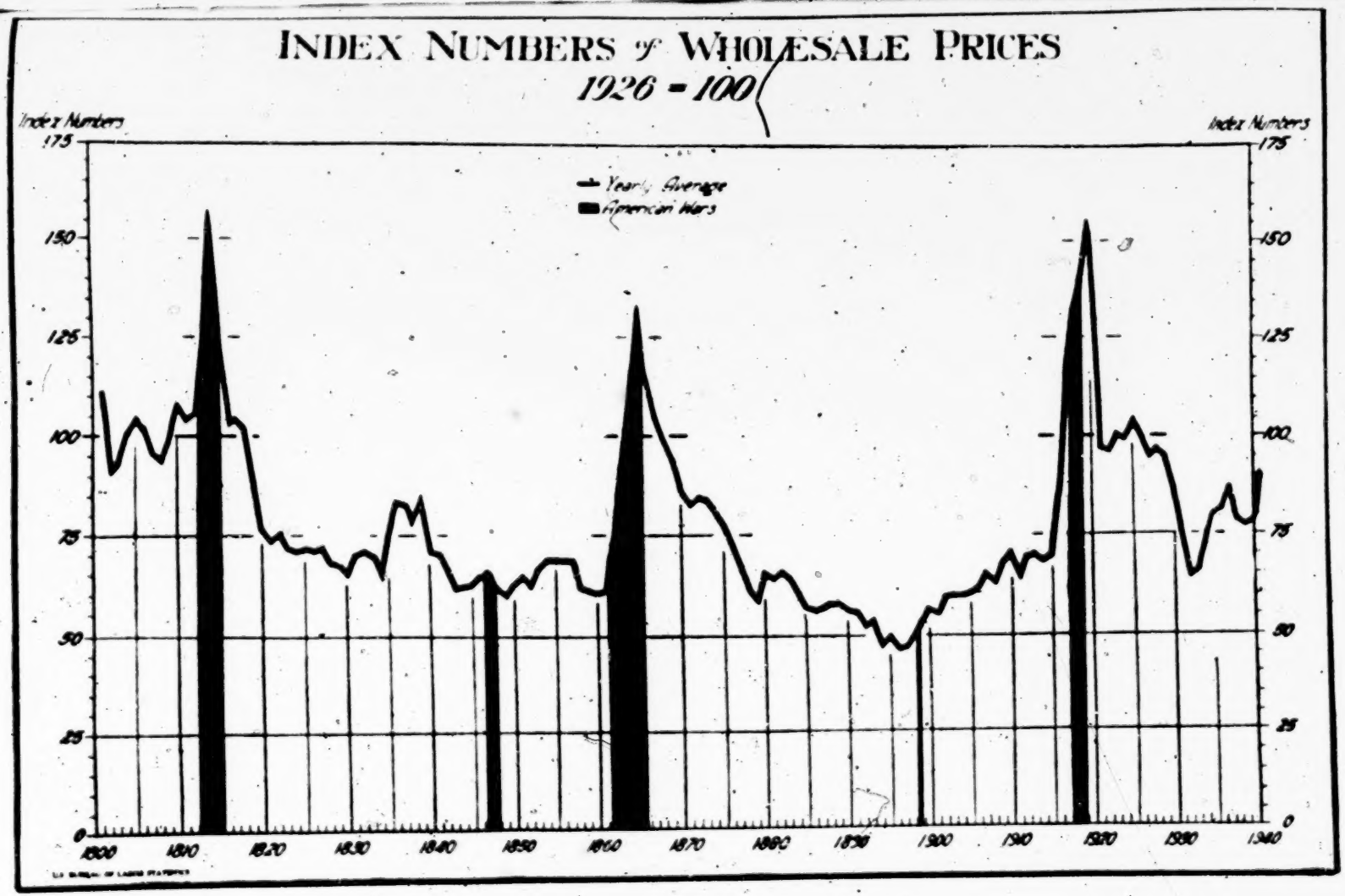
In my opinion the index of wholesale commodity prices, as compiled by the Bureau of Labor Statistics, will be at least 110 by June 30, 1942. That index is based on the prices of 1926 as 100, and stood at 91.2 on September 27, 1941. This means that during the next eleven months, wholesale prices will rise about 20 per cent and reach a level 10 per cent above that which prevailed in 1926.

This upward movement of prices will be dominated by the forces which have been set in motion by the war in Europe, and by the defense program in the United States. The experience derived from the three major wars of the past century indicates clearly what the effect of these forces will naturally be.

Prices and War

Major wars of any prolonged duration have always caused profound disturbances in commodity markets. The terrific strain of war demand on raw-material resources, producing capacity, and manpower, and the interruption of the normal flow of world commerce, and the great expansion of the use of credit have practically always led to spectacular increases in the general level of commodity prices.

[fol. 13239] Although these effects have naturally been most pronounced in the nations actually at war, they have also extended to all countries buying or selling in world markets. The extent of these disturbances is clearly depicted by the trend of wholesale prices in the United States since the year 1800. Each of the three major American wars—the War of 1812, the Civil War, and the World War—brought a price boom. This is shown in the following chart.


INDEX NUMBERS of WHOLESALE PRICES
1926 = 100
Index Numbers
175
150
125
100
75
50
25
0
Yearly Average
American Wars
1800
1810
1820
1830
1840
1850
1860
1870
1880
1890
1900
1910
1920
1930
1940

43111

[fol. 13240] This chart is based on a table of prices published in the Monthly Labor Review of July, 1935. A reprint of that table entitled, "One Hundred Thirty-four Years of Wholesale Prices," was also issued by the United States Bureau of Labor Statistics. The chart has been extended to cover the period to September 1914 by the use of the price statistics of that bureau.

A study of price movements during the last twenty-five months demonstrates that the effect of this present war upon American prices is already fully under way. The Bureau of Labor Statistics Index number of wholesale prices shows that in August, 1939, which was the last month before the outbreak of war in Europe, the level of wholesale commodity prices stood at 75.0. The index had risen to 91.5 in September, 1941. The prices have, therefore, risen 16.5 points or 22 per cent since the outbreak of the war.

This index number of wholesale prices for the years 1913 to date is attached to this report as Exhibit "A". On page 4 of this report is a table showing the index by groups for August, 1939 and for certain intervening months down to date. This table also shows the percent of increase for each group from August, 1939 to September 20, 1941.

[fol. 13241]

Index Numbers Of Wholesale Prices Of Commodities By Groups

(1926 - 100)

Groups	Aug. 1939	Aug. 1940	Dec. 1940	Mar. 1941	Sept. 20 1941	Increase Aug. 1939 to Sept. 20, 1941
All Commodities	75 0	77 4	80 6	81 5	91 5	22 0
Farm Products	61 0	65 6	69 7	71 6	91 2	49 5
Foods	67 2	70 1	73 5	75 2	88 5	31 7
Hides	92 7	96 9	102 3	102 6	111 7	20 5
Textile Products	67 8	72 3	74 8	78 4	89 2	31 6
Fuel and Lighting	72 6	71 1	71 7	72 0	80 0	10 2
Metals and Metal Products	93 2	94 9	97 6	97 7	98 7	5 9
Building Materials	82 6	93 3	99 3	99 5	106 2	18 5
Chemicals and Allied Products	74 2	76 7	77 7	79 8	87 8	18 3
House Furnishings	85 6	88 5	88 9	89 5	98 0	14 5
Miscellaneous	73 3	76 7	77 3	77 6	85 0	16 0

Source: United States Department of Labor, Bureau of Labor Statistics.

[fol. 13242] The Bureau of Labor Statistics also complies an index of prices for twenty-eight basic commodities. This index takes August, 1939 as 100 and is compiled daily for the period since the outbreak of the war. It has risen from 100 in the last month before the outbreak of the war to 151.7 on August 8, 1941.

The table below shows the index of these prices as on several dates from August, 1939 to August 8, 1941 by the five groups into which the Bureau divides them. The smallest rise of any group is 45.0 per cent, and the highest is 60.8. This new index is much more sensitive to changes in market conditions than is the Bureau's monthly index of wholesale prices.

Index Numbers of 28 Basic Commodities

Groups	Aug. 1939	Aug. 15 1940	Dec. 31 1940	Mar. 31 1941	Sept. 30 1941
28 Basic Commodities	100 0	105 6	118 5	135 0	155 7
Import Commodities (11)	100 0	106 1	119 5	144 3	157 6
Domestic Commodities (17)	100 0	105 4	117 9	129 3	154 5
Domestic Agricultural (7)	100 0	111 9	126 4	132 2	162 0
Foodstuffs (12)	100 0	100 8	115 2	134 4	170 8
Raw Industrial (16)	100 0	109 3	121 0	135 4	145 1

The average increase in these basic commodity prices is almost three times as large as the movement in the general index number shown in Exhibit A. This difference is due, in large measure, to the fact that the 883 prices included in the general price index are quoted prices only. The twenty-eight basic commodities are spot prices and many of them are quoted on organized exchanges. In other words, they are actual prices paid. At a time of changing price levels these express the prevailing trend in prices more accurately than mere quoted prices do.

[fol. 13243] If the commodities that go to make up the index of wholesale prices of the Bureau of Labor Statistics had advanced as rapidly in price as did these twenty-eight basic commodities, the general index would now stand at 155.7 times 75.0 or 116.8.

One of the lines of classification within these basic materials is that between imported and domestic commodities.

While all basic commodities had risen from 100 in August, 1939 to 155.7 on September 30, 1941, domestic commodities had gone to 154.5 and imported commodities to 157.6.

This has an important bearing on the possibility of restraining the rise of prices by control. Whatever may be accomplished in this direction in the case of domestic commodities, there is no possibility of avoiding the effect of increased ocean freight rates, or insurance on imported commodities. Their prices must rise to cover these costs. Early this year the shortage of shipping reached the emergency stage and the price of imported goods rose with this shortage and these costs. From December 31, 1940 to September 30, 1941, imported commodities advanced 38.1 points while domestic rose only 36.6.

It is illuminating to compare price movements at present with those in the World War. After the outbreak of hostilities at the end of August, 1939, the Bureau of Labor Statistics index of wholesale prices rose slightly then fell again. In June, 1940 it had risen only from 75.0 in August, 1939 to 77.5. Many people believed that this action indicated that we would escape a price increase such as we had during the World War. That war broke out on July 28, 1914. In the first two months after that prices rose 4 per cent in this country, but by December, 1941 they fell again to the July level. During the first fifteen months of hos- [fol. 13244] tilities in Europe there was practically no further advance in the general level of American commodity prices.

The Bureau of Labor Statistics index of wholesale prices (see Exhibit "A") stood at 67.3 (on the basis of 1926=100) in July, 1914. Prices went to 70.2 in September, 1941, then fell slightly and did not reach 70.2 again until October, 1915, which was fifteen months after the war began. Eight months later, in the twenty-fourth month of the war, i. e., in July, 1916, these prices stood at 83.4 which was 23.9 per cent above July, 1914.

By March, 1917, just before the United States entered the war, prices had risen to 107.7, and by June, 1917 to

122.0. The Bureau of Labor Statistics price index remained near this level until the end of the year, then rose to 136.3 in November, 1918, the month of the armistice. In the post-war boom of 1919 and early 1920, prices reached their peak of 167.2 in May, 1920.

When these prices are stated on a base of July, 1914 as 100, the resulting index shows the rate and extent of advance in prices during the first World War.

Prices In The World War

Date	On basis 1926 = 100	On basis July, 1914 = 100	Month of Warfare
July, 1914	67 3	100 0	1st
Oct. 1915	70 2	104 3	15th
Aug. 1916	85 1	126 4	25th
Mar. 1917	107 7	160 0	32nd
Aug. 1917	124 8	184 0	36th
Nov. 1918	136 3	202 5	52nd
May, 1920	167 2	248 4	(17th) (Post-war Month)

Source: United States Department of Labor, Bureau of Labor Statistics.

[fol. 13245] The present war is now in its twenty-fifth month and the general Bureau of Labor Statistics index of wholesale prices stands at 122.0 per cent of August, 1939, as is shown on page 4. Prices have, therefore, advanced 4.4 per cent less in the first twenty-five months following the outbreak of hostilities in this war. This was due largely to the extraordinary rise which occurred during the World War in the chemical and drug group; and a rise of almost 50 per cent in metals and metal products. In 1914 we were so greatly dependent upon Germany for coal-tar products and other chemicals that the chemicals and drugs group of prices rose from 77.9 in July, 1914 to 166.8 in June, 1915,—an increase of 114.1 per cent, while all prices rose only 23.2 per cent. In this present war period our American chemical industry was prepared to supply our needs in this line with an advance to date of only 13 per cent in prices.

The rise in the price of metals was largely due to the advance in the non-ferrous group, especially copper and

aluminum. In these lines prices were driven up unduly by speculation.

If it had not been for this extraordinary advance in the price of chemicals and metals, the rise would not have been materially larger in the first months of World War I than it has been in the present European war.

After August, 1916 the rise of prices was much more rapid than it had been during the nine months from October, 1915 to August, 1916. In that period the total rise had been 22 per cent of the July, 1914 level.

In the year which followed August, 1916 the rise was 57.6 per cent of the prices in July, 1914. To put it another way, after prices had risen 26 per cent during the first 25 months of war to July, 1916, they rose another 57.6 per cent in the following twelve months. This brought them to 184.0 in August, 1917.

[fol. 13246] Prices made this further rise in the twelve months following August, 1916 after chemicals and metals had already made the great advances which were noted above. As a matter of fact, chemicals were lower throughout this whole twelve month period than they had been in June, 1916. It is my opinion that prices will likewise have a further rise from the level which prevailed on September 20, 1941.

The advance in commodity prices which has resulted from the war in Europe is not limited to the United States, but has occurred in other countries,—both belligerents and non-participants in the war, as is shown by the commodity price indexes of ten countries computed by General Motors and Cornell University.

This index is based on August, 1939 as 100 and is built upon the prices of forty basic commodities, and the list is the same for each country, in so far as possible.

The indexes, which are based on prices expressed in the currency of each country, were reported on May 24, 1941 as follows:

[fol. 15247]

Commodity Price Indexes Of 10 Countries

(August, 1939 = 100)

1940	Argentina	Australia	Canada	England	Java	Mexico	New Zealand	Sweden	Switzerland	United States
May	120	118	120	143	116	113	112	131	132	112
June	118	118	120	144	116	113	114	131	136	109
July	118	118	120	145	115	112	114	132	140	109
August	118	119	120	150	115	111	120	132	144	109
September	116	120	121	145	116	110	122	135	153	111
October	113	123	122	145	117	110	120	139	158	114
November	113	125	124	146	118	111	118	142	164	118
December	113	126	126	149	120	111	119	144	168	118
1941										
January	114	127	126	150	121	111	119	144	171	120
February	114	126	127	150	121	113	119	147	171	120
March	119	122	129	150	123	114	119	154	176	122
July	135	121	141	156	136	125	122	155	194	136
August	138	121	143	156	138	127	123	156		138

Source: Compiled by General Motors Corp. and Cornell University.

[fol. 13248] The reasons for these price advances in war times are to be found in the laws of price and the forces which govern price movements. A study of those laws, and of the forces which are set in motion by war show that it is entirely natural that prices should rise at such times.

The simplest statement concerning the determination of market price is that demand and supply control it. This is the explanation most frequently heard in the market place and on the street. And the statement is true. For as the terms "demand" and "supply" are commonly used, they are taken to include all the forces that influence buyers and sellers. But like most other general explanations, this formula is of little assistance in understanding the actual movements of price until the terms "demand" and "supply" have been exactly defined and until the complex forces which are grouped under these two names have been analyzed.

The first step in the analysis is the definition of demand. The demand for a commodity is the amount of any given good which individuals stand ready to buy at a particular price, during a given time, and at a given place. Demand is the quantity which buyers stand ready to take at some specific price.

A general increase in demand on the part of buyers who have the necessary purchasing power will increase prices. When, for example, business revived during the years 1936 and 1937 and national income increased, as it does in periods of business revival, the result was a rise in the wholesale price index from 79 to 88. This was due to the fact that the increased national income led to a more active demand for commodities. For example, the average weekly earnings of factory workers rose from less than $22.00 in the first half of 1935 to $28.00 in the spring of 1937. The national income went from $56 billions to $71 billions. This rise translated itself into increased demand and caused commodity prices to rise to 88, which is the [fol. 13249] highest point they had reached since the depression of 1930-1932.

The demand which comes from government during a serious and protracted war is especially potent. This is due, first of all, to the motives which prompt that demand. A nation, in times of war, does not buy with a view to making profit. A private manufacturer purchases raw materials and partly finished commodities if he thinks he can make a profit by fabricating them into a finished product. And he will not pay a price if it is too high to enable him to do this. But governments are not prevented from buying by considerations of profit. Their purchases are made for an entirely different reason. Those reasons are non economic, but exceedingly effective.

When war strikes across the current of a nation's economic life, it produces a complete revaluation of the ends of conduct. Things which before were held in high esteem are now sacrificed ruthlessly and without hesitation to non-economic ends. Even life itself is sacrificed. No one asks that the traditional values which existed before be maintained; they ask only that the war be won, in order that the aims upon which the nation has set its heart can be realized.

This attitude of mind expresses itself in an enormous volume of demand for the things needed to prosecute war. The nation bids for these in great quantities. It would rather buy them cheaply than dearly, but buy them it must. It is this nature of war demand which gives it such great potency to raise prices. The end which the nation has set up for itself is an absolute one. When once war is undertaken, defeat must be prevented at any price. The forces which impel public opinion and dictate official action at such times are to a large degree emotional. If the commodity, or the service, is necessary for victory, it will be bought and paid for even though the price is far above the level which we have come to consider as "normal".

[fol. 13256] There is a second fundamental difference between the demand of government and that of the individual and its effect upon prices. The individual may desire a thing passionately. But if he lacks purchasing power, his demand will be ineffective. It will not influence price.

But the government of a wealthy industrial nation, such as the United States, is not seriously hampered by this problem. Its purchasing power has behind it the taxing power. Not only can it directly take the people's property and income by taxation, but it can pledge their future income for the purpose of borrowing from those who possess the power to buy things but do not choose to exercise it themselves.

Among the institutions which come to the assistance of government at such times are the banks. These institutions not only receive deposits which they may lend, but they also have the unique ability to manufacture purchasing power in the form of credit. They can then lend this credit to their governments and commonly do so at times of war. The banking situation of the United States is such that the power to buy and pay for goods is greater than the entire cost of any war which the United States has yet fought.

What we have then at the moment, is a situation in which the government of this country is making a demand upon our industries which has never been matched before. At the moment, although we are not actually at war, we are in an unlimited emergency and by reason of our defense effort we are getting the same economic results as though we were at war. And there is no doubt about our ability to obtain the purchasing power with which to make the demand of our government effective either at present or even at much higher prices.

A further characteristic of war demand for commodities and services is its immediacy. There is always great pressure for time. Under such conditions it may well be that in the long run prices would naturally be lower—but there is no time to wait for the long run. So it is the short run situation which governs.

[fol. 1825] For example, according to figures which have recently become available, the cost of constructing buildings at cantonments represents a large advance over what that cost would have been if it could have been carried

out at the ordinary rate of speed. This is one of the factors that contributes to the rise of prices in the early stages of war activity.

At present there is an ever mounting shortage in shipping. This has been accompanied by a rapidly mounting risk in all shipping operations. As a consequence, the cost of ocean shipping has multiplied greatly and this has increased certain prices.

These features of war demand are largely responsible for the increases in commodity prices which have been set forth in the tables shown earlier. The great increase in demand since war began in Europe has resulted in a large increase in industrial production in mines and manufactures. Their output has risen from 104 in August 1939 to 161 in August, 1941, according to the Federal Reserve Board index of physical volume of production. This index is based upon the average of the years 1935 to 1939 as 100. Factory payrolls rose from 91.2 in August 1939 to 152.5 in July, 1941. The national income for 1940, as computed by the Department of Commerce of the United States, was $76 billions. This is larger than it has been in any year since 1929, when it amounted to $82,885 millions. In 1941 it will exceed 1929 and will approach $90 billions.

This increase in productive activity and the rise of payrolls which accompanies it is, in turn, one of the causes which will bring about a further rise in prices. For it constitutes economic power in the hands of the workers who receive it and this swells the volume of new purchasing power that is offered on the market for commodities.

Under these conditions the only forces which can stop the rise in prices must operate on the supply side. Prices will not stay at their old level when demand increases unless [fol. 43252] additional goods can be produced so cheaply that they will continue to be offered at the old prices. Clearly, this will only happen if the cost of producing them is low enough so that they can continue to be sold at a profit at the former price. They will not be produced unless price is high enough to cover cost, including a profit.

The supply of goods will not be increased or even maintained unless this is the case.

There is no likelihood that costs of production will fall during the present war, nor for some years thereafter.

The principal items in the cost of manufactures are wages, taxes, and the maintenance and support of capital. The largest item or expense to the individual manufacturer is for materials. But the prices of these in turn resolve themselves into the costs of producing those materials. So for all manufactures, taken as a whole, the items of cost set forth above dominate prices.

The largest element in this cost is wages and salaries for they represent more than 75 per cent of the entire cost of converting materials into finished product. During 1940 the total contribution to the national income which originated in manufacturing amounted to $19,168 millions; and the wages and salaries paid by that industry were $15,218 millions or 80 per cent (Survey of Current Business, June 1941). There is no likelihood that these labor costs will increase.

The effect of war on wages is illustrated by what happened during the World War. When the war broke out in August, 1914, the weekly average earnings in New York State factories were $12.53. By September, 1915 they were $12.86, and by June, 1916 they had advanced to $14.40. By June, 1917 weekly wages in these factories had risen to $16.20. This was an increase of $3.24 or 25 per cent over September, 1915.

By November, 1918, when the armistice was declared, wages had risen $5.40 further to $21.60. This was an increase of 33⅓ per cent over June, 1917. And it was a total [fol. 13253] rise of 72 per cent above the level of August 1914.

We are using these figures for New York State for the wages of factory workers because there are no figures of

wages of factory workers available on a national scale for the period 1914 to 1920.

These figures were compiled and published by the New York State Department of Labor and are printed in its monthly publication, "The Industrial Bulletin," vol. 20, No. 1, January, 1941, page 19.

It is interesting to note several other facts about these weekly earnings. In the depression of 1921-1922, these wages never fell below $24.15 per week. From that point they rose to a high of $30.35 in March, 1929. In the depression of the 1930's they declined to a low of $20.73 in March, 1933; and by December, 1940 they had risen again to $30.01. In July, 1941 they were at $34.29, which is a new high for all time.

The chart (Exhibit B) which I prepared from these figures, shows the movement in these wages graphically. This graph is not an index number, but represents actual dollars earned per week, as is shown by the figures on the sides of the graph.

Wages did not stop rising with the armistice, but continued their advance in the post-war boom of 1919 and 1920 and finally reached $28.93 in October, 1920.

The general pattern of wage movements in the first World War, revealed by the graph (Exhibit B), may be summarized as follows:

There was, first of all, a period in which earnings were almost stationary. This lasted for a year and one-half after August, 1914. The average weekly earnings for 1915 were only 49 cents higher than in the last six months of 1914. In 1916 they recorded an advance of 12 per cent over 1915. In 1917 there was a 13.5 advance over 1916. Then, in 1918 the increase rose to 24 per cent.

The absolute rise in average weekly wages in each of [fol. 13254] these periods was as follows:

1914 to 1915	$0.40
1915 to 1916	1.58
1916 to 1917	1.94
1917 to 1918	3.98
(1914 to 1918)	$7.90
1918 to 1919	$3.15
1919 to 1920	4.65
(1918 to 1920)	$7.80
1914 to 1920	$15.70

These figures show strikingly how rapidly wages rose in the post-war inflationary period. The rise from 1914 to 1918 was 62 per cent; and the advance from 1918 to 1920 was as great as that of the war period.

In the present war, weekly earnings in New York State factories have increased 24.6 per cent in the twenty-three month period between August, 1939 and July, 1941. This exceeds their increase in the first twenty-three months of the first World War, in which period the increase was only 13 per cent. In the year which followed the first twenty-three months of the World War weekly earnings went up another 14.6 per cent. If such a rise occurs, it will put weekly earnings at $39.29 by July of next year. This would be $9.11 higher than they were in August, 1939, and will bring them 43 per cent above August, 1939 earnings.

A part of the rise which has already occurred since August, 1939 has been due to an increase in the number of hours worked. But there has also been an increase in hourly rates. In twenty-five manufacturing industries reported by the National Industrial Conference Board earnings per hour had increased 14 per cent over August, 1939 by July, 1941. The course of hourly earnings is shown in Exhibit C.

[fol. 13255] These hourly earnings, collected and compiled from twenty-five manufacturing industries by the

Conference Board are not from a single state, as were the New York State figures previously presented, but are nationwide.

I expect that these hourly earnings will increase more rapidly from now on, much as they did in the last war, after the spring of 1916, so that they will be up at least 20 per cent from the level of August, 1939 by a year from now.

The forces which are at present making for higher wages are clear and striking.

(1) First and foremosts is the fact of improved business. The index of industrial production stood at 156 for June, 1941. That is the highest level on record; and it is still expanding and business activity will grow more intense. This is going to be accompanied by a tight labor market. There is abundant evidence of this on every hand. The draft is withdrawing certain types of labor that compete in the labor market. This will make certain classes of labor harder to get. In fact, the draft is simply a complete new area of demand added to the labor field, and its effect in reducing supply will exert an upward pressure on wages.

(2) A second factor operating to increase wages is new in this country, as compared with previous war periods. This factor is organized labor, one of whose principal functions is to raise the rate of wages. This agency is much more powerful now than in the last war, or in any previous period of great business prosperity. In the five years which elapsed between June, 1936 and June, 1941, wages in New York State factories have risen $3.38, or 33.4 per cent. The labor union has a clearer notion of what it wants and how to get it than it ever had before. The events of recent months illustrate this anew.

The Exhibit illustrates what labor accomplished in the prosperity period of 1935 and 1937. Short as that period was, average hourly earnings rose 20 per cent during these three years. This was after they had already risen early in 1935, to the levels which prevailed in 1929.

[fol. 13256] Not only did thel have an astounding rise in the late months of 1936 and the first half of 1937, but they were maintained at this new level during the subse-

quent depression of late 1937 and 1938. In 1940 they started on a new rise which has been accelerated in 1941.

This rise will unquestionably continue, for all the forces which were at work in the field of wages in 1935 to 1937 are present in greatly accelerated form at this time.

One of the forces which has raised prices sensationally is the policy of our government to give the farmer a larger share in the national income by increasing the prices of his products through government assistance. Since the farmer does not labor for wages but sells the products which he grows on his farm, the only way of giving him more is by raising the prices of his products.

There is no doubt about the policy which will be followed in the field of farm prices. On May 26, 1941, the President signed legislation providing mandatory loans of 85 per cent of parity on five basic farm crops.

The President's statement at the time he signed the measure sets forth the purpose of this legislation:

"This is an effort to obtain farm prices which are nearer parity. It reflects the Government's objective of the last eight years. It reflects the fact that the farmers did not have and have not as great a share of the national income as other groups."

The Department of Agriculture estimated that food costs to consumers will be increased 10 per cent to 20 per cent.

The results of this action have been prompt and effective. When the drive for farm price parity started early in March of this year, the "foodstuffs" group in the price index for 28 basic commodities, which is based on August, 1939 as 100, stood at 120.2. By October 1, it had risen to 171.1. Cotton was at 118.4 per cent of its August 1939 price, and has risen to 160 per cent.

[fol. 13257] In the hearings on price control before the House Bank and Currency Committee proposals have been made to put a ceiling for farm products at 110 per cent of parity, and also to put a floor under some of the agricultural prices.

This, of course, raises the cost of living and so prompts the industrial worker to make new demands for higher wages. This results in higher production costs and a new increase in prices of manufactured products. This rise in prices of other products calls for a new increase in farm prices to bring them to parity, and the whole circle starts again.

Taxes and Prices.

One element in costs of production has not been considered. That costs is taxes. On the following page is a table showing the "Tax Collections in the United States," from 1913 to 1940, and an estimate for 1941 and 1942 on the assumption that the European war continues that long.

This Exhibit shows the enormous increase in taxes which took place in the World War and which is confronting us now. Taxes increased less than $1,000,000,000 (from $2,189,000,000 to $3,158,000,000) between 1913 and our entrance into the war in 1917. Of this increase only a little over one-third was in Federal taxes. In the three years after we entered the war taxes rose $6,000,000,000.

[fol. 18258] Tax Collections In The United States

1913 - 1942

(In Millions of Dollars)

Year June 30	Total Federal State and Local Tax Collections	National Income	Percent of Taxes to Nat'l Income
1913	$2,189	$31,450	6.96
1914	2,383	31,213	7.63
1915	2,487	32,533	7.61
1916	2,661	38,739	6.87
1917	3,158	46,376	6.81
1918	5,675	56,956	9.96
1919	7,423	62,945	11.79
1920	9,204	68,434	13.54
1921	8,800	56,689	15.52
1922	7,502	57,171	13.12
1923	7,234	65,662	11.02
1924	7,812	67,003	11.96
1925	7,884	70,051	11.25
1926	8,605	73,523	11.70
1927	9,059	73,966	12.25
1928	9,342	75,904	12.31

1929	9,759	79,498	12.28
1930	10,266	72,398	14.18
1931	9,300	60,203	15.45
1932	8,147	46,708	17.44
1933	7,501	44,713	16.77
1934	8,773	51,560	17.01
1935	9,731	56,254	17.30
1936	10,507	65,246	16.10
1937	12,473	69,419	17.97
1938	14,302	62,286	22.96
1939	13,850	69,400	19.96
1940	14,300	76,000	18.82
1941*	16,000	80,000	20.00
1942*	22,500	90,000	25.00

Note: *Estimated.
Source: National Industrial Conference Board.

[fol. 13259] The peak of taxes came in the fiscal year 1920 with collections of $9,204,000,000.

Neither Federal nor State and local tax ever reached as much as $2,000,000,000 in the years which followed 1920. Even in the low year of 1923 taxes only fell to $7,234,000,000. By 1930 they had reached more than $10,000,000,000, and by 1938 they had grown to $14,320,000,000 which is already $5,000,000,000 higher than the taxes of the peak year of World War I period.

The present indications are that the collections for the calendar year 1942 will be $22,500,000,000. This will be an increase of $8,500,000,000 over 1940, and will be about 25 per cent of the whole national income. This increase will certainly help to raise prices. In fact, a higher price level will be necessary to sustain a tax burden of this magnitude.

In view of all these factors, my opinion that the price level will be at or above 110 by June 30, 1942 is conservative, and is in line with the President's clear and emphatic statement of his viewpoint in his address of October 22, 1933, when he said:

"I do not hesitate to say, in the simplest, clearest language of which I am capable, that, although the prices of many products of the farm have gone up and although many farm families are better off than they were last year, I am not satisfied either with the amount or the extent of the rise, and that it is definitely a part of our policy to increase the rise and to extend it to those products

which have as yet felt no benefit. If we cannot do this one way, we will do it another. Do it we will * * *

"Finally, I repeat what I have said on many occasions, that ever since last March the definite policy of the Government has been to restore commodity price levels. The object has been the attainment of such a level as will enable agriculture and industry once more to give work to the unemployed."

In arriving at my opinion, I have taken cognizance of the fact that attempts are being made to control these prices and to insure that they shall rise in an orderly manner.

[fol. 13260] In my opinion, the price level will be kept from rising above 110 within the next year only because of these activities of the Government. Without these efforts to restrain runaway markets, prices would, in my opinion, rise higher than has been here indicated.

It must be kept in mind that a return to a price level of 100 is merely what has been considered normal and desirable, and is no ground for fear of inflation, which would be the ground for drastic restraint by the Government.

If the war in Europe continues beyond 1942, prices will rise above 110 on the Bureau of Labor Statistics index. How much they will rise will depend on our national policy with respect to the price of farm products, and to wages in industry, trade, and transportation. It is practically certain that taxes will continue to rise.

In my opinion, the rise of prices will be somewhat restrained by Government interference, as it was from June, 1917 to November, 1918. The total rise from the outbreak of World War I to the armistice, in November, 1918, was 102.5 per cent.

After the close of the war, it is my opinion that prices will rise as they did after the last war. By May, 1920 the Bureau of Labor Statistics price level was 22 per cent above November, 1918; and it was 148 per cent above August, 1914.

The more the purchase of goods is restrained by priorities during the continuation of hostilities, the greater will

be the demand for them after the war ends. If the plan for selling bonds to the great mass of the people succeeds, as it did during our participation in World War I, then the people who want these goods will get the purchasing power to buy them by selling their bonds as they did during 1919 and 1920. This demand will raise prices to higher levels.

[fol. 13261] If the war lasts to the end of 1943 the price level will certainly reach 150. It stood at 75 in August, 1939. In 1920 the price level rose to 167. The price level had been 67 in July, 1914. Prices did not recede to 67 in the depression of 1921-22. The lowest they got was 91.4 in January, 1922. They revived quickly and rose to 100.7 by the end of the year. This was practically 50 per cent above the pre-war level of 1914. They remained at that level throughout 1926. That year was finally adopted as 100 by the Bureau of Labor Statistics because prices seemed to have stabilized at about the level of that year.

There was a general belief in 1920 that prices would fall to the pre-war level as a result of the post-war readjustment. But nothing of the sort happened, as has just been shown above. The keys to this resistance of the price level to the post-war forces of price depression are the cost of living and the level of hourly wages. In the world war the costs of living followed the rise of prices but with some lag. It reached its peak in June, 1920 when it stood at 211 per cent of 1913, and at 206 of December, 1914.

Prices reached their high point at about the same time as the cost of living. But they stood at about 240 per cent of the 1913-14 level. But when prices fell from the high level to its low level of 91.4, the Bureau of Labor Statistics index of cost of living never fell below 118.7. Thus, the price level fell to 55 per cent of the peak of May 1920 and then leveled out at 60 per cent of that high point.

As contrasted with that drop, the lowest point to which the costs of living fell was 80 per cent of the peak, and it levelled out at 82 per cent. This was 70 per cent above the level during 1913-1914.

This comparison may be summarized by the statement that while prices settled down at 150 per cent of the pre-

war World War I level the cost of living remained at 170 per cent.

[fol. 13262] The course of wages has been discussed above, and it is shown graphically in Exhibits "B" and "C". That discussion shows that actual Hourly Earnings in Manufacturing never fell lower, even in 1921, than twice those of 1914. By 1929 they had risen to 240 per cent of 1914. Actual weekly earnings in 1921 were 187 per cent of 1914. In 1929 these had risen to 225 per cent of 1914.

In preparing the index number showing changes in the cost of living the Bureau of Labor Statistics uses the years 1935 to 1939 as 100. I have prepared a chart which shows the course of the cost of living in cities in the United States from 1913 to the present. On the same chart is shown the course of wholesale prices for the same years. This has been made from the Bureau of Labor Statistics' index of wholesale prices also converted to a 1935 to 1939 base.

The graph marked Chart "D" shows that the great advance in prices from 1915 to 1920 raised the cost of living. But the subsequent decline in prices did not depress the cost of living in the same degree. From 1921 to 1939 the two had variations which were in close correspondence. Prices were the most volatile of the two, and in the depression period of 1931 to 1935 prices overcame the inertia of the cost of living and pulled it down.

But upon the whole it is a factor which has the effect of sustaining wages and so maintaining costs at a level which serves as a floor for prices.

At the present time prices have again risen above the costs of living and wages are rising rapidly. In my opinion this will again produce a level in the cost of living which will sustain wages and the price of products above the level of August, 1939, and above the prices which now prevail. It is my opinion that if the general Bureau of Labor Statistics price index goes to 150 after the close of the war prices will stabilize at about 120 after the period of post-war readjustment.

(3135)

U.S. Department of Labor
BUREAU OF LABOR STATISTICS
Washington

INDEX NUMBERS OF WHOLESALE PRICES OF ALL COMMODITIES
BY MONTHS, 1890 TO 1940
(1926 = 100)

Years	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1890	54.7	54.8	55.0	55.1	55.6	55.4	55.7	57.8	58.4	58.1	57.1	56.6	56.2
1891	56.1	56.6	57.8	58.2	57.5	55.8	55.5	55.4	54.8	54.6	54.3	53.8	55.8
1892	52.7	52.4	51.6	50.5	50.8	50.7	51.9	52.4	52.5	53.0	54.0	55.0	52.2
1893	56.6	57.2	56.2	55.6	55.0	53.2	51.9	50.3	52.0	52.9	51.2	50.4	53.4
1894	49.6	48.6	47.5	47.3	47.0	47.2	47.5	48.3	49.6	48.2	47.9	47.5	47.9
1895	47.2	46.9	47.2	49.6	50.1	50.4	50.0	49.5	49.0	49.4	49.0	48.3	48.8
1896	48.0	47.9	46.9	46.7	46.0	45.5	45.1	45.1	45.3	46.6	48.1	47.6	46.5
1897	46.7	46.3	46.3	45.8	45.5	45.0	45.3	47.1	48.5	48.1	47.9	48.1	46.6
1898	48.0	48.6	48.8	48.9	51.8	48.3	48.0	48.0	47.8	47.7	48.0	48.3	48.5
1899	48.9	49.7	49.8	50.6	50.7	51.3	51.9	53.0	54.6	55.4	55.8	56.7	52.2
1900	57.0	57.3	57.3	57.2	56.1	55.5	55.8	55.7	56.1	55.3	55.4	55.1	56.1
1901	55.2	54.7	54.5	54.4	54.1	54.1	54.5	55.4	56.1	56.1	56.6	57.7	55.2
1902	56.8	56.7	56.5	57.4	58.3	58.8	59.1	58.0	58.7	63.2	60.7	61.5	58.9
1903	62.6	62.0	60.9	60.0	59.0	59.0	58.6	58.8	59.5	58.7	58.3	58.0	59.6
1904	59.7	60.7	60.5	59.3	58.5	58.4	58.5	59.2	59.3	59.9	60.7	61.1	59.7
1905	60.6	61.0	60.3	60.4	59.3	59.3	59.4	60.1	59.6	59.9	60.1	61.0	60.1
1906	61.1	60.8	60.6	61.1	61.3	61.3	59.7	61.2	61.7	62.8	63.6	64.3	61.3
1907	64.0	64.9	64.3	64.5	65.0	66.1	66.1	66.1	66.5	66.9	64.6	63.2	65.2
1908	62.3	61.4	61.8	62.2	62.2	62.6	63.1	63.0	63.3	63.5	64.1	64.3	62.9
1909	64.6	64.9	65.2	66.2	67.3	67.8	67.9	68.2	68.9	70.2	70.9	71.6	67.6
1910	71.4	71.3	72.9	73.2	72.0	71.0	71.0	70.8	69.9	67.9	66.4	66.6	70.4
1911	66.1	64.4	64.7	63.3	63.0	63.0	63.9	65.5	66.1	66.2	65.9	65.3	64.9
1912	66.0	66.7	67.5	69.7	70.0	69.0	68.9	69.7	70.5	70.8	70.2	70.1	69.1
1913	70.3	69.3	69.9	69.7	68.9	69.0	69.5	69.7	70.6	70.4	70.1	69.1	69.8
1914	68.6	68.3	68.0	67.0	67.4	67.4	67.3	69.6	70.2	68.0	67.5	67.3	68.1
1915	68.1	68.0	68.2	68.7	69.0	68.3	69.3	68.6	68.2	70.2	71.7	74.0	69.5
1916	77.0	78.5	80.4	81.7	82.5	82.9	83.4	85.1	86.9	91.1	97.4	99.2	85.5
1917	102.1	104.5	107.7	114.1	120.7	122.0	123.0	124.8	123.5	122.2	122.8	122.9	117.5
1918	125.0	122.7	126.4	128.3	128.1	129.0	130.0	134.3	137.5	136.3	136.3	136.3	131.3
1919	134.4	129.8	131.3	132.0	135.3	135.6	141.1	144.3	141.1	141.6	144.5	150.5	138.6
1920	157.7	157.1	158.6	155.5	167.2	160.5	165.8	161.4	155.2	144.2	133.4	120.7	154.4
1921	114.0	104.9	102.4	98.9	96.2	93.4	93.4	93.5	93.4	94.1	94.2	92.9	97.6
1922	91.4	92.9	92.8	93.2	96.1	96.3	99.4	98.6	99.3	99.6	100.5	100.7	96.7
1923	102.0	103.3	104.5	103.9	101.9	100.3	98.4	97.3	99.7	99.4	98.4	98.1	100.6
1924	99.6	99.7	98.5	97.3	95.9	94.9	95.6	97.3	97.1	98.2	99.1	101.5	98.1
1925	102.9	104.0	104.2	101.9	101.6	103.0	104.3	103.9	103.4	103.6	104.4	103.8	103.5
1926	103.2	102.0	100.6	100.3	100.5	100.4	99.5	99.1	99.7	99.4	98.4	97.9	100.0
1927	96.5	95.8	94.7	94.1	94.2	94.1	94.3	95.2	96.3	96.6	96.3	96.4	95.4
1928	96.4	95.8	95.5	96.6	97.5	96.7	97.4	97.6	98.6	96.7	95.8	95.8	96.7
1929	95.9	95.4	96.1	95.5	94.7	95.2	96.5	96.3	96.1	95.1	93.5	93.3	95.3
1930	92.5	91.4	90.2	90.0	88.8	86.8	84.4	84.3	84.4	83.0	81.3	79.6	86.4
1931	78.2	76.8	76.0	74.8	73.2	72.1	72.0	72.1	71.2	70.3	70.2	68.6	73.0
1932	67.3	66.3	66.0	65.5	64.4	63.9	64.5	65.2	65.3	64.4	63.9	62.6	64.8
1933	61.0	59.8	60.2	60.4	62.7	65.0	68.9	69.5	70.8	71.2	71.1	70.8	65.9
1934	72.2	73.6	73.7	73.3	73.7	74.6	74.8	76.4	77.6	76.5	76.5	76.9	74.9
1935	78.8	79.5	79.4	80.1	80.2	79.3	79.4	80.5	80.7	80.5	80.6	80.9	80.0
1936	80.6	80.6	79.6	79.7	78.6	79.2	80.5	81.6	81.6	81.5	82.4	82.2	80.8
1937	85.9	86.3	87.6	88.0	87.4	87.2	87.9	87.5	87.4	85.4	83.3	81.7	86.3
1938	80.9	79.8	79.7	78.7	78.1	78.3	78.8	78.1	78.3	77.6	77.3	77.0	78.6
1939	76.9	76.9	76.7	76.2	76.2	75.6	75.4	75.0	79.1	79.4	79.2	79.2	77.1
1940	79.4	78.7	78.4	78.6	78.4	77.5	77.7	77.4	78.0	78.7	79.6	80.0	78.6
1941	80.8	80.8	81.8	83.2	84.9	87.1	88.8	90.3					

[fol. 13264] For Immediate Release
September 25, 1941
(12729)

U. S. Department of Labor
Bureau Of Labor Statistics
Washington

Wholesale Prices For Week Ended September 20, 1941.

The reaction in agricultural markets brought the Bureau of Labor Statistics' index of wholesale prices of nearly 900 series down slightly by 0.1 percent during the week ended September 20, Acting Commissioner Hinrichs reported today (Thursday). "At 91.5 percent of the 1926 average, the general level of commodity prices in wholesale markets is 1.7 percent higher than last month and 17.8 percent above a year ago," Mr. Hinrichs said.

Average wholesale prices for farm products dropped 0.4 percent and food prices 0.7 percent during the week. Both groups are substantially higher than in 1940—farm products by 39 percent and food prices by 24½ percent. Prices for all grains, except barley, fell sharply and quotations were also lower for cotton, eggs, onions, and potatoes. Weakening prices for steers and lambs brought the average for livestock and poultry down 0.3 percent. Meats declined 2.1 percent. Quotations were also lower for fresh beef at New York, and fresh pork and lamb. Higher prices were reported for calves, live and dressed poultry, cured pork, and for hay, tobacco, and wool. There were further advances for butter, cheese, most canned and dried fruits, sweet potatoes; coffee, oleo oil, edible tallow, and refined soy bean oil.

Textile products and chemicals and allied products continued to rise, both advancing by 0.6 percent during the week. Quotations were higher for cotton goods such as denim, ticking, tire fabrics, and cotton yarn, and for rayon yarns, and raw jute. Sharp increases occurred in prices for certain industrial chemicals, including denatured alcohol, salt cake, zinc chloride, phosphates, synthetic camphor, and for fats and oils.

Hides rose more than 3 percent and prices for leather, shoes and luggage also advanced. Coal and petroleum products continued to rise.

The lumber index rose 0.9 percent because of higher quotations for most types of Douglas fir and for yellow pine drop siding, and timbers. Maple and oak flooring declined and lower prices were also reported for yellow pine boards, finish and flooring. Turpentine declined 4.4 percent during the week, while linseed oil advanced.

The following tables show (1) index numbers for the principal groups of commodities for the past 3 weeks, for August 23, 1941 and for September 21, 1940 and the percentage changes from a week ago, a month ago, and a year ago (2) percentage changes in subgroup indexes from September 13 to September 20, 1941.

(12729) WHOLESALE PRICES FOR WEEK ENDED SEPTEMBER 20, 1941
(1926 = 100)

Commodity groups	Sept. 20 1941	Sept. 13 1941	Sept. 6 1941	Aug. 23 1941	Sept. 21 1940	Percentage changes to September 20, 1941 from- Sept. 13	Aug. 23	Sept. 21 1940
ALL COMMODITIES	91.5	91.6	91.0	90.0	77.7	- 0.1	+ 1.7	+17.8
Farm products	91.2	91.6	89.1	86.7	65.7	- 0.4	+ 5.2	+38.8
Foods	88.5	89.1	88.6	87.0	71.1	- 0.7	+ 1.7	+24.5
Hides and leather products	111.7	111.4	111.2	110.8	99.0	+ 0.3	+ 0.8	+12.8
Textile products	89.2	88.7	88.3	87.3	72.0	+ 0.6	+ 2.2	+23.9
Fuel and lighting materials	80.0	80.0	79.9	79.8	71.9	0	+ 0.3	+11.3
Metals and metal products	98.7	98.7	98.7	98.6	95.3	0	+ 0.1	+ 3.6
Building materials	106.2	105.9	106.0	105.2	95.2	+ 0.3	+ 1.0	+11.6
Chemicals & allied products	87.8	87.3	86.0	85.9	76.6	+ 0.6	+ 2.2	+14.3
House furnishing goods	98.0	97.9	97.1	96.8	90.0	+ 0.1	+ 1.2	+ 8.9
Miscellaneous commodities	85.0	84.9	84.5	83.6	76.3	+ 0.1	+ 1.7	+11.4
Raw materials	89.8	90.0	88.5	86.9	70.1	- 0.2	+ 3.3	+28.1
Semimanufactured articles	90.1	89.9	90.0	89.4	77.5	+ 0.2	+ 0.8	+16.3
Manufactured products	92.8	93.0	92.6	91.8	81.7	- 0.2	+ 1.1	+13.6
All commodities other than farm products	91.6	91.7	91.4	90.7	80.4	- 0.1	+ 1.0	+13.9
All commodities other than farm products and foods	91.8	91.6	91.4	90.9	83.5	+ 0.2	+ 1.0	+11.3

PERCENTAGE CHANGES IN SUBGROUP INDEXES FROM SEPTEMBER 13 to SEPTEMBER 20, 1941

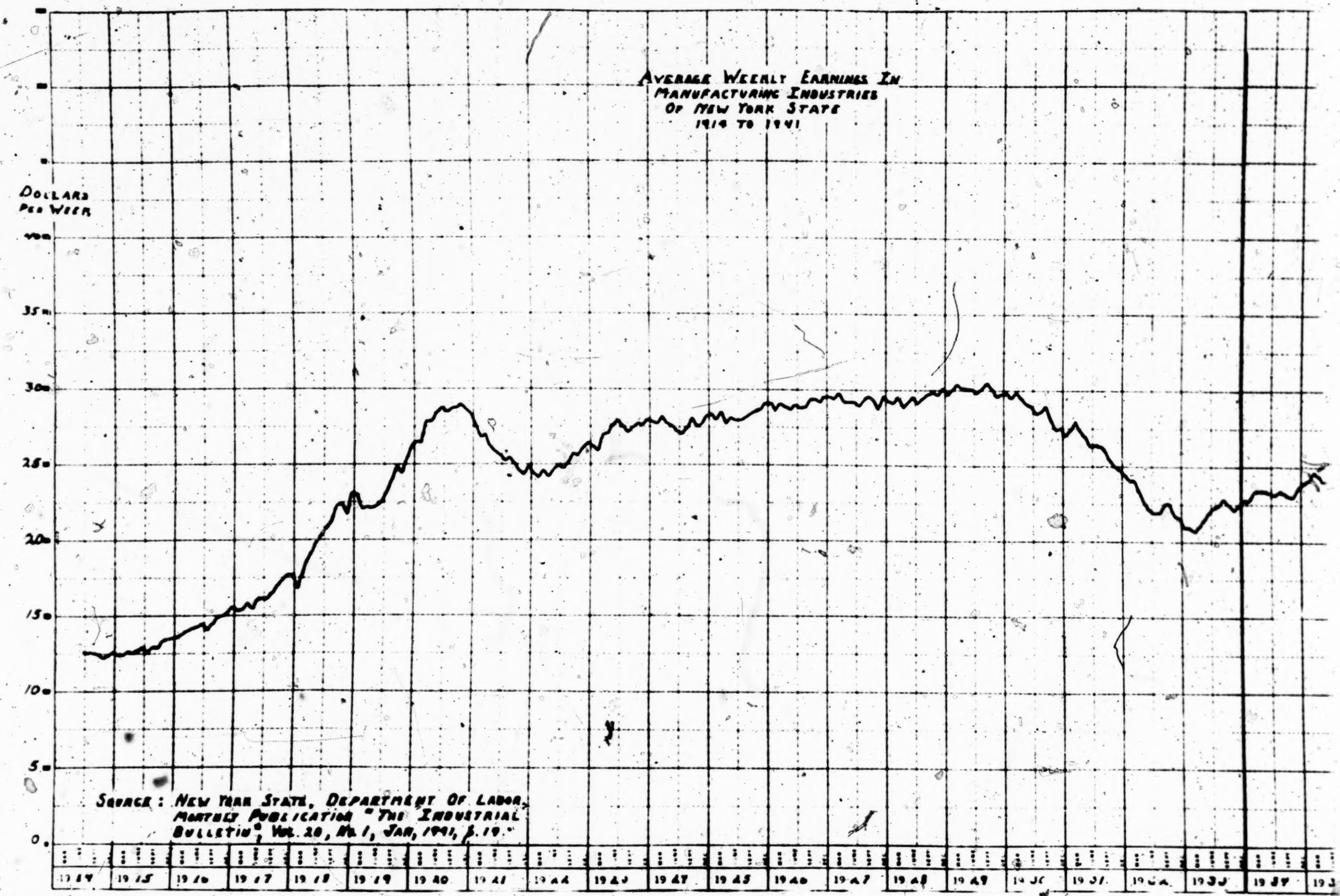
Increases

Oils and fats	2.2	Clothing	0.3
Rayon	2.0	Brick and tile	0.3
Fruits and vegetables	1.4	Chemicals	0.3
Anthracite	1.1	Shoes	0.2
Lumber	0.9	Woolen and worsted goods	0.2
Fertilizer materials	0.7	Petroleum products	0.2
Cotton goods	0.7	Drugs & pharmaceuticals	0.2
Other miscellaneous	0.6	Other textile products	0.1
Hides and skins	0.5	Bituminous coal	0.1
Leather	0.5	Furnishings	0.1
Other leather products	0.5	Furniture	0.1

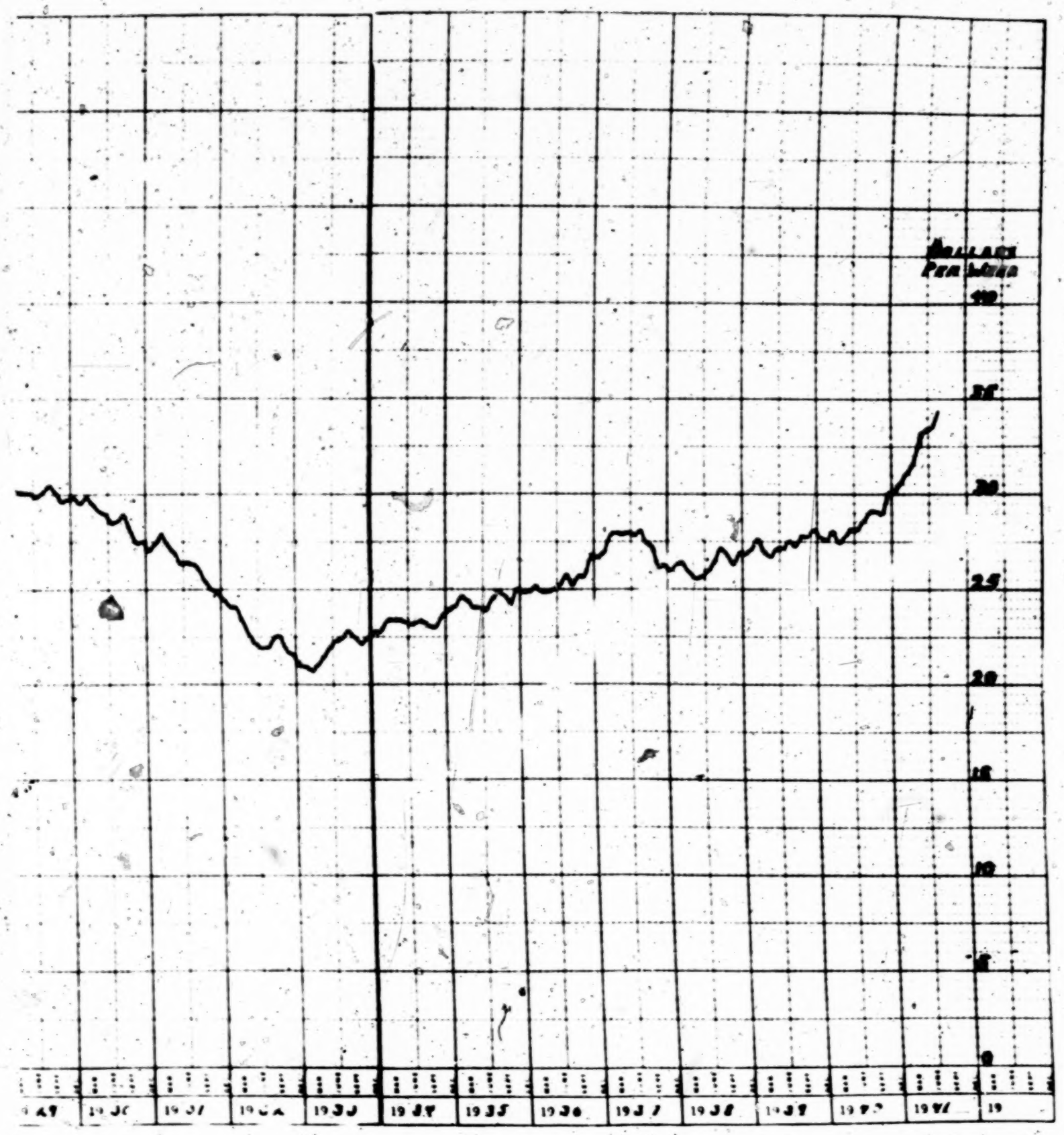
Decreases

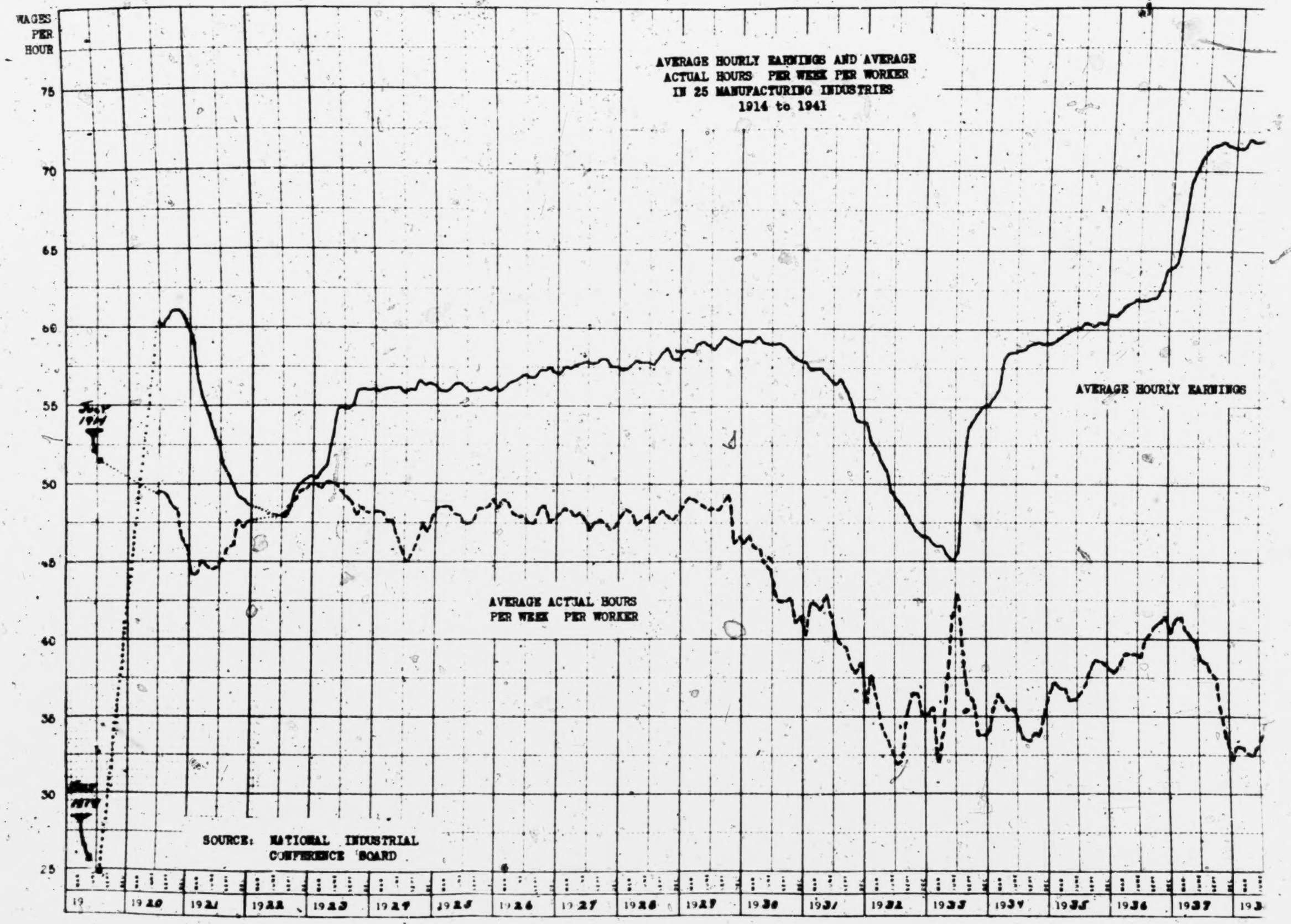
Grains	2.3	Other foods	0.8
Meats	2.1	Livestock and poultry	0.3
Cattle feed	1.3	Cereal products	0.2

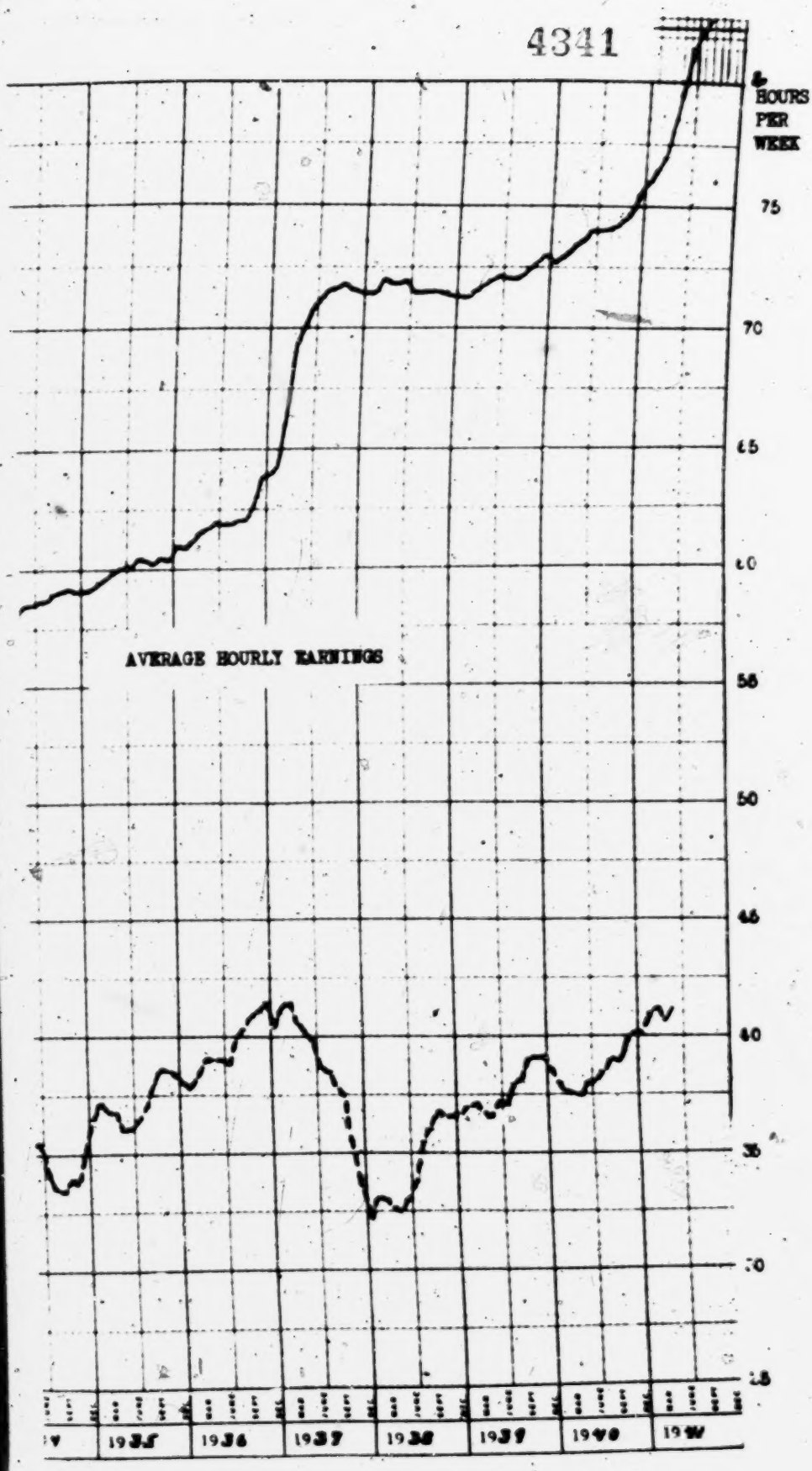
Average Weekly Earnings In Manufacturing Industries Of New York State 1914 to 1941



Source: New York State, Department Of Labor, Monthly Publication "The Industrial Bulletin", Vol. 20, No. 1, Jan, 1941, p. 19."


Dollars
Per Share
30
25
20
15
10
5
0
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941


WAGES PER HOUR
75
70
65
60
55
50
45
40
35
30
25
AVERAGE HOURLY EARNINGS AND AVERAGE ACTUAL HOURS PER WEEK PER WORKER IN 25 MANUFACTURING INDUSTRIES 1914 to 1941
AVERAGE HOURLY EARNINGS
AVERAGE ACTUAL HOURS PER WEEK PER WORKER
SOURCE: NATIONAL INDUSTRIAL CONFERENCE BOARD
19
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937


HOURS PER WEEK
75
70
65
60
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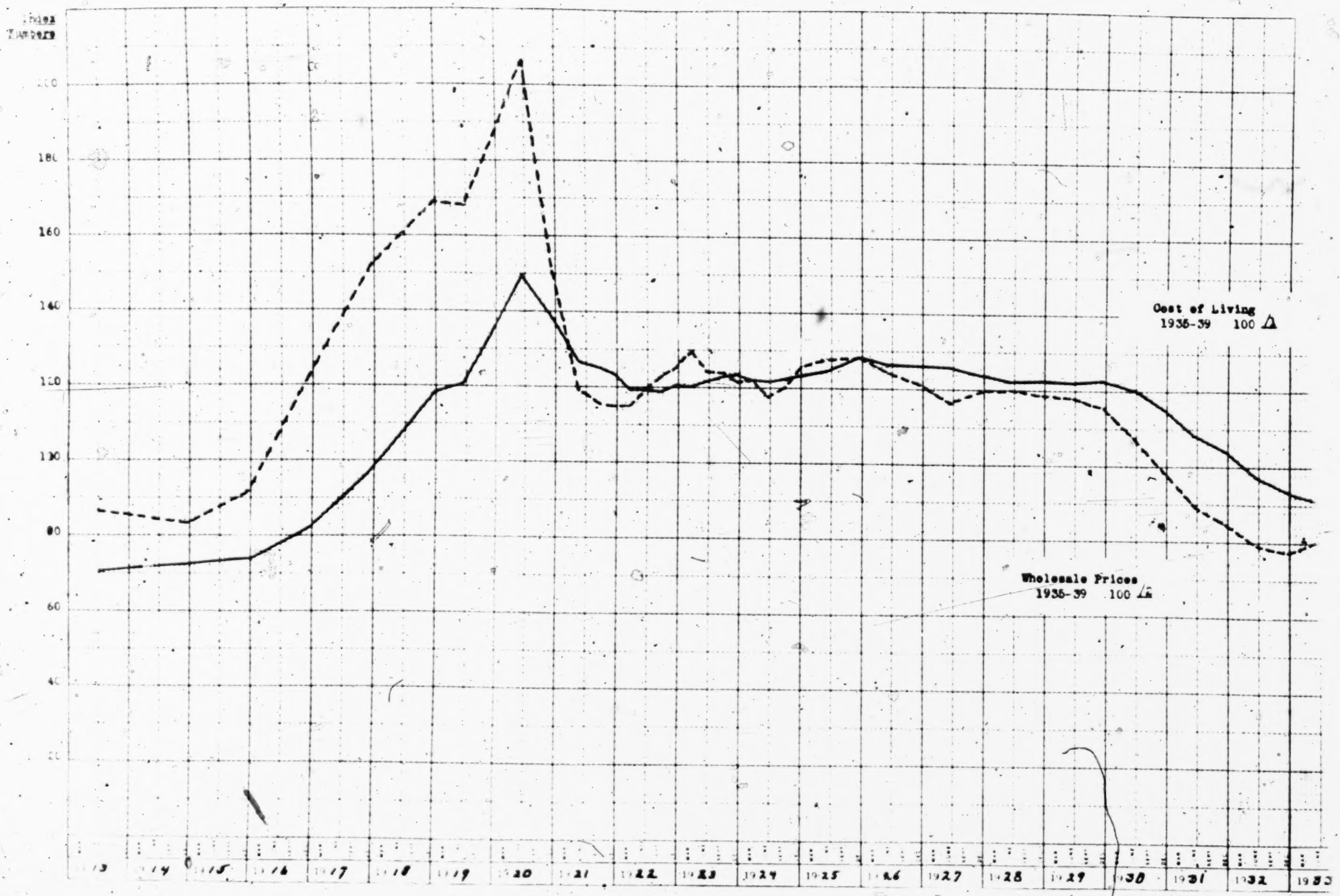
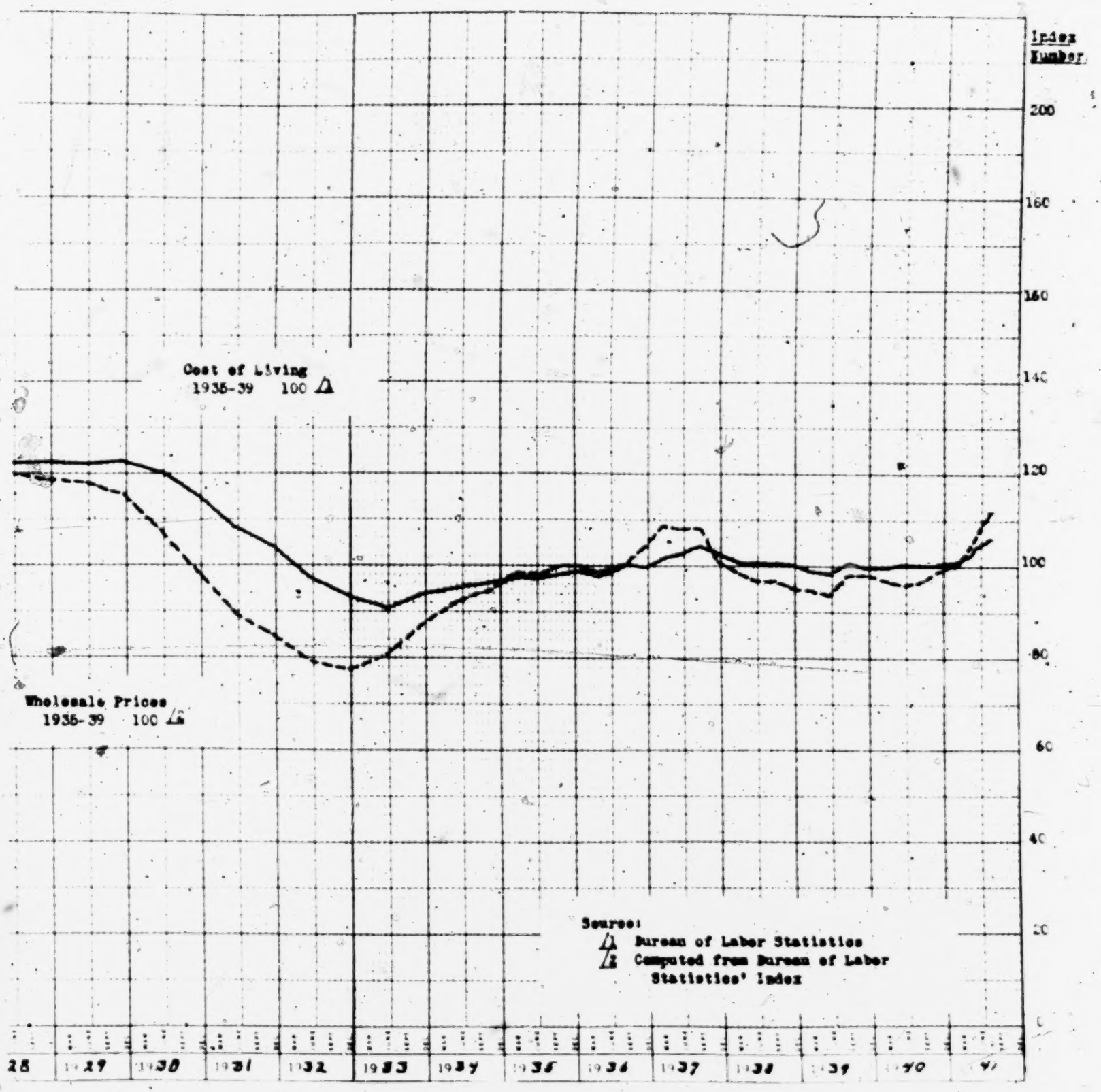
50
45
40
35
30
25
AVERAGE HOURLY EARNINGS
1935
1936
1937
1938
1939
1940
1941


Index Numbers
200
180
160
140
120
100
80
60
40
20
Cost of Living
1935-39 100
Wholesale Prices
1935-39 100
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933


Index Number
200
160
150
140
120
100
80
60
40
20
0
Cost of Living
1935-39 100 Δ
Wholesale Prices
1935-39 100 Δ
Source:
Δ Bureau of Labor Statistics
Δ Computed from Bureau of Labor Statistics' Index
28
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
41

[fol. 13270] (Exhibit 62.)

Panhandle Eastern Pipe Line Company and Subsidiary Companies.

Deduction From Cost of Reproduction New For Depreciation and Present Value of Plant, Property and Business as of June 30, 1941.

P. McDonald Biddison, Consulting Engineer
Dallas, Texas.

[fol. 13271]

P. McDonald Biddison
Consulting Engineer
Dallas Gas Building
Dallas, Texas

September 30, 1941.

Panhandle Eastern Pipe Line Company
90 Broad Street
New York, N. Y.

Attention: Mr. J. D. Creveling, President

Gentlemen:

I have made an estimate, based upon an inspection, of the amounts to be deducted from my estimate of Cost of Reproduction New as of June 30, 1941, of the consolidated Plant, Property and Business of Panhandle Eastern Pipe Line Company and Subsidiary Companies (Report of August 26, 1941) for depreciation that has occurred in the property. The total of the amount is $4,121,749.80, result-

ing in a Present Value of $79,711,698.74 as detailed in subsequent pages hereof.

Yours very truly,

(Seal)

P. McDONALD BIDDISON,
Consulting Engineer.

PMcDB/1F

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Present Value Of Plant, Property And Business
As Of June 30, 1941

General Summary

Line No.	Item (A)	Reproduction Cost — New (B)	Deduct for Depreciation (C)	Present Value (D)
1	Production System Property			
2	Land	$ 971 02	$ —	$ 971 02
3	Leaseholds	8 695 524 00	—	8 695 524 00
4	Gas Wells and Equipment	2 053 884 39	180 364 61	1 873 519 78
5	Other Production System Structures	42 188 75	5 615 44	36 573 31
6	Drilling and Clean-out Equipment	20 676 46	5 169 11	15 507 35
7	Total — Production System	$10 813 244 62	$ 191 149 16	$10 622 095 46
8	Transmission System Property			
9	Land	$ 55 909 84	$ —	$ 55 909 84
10	Right of Way	1 278 521 36	—	1 278 521 36
11	Meas. and Reg. Structures	104 475 27	11 137 11	93 338 16
12	Other Trans. System Structures	382 920 59	38 572 16	344 348 43
13	Meas. and Reg. Equipment	491 685 32	39 350 84	452 334 48
14	Transmission Mains	41 960 870 15	2 642 841 44	39 318 028 71
15	Compressor Stations	9 764 143 60	628 607 30	9 135 536 30
16	Other Trans. System Equipment	128 657 49	11 936 18	116 721 36
17	Total — Transmission System	$ 54 167 183 62	3 372 444 98	50 794 738 64
18	Gasoline Production System Property			
19	Liberal Gasoline Plant	$ 621 510 23	$ 37 690 00	$ 583 820 23
20	Total — Gasoline Prod. System	$ 621 510 23	$ 37 690 00	$ 583 820 23
21	General System Property			
22	General Office Equipment	$ 78 082 36	$ 11 712 35	$ 66 370 01
23	General Transportation Equipment	109 971 90	21 702 18	88 269 72
24	General Laboratory Equipment	6 550 71	1 310 14	5 240 57
25	General Communication Equipment	492 708 29	49 690 12	443 018 17
26	General Tools and Equipment	40 251 86	10 062 97	30 188 89
27	Total — General System	$ 727 565 12	$ 94 477 76	$ 633 087 36
28	Total — Direct Construction Cost	$ 66 329 503 59	$3 695 761 90	$62 633 741 69
29	Intangible Fixed Capital	497 471 27	—	497 471 27
30	Undistributed Construction Expendi-			
31	tures	7 647 897 58	425 987 90	7 221 909 68
32	Construction Work in Progress	149 669 62	—	149 669 62
33	Total — Fixed Property	$ 74 624 542 06	$4 121 749 80	$70 502 792 26
34	Working Capital	$ 1 569 000 00	—	$ 1 569 000 00
35	Value of Gas Purchase Contracts	1 585 914 00	—	1 585 914 00
36	Cost of Business Development	6 053 992 48	—	6 053 992 48
37	Total — Plant, Property, Business	$ 83 833 448 54	$4 121 749 80	$79 711 698 74

* * * * * * * * *

[fol. 13321] Exhibit 63.

Investors' Appraisal of the Risks of Capital In the Natural Gas Industry as Compared with Other Divisions of the Utility Industry.

Volume I.

Summary of Analyses.

Prepared by.

Paul B. Coffman, Vice President

of

Standard & Poor's Corporation

[fol. 13322] Table of Contents.

Statement of Experience and Qualifications of Paul B. Coffman.

Written Statement

of

Paul B. Coffman

1. Purpose of this Exhibit

Investors' Appraisal of the Risks of Capital in the Natural Gas Industry as Compared with Other Divisions of the Utility Industry

1. Method of Procedure

Table: Indicated Market Value of the Securities Outstanding of the Boston Edison Company for 1940

Table: Indicated Market Value of the Securities Outstanding of the Boston Edison Company for the Interim Period of 1941, January-August, Both Inclusive

2. Analysis of Data on Water Companies

Table: Determination of Investors' Appraisal of Risks of Capital for Water Company Securities

3. Analysis of Data on Electric Utility Operating Companies

Table: Determination of the Investors' Appraisal of Risks of Capital for Electric Utility Operating Companies

4. Analysis of Data on Manufactured and Mixed Gas Companies

Table: Determination of ~~the~~ Investors' Appraisal of Risks of Capital for Manufactured and Mixed Gas Companies

5. Analysis of Data on Natural Gas Companies

Table: Grand Total of Securities of 43 Natural Gas Companies Which Appear to be Fully Representative of the industry

Table: Total Securities Outstanding of 13 Natural Gas Companies Upon Which Investors' Appraisals of the Risks of Capital Have Been Computed

[fol. 13323] Table: Determination of the Investors' Appraisal of the Risks of Capital for Natural Gas Companies

Table: Determination of the Investors' Appraisal of the Risks of Capital for Natural Gas Pipe Line Companies

Table: Determination of the Investors' Appraisal of the Risks of Capital of the Panhandle Eastern Pipe Line Company

6. Summary of Analyses

Chart: Investors' Appraisal of Capital Risks in Various Divisions of the Utility Business

Table: Investors' Appraisal of Capital Risks in Various Divisions of the Utility Business

Statements

Investors' Appraisal of Risks of Capital for the Years 1937, 1938, 1939 and 1940—Water Companies A

Investors' Appraisal of Risks of Capital for the Interim Period of 1941, January-August, Both Inclusive—Water Companies A-1

Investors' Appraisal of Risks of Capital for the Years 1937, 1938, 1939 and 1940—Electric Utility Operating Companies B

Investors' Appraisal of Risks of Capital for the Interim Period of 1941, January-August, Both Inclusive—Electric Utility Operating Companies B-1

Investors' Appraisal of Risks of Capital for the Years 1937, 1938, 1939 and 1940—Manufactured and Mixed Gas Companies C

Investors' Appraisal of Risks of Capital for the Interim Period of 1941, January-August, Both Inclusive—Manufactured and Mixed Gas Companies C-1

Investors' Appraisal of Risks of Capital for the Years 1937, 1938, 1939 and 1940—All Natural Gas Companies D

Investors' Appraisal of Risks of Capital for the Interim Period of 1941, January-August, Both Inclusive—All Natural Gas Companies D-1

Investors' Appraisal of Risks of Capital for the Years 1937, 1938, 1939 and 1940—Natural Gas Pipe Line Companies E

[fol. 13324] Investors' Appraisal of Risks of Capital for the Interim Period of 1941, January-August, Both Inclusive—Natural Gas Pipe Line Companies E-1

General Information Covering Each Company as to the Nature and Size of the Business and the Territory Served F

I. Water Companies

1. Bridgeport Hydraulic Company
2. Elizabethtown Water Company, Consolidated
3. Hackensack Water Company
4. Middlesex Water Company
5. New Haven Water Company
6. Plainfield Union Water Company
7. Stamford Water Company

II. Electric Utility Operating Companies

1. Bangor Hydro Electric Company
2. Boston Edison Company
3. Central Hudson Gas & Electric Corporation
4. Cleveland Electric Illuminating Company (The)
5. Commonwealth Edison Company
6. Connecticut Power Company (The)
7. Consolidated Edison Company of New York, Inc.
8. Consolidated Gas, Electric Light & Power Company of Baltimore
9. Detroit Edison Company
10. Duke Power Company
11. Hartford Electric Light Company (The)
12. Pacific Gas & Electric Company
13. Pennsylvania Water & Power Company
14. Southern California Edison Company, Ltd.
15. Tampa Electric Company

III. Manufactured and Mixed Gas Companies

1. Bridgeport Gas Light Company
2. Brooklyn Union Gas Company
3. Elizabethtown Consolidated Gas Company
4. Hartford Gas Company
5. Laclede Gas Light Company
6. Peoples Gas Light & Coke Company
7. Providence Gas Company
8. Seattle Gas Company
9. Springfield (Mass.) Gas Light Company
10. Washington Gas Light Company

IV. Natural Gas Companies

1. Arkansas Louisiana Gas Company

[fol. 13325] IV. Natural Gas Companies (continued)

2. Atlantic Seaboard Corporation
3. Cabot, Inc., Godfrey L.
4. Canadian River Gas Company

5. Carnegie Natural Gas Company
6. Chicago District Pipeline Company
7. Cincinnati Gas Transportation Company
8. Cities Service Gas Company
9. Colorado Interstate Gas Company
10. Consolidated Gas Utilities Corporation
11. East Ohio Gas Company
12. El Paso Natural Gas Company
13. Hope Natural Gas Company
14. Houston Natural Gas Corporation
15. Interstate Natural Gas Company, Inc.
16. Kentucky West Virginia Gas Company
17. Lone Star Gas Corporation
18. Manufacturers Light and Heat Company
19. Memphis Natural Gas Company
20. Michigan Gas Transmission Corporation
21. Mississippi River Fuel Corporation
22. Montana-Dakota Utilities Company
23. Mountain Fuel Supply Company
24. National Fuel Gas Company
25. Natural Gas Company of West Virginia
26. Natural Gas Pipeline Company of America
27. New York State Natural Gas Corporation
28. Northern Natural Gas Company
29. North Penn Gas Company
30. Ohio Fuel Gas Company
31. Oklahoma Natural Gas Company
32. Pacific Lighting Corporation
33. Panhandle Eastern Pipe Line Company
34. Peoples Natural Gas Company
35. Pittsburgh and West Virginia Gas Company
36. Southern Natural Gas Company
37. South Penn Natural Gas Company
38. Texoma Natural Gas Company
39. United Fuel Gas Company
40. United Gas Pipe Line Company

41. Virginia Gas Transmission Corporation
42. Warfield Natural Gas Company
43. West Texas Gas Company

[fol. 13327] Statement of Experience and Qualifications

of

Paul B. Coffman

1. Name, Address and Age

Paul B. Coffman, 222 Sylvania Place, Westfield, N. J., Age 40.

2. Education

Graduate of Ohio State University, 1923, with degree of Bachelor of Science; graduate of Harvard University Graduate School of Business Administration, 1926, with degree of Master of Business Administration.

3. Present Position

Vice President, in charge of Research and Valuation, and Director, of Standard & Poor's Corporation (recently formed as a consolidation of Standard Statistics Company, Inc. and Poor's Publishing Company), a corporation engaged, among other things, in gathering, collating, analyzing and disseminating statistical and general information on all phases of business, industry and investments and offering professional, industrial consulting, valuation and research services.

4. Experience and Qualifications

Upon graduation in 1926 from Harvard University I became Professor of Economics and Accounting at the College of William and Mary, Williamsburg, Virginia. In September 1927, I returned to the Harvard Graduate School of Business Administration, where I joined the Faculty and became an assistant professor and tutor and remained until the end of 1936. The particular subjects I taught were accounting, corporate management and business policy.

[fol. 13328] While teaching at the Graduate School of Business Administration at Harvard University, I also

served as consulting economist for a number of industrial and financial advisory corporations, including both Standard Statistics Company, Inc., with which I became associated in 1928, and Poor's Publishing Company, publisher of Poor's Manuals, with which I became associated in 1931, and which are the predecessor companies of the present Standard & Poor's Corporation. During 1931 and 1932 I served as Executive Vice President and General Manager of Poor's Publishing Company. Also, I was collaborator on several books of accounting and business policy and author of several articles.

Over a period of years I have been retained to make investigations upon a large number of diversified situations, many of which required that I present my analysis and testify as to my conclusions before the courts, the Internal Revenue Department, the Board of Tax Appeals, and several regulatory bodies, such as, the Civil Aeronautic Authority, State Public Utility Commissions and the Federal Power Commission.

[fol. 13330] Written Statement Of Paul B. Coffman

1. Purpose of This Exhibit.

In August of this year, Standard & Poor's Corporation (through Paul B. Coffman, Vice-President and Director of this Company) was retained by the Panhandle Eastern Pipe Line Company to make a study relative to a fair rate of return on capital invested in that company. Data covering such study are contained in a separate volume.

As a collateral part of such undertaking, however, a statistical study was made to determine the investors' appraisal of the risks of capital invested in the natural gas pipe line business as compared with the risk of capital invested in other utility industries. Such study covered the following utility classifications, namely, (a) water companies, (b) electric utility operating companies, (c) manu-

factured and mixed gas companies, (d) natural gas companies and (e) natural gas pipe line companies. The telephone industry, which is logically a division of the utility industry, was excluded inasmuch as it was so largely dominated by the American Telephone and Telegraph Company system and market prices for many of the securities of the underlying operating companies were not obtainable.

This exhibit presents the findings that resulted from such investigation.

[fol. 13331] Investors' Appraisal of the Risk of Capital in the Natural Gas Industry as Compared With Other Divisions of the Utility Industry.

1. Method of Procedure

A group of companies in each of the utility classifications were selected on bases which will be described below. Statement F of this exhibit contains a general description of the business of each of the companies and the territory in which it operates.

The general method of procedure as to each company and group of companies involved four steps, as follows:

(1) For the years 1937, 1938, 1939 and 1940, the indicated total market value of all of the securities of a single company was determined by taking the sum of the amounts produced by multiplying the number of each class of security (bonds, preferred and common stocks as the case may be) outstanding at the end of each year by the average of its high and low market quotations in that year. For the interim period of 1941, January-August, both inclusive, the same procedure was followed excepting that the latest record of securities outstanding and the average of the high and low market quotations for the period were used.

[fol. 13332] Examples:

A. Indicated Market Value of the Securities Outstanding of the Boston Edison Company for 1940

	Capital Outstanding Dec. 31, 1940	1940 Market Prices High	Low	Average	Indicated Market Value
Capital Stock ($25 par)	2,468,656 shs.	36¾	30⅜	33.75	$ 83,317,140
1st Mortgage Bonds 2¾s 1970	$53,000,000	—	—	*103.53	54,870,900
				Total	$138,188,040

Note: *Offering price of $103.53 used since issue was sold on December 10, 1940.

B. Indicated Market Value of the Securities Outstanding of the Boston Edison Company for the Interim Period of 1941, January-August, Both Inclusive

	Capital Outstanding Dec. 31, 1940	Jan. 1, to Aug. 31, 1941 Market Prices High	Low	Average	Indicated Market Value
Capital Stock ($25 par)	2,468,656 shs.	34¾	26⅝	30.69	$ 75,763,053
1st Mortgage Bonds 2¾s 1970	$53,000,000	104⅜	101	102.69	54,425,700
				Total	$130,188,753

(2) Next there was determined for the individual company the total earnings available for distribution to the securities after taxes, depreciation and all other miscellaneous charges, as reported in the particular company's reports to stockholders. For the years 1937, 1938, 1939 and 1940, earnings as shown in the published annual reports for the years in question were used. For the interim period of 1941, January-August, both inclusive, the [fol. 13333] latest reported earnings covering a twelve month period were used, the dates of which are clearly indicated in the statements at the end of this exhibit.

Examples:

A. The consolidated earnings of the Boston Edison Company for 1940 available for its capital after taxes, de-

preciation and other miscellaneous charges, as shown in the published report to its stockholders for 1940, were $7,730,837.

B. For the interim period of 1941, January-August, both inclusive, the latest reported earnings for this particular company covered the twelve months ended June 30, 1941 and were $7,703,746, as computed from the interim report to stockholders.

(3) The earnings so determined under (2) A and B were then divided by the indicated market value of all securities as determined under (1) A and B respectively, and a rate for the period in question was thus obtained.

Examples:

A. In the case of the Boston Edison Company for the calendar year of 1940, dividing the consolidated earnings available for capital, in the amount of $7,730,837, as shown above, by the indicated market value of all capital of $138,188,040, gives a percentage of 5.59 per cent., which, in my opinion, fairly indicates the investors' appraisal of the risks of capital employed in that enterprise for the year 1940.

B. Applying the same formula to the interim period of 1941, January-August, both inclusive, the investors' appraisal of the risks of capital employed in that enterprise for the period in question is indicated at 5.92 per cent.

(4) Having determined in the manner described above the investors' appraisal of the risks of capital employed in each company selected, the indicated market value of the companies in each group determined under (1) A and B above, was added to obtain the indicated market value of the capital securities of the entire group. Similarly, the earnings available for distribution to the securities of [fol. 13334] each of the companies, as determined under (2) A and B above, were added to obtain the total earnings available for distribution to securities of the entire group. The latter figure was then divided by the former in order to obtain the investors' overall appraisal of the risks of all capital in the group. This was done for each of the years

1937, 1938, 1939 and 1940, and for the interim period of 1941, January-August, both inclusive.

The results of such computations for the years 1937, 1938, 1939 and 1940 appear as Statements A to E of this exhibit. Statements A-1 to E-1 present such data for the interim period of 1941, January-August, both inclusive.

The complete working papers upon which these statements are based are presented in Appendix C of the accompanying book of tables.

2. Analysis of Data on Water Companies

[fol. 13335] A list of all operating companies engaged solely in the water business was first prepared from Standard Corporation Records and appears on pages 1 and 2 of Appendix A in the accompanying book of tables. From this list of 72 companies, eliminations were made for the following reasons:

(1) Companies whose common stocks were held by one of the larger holding companies, such as American Water Works & Electric Company, the Federal Water Service Corporation and the Community Water Service Company, and whose stocks had no obtainable market evaluation.

(2) Companies whose stocks were closely held by relatively few individuals and had no available market evaluation.

(3) Companies whose 1940 gross operating revenues were less than $500,000. This latter class was not deemed of sufficient importance to be included in the study.

The result of these eliminations in the overall list was the following group of seven water companies:

Bridgeport Hydraulic Company
Elizabethtown Water Company, Consolidated
Hackensack Water Company
Middlesex Water Company
New Haven Water Company
Plainfield-Union Water Company
Stamford Water Company

For each of these companies and for the group of companies, for each of the years 1937, 1938, 1939 and 1940, and for the interim period of 1941, January-August, both inclusive, the investors' appraisal of the risks of capital as a percentage was obtained by application of the method fully described in Section 1 above.

The actual results of these determinations for the group of water companies are presented in the following table:

[fol. 13336]

Determination of Investors' Appraisal of Risks of Capital for Water Company Securities

	Total Indicated Market Value of Capital	Total Earnings Available for Capital	Investors' Appraisal of Risks of Capital
1937	$79,750,400	$4,410,321	5.53%
1938	78,545,433	4,114,060	5.24%
1939	79,635,529	4,494,594	5.64%
1940	83,244,017	4,272,794	5.13%
Interim Period Jan.-Aug. 1941	81,816,519	4,289,313	5.24%

In other words, this analysis indicated that investors appraised the risks of capital invested in water companies as a group in 1937, 1938, 1939 and 1940 respectively, at 5.53 per cent, 5.24 per cent, 5.64 per cent and 5.13 per cent, or an average of the four years of 5.38 per cent.

On the basis of data available for the interim period of 1941, January-August, both inclusive, the investors' appraisal of the risks of capital in this industry was 5.24 per cent.

Supporting data on each of the companies mentioned and for each of the years studied, as well as total figures for the group, are presented in Statements A and A-1 at the end of this exhibit.

3. Analysis of Data on Electric Utility Operating Companies

[fol. 13337] From an "Alphabetical List of Telephone, Electric and Gas Utility Common Stocks Considered in the Course of the Study of Certain Factors Influencing Investors' Appraisals of Risk Characteristics," carried as Schedule 9 of a Federal Communications Commission publication issued June 15, 1938 and entitled "The Problem of the 'Rate of Return' in Public Utility Regulation," were

selected all electric operating utility companies whose common stocks were outstanding in the hands of the public to the extent of at least five per cent.

The complete list of 40 telephone, electric and gas companies, included in the above-cited Schedule appears as page 3, Appendix A, in the accompanying book of tables. As shown in such Appendix, eliminations were made for the following reasons:

(1) Companies whose revenues were derived primarily from telephone service.

(2) Companies whose revenues were derived primarily from gas service.

(3) Companies whose common stocks were outstanding in the hands of the public to an extent less than five per cent.

(4) Companies which were primarily holding companies.

The result of these eliminations from the overall list was the following group of fifteen electric utility operating companies:

Bangor Hydro-Electric Company
Boston Edison Company
Central Hudson Gas & Electric Company
Cleveland Electric Illuminating Company
Commonwealth Edison Company
Connecticut Power Company
Consolidated Edison Company of New York
Consolidated Gas, Electric Light & Power Company of Baltimore
Detroit Edison Company
Duke Power Company
Hartford Electric Light Company
Pacific Gas & Electric Company
[fol. 13338] Pennsylvania Water & Power Company
Southern California Edison Company, Ltd.
Tampa Electric Company

The method of determining the investors' appraisal of the risks of capital in this division of the utility industry

was the same as that previously described in Section 1 above.

The actual results of these determinations for the group of electric utility operating companies are presented in the following table:

Determination of the Investors' Appraisal of Risks of Capital for Electric Utility Operating Companies

	Total Indicated Market Value of Capital	Total Earnings Available for Capital	Investors' Appraisal of Risks of Capital
1937	$3,813,738,284	$208,472,836	5.47
1938	3,691,943,124	203,823,995	5.52
1939	3,963,437,231	214,605,674	5.42
1940	3,963,963,605	216,540,166	5.46
Interim Period Jan.-Aug., 1941	3,816,860,487	214,245,818	5.61

In other words, this analysis indicated that investors appraised the risks of capital invested in electric operating utility companies as a group in 1937, 1938, 1939 and 1940, respectively, at 5.47 per cent, 5.52 per cent, 5.42 per cent and 5.46 per cent, or an average for the four years of 5.47 per cent.

On the basis of data available for the interim period of 1941, January-August, both inclusive, the investors' appraisal of the risks of capital in this industry was 5.61 per cent.

Supporting data on each of the companies mentioned and for each of the years studied, as well as total figures for the group, are presented in Statements B and B-1 at the end of this exhibit.

4. Analysis of Data on Manufactured and Mixed Gas Companies

[fol. 13339] A list was prepared of all operating companies distributing manufactured or mixed gas from Standard Corporation Records and appears on pages 4 and 5, Appendix A in the accompanying book of tables. From this list of companies, eliminations were made for the following reasons:

(1) "Companies whose stocks were controlled completely, or practically so, by a holding company and for which there was no market evaluation.

(2) Companies whose gross revenue was predominantly obtained from services other than the distribution of manufactured and/or mixed gas.

(2) Companies with gross revenues in 1940 of less than $1,000,000, because these were too small to have any important bearing on the final results.

The result of these eliminations was the following ten manufactured and mixed gas companies:

Bridgeport Gas Light Company.
Brooklyn Union Gas Company.
Elizabethtown Consolidated Gas Company.
Hartford Gas Company.
Laclede Gas Light Company.
Peoples Gas Light & Coke Company.
Providence Gas Company.
Seattle Gas Company.
Springfield Gas Light Company.
Washington Gas Light Company.

The method of determining the investors' appraisal of the risks of capital in this division of the utility industry was that previously described in Section 1 above.

The actual results of these determinations for the group of manufactured and mixed gas companies are presented in the following table:

[fol. 13340] Determination of the Investors' Appraisal of the Risks of Capital for Manufactured and Mixed Gas Companies

	Total Indicated Market Value of Capital	Total Earnings Available for Capital	Investors' Appraisal of Risks of Capital
1937	$284,278,897	$17,398,250	6.12
1938	243,001,879	16,341,221	6.72
1939	262,358,022	17,630,133	6.72
1940	262,719,698	18,001,079	6.89
Interim Period Jan.-Aug. 1941	267,129,045	18,817,497	7.04

In other words, the analysis indicated that investors appraised the risks of capital invested in manufactured

and mixed gas companies in 1937, 1938, 1939 and 1940, respectively, at 6.12 per cent, 6.72 per cent, 6.72 per cent and 6.89 per cent, or an average for the four years of 6.61 per cent.

On the basis of data available for the interim period of 1941, January-August, both inclusive, the investors' appraisal of the risks of capital in this industry was 7.04 per cent.

Supporting data on each of the companies mentioned and for each of the years studied, as well as total figures for the group, are presented in Statements C and C-1 at the end of this exhibit.

5. Analysis of Data on Natural Gas Companies

[fol. 13341] The list of natural gas companies from which selections were made to determine the investors' appraisal of risks of capital for this industry was the same as that prepared by Mr. Charles W. Knapp, Jr., of the Federal Power Commission, in an exhibit entitled "Rate of Return", which was submitted in the Hope Natural Gas Company hearings. This list was used since it appeared to be fully representative of the industry. Mr. Knapp testified that

"in preparing this list an attempt was made to include all natural gas companies which had the following characteristics:

(1) Companies engaged in the production and transmission of natural gas and sales thereof at wholesale and to main-line industrial customers.

(2) Companies engaged in the transmission of natural gas and sales thereof at wholesale and to main-line industrial customers.

(3) Companies such as those described in (1) and (2) above which also conduct retail distribution operations.

(4) Companies so engaged which have annual operating revenues of $2,000,000 or more."

Data showing the total securities outstanding of these 43 companies, as well as the amount of such securities held by the public, by institutions or by affiliates, are shown in

Appendix B, pages 1 to 10, in the accompanying book of tables. The grand total of such securities so classified appears in the following table:

[fol. 13342]

Grand Total of Securities of 43 Natural Gas Companies Which Appear to be Fully Representative of the Industry

	Total Outstanding Securities	Held by Public	Held by Institutions	Held by Affiliates
Bonds	$248,242,000	$ 96,771,000	$ 87,464,000	$ 64,007,000
Debentures	44,400,000	—	900,000	43,500,000
Notes	120,692,935	33,548	94,437,500	26,221,887
Advances	59,380,500	—	—	59,380,500
Total	$472,715,435	$96, 804,548	$182,801,500	$193,109,387
Preferred Stock	98,776,810	63,115,810	—	35,661,000
Common Stock	610,281,266	206,379,521	451,697	403,450,048
Grand Total	$1,181,773,511	$366,299,879	$183,253,197	$632,220,435

As shown by the above table, the total of outstanding securities at book values was $1,181,773,511, of which $610,281,266, or 51.6 per cent, was represented by common stocks, $98,776,810, or 8.4 per cent, by preferred stocks, and $472,715,435, or 40.0 per cent, by bonds, debentures, notes and advances.

The table also discloses that of the total securities outstanding, $366,299,879, or 31.0 per cent, was outstanding in the hands of the public, $183,253,197, or 15.5 per cent, was held by institutions, with the remaining $632,220,435, or 53.5 per cent, held by affiliated companies.

From this original list of 43 companies were eliminated all companies whose common stocks were not outstanding in the hands of the public and for which an investment appraisal of this portion of capital was not obtainable. After giving effect to these eliminations, which are shown in Appendix A, page 6, in the accompanying book of tables, the following 13 companies remained:

[fol. 13343] Consolidated Gas Utilities Corporation
El Paso Natural Gas Company
Houston Natural Gas Corporation

Interstate Natural Gas Corporation
Lone Star Gas Corporation
Memphis Natural Gas Company
Montana-Dakota Utilities Company
Mountain Fuel Supply Company
National Fuel Gas Company
Oklahoma Natural Gas Company
Pacific Lighting Corporation
Panhandle Eastern Pipe Line Company
Southern Natural Gas Company

The aggregate book value of the securities outstanding of these 13 companies, as well as data showing the ownership of such securities, is shown in the following table:

Total Securities Outstanding of 13 Natural Gas Companies Upon Which Investors' Appraisals of the Risks of Capital Have Been Computed

	Total Outstanding Securities	Held by Public	Held by Institutions	Held by Affiliates
Bonds	$124,771,000	$93,926,000	$30,845,000	$ —
Debentures	900,000	—	900,000	—
Notes	51,021,048	33,548	50,987,500	—
Advances	—	—	—	—
Total	$176,692,048	$93,959,548	$82,732,500	$ —
Preferred Stock	73,504,719	62,504,710	—	11,000,000
Common Stock	242,695,764	206,379,521	—	36,316,243
Grand Total	$492,892,522	$362,843,779	$82,732,500	$47,316,243

The aggregate book value of securities of the 13 companies used to determine investors' appraisal of the risks of capital for the natural gas industry was $492,892,522, or 41.7 per cent of the aggregate book value of all 43 natural gas companies. The percentage distribution in various types of securities was 49.2% in common stocks, 14.9% in preferred stock and 35.9% in debt composed of bonds, [fol. 13344] debentures, notes and advances.

All of the outstanding securities of these 13 companies were not held by the public. Owing to the practice in recent years of selling many senior issues privately, $82,732,500, or 46.8 per cent of the total debt outstanding was held

by institutions. In such cases it was necessary to estimate the investors' appraisal of this particular portion of the capital. However, the possible margin of error in making such estimate was very small in view of available data on original offering prices and the subsequent trend of quotations for publicly held securities.

Likewise, $11,000,000, or 15.0 per cent, of the total preferred stock outstanding was held by affiliated companies. This amount was represented by the two issues of preferred stock of the Panhandle Eastern Pipe Line Company which were outstanding in the name of Gano Dunn, Trustee for Columbia Oil & Gasoline Corporation. Here again, estimates had to be made of the investors' appraisal of these particular securities, but the margin of error in making such estimates on stocks calling for a fixed dividend payment obviously could not be great.

Of the common stocks, $36,316,243, or 15.0 per cent of the total book value of common stock of the 13 companies, was also held by affiliates. In no case, however, did affiliated companies own 100% of the outstanding common stock of any particular company and therefore the investors' appraisal of the common stocks as indicated by the record of price quotations on the publicly held portions of the issues were used to determine the aggregate value of all the stock outstanding.

[fol. 13345] The procedure followed in determining the investors' appraisal of the risks of capital in the natural gas division of the utility industry was that previously described in Section 1 above.

The actual results of these determinations for the group of natural gas companies are presented in the following table:

Determination of the Investors' Appraisal of the Risks of Capital for National Gas Companies

	Total Indicated Market Value of Capital	Total Earnings Available for Capital	Investors' Appraisal of Risks of Capital
1937	$490,968,147	$38,321,861	7.81%
1938	444,508,937	34,158,780	7.68
1939	541,190,084	41,120,890	7.60
1940	535,528,213	43,004,588	8.03
Interim Period Jan.-Aug., 1941	542,388,315	43,774,736	8.07

In other words, this analysis indicated that investors appraised the risks of capital invested in natural gas companies in 1937, 1938, 1939 and 1940, respectively, at 7.81 per cent, 7.68 per cent, 7.60 per cent and 8.03 per cent, or an average for the four years of 7.78 per cent.

On the basis of the data available for the interim period of 1941, January-August, both inclusive, the investors' appraisal of the risks of capital in this industry was 8.07 per cent.

Supporting data on each of the companies mentioned and for each of the years studied, as well as total figures for the group, are presented in Statements D and D-1 at the end of this exhibit.

Included in the 13 natural gas companies listed above were the following pipe lines companies:

El Paso Natural Gas Company
Interstate Natural Gas Company
Memphis Natural Gas Company
Panhandle Eastern Pipe Line Company
Southern Natural Gas Company

[fol. 13346] These companies were comparable from the viewpoint that in all cases revenue was derived principally from the transportation of gas through a long pipe line. In no case was the ultimate distributing system operated by the pipe line company.

The results of combining available data for the five pipe line companies only are presented in the following table:

Determination of the Investors' Appraisal of the Risks of Capital for Natural Gas Pipe Line Companies

	Total Indicated Market Value of Capital	Total Earnings Available for Capital	Investors' Appraisal of Risks of Capital
1937*	$84,303,145	$8,115,489	9.63%
1938*	78,363,890	7,460,403	9.52
1939	157,082,439	13,890,981	8.84
1940	151,452,439	14,460,549	9.55
Interim Period Jan.-Aug., 1941	157,295,131	14,926,344	9.49

Note: * Data for the Panhandle Eastern Pipe Line Company can not be computed for these years since no part of the common stock was outstanding in the hands of the public.

In other words, this analysis indicated that investors appraised the risks of capital invested in natural gas pipe line companies in 1937, 1938, 1939 and 1940, respectively, at 9.63 per cent, 9.52 per cent, 8.84 per cent and 9.55 per cent, or an average for the four years of 9.38 per cent.

On the basis of the data available for the interim period of 1941, January to August, both inclusive, the investors' appraisal of the risks of capital for pipe lines companies was 9.49 per cent.

Supporting data on each of the companies mentioned in this group are presented in Statements E and E-1 at the end of this exhibit.

Included among the five natural gas pipe line companies was the Panhandle Eastern Pipe Line Company. For this [fol. 13347] company alone, the determination of the investors' appraisal of the risks of capital is presented in the following table:

Determination of the Investors' Appraisal of the Risks of Capital of the Panhandle Eastern Pipe Line Company

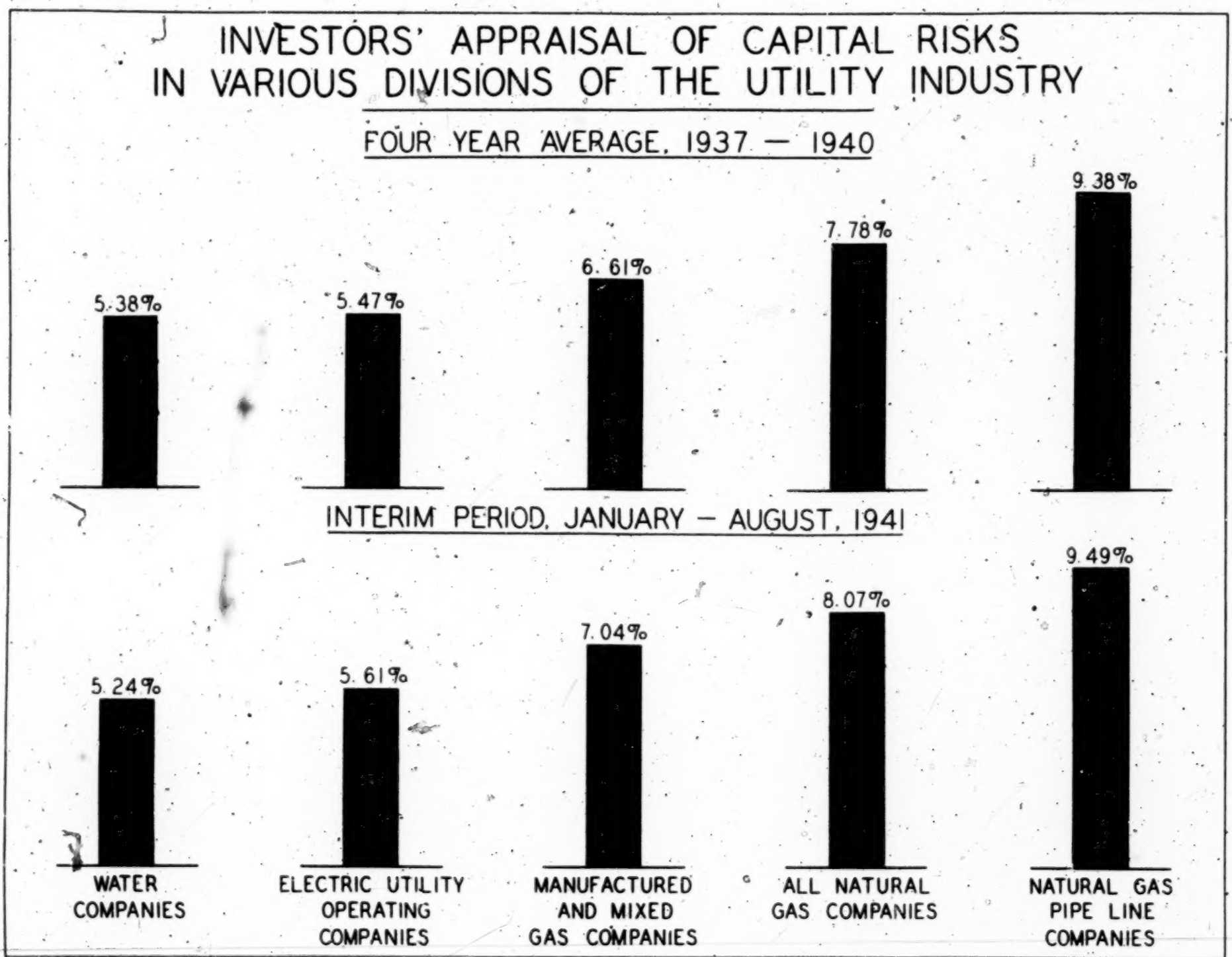
	Total Indicated Market Value of Capital	Total Earnings Available for Capital	Investors' Appraisal of Risks of Capital
1937*	$	$	—%
1938*			
1939	66,681,671	5,601,585	8.40
1940	58,156,283	5,761,686	9.91
Interim Period Jan.-Aug., 1941	64,219,240	5,843,430	9.10

Note: * Data for the Panhandle Eastern Pipe Line Company can not be computed for these years since no part of the common stock was outstanding in the hands of the public.

In other words, this analysis indicated that investors appraised the risks of capital in the Panhandle Eastern Pipe Line Company in 1939 and 1940, respectively, at 8.40 per cent and 9.91 per cent, or an average for the two years of 9.15 per cent.

On the basis of the data available for the interim period of 1941, January to August, both inclusive, the investors' appraisal of the risks of capital for this company was 9.10 per cent.

INVESTORS' APPRAISAL OF CAPITAL RISKS IN VARIOUS DIVISIONS OF THE UTILITY INDUSTRY



6. Summary of Analyses:

[fol. 13349] The foregoing analyses indicate most clearly that the percentages representing the investors' appraisal of the risks of capital invested in the various divisions of the utility industry analyzed, increased as the risks of the particular utility division increased. In order that this may be seen clearly, the summary figures are presented in the table below and graphically on the accompanying chart.

Investors' Appraisal of Capital Risks in Various Divisions of the Utility Business

	1937	1938	1939	1940	Four-Year Average 1937-40	Interim Period Jan.-Aug. 1941
Water Companies	5 53%	5 24%	5 64%	5 13%	5 38%	5.24%
Electric Utility Operating Companies	5 47	5 52	5 42	5 46	5 47	5 61
Manufactured and Mixed Gas Companies	6 12	6 72	6 72	6 89	6 61	7 04
All Natural Gas Companies	7 81	7 68	7 60	8 03	7 78	8 07
Natural Gas Pipe Line Companies — Panhandle Eastern Pipe Line Company	9 63 (*)	9 52 (*)	8 84 8 40	9 55 9 91	9 38 (**) 9 15	9 49 9. 10

Notes: (*) Data for the Panhandle Eastern Pipe Line Company cannot be computed for these years since no part of the common stock was outstanding in the hands of the public.

(**) Average for two years, 1939 and 1940.

The above table conclusively shows that for all full years studied, as well as for the interim period of 1941, January-August, both inclusive, investors appraised the risks of capital invested in natural gas companies at approximately 1 per cent higher than in manufactured and mixed gas companies, and from 2 to 2½ per cent higher than the risk of electric operating utility companies or water companies.

[fol. 13350] Furthermore, it is clearly evident that investors consider the risks of capital invested in natural gas pipe line companies to be greater than the risks encountered in other divisions of the natural gas industry.

Signed at New York City, October, 1941.

PAUL B. COFFMAN.

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEARS 1937, 1938, 1939 AND 1940

WATER COMPANIES

	Indicated Market Value of Capital				Earnings Available for Distributio		
	1937	1938	1939	1940	1937	1938	1939
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Bridgeport Hydraulic Co.	$18,079,750	$19,885,420	$18,300,930	$19,980,780	$ 904,087	$ 783,375	$ 831,754
Elizabethtown Water Co. Consolidated	4,222,735	3,889,185	4,217,839	4,513,944	296,650	297,601	328,336
Hackensack Water Co.	25,674,345	25,355,875	26,622,100	26,876,500	1,671,089	1,595,759	1,772,500
Middlesex Water Co.	3,358,995	2,894,868	2,961,420	3,121,725	195,871	170,811	192,010
New Haven Water Co.	18,009,875	16,841,375	16,542,000	17,846,000	801,022	722,305	790,753
Plainfield-Union Water Co.	6,475,700	5,731,710	6,361,240	6,312,068	356,375	348,969	367,952
Stamford Water Co.	3,929,000	3,947,000	4,630,000	4,593,000	185,227	197,240	211,289
TOTALS	$79,750,400	$78,545,433	$79,635,529	$83,244,017	$4,410,321	$4,114,060	$4,494,594

Statement A

ings Available for Distribution to Capital				Investors' Appraisal of Risks of Capital			
937	1938	1939	1940	1937	1938	1939	1940
6)	(7)	(8)	(9)	10=6÷2	11=7÷3	12=8÷4	13=9÷5
4,087	$ 783,375	$ 831,754	$ 844,352	5.00%	3.94%	4.54%	4.23%
6,650	297,601	328,336	360,665	7.03	7.65	7.78	7.89
1,089	1,595,759	1,772,500	1,495,754	6.61	6.29	6.66	5.57
5,871	170,811	192,010	180,248	5.83	5.90	6.48	5.77
1,022	722,305	790,753	843,525	4.45	4.29	4.78	4.73
6,375	348,969	367,952	342,982	5.50	6.09	5.78	5.43
5,227	197,240	211,289	205,268	4.71	5.00	4.56	4.47
0,321	$4,114,060	$4,494,594	$4,272,794	5.53%	5.24%	5.64%	5.13%

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

WATER COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investors' Appraisal of Risks of Capital
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5=3÷2
Bridgeport Hydraulic Co.	$19,193,280	$ 844,352	December 31,1940	4.40%
Elizabethtown Water Co. Cons.	4,415,069	360,665	December 31,1940	8.17
Hackensack Water Company	26,612,125	1,495,754	December 31,1940	5.62
Middlesex Water Co.	3,132,150	198,743	December 31,1940	6.35
New Haven Water Co.	16,910,250	843,525	December 31,1940	4.99
Plainfield-Union Water Co.	6,824,645	341,006	December 31,1940	5.00
Stamford Water Co.	4,729,000	205,268	December 31,1940	4.34
TOTALS	$81,816,519	$4,289,313		5.24%

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEARS 1937, 1938, 1939 and 1940

ELECTRIC UTILITY OPERATING COMPANIES

	Indicated Market Value Of Capital				Earnings Available for Distribut		
	1937	1938	1939	1940	1937	1938	193
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8
Bangor Hydro-Electric Co.	$ 17,658,678	$ 17,803,960	$ 18,675,730	$ 18,716,454	$ 964,998	$ 998,977	$ 976,
Boston Edison Co.	140,377,138	132,313,981	145,728,974	138,188,040	7,705,886	7,163,506	7,297,
Central Hudson Gas & Elec. Co.	45,606,962	41,827,003	44,969,613	47,747,225	2,204,575	2,120,707	2,160,
Cleveland Electric Illuminating Co.	162,573,543	153,145,329	163,229,810	176,026,227	8,601,798	8,325,924	8,832,
Commonwealth Edison Co.	626,918,052	660,399,663	705,083,800	721,097,209	39,294,881	39,006,579	41,254,
Connecticut Power Co.	36,990,387	33,632,638	37,066,931	41,478,516	1,958,145	1,838,446	2,020,
Consolidated Edison Co. of N. Y.	1,081,962,070	1,016,256,197	1,098,864,474	1,076,551,545	52,797,146	53,893,205	54,904,
Consolidated Gas, El. Lt. & Pr. Co. of Balt.	183,915,004	173,690,887	192,500,229	196,607,319	8,162,762	8,316,215	9,240,
Detroit Edison Co.	296,828,857	276,594,513	302,842,593	298,657,066	15,898,965	13,841,099	15,685,
Duke Power Co.	104,759,073	100,702,575	110,652,621	112,649,504	6,030,474	5,667,150	6,989,
Hartford Electric Light Co.	54,136,250	51,344,300	58,203,600	58,972,900	2,777,364	2,576,545	2,866,
Pacific Gas & Electric Co.	638,037,391	634,250,065	672,910,962	671,464,986	37,323,158	35,979,365	38,214,
Pennsylvania Water & Power Co.	59,937,547	54,881,581	58,060,506	52,664,433	3,348,104	3,584,838	3,264,2
Southern California Edison Co., Ltd.	343,135,975	326,193,494	334,074,211	335,163,005	19,146,425	19,019,797	19,480,4
Tampa Electric Co.	20,911,357	19,806,938	20,573,177	18,979,266	1,458,155	1,501,642	1,508,3
TOTALS	$3,813,738,284	$3,691,943,124	$3,963,437,231	$3,963,963,695	$208,472,836	$203,833,995	$214,695,6

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Earnings Available for Distribution to Capital				Investors' Appraisal of Risks of Capital			
1937	1938	1939	1940	1937	1938	1939	1940
(6)	(7)	(8)	(9)	10=6÷2	11=7÷3	12=8÷4	13=9÷5
964,998	998,977	976,129	$1,027,166	5.46%	5.61%	5.23%	5.49%
7,505,886	7,163,506	7,297,587	7,730,837	5.35	5.41	5.01	5.59
2,204,575	2,120,707	2,160,156	2,160,156	4.83	5.07	4.80	4.58
8,601,798	8,325,924	8,832,181	9,833,158	5.29	5.44	5.41	5.59
39,294,881	39,006,579	41,254,094	41,866,784	6.27	5.91	5.85	5.81
1,958,145	1,838,446	2,020,810	2,005,022	5.29	5.47	5.45	4.83
52,797,146	53,893,205	54,904,914	55,095,151	4.88	5.30	5.00	5.12
8,162,762	8,316,215	9,240,571	8,769,162	4.98	4.79	4.80	4.46
15,898,965	13,841,092	15,685,727	16,968,523	5.36	5.00	5.18	5.68
6,030,474	5,667,150	6,989,767	7,367,101	5.76	5.63	6.32	6.54
2,777,364	2,576,545	2,866,385	2,936,499	5.13	5.02	4.92	4.98
37,323,156	35,979,365	38,214,304	37,112,476	5.85	5.67	5.68	5.53
3,348,104	3,584,838	3,264,229	3,038,118	5.59	6.53	5.62	5.77
19,146,425	19,019,797	19,480,429	19,126,879	5.58	5.85	5.83	5.71
1,458,155	1,501,642	1,508,391	1,474,266	6.97	7.54	7.33	7.77
$208,472,836	$203,833,995	$214,695,674	$216,540,166	5.47	5.52%	5.42%	5.46%

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

ELECTRIC UTILITY OPERATING COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investors' Appraisal of Risks of Capital
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5.3+2
Bangor Hydro-Electric Co.	$19,497,463	$1,056,079	Aug. 31, 1941	5.42
Boston Edison Co.	130,188,753	7,703,746	June 30, 1941	5.92
Central Hudson Gas & Elec. Corp.	40,682,150	2,052,925	June 30, 1941	5.05
Cleveland Elec. Illuminating Co.	170,709,695	10,095,807	June 30, 1941	5.91
Commonwealth Edison Co.	690,871,828	42,806,172	June 30, 1941	6.20
Connecticut Power Co.	39,820,951	2,005,022	Dec. 31, 1940	5.04
Consolidated Edison Co. of N. Y.	993,759,658	53,124,160	June 30, 1941	5.35
Consolidated Gas Elec. Lt. & Pwr. Co. of Baltimore	190,877,517	8,736,038	June 30, 1941	4.58
Detroit Edison Co.	289,844,480	18,164,016	July 31, 1941	6.27
Duke Power Co.	115,966,535	7,367,101	Dec. 31, 1940	6.35
Hartford Electric Light Co.	57,155,000	2,936,499	Dec. 31, 1940	5.14
Pacific Gas & Electric Co.	681,892,625	34,959,006	June 30, 1941	5.13
Pennsylvania Water & Power Co.	48,867,425	3,000,155	June 30, 1941	6.14
Southern California Edison Co.	332,214,944	18,723,848	June 30, 1941	5.64
Tampa Electric Co.	14,511,463	1,505,242	July 31, 1941	10.37
TOTALS	$3,816,860,487	$214,235,818		5.61%

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEARS 1937, 1938, 1939 AND 1940

MANUFACTURED AND MIXED GAS COMPANIES

	Indicated Market Value of Capital				Earnings Available for Distribution		
	1937	1938	1939	1940	1937	1938	1939
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Bridgeport Gas Light Co.	$ 7,203,845	$ 6,378,500	$ 7,371,750	$ 7,674,000	$ 431,757	$ 421,181	$ 437,728
Brooklyn Union Gas Co.	74,712,428	55,671,027	64,483,081	64,366,613	4,447,231	4,213,480	4,336,218
Elizabethtown Consolidated Gas Co.	8,033,570	7,452,830	7,839,990	8,232,183	590,455	569,472	599,152
Hartford Gas Co.	6,000,000	5,490,000	6,405,000	6,540,000	392,260	366,943	387,306
Laclede Gas Light Co.	27,707,333	23,147,993	22,986,737	22,837,768	2,272,816	1,922,077	1,976,522
Peoples Gas, Light & Coke Co.	108,712,493	96,682,833	100,083,807	95,453,405	6,136,925	5,601,560	6,295,550
Providence Gas Co.	13,607,641	10,850,563	11,671,775	13,095,002	945,111	790,096	880,019
Seattle Gas Co.	4,735,745	3,559,771	3,529,628	4,592,857	196,406	188,556	364,806
Springfield (Mass.) Gas Light Co.	3,051,242	2,622,434	3,319,247	3,855,259	270,530	260,003	302,935
Washington Gas Light Co.	30,514,600	31,145,928	34,667,008	36,072,611	1,714,759	2,007,853	2,049,897
TOTALS	$284,278,897	$243,001,879	$262,358,023	$262,719,698	$17,398,250	$16,341,221	$17,630,133

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Earnings Available for Distribution to Capital				Investors' Appraisal of Risks of Capital			
1937	1938	1939	1940	1937	1938	1939	1940
(6)	(7)	(8)	(9)	10=6÷2	11=7÷3	12=8÷4	13=9÷5
$ 431,757	$ 421,181	$ 437,728	$ 441,618	5.99%	6.60%	5.94%	5.75%
4,447,231	4,213,480	4,336,218	4,323,953	5.95	7.57	6.72	6.72
590,455	569,472	599,152	548,277	7.35	7.64	7.64	6.66
392,260	366,943	387,306	425,918	6.54	6.68	6.05	6.51
2,272,816	1,922,077	1,976,522	2,330,739	8.20	8.30	8.60	10.21
6,136,925	5,601,560	6,295,550	6,366,277	5.65	5.79	6.29	6.67
945,111	790,096	880,019	893,427	6.95	7.28	7.54	6.82
196,406	188,556	364,808	350,291	4.15	5.30	10.34	7.63
270,530	260,003	302,935	278,618	8.87	9.91	9.13	7.23
1,714,759	2,007,853	2,049,897	2,131,961	5.62	6.45	5.91	5.91
$17,398,250	$16,341,221	$17,630,133	$18,091,079	6.12%	6.72%	6.72%	6.89%

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

MANUFACTURED AND MIXED GAS COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investo Appra of Ris of Capi
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5=3÷
Bridgeport Gas & Light Company	$ 6,443,500	$ 441,618	Dec. 31, 1940	6.8
Brooklyn Union Gas Company	59,089,732	4,230,242	June 30, 1941	7.1
Elizabethtown Consolidated Gas Co.	7,452,830	548,277	Dec. 31, 1940	7.3
Hartford Gas Company	6,135,000	425,918	Dec. 31, 1940	6.9
Laclede Gas & Light Company	29,788,757	2,598,420	June 30, 1941	8.7
Peoples Gas, Light & Coke Co.	103,469,152	6,968,708	June 30, 1941	6.7
Providence Gas Company	12,225,039	893,427	Dec. 31, 1940	7.31
Seattle Gas Company	4,363,776	352,401	June 30, 1941	8.08
Springfield (Mass.) Gas Light Co.	3,533,651	278,618	Dec. 31, 1940	7.88
Washington Gas & Light Co.	34,627,608	2,079,868	March 31, 1941	6.01
TOTALS	$267,129,045	$16,817,497		7.04

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEARS 1937, 1938, 1939 AND 1940

ALL NATURAL GAS COMPANIES

	Indicated Market Value of Capital				Earnings Available for Distribution t			
	1937	1938	1939	1940	1937	1938	1939	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Consolidated Gas Utilities Corp.	$ 8,642,688	$ 5,787,821	$ 6,243,085	$ 7,921,864	$ 582,845	$ 79,685	$ 691,175	$
El Paso Natural Gas Co.	23,053,338	25,532,882	33,076,171	33,411,781	2,300,950	2,510,812	2,710,765	
Houston Natural Gas Corp.	5,864,837	4,558,112	4,760,839	5,853,679	481,567	413,108	514,512	
Interstate Natural Gas Co.	24,062,063	20,250,251	22,632,634	22,756,518	2,383,513	2,032,488	2,014,221	
Lone Star Gas Corp.	86,958,624	79,681,534	78,796,337	78,318,290	8,143,140	6,339,854	6,408,886	
Memphis Natural Gas Company	6,068,588	5,319,599	5,404,148	6,125,818	785,079	661,021	657,002	
Montana-Dakota Utilities Co.	25,295,347	20,508,729	22,624,279	26,137,253	1,692,558	1,618,067	1,577,479	
Mountain Fuel Supply Company	16,675,379	10,825,067	9,452,034	11,322,542	654,141	758,027	902,055	
National Fuel Gas Company	60,010,382	49,760,990	48,122,611	44,045,715	3,660,300	3,179,213	3,601,477	
Oklahoma Natural Gas Co.	37,028,018	38,140,854	43,009,099	44,454,138	2,992,093	2,766,413	2,878,972	
Pacific Lighting Corp.	166,189,727	156,881,940	171,099,361	166,945,793	11,999,728	11,544,010	10,755,353	
Panhandle Eastern Pipe Line Co.	-	-	66,681,674	58,156,283	-	-	5,601,585	
Southern Natural Gas Company	31,119,156	27,261,158	29,287,812	31,080,539	2,645,947	2,256,082	2,907,408	
TOTALS (including Panhandle Eastern Pipe Line Co.)	$490,968,147	$444,508,937	$541,190,084	$535,528,213	$38,321,861	$34,158,780	$41,120,890	$43
TOTALS (excluding Panhandle Eastern Pipe Line Co.)	$490,968,147	$444,508,937	$474,508,410	$477,371,930	$38,321,861	$34,158,780	$35,519,305	$37

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rnings Available for Distribution to Capital				Investors' Appraisal of Risks of Capital			
1937	1938	1939	1940	1937	1938	1939	1940
(6)	(7)	(8)	(9)	10=6÷2	11=7÷3	12=8÷4	13=9÷5
582,845	$ 73,685	$ 591,175	$ 729,531	6.74%	1.38%	9.47%	9.21%
,300,950	2,510,812	2,710,765	2,749,087	9.98	9.83	8.20	8.23
481,567	413,108	514,512	670,450	8.21	9.06	10.81	11.45
383,513	2,032,488	2,014,221	1,972,286	9.91	10.04	8.90	8.67
143,140	6,339,854	6,408,886	7,366,636	9.36	7.96	8.13	9.41
785,079	661,021	657,002	701,853	12.94	12.43	12.16	11.46
692,558	1,618,067	1,577,479	1,653,656	6.69	7.89	6.97	6.33
654,141	758,927	902,055	950,069	3.92	7.00	9.54	8.39
660,300	3,179,213	3,601,477	4,283,237	6.10	6.39	7.48	9.72
992,093	2,766,413	2,878,972	3,490,137	8.08	7.25	6.69	7.85
999,728	11,544,010	10,755,353	9,400,323	7.22	7.36	6.29	5.66
-	-	5,601,585	5,761,686	-	-	8.40	9.91
645,947	2,256,082	2,907,408	3,275,637	8.50	8.28	9.93	10.54
321,861	$34,158,780	$41,120,890	$43,004,588	7.81%	7.68%	7.60%	8.03%
321,861	$34,158,780	$35,519,305	$37,242,902	7.81%	7.68%	7.49%	7.80

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE INTERIM PERIOD OF 1941 JANUARY-AUGUST, BOTH INCLUSIVE

ALL NATURAL GAS COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investors' Appraisal of Risks of Capital
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5=3÷2
Consolidated Gas Utilities Corp.	$ 8,729,039	$ 772,208	July 31, 1941	8.85%
El Paso Natural Gas Co.	32,739,778	2,688,603	June 30, 1941	8.21
Houston Natural Gas Corp.	6,094,468	670,450	Dec. 31, 1940	11.00
Interstate Natural Gas Co.	20,964,966	1,972,286	Dec. 31, 1940	9.41
Lone Star Gas Corp.	76,923,794	7,569,497	June 30, 1941	9.84
Memphis Natural Gas Co.	4,598,368	701,853	Dec. 31, 1940	15.26
Montana-Dakota Utilities Co.	27,615,561	1,604,968	June 30, 1941	5.81
Mountain Fuel Supply Co.	11,063,855	950,069	Dec. 31, 1940	8.59
National Fuel Gas Co.	40,464,143	4,283,237	Dec. 31, 1940	10.59
Oklahoma Natural Gas Co.	50,153,965	3,271,169	July 31, 1941	6.52
Pacific Lighting Corp.	164,048,359	9,726,794	June 30, 1941	5.93
Panhandle Eastern Pipe Line Co.	64,219,240	5,843,430	June 30, 1941	9.10
Southern Natural Gas Co.	34,772,779	3,720,172	June 30, 1941	10.70
TOTALS	$542,388,315	$43,774,736		8.07

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEARS 1937, 1938, 1939 AND 1940

NATURAL GAS PIPE LINE COMPANIES

	Indicated Market Value of Capital				Earnings Available for Distribut		
	1937	1938	1939	1940	1937	1938	1939
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
El Paso Natural Gas Co.	$23,055,338	$25,532,882	$33,076,171	$33,411,781	$2,300,950	$2,510,812	$2,710,7
Interstate Natural Gas Co.	24,062,063	20,250,251	22,632,634	22,756,518	2,383,513	2,032,488	2,014,
Memphis Natural Gas Co.	6,068,588	5,319,599	5,404,148	6,123,818	785,079	661,021	657,(
Panhandle Eastern Pipe Line Co.	-	-	66,681,674	58,156,283	-	-	5,601,!
Southern Natural Gas Co.	31,119,156	27,261,158	29,287,812	31,080,539	2,645,947	2,256,082	2,907,!
TOTALS (including Panhandle Eastern Pipe Line Co.)	$84,303,145	$78,363,890	$157,082,439	$151,452,439	$8,115,489	$7,460,403	$13,890,!
TOTALS (excluding Panhandle Eastern Pipe Line Co.)	$84,303,145	$78,363,890	$90,400,765	$93,372,656	$8,115,489	$7,460,403	$8,289,!

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nings Available for Distribution to Capital				Investors' Appraisal of Risks of Capital			
1937	1938	1939	1940	1937	1938	1939	1940
(6)	(7)	(8)	(9)	10=6÷2	11=7÷3	12=8÷4	13=9÷5
00,950	$2,510,812	$2,710,765	$2,749,087	9.98%	9.83%	8.20%	8.23%
83,513	2,032,488	2,014,221	1,972,286	9.91	10.04	8.90	8.67
85,079	661,021	657,002	701,853	12.94	12.43	12.16	11.46
-	-	5,601,585	5,761,686	-	-	8.40	9.91
45,947	2,256,082	2,907,408	3,275,637	8.50	8.28	9.93	10.54
15,489	$7,460,403	$13,890,981	$14,460,549	9.63%	9.52%	8.84%	9.55%
15,489	$7,460,403	$8,289,396	$8,698,863	9.63%	9.52%	9.17%	9.32%

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

NATURAL GAS PIPE LINE COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investors' Appraisal of Risks of Capital
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5=3÷2
El Paso Natural Gas Co.	$32,739,778	$2,688,603	June 30, 1941	8.21%
Interstate Natural Gas Co.	20,964,966	1,972,286	Dec. 31, 1940	9.41
Memphis Natural Gas Co.	4,598,368	701,853	Dec. 31, 1940	15.26
Panhandle Eastern Pipe Line Co.	64,219,240	5,843,430	June 30, 1941	9.10
Southern Natural Gas Co.	34,772,779	3,720,172	June 30, 1941	10.70
TOTALS (including Panhandle Eastern Pipe Line Co.)	$157,295,131	$14,926,344		9.49%
TOTALS (excluding Panhandle Eastern Pipe Line Co.)	$ 93,075,891	$ 9,082,914		9.76%

[fol. 13361] Statement F.

General Information Covering Each Company As To The Nature And Size Of The Business And The Territory Served.

I. Water Companies

1. Bridgeport Hydraulic Company This independent water company furnishes water for industrial and domestic purposes to Bridgeport, Stratford, Fairfield, Easton, Shelton, Trumbull and Westport, having a population of approximately 200,000. Approximately 36,000 customers are served, through 515.55 miles of mains.

2. Elizabethtown Water Company, Consolidated This independent water company serves the townships of Piscataway, Union, Clark and Hillside and the boroughs of Middlesex and Dunellen, N. J., and also serves in part the city of Plainfield, the townships of Springfield, Raritan and North Plainfield and the boroughs of Roselle and South Plainfield, N. J. The population served totals about 72,000 and the customers served about 17,000. The company has 267.22 miles of mains.

3. Hackensack Water Company This independent water company serves a population of approximately 430,000 in 53 municipalities in eastern Bergen County and northern Hudson County, N. J., including Englewood, Hackensack, Rutherford, Teaneck, Tenafly, North Bergen, Union City and Weehawken. Its wholly owned subsidiary, Spring Valley Water and Supply Co. serves a population of about 20,000 in municipalities in Southern Rockland County, N. Y., including Blauvelt, Grandview, Nanuet, Pearl River, Piermont, Sparkill and Spring Valley. The system contains 1,019 miles of mains. There are also about 104,000 service pipes, about 25 per cent of which are inactive.

4. Middlesex Water Company This independent water company serves an estimated population of 70,414 in the boroughs of South Plainfield, Metuchen, Carteret, and townships of Raritan, Woodbridge and Clark, N. J. Property consists of 175 miles of cast iron pipe line and three

sources of water supply, having a capacity of 11 million gallons per day.

5. New Haven Water Company This company owns and operates a water system supplying without competition the city of New Haven and 11 surrounding towns, including a total population of approximately 265,000. Milford Water Company, a wholly owned subsidiary, supplies water to Milford, Conn. Company and subsidiary have in operation about 545 miles of mains, supplying water to approximately 43,000 individual customers.

6. Plainfield-Union Water Company This independent water company supplies water for domestic and public use in 17 municipalities in New Jersey, including the cities of Plainfield and Linden. The company owns and operates 365.92 miles of mains and has approximately 28,000 customers.

[fol. 13362] 7. Stamford Water Company This company serves water to a population of some 50,000 in the township of Stamford, Conn. In addition, a contract is held with Greenwich Water Company to supply its need, when needed, not to exceed four million gallons of water per day. Properties include 156.5 miles of mains.

II. Electric Utility Operating Companies

[fol. 13363] 1. Bangor Hydro Electric Company Company supplies electricity without competition from any other public utility in portions of Penobscot, Hancock and Washington Counties in Eastern Maine, serving 73 communities having a total population of about 118,500. In Hancock County there is a substantial seasonal business in summer. Bangor, which is located in this company's territory, however, through its own municipal hydro-electric plant and distribution system which is connected with company's electric system, supplies electricity for municipal demands in Bangor. Approximately 45% of the electric sales revenues are derived from residential and 50% from commercial and industrial customers. Company also operates an electric street railway system in and between Bangor, Brewer, Veazie, Orono and Old Town in Penobscot County.

2. Boston Edison Company Without competition, and with no limit on franchise, this company supplies electric light and power to Boston, Mass. (excluding Charleston) and to 39 nearby cities and towns. Territory served is densely populated and company's customers are predominantly in domestic and small commercial classifications, about 37 per cent and 29 per cent of total operating revenues being derived from these respective groups. Sales to large commercial business contribute 20 per cent of revenues; street lighting sales to municipal and other electric systems, and distribution in Boston proper of steam, account for the remaining 14 per cent.

3. Central Hudson Gas & Electric Corporation Company serves and extensive territory in Hudson River Valley between New York City and Albany, supplying without competition electricity and gas to Poughkeepsie, Beacon, Kingston, Newburgh and Catskill. Also supplies electricity to 20 incorporated and 460 unincorporated villages and gas to 6 incorporated villages. In addition, it supplies energy to the Liberty, Walden and Harlem Valley districts of New York State Electric & Gas Corporation under a 10-year contract expiring May 2, 1949. Total population served is estimated at more than 267,000. In 1940, 83.5% of gross operating revenues was derived from electric service, 16.24% from gas and 0.26% from steam heating. Territory served is not highly industrialized, and communities served depend upon relatively small diversified industries and fruit and dairy farms. Company's principal industrial customers are manufacturers of building products, textiles, machine and metal products, paper and clothing and food industries. Other large customers are municipal water pumping plants and public and private institutions.

4. Cleveland Electric Illuminating Company (The) Company is engaged in the generation of electric energy and in transmission, distribution and sale thereof for light, heat and power purposes in Cleveland, Ohio, and in adjacent industrial, suburban and rural territory in Ohio extending nearly 100 miles along the south shore of Lake Erie. Company is also engaged in the production, distribution and sale of steam for heating and other purposes.

in the downtown business section of Cleveland. Approximately 95% of company's 1940 operating revenues were derived from the sale of electric energy and approximately [fol. 13364] 5% from the sale of steam. Company generates virtually all of its electric energy requirements. Territory served includes the major portions of Cuyahoga, Lake, Geauga and Ashtabula Counties, and a small part of Lorain County, Ohio. Company estimates that population of total area served is around 1,340,000.

5. Commonwealth Edison Company Company and subsidiaries supply the entire electric light and power requirements of Chicago and furnish electricity, gas and other services in the suburban area adjacent to Chicago and in other portions of Illinois as far west as the Mississippi River. Territory has an estimated population in excess of five million. Electric business is well diversified and accounts for about 90 per cent of revenues, with the remainder coming mostly from gas.

6. Connecticut Power Company (The) This operating utility supplies electricity and gas to New London and Stamford and to smaller communities including Middletown, Darien, Manchester, Waterford, New Hartford, Avon, Farmington, Bolton, Canaan, Norfolk, Thomaston and other communities in Connecticut. Electricity is furnished under long term contract to public service companies operating in Torrington, Bristol, Greenwich and Hartford. Gas is also supplied at wholesale to another company for distribution to Greenwich. Company has 60,260 electric meters and 21,000 gas meters in its territory which embraces a population of approximately 197,776. Company derives approximately 85% of its gross revenues from electric sales.

7. Consolidated Edison Company of New York, Inc. Company, with affiliates, serves approximately eight million people in New York City and vicinity. Operations include practically the entire gas and electric light and power business in Manhattan and Bronx Boroughs, New York City; almost all of Westchester County and a large part of Queens; the entire electric light and power services in Brooklyn; and a substantial steam business in important financial, commercial and residential sections of Manhat-

tan. About three-quarters of the system's total revenues are derived from the sale of electric energy, the remainder from gas, steam and miscellaneous sources. Business of the electric and gas divisions is unusually well diversified; but because of rate differentials, domestic and general retail customers account for the bulk of dollar sales:

8. Consolidated Gas, Electric Light & Power Company of Baltimore Company supplies electricity, gas and steam to Baltimore, and the first two services to surrounding territory wholly within Maryland. The population served is about 1,178,000. Nearly 75 per cent of operating revenues is derived from electric business and all but a small part of the remainder from gas operations. Electric load is well diversified, revenues from the domestic, industrial and commercial groups being approximately equal. Long term contracts are held to supply power to Pennsylvania Railroad Company.

9. Detroit Edison Company Company supplies the entire electric light and power requirements of the Detroit metropolitan area and extensive agricultural sections adjacent thereto, and also provides steam heating service in the business district of Detroit and minor gas, water and steam heating services outside the city limits. Electric [fol. 13365] revenues account for about 96 per cent of gross business. Despite preponderance of industrial load, principally with the automobile industry, promotional efforts of the management have made domestic service the largest source of revenues. Population of the area served is approximately two and one-half million.

10. Duke Power Company Company furnishes electric light and power in the manufacturing and industrial sections of North Carolina and South Carolina including Charlotte, Winston-Salem and Greensboro, North Carolina, and Greenville, Spartanburg and Anderson, South Carolina. Power is supplied at wholesale for commercial and municipal uses and to distributing companies in a territory including more than 110 cities and towns. Population served by system is approximately 1,500,000. Company also provides bus service in Charlotte and Greenville, S. C.

11. Hartford Electric Light Company (The) Besides supplying electric light and power to the City of Hartford, this company serves some 16 Connecticut towns within the same area (about 205 square miles) including West Hartford, East Hartford, Wethersfield, Tariffville, Bloomfield, East Grandy, Grandy and Newington. Number of customers is about 76,300. Total population served is about 249,000.

12. Pacific Gas & Electric Company This system supplies electricity, natural and manufactured gas, and miscellaneous services to an extensive territory in northern and central California, including the important San Francisco Bay industrial region, highly developed agricultural areas in the Sacramento and San Joaquin Valleys, and such large communities as San Francisco, Oakland, Sacramento, San Jose and Fresno. Electric operations account for approximately 70 per cent of consolidated gross revenues, with gas producing most of the remainder. Total population served aggregates over 3,200,000.

13. Pennsylvania Water & Power Company This company sells at wholesale electric power, part of which it generates while remainder is purchased. Together with its wholly-owned, transmission subsidiary, Susquehanna Transmission Co. of Maryland, the company represents an important unit in the regional power supply system supplying eastern Pennsylvania and Maryland.

14. Southern California Edison Co. Ltd. This company's service area, with a population of approximately 2,000,000, extends from the San Joaquin Valley in the central section of California to the fertile regions and highly industrialized centers in the southern part. Electric service provides virtually all of revenues, and is well diversified.

15. Tampa Electric Company Company does the entire electric light and power business in the Tampa, Plant [fol. 13366] City, Dade City and Winter Haven areas, Florida, serving a permanent population of about 192,500. It also provides street railway service in Tampa, water service in Winter Haven, operates ice plants in Dade City, Plant City, Auburndale and Winter Haven, and a precool-

ing plant at Winter Haven serving one of the largest packing houses in the State.

III. Manufactured and Mixed Gas Companies

[fol. 13367] 1. Bridgeport Gas Light Company Company supplies, under perpetual franchise, manufactured gas to a populuation of approximately 195,000 in Bridgeport, Stratford, Fairfield, Southport, Greenfield Hill, Long Hill Center, and Greens Farm, Conn. Daily capacity is 11,500,000 cubic feet.

2. Brooklyn Union Gas Company Under perpetual franchises, company supplies manufactured gas to most of Brooklyn and part of Queens, New York City. As territory served, with over 2,800,000 inhabitants, is one of the most densely populated areas in the United States, about 75 per cent of total operating revenue is derived from domestic consumers. Company owns and operates two manufacturing plants containing 16 water gas sets, with aggregate daily capacity of 84,000,000 cubic feet, and 90 coke ovens with aggregate daily capacity of 24,000,000 cubic feet.

3. Elizabethtown Consolidated Gas Company Company serves manufactured gas to a population of approximately 265,000 in 17 towns in northern New Jersey. Customers number approximately 69,000. Daily gas manufacturing capacity is 12,500,000 cubic feet.

4. Hartford Gas Company Company supplies manufactured gas to Hartford and six surrounding towns in Connecticut, serving a population of about 295,000 and approximately 56,000 customers. Plants have a daily capacity of about eight million cubic feet of water and coal gas.

5. Laclede Gas Light Company Company owns and operates the entire gas system serving a mixture of natural gas and manufactured gas to the city of St. Louis. Manufactured gas properties have a daily capacity of over 34,800,000 cubic feet. Additional manufactured gas is purchased from the Illinois & Missouri Pipe Line Company. An added supply of natural gas is available through long term contracts with Mississippi River Fuel Corporation. Distribution system consists of some 1,200 miles of mains.

Approximately 70% of its revenues is derived from domestic sales, with commercial and industrial sales contributing only about 12% and 10% respectively.

6. Peoples Gas Light & Coke Company One of the largest gas utility organizations in the world, this company supplies the entire gas requirements of the city of Chicago, serving a mixture of manufactured and natural gas to an aggregate population of about 3,700,000. Production facilities include five manufacturing plants with total daily capacity of 737,760 therms of coke oven and water gas. Natural gas transported from the Texas Panhandle fields to Chicago by affiliated pipe line companies is purchased under contract. Management has stated that when and if the supply of such fuel is materially curtailed or exhausted, or when company discontinues its purchases, service will be restored to a straight manufactured gas basis.

7. Providence Gas Company Company supplies manufactured gas to Providence and eight surrounding towns in Rhode Island, serving a population of nearly 400,000. It also produces and markets coke and other by-products. Plants have a daily generating capacity of 12,000,000 cubic feet of coal gas and 10,500,000 cubic feet of water gas.

[fol. 13368] 8. Seattle Gas Company Company supplies manufactured gas for light, heat and fuel in Seattle, Renton and Kent, and 21 surrounding communities in the state of Washington, serving a population of approximately 391,000. Generating capacity of water and oil gas plant is 15,900,000 cubic feet per day.

9. Springfield (Mass.) Gas Light Company This company supplies manufactured gas to cities of Springfield and Chicopee and six surrounding communities in Massachusetts, serving as estimated population of 241,000 and about 52,000 customers. Gas is also sold to the City of Holyoke Municipal Plant. Coal and water gas plants have a daily capacity of 16,200,000 cubic feet.

10. Washington Gas Light Company Company and subsidiaries are engaged in the business of manufacturing, purchasing, distributing and selling gas within the metropolitan area of Washington, embracing the District of

Columbia and adjacent territories in Maryland and Virginia. Population of the entire service area is estimated at about 865,000 people, and business is almost entirely domestic. The gas distributed and sold is a mixture of 70 per cent manufactured gas and 30 per cent natural gas, with a heating content of about 600 B.t.u. per cubic foot.

IV. Natural Gas Companies

[fol. 13369] 1. Arkansas Louisiana Gas Company. This company, a subsidiary of Arkansas Natural Gas Corporation, was incorporated in Delaware on March 9, 1928 as Southern Cities Distributing Company, and has since by merger or acquisition succeeded to the operation of all the natural gas properties in Arkansas, Louisiana and Texas formerly owned by Arkansas Natural Gas Corporation and subsidiaries. Bulk of company's revenue comes from direct distribution of natural gas to domestic, commercial, industrial, and other customers in 102 communities in Arkansas, Louisiana and Texas. The population supplied is about 300,000. Company's principal properties from a complete natural gas system, including production, transmission and distribution facilities. As of December 31, 1940, company owned 142 natural gas wells. Acreage held is classified as 22,000 producing and 97,300 undeveloped. Transportation and distribution facilities consist of 3,425 miles of pipe line and 9 compressor stations.

2. Atlantic Seaboard Corporation This company, a subsidiary of Columbia Gas & Electric Corporation, owns and operates, with a subsidiary, a gas transmission pipe line from Kentucky to West Virginia, Virginia and Maryland. Natural gas is purchased and transported to those three states for sale at wholesale to subsidiaries, affiliates and outsiders for retail distribution.

3. Cabot, Inc., Godfrey L. was incorporated in Massachusetts September 14, 1922. The company supplies natural gas at wholesale to other gas utility companies (principally Hope Natural Gas Company and Cabot Gas Corporation, a subsidiary), and at retail to some 4,838 customers in West Virginia, Pennsylvania and New York. Company also manufactures and sells carbon black in various states and foreign countries. At December 31,

1939, the company had 416 producing gas wells and 12 compressor or booster stations with a total rated capacity of 4,134 h. p. Company's leased and owned lands in West Virginia, New York and Pennsylvania cover 281,676 acres, of which 32,180 acres are operated and 249,496 acres are unopera[illegible] leased lands total 209,728 acres and owned lands, 71[illegible]

4. Canadian River Gas Company. This company is an affiliate of Southwestern Development Company, and was incorporated under the laws of Delaware, February 24, 1928, for the purpose of producing and transporting natural gas, and although a separate legal entity, operates substantially as a business and physical unit with Colorado Interstate Gas Company in accordance with certain operating agreements. The company supplies all the natural gas required by Colorado Interstate Gas Company for distribution through its pipe line system extending as far north as Denver and 25% of the requirements of Natural Gas Pipeline Company of America (delivered near Gray, Okla.) for resale mainly in Chicago, Illinois. At December 31, 1940, company held leases on 315,000 acres, of which 309,500 acres were operated, and owned 97 gas wells of a total of about 1,490 sweet and sour wells in the entire Texas Panhandle (Amarillo) gas field.

[Fol. 13370] 5. Carnegie Natural Gas Company, a subsidiary of United States Steel Corp., produces and purchases natural gas, the major portion of which is sold to affiliates for industrial purposes. Some natural gas is supplied at wholesale to other gas utility companies and at retail to about 3,000 customers in Pennsylvania and West Virginia. Company's leased (181,149 acres) and owned (3,099 acres) properties are classified as operated, 88,487; unoperated, 95,761. At December 31, 1939 company had 1,083 producing wells, 16 compressor or booster stations with a rated capacity of 10,650 h. p., 675 miles of gathering mains, and 584 miles of transmission mains.

6. Chicago District Pipeline Company, a subsidiary of Peoples Gas, Light & Coke Co., was incorporated in Illinois September 10, 1930 as Will Cook Construction Co. Company now purchases natural gas from Natural Gas

Pipe Line Co. of America and transports and resells such gas at wholesale to parent and other gas utilities serving territories adjacent to Chicago. Company owns a metering station at Joliet, Ill., and about 80 miles of pipeline from Joliet to the Chicago area.

7. Cincinnati Gas Transportation Company, a subsidiary of Columbia Gas & Electric Corp. (99.4%), was incorporated in West Virginia June 2, 1908, for the purpose of building and operating pipe lines connecting natural gas fields in West Virginia and Kentucky with the city of Cincinnati. The company owns and operates a high pressure gas transmission line about 195 miles in length.

8. Cities Service Gas Company, controlled by Empire Gas & Fuel Co., was incorporated under Delaware laws January 18, 1922, as Empire Natural Gas Co.; name was changed to Cities Service Gas Co. July 6, 1927. The company operates a gas pipe line system comprising 4,332 miles of line and 15 mainline compressor stations. Gas is sold to local companies serving 285 cities and communities in western Missouri, eastern Kansas and northern Oklahoma, or a total population of about 1,510,000.

9. Colorado Interstate Gas Company, controlled by Southwestern Development Co. and Standard Oil Co. of New Jersey, was incorporated June 8, 1927 in Delaware. Company transports and sells natural gas to industrial and domestic markets in Colorado, and supplies 25% of the gas required by Natural Gas Pipe Line Co. of America. By reason of long term contracts, company operates as a physical and business unit with Canadian River Gas Co., an affiliate of Southwestern Development Co. Company owns a transmission system consisting of about 420 miles of natural gas pipe lines, three compressor stations of 8,000 h. p. capacity, measuring stations and general property.

[fol. 13371] 10. Consolidated Gas Utilities Corporation, was incorporated in Delaware June 28, 1935 as successor in reorganization to Consolidated Gas Utilities Co. The company is engaged in production, transportation and wholesale and retail distribution of natural gas in western and northern Oklahoma and south central and southeastern Kansas, serving a population of 400,000 in over 50

communities. The company owns and operates 34 gas distribution systems of approximately 1,460 miles of transmission pipe lines, 12 compressor stations having a combined horsepower of about 10,070, and approximately 8,506 acres of undeveloped and 10,132 acres of developed oil and gas leases with 160 gas wells thereon. Company also has contracts to purchase gas from 200 wells.

11. East Ohio Gas Company, entirely owned by Standard Oil Co. (N. J.) was incorporated under laws of Ohio February 24, 1910. The company supplies the entire natural gas business in Cleveland, Ohio, and in over 59 other cities and towns in eastern and northern Ohio, serving a total population of approximately two millions. The daily manufacturing capacity is 3,500,000 cu. ft. The company has 6,722 miles of pipe line with 3 compressor stations of a total horsepower of 2,805. Early in 1941 a new manufacturing and storage plant was completed for handling gas in a liquid state to provide for the requirements in the peak season; the capacity of the new storage plant is 250,000 cu. ft. of liquid gas which is equivalent to about 150,000,000 cu. ft. of natural gas in its gaseous state.

12. El Paso Natural Gas Company, a subsidiary of Standard Oil Co. of N. J., was incorporated in Delaware November 28, 1928. Company and subsidiaries purchase natural gas from producers in the Lea County field in Southeastern New Mexico, transmit it through a 1,526 mile pipe line system with a daily capacity of 105,000,000 cu. ft. and sell it at wholesale to public utility and industrial customers in Texas, New Mexico, Arizona and Mexico. A wholly owned subsidiary is engaged in the production of gas and oil incident thereto. Properties include the pipe line, six compressor stations equipped with thirty 800 h. p. units, and two gasoline absorption plants.

13. Hope Natural Gas Company, wholly-owned by Standard Oil Co. (N. J.) was incorporated in West Virginia September 17, 1898. The company supplies natural gas to other utility gas companies and to various communities in West Virginia, with a total of 42,444 customers. The company operates leased acreage of 373,361 acres and owned acreage of 7,717 acres. Unoperated acreage consists

of leased lands of 577,615 acres and owned lands of 5,647 acres. At December 31, 1938, the company had 3,502 producing wells and 46 compressor or booster stations with a total rated capacity of 93,530 h. p.

[fol. 13372] 14. Houston Natural Gas Corporation was incorporated in Texas May 29, 1940, to acquire properties previously owned by Houston Natural Gas Corp. (Delaware) and its four subsidiaries. The company is engaged in the business of purchasing, distributing and marketing natural gas at retail in Houston and sixty-nine other towns in the Texas Gulf Coast area. Gas is purchased under contract from Houston Pipe Line Co., Houston Oil Co. of Texas, and several other producers. The company owned 1,251.98 miles of transmission and distribution lines as of June 30, 1940.

15. Interstate Natural Gas Company, Inc., a subsidiary of Standard Oil Company of N. J. was incorporated in Delaware on April 1, 1926. Company supplies, under contract, fuel requirements of Baton Rouge refinery of Standard Oil Co. of Louisiana, and markets excess at wholesale to utilities, industrial companies and municipalities along the route of its pipe line. Property consists mainly of 54,000 acres of leases and gas rights in the Monroe field of Louisiana, 170 miles of pipe line from the field to Baton Rouge, compressor stations with a daily capacity of 100,000,000 cu. ft. of gas, field lines, natural gas reserves and wells.

16. Kentucky West Virginia Gas Company, incorporated in West Virginia November 23, 1926 as Pittsburgh & West Virginia Pipe Line Co., owns and operates natural gas properties and pipe lines in Kentucky and West Virginia. Practically entire output is furnished to the gas systems of the companies (Louisville Gas & Electric Co. and Philadelphia Co.) which control it.

17. Lone Star Gas Corporation, incorporated in Delaware on January 23, 1926, is exclusively a holding company, owning stocks and obligations of seven operating subsidiaries comprising the Lone Star System which is principally engaged in the production, purchase (the system purchases over 75% of its gas requirements), trans-

mission and distribution of natural gas in Texas, Oklahoma, and Iowa. The system sells natural at retail in more than 300 communities with a combined population of 1,600,000. Properties at December 31, 1938 included about 163,000 acres owned or leased of which about 58,000, containing approximately 400 wells, were developed; approximately 4,500 miles of pipe line; 2,250,000 cu. ft. of gas storage holders, standby gas manufacturing plants, oil absorption plants, and compressor stations with a capacity of 34,400 h. p.

18. Manufacturers Light and Heat Company, a Pennsylvania corporation controlled by Columbia Gas & Electric Corp., distributes natural gas at retail in western Pennsylvania, eastern Ohio and northern West Virginia to an area of estimated population of 1,117,000. Its gas transmission facilities are connected with the transmission systems of, and it sells natural gas to, and purchases natural gas from, various affililated companies and independent producers. It also produces natural gas.

[fol. 13373] 19. Memphis Natural Gas Company, affiliated with Commonwealth Gas Corp., was incorporated in Delaware June 11, 1928. The company purchases and sells natural gas at wholesale only under long-term contracts. To a very small extent, the company is also engaged in the production of crude oil. Properties include approximately 402 miles of pipe line with a daily rated transportation capacity of at least 105,000,000 cu. ft., 4 compressor stations with an installed capacity of 16,425 h. p., and other equipment. The company has a one-half interest in 330 acres of an oil field in Texas, the acreage having 33 oil-producing wells with a daily proration allowable for each of 20 barrels.

20. Michigan Gas Transmission Corp., a Delaware Corporation controlled by Columbia Gas & Electric Corp., owns and operates gas transmission facilities in Michigan, Ohio and Indiana. These facilities deliver natural gas from the system of Panhandle Eastern Pipe Line Co. to the system of Michigan Consolidated Gas Co., a non-affiliate for distribution in Detroit and Ann Arbor. Its facilities also connect with the facilities of, and it sells to, various affili-

ates in Indiana and Ohio. It purchases its major requirements of natural gas from Panhandle Eastern Pipe Line Co. Gas is also sold to several other companies for resale.

21. Mississippi River Fuel Corporation is controlled by a syndicate including Standard Oil Co., (N. J.), United Gas Corp., Columbian Carbon Co. and United Carbon Co. through common stock holdings. It was incorporated in Delaware, February 8, 1928. The company buys and sells natural gas on long-term contracts. Properties consist of 450 miles of main pipe line with a daily capacity of 100,000,000 cu. ft. from Louisiana to St. Louis, together with compressing stations and branch pipe lines for deliveries of natural gas to industrial consumers and for wholesale connections to communities along the route.

22. Montana-Dakota Utilities Company was incorporated in Delaware, March 14, 1924, under the name of Minnesota Northern Power Co., functioning as a holding company until June 17, 1935, at which time the present name was adopted. At December 31, 1940 the company supplied natural gas for residential, commercial and industrial purposes to 23,757 customers in 56 communities located in western North and South Dakota and north central Montana. The company generates all the electricity used in its electric utility business and sells some to a non-affililated utility in eastern Montana, and also produces and distributes steam heat in Miles City and Glendive, Montana. Company operates 35 retail gas and electric appliance stores. At December 31, 1940, the company owned and controlled a total of 292 wells, 1,235 miles of gas transmission and field mains, 9 compressor stations and 489 miles of distribution lines. Company also owns 5 principal electric generating plants, 945.1 pole miles of transmission lines and 96 substations; also owns 1.4 miles of low pressure [fol. 13374] steam mains. Of 1940 gross revenue, 71% was derived from natural gas and the remainder from electric and miscellaneous services.

23. Mountain Fuel Supply Company was incorporated in Utah May 7, 1935, to merge Western Public Service Co. and its subsidiaries. The company is engaged in produc-

tion of natural gas in Colorado, Wyoming and Utah and the transmission to and distribution of such gas in Salt Lake City and surrounding territory to 29,770 active customers as of the end of 1940. Gas supply is obtained from 44 wells in seven fields. Company's undrilled leaseholds total 56,711 acres and its pipe line extending from gas fields to territory served have a daily capacity of 72 million cu. ft. The company had about 1,463 miles of gathering, transmission and distributing lines at the end of 1940.

24. National Fuel Gas Company, incorporated December 8, 1902 in New Jersey as successor to Natural Gas Trust Co., supplies, through fifteen subsidiaries, natural (30%) and mixed (70%) gas to a population of about 1,325,000 in western New York, western Pennsylvania, eastern Ohio and Ontario, Canada. Industrial users accounted for approximately 14% of total sales in 1940, and some 42% of gas requirements were purchased from non-subsidiaries. Subsidiaries owned on December 31, 1940, 4,244 wells, located on 431,196 acres operated. Unoperated acreage amounted to 792,144 acres. Pipe lines in the system aggregated about 8,058 miles.

25. Natural Gas Company of West Virginia, a subsidiary of Columbia Gas & Electric Corporation, distributes natural gas at retail to an estimated population of 224,760 in West Virginia, Pennsylvania and Ohio. Company produces and purchases from independent producers, natural gas. Company's gas transmission facilities connect with the transmission system of, and it purchases natural gas from and sells natural gas to, the Manufacturers Light and Heat Co. and Ohio Fuel Gas Co., affiliates.

26. Natural Gas Pipeline Company of America, incorporated in Delaware April 25, 1930 as Continental Construction Corp., was controlled at December 31, 1940 by five corporations, holdings of three of which (Cities Service Co., Peoples Gas, Light & Coke Co., and Texas Corp.) totaled 68.72%. Company purchases natural gas (75% from Texoma Natural Gas Co., 25% from Colorado Interstate Gas Co. in 1940) which it conveys to Joliet, Ill., and sells indirectly to other utilities for distribution in the Chicago area. Small quantities of gas are sold at different

points along the main pipe line. Property includes 823 miles of pipe line which has a daily capacity of 210,000,000 cu. ft., nine compressor stations containing a total of forty-eight 1,250 h. p. compressors, and a gas treating plant.

[fol. 13375] 27. New York State Natural Gas Corporation is a subsidiary of Lycoming United Gas Corp., in turn a subsidiary of Standard Oil Co. (N. J.). This company in 1939 operated 24,370 acres of property and had 124,395 acres unoperated, with a total of 35 wells. The annual gas production was 8,386,850,000 cu. ft. The company had 266.07 miles of pipe line with 2 compressor stations of a total of 960 h. p. In addition to its own production, the company also purchases gas from independent producers. Sales are at wholesale only.

28. Northern Natural Gas Company was incorporated under the laws of Delaware, April 25, 1930. The company's common stock is held as follows: Lone Star Gas Corp., 30%; North American Light & Power Co., 35%; United Light & Railways Co., 35%. North American Light & Power holdings are to be offered for sale to the public under registration statement filed April 21, 1941. The company is engaged in the purchase, production, gathering, transmission and distribution of natural gas. Natural gas is sold principally at wholesale, in Iowa, Nebraska, South Dakota and Minnesota. The company and subsidiaries own approximately 2,800 miles of transmission lines. The company's natural gas production properties consist of 52 wells owned on 202,700 acres held under leases. In 1940 the company purchased approximately 90% of its gas requirements from non-affiliated interests in Texas and Kansas.

29. North Penn Gas Company, a subsidiary of Pennsylvania Gas & Electric Corp., was incorporated in Pennsylvania on April 8, 1927. Company distributes natural gas directly and through subsidiaries to 58 communities in Pennsylvania and New York with an estimated population of 110,000. At December 31, 1940 the company and subsidiaries owned or leased 225,472 acres and 1,816 wells and a gas manufacturing plant (not used since 1930) with a

daily capacity of 8,000,000 cu. ft. Most wells are in shallow sands.

30. Ohio Fuel Gas Company, a subsidiary of Columbia Gas & Electric Corp., distributes natural gas and a small amount of manufactured gas at retail to a population of about 1,231,000 in central and western Ohio. Company produces and buys natural gas. Company owns a standby gas manufacturing plant with a capacity of 5,000,000 cu. ft. daily, two gas reforming plants with a capacity of 27,000,000 cu. ft. a day, 38 compressor stations with an aggregate capacity of 64,353 h. p., gas holders with an aggregate capacity of 9,570,000 cu. ft. and two under-ground gas storage reservoirs.

31. Oklahoma Natural Gas Company was incorporated in Delaware November 10, 1933 and as of November 30, 1933, under a plan of reorganization, acquired all the assets of Oklahoma Natural Gas Corp. The company's business is [fol. 13376] diversified, furnishing gas for residential, commercial and industrial purposes, and for use in oil well drilling; it also sells gas wholesale at the city gate to 21 distributing companies. The population of the territory served in Oklahoma is approximately 580,000. Property consists of 4,038 miles of distribution and transmission pipe line, 20 compressor stations having a total installed horsepower of 12,350; together with 162,258 acres of land under lease or owned in fee for use in gas production. The company draws gas from 707 wells. Approximately 93% of the gas distributed in 1940 was purchased under contract from other producers.

32. Pacific Lighting Corporation, a parent and an operating company, was incorporated under the laws of California, May 21, 1907, as successor to Pacific Lighting Co. organized in 1886. Through its subsidiaries natural gas is supplied without competition to 249 cities, towns and communities in 11 counties of Southern California, including the City of Los Angeles, an area of over 38,500 square miles, having a population estimated at 3,426,600. The territory supplied is all contiguous and is interconnected by gas pipe lines. Gas is purchased under long-term contracts from oil companies and other independent producers

located in 50 oil and gas fields in California. On December 31, 1940, the gas properties of the system comprised a total of 13,547.99 miles of gas mains and 18 field compressor stations having a total capacity of 50,719 h. p. Other facilities include 3 gas manufacturing plants for emergency service with a daily capacity of 105,032,600 cu. ft.; one Butane conversion plant having a daily capacity of 4,500,000 cu. ft.; 21 distribution booster stations with a capacity of 49,397 h. p.; 35 low pressure and 90 high pressure gas storage holders with a total capacity of 124,320,000 cu. ft.; and 9 Butane gas plants and distribution systems (serving 9 communities) having a total daily capacity of 370,425 cu ft.

33. Panhandle Eastern Pipe Line Company, controlled by Columbia Oil & Gasoline Corp. and Missouri-Kansas Pipe Line Co., was incorporated in Delaware, December 23, 1929 as the Interstate Pipe Line Company. Company, directly and through subsidiaries, does a large wholesale business in natural gas, purchasing about half and producing about half of its requirements, of which about 93% is sold to distribution companies, and 7%, to industrial concerns. Principal customer (40%) supplies gas to Detroit and Ann Arbor, Michigan. Company owns or controls gas rights on 49,417 acres of operated and 179,549 acres of unoperated land and a 50% working interest in 22,679 and 6,017 of operated and unoperated land respectively, in the panhandle of Texas, southwestern Kansas and Texas County, Oklahoma and, as of December 31, 1940, owned 135 wells (in 46 of which company had only a 50% interest). Total connected open flow of wells owned or controlled by company at that date was 4,423,000 M.C.F. Property in-
[fol. 13377] cludes 2,374 miles of pipe lines, 12 compressor stations with gas driven units aggregating 80,100 h. p. capacity, meter stations, a dehydrating plant and a natural gasoline extraction plant.

34. Peoples Natural Gas Company (Pa.), a subsidiary of Standard Oil Co. of New Jersey, was incorporated June 26, 1885 in Pennsylvania. Company produces, purchases, transports and distributes natural gas in southwestern Pennsylvania, and supplies natural gas to the Pittsburgh area. Company holds leases for and owns oil and gas properties and maintains pipe lines.

35. Pittsburgh and West Virginia Gas Company, Incorporated in West Virginia March 12, 1894, as the Fairmont and Grafton Gas Co., is a subsidiary of the Philadelphia Company-Standard Gas & Electric System. Company is engaged in producing and selling natural gas, directly and through subsidiaries.

36. Southern Natural Gas Company, This company, controlled by Federal Water Service Corp., was incorporated October 30, 1935, in Delaware pursuant to the reorganization of Southern Natural Gas Corp. Company operates a natural gas pipe line system comprising about 1,340 miles together with eleven compressor stations extending from Louisiana through Mississippi and Alabama to Atlanta, Ga. Gas is purchased under contract with non-affiliated gas producing companies; however, new contracts have been entered into which permit the company to utilize large recently-developed natural gas reserves of its own. Gas is sold at wholesale to eight distributing companies and two municipalities for distribution to domestic customers and for general and industrial customers. About 83.5% of 1940 gross revenues was derived from sales to distributing companies.

37. South Penn Natural Gas Company, a subsidiary of South Penn Oil Co., was incorporated in West Virginia on November 2, 1922. Company supplies natural gas at wholesale to other utilities and at retail to approximately 4,753 customers in West Virginia. Company's leased and owned lands in West Virginia cover 512,682 acres as follows: 285,161 operated (leased 276,400; owned 8,761); 227,521 unoperated (leased 221,152; owned 6,368).

38. Texoma Natural Gas Company, was incorporated in Delaware, May 26, 1930, and is controlled by Cities Service Co. and Southwestern Development Co., 28.56% each; Texas Corp., 18.86%; Columbian Carbon Co., 2.71%; Peoples Gas Light and Coke Co., 21.3%. The company has acquired leaseholds and wells and has constructed gathering lines in Amarillo (Texas) fields to carry natural gas to a purification refinery in Fritch, Texas. The company has also constructed a 24-inch main pipe line of approximately 76 miles to Gray, Okla., where gas is delivered to Natural Gas Pipe Line Co. of America under an agreement

dated October 15, 1931, by which 75% of the gas delivered is priced at cost of producing by Texoma. The company [fol. 13378] also has some revenue from industrial sales of gas, gasoline sales, and leased facilities.

39. United Fuel Gas Company, a subsidiary of Columbia Gas & Electric Corp., was incorporated in West Virginia. The company is engaged in producing and distributing natural gas at retail in western West Virginia and eastern Ohio to a total population of about 251,800. Its transmission facilities are connected with the systems of, and it sells natural gas to, and purchases natural gas from, various affiliated companies and independent producers. The company is a major source of supply for associated distributing companies in Ohio, Pennsylvania and Kentucky. It owns 18 compressor stations with an aggregate capacity of 68,490 h. p.

40. United Gas Pipe Line Company, controlled by United Gas Corp., was incorporated in Delaware September 3, 1937. On September 25, 1937, it acquired all the gathering lines, main pipe lines, compressor stations and natural gasoline plants of United Gas Public Service Co. and its subsidiaries, except those of Houston Gulf Gas Co., of which it acquired control. The company operates a gas pipe line business, acquiring its gas through purchase contracts, 60% of which was purchased from Union Producing Co. As of December 31, 1940 the system served directly 532 industrial customers.

41. Virginia Gas Transmission Corporation, controlled by Columbia Gas & Electric Corp., owns and operates transmission facilities in Virginia, which form a connecting link between the Maryland and West Virginia sections of the Seaboard line. Company purchases natural gas from and sells natural gas to affiliates.

42. Warfield Natural Gas Company, controlled by Columbia Gas & Electric Corp., distributes natural gas at retail in Ashland, Kentucky and contiguous territory with an estimated population of about 52,300. Company produces and purchases from independent producers, natural gas which it sells to associated companies with whom its

transmission system connects. Company owns two compressor stations with an aggregate capacity of 9,995 h. p.

43. West Texas Gas Company, a subsidiary of Southwestern Development Co., was incorporated April 14, 1927 in Delaware. Company purchases natural gas from an affiliate, and distributes it to about 28,000 customers in 42 towns in western Texas. Company owns 1,370 miles of pipe lines and has four compressor stations.

[fol. 13379] Exhibit 64.

Investors' Appraisal of the Risks of Capital in the Natural Gas Industry as Compared With Other Divisions of the Utility Industry.

Volume II.

Statistics Supporting Data in Volume I.

Appendixes A, B and C

Prepared by

Paul B. Coffman, Vice-President

of

Standard & Poor's Corporation.

[fol. 13380] Appendix A.

Complete List of Companies Studied

and

Reasons for Eliminating Those Not Used to Determine Investors' Appraisal of Risks of Capital.

List Of Water Companies From Which Selections Were Made To Determine Investors' Appraisal Of Risks Of Capital

	All Operating Companies engaged solely in the Water Business — as prepared from Standard Corporation Records	Companies eliminated because stock is controlled by a Holding Company	Companies eliminated because stock is held by a relatively few individuals	Companies eliminated because 1940 gross operating revenue was less than $500,000	Companies used to determine investors' appraisal of risks of capital
1.	Albama Water Service Co.	X			
2.	Alton Water Co.	X			
3.	The Ansonia Water Co.			X	
4.	Ashtabula Water Works Co.	X			
5.	Atlantic County Water Co. of N. J.	X			
6.	Biddeford & Saco Water Co.			X	
7.	Birmingham Water Works Co.	X			
8.	Bridgeport Hydraulic Co.				X
9.	Butler Water Co.	X			
10.	California Water Service Co.	X			
11.	Camden & Rockland Water Co.			X	
12.	Citizens Water Co. of Scottdale, Pa.	X			
13.	Citizens Water Co. of Washington, Pa.	X			
14.	The City of New Castle Water Co.	X			
15.	City Water Co. of Chattanooga	X			
16.	Consumers Water Co.		X		
17.	Davenport Water Co. (Iowa)	X			
18.	Elizabethtown Water Co. Cons. (a)				X
19.	Fontana Union Water Co.		X		
20.	Greenwich Water Co.	X			
21.	Guilford-Chester Water Co.			X	
22.	Gulf Coast Water Co.	X			
23.	Hackensack Water Co.				X
24.	Huntington Water Corp.	X			
25.	Illinois Water Service Co.		X		
26.	Indianapolis Water Co.	X			
27.	Jamaica Water Supply Co.		X		
28.	Joplin Water Works Co.	X			
29.	Kokomo Water Works Co.	X			
30.	Lexington Water Co. (Ky.)	X			
31.	Long Island Water Corp.	X			
32.	Middlesex Water Co.				X
33.	Milford Water Co.	X			
34.	Monmouth Consolidated Water Co.	X			
35.	Monongahela Valley Water Co.	X			
36.	The Morgantown Water Co.	X			
37.	Muncie Water Works Co.	X			
38.	New Haven Water Co.				X
39.	New Jersey Water Co.	X			
40.	New Rochelle Water Co.	X			
41.	New York Water Service Corp.	X			
42.	Norristown Water Co.		X		
43.	Ohio Cities Water Corp.	X			
44.	Ohio Water Service Co.	X			
45.	Pennsylvania & Jersey Water Co.	X			

List Of Water Companies From Which Selections Were Made To Determine Investors' Appraisal Of Risks Of Capital

	All Operating Companies engaged solely in the Water Business -- as prepared from Standard Corporation Records	Companies eliminated because stock is controlled by a Holding Company	Companies eliminated because stock is held by a relatively few individuals	Companies eliminated because 1940 gross operating revenue was less than $500,000	Companies used to determine investors' appraisal of risks of capital
46.	Pennsylvania Water Co.	X			
47.	Peoria Water Works Co.	X			
48.	Philadelphia Suburban Water Co.		X		
49.	Pinellas Water Co.	X			
50.	Pittsburgh Suburban Water Service Co.	X			
51.	Plainfield Union Water Co.				X
52.	The Roaring Creek Water Co.		X		
53.	Rochester & Lake Ontario Water Service Corp.	X			
54.	St. Joseph Water Co.	X			
55.	St. Louis County Water Co.	X			
56.	San Diego Water Supply Co.	X			
57.	San Jose Water Works	X			
58.	Scranton-Spring Brook Water Service Co.	X			
59.	Sedalia Water Co.	X			
60.	South Bay Consolidated Water Co., Inc.	X			
61.	South Pittsburgh Water Co.	X			
62.	Southern California Water Co.	X			
63.	Springfield City Water Co.	X			
64.	Stamford Water Co.				X
65.	Temescal Water Co.	X			
66.	Texarkana Water Corp.	X			
67.	Union Water Service Co.	X			
68.	West Virginia Water Service Co.	X			
69.	Western New York Water Co.	X			
70.	Westmoreland Water Co.	X			
71.	Wichita Water Co.	X			
72.	Williamsport Water Co.	X			

Note: (a) This company is not carried regularly in Standard Corporation Records, but has been included in this compilation since it is possible to compute the Investors' Appraisal of Risks of Capital.

Source: Standard Corporation Records.

List Of Electric Utility Operating Companies (And Others) From Which Selections Were Made To Determine Investors' Appraisal Of Risks Of Capital

	Telephone, Electric and Gas Utility Common Stock considered in the Course of Study of certain factors influencing Investors' Appraisals of Risk Characteristics	Companies eliminated because revenue is derived primarily from telephone service	(a)Companies eliminated because revenue is derived primarily from gas service	Companies eliminated because less than 5% of Common Stock is outstanding in hands of public	Companies eliminated because they are primarily holding companies	Companies used to determine Investors' Appraisal of Risks of Capital
1.	American Gas & Electric Co.				X	
2.	American Telephone & Telegraph Co.	X				
3.	American Water Works & Electric Co.				X	
4.	Bangor Hydro-Electric Co., The					X
5.	Boston Edison Co. (formerly Edison Elec. Ill. Co. of Boston)					X
6.	Bridgeport Gas Light Co.		X			
7.	Brooklyn Edison Co., Inc., The			X		
8.	Brooklyn Union Gas Co.		X			
9.	Central Hudson Gas & Electric Corp.					X
10.	Cincinnati & Suburban Bell Telephone Co.	X				
11.	Cleveland Electric Illuminating Co., The					X
12.	Columbia Gas & Electric Corp.				X	
13.	Commonwealth Edison Co. (Ill.)					X
14.	Connecticut Power Co. (The)					X
15.	Consolidated Edison Co. of New York, Inc.					X
16.	Consolidated Gas, Elec. Lt. & Power Co. of Balt.					X
17.	Detroit Edison Co., The					X
18.	Duke Power Co.					X
19.	Hartford Electric Light Co., The					X
20.	Laclede Gas Light Co.		X			
21.	Long Island Lighting Co.			X		
22.	Mountain States Telephone & Telegraph Co.	X				
23.	New England Telephone & Telegraph Co.	X				
24.	New York and Queens Electric Lt. & Pr. Co.			X		
25.	Niagara Hudson Power Corp.				X	
26.	North American Co.				X	
27.	Pacific Gas & Electric Co.					X
28.	Pacific Telephone & Telegraph Co.	X				
29.	Peninsular Telephone Co.	X				
30.	Pennsylvania Water & Power Co.					X
31.	Peoples Gas, Light and Coke Co., The		X			
32.	Philadelphia Electric Co.			X		
33.	Providence Gas Co.		X			
34.	Public Service Co. of Northern Illinois			X		
35.	Public Service Corp. of New Jersey				X	
36.	Southern California Edison Co., Ltd.					X
37.	Southern New England Telephone Co.	X				
38.	Tampa Electric Co.					X
39.	United Gas Improvement Co., The				X	
40.	Washington Gas Light Co.		X			

Note: (a) Attention is directed to the fact that all gas companies used in the Federal Communication Commission's study cited below, as well as three other gas companies, have been used to determine the Investors' appraisal of the Risks of Capital for Manufactured and Mixed Gas Companies. (see Appendix A, pages 4 and 5.)

Source: The list of forty companies appears as Schedule 9 and was used in the presentation of findings in a Federal Communications Commission publication dated June 15, 1938, entitled "The Problem of the 'Rate of Return' in Public Utility Regulations."

List Of Manufactured And Mixed Gas Companies From Which Selections Were Made To Determine Investors' Appraisal Of Risks Of Capital

	All Operating Companies distributing Manufactured and/or Mixed Gas — as prepared from Standard Corporation Records	Companies eliminated because stock was controlled by a Holding Company	Companies eliminated because revenue was not predominantly obtained from gas distribution	Companies eliminated because 1940 Gross Revenue was less than $1,000,000	Companies used to determine Investors' Appraisal of Risks of Capital
1.	Atlantic City Gas Co.	X			
2.	Beverly Gas & Electric Co.		X		
3.	Binghamton Gas Works	X			
4.	Birmingham Gas Co.	X			
5.	Bridgeport Gas Light Co.				X
6.	Brockton Gas Light Co.			X	
7.	Brooklyn Borough Gas Co.	X			
8.	Brooklyn Union Gas Co.				X
9.	Central Hudson Gas & Electric Corp.		X		
10.	Central Indiana Gas Co.	X			
11.	Central Pennsylvania Gas Co.			X	
12.	Cincinnati Gas & Electric Co.	X			
13.	Concord Gas Co.	X			
14.	Connecticut Light & Power Co.	X			
15.	Connecticut Power Co.		X		
16.	Consolidated Gas, Electric Light & Power Co. of Balt.		X		
17.	Consumers Gas Co: (Reading, Pa.)	X			
18.	County Gas Co. (New Jersey)	X			
19.	Comberland County Power & Light Co.	X			
20.	Delaware Power & Light Co.	X			
21.	Eastern Shore Public Service Co.		X		
22.	Elizabethtown Consolidated Gas Co.				X
23.	Fall River Gas Works Co.			X	
24.	Fitchburg Gas & Electric Light Co.		X		
25.	Florida Power & Light Co.	X			
26.	Georgia Power Co.		X		
27.	Green Mountain Power Corp.		X		
28.	Greenwich Gas Co.			X	
29.	Gulf States Utilities Co.		X		
30.	Harrisburg Gas Co.	X			
31.	Hartford Gas Co.				X
32.	Indiana Gas Utilities Co.	X			
33.	Iowa Power & Light Co.	X			
34.	Jacksonville Gas Co. (Fla.)	X			
35.	Kentucky Utilities Co.		X		
36.	Kings County Lighting Co.	X			
37.	Koppers Co.		X		
38.	Laclede Gas Light Co.				X
39.	Lake Shore Gas Co.	X			
40.	Lawrence Gas & Electric Co.		X		
41.	Lowell Gas Light Co.	X			
42.	Luzerne County Gas & Electric Corp.		X		
43.	Lynn Gas & Electric Co.		X		
44.	Manchester Gas Co.			X	
45.	Metropolitan Edison Co.		X		
46.	Michigan Gas & Electric Co.		X		
47.	Milwaukee Gas Light Co.	X			

List Of Manufactured And Mixed Gas Companies From Which Selections Were Made To Determine Investors' Appraisal Of Risks Of Capital

	All Operating Companies distributing Manufactured and/or Mixed Gas — as prepared from Standard Corporation Records	Companies eliminated because stock was controlled by a Holding Company	Companies eliminated because revenue was not predominantly obtained from gas distribution	Companies eliminated because 1940 Gross Revenue was less than $1,000,000	Companies used to determine Investors' Appraisal of Risks of Capital
48.	Minneapolis Gas Light Co.	X			
49.	Missouri Public Service Corp.		X		
50.	New Bedford Gas & Edison Light Co.	X			
51.	New Britain Gas Light Co.			X	
52.	New Haven Gas Light Co.	X			
53.	New Jersey Power & Light Co.		X		
54.	New York Power & Light Corp.	X			
55.	New York State Electric & Gas Corp.	X			
56.	New York & Richmond Gas Co.	X			
57.	Northern Liberties Gas Co.	X			
58.	Northern States Power Co.		X		
59.	Peoples Gas, Light & Coke Co.				X
60.	Peoples Water & Gas Co.	X			
61.	Pittsfield Coal Gas Co.			X	
62.	Portland Gas & Coke Co.	X			
63.	Portland (Me.) Gas Light Co.			X	
64.	Providence Gas Co.				X
65.	Puget Sound Power & Light Co.	X			
66.	Queensborg Gas & Electric Co.	X			
67.	Roanoke Gas & Light Co.	X			
68.	St. Louis County Gas Co.	X			
69.	Savannah Gas Co.	X			
70.	Seattle Gas Co.				X
71.	Sierra Pacific Power Co.		X		
72.	Sioux City Gas & Electric Co.		X		
73.	South Carolina Electric & Gas Co.		X		
74.	Springfield Gas Light Co.				X
75.	Tampa Gas Co.			X	
76.	Taunton Gas Light Co.			X	
77.	Tide Water Power Co.		X		
78.	Toledo Edison Co.		X		
79.	Twin States Gas & Electric Co.		X		
80.	Virginia Electric & Power Co.		X		
81.	Washington Gas & Electric Co.	X			
82.	Washington Gas Light Co.				X
83.	Western United Gas & Electric Co.	X			
84.	Wisconsin Gas & Electric Co.		X		
85.	Wisconsin-Michigan Power Co.		X		

Source: Standard Corporation Records.

List Of Natural Gas Companies From Which Selections Were Made To Determine Investors' Appraisal Of Risks Of Capital

	Natural Gas Companies selected by Mr. Knapp as representative of the industry in an Exhibit presented for the Federal Power Commission in the Hope Natural Gas Company Case	Companies eliminated because Common Stocks were not outstanding in the hands of the public	Companies used to determine Investors' Appraisal of Risks of Capital
1.	Arkansas Louisiana Gas Co.	X	
2.	Atlantic Seaboard Corp.	X	
3.	Cabot, Inc., Godfrey L.	X	
4.	Canadian River Gas Co.	X	
5.	Carnegie Natural Gas Co.	X	
6.	Chicago District Pipeline Co.	X	
7.	Cincinnati Gas Transportation Co.	X	
8.	Cities Service Gas Co.	X	
9.	Colorado Interstate Gas Co.	X	
10.	Consolidated Gas Utilities Corp.		X
11.	East Ohio Gas Co.	X	
12.	El Paso Natural Gas Co.		X
13.	Hope Natural Gas Corp.	X	
14.	Houston Natural Gas Corp.		X
15.	Interstate Natural Gas Co., Inc.		X
16.	Kentucky West Virginia Gas Co.	X	
17.	Lone Star Gas Corp.		X
18.	Manufacturers' Light and Heat Co.	X	
19.	Memphis Natural Gas Co.		X
20.	Michigan Transmission Corp.	X	
21.	Mississippi River Fuel Corp.	X	
22.	Montana-Dakota Utilities Co.		X
23.	Mountain Fuel Supply Co.		X
24.	National Fuel Gas Co.		X
25.	Natural Gas Company of West Virginia	X	
26.	Natural Gas Pipeline Company of America	X	
27.	New York State Natural Gas Corporation	X	
28.	Northern Natural Gas Co.	X	
29.	North Penn. Gas Co.	X	
30.	Ohio Fuel Co.	X	
31.	Oklahoma Natural Gas Co.		X
32.	Pacific Lighting Corp.		X
33.	Panhandle Eastern Pipe Line Co.		X
34.	Peoples Natural Gas Co.	X	
35.	Pittsburgh and West Virginia Gas Co.	X	
36.	Southern Natural Gas Co.		X
37.	South Penn. Natural Gas Co.	X	
38.	Texoma Natural Gas Co.	X	
39.	United Fuel Gas Co.	X	
40.	United Gas Pipe Line Co.	X	
41.	Virginia Gas Transmission Corp.	X	
42.	Warfield Natural Gas Co.	X	
43.	West Texas Gas Co.	X	

Source: Prepared by Standard & Poor's Corporation using the basic list of companies selected by Mr. Charles W. Knapp, Jr., in presenting a study on "Rate of Return" for the Federal Power Commission in the Hope Natural Gas Company case.

[fol. 13387] Appendix B:

Securities of Forty-Three Natural Gas Companies Considered Representative of the Industry.

Summary of Amounts Outstanding Segregated According to Classes of Holders.

Securities Of Natural Gas Companies

Summary According To Classes Of Holders

Company and Issues	Total Securities Outstanding	Public	Held by Institutions	Affiliates
Arkansas Louisiana Gas Co. (Dec. 31, 1940)				
Bonds and Debentures:				
First Mtge. "A" 2 3/4%, 1941-44	$ 2,700,000	$ —	$ 2,700,000	$ —
First Mtge. "B" 3 1/2%, 1945-54	9,700,000	—	9,700,000	—
Debentures, 4 1/4%, 1955	6,500,000	—	—	6,500,000
	18,900,000	—	12,400,000	6,500,000
Common Stock, 298,988 shs., Par $50	14,949,400	—	—	14,949,400
Total	$33,849,400	$ —	$12,400,000	$21,449,400
***Atlantic Seaboard Corp. (Dec. 31, 1939)**				
Advances	$13,527,000	$ —	$ —	$13,527,000
Common Stock, 50,000 shs., Par $10	500,000	—	—	500,000
Total	$14,027,000	$ —	$ —	$14,027,000
***Cabot, Inc., Godfrey L. (Dec. 31, 1939)**				
Notes, 3% 1940	$ 800,000	$ —	$ 800,000	$ —
Common Stocks, 1,600 shs.	3,285,075	—	(a) 451,697	2,833,378
Total	$ 4,085,075	$ —	$ 1,251,697	$ 2,833,378

(a) Institutional Holdings: Harvard College — 100 shares; Mass. Institute of Technology — 100 shares; Norwich University — 20 shares.

***Canadian River Gas Co. (Dec. 31, 1939)**				
Bonds and Notes:				
First Mtge. and Coll. S.P. 6% 1948	$ 5,057,000	$ —	$ —	$ 5,057,000
Notes, 6%, 1940-1948	1,348,254	—	—	1,348,254
	6,405,254	—	—	6,405,254
Common Stock, 25,000 shs., No Par	1	—	—	1
Total	$ 6,405,255	$ —	$ —	$ 6,405,255
***Carnegie Natural Gas Co. (Dec. 31, 1939)**				
Common Stock, 6,000 shs. Par $50	$ 300,000	$ —	$ —	$ 300,000
***Chicago District Pipe Line Co. (Dec. 31, 1940)**				
Notes, 5%, 1941-1951	$ 2,036,000	$ —	$ —	$ 2,036,000
Common Stock, 6,500 shs., No Par	650,000	—	—	650,000
Total	$ 2,686,000	$ —	$ —	$ 2,686,000

* Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

Securities Of Natural Gas Companies

Summary According To Class Of Holders

Company and Issues	Total Securities Outstanding	Public	Held by Institutions	Affiliates
*Cincinnati Gas Transportation Co. (Dec. 31, 1939)				
Preferred Stock, 5%, 30,000 shs., Par $100	$ 3,000,000	$ —	$ —	$ 3,000,000
Common Stock, 20,000 shs., Par $100	2,000,000	—	—	2,000,000 (b)
Common Stock, "B", 18,500 shs., Par $100	1,850,000	—	—	1,850,000 (b)
Total	$ 6,850,000	$ —	$ —	$ 6,850,000
(b) Includes $23,500 Par Values of Common and $1,100 Par Value of Common "B", held by public.				
Cities Service Gas Co. (Dec. 31, 1940)				
Bonds, Debentures and Notes:				
First Mtge. 3 3/4%, 1947-54	$20,000,000	$ —	$20,000,000	$ —
Debentures 5 1/2%, 1956	8,000,000	—	—	8,000,000
Notes 3 1/4%, 1942-1946	11,000,000 (c)	—	11,000,000	—
	39,000,000	—	31,000,000	8,000,000
Common Stock, 300,000 shs., No Par	30,000,000	—	—	30,000,000
Total	$69,000,000	$ —	$31,000,000	$38,000,000
(c) Notes Payable are secured by First Mortgage 3 1/4% Bonds maturing serially to 1946.				
Colorado Interstate Gas Co. (Mar. 1, 1941)				
First & Coll. Trust S.F. 2 3/4%, 1948	$ 7,614,000	$ —	$ 7,614,000	$ —
Preferred Stock, 6%, 20,000 shs., Par $100	2,000,000	—	—	2,000,000
Common Stock, 1,250,000 shs., No Par	2,352,941	—	—	2,352,941
Total	$11,966,941	$ —	$ 7,614,000	$ 4,352,941
Consolidated Gas Utilities Corp. (July 31, 1941)				
First Mtge. S.F. 4% "A", 1956	$ 6,500,000	$ —	$ 6,500,000	$ —
Debenture 5% 1951	900,000	—	$ 900,000	—
Common Stock, 886,027 shs., Par $1	886,027	886,027	—	—
Total	$ 8,286,027	$ 886,027	$ 7,400,000	$ —
East Ohio Gas Company (Dec. 31, 1940)				
Preferred Stock, 7%, 100,000 shs., Par $100	$10,000,000	$ —	$ —	$10,000,000
Common Stock, 285,000 shs., Par $100	28,500,000	—	—	28,500,000
Total	$38,500,000	$ —	$ —	$38,500,000

* Data taken from an Exhibit prepared by Mr. Charles W. Knapp, Jr., for the Federal Power Commission in the Hope Natural Gas Co. hearings.

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TRANSCRIPT OF RECORD

(Pages 4853 to 5267)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 2, 1945.

VOL. XI.

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION

FILED FEBRUARY 6, 1943.

United States Circuit Court of Appeals

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PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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[fol. 14448] Michigan Gas Transmission Corporation

Account 353 — Mains

Item	Reproduction Cost New June 30, 1941	Condition Percent	Reproduction Cost Less Depreciation
Mains	$10,314,496	97.7	$10,077,263
Laterals	469,831	99.7	468,422
Total, Account 353 — Mains	$10,784,327		$10,545,685

[fol. 14449] Michigan Gas Transmission Corporation

Account 354.1 — Compressor Station Equipment

Item	Reproduction Cost New June 30, 1941	Condition Percent	Reproduction Cost Less Depreciation
Montezuma Compressor Station			
Main compressor units	$ 522,837	96.0	$ 501,924
Elevated water tank	9,435	96.0	9,058
Cooling towers	20,933	91.0	19,049
Auxiliaries	298,947	95.0	284,000
	$ 852,152		$ 814,031
Zionsville Compressor Station			
Main compressor units	$ 453,672	97.0	$ 440,062
Elevated water tank	10,639	97.0	10,320
Cooling towers	19,347	93.0	17,993
Auxiliaries	268,065	96.0	257,342
	$ 751,723		$ 725,717
Edgerton Compressor Station			
Main compressor units	$ 275,563	99.0	$ 272,807
Elevated water tank	11,254	99.0	11,141
Cooling towers	9,593	97.0	9,305
Auxiliaries	216,681	99.0	214,514
	$ 513,091		$ 507,767
Not analyzed	5,432		5,253
Total, Account 354.1 — All Stations	$2,122,398		$2,052,768

[fol. 14450] Michigan Gas Transmission Corporation

Account 354.2 — Measuring And Regulating Station Equipment

Item	Reproduction Cost New June 30, 1941	Condition Percent	Reproduction Cost Less Depreciation
Ft. Wayne Regulating Station	$ 8,475	93.0	$ 7,882
Detroit Measuring Station	28,361	91.0	25,809
Detroit Regulating Station	41,079	96.0	39,436
Other Measuring and Regulating Stations			
1931	3,779	77.0	2,910
1932	6,620	80.0	5,296
1934	4,867	86.0	4,186
1935	1,315	89.0	1,170
1936	2,500	91.0	2,275
1937	22,582	93.0	21,001
1938	3,371	95.0	3,202
1939	16,837	97.0	16,332
1940-41	2,965	99.0	2,935
Total, Account 354.2 — All Locations	$142,751		$132,434

[fol. 14451]

Michigan Gas Transmission Corporation

General Equipment

Account No.	Name of Account	Reproduction Cost New June 30, 1941	Condition Percent	Reproduction Cost Less Depreciation
372	Office Furniture and Fixtures	$14,880	78.0	$11,606
373	Transportation Equipment	35,445	71.0	25,166
374	Stores Equipment	1,610	90.0	1,449
377	Tools and Work Equipment	12,985	79.0	10,258
	Total, General Equipment	$64,920		$48,479

[fol. 14466] Exhibit 87

Michigan Gas Transmission Corporation

Materials and Supplies

Restatement of Cost of Major Items at Prices as of

June 30, 1941

Francis S. Haberly
Consulting Engineer
Chicago

[fol. 14467] Michigan Gas Transmission Corporation

Materials And Supplies

Restatement of Cost of Major Items at Prices as of June 30, 1941

Summary

Item	Total Per Books June 30, 1941	Amount of Book Cost at June 30, 1941 to which present cost has been applied	% of Book Cost priced at June 30, 1941 prices	Present cost of materials and supplies which were priced at June 30, 1941 prices
Transmission line materials and supplies	$52,808	$31,288	59.2%	$36,174
Compressor station materials and supplies	40,510	22,923	56.6	25,348
Other	95	—	0	—
Totals	$93,413	$54,211	58.0%	$61,522

[fol. 14468] Michigan Gas Transmission Corporation

Restatement of Cost of Major Items of Transmission Line Materials and Supplies at Prices as of June 30, 1941

	Original Cost	Present Cost June 30, 1941
1931		
June		
Valve—18" Crane Gate (500#)	$ 390.49	$ 655
Sleeves—20" (Cast Split) Dayton #1518, short	335.36	368

Sleeves—18" Split—Complete	254.28	328
Pipe—10" P.E. Line	175.46	288
Pipe—16" P.E. Line	103.32	103
Pipe—18" P.E. Line	60.94	72
Pipe—20" P.E. Line	1,129.31	1,308
Valves—20" Crane Gate (500#)	385.89	648
Totals	$2,835.05	$ 3,770
July		
Regulator—6" H.P. Chaplin-Fulton	243.00	263
Pipe—18" P.E. Line	129.69	153
Totals	$ 372.69	$ 416
1936		
May		
22" Center Rings (Couplings)	803.48	939
22" Couplings—Complete	265.88	314
Valve—22" Crane Gate, (O.S.& Y.)	1,717.69	2,293
Pipe—26" Casing	384.08	427
Followers—22" (Coupling and Sleeve)	358.88	420
Pipe—23" P.E.	4,121.60	4,579
Totals	$7,651.61	$ 8,969
June		
Valve—8" Crane Gate—#343E	1,006.14	1,352
Sleeves—22" Cast Split—Dresser #54A	2,034.84	2,378
Sleeves—22" Welding (Over Coupling)	65.00	72
Totals	$3,105.98	$ 3,802

[fol. 14469] Michigan Gas Transmission Corporation

Restatement of Cost of Major Items of Transmission Line Materials and Supplies at Prices as of June 30, 1941

	Original Cost	Present Cost June 30, 1941
1936 (continued)		
August		
Valve—20" Crane Gate (500# W.P.)	$ 490.00	$ 654
November		
Valves—1" Crane Gate #66E	52.71	69
1937		
May		
Sleeves—6" (Cast Split) Dresser	88.17	83
August		
Sleeves—20" (Cast Split) Dresser #9710 Emergency Adj.	1,481.20	1,481
Sleeves—6" (Cast Split) Dresser	88.17	83
Totals	$1,569.37	$ 1,564

October		
Sleeves—20" (Cast Split) Dayton #1518 (Long)	445 52	478
Sleeves—20" (Cast Split) Dresser #54A	442 38	442
Totals	$ 887 90	$ 920
1938		
October		
Pipe—18" P.E. Line	263 55	264
1939		
March		
Sleeves—6" (Cast Split) Dresser	88 17	88
May		
Valve—24" Gate Venturi (D-D.O.S.& Y. 500#)	1,148 42	1,236
Valve—6" Crane Gate—500# G.W.P.	679 76	728
Pipe Paint—Bituinastic Coupling Compound	15 18	15
Pipe—26" Casing	126 16	126
Center Rings—24"—(Couplings)	248 64	249
Couplings—24"	12 33	12
Followers—24"—(Coupling and Sleeve)	358 90	359
Pipe—10" P.E. Line	98 68	99
Pipe—16" P.E. Line	1,034 00	1,245
Pipe—20" P.E. Line	165 84	140
Pipe—24" Steel	2,153 96	2,593
Totals	$6,041 87	$ 6,802

[fol. 14470] Michigan Gas Transmission Corporation

Restatement of Cost of Major Items of Transmission Line Materials and Supplies at Prices as of June 30, 1941

	Original Cost	Present Cost June 30, 1941
1939 (continued)		
August		
Pipe—4" P.E. Line	$ 357 13	$ 357
October		
Sleeves—24" (Cast Split) Emergency (Dr. 54A)	409 78	410
Sleeves—22" Welding (Over Coupling)	123 60	124
Sleeves—22" Welding (Over Welds)	351 96	352
Totals	$ 885 34	$ 886
November		
Sleeves—20" Welding (Over Couplings)	228 00	192
1940		
May		
Valves—1" Crane—Gate (#66E)	37 57	40
Pipe Paint—Bitumastic Enamel	254 52	255
Pipe Paint—Bitumastic Coupling Compound	945 36	945

Center Rings—24" (Sleeves)	265.81	266
Pipe—24" Steel	1,784.13	2,480
Felt—24"x50' Double Thick Pipe Line	295.00	295
Followers—24" (Coupling and Sleeve)	1,141.24	1,141
Pipe—20" P.E. Line	192.78	268
Totals	$4,916.41	$ 5,690
June		
Sleeves—22" Welding (Over Couplings)	395.52	550
Center Rings—24" (Coupling)	492.66	493
Pipe—10" P.E. Line	88.35	128
Totals	$ 976.53	$ 1,171
1941		
March		
Pipe—2" P.E. Line	141.49	141
May		
Valves—1" Crane Gate—(#66E)	181.12	181
Pipe—2" P.E. Line	154.86	155
Totals	$ 335.98	$ 336
Grand Totals	31,287.95	$36,174

[fol. 14471] Michigan Gas Transmission Corporation

Restatement of Cost of Major Items of Compressor Station Materials and Supplies at Prices as of June 30, 1941

	Original Cost	Present Cost June 30, 1941
1936		
October		
Metallic Packing for Power Piston Rod-Main Unit	$ 239.70	$ 309
November		
Power Piston Rod—Main Unit	472.50	
Power—Piston—Main Unit	252.00	
Totals	$ 724.50	$ 935
1937		
January		
Crank-Pin Box Wedge Half—Main Unit	766.52	
Wrist Pin Box Wedge Half—Main Unit	504.00	
Totals	$1,270.52	$ 1,640

February		
Feed Pipes—Main Unit	277 20	358
June		
Compressor Piston—Main Unit	110 25	125
August		
Exhaust Valve and Casing Complete—Main Unit	577 50	657
Power Cylinder Head—Main Unit	236 25	269
Bosch Magnetos for 6 cylinder Engine—Auxiliary Engine	258 32	294
Totals	$1,072 07	$ 1,220
October		
Shoes for L.H. Main Crosshead—Main Unit	840 00	
Compressor Piston—Main Unit	110 25	
Metallic Packing for Power Piston Rod	222 60	
Totals	$1,172 85	$ 1,334

[fol. 14472] Michigan Gas Transmission Corporation

Restatement of Cost of Major Items of Compressor Station Materials and Supplies at Prices as of June 30, 1941

	Original Cost	Present Cost June 30, 1941
1938		
January		
Piston Standard Size—Auxiliary Engine Main Unit	$ 57 75	$ 66
February		
Exhaust Valve and Casing Complete—Main Unit	577 50	657
June		
Intermediate or Rear Crosshead Gib—Main Unit	78 75	90
1939		
February		
Power Piston Rod Metallic Packing—Less Case—Main Unit	132 14	148
May		
Main Bearing Shell (Center) Auxiliary Engine	94 50	106
September		
Power Piston Rod Metallic Packing—Less Case—Main Unit	124 89	140
October		
Main Bearing Top Shell—Main Unit	247 28	
Main Bearing Side Shell—Main Unit	241 78	
Main Bearing Bottom Shell—Main Unit	329 70	

Main Bearing Side Shell—Plain—Main Unit	236.29	
Power Cylinder and Jacket Ring Complete—Main Unit	$2,720.03	
Totals	$3,775.08	$ 4,221
1940		
January		
Liner—Auxiliary Engine	66.00	73
Intermediate or Rear Crosshead Gib—Main Unit	164.86	182
Spiral Gear on Layshaft for L.H. Engine—Main Unit	214.30	236
Spiral Gear on Layshaft for R.H. Engine—Main Unit	214.30	236
Totals	$ 659.46	$ 727

[fol. 14473] Michigan Gas Transmission Corporation

Restatement of Cost of Major Items of Compressor Station Materials and Supplies at Prices as of June 30, 1941

	Original Cost	Present Cost June 30, 1941
1940 (continued)		
February		
Power Piston and Piston Rod Assembly Complete—Cooper-Bessemer—Main Unit	$ 850.50	$ 1,029
May		
Main Bearing Caps—Center—Auxiliary Engine	72.20	80
July		
Main Bearing Top Shell—Main Unit	247.28	
Main Bearing Side Shell—Main Unit	241.78	
Main Bearing Bottom Shell—Main Unit	329.70	
Main Bearing Side Shell—Plain—Main Unit	236.29	
Fire Check Rings—Complete—Main Unit	150.40	
Totals	$1,205.45	$ 1,327
October		
Power Cylinder Assembly Less Studs and Nuts	1,669.31	1,838
Main Bearing Complete—Cooper Main	664.02	803
Totals	$2,333.33	$ 2,641
December		
Main Bearing Shell Center—Auxiliary Unit	82.50	
Main Bearing Caps—Center—Auxiliary Unit	185.65	
Connecting Rod Shell Halves—Auxiliary Unit	165.00	
Totals	$ 433.15	$ 478

[fol. 14474] Michigan Gas Transmission Corporation

Restatement of Cost of Major Items of Compressor Station Materials and Supplies at Prices as of June 30, 1941

	Original Cost	Present Cost June 30, 1941
1941		
January		
Feed Pipes--Main Unit	$ 96.71	$ 97
February		
Compressor Piston:—1 Piston, 1 Rod—2 Nuts—Copper Main	331.24	387
March		
Salt	504.00	504
Pistons—Standard Size—Auxiliary	402.60	403
Liners—Auxiliary Unit	366.00	366
Power Piston Rings—Main Unit	358.56	358
Main Bearing Caps—Center—Auxiliary Unit	213.50	213
Cylinder Head Complete—Auxiliary Unit	223.77	224
Main Bearing Shell—Center " "	91.50	92
Main Bearing Caps— " " "	128.10	128
Connecting Rod Shell Halves-- " "	205.27	205
Totals	$2,493.30	$ 2,493
April		
Exhaust Valve Stem Crosshead Guides—Main Unit	365.40	365
May		
Oil—Standard Gas Engine	789.11	789
Connecting Rod—Main Unit	876.96	877
Fire Check Rings, Complete—Main Unit	225.60	226
Paint—Aluminum and other	700.00	700
Packing—Garlock	1,375.00	1,375
Totals	$3,966.67	$3,967
1941		
June		
Oil—Standard Gas Engine	198.04	198
Salt	210.00	210
Totals	$ 408.04	$ 408
Grand Total	$22,923.15	$25,348

MICHIGAN GAS TRANSMISSION CORPORATION

Comparative Balance Sheets, Per Books,
As at December 31, 1936 to 1940, Inclusive, and June 30, 1941

ASSETS	December 31, 1936	1937	1938	1939	19
UTILITY PLANT					
Property, plant and equipment - Gas	$7,770,429.45	$ 9,226,241.24	$ 9,260,046.57	$ 9,812,435.56	$12,29
INVESTMENTS					
Contractual loans in aid of construction made to customers:					
Central Indiana Gas Company	$ -	$ -	$ 14,000.00	$ 9,637.62	$ 5
Kokomo Gas and Fuel Company	-	-	-	-	
	$ -	$ -	$ 14,000.00	$ 9,637.62	$ 5
CURRENT AND ACCRUED ASSETS					
Cash	$ 80,042.95	$ 63,768.82	$ 176,102.78	$ 418,276.55	$ 956,
Working funds	14,400.00	5,920.77	5,103.64	5,110.00	5,
Accounts receivable:					
Associated companies	98,828.51	30,587.71	30,160.49	28,221.19	32,
Customers' service, etc.	556,440.37	667,359.20	796,790.52	934,061.97	1,036,
Materials and supplies	36,748.61	40,675.47	47,571.69	54,075.65	78,
Prepayments	1,697.48	2,995.77	2,876.81	3,744.93	3,
Other current and accrued assets	-	-	-	-	
	$ 788,157.92	$ 811,307.74	$ 1,058,605.93	$ 1,443,490.29	$ 2,111,
DEFERRED DEBITS					
Preliminary survey and investigation charges	$ 9,026.99	$ 528.41	$ 308.32	$ 1,039.71	$
Clearing accounts	117.04	875.81	-	-	
Retirement work in progress	*(18.59)	-	-	-	
Deferred sales promotion expense	-	56,167.00	-	3,374.07	
Contingent sales promotion expense (contra)	-	57,312.53	34,531.25	-	
Contract cancellation charge:					
Worthington Pump & Machinery Corp.	-	-	-	-	
Other deferred debits	-	9,902.47	$ 18,042.29		
	$ 9,125.44	$ 124,786.22	$ 52,881.86	$ 4,413.78	$ 1,7
	$8,567,712.81	$10,162,335.20	$10,385,534.36	$11,269,977.25	$14,415,0

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Witness - Spitznagle
Balance Sheets

ATION

Books,
and June 30, 1941

939	1940	June 30, 1941
12,435.56	$12,295,896.99	$12,402,884.28
9,637.62	$ 5,649.67	$ 3,360.45
-	-	2,692.98
9,637.62	$ 5,649.67	$ 6,053.43
18,276.55	$ 956,786.58	$ 503,871.83
5,110.00	5,200.00	5,000.00
28,221.19	32,014.97	26,402.62
34,061.97	1,036,210.92	797,598.33
54,075.65	78,172.35	93,412.78
3,744.93	3,324.65	6,000.76
-	-	753.88
43,490.29	$ 2,111,709.47	$ 1,433,040.20
1,039.71	$ -	$ 853.27
-	987.35	1,076.75
-	801.72	212.39
3,374.07	-	-
-	-	-
-	-	5,000.00
		54.10
4,413.78	$ 1,789.07	$ 7,196.51
69,977.25	$14,415,045.20	$13,849,174.42

MICHIGAN GAS TRANSMISSION CORPORATION

Comparative Balance Sheets, Per Books,
As at December 31, 1936 to 1940, Inclusive, and June 30, 1941

LIABILITIES	December 31, 1936	1937	1938	1939	19
CAPITAL STOCK					
Common - no par value	$2,240,000.00	$ 2,240,000.00	$ 2,240,000.00	$ 2,240,000.00	$ 2,24
LONG TERM DEBT PAYABLE TO COLUMBIA GAS & ELECTRIC CORPORATION (Parent Company):					
6% Demand notes payable	$ -	$ 6,391,094.30	$ 6,040,000.00	$ 5,900,500.00	$ 5,90
6% Loans payable	5,136,397.68	-	116,000.00	570,000.00	2,82
	$5,136,397.68	$ 6,391,094.30	$ 6,156,000.00	$ 6,470,500.00	$ 8,72
CURRENT AND ACCRUED LIABILITIES					
Accounts payable:					
Panhandle Eastern Pipe Line Company	$ 515,076.02	$ 486,028.67	$ 658,538.90	$ 756,155.85	$ 85
Associated companies:					
Columbia Gas & Electric Corp. - Interest	77,963.07	-	-	-	
Other	3,069.41	1,196.20	3,370.79	4,174.45	
Other	19,221.31	80,623.14	13,211.77	19,075.38	14
Taxes accrued	63,367.43	112,605.20	171,304.65	226,833.22	46
Other current and accrued liabilities	102,019.23	41,352.67	23,532.77	19,960.89	7
	$ 780,716.47	$ 721,805.88	$ 869,958.88	$ 1,026,199.79	$ 1,54
DEFERRED CREDITS					
Contractual loan from Panhandle Eastern Pipe Line Company covering 77% of an advance to Central Indiana Gas Company and repayable from collections on said advance - contra	$ -	$ -	$ 10,780.00	$ 7,420.97	$
Contingent liability for conversion costs - contra	-	57,312.53	34,531.25	-	
Other deferred credits	2,667.97	30,559.81	14,725.36	2,456.11	
	$ 2,667.97	$ 87,872.34	$ 60,036.61	$ 9,877.08	$
RESERVES					
Reserve for depreciation of Gas plant	$ 275,877.64	$ 511,336.49	$ 787,284.08	$ 1,057,724.83	$ 1,34
Injuries and damages reserve	776.07	3,176.07	5,576.07	7,216.15	1
Contingencies reserve	6,916.88	12,563.74	20,623.50	90,001.98	10
	$ 283,570.59	$ 527,076.30	$ 813,483.65	$ 1,154,942.96	$ 1,45
CONTRIBUTIONS IN AID OF CONSTRUCTION	$ -	$ 2,470.68	$ 4,760.33	$ 5,592.96	$
SURPLUS					
Capital surplus	$ 26,662.76	$ 26,662.76	$ 26,662.76	$ 166,162.76	$ 16
Earned surplus	97,697.34	165,352.94	214,632.13	196,701.70	27
	$ 124,360.10	$ 192,015.70	$ 241,294.89	$ 362,864.46	$ 43
	$8,567,712.81	$10,162,335.20	$10,385,534.36	$11,269,977.25	$14,41

Exhibit 88
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Balance Sheets

CORPORATION

s, Per Books,
asive, and June 30, 1941

1939	1940	June 30, 1941
$ 2,240,000.00	$ 2,240,000.00	$ 2,240,000.00
$ 5,900,500.00	$ 5,900,500.00	$ 5,900,500.00
570,000.00	2,820,000.00	2,420,000.00
$ 6,470,500.00	$ 8,720,500.00	$ 8,320,500.00
$ 756,155.85	$ 856,703.24	$ 661,660.92
-	-	124,807.50
4,174.45	5,423.48	4,070.30
19,075.38	143,356.38	34,437.18
226,833.22	463,181.66	537,851.88
19,960.89	76,381.93	7,557.90
$ 1,026,199.79	$ 1,545,046.69	$ 1,370,385.68
$ 7,420.97	$ 4,350.28	$ 2,587.58
-	-	-
2,456.11	-	1,927.74
$ 9,877.08	$ 4,350.28	$ 4,515.32
$ 1,057,724.83	$ 1,340,074.96	$ 1,526,600.89
7,216.15	10,765.66	14,488.14
90,001.98	107,019.58	109,799.33
$ 1,154,942.96	$ 1,457,860.20	$ 1,650,888.36
$ 5,592.96	$ 9,342.96	$ 9,342.96
$ 166,162.76	$ 166,162.76	$ 166,162.76
196,701.70	271,782.31	87,379.34
$ 362,864.46	$ 437,945.07	$ 253,542.10
$11,269,977.25	$14,415,045.20	$13,849,174.42

MICHIGAN GAS TRANSMISSION CORPORATION

Earned Surplus Per Books for the Ten Months Ended December 31, 1936, Years 1937 to 1940, Inclusive, Year and Six Months Ended June 30, 1941

	Ten Months Ended December 31, 1936 (A)	Years Ended December 31, 1937 (B)	1938 (C)	1939 (D)	1940 (E)
(1) BALANCE AT BEGINNING OF PERIOD	$ -	$ 97,697.34	$165,352.94	$214,632.13	$196,701.7
CREDITS:					
(2) Credit balance transferred from income account	209,697.34	162,849.85	228,479.19	556,573.09	500,680.6
(3) Adjustment of federal income tax accrual	-	-	-	12,978.92	11,603.1
(4) Unclaimed wages written off	-	52.61	-	-	-
(5) Partial liquidating dividend of Columbia System Protection Fund	-	-	-	5,580.00	-
(6) Additional revenue from prior years' gas sales	-	-	-	3,105.46	-
(7) Total Credits	$209,697.34	$260,599.80	$393,832.13	$792,869.60	$708,985.4
DEBITS:					
(8) Dividend appropriations - common stock	$112,000.00	$ 89,600.00	$179,200.00	$537,600.00	$425,600.0
(9) Amount reserved for additional prior years' federal income taxes	-	5,646.86	-	58,567.90	11,603.1
(10) Total Debits	$112,000.00	$ 95,246.86	$179,200.00	$596,167.90	$437,203.1
(11) BALANCE AT END OF PERIOD	$ 97,697.34	$165,352.94	$214,632.13	$196,701.70	$271,782.3

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Witness - Spitznagle
Earned Surplus

ION CORPORATION

Months Ended December 31, 1936,
d Six Months Ended June 30, 1941

	Years Ended December 31,			Twelve Months Ended	Six Months Ended
	1938 (C)	1939 (D)	1940 (E)	June 30, 1941 (F)	June 30, 1941 (G)
7.34	$165,352.94	$214,632.13	$196,701.70	$299,856.97	$271,782.31
9.85	228,479.19	556,573.09	500,680.61	392,322.37	285,997.03
	-	12,978.92	11,603.14	11,603.14	-
2.61	-	-	-	-	-
	-	5,580.00	-	-	-
	-	3,105.46	-	-	-
9.80	$393,832.13	$792,869.60	$708,985.45	$703,782.48	$557,779.34
0.00	$179,200.00	$537,600.00	$425,600.00	$604,800.00	$470,400.00
6.86	-	58,567.90	11,603.14	11,603.14	-
6.86	$179,200.00	$596,167.90	$437,203.14	$616,403.14	$470,400.00
2.94	$214,632.13	$196,701.70	$271,782.31	$ 87,379.34	$ 87,379.34

MICHIGAN GAS TRANSMISSION CORPORATION

Capital Surplus, Per books, for the Ten Months Ended December 31, 1936, Years 1937 to 1940, Inclusive, Year and Six Months Ended June 30, 1941

	Ten Months Ended December 31, 1936 (A)	Years Ended December 31, 1937 (B)	1938 (C)	1939 (D)	19 (E)
(1) BALANCE AT BEGINNING OF PERIOD	$ -	$ 26,662.76	$ 26,662.76	$ 26,662.76	$ 166,1
CREDITS:					
(2) Earned surplus of Indiana Gas Transmission Corporation at March 1, 1936, Date of Merger and Consolidation.	26,662.76	-	-	-	-
(3) Capital contribution received from Columbia Gas & Electric Corporation Representing cancellation of $139,500.00 principal amount of 6% Domand Notes.	-	-	-	139,500.00	-
(4) BALANCE AT END OF PERIOD	$ 26,662.76	$ 26,662.76	$ 26,662.76	$166,162.76	$ 166,1

14478

Exhibit 90
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Witness - Spitznagle
Capital surplus

CORPORATION

ths Ended December 31, 1936,
hs Ended June 30, 1941

Years Ended December 31,			Year Ended June 30, 1941	Six Months Ended June 30, 1941
1938 (C)	1939 (D)	1940 (E)	(F)	(G)
$ 26,662.76	$ 26,662.76	$ 166,162.76	$ 166,162.76	$ 166,162.76
-	-	-	-	-
-	139,500.00	-	-	-
$ 26,662.76	$166,162.76	$ 166,162.76	$ 166,162.76	$ 166,162.76

[fol. 14479] Exhibit 91

Michigan Gas Transmission Corporation

Preliminary Report on Original Cost Studies By Central Service Corporation

1—Original Cost—Books and Records

The records and accounts of the reporting company, complete from the date of incorporation to the present date, are maintained in their general office at Detroit, Michigan under the control of Mr. L. J. Mueller, Assistant Treasurer of the Company. The books of accounts used consist of the following:

General Ledger, containing control accounts and sub accounts thereof.

Voucher Register, containing journalization of cash and journal vouchers.

Cash Books, containing journalization of all cash receipts and disbursements.

Fixed Capital Record, containing detail classified plant accounts separated so as to give effect to the detail gas plant accounts necessary to support F. P. C. Accounts 100.1 and 100.6.

Construction Work in Progress Record, containing incompleted work orders.

Completed Construction Work in Progress Record, containing the completed work orders.

Expense Distribution Record, containing the detail accounts in support of F. P. C. Account 502—Operating Expenses.

[fol. 14480] Transportation Records, containing the accumulation of transportation expenses and the distribution thereof.

The classification of accounts used in maintaining the above records at both January 1, 1940, effective date of the Uniform System of Accounts, and at June 30, 1941, is

similar to the classification prescribed by said Uniform System of Accounts and the current accounts in the General Ledger indicate the applicable F. P. C. account number.

A work order system has been used since the date of incorporation to record all charges and credits in the gas plant account, except those resulting from the property acquired from Indiana Gas Transmission Corporation, upon merger as of March 1, 1936.

The records and accounts of Indiana Gas Transmission Corporation complete from the date of its incorporation to the date of its dissolution with the exception of certain sub accounts, set up by machine bookkeeping, which cannot be located for the years 1933, 1934 and 1935, are also kept in the Detroit Office of the reporting company under the care of Mr. L. J. Mueller, Assistant Treasurer of the Michigan Gas Transmission Corporation. This company also used a voucher system and kept the following books of accounts:

General Ledger, containing control accounts and sub accounts thereof.

Voucher Register, containing journalization of cash and journal vouchers.

Cash Books, containing journalization of all cash receipts and disbursements.

[fol. 14481] Fixed Capital Record, containing detailed classified plant accounts together with the completed work orders.

Expense Distribution Record, containing the detail accounts in support of operating expenses and maintenance.

All of the cash and journal vouchers in support of all transactions are intact so that all required detail facts and information can be obtained regarding the data recorded in the missing sub accounts.

The construction work in progress sheets developed by Columbia Gas Construction Company to show the original cost of the natural gas pipe line built by them in 1931 for The Ohio Fuel Gas Company and purchased as of No-

vember 25, 1931 by Indiana Gas Transmission Corporation, are kept in the Fixed Capital Record. All of the vouchers of Columbia Gas Construction Company which support these construction work in progress sheets are also on file in the Detroit office.

2—Original Cost—Scope of Examination

(a) All charges to property and plant account, as recorded in detail accounting records of Michigan Gas Transmission Corporation, Indiana Gas Transmission Corporation, and Columbia Gas Construction Company detail cost records covering the property acquired by Indiana Gas Transmission Corporation from The Ohio Fuel Gas Company, were examined by representatives of Columbia Engineering Corporation, an affiliated service Company, under the direction of Mr. L. J. Mueller, Assistant Treasurer of Michigan Gas Transmission Corporation.

[fol. 14482] Said representatives determined the charges and credits for capital expenditures includible in "Gas Plant" (Account 100), the sub-divisions of said account (Accounts 100.1 to 100.6 inclusive), and the detail plant accounts (Accounts 301 to 392 inclusive), as prescribed by the Federal Power Commission in its "Uniform System of Accounts", effective January 1, 1940.

Said representatives also determined that the aforementioned charges constituted actual cash expenditures of the respective Companies or its equivalent. They determined, in so far as the records would reveal, if all property taken out of service by the respective Companies had been properly retired on the books of the said Companies.

Said representatives determined the amount of charges and credits requiring reclassification in the detail plant accounts.

Said representatives have partially developed units of property owned at June 30, 1941, the original cost thereof and other related data, and are in the process of preparing like data on the balance of the Company's property.

It is the Company's intention to complete a physical inventory of office furniture and fixtures and work equip-

ment which may result in further minor adjustments to "Gas Plant", but it is believed such adjustments will not be material.

(b) The Indiana Gas Transmission Corporation at the date of acquisition of property acquired from the Panhandle Eastern Pipe Line Company was furnished with a classified statement of the cost of such acquired property by said Panhandle Eastern Pipe Line Company.

[fol. 14483] Detailed cost records for the property acquired from Panhandle Eastern Pipe Line Company, except the details of labor furnished by independent contractors, are maintained in the Kansas City, Missouri, offices of Panhandle Eastern Pipe Line Company.

Central Service Corporation examined the said detail records of Panhandle Eastern Pipe Line Company by examining at least 50% of the vouchers covering payments and charges recorded in the detail cost records, and test checked the classification of the items listed in said detail bill to Indiana Gas Transmission Corporation. No detail records to substantiate the labor classification appearing in said detail bill could be located, but the total labor charge was unified with payments made to the independent contractors.

Said analysis also developed certain variations in the detail account classification of said bill, which have been corrected, and the fact that expenses totalling $3,657.83 covering expense in connection with a proposed contract with an Indianapolis, Indiana Company, not consummated, were included in said bill. Since the item of $3,657.83 is small in relation to the total cost of property acquired, said item was permitted to remain in cost of transmission mains.

In addition, said bill contains the following allocated charges representing the proportionate part of overhead and other expenses suffered on the entire line from Texas Panhandle field to Racoon Creek, at a point in Indiana about 161½ miles east of Montezuma, Indiana.

[fol. 14484]

		Per cent of Total of Respective Charges
Organization Expense	$ 1,204.48	3.24%
Franchise Expense	1,030.42	3.24%
Overhead Expense	2,222.15	3.24%
Interest Expense	2,245.40	3.24%
Insurance Expense	14.23	3.24%
Contractors General Expense	760.47	3.24%
Williams Bros. Bond Expense	810.00	3.24%
Warehouse Expense	1.40	3.24%
Total	$ 8,288.55	
Fees and Expenses paid to Brokaw, Dixon, Garner & McKee, Engineers	$48,073.58	5.10%
	$56,362.13	

It should be noted that the above 3.24% allocations were based on total charges, of the character indicated, made to December 31, 1930, whereas, the Indiana portion of the line was not completed until March, 1931, there being no further charges of that character made to the cost of said Indiana line by Panhandle Eastern.

The records of Panhandle Eastern did not indicate the basis for the 3.24% allocation, but we were informed by a representative of Panhandle Eastern, that said 3.24% was the ratio of the miles of Indiana Line (25.5 miles) to the total miles of line under construction (790 miles). Since the resulting amount of the 3.24% allocated charges as classified and the aggregate amount thereof ($8,288.55) is not large and represents only .88% (eighty-eight hundreds of one per cent) of total direct charges of $960,774.44 incurred in building the Indiana Line, we did not believe any further investigation of such charges was warranted.

[fol. 14485] The fees and expenses of Brokaw, Dixon, Garner & McKee, engineers, cover allocated charges of $37,932.77 to January 31, 1931, based upon 5.10% of the total of said charges applicable to the 790 miles of constructed line, and allocated charges of $10,140.81 for February and March 1931. The method of determining the portion of said charges applicable to the Indiana line is not presently available.

Central Service Corporation test checked charges made to detail construction records of Michigan Gas Transmission Corporation, Indiana Gas Transmission Corporation and Columbia Gas Construction Company detail cost records covering the property acquired from The Ohio Fuel Gas Company, by checking charges against vouchers and cash payments, examining classification of ascertainable overheads and generally established that all charges made to "Gas Plant" were at original cost, except as hereinafter noted.

As a result of the examination Central Service Corporation has established that a fee of $139,423.73 was charged The Ohio Fuel Gas Company by Columbia Gas Construction Company in connection with the construction of property acquired by the Indiana Gas Transmission Corporation as of November 25, 1931. Said fee is now classified on the books of the company in "Gas Plant—Transmission Mains" and "Gas Plant—Land and Land Rights." We understand that this amount represents largely an inter-company profit by the affiliated company. Since such in-[fol. 14486] ter-company profits, under present regulation, may be questioned we have classified this amount, together with $2,200 of interest responsive to said amount, in Account 407—"Gas Plant Adjustments". We do this in order to avoid controversy at this time in connection with the rate proceedings before the Federal Power Commission and because the amount of these items is relatively small in relation to the original cost of the "Gas Plant." In the opinion of the company the amount of these items, or a substantial portion thereof, is properly includable in original cost.

Since the date the foregoing construction was completed and put into service, namely January 1, 1932, the Indiana Gas Transmission Corporation and Michigan Gas Transmission Corporation have accrued depreciation on said fee and interest amounting to $27,617.00 and $33,990.00 at January 1, 1940, and June 30, 1941, respectively.

Central Service Corporation has prepared the following statements, which are subject to corrections believed not to be material, for the purpose of affording a preliminary review of original cost in connection with the Com-

pany's present rate case before the Federal Power Commission:

[fol. 14487] Statement—A—Outline of Origin and Development.

Statement—B—Showing for each acquisition by the reporting Company or any of its predecessors of a gas operating unit or system, the original cost, estimated if not known, the cost to such company, and the amount entered in the books in respect thereto as of the date of acquisition.

Statement—C—Not applicable, because there were no amounts arrived at by appraisal, recorded in Gas Plant accounts.

Statement—D—Showing gas plant as of January 1, 1940, and June 30, 1941, as classified in the books of account immediately prior to reclassification in accordance with the new system of accounts, including, under a descriptive heading, any unclassified plant applicable jointly to the gas department and other departments of the utility.

Statement—E—Showing summary adjustments necessary to state, as of January 1, 1940, Account 100 "Gas Plant," including all its subsidiary accounts and Account 107, Gas Plant Adjustments, as prescribed in the Uniform System of Accounts.

Statement—F—Showing "Gas Plant" (balance sheet account 100) as of January 1, 1940, classified according to the accounts prescribed in the Uniform System of Accounts effective on that date, and showing also the amount includible in Account 107, "Gas Plant Adjustments".

[fol. 14488] Statement—F (a)—Showing summary of "Gas Plant" (Account 100) of Michigan Gas Transmission Corporation and predecessor companies, as reclassified by years, for period 1931 to June 30, 1941, inclusive.

Statement—G—Comparative balance sheet, as of January 1, 1940, showing the accounts and amounts appearing in the books before the adjusting entries have been made and after such entries shall have been made.

Statement—H—Suggested plan for depreciating, amortizing, or otherwise disposing in whole or in part of the amounts, as at January 1, 1940, includible in Account 100.5 "Gas Plant Acquisition Adjustment", and Account 107, "Gas Plant Adjustments."

Statement—I—Statistical Information Relative to Gas Plant at June 30, 1941.

[fol. 14489] Statement A

Michigan Gas Transmission Corporation

Outline of Origin and Development

The reporting company was organized November 2, 1935, under the laws of the State of Delaware, with an authorized capital of 50,000 shares (increased to 60,000 shares in 1936) of common stock without par value, having one vote per share. Columbia Gas & Electric Corporation (Parent Company) caused said reporting company to be organized to conduct the following business, as summarized from the "Certificate of Incorporation" of said company:

To engage in the business of transmitting natural Gas, artificial gas and or mixed gases, into, thru and from the State of Michigan and to supply gas so transmitted to other corporations, etc. engaged in the business of supplying gas to the public.

To lay, construct, purchase, etc. pipe lines and mains for transmission of gas.

To purchase or otherwise acquire, store and transmit such gas and to sell or otherwise dispose of same to corporations, etc. as aforesaid.

To acquire and to hold, sell, exchange, etc. any and all kinds of securities created or issued by any person, etc.

To promote, organize, aid or assist, persons, etc. engaged in any business.

To borrow money for any purposes of the Corporation from time to time and without limit as to amount; to issue and sell its own securities.

To purchase, hold, cancel, reissue or otherwise deal in its own securities.

[fol. 14490] The issued and outstanding common stock of the reporting company, as at January 1, 1940, was 44,800 shares, as detailed in Statement A-1 submitted herewith.

As of March 1, 1936, the reporting company acquired by merger, pursuant to "Agreement of merger and consolidation", approved March 2, 1936, by its Board of Directors, the properties and assets of the Indiana Gas Transmission Corporation and assumed the liabilities of said latter corporation.

Subsequent to March 1, 1936, the reporting company expanded its system primarily by the addition of the property described in statement I "Statistical Information, etc.," submitted herewith, except items designated "Line A and B" therein.

The Indiana Gas Transmission Corporation was organized February 18, 1931, under the laws of the State of Delaware, with an authorized capital stock of 10,000 shares of no par value. The issued and outstanding capital stock, as of March 1, 1936, of said Indiana Gas Transmission Corporation, was 200 shares of common stock, without par value, issued for cash in the amount of $10,000.00 and was owned by Columbia Gas & Electric Corporation (Parent Company). Said common stock was acquired by said parent company for $10,000.00 about February 27, 1936, from Columbia Oil & Gasoline Corporation.

As of September 15, 1931, the Indiana Gas Transmission Corporation, a subsidiary of Columbia Oil & Gasoline Corporation acquired from Panhandle Eastern Pipe Line Company, a subsidiary of Columbia Oil & Gasoline Corporation, the following constructed properties, not then in service:

[fol. 14491] 25.89 miles of natural gas pipe lines, completed prior to date of purchase, extending from a point at the Indiana-Illinois State Line, near Dana, Indiana, in an easterly direction to a point on Big Racoon Creek, in Parke [Count] Indiana; material for approximately 20½ miles of natural gas pipe-lines under construction, extend-

ing in an easterly direction, beyond a point on Big Racoon Creek, toward Muncie, Indiana; and all rights interest etc., in the contracts, franchises, business, etc., responsive to said natural gas pipe lines, subject to all liabilities of the seller to complete said line, render service and to all encumberance on the said property and project acquired.

As of November 25, 1931, the Indiana Gas Transmission Corporation, a subsidiary of Columbia Oil & Gasoline Corporation, acquired from The Ohio Fuel Gas Company, a subsidiary of Columbia Gas & Electric Corporation, the following property and services constructed and performed by Columbia Gas Construction Company, a subsidiary, of Columbia Gas & Electric Corporation, and not then in service:

Services, etc., for the completion of approximately 20½ miles of natural gas pipe line, started by and acquired from Panhandle Eastern Pipe Line Company, as previously described in this statement; approximately 23½ miles of 20" natural gas pipe line, extending from a point approximately 23½ miles west by south of Zionsville, Indiana; 52.4 miles of 18" natural gas pipe line, extending from Zionsville, Indiana to point known as King Measuring Station located adjacent to Muncie, Indiana.

Statement A-1

MICHIGAN GAS TRANSMISSION CORPORATION

Common Stock Issued and Outstanding at January 1, 1940 and June 30, 1941

Date of Issuance	Issued to	Shares Issued	Unit Price	Amount	Consideration
November 1935	Columbia Gas & Electric Corporation	20	$50.00	$ 1,000.00	Cash-Received on November 6, 1935
November 1935	Columbia Gas & Electric Corporation	300	50.00	15,000.00	Cash-Received on November 14, 1935
March 1936	Columbia Gas & Electric Corporation	200	50.00	10,000.00	Cancellation of liability for capital stock of Indiana Gas Transmission Corporation resulting from merger with that company
March 1936.	Columbia Gas & Electric Corporation	280	50.00	14,000.00	Cancellation of loans payable to parent company in the amount of $14,000.00, which were set up on February 17, 1936 upon the receipt of a cash advance for that amount
March 1936	Columbia Gas & Electric Corporation	44,000	50.00	2,200,000.00	Cancellation of $2,200,000.00 principal amount of loans payable to parent company taken over from Indiana Gas Transmission Corporation upon merger with that company
Total Common Stock Issued and Outstanding at January 1, 1940 and June 30, 1941.		44,800	$50.00	$2,240,000.00	

MICHIGAN GAS TRANSMISSION CORPORATION

Showing for each acquisition by the reporting company or any of its predece
of a gas operating unit or system, the original cost, estimated if not known, th
to such company and the amount entered in the books in respect thereto as of the
of acquisition.

MICHIGAN GAS TRANSMISSION CORPORATION:

Date of acquisition	March 1, 1936	December 1936
From whom acquired	Indiana Gas Transmission Corporation	The Ohio Fuel Gas Company
Description of property acquired	A natural gas pipe line system consisting of approximately 122 miles of 20" or 18" transmission mains in the State of Indiana from a point on the Illinois-Indiana State Line, near Dana, Ind., in an easterly direction to a point near Muncie, Indiana, known as the King Measuring Station, together with the necessary structures and equipment required to service the system's customers (Operating unit).	Testing equipment for use at measuring and regulating stations, issued from stock at Greenville, Indiana by The Ohio Fuel Gas Company (Non-operating unit).
Original cost to company from whom acquired	$2,263,313.91	$ 156.87
Amount entered on books at date of acquisition:		
Cost to reporting company	$2,210,460.87 (2)	$ 156.87
Amount credited to depreciation reserve (1)	$ 194,476.77	-
Total amount to Gas Plant	$2,404,937.64 (2)	$ 156.87

INDIANA GAS TRANSMISSION CORPORATION:

Date of acquisition	September 15, 1931	November 25, 1931
From whom acquired	Panhandle Eastern Pipe Line Company	The Ohio Fuel Gas Company
Description of property acquired	A natural gas pipe line system consisting of 25.89 miles of completed transmission mains in the State of Indiana from a point on the Illinois-Indiana State Line, near Dana, Ind., in an easterly direction to a point on Big Racoon Creek, together with approximately 109,000 feet of pipe in the process of construction east of Big Racoon Creek (Operating unit nearing completion but not in operation.)	The Ohio Fuel Gas Company A natural gas pipe line system consisting of approximately 96 miles of transmission mains in the State of Indiana from a point on Big Racoon Creek to a point near Muncie, Ind., known as King Measuring Station. This line includes the completion of the construction in progress acquired from Panhandle Eastern Pipe Line Co. (Operating unit nearing completion but not in operation).
Original cost to company from whom acquired	$1,048,253.55	$1,157,375.55
Constructed property (gross)	-	-
Retirements	-	-
Original cost of property sold	$1,048,253.55	$1,157,375.55
Cost to acquiring company	$1,048,253.55	$1,298,999.28 (2)
Amount entered on books at date of acquisition:		
Cost to predecessor company	$1,048,253.55	$1,298,999.28 (2)
Amount credited to depreciation reserve (1)	-	-
Total amount to Gas Plant	$1,048,253.55	$1,298,999.28 (2)

* ( ) Denotes red figure.

(1) Same as the amount recorded in the depreciation reserve on predecessor company's books.

(2) Includes amount of engineering fee ($139,423.73) and interest during construction thereon $2,200.00 which amount has been estimated) ti
opinion of the Company, is properly includable in original cost, classified as at January 1, 1940 in account 107 "Gas Plant Adjustmen
is so small as to eliminate any adjustment on account thereof.

SMISSION CORPORATION

roporting company or any of its predecessors
iginal cost, estimated if not known, the cost
the books in respect thereto as of the date

mber 1936 Ohio Fuel Gas Company ing equipment for use at uring and regulating stations, ed from stock at Greenville, ana by The Ohio Fuel Gas Com- (Non-operating unit).	March 1937 Indiana Gas Distribution Corporation Measuring and regulating stations at Brownsburg, Zionsville, Carmel, Dana, Rockville, North Salem and Danville, including all equipment, structures, leaseholds and mains applicable thereto (Operating unit).	April 1937 The Ohio Fuel Gas Company Measuring and regulating station at Newcastle, Indiana, including all equipment, structures and leaseholds applicable thereto (Operating unit).	
156.87	$ 8,805.34	$ 4,049.97	
156.87	$ 8,224.87	$ 3,788.01	
-	$ 580.47	$ 261.96	
156.87	$ 8,805.34	$ 4,049.97	
mber 25, 1931 Ohio Fuel Gas Company tural gas pipe line system con- ing of approximately 96 miles of smission mains in the State of ana from a point on Big Racoon k to a point near Muncie, Ind., n as King Measuring Station. line includes the completion of construction in progress acquired Panhandle Eastern Pipe Line Co. rating unit nearing completion not in operation).	Various Constructed by Company Sundry minor additions consisting largely of rural taps and measuring and regulating equipment and structures.	Total acquired and constructed property at March 1, 1936, transferred to Michigan Gas Transmission Corporation.	
57,375.55	$ -	$2,205,629.10	
-	59,478.96	59,478.96	
-	*(1,794.15)	*(1,794.15)	
57,375.55	$ 57,684.81	$2,263,313.91	
8,999.28 (2)			
8,999.28 (2)			
-			
8,999.28 (2)			

.00 which amount has been estimated) the aggregate amount of which, or a substantial portion thereof, in the
.10 in account 107 "Gas Plant Adjustments". Amount of retirements which might be applicable to these items

STATEMENT D

MICHIGAN GAS TRANSMISSION CORPORATION

Gas Plant as at January 1, 1940, and June 30, 1941, as classified in the Books of Account immediately prior to reclassification in Accordance with Uniform System of Accounts.

		January 1, 1940	June 30, 1941
	INTANGIBLE PLANT:		
(1)	Organization	$ 10,332.75	$ 10,332.75
(2)	Miscellaneous Intangible	73,667.17	73,667.17
(3)	Total Intangible Plant	$ 83,999.92	$ 83,999.92
	TRANSMISSION PLANT:		
	Land and Land Rights:		
(4)	Land	$ 27,449.07	$ 26,099.30
(5)	Land Rights (Lease Holds and Rights of Way)	230,621.81	247,859.43
(6)	Total Land and Land Rights	$ 258,070.88	$ 273,958.73
	Structures and Improvements:		
(7)	Compressor Station	$ 230,611.94	$ 434,329.42
(8)	Measuring and Regulating Station	35,590.80	50,474.45
(9)	Other Transmission System	33,392.72	38,729.46
(10)	Total Structure and Improvements	$ 299,595.46	$ 523,533.33
(11)	Compressor Station Equipment	$ 979,044.28	$ 1,810,612.35
(12)	Measuring and Regulating Station Equipment	105,162.50	126,223.06
(13)	Mains	8,044,905.93	9,410,160.74
(14)	Other Transmission System Equipment	-	121.09
(15)	Total Transmission Plant	$ 9,686,779.05	$12,144,609.30
	GENERAL PLANT:		
(16)	Office Furniture and Fixtures	$ 14,062.70	$ 16,179.21
(17)	Transportation Equipment	19,031.17	33,861.73
(18)	Stores Equipment	1,237.95	1,645.88
(19)	Tools and Work Equipment	7,324.77	13,430.51
(20)	Total General Plant	$ 41,656.59	65,117.33
(21)	TOTAL GAS PLANT CLASSIFIED	$ 9,812,435.56	$12,293,726.55
(22)	CONSTRUCTION WORK IN PROGRESS	-	109,157.73
(23)	TOTAL GAS PLANT	$ 9,812,435.56	$12,402,884.28

[fol. 14495] Statement E

Michigan Gas Transmission Corporation

Showing summary of adjustments necessary to state, as of January 1, 1940, Account 100, Gas Plant, including all its subsidiary accounts, and Account 107, Gas Plant Adjustments, as prescribed in the Uniform System of Accounts.

	Account		Debit	Credit
	100.1	Gas Plant in Service	$9,670,811.83(2)	
(1)	100.6	Gas Plant in Process of Reclassification		$9,812,435.56
	107	Gas Plant Adjustments	141,623.73(3)	
			$9,812,435.56	$9,812,435.56

(1) This account not actually set up on reporting company's books but all plant accounts at January 1, 1940, were segregated in the records to give effect to the setting up of Account 100.6, Gas Plant in Process of Reclassification.

(2) Includes $1,934.46 of reclassifications developed or transferable to expense and other balance sheet accounts, which were not reclassified because no reaccounting items were considered in this reclassification.

(3) Classified to account 107 "Gas Plant Adjustments" for the reasons hereinbefore stated. In the opinion of the company this amount or a substantial portion thereof is properly includible in account 100 "Gas Plant".

Statement F

MICHIGAN GAS TRANSMISSION CORPORATION

Showing Gas Plant (balance sheet Account 100) as of January 1, 1940 and June 30, 1941 classified according to the accounts prescribed in the Uniform System of Accounts, effective on January 1, 1940 and showing also the amount includible in Account 107, Gas Plant Adjustments.

Account Number	Description of Account	ORIGINAL COST AS OF January 1, 1940	ORIGINAL COST AS OF June 30, 1941
	ACCOUNT 100.1-GAS PLANT IN SERVICE		
INTANGIBLE PLANT:			
301	Organization	$ 10,332.75	$ 10,332.75
303	Miscellaneous Intangible Plant	73,667.17	73,667.17
TRANSMISSION PLANT:			
351.1	Land	27,495.72	26,145.95
351.2	Land Rights	224,229.71	241,467.33
352.1	Pumping Station Structures	242,542.92	446,260.40
352.2	Measuring and Regulating Station Structures	33,682.85	48,566.50
352.3	Other Transmission System Structures	22,655.74	27,992.48
353	Mains	7,910,183.84	9,275,438.65
354.1	Pumping Station Equipment	980,935.64	1,812,503.71
354.2	Measuring and Regulating Station Equipment	104,765.46	125,826.02
354.3	Other Transmission System Equipment	-0-	121.09
GENERAL PLANT:			
372	Office Furniture and Equipment	12,763.25	14,879.76
373	Transportation Equipment	19,006.91	33,837.47
374	Stores Equipment	1,201.54	1,609.47
377	Tools and Work Equipment	7,348.33	13,454.07
	TOTAL ACCOUNT 100.1-GAS PLANT IN SERVICE	$9,670,811.83	$12,152,102.82
100.2	Gas Plant Leased to Others	-	-
100.3	Construction Work in Progress	-	109,157.73
100.4	Gas Plant Held for Future Use	-	-
100.5	Gas Plant Acquisition Adjustments	-	-
100.6	Gas Plant in Process of Reclassification	-	-
	TOTAL ACCOUNT 100-GAS PLANT	$9,670,811.83	$12,261,260.55
107	Gas Plant Adjustments	(2)141,623.73	(2)141,623.73
	TOTAL BOOK VALUE OF UTILITY PLANT	(1) $9,812,435.56	$12,402,884.28

(1) Includes $1,934.46 of reclassifications developed or transferable to expense and other balance sheet accounts, which were not reclassified because no reaccounting items were considered in this reclassification.

(2) Classified to account 107 "Gas Plant Adjustments" for the reasons hereinbefore stated. In the opinion of the company this amount or a substantial portion thereof is properly includible in account 100 "Gas Plant".

MICHIGAN GAS TRANSMISSION CORPORATION

Summary Statement of "Gas Plant" Account 100
as reclassified, by years, for period 1931 to June 30, 1941, inclusive.

			Net Constructed Property and other Additions		
			By Company and Predecessor Companies (A)	By Contractors (B)	Total (C)
(1)	Michigan Gas Transmission Corporation	6 mos. ended June 30, 1941	$ 2,906.39	$ -	$ 2,906.39
(2)		Year 1940	1,322,565.24	1,155,819.36	2,478,384.60
(3)		Year 1939	308,512.68	243,876.31	552,388.99
(4)		Year 1938	33,805.33	-	33,805.33
(5)		Year 1937	778,863.46	664,093.02	1,442,956.48
(6)		10 mos. ended Dec. 31, 1936	4,270,788.38	1,094,846.56	5,365,334.94
(7)		Total	$ 6,717,441.48	$ 3,158,335.25	$ 9,875,776.73
(8)	Indiana Gas Transmission Corporation	2 mos. ended Feb. 29, 1936	7,057.24	-	7,057.24
(9)		Year 1935	40,429.79	-	40,429.79
(10)		Year 1934	4,267.36	-	4,267.36
(11)		Year 1933	*(984.19)	-	*(984.19)
(12)		Year 1932	4,649.99	-	4,649.99
(13)		10 mos. ended Dec. 31, 1931	2,264.62	-	2,264.62
(14)		Total	$ 57,684.81	$ -	$ 57,684.81
(15)	The Ohio Fuel Gas Company	Year 1937	4,049.97	-	4,049.97
(16)		Year 1936	156.87	-	156.87
(17)		Year 1932	9,164.19	-	9,164.19
(18)		Year 1931	50,416.06	1,097,795.30 (1)	1,148,211.36
(19)		Total	$ 63,787.09	$ 1,097,795.30	$ 1,161,582.39
(20)	Indiana Gas Distribution Corporation	Year 1937	8,805.34	-	8,805.34
(21)	Panhandle Eastern Pipe Line Company	Year 1931	790,548.22	257,705.33	1,048,253.55
(22)	Total "Gas Plant", Account 100, as reclassified at June 30, 1941		$ 7,638,266.94	$ 4,513,835.88	$12,152,102.82 (2)(3)(4)

(1) Affiliated contractor

(2) Includes Ascertained overheads, which exclude contractors overheads not ascertainable on all mains constructed except mains originally built for The Ohio Fuel Gas Company, Panhandle Eastern Pipe Line Company and main extending from Ohio - Michigan State Line to Detroit city-gate:

Administrative and general expense	$ 76,764.76
Engineering and Supervision	200,569.39
Damages	211,162.34
Legal fees and expenses	50,413.99
Interest during construction	143,140.07
Taxes during construction	3,761.46
Non-affiliated contractors fees and overheads	418,293.48
Total	$ 1,104,105.49

(3) Includes $1,934.46 of reclassifications developed or transferable to expense and other balance sheet accounts, which were not reclassified because no reaccounting items were considered in this reclassification.

(4) Excludes $141,623.73 classified to account 107 "Gas Plant Adjustments" for the reasons hereinbefore stated. In the opinion of the company this amount or a substantial portion thereof is properly includible in account 100 "Gas Plant".

* ( ) Denotes red figure

Statement G 14498
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MICHIGAN GAS TRANSMISSION CORPORATION

Giving a comparative balance sheet, as of January 1, 1940, showing the accounts and amounts appearing in the books before the adjusting entries have been made and after such entries shall have been made,

		Before	After
	A S S E T S		
100.1	Gas Plant in service	-	$ 9,670,811.83(1)
100.6	Gas Plant in process of reclassification	$ 9,812,435.56	-
107	Gas Plant adjustments	-	141,623.73(2)
	Total Utility Plant	$ 9,812,435.56	$ 9,812,435.56
112	Other Investments:		
	Loan to customer in aid of construction ($7,420.97 contra)	9,637.62	9,637.62
120	Cash	418,276.55	418,276.55
122	Working Funds (petty cash and advances)	5,110.00	5,110.00
125	Accounts Receivable	934,061.97	934,061.97
126.2	Receivables from Associated Companies	28,221.19	28,221.19
131	Materials and Supplies	54,075.65	54,075.65
132	Prepayments	3,744.93	3,744.93
142.2	Other Preliminary Survey and Investigation Charges	1,039.71	1,039.71
146	Other deferred debits		
	Deferred sales promotion expense	3,374.07	3,374.07
		$11,269,977.25	$11,269,977.25
	L I A B I L I T I E S		
200	Common Capital Stock - no par value	$ 2,240,000.00	$ 2,240,000.00
	Advances from Associated Companies:		
212.1	Advances on notes	5,900,500.00	5,900,500.00
212.2	Advances on open account	570,000.00	570,000.00
222	Accounts payable	775,231.23	775,231.23
223.2	Payables to Associated Companies	4,174.45	4,174.45
228	Taxes Accrued	226,833.22	226,833.22
230	Other current and accrued liabilities	19,960.89	19,960.89
242	Other deferred credits:		
	Contractual loan from Panhandle Eastern Pipe Line Company covering 77% of an advance to a customer and repayable from collections on said advance - contra	7,420.97	7,420.97
	Miscellaneous	2,456.11	2,456.11
250.1	Reserve for depreciation of Gas Plant	1,057,724.83	1,057,724.83
256	Injuries and damages reserve	7,216.15	7,216.15
258	Other Reserves:		
	Contingencies	90,001.98	90,001.98
265	Contributions in aid of Construction	5,592.96	5,592.96
270	Capital Surplus	166,162.76	166,162.76
271	Earned Surplus	196,701.70	196,701.70
		$11,269,977.25	$11,269,977.25

(1) Includes $1,934.46 of reclassifications developed or transferable to expense and other balance sheet accounts, which were not reclassified because no reaccounting items were considered in this reclassification.

(2) Classified to account 107 "Gas Plant Adjustments" for the reasons hereinbefore stated. In the opinion of the company this amount or a substantial portion thereof is properly includible in account 100 "Gas Plant".

Statement H.

[fol. 14499] Michigan Gas Transmission Corporation

Giving a suggested plan for depreciating, amortizing, or otherwise disposing in whole or in part of the amounts, as of January 1, 1940, includible in Account 100.5 Gas Plant Acquisition Adjustments, and Account 107, Gas Plant Adjustments.

No amounts are includible in Account 100.5 Gas Plant Acquisition Adjustments. No definite basis has presently been established by the Company for disposing of the amount classified in our report to Account 107 "Gas Plant Adjustments" for the reasons hereinbefore stated.

[fol. 14500]

Statement I

Michigan Gas Transmission Corporation

Statistical Information Relative to Gas Plant at June 30, 1941

Transmission Mains

Line No.	Description	Size	Length in Feet
A	From Illinois-Indiana State Line to outlet of Gate A-21 approximately 2,000' feet East of Zionsville Compressor Station	20"	370,006
		10"	5,963
AA	From Illinois-Indiana State Line to the Montezuma Compressor Station suction line	24"	49,711
		20"	25
		16"	4,458
		12"	43
AB	From Montezuma Compressor Station discharge line to line A approximately 272' West of block gate A-20 at Zionsville Compressor Station	24"	320,414
		20"	66
AC	From Line "A" to Montezuma Compressor Station suction line	20"	
AD	From Line "A" to Montezuma Compressor Station discharge line	20"	
AE	From Line "A" to Zionsville Compressor Station suction line	18"	
AF	From Line "A" to Zionsville Compressor Station discharge line	18"	
		20"	
		22"	

A-101	Line A to Dana Measuring Station	2"	224
A-102	Line A to Montezuma Measuring and Regulating Station	2"	316
A-103	Line A to Rockville Measuring and Regulating Station	2"	40
A-104	Line A to North Salem Measuring and Regulating Station	2"	894
[fol. 14501] A-105	Line A to Danville Measuring and Regulating Station	2"	78
A-106	Line A to Brownsburg Measuring and Regulating Station	2"	32
A-107	Line A to Lebanon Measuring and Regulating Station and to Public Service Company of Indiana Line	4"	70,016
		3"	5
A-108	Line "A" to Lafayette Line check measuring station and then to Public Service Company of Indiana Line A-501	6"	100,726
		4"	58
A-110	Line A to inlet of Pittsboro Measuring Station	2"	25
A-301	From terminus of A-501 to inlet of Lafayette Measuring Station and from Outlet to terminus of A-501	6"	33
A-302	From A-502 to inlet Williamsport-Attica Measuring Station and from outlet of station to A-502	6"	108
A-303	From A-108 to inlet Crawfordsville Measuring and Regulating Station and from outlet of station to line of Public Service Company of Indiana	6"	380
A-304	From A-108 at Regulating Station to inlet of Roachdale Measuring Station	2"	5
B	From Line "A" near gate valve #21 near Zionsville Compressor Station to King Measuring and Regulating Station	18"	274,400
		10"	566
B-101	From line B to inlet of Zionsville Measuring and Regulating Station	2"	286
[fol. 14502] B-102	From Line B to inlet of Carmel Measuring and Regulating Station	2"	49

B-103	From Line B to inlet of Pendleton Measuring and Regulating Station	3"	9
		2"	59
B-105	Line B to inlet of New Castle Measuring and Regulating Station	3"	27
		6"	17
B-301	Line B-103 to Lapel Regulating Station	2"	15
C	From suction line at Zionsville Compressor Station line AF to Ohio-Indiana State Line (Indiana section)	22"	569,800
		12"	5,669
C	From Ohio-Indiana State Line to Ohio-Michigan Line (Ohio section)	22"	353,500
		12"	3,394
C	From Ohio-Michigan State Line to Detroit Measuring Station outlet (Michigan section)	22"	284,723
		12"	3,974
C-101	Line C to inlet of Fort Wayne Measuring Station and outlet of station to Northern Indiana Public Service Company Line	6"	67,470
C-102	Line C to inlet of Noblesville Measuring and Regulating Station	2"	166
C-103	Line C to inlet of Ann Arbor Measuring and Regulating Station	6"	5
		4"	80
C-104	Line C to inlet of Kokomo Regulating and Measuring Station and from outlet of station to Kokomo Gas Company line	6"	60,493
C-105	Line C to inlet of Bluffton Measuring and Regulating Station	2"	2,864
[fol. 14503] C-106	Line C to inlet of Decatur Regulating and Measuring Station	2"	55
C-107	Line C to inlet of Fairmount Measuring and Regulating Station and from outlet of station to Central Indiana Gas Company Line	6"	20
		4"	73
C-108	Line C to inlet of Wauseon Measuring and Regulating Station	4"	10
		3"	120
C-109	Line C to inlet of Paulding Measuring and Regulating Station	2"	78

C-110	From Line C to 3" line of the Toledo Edison Company	3"	10
C-501	From Toledo Edison Company line to inlet of Defiance Measuring and Regulating Station and from outlet of station to Toledo Edison Company line	3"	20
		2"	20
C-301	From Kokomo Regulating Station to inlet of Tipton Measuring and Regulating Station	2"	30

Statement I
(Continued)

Transmission Plant - Compressor Station

NAME OF PLANT: Montezuma Compressor Station

LOCATION OF PLANT: 1 mile Northeast of Montezuma, Indiana

DATE OF ORIGINAL CONSTRUCTION:

Original Installation	November 19, 1936
1st Additional Installation	September 15, 1937
2nd Additional Installation	October 21, 1940
3rd Additional Installation	November 8, 1940

TYPE AND RATED CAPACITY OF POWER UNITS:

Original Installation	2 units	Worthington 24" x 36", 1300 BHP, 125 RPM, normal speed, horizontal, twin tandem, double acting, gas engines
1st Addition	2 units	Do
2nd Addition	1 unit	Do
3rd Addition	1 unit	Do

TYPE AND RATED CAPACITY OF COMPRESSOR UNITS:

Original Installation	4 units	15" x 36" Worthington feather valve type, designed for 500#/ square inch with two pocket unloaders. Cylinders designed for 14" to 18" range and fitted with 3 valves per corner
1st Addition	4 units	Do
2nd Addition	4 units	Do

ORIGINAL COST AT JUNE 30, 1941:

Account No.	Account Title	Amount
351.1	Land	$ 6,040.93
352.1	Pumping Station Structures	161,806.56
354.1	Pumping Station Equipment	702,837.64
	Total	$870,685.13

Statement I
(Continued)

NAME OF PLANT: Zionsville Compressor Station

LOCATION OF PLANT: 1 mile South of Zionsville, Indiana

DATE OF ORIGINAL CONSTRUCTION:

Original Installation	October 14, 1937
1st Addition	August 8, 1940

TYPE AND RATED CAPACITY OF POWER UNITS:

Original Installation	4 units - 24" x 36", 1300 BHP, 125 RPM normal speed, horizontal, twin tandem, double acting Worthington gas engines.
1st Addition	1 unit - Do

TYPE AND RATED CAPACITY OF COMPRESSOR UNITS:

Original Installation	8 units - 13-1/8" x 36" Worthington feather valve type, gas compressor cylinders, designed for 800#/sq. in. working pressure and provided with 2 pocket unloaders. Designed for range of 11-1/2" to 13-1/8" diameter and fitted with 3 valves per corner.
1st Addition	2 units - Do

ORIGINAL COST AT JUNE 30, 1941:

Account No.	Account Title	Amount
351.1	Land	$ 15,216.80
352.1	Pumping Station Structures	156,690.19
354.1	Pumping Station Equipment	634,786.44
	Total	$806,693.43

Statement I
(Continued)

NAME OF PLANT: Edgerton Compressor Station

LOCATION OF PLANT: 2 miles South of Edgerton, Indiana

DATE OF ORIGINAL CONSTRUCTION:

Original Installation — December 16, 1940

TYPE AND RATED CAPACITY OF POWER UNITS:

Original Installation — 3 units - 24" x 36" Cooper-Bessemer, 1300 BHP, 125 RPM, Type 24, horizontal, twin tandem, double acting gas engines

TYPE AND RATED CAPACITY OF COMPRESSOR UNITS:

Original Installation — 6 units - 13-1/4" x 36" Cooper-Bessemer Compressor cylinders, designed for 600#/ sq. in. working pressure and equipped with two pocket unloaders.

ORIGINAL COST AT JUNE 30, 1941:

Account No.	Account Title	Amount
351.1	Land	$ 3,005.16
352.1	Pumping Station Structures	127,763.65
354.1	Pumping Station Equipment	474,602.95
	Total	$605,371.76

[fol. 14507]

Exhibit 92

Michigan Gas Transmission Corporation

Original Cost Depreciated to Present Condition as at June 30, 1941
and Observed Depreciation as at June 30, 1941

	Original cost	(a) Percent condition as established By Messrs. Riddle, Lehn, and Haberly	Original Cost depreciated to present condition	Observed depreciation
Intangible Plant:				
Organization	$ 10,332.75	100.00	$ 10,332.75	$ —
Miscellaneous intangible plant	73,667.17	100.00	73,667.17	—
Transmission Plant:				
Land	26,145.95	100.00	26,145.95	—
Land rights	241,467.33	100.00	241,467.33	—
Pumping station structures	446,260.40	96.38	430,105.77	16,154.63
Measuring and regulating station structures	48,566.50	94.72	46,002.19	2,564.31
Other transmission system structures	27,992.48	93.22	26,094.59	1,897.89
Mains	9,275,438.65	97.79	9,070,451.46	204,987.19
Pumping station equipment	1,812,503.71	96.72	1,753,053.59	59,450.12
Measuring and regulating station equipment	125,826.02	92.77	116,728.80	9,097.22
Other transmission system equipment	121.09	98.00	118.67	2.42
General Plant:				
Office furniture and equipment	14,879.76	78.00	11,606.21	3,273.55
Transportation equipment	33,837.47	71.00	24,024.60	9,812.87
Stores equipment	1,609.47	90.00	1,448.52	160.95
Tools and work equipment	13,454.07	79.00	10,628.72	2,825.35
Construction Work In Progress	109,157.73	100.00	109,157.73	—
Total	$12,261,260.55	97.47	$11,951,034.05	$310,226.50

(a) Percent condition shown in Exhibits 80, 81, and 82, as summarized and applied to reproduction new value of "Gas Plant" by Francis S. Haberly, Engineer, in his Exhibit 84. Such percent condition was developed and weighted on the basis of the reproduction cost of the "Gas Plant". If such percent condition had been weighted on the basis of original cost, the resulting percent condition of the property would have been slightly higher than the amount shown in this statement.

Exhibit 93
Page No. 1
Contributions to Customers
Witness - Spitznagle

MICHIGAN GAS TRANSMISSION CORPORATION

Statement of Contributions made to Customers for Business Development
For the Years 1936, 1937 and Five Months Ended May 31, 1938
(effective date of Natural Gas Act June 21, 1938)

	Periods in which charges were made against income			
	Year Ended December 31,		Five Months Ended	
	1936	1937	May 31, 1938	Total
Detroit City Gas Company				
1. Contractual Discount allowed per provisions of Article VII of Gas Contract dated March 17, 1936	$ -	$43,560.00	$ -	$43,560.00
2. Allowance for housheating customers per provisions of Article IV of Supplemental Gas Contract dated June 2, 1936. (18,000 customers - 5,000 at $10.00 ea., 4,000 at $8.00 ea., 3,000 at $6.00 ea., 3,000 at $4.00 ea., 3,000 at $2.00 ea.)	11,251.15	7,794.47	614.20	19,659.82
Kokomo Gas and Fuel Company				
1. Contractual Discounts allowed on basis of gas deliveries per provisions of Article XVII of Gas Contract dated September 27, 1937	-	2,374.98	3,233.22	5,608.20
2. Allowance for conversion costs per Exhibit "C" of Gas Contract dated September 27, 1937. (4,939 customers at $1.50 ea.)	-	617.37	1,790.45	2,407.82
Public Service Company of Indiana				
1. Conversion cost per provisions of Article XVII of agreement dated October 1, 1936, covering customers in New Castle, Indiana (2,789 customers at $1.50 ea.)	-	$ 4,183.50	-	$ 4,183.50
2. Contribution per provisions of agreement dated June 29, 1937 covering changeover of facilities of Ingersoll Steel and Disc Division of Borg-Warner Corporation	-	39.35	135.41	174.76
3. Contribution per provision of agreement dated May 4, 1937 covering addition of facilities of Ingram Richardson Manufacturing Company	-	4,140.00	-	4,140.00
4. Contractual discounts allowed per provisions of Article XVII of Gas Contract dated October 1, 1936	-	27,095.81	16,636.85	43,732.66
5. Allowance for conversion costs per provisions of Article XVII of Gas Contract dated October 1, 1936 (15,870 customers at $1.50 each)	-	10,609.13	1,983.75	12,592.88

MICHIGAN GAS TRANSMISSION CORPORATION

Statement of contributions made to customers for Business Development
For the Years 1936,1937 and Five Months Ended May 31, 1938.

	Periods in which charges were made against Income			
	Year Ended December 31,		Five Months Ended	
	1936	1937	May 31, 1938	Total
Northern Indiana Public Service Company				
1. Contractual discount allowed per provisions of Article XVII of Gas Contract dated May 1, 1937	-	$ 15,416.68	$ 15,285.29	30,701.97
2. Allowance for conversion costs per provision of Gas Contract (Exhibit "C") dated May 1, 1937 (28,944 customers at $1.50 each)	-	7,236.00	8,629.08	15,865.08
Total	$ 11,251.15	$123,067.29	$ 48,308.25	$182,626.69

[fol. 14510]

Exhibit 94.

No. of Pages—7

Page No. 1

Witness—Spitznagle

Michigan Gas Transmission Corporation

Working Capital as at June 30, 1941

The following constitutes the reasonable amount of working capital employed and currently needed in the conduct of the business which would be deprived of any return unless included in the rate base.

Cash fund operating expenses, based on monthly average of pro forma operating expenses, excluding purchased gas, taxes, prepayments and depreciation and amortization and using 45 days (average period, in days, expense is paid before it is repaid by customer), from Page No. 2	$ 47,175.05
Materials and supplies, based on actual material and supplies on hand at June 30, 1941, per books, plus estimated amount of increase therein resulting from change in price trends to June 30, 1941, from Page No. 3	100,723.78
Purchased gas cost for line pack after deducting any portion of such cost capitalized, based upon average for twelve months ended June 30, 1941, from Page No. 4	31,406.70
Prepayments consisting of average of amounts applicable to subsequent periods as recorded on balance sheets during the twelve months ended June 30, 1941, from Page No. 6	4,538.55
Minimum bank balances required to support check privileges, based upon advice received from depositories, from Pages No. 5 and 7	116,303.00
Total Working Capital	$300,147.08

MICHIGAN GAS TRANSMISSION CORPORATION

Cash Funds For Operating Expenses

	1940 July	August	September	October	November	December	1941 January	February	March
Operation, Exclusive of Purchased Gas	$25,164.79	$25,110.32	$22,580.12	$23,512.38	$25,676.84	$*(4,043.54)	$33,661.10	$30,790.04	$31,398.
Purchased Gas	190,370.17	218,146.47	217,871.18	251,194.28	238,983.05	235,287.11	261,859.11	257,975.77	281,959.
Maintenance	6,093.09	8,341.02	5,488.00	3,602.59	3,336.83	4,556.73	3,402.51	2,978.28	5,575.
Taxes - State and Local	12,528.28	12,608.37	11,095.98	12,477.69	17,128.59	4,399.42	12,931.42	12,932.16	12,961.
- Federal	7,286.12	6,017.79	142,517.92	16,119.15	19,571.22	49,187.31	35,679.89	12,017.48	24,443.
Depreciation or Amortization	18,444.31	20,493.68	22,250.28	26,349.02	27,812.85	31,033.29	38,508.13	33,781.78	34,840.
Total Operating Expenses	$259,886.76	$290,717.65	$421,803.48	$333,255.11	$332,514.38	$320,420.32	$386,042.16	$350,475.51	$391,177.
Exclusions:									
Purchased Gas, ~~Schedule~~	$190,370.17	$218,146.47	$217,871.18	$251,194.28	$238,988.05	$235,287.11	$261,859.11	$257,975.77	$281,959.
Taxes, ~~Schedule~~	19,814.40	18,626.16	153,613.90	28,596.84	36,699.81	53,586.73	48,811.31	24,949.64	37,404.
Prepayments Included in Operation and Maintenance, ~~Schedule~~	685.84	740.85	722.59	965.37	636.19	645.84	772.56	693.28	812.
Depreciation or Amortization	18,444.31	20,493.68	22,250.28	26,349.02	27,812.85	31,033.29	38,508.13	33,781.78	34,840.
Total Exclusions	$229,314.72	$258,007.16	$394,457.95	$307,105.51	$304,136.90	$320,552.97	$349,751.11	$317,400.47	$355,016.
Net for Cash Fund Computation	$30,572.04	$32,710.49	$27,345.53	$26,149.60	$28,377.48	$*(132.65)	$36,291.05	$33,075.04	$36,160.
Pro Forma Adjustments:									
Overall Wage Increase									
Estimated Increase in Operation and Maintenance Costs Resulting Upon the Completion of Construction Work in Progress									
Pro Forma Net for Cash Fund Computation									
Cash Fund Operating Expenses: (Net for Cash Fund Computation Times Ratio of Average Period in Days Said Expenses Were Paid Before Repaid by Customers, to Period of 30 Days)	$30,572.04 x 45/30	$32,710.49 x 45/30	$27,345.53 x 45/30	$26,149.60 x 45/30	$28,377.48 x 45/30	$*(132.65) x 45/30	$36,291.05 x 45/30	$33,075.04 x 45/30	$36,160. x 45/
	$45,858.06	$49,065.74	$41,018.30	$39,224.40	$42,566.22	$*(198.98)	$54,436.58	$49,612.56	$54,241.

ORATION

enses

1941						Total and Pro Forma for the Year Ended June 30, 1941	Monthly Average of Total and Pro Forma
January	February	March	April	May	June		
$33,661.10	$30,790.04	$31,398.28	$31,210.99	$27,915.47	$28,309.19	$301,285.98	$25,107.17
261,859.11	257,975.77	281,959.06	251,200.36	251,089.44	239,805.88	2,895,746.88	241,312.24
3,402.51	2,978.28	5,575.20	5,046.97	4,389.57	4,399.73	57,210.52	4,767.54
12,931.42	12,932.16	12,961.09	12,956.05	12,901.01	11,392.34	146,312.40	12,192.70
35,679.89	12,017.48	24,443.10	24,004.56	25,025.47	32,048.20	393,918.21	32,826.52
38,508.13	33,781.78	34,840.69	30,073.01	27,872.55	23,104.88	334,564.47	27,880.37
$386,042.16	$350,475.51	$391,177.42	$354,491.94	$349,193.51	$339,060.22	$4,129,038.46	$344,086.54
$261,859.11	$257,975.77	$281,959.06	$251,200.36	$251,089.44	$239,805.88	$2,895,746.88	$241,312.24
48,611.31	24,949.64	37,404.19	36,960.61	37,926.48	43,440.54	540,230.61	45,019.22
772.56	693.28	812.76	721.13	865.88	932.91	9,195.20	766.27
38,508.13	33,781.78	34,840.69	30,073.01	27,872.55	23,104.88	334,564.47	27,880.37
$349,751.11	$317,400.47	$355,016.70	$318,955.11	$317,754.35	$307,284.21	$3,779,737.16	$314,978.10
$36,291.05	$33,075.04	$36,160.72	$35,536.83	$31,439.16	$31,776.01	$349,301.30	$29,108.44
						22,099.00	1,841.59
						6,000.00	500.00
						377,400.30	31,450.03
$36,291.05 x 45/30	$33,075.04 x 45/30	$36,160.72 x 45/30	$35,536.83 x 45/30	$31,439.16 x 45/30	$31,776.01 x 45/30		$31,450.03 x 45/30
$54,436.58	$49,612.56	$54,241.08	$53,305.25	$47,158.74	$47,664.02		$47,175.05

Exhibit 94

Page No. 3

MICHIGAN GAS TRANSMISSION CORPORATION

Statement of Materials and Supplies, by Months,
for Twelve and Eighteen Months Ended June 30, 1941

		Amount on hand at end of month, per books	Estimated amount of increase resulting from change in price trends to June 30, 1941	Total
		(A)	(B)	(C)
(1)	Average for eighteen months ended June 30, 1941	$ 70,611.77	$ 6,810.83	$ 77,422.60
(2)	Average for twelve months ended June 30, 1941	74,763.73	7,182.58	81,946.31
(3)	1940 - January	58,959.83	5,626.00	64,585.83
(4)	February	60,840.16	5,804.00	66,644.16
(5)	March	60,720.57	5,804.00	66,524.57
(6)	April	64,485.87	5,804.00	70,289.87
(7)	May	63,959.30	6,586.00	70,545.30
(8)	June	64,881.32	6,780.00	71,661.32
(9)	July	62,603.25	6,902.00	69,505.25
(10)	August	62,643.64	6,902.00	69,545.64
(11)	September	63,320.01	6,902.00	70,222.01
(12)	October	62,866.09	7,210.00	70,076.09
(13)	November	62,853.21	7,210.00	70,063.21
(14)	December	78,172.35	7,255.00	85,427.35
(15)	1941 - January	78,226.71	7,255.00	85,481.71
(16)	February	79,343.45	7,311.00	86,654.45
(17)	March	80,518.97	7,311.00	87,829.97
(18)	April	83,297.44	7,311.00	90,608.44
(19)	May	89,906.87	7,311.00	97,217.87
(20)	June	93,412.78	7,311.00	100,723.78

[fol. 14513]

Exhibit 94

Michigan Gas Transmission Corporation

Statement of Gas Line Pack, by Months, for Twelve Months Ended June 30, 1941

	Quantity of Gas in Line Pack at end of Month (Therms)	Cost Per Therm—¢	Aggregate Cost of Gas Line Pack at end of Month	Cost of Gas Line Pack Charged to "Gas Plant"	Cost of Gas Line Pack Not Capitalized
Average for twelve months ended June 30, 1941	1,502,838	2.378	$37,883.15	$6,476.45	$31,406.70
1940 — July	1,240,639	2.480	30,767.85	6,476.45	24,291.40
August	1,399,780	2.373	33,216.78	6,476.45	26,740.33
September	1,272,970	2.311	29,418.34	6,476.45	22,941.89
October	1,563,547	2.306	36,055.39	6,476.45	29,578.94
November	1,822,328	2.374	43,262.07	6,476.45	36,785.62
December	1,789,760	2.371	42,435.21	6,476.45	35,958.76
1941 — January	1,754,994	2.371	41,610.91	6,476.45	35,134.46
February	1,705,762	2.446	41,722.94	6,476.45	35,246.49
March	1,685,141	2.328	39,230.08	6,476.45	32,753.63
April	1,723,623	2.423	41,763.39	6,476.45	35,286.94
May	1,646,910	2.379	39,179.99	6,476.45	32,703.54
June	1,508,602	2.382	35,934.90	6,476.45	29,458.45

[fol. 14514] Exhibit 94.

Page No. 5.

National Bank of Detroit

Detroit, Michigan

September 30, 1941

Elbert S. Burns

Mr. George S. Young, Vice President
Michigan Gas Transmission Corporation
1316 United Artists Building
Detroit, Michigan

Dear Mr. Young:

In compliance with your request that we furnish your office with the aggregate gross deposits which it will be necessary for you to maintain in our bank, to maintain the accounts which you carry on our books in a manner satisfactory to us, we are pleased to advise you as follows:

Upon making our standard analysis based on the average activity in all accounts for the first eight months of 1941 and taking into account the increased reserve requirements which will be effective as of November 1, 1941, as well as the matter of our customary nominal profit we find that we will require $116,303.00 aggregate gross balances to maintain the accounts under the same conditions as we experienced the first eight months of this year.

This figure will, of course, be subject to adjustment from time to time as the activity varies for quarterly or semi-annual periods.

We trust this meets fully with your request.

Very truly yours,

ELBERT S. BURNS, (signed)
Cashier.

ESB:GMc

MICHIGAN GAS TRANSMISSION CORPORATION

Statement of Prepayments, by Months
For Twelve Months Ended June 30, 1941

	Average For Twelve Months Ended June 30, 1941	1940 July	August	September	October	November	
Insurance:							
Automobile Fire and Theft	$ 49.03	$ 73.01	$ 68.65	$ 64.29	$ 59.93	$ 55.57	
Automobile Public Liability and Property Damage	70.74	141.36	123.69	106.02	88.35	70.68	
Boiler	120.30	--	--	--	57.19	55.86	
Robbery and Safe Burglary	12.53	5.74	4.92	4.10	3.28	2.46	
Fidelity Bond	21.86	14.44	10.83	7.22	3.61	--	
Fire - Compressor Stations	971.88	546.54	511.28	476.02	440.76	405.50	
Fire - Miscellaneous Properties	23.79	42.09	40.26	38.43	36.60	34.77	
Forgery	6.30	7.86	8.46	7.96	7.51	7.06	
Group Life	540.30	--	--	--	1,440.80	1,260.70	1
General Excess Public Liability & Property Damage	436.35	927.63	795.24	651.92	407.44	251.85	
Riot and Malicious Damage	66.66	155.30	138.42	121.54	104.66	87.78	
Workmens' Compensation	344.55	484.24	236.80	30.56	--	--	
Taxes:							
Property - Michigan	213.02	621.88	520.45	413.37	306.29	199.21	
Automobile and Truck Lincenses	437.73	394.09	374.20	297.00	219.83	142.66	
Rentals	993.23	1,202.85	1,111.95	1,017.62	905.45	804.19	
Dues and Memberships	141.43	230.54	166.97	103.40	195.77	138.26	
Other Prepayments	88.85	--	--	--	--	--	
Total Prepayments	$4,538.55	$4,847.57	$4,112.12	$3,339.45	$4,277.47	$3,516.55	$3

Exhibit 94
Page No. 6
Prepayments

)RATION

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0; 1941

tober	November	December	1941 January	February	March	April	May	June
59.93	$ 55.57	$ 51.21	$ 46.85	$ 42.49	$ 38.13	$ 33.77	$ 29.41	$ 25.05
88.35	70.68	53.01	35.34	17.67	--	--	--	212.76
57.19	55.86	54.53	53.20	51.87	304.76	296.74	288.72	280.70
3.28	2.46	20.14	19.61	19.08	18.55	18.02	17.49	16.96
3.61	--	44.44	40.40	36.36	32.32	28.28	24.24	20.20
40.76	405.50	370.24	334.98	299.72	2,172.87	2,103.89	2,034.91	1,965.93
36.60	34.77	32.94	31.11	29.28	--	--	--	--
7.51	7.06	6.61	6.16	5.71	5.26	4.81	4.36	3.91
40.80	1,260.70	1,080.60	900.50	720.40	540.30	360.20	180.10	--
07.44	251.85	78.15	6.60	5.40	4.20	3.00	1,121.88	982.83
04.66	87.78	70.90	54.02	37.14	23.64	6.50	--	--
--	--	--	1,045.16	858.76	666.77	467.03	268.83	76.53
06.29	199.21	126.94	108.20	89.46	70.72	51.98	33.24	14.50
19.83	142.66	531.68	460.84	699.80	629.10	565.14	501.18	437.22
05.45	804.19	729.77	589.68	522.79	418.40	1,245.45	1,671.64	1,698.93
95.77	138.26	73.49	199.84	122.01	49.18	132.83	174.56	110.29
--	--	--	222.75	202.50	182.25	162.00	141.75	154.95
77.47	$3,516.55	$3,324.65	$4,155.24	$3,760.44	$5,156.45	$5,479.64	$6,492.31	$6,000.76

MICHIGAN GAST TRANSMISSION CORPORATION

Statement of Cash in Banks and on Hand
By Months for Twelve Months Ended June 30, 1941

	Average (A)	1940 July (B)	August (C)	September (D)	October (E)	November (F)	December (G)	1941 January (H)
National Bank of Detroit								
Accounts maintained:								
General account								
Disbursement account								
Paymaster account								
Office payroll account								
Six special accounts under agency transportation agreements with Panhandle Eastern Pipe Line Company:								
Eight petty cash accounts for system cashiers located at various points in the system:								
(1) **Total balance of all of the above accounts at end of month**	**$471,214.49**	**$574,893.33**	**$ 690,486.92**	**$372,494.96**	**$255,207.12**	**$403,646.38**	**$401,286.58**	**$424,374.2**
(2) **Total minimum requirement(1)**	**116,303.00**	**116,303.00**	**116,303.00**	**116,303.00**	**116,303.00**	**116,303.00**	**116,303.00**	**116,303.0**
Irving Trust Company, New York City								
General account:								
(3) Balance at end of month	304,500.00	260,000.00	310,000.00	310,000.00	310,000.00	160,000.00	560,000.00	560,000.0
(4) Minimum requirement(2)	-	-	-	-	-	-	-	-
(5) Petty cash fund kept at Detroit office by Mr. L. J. Mueller, Asst. Treasurer	700.00	700.00	700.00	700.00	700.00	700.00	700.00	700.0
Total:								
(6) Cash in bank and on hand at end of month	**776,414.49**	**835,593.33**	1,001,186.92	683,194.96	565,907.12	564,346.38	961,986.58	985,074.2
(7) Minimum requirement(1)(2)	**116,303.00**	**116,303.00**	116,303.00	116,303.00	116,303.00	116,303.00	116,303.00	116,303.0

(1) On advice of National Bank of Detroit as per their letter of September 30, 1941.
(2) Account not active and while some minimum balance is required, none is claimed in the instant cause.

Exhibit 94
Page 7

14516

Cash in Banks and on Hand

SSION CORPORATION

anks and on Hand
Ended June 30, 1941

			1941				
vember (F)	December (G)	January (H)	February (I)	March (J)	April (K)	May (L)	June (M)
3,646.38	$401,286.58	$424,374.22	$ 511,358.81	$495,459.76	$543,481.89	$629,712.08	$352,171.83
6,303.00	116,303.00	116,303.00	116,303.00	116,303.00	116,303.00	116,303.00	116,303.00
0,000.00	560,000.00	560,000.00	560,000.00	156,000.00	156,000.00	156,000.00	156,000.00
700.00	700.00	700.00	700.00	700.00	700.00	700.00	700.00
4,346.38	961,986.58	985,074.22	1,072,058.81	652,159.76	700,181.89	786,412.08	508,871.83
6,303.00	116,303.00	116,303.00	116,303.00	116,303.00	116,303.00	116,303.00	116,303.00

instant cause.

Exhibit 95
No. of Pages - 1
Page No. 1
Witness-Young

MICHIGAN GAS TRANSMISSION CORPORATION

Estimated Cost of Completing Work in Progress at June 30, 1941 and Estimated Gross Income to be Derived from the Completed Projects

Line No.	Description of Project (A)	Total estimated project expenditure (B)	Construction work in progress (C)	Estimated amount required to complete construction work in progress (D)	Estimated gross operating income before depreciation and Federal income tax, to be derived from completed projects (E)
1	Routine minor additions to transmission				
2	system property	$ 27,057	$ 4,877	$ 22,180	$ *(270)
3	Routine minor additions to general				
4	property	4,869	1,244	3,625	- (a)
5	Expenditures applicable to 24" Loop Line				
6	construction in 1940, recorded on				
7	the books in 1941	75,174	60,174	15,000	*(750) (b)
8	Expenditures applicable to construction of				
9	Edgerton Compressor Station in				
10	1940, recorded on the books in 1941	25,271	24,921	350	*(210) (b)
11	Construction of Central Warehouse near				
12	Bluffton, Indiana	28,272	1,272	27,000	*(295)
13	Construction of Measuring and Regulating				
14	Station near Monroe, Michigan	4,793	468	4,325	6,875
15	Construction of Measuring and Regulating				
16	Station near Elwood, Indiana	4,167	160	4,007	*(540)
17	Installation of two additional units at				
18	Edgerton Compressor Station	285,550	16,042	269,508	*(6,935)
19	Total	$ 455,153	$ 109,158	$ 345,995	*(2,125)

* ( ) Denotes red figure

(a) - The routine minor additions to general property represent mainly office furniture and equipment. No additional operating expenses are expected to be incurred on account of these additions and the amount of depreciation and taxes applicable thereto are negligible.

(b) - The 24" loop line and the Edgerton compressor station were placed in service on November 1, 1940 and December 16, 1940, respectively, and revenues and expenses resulting from their operation subsequent to such dates are reflected in the gross operating income for twelve months ended June 30, 1941.

[fol. 14519] Exhibit 97.

Michigan Gas Transmission Corporation

Variation in Purchase Power of Dollar As Related To "Gas Plant"

Francis S. Haberly
Consulting Engineer
Chicago

[fol. 14520] Michigan Gas Transmission Corporation

Variation In Purchasing Power Of Dollar As Related To "Gas Plant"

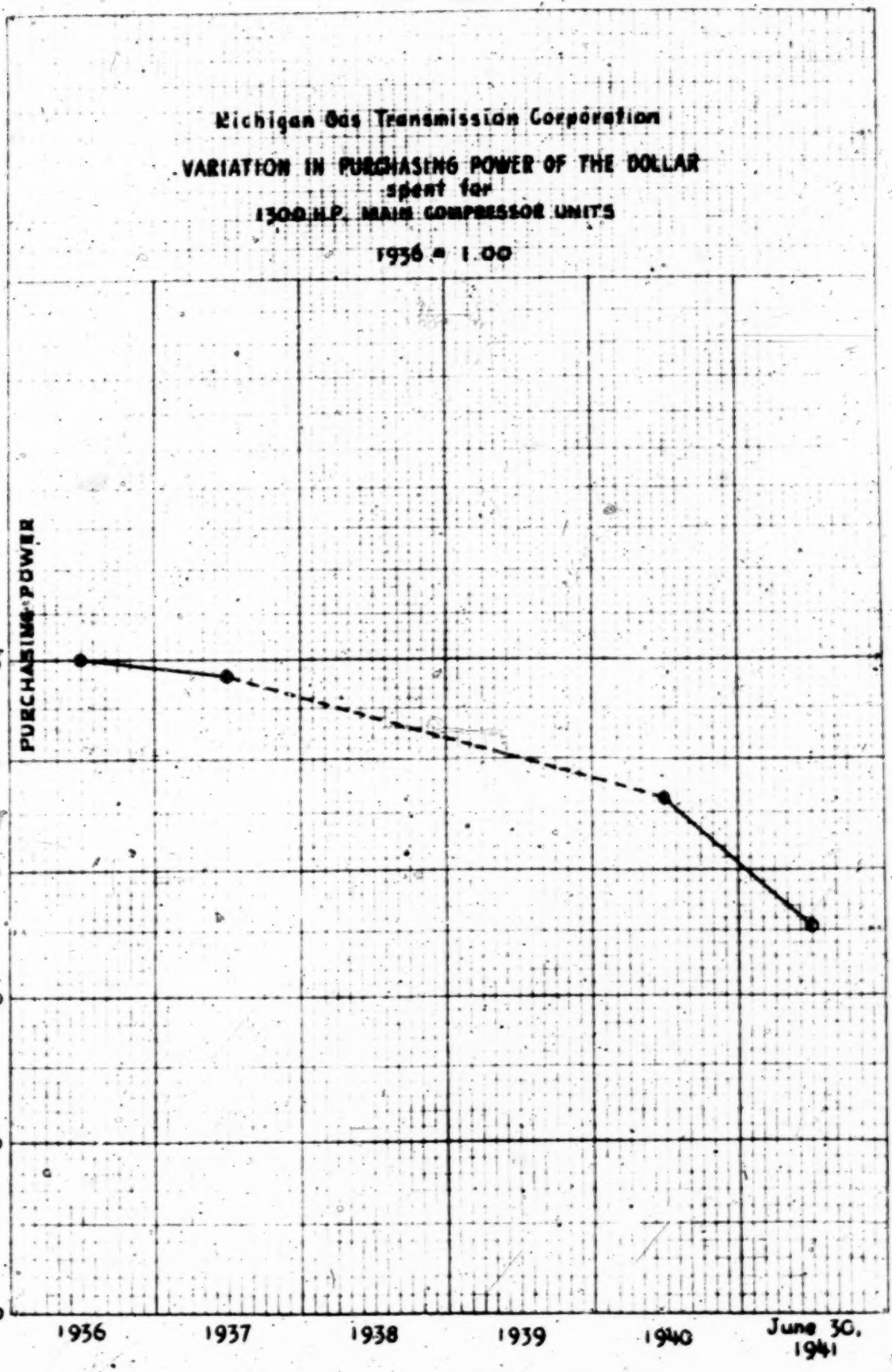
The attached charts show the yearly variation in purchasing power of the dollar as spent for construction of certain important parts of the plant and property of the Michigan Gas Transmission Corporation. The tabulation following the charts shows numerically the same data as shown on the charts, plus the numerical data covering variation in purchasing power of the dollar with regard to several other parts of the property.

While a small part of the mains were constructed in 1930 and 1931, the present company was formed in 1935, and construction on a broad scale started in 1936. For this reason, the year 1936 has been taken as 1.00. The figures for other years express the relative purchasing power of the dollar as compared with 1936. For example, in the first column, headed "1300 hp. Main Compressor Units," the figures express the purchasing power of the dollar relative to 1936 as experienced in the purchase of equipment of this type by the Michigan Gas Transmission Corporation. Likewise, the figures in the succeeding columns express the purchasing power of the dollar relative to 1936 as experienced in the purchase or construction of other items of property.

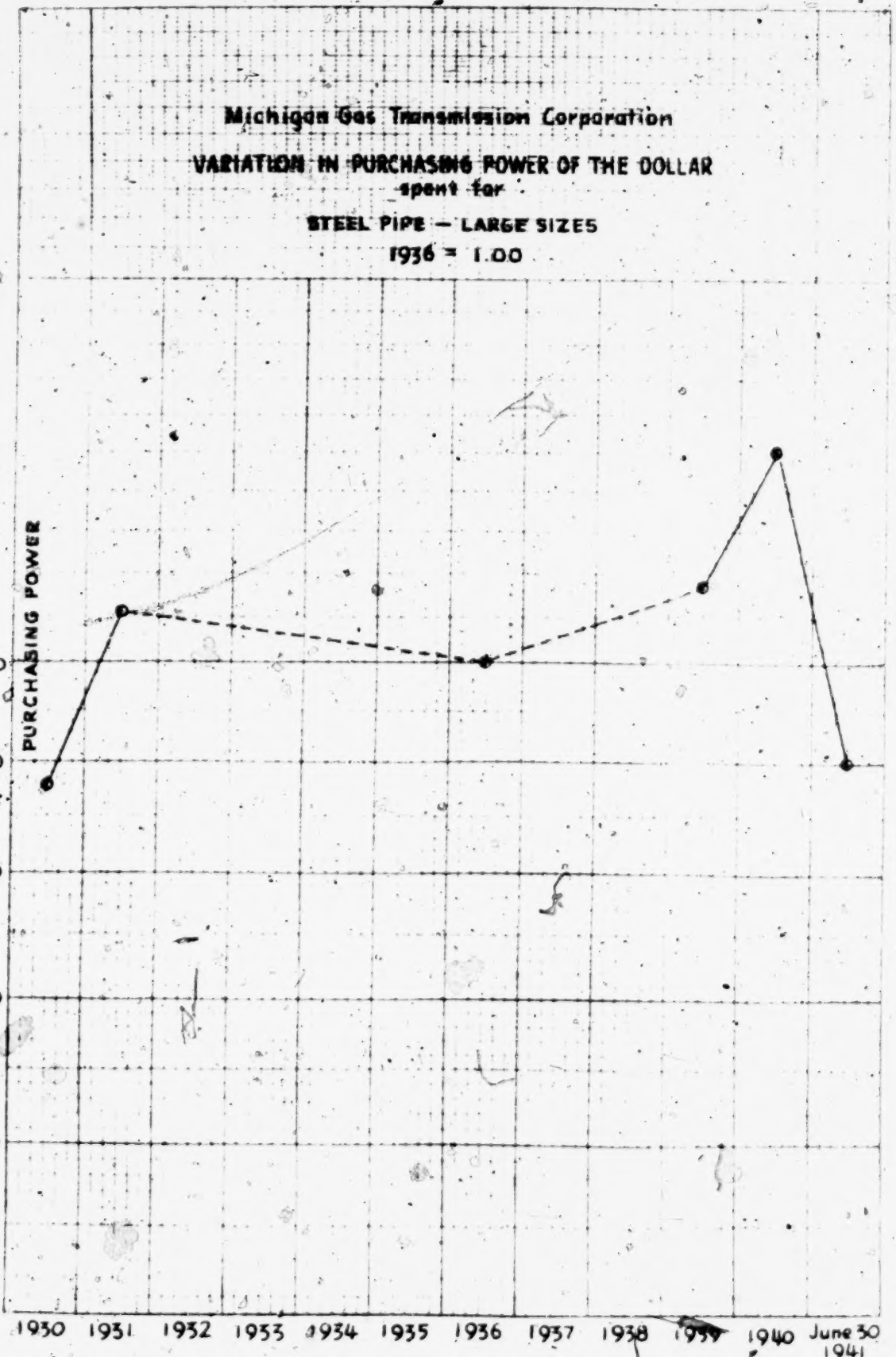
The last column on this tabulation, headed "Composite of Total 'Gas Plant' ", represents the variation in the purchasing power of the dollar as spent for all the property constructed each year.

[fol. 14521] The figure of .862, as shown in the lower right hand corner of the tabulation opposite the caption "Purchasing Power at June 30, 1941 of Actual Dollars spent on 'Gas Plant'," expresses the percent of property that could have been built at the time the various units of property were built by using today's dollar with its present purchasing power. In other words, the same number of dollars as were originally spent for this property, if spent as of June 30, 1941, would build only 86.2% of the present plant.

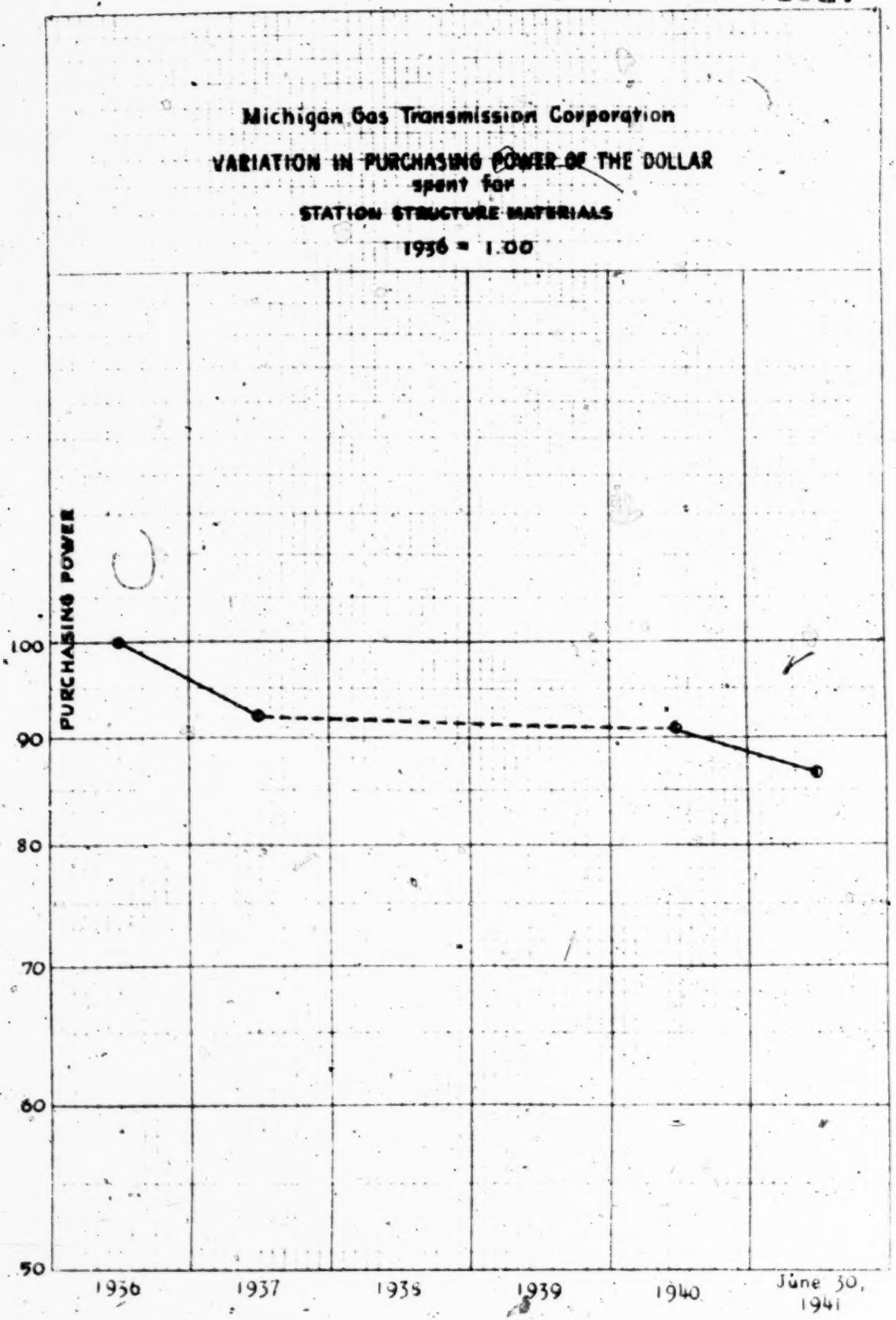
PART OF EXHIBIT 97. 4923



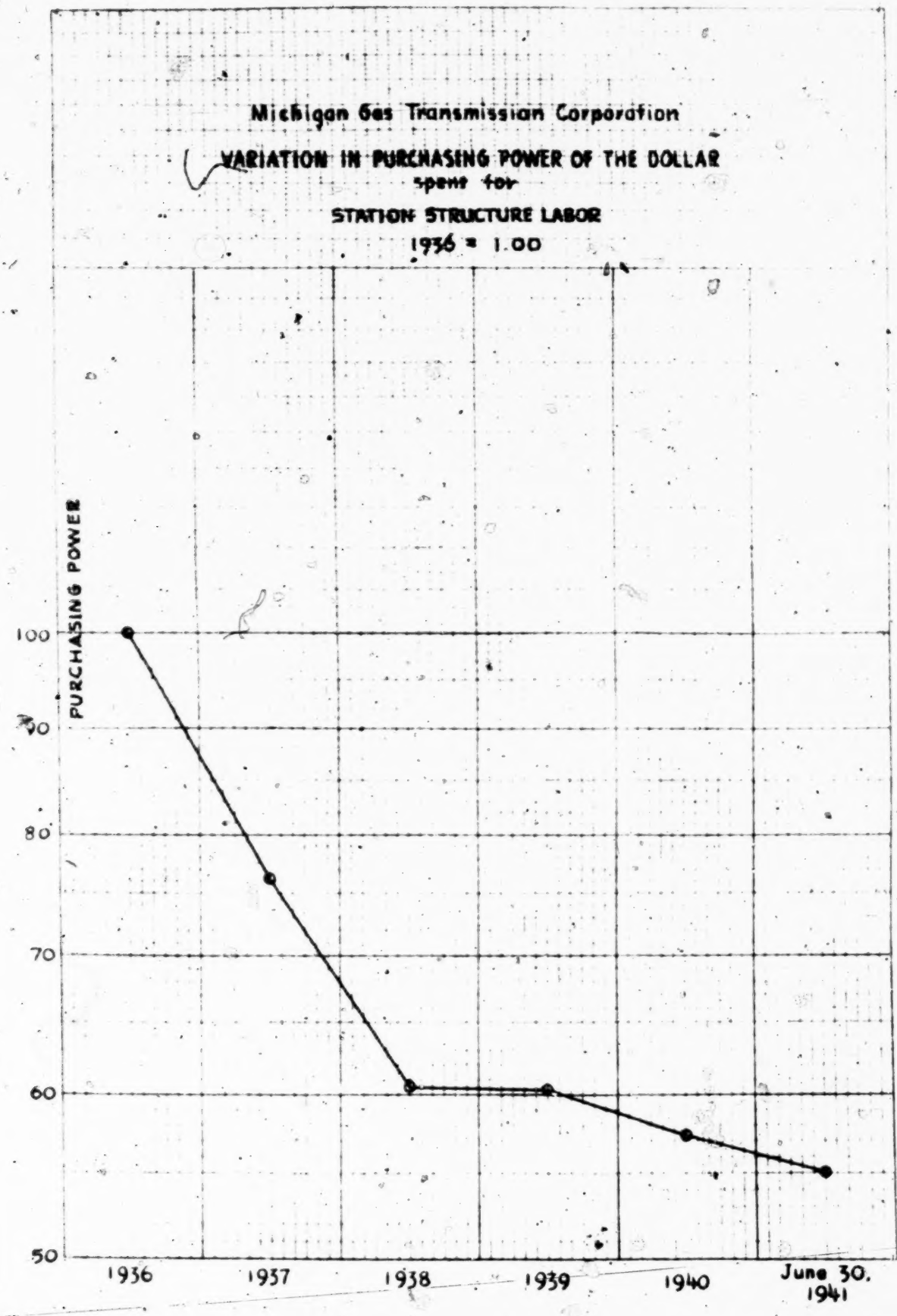
PART OF EXHIBIT 97. 4025



PART OF EXHIBIT 97. 4927



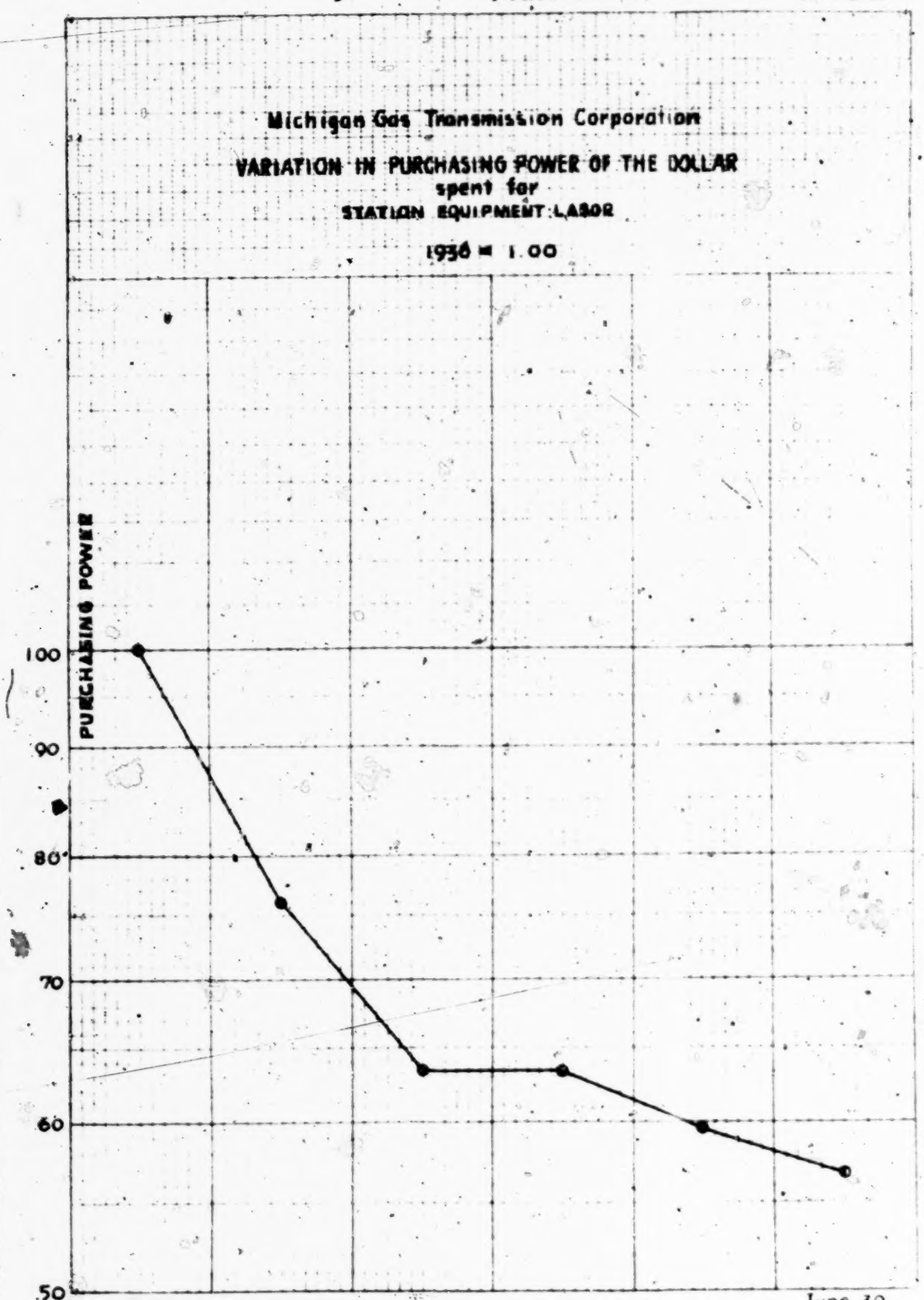
PART OF EXHIBIT 97. 4929



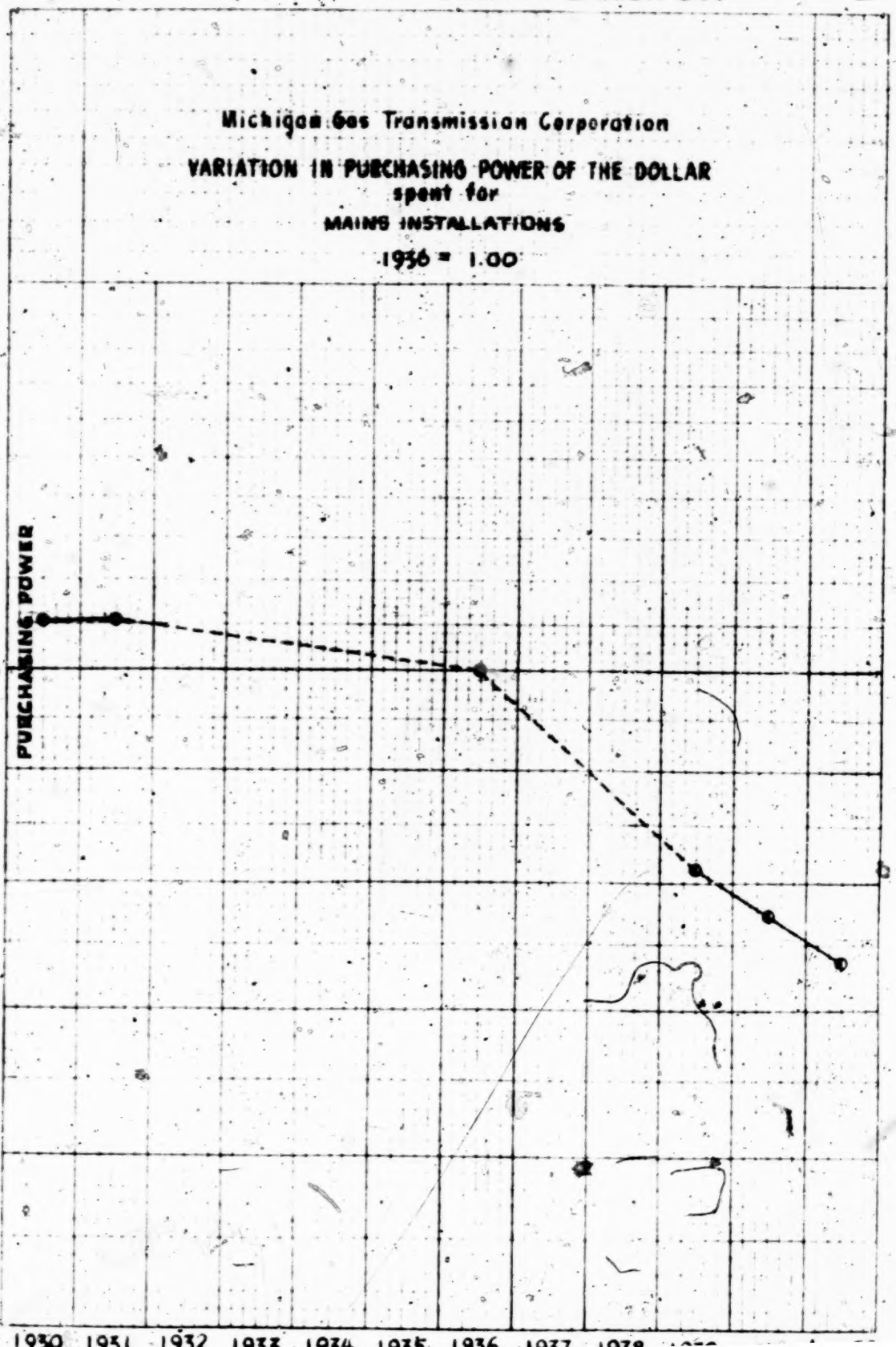
Michigan Gas Transmission Corporation

VARIATION IN PURCHASING POWER OF THE DOLLAR
spent for
STATION EQUIPMENT LABOR

1936 = 1.00



June 30


Michigan Gas Transmission Corporation
VARIATION IN PURCHASING POWER OF THE DOLLAR
spent for
MAINS INSTALLATIONS
1936 = 1.00
PURCHASING POWER
100
90
80
70
60
50
1930
1931
1932
1933
1934
1935
1936
1937

Michigan Gas Transmission Corporation

VARIATION IN PURCHASING POWER OF DOLLAR AS RELATED TO "GAS PLANT"

1936 = 1.00

	1300 hp. Main Compressor Units	180 hp. Engine-Generators	Worthington Pumps	Elevated Water Tanks-erected	12-ton Traveling Cranes	Steel Pipe, Large Sizes per net ton f.o.b. mill	Valves, Large Sizes f.o.b. mill	Main Compressor Buildings	Stati Equipm Labo
	-	-	-	-	-	.878	1.189	-	-
	-	-	-	-	-	1.056	1.257	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0
	.982	.883	.877	.857	.774	-	.818	.848	.7
	-	-	.877	.885	.736	-	.804	-	-
	-	-	.865	.860	.736	1.083	.806	-	-
	.862	.832	.852	.803	.736	1.251	.806	.774	.5
30, 1941	.753	.773	.774	.692	.555	.800	.749	.736	.5

Pu
of

alves, ge Sizes .b. mill	Main Compressor Buildings	Station Equipment Labor	Stati Structu Labor
.189	-	-	-
.257	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
.000	1.000	1.000	1.00
.818	.848	.760	.76
.804	-	-	-
.806	-	-	-
.806	.774	.596	.5
.749	.736	.568	.5

Purchasing Power
of Actuel Dollar

	Mains Installations Large Sizes (reflecting use of modern methods and machinery)	Composite of Total "Gas Plant"
)	1.052	0.952
)		1.023
	-	-
	-	-
	-	-
	-	-
00	1.000	1.000
63	-	.980
	-	.868
	.811	.943
74	.772	.958
50	.736	.847

at June 30, 1941
s spent on "Gas Plant" .862

MICHIGAN GAS TRANSMISSION CORPORATION

Statement of Income and Expense, per books, for years ended December 31, 1936 to 1940, inclusive, twelve months ended June 30, 1941 and six months ended June 30, 1941 and December 31, 1940

	Years Ended December 31,						
	1936			1937	1938	1939	1940
	Indiana Gas Transmission Corporation(a) (A)	Michigan Gas Transmission Corporation(a) (B)	Total (C)	(D)	(E)	(F)	(G)
GAS OPERATING REVENUES:							
1) Sales to other gas utilities	$373,070.82	$1,323,719.42	$1,696,790.24	$1,937,615.90	$2,162,271.52	$2,802,818.40	$3,156,3
2) Rent from gas property	-	5.00	5.00	160.00	540.00	540.00	5
3) Revenue from transportation of gas of others	-	239,695.96	239,695.96	886,680.49	971,433.64	1,226,424.35	1,455,0
4) Total Gas Operating Revenues	$373,070.82	$1,563,420.38	$1,936,491.20	$2,824,457.39	$3,134,245.16	$4,029,782.75	$4,611,9
GAS OPERATING REVENUE DEDUCTIONS:							
Operating expenses:							
5) Operation	$264,943.35	$1,102,775.09	$1,367,718.44	$1,924,708.64	$2,038,183.55	$2,541,077.50	$2,859,1
6) Maintenance	196.04	8,731.58	8,927.62	39,311.43	42,020.26	44,281.22	55,3
7) Depreciation	17,970.66	77,614.86	95,585.52	232,795.40	275,576.00	276,421.13	292,7
Taxes:							
8) Federal income (b)	8,875.38	14,333.28	23,208.66	14,642.33	62,835.04	119,228.05	190,6
9) Federal excess profits (b)	-	-	-	-	-	-	147,8
10) State, local and miscellaneous Federal	6,802.72	48,163.71	54,966.43	115,983.08	106,525.11	123,138.74	154,1
11) Total Gas Operating Revenue Deductions	$298,788.15	$1,251,618.52	$1,550,406.67	$2,327,440.88	$2,525,139.96	$3,104,146.64	$3,699,9
12) NET UTILITY INCOME	$ 74,282.67	$ 311,801.86	$ 386,084.53	$ 497,016.51	$ 609,105.20	$ 925,636.11	$ 911,9
13) OTHER INCOME	-	30.00	30.00	*(1,047.36)	-	157.92	-
14) GROSS INCOME	$ 74,282.67	$ 311,831.86	$ 386,114.53	$ 495,969.15	$ 609,105.20	$ 925,794.03	$ 911,9
INCOME DEDUCTIONS:							
15) Interest on debt to parent company	$ 19,798.92	$ 182,717.87	$ 202,516.79	$ 341,460.90	$ 379,593.03	$ 362,323.33	$ 433,9
16) Other interest charges	-	-	-	-	1,043.80	10,810.58	5,4
17) Interest charged to construction - credit	-	*(80,583.35)	*(80,583.35)	*(8,341.60)	*(10.82)	*(3,912.97)	*(28,1
18) Total Income Deductions	$ 19,798.92	$ 102,134.52	$ 121,933.44	$ 333,119.30	$ 380,626.01	$ 369,220.94	$ 411,2
19) NET INCOME TRANSFERRED TO EARNED SURPLUS	$ 54,483.75	$ 209,697.34	$ 264,181.09	$ 162,849.85	$ 228,479.19	$ 556,573.09	$ 500,6

Notes - (a) Indiana Gas Transmission Corporation was merged into Michigan Gas Transmission Corporation as of March 1, 1936. The Gas Transmission Corporation covers the two months ended February 29, 1936, while the 1936 revenue and expense of is for the ten months ended December 31, 1936. Prior to the merger Michigan Gas Transmission Corporation was in a operations.

(b) The provisions for Federal income and excess profits taxes, set out above, exceed the amounts actually paid or prese

Federal income taxes	$83.21	$7,528.03	$7,811.24	$7,421.03	$11,928.92	$11,603.14	$16,1
Federal excesss profits taxes	-	-	-	-	-	-	$135,5

The excess provisions, except for the over or under accruals made for the six months ended June 30, 1941, have bee cover the tax ultimately payable in connection with pending deficiencies in the tax, established by the Bureau o 1939. The over accrual for 1940 Federal excess profits tax includes an amount estimated to be $119,895.00, whic 1941, to the Revenue Act of 1940.

Exhibit
No. of Pages - 3
Page No. 1
Witness - Spitznagle
Income and Expense

PORATION

oks, for years ended
welve months ended
30, 1941 and

r 31, 1938 (E)	1939 (F)	1940 (G)	Twelve Months Ended June 30, 1941 (H)	Six Months Ended June 30, 1941 (I)	Six Months Ended December 31, 1940 (J)
16.90 $2,162,271.52	$2,802,818.40	$3,156,351.23	$3,481,524.01	$1,873,073.65	$1,608,450.36
30.00 540.00	540.00	540.00	635.00	365.00	270.00
30.49 971,433.64	1,226,424.35	1,455,009.12	1,506,174.94	839,393.89	666,781.05
57.39 $3,134,245.16	$4,029,782.75	$4,611,900.35	$4,988,333.95	$2,712,832.54	$2,275,501.41
08.64 $2,038,183.55	$2,541,077.50	$2,859,121.96	$3,197,032.86	$1,727,174.69	$1,469,858.17
11.43 42,020.26	44,281.22	55,306.52	57,210.52	25,792.26	31,418.26
95.40 275,576.00	276,421.13	292,766.88	334,564.47	188,181.04	146,383.43
42.33 62,835.04	119,228.05	190,668.42	218,036.44	133,095.42	84,941.02
-	-	147,896.84	159,836.84	11,940.00	147,896.84
83.08 106,525.11	123,138.74	154,175.96	162,357.33	84,257.35	78,099.98
40.88 $2,525,139.96	$3,104,146.64	$3,699,936.58	$4,129,038.46	$2,170,440.76	$1,958,597.70
16.51 $ 609,105.20	$ 925,636.11	$ 911,963.77	$ 859,295.49	$ 542,391.78	$ 316,903.71
47.36) -	157.92	-	-	-	-
69.15 $ 609,105.20	$ 925,794.63	$ 911,963.77	$ 859,295.49	$ 542,391.78	$ 316,903.71
60.90 $ 379,593.03	$ 362,323.33	$ 433,988.35	$ 489,196.66	$ 253,615.00	$ 235,581.66
1,043.80	10,810.58	5,414.46	5,896.11	2,779.75	3,116.36
41.60) *(10.82)	*(3,912.97)	*(28,119.65)	*(28,119.65)	-	*(28,119.65)
19.30 $ 380,626.01	$ 369,220.94	$ 411,283.16	$ 466,973.12	$ 256,394.75	$ 210,578.37
49.85 $ 228,479.19	$ 556,573.09	$ 500,680.61	$ 392,322.37	$ 285,997.03	$ 106,325.34

sion Corporation as of March 1, 1938. The above revenue and expense for Indiana
36, while the 1936 revenue and expense of Michigan Gas Transmission Corporation
igan Gas Transmission Corporation was in a period of organization and had no

exceed the amounts actually paid or presently payable for such taxes as follows:

21.03	$11,928.92	$11,603.14	$16,184.67	$19,228.40	$5,522.11	$13,706.29
-	-	-	$135,595.15	$123,495.62	$*(19,378.18)	$142,873.80

e six months ended June 30, 1941, have been credited to reserve for contingencies to
es in the tax, established by the Bureau of Internal Revenue up to and including the year
n amount estimated to be $119,895.00, which resulted from amendments, dated March 7,

MICHIGAN GAS TRANSMISSION CORPORATION

Management and Supervisory and Other Special Service Fees and Expenses Paid to Associated Companies for Years Ended December 31, 1938 to 1940, Inclusive, Six Months ended June 30, 1941, Six Months Ended December 31, 1940, and Twelve Months Ended June 30, 1941.

		Years Ended December 31,			Six Months Ended		Twelve Months Ended
		1938	1939	1940	June 30, 1941	December 31, 1940	June 30, 1941
		(A)	(B)	(C)	(D)	(E)	(F)
	Columbia Engineering Corporation:						
	Charged to operations:						
(1)	Compressor Station - M & E	$ -	$ 33.68	$ 56.98	$ 4.79	$ 56.98	$ 61.77
(2)	Measuring Station - Labor	194.72	-	-	-	-	-
(3)	Measuring Station - M & E	125.88	557.38	1,735.83	712.37	426.29	1,138.66
(4)	Transmission Line - Labor	24.64	-	-	-	-	-
(5)	Transmission Line - M & E	16.92	543.49	3,195.66	1,898.14	341.64	2,239.78
(6)	Supervision and Engineering - Labor	3.27	-	-	-	-	-
(7)	Supervision and Engineering - M & E	1.03	23.22	130.20	45.33	44.39	89.72
(8)	Management and Supervision - Fees and Expense	17,079.11	14,237.26	13,662.65	7,370.38	7,532.03	14,902.41
(9)	Special Services - Audit & Tax	984.10	3,174.18	3,396.66	4,888.64	390.27	5,278.91
(10)	Special Services - Other	12,007.52	12,391.36	13,887.62	10,045.16	7,636.34	17,681.50
(11)	Insurance	220.24	356.17	409.78	186.51	216.50	403.01
(12)	General Office Supplies and Expense	-	255.56	512.22	1,275.84	319.11	1,594.95
(13)	Stores Expense	-	13.24	12.52	12.46	12.52	24.98
(14)		$30,657.43	$31,585.54	$37,000.12	$26,439.62	$15,976.37	$43,415.69
	Charged to Construction work in progress:						
(15)	Compressor Station Equipment	$ -	$ -	$ 3,299.16	$ 100.00	$ 2,225.64	$ 2,325.64
(16)	Mains	-	5,539.76	12,581.82	554.74	11,101.72	11,656.46
(17)	Measuring and Regulating Equipment	41.86	-	108.35	-	108.35	108.35
(18)	Other Transmission System Structures	-	-	-	122.91	-	122.91
(19)		$ 41.86	$ 5,539.76	$15,989.33	$ 777.65	$13,435.71	$14,213.36
(20)	Charged to accrued legal fees	$ 284.40	$ -	$ -	$ -	$ -	$ -
	Charged to accounts receivable:						
(21)	The Toledo Edison Company	$ -	$ -	$ 251.96	$ -	$ -	$ -
(22)		$30,983.69	$37,125.30	$53,241.41	$27,217.27	$30,411.78	$57,629.05
	The Ohio Fuel Gas Company:						
	Charged to Operations:						
(23)	Special Services - Other	$ -	$ 3,205.25	$ 4,739.33	$ 418.09		
	The Manufacturers Light & Heat Company:						
	Charged to operations:						
(24)	Special Services - Other	$ -	$ 752.90	$ 3.20	$ -		
(25)	Total	$30,983.69	$41,083.45	$57,983.94	$27,635.36		

The above amounts include all fees and expenses paid to affiliated companies as ascertained from the Company's records.

MICHIGAN GAS TRANSMISSION CORPORATION

Depreciation Provision Per Books
For Years Ended December 31, 1936 to 1940, inclusive,
and Six Months Ended June 30, 1941

	Years Ended December 31,				
	1936			1937	1938
	Indiana Gas Transmission Corporation(1) (A)	Michigan Gas Transmission Corporation(1) (B)	Total (1) (C)	(D)	(E)
GENERAL PROPERTY					
Depreciable Base:					
(1) Beginning of year	$2,358,354.62	$ 2,358,354.62	$2,358,354.62	$7,759,846.18	$9,185,866.54
(2) Detroit Transmission Line Expenditures as of September 30, 1936	-	4,952,786.26	4,952,786.26	-	-
(3) Detroit Transmission Line Expenditures as of October 31, 1936	-	4,974,079.02	4,974,079.02	-	-
Annual Depreciation Rate:					
(4) Applicable to depreciable base at beginning of year	3%	3%	3%	3%	3%
(5) Applicable to depreciable base of Detroit Transmission Line Expenditures as of September 30, and October 31, 1936	-	2%	2%	-	-
Depreciation - Charged against Income:					
(6) On depreciable base at beginning of year.	17,970.66	52,779.96	70,750.62	232,795.40	275,576.00
(7) On depreciable base of Detroit Transmission Line Expenditures as of September 30, 1936 for 1 month	-	8,254.64	8,254.64	-	-
(8) On depreciable base of Detroit Transmission Line Expenditures as of October 31, 1936 for 2 months	-	16,580.26	16,580.26	-	-
(9) Total	$ 17,970.66	$ 77,614.86	$ 95,585.52	$ 232,795.40	$ 275,576.00
TRANSPORTATION EQUIPMENT (3)					
Depreciable Base - Actual cost of each piece of equipment less estimated salvage value.					
Depreciation Rate - Computed for each piece of equipment by dividing the depreciable base by the estimated life of the equipment.					
Depreciation - charged against Transportation					
(10) Expense - Clearing Amount	$ -	$ 4,758.12	$ 4,758.12	$ 3,193.96	$ 2,640.10
SPECIAL EQUIPMENT (3)					
Depreciable Base - Actual cost of each piece of equipment less estimated salvage value.					
Depreciation Rate - Computed for each piece of equipment by dividing the depreciable base by the estimated life of the equipment.					
Depreciation:					
(11) Charged against Transportation Expense Clearing Account	$ -	$ -	$ -	$ -	$ 476.57
(12) Charged against Special Equipment Expense Clearing Account	-	-	-	-	-

NOTES: (1) Indiana Gas Transmission Corporation was merged into Michigan Gas Transmission Corporation as of March 1, 1936. T
oiation provision for Indiana Gas Transmission Corporation cover the two months ended February 29, 1936, while
provision of Michigan Gas Transmission Corporation are for the ten months ended December 31, 1936. Prior to the
a period of organization and had no operations.
(2) Represents 51.3% of estimated annual provision for 1941 and the percentage is based on ratio of MCF deliveries to
(3) Amounts cleared from these accounts are not charged to depreciation account but to various operating expense and
of use of automotive equipment, and hours use of special equipment.

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Exhibit 99.
Page No. 3
Depreciation per books

s
, inclusive,
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ecember 31, 1937 (D)	1938 (E)	1939 (F)	1940 (G)	Six Months Ended June 30,1941 (H)
9.846.18	$9,185,866.54	$9,214,037.60	$9,758,895.91	$12,226,180.09
-	-	-	-	-
-	-	-	-	-
3%	3%	3%	3%	3%
-	-	-	-	-
2,795.40	275,576.00	276,421.13	292,766.88	188,181.04(2)
-	-	-	-	-
-	-	-	-	-
2,795.40	$ 275,576.00	$ 276,421.13	$ 292,766.88	$ 188,181.04(2)

d life of the equipment.

3,193.96	$ 2,640.10	$ 2,746.59	$ 4,424.76	$ 2,484.58

d life of the equipment.

-	$ 476.57	$ 726.48	$ 726.48	$ -
-	-	-	-	198.96

tion as of March 1, 1936. The above depreciable base, depreciation rate and depre-
d February 29, 1936, while the depreciable base, depreciation rate and depreciation
mber 31, 1936. Prior to the merger Michigan Gas Transmission Corporation was in

ratio of MCF deliveries to June 30, 1940 to MCF deliveries for year 1940.
ious operating expense and maintenance accounts, construction, etc., based on miles

MICHIGAN GAS TRANSMISSION CORPORATION

Statement of Income and Expense per Books and After Adjustments and Redistributions Necessary to Reflect the Two Six Month Periods per Books on an Annual Basis.
For Six Months Ended December 31, 1940 and June 30, 1941 and for Twelve Months Ended June 30, 1941

	F.P.C. Account Number		Six Months Ended December 31, 1940 Per Books (A)	Adjustments (B)	As Adjusted (C)	Six Months Ended June 30, Per Books (D)	Adjustments (E)
		GAS OPERATING REVENUES:					
(1)	605	Sales to other gas utilities	$1,608,450.36	$ -	$1,608,450.36	$1,873,073.65	$ -
(2)	610	Rent from gas property	270.00	-	270.00	365.00	-
(3)	615	Revenue from transportation of gas of others	666,781.05	-	666,781.05	839,393.89	-
(4)	501	Total Gas Operating Revenues	$2,275,501.41	$ -	$2,275,501.41	$2,712,832.54	$ -
		GAS OPERATING REVENUE DEDUCTIONS:					
(5)	502	Operating expenses	$1,501,276.43	$ *(207.00)(4)	$1,501,069.43	$1,752,966.95	$ *(69.00)(4)
(6)	503.1	Depreciation	146,383.43	*(3,508.13)(1)	142,875.30	188,181.04	6,535.63 (1)
	507	Taxes:					
(7)		Federal income	84,941.02	*(7,799.66)(2)	77,141.36	133,095.42	*(15,205.11)(3)
(8)		Federal excess profits	147,896.84	*(147,896.84)(3)	-	11,940.00	57,452.24 (2)
(9)		State, local and miscellaneous federal	78,099.98	-	78,099.98	84,257.35	-
(10)		Total Gas Operating Revenue Deductions	$1,958,597.70	$ *(159,411.63)	$1,799,186.07	$2,170,440.76	$48,713.76
(11)		NET GAS OPERATING REVENUES	$ 316,903.71	$159,411.63	$ 476,315.34	$ 542,391.78	$ *(48,713.76)
		INCOME DEDUCTIONS:					
(12)	534	Interest on debt to parent company	$ 235,581.66	$ -	$ 235,581.66	$ 253,615.00	$ -
(13)	535	Other interest charges	3,116.36	-	3,116.36	2,779.75	-
(14)	536	Interest charged to construction - cr.	28,119.65	-	28,119.65	-	-
(15)	538	Miscellaneous income deductions	-	207.00 (4)	207.00	-	69.00 (4)
		Total Income Deductions	$ 210,578.37	$ 207.00	$ 210,785.37	$ 256,394.75	$ 69.00
		NET INCOME TRANSFERRED TO EARNED SURPLUS	$ 106,325.34	$159,204.63	$ 265,529.97	$ 285,997.03	$ *(48,782.76)

*() Denotes deduction

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Witness - Spitznagle
Adjusted Income and Expense

and Redistributions
nnual Basis.
Twelve Months

	Six Months Ended June 30, 1941			Twelve Months Ended June 30, 1941
	Per Books (D)	Adjustments (E)	As Adjusted (F)	As Adjusted (G)
	$1,873,073.65	$ -	$1,873,073.65	$3,481,524.01
	365.00	-	365.00	635.00
	839,393.89	-	839,393.89	1,506,174.94
	$2,712,832.54	$ -	$2,712,832.54	$4,988,333.95
	$1,752,966.95	$ *(69.00)(4)	$1,752,897.95	$3,253,967.38
	188,181.04	6,535.63 (1)	194,716.67	337,591.97
	133,095.42	*(15,205.11)(3)	117,890.31	195,031.67
	11,940.00	57,452.24 (2)	69,392.24	69,392.24
	84,257.35	-	84,257.35	162,357.33
	$2,170,440.76	$48,713.76	$2,219,154.52	$4,018,340.59
	$ 542,391.78	$ *(48,713.76)	$ 493,678.02	$ 969,993.36
	$ 253,615.00	$ -	$ 253,615.00	$ 489,196.66
	2,779.75	-	2,779.75	5,896.11
	-	-	-	28,119.65
	-	69.00 (4)	69.00	276.00
	$ 256,394.75	$ 69.00	$ 256,463.75	$ 467,249.12
	$ 285,997.03	$ *(48,782.76)	$ 237,214.27	$ 502,744.24

Exhibit 100
Page No. 2
Adjustments To
Income And Expense

MICHIGAN GAS TRANSMISSION CORPORATION

Adjustments to Statement of Income and Expense for Six Months Ended December 31, 1940
Necessary to Reflect the Correct Distribution of Certain Charges for the year 1940
Between the Six Months Ended June 30, 1940 and the Six Months Ended December 31, 1940

		DEBIT	CREDIT
1.			
Earned Surplus at beginning of period		$ 3,508.13	
Depreciation			$ 3,508.13
To redistribute depreciation charged against income on the books, as follows:			
Depreciation per books for year 1940	$292,766.88		
Amount per books for six months ended December 31, 1940 based on estimates made at beginning of yearly period	$146,383.43		
Amount chargeable to said period based on MCF deliveries during said period to total MCF deliveries in 1940	142,875.30		
Amount redistributed to six months ended June 30, 1940	$ 3,508.13		
2.			
Earned Surplus at beginning of period		6,060.28	
Accrued taxes		1,739.38	
Federal Income Tax			7,799.66
To adjust 1940 provision for Federal income tax to amount per return filed plus estimated contingency with respect thereto and to redistribute such adjusted provision as follows:			
Provision per books for year 1940		$190,668.42	
Tax per return filed for year 1940	$174,483.73		
Estimated contingent tax	14,445.31	188,929.04	
Overaccrual for year 1940		$ 1,739.38	
Provision per books for six months ended December 31, 1940		$ 84,941.02	
Provision chargeable to said period based on net income before Federal income and excess profits taxes for said period to total of such income for the year 1940 applied to the above $188,929.04		77,141.36	
Provision redistributed to six months ended June 30, 1940	$ 6,060.28		
Adjustment for overaccrual for year 1940	1,739.38	$ 7,799.66	

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Page No. 3
Adjustments To
Income And Expense

MICHIGAN GAS TRANSMISSION CORPORATION

Adjustment to Statement of Income and Expense for Six Months Ended December 31, 1940
Necessary to Reflect the Correct Distribution of Certain Charges for the Year 1940
Between the Six Months Ended June 30, 1940 and the Six Months Ended December 31, 1940

	DEBIT	CREDIT
3.		
Earned Surplus at beginning of period	$ 28,028.86	
Accrued taxes	119,867.98	
Federal Excess Profits Tax		
To adjust 1940 provision for Federal excess profits tax to amount per return filed plus estimated contingency with respect thereto and to redistribute said adjusted provision as follows:		$147,896.84
Provision per books for year 1940		$147,896.84
Tax per return filed for year 1940	$ 12,301.69	
Estimated contingent tax	15,727.17	28,028.86
Overaccrual for year 1940		$119,867.98
Provision per books for six months ended December 31, 1940		$147,896.84
Provision chargeable to said period based on net income subject to Federal excess profits tax for said period to total of such income for year 1940 applied to the above $28,028.86		-o-
Provision redistributed to six months ended June 30, 1940	$ 28,028.86	
Adjustment for overaccrual for year 1940	$119,867.98	$147,896.84
4.		
Miscellaneous Income Deductions	$ 207.00	
Operation		
To transfer donations from administrative and general expense to miscellaneous income deductions		$ 207.00

MICHIGAN GAS TRANSMISSION CORPORATION

Adjustments and Redistributions to Statement of Income and Expenses for Six Months Ended June 30, 1941, Necessary to Reflect the Correct Distribution of Certain Charges for the Year 1941, Between the Six Months Ended June 30, 1941 and the Six Months Ended December 31, 1941

		DEBIT	CREDIT
1.			
Depreciation		$ 6,535.63	
Reserve for Depreciation			$ 6,535.63
To redistribute depreciation charged against income on the books, as follows:			
Depreciation for year 1941 - Estimated	$366,785.40		
Amount per books for six months ended June 30, 1941 based on estimates made at beginning of yearly period	188,181.04		
Amount chargeable to said period based on MCF deliveries during said period to total of MCF deliveries during said period plus estimated MCF deliveries for balance of year 1941	194,716.67		
Amount redistributed from six months ended December 31, 1941	6,535.63		
2.			
Federal Excess Profits Tax		$ 57,452.24	
Accrued Taxes			$ 57,452.24
To adjust provision for Federal excess profits tax to amount chargeable to six months ended June 30, 1941 under the Revenue Act of 1941, as follows:			
Provision per books for six months ended June 30, 1941	$ 11,940.00		
Provision chargeable to said period based on net income subject to Federal income and excess profits taxes for said period	69,392.24		
Adjustment for underaccrual for six months ended June 30, 1941	$ 57,452.24		
3.			
Accrued Taxes		$ 15,205.11	
Federal Income Tax			$ 15,205.11
To adjust provision for Federal income tax to amount chargeable to six months ended June 30, 1941 under the Revenue Act of 1941, as follows:			
Provision per books for six months ended June 30, 1941	$133,095.42		
Provision chargeable to said period based on net income subject to Federal income tax for said period	117,890.31		
Adjustment for overaccrual for six months ended June 30, 1941	$ 15,205.11		
4.			
Miscellaneous Income Deductions		$ 69.00	
Operations			$ 69.00
To transfer donations from administrative and general expense to miscellaneous income deductions			

MICHIGAN GAS TRANSMISSION CORPORATION

Comparative Statement of Operating Revenue
For Years ended December 31, 1936 to 1940, inclusive, Twelv ended June 30, 1941 and Six Months ended June 30, 1941 and 31, 1940.

		Years ended December 31, 1936			1937
		Indiana Gas Transmission Corporation (1)	Michigan Gas Transmission Corporation (1)	Total	
		(a)	(b)	(c)	(d)
	Sales to Other Gas Utilities:				
(1)	Central Indiana Gas Company	$ 126,269.21	$ 654,113.96	$ 780,383.17	$1,284,719.35
(2)	Indiana Gas Distribution Corporation (affiliated company)	4,475.00	105,164.50	109,639.50	292,710.30
(3)	Indiana-Ohio Public Service Company	8,577.00	21,923.50	30,500.50	28,604.50
(4)	Kentucky Natural Gas Corporation	-	929.36	929.36	570.81
(5)	Kokomo Gas and Fuel Company	-	-	-	7,978.32
(6)	Lynn Natural Gas Company	-	1,194.00	1,194.00	4,244.35
(7)	Michigan Consolidated Gas Company - Ann Arbor	-	-	-	-
(8)	Northern Indiana Public Service Company	-	-	-	43,108.77
(9)	The Ohio Fuel Gas Company (affiliated company)	209,434.51	407,672.90	617,107.41	4,023.30
(10)	Pendleton Natural Gas Company	2,264.90	2,893.55	5,158.45	6,616.90
(11)	Public Service Company of Indiana	21,991.40	128,703.00	150,694.40	260,632.35
(12)	Town of Lapol, Indiana	-	488.85	488.85	2,911.90
(13)	Town of Montezuma, Indiana	58.80	368.10	426.90	391.75
(14)	Town of Pittsboro, Indiana	-	178.15	178.15	457.40
(15)	Town of Roachdale, Indiana	-	89.55	89.55	646.90
(16)	Total	$ 373,070.82	$1,323,719.42	$1,696,790.24	$1,937,616.90
	Revenue from Transportation of Gas of Others:				
	On deliveries made for the account of Panhandle Eastern Pipe Line Company:				
(17)	Central State Natural Gas Company Inc.	-	-	-	-
(18)	Michigan Consolidated Gas Company - Ann Arbor	-	-	-	-
(19)	The Ohio Gas Light and Coke Company	-	-	-	-
(20)	Michigan Consolidated Gas Company - Detroit	-	239,695.96	239,695.96	886,680.49
(21)	National Utilities Company of Michigan	-	-	-	-
(22)	Toledo Edison Company	-	-	-	-
(23)	Total	-	239,695.96	239,695.96	886,680.49
(24)	On deliveries made to Kentucky Natural Gas Corporation	-	-	-	-
	Total	-	239,695.96	239,695.96	886,680.49
(25)	Rent from Gas Property	-	5.00	5.00	160.00
(26)	Total Operating Revenues	$ 373,070.82	$1,563,420.38	$1,936,491.20	$2,824,457.39

Notes - (1) Indiana Gas Transmission Corporation was merged into Michigan Gas Transmission Corporation as of March 1 for Indiana Gas Transmission Corporation covers the two months ended February 29, 1936, while the r Corporation is for the ten months ended December 31, 1936. Prior to the merger Michigan Gas Transm of organization and had no operations.

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Witness - Spitznagle
Comparative Operating Revenues

S TRANSMISSION CORPORATION

tatement of Operating Revenue
1936 to 1940, inclusive, Twelve Months
Months ended June 30, 1941 and December

Years ended December 31,					Twelve Months Ended June 30, 1941	Six Months Ended June 30, 1941	Six Months Ended December 31, 1941
Total	1937	1938	1939	1940			
(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
$ 780,383.17	$1,284,719.35	$1,044,098.61	$1,404,369.99	$1,505,648.21	$1,720,127.85	$ 932,407.07	$ 787,720.78
109,639.50	292,710.30	308,764.98	336,028.68	335,721.70	336,282.67	164,406.67	171,876.00
30,500.50	28,604.50	37,891.00	42,946.29	41,944.83	40,397.05	21,020.74	19,376.31
929.36	570.81	307.63		-	-	-	-
-	7,978.32	70,105.39	104,360.59	137,720.74	151,177.26	78,238.73	72,938.53
1,194.00	4,214.35	4,002.05	4,179.05	5,247.90	4,891.54	2,545.29	2,346.25
-	-	-	18,433.41	-	-	-	-
-	43,108.77	288,190.35	355,026.73	466,016.25	523,286.12	299,711.23	223,573.89
617,107.41	4,023.30	2,749.60	2,752.00	3,276.50	2,951.60	2,026.10	925.50
5,158.45	6,616.90	5,861.70	5,544.70	8,115.15	8,197.10	4,835.15	3,361.95
150,694.40	260,632.35	395,333.86	523,663.90	643,866.35	688,082.41	364,516.06	323,566.35
488.85	2,911.90	2,481.15	2,613.25	2,543.30	2,904.67	1,686.02	1,218.65
426.90	391.75	445.90	609.95	813.65	866.10	431.10	435.00
178.15	457.40	599.80	931.20	1,274.80	1,217.15	645.15	572.00
89.55	646.90	839.50	1,058.75	1,161.85	1,143.49	604.34	539.15
$1,696,790.24	$1,937,616.90	$2,162,571.52	$2,802,818.40	$3,156,351.23	$3,481,521.01	$1,873,073.65	$1,608,450.36
-	-	-		869.43	830.99	391.72	439.27
-	-	-	5,438.87	18,657.83	22,284.85	12,029.23	10,255.62
-	-	-		7,618.22	9,215.02	4,941.47	4,273.55
239,695.96	886,680.49	971,433.64	1,206,652.16	1,419,096.97	1,463,070.86	816,220.50	646,850.36
-	-	-	-	-	357.78	357.78	-
-	-	-	-	1,100.03	1,748.74	953.19	795.55
$ 239,695.96	$ 886,680.49	$ 971,433.64	$1,212,091.03	$1,447,342.44	$1,497,508.24	$ 834,893.89	$ 662,614.35
-	-	-	14,333.32	7,666.68	8,666.70	4,500.00	4,166.70
$ 239,695.96	$ 886,680.49	$ 971,433.64	$1,226,424.35	$1,455,009.12	$1,506,174.94	$ 839,393.89	$ 666,781.05
5.00	160.00	540.00	540.00	540.00	635.00	365.00	270.00
$1,936,491.20	$2,824,457.39	$3,134,245.16	$4,029,782.75	$4,611,900.35	$4,988,330.95	$2,712,832.54	$2,275,501.41

ission Corporation as of March 1, 1936. The above revenue
d February 29, 1936, while the revenue of Michigan Gas Transmission
o the merger Michigan Gas Transmission Corporation was in a period

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MICHIGAN GAS TRANSMISSION CORPORATION

Operation and Maintennance Expenses, Per Books, For the Twelve Months Ended June 30, 1941

F.P.C. Account Number		Six Months Ended Dec. 31, 1940	Six Months Ended June 30, 1941	Twelve Months Ended June 30, 1941
	GAS PURCHASED			
749	Miscellaneous duplicate charges	$ *(44,337.81)	$ *(52,820.62)	$ *(97,158.43)
754.1	Gas Purchased - Natural Gas	1,351,857.26	1,543,889.62	2,895,746.88
754.2	Gas Purchased - Other Gas	-	-	-
755	Purchased Gas Expenses	336.31	276.93	613.24
	Total Gas Purchased and Purchased Gas Expenses	$1,307,855.76	$1,491,345.93	$2,799,201.69
	TRANSMISSION EXPENSES			
758	Operation Supervision and Engineering	$ 8,991.63	$ 17,972.47	$ 26,964.10
759.111	Pumping Station - Labor	30,858.39	38,865.07	69,723.46
759.112	Measuring and Regulating Station - Labor	23,018.19	17,717.49	40,735.68
759.121	Pumping Station - Supplies and Expenses	47,010.57	57,835.57	104,846.14
759.122	Measuring and Regulating Station - Supplies and Expenses	5,976.14	7,020.47	12,996.61
759.21	Operation of Transmission Mains - Labor	11,571.44	19,801.69	31,373.13
759.22	Operation of Transmission Mains - Supplies and Expenses	3,610.28	5,863.08	9,473.36
759.3	Transmission Maps and Records	1,557.33	3,003.75	4,561.08
	Total Transmission Operation	$ 132,593.97	$ 168,079.59	$ 300,673.56
760	Maintenance Supervision & Eng.	$ 2,704.58	$ 5,402.79	$ 8,107.37
761.1	Maintenance of Pumping Station Structures	391.55	2,127.75	2,519.30
761.2	Main. of Meas. & Reg. Station Structures	693.81	812.71	1,506.52
761.3	Main. of Other Trans. Sys. Strus.	192.02	117.48	309.50
762.1	Maintenance of Mains	20,106.58	12,674.75	32,781.33
762.21	Main. of Pump. Sta. Equipment	3,712.71	3,617.00	7,329.71
762.22	Main. of Meas. and Regulating Station Equipment	3,466.16	1,022.09	4,488.25
762.23	Main. of Other Trans. Sys. Equip.	-	-	-
	Total Transmission Maintenance	$ 31,267.41	$ 25,774.57	$ 57,041.98
763.1	Trans. & Comp. of Gas by Others	$ -	$ -	$ -
763.2	Rents	1,363.42	1,731.84	3,095.26
764.1	Joint Expenses - Dr.	-	-	-
764.2	Joint Expenses - Cr.	-	-	-
	Total Transmission Expenses	$ 165,224.80	$ 195,586.00	$ 360,810.80
	SALES PROMOTION EXPENSES			
785	Supervision	$ -	$ -	$ -
786	Salaries and Commissions	-	-	-
787.1	Demonstration	-	-	-
787.2	Advertising	-	-	-
787.3	Miscellaneous Sales Expenses	1,900.00	3,929.21	5,829.21
788	Rents	-	-	-
789	Mdse., Jobbing & Contract Work	-	-	-
	Total Sales Promotion Expenses	$ 1,900.00	$ 3,929.21	$ 5,829.21

(Cont'd.)

MICHIGAN GAS TRANSMISSION CORPORATION

Operation and Maintenance Expenses, Per Books,
For the Twelve Months Ended June 30, 1941

F.P.C. Account Number		Six Months Ended December 31, 1940	Six Months Ended June 30, 1941	Twelve Months Ended June 30, 1941
	ADMINISTRATIVE AND GENERAL EXPENSES			
790	Salaries of General Officers and Executives	$ 5,250.00	$ 4,937.00	$ 10,187.00
791	Other General Office Salaries	7,757.36	9,146.89	16,904.25
792.1	Expenses of General Officers	2,906.77	933.54	3,840.31
792.2	Expenses of General Office Employees	324.50	1,167.74	1,492.24
793	General Office Supplies and Expenses	2,667.81	2,399.35	5,067.16
794	Management and Supervision Fees and Expenses	7,532.03	7,370.38	14,902.41
795	Special Services	11,832.28	15,791.68	27,623.96
796	Special Legal Services	1,117.31	4,500.00	5,617.31
797	Regulatory Commission Expenses	-	-	-
798	Insurance	2,426.89	1,609.06	4,035.95
799	Injuries and Damages	6,000.00	7,584.24	13,584.24
800.1	Employees Welfare Expenses	*(41.82)	760.80	718.98
800.2	Pensions	-	-	-
801	Miscellaneous General Expenses	970.33	3,817.90	4,788.23
802.1	Maintenance of Structures and Improvements	-	-	-
802.2	Maintenance of Office Furniture and Equipment	150.85	17.69	168.54
802.3	Maintenance of Communication Equipment	-	-	-
802.4	Maintenance of Miscellaneous Property	-	-	-
803	Rents	2,493.39	2,065.80	4,559.19
804	Commissions Paid Under Agency Sales Contracts	-	-	-
805.1	Franchise Requirements - Cash Outlays	-	-	-
805.2	" " - Gas Supplied Without Charge-Dr.	-	-	-
805.3	" " - Other Items Furnished Without Charge - Dr.	-	-	-
806	Duplicate Miscellaneous Charges - Cr.	-	-	-
807	Administrative and General Expense Transferred - Cr.	*(25,298.83)	*(65.26)	*(25,364.09)
808	Joint Expenses - Dr.	-	-	-
809	Joint Expenses - Cr.	-	-	-
	Total administrative and General Expenses	$ 26,088.87	$ 62,036.81	$ 88,125.68
	Total Operation	$1,469,651.17	$1,727,105.69	$3,196,756.86
	Total Maintenance	31,418.26	25,792.26	57,210.52
	Total Operating Expenses	$1,501,069.43	$1,752,897.95	$3,253,967.38

*( ) Denotes Red Figure.

MICHIGAN GAS TRANSMISSION CORPORATION

Gas Sales, Gas Transported, Gas Used By Company, Line Losses and Gas Pu
For Years Ended December 31, 1936 to 1940, Inclusive, Twelve Months En
June 30, 1941 and Six Months Ended June 30, 1941 and December 31, 194(

		Years Ended December 31,					
		1936			1937	1938	1939
		Indiana Gas Transmission Corporation (1) (A)	Michigan Gas Transmission Corporation (1) (B)	Total (C)	(D)	(E)	(F)
	SALES TO OTHER GAS UTILITIES-MCF: (2)						
(1)	Central Indiana Gas Company	407,636	2,176,474	2,584,110	4,882,725	3,941,546	5,553,472
(2)	Indiana Gas Distribution Corporation (associated company)	8,950	369,079	378,029	1,057,827	1,114,456	1,207,492
(3)	Indiana - Ohio Public Service Company	17,154	43,847	61,001	57,209	75,782	93,689
(4)	Kentucky Natural Gas Corporation	-	3,507	3,507	2,154	3,425	-
(5)	Kokomo Gas and Fuel Company	-	-	-	26,330	274,712	404,261
(6)	Lynn Natural Gas Company	-	2,388	2,388	8,558	8,030	8,225
(7)	Michigan Consolidated Gas Company - Ann Arbor	-	-	-	-	-	60,759
(8)	Northern Indiana Public Service Company	-	-	-	139,983	928,537	1,206,744
(9)	The Ohio Fuel Gas Company (associated company)	930,820	1,837,015	2,767,835	13,185	7,598	5,504
(10)	Pendleton Natural Gas Company	4,118	5,261	9,379	12,383	11,066	10,409
(11)	Public Service Company of Indiana	61,755	375,725	437,480	868,751	1,307,070	1,795,751
(12)	Town of Lapel, Indiana	-	985	985	6,111	4,922	5,112
(13)	Town of Montezuma, Indiana	113	733	846	748	847	1,163
(14)	Town of Pittsboro, Indiana	-	336	336	869	1,135	1,778
(15)	Town of Roachdale, Indiana	-	171	171	1,223	1,609	2,043
(16)	Total	1,430,546	4,815,521	6,246,067	7,078,054	7,680,735	10,355,402
	TRANSPORTATION OF GAS OF OTHERS - MCF: (2)						
	Delivered for Panhandle Eastern Pipe Line Company to:						
(17)	Central States Natural Gas Company, Inc.	-	-	-	-	-	4,766
(18)	Michigan Consolidated Gas Company-Detroit	-	3,864,515	3,864,515	15,969,589	16,032,389	18,364,737
(19)	Michigan Consolidated Gas Company-Ann Arbor	-	-	-	-	-	27,217
(20)	National Utilities Company of Michigan	-	-	-	-	-	-
(21)	The Ohio Gas, Light & Coke Company	-	-	-	-	-	50,249
(22)	Toledo Edison Company	-	-	-	-	-	-
(23)	Total	-	3,864,515	3,864,515	15,969,589	16,032,389	18,446,969
(24)	Delivered for Kentucky Natural Gas Corporation	-	-	-	-	-	1,706,635
(25)	Total Sold and Transported	1,430,546	8,680,036	10,110,582	23,047,643	23,713,124	30,509,006
(26)	GAS USED BY COMPANY - MCF	-	20,046	20,046	160,656	211,056	329,885
(27)	LINE LOSSES - MCF (2) (3)	*(15,530)	161,120	145,590	571,068	408,453	506,184
(28)	Total Gas Delivered and Line Losses-MCF	1,415,016	8,861,202	10,276,218	23,779,367	24,332,633	31,345,075
	GAS PURCHASED - MCF:						
(29)	Panhandle Eastern Pipe Line Company	1,397,862	4,828,027	6,225,889	7,636,699	8,300,244	11,191,471
(30)	The Ohio Fuel Gas Company	17,154	168,660	185,814	173,079	-	-
(31)	Total	1,415,016	4,996,687	6,411,703	7,809,778	8,300,244	11,191,471
(32)	GAS OF OTHERS RECEIVED FOR TRANSPORTATION - MCF	-	3,864,515	3,864,515	15,969,589	16,032,389	20,153,604
(33)	Total Gas Received - MCF (3)	1,415,016	8,861,202	10,276,218	23,779,367	24,332,633	31,345,075

NOTES: (1) Indiana Gas Transmission Corporation was merged into Michigan Gas Transmission Corporation as of March 1, 1936. The Corporation covers the two months ended February 29, 1936, while the MCF statistics of Michigan Gas Transmission Co Prior to the merger Michigan Gas Transmission Corporation was in a period of organization and had no operations.
(2) Volume based on various measurement provisions stipulated in the respective sales contracts.
(3) Volume based on 30" - 60° saturation.

* ( ) denotes red figure

Exhibit 103
No. of Pages - 1
Page No. 1
Witness - Spitznagle
Gas Sales, etc.

N CORPORATION

Company, Line Losses and Gas Purchased
940, Inclusive, Twelve Months Ended
e 30, 1941 and December 31, 1940.

er 31,						
1938	1939	1940	Twelve Months Ended June 30, 1941	Six Months Ended June 30, 1941	Six Months Ended December 31, 1940	
(E)	(F)	(G)	(H)	(I)	(J)	
3,941,546	5,553,472	5,880,115	6,781,787	3,647,938	3,133,849	
1,114,456	1,207,492	1,261,400	1,342,869	654,765	688,104	
75,782	93,689	121,697	118,522	62,773	55,749	
3,425	-	-	-	-	-	
274,712	404,261	500,198	545,707	278,348	267,359	
8,030	8,225	10,657	10,433	5,698	4,735	
-	60,759	-	-	-	-	
928,537	1,206,744	1,476,694	1,584,554	888,373	696,181	
7,598	5,504	6,553	5,968	4,117	1,851	
11,065	10,409	15,650	15,713	9,343	6,370	
1,307,070	1,795,751	2,080,820	2,275,071	1,234,667	1,040,404	
4,922	5,112	4,894	5,837	3,504	2,333	
847	1,163	1,557	1,653	822	831	
1,135	1,778	2,469	2,461	1,367	1,094	
1,609	2,043	2,225	2,313	1,287	1,026	
7,680,735	10,355,402	11,364,929	12,692,388	6,793,002	5,899,886	
-	4,766	13,088	12,157	5,990	6,167	
16,032,389	18,364,737	21,976,727	23,024,776	12,711,895	10,312,881	
-	27,217	304,546	337,849	187,758	150,091	
-	-	-	6,158	6,158	-	
-	50,249	119,062	138,907	73,935	64,972	
-	-	18,543	28,822	15,093	13,729	
16,032,389	18,446,969	22,431,966	23,548,669	13,000,829	10,547,840	
-	1,706,635	2,112,080	2,314,105	1,237,630	1,076,475	
23,713,124	30,509,006	35,908,975	38,555,662	21,031,461	17,524,201	
211,056	329,885	390,681	392,436	219,116	173,320	
408,453	506,184	555,987	616,093	284,273	331,820	
24,332,633	31,345,075	36,855,643	39,564,191	21,534,850	18,029,341	
8,300,244	11,191,471	12,311,597	13,701,417	7,296,391	6,405,026	
-	-	-	-	-	-	
8,300,244	11,191,471	12,311,597	13,701,417	7,296,391	6,405,026	
16,032,389	20,153,604	24,544,046	25,862,774	14,238,459	11,624,315	
24,332,633	31,345,075	36,855,643	39,564,191	21,534,850	18,029,341	

ation as of March 1, 1936. The above MCF statistics for Indiana Gas Transmission
of Michigan Gas Transmission Corporation is for the ten months ended December 31,1936.
ation and had no operations.
racts.

Composite copy of Registration Statement filed November 18, 1940, and Amendments filed November 22, 1940, December 3, 1940, January 27, 1941 and January 29, 1941.

Date of Filing: November 18, 1940. Registration No. 2-4579

Effective Date: January 29, 1941.

(The above to be left blank by the registrant)

FORM A-2

For Corporations

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C.

REGISTRATION STATEMENT

Under

SECURITIES ACT OF 1933

PANHANDLE EASTERN PIPE LINE COMPANY

(Name of Registrant)

Securities Registered

Title of Issue, or Issues	Amount
First Mortgage and First Lien 3% Bonds, Series B, due November 1, 1960.	$12,000,000

Amount of Filing Fee: $1,260.00.

Approximate Date of Proposed Public Offering: As soon as practicable after the effective date of this Registration Statement.

Name and address of person authorized to receive notices and communications from the Securities and Exchange Commission:

R. A. Ransom, 90 Broad Street, New York, New York.

EXHIBIT 106. 4961

The information required to be given under the items hereinbelow set forth is more specifically defined in the "Instruction Book for Form A-2 for Corporations."

The Instruction Book also sets forth requirements as to Financial Statements, Exhibits, Signatures, Consents of Experts and the Prospectus, which are to accompany the registration statement or to be incorporated therein by reference.

The financial statements and schedules filed herewith and the answer set forth in Item 45 of this Registration Statement have been reviewed by Messrs. Arthur Andersen & Co., accountants and auditors, and such statements and information are made or given on the authority of said firm. The statements with respect to matters of law and legal conclusions made in Item 5 with respect to jurisdiction of commissions of certain states, in Item 6 as to dissolution of subsidiaries of the Registrant, in Item 7 as to the ownership by the Registrant of its production property and transmission property, in Item 8 as to franchises and concessions, in Item 15 as to liens securing the Registrant's First Mortgage and First Lien 3% Bonds, Series B and First Mortgage and First Lien Bonds, Series A, in Item 40 as to litigation, and in Item 41, except paragraphs 4 and 5 thereof, as to material contracts, have been reviewed by Glenn W. Clark, head of the Registrant's legal department, and such statements are made on the authority of such counsel. The statements with respect to matters of law and legal conclusions made in Item 5 with respect to the Public Utility Act of 1935, in Item 6 under the heading "Certain Other Phases of Corporate History" in so far as such statements relate to any proceedings to which the Registrant is a party, and in paragraphs 4 and 5 of Item 41, have been reviewed by Edward N. Goodwin, general counsel of the Registrant; and such statements are made on the authority of such counsel. The letter set forth in Item 7 under the heading "Production Property and Gas Reserves" has been prepared by Ralph E. Davis, Inc., Engineers, and the letter in Item 7 under the heading "Transmission Property" has been prepared by P. McDonald Biddison, Consulting Engineer, and all of such statements are made, and all such information is presented, on the authority of said corporation and individual, respectively, as experts.

CALCULATION OF REGISTRATION FEE

Col. A	Col. B	Col. C	Col. D	Col. E
Title of Issue, or issues registered	Amount registered	Proposed maximum offering price per unit	Proposed maximum aggregate offering price	Amount of filing fee
First Mortgage and First Lien 3% Bonds, Series B, due November 1, 1960	$12,000,000	105%*	$12,600,000*	$1,260.00

* Plus accrued interest from November 1, 1940 to date of delivery. Estimate solely for the purpose of calculating the filing fee.

ORGANIZATION

1. **Exact name of registrant:**

PANHANDLE EASTERN PIPE LINE COMPANY

2. **Address of principal executive offices:**

1221 Baltimore Avenue, Kansas City, Missouri, and 90 Broad Street, New York, New York.

3. **The state or other sovereign power under which incorporated, and the date of incorporation:**

State of Delaware, under name Interstate Pipe Line Company, on December 23, 1929. Name changed to Panhandle Eastern Pipe Line Company on May 9, 1930.

4. **List the following and indicate the respective percentages of voting power as required by the Instructions:**

(a) All subsidiaries of the registrant.	Percentage of Voting Power of Securities Owned by Panhandle Eastern Pipe Line Company
Illinois Natural Gas Company, an Illinois corporation	100%

(b) All parents of the registrant.	Percentage of Voting Power of Securities of Panhandle Eastern Pipe Line Company Owned	
	Percentage	
	Within Classes	To Total(1)
Gano Dunn, Trustee for Columbia Oil & Gasoline Corporation appointed pursuant to Decree dated January 29, 1936, in Cause No. 1099 in Equity in the District Court of the United States for the District of Delaware(2)		
Common Stock	50.1%	56.1%
Preferred Stock		
Class A	100%	
Class B	100%	
Missouri-Kansas Pipe Line Company		
Common Stock	42.0%	37.0%(1)

(1) This percentage relates to voting power on all matters except the election of directors. As to the latter the Class B Preferred Stock has the right to elect two directors, the balance being elected by the Common Stock by cumulative voting.

(2) The Decree states, in effect, that its purposes are to provide against domination or control, direct or indirect, in the affairs of the Registrant by Columbia Gas & Electric Corporation, and the maintenance of the Registrant in a position of free and independent action in the production, transmission, sale and distribution of natural gas in competition with others.

The Registrant is unable to make any representation with respect to the degree of control exercised by Columbia Gas & Electric Corporation over Columbia Oil & Gasoline Corporation. However, the Registrant is informed that Columbia Gas & Electric Corporation owns all of the outstanding Twenty-Year Debentures of Columbia Oil & Gasoline Corporation, and all the Preferred Stock of Columbia Oil & Gasoline Corporation, the holders of which, voting as a class, are entitled to elect the greatest number of directors which shall constitute a minority, and that the holders of the Common Stock of Columbia Oil & Gasoline Corporation, none of which is owned by Columbia Gas & Electric Corporation, are entitled, voting as a class, to elect the smallest number of directors which shall constitute a majority, but none of the directors so elected by the holders of the Common Stock may be a director, officer or employee of Columbia Gas & Electric Corporat on or any of its subsidiaries.

The following provisions of the Decree are quoted to indicate the relationship to the Registrant of Columbia Oil & Gasoline Corporation and Columbia Gas & Electric Corporation. Such provisions as do not affect this relationship are omitted.

Section II provides:

"That the defendants be and they are hereby perpetually enjoined from exercising, or attempting, individually or collectively, directly or indirectly, to exercise any dominion or control over Panhandle Eastern and from restraining, or interfering in any manner with the free and independent action of said Panhandle Eastern in the production, transportation, sale or delivery of natural gas to any person, corporation, community or section of the United States; from holding, acquiring, voting or in any manner acting as the owners, directly or indirectly, of the whole or any part of the stock, or other share capital, or bonds, property or assets of Panhandle Eastern or any other company, corporation, association or organization owning any substantial amount of its securities; and from participating

in any way, directly or indirectly, or from exercising any control, direction, supervision, or influence, in the management or control of Panhandle Eastern; except

* * * * * *

"(c) That Columbia Gas and defendant Hillman may own or acquire obligations, without present or potential voting rights, of said Panhandle Eastern, except that Columbia Gas is hereby enjoined and restrained in connection with enforcing any rights under said obligations with respect to principal, interest or sinking fund, from acquiring any of the pipe line or other physical assets of Panhandle Eastern;

"(d) That Columbia Oil may own or acquire stock or obligations in Panhandle Eastern and exercise voting rights appurtenant thereto (and defendant Bay may be and exercise the lawful rights of an officer of Panhandle Eastern), subject to the further terms and provisions of this decree, but Columbia Gas is hereby perpetually enjoined and restrained from acquiring any interest in such stock, by operation of law, or in connection with enforcing any lien created through the present or future existence of any debt, whether funded or unfunded, of Columbia Oil to Columbia Gas, or otherwise;

"(e) That, when Columbia Gas has effectively divested itself of all control, direct or indirect, legal or practical, of Panhandle Eastern by no longer owning stock of any class having present or potential voting rights in Columbia Oil, upon the approval of this Court Columbia Oil shall no longer be subject to the restrictive clauses of this Section II;"

Section III provides:

"That Gano Dunn is hereby nominated, constituted and appointed Trustee for the purposes and with the powers and duties set forth in this Section III;

"That within 10 days after the entry of this decree Columbia Oil shall execute, and deposit with said Trustee the agreements and offers executed by it in accordance with, its agreements set forth in Section V of the stipulation pursuant to which this decree is entered;

"That within 10 days after the entry of this decree Columbia Oil shall transfer all of its stock now owned and thereafter all stock subsequently acquired in Panhandle Eastern, having present or potential voting rights, to said Trustee to hold the legal title to said stock and to exercise all the rights and privileges incidental to the absolute ownership thereof upon the following terms and conditions:

"(a) To vote said stock for the election of as many directors of Panhandle Eastern as the number of shares thereof may be entitled to elect; *Provided*, that one of the directors so elected shall be the trustee; and that the remainder shall be selected from among persons recommended by the beneficial owner of said stock, in conference and with the advice of the Trustee, but not including any of the individual defendants herein or any one (except with the approval of the Trustee and this Court) who after January 1, 1931, has been or hereafter becomes an officer, director, agent or employee of Columbia Gas; and that, as to the directors so selected, the trustee is empowered to remove and replace such directors with others of his own choosing upon his own motion, if in his judgment such action is necessary in the interest of Panhandle Eastern or for the effectuation of the purposes of this decree; subject, however, in this as well as in the exercise of all other powers to the authority of this Court upon the motion and showing of any party hereto, or upon its own motion, to restrain said Trustee from abuses of sound discretion, in view of the purposes of this decree and the law under which it is entered, or in case said Trustee does not act in good faith hereunder;

"(b) To vote said stock upon all other questions and matters in which the stock is entitled to vote, as directed by the beneficial owners thereof, except when such directions are inconsistent with the purposes of this decree;

* * * * * *

"(e) To pay over to Columbia Oil all dividends received upon said stock; except that dividends in the form of stock having present or potential voting rights shall be retained by the trustee subject to the same terms and conditions as the other shares held hereunder;

(f) To exercise all rights to subscribe to additional stock or other securities of Panhandle Eastern as Columbia Oil may direct;

* * * * * * *

"That the trust hereby created shall be and remain in full force and effect until terminated with the approval of this Court when (1) Columbia Gas has effectively divested itself of all control, direct or indirect, legal or practical, of Panhandle Eastern by (a) no longer owning stock of any class having present or potential voting rights in Columbia Oil or (b) by Columbia Oil divesting itself of ownership of all stock of Panhandle Eastern; or when (2), under the circumstances then existing, the continuation of said trust is no longer essential or necessary in carrying out the purposes of this decree: *Provided*, that no such stock of Panhandle Eastern shall be divested by transfer to any competitor of Panhandle Eastern or without prior notice and full disclosure of the facts to petitioner."

Section IV provides:

"That the defendants be and they are hereby perpetually enjoined from restraining or interfering in any manner in the freedom of Panhandle Eastern to contract or to finance or arrange the financing of all contracts, extensions (including the proposed new line to Detroit, whether or not built and owned by it), repairs, maintenance, service, or improvements necessary in its business through or with any firm, person or corporation with whom it may choose to deal (and to that end any such financial or contractual arrangements made by Panhandle Eastern to consummate the contract dated August 31, 1935, with the Detroit City Gas Company shall be subject to the approval of the trustee who shall receive, and consider the advisability of, alternative methods of financing from any responsible underwriter);

"That if such contracts be made with or financial assistance be secured from Columbia Gas, such contracts may be made or financial assistance furnished only upon terms or conditions which do not in any way, directly or indirectly, presently or potentially, confer upon Columbia Gas any voting rights, control or participation in the management of Panhandle Eastern or confer any rights of ownership in the works or properties of Panhandle Eastern except as security for the investment; and in the event that Columbia Gas shall, with respect to any contract or any contractual rights of any kind whatsoever or any property held as security or used in connection with any contract, in any way prevent the free transportation, sale, and distribution of gas by Panhandle Eastern, then upon application to this Court or any court of competent jurisdiction Panhandle Eastern shall have the right (1) to the immediate appointment of a trustee to hold such contract rights or property subject to the purposes and provisions of this decree; (2) to immediate specific performance of any and all contracts with Columbia Gas; and (3) to immediate injunction, both temporary and final, as well as any other appropriate remedy at law or in equity, including any remedy hereunder."

Reference is made to Item 6, under the heading "Certain Other Phases of Corporate History", for a statement with respect to possible change in ownership of the Registrant's common stock and Class A and Class B preferred stock now held, as above stated, by Gano Dunn as Trustee for Columbia Oil & Gasoline Corporation.

HISTORY AND BUSINESS

5. Outline briefly the general character of the business done and intended to be done by the registrant and its subsidiaries.

The Registrant is engaged in the production, purchase, transmission and sale of natural gas, the major part of which is sold to gas transmission companies and to gas distribution companies for resale. The Registrant's principal natural gas transmission system, which was placed in practical operation in the early part of 1932, extends from the Amarillo gas field in the Texas Panhandle and from the Hugoton gas field in Southwestern Kansas through the States of Oklahoma, Kansas, Missouri and Illinois, to a point near Dana, Indiana, adjacent to the Illinois-Indiana boundary. The Registrant also operates, as a separate unit, a minor transmission system located in the general vicinity of Kansas City, Missouri.

The Registrant produces approximately one-half of its gas requirements and purchases the remainder from others.

29. Give the information required below as to any property acquired or to be acquired in whole or in part, directly or indirectly, not in the ordinary course of business, in consideration of any of the securities registered or of all or any part of the proceeds thereof.

(a) General character and location of such property.

(b) The names and addresses of the persons from whom acquired or to be acquired, specifying their relationship to the registrant, if any.

(c) The allocation of the consideration given or to be given in connection with each such acquisition, reasonably itemized.

Not applicable

MANAGEMENT AND CONTROL

30. (a) Names and addresses of all persons who are, or are chosen to become, directors and officers of the registrant. Indicate office held.

Officers

Name	Address	Office
Joe D. Creveling	90 Broad Street, New York, N. Y.	President
Gerard J. Neuner	1221 Baltimore Avenue, Kansas City, Mo.	Vice President in Charge of Operations
Robert D. Field	502 Amarillo Building, Amarillo, Texas	Vice President
Leith S. Watkins	90 Broad Street, New York, N. Y.	Secretary and Controller
Louis F. Speer, Jr.	90 Broad Street, New York, N. Y.	Treasurer and Assistant Secretary
Norman F. Paxton	1221 Baltimore Avenue, Kansas City, Mo.	Assistant Secretary and Assistant Treasurer
Charley D. Jellings	1221 Baltimore Avenue, Kansas City, Mo.	Assistant Secretary
Raymond A. Ransom	90 Broad Street, New York, N. Y.	Assistant Secretary
William P. Clare, Jr.	44 Wall Street, New York, N. Y.	Vice President
A. Tirney Savage	44 Wall Street, New York, N. Y.	Assistant Secretary

Directors

Name	Address
Robert E. Bulkley	Bulkley Building, Cleveland, Ohio
Joe D. Creveling	90 Broad Street, New York, N. Y.
A. Faison Dixon	120 Broadway, New York, N. Y.
Gano Dunn	80 Broad Street, New York, N. Y.
William G. Maguire	120 Broadway, New York, N. Y.
Walter G. Mortland	400 Park Avenue, New York, N. Y.
Richard C. Patterson, Jr.	1270 Sixth Avenue, New York, N. Y.
Robert C. Winmill	One Wall Street, New York, N. Y.

(b) State as to each such person named or chosen to be a director or officer whether he has consented thereto.

All of the above named persons are now serving as indicated above.

NOTE. Reference is hereby made to Item 6, under the caption "Certain Other Phases of Corporate History", for a statement of the names of the seven persons agreed upon by the Department of Justice and Columbia Oil & Gasoline Corporation as the proposed new directors of Columbia Oil & Gasoline Corporation, certain of whom would be elected by Columbia Oil & Gasoline Corporation as directors of the Registrant, if the plan mentioned under said caption becomes effective. The Registrant has no information as to whether any or all of said seven persons have consented or will then consent to be directors of the Registrant.

31. Describe briefly the business experience of the principal executive officers for the last five years.

Joe D. Greveling, President, has been President of the Registrant since June 1936. Prior to that time he was in charge of all natural gas operations of Cities Service Company for approximately seventeen years.

Gerard J. Nooger, Vice-President in Charge of Operations, has been in the employ of the Registrant since June 1, 1931, first as Counsel and then as Vice-President and Counsel and later as Vice-President in Charge of Operations.

Leith V. Watkins, Secretary and Controller, has been in the employ of the Registrant since 1931, first as Assistant Secretary and Assistant Treasurer, then as Secretary and Treasurer, and since February 10, 1937, as Secretary and Controller. From June 7, 1933 to March 10, 1937, he was also Secretary and Treasurer of Columbia Oil & Gasoline Corporation and Secretary and Assistant Treasurer of its subsidiaries.

Louis F. Sperry, Treasurer and Assistant Secretary, has been in the employ of the Registrant as Treasurer since February 1937, and during the next preceding two years was Vice-President of the National Bank of New Jersey, New Brunswick, New Jersey, and during the next preceding [illegible] was Manager of Guaranty Company of New York, 31 Nassau Street, New York City.

32. Dates of, parties to, and general effect briefly and concisely stated of all material management and general supervisory contracts now in effect providing for management of, or services to, the registrant.

None.

33. Give the information required below for all persons owning of record or beneficially more than ten per cent of any class of voting stock of the registrant.

As of: December 31, 1940

(Owner of Record) Name and address	Beneficial Owner (if known) Name and address	Title of Issue	Amount Owned	Percent of the class
Geo. Dunn, Trustee for Columbia Oil & Gasoline Corporation, appointed pursuant to Decree dated January 29, 1936 in Cause No. 1092 in Equity in the District Court of the United States for the District of Delaware 80 Broad Street, New York, N. Y.	Columbia Oil & Gasoline Corporation, 822 Delaware Trust Building, Wilmington, Delaware	Common	404,326	50.1
		Preferred Class A	100,000	100
		Class B	20,000	100
Missouri-Kansas Pipe Line Company, Room 248, Delaware Trust Building, Wilmington, Delaware	Owner of Record is Beneficial Owner	Common	330,475	42.0

The notes in Item 4 (b) are hereby incorporated herein by reference.

EXHIBIT 106

HISTORICAL FINANCIAL INFORMATION

45. Furnish the information required below as to the respective captions on the registrant's balance sheet, the balance sheet of the registrant and its subsidiaries consolidated, and each individual or group balance sheet required to be furnished for unconsolidated subsidiaries:

(a) If, since January 1, 1922, there have been any increases or decreases in Investments, in Property, Plant and Equipment, or in Intangible Assets, resulting from substantially revaluing such assets, state:

(i) In what year or years such revaluations were made.

(ii) The amounts of such write-ups, or write-downs, and the accounts affected, including the contra entry or entries.

(iii) If in connection with such revaluations any adjustments were made in related reserve accounts, state the accounts and amounts with explanations.

On September 3, 1930 the Board of Directors of the Registrant authorized the revaluation of its gas sales and purchase contracts as determined by independent geologists and petroleum engineers engaged by the Registrant, which resulted in an increase in the asset account and a credit to capital surplus of $10,357,713.50. In March 1932, in accordance with a resolution of the Board of Directors of the Registrant, on March 29, 1932, this entry recording the revaluation was reversed thereby eliminating such appreciation from the accounts of the Registrant.

(b) If, since January 1, 1922, there have been restatements of Capital Stock, state the amounts of such restatements, and the contra entries. If, since January 1, 1922, there has been an original issue of Capital Stock, any part of the proceeds of which was credited to surplus, state such amount.

The original authorized issue of 10,000 shares of no par value common stock of the Registrant was issued in consideration for a gas lease at an assigned value of $1,000 as approved by the Board of Directors on January 2, 1930.

On June 2, 1930, 5,100 shares of such common stock were donated to the Registrant, which shares were then reissued to Missouri-Kansas Pipe Line Company. In connection therewith, the Registrant recorded a charge against its open account with Missouri-Kansas Pipe Line Company in the amount of $50,000, wrote off the value of $1,000 originally assigned to gas leases and credited the remainder, $49,000, to capital surplus.

On October 28, 1930 the Board of Directors assigned a paid-in value of $100.00 to the 10,000 shares of stock outstanding and authorized a transfer of $49.00 from capital surplus to the capital stock account.

(c) If, since January 1, 1922, any substantial amount or amounts of Bond Discount and Expense, on issues still outstanding, have been written off earlier than as required under any periodic amortization plan, give the following information: (a) title of issue; (b) date of such write-off; (c) amount written off; (d) to what account charged.

None.

EXHIBIT 106.

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LETTER OF OPINION

PANHANDLE EASTERN PIPE-LINE COMPANY,
Kansas City, Missouri.

We have reviewed the foregoing answers to Item 45 of this registration statement and, in connection therewith, we have made a review of the accounts recording property, plant and equipment, intangibles, reserves for depreciation, depletion and amortization, reserve for amortization of gas sales and purchase contracts, investments, reserve for investments, debt discount and expense and capital stock of the Registrant, for the period from December 23, 1929 (date of incorporation of Panhandle Eastern Pipe Line Company) to December 31, 1940.

In our opinion, based upon such review, the foregoing statement fairly presents the information required to be submitted in response to Item 45 as outlined in the Regulations of the Securities and Exchange Commission.

Kansas City, Missouri,
January 25, 1941.

ARTHUR ANDERSEN & CO.
ARTHUR ANDERSEN & CO.

EXHIBIT 106.

AUDITORS' CERTIFICATE

We have examined the balance sheet of Panhandle Eastern Pipe Line Company (a Delaware corporation, hereinafter referred to as the "registrant") as of December 31, 1940, the consolidated balance sheet of the registrant and its subsidiaries as at that date, and the statements of income and surplus of registrant and its subsidiaries for the three years ended that date. In connection therewith we have examined or tested accounting records of the companies and other supporting evidence and have reviewed the system of internal control and the accounting procedures of the companies by methods and to the extent we deemed appropriate, but we did not make a detailed audit of the transactions.

In our opinion the accompanying balance sheets and related statements of income and surplus, together with the schedules and items referred to thereon, fairly present the financial position of the companies at December 31, 1940, and the results of their operations for the three years ended that date, in conformity with generally accepted accounting principles consistently maintained by the companies during the periods under review.

Kansas City, Missouri,
January 25, 1941.

ARTHUR ANDERSEN & CO.
ARTHUR ANDERSEN & Co.

EXHIBIT 106

BALANCE SHEET
REGISTRANT

PANHANDLE EASTERN PIPE LINE COMPANY

(A Delaware Corporation)

BALANCE SHEET—DECEMBER 31, 1940

ASSETS

Property, Plant and Equipment (Note A) (Schedule V)			$61,637,368.17
Intangibles (Note A) (Schedule VII):			
Gas sales and purchase contracts	$2,930,286.40		
Less—Reserve for amortization (Schedule VIII)	1,465,143.00	$ 1,465,143.40	
Gas sales contracts—Other, in process of amortization		372,000.38	
Organization expense		115,172.86	
Miscellaneous		64,427.72	2,016,750.36
Investments in and Non-Current Indebtedness of Subsidiary Companies, Subsidiaries Consolidated:			
Investments in capital stock (Note A) (Schedule III)		$ 2,694,391.86	
Note receivable (Note A) (Schedule III)		250,000.00	
Loan receivable (Schedule IV)		25,000.00	2,969,391.86
Current Assets:			
Cash in banks and working funds		$ 3,291,650.42	
Accounts receivable—			
Accounts receivable, customers	$1,120,126.62		
Due from subsidiary companies, subsidiaries consolidated	235,902.39		
Miscellaneous accounts receivable	50,605.04		
	$1,406,634.05		
Less—Reserve for uncollectible accounts (Schedule XII)	30,419.88	1,376,214.17	
Materials and supplies at average cost		208,009.96	4,875,874.55
Non-Current Notes and Accounts Receivable:			
Mortgage notes receivable		$ 61,024.05	
Accounts receivable		174,574.05	235,598.10
Special Deposits			9,028.00
Deferred Charges and Prepaid Expenses:			
Debt discount and expense in process of amortization (Note B)		$ 2,229,322.74	
Prepaid expenses		64,918.68	
Other deferred items		3,810.03	2,298,051.45
			$74,042,062.45

LIABILITIES

Capital Stock (Schedule XIII):			
Preferred stock, $6.00 cumulative, par value $100—entitled in liquidation to $110, aggregating $12,100,000 for the shares called (Note C)—			
Class A, participating and redeemable (Note C)—			
Authorized and issued, 100,000 shares		$10,000,000.00	
Class B, non-participating and non-redeemable—			
Authorized and issued, 10,000 shares		1,000,000.00	
Common stock, without par value—			
Authorized 810,000 shares			
Outstanding 807,367 shares (Note D)		20,184,175.00	$31,184,175.00
Long-Term Debt (Schedule IX):			
Funded debt—			
First Mortgage and First Lien Bonds, Series A, 3%, due March 1, 1961		$22,500,000.00	
Other long-term debt—			
Leasehold purchase obligation (payable monthly from gas produced, unpaid balance payable August 18, 1946)		30,149.00	22,530,149.00
Current Liabilities (Exclusive of sinking fund payment due within one year, $5,498,000):			
Accounts payable (including payrolls of $25,583.22)		$ 364,264.24	
Preferred stock dividends payable January 1, 1941		165,000.00	
Accrued interest		300,000.00	
Accrued taxes—			
State, local and miscellaneous Federal		235,443.39	
Federal income and excess profits		2,037,671.38	3,102,279.01
Deferred Liabilities			44,351.74
Reserves:			
Depreciation, depletion, and amortization of property, plant and equipment (Schedule VI)		$ 8,658,840.63	
Contingencies (Schedule XII)		624,800.94	
Miscellaneous (Schedule XII)		78,149.74	9,361,791.31
Contributions in Aid of Construction			34,335.40
Earned Surplus Since December 31, 1935 (Note A and C) (See Page S-8)			2,784,609.01
Contingent Liabilities (Note E)			
			$74,042,062.45

Reference is made to the appended notes which are an integral part of the above balance sheet.

PANHANDLE EASTERN PIPE LINE COMPANY
(A Delaware Corporation)
AND SUBSIDIARY COMPANIES
CONSOLIDATED BALANCE SHEET—DECEMBER 31, 1940

ASSETS

Property, Plant and Equipment (Note A) (Schedule V)			$56,854,056.79
Intangibles (Note A) (Schedule VII):			
Gas sales and purchase contracts	$2,930,286.40		
Less—Reserve for amortization (Schedule VIII)	1,465,143.00	$1,465,143.40	
Gas sales contracts—Other, in process of amortization		372,000.38	
Orgahization expense		116,291.98	
Miscellaneous		97,997.71	2,051,433.47
Current Assets:			
Cash in banks and working funds			$1,753,383.06
Notes and accounts receivable—			
Notes receivable	$ 2,150.63		
Accounts receivable, customers	1,394,589.27		
Miscellaneous accounts receivable	54,654.54		
	$1,451,394.44		
Less—Reserve for uncollectible accounts (Schedule XII)	40,088.66	1,411,305.78	
Materials and supplies at average cost		212,314.42	3,377,003.26
Non-Current Notes and Accounts Receivable:			
Mortgage notes receivable		$ 61,024.05	
Accounts receivable		174,574.05	235,598.10
Special Deposits			9,125.75
Deferred Charges and Prepaid Expenses:			
Debt discount and expense in process of amortization (Note B)		$2,229,322.74	
Prepaid expenses		64,918.68	
Other deferred items		3,812.99	2,298,054.41
			$64,826,171.28

LIABILITIES

Capital Stock (Schedule XIII)		
Preferred stock, $6.00 cumulative, par value $100—entitled in liquidation to $110, aggregating $12,100,000 for the shares issued (Note C)—		
Class A, participating and redeemable (Note C)—		
Authorized and issued, 100,000 shares		$10,000,000.00
Class B, non-participating and non-redeemable—		
Authorized and issued, 1,000 shares		1,000.00
Common stock, without par value—		
Authorized 810,000 shares		
Outstanding 807,367 shares (Note D)		28,184,175.00
Long-Term Debt (Schedule IX)		
Funded debt		
First Mortgage and First Lien Bonds, Series A, 4%, due March 1, 1952		$22,800,000.00
Other long-term debt		
Leasehold purchase obligation (payable monthly from gas produced, unpaid balance payable August 31, 1946)		30,147.00
Current Liabilities (Exclusive of sinking fund payment due within one year—$1,408,000)		
Accounts payable (including payrolls of $2,576.68)		$ 923,024.00
Preferred stock dividends payable January 1, 1941		165,000.00
Accrued interest		300,000.00
Accrued taxes—		
State, local and miscellaneous Federal		258,647.00
Federal income and excess profits		2,075,271.00
Deferred Liabilities		
Reserves:		
Depreciation, depletion and amortization of property, plant and equipment (Schedule VI)		$10,189,501.00
Contingencies (Schedule XII)		624,800.00
Miscellaneous (Schedule XII)		107,408.00
Contributions in Aid of Construction		
Earned Surplus Since December 31, 1935 (Notes A and C) (See Page S-9)		
Contingent Liabilities (Note E)		
		$64,826,171.28

Reference is made to the appended notes which are an integral part of the above balance sheet

EXHIBIT 106.

BALANCE SHEET NOTES
REGISTRANT AND CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

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NOTES TO THE BALANCE SHEETS ATTACHED TO AND MADE AN INTEGRAL PART OF THE BALANCE SHEET (REGISTRANT ONLY) AND OF THE CONSOLIDATED BALANCE SHEET

As of December 31, 1940

A. (1) Property, plant and equipment is stated at cost except for $2,417,948.52 thereof assigned by the Board of Directors to assets acquired as of August 31, 1930 as a capital contribution, and intangibles are stated at cost except for $2,598,402.19 thereof assigned by the Board of Directors to gas sales and purchase contracts acquired as of August 31, 1930 as a capital contribution.

(2) Investments in subsidiary companies are stated at cost. Securities representing the Registrant's investment in subsidiary companies are pledged as collateral to the First Mortgage and First Lien Bonds, as follows:

Illinois Natural Gas Company, common stock, no-par value, 28,000 shares	$2,635,391.43
Central Distributing Company, common stock, no-par value, 100 shares	59,000.48
Central Distributing Company, income demand note	250,000.00

In January, 1941, the Registrant received 807,367 shares of common stock, of a par value of 42 cents each, of Central Distributing Company in exchange for its former investment in that company (represented by no par common stock of $59,000.48, a note receivable of $250,000.00 and a demand loan of $25,000.00) and $5,093.71 additional cash investment. These shares were then distributed as a dividend to the Registrant's common stockholders, on a share for share basis, with a concurrent charge to earned surplus of $339,094.14.

(3) The amounts at which property, plant and equipment, intangibles and investments in subsidiary companies are stated do not purport to represent the current realizable value thereof.

B. Debt discount and expense in process of amortization at December 31, 1940 consists of:

Discount and expense applicable to bond issue redeemed prior to original maturity of October 1, 1950 in process of amortization over the original life of such issue		$ 898,578.76
Items being amortized on the basis of bonds outstanding over the life of the First Mortgage and First Lien Bonds due March 1, 1952—		
Call premium on retired issue	533,736.55	
Discount and expense on present outstanding issue	797,007.43	
		$2,229,322.74

C. Surplus is restricted by the Certificate of Incorporation as to payment of common stock and participating dividends, in the amount of $3,041,457.38. In the opinion of counsel for the Registrant, the requirements of Delaware law impose no restrictions on surplus by reason of the excess ($1,100,000 at December 31, 1940) of the liquidating value over the par value of its preferred stock. Class A preferred stock may be redeemed at any time in whole or in part at $100 per share if redeemed on or before July 1, 1941 or $110 per share thereafter.

D. At December 31, 1940 there were 1,285 unissued shares available for exercise of purchase option at $25.00 a share.

E. Contingent liabilities:

Effective January 1, 1940, the Registrant adopted a retirement annuity plan for employees (including officers) who had not attained age sixty-five on that date, by means of a group annuity contract with a life insurance company, which provides, among other things, for (a) premium payments in respect of current annuities and (b) the purchase by payments over a period of years of additional annuities based on age and length of prior employment, both at the expense of the Registrant. Amounts charged to the income accounts for the year 1940 aggregated $168,700 of which $100,000 applied to past service annuities. The total cost of the additional annuities based on length of prior employment may vary according to the dates of payments but is estimated by the Registrant at approximately $630,000 (based on a payment period of approximately twenty years). The plan by its terms is subject to change or discontinuance by the Registrant at any time.

Unrecorded items in dispute aggregate approximately $60,000. The Registrant represents that there were no other contingent liabilities not reflected in the balance sheet at December 31, 1940, except those set forth in contracts for the purchase and sale of gas.

F. In the consolidated balance sheet the accounts of all subsidiaries of the Registrant have been consolidated with the accounts of the Registrant. The Registrant's equity in the net assets of such subsidiaries, as shown by the books of the latter, exceeds the aggregate investment in subsidiaries consolidated, as shown in the Registrant's books, by $132,006.22, representing undistributed earnings of subsidiaries since dates of acquisition which has been credited to earned surplus in consolidation.

EXHIBIT 106.

INCOME ACCOUNT
CONSOLIDATED

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PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

STATEMENT OF CONSOLIDATED INCOME

For the Years Ended December 31, 1938, 1939 and 1940

	Year Ended December 31,		
	1938	1939	1940
Operating Revenues:			
Gas sales	$9,540,967.85	$11,461,388.31	$13,157,241.73
Gasoline sales	353,129.31	513,940.99	355,722.01
Miscellaneous	13,032.46	21,439.93	12,489.05
Total operating revenues	$9,907,129.02	$11,996,769.23	$13,535,452.79
Operating Expenses and Taxes:			
Operation—			
Gas purchased	$ 901,927.80	$ 997,872.93	$ 1,040,106.85
Rents and royalties (Schedule XVI)—			
Rentals on unoperated gas leases	94,726.03	96,118.77	101,344.57
Gas royalties	92,404.27	118,813.56	143,341.99
Miscellaneous rents	28,409.52	30,076.25	35,665.19
General and administrative expenses	399,832.93	431,112.47	622,377.71
Provision for uncollectible accounts	6,400.00	8,400.00	10,800.00
Other operation expenses	645,594.35	708,053.17	727,113.61
General overheads charged to construction—credit*			57,380.03*
Total operation	$2,169,294.96	$ 2,399,426.95	$ 2,723,369.87
Maintenance (Note C) (Schedule XVI)	217,207.07	299,483.39	277,394.65
Depreciation, depletion and amortization of property, plant and equipment (Note A) (Schedule XVI)	1,728,687.16	1,870,699.86	1,880,889.87
Amortization of gas sales and purchase contracts (Note B) (Schedule XVI)	326,892.84	329,300.14	329,110.13
Taxes—			
State, local and miscellaneous, Federal (Schedule XVI)	562,830.32	624,338.84	566,445.71
Provision for income and excess profits taxes—			
Federal normal income and $561,000.00 for excess profits taxes in 1940	513,426.21	820,286.12	1,907,508.47
Other income taxes—State	15,048.84	51,139.69	46,425.77
Total operating expenses and taxes	$5,533,316.50	$ 6,394,674.29	$ 7,821,234.47
Net earnings from operations	$4,373,812.52	$ 5,602,094.94	$ 5,714,218.32
Other Income:			
Other interest	13,172.56	13,884.90	13,427.53
Net earnings before interest deductions	$4,386,985.18	$ 5,615,979.84	$ 5,727,645.85
Interest Deductions:			
Interest on funded debt	$ 944,233.34	$ 923,333.32	$ 903,333.32
Other interest deductions	65,120.11	14,394.31	2,787.11
Amortization of debt discount and expense (Note E)	319,076.50	314,852.87	310,039.24
Interest charged to construction—credit*	1,277.51*		36,827.80*
Total interest deductions	$1,327,761.44	$ 1,252,580.50	$ 1,179,321.87
Net income	$3,059,223.74	$ 4,363,399.34	$ 4,548,323.98

*Denotes red figure

Reference is made to the appended notes which are an integral part of the above income account.

EXHIBIT 106.

INCOME ACCOUNT NOTES
CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

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NOTES TO THE INCOME ACCOUNT ATTACHED TO AND MADE A PART OF THE CONSOLIDATED INCOME ACCOUNT

For the Years Ended December 31, 1938, 1939, and 1940

A The amounts provided by the Registrant and its subsidiaries for depreciation, depletion and amortization of property, plant and equipment are fixed annually in accordance with resolutions of the Board of Directors. Specific rates based upon the age and estimated life of the properties were not used in determining the amounts. The management has been informed by P. McDonald Biddison, an independent consulting engineer of Dallas, Texas, that, in his opinion, the annual amounts provided for depreciation, depletion and amortization are reasonable for this purpose. The provisions for the years 1938, 1939, and 1940 were equal to 2.98%, 3.20% and 3.16% of consolidated property, plant and equipment accounts at the beginning of the respective years. The Registrant's Certificate of Incorporation, as amended, provides substantially that no dividends on the common stock or any participating dividends on the preferred and common stocks may be paid except out of net surplus earned subsequent to December 31, 1935 remaining after there shall have been deducted therefrom as provisions for depreciation, depletion and amortization of property, plant and equipment, an aggregate accrual equal to one-third of 1% per month (on monthly balances) of the consolidated tangible property of the Registrant and its subsidiaries. The provisions for depreciation, depletion and amortization of tangible property as computed in accordance with the Registrant's Certificate of Incorporation would have amounted to $2,337,507.71, $2,354,588.33 and $2,378,393.37 for the years 1938, 1939, and 1940, respectively. The amounts claimed by the Registrant and its subsidiaries for depreciation for Federal income tax purposes are larger than the provisions as set forth in the income account.

B The Registrant has provided amortization of gas sales and purchase contracts in the amount of $24,419.05 per month, which will extinguish the net ledger balance at December 31, 1955 ($2,930,286.40) over a period of ten years. Of the original amount of gas sales contracts—other, $171,076.00 is being amortized over a period of fifteen years from January 1, 1937 and the remainder is being amortized primarily over the lives of the respective contracts. No provision has been made for the amortization of organization expense and miscellaneous intangibles.

C It is the practice of the Registrant to charge to maintenance the repairs of property and replacements and renewals of items determined to be less than units of property. Replacements and renewals of items considered to be units of property are charged to the property, plant and equipment accounts. At the time properties are disposed of, the cost (or estimated cost), less net salvage value, of property retired is charged to the reserve for depreciation, depletion and amortization of property, plant and equipment.

D No profits or losses on sales or other dealings between parents or subsidiaries of the Registrant are included in the consolidated income accounts. Inter-company revenues have been eliminated in consolidation.

E Consists of—

	1938	1939	1940
Amortization of debt discount and expense on issue due October 1, 1950 redeemed May 1, 1937	$ 92,161.80	$ 92,161.80	$ 92,161.80
Amortization, on call premium applicable to above issue	91,281.89	89,317.23	87,382.86
Amortization of debt discount and expense on present outstanding issue	136,262.81	133,373.84	130,484.88
	$319,676.50	$314,852.87	$310,029.24

PANHANDLE EASTERN PIPE LINE COMPANY

SCHEDULE VII—INTANGIBLE ASSETS

Column A	Column B	Column C	Column D		Column E	Column F
			Deductions			
Description	Balance at Beginning of Period	Additions at Cost	(1) Charged to Profit and Loss or Income	(2) Charged to Other Accounts	Other Changes Debit and/or Credit	Balance at Close of Period
Year Ended December 31, 1938:						
Gas sales and purchase contracts	$2,930,286.40	$ —	—	$ —	$ —	$2,930,286.40
Gas sales contracts—other	358,658.20	76,649.11(B)	—	33,864.24(C)	—	401,443.07
Organization expense	89,979.09	—	—	—	25,193.77(D)	115,172.86
Miscellaneous	49,813.41	—	—	—	14,614.31(D)	64,427.72
Total (Note A)	$3,428,737.10	$ 76,649.11	—	$ 33,864.24	$ 39,808.08	$3,511,330.05
Year Ended December 31, 1939:						
Gas sales and purchase contracts	$2,930,286.40	$ —	—	$ —	$ —	$2,930,286.40
Gas sales contracts—other	401,443.07	21,025.47(B)	—	36,271.54(C)	—	386,197.00
Organization expense	115,172.86	—	—	—	—	115,172.86
Miscellaneous	64,427.72	—	—	—	—	64,427.72
Total (Note A)	$3,511,330.05	$ 21,025.47	—	$ 36,271.54	$ —	$3,496,083.98
Year Ended December 31, 1940:						
Gas sales and purchase contracts	$2,930,286.40	$ —	—	$ —	$ —	$2,930,286.40
Gas sales contracts—other	386,197.00	24,427.59(B)	—	36,081.53(C)	2,536.68*(E)	372,006.38
Organization expense	115,172.86	—	—	—	—	115,172.86
Miscellaneous	64,427.72	—	—	—	—	64,427.72
Total (Note A)	$3,496,083.98	$ 24,427.59	—	$ 36,081.53	$ 2,536.68*	$3,481,893.36

* Denotes red figure

NOTES:

A. See Note A to the balance sheets for statement of the basis on which intangibles are stated.

B. Expenditures in connection with securing gas sales contracts consisting of cost in connection with changing over to natural gas, services of special agents, contributions for line extensions to serve industrial customers, etc.

C. Reserve for amortization of gas sales contracts—other, applied in reduction of the asset account.

D. Amounts of intangibles taken over in liquidation of Panhandle Illinois Pipe Line Company, a subsidiary.

E. Refund of expenditures in connection with securing gas sales contracts.

EXHIBIT 106

SCHEDULE VII
REGISTRANT

PANHANDLE EASTERN PIPE LINE COMPANY
AND SUBSIDIARY COMPANIES
SCHEDULE VII—INTANGIBLE ASSETS

Column A	Column B	Column C	Column D		Column E	Column F
			Deductions			
Description	Balance at Beginning of Period	Additions at Cost	(1) Charged to Profit and Loss or Income	(2) Charged to Other Accounts	Other Changes Debit and/or Credit	Balance at Close of Period
Year Ended December 31, 1938:						
Gas sales and purchase contracts	$2,930,286.40	$ —	—	$ —	—	$2,930,286.40
Gas sales contracts—other	358,658.20	76,649.11(B)	—	33,864.24(C)	—	401,443.07
Organization expense	116,291.98	—	—	—	—	116,291.98
Miscellaneous	97,991.71	—	—	—	—	97,991.71
Total (Note A)	$3,503,228.29	$ 76,649.11	—	$ 33,864.24	—	$3,546,013.16
Year Ended December 31, 1939:						
Gas sales and purchase contracts	$2,930,286.40	$ —	—	$ —	—	$2,930,286.40
Gas sales contracts—other	401,443.07	21,025.47(B)	—	36,271.54(C)	—	386,197.00
Organization expense	116,291.98	—	—	—	—	116,291.98
Miscellaneous	97,991.71	—	—	—	—	97,991.71
Total (Note A)	$3,546,013.16	$ 21,025.47	—	$ 36,271.54	—	$3,530,767.09
Year Ended December 31, 1940:						
Gas sales and purchase contracts	$2,930,286.40	$ —	—	$ —	—	$2,930,286.40
Gas sales contracts—other	386,197.00	24,427.59(B)	—	36,081.63(C)	$ 2,536.68*(D)	372,006.38
Organization expense	116,291.98	—	—	—	—	116,291.98
Miscellaneous	97,991.71	—	—	—	—	97,991.71
Total (Note A)	$3,530,767.09	$ 24,427.59	—	$ 36,081.53	$ 2,536.68*	$3,516,576.47

* Denotes red figure

NOTES:

A. See Note A to the balance sheets for statement of the basis on which intangibles are stated.

B. Expenditures in connection with securing gas sales contracts consisting of cost in connection with changing over to natural gas, services of special agents, contributions for line extensions to serve industrial customers, etc.

C. Reserve for amortization of gas sales contracts—other applied in reduction of the asset account.

D. Refund of expenditures in connection with securing gas sales contracts.

EXHIBIT 106.
SCHEDULE VII
CONSOLIDATED

EXHIBIT 106.
SCHEDULE VIII
REGISTRANT AND CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY
AND SUBSIDIARY COMPANIES

SCHEDULE VIII—RESERVES FOR DEPRECIATION AND AMORTIZATION OF INTANGIBLE ASSETS

Column A	Column B	Column C		Column D	Column E
		Additions			
Description	Balance at Beginning of period	(1) Charged to Profit and Loss or Income (See Note A)	(2) Charged to Other Accounts	Deductions From Reserves	Balance at Close of Period
Registrant and Consolidated:					
Year ended December 31, 1938:					
Gas sales and purchase contracts	$ 586,057.20	$293,028.60	$	$	$ 879,085.80
Gas sales contracts—other		33,864.24		33,864.24 (B)	
	$ 586,057.20	$326,892.84	$	$33,864.24	$ 879,085.80
Year ended December 31, 1939:					
Gas sales and purchase contracts	$ 879,085.80	$293,028.60	$	$	$1,172,114.40
Gas sales contracts—other		36,271.54		36,271.54 (B)	
	$ 879,085.80	$329,300.14	$	$36,271.54	$1,172,114.40
Year ended December 31, 1940:					
Gas sales and purchase contracts	$1,172,114.40	$293,028.60	$	$	$1,465,143.00
Gas sales contracts—other		36,081.53		36,081.53 (B)	
	$1,172,114.40	$329,110.13	$	$36,081.53	$1,465,143.00

NOTES:

A. See Note B to the income account for basis of amortization of gas sales and purchase contracts.

B. Application of the accumulated reserve for amortization of gas sales contracts—other, as reduction of the asset account.

C. It has not been the policy of the Registrant to provide for amortization of organization expense and miscellaneous intangibles set forth in Schedule VII.

EXHIBIT 106.
SCHEDULE IX
REGISTRANT AND CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

SCHEDULE IX—FUNDED DEBT

AS OF DECEMBER 31, 1940

Column A	Column B	Column C	Column D		Column E	Column F	Column G	Column H	
			Amount Included in Column C, Which Is					Amount Held by Affiliates for Which Statements are Filed Herewith	
Name of Issuer and Title of Each Issue	Amount Authorized by Indenture	Amount Issued and Not Retired or Cancelled	(1) Held by or for Account of Issuer Thereof	(2) Not Held by or for Account of Issuer Thereof	Amount Included in Sum Extended Under Caption "Funded Debt" in Related Balance Sheet	Amount in Sinking and Other Special Funds of Issuer Thereof	Amount Pledged by Issuer Thereof	(1) Persons Included in Consolidated Statement	(2) Others
Registrant and Consolidated:									
Panhandle Eastern Pipe Line Company—First Mortgage and First Lien Bonds, Series A, 4%, due March 1, 1952	(A)	$22,500,000.00	None	$22,500,000.00	$22,500,000.00	None	None	None	None
Leasehold Purchase Obligation (B)	62,000.00	30,149.00	None	30,149.00	30,149.00	None	None	None	None

NOTE

(A) Under the provisions of the Mortgage and Deed of Trust dated March 1, 1937, securing the Registrant's First Mortgage and First Lien Bonds, Series A, 4%, due March 1, 1952, not more than $30,000,000 principal amount of Series A Bonds may be issued. The aggregate principal amount of all bonds which may be issued under said Mortgage and Deed of Trust is $35,000,000.

(B) Payable monthly from gas produced, unpaid balance payable August 31, 1946.

EXHIBIT 106.

SCHEDULE XII
REGISTRANT

PANHANDLE EASTERN PIPE LINE COMPANY

SCHEDULE XII—RESERVES

Column A	Column B	Column C		Column D	Column E
		Additions			
Description	Balance at Beginning of Period	(1) Charged to Profit and Loss or Income	(2) Charged to Other Accounts	Deductions from Reserves	Balance at Close of Period
Year Ended December 31, 1938:					
Reserve for investment in subsidiary companies	$1,221,811.90	$ —	$ —	$1,221,811.90(B)	$ —
Reserve for uncollectible accounts	6,680.87	3,600.00	8,196.00(C)	16.49	18,460.38
Total reserves deducted from assets to which they apply	$1,228,492.77	$ 3,600.00	$ 8,196.00	$1,221,828.39	$ 18,460.38
Contingencies reserve	$ 96,800.94	$ —	$328,000.00(A)	$ —	$ 424,800.94
Miscellaneous—					
Reserve for injuries and damages	33,181.69	9,600.00	14,392.49(C)	—	57,164.18
Contributions for extensions	29,100.32	—	—	—	29,100.32
Total—classified as liabilities on balance sheet	$ 159,072.95	$ 9,600.00	$342,392.49	$ —	$ 511,065.44
Year Ended December 31, 1939:					
Reserve for uncollectible accounts	$ 18,460.38	$ 4,800.00	$ —	$ 37.50	$ 23,222.88
Contingencies reserve	$ 424,800.94	$ —	$200,000.00(A)	$ —	$ 624,800.94
Miscellaneous—					
Reserve for injuries and damages	57,164.18	9,600.00	—	550.00	66,214.18
Contributions for extensions	29,100.32	—	—	—	29,100.32
Total—classified as liabilities on balance sheet	$ 511,065.44	$9,600.00	$200,000.00	$ 550.00	$ 720,115.44
Year Ended December 31, 1940:					
Reserve for uncollectible accounts	$ 23,222.88	$ 7,200.00	$ —	$ 3.00	$ 30,419.88
Contingencies reserve	$ 624,800.94	$ —	$ —	$ —	$ 624,800.94
Miscellaneous—					
Reserve for injuries and damages	66,214.18	12,000.00	—	64.44	78,149.74
Contributions for extensions	29,100.32	—	—	29,100.32(D)	—
Total—classified as liabilities on balance sheet	$ 720,115.44	$12,000.00	$ —	$ 29,164.76	$ 702,950.68

NOTES:

A. Excess of 1937 provisions for Federal and State Income Taxes over revised estimated liability therefor transferred to the reserve for contingencies.
B. Elimination of reserve for investment in Panhandle Illinois Pipe Line Company upon liquidation of this subsidiary and acquisition of its net assets by the Registrant.
C. Reserves acquired in liquidation of Panhandle Illinois Pipe Line Company, a subsidiary.
D. Transfer from reserve classification to "Contributions in Aid of Construction" as of January 1, 1940.

EXHIBIT 106.

SCHEDULE XII
CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

SCHEDULE XII—RESERVES

Column A	Column B	Column C		Column D	Column E
		Additions			
Description	Balance at Beginning of Period	(1) Charged to Profit and Loss or Income	(2) Charged to Other Accounts	Deductions from Reserves	Balance at Close of Period
Year Ended December 31, 1938:					
Reserve for uncollectible accounts	$ 15,405.64	$ 6,400.00	$ 146.80	$ 584.51	$ 21,367.93
Contingencies reserve	$ 96,800.94	$ —	$328,000.00(A)	$ —	$424,800.94
Miscellaneous—					
Reserve for injuries and damages	60,664.18	14,400.00	—	—	75,064.18
Contributions for extensions	29,100.32	—	—	—	29,100.32
Total—classified as liabilities on balance sheet	$186,565.44	$14,400.00	$328,000.00	$ —	$528,965.44
Year Ended December 31, 1939:					
Reserve for uncollectible accounts	$ 21,367.93	$ 8,400.00	$ 100.09	$ 344.13	$ 29,523.89
Contingencies reserve	$424,800.94	$ —	$200,000.00(A)	$ —	$624,800.94
Miscellaneous—					
Reserve for injuries and damages	75,064.18	14,400.00	—	550.00	88,914.18
Contributions for extensions	29,100.32	—	7,196.51(B)	—	36,296.83
Total—classified as liabilities on balance sheet	$528,965.44	$14,400.00	$207,196.51	$ 350.00	$750,011.95
Year Ended December 31, 1940:					
Reserve for uncollectible accounts	$ 29,523.89	$10,800.00	$ 158.51	$ 393.74	$ 40,082.66
Contingencies reserve	$624,800.94	$ —	$ —	$ —	$624,800.94
Miscellaneous—					
Reserve for injuries and damages	88,914.18	18,600.00	—	105.81	107,408.37
Contributions for extensions	36,296.83	—	—	36,296.83(C)	—
Total—classified as liabilities on balance sheet	$750,011.95	$18,600.00	$ —	$36,402.64	$732,209.31

NOTES:

A. Excess of 1937 provisions for Federal and State Income Taxes over revised estimated liability therefor transferred to the reserve for contingencies.

B. Non-refundable contributions for extensions.

C. Transfer from reserve classification to "Contributions in Aid of Construction" as of January 1, 1940.

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

SCHEDULE XIII—CAPITAL SHARES

AS OF DECEMBER 31, 1940

Column A	Column B	Column C	Column D		Column E		Column F		Column G	Column H
			Number of Shares Included in Column C Which Are		Shares Outstanding as Shown on or Included in Related Balance Sheet Under Caption "Capital Shares"		Number of Shares Held by Affiliates for Which Statements Are Filed Herewith			
Name of Issuer and Title of Issue	Number of Shares Authorized by Charter	Number of Shares Issued and Not Retired or Cancelled	(1) Held by or for Account of Issuer Thereof	(2) Not Held by or for Account of Issuer Thereof	(1) Number	(2) Amount at Which Carried	(1) Persons Included in Consolidated Statements	(2) Others	Number of Shares Reserved for Officers and Employees	Number of Shares Reserved for Options, Warrants, Conversions, and Other Rights
Registrant and Consolidated:										
Panhandle Eastern Pipe Line Company—										
Preferred Stock—(Note A)										
Class A	100,000	100,000	None	100,000	100,000	$10,000,000.00	None	None	None	None
Class B	10,000	10,000	None	10,000	10,000(B)	1,000,000.00	None	None	None	None
Common Stock	850,000	807,367	None	807,367	807,367	20,184,175.00	None	None	None	1,285(C)
						$31,184,175.00				

NOTE

(A) Preferential dividends cumulative at the rate of $6.00 per share per annum. Holders of Class A preferred stock are entitled to receive, in addition to preferential dividends, participating dividends after certain conditions are met in regard to dividends on common stock. Preferred stocks (Class A and B) are entitled in liquidation to $110 per share.

(B) The three members of the Registrant's Board of Directors representing thereon Missouri-Kansas Pipe Line Company have voted against the payment of dividends on the Registrant's Class B Preferred Stock on the ground that such stock is not validly outstanding. In the opinion of Edward N. Gadsbury, Esq., General Counsel for the Registrant, such stock is validly outstanding. A copy of such opinion is filed herewith as Exhibit G to this Registration Statement, to which reference is hereby made.

(C) Reference is hereby made to Item 8, under the heading "Certain Other Phases of Corporate History," for a description of certain litigation concerning an obligation of Columbia Oil & Gasoline Corporation to purchase 1,285 shares of common stock of the Registrant.

EXHIBIT 106.

SCHEDULE XIII
REGISTRANT AND CONSOLIDATED

EXHIBIT 106.

SCHEDULE XVI
CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY
AND SUBSIDIARY COMPANIES

SCHEDULE XVI—SUPPLEMENTARY INCOME ACCOUNT INFORMATION

Column A	Column B		Column C		Column D
	Charged Directly to Profit and Loss		Charged to Other Accounts		
Item	(1) To Costs or Operating Expenses	(2) Other	(1) Account	(2) Amount	Total
Year Ended December 31, 1938:					
Maintenance and repairs (Note A)	$ 217,207.07				$ 217,207.07
Depreciation, depletion and amortization of property, plant and equipment (Note A)	1,728,607.16				1,728,607.16
Amortization of gas sales and purchase contracts	326,892.84				326,892.84
Taxes (other than income and excess profits taxes)—					
Ad valorem	444,099.22				444,099.22
Other	118,740.10				118,740.10
Total taxes	$562,839.32				$ 562,839.32
Management and service contract fees	—				—
Rents and royalties (Note B)—					
Rentals on unoperated gas leases	94,726.03				94,726.03
Miscellaneous rents	28,409.52				28,409.52
Gas royalties	92,404.27				92,404.27
Year Ended December 31, 1939:					
Maintenance and repairs (Note A)	$ 299,483.39				$ 299,483.39
Depreciation, depletion and amortization of property, plant and equipment (Note A)	1,870,699.86				1,870,699.86
Amortization of gas sales and purchase contracts	329,300.14				329,300.14
Taxes (other than income and excess profits taxes)—					
Ad valorem	475,573.61				475,573.61
Other	148,764.53				148,764.53
Total taxes	$ 624,338.14				$ 624,338.14
Management and service contract fees	—				—
Rents and royalties (Note B)—					
Rentals on unoperated gas leases	96,118.77				96,118.77
Miscellaneous rents	29,076.25				29,076.25
Gas royalties	118,813.36				118,813.36
Year Ended December 31, 1940:					
Maintenance and repairs (Note A)	$ 277,394.65				$ 277,394.65
Depreciation, depletion and amortization of property, plant and equipment (Note A)	1,880,889.87				1,880,889.87
Amortization of gas sales and purchase contracts	329,110.13				329,110.13
Taxes (other than income and excess profits taxes)—					
Ad valorem	437,745.73				437,745.73
Other	128,699.98	—	Construction Work in Progress	$6,012.46	134,712.44
Total taxes	$ 566,445.71	—	—	$6,012.46	$ 572,458.17
Management and service contract fees	—	—	—	—	—
Rents and royalties (Note B)—					
Rentals on unoperated gas leases	101,344.57	—	—	—	101,344.57
Miscellaneous rents	35,665.19	—	—	—	35,665.19
Gas royalties	143,341.99	—	—	—	143,341.99

NOTES:

A. Maintenance and repairs, and provisions for depreciation, depletion and amortization, are exclusive of automobile maintenance, repairs and depreciation charged to the automobile expense clearing account and redistributed, together with various other charges, to various operating, construction and other accounts.

B. Rents, for the years 1938 and 1939, do not include certain rents, the aggregate amount of which is not significant, which are included in various operating expenses but not identified as rents; these rents, however, are segregated as such for the year 1940.

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A-11488

EXHIBIT 107.

COMMITTEE ON STOCK LIST
NEW YORK STOCK EXCHANGE

PANHANDLE EASTERN PIPE LINE COMPANY

FIRST MORTGAGE AND FIRST LIEN 3% BONDS, SERIES B, DUE NOVEMBER 1, 1960

New York, New York, February 28, 1941

Panhandle Eastern Pipe Line Company (hereinafter sometimes referred to as the "Company") hereby makes application for the listing on the New York Stock Exchange of $12,000,000 principal amount of its First Mortgage and First Lien 3% Bonds, Series B, dated November 1, 1940, and due November 1, 1960, all of which are now outstanding. Reference is made to the Company's previous application A-10896, dated May 14, 1937.

OPINION OF COUNSEL

Edward N. Goodwin, Esq., 44 Wall Street, New York, New York, General Counsel of the Company, has furnished an opinion that the Mortgage and Deed of Trust, dated November 1, 1940 between the Company and City Bank Farmers Trust Company, as Corporate Trustee, is in due and legal form and constitutes a valid, legal and binding obligation of the Company and that the First Mortgage and First Lien 3% Bonds, Series B, secured thereby are valid and binding obligations of the Company payable in accordance with their terms.

STATUS UNDER FEDERAL ACTS

The $12,000,000 principal amount of First Mortgage and First Lien 3% Bonds, Series B, for which listing application is hereby made, have been registered under the Securities Act of 1933, as amended (File No. 2-4579 of the Securities and Exchange Commission). The Registration Statement (Form A-2) therefor became effective on January 29, 1941.

Application is being filed with the Securities and Exchange Commission on Form 8A for registration of these bonds on the New York Stock Exchange in accordance with the provisions of the Securities and Exchange Act of 1934, as amended.

The Mortgage and Deed of Trust securing these bonds has been qualified under and conforms with the requirements of the Trust Indenture Act of 1939 and the rules and regulations of the Securities and Exchange Commission adopted under said Act.

The Company is exempt from the Public Utility Holding Company Act of 1935 with respect to the issue, sale and delivery of these bonds.

DEPRECIATION POLICY

The formulae consistently used by the Company and its Subsidiary Companies beginning with the year 1937 to develop an amount to be recommended to the Board of Directors as a proper provision for depreciation, depletion and amortization gives consideration to the "wasting asset" theory and provides depletion on operated leaseholds on the basis of units of gas withdrawn, amortization of investment in unoperated land rights by the use of a composite life of ten years for such land rights, amortization of gas sales and purchase contracts at a specific monthly rate as provided in the Company's Certificate of Incorporation and in amounts to conform to the contract period in certain instances, and an amount for the other transmission system properties determined by its Board of Directors which recognizes amortization in addition to a composite rate based on the age and estimated life of the properties. The properties of the aggregate annual provision, as well as the reasonableness of the total reserves provided to date, has been substantiated by an opinion from an independent Consulting Engineer. Unless required to do otherwise by some regulatory authority of competent jurisdiction the Company expects to continue this policy.

[fol. 14732] (Exhibit 108.)

P. McDonald Biddison
Consulting Engineer
Dallas Gas Building
Dallas, Texas

December 13th, 1937.

Mr. N. F. Paxton, Assistant Secretary,
Panhandle Eastern Pipe Line Company,
101 West 11th Street,
Kansas City, Missouri.

Provision for Retirements, Depletion and Amortization for Year 1938.

Dear Mr. Paxton:

In keeping with your request I have observed and compared the amount which the officers of the Panhandle Eastern Pipe Line Company expect to suggest as the proper provision for retirements, depletion and amortization on a consolidated basis for the year 1938 and have found this amount, $2,055,000.00, is within approximately $60,000.00 of the amount I consider proper and shall include in the report on the valuation of Panhandle System properties which I have now in process of completion.

From this examination and comparison I can state that if the company's present plan for making such provision is continued, the annual amount for future years will be approximately equal to that of my estimate.

Yours very truly,

P. McDONALD BIDDISON,
Consulting Engineer.

PMcDB/1

[fol. 14733] (Exhibit 109.)

P. McDonald Biddison
Consulting Engineer
Dallas Gas Building
Dallas, Texas

December 29th, 1938

Mr. N. F. Paxton, Assistant Secretary,
Panhandle Eastern Pipe Line Company,
101 West Eleventh Street,
Kansas City, Missouri.

Provision for Retirements, Depletion and Amortization

Dear Mr. Paxton:

In keeping with your request, I have reviewed the amounts which the officers of Panhandle Eastern Pipe Line Company have suggested as a proper provision for retirements, depletion and amortization on a consolidated basis for the year 1939 and have found this amount, $2,100,000, (which includes provision for amortization of Gas Sales and Purchase Contracts) to be a reasonable provision for depreciation, depletion and amortization based on the estimated life of the properties. Further, in my opinion, the reserves for retirements, depletion and amortization at December 31, 1938, are reasonable reserves based on age and estimated life of the properties.

Yours very truly,

P. McDONALD BIDDISON,
Consulting Engineer.

PMcDB/1

[fol. 14734]

(Exhibit 110.)

P. McDonald Biddison
Consulting Engineer
Dallas Gas Building
Dallas, Texas

December 8th, 1939.

Mr. G. J. Neuner, Vice President,
Panhandle Eastern Pipe Line Company,
101 West Eleventh Street,
Kansas City, Missouri.

Provision for Retirements, Depletion and Amortization

Dear Mr. Neuner:

In keeping with your request, I have reviewed the amounts which the officers of Panhandle Eastern Pipe Line Company have suggested as a proper provision for retirements, depletion and amortization on a consolidated basis for the year 1940 and have found this amount, $2,200,000, (which includes provision for amortization of Gas Sales and Purchase Contracts) to be a reasonable provision for depreciation, depletion and amortization based on the estimated life of the properties. Further, in my opinion, the reserves for retirements, depletion and amortization at December 31, 1939, are reasonable reserves based on age and estimated life of the properties.

Yours very truly,

P. McDONALD BIDDISON,
Consulting Engineer

PMcDB.

[fol. 14735]

(Exhibit 111.)

P. McDonald Biddison
Consulting Engineer
Dallas Gas Building
Dallas, Texas

January 11th, 1941

Mr. G. J. Neuner, Vice President,
Panhandle Eastern Pipe Line Company,
101 West Eleventh Street,
Kansas City, Missouri.

Provision for Retirements, Depletion and Amortization

Dear Mr. Neuner:

In keeping with your request, I have reviewed the amounts which the officers of Panhandle Eastern Pipe Line Company have suggested as a proper provision for retirements, depletion and amortization on a consolidated basis for the year 1941 and have found this amount, $2,400,000, (which includes provision for amortization of Gas Sales and Purchase Contracts) to be a reasonable provision for depreciation, depletion and amortization based on the estimated life of the properties. Further, in my opinion, the reserves for retirements, depletion and amortization at December 31, 1940, are reasonable reserves based on age and estimated life of the properties.

Yours very truly,

P. McDONALD BIDDISON,
Consulting Engineer

PMcDB

[Vol. 1473o]

Exhibit 112

Schedule 1
Witness Watkins

Federal Power Commission Feb 16 1942 Received

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Table Of Subsidiary Companies Of
Panhandle Eastern Pipe Line Company

Line No.	Name of Subsidiary Company (1) (A)	Date of Incorporation (B)	Date of Dissolution (C)
1	Central Distributing Company	November 17, 1934	(2)
2	Central Pipe Line Company	August 25, 1933	November 20, 1937
3	Central States Gas Utilities Company	August 15, 1928	April 15, 1935
4	Illinois Natural Gas Company	January 19, 1938	
5	Macon Gas and Electric Light Company (3)	January 25, 1888	March 18, 1938
6	Missouri-Kansas Gas Company	June 27, 1928	October 13, 1935
7	Panhandle Illinois Pipe Line Company	August 16, 1930	July 30, 1938
8	Texas Interstate Pipe Line Company	February 12, 1930	October 31, 1936
9	(1) 51% of the stock of J. W. Judd and Company and Shale Gas Corporation was		
10	owned by Panhandle Eastern Pipe Line Company from September 1, 1930 to		
11	dissolution in year 1935. These companies' operations were not included		
12	with the wholly owned subsidiary companies in consolidation.		
13	(2) 1 January 1941, Panhandle Eastern Pipe Line Company distributed to its		
14	stockholders the common stock of Central Distributing Company, in pay-		
15	ment of a dividend.		
16	(3) Macon Gas and Electric Light Company acquired 26 February 1931, was a		
17	subsidiary of Central States Gas Utilities Company until January 1, 1935		
18	when it became a subsidiary of Panhandle Eastern Pipe Line Company.		

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	(A)	D e c e m b e r 1930 (B)	1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)
1	Central Distributing Company						X	X
2	Central Pipe Line Company				X	X	X	X
3	Central States Gas Utilities Company	X	X	X	X	X		
4	Illinois Natural Gas Company							
5	Macon Gas and Electric Light Company		X	X	X	X		
6	Missouri-Kansas Gas Company	X	X	X	X	X	X	X
7	Panhandle Illinois Pipe Line Company	X	X	X	X	X		
8	Texas Interstate Pipe Line Company	X	X	X	X	X	X	X
9								
10								
11								

Line No.	(A)	1932 April 1 to December 31 (B)	Year Ended December 1933 (C)	1934 (D)	1935 (E)	1936 (F)	1937 (G)
12							
13							
14							
15							
16							
17	Central Distributing Company				X	X	X
18	Central States Gas Utilities Company	X	X	X			
19	Illinois Natural Gas Company						
20	Macon Gas and Electric Light Company	X	X	X	X	X	X
21	Missouri-Kansas Gas Company	X	X	X	X		
22	Panhandle Illinois Pipe Line Company	X	X	X	X	X	X
23	Texas Interstate Pipe Line Company	X	X	X	X		
24	(1) 6 Months actual, 6 months estimated.						

5011 14737

EXHIBIT

SCHEDULE

WITNESS WATKINS

COMPANY AND SUBSIDIARY COMPANIES

SUBSIDIARY COMPANIES OF
PANHANDLE EASTERN PIPE LINE COMPANY
INCLUDED WITH PANHANDLE EASTERN PIPE LINE COMPANY
IN CONSOLIDATION
BALANCE SHEET - PER BOOKS
EARNED SURPLUS - PER BOOKS
CAPITAL SURPLUS - PER BOOKS
GAS PLANT

D e c e m b e r 3 1										June 30
1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 (M)
				X	X	X	X	X	X	
		X	X	X	X					
X	X	X	X							
							X	X	X	X
X	X	X	X	X	X					
X	X	X	X							
X	X	X	X	X	X	X				
X	X	X	X	X						

INCOME STATEMENT - PER BOOKS
STATEMENT OF GAS REVENUE
STATEMENT OF GAS REVENUE BY STATES

32 11 1 o ber 31 B)	Year Ended December 31								1941 (1) January 1 to December 31 (K)
	1933 (C)	1934 (D)	1935 (E)	1936 (F)	1937 (G)	1938 (H)	1939 (I)	1940 (J)	
			X	X	X	X	X	X	
X	X	X							
						X	X	X	X
X	X	X	X	X	X				
X	X	X	X						
X	X	X	X	X	X	X			
X	X	X	X	X					

(1)

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	(A)	1932 April 1 to December 31 (B)	Year Ende 1933 (C)	Year Ende 1934 (D)
1	Macon Gas and Electric Light Company	X	X	X
2	Missouri-Kansas Gas Company	X	X	X
3	Texas Interstate Pipe Line Company	X	X	X
4				
5	Panhandle Eastern Pipe Line Company purchases all gas purchased			
6	from others. Gas purchases of subsidiary companies from			
7	Panhandle Eastern Pipe Line Company are eliminated in consolidation.			
8				
9				
10				
11			Year Ende	
12	(A)		1939 (B)	
13	Illinois Natural Gas Company		X	

5013 14738

EXHIBIT 1/2

SCHEDULE 3

WITNESS WATKINS

SUBSIDIARY COMPANIES OF
PANHANDLE EASTERN PIPE LINE COMPANY
INCLUDED WITH PANHANDLE EASTERN PIPE LINE COMPANY
IN CONSOLIDATION
STATEMENT OF GAS PRODUCED

r E n d e d D e c e m b e r 3 1			
1934 (D)	1935 (E)	1936 (F)	1937 (G)
X	X	X	X
X	X.		
	X	X	

STATEMENT OF GAS PURCHASED

d

ion.

STATEMENT SHOWING COMPARISON OF SALES AND REVENUE
PRINCIPAL INDUSTRIAL CUSTOMERS

E n d e d D e c e m b e r 3 1	
1940 (C)	1941 (D)
X	X

EXHIBIT No. 131

FUTURE DIVISION OF PRODUCTION
BETWEEN FIELDS
CONSIDERING A REASONABLE EXPECTED LOAD INCREASE

Year	West Panhandle Field				Hugoton Field			
	Produced	Purchased	Total	% of Total	Produced	Purchased	Total	% of Total
1941	23,623,600 53.69	20,376,400 46.31	44,000,000	73.33	6,172,800 38.58	9,827,200 61.42	16,000,000	26.67
1942	27,635,000 55.27	22,365,000 44.73	50,000,000	73.42	8,145,657 45.00	9,955.802 55.00	18,101,459	26.58
1943	30,909,600 57.24	23,090,400 42.76	54,000,000	73,92	9,321,854 48.93	9,729,554 51.07	19,051,408	26.08
1944	32,455,500 59.01	22,544,500 40.99	55,000,000	70.90	11,835,017 52.44	10,733,666 47.56	22,568,683	29.10
1945	36,036,000 60.06	23,964,000 39.94	60,000,000	73.11	12,266,349 55.59	9,799,399 44.41	22,065,748	26.89
1946	41,262,000 68.77	18,738,000 31.23	60,000,000	65.19	19,137,276 59.74	12,897,000 40.26	32,034,276	34.81
1947	41,262,000 68.77	18,738,000 31.23	60,000,000	61.65			37,317,213	38.35
1948	41,274,000 68.79	18,726,000 31.21	60,000,000	58.48			42,607,884	41.52
1949	37,889,500 68.89	17,110,500 31.11	55,000,000	51.21			52,408,109	48.79
1950	34,495,000 68.99	15,505,000 31.01	50,000,000	44.45			62,473,428	55.55
1951	31,090,500 69.09	13,909,500 30.91	45,000,000	38.45			72,027,419	61.55
1952	27,676,000 69.19	12,324,000 30.81	40,000,000	34.18			77,031,551	65.82
1953	22,172,800 69.29	9,827,200 30.71	32,000,000	27.34			85,031,551	72.66
1954	15,265,800 69.39	6,734,200 30.61	22,000,000	18.80			95,031,551	81.20
1955	6,949,000 69.49	3,051,000 30.51	10,000,000	8.54			107,031,551	91.46
1956	4,885,300 69.79	2,114,700 30.21	7,000,000	5.98			110,031,551	94.02
1957	3,489,500 69.79	1,510,500 30.21	5,000,000	4.27			112,031,551	95.73
1958	2,791,600 69.79	1,208,400 30.21	4,000,000	3.42			113,031,551	96.58
1959	3,000,000	-	3,000,000	2.56			114,031,551	97.44
1960	2,000,000	-	2,000,000	1.71			115,031,551	98.29
	466,162,700	251,837,300	718,000,000				1,324,934,586	

EXHIBIT No. 131

FUTURE DIVISION OF PRODUCTION
BETWEEN FIELDS
CONSIDERING A REASONABLE EXPECTED LOAD INCREASE

Hugoton Field				Total Main Line		
Produced	Purchased	Total	% of Total	Produced	Purchased	Total
6,172,800 38.58	9,827,200 61.42	16,000,000	26.67	29,796,400	30,203,600	60,000,000
8,145,657 45.00	9,955.802 55.00	18,101,459	26.58	35,780,657	32,320,802	68,101,459
9,321,854 48.93	9,729,554 51.07	19,051,408	26.08	40,231,454	32,819,954	73,051,408
11,835,017 52.44	10,733,666 47.56	22,568,683	29.10	44,290,517	33,278,166	77,568,683
12,266,349 55.59	9,799,399 44.41	22,065,748	26.89	48,302,349	33,763,399	82,065,748
19,137,276 59.74	12,897,000 40.26	32,034,276	34.81	60,399,876	31,635,000	92,034,276
		37,317,213	38.35			97,317,213
		42,607,884	41.52			102,607,884
		52,408,109	48.79			107,408,109
		62,473,428	55.55			112,473,428
		72,027,419	61.55			117,027,419
		77,031,551	65.82			117,031,551
		85,031,551	72.66			117,031,551
		95,031,551	81.20			117,031,551
		107,031,551	91.46			117,031,551
		110,031,551	94.02			117,031,551
		112,031,551	95.73			117,031,551
		113,031,551	96.58			117,031,551
		114,031,551	97.44			117,031,551
		115,031,551	98.29			117,031,551
		1,324,939,586				2,042,939,586

EXHIBIT No. 132

FUTURE DIVISION OF PRODUCTION
BETWEEN FIELDS
WITHOUT CONSIDERATION FOR INCREASED LOADS
PRESSURE BASE 16.4 POUNDS

Year	West Panhandle Field			Hugoton Field			Total
	Produced MCF	Purchased MCF	Total MCF	Produced MCF	Purchased MCF	Total MCF	
1941	23,623,600	20,376,400	44,000,000	6,172,800	9,827,200	16,000,000	
	53.69	46.31		38.58	61.42		
1942	24,871,500	20,128,500	45,000,000	6,824,000	9,176,000	16,000,000	
	55.27	44.73		42.65	57.35		
1943	25,758,000	19,242,000	45,000,000	7,209,600	8,790,400	16,000,000	
	57.24	42.76		45.06	54.94		
1944	26,554,500	18,445,500	45,000,000	7,424,000	8,576,000	16,000,000	
	59.01	40.99		46.40	53.60		
1945	27,027,000	17,973,000	45,000,000	7,654,400	8,345,600	16,000,000	
	60.06	39.94		47.84	52.16		
1946	30,946,500	14,053,500	45,000,000	8,507,200	7,492,800	16,000,000	
	68.77	31.23		53.17	46.83		
1947	30,946,500	14,053,500	45,000,000			16,000,000	
	68.77	31.23					
1948	30,955,500	14,044,500	45,000,000			16,000,000	
	68.79	31.21					
1949	31,000,500	13,999,500	45,000,000			16,000,000	
	68.89	31.11					
1950	31,045,500	13,954,500	45,000,000			16,000,000	
	68.99	31.01					
1951	31,090,500	13,909,500	45,000,000			16,000,000	
	69.09	30.91					
1952	31,135,500	13,864,500	45,000,000			16,000,000	
	69.19	30.81					
1953	27,716,000	12,284,000	40,000,000			21,000,000	
	69.29	30.71					
1954	24,286,500	10,713,500	35,000,000			26,000,000	
	69.39	30.61					
1955	20,847,000	9,153,000	30,000,000			31,000,000	
	69.49	30.51					
1956	13,958,000	6,042,000	20,000,000			41,000,000	
	69.79	30.21					
1957	5,583,200	2,416,800	8,000,000			53,000,000	
	69.79	30.21					
1958	3,489,500	1,510,500	5,000,000			56,000,000	
	69.79	30.21					
1959	4,000,000	-	4,000,000			57,000,000	
1960	3,000,000	-	3,000,000			58,000,000	
			684,000,000			535,000,000	

EXHIBIT No. 132

FUTURE DIVISION OF PRODUCTION
BETWEEN FIELDS
WITHOUT CONSIDERATION FOR INCREASED LOADS
PRESSURE BASE 16.4 POUNDS

Hugoton Field			Total Main Line		
Produced MCF	Purchased MCF	Total MCF	Produced MCF	Purchased MCF	Total MCF
6,172,800	9,827,200	16,000,000	29,796,400	30,203,600	60,000,000
38.58	61.42				
6,824,000	9,176,000	16,000,000	31,695,500	29,304,500	61,000,000
42.65	57.35				
7,209,600	8,790,400	16,000,000	32,967,600	28,032,400	61,000,000
45.06	54.94				
7,424,000	8,576,000	16,000,000	33,978,500	27,021,500	61,000,000
46.40	53.60				
7,654,400	8,345,600	16,000,000	34,681,400	26,318,600	61,000,000
47.84	52.16				
8,507,200	7,492,800	16,000,000	39,453,700	21,546,300	61,000,000
53.17	46.83				
		16,000,000			61,000,000
		16,000,000			61,000,000
		16,000,000			61,000,000
		16,000,000			61,000,000
		16,000,000			61,000,000
		16,000,000			61,000,000
		21,000,000			61,000,000
		26,000,000			61,000,000
		31,000,000			61,000,000
		41,000,000			61,000,000
		53,000,000			61,000,000
		56,000,000			61,000,000
		57,000,000			61,000,000
		58,000,000			61,000,000
		535,000,000			1,219,000,000

[fol. 14783] Exhibit 187.

Acres Used In Determining Weighted Average Pressures Of Texas Panhandle Field

July	Acres			
	East Field	West Field		Total Field
		Sweet	Sour	
1935	263,150	861,643	379,512	1,504,305
1936	270,231	873,759	369,498	1,513,126
1937	272,948	785,519	391,613	1,450,080
1938	274,977	801,446	398,901	1,475,324
1939	271,220	795,761	386,210	1,453,191
1940	281,588	803,682	372,437	1,457,707

Source: Annual reports "Panhandle Oil and Gas Field, Railroad Commission of Texas."

EXHIBIT No. 138

DRY GAS PRODUCTION AND PRESSURE DECLINE
TEXAS PANHANDLE FIELD

PERIOD		EAST FIELD		WEST SWEET FIELD		WEST SOUR FIELD		TOTAL	
BEG.	END	PRODUCTION MCF	PRESSURE DECLINE LBS.	PRODUCTION MCF	PRESSURE DECLINE LBS.	PRODUCTION MCF	PRESSURE DECLINE LBS.	PRODUCTION MCF	PRESSURE DECLINE LBS.
8-1-35	7-1-36	69,060,898	16.95	226,493,969	1.82	151,785,533	13.61	447,342,322	7.51
7-1-36	7-1-37	39,199,352	12.33	227,583,806	7.10	179,482,544	0.83	446,265,702	7.95
7-1-37	8-1-38	44,709,208	20.65	243,187,395	6.48	257,988,242	12.28	545,884,845	9.39
8-1-38	8-1-39	36,601,439	20.85	251,999,957	9.50	222,061,730	14.35	510,663,126	13.94
8-1-39	8-1-40	39,667,071	(-) 5.34	276,488,683	8.38	248,129,543	5.62	564,285,297	5.39

Volumes of gas are given as of a pressure base of 14.65 pounds per square inch absolute.

Source: Annual Reports "Panhandle Oil and Gas Field, Railroad Commission of Texas."

[fol. 14783] (Exhibit 139)

Estimated Intake Pressures At Sneed Compressor Station

Years	Pounds Gauge Production From Group Area A.B.& C.	Pounds Gauge Production From Group Area D.E.F.& G.
	Pounds Gauge	Pounds Gauge
1942	293	293
1943	285	288
1944	273	276
1945	261	261
1946	247	246
1947	231	228
1948	216	210
1949	208	210*
1950	190	192
1951	172	174
1952	154	154
1953	136	134
1954	118	114
1955	100*	90
1956	80	70
1957	60	50
1958	40**	—
1959	20	—
1960	—	—

* Additional Field Horsepower will be required to maintain the same suction or cylinders changed at Sneed, or both.

** Present type compressors cannot be operated successfully at such pressures therefore new equipment will be required to compress the gas when pressures fall below 50# Gauge.

G.H.H.
1/10-42

EXHIBIT No. 140

ESTIMATED AVERAGE WORKING PRESSURES
AT WELL HEAD (GAUGE)
FOR "GROUP AREAS", SHOWN ON EXHIBIT 46
PANHANDLE FIELD, TEXAS

Year	Average Working Pressure Group Area "A" Pounds Gauge	Average Working Pressure Group Area "B" Pounds Gauge	Average Working Pressure Group Area "C" Pounds Gauge	Average Working Pressure Group Area "D" Pounds Gauge	Average Working Pressure Group Area "E" Pounds Gauge
COMPANY WELLS					
1942	317	317	303	299	308
1943	309	309	295	294	303
1944	297	297	283	282	291
1945	285	285	271	267	276
1946	271	271	257	252	261
1947	255	255	241	234	243
1948	240	240	226	216	225
1949	226	226	214	216	220
1950	208	208	196	197	202
1951	190	190	178	180	184
1952	171	171	159	170	162
1953	152	152	141	150	141
1954	132	132	123	130	119
1955	112	112	104	120	94
1956	90	90	83	100	73
1957	68	68	62	70	52
1958	46	46	41	-	-
1959	-	24	-	-	-
1960	-	-	-	-	-
GAS PURCHASE WELLS					
1942	320	317	305	299	308
1943	312	309	297	294	303
1944	300	297	285	282	291
1945	288	285	273	267	276
1946	274	271	259	252	261
1947	258	255	243	234	243
1948	243	240	228	216	225
1949	229	226	216	216	220
1950	210	208	198	197	202
1951	192	190	180	180	184
1952	173	171	158	170	162
1953	154	152	142	150	141
1954	133	132	123	130	119
1955	112	112	104	120	94
1956	90	90	83	100	73
1957	68	68	62	70	52
1958	46	46	41	-	-
1959	-	24	-	-	-
1960	-	-	-	-	-

NOTE: It is assumed that the system capacity be adjusted by added pipe lines or additional horse power so as to allow wells the estimated working pressures shown.

EXHIBIT No. 140

ESTIMATED AVERAGE WORKING PRESSURES
AT WELL HEAD (GAUGE)
FOR "GROUP AREAS", SHOWN ON EXHIBIT 46
PANHANDLE FIELD, TEXAS

Average Working Pressure Group Area "C" Pounds Gauge	Average Working Pressure Group Area "D" Pounds Gauge	Average Working Pressure Group Area "E" Pounds Gauge	Average Working Pressure Group Area "F" Pounds Gauge	Average Working Pressure Group Area "G" Pounds Gauge
COMPANY WELLS				
303	299	308	313	313
295	294	303	308	308
283	282	291	296	296
271	267	276	281	281
257	252	261	266	266
241	234	243	248	248
226	216	225	230	230
214	216	220	222	222
196	197	202	204	204
178	180	184	186	186
159	170	162	164	164
141	150	141	143	143
123	130	119	121	121
104	120	94	95	95
83	100	73	74	74
62	70	52	55	53
41	-	-	-	-
-	-	-	-	-
-	-	-	-	-
GAS PURCHASE WELLS				
305	299	308	313	313
297	294	303	308	308
285	282	291	296	296
273	267	276	281	281
259	252	261	266	266
243	234	245	248	248
228	216	229	230	230
216	216	220	222	222
198	197	202	204	204
180	180	184	186	186
158	170	162	164	164
142	150	141	143	143
123	130	119	121	121
104	120	94	95	95
83	100	73	74	74
62	70	52	55	53
41	-	-	-	-
-	-	-	-	-
-	-	-	-	-

ved by added pipe lines or additional horse power so as to allow wells to produce that cannot feed against

EXHIBIT No. 141

ANNUAL & CUMULATIVE PRODUCTION FROM PANHANDLE FIELD, TEXAS

(Figures through 1940 actual, 1941 through 1956 Estimated)
Pressure Base 16.4#

Year	Gas Used By Pipe Lines M.C.F.	Gas Used By Gasoline Plants M.C.F.	Casinghead Gas Not Treated (Blown in Air) M.C.F.	Gas Blown in Air and Used in Drilling Wells M.C.F.	Total Gas Produced M.C.F.	Total Cumulative Gas Produced M.C.F.
	(1)	(2)	(3)	(4)	(5)	(6)
1926 and earlier	15,725,533	34,300,000	92,000,000	105,400,000	247,425,533	247,425,533
1927	8,825,598	263,800,000	144,000,000	88,600,000	505,225,598	752,651,131
1928	39,978,176	330,500,000	114,000,000	49,500,000	533,978,176	1,286,629,307
1929	84,767,509	395,110,000	90,000,000	55,800,000	625,677,509	1,912,306,816
1930	81,175,878	412,796,000	70,000,000	52,600,000	616,571,878	2,528,878,694
1931	86,538,708	346,255,000	50,000,000	16,300,000	499,093,708	3,027,972,402
1932	97,087,294	283,708,708	32,940,000	4,026,000	417,762,002	3,445,734,404
1933	109,179,977	333,838,516	25,550,000	4,380,000	472,948,493	3,918,682,897
1934	147,363,215	564,804,621	33,800,000	21,665,125	767,632,961	4,686,315,858
1935	156,695,751	563,734,998	28,850,000	26,037,265	775,318,014	5,461,633,872
1936	183,804,643	330,269,607	15,540,000	30,066,628	559,680,878	6,021,314,750
1937	210,333,095	345,298,466	6,205,000	29,692,496	591,529,057	6,612,843,807
1938	207,553,695	318,498,051	5,075,000	12,268,267	543,395,013	7,156,238,820
1939	222,299,905	329,653,273	7,300,000	13,026,239	572,279,417	7,728,518,237
1940	235,860,805	337,256,848	7,320,000	17,029,475	597,467,129	8,325,985,366
1941	242,700,000	345,000,000	7,300,000	15,000,000	610,000,000	8,935,985,000
1942	266,700,000	345,000,000	7,300,000	15,000,000	634,000,000	9,569,985,000
1943	282,700,000	345,000,000	7,300,000	15,000,000	650,000,000	10,219,985,000
1944	296,700,000	345,000,000	7,300,000	15,000,000	664,000,000	10,883,985,000
1945	311,700,000	345,000,000	7,300,000	15,000,000	679,000,000	11,562,985,000
1946	311,700,000	345,000,000	7,300,000	15,000,000	679,000,000	12,241,985,000
1947	311,700,000	345,000,000	7,300,000	15,000,000	679,000,000	12,920,985,000
1948	311,700,000	345,000,000	7,300,000	15,000,000	679,000,000	13,599,985,000
1949	306,700,000	345,000,000	7,300,000	15,000,000	674,000,000	14,273,985,000

EXHIBIT No. 141

ANNUAL & CUMULATIVE PRODUCTION FROM PANHANDLE FIELD, TEXAS

(Figures through 1940 actual, 1941 through 1956 Estimated)
Pressure Base 16.4#
(Continued)

Year	Gas Used By Pipe Lines M.C.F.	Gas Used By Gasoline Plants M.C.F.	Casinghead Gas Not Treated (Blown in Air) M.C.F.	Gas Blown in Air and Used in Drilling Wells M.C.F.	Total Gas Produced M.C.F.	Total Cumulative Gas Produced M.C.F.
	(1)	(2)	(3)	(4)	(5)	(6)
1950	301,700,000	345,000,000	7,300,000	15,000,000	669,000,000	14,942,985,000
1951	293,700,000	345,000,000	7,300,000	15,000,000	661,000,000	15,603,985,000
1952	288,700,000	345,000,000	7,300,000	15,000,000	656,000,000	16,259,985,000
1953	279,700,000	345,000,000	7,300,000	14,000,000	646,000,000	16,905,985,000
1954	270,700,000	345,000,000	7,300,000	13,000,000	636,000,000	17,541,985,000
1955	259,700,000	345,000,000	7,300,000	12,000,000	624,000,000	18,165,985,000
1956	258,700,000	345,000,000	7,300,000	10,000,000	621,000,000	18,786,985,000

Gas used by Carbon Black Plants is included in column showing "Gas Used By Gasoline Plants."

Amounts of gas shown through years 1926-1931 estimated by Victor Cotner - "Geology and Occurance of Natural Gas in Amarillo District, Texas." Bulletin A.A.P.G. Vol. 17, No. 8, August 1933 p.p. 877-906.

Amounts of gas shown through years 1932-1940 - Gas used by pipe lines and gasoline plants from records of Railroad Commission of Texas. Balance of data estimated from weekly oil field scout reports.

All figures through 1940 compiled by C. J. Peterson.

Amounts of gas shown through years 1941-1956 estimated by C. H. Hinton.

[fol. 14789] Exhibit 142.--Substituted.

In the tabulation shown herein the carrying charges on the cost of reserves, the cost of existing facilities and the cost of facilities to be hereafter added, have not been taken into account; nor has consideration been given to amortization, depletion, depreciation and replacements with respect to these properties. The apportionment of transportation costs in these tabulations is based on the ratio of gas produced or gas purchased, as the case may be, to the total gas produced and purchased.

SUMMARY OF COST OF GAS PRODUCED AND PURCHASED PER M C F BY FIELDS - BASIC LOAD FOR THE YEARS 1940 to 1946 INCLUSIVE

(Year 1940 - actual, Year 1941 - 6 months actual and 6 months estimated, and the Years 1942 to 1946 inclusive - estimated).

Line No.	Description (A)	1940 (B) ¢	1941 (C) ¢	1942 (D) ¢	1943 (E) ¢	1944 (F) ¢	1945 (G) ¢	1946 (H) ¢
1	Panhandle Field							
2	Cost of Gas Produced per M C F	1.1719	1.4726	1.5126	1.5412	1.5615	1.6081	1.5979
3	Cost of Gas Purchased per M C F	3.8073	4.0127	4.0721	4.1034	4.1232	4.1643	4.1952
4	Panhandle Field - Average	2.3689	2.6488	2.6575	2.6386	2.6115	2.6290	2.4091
5	Hugoton Field							
6	Cost of Gas Produced per M C F	2.8551	3.3672	3.6334	4.1852	3.6303	3.5545	3.6969
7	Cost of Gas Purchased per M C F	4.4963	4.9192	4.9989	5.1518	5.2146	5.2477	5.2770
8	Hugoton Field - Average	3.8702	4.3205	4.4165	4.7163	4.4795	4.4377	4.4368
9	Both Fields - Combined							
10	Cost of Gas Produced per M C F	1.5560	1.8651	1.9692	2.1194	2.0135	2.0377	2.0505
11	Cost of Gas Purchased per M C F	4.0663	4.3076	4.3623	4.4322	4.4696	4.4842	4.5714
12	Main Line - Average	2.8290	3.0947	3.1189	3.1822	3.1015	3.1035	2.9410

Witness Hinton

COST OF GAS PURCHASED PER M C F BY FIELDS - BASIC LOAD FOR THE YEARS 1940 to 1946 INCLUSIVE

(Year 1940 - Actual, Year 1941 - 6 months Actual and 6 months estimated, and the Years 1942 to 1946 inclusive - estimated)

Line No.	Nature of Costs (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)
1	Panhandle Field							
2	Amount paid for gas purchased							
3	(Line 21 x 3.47¢ average price)	$570,050	$707,061	$698,459	$667,697	$640,059	$623,663	$487,656
4	Transportation costs -							
5	Transmission -							
6	Operation	8,181	10,712	11,174	11,105	10,773	10,500	8,210
7	Maintenance	2,847	4,468	5,390	5,339	5,200	5,226	4,086
8	Measurement -							
9	Operation	5,945	5,610	6,316	6,586	6,868	7,162	7,470
10	Maintenance	403	450	512	534	557	581	606
11	Compressor -							
12	Operation - Hansford	-	23,849	26,605	25,597	24,705	24,248	19,115
13	Maintenance - Hansford	-	5,277	5,351	5,372	5,407	5,532	4,542
14	Operation - Sneed	32,649	40,444	46,187	46,439	46,313	50,677	41,332
15	Maintenance - Sneed	5,385	5,636	5,716	5,738	5,775	5,909	4,851
16	Dehydration Plant - Sneed							
17	Operation	-	2,205	2,182	2,086	1,999	1,948	1,523
18	Maintenance	-	283	287	288	290	297	244
19	Taxes - Ad Valorem	-	11,642	11,465	12,800	12,604	12,715	9,948
20	Total Gas Purchased Costs	$625,470	$817,635	$819,644	$789,581	$760,550	$746,458	$589,277
21	M C F Purchased for Year	16,427,962	20,376,400	20,128,508	19,242,000	18,445,500	17,973,000	14,053,500
22	Cost of Gas Purchased per M C F - Panhandle Field	3.8073¢	4.0127¢	4.0721¢	4.1034¢	4.1232¢	4.1543	4.1952¢
23	Hugoton Field							
24	Amount paid for gas purchased							
25	(Line 35 x 4.26¢ average price)	$421,376	$418,639	$390,898	$374,471	$365,338	$355,525	$319,193
26	Transportation costs -							
27	Transmission -							
28	Operation	12,580	16,629	18,395	17,710	18,864	18,358	16,620
29	Maintenance	3,663	4,879	7,154	7,008	8,836	8,416	7,685
30	Measurement -							
31	Operation	6,380	6,255	6,833	7,124	7,218	7,525	7,845
32	Maintenance	749	764	829	862	896	931	963
33	Taxes - Ad Valorem	-	36,251	34,587	45,691	46,055	47,201	43,085
34	Total Gas Purchase Costs	$444,748	$483,417	$458,696	$452,866	$447,207	$437,954	$395,396
35	M C F Purchased for Year	9,891,451	9,827,200	9,176,000	8,790,400	8,576,800	8,345,600	7,492,800
36	Cost of Gas Purchased per M C F - Hugoton Field	4.4963¢	4.9192¢	4.9989¢	5.1518¢	5.2146¢	5.2477¢	5.2770¢
37	Both Fields - Combined							
38	Total Gas Purchase Costs	$1,070,218	$1,301,052	$1,278,340	$1,242,447	$1,207,757	$1,180,166	$984,973
39	M C F Purchased for Year	26,319,413	30,203,600	29,304,500	28,032,400	27,021,500	26,318,600	21,546,300
40	Cost of Gas Purchased per M C F-Main Line	4.0663¢	4.3076¢	4.3623¢	4.4322¢	4.4696¢	4.4842¢	4.5714¢

PRODUCTION COSTS PER M C F PRODUCED BY FIELDS - BASIC LOAD
FOR THE YEARS 1940 to 1946 INCLUSIVE
(Year 1940 - actual, Year 1941 - 6 months actual and 6 months estimated, and the Years 1942 to 1946 inclusive - estimated)

Schedule 3
Witness Hinton

Line No.	Nature of Costs (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)
1	Panhandle Field							
2	Production -							
3	Operation	$22,239	$21,657	$21,500	$22,800	$24,300	$26,300	$27,100
4	Maintenance	11,821	7,990	9,050	10,300	11,750	13,300	14,100
5	Land and Lease -							
6	Operation	5,699	3,810	3,800	3,800	3,800	3,800	3,800
7	Royalties	101,182	132,882	139,902	144,889	149,369	152,027	174,074
8	Rents	325	325	325	325	325	325	325
9	Delay Rentals	12,544	9,411	11,031	6,861	4,932	3,097	3,097
10	Renewal Bonus	8,000	4,873	-	-	800	2,050	800
11	Taxes -							
12	Ad Valoreum	-	13,498	14,166	17,135	18,144	19,120	21,893
13	Gross Production	-	37,614	39,601	41,013	42,281	43,033	49,274
14	Total Production Costs	$161,810	$232,060	$239,375	$247,123	$255,901	$263,052	$294,463
15	M C F Produced for Year	19,743,000	23,623,600	24,871,500	25,758,000	26,554,500	27,027,000	30,946,500
16	Production Costs per M C F Produced -							
17	Panhandle Field	0.8196¢	0.9823¢	0.9624¢	0.9594¢	0.9637¢	0.9733¢	0.9515¢
18	Hugoton Field							
19	Production -							
20	Operation	$14,042	$16,573	$17,373	$20,223	$21,823	$21,673	$21,008
21	Maintenance	3,492	5,470	6,450	6,900	7,500	7,950	8,300
22	Land and Lease -							
23	Operation	7,447	7,712	7,500	8,000	8,500	8,500	8,500
24	Royalties	41,698	42,072	45,773	47,979	49,223	50,556	53,353
25	Rents	-	-	-	-	-	-	-
26	Delay Rentals	76,514	80,314	91,504	89,426	87,466	86,266	85,146
27	Renewal Bonus	4,286	5,641	15,075	49,111	6,360	8,143	27,439
28	Taxes -							
29	Ad Valoreum	-	22,771	25,721	37,475	39,869	43,292	48,919
30	Gross Production	-	3,937	5,528	6,810	7,520	7,909	9,775
31	Total Production Costs	$147,479	$184,490	$214,924	$265,924	$228,261	$228,289	$264,440
32	M C F Produced for Year	5,835,900	6,172,800	6,821,000	7,209,600	7,404,000	7,654,400	8,507,200
33	Production Costs per M C F Produced -							
34	Hugoton Field	2.5271¢	2.9888¢	3.1495¢	3.6885¢	3.0746¢	2.9825¢	3.1084¢
35	Both Fields - Combined							
36	Total Production Costs	$309,289	$416,550	$454,299	$513,047	$484,162	$491,341	$558,903
37	M C F Produced for Year	25,578,900	29,796,400	31,695,500	32,967,600	33,958,500	34,681,400	39,453,700
38	Production Costs per M C F Produced -							
39	Main Line	1.2092¢	1.3980¢	1.4333¢	1.5562¢	1.4249¢	1.4167¢	1.4166¢

TRANSPORTATION COSTS PER M C F PRODUCED BY FIELDS - BASIC LOAD
FOR THE YEARS 1940 to 1946 INCLUSIVE
(Year 1940 - actual, Year 1941 - 6 months actual and 6 months estimated and the Years 1942 to 1946 inclusive - estimated)

Schedule 4
Witness Hinton

Line No.	Nature of Costs (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)
1	Panhandle Field							
2	Transmission -							
3	Operation	$9,831	$12,420	$13,808	$14,865	$15,510	$15,790	$18,080
4	Maintenance	3,422	5,181	6,660	7,146	7,485	7,859	8,999
5	Measurement -							
6	Operation	9,290	7,075	8,414	11,564	12,217	12,749	13,306
7	Maintenance	1,313	1,072	1,294	1,754	1,886	1,932	1,981
8	Compressor -							
9	Operation - Hansford	-	27,649	32,874	34,264	35,566	36,462	42,092
10	Maintenance - Hansford	-	6,118	6,613	7,191	7,784	8,318	10,001
11	Operation - Sneed	39,233	46,889	57,070	62,165	66,674	76,287	91,016
12	Maintenance - Sneed	6,472	6,535	7,064	7,681	8,314	8,885	10,683
13	Dehydration Plant - Sneed -							
14	Operation	-	2,553	2,696	2,792	2,879	2,930	3,355
15	Maintenance	-	328	355	386	418	446	536
16	Total Transportation Costs	$69,561	$115,820	$136,848	$149,848	$158,733	$171,578	$200,049
17	M C F Produced for Year	19,743,000	23,623,600	24,871,500	25,758,000	26,554,500	27,027,000	30,946,500
18	Transportation Costs per M C F Produced -							
19	Panhandle Field	0.3523¢	0.4903¢	0.5502¢	0.5818¢	0.5978¢	0.6348¢	0.6464¢
20	Hugoton Field							
21	Transmission -							
22	Operation	$7,759	$10,445	$13,680	$14,585	$16,330	$16,837	$18,870
23	Maintenance	2,260	3,064	5,320	5,747	7,649	7,719	8,725
24	Measurement -							
25	Operation	7,807	8,238	11,603	12,878	14,338	15,964	18,662
26	Maintenance	1,314	1,611	2,421	2,662	2,941	3,264	3,804
27	Compressor -							
28	Operation	-	-	-	-	-	-	-
29	Maintenance	-	-	-	-	-	-	-
30	Total Transportation Costs	$19,140	$23,358	$33,024	$35,812	$41,258	$43,784	$50,061
31	M C F Produced for Year	5,835,900	6,172,800	6,824,000	7,209,600	7,424,000	7,654,400	8,507,200
32	Transportation Costs per M C F Produced -							
33	Hugoton Field	0.3280¢	0.3784¢	0.4839¢	0.4967¢	0.5557¢	0.5720¢	0.5885¢
34	Both Fields - Combined							
35	Total Transportation Costs	$88,701	$139,178	$169,872	$185,660	$199,991	$215,362	$250,110
36	M C F Produced for Year	25,578,900	29,796,400	31,695,500	32,967,600	33,978,500	34,681,400	39,453,700
37	Transportation Costs per M C F Produced -							
38	Main Line	0.3468¢	0.4671¢	0.5359¢	0.5632¢	0.5886¢	0.6210¢	0.6339¢

Schedule 5
Witness Hinton

SUMMARY OF PRODUCTION AND TRANSPORTATION COSTS PER M C F PRODUCED
BY FIELDS - BASIC LOAD
FOR THE YEARS 1940 to 1946 INCLUSIVE
(Year 1940 -- actual, Year 1941 - 6 months actual and 6 months estimated, and the years 1942 to 1946 inclusive - estimated)

Line No.	Description (A)	1940 (B) ¢	1941 (C) ¢	1942 (D) ¢	1943 (E) ¢	1944 (F) ¢	1945 (G) ¢	1946 (H) ¢
1	Panhandle Field							
2	Production Costs per M C F Produced	0.8196	0.9823	0.9624	0.9594	0.9637	0.9733	0.9515
3	Transportation Costs per M C F Produced	0.3523	0.4903	0.5502	0.5818	0.5978	0.6348	0.6464
4	Totals - Panhandle Field	1.1719	1.4726	1.5126	1.5412	1.5615	1.6081	1.5979
5	Hugoton Field							
6	Production Costs per M C F Produced	2.5271	2.9888	3.1495	3.6885	3.0746	2.9825	3.1084
7	Transportation Costs per M C F Produced	0.3280	0.3784	0.4839	0.4967	0.5557	0.5720	0.5885
8	Totals - Hugoton Field	2.8551	3.3672	3.6334	4.1852	3.6303	3.5545	3.6969
9	Both Fields - Combined							
10	Production Costs per M C F Produced	1.2092	1.3980	1.4333	1.5562	1.4249	1.4167	1.4166
11	Transportation Costs per M C F Produced	0.3468	0.4671	0.5359	0.5632	0.5886	0.6210	0.6339
12	Totals - Main Line	1.5560	1.8651	1.9692	2.1194	2.0135	2.0377	2.0505

[fol. 14795] Exhibit 143.—Substituted.

In the tabulation shown herein the carrying charges on the cost of reserves, the cost of existing facilities and the cost of facilities to be hereafter added, have not been taken into account; nor has consideration been given to amortization, depletion, depreciation and replacements with respect to these properties. The apportionment of transportation costs in these tabulations is based on the ratio of gas produced or gas purchased, as the case may be, to the total gas produced and purchased.

SUMMARY OF COST OF GAS PRODUCED AND PURCHASED PER M C F BY FIELDS -
ESTIMATED FUTURE LOAD FOR THE YEARS 1940 to 1946 INCLUSIVE
(Year 1940 - actual, Year 1941 - 6 months actual and 6 months estimated, and the Years 1942 to 1946 inclusive - estimated)

Line No.	Description (A)	1940 (B) ¢	1941 (C) ¢	1942 (D) ¢	1943 (E) ¢	1944 (F) ¢	1945 (G) ¢	1946 (H) ¢
1	Panhandle Field							
2	Cost of Gas Produced per M C F	1.1719	1.4726	1.4929	1.4818	1.4905	1.4762	1.4713
3	Cost of Gas Purchased per M C F	3.8073	4.0126	4.0712	4.0751	4.0863	4.0805	4.1063
4	Panhandle Field - Average	2.3689	2.6488	2.6461	2.5907	2.5545	2.5164	2.2942
5	Hugoton Field							
6	Cost of Gas Produced per M C F	2.8552	3.3671	3.1635	3.4883	2.6334	2.6006	2.0896
7	Cost of Gas Purchased per M C F	4.4963	4.9192	4.9455	5.0937	4.9830	5.0466	4.8296
8	Hugoton Field - Average	3.8703	4.3204	4.1436	4.3082	3.7509	3.6869	3.1927
9	Both Fields - Combined							
10	Cost of Gas Produced per M C F	1.5560	1.8651	1.8733	1.9468	1.7960	1.7617	1.6672
11	Cost of Gas Purchased per M C F	4.0663	4.3076	4.3405	4.3771	4.3755	4.3609	4.4012
12	Main Line - Average	2.8290	3.0947	3.1189	3.1822	3.1015	3.1035	2.9410

COST OF GAS PURCHASED PER M C F BY FIELDS - ESTIMATED FUTURE LOAD
FOR THE YEARS 1940 to 1946 INCLUSIVE
(Year 1940 - actual, Year 1941 - 6 months actual and 6 months estimated, and the Years 1942 to 1946 inclusive - estimated)

Line No.	Nature of Cost (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)
1	Panhandle Field							
2	Amount paid for gas purchased							
3	(Line 21 x 3.47¢ average price)	$570,050	$707,061	$776,066	$801,237	$782,294	$831,551	$650,209
4	Transportation costs -							
5	Transmission -							
6	Operation	8,181	10,712	11,735	11,447	11,099	10,815	8,456
7	Maintenance	2,847	4,468	5,699	5,715	5,546	5,560	4,347
8	Measurement -							
9	Operation	5,945	5,609	6,316	6,586	6,868	7,162	7,470
10	Maintenance	413	449	512	534	557	581	606
11	Compressor -							
12	Operation - Hansford	-	23,849	32,793	33,571	32,657	34,153	26,860
13	Maintenance - Hansford	-	5,277	5,351	5,372	5,407	5,532	4,542
14	Operation - Sneed	32,648	40,443	52,401	55,330	55,848	61,111	50,007
15	Maintenance - Sneed	5,385	5,636	5,716	5,738	5,775	5,909	4,851
16	Dehydration Plant - Sneed							
17	Operation	-	2,203	2,417	2,495	2,437	2,590	2,025
18	Maintenance	-	283	324	337	330	349	274
19	Taxes - Ad Valoreum	-	11,642	11,255	12,600	12,411	12,527	9,795
20	Total Gas Purchase Costs	$625,469	$817,632	$910,525	$940,962	$921,229	$977,840	$769,442
21	M C F Purchased for Year	16,427,962	20,376,400	22,365,000	23,090,400	22,544,500	23,964,000	18,738,000
22	Cost of Gas Purchased per M C F -							
23	Panhandle Field	3.8073¢	4.0126¢	4.0712¢	4.0751¢	4.0863¢	4.0805¢	4.1063¢
24	Hugoton Field							
25	Amount paid for gas purchased							
26	(Line 35 x 4.26¢ average price)	$421,376	$418,639	$424,117	$414,479	$457,254	$417,454	$549,412
27	Transportation costs -							
28	Transmission -							
29	Operation	12,580	16,629	20,493	19,636	18,810	18,763	17,855
30	Maintenance	3,663	4,879	6,900	6,683	6,447	6,924	6,740
31	Measurement -							
32	Operation	6,380	6,255	6,851	7,124	7,218	7,525	7,845
33	Maintenance	749	764	829	862	878	931	968
34	Taxes - Ad Valoreum	-	36,251	33,170	46,813	44,253	42,939	40,052
35	Total Gas Purchase Costs	$444,748	$483,417	$492,360	$495,597	$534,860	$494,536	$622,872
36	M C F Purchased for Year	9,891,451	9,827,200	9,955,802	9,729,554	10,733,666	9,799,399	12,897,000
37	Cost of Gas Purchased per M C F -							
38	Hugoton Field	4.4963¢	4.9192¢	4.9455¢	5.0937¢	4.9830¢	5.0466¢	4.8296¢
39	Both Fields - Combined							
40	Total Gas Purchase Costs	$1,070,217	$1,301,049	$1,402,885	$1,436,559	$1,456,089	$1,472,376	$1,392,314
41	M C F Purchased for Year	26,319,413	30,203,600	32,320,802	32,819,954	33,278,166	33,763,399	31,635,000
42	Cost of Gas Purchased per M C F -							
43	Main Line	4.0663¢	4.3076¢	4.3405¢	4.3771¢	4.3755¢	4.3609¢	4.4012¢

PRODUCTION COSTS PER M C F PRODUCED BY FIELDS- ESTIMATED FUTURE LOAD
FOR THE YEARS 1940 to 1946 INCLUSIVE
(Year 1940 - actual, Year 1941 - 6 months actual and 6 months estimated and the Years 1942 to 1946 inclusive - estimated)

Line No.	Nature of Costs (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)
1	**Panhandle Field**							
2	Production -							
3	Operation	$22,238	$21,657	$21,500	$22,800	$24,500	$26,300	$27,100
4	Maintenance	11,821	7,989	9,050	10,300	11,750	13,300	14,100
5	Land and Lease -							
6	Operation	5,699	3,809	3,800	3,800	3,800	3,800	3,800
7	Royalties	101,182	132,882	155,447	173,867	182,562	202,703	232,099
8	Rents	325	325	325	325	325	325	325
9	Delay Rentals	12,544	9,411	11,030	6,860	4,932	3,097	3,097
10	Renewal Bonus	8,000	4,873	-	-	800	2,050	800
11	Taxes -							
12	Ad Valoreum	-	13,498	13,906	16,866	17,867	18,838	21,570
13	Gross Production	-	37,614	44,001	49,215	51,677	57,378	65,698
14	Total Production Costs	$161,809	$232,058	$259,059	$284,033	$298,213	$327,791	$368,589
15	M C F Produced for Year	19,743,000	23,623,600	27,635,000	30,909,600	32,455,500	36,036,000	41,262,000
16	Production Costs per M C F Produced -							
17	Panhandle Field	0.8196¢	0.9823¢	0.9374¢	0.9189¢	0.9188¢	0.9096¢	0.8933¢
18	**Hugoton Field**							
19	Production -							
20	Operation	$14,045	$16,572	$16,223	$18,983	$21,283	$21,343	$20,113
21	Maintenance	3,492	5,470	6,450	6,900	7,500	7,950	8,300
22	Land and Lease -							
23	Operation	7,447	7,712	7,500	8,000	8,500	8,500	8,500
24	Royalties	41,698	42,072	53,207	59,860	74,035	76,498	115,147
25	Rents	-	-	-	-	-	-	-
26	Delay Rentals	76,514	80,314	91,504	87,827	84,707	81,107	77,707
27	Renewal Bonus	4,286	5,641	10,791	46,292	6,360	2,143	26,660
28	Taxes -							
29	Ad Valoreum	-	22,771	27,139	44,852	48,793	53,749	59,431
30	Gross Production	-	3,937	7,722	10,379	13,742	14,675	23,387
31	Total Production Costs	$147,482	$184,489	$220,536	$283,093	$264,920	$265,965	$339,275
32	M C F Produced for Year	5,835,900	6,172,800	8,145,657	9,321,854	11,835,017	12,266,349	19,137,276
33	Production Costs per M C F Produced -							
34	Hugoton Field	2.5272¢	2.9887¢	2.7074¢	3.0369¢	2.2384¢	2.1682¢	1.7728¢
35	**Both Fields - Combined**							
36	Total Production Costs	$309,291	$416,547	$479,595	$567,126	$563,133	$593,756	$707,864
37	M C F Produced for Year	25,578,900	29,796,400	35,780,657	40,231,454	44,290,517	48,302,349	60,399,276
38	Production Costs per M C F Produced -							
39	Main Line	1.2092¢	1.3980¢	1.3404¢	1.4097¢	1.2715¢	1.2292¢	1.1720¢

Schedule 4
Witness Hinton

TRANSPORTATION COSTS PER M C F PRODUCED BY FIELDS - ESTIMATED FUTURE LOAD
FOR THE YEARS 1940 to 1946 INCLUSIVE
(Year 1940 - Actual, Year 1941 - 6 months actual and 6 months estimated, and the years 1942 to 1946 inclusive - estimated)

Line No.	Nature of Costs (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)
	Panhandle Field							
	Transmission -							
	Operation	$9,851	$12,419	$14,500	$15,323	$15,979	$16,263	$18,622
	Maintenance	3,422	5,181	7,042	7,690	7,984	8,360	9,573
	Measurement -							
	Operation	9,289	7,975	8,414	11,504	12,217	12,749	13,306
	Maintenance	-1,313	1,072	1,294	1,714	1,886	1,932	1,981
	Compressor -							
	Operation - Hansford	-	27,649	40,446	44,940	47,014	51,997	59,147
	Maintenance - Hansford	-	6,118	6,613	7,191	7,784	8,318	10,001
	Operation - Sneed	39,233	46,889	64,749	74,067	80,401	91,896	110,118
	Maintenance - Sneed	6,471	6,535	7,063	7,680	8,314	8,885	10,683
	Dehydration Plant - Sneed							
	Operation	-	2,553	2,987	3,341	3,508	3,895	4,460
	Maintenance	-	349	401	450	474	525	604
	Total Transportation Costs	$69,559	$115,819	$153,509	$174,000	$185,561	$204,180	$238,495
	M C F Produced for Year	19,743,000	23,623,600	27,635,000	30,909,600	32,455,500	36,036,000	41,262,000
	Transportation Costs per M C F Produced - Panhandle Field	0.3523¢	0.4903¢	0.5555¢	0.5629¢	0.5717¢	0.5666¢	0.5780¢
	Hugoton Field							
	Transmission -							
	Operation	$7,759	$10,445	$16,767	$18,824	$20,740	$23,487	$26,495
	Maintenance	2,260	3,064	5,645	6,402	7,108	8,666	10,000
	Measurement -							
	Operation	7,807	8,238	10,200	13,973	15,633	17,357	20,057
	Maintenance	1,314	1,611	2,544	2,887	3,264	3,530	4,070
	Compressor -							
	Operation	-	-	-	-	-	-	3,832
	Maintenance	-	-	-	-	-	-	1,350
	Total Transportation Costs	$19,140	$23,358	$37,156	$42,076	$46,745	$53,040	$69,704
	M C F Produced for Year	5,835,900	6,172,800	8,145,657	9,321,854	11,935,017	12,266,349	13,137,276
	Transportation Costs per M C F Produced - Hugoton Field	0.3280¢	0.3784¢	0.4561¢	0.4514¢	0.3950¢	0.4324¢	0.4754¢
	Both Fields - Combined							
	Total Transportation Costs	$88,699	$139,177	$190,665	$216,076	$232,306	$257,220	$308,199
	M C F Produced for Year	25,578,900	29,796,400	35,780,657	40,231,454	44,390,517	48,302,349	54,399,276
	Transportation Costs per M C F Produced - Main Line	0.3468¢	0.4671¢	0.5329¢	0.5371¢	0.5245¢	0.5325¢	0.5665¢

SUMMARY OF PRODUCTION AND TRANSPORTATION COSTS PER M C F PRODUCED BY FIELDS - ESTIMATED FUTURE LOAD FOR THE YEARS 1940 to 1946 INCLUSIVE

(Year 1940 - actual, Year 1941 - 6 months actual and 6 months estimated; and the years 1942 to 1946 inclusive - estimated)

Line No.	Description (A)	1940 (B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)	1945 (G)	1946 (H)
		¢	¢	¢	¢	¢	¢	¢
1	Panhandle Field							
2	Production Costs per M C F Produced	0.8196	0.9825	0.9374	0.9189	0.9188	0.9096	0.8933
3	Transportation Costs per M C F Produced	0.3523	0.4903	0.5555	0.5629	0.5717	0.5666	0.5780
4	Totals - Panhandle Field	1.1719	1.4726	1.4929	1.4818	1.4905	1.4762	1.4713
5	Hugoton Field							
6	Production Costs per M C F Produced	2.5272	2.9887	2.7074	3.0369	2.2384	2.1683	1.7728
7	Transportation Costs per M C F Produced	0.3280	0.3784	0.4561	0.4514	0.3950	0.4324	0.4739
8	Totals - Hugoton Field	2.8552	3.3671	3.1635	3.4883	2.6334	2.6006	2.2467
9	Both Fields - Combined							
10	Production Costs per M C F Produced	1.2092	1.3980	1.3404	1.4097	1.2715	1.2292	1.1720
11	Transportation Costs per M C F Produced	0.3468	0.4671	0.5329	0.5371	0.5245	0.5325	0.5450
12	Totals - Main Line	1.5560	1.8651	1.8733	1.9468	1.7960	1.7617	1.7170

EXHIBIT 145.

Date of Filing: December 24, 1941

Registration No. 2-4919

Amendment Filed: January 20, 1942

5047

Effective Date: January 21, 1942, as of January 12, 1942

PANHANDLE EASTERN PIPE LINE COMPANY

COMPILED REGISTRATION STATEMENT

COVERING ISSUES OF $10,000,000 FIRST MORTGAGE AND FIRST LIEN 3% BONDS, SERIES C, DUE JANUARY 1, 1962

and

150,000 SHARES OF % CUMULATIVE PREFERRED STOCK (Par Value $100 per share)

This document is a reprint of the Registration Statement originally filed with the Securities and Exchange Commission on December 24, 1941, as amended on January 20, 1942, and which became effective on January 21, 1942, as of January 12, 1942 for the purpose of the Company's Invitation for Bids for the Purchase of the Bonds and Stock, except that the exhibits, the statements of eligibility and qualification of the Trustees and the Prospectus which were filed are not included herein. The signatures which appear on page 96 are those of the directors and officers signing the original statement filed December 24, 1941. Information as to any other public offering of the Bonds and Stock will be given by post-effective amendment to the Registration Statement.

This document is not official; it has been prepared only for the convenience of the Company and of prospective bidders; and it is not for general circulation. It does not take the place of the Prospectus and must not be used as a Prospectus. The Securities and Exchange Commission has not made any finding that the statements in the Registration Statement and the amendment thereto are correct, nor has it approved or disapproved the securities registered thereunder.

(Compiled January 21, 1942)

EXHIBIT 145.

Date of Filing:

Registration No. 2-4919

Effective Date:

5049

(The above to be left blank by the registrant)

FORM A-2

For Corporations

SECURITIES AND EXCHANGE COMMISSION

Washington, D. C.

REGISTRATION STATEMENT

Under

SECURITIES ACT OF 1933

PANHANDLE EASTERN PIPE LINE COMPANY

(Name of Registrant)

Securities Registered

Title of Issue, or Issues	Amount
First Mortgage and First Lien 3% Bonds, Series C, due January 1, 1962	$10,000,000
—% Cumulative Preferred Stock (par value $100 per share)	150,000 shares

Amount of Filing Fee: $2,625.00

Approximate Date of Proposed Public Offering: As soon as practicable after the effective date of this Registration Statement. See the answer to Item 21.

Name and address of person authorized to receive notices and communications from the Securities and Exchange Commission:

KEITH V. WATKINS, Secretary,
Panhandle Eastern Pipe Line Company,
90 Broad Street, New York, New York.

EXHIBIT 145.

5051

ORGANIZATION

1. **Exact name of registrant:**

PANHANDLE EASTERN PIPE LINE COMPANY (herein sometimes called "the Company").

2. **Address of principal executive offices:**

4224 Baltimore Avenue, Kansas City, Missouri, and 90 Broad Street, New York, New York.

3. **The state or other sovereign power under which incorporated, and the date of incorporation:**

State of Delaware, under name Interstate Pipe Line Company, on December 23, 1929. Name changed to Panhandle Eastern Pipe Line Company on May 9, 1930.

4. **List the following and indicate the respective percentages of voting power as required by the Instructions:**

(a) All subsidiaries of the registrant. (1)	Percentage of Voting Power of Securities Owned by Panhandle Eastern Pipe Line Company
Illinois Natural Gas Company, an Illinois corporation	100%

(b) All parents of the registrant.	Percentage of Voting Power of Securities of Panhandle Eastern Pipe Line Company Owned Percentage Within Classes	To Total (3)
Gano Dunn, Trustee for Columbia Oil & Gasoline Corporation appointed pursuant to Decree dated January 29, 1936, in Cause No. 1099 in Equity in the District Court of the United States for the District of Delaware (4)		
Common Stock	50.1%	56.1%
Preferred Stock		
Class A (2)	100%	
Class B	100%	
Missouri-Kansas Pipe Line Company.		
Common Stock	42.0%	37.0%

(1) The Company intends to use a part of the proceeds of the sale of the securities being registered hereunder to acquire 100% of the outstanding securities of Michigan Gas Transmission Corporation, a Delaware corporation and of Indiana Gas Distribution Corporation, an Indiana corporation.

(2) The Company intends to use a part of the proceeds of the sale of the Cumulative Preferred Stock being registered hereunder to redeem all of its presently outstanding Class A Preferred Stock.

(3) This percentage relates to voting power on all matters except the election of directors. As to the latter the Class B Preferred Stock has the right to elect two directors, the balance being elected by the Common Stock by cumulative voting.

(4) The Decree states, in effect, that its purposes are to provide against domination or control, direct or indirect, in the affairs of the Company by Columbia Gas & Electric Corporation, and the maintenance of the Company in a position of free and independent action in the production, transmission, sale and distribution of natural gas in competition with others.

The Company is unable to make any representation with respect to the degree of control exercised by Columbia Gas & Electric Corporation over Columbia Oil & Gasoline Corporation. However, the Company is informed that Columbia Gas & Electric Corporation owns all of the outstanding Twenty-Year Debentures of Columbia Oil & Gasoline Corporation, and all the Preferred Stock of Columbia Oil & Gasoline Corporation, the holders of which, voting as a class, are entitled to elect the greatest number of directors which shall constitute a minority, and that the holders of the Common Stock of Columbia Oil & Gasoline Corporation, none of which is owned by Columbia Gas & Electric Corporation, are entitled, voting as a class, to elect the smallest number of directors which shall constitute a majority, but none of the directors

so elected by the holders of the Common Stock may be a director, officer or employee of Columbia Gas & Electric Corporation or any of its subsidiaries.

The following provisions of the Decree are quoted to indicate the relationship to the Company of Columbia Oil & Gasoline Corporation and Columbia Gas & Electric Corporation: Such provisions as do not affect this relationship are omitted.

Section II provides:

"That the defendants be and they are hereby perpetually enjoined from exercising, or attempting, individually or collectively, directly or indirectly, to exercise any dominion or control over Panhandle Eastern, and from restraining, or interfering in any manner with the free and independent action of said Panhandle Eastern in the production, transportation, sale or delivery of natural gas to any person, corporation, community or section of the United States; from holding, acquiring, voting or in any manner acting as the owners, directly or indirectly, of the whole or any part of the stock, or other share capital, or bonds, property or assets of Panhandle Eastern or any other company, corporation, association or organization owning any substantial amount of its securities; and from participating in any way, directly or indirectly, or from exercising any control, direction, supervision, or influence, in the management or control of Panhandle Eastern; except

* * * * * * *

"(c) That Columbia Gas and defendant Hillman may own or acquire obligations, without present or potential voting rights, of said Panhandle Eastern, except that Columbia Gas is hereby enjoined and restrained in connection with enforcing any rights under said obligations with respect to principal, interest or sinking fund, from acquiring any of the pipe line or other physical assets of Panhandle Eastern;

"(d) That Columbia Oil may own or acquire stock or obligations in Panhandle Eastern and exercise voting rights appurtenant thereto (and defendant Bay may be and exercise the lawful rights of an officer of Panhandle Eastern), subject to the further terms and provisions of this decree, but Columbia Gas is hereby perpetually enjoined and restrained from acquiring any interest in such stock, by operation of law, or in connection with enforcing any lien created through the present or future existence of any debt, whether funded or unfunded, of Columbia Oil to Columbia Gas, or otherwise;

"(e) That, when Columbia Gas has effectively divested itself of all control, direct or indirect, legal or practical, of Panhandle Eastern by no longer owning stock of any class having present or potential voting rights in Columbia Oil, upon the approval of this Court Columbia Oil shall no longer be subject to the restrictive clauses of this Section II;"

Section III provides

"That Gano Dunn is hereby nominated, constituted and appointed Trustee for the purposes and with the powers and duties set forth in this Section III;

"That within 10 days after the entry of this decree Columbia Oil shall execute, and deposit with said Trustee the agreements and offers executed by it in accordance with its agreements set forth in Section V of the stipulation pursuant to which this decree is entered;

"That within 10 days after the entry of this decree Columbia Oil shall transfer all of its stock now owned and thereafter all stock subsequently acquired in Panhandle Eastern, having present or potential voting rights, to said Trustee to hold the legal title to said stock and to exercise all the rights and privileges incidental to the absolute ownership thereof upon the following terms and conditions:

"(a) To vote said stock for the election of as many directors of Panhandle Eastern as the number of shares thereof may be entitled to elect; *Provided*, that one of the directors so elected shall be the trustee, and that the remainder shall be selected from among persons recommended by the beneficial owner of said stock, in conference and with the advice of the Trustee, but not including any of the individual defendants herein or any one except with the approval of the Trustee and this Court, who after January 1, 1931, has been or hereafter becomes an officer, director, agent or employee of Columbia Gas; and that as to the directors so selected, the trustee is empowered to remove and replace such directors with

others of his own choosing upon his own motion, if in his judgment such action is necessary in the interest of Panhandle Eastern or for the effectuation of the purposes of this decree; subject, however, in this as well as in the exercise of all other powers to the authority of this Court upon the motion and showing of any party hereto, or upon its own motion, to restrain said Trustee from abuses of sound discretion, in view of the purposes of this decree and the law under which it is entered, or in case said Trustee does not act in good faith hereunder;

"(b) To vote said stock upon all other questions and matters in which the stock is entitled to vote, as directed by the beneficial owners thereof, except when such directions are inconsistent with the purposes of this decree;

* * * * * * *

"(e) To pay over to Columbia Oil all dividends received upon said stock, except that dividends in the form of stock having present or potential voting rights shall be retained by the trustee subject to the same terms and conditions as the other shares held hereunder;

"(f) To exercise all rights to subscribe to additional stock or other securities of Panhandle Eastern as Columbia Oil may direct;

* * * * * * *

"That the trust hereby created shall be and remain in full force and effect until terminated with the approval of this Court when (1) Columbia Gas has effectively divested itself of all control, direct or indirect, legal or practical, of Panhandle Eastern by (a) no longer owning stock of any class having present or potential voting rights in Columbia Oil or (b) by Columbia Oil divesting itself of ownership of all stock of Panhandle Eastern; or when (2), under the circumstances then existing, the continuation of said trust is no longer essential or necessary in carrying out the purposes of this decree; *Provided*, that no such stock of Panhandle Eastern shall be divested by transfer to any competitor of Panhandle Eastern or without prior notice and full disclosure of the facts to petitioner."

Section IV provides:

"That the defendants be and they are hereby perpetually enjoined from restraining or interfering in any manner in the freedom of Panhandle Eastern to contract or to finance or arrange the financing of all contracts, extensions (including the proposed new line to Detroit, whether or not built and owned by it), repairs, maintenance, service, or improvements necessary in its business through or with any firm, person or corporation with whom it may choose to deal (and to that end any such financial or contractual arrangements made by Panhandle Eastern to consummate its contract dated August 31, 1935, with the Detroit City Gas Company shall be subject to the approval of the trustee who shall receive, and consider the advisability of, alternative methods of financing from any responsible underwriter);

"That if such contracts be made with or financial assistance be secured from Columbia Gas, such contracts may be made or financial assistance furnished only upon terms or conditions which do not in any way, directly or indirectly, presently or potentially, confer upon Columbia Gas any voting rights, control or participation in the management of Panhandle Eastern or confer any rights of ownership in the works or properties of Panhandle Eastern except as security for the investment; and in the event that Columbia Gas shall, with respect to any contract or any contractual rights of any kind whatsoever or any property held as security or used in connection with any contract, in any way prevent the free transportation, sale, and distribution of gas by Panhandle Eastern, then upon application to this Court or any court of competent jurisdiction Panhandle Eastern shall have the right (1) to the immediate appointment of a trustee to hold such contract rights or property subject to the purposes and provisions of this decree; (2) to immediate specific performance of any and all contracts with Columbia Gas; and (3) to immediate injunction, both temporary and final, as well as any other appropriate remedy at law or in equity, including any remedy hereunder."

Reference is made to Item 6, under the heading "Certain Other Phases of Corporate History", for a statement with respect to possible change in ownership of the Company's Common Stock and Class A and Class B Preferred Stock now held, as above stated, by Gano Dunn as Trustee for Columbia Oil & Gasoline Corporation. The Company intends to use a part of the proceeds of the sale of the Cumulative Preferred Stock being registered hereunder to redeem all of its presently outstanding Class A Preferred Stock.

An application for an order declaring that the Company is not a subsidiary, within the purview of the Public Utility Holding Company Act of 1935, of Columbia Gas & Electric Corporation and/or Columbia Oil & Gasoline Corporation and/or Missouri-Kansas Pipe Line Company has been denied by the Securities and Exchange Commission with respect to Columbia Gas & Electric Corporation and Columbia Oil & Gasoline Corporation and granted with respect to Missouri-Kansas Pipe Line Company.

The Company is informed that Columbia Gas & Electric Corporation is a subsidiary of The United Corporation as that term is defined in the Public Utility Holding Company Act of 1935. The Company is unable to make any representation with respect to the degree of control exercised by The United Corporation over Columbia Gas & Electric Corporation or Columbia Oil & Gasoline Corporation. However, the Company understands that approximately 19.6% of the common stock of Columbia Gas & Electric Corporation and approximately 3.6% of the common stock of Columbia Oil & Gasoline Corporation were beneficially held of record as of December 31, 1941 by The United Corporation.

HISTORY AND BUSINESS

5. Outline briefly the general character of the business done and intended to be done by the registrant and its subsidiaries.

The Company is engaged in the production, purchase, transmission and sale of natural gas, the major part of which is sold to gas transmission companies and to gas distribution companies for resale. The Company's principal natural gas transmission system, which was placed in practical operation in the early part of 1932, extends from the Amarillo gas field in the Texas Panhandle and from the Hugoton gas field in Southwestern Kansas through the States of Oklahoma, Kansas, Missouri and Illinois, to a point near Dana, Indiana, adjacent to the Illinois-Indiana boundary. The Company also operates, as a separate unit, a minor transmission system located in the general vicinity of Kansas City, Missouri.

The Company intends to use a part of the proceeds of the sale of securities being registered hereunder to acquire all of the outstanding securities of Michigan Gas Transmission Corporation (a wholly-owned subsidiary of Columbia Gas & Electric Corporation). The natural gas pipe line system of Michigan Gas Transmission Corporation is located in the States of Indiana, Ohio and Michigan, and consists principally of pipe lines extending from the present eastern terminus of the Company's system at Dana, Indiana, to points near Detroit, Michigan, and Muncie, Indiana. Reference is hereby made to the answer to Item 29 for a brief statement as to the business and property of said corporation.

The Company produces approximately one-half of its gas requirements and purchases the remainder from others.

The Company's largest customer is Michigan Consolidated Gas Company (formerly Detroit City Gas Company), which company purchases from the Company the natural gas it resells through its distribution systems in Detroit and Ann Arbor, Michigan, and environs. Natural gas sold to Michigan Consolidated Gas Company is delivered by the Company to Michigan Gas Transmission Corporation at the latter's western terminus near Dana, Indiana, for transmission and redelivery to Michigan Consolidated Gas Company. During the 12 months ended September 30, 1941, such sales in M.C.F. to Michigan Consolidated Gas Company amounted to approximately 39% of the Company's total sales.

The Company has entered into a contract with Consumers Power Company in which it has, among other things, agreed to construct certain pipe lines in Michigan and to supply a major part of the natural gas requirements of Consumers Power Company for distribution in its Flint, Pontiac, Jackson, Kalamazoo, Owosso and Battle Creek Divisions. Natural gas to be sold through the Company's proposed Michigan pipe lines will be transported by Michigan Gas Transmission Corporation from a point near Dana, Indiana to the point of connection of that company's system with the Company's proposed Michigan lines.

The Company supplies natural gas to a number of communities in central Indiana and in northwestern Ohio, the more important customers being Central Indiana Gas Company and Richmond Gas Corporation. Deliveries of natural gas to the Company's customers located in Indiana and in Ohio are also made through Michigan Gas Transmission Corporation.

The Company also sells gas to Michigan Gas Transmission Corporation for resale by that company to certain distributing companies and municipalities in Indiana. The

facilities also included, among other things, the acquisition of additional gas reserves, the drilling of additional wells, and the construction of a gasoline extraction and gas dehydration plant. During this period approximately $21,000,000 was expended by the Company and its subsidiary for such expansion of facilities. During the year 1941 the Company authorized certain construction work of a similar nature, a large part of which is now in progress, involving expenditures then estimated at approximately $9,000,000. It is anticipated that the ultimate cost of such work may exceed such estimate by approximately 10%. At the present time the Company has priority ratings for material involved in such construction work considered by it to be generally satisfactory.

The following tabulation shows for the past 5 calendar years, and for the 12 months ended September 30, 1941, for the Company and its wholly owned subsidiary companies the sales of gas in M.C.F. (thousands of cubic feet) to customers by states and groups of states:

Year	Texas, Oklahoma and Kansas	Missouri	Illinois	Indiana and Ohio*	Michigan	Total
1936	2,500,332	6,803,511	7,257,283	6,229,747	3,957,058	26,747,931
1937	2,366,788	7,276,270	7,554,821	7,639,485	15,969,598	40,806,962
1938	2,955,385	6,857,223	6,601,142	8,739,715	16,032,297	41,185,762
1939	2,479,149	8,009,919	7,398,929	12,953,121	18,391,954	49,233,072
1940	2,120,646	8,860,840	8,557,633	14,574,370	22,281,273	56,394,762
12 months ended September 30, 1941	2,180,719	9,887,598	8,959,441	17,034,842	23,758,348	61,820,948

* Sales of gas in Ohio commenced in the year 1939 and amounted to 55,015 M.C.F. for that year and amounted to 150,693 M.C.F. in the year 1940. For the 12 months ended September 30, 1941, sales of gas in Ohio amounted to 182,924 M.C.F.

A considerable part of the increase in sales of gas indicated by the above table has been due to the commencement of natural gas service to communities not theretofore served with natural gas from the Company's system. Since January 1, 1936 such new natural gas service (directly and indirectly from the Company's system) has been extended to 64 communities having an aggregate population of approximately 2,323,000.

Reference is also made to the answer to Item 5 hereof for certain other developments within the preceding five years.

Certain Other Phases of Corporate History

Immediately prior to September 17, 1930, all of the capital stock of the Company was owned by Missouri-Kansas Pipe Line Company (hereinafter sometimes called "Mokan"). Pursuant to an agreement dated September 17, 1930, Mokan sold 50% of the Company's then outstanding (common) stock to Columbia Oil & Gasoline Corporation (hereinafter sometimes called "Columbia Oil"). Said agreement also provided for the financing of the Company, a part of which was an issue of $20,000,000 principal amount of Twenty Year Sinking Fund Mortgage Gold Bonds, Series A, 6%, which were sold to The National City Company, which sold these bonds to Columbia Oil. The latter disposed of them in 1936. These bonds were redeemed by the Company in 1937. On March 6, 1935, the United States Government instituted an anti-trust suit against Columbia Oil, Columbia Gas & Electric Corporation (hereinafter sometimes called "Columbia Gas"), George H. Howard, Philip G. Gossler, Charles A. Munroe, Thomas R. Weymouth, Thomas B. Gregory, Edward Reynolds, Jr., Burt R. Bay and John H. Hillman, Jr., alleging among other things that the defendants had dominated the Company for the purpose of preventing competition between the Company and Columbia Gas. In October, 1935, the Government amended its Bill of Complaint in said suit. This suit was terminated by Stipulation and Consent Decree entered January 29, 1936, a copy of which is incorporated by reference as Exhibit K-1 to this Registration Statement, to which reference is hereby made for a complete statement of its provisions. On July 18, 1935, Henry T. Bush and C. Ray Phillips, as Receivers of Mokan, instituted a suit for damages against Columbia Gas, Columbia Oil and certain individual defendants, claiming damages by reason of the alleged domination of the Company by these defendants. Said suit was settled on or about April 29, 1936; copies of the offer of settlement as extended and modified and of the acceptance thereof are incorporated by reference as Exhibit K-2 to this Registration Statement, to which reference is hereby made for a complete statement of their provisions.

The Company is informed that in the above-mentioned anti-trust suit the United States Government filed a supplemental complaint on or about December 21, 1938,

alleging among other things that since the entry of the decree of January 29, 1936, no steps of any kind had been taken toward the effective termination of all control by Columbia Gas of the Company, that the only effective way to restore and maintain a position of free and independent action for the Company is to require Columbia Gas to divest itself of all stock of any class having existing or potential voting rights in Columbia Oil, or to require Columbia Oil to divest itself of ownership of all stock of the Company, and that to accomplish the purpose of said decree it is necessary to supplement it by a further order requiring the formulation and submission to the Court for approval of a suitable plan or plans to accomplish such termination. The Company is further informed that in such supplemental complaint the Government prayed that a judgment be entered directing that Columbia Gas divest itself of all control, legal or practical, of the Company, and to that end that plans to accomplish such divestiture be submitted to the Court for approval and that the voting trust established pursuant to said decree of January 29, 1936, be re-constituted to make said Trustee a trustee for sale of the stock of the Company beneficially owned by Columbia Oil in the manner specified in such supplemental complaint. The Company is further informed that answers to such supplemental complaint were filed on behalf of defendants, containing, in effect, a general denial of the allegations in such supplemental complain. and certain affirmative defenses, and that the above-mentioned proceeding is still pending.

The Company is further informed that in the above-mentioned anti-trust suit the United States Government filed two notices of motion on or about May 15, 1939, one of said motions being to permit the Government to withdraw, without prejudice, the above-mentioned supplemental complaint filed on or about December 21, 1938, and the other of said motions being to vacate the decree of January 29, 1936, to permit the Government to serve and file an amended and supplemental complaint, and to maintain in statu quo pending adjudication of the issues tendered by said amended and supplemental complaint, the relationships among the defendants in such suit and Gano Dunn as Trustee appointed pursuant to the decree of January 29, 1936. The Company is further informed that said amended and supplemental complaint alleges among other things that said decree of January 29, 1936, failed to nullify elements of control over the Company by Columbia Gas which existed at the time of entry of such decree, that the Company has been precluded from engaging in commerce in natural gas and from competing in any manner with Columbia Gas and Columbia Oil in the States of Indiana, Michigan and Ohio, and that the acquisition of the capital stock of Michigan Gas Transmission Corporation by Columbia Gas has had the effect of restraining commerce in natural gas in said States and of tending to create therein a monopoly in natural gas; and that said amended and supplemental complaint prays that the court adjudge among other things that the defendants have violated the Sherman Anti-Trust Act and the Clayton Act in the manner therein specified, that Columbia Oil shall proceed forthwith to sell all interest which it may now have or may hereafter acquire in any securities of the Company, and that Columbia Gas shall proceed forthwith to sell all interest which it may now have or may hereafter acquire in any securities of Michigan Gas Transmission Corporation. The Company is further informed that defendants in such suit opposed such motion and that no decision thereon has as yet been rendered by the Court. The Company is further informed that the proceedings on the Government's supplemental complaint are still pending.

The Company is further informed that in the above-mentioned anti-trust suit Columbia Oil and Columbia Gas filed a notice of motion on or about June 20, 1939, for an order providing, among other things, that the decree of January 29, 1936, shall, upon the approval of the Court and of the Securities and Exchange Commission of the proposed plan annexed to the notice of motion, be modified in the manner set forth in such notice of motion, to meet the changed conditions resulting from the carrying out of such plan, such modification including the termination of the above-mentioned trusteeship of Gano Dunn of the Company's common stock and Class A and Class B preferred stock and the retransfer of said stock to Columbia Oil. The Company is further informed that such proposed plan provides, among other things, that Columbia Oil shall transfer to Columbia Gas substantially all of the assets of the former corporation other than the Company's said stock, that Columbia Oil will agree to use its best efforts to dispose of the Company's said Class A preferred stock, and that other action be taken as set forth in such proposed plan, with a view to nullifying any control over the Company by Columbia Gas which may have heretofore existed.

The Company is further informed that the proposed plan, mentioned in the next preceding paragraph, provides, among other things, that the number of directors of

Columbia Oil shall be no larger than the number of directors to which that corporation may be entitled upon the board of directors of the Company, and that the directors of Columbia Oil shall be designated by that corporation as its representatives upon the board of directors of the Company, and that such directors and the officers of that corporation shall be not objectionable to the Department of Justice. The Company is further informed that such plan also provides substantially as follows: Subject to the approval of the Securities and Exchange Commission, if required by law, Columbia Gas shall sell the stock and indebtedness of Indiana Gas Distribution Corporation and Michigan Gas Transmission Corporation owned by it to the Company at any time within one year from the date of the entry of an order approving such plan, if the Company wishes to buy the same, for a price equal to the actual investment of Columbia Gas therein, provided the Company also purchases at the same time the gas pipe line in Indiana belonging to The Ohio Fuel Gas Company for the price of $355,191; however, if during said year, Columbia Gas receives from other sources, not connected directly or indirectly with it, an offer satisfactory to it to purchase such stock and indebtedness, Columbia Gas will give the Company written notification of the proposed terms of sale and give the Company ninety days within which to meet such terms; if during such ninety-day period, the Company does not meet the terms of said outside offer, then Columbia Gas shall be free to accept said offer.

The Company is further informed that on July 10, 1939, when the above-mentioned motion filed on or about June 20, 1939, by Columbia Oil and Columbia Gas came on to be heard, the Court entered an order providing, in effect, (a) that the matter be referred to William Prickett, Esq., of Wilmington, Delaware, as Special Master, to consider said motion and the proposed modifications of the Decree of January 29, 1936, set forth in said motion, and to take testimony, hear arguments of counsel and make report to the Court of his findings of fact, conclusions of law and recommendations concerning said motion; (b) that said Special Master forthwith proceed with the hearings directed in said order to be held, report to the Court after the conclusion of such hearings, embody his said findings, conclusions and recommendations in a report to be filed with the Court and give notice of such filing to the parties to said proceeding, and that exceptions by any party to any such finding or recommendation be thereafter filed with the Court; and (c) that the City of Detroit, Michigan, the City of Toledo, Ohio, and Mokan be permitted by the Special Master to appear at the hearings before him, as *amici curiae* but not as intervenors.

The Company is further informed as follows: During the hearings before said Special Master, Columbia Oil and Columbia Gas amended said plan in two respects, viz. (1) by striking therefrom the above-mentioned provision as to the directors of Columbia Oil, and inserting in lieu thereof provisions that the representatives of Columbia Oil on the board of directors of the Company shall be directors of Columbia Oil, that as early as practicable after the entry of the final order approving said plan, the directors of the Company, who now represent Columbia Oil, shall resign and be succeeded by persons who shall have been elected as directors of Columbia Oil under said plan, that Columbia Oil will, subject to the necessary authorization by its stockholders, amend its articles of incorporation or take such other appropriate action as may be required by law to divide its board of directors into three classes, the term of office of the first class to expire at the annual meeting next ensuing after such classification, the term of office of the second class one year thereafter, and the term of office of the third class two years thereafter, that of the directors initially to be chosen under said plan, the maximum number permissible by law shall be elected for the longest term, and that for a period of five years from the date of entry of the order approving said plan no person shall be qualified to be elected and serve as a director of Columbia Oil who shall be objectionable to the Department of Justice; and (2) by providing that the carrying out of said plan shall be contingent upon the approval to the extent required by law of the Securities and Exchange Commission, and necessary and appropriate corporate action by the stockholders of Columbia Oil. During said hearings it was stated, in effect, that Columbia Oil and the Department of Justice had agreed upon the following persons as the new directors of Columbia Oil if said plan becomes effective: Raymond Wesley Starr, of Grand Rapids, Michigan; George James Burke, of Ann Arbor, Michigan; Richard C. Patterson, Jr., of New York City; David H. Goodwillie, of Toledo, Ohio; Frank J. Lewis, of Chicago, Illinois; J. Donald Duncan, of New York City; and James Bruce, of Baltimore, Maryland, and New York City; the last two persons named having been so chosen to represent the stockholders of Columbia Oil who are not also stockholders of Columbia Gas; and that if said plan becomes effective, the number of directors of the Company to which Columbia Oil shall

be entitled shall be elected by Columbia Oil as directors of the Company (which directors would under present conditions serve as such directors in the place and stead of Joe D. Creveling, Gano Dunn, Henry H. Heimann, Walter G. Mortland and Raymond A. Ransom, said Richard C. Patterson, Jr. having since been elected a director). During such hearings it was also stated that the Department of Justice reserved the right to object to the approval of said plan by the Court unless certain large stockholders of Columbia Oil dispose of their stockholdings in said corporation. The hearings commenced before the Special Master on July 14, 1939, and concluded with the filing of briefs on July 25, 1939, and the Special Master filed his report on or about July 29, 1939, recommending that the Court approve said plan, as amended at the hearings, and grant the motion of Columbia Gas and Columbia Oil for the modification of the decree in accordance with the terms of said plan upon the approval of the Securities and Exchange Commission, to the extent required by law, and upon the taking of appropriate corporate action by the stockholders of Columbia Oil, as contemplated by said plan. On or about April 23, 1940, the District Court heard argument on the motion of Columbia Gas and Columbia Oil for confirmation of the report and on the objections and exceptions to the report which had been filed. At the hearing the Department of Justice continued to urge its objection that Mr. Gossler and certain officers and directors of Columbia Gas should dispose of their stockholdings in Columbia Oil, but took the position that the Court might defer action on its objections that other large stockholders of Columbia Oil should also dispose of their stockholdings in said corporation until the hearing before the Court upon an application for a final order for the effectuation and consummation of said plan. On January 18, 1941, the Court rendered an opinion approving the plan, as amended at the hearings before the Special Master and the modifications of the consent decree contemplated by the aforementioned motion, upon the condition that Mr. Gossler and certain officers and directors of Columbia Gas dispose of their stockholdings in Columbia Oil. The opinion recited, among other things, that The United Corporation had agreed to be made a party to the proceeding and for the decree therein to prohibit it from voting its stock of Columbia Oil without the prior approval of the Court except for the purpose of a quorum and for the proposed plan.

The Company is further informed as follows: On or about July 18, 1939, one David Young, III, as plaintiff, commenced an action in the United States District Court, for the District of Delaware, against Columbia Gas and Columbia Oil, as defendants. In his complaint in said action he alleged, among other things, that he is the owner of 100 shares of the common stock of Columbia Gas, that if said plan be effectuated, it will constitute a reckless and illegal disposition and waste of the assets of Columbia Gas, that he and all other stockholders of Columbia Gas, who are not also stockholders of Columbia Oil, will be irreparably damaged, and that on July 6, 1939, he commenced a similar suit in the Chancery Court of the State of Delaware to enjoin the carrying out of said plan and that the Chancellor of the State of Delaware refused a temporary restraining order in said suit on the ground that said suit should have been more properly brought in the United States District Court for the District of Delaware. In said complaint said plaintiff prays that Columbia Gas and Columbia Oil be enjoined, during the pendency of said action and permanently thereafter, from putting said plan into effect or attempting to carry out the same. In said action the Court denied said application for an injunction during the pendency of said action, and, in effect, ruled that said plan should not become effective prior to the trial of said action. On or about September 19, 1939, the Court referred this action to William Prickett, Esquire, Special Master, hearings were commenced before the Special Master on November 15, 1939, and were concluded December 22, 1939, and on August 10, 1940, after issuing his draft report recommending dismissal of this suit and after hearing argument on objections and exceptions which had been filed thereto, the Special Master filed his report recommending dismissal of the suit. On November 8, 1940, the District Court heard the exceptions and objections which had been filed to the report of the Special Master. On February 20, 1941 the District Court handed down its opinion approving the Special Master's report and holding that the stockholder's bill should be dismissed. An order dismissing the stockholder's bill was entered on March 3, 1941. On June 2, 1941, the stockholder filed in the District Court a notice of appeal from said order and on July 19, 1941 filed his Designation of Contents of Record on Appeal. No counter designations were filed by the appellees and the appellant filed the Record on Appeal on September 2, 1941 in the United States Circuit Court of Appeals for the Third Circuit. The Circuit Court of Appeals has extended the time within which the appellant may file his brief to and including December 31, 1941.

The Company is further informed that there is now pending in the United States District Court, for the Southern District of New York, an action brought by one Emma G. Moses, as plaintiff, against Columbia Gas and Columbia Oil, as defendants, in which substantially the same allegations are made and substantially the same relief is sought as the above-mentioned allegations and relief in said action brought by David Young, III. The Company is further informed that on or about January 2, 1940, upon motion of the defendants in said action, the District Court entered an order staying all further proceedings therein until twenty days after the final determination of the above-mentioned action brought by David Young, III, and extending the time of the defendants to move or answer for a further period of twenty days after the expiration of said stay.

The Company makes no representation as to whether said proposed plan will become effective and be consummated.

The Company is further informed that in May, 1939, the Attorney General of the United States requested permission to intervene in the proceeding before the Securities and Exchange Commission for the approval of the Integration Plan filed by Columbia Gas (Docket No. 54-12), the Attorney General alleging that his purpose in intervening was that he intended to apply to said Commission for orders (1) refusing to defer consideration of the status of the Company and Michigan Gas Transmission Corporation, and (2) disapproving any plan submitted or which may be submitted by Columbia Gas in such proceeding unless such plan provides for divesting Columbia Gas of all interest in and control over the Company and Michigan Gas Transmission Corporation. By order dated January 10, 1941 the Commission disapproved said Integration Plan.

The Company is further informed that on or about February 6, 1939, Mokan filed, on its own behalf and in a representative capacity as a stockholder of the Company, a motion for leave to intervene in the above-mentioned anti-trust suit, the motion papers praying, in effect, (1) that the defendants be adjudged guilty of contempt for failure to comply with and for having violated the provisions of the above-mentioned Decree of January 29, 1936; (2) that such Decree be interpreted, enlarged and enforced as follows: (a) that it be decreed that Columbia Gas holds as Trustee for the Company its pipe line from Dana to Zionsville, Indiana, and from Zionsville to Detroit, Michigan, and that Columbia Gas be directed forthwith to transfer said line to the Company, (b) that Columbia Gas be directed forthwith to cause Michigan Gas Transmission Corporation to transfer to the Company all contracts for the supply of gas entered into with any municipalities, persons, firms or corporations in Indiana, Michigan and Ohio since the entry of such Decree, (c) that Columbia Oil be ordered forthwith to surrender to the Company at cost for cancellation its Class B preferred stock of the Company and 80,000 shares of the common stock of the Company, (d) that Columbia Oil be ordered forthwith to sell its remaining stock of the Company to a purchaser or purchasers and upon terms to be approved by the Court, and (e) that the exceptions in Section II of such Decree quoted in the answer to Item 4(b) of this Registration Statement, be stricken out; and (3) that Gano Dunn be removed as Trustee, and that a new trustee be appointed pending divestiture by Columbia Oil of its securities of the Company. The Company is also informed that defendants in such suit opposed such motion, that after a hearing on such motion before the Court, the Court, by order dated March 30, 1939, denied such motion for leave to intervene, and that Mokan took an appeal from such order, which was subsequently consolidated with its appeal from the order denying its further motion for leave to intervene referred to in the next succeeding paragraph hereof, to the United States Circuit Court of Appeals, which consolidated appeals, as explained in the next succeeding paragraph, were dismissed by the United States Circuit Court of Appeals on or about December 15, 1939.

The Company is further informed that in the above-mentioned anti-trust suit, on July 10, 1939 Mokan presented a further motion for leave to intervene in said suit and a petition for an order directing that the above-mentioned motion filed therein by Columbia Oil and Columbia Gas on or about June 20, 1939, and the proposed plan (above mentioned) annexed thereto, be denied and disapproved, and that the Court supplement its said Decree of January 29, 1936, by such further order as to it may seem proper for the accomplishment of the declared purposes of said Decree by the divestiture of all ownership of Columbia Gas and Columbia Oil of securities of the Company. The Company is further informed that on July 10, 1939, the Court denied such motion and petition, that Mokan took an appeal therefrom, which was consolidated with

its appeal from the order of March 30, 1939, mentioned in the next preceding paragraph hereof, to the United States Circuit Court of Appeals, and that on July 20, 1939, the latter Court denied an application of Mokan for an order staying all proceedings with respect to the motion mentioned in the preceding paragraph pending the decision of that Court on said consolidated appeal by Mokan. The Company is further informed that on or about December 15, 1939, the United States Circuit Court of Appeals dismissed said consolidated appeals on the ground that it lacked jurisdiction thereof, that thereafter Mokan applied to the Supreme Court of the United States for a writ of certiorari to review the decision of the United States Circuit Court of Appeals of December 15, 1939, dismissing the consolidated appeals of Mokan, and that said application was denied by the Supreme Court of the United States on or about April 22, 1940.

A communication, dated January 15, 1940, from Mokan to the Company, its President, its Secretary and Controller, its Treasurer and each of its directors, was received by such addressees on or about that date. In such communication it was alleged, in effect, that despite the above-mentioned decree of January 29, 1936, the Company was not released from illegal control and the monopolization and restraint mentioned in said anti-trust suit were not ended, that Columbia Oil and Columbia Gas were restraining interstate commerce in the transmission and sale of natural gas through their control of Michigan Gas Transmission Corporation and that such restraint had injured and was injuring the Company, and that the fact of the continuation of the illegal acts was brought to the attention of the Board of Directors of the Company but that no action has been taken in this connection by the Company. In such communication Mokan, as a minority stockholder, demanded that the Company employ independent counsel and take the following action: (1) bring an action or actions for damages and for an accounting of the profits which Michigan Gas Transmission Corporation has made resulting from the contract of March 17, 1936 (mentioned in the answer to Item 41, to which reference is hereby made) which was imposed upon the Company by the Columbia companies, in which action Columbia Gas should be joined and required to account for all dividends and other moneys received by it from Michigan Gas Transmission Corporation which are traceable to such profits; (2) institute proceedings under the anti-trust laws against the Columbia companies, Michigan Gas Transmission Corporation and all corporations and individuals who have acted in concert with them to restrain interstate commerce in the transmission and sale of natural gas in Indiana, Ohio and Michigan, and to recover three-fold the damages suffered by the Company by virtue of said restraint; (3) institute an action against the parties mentioned in (2) above to enjoin them from continuing to violate the anti-trust laws, in which action the relief prayed for should include a prayer that Mr. Gano Dunn and the Columbia companies be restrained from exercising any voting control of the Company; (4) intervene in the above-mentioned anti-trust suit and request that the Columbia companies be held in contempt by virtue of their violations of paragraph IV of the above-mentioned consent decree and pray that the Columbia companies be required to sell to the Company all of the stock of Michigan Gas Transmission Corporation; (5) institute an action against Michigan Gas Transmission Corporation and the Columbia companies for the purpose of having the above-mentioned contract of March 17, 1936, cancelled on the ground that the Company was forced into such contract by virtue of the dominion and control exercised over it at the time by the Columbia companies; and (6) take any and all other steps and proceedings which may be deemed necessary, appropriate and advisable in the interest of the parties in the premises. Such communication also stated that Mokan offered, in the event independent counsel agreeable to it be selected to take the action demanded above, to hold the addressees harmless from any ultimate net loss through fees, costs and expenses incurred. It further stated that if the addressees fail to take all of the action outlined above on or before February 15, 1940, Mokan would take such action against said corporations and individuals as it is advised by counsel it may take as a stockholder of the Company or in its primary right. Following receipt of said communication of January 15, 1940, the Company appointed a committee to recommend to its Board of Directors the name of an independent counsel who would advise the Company as to what action, if any, should be taken with respect to said demands contained in such communication. That committee could not agree and did not make any recommendation to the Board of Directors of the Company with regard to any such independent counsel, and such Board has not taken any further action in connection with the aforesaid demands.

The Company is further informed as follows: In the above-mentioned anti-trust suit, on or about March 23, 1940, an application, allegedly in the name of the Company, was filed for leave to become a party to such suit for the limited purpose of enforcing

the rights conferred by Section IV of the above mentioned consent decree. Columbia Gas and Columbia Oil filed with the Court motions to dismiss such alleged application upon the grounds, among other things, that such application was not signed or verified by the Company and the attorneys whose names appear on the application as attorneys for the Company were not attorneys for it and were not authorized by the Company to act on its behalf. When such alleged application came on to be heard before the Court, counsel for Columbia Gas and Columbia Oil appeared in opposition, and Edward N. Goodwin, General Counsel of the Company, appeared and stated, among other things, to the Court that such application had not been authorized by the Company. By order dated April 23, 1940, the Court denied such application, and thereafter on or about June 14, 1940, the District Court allowed an alleged appeal by the Company from said order to the Supreme Court of the United States. On or about October 14, 1940, the Supreme Court of the United States decided to postpone further consideration of the question of the jurisdiction of that Court of said appeal until the hearing of the appeal on the merits. The Company also took an alleged appeal from said order of April 23, 1940, to the United States Circuit Court of Appeals, which appeal is now pending. A stipulation was entered into between the parties and filed in the last mentioned appeal in the Circuit Court of Appeals on October 19, 1940, providing that said appeal would be withdrawn and discontinued in the event the United States Supreme Court should accept jurisdiction of the appeal allowed by the District Court on June 14, 1940, and that if the United States Supreme Court should refuse to entertain jurisdiction of the appeal allowed to it, the time for appellant to file the Record on Appeal in the Circuit Court of Appeals would be extended to the tenth day following the Supreme Court's refusal to entertain jurisdiction. On March 3, 1941, after oral argument before it, the United States Supreme Court handed down its opinion affirming the order of the District Court, and thereafter, on a motion made by the appellant in the appeal pending in the Circuit Court of Appeals, said appeal was dismissed without prejudice.

The Company is further informed as follows: In the above-mentioned anti-trust suit, on or about April 15, 1940, Mokan on its behalf as a stockholder and on behalf of all other stockholders of the Company similarly situated, filed an application in behalf of and in the name of the Company, for leave to become a party to such suit for the limited purpose of enforcing the rights conferred by Section IV of said decree; and asking that a trustee be appointed to hold all the stock of Michigan Gas Transmission Corporation, that the above-mentioned Gano Dunn as Trustee be directed to deliver and surrender to the Company 80,000 shares of its capital stock, and that such trustee be directed to vote the common stock and the Class A and Class B preferred stock of the Company so that the provisions of such preferred stock may be amended to eliminate therefrom any voting rights. Columbia Gas and Columbia Oil opposed such application at a hearing thereon before the Court. By order dated April 23, 1940, the Court denied such application, and thereafter on or about June 14, 1940, the District Court allowed an appeal by Mokan from said order to the Supreme Court of the United States. On or about October 14, 1940, the Supreme Court of the United States decided to postpone further consideration of the question of the jurisdiction of that Court of said appeal until the hearing of the appeal on the merits. Mokan also appealed from said order of April 23, 1940, to the United States Circuit Court of Appeals, which appeal is now pending. A stipulation was entered into between the parties and filed in the last-mentioned appeal in the Circuit Court of Appeals on October 19, 1940, providing that said appeal would be withdrawn and discontinued in the event the United States Supreme Court should accept jurisdiction of the appeal allowed by the District Court on June 14, 1940, and that if the United States Supreme Court should refuse to entertain jurisdiction of the appeal allowed to it, the time for appellant to file the Record on Appeal in the Circuit Court of Appeals would be extended to the tenth day following the Supreme Court's refusal to entertain jurisdiction. On March 3, 1941, after oral argument before it, the United States Supreme Court handed down its opinion reversing the order of the District Court and granting Mokan's application to the extent of permitting it to intervene in the Government's anti-trust suit for the limited purpose of enforcing, on behalf of the Company, the rights conferred by Section IV of the Consent Decree entered in said suit on January 29, 1936. A petition for rehearing made by Columbia Gas and Columbia Oil was denied by the Supreme Court by order dated March 17, 1941, which amended the language of the Supreme Court's opinion of March 3, 1941 but did not change the ultimate result of its decision. On April 21, 1941, the District Court issued its order on the mandate from the Supreme Court (a) making Mokan a party to the anti-trust suit for the limited purpose aforementioned, (b) directing the defendants in said suit to answer the application of Mokan, and (c) making the Company a party to said suit

and granting it leave to file its answer to the application. Thereupon, the defendants in said suit filed their answers denying the material allegations of Mokan's application, and the Company filed its answer thereto neither admitting nor denying any of the allegations thereof. On or about May 5, 1941, A. Faison Dixon, Vice-President of Mokan, filed an affidavit of personal bias or prejudice on the part of Hon. John P. Nields, United States District Judge for the District of Delaware, against Mokan, and on May 6, 1941 said Hon. John P. Nields, District Judge, entered an order directing that an authenticated copy of the said affidavit of A. Faison Dixon should forthwith be certified to the Senior Circuit Judge of the United States Circuit Court of Appeals for the Third Circuit, to the end that such proceedings might be had thereon as are provided by law. No trial of said suit has as yet been had. On a motion made by the attorneys for Mokan in its appeal aforementioned pending in the United States Circuit Court of Appeals for the Third Circuit, said appeal was dismissed without prejudice.

On or about March 11, 1940, Mokan and Lucille I. Dammann instituted an action against Columbia Gas, Columbia Oil, Michigan Gas Transmission Corporation, the Company and Gano Dunn, in the United States District Court for the District of Delaware, praying, among other things, that the Court decree that the defendants (other than the Company) have been and are now engaged in a combination and conspiracy in restraint of trade in natural gas in violation of the anti-trust laws, that such defendants be perpetually enjoined from further engaging in such combination and conspiracy, that such defendants and the officers, directors and stockholders thereof be enjoined from holding and voting any part of the stock of the Company and Michigan Gas Transmission Corporation, that persons serving as directors of the Company who were named or elected by Columbia Oil or by Gano Dunn be enjoined from further serving in such offices, and that such defendants be enjoined from naming or electing any persons to serve as such directors. The Company filed an answer to the complaint in such action, and is informed that Columbia Gas, Columbia Oil, Michigan Gas Transmission and Gano Dunn filed motions to dismiss such complaint and for summary judgment. On or about August 27, 1940, A. Faison Dixon, Vice-President of Mokan, filed an affidavit of personal bias or prejudice on the part of Hon. John P. Nields, United States District Judge for the District of Delaware, against Mokan, one of the plaintiffs in said action; and thereafter Hon. Owen J. Roberts, Circuit Justice of the United States Circuit Court of Appeals, entered an order designating and appointing Hon. William H. Kirkpatrick, a United States District Judge, to hold the District Court of the United States in connection with said action. The aforementioned motions to dismiss the complaint and for summary judgment were argued before Judge Kirkpatrick on December 6 and 7, 1940 and no decision has as yet been rendered thereon.

On or about May 29, 1940, Mokan, as complainant, instituted an action against Columbia Oil, the Company and Gano Dunn, as respondents, in the Court of Chancery of the State of Delaware, New Castle County, praying, among other things, (a) that an injunction be granted restraining Columbia Oil from selling, assigning or otherwise disposing of its beneficial interest in 100,000 shares of Class A preferred stock of the Company; (b) that Columbia Oil and Gano Dunn be restrained from voting all the shares of stock of the Company owned or held by them on any proposal to amend the Company's certificate of incorporation so as to authorize the issuance and sale of a new preferred stock having a lesser dividend rate and without any further participation in dividend distribution, and from otherwise obstructing the refinancing of said Class A preferred stock now held by Gano Dunn and beneficially owned by Columbia Oil; (c) that Columbia Oil and Gano Dunn be restrained from demanding or receiving any dividends on said Class A preferred stock in excess of $4.50 per share per annum, without further participation; and (d) that the Company be enjoined from paying to Columbia Oil or Gano Dunn any sum by way of dividends on said Class A preferred stock in excess of $4.50 per share per annum. Thereafter the respondents in such action caused said action to be removed to the Federal Court of the United States for the District of Delaware where said action is now pending. Thereafter each of the defendants filed in said Federal Court their respective motions to dismiss the complaint in such action and for summary judgment, and such motions of Columbia Oil and Gano Dunn are now pending. The Company was allowed by said Federal Court leave to withdraw its motion to dismiss such complaint and to file its answer in place of such motion, in view of a stipulation which has been entered into on behalf of Mokan and the Company with respect to certain portions of the relief demanded in the complaint in such action. The Company accordingly withdrew said motion and filed its answer and supplemental answer. In June, 1940, the Company and Columbia Oil entered into an agreement, and the Company and Mokan entered into another agreement, whereby,

in effect, Columbia Oil agreed to repay to the Company such portion of the dividends that may be paid for the year 1940, or any calendar year thereafter, in excess of $4.50 per share per annum on the Company's Class A preferred stock, to the extent held improper by decision of the court having jurisdiction of said action, and Mokan agreed that it would not apply for any restraining order in said action and that pending the final determination of said action the Company may continue to pay dividends at the rate of $6.00 per share per annum on said Class A preferred stock and also participating dividends on said stock. On or about August 27, 1940, A. Faison Dixon, Vice-President of Mokan, filed an affidavit of personal bias or prejudice on the part of Hon. John P. Nields, United States District Judge for the District of Delaware, against Mokan, the plaintiff in said action; and thereafter Hon. Owen J. Roberts, Circuit Justice of the United States Circuit Court of Appeals, entered an order designating and appointing Hon. William H. Kirkpatrick, a United States District Judge, to hold the District Court of the United States in connection with said action. On December 3, 1940, Mokan made a motion to remand this action to the Delaware Chancery Court. This motion was argued before Judge Kirkpatrick on December 7, 1940, and arguments on the aforementioned motions of Columbia Oil and of Gano Dunn to dismiss the complaint and for summary judgment, which had been scheduled for hearing on December 5 and 6, 1940, were deferred pending the Court's decision on the motion to remand. On April 16, 1941, Judge Kirkpatrick granted Mokan's motion to remand the case to the Delaware Chancery Court, and thereupon Columbia Oil filed in that court its answer to the complaint denying the material allegations thereof. Mokan has filed a motion in such action for leave to amend its bill of complaint whereby it seeks a decree enjoining the Company from paying to Columbia Oil or in the event the Company pays prior to final decree then a decree directing Columbia Oil to repay to the Company, a dividend in the sum of $134,561.17 declared on December 19, 1941 as a participating dividend on the Class A Preferred Stock owned beneficially by Columbia Oil. This action has been set for trial on February 25, 1942. Gano Dunn has not been served with a writ of subpoena in said action and has not appeared or filed any answer to the complaint therein.

On or about October 24, 1939, Mokan and Lucille I. Dammann, on their own behalf as stockholders and on behalf of all of the stockholders of the Company similarly situated, instituted a suit in the Chancery Court of Delaware, New Castle County, against the Company, Columbia Oil and Columbia Gas as respondents. The complaint alleged that Columbia Gas and Columbia Oil wholly controlled the Company on January 31, 1936, and caused the Company to execute and deliver the agreement dated January 31, 1936, between said two corporations and the Company. The complaint further alleged, in effect, as follows: That of the 80,000 shares of common stock of the Company offered in 1939 for subscription to the stockholders of Mokan or their assignees pursuant to said agreement, certain of said shares would not be so subscribed for, that the complainants believe that Columbia Oil claims the right and intends to purchase from the Company any shares not so subscribed for, that the Company, remaining under the control of Columbia Oil, claims that it is obligated under said agreement to sell such shares to Columbia Oil, that the subscription price of said shares is $25 per share and the market value of the Company's common stock is $42.50 per share, that the true value of said shares at all times since January 31, 1936, has been far in excess of the price at which the Company was forced to agree and now proposes to sell such shares to Columbia Oil, that but for the fact that Columbia Oil and Columbia Gas exercised dominion and control over the Company on January 31, 1936 said agreement would not have been entered into by the Company, and that said agreement was made in violation of law, in evasion of the above-mentioned consent decree and was made by Columbia Oil for its own enrichment and was and is fraudulent and unfair to the Company, and if carried out as threatened, will cause irreparable injury to the complainants and the other stockholders of the Company except Columbia Oil. The complaint prayed that the Company be enjoined from selling to Columbia Oil any of the shares of the common stock of the Company remaining unsubscribed for as aforesaid, and that Columbia Oil be enjoined from purchasing such shares from the Company. The Company and each of the other two respondents filed separate answers in said suit, the answer of the Company, among other things, denying that it was controlled by Columbia Gas and Columbia Oil and that said two corporations caused said agreement to be executed by the Company, and admitting that 1,285 shares, out of the aforesaid 80,000 shares of the common stock of the Company, were not subscribed for by the stockholders of Mokan or their assignees, and alleging that the Company is obligated to sell said 1,285 shares to Columbia Oil at

$25 per share upon compliance by Columbia Oil with the provisions of the above-mentioned agreement, and denying the allegation in the complaint that such agreement was made in violation of law, in evasion of said consent decree, and was made by Columbia Oil for its own enrichment and was fraudulent and unfair to the Company and if carried out will cause irreparable injury to the stockholders of the Company. Thereafter a stipulation was entered into by the attorneys for all parties in said suit, whereby, in effect, Columbia Oil will not purchase from the Company and the Company will not sell to Columbia Oil any of the 1,285 shares until such time as said stipulation be terminated, and that said stipulation may be terminated by any party in said suit upon five days' notice of such termination to the other parties. No such notice has been given by any of said parties.

The Company is further informed as follows:

After the approval of the District Court for the District of Delaware of the Plan which had been jointly filed by Columbia Gas and Columbia Oil in said Court, Columbia Gas, on February 26, 1941, filed an application (File No. 70-263) with the Securities and Exchange Commission, in which it requested the Commission's approval of (a) its proposed acquisition of all the stock and obligations of the five oil and gasoline subsidiary companies of Columbia Oil, in consideration of the surrender by it to Columbia Oil of 400,000 shares of the participating Preferred stock of Columbia Oil, (b) the execution of a proposed agreement by Columbia Gas to save Columbia Oil harmless from any liability which may arise from a suit pending in the Court of Common Pleas of Franklin County, Ohio, instituted by John L. Davies in 1937 against Columbia Gas and others, (c) the surrender by Columbia Gas of such an amount of debentures of Columbia Oil as Columbia Oil would be able to acquire at par and accrued interest from monies raised by a contemplated disposition by Columbia Oil of its holdings of Class A Preferred stock of the Company and the proposed reduction of the interest rate on the remaining debentures of Columbia Oil from 6 per cent to 3 per cent, and (d) the proposed sale of Columbia Gas' interest in Indiana Gas Distribution Corporation and Michigan Gas Transmission Corporation to the Company, together with the proposed sale by The Ohio Fuel Gas Company of a gas pipe line in Indiana to the Company. After the handing down of the Commission's order of May 27, 1941, denying in part and granting in part the consolidated applications under Section 2(a) (8) of the Public Utility Holding Company Act of 1935, a hearing was held on June 3, 1941 before a Trial Examiner of the Commission on Columbia Gas' application (File No. 70-263), at which Columbia Gas introduced some evidence in support of its application, but the hearing was adjourned so as to permit Columbia Oil and the Company to file applications with respect to the transactions involved, in view of the order of the Commission of May 27, 1941.

On or about June 7, 1941, an agreement was entered into between Columbia Gas, Columbia Oil and Mokan, dated said day, which provided that (a) Columbia Oil and Mokan would distribute their entire respective holdings of the Company's common stock in such a way as would best serve the respective interests of said companies, through the issuance of warrants to its stockholders or by underwriting of the stock by bankers or otherwise; (b) Columbia Oil would consent to the refunding and retirement by the Company of Columbia Oil's holdings of the Class A and Class B Preferred stocks of the Company in such a manner as the Company might determine to be in its best interest, the retirement of the Class A Preferred stock to be at par and accrued dividends and the retirement of Class B Preferred stock to be at $125 per share and accrued dividends; (c) Columbia Gas would sell to the Company the stock and indebtedness of Indiana Gas Distribution Corporation and Michigan Gas Transmission Corporation for an amount equal to the actual investment of Columbia Gas therein; (d) the Company would purchase at the same time from The Ohio Fuel Gas Company, its gas pipe line in Indiana for a price of $355,191; (e) a new board of twelve directors of the Company would be elected, one member to be a nominee of Mokan, another to be a nominee of Columbia Oil, and the remaining members to be entirely independent persons whose election should be mutually satisfactory to both Mokan and Columbia Oil, all directors to be elected annually for one year, and the first Chairman of the Board of Directors to be designated by the Board of Directors of Mokan; (f) the entire Plan would be submitted in toto to the Securities and Exchange Commission for its approval, and Columbia Gas and Columbia Oil would submit it to the Department of Justice, would file with the District Court in Delaware such supplemental and amended motions to the joint motion and Plan which had been approved by said District Court on January 18, 1941 as should be necessary to obtain approval by said Court of the modification of the Consent Decree as provided in said

motion and as further modified to effect the settlement agreed upon in the instant agreement, and would expeditiously file with the Securities and Exchange Commission such applications and declarations as might be necessary under the Holding Company Act to authorize Columbia Gas and Columbia Oil to take the steps required of them in said agreement; (g) Mokan would withdraw all pending litigation against Columbia Gas or Columbia Oil or against any of its officers or directors, or against Gano Dunn, Trustee, and exchange general releases with Columbia Gas and Columbia Oil, including the officers and directors, and pending such withdrawal Mokan would institute no further litigation and would allow the present litigation to remain in statu quo; and (h) it was provided in said agreement that it would terminate and any obligations of the parties cease if all the transactions therein provided for should not be effected by October 1, 1941, but this date should be extended to December 1, 1941 upon the request of any one of the parties. The Company makes no representation whether said agreement is or is not now in effect.

On July 30, 1941, and pursuant to the three-party agreement above referred to, Columbia Gas and Columbia Oil filed in the District Court of Delaware a supplemental joint motion embodying the necessary supplemental provisions to the Plan which had been approved by the Court on January 18, 1941, to incorporate therein the transactions agreed to be carried out in said three-party agreement, and on or about August 1, 1941 Columbia Gas and The Ohio Fuel Gas Company filed with the Securities and Exchange Commission a joint amendment to the application (File No. 70-263) and Columbia Oil filed an application (File No. 70-371), in which said companies requested the Commission to approve the various transactions respectively contemplated to be carried out by them in the Plan which had been approved by the District Court on January 18, 1941, as supplemented by the supplemental provisions thereto aforesaid. On August 20, 1941, the Company filed an application and declaration with the Commission (File No. 70-387) requesting the Commission to approve (a) the proposed sale by Columbia Gas to the Company of the stock and indebtedness of Michigan Gas Transmission Corporation and of Indiana Gas Distribution Corporation, for a price equal to the actual investment of Columbia Gas therein, subject to the privilege to the Company of supplying a person or corporation who would purchase the stock and debt of Indiana Gas Distribution Corporation from Columbia Gas for an amount equal to the investment of the latter corporation therein; (b) the proposed sale by The Ohio Fuel Gas Company to the Company of certain gas pipe lines in Indiana and Ohio belonging to the former corporation for a price equal to the present fair value thereof; (c) the retirement or redemption of all of the Company's $10,000,000 par value of its Class A Preferred stock at par and accrued and unpaid dividends and all of its $1,000,000 par value of its Class B Preferred stock at $125 per share and accrued and unpaid dividends; and (d) the issuance and sale by the Company of certain new securities, the proceeds of which would be used to pay the cost of acquiring the stock, indebtedness and pipe lines above mentioned, and to retire or redeem its Class A or Class B Preferred stocks, and for other corporate purposes.

On August 25, 1941, the Securities and Exchange Commission entered a notice of and order instituting proceedings against Columbia Gas, Columbia Oil, the Company, Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation under Section 11(b)(1), 11(b)(2), 12(c), 12(f) and 15(f) of the Public Utility Holding Company Act of 1935. In said order the Commission incorporated fifty-three paragraphs of allegations which it directed the respondents to answer on or before September 8, 1941, consolidated the proceedings "In the Matter of Columbia Oil & Gasoline Corporation" bearing File No. 70-263, for hearing with the proceedings instituted by said order, and fixed September 16, 1941 as the date of said consolidated hearings. In said order the respondents were directed to show cause, among other things, why the Commission should not enter an appropriate order or orders pursuant to Sections 11(b)(1), 11(b)(2), 12(c), 12(f) and 15(f) of the Act. On or about September 8, 1941 the respondents Columbia Gas and Columbia Oil filed their answers with the Commission, denying the material allegations contained in its notice and order and the Company filed its answer. Said hearings were subsequently adjourned to October 14, 1941, on which day an argument was had before the Commission on an application of the Commission's counsel that evidence bearing upon the issues raised under Section 11(b)(1) of the Act should first be introduced, and that thereafter evidence relating to the remaining issues should be introduced. On the 15th day of October, 1941, the Commission handed down its order granting the intervention applications of Mokan, William H. Danforth, a common stockholder of Columbia Oil, and Abner Goldman, a common stockholder of Columbia Gas, to the limited extent of permitting them to participate in the proceeding to the extent

of adducing evidence, cross-examining witnesses, filing briefs and presenting oral argument, without conferring upon them the status of parties to the proceeding, and directing that upon the resumption of hearings in the proceedings evidence bearing upon the issues raised under Section 11(b)(1) of the Act should first be introduced and that thereafter evidence relating to the remaining issues of the proceedings should be introduced in accordance with the further direction of the Commission, and further directing that the hearings be adjourned to October 28, 1941. The hearings before the Trial Examiner were resumed on October 28, 1941 and continued through October 30, at which time, after conferences between the staff of the Commission and counsel for Columbia Gas, Columbia Oil and the Company, the staff recommended to the Examiner that the hearings be adjourned until November 18, 1941, with the understanding that Columbia Gas, The Ohio Fuel Gas Company, Columbia Oil and the Company should file with the Commission, on or before November 10, 1941, new applications or declarations requesting the Commission's approval of (a) a proposed sale by Columbia Gas to the Company of the stock and indebtedness of Indiana Gas Distribution Corporation and Michigan Gas Transmission Corporation for a price equal to the actual investment of Columbia Gas therein; (b) the proposed sale by The Ohio Fuel Gas Company to the Company of certain gas pipe lines located in the States of Ohio and Indiana; (c) the proposed surrender by Columbia Oil to the Company, for retirement or redemption, of $10,000,000 par value Class A Preferred stock of the Company at par and accrued and unpaid dividends; (d) the proposed acquisition by Columbia Oil from Columbia Gas of as many debentures of Columbia Oil at par and accrued interest as could be acquired with the proceeds realized by Columbia Oil from the surrender by Columbia Oil to the Company of the Class A Preferred stock of the Company; and (e) the proposed issue and sale of certain new securities by the Company, the proceeds of which would be used to pay the cost of acquiring the stock and indebtedness and pipe lines above mentioned and to retire and/or redeem its Class A Preferred stock. Counsel for Mokan and also the City of Detroit, an intervenor, by its Corporation Counsel, objected to this recommended procedure on the grounds that it would delay the Commission's proceedings under Section 11(b)(1) of the Act. After some discussion, the Corporation Counsel for the City of Detroit withdrew his objections. Pursuant to this recommended procedure, Columbia Gas and Columbia Oil filed, on November 7, 1941, their applications requesting the Commission's approval of the actions such companies respectively proposed to take in carrying out the transactions last above mentioned. On November 7, 1941 argument was made before the Commission on Mokan's objections to the procedure recommended by the Commission's counsel, as aforesaid. The Corporation Counsel of the City of Detroit reasserted his objections at that time. Such objections were subsequently overruled by the Commission. Thereafter hearings were held before the Trial Examiner of the Commission with respect, among other things, to the matters mentioned in clauses (a), (b), (c) and (e) above and subsequently, by order of the Commission, such applications and declarations regarding such matters were approved or permitted to become effective. On January 15, 1942, the Commission issued an order directing procedure and reconvening hearing in said proceedings on January 29, 1942, for the purpose of receiving evidence with respect to the issues involving the retainability by Columbia Gas and Columbia Oil of their interest, direct or indirect, in the Company under Section 11(b)(1); and with respect to the issues involving the distribution of voting rights in the Company with reference to the Class B Preferred Stock under Section 11(b)(2).

PROPERTY

7. State briefly the general character and location of the principal plants and other important units of the registrant and its subsidiaries. If any principal plant or important unit is not held in fee, so state and describe how held.

Production Property and Gas Reserves

The Company, as of September 30, 1941, owned or controlled oil and gas lease holds on approximately 271,000 acres in the Amarillo and Hugoton gas fields located in the Panhandle of Texas, Southwestern Kansas and Texas County, Oklahoma, and in addition controlled through gas purchase contracts the gas production from approximately 67,000 acres in this territory. The Company is currently producing gas from certain of these leaseholds by means of 57 gas wells in the Amarillo gas field and 80 gas wells (including 46 gas wells in which the Company has only a 50% interest) in the Hugoton gas field.

EXHIBIT 145.

AUDITORS' CERTIFICATE

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We have examined the balance sheet of Panhandle Eastern Pipe Line Company (a Delaware corporation, hereinafter referred to as the Company) as of September 30, 1941, the consolidated balance sheet of the Company and its subsidiary as at that date and the statements of income and surplus of the Company and its subsidiaries for the three years and nine months ended that date, have reviewed the system of internal control and the accounting procedures of the companies and, without making a detailed audit of the transactions, have examined or tested accounting records of the companies and other supporting evidence, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

In our opinion, the accompanying balance sheets and related statements of income and surplus, together with schedules as listed in the attached index, present fairly the position of the companies at September 30, 1941 and the results of their operations for the three years and nine months ended that date, in conformity with generally accepted accounting principles consistently applied during the period under review.

Kansas City, Missouri,
December 19, 1941.

ARTHUR ANDERSEN & CO.

Arthur Andersen & Co.

PANHANDLE EASTERN PIPE LINE COMPANY
(A Delaware Corporation)

BALANCE SHEET—SEPTEMBER 30, 1941

ASSETS

Property, Plant and Equipment (Note A) (Schedule V)			$62,604,537.07
Intangibles (Note A) (Schedule VII):			
Gas sales and purchase contracts	$2,930,286.40		
Less—Reserve for amortization (Schedule VIII)	1,684,914.45	$1,245,371.95	
Gas sales contracts—Other, in process of amortization		357,495.62	
Organization expense		115,172.86	
Miscellaneous		64,427.72	1,782,468.15
Investment in Subsidiary Company, Subsidiary Consolidated:			
Investment in capital stock (Note A) (Schedule III)			2,635,391.43
Current Assets:			
Cash in banks and working funds		$4,573,039.74	
United States Treasury Notes, Tax Series B—1943		2,750,000.00	
Accounts receivable—			
Accounts receivable, customers	$1,200,716.45		
Due from subsidiary company, subsidiary consolidated	126,329.11		
Miscellaneous accounts receivable	57,230.65		
	$1,384,276.21		
Less—Reserve for uncollectible accounts (Schedule XII)	35,819.88	1,348,456.33	
Materials and supplies at average cost		320,104.40	8,991,600.47
Non-Current Notes and Accounts Receivable:			
Mortgage notes receivable		$ 48,819.24	
Accounts receivable		160,670.43	209,489.67
Special Deposits (including $104,985.66 for payment of long-term debt called for redemption)			111,463.66
Deferred Charges and Prepaid Expenses:			
Debt discount and expense in process of amortization (Note B)		$2,081,485.06	
Prepaid expenses		125,187.77	
Other deferred items		84,621.02	2,291,293.85
			$78,623,244.30

LIABILITIES

Capital Stock (Schedule XIII):		
Preferred stock, $6.00 cumulative, par value $100—entitled in liquidation to $110, aggregating $12,100,000 for the shares issued (Note C)—		
Class A, participating and redeemable—(Note C)—Authorized and issued, 100,000 shares	$10,000,000.00	
Class B, non-participating and non-redeemable—Authorized and issued, 10,000 shares	1,000,000.00	
Common stock, without par value—		
Authorized 810,000 shares		
Outstanding 807,367 shares (Note D)	20,184,175.00	$31,184,175.00
Long-Term Debt (Schedule IX):		
Funded debt:		
First Mortgage and First Lien Bonds, Series A, due serially November 1, 1946 to November 1, 1950	$ 6,250,000.00	
First Mortgage and First Lien 3% Bonds, Series B, due November 1, 1960	12,000,000.00	
Serial Notes ($1,250,000 due November 1 of each of the years 1942 to 1945 inclusive)	5,000,000.00	
Other long-term debt:		
Leasehold purchase obligation (payable monthly from gas produced, unpaid balance payable August 31, 1946)	14,255.87	23,264,255.87
Current Liabilities:		
Accounts payable (Including pay rolls of $24,755.96)	$ 449,964.42	
Dividends declared and unpaid	1,174,208.75	
Accrued interest	225,260.45	
Accrued taxes—		
State, local and miscellaneous Federal	588,210.59	
Federal income and excess profits	2,578,369.38	
Long-term debt called for redemption	104,985.66	5,120,999.25
Deferred Liabilities		43,319.74
Reserves:		
Depreciation, depletion, and amortization of property, plant and equipment (Schedule VI)	$10,042,792.79	
Contingencies (Schedule XII)	624,800.94	
Injuries and damages (Schedule XII)	87,123.74	10,754,717.47
Contributions in Aid of Construction		35,801.06
Earned Surplus Since December 31, 1935 (Notes B and C) (See Page S-10)		8,219,975.91
Contingent Liabilities (Note E)		
		$78,623,244.30

Reference is made to the appended notes which are an integral part of the above balance sheet

PANHANDLE EASTERN PIPE LINE COMPANY
(A Delaware Corporation)
AND SUBSIDIARY COMPANY

CONSOLIDATED BALANCE SHEET—SEPTEMBER 30, 1941

ASSETS

Property, Plant and Equipment (Note A) (Schedule V)			$65,502,541.15
Intangibles (Note A) (Schedule VII):			
Gas sales and purchase contracts	$2,930,286.40		
Less—Reserve for amortization (Schedule VIII)	1,684,914.45	$1,245,371.95	
Gas sales contracts—Other, in process of amortization		357,495.62	
Organization expense		115,172.86	
Miscellaneous		64,427.72	1,782,468.15
Current Assets:			
Cash in banks and working funds		$5,040,487.20	
United States Treasury Notes, Tax Series B—1943		2,750,000.00	
Accounts receivable—			
Accounts receivable, customers	$1,340,874.63		
Miscellaneous accounts receivable	61,100.52		
	$1,401,975.15		
Less—Reserve for uncollectible accounts (Schedule XII)	47,519.88	1,354,455.27	
Materials and supplies at average cost		321,277.03	9,466,219.50
Non-Current Notes and Accounts Receivable:			
Mortgage notes receivable		$ 48,819.24	
Accounts receivable		160,670.43	209,489.67
Special Deposits (including $104,985.66 for payment of long-term debt called for redemption)			111,463.66
Deferred Charges and Prepaid Expenses:			
Debt discount and expense in process of amortization (Note B)		$2,081,485.06	
Prepaid expenses		125,187.77	
Other deferred items		87,274.79	2,293,947.62
			$79,366,129.75

LIABILITIES

Capital Stock (Schedule XIII):		
Preferred stock, $6.00 cumulative, par value $100—entitled in liquidation to $110, aggregating $12,100,000 for the shares issued (Note C)—		
Class A, participating and redeemable—(Note C)—		
Authorized and issued, 100,000 shares	$10,000,000.00	
Class B, non-participating and non-redeemable—		
Authorized and issued, 10,000 shares	1,000,000.00	
Common stock, without par value—		
Authorized 810,000 shares		
Outstanding 807,367 shares (Note D)	20,184,175.00	$31,184,175.00
Long-Term Debt (Schedule IX):		
Funded debt:		
First Mortgage and First Lien Bonds, Series A, due serially November 1, 1946 to November 1, 1950	$ 6,250,000.00	
First Mortgage and First Lien 3% Bonds, Series B, due November 1, 1960	12,000,000.00	
Serial Notes ($1,250,000 due November 1 of each of the years 1942 to 1945 inclusive)	5,000,000.00	
Other long-term debt:		
Leasehold purchase obligation (payable monthly from gas produced, unpaid balance payable August 31, 1946)	14,255.87	23,264,255.87
Current Liabilities:		
Accounts payable (Including pay rolls of $25,495.32)	$ 453,181.08	
Dividends declared and unpaid	1,174,208.75	
Accrued interest	225,260.45	
Accrued taxes—		
State, local and miscellaneous Federal	607,845.87	
Federal income and excess profits	2,613,979.33	
Long-term debt called for redemption	104,985.66	5,179,461.14
Deferred Liabilities		43,319.74
Reserves:		
Depreciation, depletion, and amortization of property, plant and equipment (Schedule VI)	$10,526,505.02	
Contingencies (Schedule XII)	624,800.94	
Injuries and damages (Schedule XII)	97,023.74	11,248,329.70
Contributions in Aid of Construction		42,062.57
Earned Surplus Since December 31, 1935 (Notes B and C) (See Page S-11)		8,404,525.73
Contingent Liabilities (Note E)		
		$79,366,129.75

Reference is made to the appended notes which are an integral part of the above balance sheet

EXHIBIT 145.

EXHIBIT 145.

BALANCE SHEET NOTES
COMPANY AND CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANY

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NOTES TO THE BALANCE SHEETS

ATTACHED TO AND MADE AN INTEGRAL PART OF THE BALANCE SHEET (COMPANY ONLY) AND OF THE CONSOLIDATED BALANCE SHEET

As of September 30, 1941

A. (1) Property, plant and equipment and intangibles are stated at cost except for $4,816,350.71 thereof which was recorded at the amount assigned by the Board of Directors to assets acquired as of August 31, 1930 as a capital contribution. It is the belief of the present management of the Company that the amount assigned to the capital contribution represented the value of the assets contributed as determined by the donor, Missouri-Kansas Pipe Line Company. Of the total, $2,417,948.52, representing the amount at which the contributed tangible property was recorded on the books of Missouri-Kansas Pipe Line Company, was assigned to property, plant and equipment, and the balance of $2,398,402.19 was assigned to gas sales and purchase contracts.

(2) Investment in subsidiary company is stated at cost. The securities representing such investment are pledged as collateral to the First Mortgage and First Lien Bonds. In January, 1941, the Company received 807,367 shares of common stock, of a par value of 42 cents each, of Central Distributing Company in exchange for its former investment in that company (represented by no par common stock of $59,000.43, a note receivable of $250,000.00 and a demand loan of $25,000.00) and $5,093.71 additional cash investment. These shares were then distributed as a dividend to the Company's common stockholders, on a share for share basis, with a concurrent charge to earned surplus of $339,094.14.

(3) The amounts at which property, plant and equipment, intangibles and investment in subsidiary company are stated do not purport to represent the current realizable value thereof.

B. Debt discount and expense in process of amortization at September 30, 1941 consists of:

Discount and expense applicable to 6% bond issue redeemed in 1937 prior to original maturity of October 1, 1950 in process of amortizaton over the original life of such issue	$ 829,457.41
Items being amortized on the basis of bonds outstanding over the life of the 4% bond issue redeemed in 1941 prior to original maturity of March 1, 1952—	
Call premium on 6% issue	471,822.61
Debt discount and expense on 4% issue	374,436.79
Items being amortized on the basis of bonds outstanding over the lives of present outstanding issues—	
Call premium on 4% issue	190,061.40
Debt discount and expense on present outstanding issues	215,706.85
	$2,081,485.06

On December 19, 1941, the Board of Directors authorized the charging to earned surplus, as of the date of refunding, February 3, 1941, of the unamortized balance of debt discount, expense and call premiums applicable to refunded issues and the discount and expenses applicable to outstanding issues.

C. Surplus is restricted by the Mortgage and Deed of Trust dated November 1, 1940 as to payment of dividends, in the amount of $4,113,952.58. In the opinion of counsel for the Company, the requirements of Delaware law impose no restrictions on surplus by reason of the excess ($1,100,000 at September 30, 1941) of the liquidating value over the par value of its preferred stock. Class A preferred stock may be redeemed at any time in whole or in part at $100 per share if redeemed on or before January 1, 1942 or $110 per share thereafter.

D. At September 30, 1941 there were 1,285 unissued shares available for exercise of purchase option at $25.00 a share.

E. Contingent liabilities:

Effective January 1, 1940, the Company adopted a retirement annuity plan for employees (including officers) who had not attained age sixty-five on that date, by means of a group annuity

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANY

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NOTES TO THE BALANCE SHEETS—(Continued)

ATTACHED TO AND MADE AN INTEGRAL PART OF THE BALANCE SHEET (COMPANY ONLY) AND OF THE CONSOLIDATED BALANCE SHEET

As of September 30, 1941

contract with a life insurance company, which provides, among other things, for (a) premium payments in respect of current annuities and (b) the purchase by payments over a period of years of additional annuities based on age and length of prior employment, both at the expense of the Company. Amounts charged to the income accounts for the year 1940 aggregated $168,700 of which $100,000 applied to past service annuities and for the nine months ended September 30, 1941 aggregated $134,700 of which $75,000 applied to past service annuities. The total cost of the additional annuities based on length of prior employment may vary according to the dates of payments but it is estimated by the Company at approximately $630,000 (based on a payment period of approximately twenty years). The plan by its terms is subject to change or discontinuance by the Company at any time.

The Company has made commitments in connection with expansion of facilities of approximately $4,000,000 at September 30, 1941. The Company represents that there were no other contingent liabilities not reflected in the balance sheet at September 30, 1941, except those set forth in contracts for the purchase and sale of gas.

F. In the consolidated balance sheet the accounts of the subsidiary of the Company have been consolidated with the accounts of the Company. The Company's equity in the net assets of such subsidiary, as shown by the books of the latter, exceeds the aggregate investment, as shown in the Company's books, by $184,549.82, representing undistributed earnings of subsidiary since date of acquisition which has been credited to earned surplus in consolidation.

EXHIBIT 145.
EXHIBIT 145.

INCOME ACCOUNT
CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

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STATEMENT OF CONSOLIDATED INCOME

For the Years Ended December 31, 1938, 1939 and 1940 and the Nine Months Ended September 30, 1941

	Year Ended December 31,			Nine Months Ended September 30, 1941 (Note G)
	1938	1939	1940	
Operating Revenues:				
Gas sales	$9,540,967.85	$11,461,388.31	$13,167,241.73	$10,518,678.44
Gasoline sales	353,128.71	513,940.99	355,722.01	432,677.73
Miscellaneous	13,032.46	21,439.93	12,489.05	7,424.68
Total operating revenues	$9,907,129.02	$11,996,769.23	$13,535,452.79	$10,958,780.85
Operating Expenses and Taxes:				
Operation—				
Gas purchased	$ 901,927.86	$ 997,872.93	$ 1,090,106.83	$ 848,148.38
Rents and royalties (Schedule XVI)—				
Rentals on unoperated gas leases	94,726.03	96,118.77	101,344.57	78,599.15
Gas royalties	92,404.27	118,813.36	143,341.99	122,449.57
Miscellaneous rents	28,409.52	29,076.25	35,665.19	30,586.17
General and administrative expenses	399,832.93	431,112.47	672,377.71	513,216.98
Provision for uncollectible accounts	6,400.00	8,400.00	10,800.00	8,100.00
Other operation expenses	645,594.35	718,033.17	727,113.61	580,355.71
General overheads charged to construction—credit	—	—	57,380.03*	—
Total operation	$2,169,294.96	$ 2,399,426.95	$ 2,723,369.87	$ 2,181,455.91
Maintenance (Note C) (Schedule XVI)	217,207.07	299,483.39	277,394.65	252,460.29
Depreciation, depletion and amortization of property, plant and equipment (Note A) (Schedule XVI)	1,728,607.16	1,870,699.86	1,880,889.87	1,483,972.46
Amortization of gas sales and purchase contracts (Note B) (Schedule XVI)	326,892.84	329,300.14	329,110.13	249,234.07
Charges in lieu of—				
Federal income taxes (Note D)	—	—	—	100,000.00
Federal excess profits taxes (Note D)	—	—	—	487,000.00
Taxes—				
State, local and miscellaneous Federal (Schedule XVI)	562,839.32	624,338.14	566,445.71	507,777.17
Provision for income and excess profits taxes—				
Federal income	513,426.21	820,286.12	1,436,598.47	1,202,000.00
Federal excess profits	—	—	561,000.00	648,000.00
Other income taxes—State	15,048.84	51,139.69	46,425.77	36,000.00
Total operating expenses and taxes	$5,533,316.40	$ 6,394,674.29	$ 7,821,234.47	$ 7,147,899.90
Net earnings from operations	$4,373,812.62	$ 5,602,094.94	$ 5,714,218.32	$ 3,810,880.95
Other Income:				
Other interest	13,172.56	13,884.90	13,427.53	12,124.28
Net earnings before interest deductions	$4,386,985.18	$ 5,615,979.84	$ 5,727,645.85	$ 3,823,005.23
Interest Deductions:				
Interest on funded debt	$ 944,233.34	$ 923,333.32	$ 903,333.32	$ 437,080.31
Other interest deductions	65,129.11	14,394.31	2,787.11	5,350.33
Amortization of debt discount and expense (Note E)	319,676.50	314,852.87	310,029.24	223,298.61
Interest charged to construction—credit	1,277.51*	—	36,827.80*	1,275.92*
Total interest deductions	$1,327,761.44	$ 1,252,580.50	$ 1,179,321.87	$ 664,453.33
Net income	$3,059,223.74	$ 4,363,399.34	$ 4,548,323.98	$ 3,158,551.90

*Denotes red figure.

Reference is made to the appended notes which are an integral part of the above income account.

EXHIBIT 145.

INCOME ACCOUNT NOTES
CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

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NOTES TO THE INCOME ACCOUNT

ATTACHED TO AND MADE A PART OF THE CONSOLIDATED INCOME ACCOUNT

FOR THE YEARS ENDED DECEMBER 31, 1938, 1939, AND 1940 AND THE NINE MONTHS ENDED SEPTEMBER 30, 1941

A. The formulae consistently used by the Company and its subsidiaries beginning with the year 1937 to develop an amount to be recommended to the Board of Directors as a proper provision for depreciation, depletion, and amortization gives consideration to the "wasting asset" theory and provides depletion on operated leaseholds on th basis of units of gas withdrawn, amortization of investment in unoperated land rights by the use of a composite life of ten years for such land rights, amortization of gas sales and purchase contracts at a specific monthly rate as provided in the Company's Certificate of Incorporation and in amounts to conform to the contract period in certain instances, afid an amount for the other transmission system properties determined by its Board of Directors which recognizes amortization in addition to a composite rate based on the age and estimated life of the properties. The propriety of the aggregate annual provision, as well as the reasonableness of the total reserves provided to date, has been substantiated by P. McDonald Biddison, an independent Consulting Engineer of Dallas, Texas. The Company's Certificate of Incorporation, as amended, provides substantially that no dividends on the common stock or any participating dividends on the preferred and common stocks may be paid except out of net surplus earned subsequent to December 31, 1935 remaining after there shall have been deducted therefrom as provisions for depreciation, depletion and amortization of property, plant and equipment, an aggregate accrual equal to one-third of 1% per month (on monthly balances) of the consolidated tangible property of the Company and its subsidiaries; the provisions for depreciation, depletion and amortization of tangible property as computed in accordance with the Company's Certificate of Incorporation would have amounted to $2,337,597.71, $2,354,588.33, $2,378,393.37, and $1,993,360.66 for the years 1938, 1939, 1940, and the nine months ended September 30 1941, respectively. The amounts claimed by the Company and its subsidiaries for depreciation for Federal income tax purposes are larger than the provisions as set forth in the income account.

B. The Company has provided amortization of gas sales and purchase contracts in the amount of $24,419.05 per month, which will extinguish the net ledger balance at December 31, 1935 ($2,930,286.40) over a period of ten years. Of the original amount of gas sales contracts—other, $371,076.00 is being amortized over a period of fifteen years from January 1, 1937 and the remainder is being amortized primarily over the lives of the respective contracts. No provision has been made for the amortization of organization expense and miscellaneous intangibles.

C. It is the practice of the Company to charge to maintenance the repairs of property and replacements and renewals of items determined to be less than units of property. Replacements and renewals of items considered to be units of property are charged to the property, plant and equipment accounts. At the time properties are disposed of, the cost (or estimated cost), less net salvage value, of property retired is charged to the reserve for depreciation, depletion and amortization of property, plant and equipment.

D. Charges in lieu of Federal income and excess profits taxes represent an amount equivalent to such taxes which would have been payable on current earnings if the Company had not had the benefit for tax purposes of deductions for discount, premium and expense resulting from the refinancing of long-term debt. Such amounts have been credited to unamortized debt discount and expense as a partial offset to the items included therein applicable to the bonds which were refunded.

E. Consists of—

	1938	1939	1940	Nine Months Ended September 30, 1941
On issue due October 1, 1950, redeemed in 1937—				
Amortization of debt discount and expense	$ 92,161.80	$ 92,161.80	$ 92,151.80	$ 69,121.35
Amortization of call premium	91,251.89	89,317.23	87,382.56	61,913.94
On issue due March 1, 1952, redeemed in 1941—				
Amortization of debt discount and expense	136,262.81	133,373.84	130,484.88	52,570.64
Amortization of call premium	—	—	—	12,978.60
On present outstanding issues—				
Amortization of debt discount and expense	—	—	—	26,714.08
	$319,676.50	$314,852.87	$310,029.24	$223,298.51

EXHIBIT 145.

INCOME ACCOUNT NOTES
CONSOLIDATED—(Continued)

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PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

NOTES TO THE INCOME ACCOUNT—(Continued)

ATTACHED TO AND MADE A PART OF THE CONSOLIDATED INCOME ACCOUNT

FOR THE YEARS ENDED DECEMBER 31, 1938, 1939, AND 1940 AND THE NINE MONTHS ENDED SEPTEMBER 30, 1941

Reference is made to Note B to the Balance Sheets for details respecting change in amortization of debt discount and expense authorized by the Board of Directors on December 19, 1941 which will result in the restoration to income account of amortization recorded for the period subsequent to February 3, 1941, date of refunding, in the amount of $195,811.91.

F. No profits or losses on sales or other charges to parents or subsidiaries of the Company are included in the consolidated income accounts. Inter-company revenues have been eliminated in consolidation.

G. Due to the seasonal character of the Company's business, its earnings for the nine months ended September 30, 1941 may not necessarily be a correct criterion of its earnings on a twelve months' basis.

PANHANDLE EASTERN PIPE LINE COMPANY
AND SUBSIDIARY COMPANIES

SCHEDULE VI—RESERVES FOR DEPRECIATION, DEPLETION, AND AMORTIZATION OF PROPERTY, PLANT AND EQUIPMENT

Column A	Column B	Column C		Column D		Column E
		Additions		Deductions from Reserves		
Description	Balance at Beginning of Period	(1) Charged to Profit and Loss or Income (see Note A)	(2) Charged to Other Accounts	(1) Retirements, Renewals and Replacements (see Note F)	(2) Other	Balance at Close of Period
Company:						
Year ended December 31, 1938	$3,281,448.11	$1,556,994.03	$ 22,313.39(B) 612,057.63(C)	$113,598.20	$ —	$ 5,359,214.96
Year ended December 31, 1939	5,359,214.96	1,787,259.86	22,627.43(B) 46,364.54(D)	72,365.39	—	7,143,101.40
Year ended December 31, 1940	7,143,101.40	1,796,889.87	25,012.33(B)	312,142.97	—	8,652,860.63
Nine months ended September 30, 1941	8,652,860.63	1,429,002.46	19,431.31(B)	58,501.63	—	10,042,792.79
Consolidated:						
Year ended December 31, 1938	$4,104,955.89	$1,728,607.16	$ 22,313.39(B)	$119,448.95	$ —	$ 5,736,427.49
Year ended December 31, 1939	5,736,427.49	1,870,699.86	22,627.43(B) 46,364.54(D)	77,840.90	—	7,598,278.42
Year ended December 31, 1940	7,598,278.42	1,880,839.87	25,012.33(B)	314,679.38	—	9,189,501.24
Nine months ended September 30, 1941	9,189,501.24	1,483,972.46	19,431.31(B)	58,504.04	107,895.95(E)	10,526,505.02

NOTES:

A. Reference is made to Note A to Statement of Consolidated Income for the basis of provision for depreciation, depletion and amortization.

B. Provisions for depreciation of automobiles charged to automobile clearing accounts, and depreciation of drilling rigs during process of drilling wells charged to others.

C. Amount of reserve taken over in liquidation of Panhandle Illinois Pipe Line Company, a subsidiary.

D. Balance of capital surplus transferred to reserve for depreciation, depletion and amortization as authorized by the Board of Directors.

E. Eliminated as a result of disposal of investment in Central Distributing Company, a wholly-owned subsidiary.

F. The differences between retirement as shown in Schedule V and in the above schedule represent salvage, less removal costs, netted against retirements above.

EXHIBIT 145. 5099
SCHEDULE VI
COMPANY AND CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY

SCHEDULE VII—INTANGIBLE ASSETS

Column A	Column B	Column C	Column D		Column E	Column F
			Deductions			
Description	Balance at Beginning of Period	Additions at Cost	(1) Charged to Profit and Loss or Income	(2) Charged to Other Accounts	Other Changes Debit and/or Credit	Balance at Close of Period
Year Ended December 31, 1938:						
Gas sales and purchase contracts	$2,930,286.40	$ —	$ —	$ —	$ —	$2,930,286.40
Gas sales contracts—other	358,658.20	76,649.11(B)	—	33,864.24(C)	—	401,443.07
Organization expense	89,979.09	—	—	—	25,193.77(D)	115,172.86
Miscellaneous	49,813.41	—	—	—	14,614.31(D)	64,427.72
Total (Note A)	$3,428,737.10	$ 76,649.11	$ —	$ 33,864.24	$ 39,808.08	$3,511,330.05
Year Ended December 31, 1939:						
Gas sales and purchase contracts	$2,930,286.40	$ —	$ —	$ —	$ —	$2,930,286.40
Gas sales contracts—other	401,443.07	21,025.47(B)	—	36,271.54(C)	—	386,197.00
Organization expense	115,172.86	—	—	—	—	115,172.86
Miscellaneous	64,427.72	—	—	—	—	64,427.72
Total (Note A)	$3,511,330.05	$ 21,025.47	$ —	$ 36,271.54	$ —	$3,496,083.98
Year Ended December 31, 1940:						
Gas sales and purchase contracts	$2,930,286.40	$ —	$ —	$ —	$ —	$2,930,286.40
Gas sales contracts—other	386,197.00	24,427.59(B)	—	36,081.53(C)	2,536.68*(E)	372,006.38
Organization expense	115,172.86	—	—	—	—	115,172.86
Miscellaneous	64,427.72	—	—	—	—	64,427.72
Total (Note A)	$3,496,083.98	$ 24,427.59	$ —	$ 36,081.53	$ 2,536.68	$3,481,893.36
Nine Months Ended September 30, 1941:						
Gas sales and purchase contracts	$2,930,286.40	$ —	$ —	$ —	$ —	$2,930,286.40
Gas sales contracts—other	372,006.38	14,951.86(B)	—	29,462.62(C)	—	357,495.62
Organization expense	115,172.86	—	—	—	—	115,172.86
Miscellaneous	64,427.72	—	—	—	—	64,427.72
Total (Note A)	$3,481,893.36	$ 14,951.86	$ —	$ 29,462.62	$ —	$3,467,382.60

*Denotes red figure.

NOTES:

A. See Note A to the balance sheets for statement of the basis on which intangibles are stated.

B. Expenditures in connection with securing gas sales contracts consisting of cost in connection with changing over to natural gas, services of special agents, contributions for line extensions to serve industrial customers, etc.

C. Reserve for amortization of gas sales contracts—other, applied in reduction of the asset account.

D. Amounts of intangibles taken over in liquidation of Panhandle Illinois Pipe Line Company, a subsidiary.

E. Refund of expenditures in connection with securing gas sales contracts.

EXHIBIT 145. 5101 SCHEDULE VII COMPANY

SCHEDULE VII
CONSOLIDATED

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

SCHEDULE VII—INTANGIBLE ASSETS

Column A	Column B	Column C	Column D		Column E	Column F
			Deductions			
Description	Balance at Beginning of Period	Additions at Cost	(1) Charged to Profit and Loss or Income	(2) Charged to Other Accounts	Other Changes Debit and/or Credit	Balance at Close of Period
Year Ended December 31, 1938:						
Gas sales and purchase contracts	$2,930,286.40	$ —	$ —	$ —	$ —	$2,930,286.40
Gas sales contracts—other	358,658.20	76,649.11(B)	—	33,864.24(C)	—	401,443.07
Organization expense	116,291.98	—	—	—	—	116,291.98
Miscellaneous	97,991.71	—	—	—	—	97,991.71
Total (Note A)	$3,503,228.29	$ 76,649.11	$ —	$ 33,864.24	$ —	$3,546,013.16
Year Ended December 31, 1939:						
Gas sales and purchase contracts	$2,930,286.40	$ —	$ —	$ —	$ —	$2,930,286.40
Gas sales contracts—other	401,443.07	21,025.47(B)	—	36,271.54(C)	—	386,197.00
Organization expense	116,291.98	—	—	—	—	116,291.98
Miscellaneous	97,991.71	—	—	—	—	97,991.71
Total (Note A)	$3,546,013.16	$ 21,025.47	$ —	$ 36,271.54	$ —	$3,530,767.09
Year Ended December 31, 1940:						
Gas sales and purchase contracts	$2,930,286.40	$ —	$ —	$ —	$ —	$2,930,286.40
Gas sales contracts—other	386,197.00	24,427.59(B)	—	36,081.53(C)	2,536.68*(D)	372,006.38
Organization expense	116,291.98	—	—	—	—	116,291.98
Miscellaneous	97,991.71	—	—	—	—	97,991.71
Total (Note A)	$3,530,767.09	$ 24,427.59	$ —	$ 36,081.53	$ 2,536.68*	$3,516,576.47
Nine Months Ended September 30, 1941:						
Gas sales and purchase contracts	$2,930,286.40	$ —	$ —	$ —	$ —	$2,930,286.40
Gas sales contracts—other	372,006.38	14,951.86(B)	—	29,462.62(C)	1,119.12*(E)	357,495.62
Organization expense	116,291.98	—	—	—	33,563.99*(E)	115,172.86
Miscellaneous	97,991.71	—	—	—		64,427.72
Total (Note A)	$3,516,576.47	$ 14,951.86	$ —	$ 29,462.62	$ 34,683.11*	$3,467,382.60

*Denotes red figure.

NOTES:

A. See Note A to the balance sheets for statement of the basis on which intangibles are stated.

B. Expenditures in connection with securing gas sales contracts consisting of cost in connection with changing over to natural gas, services of special agents, contributions for line extensions to serve industrial customers, etc.

C. Reserve for amortization of gas sales contracts—other, applied in reduction of the asset account.

D. Refund of expenditures in connection with securing gas sales contracts.

E. Eliminated as a result of disposal of investment in Central Distributing Company, a wholly-owned subsidiary.

PANHANDLE EASTERN PIPE LINE COMPANY
AND SUBSIDIARY COMPANIES

SCHEDULE VIII—RESERVES FOR DEPRECIATION AND AMORTIZATION OF INTANGIBLE ASSETS

Column A	Column B	Column C		Column D	Column E
		Additions			
Description	Balance at Beginning of Period	(1) Charged to Profit and Loss or Income (See Note A)	(2) Charged to Other Accounts	Deductions From Reserves	Balance at Close of Period
Company and Consolidated:					
Year Ended December 31, 1938:					
Gas sales and purchase contracts	$ 586,057.20	$293,028.60	$ —	$ —	$ 879,085.80
Gas sales contracts—other	—	33,864.24	—	33,864.24(B)	—
	$ 586,057.20	$326,892.84	$ —	$33,864.24	$ 879,085.80
Year Ended December 31, 1939:					
Gas sales and purchase contracts	$ 879,085.80	$293,028.60	$ —	$ —	$1,172,114.40
Gas sales contracts—other	—	36,271.54	—	36,271.54(B)	—
	$ 879,085.80	$329,300.14	$ —	$36,271.54	$1,172,114.40
Year Ended December 31, 1940:					
Gas sales and purchase contracts	$1,172,114.40	$293,028.60	$ —	$ —	$1,465,143.00
Gas sales contracts—other	—	36,081.53	—	36,081.53(B)	—
	$1,172,114.40	$329,110.13	$ —	$36,081.53	$1,465,143.00
Nine Months Ended September 30, 1941:					
Gas sales and purchase contracts	$1,465,143.00	$219,771.45	$ —	$ —	$1,684,914.45
Gas sales contracts—other	—	29,462.62	—	29,462.62(B)	—
	$1,465,143.00	$249,234.07	$ —	$29,462.62	$1,684,914.45

NOTES:

A. See Note B to the Statement of Consolidated income for basis of amortization of gas sales and purchase contracts.

B. Application of the accumulated reserve for amortization of gas sales contracts—other, as reduction of the asset account.

C. It has not been the policy of the Company to provide for amortization of organization expense and miscellaneous intangibles set forth in Schedule VII.

EXHIBIT 145. 5105
SCHEDULE VIII
COMPANY AND CONSOLIDATED

[fol. 15091] (Exhibit 147.)

For immediate Release Friday, January 23, 1942

Securities and Exchange Commission, Washington

Holding Company Act Release No. 3286.

In the Matter of

Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation, Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation, Indiana Gas Distribution Corporation, The Ohio Fuel Gas Company

File Nos. 59-33, 70-263, 70-371, 70-387, 70-430, 70-431

(Public Utility Holding Company Act of 1935)

Findings and Opinion of the Commission

Acquisition of Securities By Registered Holding Company or Subsidiary:

Application pursuant to Section 10 of the Act by non-utility subsidiary company with respect to its acquisition from the parent holding company of the entire stock and debt of another non-utility subsidiary and of a utility subsidiary of the parent at the parent's investment cost therein approved, and declaration by parent under Section 12 (f) of the Act with respect thereto permitted to become effective, subject to the condition that there be eliminated from the investment cost of the parent in the non-utility subsidiary of the undepreciated portion of an item representing a profit paid to another wholly-owned subsidiary of the parent, the Commission making no adverse findings under Sections 10(b) and 10(c) (1) of the Act and finding, with respect to the utility subsidiary, that the acquisition has the tendency required by Section 10 (c) (2) of the Act.

Consideration—Constructive Trust

Where all persons interested in subsidiary acquiesced and gave general releases for substantial consideration and with knowledge of all the facts imposition of constructive trust upon parent holding company in favor of acquiring subsidiary found inappropriate.

Where imposition of constructive trust upon parent in favor of acquiring subsidiary would involve construction of decree of court in light of all circumstances surrounding its issuance when court is engaged in such construction, held matter will be left to determination of court since transactions will not affect rights with respect thereto.

[fol. 15092] Acquisition of Utility Assets by Registered Holding Company or Subsidiary:

Application pursuant to Section 10 of the Act by non-utility subsidiary with respect to its acquisition of utility assets from associate company for consideration measured by sale price of similar properties to a non-affiliate in an arms-length bargain where cost records not available approved, and declartion by associate under Section 12 (f) of the Act with respect thereto permitted to become effective, the Commission making no adverse findings under Section 10 (b) and 10 (c) (1) of the Act and finding, that the acquisition has the tendency required by Section 10 (c) (2) of the Act.

Acquisition of Securities by the Issuer:

Declarations under Section 12 (c) and 12 (f) of the Act with respect to the acquisition by subsidiary company at par of its own securities from parent, intermediate company in holding company system and acquisition by latter at principal amount of its own securities from parent holding company permitted to become effective and applications under Section 10 of the Act with respect thereto approved, to extent that provisions of Section 10 of the Act are applicable.

Consideration—Purchase by Parent of Securities of Subsidiary at Discount

Where subsidiary received full consideration in money or money's worth for claims and all persons interested in transaction acquiesced and executed general releases for valuable consideration and with knowledge of all facts, claim of parent will not be reduced despite fact that there might be basis for contention that claims were purchased by it at discount.

Consideration—Offset Against Parent for Excessive Dividends Received on Securities to be Retired

Commission will take all necessary action to prevent abuse of control by parent to prevent refunding of securities of subsidiary on more favorable terms but will not consider claims and defenses as to past abuse where judicial action is pending with respect thereto, and large minority stockholder, which with parent owns almost entire equity in subsidiary, states matter should be left to judicial determination.

Exemption of Security Issue of Registered Holding Company or Subsidiary

Issue Solely For Purpose of Financing Business of Subsidiary

Application by non-utility subsidiary company pursuant to Section 6 (b) of the Act for exemption from the provisions of Section 6 (a) with respect to the issue and sale of bonds and preferred stock to refund part of outstanding preferred stock and to finance acquisitions and additional construction granted, jurisdiction being reserved with respect to matters arising in competitive bidding.

Propriety of Preferred Stock

While common stock issue is preferable, no condition under Section 6 (b) is imposed with respect thereto where property and earnings ratios are proper and preferred stock is issued with adequate sinking fund provision.

[fol. 15093] Deferred Stock Vote

No normal vote required to be given to preferred stock to be issued where such stock elects majority of directors after four quarterly dividend defaults and two-thirds vote of such stock is required in matters most likely adversely to affect it; and where smaller outstanding issue with right to elect two directors is being considered in pending 11 (b) (2) proceedings which will be given prompt hearing.

Legal Fees

Jurisdiction reserved with regard to legal fees payable by parent holding company and subsidiaries for services in connection with actions approved.

Appearances:

Ambrose Selig, William R. Nowlin and Sidney Willner, for the Public Utilities Division of the Commission.

William H. Button, James B. Alley and Charles R. Lowther, for Columbia Oil & Gasoline Corporation.

Wayne Johnson, Jr., Edward S. Pinney, William Wemple, and Frederick S. Beebe, of Cravath, DeGersdorff, Swain & Wood, for Columbia Gas & Electric Corporation, Michigan Gas Transmission Corporation, and Indiana Gas Distribution Corporation.

Robert J. Bulkley, Arthur Logan, and Russell Hardy, and Richard B. Hand, 111 Broadway, New York, New York, for Missouri Kansas Pipe Line Company.

Edwin N. Goodwin and William L. Glenn, for Panhandle Eastern Pipe Line Company.

James McGlothlin, John F. Mack and J. C. Laylin, for W. H. Danforth.

John D. Ellis, for the City of Cincinnati.

James H. Lee, for the City of Detroit.

Kenneth L. Sater, for the Public Utilities Commission of Ohio.

Eugene Bleiweiss, for Abner Goldman.

The applications and declarations presently before us, pursuant to Sections 6, 7, 9, 10, 12 (c) and 12 (f) of the Public Utility Holding Company Act of 1935 and rules promulgated thereunder, constitute part of a consolidated proceeding and are concerned with the following transactions:

(1) The disposition by Columbia Oil & Gasoline Corporation (hereinaffer referred to as Columbia Oil) to Panhandle Eastern Pipe Line Company (hereinafter referred to as Panhandle Eastern) and the acquisition by the latter of the Class A preferred stock of Panhandle Eastern in the par value of $10,000,000;

[fol. 15094] (2) The sale by Columbia Gas & Electric Corporation (hereinafter referred to as Columbia Gas) to

Panhandle Eastern and the acquisition by the latter of the stock and debt of Michigan Gas Transmission Corporation (hereinafter referred to as Michigan Gas) and of Indiana Gas Distribution Corporation (hereinafter referred to as Indiana Gas) at the alleged investment cost of those companies to Columbia Gas plus undistributed surpluses at the date of the transaction, such prices being, as of September 30, 1941, $10,780,840.59 for Michigan Gas, and $153,698.20 for Indiana Gas; and the sale by The Ohio Fuel Gas Company (hereinafter referred to as Ohio Fuel), a subsidiary of Columbia Gas, to Panhandle Eastern and the acquisition by the latter of certain pipe lines and other property owned by Ohio Fuel in the states of Indiana and Ohio at a price of $439,326.08, which is based on the amount received for the sale of similar property to a non-associated purchaser;

(3) The disposition by Columbia Gas to Columbia Oil and the acquisition by the latter of $11,000,000 face amount of debentures of Columbia Oil held by Columbia Gas;

(4) The issue and sale of securities for the financing by Panhandle Eastern to secure the funds necessary to carry out the transactions described in (1) and (2) supra, as well as for certain additional construction.

History of Proceedings

On May 20, 1941, we ordered[1] a hearing to be held June 3, 1941 on an application by Columbia Gas seeking approval of the acquisition by it of the securities and debt of certain wholly-owned oil and gasoline subsidiary companies of Columbia Oil. That transaction was part of a plan filed with the United States District Court for the District of Delaware on June 20, 1939 by the parties to a pending anti-trust action involving the control by Columbia Gas and Columbia Oil of Panhandle Eastern for the settlement of that action.

During the intervening period, on May 27, 1941, we handed down our Findings, Opinion and Order[2] denying the application of Columbia Oil to be declared not to be a subsidiary of Columbia Gas and denying the application of

[1] Holding Company Act Release No. 2766.
[2] Holding Company Act Release No. 2778.

Panhandle Eastern to be declared not to be a subsidiary of Columbia Oil and of Columbia Gas. In our same order, we granted the application of Panhandle Eastern to be declared not to be a subsidiary of Missouri-Kansas Pipe Line Company (hereinafter referred to as Mokan).

The hearing on the aforementioned application of Columbia Gas was at its request continued subject to call of the Trial Examiner. On June 7, 1941, Columbia Gas, Columbia Oil, and Mokan entered into an agreement modifying the plan previously mentioned for settlement of the pending anti-trust action. Subsequently, Columbia Gas amended its applications and Columbia Oil and Panhandle Eastern filed applications and declarations to obtain our approval of various transactions embodied in the said plan as modified.

[fol. 15095] On August 25, 1941, we issued a notice of and order[3] instituting proceedings under Sections 11 (b) (1), 11 (b) (2), 12 (c), 12 (f), and 15 (f) of the Public Utility Holding Company Act against Columbia Gas, Columbia Oil, Michigan Gas, Indiana Gas, and Panhandle Eastern and consolidated the several applications and declarations with the said proceedings. The hearing on the said consolidated proceeding was set for September 16, 1941, but at the request of Columbia Gas and Columbia Oil was twice postponed until October 14, 1941.

After argument before us, we entered an order[4] on October 15, 1941 granting Mokan, as owner of 42% of the common stock of Panhandle Eastern, the limited right to participate in the proceeding to the extent of adducing evidence, cross-examining witnesses and presenting oral argument. Similar action was taken with respect to William H. Danforth as beneficial owner of 98,756 shares of common stock of Columbia Oil and as trustee of a trust holding 25,934 additional such shares, and to Abner Goldman as the owner of 500 shares of common stock of Columbia Gas (orders having previously been entered granting the applications for intervention as of right of the Public Utilities Commission of Ohio, the City of Cincinnati,

[3] Holding Company Act Release No. 2963.
[4] Holding Company Act Release No. 3078.

and the City of Detroit). In addition, at the request of the Staff and over the opposition of Columbia Oil and Danforth, we ordered that upon the resumption of hearings evidence bearing upon the issues raised under Section 11 (b) (1) should first be introduced and thereafter evidence relating to the remaining issues in the proceeding in accordance with our further directions. At the request of Columbia Oil, the hearings were adjourned until October 28, 1941.

After resumption of the hearings and the introduction of some evidence relating to the 11 (b) (1) issues, discussions were had between the Staff and representatives of the respondents at the request of the latter with respect to the possibility of modifying the order of procedure so as to achieve a more expeditious determination of certain of the issues involved. Accordingly, the latter proposed to file applications and declarations relating to the transactions presently before us and the Staff made a recommendation that the order of procedure as set forth in our order of October 15, 1941 be modified so as to permit consideration of the applications and declarations so to be filed prior to further consideration of the 11 (b) (1) issues.

After argument, on November 7, 1941, held at the request of Mokan, we issued an order[5] on November 14, 1941 overruling the objection of Mokan to the modifications of the order of procedure and consolidating the new applications which had been filed in the intervening time with the consolidated proceeding.

We further ordered that the hearings should be resumed on November 25, 1941, at which time the issues raised by the present applications and declarations should be introduced first, to be followed by the evidence bearing upon the remaining issues under Section 11 (b) (1). In addition, we reserved the right to enter appropriate orders at any time. Accordingly, hearings were held from November 25 to November 29, 1941, inclusive, at which evidence relating to the present filings was introduced.

[fol. 15096] After consideration of the entire record, we make the following findings:

[5]Holding Company Act Release No. 3128.

Brief Description of Applicants and Declarants

Panhandle Eastern, a subsidiary of Columbia Oil and Columbia Gas, is a non-public utility holding and operating company incorporated in Delaware in 1929. It is engaged in the production, purchase, transmission, and sale of natural gas. It taps fields in Texas and Kansas and its lines run through Texas, Oklahoma, Kansas, Missouri, and Illinois to a point on the Indiana-Illinois border near Dana, Indiana, where its line connects with that of Michigan Gas. It has outstanding the following securities:

$12,000,000 Series B 3% Bonds due November 1, 1960

$6,250,000 Series A Bonds due serially November 1, 1946 to November 1, 1950

$5,000,000 of notes due serially November 1, 1942 to November 1, 1945

Class A, $100 par preferred stock,* $6 cumulative, participating	100,000 shares
Class B, $100 par preferred stock,* $6 cumulative, non-participating	10,000 shares
Common Stock, no par (stated value $25 per share).	807,367 shares

*(Class A stock is redeemable, Class B is not).

All of Panhandle Eastern's preferred stock is held beneficially for Columbia Oil, as are also 404,326 shares, or 50.1% of Panhandle Eastern's common stock. 339,475 shares, or 42.0% of the common stock, is owned by Mokan. The remaining 7.9% is in the hands of over 1,700 holders. The bonds of Panhandle Eastern (many of which are bearer bonds) are stated to be held by interests unaffiliated with the Columbia companies.

Columbia Oil, a non-public utility holding company, was incorporated in Delaware in 1930 for the purpose of acquiring from Columbia Gas the oil and gasoline subsidiaries previously owned by the latter. It has outstanding the following securities:

6% debentures due 1956	$20,400,000 principal amount
Preferred Stock, participating (stated value $34,087,500)	400,000 shares
Common Stock, $1 par	2,336,826 shares

Columbia Gas holds all the preferred stock and all of the outstanding debentures. It holds none of the common stock. This stock, issued to Columbia Gas on the formation of Columbia Oil in 1930, was in the same year placed in a voting trust. The voting trust certificates were, in that year, distributed to the holders of Columbia Gas common stock as a dividend. The voting trust was dissolved in [fol. 15097] 1936 as a part of a recapitalization of Columbia Oil, and the common stock was distributed to the holders of the voting trust certificates.

Michigan Gas, a wholly-owned subsidiary of Columbia Gas, is a non-public utility corporation organized in Delaware in 1935. It owns and operates a gas transmission line connecting with the Panhandle Eastern line at Dana, Indiana, and extending to Detroit, Michigan. The gas transmitted through its line is delivered primarily to the Michigan Consolidated Gas Company for the account of Panhandle Eastern. Michigan Gas also owns a pipe line extending from a point on the Detroit line near Zionsville, Indiana, to Muncie, Indiana, where it connects with the line of Ohio Fuel which is proposed to be sold to Panhandle Eastern.

Indiana Gas, a public utility company incorporated in Indiana in 1931, is also a wholly-owned subsidiary of Columbia Gas. It owns distribution facilities in western Indiana located along the transmission lines of Michigan Gas from which it receives all of its gas requirements. It sells gas at retail to approximately 1,800 customers and to one industrial customer.

Ohio Fuel, a subsidiary of Columbia Gas, is a public utility company incorporated in Ohio. It is engaged primarily in the production, transmission, and distribution of natural and manufactured gas in the State of Ohio. Its distribution area is centered in Columbus, Toledo, Zanesville, Springfield, Lorain, Mansfield, Marion, and the areas contiguous thereto.

Acquisition and Disposition of Panhandle Eastern Class A Preferred Stock

As we have previously stated, Columbia Oil holds the entire outstanding issue of Panhandle Eastern's Class A, cumulative participating preferred stock in the par amount of $10,000,000. This stock is entitled to cumulative preferential dividends of $6 a share. In addition, after certain reserve requirements have been met and dividends on the common stock to the extent of $1.50 per share have been declared or paid in any one year, the Class A stock participates in any additional dividends to the extent of 25%. Under the Certificate of Incorporation of Panhandle Eastern, the Class A stock was originally redeemable at any time at par prior to or on July 1, 1941, or at $110 per share thereafter. Various agreements were entered into, however, extending the time in which the Class A stock may be redeemed without payment of the $10 premium. The last such agreement extended the time until April 1, 1942. In its proposal to dispose of the Class A stock to Panhandle Eastern, Columbia Oil proposes to accept par for the stock.

The $10,000,000 par value Class A preferred and the $1,000,000 of Class B preferred stock were issued by Panhandle Eastern on July 1, 1936 in exchange for $11,000,000 of convertible preferred stock. Panhandle Eastern had previously issued $9,400,000 of convertible preferred stock and $1,600,000 of notes convertible into convertible preferred for its 6% promissory notes, in the face amount of $9,891,000, which had been issued for an equivalent amount of cash, plus the unpaid accrued interest thereon of $1,440,789, a total of $11,331,789.

[fol. 15098] Columbia Oil, which received both the Class A and Class B stock, had originally, in 1931 and 1932, acquired directly from Panhandle Eastern one-half of the notes in the face amount of $4,945,500 for that amount of cash, which was advanced to it by Columbia Gas. Mokan, which, like Columbia Oil, at that time owned one-half of the common stock of Panhandle Eastern, caused the one-half of the notes to which it was entitled to subscribe to be issued to its subsidiary, Panhandle Corporation, to which

it also transferred the common stock. Panhandle Corporation pledged the notes and stock of Panhandle Eastern so received by it to a group of bankers (hereinafter called the Hillman group) as security for its own collateral trust notes in the face amount of $4,940,000. These notes were guaranteed by Mokan which, in addition, borrowed $1,060,000 from the Hillman group on its own notes, secured inter alia, by 900 of the 1,000 shares of Panhandle Corporation stock.

In March, 1932, receivers were appointed for Mokan. The claim of the Hillman group on the Mokan notes was liquidated by the receipt by it of cash plus 750 shares of Panhandle Corporation stock. The interest of Mokan, or its receivers, in Panhandle Eastern was thus reduced to a one-quarter interest in the pledgor's equity of Panhandle Corporation in one-half of the common stock and notes of Panhandle Eastern.

On March 2, 1934, Panhandle Eastern failed to pay interest on its notes. On March 15, 1934, the Panhandle Corporation notes, whose maturity date had been extended, with the consent of 98% of the noteholders, for one year from March 15, 1933, became due, but the corporation defaulted in the payment of both interest and principal.

This situation remained unchanged, except for the accrual of unpaid interest on the notes of both Panhandle Eastern and Panhandle Corporation, until the settlement agreement dated June 1, 1936. During the intervening period, however, viz. in March 1935, a civil anti-trust suit was brought by the Department of Justice against Columbia Gas, Columbia Oil, certain of their respective directors, and Hillman, et al, charging them with mismanagement and financial strangulation of Panhandle Eastern. In July 1935, an action for treble damages in the amount of $180,000,000 was brought by the Mokan receivers against the same persons upon identical contentions.

In June 1935, after the commencement of the government anti-trust suit but before the action of the Mokan receivers, Columbia Oil offered to purchase from the Hill-

man group and other noteholders their interests in Panhandle Corporation on condition that the anti-trust suit be settled so as to allow Columbia Oil to retain its interest in Panhandle Eastern. On January 29, 1936, a stipulation and Consent Decree were entered into between the Department of Justice and the defendants, providing inter alia for such retention upon certain conditions. Moreover, after a series of negotiations, an over-all settlement was made with the Mokan receivers of their various claims arising from the alleged mis-management of Panhandle Eastern, the essential terms of which were approved by the Delaware Court having jurisdiction over the receivership. This agreement was consummated on June 5, 1936, and was dated as of June 1, 1936.

[fol. 15099] For the purpose of carrying out the terms of the stipulation and Consent Decree as well as the settlement, Columbia Oil purchased the securities of Panhandle Corporation from the Hillman group and other holders of Panhandle Corporation notes, paying $4,183,393.92 for the notes of that corporation in the face amount of $4,940,000 secured by the notes and stock of Panhandle Eastern, and paying $693,671.71 for the 750 shares of the Panhandle Corporation common stock held by the Hillman group. In addition, it advanced $213,092.58 to Panhandle Corporation for its debts and expenses, paid the receivers of Mokan $300,000 in cash, released Mokan from its guaranty of the notes of Panhandle Corporation, and from its liability to Panhandle Eastern in the amount of $42,606.74, recapitalized Panhandle Eastern and gave to the Mokan receivers half of the common stock of Panhandle Eastern. Columbia Oil itself received the Class A and Class B stock upon surrender of the convertible preferred which in turn had been issued for the promissory notes as aforesaid. The Mokan receivers, in exchange, surrendered their 250 shares in Panhandle Corporation and released Columbia Oil, Columbia Gas, their directors, and Hillman from all claims and causes of action on their own account and that of Panhandle Eastern for all past derelictions. Columbia Gas, among other things, recapitalized Columbia Oil, surrendered its claims for unpaid dividends, reduced the dividend rights on the new preferred shares,

and reduced interest rates on the debt due to Columbia Gas.

As as has been stated, the Class A preferred is, by its terms, redeemable. During 1938 the management of Panhandle Eastern discussed the possibility of refunding it by the issuance of a security without the participation feature and with a lower preferential dividend rate. These proposals envisaged the substitution of a convertible preferred and were objected to by Mokan for that reason, since the conversion of such stock would strengthen Columbia Oil's control over Panhandle Eastern. In July, 1939, however, offers were made by banking groups to market a cumulative, non-convertible, non-participating preferred bearing dividends of 4½ to 5%, the proceeds of which could be used to retire the Class A stock.

In December of 1938, the Department of Justice had petioned to reopen the Consent Decree on the ground that the Decree had failed to accomplish its objective, the divestment of the control of Columbia Gas over Panhandle Eastern. In June, 1939, Columbia Gas and Columbia Oil entered into a new settlement agreement, which, with certain conditions, obtained the acquiescence of the Department of Justice and the approval of the court having jurisdiction over the Consent Decree. One of the provisions of that agreement was that the Class A stock should be refunded. A common stockholder of Columbia Gas brought an action to restrain the carrying out of the settlement plan on the ground that some of its provisions were unfair to that company. Columbia Oil refused and continued to refuse to permit the refunding of the Class A stock unless the other provisions of the plan were simultaneously consummated. In its present declaration, however, it consents to such refunding without regard to the action taken with respect to such collateral transactions other than those involved herein.

There seems to be no question but that the retirement of the Class A stock by Panhandle Eastern is in the interest of the public and of investors and consumers, in that it will permit the substitution of securities having far less [fol. 15100] burdensome terms. The problems raised by the application and declarations with respect to the pro-

posed transaction relate solely to the price to be paid for the stock. The charter originally provided for the payment of a ten-point premium per share if the redemption is not out of earnings and takes place subsequent to July 1, 1941. Columbia Oil by agreement extended such time for redemption without premium until April 1, 1942, and in its application waives the premium entirely. We have no difficulty in approving such waiver in the circumstances here present, including the interference by Columbia Oil with the proposed earlier redemption.

The circumstances surrounding the origin of the stock have been reviewed with great care in line with our policy, heretofore announced and applied, of preventing holding companies from exercising their controlling influence and strategic position with respect to their subsidiaries so as to profit at the expense of other interests therein. In the present case, despite the evident difficulties in any attempt at allocation of the cost items, there may be some basis for a contention that Columbia Oil purchased the claims which ripened into the Class A and Class B stock at a discount. There are, however, two countervailing factors. The first is the Panhandle Eastern itself received full value in money or money's worth for the stock in the surrender of the promissory notes and the unpaid accrued interest thereon in the total amount of $11,331,000. The second and more important is that the only other groups even contingently interested in the corporation at that time, to-wit, the Hillman group and the Mokan receivers, acquiesced in the purchase of the claims and the issuance of the securities with full knowledge of the facts and as part of a total settlement of all claims and cross claims. These considerations make it unnecessary in the present situation to limit the claim to cost.

In view of the pendency of a judicial action to cause Columbia Oil to account for any excessive dividends received by it as a result of its refusal to permit the earlier refunding of the Class A stock, we shall in the present instance make no ruling as to the propriety of offsetting that item against the price to be paid for the stock. The matter is one lending itself to a judicial determination and Mokan, by far the largest minority stockholder in Panhandle Eastern, has stated that the issues involved should be left to such de-

termination. While so ruling in the present instance, giving weight to the present acquiescence to the refunding, and without attempting to pass upon the merits of such claims and defenses as may be present in the pending action, we take the opportunity to warn against the interference by holding companies with desirable refinancing of subsidiary companies and to indicate that all necessary measures will be taken to deal with such abuse wherever it may be found.

Since we find no reason to modify the price to be paid for the stock and since in all other respects the standards of Section 12 (c) and, to the extent to which they may be applicable, the requirements of Section 10 are clearly complied with, the application and declarations with respect to the disposition and acquisition of the Class A stock at par are approved as filed.

[fol. 15101] Sale and Acquisition of Michigan Gas, Indiana Gas and Ohio Fuel Properties

There again seems to be no question among the many conflicting interests represented in the present proceeding that it is in the public interest that Michigan Gas be acquired by Panhandle Eastern. The functional relationship of Michigan Gas to Panhandle Eastern and its lack of such relationship to the remainder of the Columbia Gas system would seem clearly to support this conclusion.

Michigan Gas was built in the first instance as an extension of Panhandle Eastern, giving the latter an outlet to the Detroit market. All the gas sold or transported by Michigan Gas since 1937 has been gas taken from the Panhandle Eastern line and at the present time Michigan Gas is engaged principally in transporting gas for the account of Panhandle Eastern. The only portion of the remainder of the Columbia Gas system to which gas is delivered through the Michigan Gas line is Indiana Gas, which it is also proposed that Panhandle Eastern acquire as part of the same transaction.

Similarly, Indiana Gas and the pipe lines of Ohio Fuel proposed to be acquired by Panhandle Eastern bear no operating relationship to any portion of the Columbia system other than Panhandle Eastern and Michigan Gas.

In brief, Panhandle Eastern together with Michigan Gas, Indiana Gas, and the Ohio Fuel lines and property proposed to be acquired themselves constitutes an inter-related gas production, transmission and distribution system which is entirely separate from and unrelated to any of the other activities of the Columbia system, deriving its gas in a different area and distributing it in different markets.

As an intra-system transaction, the sale and acquisition will, of course, have no tendency toward interlocking relationships or the concentration of control of public utility companies so as to contravene the provisions of Section 10 (b) (1). So also, not only will the acquisition not tend unduly to complicate the capital structure of the Columbia Gas system within the meaning of Section 10 (b) (3) but it should ultimately, at least, result in a simplification of the system and its capital structure.

While we are not, at the present time, concerned directly with that portion of the consolidated proceeding relating to the divorcement of Panhandle Eastern from Columbia Gas, it has already been noted that the retention of control over the former by the latter has been the subject of an anti-trust suit brought by the Department of Justice and that in its Petition of December 1938, to reopen the Consent Decree, previously entered in the action, the Department of Justice based its contention that the Consent Decree had been ineffective to achieve the results sought to be accomplished therein, principally on the ground that the control by Columbia Gas of Michigan Gas has enabled it to exercise a control, contrary to the public interest, over Panhandle Eastern. Without making any attempt to pass upon the merits of this contention, the conclusion seems permissible that the proposed sale and acquisition may reasonably be deemed not to be detrimental to the interests of consumers but should prove beneficial.

[fol. 15102] Since Michigan Gas is a non-utility operating company, the transaction, insofar as it concerns it, must be tested under the standards of Section 10 (c) (1) rather than those of Section 10 (c) (2). As is apparent from the foregoing discussion, it not only would satisfy the requirements of either subsection since the sale and acquisition are not contrary to the requirements

of Section 11 but might well be required as a step toward the economical and efficient development of an integrated Columbia Gas System. The interests in Indiana Gas and the Ohio Fuel pipe lines do constitute securities and utility assets of public-utility companies, respectively, but here again by reason of their lack of relationship to the Columbia Gas system, their sale as a step in their divorcement from the system will tend toward compliance with Section 11 (b) (1). Hence, no adverse findings need be made with respect to the proposed transactions under Section 10 (c).

An opinion of counsel has been submitted to the effect that all state laws applicable to the proposed transactions have been complied with. Since nothing appears to the contrary, the provisions of Section 10 (f) are satisfied.

The price fixed in the applications for the sale and acquisition of Michigan Gas is stated to be the actual investment of Columbia Gas therein plus any undistributed surplus of Michigan Gas at the time of the consummation of the transaction. With the exception of one item, the record indicates that the figure stated in the application, $19,780,840.59, as constituting the investment of Columbia Gas in Michigan Gas plus surplus at September 30, 1941, constitutes actual system expenditures and is equal to net plant account after depreciation less the excess of current liabilities over current assets.

The one questionable item is the amount of $139,424 paid as a fee by Indiana Gas Transmission Corporation, a company subsequently merged into Michigan Gas, to The Columbia Gas Construction Company, another wholly-owned subsidiary of Columbia Gas. This item represents an intercompany profit. At the hearing, a representative of Columbia Gas sought to justify the inclusion of this item in the investment by reason of the implied limitation contained in Rule U-90 to intercompany transactions subsequent to the passage of the Act since the fee in question was paid prior to that time. The question here, however, is not whether the fee was a proper expense to Michigan Gas or was properly received by The Columbia Gas Construction Company, but it is whether it properly

constitutes an investment by Columbia Gas in Michigan Gas. Since Columbia Gas, as the sole owner of The Columbia Gas Construction Company, in effect, received the profit which Michigan Gas paid, it cannot possibly be claimed that it represents a system expenditure in Michigan Gas, and hence is not properly included in the investment account. It appears from the record, however, that this item had been depreciated as of September 30, 1941 in the amount of $34,500 since it was set up. We shall, therefore, not allow the undepreciated portion of this item ($104,924 as of September 30, 1941) to be included in the computation of the price. Columbia Gas has agreed to the exclusion of this item.

A more fundamental question arises with respect to the propriety of the basis employed, i.e., investment cost, in computing the price. It has been suggested that Columbia Gas cannot be considered the beneficial owner of Michigan Gas, but occupies, instead, the position of a constructive trustee and that the price should be computed on that basis, subtracting from the investment of Columbia Gas in Michigan Gas the profits which it has received since its construction.

[fol. 15103] There would seem to be no question but that Panhandle Eastern was subject to a controlling influence by Columbia Gas at the time of the construction of the "Detroit Extension." Such conclusion is inescapable from the record and our previous Findings and Opinion in passing upon applications of Panhandle Eastern and Columbia Oil under Section 2 (a) (8)[6]. It is equally clear that the extension might well be considered a corporate opportunity belonging to Panhandle Eastern as a natural and necessary adjunct to its operations, bearing little relation to the operations of the remainder of the Columbia system. While Panhandle Eastern was unable at the time itself to finance the construction of the extension by reason of insolvency resulting from the default on its 6% promissory notes, there is some indication that this might have been the result of the wrongful exercise of their control by the Columbia interests. Moreover, under the decision in Irving Trust Co. v. Deutsch, 73 F. (2d) 121, such

[6] Holding Company Act Release No. 2778.

financial inability even if it existed would not constitute a defense to Columbia Gas for its breach of fiduciary obligation in appropriating the corporate opportunity.

Again, however, it must be noted that the only persons even contingently interested in Panhandle Eastern at the time of the "wrong" other than Columbia Gas and Columbia Oil were the receivers and the Hillman group. They were therefore the sole beneficiaries of the fiduciary obligation imposed on Columbia Gas by reason of its control over Panhandle Eastern. Accordingly, the transactions with those groups under the settlement agreement of June 1, 1936, approximately seven months after the organization of Michigan Gas and at a time when the Detroit extension was almost completed, would seem to make inappropriate the imposition of constructive trust on the above theory.

Mokan, however, has advanced the contention that the releases then given expressly excepted such rights as might flow from the agreement itself and from the Consent Decree and that the latter properly construed makes it clear "that the ownership of Michigan Gas stock and indebtedness by Columbia Gas, cannot be a full beneficial ownership, but must be only such ownership as will secure the repayment of advances." The portion of the Consent Decree relied upon for this position is as follows:

"That the defendants be and they are hereby perpetually enjoined from *** interfering in any manner in the freedom of Panhandle Eastern to contract or to finance or arrange the financing of all contracts, extensions (including the proposed new line to Detroit, whether or not built and owned by it), ***.

"That if such contracts be made with or financial assistance be secured from Columbia Gas, such contracts may be made or financial assistance furnished upon terms or conditions which do not in any way, directly or indirectly, presently or potentially, *** confer any rights of ownership in the works or properties of Panhandle Eastern except as security for the investment *****."

If is apparent from reading the matter above quoted that any attempt to give the decree the claimed effect

would involve the construction of the mandate of a court in the light of all the circumstances surrounding its issuance at a time when that very court itself is being asked to construe it. We therefore again find it inappropriate to pass upon the merits of the issue. Our present ruling will, of course, not affect any rights of action or to an accounting which Panhandle Eastern or its stockholders may have.

[fol 15104] A capitalization of the present earnings of Michigan Gas might justify a higher price than investment cost in an arm's-length bargain. Here again, countervailing factors, difficult to assess, are present. The rates charged by both Michigan Gas and Panhandle Eastern giving rise to the present earnings are being reviewed at the present time by the Federal Power Commission and may be subject to a downward revision. Moreover, the allocation of earnings between Panhandle Eastern and Michigan Gas is based upon a contract between the parties, which might be subject to some question. In view of all the attendant circumstances we conclude that the sale of Michigan Gas at a price based upon Columbia Gas's investment cost as adjusted herein is not unreasonable.

The proposed price for Indiana Gas, $153,698.20 also represents actual investment of Columbia Gas therein and no question has been raised nor does any appear in the record with respect to the computation of such investment or its use as a basis.

The proposed price of Ohio Fuel properties is $439,326.08. This price is considerably below the estimated original cost of the lines and is based upon the sale price in an arm's-length transaction to a non-affiliate of similar properties in the same area. No adequate cost figure is available and so far as appears from the record, the price represents a reasonable approximation to the value of the property.

The applications and declarations with respect to these transactions are therefore approved except that we direct that the price to be paid to Columbia Gas for Michigan Gas shall not include the item of $104,924 as of September 30, 1941, described above.

Acquisition and Disposition of Columbia Oil Debentures.

By reason of the recapitalization of 1936 and subsequent advances in that year and 1937 from Columbia Gas to Columbia Oil, Columbia Gas received $21,000,000 of Columbia Oil debentures carrying interest of 3% for two years and increasing 1% a year until February, 1940, when the interest rate became 6%. Through the operation of the sinking fund provision, the face amount of debentures outstanding has been reduced by $600,000 so that it is now $20,400,000. In the present application and declarations, Columbia Oil is to use the $10,000,000 to be received by it from the disposition of the Panhandle Eastern Class A preferred stock plus $1,000,000 of cash now held by it for the redemption of $11,000,000 face amount of the debentures at their face amount. In its declaration, Columbia Gas has agreed to accept the face amount, thereby waiving the four-point premium now payable on retirement of the debentures under the terms thereof.

The reduction of the outstanding debt of Columbia Oil by the amount proposed and the receipt by Columbia Gas of an equivalent amount of cash are in the public interest and in the interest of investors of both companies as well as of consumers. The transaction complies with the requirements of Sections 12 (c) and 12 (f) as well as the standards of Section 10, to the extent that the latter are applicable.

[fol. 15105] Proposed Financing By Panhandle Eastern

Panhandle Eastern proposes to issue and sell $10,000,000 of First Mortgage Bonds and $15,000,000 par value of preferred stock at competitive bidding.

It proposes to devote the proceeds from these securities, plus cash on hand and to be derived from operations, to the following purposes:

(1) Retirement of its Class A Preferred Stock		$10,000,000
(2) Acquisition of Assets:		
Stock and debt of Michigan Gas	$10,675,917 [7]	
Stock and debt of Indiana Gas	153,698 [7]	
Lines of Ohio Fuel Gas	439,326	11,268,941

[7] As of September 30, 1941. The price includes undistributed surplus, which may be paid up to Columbia prior to the sale.

(3) Construction Expenditures:

Panhandle Eastern	$8,493,700	
Illinois Natural Gas	254,300	$8,748,000
		$30,016,941

The construction program indicated consists of the extension of Panhandle Eastern's lines into the state of Michigan so as to supply natural gas to Consumers Power Company; the increase of the capacity of its main line from Texas to Dana, Indiana, through the construction of 146 miles of looping; and additions to compressor facilities. It is estimated that the construction will be completed by the middle of 1942.

Fixed Assets

At September 30, 1941 the fixed assets of Panhandle Eastern on a consolidated basis and of Michigan Gas, Indiana Gas and the Ohio Fuel properties to be acquired were as follows:

	Gross Tangible Property	Intangibles (Net)	Total Fixed Assets
Panhandle Eastern (consolidated)	$65,502,541	$1,782,468	$67,285,009
Michigan Gas	12,533,353	84,000	12,617,353
Indiana Gas	184,581	11,414	195,995
Ohio Fuel properties	439,326 [a]	—	439,326 [a]
	$78,659,801	$1,877,882	$80,537,683

Panhandle Eastern states that its property account is stated at cost, except for certain "local area property," having a present book value of $1,918,149[b], which was donated to Panhandle Eastern by Mokan as of August 31, 1930 in accordance with the terms of the September 17, [fol. 15106] 1930 contract which also provided for the sale of half of Mokan's interest in Panhandle Eastern to Columbia Oil. The intangibles represent the valuation of gas

[a] Represents the proposed price of the properties. Their gross ledger value on the books of Ohio Fuel is approximately $677,400.

[b] The original valuation of these properties of $2,417,949 was the same as that on the books of Mokan, but this amount appears to have reflected profits to affiliated interests aggregating $771,893.

purchase and sale contracts and appear to include substantial write-ups.[10] The intangibles have been and are being amortized and the largest items will be written off completely by December 31, 1945.

The property accounts of Michigan Gas and Indiana Gas are allegedly stated at original cost, as defined by The Federal Power Commission, except for the $139,424 construction fee described hereinbefore. The intangibles of Michigan Gas represent, for the most part, legal fees incurred in connection with gas contracts, and there are $48,870 of other legal fees included in tangible property account, resulting in a total of $123,937 of legal fees in the fixed asset account.

Reserves For Depreciation, Depletion and Amortization

The reserves for depreciation, depletion and amortization of Panhandle Eastern, Michigan Gas, and Indiana Gas at September 30, 1941 were as follows:

		% of Property [11]
Panhandle Eastern (consolidated)	$10,526,505	16 3
Michigan Gas	1,597,032	13 0
Indiana Gas	26,559	14 1
	$12,150,096	15 7

Panhandle Eastern provides reserves for depletion on operated leaseholds on the basis of units of gas withdrawn, amortization of unoperated leaseholds on the basis of a ten-year life, and depreciation on transmission properties on a basis including the estimated life of the gas reserves as well as the estimated life of the transmission properties. The ratio of accruals of Panhandle and its subsidi-

[10] As of August 31, 1930, $2,398,402 was debited to intangibles to record the valuation of certain gas contracts donated by Mokan. Such contracts had been carried on the books of Mokan at $926,250, and it appears that this valuation represented largely the stated value of stock issued to affiliated interests for contracts acquired by such interests without cost.

[11] Excluding construction work in progress and, in the case of Panhandle Eastern, intangible assets, for which a separate reserve is provided; in the case of Michigan and Indiana, the figure includes intangible assets, as one reserve is provided for all fixed assets.

aries to the tangible property at the beginning of the calendar year has been as follows:

1938	2.99%
1939	3.20%
1940	3.19%

An independent geologist has estimated that the minimum life of the gas reserves is 25 years. It was testified that the company could, without difficulty, acquire reserves sufficient for 30 to 35 years after allowing for a greatly expanded market in Michigan.

[fol. 15107] Michigan Gas and Indiana Gas have respectively appropriated 3% and 2% annually for their property reserves.

The relationship of Panhandle Eastern's debt and preferred stock to consolidated fixed assets as of September 30, 1941, actual and pro forma, is as follows:

	Actual	Pro Forma [12]
	%	%
Funded debt to Fixed Assets, including Intangibles (Net)	34.6	37.2
Funded debt to Tangible Property	35.5	38.0
Funded debt to Fixed Assets, including Intangibles, less Reserves	41.0	43.0
Funded debt to Net Tangible Property	42.3	44.1
Funded debt and Preferred Stock to Net Tangible Property	62.3	65.3

The present (as of September 30, 1941) and pro forma consolidated capitalization of Panhandle Eastern is as follows:

	Actual		Pro Forma	
Consolidated	Amount	%	Amount	%
Funded Debt				
1st Mortgage Series A, 1946-1950	$6,250,000	10.28	$6,250,000	8.25
1st Mortgage Series B, S.F. 3's 1960	12,000,000	19.75	12,000,000	15.83
1st Mortgage Series C, S.F. 3's 1962	—		10,000,000	13.20
Serial Notes, 1942-1945	5,000,000	8.23	5,000,000	6.60
Leasehold Purchase Obligation	14,256	.02	14,256	.02
	$23,264,256	32.28	$33,264,256	43.90

[12] After allowing for the acquisition of Michigan Gas, Indiana Gas, and the lines of Ohio Fuel and for the construction of authorized but unpaid for property additions as of September 30, 1941.

Preferred Stock				
Class A	$10,000,000	16.46	$ —	—
Class B	1,000,000	1.64	1,000,000	1.32
Cumulative Preferred			15,000,000	19.80
	$11,000,000	18.10	$16,000,000	21.12
Common and Surplus				
Common Stock — 807,367 sh.	$20,184,175	33.21	$20,184,175	26.64
Earned Surplus	6,323,041 [13]	10.41	6,323,041 [13]	8.35
	26,507,216	43.62	26,507,216	34.99
	$60,771,472	100.00	$75,771,472	100.00

[fol. 15108] Earnings

Comparative consolidated income and expense statements of Panhandle Eastern Pipe Line Company are summarized below, given to the nearest thousand dollars:

			12 Mos. Ended Sept. 30, 1941	
	1939	1940	Actual	Pro Forma
Gross Income	$5,616	$5,728	$5,461	$6,489 [14]
Interest on Funded Debt	923	908	662	841 [15]
Other Interest and Fixed Charges	329	276	297	280 [16]
Total Fixed Charges	$1,252	$1,179	$ 959	$1,121
Net Income	$4,364	$4,548	$4,502	$5,368
Preferred Dividend Requirements	660	660	660	735 [17]

[13] After deduction from surplus of $2,081,485 of debt discount and expense and call premiums, such items having been written off since September 30, 1941.

[14] After the acquisition of Michigan Gas and Indiana Gas, but without allowing for either increased revenues from new property construction or changes in income taxes or excess profits taxes.

[15] Adjusted to give effect to a refunding of the funded debt on February 3, 1941, and assuming the issuance of $10,000,000 principal amount of 3% bonds.

[16] Without allowing for the charge-off of unamortized debt discount and expense and call premiums. (See Note to capitalization chart).

[17] Assuming the retirement of the A stock and the issuance of $15,000,000 of 4½% Preferred Stock.

Net to Common and Participating Preferred	$3,704	$3,888	$3,842	—
Net to Common only	—	—	—	$4,633

The margin of earnings protection for the securities in terms of times requirements earned is summarized as follows:

			12 Mos. Ended Sept. 30, 1941	
	1939	1940	Actual	Pro Forma
Times earned:				
Interest on Funded Debt	6.08	6.34	8.25	7.72
Fixed Charges	4.49	4.86	5.69	5.79
Preferred Dividend Requirements	6.61	6.89	6.82	7.30
Fixed Charges and Preferred Dividends	2.94	3.11	3.37	3.50
Earned per Share of Common	$4.59 [18]	$4.82 [18]	$4.76 [18]	$5.74

[fol. 15109] It must be pointed out that Panhandle Eastern Pipe Line Company's earnings are perhaps at flood tide at the present time in view of the rapid increase in the volume of its business due both to expansion of the territory served and to the defense activity in the areas served. There is at present pending before the Federal Power Commission a rate case to determine a proper charge of Panhandle Eastern Pipe Line Company to make for the gas sold to Michigan Consolidated Gas Company, the most important single customer. The earnings coverage which might be expected as a result of a drastic rate cut, if such rate cut is made, followed by depressed business conditions is, of course, impossible to estimate, but it is probable that Panhandle will be able to recover some revenues lost in such a rate cut through increased business as a consequence not only of lower rates but of expanding into new markets and continuing to develop old markets.

The Securities to be Issued

A. The Bonds

Security. The Series C Bonds will be issued under an Indenture dated November 1, 1940 (under which the

[18] Without allowing for participating dividends on the A preferred stock.

Series A and B Bonds were issued) and under a Supplemental Indenture dated January 1, 1942 from the company to City Bank Farmers Trust Company and James M. Kemper, as Trustees. They will be secured by all fixed properties of Panhandle Eastern, with minor exceptions having an aggregate book value of $3,135,000, as well as by all the securities of Illinois Natural Gas Company, a wholly-owned subsidiary of Panhandle Eastern. Panhandle Eastern agrees in the supplemental indenture not to pledge or hypothecate any of the securities of Michigan Gas nor to allow Michigan Gas to incur any indebtedness, with certain limited exceptions, other than to Panhandle Eastern; and that within two years Michigan Gas will be either merged with Panhandle Eastern or brought under the terms of the indenture as a qualified subsidiary.

Additional Bonds. The indenture provides that additional bonds may be issued to the extent of 60% of property additions. The bonds issuable against Michigan Gas upon its merger with Panhandle Eastern or its qualification under the indenture are limited to $4,000,000.

Sinking Fund. Through serial maturities and the operation of a sinking fund, all the presently outstanding funded debt will be retired by 1950. The supplemental indenture will likewise provide for a sinking fund for the Series C Bonds sufficient to retire all but $500,000 principal amount by the date of maturity, January 1, 1962.

Maintenance and Construction Clause. The supplemental indenture will provide that the company will annually pay, in cash, to the trustee any excess of 3% of consolidated gross tangible property, computed monthly, over the actual expenditures for maintenance, additions to property (including renewals and replacements), retirement of bonds of the presently outstanding serial notes, and retirement of preferred stock other than that refunded by substitution of other stock. Properties constructed or acquired under the maintenance and construction clause are to be considered as bonded.

[fol. 15110] Dividend Provisions. The original indenture restricts dividends and other distributions on capital stock,

including purchase and redemption, to surplus per books earned since January 1, 1940 plus $1,500,000. The supplemental indenture will provide, in addition, that in computing such earned surplus in connection with dividends or distributions on common stock the surplus per books shall be adjusted by deducting therefrom the 3% of gross property per year, computed monthly as required in the maintenance and construction clause, and by adding thereto the actual book provisions for maintenance, depreciation and depletion.

Redemption Provisions. The Series C Bonds may be called at any time in whole or in part in principal amounts of at least $500,000 on 30 days' notice, at call premiums ranging from three points above the price at which the bonds are initially offered to the public by underwriters or the price to private purchasers, as the case may be, to zero on January 1, 1961. There are special redemption prices for the sinking fund, the initial call price being one-half of 1% above the price to the public or private purchasers.

B. Preferred Stock

Panhandle Eastern proposes to create a new class of Cumulative Preferred Stock, $100 par value, having a total of 250,000 authorized shares, and proposes to issue 150,000 shares thereof at this time. The dividend rate and the price are to be fixed by competitive bidding. The involuntary liquidating value of the present issue is to be $100 per share plus accrued dividends and the voluntary liquidating value will be equivalent to the redemption price.

Issuance of Additional Shares. The charter as amended will provide that additional series of the proposed new Cumulative Preferred Stock may not be issued without the approval of the holders of two-thirds of the series presently to be issued unless (a) earnings are at least equal to one and one-half times interest charges and Preferred Stock dividend requirements (including the requirements on the series then to be issued) or twice the Preferred Stock dividend requirements, whichever is greater; and (b) common capital and surplus must be at least equal to

the par value of the Preferred Stock outstanding and then to be issued.

Limitation on Unsecured Debt. The Preferred Stock certificate with respect to the proposed issue limits the amount of unsecured indebtedness which may be issued to $15,000,000 (including the presently outstanding serial notes) or to 10% of bonds, capital, and surplus, whichever is greater, unless a greater amount is authorized by the vote of the holders of at least two-thirds of the Cumulative Preferred Stock. Unless authorized by a similar vote, the amount of unsecured debt maturing in two years or less is to be limited to 10% of bonds, capital, and surplus, and no unsecured debt is to have a maturity of more than ten years.

[fol. 15111] Limitation on Common Stock Dividends. The certificate with respect to the proposed issue of Preferred Stock provides that unless authorized by a two-thirds vote of the holders of the Cumulative Preferred Stock, no dividends or other distribution on the common stock may be made unless after such dividend or distribution the total common capital and surplus will be at least equal to the par value of all outstanding shares of Cumulative Preferred Stock.

Voting Provisions. The Preferred Stock presently to be issued is to have no normal vote in the election of directors or for any other purpose except that whenever there may have been a default in the payment of a total of four quarterly dividends it is to have the right, as a class, to elect the smallest number constituting a majority of the board of directors and such right is to continue until all dividend arrearages have been paid. After the fourth quarterly default, the company will, at the request of any preferred stockholder, send notices to the stockholders entitled to vote, calling a stockholders' meeting for the purpose of electing a new board of directors. In addition, approval by the holders of two-thirds of the shares of any series of Cumulative Preferred Stock is to be necessary for any change in the certificate of incorporation or any other corporate action adversely affecting the rights, preferences, or powers of any such series; and the approval of

at least two-thirds of the then outstanding shares of Cumulative Preferred Stock is to be required for the authorization or creation of any additional class of stock ranking prior to or on a parity with such Cumulative Preferred Stock in respect of dividends or assets, or the authorization or creation of any stock or obligations convertible into or with the rights to purchase any such stock. Approval by two-thirds of the Cumulative Preferred Stock is also to be required for the sale, lease, transfer, or conveyance of all or a greater part of the property or business of the corporation, for its voluntary liquidation or dissolution, or for its merger or consolidation with any company other than Michigan Gas or Illinois Natural Gas, except where any such transaction has been approved by us pursuant to the Public Utility Holding Company Act.

Any new series of Cumulative Preferred Stock may have such additional voting rights as the board of directors may determine prior to its issuance except that no such stock shall have more than one vote per share in the election of directors.

Redemption Provisions. The Company may, at any time, redeem the whole or any part of the proposed issue of Preferred Stock at a price equal to the price at which such stock is initially offered by the underwriters to the public or sold by the Company to private purchasers, as the case may be, plus $4 and accrued dividends.

Sinking Fund. The certificate relating to the Preferred Stock provides that the Company will set aside as a sinking fund on April 1, 1942 $100,000 and on April 1 of each succeeding year (a) a "fixed sinking fund" sufficient to redeem at the sinking fund redemption price 1½% of the largest amount of such stock at any time outstanding and (b) a "contingent sinking fund" equal to the lesser of (1) a sum sufficient to redeem at the sinking fund redemption price 2% of the largest amount of such stock at any time outstanding or (2) a sum equal to the balance of earnings applicable to the contingent sinking fund after the payment of Preferred Stock dividends and after the payment of the fixed sinking fund, but before the payment of any

common stock dividends. The price at which stock may be redeemed through the sinking fund will be the price at which the stock is initially offered by underwriters to the [fol. 15112] public or sold by the Company to private purchasers, as the case may be, plus $1 and accrued dividends.

Assuming that the contingent sinking fund operates regularly all of the present issue of Preferred Stock will be retired within a period of 28 years.

Competitive Bidding

In compliance with Rule U-50, Panhandle Eastern proposes to make a public invitation for proposals for the purchase of the securities to be issued. According to the arrangement both individuals and groups may submit bids upon either the issue of bonds or the issue of preferred stock or both. A bidder for both issues must also submit a separate bid for each issue. Each bid must be accompanied by a deposit equal to 5% of the principal or par amount of the issue or issues for which it is made. A bidder for both issues need not make an additional deposit for the separate bids required. The company reserves the right to reject all bids but can accept only the bid or bids providing for the lowest annual money cost computed in accordance with a stated formula. The deposits of unsuccessful bidders will be returned.

The successful bidder will enter into a detailed purchase contract with the issuer. This contract is contingent, among other things, upon a favorable legal opinion by counsel selected by the issuer to represent prospective purchasers. The counsel selected by Panhandle Eastern for this purpose is the firm of Chadbourne, Hunt, Jaeckel and Brown of New York City. We raise no objection to the retention of this firm as counsel for the prospective buyers.

Since the price to be received for the bonds and preferred stock and the dividend rate on the stock will be determined by competitive bidding, these facts, together with amount

of underwriters' spread, will be filed with this Commission by a subsequent amendment. We shall consider the propriety of the price, the underwriters' spread and the allocation thereof when the necessary details are available. A further order will be entered as to these matters. Jurisdiction is reserved for this purpose.

Fees and Expenses.

Estimates of fees and expenses have been submitted by the applicants and declarants which, aside from the estimated legal fees included, do not appear to be unreasonable. The estimates of legal fees are $15,000 for independent counsel, comprising $8,500 for the bond issue and $6,500 for the preferred stock issue to be paid by the successful bidder or bidders, $25,000 to be incurred by Panhandle Eastern for its own counsel, $28,000 by Columbia Gas, and $7,195 (to date) for Columbia Oil. The independent counsel have submitted a memorandum explaining the basis for computing their fee and in view thereof and of the nature of the circumstances here present we do not find the amount unreasonable. Columbia Gas, Columbia Oil, and Panhandle Eastern have not submitted any breakdowns of their estimates so that we have been unable to pass upon the reasonableness of their estimated legal fees. We will, therefore, reserve jurisdiction to do so later and to make appropriate supplemental orders with respect thereto.

[fol. 15113] Conclusions.

Panhandle Eastern is a non-utility company, and it appears that the issuance and sale here contemplated are solely for the purpose of financing its business. The issue and sale therefore fall within the provisions of Section 6 (b) of the Public Utility Holding Company Act and are exempt from the provisions of Section 6 (a) thereof, subject to such terms and conditions as may be appropriate in the public interest of for the protection of investors or consumers.

Since the company is engaged in the business of the production and transmission of natural gas and hence is

dependent upon a wasting asset, an all common-stock structure would seem to be preferable to that here contemplated. In view of the fact, however, that the ratios of debt and of debt and preferred stock to property are within reasonable limits and of the fact that the sinking fund provisions with respect to both the bonds and the new preferred stock of the company should, if earnings are adequate, result in the retirement of all such senior securities prior to the prospective exhaustion of its gas reserves, we deem it proper not to impose any term or condition with respect thereto.

Mokan has contended that the preferred stock to be issued should be given normal voting rights in the election of directors and in all other corporate matters. In view of the provision made for the election of a majority of the directors by the preferred stock after four quarterly defaults and the requirement of an approval by at least two-thirds of the preferred stock of any corporate action of the types most likely adversely to affect its rights and preferences, we do not think it necessary to impose any further conditions with respect to the voting rights to be conferred upon the stock. We have not ignored, in this connection, the problems raised by the presence in the corporate structure of the outstanding Class B stock. The right of this stock, representing an investment of $1,000,000, to elect two directors would seem prima facie to raise serious issues with respect to the existence of an equitable distribution of voting power in the corporation, insofar as such rights are attached to the stock. It was for these reasons that proceedings under section 11 (b) (2) have been brought with respect to such stock. These proceedings form part of the pending consolidated proceeding and, in view of the connection of this question to the issues herein, hearings will be held with respect thereto and a determination made, with all possible speed.

We conclude that, as has been indicated, the purposes to be effected by the issue and sale are clearly in the public interest and that the proposed transactions, viewed either separately or as an entirety, will not be detrimental to the public interest or the interest of investors and consumers.

We will, therefore, grant the applications and permit the declarations to become effective subject, however, to the conditions previously mentioned, to the terms and conditions prescribed in Rule U-24 and to the following further condition that Panhandle Eastern report to the Commission the results of the competitive bidding, as required by Rule U-50 (c), and comply with such supplemental order as the Commission may enter in view of the facts disclosed thereby.

An appropriate order will issue.

By the Commission, (Chairman Purcell, and Commissioners Healy, Eicher, Pike, and Burke).

(Seal) FRANCIS P. BRASSOR,
Secretary.

January 21, 1942.

[fol. 15114] United States of America

Before the Securities and Exchange Commission

At a regular session of the Securities and Exchange Commission, held at its office in the City of Washington, D. C., on the 21st day of January, A. D., 1942.

In the Matter of

Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation, Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation, Indiana Gas Distribution Corporation, the Ohio Fuel Gas Company.

Order

File Nos. 59-33, 70-263, 70-371, 70-387, 70-430, 70-431.

(Public Utility Holding Company Act of 1935.)

The above-named parties having filed applications or declarations pursuant to Sections 6, 7, 9, 10, 12 (c) and 12

(f) of the Public Utility Holding Company Act of 1935 and rules and regulations thereunder with respect to the following transactions:

(1) The disposition by Columbia Oil & Gasoline Corporation to Panhandle Eastern Pipe Line Company and the acquisition by the latter of the Class A preferred stock of Panhandle Eastern Pipe Line Company in the par value of $10,000,000;

(2) The sale by Columbia Gas & Electric Corporation to Panhandle Eastern Pipe Line Company and the acquisition by the latter of the stock and debt of Michigan Gas Transmission Corporation and of Indiana Gas Distribution Corporation at the alleged investment cost of those companies to Columbia Gas & Electric Corporation plus undistributed surpluses at the date of the transaction, such prices being, as of September 30, 1941, $10,780,840.59 for Michigan Gas Transmission Corporation, and $153,698.20 for Indiana Gas Distribution Corporation; and the sale by The Ohio Fuel Gas Company, a subsidiary of Columbia Gas & Electric Corporation, to Panhandle Eastern Pipe Line Company and the acquisition by the latter of certain pipe lines and other properties owned by The Ohio Fuel Gas Company in the states of Indiana and Ohio at a price of $439,326.08, which is based on the amount received for the sale of similar property to a non-associated purchaser;

(3) The disposition by Columbia Gas & Electric Corporation to Columbia Oil & Gasoline Corporation and the acquisition by the latter, at principal amount of $11,000,000 face amount of debentures of Columbia Oil & Gasoline Corporation held by Columbia Gas & Electric Corporation;

(4) The issue and sale by Panhandle Eastern Pipe Line Company of First Mortgage 3% Bonds in the principal amount of $10,000,000 and of Cumulative Preferred Stock having a par value of $15,000,000 to obtain the funds [fol. 15115] necessary to carry out the transactions described in paragraphs (1) and (2) above as well as for certain additional construction. The issuer will publicly

invite proposals for the purchase of these securities pursuant to Rule U-50; and

The Commission by its order dated November 14, 1941 having consolidated said applications or declarations with a pending consolidated proceeding and having directed that hearings be held with respect to said applications or declarations prior to the continuance of hearings with respect to the remainder of the said consolidated proceeding; and

The hearing with respect to the said applications or declarations having been held and completed after appropriate notice to all persons interested therein; and arguments and briefs having been waived by all persons interested in the proceedings; and the Commission having considered the record of the proceedings and having entered its findings and opinion herein;

It Is Hereby Ordered that the aforesaid declarations be and hereby are permitted to become effective forthwith and the aforesaid applications be and hereby are granted forthwith subject, however, to the terms and conditions prescribed in Rule U-24 and to the following further terms and conditions:

(1) That there be excluded from the price to be paid by Panhandle Eastern Pipe Line Company to Columbia Gas & Electric Corporation for the stock and debt of Michigan Gas Transmission Corporation the undepreciated portion of the item of $139,424 representing the fee paid by the Michigan Gas Transmission Corporation to The Columbia Gas Construction Company;

(2) That Panhandle Eastern Pipe Line Company report to the Commission the results of the competitive bidding as required by Rule U-50 (c) and comply with such supplemental order as the Commission may enter in view of the facts disclosed thereby.

Jurisdiction is hereby reserved to pass upon the facts disclosed by the report of Panhandle Eastern Pipe Line Company to the Commission with respect to the results

of the competitive bidding as required by Rule U-50 (c) and for the issuance of a supplemental order with respect thereto.

Jurisdiction is further reserved to pass upon the legal fees to be paid by Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation and Panhandle Eastern Pipe Line Company in connection with the above-mentioned transactions, and for the issuance of appropriate supplemental orders with respect thereto.

By the Commission.

(Seal) FRANCIS P. BRASSOR,
Secretary.

[fol. 15117] Exhibit 149

Panhandle Eastern Pipe Line Company
Statement Showing Investment Made by the Owners and Long-Term Creditors at June 30, 1941

Net Assets, Liabilities, etc.			
Plant Assets			
Gas Plant		$66,689,669 57	
Contributions in Aid of Construction		(41,346 91)	
Reserves for Depreciation and Depletion		(16,135,513 92)	
Net Investment in Gas Plant			$56,512,808 74
Other Investments			214,298 25
Other Assets, Liabilities, etc.			
Current and Accrued Assets	$ 9,990,919 84		
Current and Accrued Liabilities	(5,149,111 73)	4,841,808 11	
Deferred Debits		2,763,002 03	
Deferred Credits		(43,333 69)	
Reserve for Uncollectible Accounts		(44,819 88)	
Reserve for Injuries and Damages		(93,123 74)	
Reserve for Contingencies		(624,800 94)	
Total Other Assets, Liabilities, etc.			6,798,731 89
Total			$63,525,838 88

Net Equities of Owners and Long-Term Creditors

Long-Term Debt			$23,267,543 80
Capital Stock			
Common Capital Stock	$20,184,175 00		
Preferred Capital Stock	11,000,000 00		
Total		31,184,175 00	
Earned Surplus		9,074,120 08	
Total Capital Stock and Surplus			$40,258,295 08
Total			$63,525,838 88

Table No. 1

Exhibit 150

FINANCIAL DATA ON COMMON STOCK ISSUES OF ELECTRIC AND GAS UTILITIES

YEARS 1935, 1936, 1937, 1938, 1939 AND 1940

Company	Common Stock Issue	Number of Shares	Approximate Offering Date	Price to Underwriters (a) Amount	Price to Underwriters (a) Cost	Net Price to Company (b) Amount	Net Price to Company (b) Cost	Price to Public Amount	Price to Public Yield	Market Price Range from Date of Issue to December 31, 1940 (f) Last	High	Low
				$	%	$	%	$	%	$	$	$
Boston Edison Co.	Common Stock $100 par (Now $25 par)	82,289	Dec. 4, 1935	(g)	-	150.07	-	150.93	-	33.50	36.63	30.75
Kansas Pipe Line & Gas Co.	Common Stock $5 par	110,000	Aug. 27, 1936	4.62	-	4.73	-	5.00	-	(h) 4.00	(h) 5.75	(h) 3.00
El Paso Natural Gas Co.	" " $3 par (d)	60,000	Sept. 10, 1936	19.00	-	(d)	-	20.00	-	30.00	42.75	14.50
Greenwich Gas Co.	" " No par	3,679	July 8, 1937	13.00	-	12.62	-	15.00	-	(h)11.00	(h)15.00	h)10.00
Indianapolis Power & Light Co.	" " No par (e)	68,855	Apr. 3, 1940	22.00	-	21.73	-	24.00	-	20.25	23.00	20.00
West Penn Power Co.	" " No par	160,000	Apr. 10, 1940	25.00	-	24.76	-	27.00	-	(h)25.13	26.75	24.75

Notes: (a) Gross proceeds to the company after underwriting commission but before other expenses.
(b) Net proceeds to the company after underwriting commissio and other expenses.
(c) Obtained from sources which are generally accepted.
(d) Offered for account of others.
(e) New issue sold together with 645,980 shares sold by trustee of Utilities Power & Light Company.
(f) Selling price as of Dec. 31, 1940, or latest available date, unless otherwise noted.
(g) Offering purchased by stockholders, 77,529 shares at $150 per share, balance of 4,760 shares sold at public auction at $166 per share.
(h) Bid prices.

Source: "Security Issues of Electric and Gas Utilities, 1935-1940," a report of the Public Utilities Division, Securities and Exchange Commission.

Table No. 2

Exhibit 150

EARNINGS-PRICE RATIOS ON COMMON STOCK ISSUES OF ELECTRIC AND GAS UTILITIES

YEARS 1935, 1936, 1937, 1938, 1939 AND 1940

Company	Common Stock Par Value	Approximate Offering Date	Price to Public	Net Price to Seller	Earnings Per Share		Earnings-Price Ratio Based on:	
					(a) Year Ended	Amount	Price to Public	Net Price to Issuer
	$		$	$		$	%	%
Boston Edison Co.	100	Dec. 4, 1935	150.93	150.07	Oct. 31, 1935	9.57	6.34	6.38
Kansas Pipe Line & Gas Co.	5	Aug. 27, 1936	5.00	4.73	(b)	-	-	-
El Paso Natural Gas Co.	3	Sept.10, 1936	20.00	19.00	June 30, 1936	1.84	9.20	9.68
Greenwich Gas Co.	No par	July 8, 1937	15.00	12.82	Dec. 31, 1936	.72	4.80	5.62
Indianapolis Power & Light Co.	No par	Apr. 3, 1940	24.00	21.73	Dec. 31, 1939	2.05	8.54	9.43
West Penn Power Co.	No par	Apr. 10, 1940	27.00	24.76	Dec. 31, 1939	1.70	6.30	6.87

Notes: (a) Latest year, results for which were available to the public before the approximate offering date.

(b) Prospectus for this issue dated August 24, 1936 (issued as of July 19, 1936) stated "No statements of income and surplus accounts of the company for any period prior to March 31, 1936 are included in this registration statement for the reason that the operating revenues of the company in prior periods have been derived from the operation of properties which, to a large extent, are not among the issuer's assets at March 31, 1936 and operating expenses, maintenance, taxes and income deductions for prior periods are almost wholly irrelevant to the property as constituted" at March 31, 1936.

Source: Computed by Standard & Poor's Corp. from data contained in Table No. 1, using earnings data as published in Standard Corporation Records, Daily News Section.

Table No. 3

Exhibit 150

(b) FINANCIAL DATA ON COMMON STOCK ISSUES OF UTILITY COMPANIES FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

Company	Stock Issue	Number of Shares	Approximate Offering Date	Price to Public	Price to Underwriters	Net Price to Seller
Connecticut Light & Power Co.	Common No Par	701,253	Apr. 9, 1941	42.50	39.50	(a)
Indianapolis Water Co.	4 Class A Common $10.50 par	225,000	July 9, 1941	13.75	12.50	(a)
San Diego Gas & Electric Co.	Common $10 par	590,527	July 9, 1941	14.375	13.427	(a)

Note: (a) Data not available in Standard & Poor's Corp. files.
(b) Does not include offering of stock on rights to stockholders since prices paid in such cases must necessarily be lower than market prices in order to make financing successful.

Source: Prospectuses and Standard Corporation Records.

Exhibit 150"

(b) EARNINGS-PRICE RATIOS ON COMMON STOCK ISSUES OF UTILITY COMPANIES

FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

Company	Common Stock Par Value	Approximate Offering Date	Price to Public	(c) Price to Underwriters	Earnings Per Share: (a) Year Ended	Earnings Per Share: Amount	Earnings-Price Ratio Based on: Price to Public	Earnings-Price Ratio Based on: (c) Price to Underwriters
			$	$		$	%	%
Connecticut Light & Power Co.	No par	Apr. 8, 1941	42.50	39.50	Mar. 31, 1941	3.46	8.14	8.76
Indianapolis Water Co.	10.50	July 9, 1941	13.75	12.50	May 31, 1941	1.30	9.45	10.40
San Diego Gas & Electric Co.	10.00	July 9, 1941	14.375	13.427	Apr. 30, 1941	1.60	12.52	13.41

Notes: (a) Latest year, results for which were available to the public before the approximate offering date.

(b) Does not include offering of stock on rights to stockholders since prices paid in such cases must necessarily be lower than market prices in order to make financing successful.

(c) Since the "net price to seller" was not available, these figures represent the "net price to the underwriters" and are subject to the expenses of financing borne by the seller.

Source: Computed by Standard & Poor's Corp. from data contained in Table No. 3, using earnings data as published in Standard Corporation Records - Daily News Section.

Exhibit 151

(a) EARNINGS-PRICE RATIOS OF COMMON STOCKS IN VARIOUS DIVISIONS OF THE UTILITY BUSINESS

	1937 %	1938 %	1939 %	1940 %	Four Year Average 1937-1940 %	Interim Period Jan.-Aug. 1941 %
Water Companies	6.25	6.17	7.02	6.54	6.50	6.97
Electric Utility Operating Companies	6.88	7.56	7.09	7.42	7.24	8.30
Manufactured and Mixed Gas Companies	7.87	9.50	8.59	9.12	8.85	10.46
All Natural Gas Companies	10.77	11.72	11.98	13.86	12.08	13.14
Natural Gas Pipe Line Companies	13.51	13.45	13.28	13.82	13.52	12.99
Panhandle Eastern Pipe Line Company	*	*	9.61	13.55	/ 11.58	11.53

Notes: * Data for the Panhandle Eastern Pipe Line Company cannot be computed for these years since no part of the common stock was outstanding in the hands of the public.

/ Average for two years, 1939 and 1940.

(a) Excluding data for companies that did not report earnings available for common stock in all periods studied.

Table 1.

Exhibit 151

EARNINGS-PRICE RATIOS ON WATER COMPANY COMMON STOCKS

1937 - 1940

	Earnings Per Share				Average of High and Low Market Prices				Earnings-Price Ratios			
	1937 $	1938 $	1939 $	1940 $	1937 $	1938 $	1939 $	1940 $	1937 %	1938 %	1939 %	1940 %
Bridgeport Hydraulic Co.	2.06	1.70	1.88	1.77	35.75	41.00	35.88	35.75	5.76	4.15	5.24	4.95
Elizabethtown Water Co. Consol.	7.03	7.06	8.06	8.99	98.50	90.00	104.50	112.00	7.14	7.85	7.71	8.03
Hackensack Water Co.	2.70	2.21	3.50	2.81	28.94	27.00	30.63	31.75	9.33	8.19	11.43	8.85
Middlesex Water Co.	3.45	2.39	3.61	4.09	55.00	35.50	42.00	48.25	6.27	6.73	8.60	8.48
New Haven Water Co.	3.79	3.33	3.82	4.21	79.50	71.25	69.75	78.50	4.77	4.67	5.48	5.36
Plainfield-Union Water Co.	5.14	5.01	5.34	4.90	90.00	77.00	88.00	87.25	5.71	6.51	6.07	5.62
Stamford Water Co.	8.26	1.77	1.91	1.85	172.50	34.75	41.50	41.00	4.79	5.09	4.60	4.51
Average									6.25	6.17	7.02	6.54

Source: See Table 4-A.

Table 1-A

Exhibit 151

EARNINGS-PRICE RATIOS ON WATER COMPANY COMMON STOCKS

FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

	Earnings Per Share		Average of High and Low Market Prices Jan. 1-Aug.31,1941	Earnings-Price Ratio
	Period	Amount		
		$	$	%
Bridgeport Hydraulic Co.	12 Months Ended Dec. 31, 1940	1.77	33.50	5.28
Elizabethtown Water Co. Consolidated	" " " " " "	8.99	109.50	8.21
Hackensack Water Co.	" " " " " "	2.81	30.50	9.21
Middlesex Water Company	" " " June 30, 1941	4.87	48.50	10.04
New Haven Water Company	" " " Dec. 31, 1940	4.21	72.25	5.83
Plainfield-Union Water Co.	" " " June 30, 1941	4.87	83.50	5.83
Stamford Water Co.	" " " Dec. 31, 1940	1.85	42.25	4.38
Average				6.97

Source: See Table 4-A

Exhibit 151

EARNINGS-PRICE RATIOS ON ELECTRIC UTILITY OPERATING COMPANY COMMON STOCKS

1937 - 1940

	Earnings Per Share				Average of High and Low Market Prices				Earnings-Price Ratios			
	1937 $	1938 $	1939 $	1940 $	1937 $	1938 $	1939 $	1940 $	1937 %	1938 %	1939 %	1940 %
Bangor Hydro-Electric Co.	1.73	1.81	1.69	1.92	20.63	18.38	21.00	20.25	8.39	9.59	8.05	9.48
Boston Edison Co.	8.72	8.38	8.36	2.39	137.50	121.00	143.38	33.75	6.34	6.93	6.18	7.08
Central Hudson Gas & Elec. Co.	0.99	0.85	0.88	0.87	15.38	12.50	14.25	14.88	6.18	6.80	6.18	5.85
Cleveland Elec. Illum. Co.	2.56	2.44	2.66	3.08	39.38	34.38	39.38	40.25	6.50	7.00	6.75	7.65
Commonwealth Edison Co.	2.08	2.37	2.43	2.32	26.88	25.06	28.88	29.44	7.74	9.46	8.41	7.88
Connecticut Power Co.	2.69	2.49	2.77	2.71	48.00	43.00	48.25	48.25	5.60	5.79	5.74	5.62
Consol. Edison Co. of N.Y.	2.17	2.09	2.22	2.23	35.50	25.63	31.00	27.43	6.11	8.15	7.16	8.22
Consol. Gas Elec. Light & Power Co. of Balt.	4.63	4.06	4.94	4.41	74.75	64.50	77.63	74.56	6.19	6.29	6.36	5.91
Detroit Edison Co.	7.35	6.19	7.59	8.45	117.56	95.56	114.25	111.81	6.68	6.48	6.64	7.56
Duke Power Co.	4.59	4.23	5.56	5.92	65.50	60.88	70.13	71.81	7.01	6.95	7.93	8.24
Hartford Electric Light Co.	3.21	2.94	3.31	3.38	60.25	57.00	65.25	66.25	5.33	5.16	5.07	5.10
Pacific Gas & Electric Co.	2.71	2.48	2.84	2.68	30.00	26.38	31.13	29.94	9.03	9.40	9.12	8.95
Penna. Water & Power Co.	5.00	5.55	4.81	4.67	78.50	87.25	75.50	62.88	6.37	8.25	6.37	7.43
Southern Calif. Edison Co., Ltd.	2.18	2.10	2.36	2.27	24.88	22.13	26.19	26.88	8.76	9.49	9.01	8.44
Tampa Electric Co.	2.33	2.39	2.41	2.35	33.13	31.44	32.50	29.38	7.03	7.60	7.42	7.86
Average									6.88	7.56	7.09	7.42

Source: See Table 4-A.

Table 2-A

Exhibit 151

EARNINGS-PRICE RATIOS ON ELECTRIC UTILITY OPERATING COMPANY COMMON STOCKS FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

	Earnings Per Share		Average of High and Low Market Prices Jan. 1-Aug. 31, 1941	Earnings-Price Ratio
	Period	Amount		
		$	$	%
Bangor Hydro-Electric Co.	12 Months Ended Aug. 31, 1941	2.01	20.31	9.90
Boston Edison Co.	" " " June 30, 1941	2.38	30.69	7.75
Central Hudson Gas & Electric Co.	" " " June 30, 1941	0.74	11.00	6.73
Cleveland Electric Illum. Co.	" " " June 30, 1941	3.19	38.00	8.39
Commonwealth Edison Co.	" " " June 30, 1941	2.38	27.19	8.75
Connecticut Power Co.	" " " Dec. 31, 1940	2.71	45.88	5.91
Consol. Edison Co. of N.Y.	" " " June 30, 1941	2.06	20.31	10.14
Consol. Gas Elec. Light & Power Co. of Balt.	" " " June 30, 1941	4.18	64.38	6.49
Detroit Edison Co.	" " " July 31, 1941	1.84	21.50	8.56
Duke Power Co.	" " " Dec. 31, 1940	5.92	74.50	7.95
Hartford Electric Light Co.	" " " Dec. 31, 1940	3.38	58.62	5.77
Pacific Gas & Electric Co.	" " " June 30, 1941	2.45	25.56	9.59
Penna. Water & Power Co.	" " " June 30, 1941	4.67	53.81	8.68
Southern Calif. Edison Co., Ltd.	" " " June 30, 1941	2.30	25.25	9.11
Tampa Electric Co.	" " " July 31, 1941	2.40	22.38	10.72
Average				8.30

Source: See Table 4-A.

Table 3

Exhibit 151

EARNINGS-PRICE RATIOS ON MANUFACTURED AND MIXED GAS COMPANY COMMON STOCKS

1937 - 1940

	Earnings Per Share				Average of High and Low Market Prices				Earnings-Price Ratios			
	1937 $	1938 $	1939 $	1940 $	1937 $	1938 $	1939 $	1940 $	1937 %	1938 %	1939 %	1940 %
Bridgeport Gas Light Co.	2.16	2.10	2.19	2.21	33.63	29.00	34.50	36.00	6.42	7.24	6.35	6.14
Brooklyn Union Gas Co.	2.57	2.25	2.42	2.42	34.13	16.75	21.88	19.13	7.53	13.43	11.06	12.65
Elizabethtown Consol. Gas Co.	15.25	14.71	15.48	14.16	207.50	192.50	202.50	212.63	7.35	7.64	7.64	6.66
Hartford Gas Co.	2.22	2.05	2.18	2.44	30.50	28.00	33.50	34.00	7.28	7.32	6.51	7.18
Laclede Gas Light Co.	(.01)	(3.28)	(2.43)	0.93	16.94	13.00	10.25	6.75	(a)	(a)	(a)	13.78
Peoples Gas Light & Coke Co.	3.65	2.97	4.13	4.63	43.75	32.06	37.75	34.00	8.34	9.28	10.94	14.03
Providence Gas Co.	0.75	0.61	0.69	0.70	9.50	6.88	7.69	9.00	7.89	8.87	8.97	7.78
Seattle Gas Co.	(18.16)	(18.37)	(10.94)	(11.48)	1.69	0.75	0.31	0.38	(a)	(a)	(a)	(a)
Springfield Gas Light Co.	1.10	1.07	1.28	1.17	10.50	8.50	11.75	14.25	10.48	12.59	10.89	8.21
Washington Gas Light Co.	1.81	2.24	2.52	2.52	23.50	23.19	28.75	24.37	7.70	9.66	8.77	10.34
Average of all Earnings-Price Ratios									7.87	9.50	8.89	9.64
Average (Excluding companies that did not achieve profits in all periods, namely, Laclede Gas Light Co. and Seattle Gas Co.)									7.87	9.50	8.89	9.12

Notes: (a) Earnings-Price Ratios on common stock were not computed owing to the fact that earnings were not sufficient to cover fully the requirements of senior capital.

Parentheses indicate red figures.

Source: See Table 4-A.

Table 3-A

Exhibit 151

EARNINGS-PRICE RATIOS ON MANUFACTURED AND MIXED GAS COMPANY COMMON STOCKS FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

	Earnings Per Share		Average of High and Low Market Prices Jan. 1- Aug. 31, 1941	Earnings-Price Ratio
	Period	Amount		
		$	$	%
Bridgeport Gas Light Co.	12 Months Ended Dec. 31, 1940	2.21	29.00	7.62
Brooklyn Union Gas Co.	" " " June 30, 1941	2.79	12.00	16.25
Elizabethtown Consol. Gas Co.	" " " Dec. 31, 1940	14.16	192.50	7.36
Hartford Gas Co.	" " " Dec. 31, 1940	2.44	31.00	7.87
Laclede Gas Light Co.	" " " June 30, 1941	3.43	11.75	29.19
Peoples Gas Light & Coke Co.	" " " June 30, 1941	5.65	44.15	12.79
Providence Gas Co.	" " " Dec. 31, 1940	0.70	8.19	8.55
Seattle Gas Co.	" " " June 30, 1941	(11.34)	0.15	(a)
Springfield Gas Light Co.	" " " Dec. 31, 1940	1.17	12.75	9.18
Washington Gas Light Co.	" " " Mar. 31, 1941	2.41	21.25	11.34
Average of all Earnings-Price Ratios				12.54
Average (Excluding companies that did not achieve profits in all periods, namely, Laclede Gas Light Co. and Seattle Gas Co.)				10.46

Notes: (a) Earnings-Price Ratio on common stock was not computed owing to the fact that earnings were not sufficient to cover fully the requirements of senior capital.

Parentheses indicate red figures.

Source: See Table 4-A.

Exhibit 151

EARNINGS-PRICE RATIOS ON NATURAL GAS COMPANY COMMON STOCKS

1937 - 1940

	Earnings Per Share				Average of High and Low Market Prices				Earnings-Price Ratios			
	1937 $	1938 $	1939 $	1940 $	1937 $	1938 $	1939 $	1940 $	1937 %	1938 %	1939 %	1940 %
Consolidated Gas Utilities Corp. (a)	0.09	(0.47)	0.11	0.30	2.44	0.91	0.94	1.69	3.69	(f)	11.70	17.75
El Paso Natural Gas Co.	3.00	3.30	3.75	3.73	21.75	23.44	35.38	33.94	13.79	14.08	10.60	10.99
Houston Natural Gas Corp.	1.72	1.22	1.83	2.89	16.63	8.50	8.88	11.00	10.34	14.35	20.61	26.27
Interstate Natural Gas Co.	2.50	2.13	2.11	2.07	25.25	21.25	23.75	23.86	9.90	10.02	8.86	8.67
Lone Star Gas Corp.	1.14	0.88	0.98	1.17	9.75	8.56	8.81	9.19	11.69	10.28	11.12	12.73
Memphis Natural Gas Co.	0.78	(b)0.64	0.65	0.69	4.63	3.94	4.13	4.38	16.85	16.24	15.74	15.75
Montana-Dakota Utilities Co.	0.65	0.60	0.54	0.89	11.00	6.00	6.25	7.75	5.91	10.00	8.64	11.48
Mountain Fuel Supply Co.	0.33	0.38	0.45	0.47	8.38	5.44	4.75	5.69	3.94	6.99	9.47	8.26
National Fuel Gas Co.	0.96	0.64	0.95	1.12	15.75	13.06	12.63	11.56	6.10	6.43	7.52	9.69
Oklahoma Natural Gas Co. (c)	2.13	1.86	1.75	3.71	10.68	10.50	14.38	17.50	19.94	17.71	12.17	21.20
Pacific Lighting Corp.	4.10	4.18	3.60	3.13	44.25	37.69	45.94	41.50	9.27	11.09	7.84	7.54
Panhandle Eastern Pipe Line Co.	3.57	2.84	3.82	3.99	(d)	(d)	39.75	29.44	(d)	(d)	9.61	13.55
Southern Natural Gas Co.	2.01	1.49	2.55	3.17	(e)	(e)	11.81	15.75	(e)	(e)	21.59	20.13
Average of all Earnings-Price Ratios									10.13	11.72	11.98	14.15
Average (Excluding company that did not achieve profits in all periods, namely, Consolidated Gas Utilities Corp.)									10.72	11.72	11.98	13.86

Parentheses indicate red figures.

Notes: (a) Earnings for Fiscal Years Ended Oct. 31, 1937-1940, Inclusive.
(b) Earnings for 1938 revised to give effect to compromise settlement under city-gate contract with Memphis Power and Light Co.
(c) Earnings for Fiscal Year Nov. '30 in 1937 and 1938 and Aug. 31 in 1939 and 1940.
(d) No stock held by Public prior to September, 1939.
(e) Prior to May, 1939 there were two classes of common outstanding, Class A and B. Earnings for full period based on 691,970 shares which were exchanged for former Class A and B shares.
(f) Earnings-Price Ratio on common stock was not computed owing to the fact that earnings were not sufficient to cover fully the requirements of senior capital.

Source: See Table 4-A.

Table 4-A

Exhibit 151

EARNINGS-PRICE RATIOS ON NATURAL GAS COMPANY COMMON STOCKS FOR THE INTERIM PERIOD OF 1941, JANUARY-AUGUST, BOTH INCLUSIVE

	Earnings Per Share			Average of High and Low Market Prices Jan. 1-Aug.31,1941	Earnings-Price Ratio
	Period		Amount		
			$	$	%
Consolidated Gas Utilities Corp.	12 Months Ended	July 31, 1941	0.36	1.50	24.00
El Paso Natural Gas Co.	12 Months Ended	June 30, 1941	3.61	31.06	11.62
Houston Natural Gas Corp.	Calendar Year Ended	Dec. 31, 1940	2.89	12.00	24.08
Interstate Natural Gas Co.	" " "	" " "	2.07	22.00	9.41
Lone Star Gas Corp.	12 Months Ended	June 30, 1941	1.24	9.25	13.41
Memphis Natural Gas Co.	Calendar Year Ended	Dec. 31, 1940	0.69	4.57	15.10
Montana-Dakota Utilities Co.	12 Months Ended	June 30, 1941	0.89(a)	9.69	9.18
Mountain Fuel Supply Co.	Calendar Year Ended	Dec. 31, 1940	0.47	5.56	8.45
National Fuel Gas Co.	12 Months Ended	Dec. 31, 1940	1.12	10.62	10.55
Oklahoma Natural Gas Co.	12 Months Ended	July 31, 1941	3.45	19.88	17.38
Pacific Lighting Corp.	12 Months Ended	June 30, 1941	3.51	36.25	9.68
Panhandle Eastern Pipe Line Co.	12 Months Ended	June 30, 1941	4.21	36.50	11.53
Southern Natural Gas Co.	12 Months Ended	June 30, 1941	2.04	11.81	17.27
Average of all Earnings-Price Ratios					13.97
Average (Excluding company that did not achieve profits in all periods, namely, Consolidated Gas Utilities Corp.)					13.14

Note: (a) Actual before taxes $1.19. Taxes estimated by Standard & Poor's Corporation at $200,000 or 30¢ per share.

Source: "Earnings per Share" were computed from data appearing in Appendix C, Volume II "Investors' Appraisal of the Risks of Capital in the Natural Gas Industry as Compared with other Divisions of the Utility Industry" identified as Exhibit 64. Where necessary to determine the amount of preferred dividends paid in any year, such data were obtained from annual reports of the various companies.
"Average of High and Low Market Prices" were taken from Appendix C, supra.
"Earnings-Price Ratios" were computed by Standard & Poor's Corporation.

Exhibit 152

PANHANDLE EASTERN PIPE LINE COMPANY

ESTIMATE OF FEDERAL INCOME AND EXCESS-PROFITS TAXES, APPLYING RATES LEVIED IN THE REVENUE ACT OF 1941 TO NET INCOME FOR THE YEAR ENDED JUNE 30, 1941

Taxable Income Indicated by Tax Expense Reported for the Year Ended June 30, 1941

Federal Income Tax of $1,602,200 indicates, at the 1940 rate of 24%, a taxable income of				$6,675,800
Federal Excess-Profits Tax of $756,900 indicates, at 1940 rates, excess profits of				$1,605,800
Tax of	$204,000	indicates profits of	$1,500,000	
Remaining	552,900	of tax was at 50%, indicating excess profits of	1,105,800	
Total tax of	$756,900	indicates excess profits of	$1,605,800	

Taxes Computed at Rates Levied in the Revenue Act of 1941

Excess-Profits Tax					
Excess profits indicated by tax reported for year ended June 30, 1941			$1,605,800		
Add back: Normal Tax (not deductible under 1941 Act)			1,602,200		
Amount subject to Excess-Profits Tax			$3,208,000		
Tax on first		$ 500,000			$ 254,000
Tax at 60% on remaining		2,708,000			1,624,800
Total Excess-Profits Tax on			$3,208,000		$1,878,800
As Adjusted						$1,878,000
Normal Tax and Surtax					
Taxable income indicated by tax reported for year ended June 30, 1941			$6,675,800		
Deduct: Excess-Profits Tax			1,878,800		
Amount subject to Normal Tax and Surtax			$4,797,000		
Normal Tax at 24%					$1,151,280
Surtax:					
Tax at 6% on first		$ 25,000		$ 1,500	
Tax at 7% on remaining		4,772,000		334,040	
Total Surtax on			$4,797,000		335,540
Total Normal Tax and Surtax					$1,486,820
As Adjusted						1,485,000
Total Projected Normal Tax and Surtax and Excess-Profits Tax						$3,363,000

PANHANDLE EASTERN PIPE LINE COMPANY

SUMMARY OF INCREASES IN FEDERAL TAXES ON INCOME

FOR THE YEARS 1936 TO 1941, BOTH INCLUSIVE

	Normal Tax	Normal Tax and Surtax	Excess-Profits Tax	Total	Annual Increase
	$	$	$	$	%
Year Ended June 30, 1941 recomputed by Standard & Poor's Corp. to give effect to rates levied in the Revenue Act of 1941)		1,485,000	1,878,000	* 3,363,000	68.4 (a) 42.6 (b)
Year Ended June 30, 1941 (as reported)	1,602,200		756,900	2,359,100	18.1
Calendar Year 1940	1,436,598		561,000	1,997,598	143.5
1939	820,286			820,286	59.8
1938	513,426			513,426	4.4
1937	492,000			492,000	13.9
1936	230,000			230,000	-

* Projected $4,369,000 ($3,363,000 plus 10%, or $336,000, plus $700,000 State, local and miscellaneous Federal).

Notes: (a) Increase over total reported for calendar year 1940.
(b) Increase over total reported for year ended June 30, 1941.

Source: Company's annual and interim reports.
Computations by Standard & Poor's Corporation.

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SUMMARY OF INCREASES IN FEDERAL TAXES ON CORPORATE INCOME

FOR THE YEARS 1936 TO 1941, BOTH INCLUSIVE

Taxable Year	Revenue Act of	Rates Levied — Normal Tax	Rates Levied — Surtax	Rates Levied — Surtax on Undistributed Profits	Rates Levied — Excess-Profits Tax	Federal Taxes on a Taxable Net Income of $6,700,000 (4) (5) — Normal Tax	Surtax	Surtax on Undistributed Profits	Excess-Profits Tax	Total Tax	Annual Increase — In Tax Rates (Normal & Surtax only)(7)	Annual Increase — In Estimated Total Tax	Cumulative Increase in Estimated Total Tax
						$	$	$	$	$	$	$	$
1941	1941	24% (1)	6% of $25,000 7% of Balance	None	50.8% of $500,000 60% of Balance	1,158,240	337,570	None	1,374,000	3,369,810	29.2	42.9	284.0
1940	Second 1940	24% (1)	None	None	40.8% of $500,000 50% of Balance	1,608,000	None	None	750,000	2,358,000	26.3	79.3	198.8
1938 and 1939	1938	19% (2)	None	2 1/2%	None	1,273,000	None	41,875	None	1,314,875 (6)	26.7	10.8	110.8
1936 and 1937	1936	15% (3)	None	7 to 27%	None	1,003,840	None	182,550	None	1,186,390 (6)	-	-	100.0

Notes: (1) For corporations whose incomes are neither less than nor slightly in excess of $25,000.
(2) Subject to certain credits.
(3) Rate applicable to that portion of normal tax net income in excess of $40,000. Rates start at 8%.
(4) Omitting Declared Value Excess-Profits Tax.
(5) Assuming an excess profit of $3,200,000.
(6) Represents the maximum tax, assuming undistributed profits equal to 25% taxable net income.
(7) Gives no effect to Excess-Profits Tax and Surtax on Undistributed Profits, rates of which cannot be compared with Normal and Surtax rates.

Source: Compiled by Standard & Poor's Corp.

[fol. 15134] Morgenthau for 100% Tax on Corporate Gains Over 6%

Washington, Sept. 24—Secretary Morgenthau recommended today that all corporation profits over 6 per cent on invested capital be taxed away by the government for the period of the emergency, asserted that additional restrictions on bank credits might become necessary and opposed fixing by legislation of a price ceiling on wages.

Testifying before the House Banking and Currency Committee in endorsement of the Administration's Price Control Bill, the Secretary of the Treasury held up his concept of profit limitations as "something to shoot at" and gave it merely as a "rule of thumb" representing his own "sincere" conviction.

"In times like these when a corporation earns 6 per cent on its capital it ought to be satisfied," the Secretary said. "In times like these all the rest ought to be taken to pay for these unusual and fantastic figures that represent defense expenditures."

His suggestion for a 6 per cent limitation on profits, was not mentioned in his prepared statement, but was offered in reply to a question from Representative Williams. Later, when Representative Dewey, a former Assistant Secretary of the Treasury, asked for specifications, the Secretary said:

"I was attempting to tell you how I felt, to give you a rule of thumb, but I knew when the tax experts got a hold of it the thing would be much more complicated. In these times, when we are asking young men to serve their country at a dollar a day, and give up what they're giving up, I don't think we're asking business to do any more than its share by giving up everything over 6 per cent.

Source: New York Times, Thursday, September 25, 1941, page 1.

Line No.	Particulars (A)	Amount (B)	Payment: Date (C)	Payment: To Whom Paid (D)
1	Payments to agents for securing gas sale contract with Detroit			
2	City Gas Company (now Michigan Consolidated Gas Company).	$100 000 00	August 7, 1936	Frank P. Parish
3			August 7, 1936	Dupuy G. Warrick
4				
5				
6	Payment for portion of change-over costs as provided in contract			
7	with Detroit City Gas Company (now Michigan Consolidated Gas			
8	Company) dated August 31, 1935 and contract with Michigan Gas			
9	Transmission Corporation dated March 17, 1936.	176 440 00	-	Detroit City Gas Company
10				
11				
12				
13				
14	Payment for portion of contribution for securing new househeating			
15	customers as provided in supplemental contract with Detroit City			
16	Gas Company (now Michigan Consolidated Gas Company) dated June 2,			
17	1936 and supplemental contract with Michigan Gas Transmission			
18	Corporation dated June 2, 1936.	94 636 00	-	Detroit City Gas Company
19				
20				
21				
22				
23	Payment for expenses incurred by Michigan Gas Transmission Corporation			
24	in securing gas sale contract with Washtenaw Gas Company (now Michigan			
25	Consolidated Gas Company) dated April 20, 1937, which contract was			
26	assigned to Panhandle Eastern Pipe Line Company on December 11, 1939.	12 875 58	December 11, 1939	Michigan Gas Transmission Corporatio
27				
28	Payment for portion of change-over costs as provided in contract with			
29	Washtenaw Gas Company (now Michigan Consolidated Gas Company) dated			
30	April 20, 1937 and letter agreement with Michigan Gas Transmission			
31	Corporation dated December 11, 1939.	14 723 20	-	Michigan Consolidated Gas Company
32				
33				
34				
35				
36				
37				

DIARY COMPANIES

STATEMENT OF COST OF BUSINESS DEVELOPMENT
PERIOD FROM APRIL 1, 1932 TO JUNE 30, 1941

Payments			
e	To Whom Paid (D)	Amount (E)	Method of Payment (F)
, 1936	Frank P. Parish	$ 87 500 00	Cash
, 1936	Dupuy G. Warrick	12 500 00	Cash
	Detroit City Gas Company	176 440 00	Through deductions from monthly gas bills during year 1937 at the rate of $14,703.33 per month.
	Detroit City Gas Company	94 636 00	Through deductions from gas bills as follows: July, 1937 $48 479 30; July, 1938 30 801 60; July, 1939 15 355 10
11, 1939	Michigan Gas Transmission Corporation	12 875 58	Cash
	Michigan Consolidated Gas Company	14 723 20	Through deductions from monthly gas bills, December 1939 to November 1940 inclusive, at the rate of $1,226.93 per month.

Line No.	Particulars (A)	Amount (B)	Payment Date (C)	Payment To Whom Paid (D)
1	Payment for portion of contribution for securing new househeating customers as provided in supplemental contract with Washtenaw Gas Company (now Michigan Consolidated Gas Company) dated April 20, 1937 and letter agreement with Michigan Gas Transmission Corporation dated December 11, 1939.	$ 1 154 88	-	Michigan Consolidated Gas Company
9	Payment for portion of contribution toward cost of constructing a line extension to Ingram-Richardson Manufacturing Company, a customer of Public Service Company of Indiana, as provided in contract dated May 4, 1937.	11 323 32	August 16, 1937 November 12, 1940	Michigan Gas Transmission Corporatic
16	Payment for portion of contribution toward cost of constructing a line extension to Ingersoll Steel and Disc Division, a customer of Public Service Company of Indiana, as provided in contract dated June 29, 1937.	3 080 00	-	Michigan Gas Transmission Corporatic
25	Payment for portion of contribution toward cost of converting burner equipment of Sterling Glass Company, a customer of Central Indiana Gas Company, as provided in letters dated November 29, 1939 and December 15, 1939.	1 116 50	October 28, 1940	Michigan Gas Transmission Corporati
30	Payment for portion of contribution toward cost of constructing a line extension to Continental Steel Corporation, a customer of Kokomo Gas and Fuel Company, as provided in contract dated November 4, 1940.	10 449 51	March 24, 1941	Michigan Gas Transmission Corporati
35	Payment for portion of change-over costs of Public Service Company of Indiana, Northern Indiana Public Service Company and Kokomo Gas and Fuel Company, as provided in contract dated October 1, 1936.	73 047 98	February 10, 1938	Michigan Gas Transmission Corporati

40 *Denotes red figure.

UBSIDIARY COMPANIES

STATEMENT OF COST OF BUSINESS DEVELOPMENT
PERIOD FROM APRIL 1, 1932 TO JUNE 30, 1941

Payments			
Date (C)	To Whom Paid (D)	Amount (E)	Method of Payment (F)
-	Michigan Consolidated Gas Company	$ 1 154 88	Through deduction from gas bill for month of September 1940.
st 16, 1937	Michigan Gas Transmission Corporation	13 860 00	Cash
nber 12, 1940		2 536 68*	Cash refund due to deficiency in gas purchased.
-	Michigan Gas Transmission Corporation	3 080 00	Through deductions from monthly gas bills, November 1937 to July 1939, inclusive, based on therms delivered.
ber 28, 1940	Michigan Gas Transmission Corporation	1 116 50	Cash
h 24, 1941	Michigan Gas Transmission Corporation	10 449 51	Cash
uary 10, 1938	Michigan Gas Transmission Corporation	73 047 98	Cash

Line No.	Particulars (A)	Amount (B)	Payment Date (C)	Payment To Whom Paid (D)
1	Payment for portion of change-over costs of Northern Indiana Public Service Company, as provided in contract dated October 1, 1936.	$ 2 961 50	November 30, 1938	Michigan Gas Transmission Corporation
3	Reimbursement for portion of costs of converting appliances and advertising of The Ohio Gas, Light and Coke Company, as provided in contract dated March 15, 1939 and letter agreement with Michigan Gas Transmission Corporation dated May 12, 1939.	4 672 75	July 25, 1939	Michigan Gas Transmission Corporation
7	Reimbursement for portion of costs of converting appliances of The Ohio Gas, Light and Coke Company in Napoleon, Ohio, as provided in contract dated March 15, 1939, letter dated June 14, 1939 and letter agreement with Michigan Gas Transmission Corporation dated May 12, 1939.	875 49	July 12, 1939	Michigan Gas Transmission Corporation
12	Reimbursement for portion of certain advertising costs of The Toledo Edison Company, as provided in contract dated December 22, 1939 and letter agreement with Michigan Gas Trahsmission Corporation dated December 22, 1939.	2 156 00	October 28, 1940	Michigan Gas Transmission Corporation
16	Payments made as a contribution to costs incident to changes and additions to facilities of Kentucky Natural Gas Corporation, as provided in contract dated June 17, 1938.	11 349 77	Various	Kentucky Natural Gas Corporation
19	Payments for securing of new househeating customers resulting from a business development campaign in the States of Missouri and Illinois during the years 1933, 1934 and 1935, as provided in letter agreements with Utilities dated June 27, 1933, August 24, 1933, October 23, 1933, May 16, 1934 and August 31, 1934.	33 130 00	Various	Missouri Utility Companies - Bowling Green Gas Company; Citizens Gas Company of Hannibal; Missouri Edison Company; Missouri Power and Light Company; Missouri Utilities Company; Illinois Utility Companies - Central Illinois Electric and Gas Company; Central Illinois Light Company; Central Illinois Public Service Compan; Illinois Power and Light Company, (now Illinois-Iowa Power Company)
36	Totals	$553 992 48		

Y COMPANIES

STATEMENT OF COST OF BUSINESS DEVELOPMENT
PERIOD FROM APRIL 1, 1932 TO JUNE 30, 1941

	Payments		
	To Whom Paid (D)	Amount (E)	Method of Payment (F)
1938	Michigan Gas Transmission Corporation	$ 2 961 50	Cash
)	Michigan Gas Transmission Corporation	4 672 75	Cash
)	Michigan Gas Transmission Corporation	875 49	Cash
940	Michigan Gas Transmission Corporation	2 156 00	Cash
	Kentucky Natural Gas Corporation	11 349 77	Cash
	Missouri Utility Companies -		
	Bowling Green Gas Company	152 50	Cash
	Citizens Gas Company of Hannibal	661 00	Cash
	Missouri Edison Company	42 00	Cash
	Missouri Power and Light Company	4 930 50	Cash
	Missouri Utilities Company	1 314 00	Cash
	Illinois Utility Companies -		
	Central Illinois Electric and Gas Company	453 00	Cash
	Central Illinois Light Company	16 674 00	Cash
	Central Illinois Public Service Company	3 225 00	Cash
	Illinois Power and Light Company, (now Illinois-Iowa Power Company)	5 688 00	Cash
		$553 992 48	

[fol. 15227] (Certificate to Exhibit 157-A, 157-B and 157-C.)

United States of America,
Securities and Exchange Commission.

I, Francis P. Brassor, Secretary of the Securities and Exchange Commission, Washington, D. C., which Commission was created by the Securities Exchange Act of 1934 (15 U.S.C.A., Sec. 78a et seq), and official custodian of the books and records of said Commission, and all books and records created or established by the Federal Trade Commission, pursuant to the provisions of the Securities Act of 1933 and transferred to this Commission in accordance with Section 210 of the Securities Exchange Act of 1934, do hereby certify that attached is a full, true and complete copy of:

Exhibit "H-6", "Agreement between Columbia Oil & Gasoline Corporation and Columbia Gas & Electric Corporation and Panhandle Eastern Pipe Line Company and Henry T. Bush and C. Ray Phillips as Receivers of Missouri-Kansas Pipe Line Company, dated as of June 1, 1936" and Exhibits A, B and C thereto, as contained in Exhibit "H-9", and Exhibit "I-2" to the registration statement filed with this Commission December 30, 1936 by Panhandle Eastern Pipe Line Company, pursuant to the provisions of the Securities Act of 1933 as amended, under File No. 2-2764, the above registration statement having been withdrawn upon request of the registrant, the Commission having consented to such withdrawal by order dated May 14, 1937.

In witness whereof I have hereunto subscribed my name and caused the seal of the Securities and Exchange Commission to be affixed this 2nd day of December, A. D., 1941, at Washington, D. C.

(Seal) FRANCIS P. BRASSOR,
Secretary.

[fol. 15228] Exhibit 157-A.

Exhibit "H-6".

Agreement

Between

Panhandle Eastern Pipe Line Company

and

Columbia Gas & Electric Corporation

and

Columbia Oil & Gasoline Corporation

Dated January 31, 1936.

[fol. 15229] Agreement made this 31st day of January, 1936, between Panhandle Eastern Pipe Line Company (hereinafter referred to as Eastern), a corporation of the State of Delaware, party of the first part, Columbia Gas & Electric Corporation (hereinafter referred to as Columbia Gas), a corporation of the State of Delaware, party of the second part, and Columbia Oil & Gasoline Corporation (hereinafter referred to as Columbia Oil), a corporation of the State of Delaware, party of the third part.

Eastern has entered into a contract, dated the 31st day of August, 1935, with Detroit City Gas Company, whereby Eastern has contracted to supply the natural gas requirements of Detroit City Gas Company, up to the maximum amount therein specified, for the period set forth in said contract. A copy of said contract (hereinafter referred to as the Detroit Contract) is attached hereto as Exhibit A.

Section 7 of Article II of the Detroit Contract provides that it shall not become effective unless Eastern shall be able to arrange on or before February 1, 1936 for the financing of the construction of a pipe line connecting the eastern terminus of Eastern's existing pipe line at a point in Vermilion County, Indiana, adjacent to the Illinois-Indiana state line with the place of delivery specified in the Detroit Contract, as well as the reinforcement of the

present pipe line of Eastern, since the present pipe line of Eastern is inadequate to deliver the quantity of gas called for by the Detroit Contract. In reliance on the present contract, Eastern has notified Detroit City Gas Company that it has been able to so arrange. The new pipe line extension must be constructed and ready for the delivery of gas not earlier than July 1, 1936, and not later than September 1, 1936. The amount required by Eastern to increase its present pipe line capacity and for working capital is estimated to be approximately $8,600,000, of which it is estimated that approximately $4,000,000 will [fol. 15230] be required in the spring of 1936, and the remainder at some subsequent date or dates.

Indiana Gas Transmission Corporation (hereinafter referred to as Indiana), a Delaware corporation, is a subsidiary of Columbia Oil and owns a natural gas transmission pipe line extending from the eastern terminus of Eastern's existing pipe line across the State of Indiana to a connection with the pipe line of The Ohio Fuel Gas Company at King Measuring Station, near Muncie Indiana.

Michigan Gas Transmission Corporation (hereinafter called Michigan), a Delaware corporation, is a subsidiary of Columbia Gas, organized for the purpose of constructing a pipe line extending from a point on Indiana's pipe line near Zionsville, Indiana, to the place of delivery specified in the Detroit Contract.

Now, Therefore, in consideration of the mutual covenants and agreements herein set forth, the parties hereto, severally and not jointly, covenant and agree as follows:

1. Eastern agrees with the parties hereto as follows:

(a) That it will enter into a contract with Indiana for the delivery of gas through Indiana's pipe line to Michigan and will enter into a contract with Michigan for the delivery of gas by Michigan to Detroit City Gas Company, such contracts to contain such terms and provisions as shall insure the delivery to Detroit City Gas Company of natural gas in the quantities and upon the terms and conditions specified in the Detroit Contract; or, in case Michigan shall acquire said line of Indiana ex-

tending from the Illinois-Indiana state line to Zionsville, will enter into a contract with Michigan providing for the delivery of said gas by Eastern to Michigan at the Illinois-Indiana state line, without the intervention of Indiana, the terms of such single contract to have sub-
[fol. 15231] stantially the same result to Eastern as the terms of the two contracts above referred to.

(b) That it will carry out all of the terms and provisions of said contracts or contract to the end that its obligations under the Detroit Contract may be fully performed.

(c) That it will apply the funds to be provided, as hereinafter stated, to increase the capacity of its existing main pipe line to the end that it shall be able to deliver to Indiana (or Michigan) at the Illinois-Indiana state line the quantities of natural gas at the times and at the pressure necessary to carry out the terms and provisions of its proposed contract with Indiana (or Michigan) referred to in Subdivision (a) of this Article 1 hereof.

(d) That it will offer pro rata to the holders of its Common Stock preemptive rights to subscribe to such number of shares of its Common Stock, at such price per share as will yield not less than $4,000,000, payable on or before April 1, 1930; and that it will sell to Columbia Oil, at such subscription price, all of the shares of Common Stock so offered to its other stockholders which shall not be subscribed for by them or by their assignees.

2. Columbia Gas agrees with the parties hereto as follows:

(a) That it will cause Michigan to enter into the proposed contract with Eastern referred to in Subdivision (a) of Article 1 hereof and will cause Michigan to carry out the terms and provisions thereof.

(b) That it will cause Michigan to construct a natural gas transmission pipe line from a point on Indiana's existing pipe line near Zionsville, Indiana, to the place
[fol. 15232] of delivery specified in the Detroit Contract, said pipe line to be of a size, design and construction adequate to deliver at said place of delivery the maximum

amount of natural gas called for by the Detroit Contract, and that it will furnish the funds necessary to enable Michigan to finance the construction of said pipe line.

(c) That, to provide the additional sum of $4,600,000 required by Eastern for the further increase of its pipe line capacity, Columbia Gas will purchase from Eastern 6% Bonds of Series A under the Mortgage Trust Indenture of Eastern, at par or, if the restrictions of said Mortgage Trust Indenture do not at the time permit this, will purchase Second Mortgage 6% Bonds of Eastern at par, which shall be exchangeable at the option of Columbia Gas into such Bonds of Series A when the restrictions of said Mortgage Trust Indenture to permit such exchange can be met.

(d) That it will advance, on open account to Columbia Oil until funded by the agreement of the parties, the necessary funds required by Columbia Oil to carry out its obligations under this Agreement.

3. Columbia Oil agrees with the parties hereto as follows:

(a) That, upon the issuance by Eastern of rights to subscribe for shares of Common Stock of Eastern, as provided in Subdivision (d) of Article 1 of this Agreement, it will (1) immediately subscribe for its pro rata proportion of such shares, and (2) on April 2, 1936, will either (a) purchase such of the shares of Common Stock of Eastern so offered for subscripiton as shall not have been subscribed for by the stockholders of Eastern or their respective assignees or (b) if the time for the payment of such subscriptions shall have been extended by Eastern [fol. 15233] to a date later than April 1, 1936, advance to Eastern the amount that would be payable if all of the subscriptions to such shares of Common Stock which may be exercised later than April 1, 1936, had been exercised, the portion of such advance represented by the subscription rights later exercised to be repaid by Eastern, with interest at the rate of 6% per annum, upon the exercise of such subscription rights.

(b) That it will cause Indiana to enter into the proposed contract with Eastern referred to in Subdivision

(a) of Article 1 hereof, and will cause Indiana to carry out the terms and provisions thereof (unless Eastern shall elect to contract solely with Michigan as herein provided).

(c) That it will cause Indiana to make any necessary additions to or reinforcements of its existing pipe line necessary to enable Indiana to transport through said pipe line the maximum quantities of gas called for by the requirements of the proposed contract between Eastern and Indiana referred to in Subdivision (a) of Article 1 hereof, and that it will provide Indiana with the funds necessary therefor.

4. All of the parties hereto severally agree with each other as follows:

(a) The parties hereto recognize the possibility that the corporate relationships between the parties hereto, Indiana and Michigan, may be changed, through the acquisition by Columbia Gas or by Michigan of the stock or pipe line of Indiana or by the merger of Indiana and Michigan, or by a combination of the foregoing, or otherwise. In any such case, this Agreement and the contracts referred to in Subdivision (a) of Article 1 hereof shall be appropriately amended, provided that such amend- [fol. 15234] ments shall be such as to preserve the following basic principles:

(1) That Columbia Gas and Columbia Oil shall be responsible for their respective obligations with respect to the financing of the reinforcement of Eastern's existing pipe line as set forth in Subdivision (c) of Article 2 and in Subdivision (a) of Article 3 hereof;

(2) That Columbia Gas and Columbia Oil shall each be severally responsible for the financing of that portion, if any, of the pipe line from the Illinois-Indiana State line to the Place of Delivery specified in the Detroit Contract, which shall at the time in question be owned by their respective subsidiaries;

(3) That the operating contracts among the several pipe line companies (including Eastern) shall contain such terms and provisions as shall insure the delivery to De-

troit City Gas Company of natural gas in the quantities and upon the terms and conditions specified in the Detroit Contract; and

(4) That such operating contracts shall be as favorable to Eastern as the forms of contract referred to in Subdivision (a) of Article 1 hereof.

(b) That if, for any reason not involving a breach of the Detroit Contract by Eastern, Indiana or Michigan, the Detroit Contract shall fail to be performed, all the obligations of the parties hereto then unperformed shall become void and shall be of no further force or effect whatsoever.

(c) That this Agreement is subject to the securing of such consents to the taking of the action described hereunder from Federal and State authorities as may be necessary.

[fol. 15235] 5. Anything herein contained to the contrary notwithstanding, Eastern shall have the right provided for in clause (b) of Article V of the Stipulation accompanying the Decree of the United States District Court for the District of Delaware entered on January 29, 1936, in the cause entitled United States of America, Petitioner, against Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation, and others, Defendants, being cause No. 1099 in Equity, which Stipulation was entered in the United States District Court for the District of Delaware contemporaneously with said Decree and is hereafter referred to as the Stipulation, to arrange for the financing of its undertakings under the Detroit Contract otherwise than through the assistance of Columbia Oil and Columbia Gas which they have agreed to furnish under their agreements herein. It is therefore agreed by all parties hereto that Eastern shall have twenty days from the date of the curing of the default of its 6% Promissory Notes referred to in said clause of said Stipulation, or their retirement, in which to arrange for such financing from other sources. Eastern agrees that it will forthwith take the appropriate action necessary for such curing of default or retirement

of its Notes and that if, by the expiration of twenty days thereafter, it shall not have notified in writing Columbia Oil and Columbia Gas, by notice delivered to their respective New York City offices, that it has been able to arrange such financing from other sources, this Agreement shall be binding on Eastern and Columbia Oil and Columbia Gas according to its terms. Pending said period of twenty days, both Columbia Oil and Columbia Gas remain bound according to the terms hereof. In case Eastern shall be able to arrange said financing from other sources and shall so notify the other parties hereto, both Columbia Oil and Columbia Gas shall be freed of their obligations hereunder to provide such financing. Eastern agrees that it will submit any such alternative method of financing, before entering into it, to the Trustee appointed under said Decree for his approval and will not enter into it without his written approval.

[fol. 15236] In Witness Whereof, the parties hereto have caused this Agreement to be signed by their respective Presidents or Vice-Presidents thereunto duly authorized, and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

PANHANDLE EASTERN PIPE LINE COMPANY,

By Jas. L. Harrop,
Vice-President.

(Corporate Seal)

Attest:

Leith V. Watkins,
Secretary.

COLUMBIA GAS & ELECTRIC CORPORATION,

By E. Reynolds, Jr.,
Vice-President.

(Corporate Seal)

Attest:

H. H. Pell, Jr.,
Secretary.

COLUMBIA OIL & GASOLINE CORPORATION,

By Charles A. Munroe,
President.

(Corporate Seal)

Attest:

W. A. Blind,
Asst. Secretary.

(3468)

[fol. 15237]

Exhibit 157-B.

Exhibit "H-9".

Agreement

Between

Columbia Oil & Gasoline Corporation

and

Columbia Gas & Electric Corporation.

and

Panhandle Eastern Pipe Line Company

and

Henry T. Bush and C. Ray Phillips

As Receivers of Missouri-Kansas Pipe Line Company

Dated as of June 1, 1936

[fol. 15238] Agreement dated as of the 1st day of June, 1936, between Columbia Oil & Gasoline Corporation, a Delaware corporation (hereinafter called Columbia Oil), party of the first part, Columbia Gas & Electric Corporation, a Delaware corporation (hereinafter called Columbia Gas), party of the second part, Panhandle Eastern Pipe Line Company, a Delaware corporation (hereinafter

called Eastern), party of the third part, and Henry T. Bush and C. Ray Phillips, Receivers (hereinafter called the Receivers) of Missouri-Kansas Pipe Line Company, a Delaware corporation (hereinafter called Mo-Kan), appointed by the Court of Chancery of the State of Delaware, parties of the fourth part.

Whereas Columbia Oil and Columbia Gas made an offer to the Receivers, dated January 31, 1936, to settle certain claims between them, said offer as extended, supplemented and modified having been duly approved by the Court of Chancery of the State of Delaware by an order dated April 29, 1936 and accepted by the Receivers; and

Whereas Columbia Oil, Columbia Gas and the Receivers desire Eastern to take certain corporate action to carry out the terms of the aforementioned settlement; and

Whereas Eastern is willing for the consideration hereinafter mentioned to take the corporate action on its part necessary to carry out the aforementioned settlement; and

Whereas Columbia Oil, Mo-Kan and The National City Company have heretofore entered into an agreement dated the 17th day of September, 1930, and various agreements supplemental thereto bearing the dates September 19, 1930, September 30, 1930, October 8, 1930 and October 23, 1930, respectively; and

[fol. 15239] Whereas The National City Company has fully performed all of its obligations under the aforesaid agreement dated the 17th day of September, 1930 and the agreements supplemental thereto and has received full performance of all obligations due to it thereunder and has been dissolved; and

Whereas Columbia Oil, Columbia Gas, Eastern and the Receivers, acting in their capacity as Receivers and on behalf of Mo-Kan, are desirous of releasing, terminating, canceling, satisfying and discharging all rights, obligations and liabilities of whatsoever nature of Columbia Oil, Columbia Gas, Eastern, Mo-Kan and the Receivers, or any of them, with respect to, on account of, or in any way arising out of, appertaining to, or in connection with said Agreement, dated the 17th day of Sep-

tember, 1930 or any amendments thereof or supplements thereto; and

Whereas, in connection with the aforesaid agreement of September 17, 1930, Mo-Kan and Eastern entered into an agreement dated the 20th day of October, 1930; and

Whereas Eastern and the Receivers, acting in their capacity as Receivers and on behalf of Mo-Kan, are desirous of releasing, terminating, cancelling, satisfying and discharging all rights, obligations and liabilities of whatsoever nature of Eastern, Mo-Kan and the Receivers, or any of them, with respects to, on account of, or in any way arising out of, appertaining to or in connection with said agreement dated the 20th day of October, 1930;

Now, Therefore, the parties hereto, in consideration of the premises, of their mutual covenants and agreements herein contained, and of other good and valuable consideration, the receipt of which by each of the parties hereto from each of the others of the parties hereto is hereby acknowledged, have agreed and do hereby agree as follows:

[fol. 15240] I. Eastern agrees with the parties hereto as follows:

(a) That it will execute and deliver to Columbia Oil, Columbia Gas and the corporations and individuals or classes thereof referred to therein, a good and sufficient release, in the form attached hereto as Exhibit A.

(b) That it will execute and deliver to the Receivers and to Mo-Kan and its subsidiaries a good and sufficient release in the form attached hereto as Exhibit B.

(c) That it will cause its subsidiary Central Distributing Company to release the claim of such subsidiary in the amount of $2,704.31 filed in the Mo-Kan receivership, by the execution and delivery to the Receivers of a release of claim in the form attached hereto as Exhibit C.

(d) That, subject to action by its stockholders, it will amend its Certificate of Incorporation so as to authorize, in lieu of the 110,000 shares of Convertible Cumulative Preferred Stock now authorized, two classes of Preferred Stock, to be designated as Class A Preferred Stock and

Class B Preferred Stock and to have powers, preferences and rights, and qualifications, limitations and restrictions, respectively, as set forth in the form of Certificate of Amendment of Certificate of Incorporation attached hereto as Exhibit D.

(e) That it will amend its Mortgage Trust Indenture dated as of October 1, 1930 (as heretofore amended) so as to increase the sinking fund for the Bonds of Series A thereunder to an amount calculated, on a cumulative basis, to retire the principle amount of all of the Bonds of Series A by October 1, 1951, as set forth in the form of Third Supplemental Indenture attached hereto as Exhibit E.

[fol. 15241] (f) That it will fix the period within which the subscription rights now held by Panhandle Corporation to subscribe for 80,000 shares of the Common Stock of Eastern may be exercised, to and including the ninetieth day following the termination of the receivership of Mo-Kan, but in no case beyond January 1, 1937; provided, however, that, if prior to the exercise of said subscription rights it shall appear, either from an opinion of Eastern's counsel or from action by the Securities and Exchange Commission, that registration of said subscription rights or of the Common Stock of Eastern called for thereby under the Securities Act of 1933, as amended, is necessary, then and in that event Eastern will file a registration statement under said Act at Eastern's expense in respect of said rights or Common Stock, as the case may be, and will extend the period during which such subscription rights may be exercised to and including the 90th day following the effective date of said registration statement. That it will consent that such subscription rights owned by Panhandle will be assignable and will, on such reasonable notice as shall suffice for preparation and printing, issue transferable subscription warrants upon the request of the person or persons holding such subscription rights.

II. Columbia Oil agrees with the parties hereto as follows:

(a) That, in the event Eastern elects to redeem at any time part of its Class A Preferred Stock out of earnings,

it will waive the premium of $10 per share payable on the redemption of such shares of Class A Preferred Stock as may at the time be owned, held or controlled by it and be then called for redemption.

[fol. 15242] (b) That it will join with Columbia Gas in executing and delivering to Eastern and its subsidiary companies a good and sufficient release in the form attached hereto as Exhibit F.

III. Columbia Gas agrees with the parties hereto as follows:

(a) That in the event Eastern elects to redeem at any time part of its Class A Preferred Stock out of earnings, it will waive the premium of $10 per share payable on the redemption of such shares of Class A Preferred Stock, if any, as may at the time be owned, held or controlled by it and be then called for redemption.

(b) That it will join with Columbia Oil in executing and delivering to Eastern and its subsidiary companies a good and sufficient release in the form attached hereto as Exhibit F.

IV. The Receivers agree with the parties hereto that, in their capacity as Receivers and on behalf of Mo-Kan, they will execute and deliver to Columbia Oil, Columbia Gas, Eastern and the corporations or individuals or classes thereof referred to therein, a good and sufficient release, in the form attached hereto as Exhibit G, and will execute and deliver to Burt R. Bay Covenants Not to Sue in the forms attached hereto as Exhibits G-1 and G-2.

V. All of the parties hereto severally agree with each other as follows:

1. All rights, obligations and liabilities of whatsoever nature of Columbia Oil, Columbia Gas, Eastern, Mo-Kan, and the Receivers, and each of them, with respect to, on account of or in any way arising out of, appertaining to, or in connection with, said agreement dated the 17th day of September, 1930, or any amendments thereof or sup-[fol. 15243] plements thereto are hereby in all respects terminated, rescinded, canceled, satisfied and discharged.

2. Each of the parties hereto, namely Columbia Oil, Columbia Gas, Eastern and the Receivers, on behalf of themselves as Receivers and on behalf of Mo-Kan, has remised, released and forever discharged the others of said parties, and does by these presents for the respective heirs, administrators, executors, representatives, successors and assigns of said party or parties, remise, release and forever discharge the others of said parties, their respective heirs, administrators, executors, representatives, successors and assigns, of all and from all manner of action and actions, cause and causes of action, suits, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims and demands whatsoever, in law or in equity, or by force of any statute of the United States or any state thereof, which any one of said parties, their respective heirs, administrators, executors, representatives, successors or assigns may now have against any one or more of the other parties hereto, or their respective heirs, administrators, executors, representatives, successors or assigns, for, upon or by reason of any matter, cause or thing whatsoever with respect to, on account of, or in any way arising out of, appertaining to, or in connection with, said agreement dated the 17th day of September, 1930, or any amendments thereof or supplements thereto, or any thereof, or the execution of the same.

VI. Eastern and the Receivers in their capacity as Receivers and on behalf of Mo Kan agree with each other as follows:

[fol. 15244] 1. All rights, obligations and liabilities of whatsoever nature of Eastern, Mo-Kan, and the Receivers, and each of them, with respect to, on account of or in any way arising out of, appertaining to, or in connection with, said agreement dated the 20th day of October, 1930, are hereby in all respects terminated, rescinded, canceled, satisfied and discharged.

2. Each of said parties hereto, namely, Eastern and the Receivers, on behalf of themselves as Receivers and on behalf of Mo-Kan, has remised, released and forever discharged the others of said parties, and does by these

presents for the respective heirs, administrators, executors, representatives, successors and assigns of said party or parties, remise, release and forever discharge the others of said parties, their respective heirs, administrators, executors, representatives, successors and assigns, of all and from all manner of action and actions, cause and causes of action, suits, debts, dues, sums of money, accounts, reckoning, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims and demands whatsoever, in law or in equity, or by force of any statute of the United States or any state thereof, which any one of said parties, their respective heirs, administrators, executors, representatives, successors or assigns may now have against any one or more of the other parties hereto, or their respective heirs, administrators, executors, representatives, successors or assigns, for, upon or by reason of any matter, cause or thing whatsoever with respect to, on account of or in any way arising out of, appertaining to, or in connection with, said Agreement dated the 29th day of October, 1930.

[fol. 15245] VII. The foregoing Articles V and VI are without prejudice to the right of any of the parties hereto to enter into any contract or contracts with any of the other parties hereto relative to the purchase and sale of gas, when duly authorized in the case of corporate parties by their respective Boards of Directors.

In Witness Whereof, Columbia Oil & Gasoline Corporation, Columbia Gas & Electric Corporation and Panhandle Eastern Pipe Line Company, have caused this Agreement to be duly signed by their respective Presidents or Vice-Presidents thereunto duly authorized and their respective corporate seals to be hereunto affixed and attested by their respective Secretaries or Assistant Secretaries and the Receivers of Missouri-Kansas Pipe Line Company have duly executed this Agreement all as of the day and year first above written.

COLUMBIA OIL & GASOLINE CORPORATION,
By Charles A. Munroe,
President.

(Corporate Seal)

Attest:
Conrad H. Lavin,
Assistant Secretary.

COLUMBIA GAS & ELECTRIC CORPORATION,
By E. Reynolds, Jr.,
President.

(Corporate Seal)

Attest:
H. H. Pell, Jr.,
Secretary.

[fol. 15246]

PANHANDLE EASTERN PIPE LINE COMPANY,
By James L. Harrop,
Vice-President.

(Corporate Seal)

Attest:
Leith V. Watkins,
Secretary.

C. RAY PHILLIPS, (L. S.)
HENRY T. BUSH, (L. S.)
As Receivers of Missouri-Kansas Pipe Line Company.

[fol. 15247] State of New York,
County of New York,—ss.:

On the 5th day of June, in the year 1936, before me personally came Charles A. Munroe, to me known, who, being by me duly sworn, did depose and say that he resided in Chicago, Illinois; that he is the President of Columbia Oil & Gasoline Corporation, a corporation of the State of Delaware, one of the corporations described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

(Notarial Seal)

FRANK A. MOYER,
Notary Public, Kings Co. N. Y.
Kings Co. Clk's No. 349, Reg. No. 8397.
N. Y. Co. Clk's No. 952, Reg. No. 8M60.
Commission expires March 30, 1938.

[fol. 15248] State of New York,
County of New York,—ss.:

On the 4th day of June, in the year 1936, before me personally came E. Reynolds, Jr., to me known, who, being by me duly sworn, did depose and say that he resided in Stamford, Connecticut; that he is the President of Columbia Gas & Electric Corporation, a corporation of the State of Delaware, one of the corporations described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

(Notarial Seal) JOHN E. CLEARY,
Notary Public, Bronx County, N. Y.
Bronx Co. Clk's No. 42, Reg. No. 29C38
N. Y. Co. Clk's No. 398, Reg. No. 8C210
Commission Expires March 30, 1938.

[fol. 15249] State of New York,
County of New York,—ss.:

On the 5th day of June, in the year 1936, before me personally came James L. Harrop, to me known, who, being by me duly sworn, did depose and say that he resided in Maplewood, New Jersey; that he is a Vice-President of Panhandle Eastern Pipe Line Company, a corporation of the State of Delaware, one of the corporations described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

(Notarial Seal) FRANK A. MOYER,
Notary Public, Kings Co. N. Y.
Kings Co. Clk's No. 349, Reg. No. 8397
N. Y. Co. Clk's No. 952, Reg. No. 8M607
Commission expires March 30, 1938.

[fol. 15250] State of Delaware,
County of New Castle,—ss.:

On this 5th day of June, 1936, before me personally came Henry T. Bush and C. Ray Phillips, to me known and

known to me to be the Receivers for Missouri-Kansas Pipe Line Company, a Delaware corporation, appointed by the Chancellor of the state of Delaware on March 18, 1932, and the individuals described in and who executed the foregoing instrument, and they duly acknowledged to me that they executed the same as such Receivers.

(Notarial Seal) C. C. FITZPATRICK,
Notary Public.

[Vol. 15251]

Exhibit A.

General Release.

Know All Men by These Presents, that for and in consideration of the sum of One hundred dollars ($100), lawful money of the United States of America, and other good and valuable consideration, to us in hand paid, the receipt whereof is hereby acknowledged, Panhandle Eastern Pipe Line Company, a Delaware corporation, for itself, its subsidiaries, successors and assigns, has remised, released and forever discharged and by these presents does remise, release and forever discharge Columbia Gas & Electric Corporation, a Delaware corporation, Columbia Oil & Gasoline Corporation, a Delaware corporation, and each of them and their respective successors and assigns, and their respective subsidiary corporations, and each of them, and the respective successors and assigns of said subsidiary corporations, and also each and every of such persons as are or have been the officers or directors, present or past, of said Columbia Gas & Electric Corporation, said Columbia Oil & Gasoline Corporation and of their respective subsidiary corporations, and their respective heirs, administrators, executors and assigns, of, all and from all and all manner of action and actions, cause and causes of action, suits, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims and demands whatsoever, in law or in equity, or by force of any statute of the United States or any state thereof, which against them or any of them said Panhandle Eastern Pipe Line Company or its subsidiaries ever had, now has, or which it, its subsidiaries, successors or assigns, there-

after can, shall or may have, for, upon or by reason of [fol. 15252] any matter, cause or thing whatsoever from the beginning of the world to the day of the date of these presents, except such rights, if any, as said Panhandle Eastern Pipe Line Company may have under (a) the Agreement between Panhandle Eastern Pipe Line Company, Columbia Gas & Electric Corporation and Columbia Oil & Gasoline Corporation, dated January 31, 1936, (b) the Agreement between Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, dated March 17, 1936, and (c) the Agreement between Columbia Oil & Gasoline Corporation, Columbia Gas & Electric Corporation, Panhandle Eastern Pipe Line Company and Henry T. Bush and C. Ray Phillips, as Receivers of Missouri-Kansas Pipe Line Company, dated as of June 1, 1936, and except such rights, if any, as Panhandle Eastern Pipe Line Company may have against said Michigan Gas Transmission Corporation arising out of current dealings between said Panhandle Eastern Pipe Line Company and said Michigan Gas Transmission Corporation.

In Witness Whereof, Panhandle Eastern Pipe Line Company has caused this instrument to be executed by its President or a Vice-President thereunto duly authorized, and its corporate seal to be hereto affixed and attested by its Secretary, this 3rd day of June, 1936, at New York, N. Y.

PANHANDLE EASTERN PIPE LINE COMPANY,

By .....,
Vice-President.

Attest:
Secretary.

[fol. 15253] State of New York,
County of New York, — ss.:

On the 3rd day of June, in the year 1936, before me personally came James L. Harrop, to me known, who, being by me duly sworn, did depose and say that he resided in Maplewood, New Jersey; that he is a Vice-President of Panhandle Eastern Pipe Line Company, a corporation of the State of Delaware, the corporation de-

scribed in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

.....

[fol. 15254] Exhibit B.

General Release to Receivers.

Know All Men by These Presents, that for and in consideration of the sum of One hundred dollars ($100), lawful money of the United States of America, and other good and valuable consideration, to us in hand paid, the receipt whereof is hereby acknowledged, Panhandle Eastern Pipe Line Company, a Delaware corporation, for itself, its subsidiaries, successors and assigns, has remised, released and forever discharged and by these presents does remise, release and forever discharge Missouri-Kansas Pipe Line Company, a Delaware corporation, and its subsidiaries, successors and assigns, and Henry T. Bush and C. Ray Phillips as Receivers for Missouri-Kansas Pipe Line Company, appointed by the Chancellor of the State of Delaware on March 18, 1932, and Thurlow G. Essington, as Receiver for Missouri-Kansas Pipe Line Company, appointed by the District Court of the United States for the Northern District of Illinois, Eastern Division, on May 12, 1932, and their respective heirs, administrators, executors, successors and assigns, of all and from all and all manner of action and actions, cause and causes of action, suits, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims and demands whatsoever, in law or in equity, or by force of any statute of the United States or any state thereof, which against them or any of them said Panhandle Eastern Pipe Line Company or its subsidiaries ever had, now has, or which it, its subsidiaries, successors or assigns, hereafter can, shall or may have, for, upon or by reason of any matter, cause or

thing whatsoever from the beginning of the world to the day of the date of these presents, except such rights, if any, as Panhandle Eastern Pipe Line Company may have under the Agreement between Columbia Oil & Gasoline Corporation, Columbia Gas & Electric Corporation, Panhandle Eastern Pipe Line Company and Henry T. Bush [fol. 15255] and C. Ray Phillips, as Receivers of Missouri-Kansas Pipe Line Company, dated as of June 1, 1936.

In Witness Whereof, Panhandle Eastern Pipe Line Company has caused this instrument to be executed by its President or a Vice-President thereunto duly authorized, and its corporate seal to be hereto affixed and attested by its Secretary, this 3rd day of June, 1936, at New York, N. Y.

PANHANDLE EASTERN PIPE LINE COMPANY,

By

Vice-President.

Attest:

Secretary.

State of New York,
County of New York,—ss.:

On the 3rd day of June, in the year 1936, before me personally came James L. Harrop, to me known, who, being by me duly sworn, did depose and say that he resided in Maplewood, New Jersey; that he is a Vice-President of Panhandle Eastern Pipe Line Company; a corporation of the State of Delaware, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

. . . . . .

[fol. 15256] Exhibit C.

Release of Claim.

Know All Men by These Presents, that for and in consideration of the sum of One hundred dollars ($100), law-

ful money of the United States of America, and other good and valuable consideration, to us in hand paid, the receipt whereof is hereby acknowledged, Central Distributing Company, a Delaware corporation, for itself, its successors and assigns, has remised, released and forever discharged and by these presents does remise, release and forever discharge Missouri-Kansas Pipe Line Company, a Delaware corporation, and its subsidiaries, successors and assigns, and Henry T. Bush and C. Ray Phillips as Receivers of said Missouri-Kansas Pipe Line Company, and their respective heirs, administrators, executors, successors and assigns, of all and from all and all manner of action and actions, cause and causes of action, suits, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims and demands whatsoever, in law or in equity, or by force of any statute of the United States or any state thereof, which against them or any of them said Central Distributing Company ever had, now has, or which it, its successors or assigns, hereafter can, shall or may have, for, upon or by reason of a certain payment made by Central States Gas Utilities Company, an Illinois corporation, to the United States Government, in respect of taxes and interest assessed against said Missouri-Kansas Pipe Line Company or its subsidiaries for the year 1929, for which payment a claim has heretofore been filed in the amount of Two Thousand Seven Hundred and Four Dollars and Thirty One Cents ($2,704.31) in the receivership proceedings of said Missouri-Kansas Pipe Line Company.

[fol. 15257] In Witness Whereof, Central Distributing Company has caused this instrument to be executed by its President or a Vice-President thereunto duly authorized, and its corporate seal to be hereto affixed and attested by its Secretary, this 3rd day of June, 1936, at New York, N. Y.

CENTRAL DISTRIBUTING COMPANY,

By

Vice-President.

Attest:

Secretary.

State of New York,
County of New York,—ss.:

On the 3rd day of June, in the year 1936, before me personally came James L. Harrop, to me known, who, being by me duly sworn, did depose and say that he resided in Maplewood, New Jersey; that he is a Vice-President of Central Distributing Company, a corporation of the State of Delaware, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that he signed his name thereto by like order.

.....

[fol. 15258] Exhibit 157-C.
Exhibit "I-2".

Columbia Oil & Gasoline Corporation
Sixty-One Broadway,
New York.

January 31, 1936.

Messrs. Henry T. Bush and C. Ray Phillips;
as Receivers of Missouri-Kansas Pipe Line Company,
Wilmington, Delaware.

Dear Sirs:

You are familiar with the relations which have heretofore existed between Missouri-Kansas Pipe Line Company, yourselves as Receivers thereof, Panhandle Eastern Pipe Line Company, Panhandle Corporation, Columbia Gas & Electric Corporation and the undersigned Columbia Oil & Gasoline Corporation, and particularly with the differences of opinion which have existed between the Missouri-Kansas interests on the one hand and the interests of Columbia Gas & Electric Corporation and the undersigned on the other with respect to the management and affairs of Panhandle Eastern Pipe Line Company. The principal

disagreement has arisen out of the problem of marketing Panhandle Eastern's available gas.

As the result of the contract dated August 31, 1935, between Panhandle Eastern Pipe Line Company and Detroit City Gas Company, under which Panhandle Eastern is afforded the opportunity to supply the City of Detroit with natural gas, the principal point of our controversy, namely, the marketing of Panhandle Eastern's gas, would seem to be removed inasmuch as this market should absorb all of the gas which we believe Panhandle Eastern can now safely contract to supply at such distance from its production area.

After a comprehensive study and extensive negotiations, we believe that, with this contract as a foundation, an opportunity is afforted to adjust the controversies heretofore existing between Missouri-Kansas interests and ours on terms we believe manifestly advantageous to your interests, and which at the same time would permit the financial rehabilitation of Panhandle Eastern and would materially strengthen the financial position of Missouri-Kansas.

We enclose a copy of the contract of August 31, 1935, between Panhandle Eastern and Detroit City Gas Company. You will observe this contract provides for the sale of gas by Panhandle Eastern to Detroit City Gas Company for a firm period of fifteen years on terms which we believe you will agree to be highly advantageous to Panhandle Eastern. The contract provides for delivery of natural gas at a point near the City of Detroit. Panhandle Eastern's pipe line system extends only to the Illinois-Indiana State line and its present capacity is not sufficient to transport the volume of gas that may be required under the Detroit Contract. It is estimated that the cost of the necessary increase in the capacity of the existing pipe line, with additional compressor stations and necessary equipment, will be approximately $8,600,000 and that the cost of building or acquiring an extension to Detroit will be approximately $8,300,000 more.

[fol. 15259] At the present time, as you know, the outstanding securities of Panhandle Eastern are held as follows:

Securities	Owned by Columbia Oil	Panhandle Corporation*
6% Mortgage Bonds	$18,200,000	—
6% Promissory Notes	4,945,500	$4,945,500
Common Stock	1,149 sh.	1,149 sh.

*At the present time Panhandle Corporation has outstanding $4,940,000 of Two-Year 6% Collateral Trust Notes (now in default as to principal and interest), which Notes are now held by others, and which are guaranteed as to principal and interest by Missouri-Kansas. Missouri-Kansas now owns 25% of the Common Stock of Panhandle Corporation, the remaining 75% of the Common Stock being owned by others; so that at the present time Missouri-Kansas' interest in Panhandle Corporation is the ownership of 25% of the Common Stock, the value of which is subject to the $4,940,000 defaulted Notes of Panhandle Corporation, which in turn are guaranteed by Missouri-Kansas.

The Panhandle Eastern Notes aggregating $9,891,000 have long been in default as to interest, which default entitles the holders of such Notes to call on the Trustee to accelerate their maturity and also constitutes an event of default under the mortgage securing the Bonds. Furthermore, the $4,945,500 of Panhandle Eastern Notes, as well as all the shares of Panhandle Eastern Common Stock, owned by Panhandle Corporation are now pledged to secure the $4,940,000 principal amount of defaulted Two-Year 6% Collateral Trust Notes issued by Panhandle Corporation mentioned above.

It would seem manifestly impracticable under present conditions for Panhandle Eastern to refund its present defaulted obligations, much less to finance the necessary capital expenditures amounting (exclusive of the investment in the extension to Detroit) to approximately $8,600,000 in new money, except through those already having a financial interest in its securities. Furthermore, such financing, even under favorable conditions, is costly. Under the proposal stated below, this financing would be done without cost to Panhandle Eastern or Missouri-

Kansas, the entire cost of financing being borne by Columbia Gas & Electric Corporation and ourselves.

Without prejudice either to the claims asserted in your suit against us or to our contention that such claims are groundless, we believe that with your cooperation a formal contract embracing the following plan, which we and Columbia Gas & Electric Corporation are able and willing and hereby offer to enter into, would provide a satisfactory compromise of our conflicting claims:

(1) We would agree to fund the entire issue of outstanding 6% Promissory Notes of Panhandle Eastern into 6% Preferred Stock in the amount and of the character hereinafter stated. This would be accomplished in connection with our acquisition, as hereinafter explained, of substantially all of the Notes and the 75% of the stock of Panhandle Corporation held by others.

(2) We would further agree to cause Panhandle Eastern to be recapitalized as hereinafter more fully set forth, and to cause Missouri-Kansas to regain its direct ownership of one-half of the Common Stock of Panhandle Eastern to be issued and outstanding prior to the new financing mentioned in paragraph (6) below.

(3) We would cancel the guaranty by Missouri-Kansas of the principal and interest of the Panhandle Corporation Notes, now amounting to more than $5,500,000, and would release Missouri-Kansas of all liability on this guaranty.

(4) The claim of Panhandle Eastern and its subsidiaries against Missouri-Kansas in the sum of $42,606.74 would be cancelled.

(5) We would agree to pay to you, as Receivers of Missouri-Kansas, the sum of $300,000 in cash, to be applied toward the expenses of the receivership and liquidating other obligations of Missouri-Kansas.

(6) The additional financing necessary to provide funds needed by Panhandle Eastern (estimated at approximately $8,600,000) would be provided by an issue of 160,000 shares of Common Stock of Panhandle Eastern, to be sold at $25 per share (producing $4,000,000), to which

[fol. 15260] Missouri-Kansas stockholders would be given the right to subscribe for one-half but would not be obligated to subscribe, we agreeing to take the entire balance not so subscribed; the remainder of the necessary funds (not to exceed $4,600,000) Columbia Gas & Electric Corporation would agree to supply by the purchase at par of 6% Bonds of Panhandle Eastern.

(7) In order to minimize the financial burden on Panhandle Eastern, we and Columbia Gas & Electric Corporation would agree to cause to be financed and constructed the necessary pipe line extension to the city gate at Detroit, without cost or expense or financial obligation of any kind on Panhandle Eastern. The existing pipe line at present owned by Indiana Gas Transmission Corporation (a subsidiary of the undersigned) and representing a cash investment of more than $1,500,000, would be used as far as a point near Zionsville, Indiana; and Michigan Gas Transmission Corporation (a subsidiary of Columbia Gas & Electric Corporation) would construct and own a pipe line from that point to the Place of Delivery specified in the Detroit contract at a cost now estimated at about $6,780,000. Contracts would be entered into whereby Panhandle Eastern would deliver to Michigan Gas Transmission Corporation (either directly or through the intervention of Indiana Gas Transmission Corporation) and Michigan Gas Transmission Corporation would in turn deliver to Detroit City Gas Company, all of the gas required for delivery under the Detroit Contract. Our engineers have calculated that, at the rates contemplated in these contracts, Panhandle Eastern would receive an average price of about 26½ cents per MCF when the line operates at a 70% load factor, and that these rates would produce, for the companies involved, an equitable apportionment of the net earnings to be derived from the Detroit Contract.

(8) In consideration of the taking of the foregoing action by us and by Columbia Gas & Electric Corporation, you would agree

(a) To dismiss the suit brought by you in the United States District Court for the Southern District of New York on July 18, 1935, and execute a general release, as hereinafter more fully set forth;

(b) To distribute to Missouri-Kansas stockholders, in the manner hereinafter set forth, the warrants evidencing the right to subscribe for additional Common Stock of Panhandle Eastern which you or Missouri-Kansas would receive as a stockholder in Panhandle Eastern;

(c) To join with us, Columbia Gas & Electric Corporation and Panhandle Eastern in an agreement for the cancellation of the contract dated September 17, 1930 between Missouri-Kansas, The National City Company and the undersigned, including specifically the provisions thereof with respect to the purchase or sale of gas or the execution of gas contracts; and

(d) To join with us in taking appropriate corporate action to liquidate Panhandle Corporation in such manner that through such liquidation you would receive one-half of the Common Stock of Panhandle Eastern and we would receive the Preferred Stock.

The following is a more detailed explanation and discussion of the several steps involved in this plan and of the reasons underlying its various provisions.

As stated above, the securities of Panhandle Eastern at present owned by Panhandle Corporation are pledged to secure its $4,940,000 of Two-Year 6% Collateral Trust Notes, which are now in default. Panhandle Corporation has outstanding 1,000 shares of capital stock, of which you, as Receivers, hold 250 shares. We have made offers to the holders of the other 750 shares of stock and to the holders of the Notes to acquire such stock and Notes, subject to certain conditions, and these offers have been accepted by the holders of the 750 shares of stock and by the holders of over 97% of the Notes. As part of this purchase price we are giving up approximately $3,613,500 of Panhandle Eastern Bonds. We propose that, if we acquire these Notes and stock, Panhandle Corporation be dissolved and liquidated in such manner that you receive Panhandle Corporation's half of the Common Stock of Panhandle Eastern. In connection with this liquidation we would cause Panhandle Corporation to satisfy such of its Two-Year 6% Collateral Trust Notes as we shall not have acquired, and we, as holders of the remainder of said Notes, would in this general plan release the guaranty by

Missouri-Kansas of the principal and interest thereof. [fol. 15261] The accomplishment of this liquidation in the most expeditious manner would require your cooperation with us in the taking of the appropriate corporate action.

It is proposed that Panhandle Eastern be recapitalized so that its outstanding securities (before the additional financing required to increase the capacity of its pipe line) would consist of $18,200,000 principal amount (subject to reduction by operation of the sinking fund) of First Mortgage Bonds, $11,000,000 par value of Preferred Stock and such number of shares of Common Stock without par value as would have an initial book value of approximately $25 per share after making certain adjustments hereinafter specified.

The First Mortgage Bonds would be the existing Twenty-Year Sinking Fund Mortgage Bonds, Series A, 6%, issued under the Mortgage Trust Indenture dated as of October 1, 1930, amended in the general respects (except as to interest and sinking fund provisions) set forth in the plan of Readjustment of Funded Dept and Capitalization dated March 12, 1934, with which you are familiar. They would mature October 1, 1950, would bear interest at the rate of 6% per annum and would be subject to a cumulative sinking fund calculated to equal the principal amount of the entire issue over the fifteen-year firm period of the Detroit Contract.

The $11,000,000 par value of Preferred Stock, which the plan contemplates we are to receive, is intended to reflect approximately the amount of investment which we would by then have made in the securities of Panhandle Eastern junior to the Bonds, in excess of the investment made by Missouri-Kansas. This would include the cost to us of the one-half of the 6% Promissory Notes and additional Common Stock of Panhandle Eastern which we acquired directly from Panhandle Eastern and the cost to us (payable in Bonds and cash) of the Notes and 75% of the stock of Panhandle Corporation (both purchased at substantially below issue prices), an advance to Panhandle Corporation to pay its obligations other than the Notes, and the $300,000 cash which we have been asked to provide, and which we are willing to provide, for your use toward

meeting the expenses of the receivership of Missouri-Kansas and the settlement of claims against it.

The Preferred Stock would have a par value of $100 per share; would be entitled to dividends at the rate of 6% per annum, dividends to be cumulative only to the extent earned (depreciation and depletion being taken at no increase over the current rate) until December 31, 1936; thereafter to be fully cumulative; would be redeemable at any time in whole or in part at 110% plus accrued dividends (premium to be waived in case of partial redemption from time to time out of earnings so long as the undersigned or Columbia Gas & Electric Corporation or their respective subsidiaries or affiliates own said stock); and would be entitled to full voting rights, share for share with the Common Stock; and each share would be convertible at the option of the holder into four shares of Common Stock at any time up to the date of redemption. While any of the Preferred Stock remains outstanding there must be set aside from earnings each year 4% of tangible property account to provide for depreciation, depletion and amortization of investment before payment of dividends on the Common Stock.

The Common Stock would consist of such number of shares without par value as would have a book value of approximately $25 per share, such book value to be determined in the following manner: the consolidated balance sheet of Panhandle Eastern and subsidiaries as of December 31, 1935 would be adjusted (1) to give effect to the capital structure above set forth and (2) to write off the claims of Panhandle Eastern against Missouri-Kansas; the resulting net worth applicable to the Common Stock would be divided by $25; and the quotient, to the next lower even number of full shares, would be the number of shares of Common Stock. Applying the foregoing principles to the preliminary figures subject to audit, the number of shares would be 648,652.

In addition to the 4% of tangible property account to be set aside out of earnings as mentioned above, Panhandle Eastern would also set aside out of earnings each year, before payment of dividends on the Common Stock, an amount sufficient to amortize over a ten-year period cer-

tain assets of a non-realizable nature now carried on its books at $3,053,391.53 (less reserves heretofore established [fol. 15262] in respect thereof and amounting, as of December 31, 1935, to $123,105.13).

The Certificate of Incorporation of Panhandle Eastern would be amended so as to provide for cumulative voting for the election of directors. The Board of Directors would be reconstituted so as to consist of 9 members, initially selected by application of the cumulative voting rights in accordance with the new capitalization and its ownership as proposed herein.

The effect of the foregoing would thus be to enable the Missouri-Kansas interests to regain their position as beneficial owners of one-half of the Common Stock of Panhandle Eastern, with the right of cumulative voting in the election of directors. This Common Stock would be subject only to senior securities representing substantially the additional investment made by the undersigned subsequently to the original Common Stock investment, and would be freed from the burden of the guaranty by Missouri-Kansas (amounting to some $5,500,000) of the principal and interest of the Panhandle Corporation Notes.

The resulting distribution of the securities of Panhandle Eastern would be as follows:

	Owned by		
Securities	Columbia Oil	Receivers	Others
6% Mortgage Bonds	$14,586,500	—	$3,613,500
Preferred Stock	11,000,000	—	—
Common Stock (approximately)	324,326 sh.	324,326 sh.	

In terms of Panhandle Eastern's book value (using December 31, 1935 consolidated balance sheet figures), the following table shows what the net assets of Panhandle Eastern would be under the proposed plan:

	Under the Proposed Plan
Net Assets applicable to all securities..	$45,458,943
Less claim against Mo-Kan (which Panhandle Eastern will release)	42,607
	$45,416,336
Less Bonds	18,200,000
Balance after Bonds	$27,216,336
Less Preferred Stock	11,000,000
Balance for Common Stock	$16,216,336
One-half of Common Stock	$ 8,108,168
Claim against Mo-Kan	42,607
Net interest of Receivers	$ 8,150,775

This table does not purport to reflect the value of the assets as affected by earnings, nor does it reflect the contemplated additions to Panhandle Eastern's property nor the additional Common Stock and Bonds to be issued therefor.

As stated above, it is estimated that, in order to carry out the Detroit Contract, Panhandle Eastern will require about $8,600,000 of additional capital to increase its present capacity to deliver gas at the Illinois-Indiana State line. The plan contemplates the raising of $4,000,000 on April 1, 1936 through the issuance of 160,000 shares of additional Common Stock at $25 per share and the raising of the remaining amount through the sale of up to $4,600,000 of 6% Bonds, as needed, within three years.

The stock would be offered by Panhandle Eastern for subscription, pro rata to the holders of its Common Stock, subscription rights issued to you as Receivers or to Missouri-Kansas to be distributed pro rata (according to the total number of votes represented by the outstanding stock) to the stockholders of Missouri-Kansas who sat-

isfactorily establish that they are such stockholders, and to be exercisable only by such stockholders or their re- [fol. 15263] spective assignees. The time for the exercise of the warrants so distributed would be extended until 90 days after the termination of the receivership, but in no case beyond October 1, 1936. We would subscribe for our own share of such additional stock, we would purchase any shares not subscribed for by your stockholders and, if the time for making subscriptions should be extended, we would temporarily advance the funds to Panhandle Eastern to be repaid with interest at 6% when the subscriptions were made, to assure the availability of the necessary $4,000,000 to Panhandle Eastern on April 1, 1936. The $4,600,000 of additional Bonds as needed would be purchased by Columbia Gas & Electric Corporation at par. No compensation would be paid to us or to Columbia Gas & Electric Corporation in connection with this financing.

As you know, the existing business of Panhandle Eastern has not been sufficient to yield it an adequate return on its investment. While, of course, we are not in a position to make any representations as to future earnings and do not do so, nevertheless Columbia Gas & Electric Corporation has caused its engineers to make an extensive study of the probable effects of the Detroit Contract on the earnings of Panhandle Eastern and they have estimated that this contract (after giving effect to the proposed gas contracts referred to above) would produce, during the first full year of operation, sufficient net operating revenue, after reasonable charges for depreciation and depletion, to cover all interest charges and dividends on the Preferred Stock contemplated by the plan and thereafter would produce additional net earnings which would be available for the Common Stock on the capitalization contemplated herein. These estimated earnings and the interest of Missouri-Kansas and its stockholders therein under the proposed plan, as compared with their interest in the earnings for the latest twelve-months' period under the existing financial structure, are more clearly shown by the following table:

	Consolidated Earnings for 12 Months ended December 31, 1935	Estimated Earnings Under Proposed Capitalization for 5th Year of Operation under Detroit Contract
Total Gross Revenue (inc. Other Income)	$3,614,877	$9,785,000
Operation and Maintenance	$1,064,409	$3,121,000
Provision for Retirements and Depletion	768,197	2,247,000
Taxes (inc. Federal income taxes)	284,598	1,366,000
Total Operating Expenses	$2,117,204	$6,734,000
Gross Corporate Income	$1,497,673	$3,051,000
Interest (other than Note interest) and Amortization of Debt Discount and Expense on First Mortgage Bonds	1,230,267	1,251,000
Balance for Junior Securities	$ 267,406	$1,800,000
Note Interest	593,460*	—
Preferred Stock Dividends	—	660,000
Balance for Common Stock	$ 326,054	$1,140,000

* Note interest for one year; as of December 31, 1935, there was Note interest of $1,383,091.50 in arrears to be made up before any earnings would be available for the Common Stock.

We should be pleased to submit to your examination the data from which the engineers have drawn these estimates, in order that you may make your own decision as to the correctness thereof.

In order to effect a complete settlement of the points of difference among the parties, it is essential that your suit be dismissed and that you and Missouri-Kansas give the defendants in that suit, Panhandle Eastern, their subsidiary companies, and the officers and directors of all said companies, a general release of all your claims. For the same reason the plan also provides for the cancellation of the obligations of the parties under the contract dated September 17, 1930, under which we made our original investment in the stock of Panhandle Eastern, including the [fol. 15264] obligations with respect to the purchase of gas from Panhandle Eastern by Missouri-Kansas and Columbia Gas & Electric Corporation, inasmuch as the obligation of Panhandle Eastern under the Detroit Con-

tract would be as great as it would be justified in assuming under present conditions.

Due to unforseen complications, we were unable to present this plan to you as early as we had originally hoped, so that it will be obviously impossible for you to obtain the approval thereof by the Court of Chancery of the State of Delaware in time to enable Panhandle Eastern to notify Detroit City Gas Company by February 1, 1936, as required by Section 7 of Article II of the Detroit Contract, that the financial arrangements contemplated by the plan have been completed. We are accordingly planning to make arrangements to meet this date, which will in no way prejudice your position under the plan and which will preserve for your stockholders the subscription rights which the plan contemplates they are to receive, provided that you accept promptly and secure, on or before March 15, 1936, the approval by the Court of the action necessary to carry it into effect.

The foregoing plan is conditioned upon the following: (1) the execution by you on or before March 15, 1936 of the formal documents necessary to carry out this plan together with the approval thereof by the Court of Chancery of the State of Delaware and the approval of any other Federal or State Courts or public authorities whose approval shall be necessary and from none of which approvals appeal shall lie or the right to such appeal shall be waived by all parties; (2) the appeal of such Federal or State public authorities as shall be required by law for the consummation of the plan; and (3) that the sellers of 75% of the stock and approximately 97% of the Two-Year 6% Collateral Trust Notes of Panhandle Corporation who have contracted to sell the same to us shall perform their contracts so that we shall be able to acquire all of the debt and 75% of the stock of Panhandle Corporation. If you should accept the foregoing proposal and if thereafter for any reason not involving a breach of the Detroit Contract by Panhandle Eastern, Indiana Gas Transmission Corporation or Michigan Gas Transmission Corporation, the Detroit Contract should fail to be performed, then all of the obligations of the parties then unperformed would no longer be binding.

The action called for by the foregoing proposal would be taken by the several parties concurrently on or before April 1, 1936, except that the performance of such action as could not in the nature of things be taken concurrently would be taken at the times indicated above.

The advantages of the proposed plan to the stockholders of Missouri-Kansas (assuming the consummation of the Detroit Contract) may be summed up as follows:

1. It would immediately restore to Missouri-Kansas a full one-half direct interest in the Common Stock of Panhandle Eastern, with Preferred Stock substituted for senior obligations which are now in default.

2. Missouri-Kansas would be released from its contingent liability of over $5,500,000 in respect of its guaranty of the Panhandle Corporation Notes.

3. A means would be provided for terminating the receivership of Missouri-Kansas.

4. Your stockholders would have a direct opportunity to participate in the further equity financing of Panhandle Eastern and consequently in any increase in its earning power.

5. The direct ownership by you and your stockholders of Common Stock of Panhandle Eastern, coupled with the provisions for cumulative voting would give the Missouri-Kansas interests representatives on the Board of Directors of Panhandle Eastern, and consequently a direct voice in its management.

Under date of January 29, 1936, a consent decree was entered in the District Court of the United States for the District of Delaware, in the cause entitled United States of America, Petitioner, against Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation, and others, Defendants in equity No. 1099. A copy of said decree is enclosed. The within offer should be read in the light of its provisions.

[fol. 15265] We suggest that you give this offer your careful consideration and advise us promptly as to your willingness to accept it. In the event of your acceptance, we shall be pleased to prepare and submit the formal contract embodying the above terms, so that proceedings may be instituted promptly for its approval by the Chancery Court of the State of Delaware within the time limit above set forth.

Yours very truly,

COLUMBIA OIL & GASOLINE CORPORATION,
By Charles A. Monroe,
President.

Messrs. Henry T. Bush and C. Ray Phillips,
as Receivers of Missouri-Kansas Pipe Line Company.

Dear Sirs:

The undersigned Columbia Gas & Electric Corporation concurs in the foregoing letter and, if you accept the plan set forth therein, will agree

(a) To take all of the action on its part set forth therein; and

(b) To enter into an agreement to furnish, to the extent that it may be necessary, the funds required by Columbia Oil & Gasoline Corporation to enable it to carry out its obligations therein set forth.

Yours very truly,

COLUMBIA GAS & ELECTRIC CORPORATION,
By E. Reynolds, Jr.,
Vice-President.

[fol. 15266]

The Ambassador
Park Avenue and 51st Street
New York.

March 4, 1936.

Columbia Oil & Gasoline Corporation,
61 Broadway,
New York, N. Y.

Gentlemen:

Under the date of January 31, 1936, you submitted to the Receivers of Missouri-Kansas Pipe Line Company a proposal of settlement of the controversies existing between Missouri-Kansas Pipe Line Company and Columbia Oil & Gasoline Corporation and Columbia Gas & Electric Corporation, which proposal had been negotiated by us some time previously.

Two days later the Receivers mailed you a letter purporting to reject this offer for the reason there stated that the proposal did not comply with the stipulation under which the consent decree of January 29th was entered in the District Court of the United States for the District of Delaware in the cause entitled United States of America, petitioner, against Columbia Gas & Electric Corporation, et al, in Equity No. 1069, and the further reason that the proposal was not acceptable to them.

We are advised that this action was taken without notice to creditors and stockholders whose interests would be affected by the acceptance or rejection of this proposal.

Substantial creditors and stockholders of Missouri-Kansas Pipe Line Company, upon learning of this action of the Receivers, have asked us to undertake to have this proposal resubmitted so that it may be presented to the Chancery Court of Delaware for consideration after due notice to stockholders and creditors whose interests are to be affected. These stockholders and creditors believe the proposal should be accepted and desire an opportunity to urge the acceptance of it by the Chancery Court of Delaware.

In the interest of fairness to creditors and stockholders of Missouri-Kansas Pipe Line Company, we ask that this proposal of settlement be resubmitted.

The proposal of January 31, 1936 required acceptance by the Receivers and approval of the Chancery Court of Delaware on or before March 15, 1936. It is manifestly impossible to fairly present this matter to the Court by that date. Accordingly we suggest that the time within which the offer must be accepted by the Receivers and approved by the Court be extended to May 1, 1936.

If you renew this proposal, may we suggest that your letter of transmittal include a statement of any changes that have taken place in the general situation affecting this proposal since January 31, 1936 and, if you are aware of the basis of the Receivers' contention that this proposal does not comply with the terms of the stipulation, a statement with respect to this matter.

Very Truly yours,

(Signed) FRANK P. PARISH,
(Signed) DUPUY G. WARRICK.

[fol. 15267] March 5, 1936.

Messrs. Frank P. Parish and Dupuy G. Warrick
Ambassador Hotel,
Park Avenue and 51st Street,
New York, N. Y.

Dear Sirs:

We acknowledge receipt of your letter of the 4th instant and in reply state that you may consider our offer of January 31, 1936, addressed to Messrs. Bush and Phillips, Receivers of Missouri-Kansas Pipe Line Company, as still

in force so that it may be submitted to the Chancery Court of Delaware as you propose. We also are willing that the time within which the offer must be accepted by the Receivers and approved by the Chancery Court be extended to May 1, 1936.

Referring to your request for a statement of important developments affecting this proposal which have taken place since January 31, 1936, we would say as follows:

On January 31, 1936, Panhandle Eastern Pipe Line Company entered into an agreement under which it received from Columbia Oil & Gasoline Corporation and Columbia Gas & Electric Corporation the assurance of sufficient financial assistance to enable it to comply with its Detroit Contract, by providing that they will undertake the construction of the new pipe line to connect with the Detroit market and will provide the funds needed by Panhandle Eastern for the reinforcement of its present pipe line up to the necessary delivery capacity. This agreement was not binding on Panhandle Eastern if, within the twenty days specified in clause (b) of Article V of the stipulation accompanying the Decree of the United States District Court for the District of Delaware entered on January 29, 1936, (copy of which has already been furnished you) it arranged for the necessary financing otherwise than through the assistance of Columbia Oil and Columbia Gas. Panhandle Eastern did not, within such twenty day period, arrange for the necessary financing from any other source and thereupon became bound by the said agreement. Furthermore, on February 28, 1936, Mr. Gano Dunn, the Trustee under the said Degree, approved of this arrangement with the two Columbia companies. A copy of his letter of that date to Panhandle Eastern so expressing his approval, together with a copy of the enclosure mentioned therein, is attached hereto.

Panhandle Eastern Pipe Line Company also on January 31, 1936 (notified Detroit City Gas Company that it had arranged for the financing of the construction of the connecting line and of the reinforcement of its present pipe line pursuant to Section 7 of Article II of the contract dated August 31, 1935, between them, and has re-

ceived Detroit City Gas Company's acceptance of such notice and of the adequacy of the financial assurance contained therein.

On February 6, 1936, Panhandle Eastern Pipe Line Company retired all of its previously outstanding issue of 6% Promissory Notes, due October 2, 1950, which had been in default as to interest and by amendment of the Mortgage Trust Indenture securing its Mortgage Bonds it cured its defaults in respect to said Bonds. It accomplished these objectives by a recapitalization as the result of which its outstanding securities and the ownership thereof are as follows:

[fol. 1526S]

Securities of Panhandle Eastern	Columbia Oil	Owned by Panhandle Corp.	Public
Mortgage 6% Bonds*	$14,574,500	$ —	$3,625,500
Notes due September 1, 1937#	800,000	800,000	—
Preferred Stock (par value)	4,700,000	4,700,000	
Common Stock	1,149 shs.	1,149 shs.	

(*) The Trustee under the Mortgage now holds $315,000 cash in the Sinking Fund and is calling for tenders of Bonds to exhaust said funds.

(#) These notes bear no interest until September 1, 1936, and 5% interest for one year thereafter, payable at maturity, and are convertible at the option of the holders, par for par, into Preferred Stock.

The Preferred Stock now outstanding has the voting and conversion rights and other preferences described in our said offer dated January 31, 1936. $1,600,000 (par value) additional thereof has been authorized to be issued on the conversion of the presently outstanding Notes of the same principal amount.

On and after February 6, 1936, the undersigned Columbia Oil & Gasoline Corporation acquired by purchase or made provision for the payment of all of the presently outstanding $4,940,000 principal amount of Two-Year 6% Collateral Trust Notes of Panhandle Corporation, which are now in default as to principal and interest and which are unconditionally guaranteed as to principal and interest by Missouri-Kansas Pipe Line Company. These Notes are collaterally secured by pledge of the Notes, Preferred Stock and Common Stock of Panhandle Eastern owned by Panhandle Corporation.

On February 6, 1936, the undersigned, Columbia Oil, also purchased 750 shares (75%) of the common stock of Panhandle Corporation and loaned to Panhandle Corporation the sum of $187,876.28 for the discharge of liabilities other than its Two-Year 6% Collateral Trust Notes and its notes evidencing these loans.

Within the period specified in the above mentioned Decree, Columbia Oil has transferred to Mr. Gano Dunn, as Trustee thereunder, the Preferred Stock and Common Stock of Panhandle Eastern owned by it as shown in the above table.

The nine directors of Panhandle Eastern, selected pursuant to paragraph (a) of Section III of the above mentioned Decree are at present Messrs. Gano Dunn, Joseph A. Bower, James L. Harrop, Dean Mathey, William P. Philips, Henry T. Bush, C. Ray Phillips, Ashton W. Hawkins and F. Cliffe Johnston. The last two named were selected by Mr. Dunn to be independent of either Columbia or Missouri-Kansas interests and Columbia Oil has advised Mr. Dunn that, as to Messrs. Henry T. Bush and C. Ray Phillips and to the two so selected by him, the nomination applies also to the next annual election of directors which will occur on March 9, 1936.

Replying to your request that if we are aware of the basis of the Receivers' contention that our proposal did not comply with the terms of the stipulation, we should enclose a statement with respect to this matter, we beg to say that we have not been advised by the Receivers of the basis for their contention. With respect to certain provisions of the offer which you and we have heretofore discussed, we can add the following as a clarification of their meaning:

The plan of financing the whole project of supplying the Detroit market with natural gas from Panhandle Eastern Pipe Line Company, as set forth in our said offer of [fol. 15269] January 31, 1936, embodied the terms on which the undersigned Columbia Oil & Gasoline Corporation and Columbia Gas & Electric Corporation would be willing to assist in this financing. (Their agreement with Panhandle Eastern dated January 31, 1936, described in the second paragraph of this letter, is in conformity there-

with.) The provision in said plan that Columbia Gas would construct or acquire the necessary connecting pipe line from Panhandle Eastern's present pipe line to the city gate at Detroit in no way restricted Panhandle Eastern in its freedom to make other arrangements for this financing within the period provided in the above mentioned Decree entered on January 29, 1936. On the contrary, this provision, acceptance of which was optional with Panhandle Eastern, relieves Panhandle Eastern of the burden of raising approximately half of the total new capital funds needed for the whole Detroit project.

Another of the provisions of our said offer dated January 31, 1936, contemplated the cancellation of those provisions of the contract dated September 17, 1930, (between Missouri-Kansas, The National City Company and the undersigned Columbia Oil) which relate to the execution of contracts for the purchase of gas from Panhandle Eastern by Columbia Gas and Missouri-Kansas. The differences of opinion arising from varied meanings attributed to these provisions constitute a part of the claims asserted by the Receivers of Missouri-Kansas in their suit against us and others which our said offer dated January 31, 1936, proposed to settle. If any settlement is to be made, manifestly it should be a settlement of all controversies. The requirements of the Detroit Contract so absorb the capacity of Panhandle Eastern's pipe line as then constituted that it can not make additional commitments for substantial quantities of firm gas. Furthermore, should it hereafter become possible to increase the capacity of the line beyond the requirements of the Detroit Contract, this arrangement would not prevent Panhandle Eastern from selling its then available gas to Missouri-Kansas or to any other purchaser on the terms which might then appear most advantageous to it.

If there are any other features of this matter about which you would care to make inquiry, we should be glad to have you take them up with us.

Yours very truly,

COLUMBIA OIL & GASOLINE CORPORATION,

By Charles A. Munroe, President.

The undersigned, Columbia Gas & Electric Corporation, concurs in the foregoing letter.

COLUMBIA GAS & ELECTRIC CORPORATION,

By E. Reynolds, Jr.,
Executive Vice-President.

[fol. 15270] April 22, 1936.

Columbia Oil & Gasoline Corporation
and
Columbia Gas & Electric Corporation
61 Broadway
New York, N. Y.

In re: Missouri-Kansas Pipe Line Company Receivership.

Dear Sirs:

We, the undersigned, Receivers of Missouri-Kansas Pipe Line Company, suggest that your offer to us dated January 31, 1936, as supplemented by your letter of March 5, 1936, filed in the Missouri-Kansas Pipe Line Company receivership proceedings, be modified in the following particulars and we hereby offer, in the event you agree to the following modifications, that we will present the offer as so modified to the Chancellor of the State of Delaware at the adjourned hearing now set for Thursday, April 23, 1936, and will recommend that he enter an order directing us to accept the offer as so modified. Subject to your acceptance and such approval by the Chancellor, we agree to carry into effect with you the offer as so modified.

The modifications are as follows:

1. That the Preferred Stock of Panhandle Eastern Pipe Line Company, as described in your letter of January 31, 1936, be changed in the following respects:

(a) The provision for the convertibility of each share of Preferred Stock into 4 shares of Common Stock at any time up to the date of redemption be eliminated;

[fol. 15271] (b) The provision giving the Preferred Stock voting rights for the election of directors be eliminated and there be substituted in lieu thereof the following arrangement:

Of the 110,000 shares of Preferred Stock mentioned in your letter of January 31, 1936, 10,000 shares be set apart and designated as Class B Preferred Stock and the same be non-redeemable, non-convertible and non-participating in earnings except that such 10,000 shares shall bear a dividend provision identical with the dividend provisions provided for in your letter of January 31, 1936, and that said 10,000 shares of Class B Preferred Stock be entitled to elect as a class two of the nine directors to the Board of Panhandle Eastern Pipe Line Company. The balance of the directors, seven in number, shall be elected by the common stock and said stock shall have cumulative voting rights;

(c) The balance of the 110,000 shares of Preferred Stock mentioned in your letter of January 31, 1936, other than the shares to be set apart as a Class B, Preferred Stock, as mentioned in subparagraph (b) above consisting of 100,000 shares of Preferred Stock be designated Class A Preferred Stock and until redeemed shall be entitled to [fol. 15272] participate in earnings of Panhandle Eastern Pipe Line Company upon the following basis:

When in any year the preferred dividends plus any and all accumulations on both the Class A and the Class B Preferred Stock outstanding have been declared and paid and a dividend has been declared and paid upon the Common Stock at the rate of $1.50 per share, any further dividends declared and paid in any such year shall be shared by the Class A preferred Stock and the Common Stock by classes in the ratio of 25% thereof to the Class A Preferred Stock and 75% thereof to the Common Stock so long as the 100,000 shares of Class A Preferred Stock are outstanding. In the event that the Class A Preferred Stock is redeemed in part the percentage of participation of the remaining Class A Preferred Stock outstanding shall be in such proportion of 25% as such number of shares outstanding bears to 100,000 and upon said percentage (25%) being reduced through part of the Class A Preferred Stock

being redeemed, the percentage otherwise payable to the Common Stock (75%) would be accordingly increased;

(d) Said Class A Preferred Stock shall be redeemable at any time in whole or in part at par plus accrued divi- [fol. 15273] dends on or before July 1, 1941; after July 1, 1941, said Class A Preferred Stock shall be redeemable at any time in whole or in part at 110% plus accrued dividends. However, at any and all times the premium of 10% on such stock shall be waived upon any redemption from time to time out of earnings of the Corporation of any part of said Class A Preferred Stock then owned, held or controlled by Columbia Oil & Gasoline Corporation or Columbia Gas & Electric Corporation.

(e) Except as above stated, the Class A and Class B Preferred Stock shall contain identical provisions which shall be substantially those now stated in the Certificate of Incorporation.

2. The 80,000 shares of Common Stock which the offer of January 31, 1936, contemplates shall first be tendered to stockholders of Missouri-Kansas Pipe Line Company and thereafter taken up by Columbia Oil & Gasoline Corporation to the extent not purchased by said stockholders shall be tendered to said stockholders as provided in the offer of January 31, 1936, as modified by the letter of Ganno Dunn, Trustee, dated February 28, 1936, attached to your letter of March 5, 1936, and to the extent Missouri-Kansas Pipe Line Company stockholders do not exercise their rights to subscribe the same shall be subscribed by Columbia Oil & Gasoline Corporation, and to the extent Columbia Oil & Gasoline Corporation subscribes for said shares and [fol. 15274] purchases the same Missouri-Kansas Pipe Line Company or any new corporation taking over its assets under any plan of reorganization or readjustment or reclassification of its stock shall have the right to purchase said shares at $25 per share plus interest at the rate of 6% per annum from the date of purchase by Columbia Oil & Gasoline Corporation to the date of such purchase from Columbia Oil & Gasoline Corporation during a period of six months after the discharge of the undersigned as Receivers of Missouri-Kansas Pipe Line Company and the termination of the receivership estate except that in

no event shall such right continue after the 31st day of December, 1937. In your offer of January 31, 1936, you have the following statement:

"The stock would be offered by Panhandle Eastern for subscription pro rata to the holders of its Common Stock, subscription rights issued to you as Receivers or to Missouri-Kansas to be distributed pro rata (according to the total number of votes represented by the outstanding stock) to the stockholders of Missouri-Kansas who satisfactorily establish that they are such stockholders, and to be exercisable only by such stockholders or their respective assignees."

This should be changed to read as follows:

[fol. 15275] The stock would be offered by Panhandle Eastern for subscription, pro rata to the holders of its Common Stock, subscription rights issued to you as Receivers or to Missouri-Kansas to be distributed pro rata among the holders of your Common Stock and Class B Stock in proportion to the relative dividend and liquidation provisions of said classes of stock, namely, each Class B share would be entitled to one-twentieth of the right which would be accorded each share of the Common Stock. Such distribution to be made to the stockholders of Missouri-Kansas who satisfactorily establish that they are such stockholders and said rights to be exercisable only by such stockholders or their respective assignees.

3. The September 17, 1930 contract shall be canceled as provided in your offer of January 31, 1936 without prejudice, however, to Missouri-Kansas Pipe Line Company or its Receivers to enter into any contract or contracts with Panhandle Eastern Pipe Line Company for the purchase of gas which the Board of Directors of Panhandle Eastern Pipe Line Company agree upon and the releases to be given to you pursuant to your offer shall include all rights of Panhandle Eastern Pipe Line Company and its stockholders, you and we cooperating as the owners of its entire stock to authorize the same.

4. The provisions in the offer of January 31, 1936, with respect to the amount of cash which the undersigned shall receive, be changed as follows:

[fol. 15276] (a) The payment of $300,000 presently provided for, remains;

(b) Columbia Oil & Gasoline Corporation shall purchase from the Receivers at $25 per share up to 40,000 shares of Panhandle Eastern Pipe Line Company Common Stock which the Receivers will obtain under the offer, provided, however, that at least such number of shares be first offered to the present stockholders of Missouri-Kansas Pipe Line Company for purchase by them at $25 per share, in addition to, at the same time and in the same manner, as the 80,000 shares referred to in Paragraph 2 above. The obligation of Columbia Oil & Gasoline Corporation shall be to purchase only such portion as shall not be taken by the stockholders after such offering, but the money provided by Columbia Oil & Gasoline Corporation shall be used only for the purpose of paying claims adjudicated in the receivership proceedings and administration fees and expenses allowed by the Chancellor. Money raised from other sources or from stockholders may be used for other purposes. To the extent there would not be needed for said purposes the full $1,000,000 which would be so provided by Columbia Oil & Gasoline Corporation if it purchased 40,000 shares of the Panhandle Eastern stock at $25 per share, Columbia Oil & Gasoline Corporation shall not be called upon to make such purchase. In [fol. 15277] the event Columbia Oil & Gasoline Corporation is called upon to purchase any part or all of the 40,000 shares, Missouri-Kansas Pipe Line Company or any new company taking over its assets under a plan of reorganization, readjustment or reclassification, shall be given a right within a period of six months after the discharge of the undersigned as Receivers of Missouri-Kansas Pipe Line Company and the termination of the receivership estate to repurchase said shares at $25 per share plus interest at the rate of 6% per annum from the date of purchase by Columbia Oil & Gasoline Corporation to the date of such purchase from Columbia Oil & Gasoline Corporation, which right shall in no event extend beyond the 31st day of December, 1937.

(c) In the event the Chancellor of the State of Delaware shall request an extension of the offer beyond May 1,

1936, you will be willing to extend it for his convenience until the 10th day of May, 1936.

5. Except as the modifications suggested in this letter make changes in the offer of January 31, 1936, all of its terms and provisions shall remain unaltered.

C. RAY PHILLIPS.
HENRY T. BUSH.
As Receivers of Missouri-Kansas Pipe Line Company.

We hereby agree to the modification set forth above.

[fol. 15278] COLUMBIA OIL & GASOLINE CORPORATION,
By Charles A. Munroe, President.

COLUMBIA GAS & ELECTRIC CORPORATION,
By E. Reynolds, Jr., President.

[fol. 15279] Marvel, Morford, Ward & Logan
Delaware Trust Building
Wilmington, Delaware

April 29, 1936.

Columbia Gas and Electric Corporation
Columbia Oil and Gasoline Corporation
61 Broadway,
New York, New York

Gentlemen:

In re: R. H. McWilliams Co. vs. Missouri-Kansas Pipe Line Company, et al.
Consolidated and Constituent Causes

This is to advise you that Henry T. Bush and C. Ray Phillips, as Receivers of Missouri-Kansas Pipe Line Company, presented your offer dated January 31, 1936, as supplemented by your letter of March 5, 1936, and as modified by their letter to you of April 22, 1936, setting forth certain modifications which had been agreed to by you, the Chancellor of the State of Delaware at the adjourned hearing on Thursday, April 23, 1936, in the above-

captioned proceedings, and recommended that he enter an order directing them to accept the offer as so modified. This is to notify you that the Chancellor approved the offer as so modified and entered an order dated the 29th day of April, A. D. 1936, authorizing and directing said Receivers to accept the offer as so modified. Enclosed herewith is a copy of the order entered by the Chancellor.

The Receivers are now prepared and authorized to join with you in carrying the offer as so modified into effect, and, to the extent necessary, hereby accept the offer as so modified.

Yours truly,

HENRY T. BUSH AND
C. RAY PHILLIPS,
Receivers of Missouri-Kansas
Pipe Line Company.

By Marvel, Morford, Ward & Logan,
Their Attorneys.

AGL/MD
Enc.

Exhibit 158

GAS REVENUE FROM INDIANA GAS TRANSMISSION CORPORATION
AND MICHIGAN GAS TRANSMISSION CORPORATION
PERIOD FROM NOVEMBER 1931 TO NOVEMBER 1941 INCLUSIVE
PANHANDLE EASTERN PIPE LINE COMPANY

Year	Month	MCF	Average Price	Amount	Year Ended December 31 MCF	Average Price	Amount
1931 -	November	4 536	18.00	$ 816 48			
	December	260 541	18.00	46 897 38	265 077	18.00	$ 47 713 86
1932 -	January	262 637	18.00	47 274 66			
	February	184 043	18.00	33 128 64			
	March	192 050	18.00	34 569 00			
	April	170 970	18.00	30 774 60			
	May	132 986	18.00	23 937 48			
	June	120 753	18.00	21 735 54			
	July	138 822	18.00	24 987 96			
	August	117 138	18.00	21 084 84			
	September	144 380	18.00	25 988 40			
	October	123 450	18.00	22 221 00			
	November	124 663	18.00	22 439 34			
	December	122 223	18.00	22 000 14	1 834 120	18.00	330 141 60
1933 -	January	98 071	18.00	17 652 78			
	February	95 888	18.00	17 259 84			
	March	155 742	18.00	28 033 56			
	April	116 624	18.00	20 992 32			
	May	157 787	18.00	28 401 66			
	June	172 755	18.00	31 095 90			
	July	155 972	18.00	28 074 96			
	August	141 637	18.00	25 494 66			
	September	118 167	18.00	21 270 06			
	October	125 111	18.00	22 519 98			
	November	134 360	18.00	24 184 80			
	December	139 323	18.00	25 078 14	1 611 437	18.00	290 058 66
1934 -	January	141 293	18.00	25 432 74			
	February	163 159	18.00	29 368.62			
	March	147 616	18.00	26 570 88			
	April	142 012	18.00	25 562 16			
	May	133 980	18.00	24 116 40			
	June	145 353	18.00	26 163 54			
	July	129 554	18.00	23 319 72			
	August	146 266	18.00	26 327 88			
	September	140 855	18.00	25 353 90			
	October	157 335	18.00	28 320 30			
	November	135 826	18.00	24 448 68			
	December	143 100	18.00	25 758 00	1 726 349	18.00	310 742 82

GAS REVENUE FROM INDIANA GAS TRANSMISSION CORPORATION
AND MICHIGAN GAS TRANSMISSION CORPORATION
PERIOD FROM NOVEMBER 1931 TO NOVEMBER 1941 INCLUSIVE
PANHANDLE EASTERN PIPE LINE COMPANY

Year	Month	MCF	Average Price	Amount	Year Ended December 31 MCF	Average Price	Amount
1935 -	January	149 228	18.00	$ 26 861 04			
	February	139 906	18.00	25 183 08			
	March	140 903	18.00	25 362 54			
	April	146 191	18.00	26 314 38			
	May	212 081	18.00	38 174 58			
	June	156 811	18.00	28 225 98			
	July	182 790	18.00	32 902 20			
	August	171 218	18.00	30 819 24			
	September	184 920	18.00	33 285 60			
	October	228 950	18.00	41 211 00			
	November	215 022	18.00	38 703 96			
	December	441 634	18.00	79 494 12	2 369 654	18.00	$ 426 537 72
1936 -	January	769 343	18.00	138 481 74			
	February	628 519	18.00	113 133 42			
	*March	717 198	18.00	129 095 64			
	April	757 800	18.00	136 404 00			
	May	445 863	18.00	80 255 34			
	June	219 196	18.00	39 455 28			
	July	260 670	18.00	46 920 60			
	August	332 677	20.65	68 695 72			
	September	368 029	20.85	76 752 00			
	October	422 790	20.78	87 854 60			
	November	483 642	20.88	100 980 10			
	December	824 020	22.91	188 770 96	6 229 747	19.37	1 206 799 40
1937 -	January	304 344	23.20	70 595 57			
	February	477 936	21.43	102 425 89			
	March	462 053	21.32	98 514 38			
	April	568 900	19.85	112 914 48			
	May	699 003	19.23	134 427 29			
	June	690 351	19.39	133 983 60			
	July	773 116	18.85	145 718 28			
	August	790 079	18.88	149 146 36			
	September	787 750	18.72	147 444 31			
	October	777 652	19.51	151 720 60			
	November	654 210	20.46	133 835 28			
	December	653 591	20.19	131 947 56	7 639 485	19.80	1 512 673 60

*Name changed 3/4/36

GAS REVENUE FROM INDIANA GAS TRANSMISSION CORPORATION
AND MICHIGAN GAS TRANSMISSION CORPORATION
PERIOD FROM NOVEMBER 1931 TO NOVEMBER 1941 INCLUSIVE
PANHANDLE EASTERN PIPE LINE COMPANY

Year	Month	MCF	Average Price	Amount	Year Ended December 31 MCF	Average Price	Amount
1938 -	January	618 539	20.22	$ 125 094 30			
	February	532 222	22.86	121 655 87			
	March	548 718	22.12	121 359 31			
	April	586 252	22.26	130 492 62			
	May	696 510	21.08	146 807 85			
	June	655 078	20.94	137 191 60			
	July	609 954	21.18	129 192 77			
	August	647 940	21.09	136 654 77			
	September	765 046	21.09	161 344 47			
	October	831 477	20.72	172 314 74			
	November	903 984	20.28	183 324 08			
	December	904 616	20.50	185 474 68	8 300 336	21.09	$1 750 907 06
1939 -	January	895 747	20.48	183 424 00			
	February	862 104	20.65	178 000 07			
	March	959 104	19.52	187 262 21			
	April	895 425	20.56	184 075 43			
	May	948 480	20.13	190 949 35			
	June	877 849	20.50	179 921 64			
	July	847 672	20.31	172 170 01			
	August	933 025	20.29	189 329 78			
	September	887 732	21.01	186 526 72			
	October	1 041 013	20.82	216 726 07			
	November	1 038 115	21.06	218 605 78			
	December	1 005 205	20.62	207 236 29	11 191 471	20.50	2 294 229 35
1940 -	January	1 098 355	20.23	222 210 31			
	February	994 707	20.83	207 185 34			
	March	1 039 478	20.44	212 498 58			
	April	943 766	21.66	204 382 38			
	May	952 551	21.47	204 502 06			
	June	877 714	21.91	192 271 56			
	July	869 147	22.01	191 290 32			
	August	1 011 225	21.57	218 146 47			
	September	1 017 150	21.42	217 871 18			
	October	1 186 440	21.17	251 194 26			
	November	1 140 722	20.52	234 060 66			
	December	1 180 342	20.35	240 196 82	12 311 597	21.08	2 595 809 96

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GAS REVENUE FROM INDIANA GAS TRANSMISSION CORPORATION
AND MICHIGAN GAS TRANSMISSION CORPORATION
PERIOD FROM NOVEMBER 1931 TO NOVEMBER 1941 INCLUSIVE
PANHANDLE EASTERN PIPE LINE COMPANY

Year	Month	MCF	Average Price	Amount	Year Ended December 31 MCF	Average Price	Amount
1941 -	January	1 233 135	21.24	$ 261 876 79			
	February	1 188 548	21.71	257 975 77			
	March	1 337 190	21.09	281 959 06			
	April	1 152 899	21.77	250 988 61			
	May	1 207 457	20.81	251 301 19			
	June	1 177 162	20.37	239 805 88			
	July	1 230 515	20.03	246 447 92			
	August	1 282 293	19.82	254 199 27			
	September	1 350 073	20.06	270 827 61			
	October	1 462 223	20.32	297 096 23			
	November	1 463 279	21.20	310 250 92			
Totals 11 Months 1941 -		14 084 777	20.75	$2 922 729 25			

[fol. 15285] (Exhibit 160)

Panhandle Eastern Pipe Line Company

Purchase Agreement

February 2, 1942.

Glore, Forgan & Co. and
Kidder, Peabody & Co.,
as Representatives of the respective
Purchasers named within,
38 Wall Street, New York, N. Y.

Dear Sirs:

The undersigned, Panhandle Eastern Pipe Line Company (hereinafter called the "Company"), hereby confirms its agreement with the several Purchasers, or with the Purchaser, as the case may be, hereinafter named, as follows:

1. Purchasers and Representative. If there shall be two or more persons, firms or corporations named in paragraph 13 hereof, the term "Purchasers" as used herein shall be deemed to mean the several persons, firms, or corporations so named (including the Representative hereinafter mentioned, if so named), and if there shall be only one such person, firm or corporation so named, the term "Purchasers" as used herein shall mean such person, firm or corporation. The term "Representative" as used herein shall be deemed to mean the representative or, if more than one, the representatives to whom this Purchase Agreement is addressed, who by signing this Purchase Agreement represent that it or they have been authorized by the Purchasers to execute this Purchase Agreement on their behalf and to act for them in the manner herein provided, and if there shall be only one Purchaser the term "Representative" as used herein shall be deemed to mean such Purchaser. All obligations of the Purchasers hereunder are several in accordance with their respective interests and not joint, and nothing herein contained shall constitute the Purchasers co-partners of each other.

2. Description of Bonds and Stock. The Company proposes to issue $10,000,000 principal amount of its First Mortgage and First Lien 3% Bonds, Series C, due January 1, 1962 (hereinafter called the "Bonds"), to be issued under and secured by its presently existing Mortgage and Deed of Trust (hereinafter called the "Original Indenture"), dated November 1, 1940, to City Bank Farmers Trust Company and James M. Kemper, as Trustees, and a proposed Supplemental Indenture to be dated January 1, 1942 (hereinafter called the "Supplemental Indenture"). The Original Indenture and the Supplemental Indenture are hereinafter sometimes collectively called the "Indenture". The Bonds and the Supplemental Indenture have been duly authorized by appropriate corporate action and will be in the forms or substantially in the forms, respectively, filed with the Securities and Exchange Commission (hereinafter called the "Commission") in connection with the Registration Statement of the Company hereinafter mentioned. Two copies of the Original Indenture and of the Supplemental Indenture are herewith delivered to you, marked for identification.

The Company also proposes to issue 150,000 shares of its 5.60% Cumulative Preferred Stock (hereinafter called the "Stock"), to be created and authorized by a Certificate of Amendment of the Certificate of Incorporation of the Company (filed under Section 26 of Chapter 65 of the Revised Code, as amended, of the State of Delaware) and a proposed Certificate Setting Forth the Designation and Certain of the Terms of the 5.60% Cumulative Preferred Stock (to be filed under Section 13 of Chapter 65 of said Revised Code.) The Stock and said two Certificates (said two Certificates being hereinafter sometimes collectively called the "Certificate of Amendment") have been duly authorized by appropriate corporate action and the stock certificates for such Stock and said two Certificates will be in the forms or substantially the forms, respectively, filed with the Commission in connection with said Registration Statement. Two copies of each of said Certificates are herewith delivered to you, marked for identification.

[fol. 15286] 3. Representations and Warranties of the Company. The Company represents and warrants to the several Purchasers that:

(a) The Company has filed with the Commission a registration statement, on Form A-2 (Registration No. 2-4919), and a prospectus, for the registration of the Bonds and Stock under the Securities Act of 1933, as amended (hereinafter called the "Securities Act"), and such registration statement, as heretofore amended, has become effective for the purpose of the Company's public invitation for bids for the purchase of the Bonds and the Stock. The Company has prepared and will promptly file with the Commission a post-effective amendment to such registration statement (hereinafter called the "Post-Effective Amendment") and an amended prospectus (copies of which are herewith delivered to you, marked for identification) and will not at any time before the effective date of the Post-Effective Amendment file any other amendment to such registration statement or any other amended prospectus of which the Representative shall not previously have been advised and furnished with a copy thereof or to which the Representative shall reasonably object in writing. Such registration statement, as heretofore amended, and as amended by the Post-Effective Amendment and by such other amendment or amendments thereto, if any, as may be filed before the effective date of the Post-Effective Amendment, and the amended prospectus now proposed to be filed or, if any other amended prospectus be filed before the effective date of the Post-Effective Amendment, the last such amended prospectus filed, are hereinafter called the "Registration Statement" (which term shall include all financial statements and exhibits) and the "Prospectus", respectively. The Company will not file any amendment to the Registration Statement or any supplement to the Prospectus or any amended prospectus after the effective date of the Post-Effective Amendment of which the Representative shall not previously have been advised and furnished with a copy thereof or which shall be disapproved by Messrs. Chadbourne, Hunt, Jaeckel & Brown who are acting as counsel on behalf of the several Purchasers for the purposes of this Purchase Agreement.

(b) When the Post-Effective Amendment shall become effective, the Registration Statement and the Prospectus will fully comply with the provisions of the Securities Act

and the Rules and Regulations of the Commission thereunder, and the Registration Statement will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading, and the Prospectus will not contain an untrue statement of a material fact and will not omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading; provided, however, that it is understood that none of the representations and warranties in this clause (b) contained shall apply to statements or omissions in the Registration Statement or Prospectus made in reliance upon or in conformity with information furnished herein or in writing to the company by or on behalf of any Purchaser for use in connection with the preparation of the Registration Statement or Prospectus, or to any statements in or omissions from the Statements of Eligibility and Qualification (Forms T-1 and T-2) of the Trustees under the Indenture.

(c) The accountants who have certified or shall certify the financial statements and schedules (except certain financial statements of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation which are stated in the Registration Statement not to be certified) filed and to be filed with the Commission as parts of the Registration Statement and the Prospectus are independent public or independent certified public accountants, as required by the Securities Act and the Rules and Regulations of the Commission thereunder.

(d) Since the respective dates as of which information is given in the registration statement and the prospectus, as heretofore amended, there has not been any substantial change in the condition of the Company or in the condition of its subsidiary company, financial or otherwise, except changes on account of dividends declared or changes arising from transactions in the ordinary course of business or except as described in the Post-Effective Amendment and the amended prospectus now proposed to be filed.

[fol. 15287] (e) The Company has filed with the Commission an application and declaration on Form U-1 under the Public Utility Holding Company Act of 1935, seeking an appropriate order authorizing or permitting the issue and sale by the Company of the Bonds and the Stock and the transactions related thereto. The State Corporation Commission of Kansas has issued its order or orders authorizing or permitting the issue and sale by the Company of the Bonds and the Stock and the transactions related thereto. Copies of the said order or orders have been heretofore delivered to the Representative. If the order sought from the Commission is obtained and if such order and said order or orders of the State Corporation Commission of Kansas continue in full force and effect, no consent of or approval by any other public board or body is necessary to authorize the issue and sale of the Bonds and the Stock, except that the Registration Statement under the Securities Act must become effective and there must be compliance with the securities laws in the states in which the Bonds and the Stock are to be sold.

(f) All the real property and interest therein of the Company subject or to be subject to the lien of the Indenture are or will be adequately described in the Indenture, in order that the Indenture shall constitute a valid lien on all such property.

4. Time and Place of Closing. Delivery of the Bonds and Stock (excepting the maximum number of shares to be reserved by the Company for offering to certain of its Common Stockholders as stated in paragraph 14 hereof, delivery of and payment for the shares so reserved and not subscribed for by such stockholders to be made at the time provided in said paragraph 14) and payment therefor shall be made at the office of City Bank Farmers Trust Company, 22 William Street, New York, New York, at 9:30 o'clock a.m. (Eastern Standard Time) on the third full business day (unless postponed in accordance with the provisions of paragraph 11 hereof) following the day on which the Post-Effective Amendment shall become effective, or at such other time on such date, not later than ten business days after such effective date, as shall be agreed upon in writing by the Company and the Repre-

sentative. The hour and date of such delivery and payment is herein called the "Closing Date". Anything herein contained to the contrary notwithstanding, the obligation of the Company to deliver any of the Bonds or Stock hereunder, and the obligation of the Purchasers to purchase any of the Bonds or Stock hereunder, shall be subject to the condition that at the Closing Date the Company shall sell and receive payment for all the Bonds and all the Stock (except as otherwise provided in paragraph 14 hereof) in accordance with the terms hereof. Payment for the Bonds and the Stock shall be made to the Company or its order by certified or bank cashier's checks in New York Clearing House funds for the respective accounts of the several Purchasers. Such payment shall be made upon delivery of the Bonds and of certificates for the Stock to the Representative for the respective accounts of the several Purchasers against receipt therefor signed by the Representative. Initial delivery of the Bonds shall be made in the denominations of $1,000 each, either (at the option of the Company) in temporary form without coupons or in definitive form with coupons, registerable as to principal only and in form satisfactory to Messrs. Chadbourne, Hunt, Jaeckel & Brown. If delivery of the Bonds shall be made in the form of temporary Bonds without coupons, such Bonds shall be exchangeable without charge to the holders thereof for definitive Bonds with coupons, registerable as to principal only, when prepared, which shall be as soon as reasonably practicable after the delivery of the temporary Bonds; provided, that at the option of the Company and on agreement with the Representative, such temporary Bonds shall also be exchangeable without charge to the holders thereof for the definitive fully registered Bonds without coupons, when prepared, in such denominations permitted by the Supplemental Indenture as may be agreed upon between the Company and the Representative and in form satisfactory to Messrs. Chadbourne, Hunt, Jaeckel & Brown, as soon as reasonably practicable after the delivery of the temporary Bonds. Initial delivery of the certificates for the Stock shall be made either (at the option of the Company) in temporary form or in definitive form registered in such names and in such denominations as the Representative

shall request in writing. If the Representative shall request that any certificate be issued in a name or names other than that of the Purchaser agreeing to purchase the shares of Stock represented thereby, such Purchaser shall pay any transfer taxes resulting from such issuance.

It is understood that the Representative, individually and not as the Representative, may (but shall not be obligated to) make payment to the Company for the Bonds and for the Stock to be purchased by any Pur- [fol. 15288] chaser whose check shall not have been received by the Representative on the Closing Date for the account of such Purchaser. Any such payment by the Representative shall not release such Purchaser from any of its obligations hereunder.

5. Deposit. The Company acknowledges the deposit with it by the several Purchasers of a certified or bank cashier's check or checks for 5% of the principal amount of the Bonds (amounting, in the aggregate, to $500,000) and 5% of the par value of the Stock (amounting, in the aggregate, to $750,000) agreed to be purchased by the respective Purchasers. The amount so deposited by each Purchaser shall be held by the Company as security for the faithful performance by such Purchaser of its obligations hereunder until disposed of as hereinafter in this paragraph 5 provided. Upon receipt by the Company of payment for the Bonds and Stock agreed to be purchased by any Purchaser as provided in paragraph 13 hereof, or if this agreement shall be terminated, otherwise than on account of the default of such Purchaser, either pursuant to the provisions of paragraph 11 hereof or by reason of non-fulfillment of the conditions specified in paragraph 4 hereof, the Company shall forthwith return the amount of such deposit, without interest, to the Representative for account of such Purchaser. In the event that this Purchase Agreement shall be duly terminated in accordance with the provisions of paragraphs 7, 8 or 10 hereof or because of any material misstatement in or breach of the representations or warranties in paragraph 3 hereof or of any default of the Company in the performance of its obligations hereunder, the Company shall forthwith return the amount of all such deposits, without interest, to the

Representative for the account of the respective Purchasers. The Company may return such deposits either by returning the checks deposited with it by the Representative or the several Purchasers or by issuing and delivering to the Representative or the several Purchasers (as the case may be) its own check or checks, certified if requested, in amounts equal to the amount so deposited by the Representative or the several Purchasers (as the case may be). In the event that any Purchaser shall fail or refuse, otherwise than for some reason sufficient to justify in accordance with the terms hereof the cancellation or termination of its obligations hereunder, to purchase and pay for the Bonds and the Stock which such Purchaser has agreed to purchase, as provided in paragraph 13 hereof, the deposit made by such Purchaser shall become the property of the Company free of any claim on the part of such Purchaser or of the Representative, without prejudice, however, to any other rights of the Company under this Purchase Agreement.

6. Covenants of the Company. The Company covenants and agrees that:

(a) The Company will use its best efforts, when and as requested by the Representative, (i) to qualify the Bonds and Stock for sale under the securities or blue sky laws of such states as the Representative may designate (provided, always, that the Company shall not be required to expend for such purpose more than the maximum amount specified in subparagraph (e) (v) of this paragraph 6); and (ii) as soon as practicable after request of the Representative, made not later than fifteen months after the delivery of and payment for the Bonds and Stock, to procure the listing of the Bonds and the Stock on the New York Stock Exchange, and the registration thereof under the Securities Exchange Act of 1934.

(b) The Company will promptly deliver to the Representative two conformed copies of the aforesaid registration statement as originally filed and of all amendments thereto heretofore or hereafter made, including the Post-Effective Amendment (in each case including all exhibits thereto filed therewith), and of any further amended prospectus, and will also deliver to the Representative, for

distribution to the Purchasers, a sufficient number of additional copies of each of the foregoing (but without exhibits) so that one copy of each may be distributed to each Purchaser. The Company will also send to the Purchasers, without expense to them, on the effective date of the Post-Effective Amendment and thereafter from time to time during the period of one year after the effective date of the Post-Effective Amendment, as many copies of the Prospectus as supplemented or amended, if the Company shall have made any supplements or amendments thereto, as the Representative may reasonably request for the purposes contemplated by the Securities Act.

[fol. 15289] (e) The Company will pay all expenses in connection with (i) the preparation and filing by it of the Registration Statement and Prospectus and the printing of this Purchase Agreement, (ii) the issue and delivery of the Bonds and Stock as provided in paragraphs 4 and 14 hereof, (iii) the preparation, execution and recording and/or filing of the Supplemental Indenture and the Certificate of Amendment, (iv) the listing of the Bonds and the Stock on the New York Stock Exchange and the registration thereof under the Securities Exchange Act of 1934 (if there shall be any such listing and registration of the Bonds and Stock), (v) the qualification of the Bonds and Stock under state securities or blue sky laws as aforesaid, but not in excess of $3,000 including filing fees; and (vi) the printing and furnishing to the Purchasers in reasonable quantities of copies of the Registration Statement and the Prospectus and any amendments or supplements thereto; and will pay all Federal taxes (but not including any transfer taxes) on the issue of the Bonds and Stock. The Company shall not, however, be required to pay any amount for any expenses of the Representative or any of the Purchasers, except that if this agreement shall be duly terminated in accordance with the provisions of paragraphs 4, 7, 8, 10 or 11 hereof or because of any material misstatement in or breach of the representations or warranties in paragraph 3 hereof or of any default of the Company in the performance of its obligations hereunder, the Company will reimburse the Representative for the reasonable fees and disbursements of Messrs. Chadbourne, Hunt, Jaeckel & Brown, who are acting on behalf of the several

Purchasers for the purposes of this Purchase Agreement. The Company shall not in any event be liable to any of the several Purchasers for damages on account of loss of anticipated profits.

(d) The Company will advise the Representative, immediately, and confirm the advice in writing, when the Post-Effective Amendment shall have become effective and when appropriate orders have been entered by the Commission and the State Corporation Commission of Kansas permitting the issuance and sale of the Bonds and the Stock.

(e) The Company will promptly notify each Purchaser in the event of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, or in the event of the institution or notice of intended institution of any action or proceeding for that purpose.

(f) In the the event the Commission shall enter a stop order suspending the effectiveness of the Registration Statement after the Bonds and Stock have been delivered to the several Purchasers and paid for as herein provided, the Company will make every reasonable effort to obtain the lifting of such order at the earliest possible moment.

(g) Until the expiration of one year after the Registration Statement becomes effective, the Company will comply so far as it is able, and at its own expense, with all requirements imposed upon it by the Securities Act, as now and hereafter amended, and by the Rules and Regulations of the Commission thereunder, as from time to time in force, so far as necessary to permit the continuance of sales of or dealings in the Bonds and Stock in accordance with the provisions hereof and the Prospectus.

(h) The Company will, so long as any of the Bonds or Stock shall be outstanding, deliver to the Representative upon its request, and to each Purchaser who may so request, as soon as practicable after the close of every fiscal year, a balance sheet of the Company, setting forth its financial condition as of the end of such fiscal year, together with statements of income and surplus for such fiscal year, all in reasonable detail, such balance sheet and statements of income and surplus to be accompanied by a copy of the certificate or report with respect thereto of

independent public or certified public accountants, who may be the regular accountants for the Company. If there be subsidiaries of the Company whose accounts, in the ordinary practice of the Company, are consolidated with the Company's accounts, such financial statements shall be furnished on a consolidated basis.

(i) During a period of one year after the effective date of the Post-Effective Amendment, if any event relating to or affecting the Company or its subsidiaries, or of which the Company shall be advised in writing by the Representative, shall occur as a result of which it is necessary to supplement or amend the Prospectus in order to make the Prospectus not misleading in the light of the circum- [fol. 15290] stances existing at the time it is delivered to a Purchaser, the Company will forthwith at its expense prepare and furnish to the Purchasers a reasonable number of copies of a supplement or supplements or an amendment or amendments to the Prospectus (in form satisfactory to Messrs. Chadbourne, Hunt, Jaeckel & Brown) which will supplement or amend the Prospectus so that as supplemented or amended it will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances existing at the time the Prospectus is delivered to a purchaser, not misleading. In case any Purchaser is required to deliver a prospectus descriptive of the Bonds and Stock after the expiration of one year after the effective date of the Post-Effective Amendment, the Company, upon the request of the Representative, will furnish to the Representative, at the expense of such Purchaser, a reasonable quantity of supplemented prospectuses or supplements to the Prospectus complying with Section 10 of the Securities Act. For the purposes of this paragraph (i) the Company will furnish such information with respect to itself and its subsidiaries as the Representative may from time to time reasonably request.

(j) The Company will make generally available to its security holders, as soon as practicable, an earning statement (which need not be audited) in the same detail as the statement of income appearing in the Registration Statement, covering a period of at least twelve months

beginning not earlier than the effective date of the Post-Effective Amendment.

(k) The Company will apply the proceeds from the sale of the Bonds and the Stock as set forth in answer to Item 28 of the Registration Statement.

7. Conditions of Purchasers' Obligations. The obligations of the several Purchasers to purchase and pay for the Bonds and Stock shall be subject to the performance by the Company of its obligations to be performed hereunder at and prior to the Closing Date, and upon the following terms and conditions:

(a) The Post-Effective Amendment shall have become effective prior to 7 o'clock P. M. (Eastern Standard Time) on February 4, 1942, or such other time and date, not later than 7 o'clock P. M. (Eastern Standard Time) on the seventh day thereafter, as may be approved by the Representative; the effectiveness of the Registration Statement shall continue; and no stop order shall have been issued under the Securities Act, or proceedings therefor instituted by the Commission, prior to the Closing Date.

(b) Prior to 7 o'clock P. M. (Eastern Standard Time) on February 4, 1942, or such other time and date, not later than 7 o'clock P. M. (Eastern Standard Time) on the seventh day thereafter, as may be approved by the Representative, there shall have been issued, and on the Closing Date there shall be in full force and effect, an order or orders of the Commission and of the State Corporation Commission of Kansas permitting the issuance and sale of the Bonds and the Stock and the transactions related thereto on the terms and conditions herein set forth or contemplated and containing no provision unacceptable to the Representative.

(c) At or prior to the Closing Date the several Purchasers shall have received from Messrs. Chadbourne, Hunt, Jaeckel & Brown, who are acting on behalf of the several Purchasers for the purposes of this Purchase Agreement, a favorable opinion (in rendering which they may rely upon either or both of the Company's counsel named in subparagraph (d) hereof regarding matters pertaining to titles, franchises, the lien of the Indenture, recording and filing of the Indenture and conformity to local

law, with the reservation that they have not passed upon and express no opinion with respect to such matters except that they have independently examined the laws of the various states in which the Company's properties are located as to the jurisdiction of State Commissions over the issuance of the Bonds and Stock and concur in the opinion of Company's counsel with regard to this matter) to the effect that—

(i) the Company is a validly organized and existing corporation under the laws of the State of Delaware;

[fol. 15291] (ii) the Indenture has been duly and validly authorized, executed and delivered and is in due and proper form and constitutes the valid mortgage of the Company;

(iii) the execution, authentication and issuance of the Bonds have been duly and validly authorized by all necessary corporate action and the Bonds are in due and proper form and when duly executed and authenticated and delivered to the Purchasers thereof against payment of the agreed consideration therefor they will be legal, valid and binding obligations of the Company enforceable (subject to bankruptcy and insolvency laws) in accordance with their terms and entitled to the benefits and security of the Indenture;

(iv) the Certificate of Amendment has been duly and validly authorized, executed and filed and constitutes valid amendments to the Certificate of Incorporation of the Company;

(v) the issuance and sale of the Stock have been duly and validly authorized by all necessary corporate action, and the certificates therefor are in due and proper form and when duly executed and delivered to the Purchasers thereof against payment of the agreed consideration therefor, the shares represented thereby will be duly and validly issued and full paid and non-assessable;

(vi) the execution and delivery of this Purchase Agreement have been duly and validly authorized by all necessary corporate action on the part of the Company and constitutes the valid and binding agreement of the Company;

(vii) orders have been entered (in proceedings as to the validity of which they have relied upon opinions of counsel for the Company) by the Commission under the Public Utility Holding Company Act of 1935 and by the State Corporation Commission of Kansas, permitting the issuance and sale of the Bonds and the Stock and the transactions related thereto; and no further approval, authorization, consent, certificate or order of any public board or body is legally required for the issuance and sale by the Company of the Bonds and Stock pursuant to this agreement;

(viii) the Post Effective Amendment has become, and at the closing date the Registration Statement is, effective under the Securities Act, and, to the best of their knowledge, no proceedings for a stop order are pending or threatened under Section 8(d) of the Securities Act;

(ix) the Registration Statement and Prospectus (other than the financial statements included therein as to which no opinion need be rendered) comply as to form in all material respects with the requirements of the Securities Act, and the Trust Indenture Act of 1939 and the Rules and Regulations of the Commission thereunder;

(x) the Indenture is qualified under the Trust Indenture Act of 1939;

(xi) the terms and provisions of the Bonds and the Stock conform to their respective descriptions contained in the Registration Statement and in the Prospectus; and

(xii) the Board of Directors of the Company has adopted resolutions authorizing the redemption or other acquisition for retirement of all its outstanding Class A Preferred Stock at a price equal to the par value of such stock plus accrued and unpaid preferential dividends thereon, and all such stock has been surrendered to the Company upon payment by it of such price.

(d) At or prior to the Closing Date the several Purchasers shall have received the favorable opinions of Edward N. Goodwin, Esq., General Counsel for the Company, and or Glenn W. Clark, Esq., Head of the Legal Department of the Company, in form and substance satisfactory to Messrs. Chadbourne, Hunt, Jaeckel & Brown, to the effect that—

(i) the Company is a corporation duly organized and existing under the laws of the State of Delaware and is duly authorized to carry on the business in which it, according to the statements made in the Registration Statement, is presently engaged;

[fol. 15292] (ii) the Company is duly qualified as a foreign corporation in the States of Texas, Oklahoma, Kansas, Missouri, Illinois and Indiana;

(iii) the Indenture has been duly and validly authorized, executed and delivered and is in due and proper form and constitutes the valid mortgage of the Company;

(iv) the Indenture is a valid and direct first lien on all fixed properties of the Company as defined in the Indenture (excluding any property specifically excepted from the lien of the Indenture by the provisions thereof), subject to a certain leasehold purchase obligation in the principal sum of $14,255.87 and to certain other liens, exceptions and reservations (including permissible encumbrances defined in the Indenture) which do not, in the opinion of such counsel, materially affect the Company's title to or right to use such property and to the prior lien of the Trustees under the Indenture for compensation, expenses and liabilities; and that there have also been validly pledged under the Indenture all the outstanding capital stock of Illinois Natural Gas Company, an Illinois corporation, and all the right, title and interest of the Company in and to certain contracts between the Company and certain third parties, which securities and contracts are specifically listed in the granting clauses of the Original Indenture;

(v) the Bonds are in due and proper form, have been duly and validly authorized by all necessary corporate action and when the same have been duly executed and authenticated and delivered to the Purchasers thereof against payment of the agreed consideration therefor, they will be legal, valid and binding obligations of the Company enforceable (subject to bankruptcy and insolvency laws) in accordance with their terms and entitled to the benefits and security of the Indenture;

(vi) the Certificate of Amendment has been duly and validly authorized, executed and filed and constitutes

valid amendments to the Certificate of Incorporation of the Company;

(vii) the issuance and sale of the Stock have been duly and validly authorized by all necessary corporate action, and the certificates therefor are in due and proper form and when duly executed and delivered to the Purchasers thereof against payment of the agreed consideration therefor, the shares represented thereby will be duly and validly issued and full paid and nonassessable;

(viii) the execution and delivery of this Purchase Agreement have been duly and validly authorized by all necessary corporate action on the part of the Company and constitutes a valid and binding agreement of the Company;

(ix) orders have been entered by the Commission under the Public Utility Holding Company Act of 1935 and by the State Corporation Commission of Kansas, permitting the issuance and sale of the Bonds and the Stock and the transactions related thereto; and no further approval, authorization, consent, certificate or order of any public board or body is legally required for the issuance and sale by the Company of the Bonds and the Stock pursuant to this agreement;

(x) the Post Effective Amendment has become, and at the closing date the Registration Statement is, effective under the Securities Act, and to the best of their knowledge no proceedings for a stop order are pending or threatened under Section 8 (d) of the Securities Act;

(xi) the Registration Statement and Prospectus (other than the financial statements included therein, as to which no opinion need be rendered) comply as to form in all material respects with the requirements of the Securities Act and the Trust Indenture Act of 1939 and the Rules and Regulations of the Commission thereunder;

(xii) the Indenture is qualified under the Trust Indenture Act of 1939;

(xiii) the Board of Directors of the Company has adopted resolutions authorizing the redemption or other acquisition for retirement of all its outstanding Class A Pre- [fol. 15293] ferred Stock at a price equal to the par value

of such stock plus accrued and unpaid preferential dividends thereon, and all such stock has been surrendered to the Company upon payment by it of such price;

(xiv) the portions of the answers to the Items in the Registration Statement and the corresponding information contained in the Prospectus which are stated therein to have been made on their authority have been reviewed by them and, as to matters of law and legal conclusions, are correct;

(xv) the outstanding capital stock of the Company as set forth in Item 10A of the Registration Statement has been duly authorized and is validly issued and outstanding and full paid and non-assessable (except for the Class A Preferred Stock being acquired by the Company as stated in clause (xiii) above);

(xvi) to the best of their knowledge, neither the Company nor its subsidiary is involved in any material litigation nor does the Company or its subsidiary have any material contracts not made in the ordinary course of business required to be set forth in the Registration Statement, except as set forth in the answers to Items 40 and 41 thereof, respectively;

(xvii) the Company and its subsidiary possess all licenses, permits, consents and/or orders of governmental political subdivisions or regulatory authorities required for the maintenance and operation of their respective properties and businesses as now conducted;

(xviii) the existing gas contracts and gas and gas and oil leases to which the Company is a party are valid and enforceable contracts and leases in accordance with their terms;

(xix) Illinois Natural Gas Company is a duly organized and legally existing corporation under the laws of the State of Illinois with power and authority to carry on the business in which it, according to the statements made in the Registration Statement, is presently engaged and has outstanding stock consisting of 28,000 shares of common stock without par value, all of which have been duly authorized and issued and are full paid and non-assessable;

(xx) Michigan Gas Transmission Corporation is a duly organized and legally existing corporation under the laws of the State of Delaware and has outstanding capital stock consisting of 44,800 shares of common stock without par value, all of which have been duly authorized and issued and are full paid and non-assessable;

(xxi) Indiana Gas Distribution Company is a duly and legally existing corporation under the laws of the State of Indiana and has outstanding capital stock consisting of 20 shares of common stock without par value, all of which have been duly authorized and issued and are full paid and non-assessable;

(xxii) as contemplated in Item 29 of the Registration Statement, the Company has acquired (a) from Columbia Gas & Electric Corporation the outstanding securities (including open account indebtedness) of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation owned by (or owed to) said Columbia Gas & Electric Corporation and (b) from The Ohio Fuel Gas Company, the pipe lines referred to in said Item 29; and

(xxiii) the terms and provisions of the Bonds and the Stock conform to their respective descriptions contained in the Registration Statement and in the Prospectus.

At or prior to the Closing Date the several Purchasers shall also have received (a) photostatic copies of the opinion dated February 3, 1941 of Glenn W. Clark, Esq., addressed to Messrs. Chadbourne, Hunt, Jaeckel & Brown (having annexed thereto photostatic copies of opinions of various local counsel referred to therein) with respect to the Company's titles to its properties and the lien of the Original Indenture, (b) favorable opinions of the said Glenn W. Clark, Esq. (which may be based upon opinions of local counsel in whom he has confidence), in form and substance satisfactory to Messrs. Chadbourne, Hunt, Jaeckel & Brown as to the Company's title to property of [fol. 15294] the character of "fixed property" defined in the Indenture, acquired by it subsequent to the title examinations made in connection with the rendering of the opinions referred to in (a) above (including the pipe lines to be acquired from The Ohio Fuel Gas Company, referred to above) and as to the titles of Michigan Gas

Transmission Corporation and Indiana Gas Distribution Corporation to their respective properties.

(e) At the Closing Date the Representative shall have received a certificate, dated as of the Closing Date, signed by the President or a Vice-President and the Treasurer or the Secretary of the Company, to the effect that (i) no stop order has been issued under the Securities Act and no proceedings therefor have been instituted by the Commission, (ii) the orders of the Commission and of the State Corporation Commission of the State of Kansas permitting the issuance and sale of the Bonds and the Stock are still in full force and effect, (iii) since the respective dates as of which information is given in the Registration Statement and Prospectus, there has not been any substantial adverse change in the condition, financial or otherwise, of the Company or its subsidiary, except such as shall have occurred by reason of transactions in the ordinary and regular conduct of business, and (iv) since such dates, except as set forth in the Registration Statement, there has not been any material transaction entered into by the Company, other than transactions in the ordinary course of business and the payment of dividends on the stock of the Company.

(f) All legal proceedings to be taken in connection with the issuance and sale of the Bonds and Stock shall be satisfactory in form and substance to Messrs. Chadbourne, Hunt, Jaeckel & Brown, acting on behalf of the several Purchasers for the purposes of this Purchase Agreement.

In case any of the conditions specified above in this paragraph 7 shall not have been fulfilled, this Purchase Agreement may be terminated by the Representative with the consent of Purchasers which have agreed to purchase in the aggregate fifty per cent or more of the aggregate principal amount of the Bonds and par value of the Stock agreed to be purchased hereunder, upon mailing or delivering written notice thereof to the Company. Any such termination shall be without liability of any party to any other party except as otherwise provided in paragraph 5 and in subparagraph (e) of paragraph 6 hereof.

8. Conditions of the Company's Obligations. The obligations of the Company to deliver the Bonds and the

Stock shall be subject to the following conditions:

(a) The Post-Effective Amendment shall have become effective prior to 7 o'clock P. M. (Eastern Standard Time) on February 4, 1942, or such other time and date, not later than 7 o'clock P. M. (Eastern Standard Time) on the seventh day thereafter, as may be approved by the Company, and no stop order shall have been issued under the Securities Act or proceedings therefor instituted by the Commission prior to the Closing Date.

(b) Prior to 7 o'clock P. M. (Eastern Standard Time) on February 4, 1942, or such other time and date, not later than 7 o'clock P. M. (Eastern Standard Time) on the seventh day thereafter, as may be approved by the Company, there shall have been issued, and on the Closing Date there shall be in full force and effect, orders of the Commission and of the State Corporation Commission of Kansas permitting the issuance and sale of the Bonds and the Stock and the transactions related thereto on the terms and conditions herein set forth or contemplated and containing no provision unacceptable to the Company.

(c) The Indenture shall have become and be qualified under the Trust Indenture Act of 1939.

In case any of the conditions specified above in this paragraph 8 shall not have been fulfilled, this Purchase Agreement may be terminated by the Company, upon mailing or delivering written notice thereof to the Representative. Any such termination shall be without liability of any party to any other party except as otherwise provided in paragraph 5 and in subparagraph (c) of paragraph 6 hereof.

9. Indemnification. (a) The Company agrees to indemnify and hold harmless each Purchaser and each person, if any, who controls any Purchaser within the meaning of Section 15 of the Securities Act, from and against [fol. 15295] any and all losses, claims, damages or liabilities, joint or several, to which such Purchaser or such controlling person may become subject under the Securities Act, or the common law, or otherwise (and will reimburse each such Purchaser and controlling person for any reasonable legal or other expenses incurred by it or

them in connection with defending against any such losses, claims, damages or liabilities unless the Company designates counsel, with the approval of such Purchaser or controlling person, which approval shall not be unreasonably withheld, to conduct the defense of such action at its own expense as hereinafter provided) arising out of or based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any post-effective amendments thereto, or the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or (ii) any untrue statement or alleged untrue statement of a material fact contained in the Prospectus (or the Prospectus as amended or supplemented, if such losses, claims, damages or liabilities arise out of or are based upon the use of the Prospectus or the Prospectus as amended or supplemented after the Company shall have amended or supplemented the Prospectus), or the omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that in no case shall the Company be liable under the indemnity agreement contained in this paragraph unless such Purchaser or controlling person, within ten days after a summons or other legal process shall have been served upon it, shall notify the Company in writing of such service and shall have afforded the Company an opportunity to appoint counsel to conduct the defense of such suit in association with such other counsel, if any, as such Purchaser or controlling person may choose to select, the fees and expenses of such other counsel, if any, to be paid in such case by such Purchaser or controlling person; and, provided, further, that the indemnity agreement contained in this paragraph shall not apply to any such losses, claims, damages or liabilities arising out of or based upon any such untrue statement or alleged untrue statement, or any such omission or alleged omission, if such statement or omission was made in reliance upon and in conformity with information furnished herein or in writing to the Company by or on behalf of any Purchaser for use in connection with the preparation of the Registration Statement or the Pros-

pectus or any amendment or supplement to either thereof, or arising out of or based upon statements in or omissions from that part of the Registration Statement which shall constitute the Statements of Eligibility and Qualification under the Trust Indenture Act of 1939 (Forms T-1 and T-2) of the Trustees under the Indenture. The failure to notify the Company, as hereinabove provided, of any such action shall not relieve it from any liability which it may have to the person against whom such action is brought by reason of any such statement or omission, otherwise than on account of the indemnify agreement contained in this paragraph. The indemnity agreement of the Company contained in this paragraph and the representations and warranties of the Company contained in paragraph 3 hereof shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of any Purchaser or any such controlling person, and shall survive the delivery of any payment for the Bonds and the Stock. The Company agrees promptly to notify the Representative of the commencement of any litigation or proceedings against the Company or any of its officers or directors in connection with the issuance and sale of the Bonds and the Stock.

(b) Each Purchaser severally agrees to indemnify and hold harmless the Company and each other Purchaser and each person, if any, who controls any such Purchaser within the meaning of Section 15 of the Securities Act, from and against any and all losses, claims, damages or liabilities, joint or several, to which the Company or the other Purchasers and any other persons controlling any of them, or any one or more of them, may become subject under the Securities Act, or the common law, or otherwise (and will reimburse the Company, and the other Purchasers and each person controlling any of them, and each of them, for any reasonable legal or other expenses incurred by it or them, or any of them, in connection with defending against any such losses, claims, damages or liabilities, unless such Purchaser designates counsel, with the approval of the Company, which approval shall not be unreasonably withheld, to conduct the defense of such action at its own expense as hereinafter provided) arising out of or based upon (i) any untrue statement or alleged

untrue statement of a material fact contained in the Registration Statement or any post-effective amendments thereto, or the omission or alleged omission to state [fol. 15296] therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or (ii) any untrue statement or alleged untrue statement of a material fact contained in the Prospectus (or the Prospectus as amended or supplemented, if such losses, claims, damages or liabilities arise out of or are based upon the use of the Prospectus or the Prospectus as amended or supplemented after the Company shall have amended or supplemented the Prospectus), or the omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, if such statement or omission was made in reliance upon and in conformity with information furnished herein or in writing to the Company by or on behalf of such Purchaser for use in connection with the preparation of the Registration Statement or the Prospectus or any amendment or supplement to either thereof, or resulted from any action or alleged action by such Purchaser contrary to information furnished to the Company by such Purchaser or the Representative as to discounts or concessions allowed to any dealer or any other person or classes of persons; provided, however, that in no case shall any Purchaser be liable under this paragraph to the Company or to any other Purchaser unless the Company or such one or more of the other Purchasers, within ten days after a summons or other legal process shall have been served upon the Company or such one or more of the other Purchasers, shall notify such Purchaser in writing of such service and shall have afforded such Purchaser an opportunity to appoint counsel to conduct the defense of such suit in association with such other counsel, if any, as the Company or such one or more of the other Purchasers may choose to select, the fees and expenses of such other counsel, if any, to be paid in such case by the Company or such one or more of the other Purchasers. The failure to notify any Purchaser, as hereinabove provided, of any such action shall not relieve such Purchaser from any liability which it may have to the Company or to any one or more of the other Purchasers

by reason of any such statement, omission, or action otherwise than on account of the indemnity agreement contained in this paragraph. The indemnity agreement of each Purchaser contained in this paragraph shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of the Company or any other Purchaser or any such controlling person, and shall survive the delivery of and payment for the Bonds and Stock. Each Purchaser agrees promptly to notify the Company of the commencement of any litigation or proceedings against it in connection with the issuance and sale of the Bonds and the Stock.

10. Termination. This Purchase Agreement may be terminated at any time prior to the expiration of twenty-four hours after the Post-Effective Amendment shall become effective (but not after the initial public offering of the Bonds and Stock purchased hereunder, if the Purchasers shall make a public offering thereof), by the Representative with the consent of Purchasers which have agreed to purchase in the aggregate fifty per cent or more of the aggregate principal amount of the Bonds and of the par value of the Stock agreed to be purchased hereunder, if the market value of securities in general or political, financial or economic conditions shall have so materially changed after 12 noon, Eastern Standard Time, on the date of this Purchase Agreement and within the time set forth above as, in the judgment of the Representative, to render it either inadvisable to make a public offering (if contemplated) or inadvisable to proceed with the delivery of the Bonds and Stock agreed to be purchased hereunder. This Purchase Agreement may be terminated by the Representative, with like consent, at any time prior to the Closing Date, if the Company shall have sustained a substantial loss by fire, flood, accident or other calamity, which, in the judgment of the Representative, shall render it inadvisable to proceed with the delivery of the Bonds and Stock agreed to be purchased hereunder, whether or not said loss shall have been insured, and the Company agrees to notify the Representative promptly of any such loss. Any termination of this Purchase Agreement pursuant to this paragraph 10 shall be without liability of any party to any other party except

as otherwise provided in paragraph 5 and in sub-paragraph (c) of paragraph 6 hereof. The time of the "initial public offering", for the purposes of this paragraph 10, shall mean the time of the release by the Representative for publication of the first newspaper advertisement which is subsequently published relating to the Bonds and the Stock, or the time of the release by the Representative for delivery to members of a selling group of copies of the Prospectus and signed copies of an offering letter or an offering telegram to such selling group members relating to the Bonds and the Stock, whichever shall first occur.

[fol. 15297] If the Representative elects to terminate this agreement, as provided in this paragraph 10, the Company and each other Purchaser shall be notified promptly by telephone or telegram, confirmed by letter.

11 Substitution of Purchasers. If for any reason any one or more of the Purchasers shall fail or refuse to purchase and pay for the principal amount of Bonds and number of shares of Stock set forth opposite its or their names in paragraph 13 hereof, upon tender at the Closing Date of such Bonds and Stock (subject to the provisions of paragraph 14 hereof) in accordance with the terms hereof, the Company shall immediately notify the remaining Purchasers, who may within twenty-four hours of receipt of such notice agree to purchase or procure some other responsible party or parties satisfactory to the Company to agree to purchase such Bonds and Stock on the terms herein set forth; and if the remaining Purchasers shall not agree to purchase and shall not procure a satisfactory party or parties to agree to purchase such Bonds and Stock, within twenty four hours after the receipt of such notice, then the Company shall be entitled to an additional period of twenty-four hours within which to procure another party or parties to agree to purchase such Bonds and Stock on the terms herein set forth. In any such case, either the Representative or the Company shall have the right to postpone the Closing Date not more than seven business days from the date determined as provided in paragraph 4 hereof, in order that the necessary changes in the Registration Statement and Prospectus and any other documents and arrangements may be effected. If the remaining Purchasers shall not agree to purchase and shall not procure a satisfactory party or par-

lies to agree to purchase such Bonds and Stock, and if the Company also shall not procure another party or parties to agree to purchase such Bonds and Stock within the aforesaid periods, then this Purchase Agreement shall terminate without any liability on the part of the Company (except as otherwise provided in paragraph 5 and in subparagraph (c) of paragraph 6 hereof) or any Purchaser (other than a Purchaser who shall have failed or refused, otherwise than for some reason sufficient to justify in accordance with the terms hereof the cancellation or termination of its obligations hereunder, to purchase and pay for the Bonds and Stock which such Purchaser has agreed to purchase as provided in paragraph 13 hereof).

12. Miscellaneous. This Purchase Agreement shall inure to the benefit of the Company, the several Purchasers, each controlling person referred to in paragraph 9 hereof, and their respective successors and assigns. Nothing in this Purchase Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable right, remedy or claim under or in respect of this Purchase Agreement or any provision herein contained. The term "successors and assigns" as used in this Purchase Agreement shall not include any purchaser, as such, purchaser, of any of the Bonds or Stock from any of the several Purchasers.

13. Purchase, Sale and Delivery. On the basis of the representations and warranties herein contained, but subject to the terms and conditions in this Purchase Agreement set forth, the Company agrees to sell to each of the several Purchasers named below, and each such Purchaser agrees, severally and not jointly, to purchase from the Company (a) the principal amount of Bonds set forth below after the name of such Purchaser, at 100.02% of the principal amount thereof plus accrued interest thereon from January 1, 1942, to the date of delivery; and (b) the number of shares of Stock set forth below after the name of such Purchaser (subject to the provisions of paragraph 14 hereof), at $100.2789 per share plus accrued dividends thereon from January 1, 1942 to the date of delivery:

[fol. 15297]

Name	Address	Principal Amount of Bonds	Number of Shares of Stock
Glore, Forgan & Co.	38 Wall Street, New York, N. Y.	$ 1,105,000	20,000
Kidder, Peabody & Co.	17 Wall Street, New York, N. Y.	1,105,000	20,000
The First Boston Corporation	100 Broadway, New York, N. Y.	870,000	12,900
Blair & Co., Inc.	44 Wall Street, New York, N. Y.	525,000	8,000
[fol. 15298] Eastman, Dillon & Co.	15 Broad Street, New York, N. Y.	$ 525,000	6,600
Hemphill, Noyes & Co.	15 Broad Street, New York, N. Y.	525,000	6,600
Hornblower & Weeks	40 Wall Street, New York, N. Y.	525,000	7,500
W. E. Hutton & Co.	14 Wall Street, New York, N. Y.	525,000	7,500
Lee Higginson Corporation	40 Wall Street, New York, N. Y.	525,000	7,000
White, Weld & Co.	40 Wall Street, New York, N. Y.	525,000	7,500
Bodell & Co., Inc.	32 Custom House Street, Providence, R. I.	360,000	4,500
Hallgarten & Co.	44 Wall Street, New York, N. Y.	210,000	6,000
Harris, Hall & Company (Incorporated)	111 West Monroe Street, Chicago, Ill.	360,000	6,000
Baker, Weeks & Harden	52 Wall Street, New York, N. Y.	240,000	3,000
Graham, Parsons & Co.	1421 Chestnut Street, Philadelphia, Pa.	240,000	3,500
Mitchum, Tully & Co.	405 Montgomery Street, San Francisco, Calif.	240,000	3,000
G. M.-P. Murphy & Co.	111 Broadway, New York, N. Y.	240,000	3,750
The Wisconsin Company	110 East Wisconsin Avenue, Milwaukee, Wis.	240,000	3,000
Dean Witter & Co.	45 Montgomery Street, San Francisco, Calif.	240,000	3,000
E. W. Clark & Co.	Locust at 16th Street, Philadelphia, Pa.	125,000	1,500
R. S. Dickson & Company, Incorporated	Wilder Building, Charlotte, N. C.	125,000	1,500
Moore, Leonard & Lynch	Union Trust Building, Pittsburg, Pa.	125,000	1,500
Maynard H. Murch & Co.	925 Euclid Avenue, Cleveland, Ohio	125,000	1,500
Singer, Deane & Scribner	Union Trust Building, Pittsburg, Pa.	125,000	1,500
Pacific Company of California	623 South Hope Street, Los Angeles, Cal.	70,000	900

	New York, N. Y.		
Kidder, Peabody & Co.	17 Wall Street, New York, N. Y.	1,105,000	20,000
The First Boston Corporation	100 Broadway, New York, N. Y.	870,000	12,900
Blair & Co., Inc.	44 Wall Street, New York, N. Y.	525,000	8,000
[fol. 1520] Eastman, Dillon & Co.	15 Broad Street, New York, N. Y.	525,000	6,600
Hemphill, Noyes & Co.	15 Broad Street, New York, N. Y.	525,000	6,600
Hornblower & Weeks	40 Wall Street, New York, N. Y.	525,000	7,500
W. E. Hutton & Co.	14 Wall Street, New York, N. Y.	525,000	7,500
Lee Higginson Corporation	40 Wall Street, New York, N. Y.	525,000	7,000
White, Weld & Co.	40 Wall Street, New York, N. Y.	525,000	7,500
Bodell & Co., Inc.	32 Custom House Street, Providence, R. I.	360,000	4,500
Hallgarten & Co.	44 Wall Street, New York, N. Y.	210,000	6,000
Harris, Hall & Company (Incorporated)	111 West Monroe Street, Chicago, Ill.	360,000	6,000
Baker, Weeks & Harden	52 Wall Street, New York, N. Y.	240,000	3,000
Graham, Parsons & Co.	1421 Chestnut Street, Philadelphia, Pa.	240,000	3,500
Mitchum, Tully & Co.	405 Montgomery Street, San Francisco, Calif.	240,000	3,000
G. M.-P. Murphy & Co.	111 Broadway, New York, N. Y.	240,000	3,750
The Wisconsin Company	110 East Wisconsin Avenue, Milwaukee, Wis.	240,000	3,000
Dean Witter & Co.	45 Montgomery Street, San Francisco, Calif.	240,000	3,000
E. W. Clark & Co.	Locust at 16th Street, Philadelphia, Pa.	125,000	1,500
R. S. Dickson & Company, Incorporated	Wilder Building, Charlotte, N. C.	125,000	1,500
Moore, Leonard & Lynch	Union Trust Building, Pittsburg, Pa.	125,000	1,500
Maynard H. Murch & Co.	925 Euclid Avenue, Cleveland, Ohio	125,000	1,500
Singer, Deane & Scribner	Union Trust Building, Pittsburg, Pa.	125,000	1,500
Pacific Company of California	622 South Hope Street, Los Angeles, Cal.	70,000	900
J. M. Dain & Company	2350 Rand Tower, Minneapolis, Minn.	60,000	750
Clement A. Evans & Company, Inc.	1320 1st National Bank Building, Atlanta, Ga.	60,000	750
Quail & Co.	902 Davenport Bank Building, Davenport, Iowa	60,000	750
		$10,000,000	150,000

Vol. XII

TRANSCRIPT OF RECORD

(Pages 5269 to 5603)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. XII.

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

United States Circuit Court of Appeals

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FILED FEBRUARY 6, 1943.

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[fol. 15299] Delivery of the Bonds and of the Stock (subject to the provisions of paragraph 14 hereof) shall be made to the Representative for the respective accounts of the above named Purchasers, against payment of the purchase price thereof as provided in paragraph 4 hereof.

14. As stated in the answer to Item 21 of the Registration Statement as to be amended by the Post-Effective amendment, the Company will offer a portion of the Stock (not exceeding a maximum of 14,000 shares) for subscription by certain of its Common Stockholders, all as more fully set forth in said Item. If and to the extent such stockholders subscribe for any of such shares pursuant to such offering, then the number of shares of Stock which the Company is obligated to sell the Purchasers hereunder, and the Purchasers are obligated to purchase, shall be correspondingly decreased, the several obligations of the several Purchasers of such Stock to be decreased proportionately (except that the respective number of shares to be purchased by each such Purchaser may be adjusted as among the Purchasers by the Representative to such extent as may be necessary in order to eliminate fractions of a share). The Company will, not later than 4 P. M., Eastern Standard Time, on the date of expiration of such offering to certain of its Common Stockholders, notify the Representative in writing of the number of shares not subscribed for and which are to be purchased by the Purchasers, and delivery of and payment for such unsubscribed Stock shall be made at the office of the Company, 90 Broad Street, New York, New York, at 11 A. M. Eastern Standard Time on the next succeeding full business day. The provisions of paragraph 4 hereof as to the manner of delivery of and payment for Stock, form of stock certificate and manner of registration of stock certificates shall also be applicable to the delivery of such unsubscribed Stock. Default by any Purchaser to take and pay for its proportion of such unsubscribed Stock shall not relieve the Company from its obligation to deliver to the remaining Purchasers, nor relieve such remaining Purchasers from their several obligations to take and pay for, their respective proportions of such unsubscribed Stock.

15. Notices. All communications hereunder shall be in writing and if to the Purchasers shall be mailed or delivered to the Representative, at 38 Wall Street, New York, N. Y., or, if to the Company, shall be mailed or delivered to it at 90 Broad Street, New York, New York.

Please sign and return to us the enclosed duplicate of this letter, whereupon this letter will become a binding agreement between the Company and the several Purchasers, in accordance with its terms.

Very truly yours,

PANHANDLE EASTERN PIPE LINE COMPANY,
By Louis F. Sperry, Treasurer.

The foregoing Purchase Agreement is hereby confirmed and accepted as of the date first above written.

GLORE FORGAN & CO.
KIDDER PEABODY & CO.

Acting on behalf of the several Purchasers named in paragraph 13 thereof, including itself if so named.

Exhibit 181

PANHANDLE EASTERN PIPE LINE COMPANY SYSTEM

EST

Line No.	(A)	(B)	1941 (C)	1942 (D)	1943 (E)	1944 (F)
1	EAST OF DANA					
2	Michigan					
3	Detroit - - - - - - - - - - -	MCF SALES	24 000 000	27 000 000	29 150 000	30 950 000
4		REVENUE $	6 288 000	7 290 000	8 045 400	8 697 000
5	Other					
6	Industrial - - - - - - -	MCF SALES		1 040 000	1 423 000	1 588 000
7		REVENUE $		210 000	287 600	321 600
8	Dom. Comml. & Other - -	MCF SALES	407 500	4 051 870	4 697 200	5 060 000
9		REVENUE $	105 700	947 100	1 104 100	1 226 300
10	Indiana and Ohio					
11	Industrial - - - - - - - -	MCF SALES	10 250 000	11 300 000	12 100 000	12 700 000
12		REVENUE $	1 896 300	2 090 500	2 238 500	2 349 500
13	Other (Incl. Co. use) - -	MCF SALES	5 200 000	5 600 000	6 000 000	6 408 000
14		REVENUE $	1 294 800	1 433 600	1 572 000	1 715 200
15	Kentucky Natural Gas Corp. -	MCF SALES	2 200 000	1 720 000	1 690 800	2 002 500
16		REVENUE $	484 000	404 200	397 300	470 600
17	TOTAL EAST OF DANA - - - - - -	MCF SALES	42 057 500	50 711 870	55 061 000	58 700 500
18		REVENUE $	10 068 800	12 375 400	13 644 900	14 780 200
19	WEST OF DANA					
20	Industrial - - - - - - - - - -	MCF SALES	13 000 000	14 000 000	14 300 000	14 850 000
21		REVENUE $	2 158 000	2 324 000	2 373 800	2 465 100
22	Domestic and Commercial - - -	MCF SALES	7 000 000	7 500 000	8 100 000	8 700 000
23		REVENUE $	2 296 000	2 482 500	2 705 400	2 923 200
24	TOTAL WEST OF DANA - - - - - -	MCF SALES	20 000 000	21 500 000	22 400 000	23 550 000
25		REVENUE $	4 454 000	4 806 500	5 079 200	5 388 300
26	TOTAL MAIN LINE - - - - - - - -	MCF SALES	62 057 500	72 211 870	77 461 000	82 250 500
27		REVENUE $	14 522 800	17 181 900	18 724 100	20 168 500

Estimated unit rates used in calculating revenues to be received from sale of gas to the Michigan Consolidated Gas Company for t
assumptions:

(1) Michigan Consolidated Gas Company will continue to purchase all of Detroit's requirements under the present two part rate.
(2) Panhandle Eastern will carry the peak loads and Detroit will therefore earn a unit rate corresponding to a poor load factor.
If Detroit should shave its peaks or avail itself of the new so called "28-40" rate the average rate would be less than that us

Estimated unit rates used in calculating revenues to be received from sale of gas to Consumers Power Company are based upon the
Company will shave its peaks through the use of gas produced in Michigan and will therefore earn a rate corresponding to a good load f
If Consumers Power Company should fail to shave its peaks as contemplated the average rate would be considerably higher than the

ANY SYSTEM

ESTIMATED MAIN LINE SALES AND REVENUES
YEARS 1941 - 1946, INCLUSIVE

1943 (E)	1944 (F)	1945 (G)	1946 (H)
29 150 000	30 950 000	32 750 000	34 700 000
8 045 400	8 697 000	9 399 300	10 167 100
1 423 000	1 566 000	1 718 000	3 323 000
287 600	321 600	348 100	669 600
4 697 200	5 060 000	5 451 000	10 296 200
1 104 100	1 226 300	1 330 700	2 503 800
12 100 000	12 700 000	13 200 000	13 700 000
2 238 500	2 349 500	2 442 000	2 534 500
6 000 000	6 400 000	6 800 000	7 200 000
1 572 000	1 715 200	1 863 200	2 016 000
1 690 800	2 002 500	2 500 000	2 920 000
397 300	470 600	587 500	686 200
55 061 000	58 700 500	62 419 000	72 139 200
13 644 900	14 780 200	15 970 800	18 577 200
14 300 000	14 850 000	15 300 000	15 600 000
2 373 800	2 465 100	2 539 800	2 589 600
8 100 000	8 700 000	9 300 000	9 850 000
2 705 400	2 923 200	3 143 400	3 349 000
22 400 000	23 550 000	24 600 000	25 450 000
5 079 200	5 388 300	5 683 200	5 938 600
77 461 000	82 250 500	87 019 000	97 589 200
18 724 100	20 168 300	21 654 000	24 515 800

chigan Consolidated Gas Company for Detroit are based upon the following

ts under the present two part rate.
corresponding to a poor load factor.
rage rate would be less than that used above.

ers Power Company are based upon the assumption that Consumers Power
a rate corresponding to a good load factor.
would be considerably higher than that used above.

Work Sheet #1
10 Yrs. Est.

Exhibit 162

ESTIMATED SALES TO DETROIT
1941 - 1951 INCLUSIVE

T H E R M S

Year	Est. H.H. Cust. End Yr.	Est. H.H. Cust. Avg.	Total	Approx. True B. Load	Approx. Heating 25 c.f x 6500 d.d x Avg. H.H.C.	Max. Days M. MCF B.L.@ 80% L.F. (Jan. Max.)	Max. Days M. MCF H.H. Demand*	Max. Days M. MCF Total
1937	11 782		161 418 342	143 400 000				
1938	17 473		162 126 050	136 500 000				
1939	27 558		185 908 514	146 000 000				
1940	38 773		222 769 874	157 000 000				
1941	48 000	43 000	240 000 000	170 000 000	70 000 000	58	84	142
1942	58 000	53 000	270 000 000	184 000 000	86 000 000	63	101.5	164.5
1943	63 000	60 500	291 500 000	193 000 000	98 500 000	66	110	176
1944	68 000	65 500	309 500 000	203 000 000	106 500 000	70	119	189
1945	73 000	70 500	327 500 000	213 000 000	114 500 000	73	128	201
1946	78 000	75 500	347 000 000	224 000 000	123 000 000	77	136.5	213.5
1947	83 000	80 500	366 000 000	235 000 000	131 000 000	81	145	226
1948	88 000	85 500	386 000 000	247 000 000	139 000 000	85	154	239
1949	93 000	90 500	407 000 000	260 000 000	147 000 000	89	163	252
1950	98 000	95 500	428 500 000	273 000 000	155 500 000	93	171.5	264.5
1951	103 000	100 500	450 000 000	287 000 000	163 000 000	98	180.5	278.5
1952	108 000	105 500	473 500 000	302 000 000	171 500 000	103	189	292

* H. H. Dem.= Cust. end of Yr. x 70 (d.d) x 25 c.f
B.L. Dem.= 365 x .8 into B.L. for Yr. (thats what its running now-see study to Fed. Pr. on Detroit h.h. rate. B.L. Dem. = 542 467)

Annual D.D.D. at Detroit = 6 500

"Max. Day" as used here means the contribution to system Max. Day as of Dec. in the year shown or in Jany. of the succeeding year.

Work Sheet #2
10 Yrs. Est.

15302

ESTIMATED SALES - ANN ARBOR
MONROE & ADRIAN MICH.

		MCF ANNUAL	MCF CONTRIBUTION TO MAX. DAY	
1940		304 546	1 258	67% L.F.
1941		362 500	1 384	71.5%
1942		400 000	1 560	70%
1943	10% inc.	440 000	1 720	
1944	8% inc.	475 000	1 850	
1945		510 000	2 000	
1946		545 000	2 130	
1947		580 000	2 260	
1948		615 000	2 400	
1949		650 000	2 540	
1950		685 000	2 680	
1951		720 000	2 820	

		MONROE, MICH (Excludes Republic)		ADRIAN, MICH. 2500 to 3000 Cust.	
		Annual	Contr.	Annual	Contr.
1941		45 000	400 (Dec.)	-	-
1942		115 000	580 (Jan.)	75 000	370
1943		140 000	700	94 500	540
1944	Gain 2 MCF per cust. on 4000	148 000	810	120 000	800
1945		156 000	855	126 000	860
1946		164 000	900	132 000	920
1947	Gain 2 MCF per cust. on 4500	173 000	955	138 000	980
1948		182 000	1 000	144 000	1 040
1949		191 000	1 050	150 000	1 100
1950	Gain 2 MCF per cust. on 5000	201 000	1 100	156 000	1 160
1951		211 000	1 150	162 000	1 220

TOTALS

		1 384 Jan.	Ann Arbor
1941 (Ann Arbor & Mon.)	407 500	1 784 Dec.	Both Ann Arbor & Monroe (not Adrian)
1942	590 000	2 510 Jan.	
1943	674 500	2 960	
1944	743 000	3 460	
1945	792 000	3 715	
1946	841 000	3 950	
1947	891 000	4 195	
1948	941 000	4 440	
1949	991 000	4 690	
1950	1 042 000	4 940	
1951	1 093 000	5 190	

5275

Work Sheet #3
10 Yrs. Est.

15303

ESTIMATE OF TOTAL MCF SALES TO BE EXPERIENCED IN SOUTHERN MICHIGAN

ASSUMING LOCAL GAS IS DEPLETED AT END OF FIVE YEARS FROM DECEMBER 31, 1940

Consumers Power Company	1st Year (1942)	2nd Year	3rd to 5th Years	6th to 10th Years
(1) Pontiac, Flint and Owosso	3 154 270	3 709 720	4 324 880	6 178 400
(1) Jackson, Marshall, and Kalamazoo	947 660	1 165 990	1 429 400	2 042 000
(2) Battle Creek	570 000	747 000	1 024 000	1 024 000
(3) Adrian	75 000	94 500	120 000	120 000
(4) Lansing, Grand Rapids, Saginaw, Bay City, Alma, Clare, Big Rapids, Muskegon, Mt. Pleasant	Local Gas for Five Years			10 477 500
Total	4 746 930	5 717 210	6 898 280	19 841 900

NOTE: Possible Boiler Load of five billion cubic feet not included in above.

(1) J. A. Brown's estimate of 1/9/41 as set forth in MEPL Study IV. It is attached to these papers

(2) C. H. M. Burnham's estimate February 1938.

(3) O. W. Morton's estimate June 11, 1941.

(4) Michigan Public Utilities Commission, Dept. of Conservation, 1940 Report

		1942	1943	1944	1945	1946	1947	1
(1) Pontiac, Flint and Owosso	- Annual	3 154 270	3 709 720	3 900 000	4 100 000	4 324 880	4 700 000	5 1
	Max-Day	8 600	10 200	12 000	12 500	13 200	14 300	
(1) Jackson, Marshall, Kalamazoo	- Annual	947 600	1 165 990	1 255 000	1 345 000	1 429 400	1 550 000	1 6
	Max-Day	2 600	3 200	3 600	4 100	4 300	4 800	
(2) Battle Creek	- Annual	400 000	570 000	750 000	932 000	1 024 000	1 050 000	1 0
	Max-Day	1 600	2 200	2 900	3 700	4 000	4 100	
(4) Lansing, Grand Rapids, Saginaw, Bay City, Alma, Clare, Big Rapids, Muskegon, Mt. Pleasant	- Annual					6 000 000	7 000 000	8 0
	Max-Day					27 400	32 000	
Total	- Annual	4 501 870	5 445 710	5 905 000	6 377 000	12 778 200	14 300 000	15 8
	Max-Day	12 800	15 600	18 700	20 300	48 900	55 200	
Ann Arbor, Monroe and Adrian	- Annual	590 000	674 500	743 000	792 000	841 000	891 000	
	Max-Day	2 500	3 000	3 500	3 700	3 900	4 200	
Total	- Annual	5 091 870	6 120 210	6 648 000	7 169 000	13 619 200	15 191 000	16
	Max-Day	15 300 Dec. 12 000 Jan.	18 600	22 200	24 000	52 800	59 400	

(1) J. A. Brown's estimates with slight adjustments. On the "Contribution to Max-Day" we could not use his individual Max-Day estimates.

(2) C.H.M.B. and R.A.R.'s estimate - Checks ok with mine.

(4) C.H.M.B. advises this is present use according to M.P.U. Comm. Dept. of Conservation 1940 Report.
I moved the exhaustion of Michigan Gas back 1 year to be conservative.
This sheet grew out of C.H.M.B.'s report to me (W.S. #3)

W.S. #4

15304

ESTIMATED SALES
OTHER MICHIGAN

	1946	1947	1948	1949	1950	1951
0	4 324 880	4 700 000	5 100 000	5 500 000	5 850 000	6 178 400
0	13 200	14 300	20 000	23 000	26 700	30 800
0	1 429 460	1 550 000	1 680 000	1 800 000	1 920 000	2 042 000
0	4 300	4 800	6 600	7 600	8 700	10 200
0	1 024 000	1 050 000	1 080 000	1 100 000	1 150 000	1 200 000
0	4 000	4 100	4 200	4 300	4 500	5 500
	6 000 000	7 000 000	8 000 000	9 000 000	10 000 000	10 477 500
	27 400	32 000	36 000	41 000	46 000	52 000
0	12 778 200	14 300 000	15 860 000	17 400 000	18 920 000	19 897 900
0	48 900	55 200	66 800	75 900	85 900	98 500
0	841 000	891 000	941 000	991 000	1 042 000	1 093 000
0	3 900	4 200	4 400	4 700	5 000	5 200
0	13 619 200	15 191 000	16 801 000	18 391 000	19 962 000	20 990 900
0	52 800	59 400	71 200	80 600	90 900	103 700

s individual Max-Day estimates, of course.

			1942	1943	1944	1945	1946	1947	19
	Pontiac, Flint and Owosso								
	Total	- Annual	3 154 270	3 709 720	3 900 000	4 100 000	4 324 880	4 700 000	5 10
	"	- Max-Day	8 600	10 200	12 000	12 500	13 200	14 300	
A	Industrial	- Annual	680 000	925 000	975 000	1 040 000	1 080 000	1 175 000	1 2
B	"	- Max-Day	1 850	2 500	3 000	3 170	3 300	3 600	
	Jackson, Kalamazoo, Marshall								
	Total	- Annual	947 600	1 165 990	1 255 000	1 345 000	1 429 400	1 550 000	1
	"	- Max-Day	2 600	3 200	3 800	4 100	4 300	4 800	
A	Industrial	- Annual (17%)	160 000	198 000	213 000	228 000	243 000	263 000	2
B	"	- Max-Day	440	540	650	700	740	800	
	Battle Creek								
	Total	- Annual	400 000	570 000	750 000	932 000	1 024 000	1 050 000	1 0
	"	- Max-Day	1 600	2 200	2 900	3 700	4 000	4 100	
A	Industrial	- Annual	200 000	300 000	400 000	450 000	500 000	525 000	5
B	"	- Max-Day	600	900	1 200	1 400	1 500	1 600	
	Lansing, Grand Rapids, Saginaw, Bay City, Alma, etc.								
	Total	- Annual					6 000 000	7 000 000	8 0
	"	- Max-Day					27 400	32 000	
A	Industrial	- Annual (25%)					1 500 000	1 750 000	2 0
B	"	- Max-Day					4 500	5 300	
	Totals from W.S. #4								
	Total	- Annual	5 091 870	6 120 200	6 648 000	7 169 000	13 619 200	15 191 000	16 8
	"	- Max-Day	12 000	18 600	22 200	24 000	52 800	59 400	
(Total) A	Industrial	- Annual	1 040 000	1 423 000	1 588 000	1 718 000	3 323 000	3 713 000	4 1
(") B	"	- Max-Day	2 890	3 940	4 850	5 270	10 040	11 300	
	Other (than Industrial)	- Annual	4 051 870	4 697 200	5 060 000	5 451 000	10 296 200	11 478 000	12
		- Max-Day	9 110	14 660	17 350	18 730	42 760	48 100	

ESTIMATE BREAKDOWN OF "OTHER" MICHIGAN SALES
BETWEEN INDUSTRIAL AND OTHER

This work sheet results from request of Mr. Creveling for a breakdown between Industrial and other Sales shown on W.S. 4 and Summary.

1946	1947	1948	1949	1950	1951
4 324 880	4 700 000	5 100 000	5 500 000	5 850 000	6 178 400
13 200	14 300	20 000	23 000	26 700	30 800
1 080 000	1 175 000	1 280 000	1 380 000	1 460 000	1 550 000
3 300	3 600	3 900	4 200	4 450	4 740
1 429 400	1 550 000	1 680 000	1 800 000	1 920 000	2 042 000
4 300	4 800	6 600	7 600	8 700	10 200
243 000	263 000	285 000	306 000	326 000	347 000
740	800	870	930	1 000	1 050
1 024 000	1 050 000	1 080 000	1 100 000	1 150 000	1 200 000
4 000	4 100	4 200	4 300	4 500	5 500
500 000	525 000	540 000	550 000	570 000	600 000
1 500	1 600	1 650	1 670	1 730	1 830
6 000 000	7 000 000	8 000 000	9 000 000	10 000 000	10 477 500
27 400	32 000	36 000	41 000	46 000	52 000
1 500 000	1 750 000	2 000 000	2 250 000	2 500 000	2 620 000
4 500	5 300	6 000	6 860	7 620	7 980
13 619 200	15 191 000	16 801 000	18 391 000	19 962 000	20 990 900
52 800	59 400	71 200	80 600	90 900	103 700
3 323 000	3 713 000	4 105 000	4 486 000	4 856 000	5 117 000
10 040	11 300	12 420	13 660	14 800	15 600
10 296 200	11 478 000	12 696 000	13 905 000	15 106 000	15 873 900
42 760	48 100	58 780	66 940	76 100	88 100

15306

Work Sheet #5
10 Yrs. Est.

WORK SHEET SHOWING ESTIMATE OF
INDUSTRIAL SALES IN INDIANA

		ANNUAL MCF	CONTRIBUTION TO SYSTEM MAX. DAY
1940		7 642 862	
1941		10 250 000	27 700 (Feby.)
1942	x 1.10	11 300 000	34 400
1943	x 1.07	12 100 000	36 800
1944	x 1.05	12 700 000	38 700
1945		13 200 000	40 250
1946		13 700 000	41 700
1947		14 200 000	43 250
1948		14 700 000	44 750
1949		15 200 000	46 300
1950		15 700 000	47 800
1951		16 200 000	49 400

At August 6th statistics for last year and this year indicate 1941 will exceed 1940 by 33 1/3%. See sheet 26C PEPL Financial Report.

	First 6 Mos. MCF	First 6 Mos. REV.	12 Mos. MCF	12 Mos. REV.
1940	3 543 428	675 980.27	7 642 862	1 451 463.51
1941	4 740 935	889 518.06	10 250 000	
Avg. per Mo. 1940	590 000	112 600		
Avg. per Mo. 1941	790 000	148 200		
Increase per Mo.	200 000	35 600		
Increase %	34	32		

Exhibit 162

ESTIMATED RESIDENTIAL, COMMERCIAL AND COMPANY USE - EAST OF DANA
FOR ALL DISTRIBUTORS IN OHIO AND INDIANA
EXCLUDES ALL MICHIGAN SALES

1937	1 939 800
1938	3 133 118
1939	3 979 999
1940	4 779 428
1940-1st 6 Months	2 363 143
	65 825
	2 428 968

1941-1st 6 Months

	1 867 736
	687 720
	95 018
	2 650 474

	Annual MCF	Contr. To Max. Day M. MCF.
1941	5 200 000	21
1942	5 600 000	28
1943	6 000 000	30
1944	6 400 000	32
1945	6 800 000	34
1946	7 200 000	36
1947	7 600 000	38
1948	8 000 000	40
1949	8 400 000	42
1950	8 800 000	44
1951	9 200 000	46

Approximately 100,000 customers represented. Increase is 4 MCF per customer per year, which would be too high but for the fact that there will be new customers. Above estimate is growth of present customers plus new business.

Year 1943 looks like 55% l. f. If increase in latter years is due ½ to Base Load at 85% L. F. and ½ to h. h. at 25% L. F., then the L. F. of the increase shown would be 55% and this seems reasonable.

Exhibit 162
WORK SHEET SHOWING ESTIMATED SALE
KENTUCKY NATURAL GAS COMPANY BY YEARS

		M.MCF	Contribution to Max-Day 90% L.F. M.MCF
5 Mos., 1941		687 500	
		29 200	
		716 700	
1942		1 650 000	5.2
		70 000	
		1 720 000	
1943		1 650 000	
		40 800	
		1 690 800	5.2
1944	7/12x1,650.000	962 500	
	5/12x2,500.000	1 040 000	
		2 002 500	6.1

	M.MCF	Contribution to System Max-Day M.MCF
1945	2 500 000	7.6
1946 7/12x2,500.000	1 460 000	
5/12x3,500,000	1 460 000	8.9
	2 920 000	
1947	3 500 000	10.6
1948	4 000 000	12.2
1949	4 000 000	12.2
1950	4 250 000	13.0
1951	4 500 000	13.7

Min. provisions of contract: 6/27/41

Therms	
16,500,000	8/1/41-7/31/42
16,500,000	8/1/42-7/31/43
16,500,000	8/1/43-7/31/44
25,000,000	8/1/44-7/31/45
25,000,000	8/1/45-7/31/46
35,000,000	after -

Note:
Kentucky Natural is 140,000 MCF "under" their present contract. It is anticipated it will take 140,000 over a period of 2 yrs thus:

1941	29 200
1942	70 000
1943	40 800
	140 000

May obligation P.E.P.L.?
150,000 th/day
45 MM th. Yr.
Short now 140,000 MCF. which will make up in 24 Mos.

16,500,000*12
= 1,375,000 per mo. or 45,000th @ 90% L.F. = 1,375÷(30.4x 90)
= 5 MM day on Max Day or 4.5 MM per day avg.
140 MM = 5.83 MM/MO
24 MO
5.83x12= 70 MM yr.

8-8-41

All FIGS. SLIDE RULE

W.S. #2
10 Yrs. Est.

15309

DIRECT AND INDIRECT INDUSTRIAL
WEST OF DANA

		M Industrial Indirect	C Industrial Direct	F Total	
April	1939	472 609	297 985	770 594	
May		471 617	296 792	768 409	
June		468 823	302 325	771 148	
July		397 721	317 660	715 381	
August		493 868	327 418	821 286	
September		508 143	335 956	844 099	
October		556 223	374 818	931 041	
November		596 469	378 046	974 515	
December		570 296	377 059	947 355	
	9 Mos. Total	4 535 769	3 008 059	7 543 828	
January	1940	550 267	293 865	844 132	
February		595 336	271 689	867 025	
March		511 451	346 520	857 971	
April		534 196	328 633	862 829	
May		518 020	342 951	860 971	
June		549 838	340 160	889 998	
July		531 179	368 430	899 609	
August		575 018	360 036	935 054	
September		610 890	347 879	958 769	
October		599 792	366 425	966 217	
November		658 192	381 618	1 039 810	
December		661 693	391 627	1 053 320	
	12 Mos. Total	6 996 072	4 039 833	11 035 905	
January	1941	674 063	230 404	904 467	
February		674 166	374 882	1 049 048	
March		626 777	400 121	1 026 898	
April		672 538	405 377	1 077 915	
May		637 478	437 750	1 075 228	
June		645 902	459 361	1 105 263	
July				1 200 000	Est.
August				1 250 000	"
September				1 300 000	"
October				1 320 000	"
November				1 330 000	"
December				1 330 000	"
	12 Mos. Total			13 968 819	
			2nd 6 Mos.	7 730 000	
			1st 6 Mos.	6 238 819	

W.S. #9
10 Yrs. Est.

15310

ESTIMATE OF DIRECT AND INDIRECT INDUSTRIAL SALES
FOR PERIOD 1941 - 1951 - WEST OF DANA

		Total	Contribution to System Max- Day = Avg. ÷ 90 M.MCF
1940		11 035 905	
1941		13 000 000	38.4
1942	Prev. x 1.075	14 000 000	42.6
1943	" x 1.03 ≠	14 300 000	43.6
1944	" x 1.03 ≠	14 850 000	45.2
1945	" x 1.03 ≠	15 300 000	46.6
1946	" x 1.02 -	15 600 000	47.5
1947	" x 1.02 -	15 900 000	48.5
1948	" x 1.02 -	16 200 000	49.4
1949	" x 1.02 -	16 500 000	50.3
1950	" x 1.02 -	16 800 000	51.1
1951	" x 1.01	17 000 000	51.8

MAIN LINE SALES WEST OF DANA
DOES NOT INCLUDE ARGUS, LOCAL AREA, CO. USE, LEAKAGE, DRILLING OR FIELD GAS
DOMESTIC AND COMMERCIAL ONLY

		Detail of Industrial Direct	Detail of Industrial Indirect	Contribution to Max-Day	% L.F.
1938					
Total	13 583 050				
Direct & Indirect Industrial	8 436 234	2 975 257	5 460 977	54 962	67.5
Domestic and Commercial	5 146 816				
1939					
Total	15 548 344				
Direct & Indirect Industrial	9 781 429	3 759 850	6 021 579	57 553	74
Domestic and Commercial	5 766 915				
1940					
Total	17 539 135				
Direct & Indirect Industrial	11 035 905	4 039 833	6 996 072	71 728	67
Domestic and Commercial	6 503 230			(1941) 72 414	

133,000 avg. customers during 1940 and 136,000 at December 1940. Prospective Business as follows: Domestic and Commercial only (Industrial not here).

	Cust.	1st	2nd	3rd
Bloomington and Normal	10 000	213 400	250 000	278 100
California, Missouri	400(ult)	2 500	7 000	15 000
Clinton	1 200	24 000	31 000	38 100
Galesburg Group	10 000	200 000	250 000	280 000

		Customer	MCF Per Customer	MCF Annual	Contribution to Max-Day M.MCF
	1941	140 000	50	7 000 000	34.0
114,000 1936	1942	145 000	52	7 500 000	41.0
136,000 1940	1943	150 000	54	8 100 000	44.3
22,000 Gain	1944	155 000	56	8 700 000	47.6
5 to 6 M per year	1945	160 000	58	9 300 000	51.0
	1946	164 000	60	9 850 000	54.0
	1947	167 000	61	10 200 000	56.0
	1948	169 000	62	10 500 000	57.6
	1949	170 000	63	10 700 000	58.6
	1950	171 000	64	10 900 000	59.7
	1951	172 000	65	11 200 000	61.5

Growth about 2 MCF per customer per year.

Max-Day total west of Dana 2/19/41 was 72,414 at that time Direct and Indirect Industrial apparently contributed about 1,048,945 MCF $\div \frac{30.4}{?}$ = 38.4 MCF leaving 34.0 MM as D & C contribution. $\frac{1,000,000}{365}$ MCF $\div$ 34.0 = .565 (temp. ÷ 17)

This same ratio for 1939 was .54
and for 1940 was .43 (temp.)
Used ratio of .5 for future years.

5203

Exhibit 163

COLUMBIA SYSTEM

FINANCIAL STATEMENT

OF

MICHIGAN GAS TRANSMISSION CORPORATION
(Unassigned)

FOR PERIOD ENDED December 31, 1941

SIGNED E J Mercer
Assistant TREASURER

DATE January 21, 1942

1 ASSETS

COLUMBIA SYSTEM

15313 MICHIGAN GAS TRANSMISSION CORPORATION Exhibit 163

Balance Sheet as of December 31, 1941

	Acc't No.	SUMMARY	Detail on Page		Increase Over Previous Month	Increase Since January First
1		FIXED CAPITAL	x x	12 804 341 16	34 292 78	508 444 17
2		INVESTMENTS IN SUBSIDIARY COMPANIES	x x	-	-	-
3		OTHER INVESTMENTS	x x	-	-	-
4		CURRENT AND WORKING ASSETS	x x	1 533 025 82	80 678 60	546 608 68
5		INTER-COMPANY ACCOUNTS	x x	29 323 77	559 64	2 691 20
6		SPECIAL DEPOSITS AND FUNDS	x x	13 00	-	13 00
7		DEFERRED DEBITS	x x	38 565 13	32 323 06	32 915 46
8		CLEARING AND CONTRA ACCOUNTS	x x	4 388 74	653 65	3 825 81
9						
10		TOTAL ASSETS		14 409 717 62	14 157 77	4 101 44
11						
12		DETAIL OF ASSETS				
13		FIXED CAPITAL	73	12 792 700 08	471 347 68	501 979 92
14	1	Property, Plant and Equipment		11 641 08	437 054 90	6 564 25
15	2	Construction Work in Progress	x x			
16						
17						
18		TOTAL FIXED CAPITAL		12 804 341 16	34 292 78	508 444 17
19		INVESTMENTS IN ASSOCIATED COMPANIES				
20	3	Capital Stocks	20			
21	4	Bonds	20			
22	5	Notes Receivable	20			
23	6	Income Demand Notes Receivable	20			
24	7	Loans Receivable	20			
25	8	Income Demand Loans Receivable	20			
26						
27		TOTAL INVESTMENTS IN SUBSIDIARY CO'S.		-	-	
28		OTHER INVESTMENTS				
29		COLUMBIA OIL & GASOLINE CORPORATION				
30	10	Capital Stock - Preferred	20			
31	11	Bonds	20			
32		OTHER COMPANIES				
33	12	Capital Stocks	20			
34	13	Bonds	20			
35	14	Miscellaneous	20			
36	187	Less: Reserve for Investment Securities				
37		Total Other Companies				
38		TOTAL OTHER INVESTMENTS		-	-	-
39		CURRENT AND WORKING ASSETS				
40	20	Cash	x x	172 585 11	177 615 32	784 201 47
41	21	Working Funds	x x	4 900 00	50 00	300 00
42	23	Temporary Cash Investments	20	-	-	-
43	24	Notes Receivable	20	-	-	-
44	25	Accounts Receivable - Utility Service	20	358 812 54	10 333 31	101 762 24
45	26	" " - Appliance - Current Acc'ts	20	-	-	-
46	27	" " - Appliance - Install't Acc'ts	20	-	-	-
47	28	" " - Other	20 A	874 872 42	81 854 72	95 711 80
48		Total Notes and Accounts Receivable		1 233 684 96	92 188 03	197 474 04
49	188	Less: Reserve for Uncollectible Accounts	21	-	-	-
50		Net Notes and Accounts Receivable		1 233 684 96	92 188 03	197 474 04
51	31	Interest Receivable	x x	-	-	-
52	32	Dividends Receivable	x x	-	-	-
53	33	Supplies General	21 A	115 053 90	5 509 43	36 881 55
54	34	Supplies Fuel	x x	-	-	-
55	35	Merchandise Stock	x x	-	-	-
56	36	Gas Stored	20	-	-	-
57	37	Miscellaneous Inventories	x x	-	-	-
58	38	Prepaid Accounts	21 A	6 364 61	710 74	2 039 96
59	39	Other Current and Accrued Assets	21 A	497 24	-	497 24

29		COLUMBIA OIL & GASOLINE CORPORATION				
30	10	Capital Stock - Preferred	20			
31	11	Bonds	20			
32		OTHER COMPANIES				
33	12	Capital Stocks	20			
34	13	Bonds	20			
35	14	Miscellaneous	20			
36	187	Less: Reserve for Investment Securities				
37		Total Other Companies				
38		TOTAL OTHER INVESTMENTS		-	-	-
39		CURRENT AND WORKING ASSETS				
40	20	Cash	x x	172 585 11	177 615 32	784 201 27
41	21	Working Funds	x x	4 900 00	50 00	300 00
42	23	Temporary Cash Investments	20	-	-	-
43	24	Notes Receivable	20	-	-	-
44	25	Accounts Receivable - Utility Service	20	358 812 54	10 333 31	101 762 24
45	26	" " - Appliance - Current Acc'ts	20	-	-	-
46	27	" " - Appliance - Install't Acc'ts	20	-	-	-
47	28	" " - Other	20 A	874 872 42	81 854 72	95 711 80
48		Total Notes and Accounts Receivable		1 233 684 96	92 188 03	197 474 04
49	188	Less: Reserve for Uncollectible Accounts	21	-	-	-
50		Net Notes and Accounts Receivable		1 233 684 96	92 188 03	197 474 04
51	31	Interest Receivable	x x	-	-	-
52	32	Dividends Receivable	x x	-	-	-
53	33	Supplies General	21 A	115 053 90	5 509 43	36 881 55
54	34	Supplies Fuel	x x	-	-	-
55	35	Merchandise Stock	x x	-	-	-
56	36	Gas Stored	20	-	-	-
57	37	Miscellaneous Inventories	x x	-	-	-
58	38	Prepaid Accounts	21 A	6 364 61	710 74	3 039 96
59	39	Other Current and Accrued Assets	21 A	497 24	-	497 24
60						
61						
62						
63		TOTAL CURRENT AND WORKING ASSETS		1 533 085 82	80 578 60	546 608 68
				(A)	(B)	(C)

5297

COLUMBIA SYSTEM

MICHIGAN GAS TRANSMISSION CORPORATION

15314

ASSETS 1-A

Exhibit 163

Balance Sheet as of December 31, 1941

	Acc't No.	DETAIL OF ASSETS (Continued)	Detail on Page		Increase Over Previous Month	Increase Since January First
64		INTER-COMPANY ACCOUNTS				
65	55	Accounts Receivable - This Group	20	-	-	-
66	56	" " - Other Groups	20 B	29 323 77	558 64	2 691 20
67	57	Dividends Receivable	20	-	-	-
68	58	Interest Receivable	20	-	-	-
69						
70						
71		TOTAL INTER-COMPANY ACCOUNTS		29 323 77	558 64	2 691 20
72		SPECIAL DEPOSITS AND FUNDS				
73	71	Impounded Cash	20	-	-	-
74	72	Employees Welfare Fund	20	-	-	-
75	75	Miscellaneous	20 A	13 00	-	13 00
76						
77						
8						
79		TOTAL SPECIAL DEPOSITS AND FUNDS		13 00	-	13 00
80		DEFERRED DEBITS				
81	81	Unamortized Debt Discount and Expense	21	-	-	-
82	82	Extraordinary Property Losses	21	-	-	-
83	83	Preliminary Survey and Investigation Charges	21 A	2 079 72	922 38	2 079 72
84	84	Other Deferred Debits	21 A	36 485 41	33 245 44	30 835 74
85						
86						
87						
88						
89						
90		TOTAL DEFERRED DEBITS		38 565 13	32 323 06	32 915 46
91		CLEARING AND CONTRA ACCOUNTS				
92	85	Maintenance and Jobbing Work in Progress	x x	4 388 74	653 65	3 825 81
93	88	Shop Expense-Clearing	x x	-	-	-
94	89	Other Clearing Accounts	x x	-	-	-
95	90	Inter-Co. Contingent Interest Receivable (Contra Acc't)		-	-	-
96	91	Inter-Co. Contingent Interest Expense (Contra Acc't)	x x	-	-	-
97	92	Contingent Assets (Contra Account)	x x	-	-	-
98	93	Non-Productive Well Drilling Expense	x x	-	-	-
99	94-5	Special Deposits-Interest & Dividends (Contra Acc't)		-	-	-
100						
101						
102						
103						
104						
106						
106		TOTAL CLEARING AND CONTRA ACC'TS		4 388 74	653 65	3 825 81
107		TOTAL ASSETS		14 409 717 62	14 157 77	4 101 44
				(A)	(B)	(C)

COLUMBIA SYSTEM

2-A LIABILITIES — MICHIGAN GAS TRANSMISSION CORPORATION

Exhibit 163

Balance Sheet as of December 31, 1941

15313

Acct. No.	DETAIL OF LIABILITIES (Continued)	Detail on Page		Increase Over Previous Month	Increase Since January First	
	CLEARING AND CONTRA ACCOUNTS					64
86	Transportation Expenses - Clearing	21 B	602 70	134 58	451 72	65
166	Other Clearing Accounts	21 C	254 65	14 38	830 05	66
167	Contingent Liabilities (Contra Account)	21	-	-	-	67
168	Unpres. Coupons & Unclaimed Dividends (Contra Acc't)	21	-	-	-	68
169	Inter Co. Contingent Interest Payable (Contra Acc't)	21	-	-	-	69
170	Inter Co. Contingent Interest Income (Contra Acc't)	21	-	-	-	70
						71
	TOTAL CLEARING AND CONTRA ACC'TS		857 35	120 20	1 281 77	72
	RESERVES AND SPECIAL SURPLUS					73
180	Retirement and Depletion	21 C	1 697 894 03	34 827 36	357 819 07	74
97	Less Retirement Work in Progress	21 B	71 70	2 061 08	873 42	75
	Net Reserve for Retirement and Depletion		1 697 965 73	32 766 28	358 692 49	76
181	Injuries and Damages	21 C	18 216 86	19 90	7 451 20	77
182	Non Productive Well Drilling	21	-	-	-	78
183	Contributions In Aid of Construction	21 C	9 352 96	10 00	10 00	79
184	Columbia System Protection Fund	21	-	-	-	80
185	Contingencies	21 C	317 648 19	7 972 53	210 628 61	81
186	Other Reserves	21 C	1 200 00	100 00	240 00	82
190	Special Capital Surplus	18 A	139 500 00	-	-	83
191 & 2	Surplus Prior to January 1, 1938	18 A	28 215 02	1 552 26	126 897 16	84
						85
	TOTAL RESERVES AND SPECIAL SURPLUS		2 212 098 76	42 420 97	449 645 14	86
	CAPITAL AND SURPLUS SINCE DEC. 31, 1937		-	-	-	87
101	44,800 Shares Common (- No Par)					88
	Less - Shares in Treasury	x x	2 240 000 00	-	-	89
103	- Shs. Pref. (- %)(- Par)					90
	Less - Shares in Treasury	x x	-	-	-	91
	- Shs Pref (- %)(- Par)					92
	Less - Shares in Treasury	x x	-	-	-	93
	- Shs Cum. Pref (- %)(- Par)					94
	Less - Shares in Treasury	x x	-	-	-	95
	Authorized 60,000 shares common					96
	Issued 15,200 Shares Common					97
						98
	Total Capital Stocks		2 240 000 00	-	-	99
93	Capital Surplus Since December 31, 1937	18 A	-	-	-	100
94	Earned Surplus Since December 31, 1937	18	132 081 13	16 141 48	11 251 76	101
						102
						103
						104
	Total Surplus	x x	132 081 13	16 141 48	11 251 76	105
	TOTAL CAPITAL AND SURPLUS SINCE DEC. 31, 1937	x x	2 372 081 13	16 141 48	11 251 76	106
	TOTAL LIABILITIES		14 409 717 62	14 157 77	4 101 44	107
			(A)	(B)	(C)	

FORM C6188F C&D

COLUMBIA SYSTEM

15316 LIABILITIES 2

MICHIGAN GAS TRANSMISSION CORPORATION

Exhibit 163

Balance Sheet as of December 31, 1941

Acc't No.	SUMMARY	Detail on Page		Increase Over Previous Month	Increase Since January First
	LONG TERM DEBT (Except Current Maturities)	x x	-	-	-
	LONG TERM DEBT - INTER-COMPANY	x x	8 320 500 00	-	400 000 00
	CURRENT AND ACCRUED LIABILITIES	x x	1 495 780 03	43 346 05	42 403 18
	INTER-COMPANY ACCOUNTS	x x	7 866 69	83 325 97	2 443 21
	DEFERRED CREDITS	x x	533 66	337 14	3 816 62
	CLEARING AND CONTRA ACCOUNTS	x x	857 35	120 20	1 281 77
	RESERVES	x x	2 212 098 76	42 420 97	449 645 14
	CAPITAL AND SURPLUS	x x	2 372 081 13	16 141 48	11 251 76
	TOTAL LIABILITIES		14 409 717 62	14 157 77	4 101 44

DETAIL OF LIABILITIES

	LONG TERM DEBT (Except Current Maturities)				
110	Bonds	20			
111	Miscellaneous	20			
	TOTAL LONG TERM DEBT		-	-	-
	LONG TERM DEBT - INTER-COMPANY				
115	Notes Payable	20B	5 900 500 00	-	-
116	Income Demand Notes Payable	20	-	-	-
117	Loans Payable	20B	2 420 000 00	-	400 000 00
118	Income Demand Loans Payable	20	-	-	-
	TOTAL LONG TERM DEBT - INTER-COMPANY		8 320 500 00		400 000 00
	CURRENT AND ACCRUED LIABILITIES				
120	Notes Payable	20			
121	Accounts Payable	x x	1 076 212 86	91 959 31	76 751 21
122	Compensation Awards Payable	20	-	-	-
123	Long Term Debt - Current Maturities	20	-	-	-
124	Dividends Declared	x x	-	-	-
125	Customers Deposits	x x	-	-	-
126	Other Current Liabilities 20A	x x	14 516 88	24 773 69	59 672 48
127	Accrued Taxes	21B	403 080 15	17 671 42	60 101 51
128	Accrued Interest, Customers' Deposits	21	-	-	-
129	" " Long Term Debt	21	-	-	-
130	" " Other	21	-	-	-
131	Accrued Dividends	x x	-	-	-
132	Other Accrued Liabilities	21B	1 970 14	6 168 18	619 60
	TOTAL CURRENT AND ACCRUED LIABILITIES		1 495 780 03	43 346 05	42 403 18
	INTER-COMPANY ACCOUNTS				
155	Accounts Payable - This Group	20	-	-	-
156	" " Other Groups	20B	7 866 69	120 97	2 443 21
157	Dividends Payable	20	-	-	-
158	Interest Payable	20	-	83 205 00	-
	TOTAL INTER-COMPANY ACCOUNTS		7 866 69	83 325 97	2 443 21
	DEFERRED CREDITS				
160	Contingent Earnings Pending Rate Decision	21	-	-	-
75	Less: Income Tax on Contingent Earnings	21	-	-	-
	Net Contingent Earnings		-	-	-
161	Customers' Advances for Construction	21	-	-	-
162	Unclaimed Customers' Deposits Including Interest	21	-	-	-
163	Other Deferred Credits	21B	533 66	337 14	3 816 62

127	Accrued Taxes	21B	403 080 15	17 671 42	60 101 54	33
128	Accrued Interest-Customers Deposits	21	-	-	-	34
129	" " Long Term Debt	21	-	-	-	35
130	" " Other	21	-	-	-	36
131	Accrued Dividends	x x	-	-	-	37
132	Other Accrued Liabilities	21B	1 970 14	6 168 15	619 60	38
						39
						40
						41
						42
						43
	TOTAL CURRENT AND ACCRUED LIABILITIES		1 495 780 02	43 346 05	42 403 18	44
	INTER-COMPANY ACCOUNTS					45
155	Accounts Payable-This Group	20	-	-	-	46
156	" " -Other Groups	20B	7 866 69	120 97	2 443 21	47
157	Dividends Payable	20	-	-	-	48
158	Interest Payable	20	-	83 205 00	-	49
						50
						51
	TOTAL INTER-COMPANY ACCOUNTS		7 866 69	83 325 97	2 443 21	52
	DEFERRED CREDITS					53
160	Contingent Earnings Pending Rate Decision	21	-	-	-	54
79	Less Income Tax on Contingent Earnings	21	-	-	-	55
	Net Contingent Earnings		-	-	-	56
161	Customers Advances for Construction	21	-	-	-	57
162	Unclaimed Customers' Deposits Including Interest	21	-	-	-	58
163	Other Deferred Credits	21B	533 66	337 14	3 816 62	59
						60
						61
						62
	TOTAL DEFERRED CREDITS		533 66	337 14	3 816 62	63

(A) (B) (C)

5808

FORM CO-1939 C&C

COLUMBIA SYSTEM

Exhibit 163

MICHIGAN GAS TRANSMISSION CORPORATION

15317 INCOME STATEMENT 3

Month of **December 1941**

	Detail on Page	Amount	Percent of Gross This Year	Percent of Gross Previous Year	Increase Over Previous Year Amount	Increase Over Previous Year Percent	
		MONTH OF **December 1941**					1
GROSS REVENUES							2
Gas	4A	558 380 20	100.0	100.0	117 179 24	26.6	3
Electric	5A	-	-	-	-	-	4
Railway and Bus	6	-	-	-	-	-	5
Water and Heating	8A	-	-	-	-	-	6
Non-Utility	9	-	-	-	-	-	7
							8
TOTAL REVENUES		558 380 20	100 0	100 0	117 179 24	26.6	9
OPERATING EXPENSES							10
Operation	x x	342 379 99	61.3	52.4	111 136 42	48.1	11
Maintenance	x x	4 930 95	.9	1.0	374 22	8.2	12
Provision for Retirements and Depletion	x x	38 774 66	6.9	7.0	7 741 37	24.9	13
Taxes	24 E	60 173 88	10.8	12.2	6 587 13	12.3	14
TOTAL EXPENSES		446 259 46	79.9	72.6	125 839 14	39.3	15
NET OPERATING REVENUE		112 120 74	20.1	27.4	8 659 90	7.2	16
OTHER INCOME	16	-	-	-	-	-	17
GROSS CORPORATE INCOME		112 120 74	20.1	27.4	8 659 90	7.2	18
OTHER DEDUCTIONS	17	42 824 69	7.7	9.7	299 11	.7	19
LESS: Interest Charged to Construction - Credit	17	4 162 47	.7	6.4	23 957 18	85.2	20
NET INCOME		73 458 52	13.1	24.1	32 916 19	30.9	21
		MONTHS ENDED					22
GROSS REVENUES							23
Gas	4B						24
Electric	5B						25
Railway and Bus	6						26
Water and Heating	8B						27
Non-Utility	9						28
							29
TOTAL REVENUES			100 0	100 0			30
OPERATING EXPENSES							31
Operation	x x						32
Maintenance	x x						33
Provision for Retirements and Depletion	x x						34
Taxes	24						35
TOTAL EXPENSES							36
NET OPERATING REVENUE							37
OTHER INCOME	16						38
GROSS CORPORATE INCOME							39
OTHER DEDUCTIONS	17						40
LESS: Interest Charged to Construction - Credit	17						41
NET INCOME							42
		12 MONTHS ENDED **December 31, 1941**					43
GROSS REVENUES							44
Gas	4B	5 527 664 76	100.0	100.0	915 764 41	19.9	45
Electric	5C	-	-	-	-	-	46
Railway and Bus	6	-	-	-	-	-	47
Water and Heating	8C	-	-	-	-	-	48
Non-Utility	9	130 00	-	-	130 00	-	49
							50
TOTAL REVENUES		5 527 794 76	100 0	100 0	915 894 41	19.9	51
OPERATING EXPENSES							52
Operation	x x	3 614 865 37	65.4	62.0	755 743 41	26.4	53
Maintenance	x x	52 159 96	.9	1.2	3 146 56	5.7	54
Provision for Retirements and Depletion	x x	366 785 40	6.6	6.3	74 018 52	25.3	55
Taxes	24 E	472 492 26	8.6	10.7	20 248 96	4.1	56
TOTAL EXPENSES		4 506 302 99	81.5	80.2	806 366 [illegible]	[illegible]	
NET OPERATING REVENUE							

OPERATING EXPENSES							31
Operation	x x						32
Maintenance	x x						33
Provision for Retirements and Depletion	x x						34
Taxes	24						35
TOTAL EXPENSES							36
NET OPERATING REVENUE							37
OTHER INCOME	16						38
GROSS CORPORATE INCOME							39
OTHER DEDUCTIONS	17						40
LESS: Interest Charged to Construction - Credit	17						41
NET INCOME							42
		12 MONTHS ENDED December 31, 1941					43
GROSS REVENUES							44
Gas	4C H	5 527 664 76	100.0	100.0	915 764 41	19.9	45
Electric	5C	-	-	-	-	-	46
Railway and Bus	6	-	-	-	-	-	47
Water and Heating	8C	-	-	-	-	-	48
Non-Utility	9	130 00	-	-	130 00	-	49
							50
TOTAL REVENUES		5 527 794 76	100.0	100.0	915 894 41	19.9	51
OPERATING EXPENSES							52
Operation	x x	3 614 865 37	65.4	62.0	755 743 41	26.4	53
Maintenance	x x	52 159 96	.9	1.2	3 146 56	5.7	54
Provision for Retirements and Depletion	x x	366 785 40	6.6	6.3	74 018 52	25.3	55
Taxes	24 E	472 492 26	8.6	10.7	20 248 96	4.1	56
TOTAL EXPENSES		4 506 302 99	81.5	80.2	806 366 41	21.8	57
NET OPERATING REVENUE		1 021 491 77	18.5	19.8	109 528 00	12.0	58
OTHER INCOME	16	227 42	-	-	227 42	-	59
GROSS CORPORATE INCOME		1 021 719 19	18.5	19.8	109 755 42	12.0	60
OTHER DEDUCTIONS	17	515 999 04	9.4	9.5	76 596 23	17.4	61
LESS: Interest Charged to Construction - Credit	17	4 178 67	.1	.6	23 940 98	85.1	62
NET INCOME		509 898 82	9.2	10.9	9 218 21	1.8	63
		(A)	(B)	(C)	(D)	(E)	

COLUMBIA SYSTEM

15318 GAS 4

Exhibit 163

MICHIGAN GAS TRANSMISSION CORPORATION

1 Months Ended December 31, 1941

Acct No.		Detail on Page	Amount	Percent of Gross	Cents Per MCF †	Increase Over Previous Year Amount	Increase Over Previous Year Percent	Increase Over Previous Year Cents Per MCF †	
	GROSS REVENUE GAS								1
1200	Residential	x x	-	-	-	-	-	-	2
1201	Commercial	x x	-	-	-	-	-	-	3
1202	Municipal & Other Public	x x	-	-	-	-	-	-	4
1203	Industrial	x x	-	-	-	-	-	-	5
1204	Other Public Utilities	x x	357 147 18	64.0	28.72	100 096 88	38.9	1.99	6
1205	Other Sales	x x	-	-	-	-	-	-	7
									8
	TOTAL		357 147 18	64.0	28.72	100 096 88	38.9	1.99	9
1208	Inter-Company Sales - This Group	24	-	-	-	-	-	-	10
1209	" " " - Other Groups	24 A	27 259 87	4.9	24.80	4 726 45	14.8	.47	11
	TOTAL SALES - INTER-COMPANY		27 259 87	4.9	24.80	4 726 45	14.8	.47	12
	TOTAL REVENUE - GAS		384 407 05	68.9	28.40	95 370 43	33.0	1.75	13
	Other Gas Department Revenues	24 D	173 973 15	31.1	6.16	21 808 81	14.3	.50	14
	TOTAL REVENUE		558 380 20	100 0	-	117 179 24	26.6	-	15
	OPERATING EXPENSES								16
	Gas Purchased - Inter-Co - This Group	25	-	-	-	-	-	-	17
	" " " " - Other Groups	25	-	-	-	-	-	-	18
	TOTAL PURCHASED - INTER-CO		-	-	-	-	-	-	19
	Gas Purchased - Others	25	326 466 82	58.5	21.33	91 179 71	38.8	1.90	20
	Interchange of Gas - Net	25	-	-	-	-	-	-	21
	Gas In or Out of Storage - Net	25	-	-	-	-	-	-	22
	Purchased Gas Expense - Operation	25	42 28	-	-	7 77	22.5	-	23
	" " " - Maintenance	25	-	-	-	-	-	-	24
	Productions Operation	26-7	-	-	-	-	-	-	25
	Maintenance	26-7	-	-	-	-	-	-	26
	Transmission - Operation	28	37 309 34	6.7	.99	9 550 20	34.4	.15	27
	" - Maintenance	28	4 911 02	.9	.12	361 37	7.9	-	28
	Distribution - Operation	29	-	-	-	-	-	-	29
	" - Maintenance	29	-	-	-	-	-	-	30
	Customers Acc't'g & Collecting	30	-	-	-	-	-	-	31
	Sales Promotion	30	1 395 56	.2	.03	1 388 63	-	.03	32
	Administrative & General - Operation	31	5 698 70	1.0	.14	11 243 82	202.8	.29	33
	" " " - Maintenance	31	19 93	-	-	12 85	181.5	-	34
	Misc. Duplicate Charges - Credit	31	17 134 31	3.1	.41	20 253 93	54.2	.58	35
	TOTAL OPERATION & MAINTENANCE		347 310 94	62.2	25.66	111 510 64	47.3	3.92	36
		% of Gross Prev. Year							37
	Total Operation	52.4	342 379 99	61.3	25.30	111 136 42	48.1	3.98	38
	Total Maintenance	1.0	4 930 95	.9	.12	374 22	8.2	-	39
	Prov. for Retirements & Depletion	7.0	38 774 66	6.9	.93	7 741 37	24.9	.21	40
	Taxes - Federal	11.2	57 02	10.3	1.38	8 369 71	17.0	.08	41
	Taxes - State and Other	1.0	2 616 84	.5	.06	1 782 38	40.5	.06	42
	TOTAL EXPENSES	72.6	446 259 46	79.9	32.97	125 839 14	39.3	3.43	43
	NET OPERATING REVENUE - GAS	27.4	112 120 74	20.1	2.68	8 659 90	7.2	.52	44
									45
			STATISTICS						46
	MCF - Sales to Public and Other Utilities	51	1 243 425	28.8	x x x	285 268	29.8	x x x	47
	Sales Inter-Company - This Group	51	-	-	x x x	-	-	x x x	48
	" " " - Other Groups	51	109 910	2.5	x x x	16 689	13.2	x x x	49
	Total All Sales	51	1 353 335	31.3	x x x	268 579	24.8	x x x	50
	Company Use, Elec. Gen. Stations	51	-	-	x x x	-	-	x x x	51
	Other Company Use	51	51 493	1.2	x x x	13 952	37.2	x x x	52
	Other Miscellaneous P.E.P.L.Co.& Ky.	51	2 823 027	65.4	x x x	132 427	4.9	x x x	53
	TOTAL DELIVERIES	51	4 227 855	97.9	x x x	414 958	10.9	x x x	54

TOTAL OPERATION & MAINTENANCE			347 310 94	62.2	25.66	111 510 64	47.3	3.92	36
	% of Gross Prev. Year								37
Total Operation	52.4	31	342 379 99	61.3	25.30	111 136 42	48.1	3.98	38
Total Maintenance	1.0	31	4 930 95	.9	.12	374 22	8.2	-	39
Prov. for Retirements & Depletion	7.0	31	38 774 66	6.9	.93	7 741 37	24.9	.11	40
Taxes - Federal	11.2	31	57 557 02	10.3	1.38	8 369 71	17.0	.08	41
Taxes - State and Other	1.0	31	2 616 84	.5	.06	1 782 58	40.5	.06	42
TOTAL EXPENSES	72.6	31	446 259 46	79.9	32.97	125 839 14	39.3	3.43	43
NET OPERATING REVENUE - GAS	27.4		112 120 74	20.1	2.68	8 659.90	7.2	.52	44
			STATISTICS						45
									46
MCF Sales to Public and Other Utilities		51	1 243 425	28.8	x x x	285 268	29.8	x x x	47
Sales Inter-Company - This Group		51	-	-	x x x	-	-	x x x	48
" " " - Other Groups		51	109 910	2.5	x x x	16 689	13.2	x x x	49
Total All Sales		51	1 353 335	31.3	x x x	268 579	24.8	x x x	50
Company Use - Elec. Gen. Stations		51	-	-	x x x	-	-	x x x	51
Other Company Use		51	51 493	1.2	x x x	13 952	37.2	x x x	52
~~Other Miscellaneous~~ P.E.P.L.Co.& Ky.		51	2 823 027	65.4	x x x	132 427	4.9	x x x	53
TOTAL DELIVERIES		51	4 227 855	97.9	x x x	414 958	10.9	x x x	54
MCF Purchased - Inter-Co - This Group		51	-	-	x x x	-	-	x x x	55
" " " - Other Groups		51	-	-	x x x	-	-	x x x	56
Purchased - Others		51	1 495 454	34.6	x x x	315 112	26.7	x x x	57
Produced		51	-	-	x x x	-	-	x x x	58
Interchanged - Net		51	-	-	x x x	-	-	x x x	59
~~In or Out of Storage - Net~~ Rec. for P.E.P.L.		51	2 644 188	61.2	x x x	195 320	8.0	x x x	60
Received for Kentucky		51	178 839	4.2	x x x	62 893	26.0	x x x	61
TOTAL GAS AVAILABLE FOR DELIVERIES		51	4 318 481	100.0	x x x	447 539	11.6	x x x	62
UNACCOUNTED FOR - [ESTIMATED]		51	90 626	2.1	x x x	32 581	56.1	x x x	63
			(A)	(B)	(C)	(D)	(E)	(F)	

† Two Places Beyond Decimal Point
Losses in Black

5307

Exhibit 163

MICHIGAN GAS TRANSMISSION CORPORATION

12 Months Ended December 31, 1941

Acct. No.		Detail on Page	Amount	Percent of Gross	Cents Per MCF †	Increase Over Previous Year: Amount	Increase Over Previous Year: Percent	Increase Over Previous Year: Cents Per MCF †	
	GROSS REVENUE - GAS								1
1200	Residential	x x	-	-	-	-	-	-	2
1201	Commercial	x x	-	-	-	-	-	-	3
1202	Municipal & Other Public	x x	-	-	-	-	-	-	4
1203	Industrial	x x	-	-	-	-	-	-	5
1204	Other Public Utilities	x x	3 576 343 78	64.7	27.21	758 990 75	26.9	.69	6
1205	Other Sales	x x	-	-	-	-	-	-	7
									8
	TOTAL		3 576 343 78	64.7	27.21	758 990 75	26.9	.69	9
1208	Inter-Company Sales - This Group	24	-	-	-	-	-	-	10
1209	" " Other Groups	24-A	322 819 43	5.8	24.60	16 178 77	4.8	2.14	11
	TOTAL SALES - INTER-COMPANY		322 819 43	5.8	24.60	16 178 77	4.8	2.14	12
	TOTAL REVENUE - GAS		3 899 163 21	70.5	26.97	742 811 98	23.5	.30	13
	Other Gas Department Revenues	24-D	1 628 501 55	29.5	6.16	172 952 43	11.9	.23	14
	TOTAL REVENUE		5 527 664 76	100.0	-	915 764 41	19.9	-	15
	OPERATING EXPENSES								16
	Gas Purchased - Inter-Co. - This Group	25	-	-	-	-	-	-	17
	" " " " - Other Groups	25	-	-	-	-	-	-	18
	TOTAL PURCHASED - INTER-CO		-	-	-	-	-	-	19
	Gas Purchased - Others	25	3 249 178 39	58.8	20.85	653 350 75	25.2	.23	20
	Interchange of Gas - Net	25	-	-	-	-	-	-	21
	Gas In or Out of Storage - Net	25	-	-	-	-	-	-	22
	Purchased Gas Expense - Operation	25	515 49	-	-	63 24	10.9	-	23
	" " - Maintenance	25	-	-	-	-	-	-	24
	Production - Operation	26-7	-	-	-	-	-	-	25
	" - Maintenance	26-7	-	-	-	-	-	-	26
	Transmission - Operation	28	341 250 11	6.2	.83	66 760 70	24.3	.07	27
	" - Maintenance	28	52 073 58	.9	.13	2 827 33	5.1	.02	28
	Distribution - Operation	29	-	-	-	-	-	-	29
	" - Maintenance	29	-	-	-	-	-	-	30
	Customers Acc't'g & Collecting	30	-	-	-	-	-	-	31
	Sales Promotion	30	8 069 93	.1	.02	4 050 22	100.8	.01	32
	Administrative & General - Operation	31	124 948 78	2.3	.31	15 962 41	14.6	.01	33
	" " - Maintenance	31	86 38	-	-	319 23	78.7	-	34
	Misc. Duplicate Charges - Credit	31	109 097 33	2.0	.27	15 682 57	12.6	.08	35
	TOTAL OPERATION & MAINTENANCE		3 667 025 33	66.3	25.36	752 596 85	25.8	.28	36
		% of Gross Prev. Year							37
	Total Operation	62.0	31	3 614 865 37	65.4	25.00	755 743 41	26.4	.16	38
	Total Maintenance	1.2	31	52 159 96	.9	.13	3 146 56	5.7	.02	39
	Prov. for Retirements & Depletion	6.3	31	366 785 40	6.6	.90	74 018 52	25.3	.08	40
	Taxes - Federal	7.7	31	329 837 20	6.0	.81	25 552 40	7.2	.18	41
	Taxes - State and Other	3.0	31	142 655 06	2.6	.35	5 303 44	3.9	.03	42
	TOTAL EXPENSES	80.2	31	4 506 302 99	81.5	31.17	806 366 41	21.8	1.39	43
	NET OPERATING REVENUE - GAS	19.8		1 021 361 77	18.5	2.50	109 398 00	12.0	.04	44
										45
	STATISTICS									46
	MCF - Sales to Public and Other Utilities		51	13 145 792	31.3	x x x	3 048 816	30.2	x x x	47
	" Sales Inter-Company - This Group		51	-	-	x x x	-	-	x x x	48
	" " " " - Other Groups		51	1 312 221	3.1	x x x	44 268	3.5	x x x	49
	" Total All Sales		51	14 458 013	34.4	x x x	3 093 084	27.2	x x x	50
	" Company Use, Elec. Gen. Stations		51	-	-	x x x	-	-	x x x	51
	" Other Company Use		51	423 552	1.0	x x x	32 871	8.4	x x x	52
	" ~~Other Miscellaneous~~ P.E.P.L.Co. Ky.		51	26 422 715	62.9	x x x	1 878 669	7.7	x x x	53
	TOTAL DELIVERIES		51	41 304 280	98.3	x x x	5 004 624	13.8	x x x	54

TOTAL OPERATION & MAINTENANCE			3 667 025 33	66.3	25.36	752 596 85	25.8	.28	36
	% of Gross Prev. Year								37
Total Operation	62.0	31	3 614 865 37	65.4	25.00	755 743 41	26.4	.16	38
Total Maintenance	1.2	31	52 159 96	.9	.13	3 146 56	5.7	.02	39
Prov. for Retirements & Depletion	6.3	31	366 785 40	6.6	.90	74 018 52	25.3	.08	40
Taxes - Federal	7.7	31	329 837 20	6.0	.81	26 552 40	7.2	.18	41
Taxes - State and Other	3.0	31	142 655 06	2.6	.35	5 303 44	3.9	.03	42
TOTAL EXPENSES	80.2	31	4 506 302 99	81.5	31.17	806 366 41	21.8	1.39	43
NET OPERATING REVENUE - GAS	19.8		1 021 361 77	18.5	2.50	109 398 00	12.0	.04	44
									45
			STATISTICS						46
MCF - Sales to Public and Other Utilities		51	13 145 792	31.3	x x x	3 048 816	30.2	x x x	47
" Sales Inter-Company - This Group		51	-	-	x x x	-	-	x x x	48
" " " " - Other Groups		51	1 312 221	3.1	x x x	44 268	3.5	x x x	49
" Total All Sales		51	14 458 013	34.4	x x x	3 093 084	27.2	x x x	50
" - Company Use, Elec. Gen. Stations		51	-	-	x x x	-	-	x x x	51
" Other Company Use		51	423 552	1.0	x x x	32 871	8.4	x x x	52
" ~~Other Miscellaneous~~ P.E.P.L.Co. Ky.		51	26 422 715	62.9	x x x	1 878 669	7.7	x x x	53
" TOTAL DELIVERIES		51	41 304 280	98.3	x x x	5 004 624	13.8	x x x	54
MCF - Purchased - Inter-Co. - This Group		51	-	-	x x x	-	-	x x x	55
" " " " - Other Groups		51	-	-	x x x	-	-	x x x	56
" Purchased - Others		51	15 580 331	37.1	x x x	3 268 734	26.6	x x x	57
" Produced		51	-	-	x x x	-	-	x x x	58
" Interchanged - Net		51	-	-	x x x	-	-	x x x	59
" ~~In or Out of Storage - Net~~ Rec. for P.E.P.L.		51	24 420 803	58.1	x x x	1 988 837	8.9	x x x	60
" Received for Kentucky		51	2 001 912	4.8	x x x	110 168	5.2	x x x	61
" TOTAL GAS AVAILABLE FOR DELIVERIES		51	42 003 046	100.0	x x x	5 147 403	14.0	x x x	62
" UNACCOUNTED FOR - [ESTIMATED]*		51	698 766	1.7	x x x	142 779	25.7	x x x	63
			(A)	(B)	(C)	(D)	(E)	(F)	

† Two Places Beyond Decimal Point
* Losses in Black

5309

COLUMBIA SYSTEM

15320

NON-UTILITY 9

Exhibit 163

MICHIGAN GAS TRANSMISSION CORPORATION

Month of December 1941

	Detail on Page	Amount	Increase Over Previous Year Amount	Increase Over Previous Year Percent	
MONTH OF December 1941					1
					2
GROSS REVENUE - NON-UTILITY					3
Gasoline	10A				4
Appliance	11A				5
Farm	12				6
Shop and Jobbing	12				7
Miscellaneous	12				8
Garage	13				9
					10
					11
TOTAL REVENUE - NON-UTILITY					12
OPERATING EXPENSES					13
Operation					14
Maintenance					15
Provision for Retirements					16
Taxes - Federal					17
Taxes - State and Other					18
					19
TOTAL EXPENSES		-	-	-	20
NET REVENUE - NON-UTILITY					21
					22
MONTHS ENDED					23
GROSS REVENUE - NON-UTILITY					24
Gasoline	10B				25
Appliance	11B				26
Farm	12				27
Shop and Jobbing	12				28
Miscellaneous	12				29
Garage	13				30
					31
					32
TOTAL REVENUE - NON-UTILITY					33
OPERATING EXPENSES					34
Operation					35
Maintenance					36
Provision for Retirements					37
Taxes - Federal					38
Taxes - State and Other					39
					40
TOTAL EXPENSES					41
NET REVENUE - NON-UTILITY					42
					43
12 MONTHS ENDED December 1941					44
GROSS REVENUE - NON-UTILITY					45
Gasoline	10C	-	-	-	46
Appliance	11C	-	-	-	47
Farm	12	-	-	-	48
Shop and Jobbing	12	-	-	-	49
Miscellaneous	12	130 00	130 00	-	50
Garage	13	-	-	-	51
					52
					53
TOTAL REVENUE - NON-UTILITY					

						32
TOTAL REVENUE - NON-UTILITY						33
OPERATING EXPENSES						34
Operation						35
Maintenance						36
Provision for Retirements						37
Taxes - Federal						38
Taxes - State and Other						39
						40
TOTAL EXPENSES						41
NET REVENUE - NON-UTILITY						42
12 MONTHS ENDED December 1941						43-44
GROSS REVENUE - NON-UTILITY						45
Gasoline	10C	-		-	-	46
Appliance	11C	-		-	-	47
Farm	12	-		-	-	48
Shop and Jobbing	12	-		-	-	49
Miscellaneous	12	130 00		130 00	-	50
Garage	13	-		-	-	51
						52
						53
TOTAL REVENUE - NON-UTILITY		130 00		130 00	-	54
OPERATING EXPENSES						55
Operation						56
Maintenance						57
Provision for Retirements						58
Taxes - Federal						59
Taxes - State and Other						60
						61
TOTAL EXPENSES		-		-	-	62
NET REVENUE - NON-UTILITY		130 00		130 00		63
		(A)	(B)	(C)	(D)	

COLUMBIA SYSTEM

MICHIGAN GAS TRANSMISSION CORPORATION

15321 OTHER INCOME 16

Exhibit 163

Month of December 1941

Acc't No.		Detail on Page	Amount		Increase Over Previous Year Amount	Increase Over Previous Year Percent	
	MONTH OF December 1941						1
							2
	INTEREST						3
1971	Inter-Company - This Group						4
1972	Inter-Company - Other Groups						5
1973	Others						6
	TOTAL INTEREST						7
	DIVIDENDS						8
1976	Inter-Company - This Group						9
1977	Inter-Company - Other Groups						10
1978	Others						11
							12
	TOTAL DIVIDENDS						13
	MISCELLANEOUS						14
1981	Revenues from Sinking & Other Funds						15
1982	Earned Carrying Charges						16
1983	Other						17
							18
	TOTAL MISCELLANEOUS						19
							20
	TOTAL OTHER INCOME		-		-	-	21
	MONTHS ENDED						22
							23
	INTEREST						24
1971	Inter-Company - This Group						25
1972	Inter-Company - Other Groups						26
1973	Others						27
	TOTAL INTEREST						28
	DIVIDENDS						29
1976	Inter-Company - This Group						30
1977	Inter-Company - Other Groups						31
1978	Others						32
							33
	TOTAL DIVIDENDS						34
	MISCELLANEOUS						35
1981	Revenues from Sinking & Other Funds						36
1982	Earned Carrying Charges						37
1983	Other						38
							39
	TOTAL MISCELLANEOUS						40
							41
	TOTAL OTHER INCOME						42
	12 MONTHS ENDED December 31, 1941						43
							44
	INTEREST						45
1971	Inter-Company - This Group		-		-	-	46
1972	Inter-Company - Other Groups		-		-	-	47
1973	Others		227 42		227 42	-	48
	TOTAL INTEREST		227 42		227 42	-	49
	DIVIDENDS						50
1976	Inter-Company - This Group						51
1977	Inter-Company - Other Groups						52
1978	Others						53
							54
	TOTAL DIVIDENDS						

						33
	TOTAL DIVIDENDS					34
	MISCELLANEOUS					35
1981	Revenues from Sinking & Other Funds					36
1982	Earned Carrying Charges					37
1983	Other					38
						39
	TOTAL MISCELLANEOUS					40
						41
	TOTAL OTHER INCOME					42
	12 MONTHS ENDED December 31, 1941					43 44
	INTEREST					45
1971	Inter-Company - This Group	-		-	-	46
1972	Inter-Company - Other Groups	-		-	-	47
1973	Others	227 42		227 42	-	48
	TOTAL INTEREST	227 42		227 42	-	49
	DIVIDENDS					50
1976	Inter-Company - This Group					51
1977	Inter-Company - Other Groups					52
1978	Others					53
						54
	TOTAL DIVIDENDS	-		-	-	55
	MISCELLANEOUS					56
1981	Revenues from Sinking & Other Funds				5213	57
1982	Earned Carrying Charges					58
1983	Other					59
						60
	TOTAL MISCELLANEOUS	-		-	-	61
						62
	TOTAL OTHER INCOME	227 42		227 42	-	63
		(A)	(B)	(C)	(D)	

COLUMBIA SYSTEM

15322 OTHER DEDUCTIONS 17

MICHIGAN GAS TRANSMISSION CORPORATION

Exhibit 163

Month of December 1941

Acct No.		Detail on Page	Amount	Increase Over Previous Year Amount	Increase Over Previous Year Percent
	MONTH OF December 1941				
	INTEREST				
9571	Bonds		-	-	-
9572	Miscellaneous Long Term Debt		-	-	-
9573	Inter-Co. Notes & Loans - This Group		-	-	-
9574	" " " " - Other Groups	24A	41 602 50	33 34	.1
9575	Other - Customers Deposits, Etc.		1 222 19	265 77	27.8
	TOTAL INTEREST		42 824 69	299 11	.7
9580	AMORTIZATION - DEBT DISCOUNT AND EXPENSE		-	-	-
	TOTAL FIXED CHARGES		42 824 69	299 11	.7
9583	Miscellaneous Deductions		-	-	-
9585	Preferred Dividends-Accrued or Guaranteed		-	-	-
9586	Rent for Lease of Utility Plant		-	-	-
	TOTAL OTHER DEDUCTIONS		42 824 69	299 11	.7
9587	LESS Interest Charged to Construction - Credit		4 162 47	23 957 18	85.2
	NET DEDUCTIONS FROM INCOME		38 662 22	24 256 29	168.4
	MONTHS ENDED				
	INTEREST				
9571	Bonds				
9572	Miscellaneous Long Term Debt				
9573	Inter-Co. Notes & Loans - This Group				
9574	" " " " - Other Groups				
9575	Other - Customers Deposits, Etc.				
	TOTAL INTEREST				
9580	AMORTIZATION - DEBT DISCOUNT AND EXPENSE				
	TOTAL FIXED CHARGES				
9583	Miscellaneous Deductions				
9585	Preferred Dividends-Accrued or Guaranteed				
9586	Rent for Lease of Utility Plant				
	TOTAL OTHER DEDUCTIONS				
9587	LESS Interest Charged to Construction - Credit				
	NET DEDUCTIONS FROM INCOME				
	12 MONTHS ENDED December 31, 1941				
	INTEREST				
9571	Bonds		-	-	-
9572	Miscellaneous Long Term Debt		-	-	-
9573	Inter-Co. Notes & Loans - This Group		-	-	-
9574	" " " " - Other Groups	24A	503 230 00	69 241 65	16.0
9575	Other - Customers Deposits, Etc.		12 769 04	7 354 58	135.8

							31
	TOTAL INTEREST						32
9580	AMORTIZATION - DEBT DISCOUNT AND EXPENSE						33
	TOTAL FIXED CHARGES						34
9583	Miscellaneous Deductions						35
9585	Preferred Dividends-Accrued or Guaranteed						36
9586	Rent for Lease of Utility Plant						37
							38
	TOTAL OTHER DEDUCTIONS						39
9587	LESS: Interest Charged to Construction - Credit						40
							41
	NET DEDUCTIONS FROM INCOME						42
			12 MONTHS ENDED December 31, 1941				43
							44
	INTEREST						45
9571	Bonds		-		-	-	46
9572	Miscellaneous Long Term Debt		-		-	-	47
9573	Inter-Co. Notes & Loans - This Group		-		-	-	48
9574	" " " " " Other Groups	24A	503 230 00		69 241 65	16.0	49
9575	Other - Customers Deposits, Etc		12 769 04		7 354 58	135.8	50
							51
							52
	TOTAL INTEREST		515 999 04		76 596 23	17.4	53
9580	AMORTIZATION - DEBT DISCOUNT AND EXPENSE		-		-	-	54
	TOTAL FIXED CHARGES		515 999 04		76 596 23	17.4	55
9583	Miscellaneous Deductions		-		-	-	56
9585	Preferred Dividends-Accrued or Guaranteed		-		-	-	57
9586	Rent for Lease of Utility Plant		-		-	-	58
							59
	TOTAL OTHER DEDUCTIONS		515 999 04		76 596 23	17.4	60
9587	LESS: Interest Charged to Construction - Credit		4 178 67		23 940 98	85.1	61
							62
	NET DEDUCTIONS FROM INCOME		511 820 37		100 537 21	24.4	63
			(A)	(B)	(C)	(D)	

COLUMBIA SYSTEM

15323 SURPLUS 18

MICHIGAN GAS TRANSMISSION CORPORATION

Exhibit 163

12 Months Ended December 31, 1941

	Detail on Page		
EARNED SURPLUS SINCE DECEMBER 31, 1937			
BALANCE - JANUARY 1, 1941			143 332 89
CREDITS:			
Net Income 12 Months Ended Dec. 31 1941 As Shown by Income Statement		509 898 82	
Profit from Sale of Investments †		-	
Other Credits †		-	
			509 898 82
TOTAL			653 231 71
DEBITS:			
Deficit 12 Months Ended Dec. 31 1941 As Shown by Income Statement		-	
Dividend Appropriations - Preferred Stock - Cum. 6% Series A - C. G. & E. Corp		-	
Dividend Appropriations - Preferred Stock - Cum. 5% Series - C. G. & E. Corp		-	
Dividend Appropriations - Preference Stock - 5% Cum. - C. G. & E. Corp		-	
Dividend Appropriations -		-	
Dividend Appropriations - Common Stock †		521 150 58	
Loss from Sale of Investments †			
Investments Written Down or Written Off †			
Surplus Appropriated to Reserves †			
Other Debits †			
TOTAL DEBITS			521 150 58
BALANCE - December 31, 1941			132 081 13

† Show Detail:

Dividend Appropriations - Common Stock

Dividend of $2.50 per share on 44,800 shares of Common Stock declared on March 5th, paid on March 14th, to stockholders of record on March 7th, 1941.	112 000 00
Proportion of dividend of $8.00 per share on 44,800 shares of Common Stock declared on June 19th, paid on June 24th, to stockholders of record on June 20th, 1941.	229 950 58
Dividend of $2.00 per share on 44,800 shares of Common Stock declared on September 10th, paid on September 16th, to stockholders of record on September 12th, 1941.	89 600 00
Dividend of $2.00 per share on 44,800 shares of Common Stock declared on December 3rd, paid on December 15th, to stockholders of record on December 10, 1941.	89 600 00

FORM C-B 1-BAP C-B-D

COLUMBIA SYSTEM

15324

SURPLUS 18A

MICHIGAN GAS TRANSMISSION CORPORATION

Exhibit 163

12 Months Ended December 31, 1941

	Detail on Page			
SPECIAL CAPITAL SURPLUS				1 2
BALANCE - JANUARY 1, 1941		x x x x x x x x x x	139 500 00	3
CREDITS				4
				5
DEBITS				6
				7
				8
			-	9
BALANCE - December 31, 1941		x x x x x x x x x x	139 500 00	10
SURPLUS PRIOR TO JANUARY 1, 1938				11 12
BALANCE - SURPLUS PRIOR TO JANUARY 1, 1938 AT JANUARY 1, 1941		x x x x x x x x x x	155 112 18	13
CAPITAL SURPLUS PRIOR TO JANUARY 1, 1938				14
AT DATE OF ACQUISITION BY C. G. & E. CORP				15
BALANCE - JANUARY 1, 1941		x x x x x x x x x x	26 662 76	16
CREDITS				17
				18
DEBITS				19
				20
			-	21
BALANCE - December 31, 1941		x x x x x x x x x x	26 662 76	22
SINCE DATE OF ACQUISITION BY C. G. & E. CORP.				23
BALANCE - JANUARY 1, 1941		x x x x x x x x x x	-	24
CREDITS				25
				26
DEBITS				27
				28
			-	29
BALANCE - December 31, 1941		x x x x x x x x x x	-	30
BALANCE - CAPITAL SURPLUS PRIOR TO JANUARY 1, 1938		x x x x x x x x x x	26 662 76	31
EARNED SURPLUS PRIOR TO JANUARY 1, 1938				32
BALANCE - EARNED SURPLUS PRIOR TO JANUARY 1, 1938 AT JANUARY 1, 1941		x x x x x x x x x x	128 449 42	33
AT DATE OF ACQUISITION BY C. G. & E. CORP.				34
BALANCE - JANUARY 1, 1941		x x x x x x x x x x	-	35
CREDITS				36
				37
				38
DEBITS				39
				40
			-	41
BALANCE - December 31, 1941		x x x x x x x x x x	-	42
SINCE DATE OF ACQUISITION BY C. G. & E. CORP.				43
BALANCE - JANUARY 1, 1941		x x x x x x x x x x	128 449 42	44
CREDITS (Liquidating dividend in Columbia System Protection Fund)		1 552 26		45 46
DEBITS		128 449 42		47
(Proportion of dividend of $8.00 per share on Common Stock paid June 24, 1941)				48
			126 897 16	49
BALANCE - December 31, 1941		x x x x x x x x x x	1 552 26	50
BALANCE - EARNED SURPLUS PRIOR TO JANUARY 1, 1938		x x x x x x x x x x	1 552 26	51
BALANCE - SURPLUS PRIOR TO JANUARY 1, 1938		x x x x x x x x x x	28 215 02	52
CAPITAL SURPLUS SINCE DECEMBER 31, 1937				53 54
BALANCE - JANUARY 1, 1941		x x x x x x x x x x		55
CREDITS				56
				57

BALANCE - December 31, 1941	x x x x x x x x x x	-	30
BALANCE - CAPITAL SURPLUS PRIOR TO JANUARY 1, 1938	x x x x x x x x x x	28 662 76	31
EARNED SURPLUS PRIOR TO JANUARY 1, 1938			32
BALANCE - EARNED SURPLUS PRIOR TO JANUARY 1, 1938 AT JANUARY 1, 1941	x x x x x x x x x x	128 449 42	33
AT DATE OF ACQUISITION BY C. G. & E. CORP.			34
BALANCE - JANUARY 1, 1941	x x x x x x x x x x	-	35
CREDITS			36
			37
			38
DEBITS			39
			40
		-	41
BALANCE - December 31, 1941	x x x x x x x x x x	-	42
SINCE DATE OF ACQUISITION BY C. G. & E. CORP.			43
BALANCE - JANUARY 1, 1941	x x x x x x x x x x	128 449 42	44
CREDITS (Liquidating dividend in Columbia System Protection Fund)	1 552 26		45
			46
DEBITS	128 449 42		47
(Proportion of dividend of $8.00 per share on Common Stock paid June 24, 1941)			48
		126 897 16	49
BALANCE - December 31, 1941	x x x x x x x x x x	1 552 26	50
BALANCE - EARNED SURPLUS PRIOR TO JANUARY 1, 1938	x x x x x x x x x x	1 552 26	51
BALANCE - SURPLUS PRIOR TO JANUARY 1, 1938	x x x x x x x x x x	28 215 02	52
			53
CAPITAL SURPLUS SINCE DECEMBER 31, 1937			54
BALANCE - JANUARY 1, 1941	x x x x x x x x x x		55
CREDITS			56
			57
			58
DEBITS			59
			60
			61
			62
BALANCE - December 31, 1941	x x x x x x x x x x		63
	(A)	(B)	

DESCRIPTION					
Current and Working Assets					1
Accounts Receivable - Other					2
Officers and Employees				1 733 54	3
Miscellaneous					4
For gas delivered during December 1941 for the account					5
of Panhandle Eastern Pipe Line Company					6
Central States Natural Gas Company, Inc.		326 00			7
Michigan Consolidated Gas Company - Ann Arbor		14 239 61			8
Michigan Consolidated Gas Company - Detroit		824 269 01			9
National Utilities Company of Michigan		9 206 45			10
The Ohio Gas, Light and Coke Company		7 189 95			11
Richmond Gas Corporation		6 964 63			12
Toledo Edison Company		1 095 81			13
Western Ohio Public Service Company		350 27	863 641 73		14
For gas transported during December 1941					15
Kentucky Natural Gas Corporation			1 000 00	864 641 73	16
Sundry Accounts				8 497 15	17
Total, Page 1, Line 47				874 872 42	18
Special Deposits and Funds					19
Miscellaneous					20
Utility Service Deposit					21
City of Bluffton				3 00	22
City of Detroit				10 00	23
Total, Page 1A, Line 75				13 00	24
Current and Accrued Liabilities					25
Other Current Liabilities					26
Contractors Retainage:					27
The Fluor Corporation, Ltd.			12 419 62		28
Midwest Engineering and Construction Company			250 00		29
The Weikel Construction Company			1 138 75	13 808 37	30
Deductions from Employees Earnings:					31
Federal Old Age Benefit Tax			704 23		32
Indiana Gross Income Tax			4 28	708 51	33
Total, Page 2, Line 32				14 516 88	34

15325

DETAIL OF BALANCE SHEET ACCOUNTS

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

Month of December 1941

20

Exhibit 163.

5323

DESCRIPTION				
Assets				
Accounts Receivable - Other Groups				
Columbus Group:				
Indiana Gas Distribution Corporation (Gas Sold)			27 037 80	
Indiana Gas Distribution Corporation (Other)			7 41	27 045 21
The Ohio Fuel Gas Company (Gas Sold)			222 07	
The Ohio Fuel Gas Company (Other)			504 23	726 30
Unassigned:				
Columbia Engineering Corporation-Columbia System Protection Fund				1 552 26
Total, Page 1A, Line 66				29 323 77
Liabilities				
Notes Payable - Other Groups				
Unassigned:				
Columbia Gas & Electric Corporation				
Note No.	Date			
2	8-1-37			5 210 500 00
3 R 1	8-10-37			200 000 00
4 R 2	9-1-37			190 000 00
5 R 3	10-1-37			170 000 00
6 R 4	11-1-37			100 000 00
7 R 5	12-1-37			30 000 00
Total, Page 2, Line 18				5 900 500 00
Loans Payable - Other Groups				
Unassigned:				
Columbia Gas & Electric Corporation Page 2, Line 20				2 420 000 00
Accounts Payable - Other Groups				
Columbus Group:				
Indiana Gas Distribution Corporation				5 40
The Ohio Fuel Gas Company				471 25
Pittsburgh Group:				
The Manufacturers Light and Heat Company				353 60
Unassigned:				
Columbia Engineering Corporation				7 036 44
Total, Page 2, Line 47				7 866 69

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Exhibit 163

Acct No	Title of Account and Description	Total Amount Basis	Mos. to Run	Balance Beginning of Month	Charges During Month: Debits	Charges During Month: Credits	Balance End of Month
	Current and Working Assets						
33	**Supplies - General**						
	Material and Supplies	-	-	109 452 23			
	Purchases				10 171 87		
	Returns				2 036 05		
	Issues					6 819 49	114 840 66
	Material Loans			90 24	-	-	90 24
	Other			2 00	121 00	-	123 00
	Total, Page 1, Line 53			109 544 47	12 328 92	6 819 49	115 053 90
38	**Prepaid Accounts**						
	Insurance	Indefinite	Var.	5 308 96	167 71	554 49	4 922 18
	Taxes	1 486 48	Var.	344 58	34 98	192 40	187 16
	Rentals	2 303 50	Var.	1 132 27	77 00	160 48	1 048 79
	Dues and Memberships	407 50	Var.	196 52	-	71 43	125 09
	Other	370 45	Var.	93 02	17 75	29 38	81 39
	Total, Page 1, Line 58			7 075 35	297 44	1 008 18	6 364 61
39	**Other Current & Accrued Assets**						
	Deferred Accounts Receivable Panhandle Eastern Pipe Line Company for proportionate share of liability to Michigan Consolidated Gas Company-Ann Arbor for housheating customers	124 customers connected	-	497 24	-	-	497 24
	Page 1, Line 59						
	Deferred Debits						
83	Preliminary Survey and Investigation Charges						
	Other Gas						
	Page 1A, Line 83	-	-	3 002 10	886 46	1 808 84	2 079 72
84	**Other Deferred Debits**						
	Contractual Advance to Central Indiana Gas Company	14 000 00	Indef.	1 130 87	-	437 83	693 04
	Contractual Advance to Kokomo Gas and Fuel Company	3 392 70	Indef.	2 109 10	-	117 86	1 991 24
	Deferred Costs of Rate Case	Indefinite	54 Mo.	-	39 801 13	6 000 00	33 801 13
	Total, Page 1A, Line 84			3 239 97	39 801 13	6 555 69	36 485 41

DETAIL OF BALANCE SHEET ACCOUNTS (A) (B) (C) (D) (E) (F)

Month of December 1941

MICHIGAN GAS TRANSMISSION CORPORATION

15321Y 21

Title of Account and Description	Total Amount Basis	Mos. to Run	Balance Beginning of Month	Changes During Month		Balance End of Month
				Debits	Credits	
Clearing and Contra Accounts						
Transportation Expense - Clearing						
Page 2A, Line 65	-	-	737 28	1 920 05	1 785 47	602 70
Retirement Work in Progress						
Page 2A, Line 75	-	-	2 132 78	6 364 39	4 303 31	71 70
Current and Accrued Liabilities						
Accrued Taxes						
Capital Stock (1940-1941) Fed.	12 500 00	-	12 500 00	12 500 00	-	-
Capital Stock (1941-1942) Fed.	12 500 00	6	5 208 32	-	1 041 68	6 250 00
Franchise (1941) Delaware	175 00	-	160 41	-	14 59	175 00
Income (1940) Federal	186 785 43	-	46 696 35	46 696 35	-	-
Income (1941) Federal	268 384 85	-	218 913 59	-	49 471 26	268 384 85
Old Age Benefit (1941) Federal	1% of Payrolls	-	456 99	-	246 87	703 86
Property (1941) Indiana	114 000 00	-	111 833 32	-	2 166 68	114 000 00
Property (1941) Ohio	10 800 00	-	11 000 00	-	200 00	10 800 00
Property (1941) Michigan	12 687 44	-	12 009 30	11 863 42	145 88	-
Unemployment Ins. (1941) Fed.	.3% of Payrolls	-	734 22	-	74 06	808 28
Unemployment Ins. (1941) Ind.	2.7% of State Payrolls	-	890 17	-	490 62	1 380 79
Unemployment Ins. (1941) Mich.	3.0% of State Payrolls	-	348 90	-	228 47	577 37
Total, Page 2, Line 33			420 751 57	71 059 77	53 388 35	403 080 15
Other Accrued Liabilities						
Accrued Insurance	Indefinite	Var.	1 073 18	-	276 96	1 350 14
Accrued Legal Fees	3 018 14	-	6 445 11	1 213 25	5 231 86	-
Liability to Michigan Consolidated Gas Co.-Ann Arbor for housheating customers	5.00 per customer	-	620 00	-	-	620 00
Total, Page 2, Line 38			8 138 29	1 213 25	4 954 90	1 970 14
Deferred Credits						
Other Deferred Credits						
Contractual Liability to Panhandle Eastern Pipe Line Company for its contribution to amount advanced Central Indiana Gas Company						
Page 2, Line 59	10 760 00	Indef.	870 80	337 14	-	533 66

15328

FORM CS 13-81F C & S

Exhibit 163

5829

Acc't No.	Title of Account and Description	Total Amount Basis	Mos. to Run	Balance Beginning of Month	Changes During Month		Balance End of Month
					Debits	Credits	
	Clearing and Contra Accounts						
166	Other Clearing Accounts						
	Special Equipment Expense-Clearing						
	Page 2A, Line 66	-	-	240 27	63 62	78 00	254 65
	Reserves						
180	Retirement and Depletion						
	Property, Plant and Equipment	3% of P.P.&E. Per Annum	-	1 651 366 95	4 070 60	38 774 66	1 686 071 01
	Transportation Equipment	Estimated Life	-	9 912 07	219 62	319 83	10 012 28
	Special Equipment	Estimated Life	-	1 787 65	-	23 09	1 810 74
	Total, Page 2A, Line 74			1 663 066 67	4 290 22	39 117 58	1 697 894 03
181	Injuries and Damages						
	Page 2A, Line 77	12 000 00 per annum	-	18 196 96	980 10	1 000 00	18 216 86
183	Contributions in Aid of Construction						
	Page 2A, Line 79			9 342 96	-	10 00	9 352 96
185	Contingencies						
	Taxes						
	Page 2A, Line 81	Various	-	309 695 66	-	7 972 53	317 648 19
186	Other Reserves						
	Reserve for Audit Fees						
	Page 2A, Line 82	1 200 00 per annum	-	1 100 00	-	100 00	1 200 00

Detail of Contingent Taxes Balance:

Contingent Prior Years Taxes	244 438 14
Interest on Prior Years Taxes	27 130 31
Contingent 1941 Taxes	46 079 74
	317 648 19

15329

DETAIL OF BALANCE SHEET ACCOUNTS (A) (B) (C) (D) (E) (F)

Month of December 1941

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MICHIGAN GAS TRANSMISSION CORPORATION

COLUMBIA SYSTEM

Exhibit 163

5321

Acc't No.	Description	Current Month	Increase Over Previous Year	___ Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
1209	Inter-Company Sales-Other Groups						
	Columbus Group:						
	Indiana Gas Distribution Corporation	27 037 80	4 561 02			320 181 22	15 540 48
	The Ohio Fuel Gas Company	222 07	165 43			2 638 21	638 29
	Total, Page 4, Line 11	27 259 87	4 726 45			322 819 43	16 178 77
9574	Interest Inter-Company - Other Groups						
	Unassigned:						
	Columbia Gas & Electric Corporation Page 17, Lines 7 and 49	41 602 50	33 34			503 230 00	69 241 65

(A) (B) (C) (D) (E) (F)

15330

DETAIL OF INCOME ACCOUNTS

Inter-Company Sales & Interest Expense

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

Month of December 1941

24

Exhibit 163

Acc't No.	Description	Current Month	Increase Over Previous Year	Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
	Total Other Gas Department Revenue Brought Forward	169 599 57	18 349 28			1 607 029 11	160 246 70
	Total Miscellaneous Other Revenue Brought Forward	169 534 57	18 329 28			1 606 274 11	160 031 70
	Received from Toledo Edison Co.						
	M.C.F.	3 356	790			31 557	13 014
	Rate	32.65¢	.43¢			31.48¢	.73¢
	Amount	1 095 81	268 92			9 933 52	4 232 15
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	3 356	790			31 557	13 014
	Rate	26.12¢	.29¢			25.32¢	.51¢
	Amount	876 49	213 62			7 989 31	3 387 97
	Net Revenue-Toledo Edison	219 32	55 27			1 944 21	844 18
	Received from National Utilities Company of Michigan						
	M.C.F.	31 763	31 763			113 787	113 787
	Rate	28.98¢	28.98¢			29.70¢	29.70¢
	Amount	9 206 45	9 206 45			33 797 82	33 797 82
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	31 763	31 763			113 787	113 787
	Rate	23.45¢	23.45¢			24.01¢	24.01¢
	Amount	7 447 05	7 447 05			27 324 24	27 324 24
	Net Revenue-National Utilities	1 759 40	1 759 40			6 473 58	6 473 58
	Received from Western Ohio Public Service Co.						
	M.C.F.	1 132	1 132			3 587	3 587
	Rate	30.94¢	30.94¢			32.55¢	32.55¢
	Amount	350 27	350 27			1 167 53	1 167 53
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	1 132	1 132			3 587	3 587
	Rate	24.62¢	24.62¢			26.05¢	26.05¢
	Amount	278 72	278 72			934 48	934 48
	Net Revenue-Western Ohio	71 55	71 55			233 05	233 05
	Total Miscellaneous Other Revenue Carried Forward	171 584 84	20 215 50			1 614 924 95	167 582 51
	Total Other Gas Department Revenue Carried Forward	171 649 84	20 235 50			1 615 679 95	167 797 51

(A) (B) (C) (D) (E) (F)

DETAIL OF INCOME ACCOUNTS

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

Other Gas Department Revenue

Month of December 1941

15332

24 c

Exhibit 163

Description	Current Month	Increase Over Previous Year	Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
Total Other Gas Department Revenue Brought Forward	171 649 84	20 235 50			1 615 679 95	167 797 51
Total Miscellaneous Other Revenue Brought Forward	171 584 84	20 215 50			1 614 924 95	167 582 51
Received from Richmond Gas Corporation						
M.C.F.	23 146	23 146			48 844	48 844
Rate	30.09¢	30.09¢			30.27¢	30.27¢
Amount	6 964 63	6 964 63			14 787 22	14 787 22
Paid to Panhandle E.P.L.Co.						
M.C.F.	23 146	23 146			48 844	48 844
Rate	24.37¢	24.37¢			24.50¢	24.50¢
Amount	5 641 32	5 641 32			11 965 62	11 965 62
Net Revenue-Richmond Gas Corporation	1 323 31	1 323 31			2 821 60	2 821 60
Kentucky Natural Gas Corp.						
M.C.F.	178 839	62 893			2 001 912	110 168
Rate	.56¢	.25¢			.50¢	.14¢
Amount	1 000 00	250 00			10 000 00	2 333 32
Total Miscellaneous Other Revenue	173 908 15	21 788 81			1 627 746 55	172 737 43
Total, Page 4, Line 14	173 973 15	21 808 81			1 628 501 55	172 952 43

(A) (B) (C) (D) (E) (F)

DETAIL OF INCOME ACCOUNTS

Other Gas Department Revenue

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

Month of December 1941

15333 5 24

Exhibit 163

Acct No.	Description	Current Month	Increase Over Previous Year	___ Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
2996	**Taxes - Federal**						
	Income	21 606 72	808 94			222 707 99	32 039 57
	Excess Profits	34 612 88	10 000 36			91 756 60	56 148 27
	Capital Stock	1 041 68	975 00			12 150 00	2 200 00
	Old Age Benefit	225 95	48 69			2 478 92	575 58
	Unemployment Insurance	67 79	14 60			743 69	172 69
	Total, Page 4, Line 41	57 557 02	8 369 71			329 837 20	25 552 40
2997	**Taxes - State and Other**						
	Franchise Delaware	14 59	-			175 00	-
	Property Indiana	2 166 62	625 04			112 940 98	5 305 29
	Property Ohio	200 00	1 200 00			9 273 14	1 322 18
	Property Michigan	26 08	126 14			13 345 70	269 92
	Property Intangible Pers.-Ohio	-	-			-	1 59
	Unemployment Ins. Indiana	433 87	97 67			4 546 26	1 175 99
	Unemployment Ins. Michigan	218 60	74 17			2 271 40	378 09
	Unemployment Ins. Billed by Affiliated Companies	9 18	3 24			102 55	37 76
	Total, Page 4, Line 42	2 536 84	1 782 58			142 655 06	5 303 44
	Total, Page 3, Lines 14 and 56	60 173 86	6 587 13			472 492 26	20 248 96

DETAIL OF INCOME ACCOUNTS

(A) (B) (C) (D) (E) (F)

Tax Expense

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

Month of December 1941

15334

24

COLUMBIA SYSTEM

MICHIGAN GAS TRANSMISSION CORPORATION

GAS EXPENSES 25

15335

Month of December 1941

12 Months To Date	Increase Over Previous Year	Acc't No.	GAS PURCHASED FOR RESALE	Current Month	Increase Over Previous Year	
						1
-	-	2000	Natural Gas Purchased - This Group	-	-	2
-	-	2001	" " " - Other Groups	-	-	3
3 249 178 39	653 350 75	2002	" " " - Others	326 466 82	91 179 71	4
-	-	2003	Manufactured Gas Purchased - This Group	-	-	5
-	-	2004	" " " - Other Groups	-	-	6
-	-	2005	" " " - Others	-	-	7
-	-	2010	Interchange of Gas - Net - This Group	-	-	8
-	-	2011	" " " - Other Groups	-	-	9
-	-	2012	" " " - Others	-	-	10
-	-	2014	Gas Placed in Storage	-	-	11
-	-	2015	Gas Withdrawn from Storage	-	-	12
3 249 178 39	653 350 75		- TOTAL	326 466 82	91 179 71	13
						14
			GAS PURCHASE EXPENSES			15
			OPERATION			16
396 75	8 62	2016	Purchase Expenses - Natural Gas - Labor	29 12	70	17
118 74	54 62	2017	" " " " - M. & E.	13 16	8 47	18
-	-	2018	" " - Manufactured Gas - - Labor	-	-	19
-	-	2019	" " " " " - M & E.	-	-	20
						21
						22
515 49	63 24		TOTAL OPERATION	42 28	7 77	23
			MAINTENANCE			24
-	-	2054	Struc. & Equip. - Natural Gas - Labor	-	-	25
-	-	2055	" " " " " " - M. & E.	-	-	26
-	-	2062	" " " - Manufactured Gas - Labor	-	-	27
-	-	2063	" " " " " " - M. & E.		-	28
						29
						30
-	-		TOTAL MAINTENANCE	-	-	31
515 49	63 24		TOTAL PURCHASE EXPENSES	42 28	7 77	32
						33
			GAS PURCHASED SUMMARY			34
			NATURAL GAS			35
3 249 178 39	653 350 75		Total Purchases	326 466 82	91 179 71	36
515 49	63 24		Total Purch. Exp. - Operation	42 28	7 77	37
-	-		" " " - Maintenance	-	-	38
3 249 693 88	653 287 51		TOTAL	326 509 10	91 187 48	39
			MANUFACTURED GAS			40
			Total Purchases			41
			Total Purch. Exp. - Operation			42
			" " " - Maintenance			43
-	-		TOTAL	-	-	44
			Interchange of Gas - Net			45
			Gas In & Out of Storage - Net			46
-	-		TOTAL	-	-	47
3 249 693 88	653 287 51		TOTAL GAS PURCHASED EXPENSES	326 509 10	91 187 48	48
						49
			GAS PURCHASE STATISTICS			50
15 580 331	3 268 734		Natural Gas Purchased - MCF	1 495 454	315 112	51
-	-		Interchange of Gas - Net - MCF	-	-	52
-	-		Natural Gas Stored - Cr. - MCF	-	-	53
			TOTAL	1 495 454	315 112	54

Exhibit 163

		GAS PURCHASED SUMMARY			33
					34
		NATURAL GAS			35
3 249 178 39	653 350 75	Total Purchases	326 466 82	91 179 71	36
515 49	63 24	Total Purch. Exp. - Operation	42 28	7 77	37
-	-	" " " - Maintenance	-	-	38
3 249 693 88	653 287 51	TOTAL	326 509 10	91 187 48	39
		MANUFACTURED GAS			40
		Total Purchases			41
		Total Purch. Exp. - Operation			42
		" " " - Maintenance			43
-	-	TOTAL	-	-	44
		Interchange of Gas - Net			45
		Gas In & Out of Storage - Net			46
-	-	TOTAL	-	-	47
3 249 693 88	653 287 51	TOTAL GAS PURCHASED EXPENSES	326 509 10	91 187 48	48
		GAS PURCHASE STATISTICS			49
					50
15 580 331	3 268 734	Natural Gas Purchased - MCF	1 495 454	315 112	51
-	-	Interchange of Gas - Net - MCF	-	-	52
-	-	Natural Gas Stored - Cr. - MCF	-	-	53
15 580 331	3 268 734	TOTAL	1 495 454	315 112	54
20.85	.23	Average Cost Per MCF (Cents)	21.83	1.90	55
-	-	Manufactured Gas Purchased - MCF	-	-	56
-	-	Manufactured Gas Stored - Cr. - MCF	-	-	57
-	-	TOTAL	-	-	58
-	-	Average Cost Per MCF (Cents)	-	-	59
	-	Gas Withdrawn from Storage - MCF	-	-	60
	-	Average Cost Per MCF (Cents)	-	-	61
15 580 331	3 268 734	TOTAL GAS PURCHASED - MCF	1 495 454	315 112	62
20.85	.23	AVG. COST PER MCF (Cents)	21.83	1.90	63
(A)	(B)		(C)	(D)	

COLUMBIA SYSTEM

MICHIGAN GAS TRANSMISSION CORPORATION

15336

GAS EXPENSES 28

Month of December 1941

12 Months To Date	Increase Over Previous Year	Acc't No?	TRANSMISSION		Current Month	Increase Over Previous Year	
			OPERATION				1
21 517 01	9 984 64	2300	Supervision & Engineering	Labor	1 879 41	1 109 94	2
12 572 31	6 032 97	2301	" " "	M. & E.	995 74	100 51	3
1 200 00	-	2302	Load Dispatching	Labor	100 00	-	4
2 140 02	320 30	2303	" "	M. & E.	395 71	266 02	5
4 616 89	2 851 80	2304	Transmission Maps and Records	Labor	524 25	174 15	6
1 890 30	1 414 33	2305	" " "	M. & E.	56 14	248 68	7
82 813 23	24 212 38	2306	Compressor Station	Labor	8 899 88	2 396 20	8
99 143 83	5 311 88	2307	" "	Power	12 166 13	3 563 28	9
13 320 45	2 029 66	2309	" " "	M. & E.	1 608 31	515 27	10
37 902 17	3 861 29	2310	Measuring and Regulating Station	Labor	3 734 77	10 175 00	11
12 119 46	2 110 70	2311	" " " "	M. & E.	1 310 47	2 266 25	12
38 719 43	7 406 28	2312	Transmission Lines	Labor	4 119 09	12 584 79	13
9 884 03	428 01	2313	" "	M. & E.	1 250 49	2 842 25	14
-	-	2316	Other Transmission Expenses	Labor	-	-	15
	-	2317	" " "	M. & E.	-	-	16
3 410 98	796 46	2323	Rents		267 98	66 56	17
							18
							19
							20
							21
							22
							23
							24
341 250 11	66 760 70		TOTAL OPERATION		37 308 34	9 550 20	25
			MAINTENANCE				26
7 776 28	3 164 53	2350	Supervision & Engineering	Labor	705 04	396 01	27
2 529 43	1 420 03	2351	" " "	M. & E.	217 68	30 07	28
2 369 63	1 699 83	2352	Compressor Station Struct & Imp'm'ts	Labor	166 76	141 12	29
1 848 62	1 554 91	2353	" " " "	M. & E.	621 84	601 35	30
1 268 49	318 16	2354	Other Trans System Struct & Imp'm'ts	Labor	50 30	15 28	31
659 56	15 70	2355	" " " "	M. & E.	109 65	44 50	32
6 097 63	3 380 81	2356	Compressor Station Equipment	Labor	499 91	277 91	33
4 213 22	877 65	2357	" " "	M. & E.	421 89	335 20	34
13 756 66	5 668 56	2362	Transmission Lines	Labor	766 18	109 66	35
8 880 74	6 683 37	2363	" "	M. & E.	1 113 63	910 33	36
1 342 15	773 71	2370	Measuring Station Equipment	Labor	120 61	1 327 28	37
1 326 17	378 01	2371	" " "	M. & E.	117 53	1 002 56	38
-	-	2376	Other Transmission Equipment	Labor	-	-	39
-	-	2377	" " "	M. & E.	-	-	40
							41
							42
							43
							44
							45
							46
							47
							48
							49
							50
							51
							52
52 073 58	2 827 33		TOTAL MAINTENANCE		4 911 02	361 37	53
393 323 69	63 933 37		TOTAL TRANSMISSION EXPENSES		42 219 36	9 911 57	54
							55

Exhibit 163

FORM CB 18 NO P C B O

COLUMBIA SYSTEM

15337

GAS EXPENSES 30

MICHIGAN GAS TRANSMISSION CORPORATION

Month of December 1941

12 Months To Date	Increase Over Previous Year	Acc't No.	CUSTOMERS ACCOUNTING & COLLECTING	Current Month	Increase Over Previous Year	
						1
		2600	Supervision - Labor			2
		2601	" - M. & E.			3
		2602	Customers Contract & Orders - Labor			4
		2603	" " " - M. & E.			5
		2604	Credit Investigation & Records - Labor			6
		2605	" " " - M. & E.			7
		2606	Meter Reading - Labor			8
		2607	" " - M. & E.			9
		2608	Collecting - Labor			10
		2609	" - M. & E.			11
		2610	Customers Billing & Acctg - Labor			12
		2611	" " " - M. & E.			13
		2612	Delivering Bills - Labor			14
		2613	" " - M. & E.			15
		2614	Miscellaneous - Labor			16
		2615	" - M. & E.			17
		2630	Uncollectible Accounts			18
		2633	Rents - Billing Equipment			19
		2634	" - Other			20
						21
						22
						23
						24
						25
						26
						27
						28
						29
						30
						31
						32
						33
						34
						35
						36
			TOTAL CUST. ACCTG. & COLL. EXP.			37

COST STATEMENT

Exh1

						30
						31
						32
						33
						34
						35
						36
			TOTAL CUST. ACCTG. & COLL. EXP.			37
			SALES PROMOTION			38
						39
		2700	Supervision - Salaries			40
		2701	" - M. & E.			41
		2704	Canvassing and Soliciting - Salaries			42
		2705	" " " - M. & E.			43
		2706	Commissions			44
		2708	Demonstration - Labor			45
		2709	" - M. & E.			46
		2710	Advertising - Labor			47
		2711	" - M. & E.			48
		2714	Miscellaneous - Labor			49
		2715	" - M. & E.	1 395 56	1 388 63	50
8 069 93	4 050 22	2719	Rents			51
						52
						53
						54
						55
						56
						57
						58
						59
						60
						61
						62
			TOTAL SALES PROMOTION EXPENSES	1 395 56	1 388 63	63
8 069 93 (A)	4 050 22 (B)			(C)	(D)	

COLUMBIA SYSTEM

MICHIGAN GAS TRANSMISSION CORPORATION

15338

GAS EXPENSES 31

Month of December 1941

12 Months To Date	Increase Over Previous Year	Acc't No.	ADMINISTRATIVE & GENERAL	Current Month	Increase Over Previous Year	
			OPERATION			1
9 887 00	613 00	2800	General Officers - Salaries	950 00	75 00	2
2 077 11	3 234 71	2801	" " - Expenses	130 38	277 67	3
20 180 27	6 285 46	2804	General Office Employees - Salaries	2 036 97	569 42	4
2 220 67	1 311 81	2805	" " - Expenses	329 91	143 06	5
4 915 52	196 64	2807	General Office Supplies and Expenses	709 34	129 14	6
12 879 98	821 22	2809	Mgmt. & Supervision Fees & Expenses	5 367 25	6 661 33	7
3 018 14	4 099 17	2810	Special Services - Legal	5 231 86	349 17	8
7 136 11	2 359 32	2811	" " - Audit & Taxes	948 93	601 55	9
18 052 77	1 772 80	2814	" " - Other	1 546 70	4 128 86	10
6 011 82	6 011 82	2815	Regulatory Commission Expenses	12 866 88	2 866 88	11
2 750 03	2 036 79	2817	Insurance	240 40	273 21	12
15 780 99	3 780 99	2819	Injuries and Damages	1 400 90	400 90	13
1 241 02	649 38	2821	Employees' Welfare Exp. Grp. Life Ins.	253 24	164 16	14
362 66	17 24	2823	" " " Other	10 00	84 90	15
-	-	2824	Pensions	-	-	16
-	-	2825	Miscellaneous General - Public Relations	-	-	17
8 885 57	4 855 74	2829	" " Other	1 079 60	977 46	18
-	-	2831	Franchise Requirements	-	-	19
-	-	2832	Rents - Accounting Equipment	-	-	20
4 372 38	191 64	2833	General Rents	490 20	69 74	21
5 176 74	3 656 62	2835	Stores Expenses	734 12	367 77	22
						23
						24
						25
						26
124 948 78	15 962 41		TOTAL OPERATION	5 698 70	11 243 82	27
			MAINTENANCE			28
-	-	2850	Structures & Improvements	-	-	29
86 38	319 23	2852	General Office Furniture & Equipment	19 93	12 85	30
-	-	2854	Communication Equipment	-	-	31
-	-	2856	Miscellaneous General Equipment	-	-	32
						33
						34
						35
						36
						37
						38
86 38	319 23		TOTAL MAINTENANCE	19 93	12 85	39
125 035 16	15 643 18		TOTAL ADMINISTRATIVE & GENERAL EXP.	- 5 678 77	11 230 97	40
			MISCELLANEOUS DUPLICATE CHARGES			41
						42
4 123 40	21 178 41	2982	Adm. & Gen'l. Exp. Transf. to Constr. - Credit	3 880 52	21 402 88	43
-	-	2983	Joint Operating Expenses Trans. - Credit	-	-	44
99 143 83	5 311 88	2985 1	Gas Used by Gas Depts. for Power - Credit	12 166 13	3 563 28	45
-	-	2985 2	" " " " " Mfd. Gas - Credit	-	-	46
3 234 09	2 114 54	2985 3	" " " " " Co. Bldgs. - Credit	510 90	88 57	47
11 21	2 812 47	2985 4	" " " " " Other - Credit	11 21	2 812 47	48
-	-	2987	" " Other Depts. - Credit	-	-	49
-	-	2986	Free Gas - Credit	-	-	50
2 584 80	881 89	2989	Stores Expenses Transferred - Credit	565 55	309 57	51
						52
109 097 33	15 682 57		TOTAL DUPLICATE CHARGES	17 134 31	20 253 93	53
						54
3 614 865 37	755 743 41		Total Operation	342 379 99	111 136 42	55
52 159 96	3 146 56		Total Maintenance	4 930 95	374 22	56

Exhibit 163

						33
						34
						35
						36
						37
86 38	319 23		TOTAL MAINTENANCE	19 93	12 85	38
125 035 16	15 643 18		TOTAL ADMINISTERATIVE & GENERAL EXP	5 678 77	11 230 97	39
			MISCELLANEOUS DUPLICATE CHARGES			40
						41
4 123 40	21 178 41	2982	Adm & Gen'l Exp Transf to Constr — Credit	3 880 52	21 402 88	42
-	-	2983	Joint Operating Expenses Trans — Credit	-	-	43
99 143 83	5 311 88	2985 1	Gas Used by Gas Dept for Power — Credit	12 166 13	3 563 28	44
-	-	2985 2	" " " " Mfd Gas — Credit	-	-	45
3 234 09	2 114 54	2985 3	" " " Co Bldgs — Credit	510 90	88 57	46
11 21	2 812 47	2985 4	" " " Other — Credit	11 21	2 812 47	47
-	-	2987	" " Other Depts — Credit	-	-	48
-	-	2988	Free Gas — Credit	-	-	49
2 584 80	881 89	2989	Stores Expenses Transferred — Credit	565 55	309 57	50
						51
109 097 33	15 682 57		TOTAL DUPLICATE CHARGES	17 134 31	20 253 93	52
						53
3 614 865 37	755 743 41		Total Operation	342 379 99	111 136 42	54
52 159 96	3 146 56		Total Maintenance	4 930 95	374 22	55
366 785 40	74 018 52	2990	Provision for Retirements	38 714 66	7 741 37	56
-	-	2992	Extraordinary Retirement Expense	-	-	57
329 837 20	25 552 40	2996	Taxes Federal	57 557 02	8 369 71	58
142 655 06	5 303 44	2997	Taxes State and Other	2 616 84	1 782 58	59
						60
						61
4 506 302 99	806 366 41		TOTAL GAS EXPENSES	446 259 46	125 839 14	62
(A)	(B)			(C)	(D)	63

5347

15339

Exhibit 163

COLUMBIA SYSTEM

STATISTICAL REPORT

OF

MICHIGAN GAS TRANSMISSION CORPORATION
(Unassigned)

FOR PERIOD ENDED December 31, 1941

SIGNED C J Murdock
Assistant TREASURER

DATE January 21, 1942

Exhibit 163

DELIVERIES	CUSTOMERS Current Month	CUSTOMERS Increase Over Previous Year	MCF Current Month	MCF Increase Over Previous Year	MCF Percent Increase	MCF Months To Date	MCF Increase Over Previous Year	MCF Percent Increase	MCF 12 Months To Date	MCF Increase Over Previous Year	MCF Percent Increase	
RETAIL												2
Residential												3
Commercial												4
Municipal and Other Public												5
Industrial †												6
Other												7
												8
TOTAL RETAIL SALES	-	-	-	-	-				-	-	-	9
WHOLESALE												10
Other Public Utilities †	11	-	1 243 425	285 268	29.8				13 145 792	3 048 816	30.2	11
Other Utilities - Col. Sys. †	-	-	-	-	-				-	-	-	12
												13
TOTAL SALES TO PUBLIC	11	-	1 243 425	285 268	29.8				13 145 792	3 048 816	30.2	14
INTER-COMPANY												15
This Group †			-	-	-				-	-	-	16
Other Groups †			109 910	16 689	13.2				1 312 221	44 268	3.5	17
TOTAL INTER-COMPANY SALES			109 910	16 689	13.2				1 312 221	44 268	3.5	18
TOTAL ALL SALES			1 353 335	268 579	24.8				14 458 013	3 093 084	27.2	19
MISCELLANEOUS DELIVERIES												20
Company Use, Elec. Gen. Stations †			-	-	-				-	-	-	21
Other Company Use, etc.			51 493	13 952	37.2				423 552	32 871	8.4	22
~~Gas Municipal and Other~~ Del. for P.E.P.L.Co.			2 644 188	195 320	8.0				24 420 803	1 988 837	8.9	23
Delivered for Kentucky			178 839	62 893	26.0				2 001 912	110 168	5.2	24
TOTAL MISCELLANEOUS DELIVERIES			2 874 520	146 379	5.4				26 846 267	1 911 540	7.7	25
TOTAL GAS DELIVERIES			4 227 855	414 958	10.9				41 304 280	5 004 624	13.8	26
AVAILABLE FOR DELIVERIES												27
PURCHASED INTER-COMPANY												28
This Group †												29
Other Groups †												30
TOTAL PURCHASED INTER-COMPANY			-	-	-				-	-	-	31
PURCHASED INDEPENDENTS												32
Natural Gas †			1 495 454	315 112	26.7				15 580 331	3 268 734	26.6	33
Manufactured Gas †			-	-	-				-	-	-	34
												35
TOTAL PURCHASED INDEPENDENTS			1 495 454	315 112	26.7				15 580 331	3 268 734	26.6	36
TOTAL GAS PURCHASED			1 495 454	315 112	26.7				15 580 331	3 268 734	26.6	37
PRODUCED												38
Natural Gas												39
Manufactured Gas												40
												41
												42
TOTAL GAS PRODUCED			-	-	-				-	-	-	43
~~INTERCHANGE OF GAS - NET~~ Miscellaneous			2 644 188	195 320	8.0				24 420 803	1 988 837	8.9	44
~~GAS IN OR OUT OF STORAGE - NET~~ Kentucky			178 839	62 893	26.0				2 001 912	110 168	5.2	45
TOTAL GAS AVAILABLE FOR DELIVERIES			4 318 481	447 539	11.5				42 003 046	5 147 403	14.0	46
LOSS (Black) GAIN (Red)			90 626	32 581	56.1				698 766	142 779	25.7	47
† Detail on Page 53			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	

GAS STATISTICS

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

Month of December 1941

0439

1 C 51

Exhibit 163

	MCF OR KWH Current Month	Increase Over Previous Year	Avg. Rate	MCF OR KWH ___ Months To Date	Increase Over Previous Year	Avg. Rate	MCF OR KWH 12 Months To Date	Increase Over Previous Year	Avg. Rate
DELIVERIES									
Wholesale-Other Public Utilities									
Central Indiana Gas Company	722 055	182 550	25.42				8 142 040	2 261 925	24.89
Indiana-Ohio Public Service Co.	14 636	2 613	35.45				122 887	1 190	33.32
Kokomo Gas and Fuel Company	43 745	1 119	28.86				567 666	67 468	27.85
Lynn Natural Gas Company	1 170	36	35.01				10 681	24	39.14
Northern Indiana Public Service Company	204 077	48 544	34.31				1 793 964	317 270	32.95
Pendleton Natural Gas Company	1 930	402	51.46				17 639	1 989	51.97
Public Service Company of Indiana	254 299	51 913	32.98				2 476 459	395 609	29.89
Town of Lapel, Indiana	693	207	30.81				7 646	2 752	38.57
Town of Montezuma, Indiana	141	13	52.59				1 662	105	52.52
Town of Pittsboro, Indiana	383	93	36.80				2 704	235	40.69
Town of Roachdale, Indiana	296	42	35.49				2 444	219	40.28
Total, Page 51, Line 11	1 243 425	285 268	28.72				13 145 792	3 048 816	27.21
Inter-Company Sales-Other Groups									
Columbus Group:									
Indiana Gas Distribution Corp.	109 311	16 513	24.72				1 306 394	44 994	24.51
The Ohio Fuel Gas Company	599	176	37.07				5 827	726	45.28
Total, Page 51, Line 17	109 910	16 689	24.80				1 312 221	44 268	24.60
Total, Page 51, Line 19	1 353 335	268 579	23.40				14 458 013	3 093 084	26.97
Miscellaneous									
Delivered for Panhandle Eastern Pipe Line Company To:									
Michigan Consolidated Gas Co.- Detroit	2 523 077	127 535	32.67				23 698 153	1 721 426	32.97
Michigan Consolidated Gas Co.- Ann Arbor	40 599	5 527	35.13				358 943	54 397	32.64
The Ohio Gas, Light & Coke Co.	20 200	5 675	35.59				154 955	35 893	33.20
Central States Natural Gas Company, Inc.	975	248	33.44				10 977	2 111	32.46
Toledo Edison Company	3 356	790	32.65				31 557	13 014	31.48
National Utilities Co. of Michigan	31 763	31 763	28.98				113 787	113 787	29.70
Western Ohio Public Service Co.	1 132	1 132	30.94				3 587	3 587	32.55
Richmond Gas Corporation	23 146	23 146	30.09				48 844	48 844	30.27
Total, Page 51, Line 23	2 644 188	195 320	32.66				24 420 803	1 968 837	32.94
Delivered to Kentucky Natural Gas Corporation									
Page 51, Line 24	178 839	62 893	.56				2 001 912	110 168	.50
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)

Exhibit 163

	MCF OR KWH			MCF OR KWH			MCF OR KWH			
	Current Month	Increase Over Previous Year	Avg. Rate	___ Months To Date	Increase Over Previous Year	Avg. Rate	12 Months To Date	Increase Over Previous Year	Avg. Rate	
AVAILABLE FOR DELIVERY										1
Purchased-Independents-Natural Gas										2
Panhandle Eastern Pipe Line Co.										3
Page 51, Line 33	1 495 454	315 112	21.83				15 580 331	3 268 331	20.85	4
Miscellaneous										5
Received from Panhandle Eastern Pipe Line Company for-										6
Michigan Consolidated Gas Company-Detroit	2 523 077	127 635	26.13				23 698 153	1 721 426	26.34	7
Michigan Consolidated Gas Company - Ann Arbor	40 539	5 527	27.81				358 943	54 397	26.11	8
The Ohio Gas, Light & Coke Co.	20 200	5 675	28.13				154 955	35 893	26.50	9
Central States Natural Gas Company, Inc.	975	248	26.65				10 977	2 111	25.99	10
Toledo Edison Company	3 356	790	26.12				31 557	13 014	25.32	11
National Utilities Company of Michigan	31 763	31 763	23.45				113 787	113 787	24.01	12
Western Ohio Public Service Company	1 132	1 132	24.62				3 587	3 587	26.05	13
Richmond Gas Corporation	23 146	23 146	24.37				48 844	48 844	24.50	14
Total, Page 51, Line 44	2 644 188	195 320	26.12				24 420 803	1 988 837	26.32	15
Received for Kentucky Natural Gas Corporation										16
Page 51, Line 45	178 830	62 893	-				2 001 912	110 168	-	17

(A) (B) (C) (D) (E) (F) (G) (H) (I)

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DETAIL OF STATISTICS

Gas

MICHIGAN GAS TRANSMISSION CORPORATION

COLUMBIA SYSTEM

Month of December 1941

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Exhibit 163

COLUMBIA SYSTEM

FIXED CAPITAL EXPENDITURE REPORT

OF

MICHIGAN GAS TRANSMISSION CORPORATION
(Unassigned)

FOR PERIOD ENDED December 31, 1941

SIGNED E J Mueller
Asaistant TREASURER

DATE January 22, 1942

Exhibit 163

Budget No.	DESCRIPTION	Amount of Budget	Expenditures: This Month	Expenditures: Since Jan. 1st	Expenditures: From Beginning	Estimated To Complete	Expenditures: Present Estimated Total	Increase Present Est. Over Last Approval: Amount	Increase Present Est. Over Last Approval: %	% Physically Complete	Est'd Date of Acct's Complete	
	TRANSMISSION DEPARTMENT											1
13	Transmission Mains-Minor Additions	22 000	3 377	11 059	11 059	-	11 059	10 941	50	Complete		2
14	Measuring & Regulating Equipment	3 500	1 401	1 653	1 653	-	1 653	1 847	50	Complete		3
15	Compressor Station Equipment	5 000	273	1 824	1 824	-	1 824	3 176	63	Complete		4
16	Compressor Station Structures	1 000	892	1 886	1 886	-	1 886	886	88	Complete		5
17	Measuring & Regulating Station Structures	1 000	2	470	470	-	470	530	53	Complete		6
18	Other Transmission System Structures	500	-	195	195	-	195	305	61	Complete		7
94	Installation of Valve Operator at Detroit Measuring Station	1 200	-	1	1 589	-	1 589	389	32	Complete		8
98	Construct 54,71 miles of 24" pipe line	1 638 000	234	74 063	1 453 996	-	1 453 996	184 004	11	Complete		9
100-R	Construct Edgerton Station and addition to Montezuma Station	759 600	-	24 866	763 603	-	763 603	4 003	1	Complete		10
107-R	Construct Central District Warehouse near Bluffton, Indiana	27 978	9 548	26 438	26 438	1 540	27 978	-	-	85	Mar.	11
109	Construction of Regulating and Measuring Station to serve Monroe, Michigan	4 791	565	6 065	6 065	-	6 065	1 274	27	100	Mar.	12
110	Reinforcement of Transmission Facilities of Michigan Gas Transmission Corporation	285 500	22 134	302 102	302 102	20 000	322 102	36 602	13	95	Apr.	13
112	Construction of Regulating and Measuring Station on Line "C" near Elwood, Ind.	4 167	514	4 818	4 818	-	4 818	651	15	100	Mar.	14
114	Install two Blew-Knox Cleaners at Montezuma, Indiana	13 496	-	54	54	13 442	13 496	-	-	-	June	15
115	Construct 48,000' of 6-5/8" O.D. Pipe Line and add one meter at Port Wayne Measuring Station	65 055	492	53 238	53 238	4 000	57 238	7 817	12	90	Apr.	16
117	Construct Richmond Regulating and Measuring Station	8 485	725	2 276	2 276	6 209	8 485	-	-	25	Apr.	17
	Transmission Department Carried Forward	2 841 272	37 355	511 006	2 631 266	45 191	2 676 457	264 815	-	-		18
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)

FIXED CAPITAL ADDITIONS — MICHIGAN GAS TRANSMISSION CORPORATION — COLUMBIA SYSTEM — Month of December 1941

Exhibit 163

Budget No.	DESCRIPTION	Amount of Budget	Expenditures: This Month	Expenditures: Since Jan. 1st	Expenditures: From Beginning	Estimated To Complete	Present Estimated Total	Increase Present Est. Over Last Approval: Amount	Increase Present Est. Over Last Approval: %	% Physically Completed	Est'd Date of Acct's Compl'n
	Transmission Department										
-	Brought Forward	2 841 272	37 355	511 006	2 631 266	45 191	2 876 457	164 849	-	-	-
119	Construct Greenfield Measuring and Regulating Station	3 348	599	599	599	2 749	3 348	-	-	25	May
120	Construct Panhandle-Michigan Measuring Station	31 352	1 161	1 161	1 161	30 191	31 352	-	-	-	June
122	Purchase of land for water well site	1 800	38	38	38	1 762	1 800	-	-	-	Apr.
	Total Transmission	2 877 772	39 153	512 804	2 633 064	79 893	2 712 957	164 849	6	-	-
	GENERAL PROPERTY										
41	Office Furniture & Fixtures	1 700	205	2 161	2 161	-	2 161	461	27	Complete	
42	Tools and Work Equipment	3 500	536	2 669	2 669	-	2 669	832	45	Complete	
43-R	Stores Equipment	750	-	644	644	-	644	100	18	Complete	
97	Purchase of Emergency Pipe Repair Equipment	3 200	-	20	3 213	-	3 213	13	-	Complete	
106R	Automotive Equipment- 1st Quarter	1 600	-	1 467	1 467	-	1 467	133	8	Complete	
111	2nd Quarter	3 558	5	3 411	3 411	-	3 411	147	4	Complete	
113	3rd Quarter	1 844	-	1 815	1 815	-	1 815	29	2	Complete	
116	Purchase Marchant Calculator	675	-	695	695	-	695	20	3	Complete	
118	Automotive Equipment- 4th Quarter	1 558	758	758	758	800	1 558	-	-	50	Mar.
	Total General Property	18 385	1 504	13 640	16 833	800	17 633	752	4	-	-
	Total Gas Department -	2 896 157	40 657	526 444	2 649 897	80 693	2 730 590	165 601	6	-	-
	Reconcilement with Fixed Capital Account as shown on Balance Sheet										
	Total Expenditures as shown above		40 657	526 444	2 649 897						
	Completed items transferred to Fixed Capital during 1941										
	Balance in open blanket work orders as of December 31, 1940		-	-	3 234						
	Completed items closed to Fixed Capital during 1940 but included in Column E		-	-							
				6 564	11 641						

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K)

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FIXED CAPITAL ADDITIONS

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

Month of December 1941

70 B.

Budget No.	DESCRIPTION	Cost Of Retiring - Less Salvage Value: Amount of Budget	This Month	Since Jan. First	From Beginning	Estimated To Complete	Credit To Fixed Capital To Date	Cost of Retiring To Date	Salvage Value To Date	Net Charge To Retirement Work in Progress To Date	Est'd Date of Asst's Compl'n
	TRANSMISSION DEPARTMENT										
X13	Transmission Mains-Minor Retirements	400	46	461	461	-	1 482	335	796	1 021	Comp.
X14	Measuring & Regulating Equipment	1 500	227	276	276	-	1 250	142	418	974	Comp.
X15	Compressor Station Equipment	2 000	64	659	659	-	1 853	104	763	1 194	Comp.
X16	Compressor Station Structures	650	188	729	729	-	2 186	949	220	2 915	Comp.
X17	Measuring & Regulating Station Structures	650	-	20	20	-	20	-	20	-	Comp.
X18	Other Transmission System Structures	200	-	-	-	-	-	-	-	-	Comp.
X818	Removal of Displacement Measuring Equipment at Winchester Station	540	-	-	141	-	431	59	200	290	Comp.
X820	Remove Structures and Equipment at Detroit Regulator Station	285	-	138	1 335	-	3 944	55	1 390	2 609	Comp.
X822	Sale of Property Acquired Under Michigan Scavenger Act	2 514	-	2 487	2 487	-	2 487	-	2 487	-	Comp.
	Total Transmission	5 739	71	3 312	4 650	-	13 653	1 644	6 294	9 003	-
	GENERAL PROPERTY										
X14	Office Furniture & Fixtures	100	-	-	-	-	-	-	-	-	Comp.
X42	Tools and Work Equipment	200	-	-	-	-	-	-	-	-	Comp.
X43	Stores Expense	50	-	-	-	-	-	-	-	-	Comp.
X821	Automobiles - 1st Quarter	295	-	952	952	-	3 227	-	952	2 275	Comp.
X823	Automobiles - 2nd Quarter	300	-	300	300	-	1 045	-	300	745	Comp.
X824	Automobiles - 3rd Quarter	325	-	325	325	-	1 171	-	325	846	Comp.
X825	Retirement of one Monroe Portable Calculator	100	-	100	100	-	202	-	100	102	Comp.
X826	Automobiles - 4th Quarter	233	233	233	233	-	453	-	233	220	Comp.
	Total General Property	1 233	233	1 910	1 910	-	6 098	-	1 910	4 188	-
	Total Gas Department	6 972	304	5 222	6 560	-	19 751	1 644	8 204	13 191	-

(B) (C) (D) (E) (F) (G) (H) (I) (J) (K)

15346

X-70

ED CAPITAL RETIREMENTS

MICHIGAN GAS TRANSMISSION CORPORATION

COLUMBIA SYSTEM

Month of December 1941

Exhibit 163

DESCRIPTION	Cost Of Retiring Less Salvage Value: Amount of Budget	This Month	Since Jan. First	From Beginning	Estimated To Complete	Credit To Fixed Capital To Date	Cost of Retiring To Date	Salvage Value To Date	Net Charge To Retirement Work In Progress To Date	Est'd Date of Ass'g Complt'n
Reconcilement with Retirement Work in Progress as shown on Balance Sheet										
Net charge to date as shown on sheet X70-A									13 191	
Amount transferred to Retirement and Depletion Reserve									13 651	
Balance in open Work Orders as of December 31, 1940									388	
Retirement Work in Progress as of December 31, 1941									72	

15347

Acc't No.	Account Title	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
	AMOUNT BROUGHT FORWARD	-	-	-		1
	STORAGE PLANT					2
235	Land and Land Rights					3
235-1	Land					4
235-2	Land Rights					5
236	Structures and Improvements					6
237	Gas Holders					7
238	Gas Storage Wells					8
238-1	Gas Storage Well Construction					9
238-2	Gas Storage Well Equipment					10
239	Miscellaneous Storage Equipment					11
						12
	TRANSMISSION PLANT					13
240	Land and Land Rights					14
240-1	Land	3 825 69	859 80	2 487 00	2 198 49	15
240-2	Land Rights	-	-	-	-	16
240-3	Rights-of-Way	17 237 62	1 280 31	-	18 517 93	17
242	Structures and Improvements					18
242-1	Compressor Station Structures	205 698 59	69 686 52	2 106 11	273 279 00	19
242-2	Transmission System Measuring and Regulating Station Structures	15 105 72	1 470 25	19 49	16 556 48	20
242-3	Other Transmission System Structures	161 28	24 251 78	-	24 413 06	21
243	Compressor Station Equipment	833 763 10	260 162 98	459 15	1 093 466 93	22
244	Measuring and Regulating Equipment	22 173 99	12 263 18	311 80	34 125 37	23
245	Mains	1 373 734 50	134 682 89	-	1 508 417 39	24
246	Miscellaneous Transmission Equipment	121 09	1 522 02	-	1 643 11	25
						26
	DISTRIBUTION PLANT					27
250	Land and Land Rights					28
250-1	Land					29
250-2	Land Rights					30
250-3	Rights-of-Way					31
251	Structures and Improvements					32
252	Pumping, Regulating and Measuring Equipment					33
253	Mains					34
259	Services					35
260	Meters					36
260-1	Meters					37
260-2	Meter Installations					38
260-3	House Regulators					39
260-4	Industrial Measuring Installations					40
260-5	House Regulator Installations					41
261	Other Property on Customers' Premises					42
262	Street Lighting Equipment					43
264	Miscellaneous Distribution Equipment					44
						45
						46
	AMOUNT CARRIED FORWARD	2 471 821 58 (A)	506 179 73 (B)	5 383 55 (C)	2 972 617 76 (D)	47

15348

DETAIL OF
PROPERTY, PLANT AND EQUIPMENT
GAS

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

For Period Ended December 31, 1941

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Exhibit 163

5369

Account Title	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period
AMOUNT BROUGHT FORWARD	2 471 821 58	506 179 73	5 383 55	2 972 617 76
GENERAL PLANT				
Land and Land Rights				
Land	-	-	-	-
Land Rights	-	-	-	-
Structures and Improvements	-	-		-
Office Furniture and Equipment	1 639 07	2 855 88	-	4 494 95
Transportation Equipment	-	-	-	-
Automobiles and Trucks	14 058 05	7 458 78	17 14	21 499 69
Other Automotive Equipment	-	-	-	-
Trailers	1 706 68	-	-	1 706 68
Other	4 824 40	-	-	4 824 40
Stores Equipment	83 97	643 74	-	727 71
Shop Equipment	-	-	-	-
Laboratory Equipment	-	-	-	-
Tools and Work Equipment	5 577 31	2 748 21	-	8 325 52
Communication Equipment	-	-	-	-
Miscellaneous General Equipment	-	-	-	-
Other Tangible Property	-	-	-	-
Gas Plant Purchased	-	-	-	-
Gas Plant Sold	-	-	-	-
Gas Plant in Process of Reclassification *	9 791 109 10	6 86	12 598 87	9 778 503 37
▸ See Detail on 71A, 72A and 73A Sheets				
TOTAL GAS PLANT IN SERVICE	12 290 820 16	519 879 48	17 999 56	12 792 700 08
Gas Plant Leased to Others				
Gas Plant Held for Future Use				
Gas Plant Acquisition Adjustments				
Gas Plant Adjustments				
TOTAL PROPERTY, PLANT AND EQUIPMENT - GAS	12 290 820 16	519 879 48	17 999 56	12 792 700 08
	(A)	(B)	(C)	(D)

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DETAIL OF PROPERTY, PLANT AND EQUIPMENT - GAS

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

For Period Ended December 31, 1941

73

Exhibit 163

Account Title	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
INTANGIBLE PLANT					1
Organization	10 332 75	-	-	10 332 75	2
Franchises and Consents					3
Perpetual	-	-	-	-	4
Limited	-	-	-	-	5
Miscellaneous Intangible Plant	73 667 17	-	-	73 667 17	6
PRODUCTION PLANT - NATURAL GAS					7
Land and Land Rights					8
Gas Land Owned in Fee					9
Gas Land Leaseholds					10
Gas Land Rights					11
Rights-of-Way					12
Other Land					13
Other Land Rights					14
Structures and Improvements					15
Gas Well Structures					16
Field Measuring and Regulating Station Structures					17
Other Production System Structures					18
Gas Wells					19
Gas Well Construction					20
Gas Well Equipment					21
Gathering Lines					22
Measuring and Regulating Equipment					23
Drilling and Cleaning Equipment					24
Purification Equipment					25
Miscellaneous Production Equipment					26
PRODUCTION PLANT - MANUFACTURED GAS					27
Land and Land Rights					28
Land					29
Land Rights					30
Structures and Improvements					31
Boiler Plant Equipment					32
Other Power Equipment					33
Benches and Retorts					34
Coke Ovens					35
Producer Gas Equipment					36
Water Gas Generating Equipment					37
Petroleum Gas Equipment					38
Other Gas Generating Equipment					39
Gas Reforming Equipment					40
Purification Equipment					41
Residual Refining Equipment					42
Miscellaneous Production Equipment					43
Coal, Coke and Ash Handling Equipment					44
Other Miscellaneous Production Equipment					45
					46
AMOUNT CARRIED FORWARD	83 999 92	-	-	83 999 92	47
	(A)	(B)	(C)	(D)	

15350

DETAIL OF PROPERTY, PLANT AND EQUIPMENT

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

GAS Plant in Process of Reclassification

For Period Ended December 31, 1941

21.2

Exhibit 163 5373

Acc't No.	Account Title	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
	AMOUNT BROUGHT FORWARD	83 999 92	-	-	83 999 92	1
	STORAGE PLANT					2
235	Land and Land Rights					3
235-1	Land					4
235-2	Land Rights					5
236	Structures and Improvements					6
237	Gas Holders					7
238	Gas Storage Wells					8
238-1	Gas Storage Well Construction					9
238-2	Gas Storage Well Equipment					10
239	Miscellaneous Storage Equipment					11
						12
	TRANSMISSION PLANT					13
240	Land and Land Rights					14
240-1	Land	22 273 61	-	-	22 273 61	15
240-2	Land Rights	284 96	-	-	284 96	16
240-3	Rights-of-Way	230 336 85	-	-	230 336 85	17
242	Structures and Improvements					18
242-1	Compressor Station Structures	228 630 83	* 449 73	79 55	229 001 01	19
242-2	Transmission System Measuring and Regulating Station Structures	35 303 00	* 149 91	-	35 452 91	20
242-3	Other Transmission System Structures	38 568 18	-	-	38 568 18	21
243	Compressor Station Equipment	976 401 07	* 456 59	1 396 88	974 547 60	22
244	Measuring and Regulating Equipment	102 617 60	* 75 09	3 558 02	99 134 67	23
245	Mains	8 035 150 74	-	1 483 54	8 033 667 20	24
246	Miscellaneous Transmission Equipment	-	-	-	-	25
						26
	DISTRIBUTION PLANT					27
250	Land and Land Rights					28
250-1	Land					29
250-2	Land Rights					30
250-3	Rights-of-Way					31
251	Structures and Improvements					32
252	Pumping, Regulating and Measuring Equipment					33
253	Mains					34
259	Services					35
260	Meters					36
260-1	Meters					37
260-2	Meter Installations					38
260-3	House Regulators					39
260-4	Industrial Measuring Installations					40
260-5	House Regulator Installations					41
261	Other Property on Customers' Premises					42
263	Street Lighting Equipment					43
264	Miscellaneous Distribution Equipment					44
						45
						46
	AMOUNT CARRIED FORWARD	9 753 566 76 (A)	218 14 (B)	6 517 99 (C)	9 747 266 91 (D)	47

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DETAIL OF PROPERTY, PLANT AND EQUIPMENT

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

For Period Ended December 31, 1941

GAS Plant in Process of Reclassification

* Transfer of Equipment from one account to another

72 A

Exhibit 163

Acct No.	Account Title	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period
	AMOUNT BROUGHT FORWARD	9 753 566 76	218 14	6 517 99	9 747 266 91
	GENERAL PLANT				
270	Land and Land Rights				
270-1	Land				
270-2	Land Rights				
271	Structures and Improvements				
272	Office Furniture and Equipment	13 865 07	*225 00	202 50	13 437 57
273	Transportation Equipment	-	-	-	-
273-1	Automobiles and Trucks	12 692 23	-	5 878 38	6 813 85
273-2	Other Automotive Equipment	-	-	-	-
273-3	Trailers	321 31	-	-	321 31
273-4	Other	2 028 15	-	-	2 028 15
274	Stores Equipment	1 251 59	-	-	1 251 59
275	Shop Equipment	-	-	-	-
276	Laboratory Equipment	-	-	-	-
277	Tools and Work Equipment	7 383 99	-	-	7 383 99
278	Communication Equipment	-	-	-	-
279	Miscellaneous General Equipment	-	-	-	-
290	Other Tangible Property				
291	Gas Plant Purchased				
292	Gas Plant Sold				
293	Gas Plant in Process of Reclassification				
	TOTAL GAS PLANT IN SERVICE	9 791 109 10	6 86	12 598 87	9 778 503 37
1-22	Gas Plant Leased to Others				
1-23	Gas Plant Held for Future Use				
1-24	Gas Plant Acquisition Adjustments				
1-25	Gas Plant Adjustments				
	TOTAL PROPERTY, PLANT AND EQUIPMENT GAS	9 791 109 10	6 86	12 598 87	9 778 503 37
		(A)	(B)	(C)	(D)

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DETAIL OF
PROPERTY, PLANT AND EQUIPMENT
GAS Plant in Process of Reclassification

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

For Period Ended December 31, 1941

* Transfer of Equipment between accounts.

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FORM C-10 ###

Exhibit 164
COLUMBIA SYSTEM

TOWN	THIS MONTH					12 MONTHS TO DATE			
	NO. OF ACCOUNTS	CUBIC FEET M	CUBIC FEET C	CENTS PER M	AMOUNT	CUBIC FEET M	CUBIC FEET C	CENTS PER M	AMOUNT
Other Public Utilities Revenue									
Central Indiana Gas Co.		722 055		25.42	183 512 65	8 142 040		24.89	2 026 732 36
Indiana-Ohio Public Service Company		14 636		35.45	5 188 27	122 887		33.32	40 941 62
Kokomo Gas & Fuel Co.		43 745		28.86	12 625 04	567 666		27.85	158 083 62
Lynn Natural Gas Co.		1 170		35.01	409 60	10 681		39.14	4 181 02
Northern Indiana Public Service Co.		204 077		34.31	70 025 61	1 793 964		32.95	591 156 50
Pendleton Natural Gas Company		1 930		51.46	993 10	17 639		51.97	9 166 35
Public Service Company of Indiana		254 299		32.98	83 859 25	2 476 459		29.89	740 175 33
Town of Lapel, Indiana		693		30.81	213 53	7 646		38.57	2 949 31
Town of Montezuma, Ind.		141		52.59	74 15	1 662		52.52	872 95
Town of Pittsboro, Ind.		383		36.80	140 94	2 704		40.69	1 100 28
Town of Roachdale, Ind.		296		35.49	105 04	2 444		40.28	984 44
Total		1 243 425		28.72	357 147 18	13 145 792		27.21	3 576 243 78
Inter-Company Sales - Other Groups									
Indiana Gas Distribution Corporation		109 311		24.73	27 037 80	1 306 394		24.51	320 181 22
The Ohio Fuel Gas Co.		599		37.07	222 07	5 827		45.28	2 638 21
Total		109 910		24.80	27 259 87	1 312 221		24.60	322 819 43
Total Sales		1 353 335		28.40	384 407 05	14 458 013		26.97	3 899 163 21
Delivered for Panhandle Eastern Pipe Line Co. To									
Michigan Consolidated Gas Company -Detroit		2 523 077		32.67	824 269 01	23 698 153		32.97	7 812 867 76
Michigan Consolidated Gas Company-Ann Arbor		40 539		35.13	14 239 61	358 943		32.64	117 151 17
The Ohio Gas, Light & Coke Company		20 200		35.59	7 189 95	154 955		33.20	51 449 26
Central States Natural Gas Company, Inc.		975		33.44	326 00	10 977		32.46	3 562 54
Toledo Edison Company		3 356		32.65	1 095 81	31 557		31.48	9 933 52
National Utilities Company of Michigan		31 763		28.98	9 206 45	113 787		29.70	33 797 82
Western Ohio Public Service Company		1 132		30.94	350 27	3 587		32.55	1 167 53
Richmond Gas Corp.		23 146		30.09	6 964 53	48 344		30.27	14 787 22
Total		2 644 188		32.66	863 641 73	24 420 803		32.94	8 044 717 02
Delivered to Kentucky Natural Gas Corp.		178 839		.56	1 000 00	2 001 912		.50	10 000 00
Grand Total		4 176 362		29.91	1 249 048 78	40 880 728		29.24	11 953 880 23

Central Indiana Gas Co.	722 055	25.42	183 514 05	5 142 040	44.69	2 [illegible] 30
Indiana-Ohio Public Service Company	14 636	35.45	5 188 27	122 887	33.32	40 941 62
Kokomo Gas & Fuel Co.	43 745	28.86	12 625 04	567 666	27.85	158 083 62
Lynn Natural Gas Co.	1 170	35.01	409 60	10 681	39.14	4 181 02
Northern Indiana Public Service Co.	204 077	34.31	70 025 61	1 793 964	32.95	591 156 50
Pendleton Natural Gas Company	1 930	51.46	993 10	17 639	51.97	9 166 35
Public Service Company of Indiana	254 299	32.98	83 85[illegible] 25	2 476 459	29.89	740 175 33
Town of Lapel, Indiana	693	30.81	213 53	7 646	38.57	2 949 31
Town of Montezuma, Ind.	141	52.59	74 15	1 662	52.52	872 95
Town of Pittsboro, Ind.	383	36.80	140 94	2 704	40.69	1 100 28
Town of Ronchdale, Ind.	296	35.49	105 04	2 444	40.28	984 44
Total	1 243 425	28.72	357 147 18	13 145 792	27.21	3 576 243 78
Inter-Company Sales - Other Groups						
Indiana Gas Distribution Corporation	109 311	24.73	27 037 80	1 306 394	24.51	320 181 22
The Ohio Fuel Gas Co.	599	37.07	222 07	5 827	45.28	2 638 21
Total	109 910	24.80	27 259 87	1 312 221	24.60	322 819 43
Total Sales	1 353 335	28.40	384 407 05	14 458 013	26.97	3 899 163 21
Delivered for Panhandle Eastern Pipe Line Co. To						
Michigan Consolidated Gas Company -Detroit	2 523 077	32.67	824 269 01	23 698 153	32.97	7 812 867 76
Michigan Consolidated Gas Company-Ann Arbor	40 539	35.13	14 239 61	358 943	32.64	117 151 17
The Ohio Gas, Light & Coke Company	20 200	35.59	7 189 95	154 955	33.20	51 449 26
Central States Natural Gas Company, Inc.	975	33.44	326 00	10 977	32.46	3 562 74
Toledo Edison Company	3 356	32.65	1 095 81	31 557	31.48	9 933 52
National Utilities Company of Michigan	31 763	28.98	9 206 45	113 787	29.70	33 797 82
Western Ohio Public Service Company	1 132	30.94	350 27	3 587	32.55	1 167 53
Richmond Gas Corp.	23 146	30.09	6 964 53	48 344	30.27	14 787 22
Total	2 644 188	32.66	863 641 73	24 420 803	32.94	8 044 717 02
Delivered to Kentucky Natural Gas Corp.	178 839	.56	1 000 00	2 001 912	.50	10 000 00
Grand Total	4 176 362	29.91	1 249 048 78	40 880 728	29.24	11 953 880 23

Exhibit 164

15354

COLUMBIA SYSTEM

TOWN	THIS MONTH					12 MONTHS TO DATE			
	NO. OF ACCOUNTS	CUBIC FEET M	CUBIC FEET C	CENTS PER M	AMOUNT	CUBIC FEET M	CUBIC FEET C	CENTS PER M	AMOUNT
Other									
Panhandle Eastern Pipe Line Company	1	1 495 454		21.83	326 466 82	15 580 331		20.35	3 249 179 39
Received from Panhandle Eastern Pipe Line Co.									
Michigan Consolidated Gas Company-Detroit		2 523 077		26.13	659 273 70	23 698 153		26.34	6 241 128 12
Michigan Consolidated Gas Company-Ann Arbor		40 539		27.81	11 274 09	358 943		26.11	93 719 26
The Ohio Gas, Light and Coke Company		20 200		28.13	5 682 34	154 955		26.50	41 057 06
Central States Natural Gas Company, Inc.		975		26.65	259 87	10 977		25.99	2 852 38
Toledo Edison Company		3 356		26.12	876 49	31 557		25.32	7 989 31
National Utilities Company of Michigan		31 763		23.45	7 447 05	113 787		24.01	27 324 24
Western Ohio Public Service Company		1 132		24.62	278 72	3 587		26.05	934 48
Richmond Gas Corp.		23 146		24.37	5 641 32	48 844		24.50	11 965 62
Total		2 644 188		26.12	690 733 58	24 420 803		26.32	6 426 970 47
Received for Kentucky Natural Gas Corp. *		178 839		-	-	2 001 912		-	-
Grand Total		4 318 481		23.55	1 017 200 40	42 003 046		23.04	9 676 148 86

* Included on this statement to account for M.C.F. Only.

Line Company						
Received from Panhandle Eastern Pipe Line Co.						
Michigan Consolidated Gas Company-Detroit	2 523 077	26.13	659 273 70	23 698 153	26.34	6 241 128 12
Michigan Consolidated Gas Company-Ann Arbor	40 539	27.81	11 274 09	358 943	26.11	93 719 26
The Ohio Gas, Light and Coke Company	20 200	28.13	5 682 34	154 955	26.50	41 057 06
Central States Natural Gas Company, Inc.	975	26.65	259 87	10 977	25.99	2 852 38
*Toledo Edison Company	3 356	26.12	876 49	31 557	25.32	7 989 31
National Utilities Company of Michigan	31 763	23.45	7 447 05	113 787	24.01	27 324 24
Western Ohio Public Service Company	1 132	24.62	278 72	3 587	26.05	934 48
Richmond Gas Corp.	23 146	24.37	5 641 32	48 844	24.50	11 965 62
Total	2 644 188	26.12	690 733 58	24 420 803	26.32	6 426 970 47
Received for Kentucky Natural Gas Corp. *	178 839	-	-	2 001 912	-	-
Grand Total	4 318 481	23.55	1 017 200 40	42 003 046	23.04	9 676 148 86

* Included on this statement to account for M.C.F. Only.

MICHIGAN GAS TRANSMISSION CORPORATION COMPANY DIST. NO. ALL

ANALYSIS OF Gas Purchased MONTH December 1941 PAGE NO. 12

6235

Exhibit 165

COLUMBIA SYSTEM

~~FINANCIAL STATEMENT~~
OPERATING BUDGET

OF

MICHIGAN GAS TRANSMISSION CORPORATION

FOR PERIOD ENDED YEAR 1942 19

SIGNED _____
Assistant TREASURER

DATE December 5, 1941

COLUMBIA SYSTEM

15357 INCOME STATEMENT 3

MICHIGAN GAS TRANSMISSION CORPORATION

CALENDAR YEAR 1942

	Detail on Page	Est. 12 Months Ended 12-31-42	Percent of Gross This Year	Percent of Gross Previous Year	Increase Over Previous Year Amount	Increase Over Previous Year Percent	
		Estimated			Actual 12 Mo. Ended 10-31-41		1
GROSS REVENUES							2
Gas	4A	4 061 881	100.0		637 133	18.6	3
Electric	5A	-	-		-	-	4
Railway and Bus	6	-	-		-	-	5
Water and Heating	8A	-	-		-	-	6
Non-Utility	9	-	-		130	100.0	7
							8
TOTAL REVENUES		4 061 881	100 0	100 0	637 003	18.6	9
OPERATING EXPENSES							10
Operation	x x	1 920 959	47.3		367 083	23.6	11
Maintenance	x x	70 530	1.7		18 394	35.3	12
Provision for Retirements and Depletion	x x	380 000	9.4		28 718	8.2	13
Taxes	24	644 347	15.8		180 688	39.0	14
TOTAL EXPENSES		3 015 836	74.2		594 863	24.6	15
NET OPERATING REVENUE		1 046 045	25.8		42 160	4.2	16
OTHER INCOME	16	-	-		227	100.0	17
GROSS CORPORATE INCOME		1 046 045	25.8		41 933	4.2	18
OTHER DEDUCTIONS	17	514 075	12.7		192	-	19
LESS Interest Charged to Construction - Credit	17	-	-		28 136	100.0	20
NET INCOME		531 970	13.2		13 605	2.6	21
		MONTHS ENDED					22
GROSS REVENUES							23
Gas	4B						24
Electric	5B						25
Railway and Bus	6						26
Water and Heating	8B						27
Non-Utility	9						28
							29
TOTAL REVENUES			100 0	100 0			30
OPERATING EXPENSES							31
Operation	x x						32
Maintenance	x x						33
Provision for Retirements and Depletion	x x						34
Taxes	24						35
TOTAL EXPENSES							36
NET OPERATING REVENUE							37
OTHER INCOME	16						38
GROSS CORPORATE INCOME							39
OTHER DEDUCTIONS	17						40
LESS Interest Charged to Construction - Credit	17						41
NET INCOME							42
		12 MONTHS ENDED					43
GROSS REVENUES							44
Gas	4C						45
Electric	5C						46
Railway and Bus	6						47
Water and Heating	8C						48
Non-Utility	9						49
							50
TOTAL REVENUES			100.0	100.0			51
OPERATING EXPENSES							52
Operation	x x						53
Maintenance	x x						54
Provision for Retirements and Depletion	x x						55

		[illegible]			Actual 12 Mo. ended 10-31-41		
GROSS REVENUES							
Gas	4A	4 061 881	100.0		637 133	18.6	
Electric	5A	-	-		-	-	
Railway and Bus	6	-	-		-	-	
Water and Heating	8A	-	-		-	-	
Non-Utility	9	-	-		130	100.0	
TOTAL REVENUES		4 061 881	100 0	100 0	637 003	18.6	
OPERATING EXPENSES							
Operation	x x	1 920 959	47.3		367 043	23.6	
Maintenance	x x	70 530	1.7		18 394	35.3	
Provision for Retirements and Depletion	x x	380 000	9.4		28 718	8.2	
Taxes	24	644 347	15.8		180 688	39.0	
TOTAL EXPENSES		3 015 836	74.2		594 843	24.6	
NET OPERATING REVENUE		1 046 045	25.8		42 160	4.2	
OTHER INCOME	16	-	-		227	100.0	
GROSS CORPORATE INCOME		1 046 045	25.8		41 933	4.2	
OTHER DEDUCTIONS	17	514 075	12.7		192	-	
LESS Interest Charged to Construction - Credit	17	-	-		28 136	100.0	
NET INCOME		531 970	13.1		13 605	2.6	

MONTHS ENDED

GROSS REVENUES							
Gas	4B						
Electric	5B						
Railway and Bus	6						
Water and Heating	8B						
Non-Utility	9						
TOTAL REVENUES			100 0	100 0			
OPERATING EXPENSES							
Operation	x x						
Maintenance	x x						
Provision for Retirements and Depletion	x x						
Taxes	24						
TOTAL EXPENSES							
NET OPERATING REVENUE							
OTHER INCOME	16						
GROSS CORPORATE INCOME							
OTHER DEDUCTIONS	17						
LESS Interest Charged to Construction - Credit	17						
NET INCOME							

12 MONTHS ENDED

GROSS REVENUES							
Gas	4C						
Electric	5C						
Railway and Bus	6						
Water and Heating	8C						
Non-Utility	9						
TOTAL REVENUES			100 0	100 0			
OPERATING EXPENSES							
Operation	x x						
Maintenance	x x						
Provision for Retirements and Depletion	x x						
Taxes	24						
TOTAL EXPENSES							
NET OPERATING REVENUE							
OTHER INCOME	16						
GROSS CORPORATE INCOME							
OTHER DEDUCTIONS	17						
LESS Interest Charged to Construction - Credit	17						
NET INCOME							

(A) (B) (C) (D) (E)

5383

COLUMBIA SYSTEM

15358
GAS 4

MICHIGAN GAS TRANSMISSION CORPORATION
OPERATING BUDGET

xxxx

1200	Residential	x x	-	-	-	-	-	-	
1201	Commercial	x x	-	-	-	-	-	-	3
1202	Municipal & Other Public	x x	-	-	-	-	-	-	4
1203	Industrial	x x	-	-	-	-	-	-	5
1204	Other Public Utilities	x x	1 607 752	39.6	30.82	211 061	15.1	.87	6
1205	Other Sales	x x	-	-	-	-	-	-	7
									8
	TOTAL		1 607 752	39.6	30.82	211 061	15.1	.87	9
1208	Inter-Company Sales - This Group	24	-	-	-	-	-	-	10
1209	" " " " - Other Groups	24	-	-	-	-	-	-	11
	TOTAL SALES - INTER-COMPANY		-	-	-	-	-	-	12
	TOTAL REVENUE - GAS		1 607 752	39.6	30.82	211 061	15.1	.87	13
	Other Gas Department Revenues	24	2 454 129	60.4	5.87	426 072	21.0	.14	14
	TOTAL REVENUE		4 061 881	100 0	-	637 133	18.6	-	15
	OPERATING EXPENSES								16
	Gas Purchased - Inter-Co - This Group	25	-	-	-	-	-	-	17
	" " " " - Other Groups	25	-	-	-	-	-	-	18
	TOTAL PURCHASED - INTER-CO		-	-	-	-	-	-	19
	Gas Purchased - Others	25	1 467 338	36.1	24.80	249 200	20.5	3.50	20
	Interchange of Gas - Net	25	-	-	-	-	-	-	21
	Gas In or Out of Storage - Net	25	-	-	-	-	-	-	22
	Purchased Gas Expenses - Operation	25	720	-	-	202	39.0	-	23
	" " " - Maintenance	25	-	-	-	-	-	-	24
	Production - Operation	26-7	-	-	-	-	-	-	25
	" - Maintenance	26-7	-	-	-	-	-	-	26
	Transmission - Operation	28	409 190	10.1	.87	86 928	27.0	.07	27
	" - Maintenance	28	70 230	1.7	.15	18 179	34.9	.02	28
	Distribution - Operation	29	-	-	-	-	-	-	29
	" - Maintenance	29	-	-	-	-	-	-	30
	Customers Acc'tg & Collecting	30	-	-	-	-	-	-	31
	Sales Promotion	30	17 156	.4	.04	10 143	144.6	.02	32
	Administrative & General - Operation	31	148 240	3.7	.32	18 028	13.8	.01	33
	" " " - Maintenance	31	300	-	-	215	252.9	-	34
	Misc. Duplicate Charges - Credit	31	121 685	3.0	.26	2 542	20.5	.05	35
	TOTAL OPERATION & MAINTENANCE		1 991 489	49.0	4.23	385 437	24.0	.22	36
		% of Gross Prev. Year							37
	Total Operation	31	1 920 959	47.3	4.08	367 043	23.6	.20	38
	Total Maintenance	31	70 530	1.7	.15	18 394	35.3	.02	39
	Prov. for Retirements & Depletion	31	380 000	9.4	.81	28 718	8.2	.07	40
	Taxes - Federal	31	480 468	11.8	1.02	165 350	52.5	.23	41
	Taxes - State and Other	31	163 879	4.0	.35	15 338	10.3	.02	42
	TOTAL EXPENSES	31	3 015 836	74.2	6.41	594 843	24.6	.36	43
	NET OPERATING REVENUE - GAS		1 046 045	25.8	2.22	42 290	4.2	.29	44
									45
	STATISTICS								46
	MCF - Sales to Public and Other Utilities	51	5 216 500	10.9	x x x	553 649	11.9	x x x	47
	Sales Inter Company - This Group	51	-	-	x x x	-	-	x x x	48
	" " Other Groups	51	-	-	x x x	-	-	x x x	49
	Total All Sales	51	5 216 500	10.9	x x x	553 649	11.9	x x x	50
	Company Use, Elec. Gen. Stations	51	-	-	x x x	-	-	x x x	51
	Other Company Use	51	486 500	1.0	x x x	96 451	24.7	x x x	52
	Other Miscellaneous - Panhandle, etc.	51	41 798 279	87.6	x x x	6 408 195	18.1	x x x	53
	TOTAL DELIVERIES	51	47 501 279	99.5	x x x	7 058 295	17.5	x x x	54
	MCF, Purchased - Inter-Co - This Group	51	-	-	x x x	-	-	x x x	55
	" " " Other Groups	51	-	-	x x x	-	-	x x x	56
	Purchased - Others	51	5 916 000	12.4	x x x	196 500	3.4	x x x	57
	Produced	51	-	-	x x x	-	-	x x x	58
	Interchanged - Net	51	-	-	x x x	-	-	x x x	59
	Rec. for Panhandle	51	38 472 279	80.6	x x x	5 194 160	15.6	x x x	60
	Received for Kentucky, etc.	51	3 326 000	7.0	x x x	1 214 035	57.5	x x x	61
	TOTAL GAS AVAILABLE FOR DELIVERIES	51	47 714 279	100.0	x x x	6 604 695	16.1	x x x	62
	UNACCOUNTED FOR - [ESTIMATED]	51	213 000	.5	x x x	453 600	68.0	x x x	63
			(A)	(B)	(C)	(D)	(E)	(F)	

† Two Places to the Decimal Point
* Losses in Mcf

Exhibit 165

Acc't No.		Detail on Page	Amount		Increase over Actual 12 Mo. Ended 10-31-41 Amount	Percent	
			MONTH OF	Estimated 12 Months Ended 12-31-42			1
	INTEREST						2
9571	Bonds		-	-	-	-	3
9572	Miscellaneous Long Term Debt		-	-	-	-	4
9573	Inter-Co. Notes & Loans - This Group		-	-	-	-	5
9574	" " " Other Groups	24A	499 230		2 967	.6	6
9575	Other - Customers Deposits, Etc		14 845		3 159	27.0	7
							8
							9
	TOTAL INTEREST		514 075		192	-	10
9580	AMORTIZATION - DEBT DISCOUNT AND EXPENSE		-		-	-	11
	TOTAL FIXED CHARGES		514 075		192	-	12
9583	Miscellaneous Deductions		-		-	-	13
9585	Preferred Dividends Accrued or Guaranteed		-		-	-	14
9586	Rent for Lease of Utility Plant		-		-	-	15
							16
	TOTAL OTHER DEDUCTIONS		514 075		192	-	17
9587	LESS Interest Charged to Construction - Credit		-		28 136	100.0	18
							19
	NET DEDUCTIONS FROM INCOME		514 075		28 328	5.8	20
			MONTHS ENDED				21
	INTEREST						22
9571	Bonds						23
9572	Miscellaneous Long Term Debt						24
9573	Inter-Co. Notes & Loans - This Group						25
9574	" " " Other Groups						26
9575	Other - Customers Deposits, Etc						27
							28
							29
	TOTAL INTEREST						30
9580	AMORTIZATION - DEBT DISCOUNT AND EXPENSE						31
	TOTAL FIXED CHARGES						32
9583	Miscellaneous Deductions						33
9585	Preferred Dividends Accrued or Guaranteed						34
9586	Rent for Lease of Utility Plant						35
							36
	TOTAL OTHER DEDUCTIONS						37
9587	LESS Interest Charged to Construction - Credit						38
							39
	NET DEDUCTIONS FROM INCOME						40
			12 MONTHS ENDED				41
	INTEREST						42
9571	Bonds						43
9572	Miscellaneous Long Term Debt						44
9573	Inter-Co. Notes & Loans - This Group						45
9574	" " " Other Groups						46
9575	Other - Customers Deposits, Etc						47
							48
							49
							50

9572	Miscellaneous Long Term Debt					
9573	Inter-Co. Notes & Loans - This Group		-			
9574	" " " " - Other Groups	24A	499 230	2 907		
9575	Other - Customers Deposits, Etc.		14 845	3 159	27.0	
	TOTAL INTEREST		514 075	192	-	
9580	AMORTIZATION - DEBT DISCOUNT AND EXPENSE		-	-	-	
	TOTAL FIXED CHARGES		514 075	192	-	
9583	Miscellaneous Deductions		-	-	-	
9585	Preferred Dividends-Accrued or Guaranteed		-	-	-	
9586	Rent for Lease of Utility Plant		-	-	-	
	TOTAL OTHER DEDUCTIONS		514 075	192	-	
9587	LESS Interest Charged to Construction - Credit		-	28 136	100.0	
	NET DEDUCTIONS FROM INCOME		514 075	28 328	5.8	

MONTHS ENDED

	INTEREST					
9571	Bonds					
9572	Miscellaneous Long Term Debt					
9573	Inter-Co. Notes & Loans - This Group					
9574	" " " " - Other Groups					
9575	Other - Customers Deposits, Etc.					
	TOTAL INTEREST					
9580	AMORTIZATION - DEBT DISCOUNT AND EXPENSE					
	TOTAL FIXED CHARGES					
9583	Miscellaneous Deductions					
9585	Preferred Dividends-Accrued or Guaranteed					
9586	Rent for Lease of Utility Plant					
	TOTAL OTHER DEDUCTIONS					
9587	LESS Interest Charged to Construction - Credit					
	NET DEDUCTIONS FROM INCOME					

12 MONTHS ENDED

	INTEREST					
9571	Bonds					
9572	Miscellaneous Long Term Debt					
9573	Inter-Co. Notes & Loans - This Group					
9574	" " " " - Other Groups					
9575	Other - Customers Deposits, Etc.					
	TOTAL INTEREST					
9580	AMORTIZATION - DEBT DISCOUNT AND EXPENSE					
	TOTAL FIXED CHARGES					
9583	Miscellaneous Deductions					
9585	Preferred Dividends-Accrued or Guaranteed					
9586	Rent for Lease of Utility Plant					
	TOTAL OTHER DEDUCTIONS					
9587	LESS Interest Charged to Construction - Credit					
	NET DEDUCTIONS FROM INCOME					

(A) (B) (C) (D)

Exhibit 165

Exhibit 165

Acc't No.	Description	Estimated 12 Mos. Ended 12-31-42	Increase Over Ended 10-31-41	___ Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
1215	Miscellaneous Other Revenue						
	Columbus Group:						
	Indiana Gas Distribution Corp.	58 519	12 911				
	The Ohio Fuel Gas Company	372	907				
	Total, Page 240	58 891	13 818				
9574	Interest-Inter-Company-Other Groups						
	Unassigned:						
	Columbia Gas & Electric Corp. Page 17, Line 7	499 230	2 967				

153360

(A) (B) (C) (D) (E) (F)

DETAIL OF INCOME ACCOUNTS

Inter-Company Revenue & Interest Expense

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

YEAR 1942
OPERATING BUDGET

Exhibit 165

Acct No.	Description	Estimated 12 Mo. Ended 12-31-42	Increase Over Year Ended 10-31-41	Months' To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
	Other Gas Department Revenue						
1210	Rent from Gas Property	780	~ 65				
1215	Miscellaneous Other Revenues						
	Received from Michigan Consol-idated Gas Co.-Detroit						
	M.C.F.	26 100 502	2 645 574				
	Rate	34.32¢	1.56¢				
	Amount	8 957 172	1 272 231				
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	26 100 502	2 645 574				
	Rate	27.25¢	1.05¢				
	Amount	7 113 443	968 638				
	Net Revenue - Detroit	1 843 729	303 593				
	Received from Michigan Consol-idated Gas Co.-Ann Arbor						
	M.C.F.	387 000	36 893				
	Rate	35.18¢	2.52¢				
	Amount	136 133	21 792				
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	387 000	36 893				
	Rate	27.84¢	1.71¢				
	Amount	107 742	16 273				
	Net Revenue - Ann Arbor	28 391	5 519				
	Rec'd.from The Ohio,Gas L.&C.Co.						
	M.C.F.	147 500	3 608				
	Rate	32.61¢	.13¢				
	Amount	48 101	989				
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	147 500	3 608				
	Rate	26.09¢	.09¢				
	Amount	38 478	804				
	Net Revenue-The Ohio Gas Light	9 623	185				
	Received from Central S.N.G.Co.						
	M.C.F.	11 150	188				
	Rate	32.75¢	.39¢				
	Amount	3 652	17				
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	11 150	188				
	Rate	26.16¢	.24¢				
	Amount	2 917	22				
	Net Revenue - Central States	735	5				
	Total Miscellaneous Other Revenue Carried Forward	1 882 478	309 302				
	Total Other Gas Department Revenue Carried Forward	1 883 258	309 367				

15361

(A) (B) (C) (D) (E) (F)

DETAIL OF INCOME ACCOUNTS

Other Gas Department Revenue

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

Month of YEAR 1942
OPERATING BUDGET

24 B

Exhibit 165

Description	Estimated 12 Mos. Ended 12-31-42	Increase Over Year Ended 10-31-41	Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
Total Other Gas Department Revenue Brought Forward	1 883 258	309 367				
Total Miscellaneous Other Revenue Brought Forward	1 882 478	309 302				
Received from Toledo Edison Co.						
M.C.F.	31 800	1 347				
Rate	30.68¢	.62¢				
Amount	9 755	225				
Paid to Panhandle E.P.L. Co.						
M.C.F.	31 800	1 347				
Rate	24.76¢	.43¢				
Amount	7 874	202				
Net Revenue - Toledo Edison	1 881	23				
Received from National Utilities						
M.C.F.	313 500	257 357				
Rate	27.36¢	3.05¢				
Amount	85 777	68 702				
Paid to Panhandle E.P.L. Co.						
M.C.F.	313 500	257 357				
Rate	22.31¢	2.26¢				
Amount	69 955	56 160				
Net Revenue - National Utilities	15 822	12 542				
Received from Western Ohio Public Service Co.						
M.C.F.	7 900	6 366				
Rate	30.97¢	2.29¢				
Amount	2 447	1 937				
Paid to Panhandle E.P.L. Co.						
M.C.F.	7 900	6 366				
Rate	24.95¢	1.83¢				
Amount	1 971	1 560				
Net Revenue - Western Ohio	476	377				
Total Miscellaneous Other Revenue Carried Forward	1 900 657	322 244				
Total Other Gas Department Revenue Carried Forward	1 900 437	322 309				

15862

(A) (B) (C) (D) (E) (F)

DETAIL OF INCOME ACCOUNTS

Other Gas Department Revenue

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

~~March~~ YEAR 1942
OPERATING BUDGET

24 c

Exhibit 165

Acct No.	Description	Estimated 12 Mo. Ended 12-31-42	Increase Over Previous Year Ended 10-31-41	___ Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
	Total Other Gas Department Revenue Brought Forward	1 901 437	322 309				
	Total Miscellaneous Other Revenue Brought Forward	1 900 657	322 244				
	Received from Richmond Gas Corp.						
	M.C.F.	140 000	133 438				
	Rate	31.00¢	.96¢				
	Amount	43 400	41 427				
	Paid to Panhandle E.P.L. Co.						
	M.C.F.	140 000	133 438				
	Rate	25.00¢	.65¢				
	Amount	35 000	33 402				
	Net Revenue-Richmond Gas Corp.	8 400	8 025				
	Received from Central Indiana Gas Company						
	M.C.F.	9 674 010	1 953 570				
	Rate	22.69¢	2.28¢				
	Amount	2 194 729	266 887				
	Paid to Panhandle E.P.L. Co.						
	M.C.F.	9 674 010	1 953 570				
	Rate	18.87¢	1.56¢				
	Amount	1 825 162	248 013				
	Net Revenue -- Central Indiana	369 567	18 874				
	Received from Indiana-Ohio Public Service Co.						
	M.C.F.	121 500	2 677				
	Rate	33.13¢	.72¢				
	Amount	40 251	1 738				
	Paid to Panhandle E.P.L. Co.						
	M.C.F.	121 500	2 677				
	Rate	26.44¢	.48¢				
	Amount	32 124	1 282				
	Net Revenue - Indiana-Ohio Public Service Co.	8 127	456				
	Total Miscellaneous Other Revenue Carried Forward	2 286 751	349 599				
	Total Other Gas Department Revenue Carried Forward	2 287 531	349 664				
		(A)	(B)	(C)	(D)	(E)	(F)

DETAIL OF INCOME ACCOUNTS

Other Gas Department Revenue

Michigan Gas Transmission Corporation
COLUMBIA SYSTEM

REVISED YEAR 1942
OPERATING BUDGET

24 a

Exhibit 165

Acct No.	Description	Estimated 12 Mo. Ended 12-31-42	Increase Over Preceding Year Ended 10-31-41	Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
	Total Other Gas Department Revenue Brought Forward	2 287 531	349 664				
	Total Miscellaneous Other Revenue Brought Forward	2 286 751	349 599				
	Received from Lynn Natural Gas Co.						
	M.C.F.	10 750	137				
	Rate	33.37¢					
	Amount	3 587					
	Paid to Panhandle E.P. L. Co.						
	M.C.F.	10 750	137				
	Rate	26.60¢	1.06¢				
	Amount	2 859	148				
	Net Revenue-Lynn Natural Gas Co.	728					
	Received from Pendleton N.G.Co.						
	M.C.F.	17 201	41				
	Rate	33.07¢					
	Amount	5 688					
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	17 201	41				
	Rate	26.41¢					
	Amount	4 543					
	Net Revenue-Pendleton N.G.Co.	1 145					
	Received from Town of Lapel, Ind.						
	M.C.F.	8 200	922				
	Rate	31.18¢					
	Amount	2 557					
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	8 200	922				
	Rate	25.12¢	.59¢				
	Amount	2 060	275				
	Net Revenue-Town of Lapel, Ind.	497					
	Received from Town of Montezuma, Indiana						
	M.C.F.	1 809	133				
	Rate	30.90¢					
	Amount	559					
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	1 809	133				
	Rate	24.99¢					
	Amount	452	33				
	Net Revenue-Town of Montezuma	107					
	Total Misc.Other Rev.Cr'd.Fwd.	2 289 228	345 006				
	Total Other Gas Department Revenue Carried Forward	2 290 008	345 063				
		(A)	(B)	(C)	(D)	(E)	(F)

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DETAIL OF INCOME ACCOUNTS

Other Gas Department Revenue

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

EXHIBIT YEAR 1942
OPERATING BUDGET

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Description	Current Month	Increase Over Year	___ Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year	
	12-31-42	Ended 12-31-41					1
Total Other Gas Department Revenue Brought Forward	2 290 008	345 081					2 3
							4
Total Miscellaneous Other Revenue Brought Forward	2 289 228	345 016					5 6
							7
Received from Town of Pittsboro, Indiana							8 9
M.C.F.	2 625	63					10
Rate	33.87¢	10.26¢					11
Amount	889	242					12
Paid to Panhandle E.P.L.Co.							13
M.C.F.	2 625	63					14
Rate	26.97¢	.86¢					15
Amount	708	39					16
Net Revenue-Town of Pittsboro	181	281					17
Received from Town of Roachdale, Indiana							18 19
M.C.F.	2 455	65					20
Rate	33.03¢	10.74¢					21
Amount	811	235					22
Paid to Panhandle E.P.L.Co.							23
M.C.F.	2 455	65					24
Rate	26.44¢	1.92¢					25
Amount	649	63					26
Net Revenue-Town of Roachdale	162	298					27
Received from Greenfield Gas Co.							28
M.C.F.	26 000	26 000					29
Rate	32.04¢	32.04¢					30
Amount	8 330	8 330					31
Paid to Panhandle E.P.L.Co.							32
M.C.F.	26 000	26 000					33
Rate	26.04¢	26.04¢					34
Amount	6 770	6 770					35
Net Revenue-Greenfield Gas Co.	1 560	1 560					36
							37
Total Miscellaneous Other Revenue Carried Forward	2 291 131	345 997					38 39
							40
Total Other Gas Department Revenue Carried Forward	2 291 911	346 062					41 42
							43 44 45 46 47

(A) (B) (C) (D) (E) (F)

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DETAIL OF INCOME ACCOUNTS

Other Gas Department Revenue

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

YEAR 1942
OPERATING BUDGET

24

Acc't No.	Description	Estimated 12 Mo. Ended 12-31-42	Increase Over Year Ended 10-31-41	Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
	Total Other Gas Department Revenue Brought Forward	2 291 911	346 062				
	Total Miscellaneous Other Revenue Brought Forward	2 291 131	345 997				
	Received from Indiana Gas Distribution Corporation						
	M.C.F.	1 463 697	127 337				
	Rate	23.72¢	.15¢				
	Amount	347 213	28 196				
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	1 463 697	127 337				
	Rate	19.72¢	1.19¢				
	Amount	288 694	41 107				
	Net Revenue-Indiana Gas	58 519	12 911				
	Received from Ohio Fuel Gas Co.						
	M.C.F.	4 680	1 180				
	Rate	37.31¢	10.48¢				
	Amount	1 746	1 055				
	Paid to Panhandle E.P.L.Co.						
	M.C.F.	4 680	1 180				
	Rate	29.36¢	3.39¢				
	Amount	1 374	148				
	Net Revenue-Ohio Fuel Gas Co.	372	907				
	Kentucky Natural Gas Corp.						
	M.C.F.	1 745 000	366 963				
	Rate	.69¢	.24¢				
	Amount	12 000	2 500				
	Battle Creek Gas Company						
	M.C.F.	288 000	288 000				
	Rate	6.00¢	6.00¢				
	Amount	17 280	17 280				
	Total Miscellaneous Other Revenue Carried Forward	2 379 302	351 959				
	Total Other Gas Department Revenue Carried Forward	2 380 082	352 024				

(A) (B) (C) (D) (E) (F)

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DETAIL OF INCOME ACCOUNTS

Other Gas Department Revenue

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

YEAR 1942
OPERATING BUDGET

24

Exhibit 165

Acc't No.	Description	Estimated Year Ended 12-31-42	Increase Over Year Ended 10-31-41	Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
	Other Gas Department Revenue Brought Forward	2 380 082	352 024				
	Total Miscellaneous Other Revenue Brought Forward	2 379 202	351 959				
	Citizens Gas Fuel Company						
	M.C.F.	36 000	36 000				
	Rate	6.00¢	6.00¢				
	Amount	2 160	2 160				
	Consumers Power Company						
	M.C.F.	1 257 000	1 257 000				
	Rate	5.72¢	5.72¢				
	Amount	71 887	71 887				
	Total Miscellaneous Other Revenue	2 453 349	426 006				
	Total Other Gas Department Revenue	2 454 129	426 072				

15362

DETAIL OF INCOME ACCOUNTS

(A) (B) (C) (D) (E) (F)

Other Gas Department Revenue

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

YEAR 1942
OPERATING BUDGET

24 H

	Description	Estimated Year Ended 12-31-42	Increase Over Previous Year Ended 10-31-41	___ Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
346	**Taxes - Federal**						
	Income	254 069	34 690				
	Excess Profits	209 859	130 211				
	Capital Stock	12 500					
	Old Age Benefit	3 090	712				
	Unemployment Insurance	950	237				
	Total, Page 4, Line 41	480 468	165 350				
347	**Taxes - State and Other**						
	Franchise Delaware	175	-				
	Property Indiana	130 000	12 242				
	Property Ohio	11 000	527				
	Property Michigan	14 000	471				
	Unemployment Ins. Indiana)	8 704	2 098				
	Unemployment Ins. Michigan)						
	Total, Page 4, Line 42	163 879	15 338				
	Total, Page 3, Line 14	644 347	160 688				

(A) (B) (C) (D) (E) (F)

15368

DETAIL OF INCOME ACCOUNTS

Tax Expense

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

YEAR 1942
OPERATING BUDGET

Exhibit 165

DELIVERIES	CUSTOMERS Current Month	CUSTOMERS Increase Over Previous Year	Est. 12 Months Ended 12-31-42 MCF	Increase Over Year Ended 10-31-41 MCF	Percent Increase	Months To Date MCF	Increase Over Previous Year	Percent Increase	12 Months To Date MCF	Increase Over Previous Year	Percent Increase	
Retail												1
Residential												2
Commercial												3
Municipal and Other Public												4
Industrial †												5
Other †												6
												7
												8
TOTAL RETAIL SALES			-	-	-							9
WHOLESALE												10
Other Public Utilities †	3		5 216 500	553 649	11.9							11
Other Utilities - Coal Sys †												12
												13
TOTAL SALES TO PUBLIC	3		5 216 500	553 649	11.9							14
INTER-COMPANY												15
This Group †												16
Other Groups †			-	-	-							17
TOTAL INTER-COMPANY SALES			-	-	-							18
TOTAL ALL SALES			5 216 500	553 649	11.9							19
MISCELLANEOUS DELIVERIES												20
Company Use, Elec. Gen. Stations †			-	-	-							21
Other Company Use, etc.			686 500	96 451	24.7							22
[redacted] Del. For P.E.P.L.Co.			38 472 279	5 194 160	15.6							23
Delivered to Kentucky, etc.			3 326 000	1 214 035	57.5							24
TOTAL MISCELLANEOUS DELIVERIES			42 284 779	6 504 646	18.2							25
TOTAL GAS DELIVERIES			47 501 279	7 058 295	17.5							26
GAS AVAILABLE FOR DELIVERIES												27
PURCHASED INTER-COMPANY												28
This Group †												29
Other Groups †												30
TOTAL PURCHASED INTER-COMPANY			-	-	-							31
PURCHASED INDEPENDENTS												32
Natural Gas †			5 916 000	196 500	3.4							33
Manufactured Gas †			-	-	-							34
												35
TOTAL PURCHASED INDEPENDENTS			5 916 000	196 500	3.4							36
TOTAL GAS PURCHASED			5 916 000	196 500	3.4							37
PRODUCED												38
Natural Gas												39
Manufactured Gas												40
												41
												42
TOTAL GAS PRODUCED			-	-	-							43
[redacted] Miscellaneous			38 472 279	5 194 160	15.6							44
[redacted] Kentucky, etc.			3 326 000	1 214 035	57.5							45
TOTAL GAS AVAILABLE FOR DELIVERIES			47 714 279	6 604 695	16.1							46
LOSS (Red) GAIN (Red)			213 000	453 600	68.0							47

(A) (B) (C) (D) (E) (F) (G) (H) (I)

Carried on Page 53

GAS STATISTICS

MICHIGAN GAS TRANSMISSION CORPORATION
COLUMBIA SYSTEM

MONTH YEAR 1942
OPERATING BUDGET

	Estimated MCF [illegible] 12 Mos. Ended 12-31-42	Increase Over [illegible] Year	Avg. Rate	MCF OR KWH — Months To Date	Increase Over Previous Year	Avg. Rate	MCF OR KWH — 12 Months To Date	Increase Over Previous Year	Avg. Rate
DELIVERIES		Actual 12 Mo. Ended 10-31-41							
Wholesale - Other Public Utilities									
Kokomo Gas and Fuel Company	601 500	33 433	27.83						
Northern Indiana Public Service Co.	2 005 000	299 459	32.34						
Public Service Co. of Indiana	2 610 000	220 757	30.35						
Total, Page 51, Line 11	5 216 500	553 649	30.82						
Miscellaneous									
Delivered for Panhandle E.P.L.Co.to									
Michigan Consol.Gas Co.-Detroit	26 100 502	2 645 574	34.32						
Michigan Consol.Gas Co.-Ann Arbor	387 000	36 893	35.18						
The Ohio Gas, Light & Coke Co.	147 500	3 608	32.61						
Central States Natural Gas Co.	11 150	188	32.75						
The Toledo Edison Company	31 800	1 347	30.68						
National Utilities Co. of Michigan	313 500	257 357	27.36						
Western Ohio Public Service Co.	7 900	6 366	30.97						
Richmond Gas Corporation	140 000	133 438	31.00						
Central Indiana Gas Company	9 674 010	1 953 570	22.69						
Indiana-Ohio Public Service Co.	121 500	2 677	33.13						
Lynn Natural Gas Company	10 750	137	33.37						
Pendleton Natural Gas Company	17 201	41	33.07						
Town of Lapel, Indiana	8 200	922	31.18						
Town of Montezuma, Indiana	1 809	133	30.90						
Town of Pittsboro, Indiana	2 625	63	33.87						
Town of Roachdale, Indiana	2 455	65	33.03						
Greenfield Gas Company	26 000	26 000	32.04						
Indiana Gas Distribution Corp.	1 463 697	127 337	23.72						
The Ohio Fuel Gas Company	4 680	1 180	37.31						
Total, Page 51, Line 23	38 472 279	5 194 160	30.91						
Other Deliveries									
Kentucky Natural Gas Corporation	1 745 000	366 965	.69						
Battle Creek Gas Company	288 000	288 000	6.00						
Citizens Gas Fuel Company	36 000	36 000	6.00						
Consumers Power Company	1 257 000	1 257 000	5.72						
Total, Page 51, Line 24	3 326 000	1 214 035	3.11						
AVAILABLE FOR DELIVERY									
Purchased Independents-Natural Gas									
Panhandle Eastern Pipe Line Company Page 51, Line 33	5 916 000	196 500	24.80						

(A) (B) (C) (D) (E) (F) (G) (H) (I)

15370

Exhibit 165

	Estimated MCF [illegible] 12 Mos.Ended 12-31-42	Increase Over [illegible] Year	Avg. Rate	MCF OR KWH Months To Date	Increase Over Previous Year	Avg. Rate	MCF OR KWH 12 Months To Date	Increase Over Previous Year	Avg. Rate
AVAILABLE FOR DELIVERY (Cont'd.)		Actual 12 Mo. Ended 10-31-41							
Miscellaneous									
Received from Panhandle E.P.L.Co.for									
Michigan Consol.Gas Co.-Detroit	26 100 502	2 645 574	27.25						
Michigan Consol.Gas Co.-Ann Arbor	387 000	36 893	27.84						
The Ohio Gas, Light & Coke Company	147 500	3 608	26.09						
Central States Natural Gas Company	11 150	188	26.16						
The Toledo Edison Company	31 800	1 347	24.76						
National Utilities Co. of Michigan	313 500	257 357	22.31						
Western Ohio Public Service Co.	7 900	6 366	24.95						
Richmond Gas Corporation	140 000	133 438	25.00						
Central Indiana Gas Company	9 674 010	1 953 570	18.87						
Indiana-Ohio Public Service Co.	121 500	2 677	26.44						
Lynn Natural Gas Company	10 750	137	26.60						
Pendleton Natural Gas Company	17 201	41	26.41						
Town of Lapel, Indiana	8 200	922	25.12						
Town of Montezuma, Indiana	1 809	133	24.99						
Town of Pittsboro, Indiana	2 625	63	26.97						
Town of Roachdale, Indiana	2 455	65	26.44						
Greenfield Gas Company	26 000	26 000	26.04						
Indiana Gas Distribution Corp.	1 463 697	127 337	19.72						
The Ohio Fuel Gas Company	4 680	1 180	29.36						
Total, Page 51, Line 44	38 472 279	5 194 160	24.80						
Other Deliveries									
Kentucky Natural Gas Corporation	1 745 000	366 965	-						
Battle Creek Gas Company	288 000	288 000	-						
Citizens Gas Fuel Company	36 000	36 000	-						
Consumers Power Company	1 257 000	1 257 000	-						
Total, Page 51, Line 45	3 326 000	1 214 035	-						

(A) (B) (C) (D) (E) (F) (G) (H) (I)

15371

Substituted Exhibit 166

INDIANA GAS TRANSMISSION CORPORATION

CERTAIN STATISTICAL DATA
YEARS 1931 TO 1935 INCLUSIVE

	1931		1932		1933		1934		1935	
	M.C.F.	Amount	M.C.F.	Amount	M.C.F.	Amount	M.C.F.	Amount	M.C.F.	Amount
Purchased from Panhandle Eastern Pipe Line Company:										
By Indiana Gas Transm. Corp.	265,077	$ 47,713.86	1,834,120	$330,141.60	1,611,437	$290,058.66	1,726,349	$310,742.82	2,369,654	$426,537.
The Ohio Fuel Gas Co. Purchased: From Indiana Gas Transm. Corp.	12,212	2,747.70	215,048	48,385.81	55,384	12,461.41	84,634	18,907.67	315,984	71,096.
Indiana Gas Distr. Corp. Purchased: From Indiana Gas Transm. Corp.	-	-	1,521	760.25	7,428	3,714.00	13,029	6,514.50	25,279	12,639.
The Ohio Fuel Gas Co. Sold: To Indiana Gas Transm. Corp.	-	-	2,336	1,097.92	-	-	3,370	1,583.90	37,195	17,481.

Revenues of Indiana Gas Transmission
Pres. into record by Mr Shitzpagle
March 3, 1942

Exhibit 167

MICHIGAN CONSOLIDATED GAS COMPANY
DETROIT DISTRICT

CHECKS, IN FAVOR OF THE MICHIGAN GAS TRANSMISSION CORPORATION, DRAWN ON THE NATIONAL BANK OF DETROIT (EXCEPT AS NOTED)

Check Number	Date	Amount	Cancellation Date
35474	Aug. 20, 1936	$ 5,856.61	Aug. 24, 1936
36539	Sept. 21, 1936	30,378.18	Sept. 22, 1936
37720	Oct. 20, 1936	110,641.17	Oct. 22, 1936
38912	Nov. 20, 1936	258,668.13	Nov. 21, 1936
40152	Dec. 21, 1936	385,075.41	Dec. 22, 1936
41286	Jan. 20, 1937	307,881.32	Jan. 21, 1937
(1) 284		100,000.00	Jan. 22, 1937
42418	Feb. 20, 1937	375,591.26	Feb. 23, 1937
43353	Mar. 20, 1937	395,973.05	Mar. 22, 1937
44533	Apr. 20, 1937	317,876.40	Apr. 21, 1937
45399	May 20, 1937	384,959.10	May 21, 1937
46115	June 21, 1937	379,864.26	June 22, 1937
47154	July 20, 1937	345,075.04	July 21, 1937
48169	Aug. 20, 1937	265,970.29	Aug. 21, 1937
49025	Sept. 20, 1937	323,841.30	Sept. 21, 1937
49892	Oct. 20, 1937	365,818.82	Oct. 21, 1937
50896	Nov. 20, 1937	425,278.73	Nov. 22, 1937
51871	Dec. 20, 1937	456,260.74	Dec. 21, 1937
(2) 2384	Jan. 20, 1938	150,000.00	Jan. 22, 1938
52847		346,002.84	Jan. 21, 1938
(2) 2506	Feb. 21, 1938	150,000.00	Feb. 24, 1938
53458		372,993.27	Feb. 23, 1938
53985	Mar. 21, 1938	465,590.87	Mar. 22, 1938
54514	Apr. 20, 1938	141,791.48	Apr. 21, 1938
55004	May 20, 1938	431,691.46	May 23, 1938
55454	June 20, 1938	393,363.90	June 21, 1938
55883	July 20, 1938	351,502.60	July 21, 1938
56336	Aug. 19, 1938	287,597.32	Aug. 22, 1938
384	Sept. 20, 1938	327,828.13	Sept. 21, 1938
713	Oct. 20, 1938	388,810.87	Oct. 21, 1938
1383	Nov. 21, 1938	353,553.71	Nov. 22, 1938
(3) 1140		85,000.00	Nov. 23, 1938
1913	Dec. 17, 1938	519,340.74	Dec. 17, 1938
2588	Jan. 20, 1939	592,235.58	Jan. 21, 1939
2803	Feb. 20, 1939	609,543.26	Feb. 21, 1939
3126	Mar. 20, 1939	$585,882.91	Mar. 21, 1939
3429	Apr. 20, 1939	570,095.29	Apr. 21, 1939
3683	May 19, 1939	528,571.89	May 22, 1939
3935	June 20, 1939	429,799.15	June 21, 1939
4209	July 20, 1939	388,072.68	July 21, 1939
4498	Aug. 21, 1939	327,927.35	Aug. 22, 1939
4830	Sept. 20, 1939	367,793.28	Sept. 21, 1939
5161	Oct. 20, 1939	414,518.09	Oct. 23, 1939
5478	Nov. 20, 1939	500,132.09	Nov. 21, 1939
5778	Dec. 20, 1939	603,102.22	Dec. 21, 1939
6068	Jan. 20, 1940	676,398.39	Jan. 22, 1940
6401	Feb. 20, 1940	816,512.15	Feb. 21, 1940
6734	Mar. 20, 1940	734,647.89	Mar. 21, 1940
7034	Apr. 20, 1940	732,611.07	Apr. 22, 1940
7310	May 20, 1940	619,609.77	May 21, 1940
7592	June 20, 1940	520,460.67	June 21, 1940
7813	July 20, 1940	420,413.88	July 22, 1940
8042	Aug. 20, 1940	387,673.71	Aug. 21, 1940
8174	Sept. 20, 1940	419,430.39	Sept. 23, 1940
8278	Oct. 21, 1940	470,037.86	Oct. 22, 1940
8407	Nov. 20, 1940	562,758.15	Nov. 22, 1940
8536	Dec. 20, 1940	691,625.61	Dec. 23, 1940
8627	Jan. 20, 1941	754,135.95	Jan. 21, 1941
8726	Feb. 20, 1941	813,965.97	Feb. 21, 1941
8840	Mar. 20, 1941	795,042.51	Mar. 21, 1941
8937	Apr. 19, 1941	768,749.05	Apr. 21, 1941
9033	May 20, 1941	640,714.79	May 21, 1941
9137	June 20, 1941	569,684.77	June 23, 1941
9283	July 19, 1941	517,505.28	July 21, 1941
9525	Aug. 20, 1941	485,561.63	Aug. 21, 1941
9654	Sept. 20, 1941	491,400.76	Sept. 22, 1941
9822	Oct. 20, 1941	527,902.25	Oct. 21, 1941
9946	Nov. 19, 1941	628,651.73	Nov. 21, 1941
10069	Dec. 20, 1941	749,420.01	Dec. 22, 1941

(1) Central Hanover Bank and Trust Company, New York, N.Y.
(2) Mellon National Bank, Pittsburgh, Pennsylvania
(3) The Manufacturers National Bank of Detroit, Detroit, Michigan

Exhibit 169

STATISTICAL INFORMATION
DERIVED FROM EXHIBITS 101, 103 AND 164

OFFERED BY INTERVENOR (MICHIGAN CONSOLIDATED GAS COMPANY) AS A PART OF CROSS EXAMINATION OF FRED A. SPITZNAGLE

	1936 Indiana Gas Transmission Corp.			1936 Michigan Gas Transmission Corp.		
	Sales MCF	Revenue	Revenue per MCF	Sales MCF	Revenue	Revenue per MCF
(1) Central Indiana Gas Company	407,636	$126,269.21	30.976¢	2,176,474	$ 654,113.96	30.054¢
(2) Indiana Gas Distribution Corp. (affiliated company)	8,950	4,475.00	50.000	369,079	105,164.50	28.494
(3) Indiana-Ohio Public Service Company	17,154	8,577.00	50.000	43,847	21,923.50	50.000
(4) Kentucky Natural Gas Corporation	-	-	-	3,507	929.36	26.500
(5) Kokomo Gas and Fuel Company	-	-	-	-	-	-
(6) Lynn Natural Gas Company	-	-	-	2,388	1,194.00	50.000
(7) Michigan Consolidated Gas Company - Ann Arbor	-	-	-	-	-	-
(8) Northern Indiana Public Service Company	-	-	-	-	-	-
(9) The Ohio Fuel Gas Company (affiliated company)	930,820	209,434.51	22.500	1,837,015	407,672.90	22.192
(10) Pendleton Natural Gas Company	4,118	2,264.90	55.000	5,261	2,893.55	55.000
(11) Public Service Company of Indiana	61,755	21,991.40	35.611	375,725	128,703.00	34.255
(12) Town of Lapel, Indiana	-	-	-	985	488.85	49.629
(13) Town of Montezuma, Indiana	113	58.80	52.035	733	368.10	50.218
(14) Town of Pittsboro, Indiana	-	-	-	336	178.15	53.021
(15) Town of Roachdale, Indiana	-	-	-	171	89.55	52.368
(16) Total	1,430,546	$373,070.82	26.079¢	4,815,521	$1,323,719.42	27.469¢
Less - The Ohio Fuel Gas Company (affiliated company)	930,820	209,434.51	22.500	1,837,015	407,672.90	22.192
Total	499,726	$163,636.31	32.745¢	2,978,506	$ 916,046.52	30.755¢
Less - Indiana Gas Distribution Corp. (affiliated company)	8,950	4,475.00	50.000	369,079	105,164.50	28.494
Total	490,776	$159,161.31	32.431¢	2,609,427	$ 810,882.02	31.075¢

Percentage Increase or Decrease of Sales of Corporation for years 1937 to 1941 in Revenue and Revenue per MCF over those sales of Indiana Gas Transmission Cor

Year	Sales MCF
1937	93.76%
1938	111.56
1939	194.90
1940	225.69
1941	324.03

Minus sign

19 Gas Transmission Corp.		Total 1936			1937			1938		
Revenue	Revenue per MCF	Sales MCF	Revenue	Revenue per MCF	Sales MCF	Revenue	Revenue per MCF	Sales MCF	Revenue	Reve per
$ 654,113.96	30.054¢	2,584,110	$ 780,383.17	30.199¢	4,882,723	$1,284,719.35	26.312¢	3,941,646	$1,044,098.61	26.4
105,164.50	28.494	378,029	109,639.50	29.003	1,057,827	292,710.30	27.671	1,114,456	308,764.98	27.7
21,923.50	50.000	61,001	30,500.50	50.000	57,209	28,604.50	50.000	75,782	37,891.00	50.0
929.36	26.500	3,507	929.36	26.500	2,154	570.81	26.500	3,425	907.63	26.5
-	-	-	-	-	26,330	7,978.32	30.301	274,712	70,105.39	25.5
1,194.00	50.000	2,388	1,194.00	50.000	8,558	4,244.35	49.595	8,030	4,002.05	49.8
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	139,983	43,108.77	30.796	928,537	288,190.35	31.0
407,672.90	22.192	2,767,835	617,107.41	22.296	13,185	4,023.30	30.514	7,598	2,749.60	36.1
2,893.55	55.000	9,379	5,158.45	55.000	12,383	6,616.90	53.435	11,066	5,861.70	52.97
128,703.00	34.255	437,480	150,694.00	34.446	868,751	260,632.35	30.000	1,307,070	395,333.86	30.24
488.85	49.629	985	488.85	49.629	6,111	2,911.90	47.650	4,922	2,481.15	50.40
368.10	50.218	846	426.90	50.461	748	391.75	52.373	847	445.90	52.64
178.15	53.021	336	178.15	53.021	869	457.40	52.635	1,135	599.80	52.84
89.55	52.368	171	89.55	52.368	1,223	646.90	52.895	1,609	839.50	52.17
$1,323,719.42	27.489¢	6,246,067	$1,696,790.24	27.166¢	7,078,054	$1,937,616.90	27.375¢	7,680,735	$2,162,271.52	28.15
407,672.90	22.192	2,767,835	617,107.41	22.296	13,185	4,023.30	30.514	7,598	2,749.60	36.18
$ 916,046.52	30.755¢	3,478,232	$1,079,682.83	31.041¢	7,064,869	$1,933,593.60	27.369¢	7,673,137	$2,159,521.92	28.14
105,164.50	28.494	378,029	109,639.50	29.003	1,057,827	292,710.30	27.671	1,114,456	308,764.98	27.705
$ 810,882.02	31.075¢	3,100,203	$ 970,043.33	31.290¢	6,007,042	$1,640,883.30	27.316¢	6,558,681	$1,850,756.94	28.218

e Increase or Decrease of Sales of Natural Gas of Michigan Gas Transmission
eration for years 1937 to 1941 inclusive to non-affiliates, with responsive
ue and Revenue per MCF over those of the year 1936 (including in that year
s of Indiana Gas Transmission Corporation merged March 1, 1936).

Year	Sales MCF	Revenue	Revenue per MCF
937	93.76%	69.16%	-12.70%
938	111.56	90.79	- 9.82
939	194.90	154.01	-13.86
940	225.69	190.44	-10.82
941	324.03	268.68	-13.06

Minus sign (-) denotes decrease.

1938			1939			1940			Twelve Months Ended	
Sales MCF	Revenue	Revenue per MCF	Sales MCF	Revenue	Revenue per MCF	Sales MCF	Revenue	Revenue per MCF	Sales MCF	Revenue
3,941,546	$1,044,098.61	26.490¢	5,553,472	$1,404,669.99	25.293¢	5,880,115	$1,505,648.21	25.606¢	6,781,787	$1,720,12
1,114,456	308,764.98	27.705	1,207,492	336,028.68	27.829	1,261,400	335,721.70	26.615	1,342,869	336,28
75,782	37,891.00	50.000	93,689	42,946.20	45.839	121,697	44,944.83	36.932	148,522	40,39
3,425	907.63	26.500	-	-	-	-	-	-	-	
274,712	70,105.39	25.520	404,261	104,300.59	25.815	500,198	137,720.74	27.533	545,707	151,17
8,030	4,002.05	49.839	8,225	4,179.05	50.809	10,657	5,247.90	49.244	10,433	4,89
-	-	-	60,759	18,433.41	30.339	-	-	-	-	
928,537	288,190.35	31.037	1,205,744	355,026.73	29.445	1,476,694	466,016.25	31.558	1,584,554	523,28
7,598	2,749.60	36.188	5,504	2,752.00	50.000	6,553	3,276.50	50.000	5,968	2,95
11,066	5,861.70	52.970	10,409	5,544.70	53.268	15,650	8,115.15	51.854	15,713	8,19
1,307,070	395,333.86	30.246	1,795,751	523,663.90	29.161	2,080,820	643,866.35	30.943	2,275,071	688,08
4,922	2,481.15	50.409	5,112	2,613.25	51.120	4,894	2,543.30	51.968	5,037	2,90
847	445.90	52.645	1,163	609.95	52.446	1,557	813.65	52.258	1,653	86
1,135	599.80	52.846	1,778	931.20	52.373	2,469	1,274.80	51.632	2,461	1,21
1,609	839.50	52.175	2,043	1,058.75	51.823	2,225	1,161.85	52.218	2,313	1,14
7,680,735	$2,162,271.52	28.152¢	10,355,402	$2,802,818.40	27.066¢	11,264,929	$3,156,351.23	27.775¢	12,692,888	$3,481,52
7,598	2,749.60	36.188	5,504	2,752.00	50.000	6,553	3,276.50	50.000	5,968	2,95
7,673,137	$2,159,521.92	28.144¢	10,349,898	$2,800,066.40	27.054¢	11,358,376	$3,153,074.73	27.760¢	12,686,920	$3,478,57
1,114,456	308,764.98	27.705	1,207,492	336,028.68	27.829	1,261,400	335,721.70	26.615	1,342,869	336,28
6,558,681	$1,850,756.94	28.218¢	9,142,406	$2,464,037.72	26.952¢	10,096,976	$2,817,353.03	27.903¢	11,344,051	$3,142,28

Revenue per MCF	Twelve Months Ended June 30, 1941 Sales MCF	Revenue	Revenue per MCF	1941 Sales MCF	Revenue	Revenue per MCF
25.606¢	6,781,787	$1,720,127.85	25.364¢	8,142,040	$2,026,732.36	24.892¢
26.615	1,342,869	336,282.67	25.042	1,306,394	320,181.22	24.509
36.932	118,522	40,397.05	34.084	122,887	40,941.62	33.316
-	-	-	-	-	-	-
27.533	545,707	151,177.26	27.703	567,666	158,083.62	27.848
39.244	10,433	4,891.54	46.885	10,681	4,181.02	39.144
-	-	-	-	-	-	-
31.550	1,584,554	523,285.12	33.024	1,793,964	591,156.50	32.953
50.000	5,968	2,951.60	49.457	5,827	2,638.21	45.276
51.854	15,713	8,197.10	52.168	17,639	9,166.35	51.966
30.943	2,275,071	688,082.41	30.244	2,476,459	740,175.33	29.888
51.968	5,837	2,904.67	49.763	7,646	2,949.31	38.573
52.258	1,653	866.10	52.396	1,662	872.95	52.524
51.632	2,461	1,217.15	49.458	2,704	1,100.28	40.691
52.219	2,313	1,143.19	49.438	2,444	984.44	40.280
27.775¢	12,692,888	$3,481,524.01	27.429¢	14,458,013	$3,899,163.21	26.969¢
50.000	5,968	2,951.60	49.457	5,827	2,638.21	45.276
27.760¢	12,686,920	$3,478,572.41	27.419¢	14,452,186	$3,896,525.00	26.961¢
26.615	1,342,869	336,282.67	25.042	1,306,394	320,181.22	24.509
27.903¢	11,344,051	$3,142,289.74	27.700¢	13,145,792	$3,576,343.78	27.205¢

Exhibit 169

STATISTICAL INFORMATION
DERIVED FROM EXHIBITS 101, 103 AND 164

OFFERED BY INTERVENOR (MICHIGAN CONSOLIDATED GAS COMPANY) AS A PART OF CROSS EXAMINATION OF FRED A. SPITZNAGLE.

	1936 Indiana Gas Transmission Corp.			1936 Michigan Gas Transmission Corp.		
	Sales MCF	Revenue	Revenue per MCF	Sales MCF	Revenue	Revenue per MCF
(1) Central Indiana Gas Company	407,636	$126,269.21	30.976¢	2,176;474	$654,113.96	30.054¢
(3) Indiana-Ohio Public Service Company	17,154	8,577.00	50.000	43,847	21,923.50	50.000
(10) Pendleton Natural Gas Company	4,118	2,264.90	55.000	5,261	2,893.55	55.000
(11) Public Service Company of Indiana	61,755	21,991.40	35.611	375,725	128,703.00	34.255
(13) Town of Montezuma, Indiana	113	58.80	52.035	733	368.10	50.218
Total	490,776	$159,161.31	32.431¢	2,602,040	$808,002.11	31.053¢

Percentage
Transmissi
for years
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over the s
natural ga

1936			Total 1936			1937			1938	
chigan Gas Transmission Corp.										
.es MCF	Revenue	Revenue per MCF	Sales MCF	Revenue	Revenue per MCF	Sales MCF	Revenue	Revenue per MCF	Sales MCF	Revenue
76,474	$654,113.96	30.054¢	2,584,110	$780,383.17	30.193¢	4,882,723	$1,284,719.35	26.312¢	3,941,546	$1,044,098
43,647	21,923.50	50.000	61,001	30,500.50	50.000	57,209	28,604.50	50.000	75,782	37,891
5,261	2,893.55	55.000	9,379	5,158.45	55.000	12,383	6,616.90	53.435	11,066	5,861
375,725	128,703.00	34.255	437,480	150,694.40	34.446	868,751	260,632.35	30.000	1,307,070	395,333
733	368.10	50.218	846	426.90	50.461	748	391.75	52.373	847	445
602,040	$808,002.11	31.053¢	3,092,816	$967,163.42	31.271¢	5,821,814	$1,580,964.85	27.156¢	5,336,311	$1,483,631

Percentage Increase or Decrease of Sales of Natural Gas of Michigan Gas Transmission Corporation (including Indiana Gas Transmission Corporation) for years 1937 to 1941, inclusive, to all non-affiliated customers served throughout the year 1936, with responsive revenues and Revenue per MCF, over the sales to the same customers in 1936, (all having been served with natural gas continuously since 1936).

Year	Sales MCF	Revenue	Revenue Per MCF
1937	88.24%	63.46%	-13.16%
1938	72.54	53.40	-11.09
1939	141.03	104.46	-15.17
1940	161.89	127.82	-13.01
1941	247.93	191.36	-16.26

Minus sign (-) denotes decrease.

ue MCF	1938 Sales MCF	1938 Revenue	1938 Revenue per MCF	1939 Sales MCF	1939 Revenue	1939 Revenue per MCF	1940 Sales MCF	1940 Revenue	1940 Revenue per MCF	Twe Sal
12¢	3,941,546	$1,044,098.61	26.490¢	5,553,472	$1,404,669.99	25.293¢	5,880,115	$1,505,648.21	25.606¢	8,7
00	75,782	37,891.00	50.000	93,689	42,946.20	45.839	121,697	44,944.83	36.932	1
35	11,066	5,861.70	52.970	10,409	5,544.70	53.269	15,650	8,115.15	51.854	
00	1,307,070	395,333.86	30.246	1,795,751	523,663.90	29.161	2,080,820	643,866.35	30.943	2,4
73	847	445.90	52.645	1,163	609.95	52.446	1,557	813.65	52.258	
66¢	5,336,311	$1,483,631.07	27.803¢	7,454,484	$1,977,434.74	26.527¢	8,099,839	$2,203,388.19	27.203¢	9,

Percentage Decrease in Revenue per MCF derived by Michigan Gas Transmission Corporation from Sales of Natural Gas to Non-affiliated Customers in 1941 under the Revenue per MCF obtained by Indiana Gas Transmission Corporation from the same non-affiliated customers in 1936 - 19.25%

ue	Revenue per MCF	Twelve Months Ended June 30, 1941 Sales MCF	Revenue	Revenue per MCF	1941 Sales MCF	Revenue	Revenue per MCF
,648.21	25.606¢	6,781,787	$1,720,127.85	25.364¢	8,142,040	$2,026,732.36	24.892¢
;944.83	36.932	118,522	40,397.05	34.084	122,887	40,941.62	33.318
,115.15	51.854	15,713	8,187.10	52.168	17,639	9,166.35	51.966
;866.35	30.943	2,275,071	688,082.41	30.244	2,476,459	740,175.33	29.888
813.65	52.258	1,653	866.10	52.396	1,662	872.95	52.524
,388.19	27.203¢	9,192,746	$2,457,670.51	26.735¢	10,760,687	$2,817,888.61	26.187¢

[fol. 15378]

Exhibit 170.

Certificate

Setting Forth the Designation and Certain of the Terms

of the

5.60% Cumulative Preferred Stock

of

Panhandle Eastern Pipe Line Company

Pursuant to Section 13 of Chapter 65 of the Revised Code as Amended, of the State of Delaware

(Filed February 3, 1942)

[fol. 15379]

Certificate

Setting Forth the Designation and Certain of the Terms

of the

5.60% Cumulative Preferred Stock

of

Panhandle Eastern Pipe Line Company

We, the undersigned, J. D. Creveling and Leith V. Watkins, President and Secretary, respectively, of Panhandle Eastern Pipe Line Company (hereinafter called the corporation), hereby certify as follows, pursuant to Section 13 of Chapter 65 of the Revised Code, as amended, of the State of Delaware:

1. The Certificate of Incorporation of the corporation, as amended, authorizes the issuance of 250,000 shares of Cumulative Preferred Stock in series, with variations, as may be determined by the Board of Directors of the corporation prior to the issue thereof, as to (1) the rate of dividend, the dividend payment dates and the manner and medium of payment thereof and the dates from which the dividends shall commence to accrue, (2) the amount payable upon redemption, (3) the amount payable upon any voluntary liquidation, dissolution or winding up of the corporation or any voluntary distribution of assets by way of return of capital, (4) the provisions of the sinking fund,

if any, (5) the terms and rates of conversion and or exchange, if convertible and or exchangeable, (6) the provisions of the rights or options, if any, to purchase any shares of capital stock of any class or classes of the corporation, (7) the provisions, if any, as to payment or refund of taxes and (8) the provisions as to voting rights, if any (in addition to the voting rights given in Subdivisions VI and VII of Section B of Article Fourth the Certificate of Incorporation, as amended, to all Cumulative Preferred Stock); but the stock of each series of Cumulative Preferred Stock shall, in all other respects, be alike; and the shares of each such series shall be alike with all other shares of the same series in all respects except as to the dates from which dividends shall commence to accrue.

II. The Board of Directors of the corporation, at a meeting duly called and held at the offices of the corporation, 20 [fol. 15380] Broad Street, New York, New York, on the 2nd day of February, 1942, at which meeting a majority and quorum of the directors were present and acting throughout, did duly adopt the following resolutions authorizing the creation of a series of Cumulative Preferred Stock to be known as "5.60% Cumulative Preferred Stock", stating that 150,000 shares of the authorized and unissued Cumulative Preferred Stock shall belong to such series and setting forth a statement of the designations, powers, preferences and rights, and the qualifications, limitations and restrictions thereof, of the 5.60% Cumulative Preferred Stock which have not been set forth in the Certificate of Incorporation of the corporation, as amended:

"Resolved that 150,000 shares of authorized but unissued Cumulative Preferred Stock of the corporation be and hereby are determined to be and shall be of a series hereby designated as "5.60% Cumulative Preferred Stock"; and

Resolved that the following is a statement of the powers, preferences and rights, and the qualifications, limitations and restrictions thereof, of such series which have not been set forth in the Certificate of Incorporation, or any amendment thereto:

1. The rate of dividend payable on the shares of 5.60% Cumulative Preferred Stock shall be 5.60% per annum; such dividend shall be payable in cash; and the dividend payment dates for such series shall be the first days of January, April, July and October.

2. The amount payable upon redemption of the 5.60% Cumulative Preferred Stock (other than redemption through operation of the sinking fund, as provided in Subdivision 4 below) shall be $108 per share, plus accrued dividends.

3. The amount to be paid to the 5.60% Cumulative Preferred Stock upon any voluntary liquidation, dissolution or winding up of the corporation, or any voluntary distribution of assets by way of return of capital, shall be $108 per share, plus accrued dividends.

4. The 5.60% Cumulative Preferred Stock shall be entitled to the benefit of sinking funds as set forth in this Subdivision 4. On April 1, 1942, the corporation shall make [fol. 15381] available (by depositing in a segregated account) the sum of $100,000, and on April 1st in each year thereafter (hereinafter in this Subdivision 4 called "sinking fund payment date") so long as any shares of the 5.60% Cumulative Preferred Stock remain outstanding, the corporation shall make available (by depositing in a segregated account)

(1) a sum hereinafter in this Subdivision 4 sometimes called the "fixed sinking fund") sufficient to redeem at the sinking fund redemption price (hereinafter specified) on the 1st day of July next succeeding the sinking fund payment date, 1½% of the largest amount of 5.60% Cumulative Preferred Stock at any time outstanding prior to the sinking fund payment date; and

(2) a sum (hereinafter in this Subdivision 4 sometimes called the "contingent sinking fund") equal to the lesser of (a) a sum sufficient to redeem at the sinking fund redemption price on the 1st day of July next succeeding the sinking fund payment date, 2% of the largest amount of 5.60% Cumulative Preferred Stock at any time outstanding prior to the sinking fund payment date, or (b) a sum equal to the balance of earnings applicable to the contingent sinking fund (computed as hereinafter provided) for the twelve months period ended on the December 31st next preceding the sinking fund payment date.

The term "balance of earnings applicable to the contingent sinking fund", as used in clause (2) of this Subdivision 4, shall mean the consolidated net earnings of the corporation

and its subsidiaries after deductions of all charges of a proper character, including (but without being limited thereto) operating expenses, interest, expenditures for ordinary maintenance, appropriations for reserves for depreciation, depletion and amortization and for amortization of intangible property, taxes (including income and excess profits taxes), dividends accrued and or paid on the Cumulative Preferred Stock and the Preferred Stock in respect of the period of computation, and the sum paid during the period of computation to the fixed sinking fund under clause (3) of this Subdivision 4 (not including, however, [fol. 15382] any sum so paid on account of default in the fixed sinking fund prior to the period of computation) or the sum of $100,000 in the case of any computation of the balance of earnings applicable to the contingent sinking fund for the twelve months' period ended December 31, 1942.

The corporation shall have the right to anticipate at any time or from time to time all or any part of any sinking fund payments (a) by delivering to the sinking funds shares of 5.60% Cumulative Preferred Stock which, after being outstanding, have been purchased or otherwise acquired by the corporation and have not previously been surrendered to the sinking funds, or (b) by redeeming shares of 5.60% Cumulative Preferred Stock at the price set forth in Subdivision 2 hereof, provided no previous sinking fund credit has been taken in respect of the shares so redeemed. To the extent that the corporation shall at any time so anticipate sinking fund payments the corporation shall be entitled to credit on account of the aggregate amount of all sinking fund payments then becoming due and thereafter to become due for an amount equal to the aggregate sinking fund redemption price of all shares so surrendered to the sinking fund or so redeemed, such credits to be applied on such sinking fund payments in such order as the corporation may elect.

Subject to the provisions of Subdivision X of Section B of Article Fourth of the Certificate of Incorporation of the corporation and to the provisions of Subdivision 6 hereof, all moneys in the sinking funds shall be applied by the corporation, from time to time, as soon as reasonably practicable after payment thereof into the sinking funds, to the purchase of 5.60% Cumulative Preferred Stock at

private sale or in the open market, with or without advertising for tenders, at the best prices obtainable by the corporation considering the amount purchased, but at a cost (including accrued dividends and customary brokerage paid) not exceeding the sinking fund redemption price thereof, all as the corporation shall determine. If on or before May 31st next succeeding any sinking fund payment date, the corporation shall not be able to purchase shares of 5.60% Cumulative Preferred Stock in amount [fol. 1538] sufficient to exhaust the moneys in such sinking funds, then the moneys in such sinking funds not applied to the purchase of shares of 5.60% Cumulative Preferred Stock as aforesaid shall be applied by the corporation to redemption on the next succeeding July 1st, of shares of 5.60% Cumulative Preferred Stock, to be selected by lot, at the sinking fund redemption price.

Shares of 5.60% Cumulative Preferred Stock (determined by lot as above provided) may be redeemed, at the option of the Board of Directors of the corporation, at a redemption price (herein sometimes referred to as the "sinking fund redemption price") of $105 per share, plus accrued dividends. The provisions of Subdivision IV of Section B of Article Fourth of the Certificate of Incorporation of the corporation, to the extent not in conflict with the provisions of this Subdivision 4, shall be applicable to any redemption of shares pursuant to this Subdivision 4.

No 5.60% Cumulative Preferred Stock purchased or redeemed for, or surrendered to, the sinking funds shall be reissued or otherwise disposed of, and no Cumulative Preferred Stock shall be issued in lieu thereof, and the corporation may from time to time cause all such shares to be retired in the manner provided by law. Whenever no shares of 5.60% Cumulative Preferred Stock shall remain outstanding, any balance remaining in the sinking funds shall become a part of the general funds of the corporation.

If, while any of the 5.60% Cumulative Preferred Stock shall be outstanding, there shall be created any other series of Cumulative Preferred Stock having a sinking fund (fixed or contingent, or both) which provides for the retirement of shares of such other series at a more rapid rate than the retirement of shares of 5.60% Cumulative Preferred Stock is provided for under the provisions of the sinking funds hereinbefore created in this Subdivision

4, then the sinking fund requirements for the 5.60% Cumulative Preferred Stock hereinbefore set forth in this Subdivision 4 shall be forthwith increased so as to provide thenceforth for the retirement of shares of 5.60% Cumula- [fol. 15384] tive Preferred Stock at a rate as rapid as that provided for in the sinking fund for such new series.

5. So long as any shares of 5.60% Cumulative Preferred Stock are outstanding, the corporation shall not, without the affirmative vote at a meeting (the notice of which shall state the general character of the matters to be submitted thereat), or the written consent with or without a meeting, of the holders of at least two-thirds of the then outstanding shares of 5.60% Cumulative Preferred Stock,

(A) issue or sell any Cumulative Preferred Stock or any class of stock ranking prior to or on a parity with the Cumulative Preferred Stock in respect of dividends or assets or any class of stock or obligations convertible into or evidencing a right to purchase any stock of any class ranking prior to or on a parity with the Cumulative Preferred Stock in respect of dividends or assets, if the consolidated net earnings of the corporation and of all the subsidiaries available for interest and dividends, for a period of twelve (12) consecutive calendar months ending within ninety (90) days immediately preceding such issue or sale, shall amount to less than one and one-half times the sum of (a) the aggregate consolidated annual interest requirements on all indebtedness of the corporation and its subsidiaries, to be outstanding after giving effect to the proposed issue or sale of such additional securities, and (b) the aggregate annual dividend requirements on all shares of Cumulative Preferred Stock and on all other classes of stock of the corporation ranking prior to or on a parity with the Cumulative Preferred Stock in respect of dividends or assets and on stock of all classes of subsidiaries not owned by the corporation ranking prior to the common stock of such subsidiaries in respect of dividends or assets, to be outstanding after giving effect to such proposed issue or sale of such additional securities, or

(B) issue or sell any Cumulative Preferred Stock or any class of stock ranking prior to or on a parity with the Cumulative Preferred Stock in respect of dividends or assets;

[fol. 15385] (1) if the consolidated net earnings of the corporation and of all the subsidiaries available for dividends, for a period of twelve (12) consecutive calendar months ending within ninety (90) days immediately preceding such issue or sale, shall amount to less than two times the annual dividend requirements on all shares of Cumulative Preferred Stock and on all other classes of stock of the corporation ranking prior to or on a parity with the Cumulative Preferred Stock in respect of dividends or assets and on stock of all classes of subsidiaries not owned by the corporation ranking prior to the common stock of such subsidiaries in respect of dividends or assets, to be outstanding after giving effect to such proposed issue or sale of such additional stock; or

(2) if as a result of the issuance or sale of such shares the aggregate par value, or if such stock has no par value the preference on involuntary liquidation, of all shares of Cumulative Preferred Stock, and of all stock ranking prior to or on a parity with the Cumulative Preferred Stock in respect of dividends or assets, to be outstanding after giving effect to such proposed issue or sale of such additional stock would exceed the sum of (a) the total capital of the corporation represented by then outstanding shares of Common Stock and any other stock ranking junior to the Cumulative Preferred Stock in respect of dividends and assets and (b) the surplus of the corporation as then stated on its books of account.

The foregoing provisions of this Subdivision 5 shall not apply to the initial issuance and sale of the first 150,000 shares of Cumulative Preferred Stock issued and sold.

For the purpose of the foregoing provisions of this Subdivision 5, the "consolidated net earnings of the corporation and of all the subsidiaries available for interest and dividends" shall be ascertained, with intercompany items eliminated, as follows: From the total of the operating revenues (including rentals) of the corporation and of all [fol. 15386] the subsidiaries plus the net non-operating earnings of the corporation and of all the subsidiaries (excluding profits derived from the appreciation in value or from the sale or other disposition of real estate, plants, equipment or other capital assets), there shall be deducted all operating expenses of the corporation and the

subsidiaries (excluding from operating expenses (a) all charges for interest and (b) amortization of debt discount and expenses, but including all rentals, insurance, expenditures for current maintenance and taxes) and also deducted appropriations for reserves for depreciation, depletion and amortization and for amortization of intangible property, and the balance shall constitute the consolidated net earnings of the corporation and of all the subsidiaries available for interest and dividends; provided, however, that for the purposes of this paragraph the net non-operating earnings of the corporation and of all the subsidiaries shall not be included in such consolidated net earnings of the corporation and of all the subsidiaries available for interest and dividends except in an aggregate amount not in excess of twenty per cent. (20%) of said consolidated net earnings of the corporation and of all the subsidiaries available for interest and dividends.

For the purpose of the foregoing provisions of this Subdivision 5, the "consolidated net earnings of the corporation and of all the subsidiaries available for dividends" shall be computed in the same manner as the computation is made pursuant to the provisions of the next preceding paragraph hereof of the consolidated net earnings of the corporation and of all the subsidiaries available for interest and dividends, except that there shall be deducted from total revenues, in addition to the other deductions provided for in said preceding paragraph, an amount equal to all interest paid or accrued in respect of the period of computation and amortization of debt discount and expense for such period.

In case, within or after the period for which the calculation of consolidated net earnings is made pursuant to the provisions of this Subdivision, the corporation or a subsidiary shall have acquired any properties or shall have been consolidated or merged with any corporation, and such state of facts still exists at the date of the calculation, then in computing such consolidated net earnings [fol. 15387] there shall be included, to the extent the same may not have been otherwise included, the net earnings derived from the operation of the properties acquired or the properties of such other corporation, as the case may be, for the whole of such period. Such consoli-

dated net earnings shall be ascertained and computed, as in this Subdivision provided, as if such properties had been owned and operated by the corporation or a subsidiary during the whole of such period.

6. So long as any shares of the 5.60% Cumulative Preferred Stock are outstanding, the Company shall not, without written consent of the holders of a majority of the then outstanding shares of 5.60% Cumulative Preferred Stock or, in the alternative and subject to the proviso hereinafter set forth in this Subdivision 6, the affirmative vote, at a meeting (the notice of which shall state the general character of the matters to be submitted thereat) at which there is a quorum as defined below in this Subdivision 6, of the holders of a majority of the then outstanding shares of 5.60% Cumulative Preferred Stock which are represented at such meeting by the attendance of the holders thereof in person or by proxy, purchase or redeem any shares of Cumulative Preferred Stock or of any other stock ranking on a parity with or prior to the Cumulative Preferred Stock in respect of dividends or assets, during the continuance of any default in the payment of dividends on the 5.60% Cumulative Preferred Stock; provided, however, that if, at any such meeting, at least one-third of all shares of such 5.60% Cumulative Preferred Stock then outstanding shall be voted against the action, then proposed of the character aforesaid, such action may be taken only with the affirmative vote of the holders of a majority of the then outstanding shares of 5.60% Cumulative Preferred Stock.

At any meeting of such 5.60% Cumulative Preferred Stock for the purpose of taking action on matters set forth in this Subdivision 6, the presence in person or by proxy of the holders of a majority of the shares of such stock then outstanding shall constitute a quorum except that if the presence of such a majority shall not have been obtained [fol. 15388] and shall not be obtained for a period of thirty days from the date of such meeting, the presence in person or by proxy of the holders of one-third of the shares of such stock then outstanding shall be sufficient to constitute a quorum.

7. So long as any shares of 5.60% Cumulative Preferred Stock are outstanding, the corporation shall not, without

the affirmative vote at a meeting (the notice of which shall state the general character of the matters to be submitted thereat), or the written consent with or without a meeting, of the holders of at least two-thirds of the then outstanding shares of 5.60% Cumulative Preferred Stock,

(a) issue, assume or guarantee any unsecured notes, debentures or other securities representing unsecured indebtedness (hereinafter in this Subdivision 7 collectively referred to as "unsecured securities") for any purpose other than the redemption or other retirement of all the then outstanding shares of 5.60% Cumulative Preferred Stock and/or all the then outstanding shares of Class B Preferred Stock, if, immediately after such issue, assumption or guarantee, the total principal amount of all unsecured securities issued, assumed or guaranteed by the corporation and then outstanding (including unsecured securities then to be issued, assumed or guaranteed) will exceed $15,000,000; provided, however, that if and so long as the sum of (1) the total principal amount of all bonds and other securities representing secured indebtedness issued or assumed by the corporation and then outstanding and (2) the capital and surplus of the corporation as then stated on the books of account of the corporation, shall exceed $150,000,000, then the above limitation of $15,000,000 upon the aggregate principal amount of unsecured securities shall be increased by an amount equal to 10% of such excess; or

(b) issue, assume or guarantee any unsecured securities which shall mature by their terms more than ten years from the date upon which they are issued, assumed or guaranteed by the corporation; or

[fol. 15389] (c) issue, assume or guarantee any unsecured securities maturing by their terms two years or less from the date upon which they are issued, assumed or guaranteed by the corporation in a principal amount which, when added to the principal amount of all other unsecured securities at the time outstanding (not including, however, any Serial Notes of the corporation issued under its Indenture dated as of November 1, 1940 to Chemical Bank & Trust Company, as Trustee) maturing by their terms two years or less from the date upon which they were issued,

assumed or guaranteed by the corporation, would exceed 10% of the sum of (1) the total principal amount of all bonds and other securities representing secured indebtedness issued or assumed by the corporation and then outstanding and (2) the capital and surplus of the corporation as then stated on the books of account of the corporation.

8. So long as any shares of 5.60% Cumulative Preferred Stock are outstanding, the corporation shall not, without the affirmative vote at a meeting (the notice of which shall state the general character of the matters to be submitted thereat), or the written consent with or without a meeting, of the holders of at least two-thirds of the then outstanding shares of 5.60% Cumulative Preferred Stock, declare or pay any dividends (other than dividends payable in shares of its capital stock ranking junior to the Cumulative Preferred Stock in respect of dividends and assets), or make any other distribution on, or purchase or redeem, any shares, at any time outstanding, of its Common Stock or any other class of stock ranking junior to the Cumulative Preferred Stock in respect of dividends or assets,

(A) if the cumulative aggregate amount of such dividends, distributions, purchases and redemptions (at cost) declared or effected subsequent to January 1, 1940, exceeds the amount of earned surplus (computed before deducting any amount in respect of such dividends, distributions, purchases and redemptions declared or effected subsequent to January 1, 1940, but after deducting an [fol. 5390] amount equal to all dividends paid or accrued and unpaid subsequent to January 1, 1940 upon the Cumulative Preferred Stock and all other stock of the corporation ranking prior to or on a parity with the Cumulative Preferred Stock in respect of dividends or assets) arising subsequent to January 1, 1940, determined in accordance with sound accounting practice, plus the sum of $1,500,000; provided, however, that, for the purposes of this Subdivision 8, in determining at any time or from time to time the amount of earned surplus arising subsequent to January 1, 1940, no deduction or addition shall be made for any or all of the following direct charges or credits to earned surplus:

(1) surplus adjustments applicable to a period or periods prior to January 1, 1940;

(2) charges to earned surplus for the write-off at any time of unamortized discount and expense, applicable to the funded debt of the corporation existing at any time prior to January 1, 1940, or of any unamortized premium paid in connection with the redemption of any such funded debt;

(3) charges to earned surplus for the write-down or write-off of the excess of the cost to the corporation of properties acquired as entireties or otherwise over the original cost of such properties when first devoted to public use, which may be required by any rule, regulation or order of any public body or authority exercising supervisory authority over the accounts of the corporation;

(4) charges to earned surplus for dividends aggregating $1,211,050.50 declared on the shares of the capital stock of the corporation during the year 1940, in respect of earnings for the year 1939, and paid during the year 1940; or

(B) if immediately following such dividend, distribution, purchase or redemption, the aggregate par value, or if such stock has no par value the preference on in- [fol. 15391] voluntary liquidation, of all outstanding shares of Cumulative Preferred Stock, and of all stock ranking prior to or on a parity with the Cumulative Preferred Stock in respect of dividends or assets, would exceed an amount equal to the sum of (a) the total capital of the corporation represented by then outstanding shares of Common Stock and any other stock ranking junior to the Cumulative Preferred Stock in respect of dividends or assets and (b) the surplus of the corporation as then stated on its books of account.

The foregoing provisions of this Subdivision 8 shall not apply to the purchase or redemption of any shares of the capital stock of the corporation of any class effected through the exchange of other shares of stock of the corporation ranking junior to the Cumulative Preferred Stock in respect of dividends and assets or from the net proceeds (received after January 1, 1942) of shares of

stock ranking junior to the Cumulative Preferred Stock in respect of dividends and assets.

9. Any term hereinabove used, which is defined in the Certificate of Incorporation of the corporation, has the meaning therein assigned to it in such definition."

In Witness Whereof, this certificate has been made under the seal of said Panhandle Eastern Pipe Line Company and has been signed by the undersigned, said J. D. Creveling, its President, and said Leith V. Watkins, its Secretary, respectively, this 2nd day of February, 1942.

J. D. CREVELING,
President.

LEITH V. WATKINS,
Secretary.

PANHANDLE EASTERN PIPE LINE COMPANY.

(Corporate Seal)
1929
Delaware.

Attest:

Leith V. Watkins,
Secretary.

[fol. 15392] State of New York,
County of New York—ss.:

Be It Remembered that on the 2nd day of February, 1942, personally came before me, Frank A. Moyer, a Notary Public in and for the County and State aforesaid J. D. Creveling, President of Panhandle Eastern Pipe Line Company, a corporation of the State of Delaware, the corporation described in and on behalf of which was made the foregoing certificate, known to me personally to be such President, and he, said J. D. Creveling as such President, duly executed said certificate before me and acknowledged said certificate to be his act and deed and the act and deed of said corporation; and that he further acknowledged to me that the signatures affixed to said certificate are the genuine signatures of J. D. Creveling as President and

Leith V. Watkins as Secretary of said corporation, respectively, that the seal affixed to said certificate is the corporate seal of said corporation, and that said certificate was sealed, executed, acknowledged and delivered pursuant to due authority from the Board of Directors and from the stockholders of said corporation.

FRANK A. MOYER,
Notary Public, Kings Co., N. Y.
Kings Co. Clk's No. 205; Reg. No. 2221
N. Y. Co. Clk's No. 574; Reg. No. 2M353.

Commission expires March 30, 1942.

[fol. 15393] Exhibit 171.

Certificate

of

Purchase and Retirement of Class A Preferred Stock

of

Panhandle Eastern Pipe Line Company

Pursuant to Section 27 of the General Corporation Law

of the State of Delaware

(Filed February 14, 1942)

[fol. 15394] Certificate

of

Purchase and Retirement of Class A Preferred Stock

of

Panhandle Eastern Pipe Line Company

Pursuant to Section 27 of the

General Corporation Law

of the State of Delaware

Panhandle Eastern Pipe Line Company (hereinafter called the Corporation), under the seal of the Corporation and the hands of its President and Secretary, does hereby Certify:

That the Corporation has purchased One Hundred Thousand (100,000) shares of its Class A Preferred Stock of the

par value of $100 each, at par, being a price not exceeding the price at which such shares might be redeemed, and has retired such shares pursuant to resolution of its Board of Directors duly adopted.

That the amount of capital of the Corporation applied to the purchase of said shares was Ten Million Dollars ($10,000,000).

That the capital of the Corporation is hereby reduced by the amount of capital which was applied to such purchase to wit: Ten Million Dollars ($10,000,000), which amount is the same as the amount of capital represented by the shares so purchased.

That the Certificate of Incorporation, as amended, prohibits the reissue of such shares so purchased and retired, and in as much as the shares so purchased and retired constitute all of the outstanding shares of Class A Preferred Stock, the filing and recording of this Certificate shall constitute an amendment to the Certificate of Incorporation effecting a reduction in the authorized capital stock of the Corporation by the elimination therefrom of all reference to Class A Preferred Stock.

That the assets of the Corporation remaining after such purchase and retirement are sufficient to pay any debts of the Corporation, the payment of which has not been otherwise provided for.

[fol. 15395] In Witness Whereof, this Certificate has been made under the Seal of said Panhandle Eastern Pipe Line Company and has been signed by the undersigned, said J. D. Creveling, its President, and said Leith V. Watkins, its Secretary, respectively, this 12th day of February, 1942.

J. D. CREVELING,
President.

LEITH V. WATKINS,
Secretary.

PANHANDLE EASTERN PIPE LINE COMPANY,

(Corporate Seal)
1929
Delaware

Attest:

Leith V. Watkins,
Secretary.

[fol. 15396] State of Missouri,
County of Jackson—ss.:

Be It Remembered that on this 12th day of February, 1942, personally came before me, Mary C. Magers, a Notary Public in and for the County and State aforesaid, J. D. Creveling, the President of Panhandle Eastern Pipe Line Company, a corporation of the State of Delaware, the corporation described in and on behalf of which was made the foregoing Certificate, known to me personally to be such President, and he, said J. D. Creveling, as such President, duly executed said certificate before me and acknowledged said certificate to be his act and deed and the act and deed of said corporation; and that he further acknowledged to me that the signatures affixed to said certificate are the genuine signatures of J. D. Creveling, as President and Leith V. Watkins as Secretary of said corporation, respectively, that the seal affixed to said certificate is the corporate seal of said corporation, and that said certificate was sealed, executed, acknowledged and delivered pursuant to due authority from the Board of Directors and from the stockholders of said corporation.

MARY C. MAGERS,
Notary Public.

My Commission expires August 31, 1943.

MARY C. MAGERS,
Notary Public, Jackson County, Mo.

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

A S S E T S

Line No.	Item (A)	1930 (B)	1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)
1	GAS PLANT	$44 432 256 86	$55 414 134 62	$45 606 714 20	$45 625 712 23	$45 525 157 54	$45 495 363 07	$49 863 521 83 $
2	INVESTMENTS AND FUND ACCOUNTS							
3	Other Investments	200 169 09	200 169 09	190 784 68	187 724 68	180 240 68	1 00	150 146 84
4	CURRENT AND ACCRUED ASSETS							
5	Cash	713 599 28	439 459 43	456 864 60	494 528 10	498 968 73	726 495 15	963 219 16
6	Special Deposits	8 772 563 72	909 00	423 997 72	660 75	630 689 07	854 07	1 527 31
7	Working Funds (Petty Cash							
8	and Advances)	21 268 54	8 747 46	3 109 93	2 215 79	2 505 13	2 234 12	5 261 77
9	Notes Receivable	57 500 00	1 051 338 64	1 051 843 40	300 953 36	150 847 80	150 706 20	12 532 38
10	Accounts Receivable	181 501 89	365 109 83	364 238 03	373 714 29	383 272 01	489 507 74	996 229 66
11	Interest and Dividends							
12	Receivable	-	108 43	116 81	6 35	5 65	4 70	7 565 93
13	Material and Supplies	235 221 44	496 381 01	409 308 39	269 574 03	264 929 92	228 070 68	215 387 53
14	Prepayments	9 276 79	31 133 58	37 492 72	34 499 61	39 725 23	40 685 07	41 296 84
15	Total Current and Accrued Assets	9 990 931 66	2 384 187 38	2 746 971 60	1 476 152 28	1 970 945 54	1 638 557 73	2 243 020 58
16	DEFERRED DEBITS							
17	Unamortized Debt Discount and							
18	Expense	2 026 261 70	1 968 010 43	1 860 157 13	1 702 747 90	1 601 091 34	1 406 686 22	1 267 225 96
19	Extraordinary Property Losses	-	-	279 538 39	358 095 27	409 467 63	11 752 17	11 752 17
20	Clearing Accounts	-	-	-	-	-	-	-
21	Retirement Work in Progress	-	73 880 86	3 320 48	10 106 56	6 931 20	6 964 81	146 11
22	Other Work in Progress	-	12 897 13	2 027 56	1 353 03	1 163 45	6 199 85	10 793 16
23	Other Deferred Debits	8 744 85	9 997 02	46 274 98	48 997 03	45 315 85	35 618 40	21 093 06
24	Total Deferred Debits	2 035 006 55	2 064 785 44	2 191 318 54	2 121 299 79	2 061 969 47	1 467 221 45	1 311 010 46
25	REACQUIRED SECURITIES							
26	Reacquired Long-Term Debt	-	-	-	-	-	-	-
27	TOTAL ASSETS AND OTHER DEBITS	$56 658 364 16	$60 063 276 53	$50 735 789 02	$49 410 888 [illegible]	$49 738 311 23	$48 601 143 25	$53 567 699 71 $67

EXHIBIT 172 15397

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WITNESS WATKINS

ND SUBSIDIARY COMPANIES

BALANCE SHEETS - PER BOOKS

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Supplements Ex 45

b e r 31

	1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 (M)
54	$45 495 363 07	$49 863 521 83	$60 977 186 19	$61 214 797 04	$61 838 380 91	$66 906 389 76	$69 650 032 63
68	1 00	150 146 84	199 430 77	225 898 06	228 791 91	235 598 10	2 954 498 52 (1)
73	726 495 15	963 219 16	1 546 962 47	1 396 984 87	5 479 321 37	3 744 194 06	3 984 032 18
07	854 07	1 527 31	6 038 25	4 758 25	5 028 25	9 125 75	102 580 14
13	2 234 12	5 261 77	4 416 14	4 997 18	8 419 45	9 189 00	11 572 08
80	150 706 20	12 532 38	3 991 75	14 854 84	16 020 60	2 150 63	-
01	489 507 74	996 229 66	971 532 85	1 126 143 55	1 280 529 32	1 445 442 03	1 633 275 50
65	4 70	7 565 93	6 492 87	5 959 40	5 237 70	3 801 78	8 388 47
92	228 070 68	215 387 53	257 963 63	165 267 50	159 321 97	212 314 42	374 839 09
23	40 685 07	41 296 84	80 232 10	78 881 97	84 806 27	64 918 68	94 732 18
54	1 638 557 73	2 243 020 58	2 877 630 06	2 797 827 56	7 038 684 93	5 491 136 35	6 209 419 64
34	1 406 686 22	1 267 225 96	3 173 881 35	2 854 204 85	2 539 351 98	2 229 322 74	-
63	11 752 17	11 752 17	-	-	-	-	-
	-	-	3 122 21	-	-	-	6 760 57
20	6 964 81	146 11	-	-	-	-	-
45	6 199 85	10 793 16	20 447 87	30 898 92	59 79	2 975 91	176 619 80
85	35 618 40	21 093 06	14 624 98	13 311 38	6 00	837 08	4 068 91
47	1 467 221 45	1 311 010 46	3 212 076 41	2 898 415 15	2 539 417 77	2 233 135 73	187 449 28
	-	-	454 000 00	-	-	-	-
23	$48 601 143 25	$53 567 699 71	$67 720 323 43	$67 136 937 81	$71 645 275 52	$74 866 259 94	$79 001 400 07

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

L I A B I L I T I E S

Line No.	Item (A)	1930 (B)	1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	
1	CAPITAL STOCK							
2	Common Capital Stock	$ 100 000 00	$ 980 000 00	$ 1 199 000 00	$ 1 199 000 00	$ 1 199 000 00	$ 1 199 000 00	$18 2
3	Preferred Capital Stock	-	-	-	-	-	-	11 0
4	Total Capital Stock	100 000 00	980 000 00	1 199 000 00	1 199 000 00	1 199 000 00	1 199 000 00	29 2
5	LONG-TERM DEBT							
6	Bonds	20 000 000 00	20 000 000 00	20 000 000 00	19 400 000 00	19 400 000 00	18 200 000 00	17 5
7	Miscellaneous Long-Term Debt	-	7 920 000 00	9 891 000 00	9 993 500 00	9 981 594 75	9 976 670 24	1
8	Total Long-Term Debt	20 000 000 00	27 920 000 00	29 891 000 00	29 393 500 00	29 381 594 75	28 176 670 24	17 7
9	CURRENT AND ACCRUED LIABILITIES							
10	Notes Payable	4 012 000 00	-	-	-	-	-	4
11	Accounts Payable	2 394 496 69	168 669 71	70 058 14	91 691 52	91 168 32	101 847 05	5
12	Dividends Declared	-	-	-	-	-	-	
13	Matured Long-Term Debt	-	-	-	-	-	-	
14	Matured Interest	-	-	-	-	593 460 00	1 186 920 00	
15	Customers' Deposits	6 839 00	2 050 00	2 262 00	2 198 00	1 990 00	1 943 00	
16	Taxes Accrued	10 359 69	219 628 43	179 091 53	167 745 72	159 487 83	160 533 10	4
17	Interest Accrued	303 614 56	457 379 32	496 472 90	487 264 41	487 239 10	469 222 85	2
18	Other Current and Accrued							
19	Liabilities	1 860 80	1 053 53	1 763 81	1 954 41	4 108 80	3 164 49	
20	Total Current and Accrued							
21	Liabilities	6 729 170 74	848 780 99	749 648 38	750 854 06	1 337 454 05	1 923 630 49	1 6
22	DEFERRED CREDITS							
23	Customers' Advances for							
24	Construction	-	-	-	57 00	1 139 00	1 075 00	
25	Other Deferred Credits	19 767 24	17 104 10	51 241 12	32 325 25	19 528 26	20 796 67	
26	Total Deferred Credits	19 767 24	17 104 10	51 241 12	32 382 25	20 663 26	21 871 67	
27	RESERVES							
28	Reserve for Depreciation of							
29	Gas Plant	53 097 66	190 318 12	543 336 41	1 066 349 96	1 648 572 85	2 184 909 83	2 7
30	Reserve for Amortization and							
31	Depletion of Producing Natural							
32	Gas Land and Land Rights	-	-	9 407 08	23 378 95	43 020 03	67 827 41	1
33	Reserve for Abandoned Leases	-	17 100 00	52 423 04	79 524 32	133 286 98	184 717 93	1
34	Reserve for Uncollectible Accounts	3 946 05	2 907 60	6 096 44	7 245 27	12 220 09	14 459 60	
35	Injuries and Damages Reserve	-	3 300 00	8 764 18	19 564 18	30 364 18	41 164 18	
36	Other Reserves	36 002 66	36 002 66	36 002 66	36 002 66	-	-	
37	Total Reserves	93 046 37	249 628 38	656 029 81	1 232 065 34	1 867 464 13	2 493 078 95	3 0
38	CONTRIBUTIONS IN AID OF CONSTRUCTION	-	-	-	1 040 32	1 040 32	1 040 32	
39	SURPLUS							
40	Capital Surplus	29 643 581 17	29 652 338 25	19 294 624 55	19 294 624 55	19 285 867 47	18 582 941 56	4
41	Earned Surplus	72 798 64	395 424 81	1 105 754 84*	2 492 577 54*	3 354 772 75*	3 741 089 98*	1 67
42	Total Surplus	29 716 379 81	30 047 763 06	18 188 869 71	16 802 047 01	15 931 094 72	14 785 851 58	1 7
43	TOTAL LIABILITIES AND OTHER							
44	CREDITS	$56 658 364 16	$60 063 276 53	$50 735 789 02	$49 410 888 98	$49 738 311 23	$48 601 143 25	$53 56

45 *Denotes red figures.

Reference is made to the appended notes which are an

WY AND SUBSIDIARY COMPANIES

BALANCE SHEETS - PER BOOKS

[T I E S

b e r 31

34	1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 (M)
)00 00	$ 1 199 000 00	$18 216 300 00	$18 216 300 00	$18 216 300 00	$20 184 175 00	$20 184 175 00	$20 184 175 00
-	-	11 000 000 00	11 000 000 00	11 000 000 00	11 000 000 00	11 000 000 00	11 000 000 00
)00 00	1 199 000 00	29 216 300 00	29 216 300 00	29 216 300 00	31 184 175 00	31 184 175 00	31 184 175 00
)00 00	18 200 000 00	17 589 000 00	24 000 000 00	23 500 000 00	23 000 000 00	22 500 000 00	18 250 000 00
594 75	9 976 670 24	172 244 41	2 158 848 83	2 062 664 20	41 436 10	30 149 00	5 009 789 19
594 75	28 176 670 24	17 761 244 41	26 158 848 83	25 562 664 20	23 041 436 10	22 530 149 00	23 259 789 19
-	-	400 000 00	2 625 000 00	-	-	-	-
168 32	101 847 05	579 220 46	309 825 00	174 172 16	523 121 52	363 523 43	1 083 337 88
-	-	-	165 000 00	165 000 00	165 000 00	165 000 00	905 086 42
-	-	-	2 110 00	1 582 50	1 582 50	-	96 822 14
160 00	1 186 920 00	540 00	2 352 50	2 290 00	890 00	2 420 00	4 230 00
990 00	1 943 00	2 276 00	2 370 00	2 840 00	3 415 00	3 885 00	-
187 83	160 533 10	445 175 74	736 680 20	1 036 992 32	1 105 545 25	2 333 878 95	3 218 503 42
239 10	469 222 85	263 877 20	316 168 83	315 694 47	306 666 68	300 000 00	90 104 18
108 80	3 164 49	8 156 11	5 909 35	3 117 66	3 085 58	3 199 01	3 433 42
154 05	1 923 630 49	1 699 245 51	4 165 415 88	1 701 689 11	2 109 306 53	3 171 906 39	5 401 517 46
135 00	1 075 00	1 195 00	1 553 00	5 964 58	8 241 29	9 339 48	-
528 26	20 796 67	70 310 96	108 461 94	27 830 62	63 874 60	44 351 74	43 414 51
663 26	21 871 67	71 505 96	110 014 94	33 795 20	72 115 89	53 691 22	43 414 51
772 85	2 184 909 83	2 746 714 26	3 731 763 48	5 272 697 52	6 981 592 47	8 478 956 45	10 045 784 05
020 03	67 827 41	108 106 52	160 634 78	211 533 71	277 251 34	356 987 61	447 164 67
286 98	184 717 93	150 789 04	212 557 63	252 196 26	339 434 61	353 557 18	415 074 53
220 09	14 459 60	13 909 80	15 405 64	21 367 93	29 523 89	40 088 66	50 219 88
864 18	41 164 18	51 964 18	60 664 18	75 064 18	88 914 18	107 408 37	100 923 74
-	-	-	96 800 94	424 800 94	624 800 94	624 800 94	624 800 94
764 13	2 493 078 95	3 071 483 80	4 277 826 65	6 257 660 54	8 341 517 43	9 961 799 21	11 683 967 81
040 32	1 040 32	29 100 32	29 100 32	29 100 32	36 296 83	41 571 91	42 062 57
767 47	18 582 941 56	46 364 54	46 364 54	46 364 54	-	-	-
772 75*	3 797 089 98*	1 672 455 17	3 716 452 27	4 289 363 90	6 860 427 74	7 922 967 21	7 386 473 53 (2)
994 72	14 785 851 58	1 718 819 71	3 762 816 81	4 335 728 44	6 860 427 74	7 922 967 21	7 386 473 53
111 23	$48 601 143 25	$53 567 699 71	$67 720 323 43	$67 136 937 81	$71 645 275 52	$74 866 259 94	$79 001 400 07

ppended notes which are an integral part of the above balance sheet.

EXHIBIT 172.

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WITNESS WATKINS

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

NOTES TO BALANCE SHEETS

Line No.		
1	(1)	Including $2,750,000 principal amount
2		of United States Treasury Notes of
3		Tax Series B - 1943. (Tax Anticipation Notes)
4	(2)	Surplus is restricted by the Certificate
5		of Incorporation as to the payment
6		of common stock and participating
7		dividends, in the amount of $3,581,379.41.

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANI

Line No.	Item (A)	1932 April 1 to December 31 (B)	Year Ended December 1933 (C)	1934 (D)	1935 (E)	1936 (F)	1937 (G)
1	INCOME						
2	Operating Revenues						
3	Gas	$1 346 228 99	$2 416 397 62	$2 844 934 63	$3 371 882 80	$5 815 682 31	$9 212 821 95
4	Gasoline	-	-	-	-	46 318 74	429 051 48
5	Pipe Line Rentals	67 018 27	154 911 25	189 638 39	221 276 31	102 872 18	-
6	Miscellaneous	14 246 32	14 087 92	13 944 83	18 705 92	72 994 76	21 035 99
7	Total Operating Revenues	1 427 493 58	2 585 396 79	3 048 517 85	3 611 865 03	6 037 867 99	9 662 909 42
8	Operating Revenue Deductions						
9	Operation and Maintenance Expenses	787 282 03	999 104 75	1 009 569 44	1 064 408 69	1 503 536 46	2 193 924 05
10	Depreciation (Including Amortization)	321 196 03	624 052 98	629 017 13	630 539 44	672 400 19	1 217 882 04
11	Amortization and Depletion of Producing						
12	Natural Gas Land and Land Rights	6 908 30	13 971 87	19 641 08	24 807 38	40 279 11	52 528 26
13	Abandoned Leases	73 683 14	85 580 00	82 692 00	79 560 90	75 010 26	113 976 77
14	Amortization of Other Limited Term						
15	Gas Investments	26 761 93	33 289 68	33 289 68	33 289 68	296 906 58	320 565 16
16	Charges in Lieu of Federal						
17	Income and Excess Profits Taxes	-	-	-	-	-	-
18	Taxes						
19	State, Local and Miscellaneous						
20	Federal	216 130 27	262 375 23	270 204 00	284 598 03	360 293 90	412 961 36
21	Federal Income	-	-	-	-	230 000 00	492 000 00
22	Federal Excess Profits	-	-	-	-	-	-
23	Total Operating Revenue Deductions	1 431 961 70	2 018 374 51	2 044 413 33	2 117 204 12	3 178 426 50	4 803 837 64
24	Net Operating Revenue	4 468 12*	567 022 28	1 004 104 52	1 494 660 91	2 859 441 49	4 859 071 78
25	OTHER INCOME						
26	Interest Revenues	15 008 44	8 234 75	4 055 81	3 011 75	7 605 71	17 737 82
27	Miscellaneous Nonoperating Revenues	6 375 00	-	-	-	-	-
28	Total Other Income	21 383 44	8 234 75	4 055 81	3 011 75	7 605 71	17 737 82
29	Gross Income	16 915 32	575 257 03	1 008 160 33	1 497 672 66	2 867 047 20	4 876 809 60
30	INCOME DEDUCTIONS						
31	Interest on Long-Term Debt	1 334 607 00	1 770 760 00	1 760 158 18	1 725 397 26	1 137 387 05	987 030 42
32	Amortization of Debt Discount and						
33	Expense	78 653 23	102 702 87	119 741 62	98 250 56	93 679 98	285 107 13
34	Other Interest Charges	682 35	1 091 79	267 29	78 87	1 934 49	34 383 06
35	Interest Charged to Construction	5 332 60*	-	-	-	77 139 75*	189 238 82*
36	Total Income Deductions	1 408 609 98	1 874 554 66	1 880 167 09	1 823 726 69	1 155 861 77	1 117 281 79
37	NET INCOME	$1 391 694 66*	$1 299 297 63*	$ 872 006 76*	$ 326 054 03*	$1 711 185 43	$3 759 527 81

38 *Denotes red figures.

EXHIBIT 173

SCHEDULE 1

15400

WITNESS WATKINS

Y AND SUBSIDIARY COMPANIES

INCOME STATEMENT - PER BOOKS
PERIOD FROM APRIL 1, 1932 TO DECEMBER 31, 1941

Supplement 24 49

e d	D e c e m b e r 31					Cumulative	Average 1938-1940	
1936	1937	1938	1939	1940		Total	(8-3/4 Yr.)	1941
(F)	(G)	(H)	(I)	(J)		(K)	(L)	(M)
$15 682 31	$9 212 821 95	$9 540 967 85	$11 461 388 31	$13 167 241 73		$59 177 546 19	$6 763 148 13	$14 688 263 44
46 318 74	429 051 48	353 128 71	513 940 99	355 722 01		1 698 161 93	194 075 65	735 077 94
102 872 18	-	-	-	-		735 716 40	84 081 87	-
72 994 76	21 035 99	13 032 46	21 439 93	12 489 05		201 977 18	23 083 11	11 515 35
037 867 99	9 662 909 42	9 907 129 02	11 996 769 23	13 535 452 79		61 813 401 70	7 064 388 76	15 434 856 73
503 536 46	2 193 924 05	2 386 502 03	2 698 910 34	3 000 764 52		15 644 002 31	1 787 885 98	3 392 827 05
572 400 19	1 217 882 04	1 577 158 67	1 711 382 62	1 720 744 97		9 104 374 07	1 040 499 89	1 937 994 80
40 279 11	52 528 26	50 898 93	65 717 63	79 736 27		354 488 83	40 513 01	90 177 06
75 010 26	113 976 77	100 549 56	93 599 61	80 408 63		785 060 87	89 721 24	74 685 45
296 906 58	320 565 16	326 892 84	329 300 14	329 110 13		1 729 405 82	197 646 38	332 142 69
-	-	-	-	-		-	-	823 881 49
360 293 90	412 961 36	577 888 16	675 477 83	612 871 48		3 672 800 26	419 748 60	733 622 93
230 000 00	492 000 00	513 426 21	820 286 12	1 436 598 47		3 492 310 80	399 121 23	1 690 000 00
-	-	-	-	561 000 00		561 000 00	64 114 29	900 000 00
78 426 50	4 803 837 64	5 533 316 40	6 394 674 29	7 321 234 47		35 343 442 96	4 039 250 62	9 975 331 47
559 441 49	4 859 071 78	4 373 812 62	5 602 094 94	5 714 218 32		26 469 958 74	3 025 138 14	5 459 525 26
7 605 71	17 737 82	13 172 56	13 884 90	13 427 53		96 139 27	10 987 34	18 541 89
-	-	-	-	-		6 375 00	728 57	-
7 605 71	17 737 82	13 172 56	13 884 90	13 427 53		102 514 27	11 715 91	18 541 89
67 047 20	4 876 809 60	4 386 985 18	5 615 979 84	5 727 645 85		26 572 473 01	3 036 854 05	5 478 067 15
37 387 05	987 030 42	944 233 34	923 333 32	903 333 32		11 486 239 89	1 312 713 13	651 903 65
93 679 98	285 107 13	319 676 50	314 852 87	310 029 24		1 722 694 00	196 879 31	27 486 70
1 934 49	34 383 06	65 129 11	14 394 31	2 787 11		120 748 38	13 799 82	5 958 57
77 139 75*	189 238 82*	1 277 51*	-	36 827 80*		309 816 48*	35 407 60*	11 774 51*
55 861 77	1 117 281 79	1 327 761 44	1 252 580 50	1 179 321 87		13 019 865 79	1 487 984 66	673 574 41
11 185 43	$3 759 527 81	$3 059 223 74	$ 4 363 399 34	$ 4 548 323 98		$13 552 607 22	$1 548 869 39	$ 4 804 492 74

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	Item (A)	1932 April 1 to December 31 (B)	Year Ended December 1933 (C)	1934 (D)	1935 (E)	1936 (F)	1937 (G)	
1	Net income per Schedule 1, Line 38	$1 391 694 66*	$1 299 297 63*	$ 872 006 76*	$ 326 054 03*	$1 711 135 43	$3 759 527 81	$3 (
2	Add							
3	Depreciation per Schedule 1, Line 10	321 196 03	624 052 98	629 017 13	630 539 44	672 400 19	1 217 882 04	1
4		1 070 498 63*	675 244 65*	242 989 63*	304 485 41	2 383 585 62	4 977 409 85	4 (
5	Deduct							
6	Depreciation computed at 3%	905 843 71	1 220 847 24	1 222 952 40	1 224 563 46	1 282 510 15	1 514 935 50	1 (
7	Net income as adjusted	$1 976 342 34*	$1 896 091 89*	$1 465 942 03*	$ 920 078 05*	$1 101 075 47	$3 462 474 35	$2
8	* Denotes red figure							

EXHIBIT 173

15401

SCHEDULE 2

WITNESS WATKINS

UBSIDIARY COMPANIES

NET INCOME ADJUSTED FOR DEPRECIATION
(INCLUDING AMORTIZATION) COMPUTED AT 3%
FOR PERIOD FROM APRIL 1, 1932 TO DECEMBER 31, 1941

d 6	December 31 1937 (G)	1938 (H)	1939 (I)	1940 (J)	Cumulative Total (K)	Average 1932-1940 (8 3/4 Yrs.) (L)	1941 (M)
35 43	$3 759 527 81	$3 059 223 74	$4 363 399 34	$4 548 323 98	$13 552 607 22	$1 548 869 39	$4 804 492 74
00 19	1 217 882 04	1 577 158 67	1 711 382 62	1 720 744 97	9 104 374 07	1 040 499 89	1 937 994 80
95 62	4 977 409 85	4 636 382 41	6 074 781 96	6 269 068 95	22 65 981 29	2 589 369 28	6 742 487 54
10 15	1 514 935 50	1 698 519 63	1 715 579 73	1 800 529 31	12 586 281 13	1 438 432 13	1 891 270 88
75 47	$3 462 474 35	$2 937 862 78	$4 359 202 23	$4 468 539 64	$10 070 100 16	$1 150 937 15	$4 851 216 66

Line No.	Item (A)	1930 September 1 to December 31 (B)	Year Ended 1931 (C)	1932 (D)	1933 (E)	1934 (F)	
1	Earned surplus, beginning of year	$ -	$ 72 798 64	$ 395 424 81	$1 105 754 84*	$2 492 577 54*	$3 3
2	CREDITS						
3	Credit balance transferred from income account	72 798 64	342 321 35	-	-	-	
5	Miscellaneous credits to surplus:						
6	Transfer of unused balance of reserve for income taxes previously provided for by a subsidiary company					36 002 66	
9	Nominal value assigned to investment in subsidiary company					1 00	
11	Adjusted earned deficit at December 31, 1935 combined with capital surplus:						
13	Adjusted earned surplus deficit of Panhandle Eastern Pipe Line Company at December 31, 1935 combined with capital surplus as authorized by Board of Directors						
18	Provision for reserve for loss on investments in subsidiary companies as of December 31, 1935 combined with capital surplus as authorized by Board of Directors						
23	Surplus arising from readjustment of funded debt and cancellation of accrued interest thereon to February 6, 1936 ($274,091.50 applicable to period prior to December 31, 1935)						
28	Discount on reacquired bonds						
29	Deficit of a subsidiary company (dissolved) transferred to Capital Surplus						
31	Miscellaneous direct credits			7 679 83			
32	TOTAL CREDITS	$ 72 798 64	$ 342 321 35	$ 7 679 83	$ -	$ 36 003 66	$
33	* Denotes red figure.						

EXHIBIT 174 15402

PAGE 1

WITNESS WATKINS

D SUBSTDIARY COMPANIES

EARNED SURPLUS - PER BOOKS
PERIOD FROM COMMENCEMENT OF OPERATIONS TO DECEMBER 31, 1941
(Supplemental 50)

n d e d D e c e m b e r 31							
1934 (F)	1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 (M)
492 577 54	*$3 354 772 75	*$3 797 089 98	*$1 672 455 17	$3 716 452 27	$4 289 363 90	$6 860 427 74	$7 922 967 21
-	-	1 711 185 43	3 759 527 81	3 059 223 74	4 363 399 34	4 548 323 98	4 804 492 74
36 002 66							
1 00							
		1 247 365 50					
		2 232 009 04					
		331 789 00					
		4 064 37		7 806 25			
	39 891 36						
		2 859 90		386 61			
36 003 66	$ 39 891 36	$5 529 273 24	$3 759 527 81	$3 067 416 60	$4 363 399 34	$4 548 323 98	$4 804 492 74

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	Item (A)	1930 September 1 to December 31 (B)	Year Ended December 31 1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)
1	DEBITS						
2	Debit balance transferred from income account	$ -	$ -	$1 341 579 39	$1 299 297 63	$ 872 006 76	$ 326 054 03
3	Dividend appropriations - Preferred Stock:						
4	Ordinary						
5	Participating						
6	Dividend appropriations - Common Stock:						
7	Ordinary						
8	Participating						
9	Miscellaneous debits to surplus:						
10	Reduction of interest capitalized by amount						
11	of interest earned during 1930.		18 334 42				
12	Reduction of investment in subsidiary						
13	company			5 904 41			
14	Capitalization of net income from operations						
15	during construction period for certain						
16	subsidiary companies			53 551 88			
17	Provision for additional depreciation and						
18	amortization for period from April 1, 1931						
19	to December 31, 1931.			107 823 80			
20	Earned surplus balance of a subsidiary						
21	company transferred to retirement and de-						
22	pletion reserve				2 818 71		
23	Unamortized debt discount and expense						
24	applicable to bonds retired				54 706 36		96 154 56
25	Premium on bonds retired				30 000 00		60 000 00
26	Loss sustained on investment in dissolution						
27	or disposal of subsidiary companies					23 488 80	
28	Provision for uncollectible account due						
29	from receivers of Missouri-Kansas Pipe						
30	Line Company					2 703 31	
31	Balance of unamortized debt discount,						
32	expense and call premiums on						
33	refunded and outstanding debt						
34	Miscellaneous direct debits		1 360 76				
35	TOTAL DEBITS	$ -	$ 19 695 18	$1 508 859 48	$1 386 822 70	$ 898 198 87	$ 482 208 59
36	EARNED SURPLUS, END OF YEAR	$ 72 798 94	$ 395 424 81	$1 105 754 84*$2 492 577 54*$3 354 772 75*$3 797 089 98*$1			
37	* Denotes red figure						

UBSIDIARY COMPANIES

EARNED SURPLUS - PER BOOKS
PERIOD FROM COMMENCEMENT OF OPERATIONS TO DECEMBER 31, 1941

d e d D e c e m b e r 31							
934 (F)	1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 (M)
72 006 76	$ 326 054 03	$ -	$ -	$ -	$ -	$ -	$ -
			1 320 000 00	660 000 00	660 000 00	660 000 00	660 000 00
				182 163 00		403 683 51	336 402 92
			364 326 00	1 092 978 00	1 132 335 50	1 211 050 50	1 953 828 14
				546 489 00		1 211 050 50	403 683 50
		96 154 56	45 780 28				
		60 000 00	13 947 81				
23 488 80				30 829 71			26 323 49
2 703 31							
							1 960 748 37
			375 00	12 874 97			
98 198 87	$ 482 208 59	$ 59 728 09	$1 715 530 71	$2 494 504 97	$1 792 335 50	$3 485 784 51	$5 340 986 42
54 772 75*	$3 797 089 98*	$1 672 455 17	$3 716 452 27	$4 289 363 90	$6 860 427 74	$7 922 967 21	$7 386 473 53

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANI

Line No.	Item (A)	1930 September 1 to December 31 (B)	Year Ended 1931 (C)	1932 (D)	1933 (E)	1934 (F)
1	Balance beginning of year	$ -	$29 643 581 17	$29 652 338 25	$19 294 624 55	$19 294 624 55
2	CREDITS					
3	Capital surplus arising from assets donated					
4	and indebtedness cancelled by Missouri-Kansas					
5	Pipe Line Company as of August 31, 1930.	19 335 867 47				
6	Capital surplus arising from sale of 5,100					
7	shares of no par value common stock donated to					
8	the Treasury. $50 000 00					
9	Less - write-off value assigned to					
10	gas lease 1 000 00	49 000 00				
11	Capital surplus arising from revaluation					
12	of Gas Sales and Purchase Contracts, re-					
13	versed March 31, 1932.	10 357 713 70				
14	Excess value per books over cost on acquired					
15	capital investment in subsidiary company, re-					
16	versed in year 1934.		8 757 08			
17	TOTAL CREDITS	29 742 581 17	8 757 08	-	-	-
18	DEBITS					
19	Additional value assigned to no par value					
20	common stock in accordance with a resolution					
21	of the Board of Directors on October 28, 1930	99 000 00				
22	Reversal of capital surplus arising from re-					
23	valuation of Gas Sales and Purchase Contracts			10 357 713 70		
24	Reversal of excess value per books over cost on					
25	acquired capital investment in subsidiary company					8 757 08
26	Loss sustained on the liquidation of investment					
27	in dissolution of subsidiary companies,					
28	Adjusted earned deficit at December 31, 1935					
29	combined with capital surplus:					
30	Adjusted earned surplus deficit of Panhandle					
31	Eastern Pipe Line Company at December 31, 1935					
32	combined with capital surplus as authorized by					
33	Board of Directors					
34	Provision for reserve for loss on investments					
35	in subsidiary companies as of December 31,					
36	1935 as authorized by Board of Directors.					
37	Claims against receivers of Missouri-Kansas					
38	Pipe Line Company written-off.					
39	Capital surplus assigned to stock dividend paid					
40	by the issuance of 646,354 shares of common stock					
41	Capital surplus transferred to reserve for depre-					
42	ciation, as authorized by the Board of Directors					
43	TOTAL DEBITS	99 000 00	-	10 357 713 70	-	8 757 08
44	BALANCE END OF YEAR	$29 643 581 17	$29 652 338 25	$19 294 624 55	$19 294 624 55	$19 285 867 47

$18 582 94

EXHIBIT 175

15404

PAGE 1

WITNESS WATKINS

WD SUBSIDIARY COMPANIES

CAPITAL SURPLUS PER BOOKS
PERIOD FROM SEPTEMBER 1, 1930 TO DECEMBER 31, 1941

(Supplemental Ex 51)

n d e d D e c e m b e r 31									
3	1934 (F)	1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 (M)	
24 55	$19 294 624 55	$19 285 867 47	$18 582 941 56	$46 364 54	$46 364 54	$46 364 54	$ -	$ -	
-	-	-	-	-	-	-	-	-	-

8 757 08

702 925 91

1 247 365 50

2 232 009 04

39 902 48

15 017 300 00

46 364 54

-	8 757 08	702 925 91	18 536 577 02	-	-	-	46 364 54	-	-
24 55	$19 285 867 47	$18 582 941 56	$ 46 364 54	$46 364 54	$46 364 54	$ -	$ -	$ -	

Line No.	Item (A)	1930 (B)	1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	19 (H)
1	INTANGIBLE PLANT							
2	Organization	$ 24 746 20	$ 110 647 63	$ 115 834 83	$ 115 834 83	$ 115 986 15	$ 116 707 57	$ 116 8
3	Franchises and consents	2 191 34	58 934 48	117 385 32	-	-	-	
4	Miscellaneous intangible plant	618 80	-	19 671 95	98 005 11	98 005 11	97 991 71	97 9
5	Totals Intangible Plant	27 556 34	169 582 11	213 548 20	213 839 94	213 991 26	214 699 28	214 8
6	PRODUCTION PLANT							
7	(a) Natural Gas Production							
8	Plant							
9	Natural gas producing							
10	leaseholds - drilled	453 354 93	420 930 76	394 111 17	376 594 80	387 238 81	369 633 08	472 7
11	Natural gas producing							
12	leaseholds - not drilled	1 203 901 45	1 499 090 43	1 455 299 39	1 387 510 67	1 348 237 06	1 293 219 55	1 191 9
13	Other land and land rights	-	299 00	299 00	299 00	299 00	299 00	2
14	Other production system							
15	structures	-	79 015 90	38 094 06	38 588 63	38 588 63	38 887 13	38 8
16	Producing gas wells -							
17	well construction	345 227 18	1 118 060 68	969 926 43	948 284 81	948 704 40	917 717 40	1 038 7
18	Producing gas wells -							
19	well equipment	101 158 57	334 480 02	311 703 66	309 874 19	302 299 28	309 541 68	345 7
20	Drilling and cleaning							
21	equipment	250 00	53 557 70	54 701 88	48 801 31	48 780 53	42 512 52	39 3
22	Purification and residual							
23	refining equipment	-	-	-	-	-	-	2 3
24	Other production equipment	-	-	-	-	-	-	
25	Totals Natural Gas Production							
26	Plant	2 103 892 13	3 505 434 49	3 224 135 59	3 109 953 41	3 074 147 71	2 971 810 36	3 130 1
27	(b) Manufactured Gas							
28	Production Plant	-	30 112 02	30 112 02	30 112 02	30 112 02	30 112 02	30 1
29	Totals Production Plant	2 103 892 13	3 535 546 51	3 254 247 61	3 140 065 43	3 104 259 73	3 001 922 38	3 160 2
30	TRANSMISSION PLANT							
31	Land	1 940 75	41 372 32	42 021 68	42 121 68	42 212 31	42 212 31	46 4
32	Land rights	16 341 27	819 942 01	900 965 73	900 405 76	915 476 41	917 541 62	930 8
33	Pumping station structures	-	208 399 61	218 459 25	218 459 25	218 459 25	219 424 84	719 5
34	Measuring and regulating							
35	station structures	9 793 95	22 404 82	30 099 51	35 298 05	35 945 19	33 685 50	35 7
36	Other transmission structures	-	114 333 08	179 121 24	180 808 73	181 339 30	181 929 64	187 3
37	Mains	2 759 107 93	31 231 403 05	31 551 884 52	31 547 742 59	31 700 129 66	31 651 527 54	31 936 6
38	Pumping station equipment	270 534 33	1 995 804 84	2 035 172 59	2 028 831 40	2 029 554 36	2 030 212 87	4 968 6
39	Measuring and regulating							
40	station equipment	52 681 48	236 965 68	352 739 89	346 690 57	358 362 14	362 097 17	382 31
41	Other transmission equipment	-	-	842 46	842 46	2 454 36	3 096 35	2 78
42	Totals Transmission Plant	$3 110 399 71	$34 670 685 41	$35 311 306 87	$35 301 200 49	$35 483 932 98	$35 441 727 84	$39 210 18

AND SUBSIDIARY COMPANIES

GAS PLANT

(Supplement to Ex 5-2)

m	b	e	r	31				
	1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 (M)
15	$ 116 707 57	$ 116 820 90	$ 116 291 98	$ 116 291 98	$ 116 291 98	$ 116 291 98	$ 115 172 86
11	97 991 71	97 991 71	97 991 71	97 991 71	97 991 71	97 991 71	64 427 72
26	214 699 28	214 812 61	214 283 69	214 283 69	214 283 69	214 283 69	179 600 58
81	369 633 08	472 776 10	749 406 55	834 269 49	949 880 70	996 613 19	1 017 993 19
06	1 293 219 55	1 191 969 57	1 049 128 94	955 795 59	865 472 36	759 239 20	747 784 12
00	299 00	299 00	299 00	299 00	299 00	299 00	299 00
63	38 887 13	38 899 88	44 262 39	46 166 15	46 768 78	46 426 96	47 797 15
40	917 717 40	1 038 775 03	1 553 917 31	1 756 980 43	1 937 811 04	2 023 739 02	2 067 934 08
28	309 541 68	345 723 21	454 395 16	515 138 02	565 682 80	592 983 63	604 915 00
53	42 512 52	39 334 85	52 932 74	29 140 00	19 971 18	20 762 34	20 691 46
-	-	2 383 04	609 814 73	624 609 15	629 652 39	658 355 27	704 263 18
-	-	-	-	-	-	399 08	826 16
71	2 971 810 36	3 130 160 68	4 514 156 82	4 762 397 83	5 015 538 25	5 098 817 69	5 212 503 34
02	30 112 02	30 112 02	-	-	-	-	-
73	3 001 922 38	3 160 272 70	4 514 156 82	4 762 397 83	5 015 538 25	5 098 817 69	5 212 503 34
31	42 212 31	46 432 82	72 335 42	114 133 36	116 568 95	117 014 44	118 187 62
41	917 541 62	930 838 27	1 071 122 10	1 109 602 67	1 114 333 56	1 179 121 65	1 185 327 52
25	219 424 84	719 516 36	1 059 117 40	1 070 378 29	1 086 720 88	1 181 411 39	1 365 188 87
19	33 685 50	35 747 52	55 746 14	61 089 74	65 890 22	69 511 69	75 227 93
30	181 929 64	187 328 11	313 548 07	334 519 47	355 915 32	359 500 13	453 383 35
66	31 651 527 54	31 936 602 82	41 362 290 02	41 671 595 35	41 774 443 45	46 534 673 30	46 646 907 41
36	2 030 212 87	4 968 614 55	7 970 551 89	7 900 306 61	7 890 354 95	7 973 458 74	8 740 308 45
14	362 097 17	382 314 16	445 560 01	487 393 11	513 370 73	528 960 46	548 721 22
36	3 096 35	2 788 09	8 327 95	23 766 17	42 562 38	51 893 85	46 379 31
98	$35 441 727 84	$39 210 182 70	$52 358 599 00	$52 772 784 77	$52 960 360 44	$57 995 545 65	$59 179 631 68

Line No.	Item (A)	1930 (B)	1931 (C)	1932 (D)	1933 (E)	1934 (F)	1935 (G)	1936 (H)
1	DISTRIBUTION PLANT							
2	Land and land rights	$ -	$ 588 13	$ 665 53	$ 677 03	$ 700 63	$ 700 63	$ 700 63
3	Structures and improvements	1 365 79	1 866 82	1 991 91	1 991 91	1 991 91	1 999 11	2 345 19
4	Mains	37 944 50	280 539 74	315 205 41	318 490 95	323 069 04	324 670 23	325 894 89
5	Pumping and regulating							
6	equipment	2 075 04	6 843 98	7 763 73	7 822 37	7 898 63	7 544 52	7 544 52
7	Services	5 351 65	27 108 43	33 137 49	35 686 47	39 446 66	41 398 50	43 932 23
8	Meters	9 608 89	40 798 15	35 422 33	36 225 76	39 786 29	43 393 85	45 860 84
9	Meter installations	1 444 00	2 234 55	3 186 70	3 542 27	3 831 47	4 094 96	4 330 42
10	House regulators and							
11	installations	1 533 10	10 984 13	8 966 50	9 639 58	10 234 56	11 000 45	12 211 98
12	Other distribution equipment	476 36	476 36	476 36	476 36	476 36	476 36	476 36
13	Totals Distribution Plant	59 799 33	371 440 29	406 815 96	414 552 70	427 435 55	435 278 61	443 297 06
14	GENERAL PLANT							
15	General office structures	5 141 26	9 284 51	9 284 51	9 292 64	9 292 64	8 901 86	3 797 17
16	Office furniture and equipment	42 508 91	57 701 46	58 091 32	56 006 70	52 972 79	52 561 23	57 478 18
17	Transportation equipment	68 195 83	103 422 68	87 072 04	84 203 41	82 896 12	78 278 85	83 450 23
18	Shop equipment	-	530 66	56 86	56 86	56 86	56 86	56 86
19	Laboratory equipment	2 608 48	4 512 49	7 254 72	7 104 72	7 104 72	7 081 92	7 552 48
20	Tools and work equipment	4 021 32	26 647 13	28 970 62	18 444 93	17 868 28	17 824 02	18 126 58
21	Communication equipment	-	381 602 69	366 804 16	367 205 26	367 205 26	364 843 57	368 723 10
22	Miscellaneous equipment	-	101 86	101 86	101 86	101 86	101 86	101 86
23	Totals General Plant	122 475 80	583 803 48	557 636 09	542 416 38	537 498 53	529 650 17	539 286 46
24	UNDISTRIBUTED CONSTRUCTION							
25	EXPENDITURES							
26	Engineering and superintendence							
27	during construction	-	62 825 67	125 60	125 60	125 60	125 60	125 60
28	Law expenditures during							
29	construction	-	84 749 64	104 868 19	104 868 19	104 868 19	104 868 19	104 868 19
30	Interest during construction	7 617 38*	1 926 972 76	2 381 718 19	2 381 718 19	2 386 153 55	2 386 153 55	2 387 453 97
31	Taxes during construction	-	281 409 98	291 854 91	290 100 93	290 100 93	290 100 93	290 100 93
32	Miscellaneous construction							
33	expenditures	5 653 33*	101 862 59	16 779 32	16 779 32	16 943 63	16 943 63	16 943 63
34	Totals Undistributed							
35	Construction Expenditures	13 270 71*	2 457 820 64	2 795 346 21	2 793 592 23	2 798 191 90	2 798 191 90	2 799 492 32
36	OTHER UNDISTRIBUTED GAS PLANT							
37	Undistributed gas plant	2 160 998 51	26 902 93	29 381 97	29 381 97	29 381 97	19 730 34	19 730 34
38	Total Gas Plant Classified	7 71 851 11	41 815 781 37	42 568 282 91	42 435 049 14	42 594 691 92	42 441 200 52	46 387 074 19
39	Construction work in progress	23 462 003 56	188 808 94	11 801 69	196 147 89	309 70	156 121 08	503 061 42
40	Gas sales and purchase contracts	13 398 402 19	13 409 544 31	3 053 391 53	3 053 391 53	3 053 391 53	3 053 391 53	2 930 286 40
41	Reserve for amortization of							
42	gas sales and purchase contracts	-	-	26 761 93*	58 876 33*	90 990 73*	123 105 13*	295 731 30*
43	Other gas sales and purchase							
44	contracts	-	-	-	-	-	-	371 076 00
45	Consolidation reduction in invest-							
46	ment in subsidiary company	-	-	-	-	32 244 88*	32 244 88*	32 244 88
47	GAS PLANT	$14 432 256 86	$55 414 134 62	$45 606 714 20	$45 625 712 23	$45 525 157 54	$45 495 363 07	$49 863 5k2 83
48	* Denotes red figure							

EXHIBIT 176 15406

PAGE 2

WITNESS WATKINS

AND SUBSIDIARY COMPANIES

GAS PLANT

4	1935 (G)	1936 (H)	1937 (I)	1938 (J)	1939 (K)	1940 (L)	1941 (M)
0 63	$ 700 63	$ 700 63	$ 647 93	$ 674 18	$ 674 18	$ 634 44	$ -
1 91	1 999 11	2 345 19	2 345 19	1 999 11	1 999 11	1 999 11	-
9 04	324 670 23	325 894 89	288 802 85	296 897 70	305 304 37	315 171 01	-
8 63	7 544 52	7 544 52	7 354 55	7 556 60	7 946 87	7 976 42	-
6 66	41 398 50	43 932 23	42 682 97	44 653 58	47 448 19	51 003 90	-
6 29	43 393 85	45 860 84	46 817 97	49 583 62	53 060 05	56 777 98	-
1 47	4 094 96	4 330 42	4 492 85	4 710 56	4 877 65	5 102 59	-
4 56	11 000 45	12 211 98	12 927 25	14 016 80	14 872 20	16 113 72	-
6 36	476 36	476 36	476 36	476 36	476 36	476 36	-
5 55	435 278 61	443 297 06	406 547 92	420 568 51	436 658 98	455 255 53	-
2 64	8 901 86	3 797 17	-	-	-	-	-
2 79	52 561 23	57 478 18	65 681 96	67 375 68	71 564 19	80 018 95	86 093 91
6 12	78 278 85	83 450 23	96 527 78	97 172 16	102 939 59	108 097 47	126 018 86
6 86	56 86	56 86	-	-	-	-	-
4 72	7 081 92	7 552 48	6 869 88	6 869 88	6 619 88	6 619 88	6 550 71
8 28	17 824 02	18 126 58	19 773 44	21 293 40	29 179 13	32 591 73	42 699 88
5 26	364 843 57	368 723 10	369 634 26	368 757 10	369 088 82	369 365 07	371 000 80
1 86	101 86	101 86	101 86	101 86	101 86	101 86	2 097 05
8 53	529 650 17	539 286 46	558 589 18	561 570 08	579 493 47	596 794 96	634 461 21
5 60	125 60	125 60	-	-	-	-	-
8 19	104 868 19	104 868 19	-	-	-	-	-
3 55	2 386 153 55	2 387 453 97	-	-	-	-	-
0 93	290 100 93	290 100 93	-	-	-	-	-
3 63	16 943 63	16 943 63	-	-	-	-	-
1 90	2 798 191 90	2 799 492 32	-	-	-	-	-
1 97	19 730 34	19 730 34	19 730 34	19 730 34	19 730 34	19 730 34	19 730 34
1 92	42 441 200 52	46 387 074 19	58 071 906 95	58 751 335 22	59 226 065 17	64 380 427 86	65 225 927 15
9 70	156 121 03	503 061 42	202 391 84	10 818 15	467 946 74	688 812 12	2 899 093 40
1 53	3 053 391 53	2 930 286 40	2 930 286 40	2 930 286 40	2 930 286 40	2 930 286 40	2 930 286 40
0 73*	123 105 13*	295 731 30*	586 057 20*	879 085 80*	1 172 114 40*	1 465 143 00*	1 758 171 60*
-	-	371 076 00	358 658 20	401 443 07	386 197 00	372 006 38	352 897 28
44 88*	32 244 88*	32 244 88*	-	-	-	-	-
57 54	$45 495 363 07	$49 863 521 83	$60 977 186 19	$61 214 797 04	$61 838 380 91	$66 906 389 76	$69 650 032 63

ol. 15407]

Exhibit 177
Witness Watkins

9456

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement Of Gas Produced
Period From April 1, 1932 To December 31, 1941

Supplements Ex 56

M C F

Line No.	Year (A)	Amarillo Field (B)	Hugoton Field (C)	Other (D)	Totals (1) and (2) (E)
1	1932 (3)	1 225 165	1 077 902	247 042	2 549 809
2	1933	2 541 947	2 115 348	272 371	4 929 666
3	1934	4 405 133	2 177 399	204 973	6 787 505
4	1935	5 816 410	2 452 716	117 513	8 386 639
5	1936	9 057 079	4 359 663	110 971	13 527 713
6	1937	11 919 995	5 498 206	93 423	17 511 624
7	1938	12 457 776	4 342 590	58 636	16 859 002
8	1939	16 176 715	5 679 973	49 188	21 905 876
9	1940	19 743 030	6 796 044	39 683	26 578 757
10	Cumulative Totals	83 343 247	34 490 541	1 193 803	119 036 591
11	Average (8 3/4 yr)	9 524 942	3 942 805	136 435	13 604 182
12	1941	22 708 705	7 317 038	33 278	30 059 021

13 (1) As measured (16.4 Absolute pressure base)
14 (2) Includes royalty gas subsequent to November 1, 1936
15 (3) 9 Months — April 1 to December 31, 1932

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	Year (A)	Amarillo MCF (B)	Amarillo Average Cost Per MCF (C)	Amarillo Amount (D)	Hugoton MCF (E)	Hugoton Average Cost Per MCF (F)	Hugoton Amount (G)	Other MCF (H)	Other Average Cost Per MCF (I)	Other Amount (J)
1	1932 (3)	612 266	3.64	$ 22 302 59	484 553	5.00	$ 24 227 70	1 830 196	8.03	$ 147 039 97
2	1933	1 861 430	3.60	66 957 24	1 153 149	4.89	56 437 21	2 160 632	8.03	173 600 42
3	1934	2 611 228	3.62	94 553 37	1 066 427	4.86	51 878 80	1 978 784	8.02	158 741 56
4	1935	2 861 540	3.65	104 317 84	1 326 558	4.88	64 770 46	2 031 941	8.04	163 364 92
5	1936	6 546 660	3.56	233 193 31	3 343 376	4.73	158 242 11	1 499 565	8.09	121 010 22
6	1937	11 031 392	3.46	381 636 55	9 326 824	4.37	407 196 45	1 263 958	8.06	101 852 51
7	1938	12 137 053	3.47	421 552 29	7 809 441	4.18	326 219 92	1 920 786	8.03	154 155 65
8	1939	14 862 274	3.48	517 454 31	8 630 176	4.22	364 516 64	1 450 541	7.99	115 901 98
9	1940	16 427 962	3.48	571 248 06	9 891 450	4.26	421 395 43	1 218 356	8.00	97 463 34
10 11	Cumulative Totals	68 951 805	3.50	$2 413 215 56	43 031 954	4.36	$1 874 884 72	15 354 759	8.03	$1 233 130 57
12 13	Average (8-3/4 yr)	7 880 206	3.50	$ 275 796 06	4 917 938	4.36	$ 214 272 54	1 754 830	8.03	$ 140 929 21
14	1941	18 519 753	3.47	$ 642 600 50	10 484 014	4.27	$ 447 317 35	1 133 642	8.03	$ 90 993 78

15 (1) As measured (16.4# Absolute pressure base)
16 (2) Includes royalty gas prior to November 1, 1936
17 (3) 9 Months April 1 to December 31, 1932

EXHIBIT 178. 15408

WITNESS WATKINS

IARY COMPANIES

STATEMENT OF GAS PURCHASED
PERIOD FROM APRIL 1, 1932 TO DECEMBER 31, 1941

Supplemental Ex 57

1 d					
Other			Totals (1) and (2)		
MCF (H)	Average Cost Per MCF (I)	Amount (J)	MCF (K)	Average Cost Per MCF (L)	Amount (M)
30 196	8.03	$ 147 039 97	2 927 015	6.61	$ 193 570 26
60 632	8.03	173 600 42	5 175 211	5.74	296 994 87
78 784	8.02	158 741 56	5 656 439	5.40	305 173 73
31 941	8.04	163 364 92	6 220 039	5.34	332 453 22
99 565	8.09	121 010 22	11 389 601	4.50	512 445 64
63 958	8.06	101 852 51	21 622 174	4.12	890 685 51
20 786	8.03	154 155 65	21 867 280	4.12	901 927 86
50 541	7.99	115 901 98	24 942 991	4.00	997 872 93
18 356	8.00	97 463 34	27 537 768	3.96	1 090 106 83
54 759	8.03	$1 233 130 57	127 338 518	4.34	$5 521 230 85
54 830	8.03	$ 140 929 21	14 552 974	4.34	$ 630 997 81
33 642	8.03	$ 90 993 78	30 137 409	3.92	$1 180 917 63

Line No.	Year (A)	Residential MCF (B)	Residential Average Per MCF (C)	Residential Amount (D)	Commercial MCF (E)	Commercial Average Per MCF (F)	Commercial Amount (G)	Industrial MCF (H)	Industrial Average Per MCF (I)	Industrial Amount (J)	Sal MCF (K)
1	1932 (1)	68 710	72.86	$ 50 062 15	44 240	47.96	$ 21 216 14	471 706	17.91	$ 84 483 86	5 469
2	1933	120 789	73.51	88 797 13	76 174	47.04	36 288 46	1 978 429	13.96	276 078 69	9 275
3	1934	133 856	73.30	98 110 55	86 596	47.81	41 399 29	2 227 730	14.00	311 800 72	10 983
4	1935	161 404	72.54	117 149 15	109 977	46.55	51 193 60	2 205 048	15.08	332 444 94	13 394
5	1936	184 970	69.92	129 336 48	128 406	45.18	58 019 01	3 480 449	16.46	573 015 04	22 048
6	1937	206 259	69.69	143 748 69	142 103	45.30	64 371 17	3 145 623	17.50	550 506 69	36 973
7	1938	195 191	71.55	139 655 30	126 361	45.86	57 952 18	2 975 257	15.75	468 461 94	37 675
8	1939	213 383	71.01	151 525 26	136 298	45.92	62 586 92	3 759 850	15.95	599 835 37	44 995
9	1940	278 037	66.90	186 018 44	172 617	44.32	76 497 50	4 039 833	16.66	673 091 89	51 841
10	Cumulative Totals	1 562 689	70.67	$1 104 401 15	1 022 772	45.91	$469 514 04	24 283 925	15.94	$3 869 719 94	233 231
11	Average (8-3/4 Yr.)	178 593	70.67	$ 126 217 28	116 888	45.91	$ 53 659 21	2 775 278	15.94	$ 442 253 71	26 655
12	1941	13 780	68.55	$ 9 446 77	531	54.69	$ 290 39	5 358 169	17.00	$ 910 723 20	58 311

13 (1) 9 Months - April 1 to December 31, 1932.

13409

EXHIBIT

SUBSIDIARY COMPANIES

WITNESS WATKINS

STATEMENT OF GAS REVENUE
PERIOD FROM APRIL 1, 1932 TO DECEMBER 31, 1941

Duplicate Ex 54

Sales to Gas Utilities				Other			Total		
Amount (J)	MCF (K)	Average Per MCF (L)	Amount (M)	MCF (N)	Average Per MCF (O)	Amount (P)	MCF (Q)	Average Per MCF (R)	Amount (S)
4 483 86	0 465 508	21.7#	$ 1 190 466 87	-	-	$ -	6 050 264	22.2)	$1 346 228 39
6 078 89	9 275 286	21.71	2 013 712 39	13 037	11.67	1 521 95	11 463 415	21.08	2 416 397 62
1 800 72	10 983 472	21.73	2 386 428 87	65 995	10.80	7 195 20	13 497 649	21.08	2 844 934 63
2 444 94	13 394 691	21.35	2 859 427 43	108 180	10.79	11 667 68	15 979 390	21.10	3 371 882 80
3 015 64	22 646 617	22.18	5 021 821 23	308 089	10.87	33 495 95	26 747 931	21.74	5 815 688 31
0 506 69	36 873 685	22.76	8 416 974 84	339 292	11.26	38 220 56	40 806 962	22.58	9 212 822 09
8 461 94	37 675 240	23.48	8 847 455 14	213 713	12.65	27 045 29	41 185 762	23.17	9 540 967 65
9 835 37	44 [illegible] 441	23.64	10 631 445 06	147 600	10.84	15 995 70	49 [illegible] 072	23.28	11 461 388 31
3 091 89	51 842 [illegible] 46	23.58	12 222 934 25	62 430	13.93	8 698 95	56 [illegible] 762	23.35	13 167 241 73
9 719 94	233 231 785	22.98	$53 596 066 78	1 258 336	11.43	$143 441 28	261 359 207	22.64	$59 177 346 19
2 253.72	26 [illegible] 861	22.98	$6 124 578 94	143 810	11.43	$ 16 439 00	29 869 624	22.64	$ 6 763 148 14
0 723 28	58 321 064	23.61	$13 767 475 56	3 275	10.00	$ 327 50	63 686 819	23.06	$14 688 263 44

Line No.	Period (A)	Texas MCF (B)	Texas Amount (C)	Oklahoma MCF (D)	Oklahoma Amount (E)	Kansas MCF (F)	Kansas Amount (G)	Missouri MCF (H)	Missouri Amount (I)	I MCF (J)
1	1932 (1)	6 161	$ 2 503 44	-	$ -	1 876 199	$ 280 091 16	1 601 225	$ 387 926 63	1 371 294
2	1933	17 620	4 232 62	-	-	2 690 596	430 111 09	3 903 073	771 343 49	3 240 689
3	1934	37 149	6 624 59	-	-	2 845 106	449 272 17	4 150 615	819 274 06	4 738 430
4	1935	58 429	8 779 01	-	-	2 866 513	468 871 27	4 785 846	965 842 26	5 898 948
5	1936	122 866	15 684 22	10 538	1 053 80	2 366 928	398 186 44	6 806 318	1 375 477 12	7 254 476
6	1937	94 356	12 484 40	4 299	429 90	1 400 042	215 662 62	8 144 361	1 674 233 20	7 554 821
7	1938	62 319	10 248 55	4 028	604 20	1 326 677	198 894 60	8 419 584	1 664 090 85	6 601 142
8	1939	105 887	13 587 36	-	-	2 373 262	391 645 04	8 009 919	1 610 196 14	7 398 929
9	1940	11 168	4 429 10	-	-	2 109 478	336 712 70	8 860 840	1 815 299 29	8 557 633
10 11	Accumulative Totals	515 955	$78 573 29	18 865	$2 087 90	19 854 801	$3 169 447 09	54 681 781	$11 083 683 04	52 616 362
12	Average (8½ yr)	58 966	$ 8 979 81	2 156	$ 238 62	2 269 120	$ 362 222 53	6 249 346	$ 1 266 706 63	6 013 299
13	1941	11 585	$ 4 737 34	135	$ 82 13	2 154 412	$ 293 892 68	10 388 923	$ 1 995 330 83	9 128 718

14 (1) 9 Months - April 1 to December 31, 1932

EXHIBIT 180 5461 15410

WITNESS WATKINS

EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

STATEMENT OF GAS REVENUE BY STATES
PERIOD FROM APRIL 1, 1932 TO DECEMBER 31, 1941

Supplementing Ex 59

	Missouri		Illinois		Indiana		Michigan		Ohio		Total	
	Amount (I)	MCF (J)	Amount (K)	MCF (L)	Amount (M)	MCF (N)	Amount (O)	MCF (P)	Amount (Q)	MCF (R)	Amount (S)
225	$ 387 926 63	1 371 294	$ 460 538 46	1 195 385	$ 215 169 30	-	$ -	-	$ -	6 050 264	$ 1 346 228
073	771 343 49	3 240 689	920 651 76	1 611 437	290 058 66	-	-	-	-	11 463 415	2 416 397
615	819 274 06	4 738 430	1 259 020 99	1 726 349	310 742 82	-	-	-	-	13 497 649	2 844 934
846	965 842 26	5 898 948	1 501 852 54	2 369 654	426 537 72	-	-	-	-	15 979 390	3 371 882
318	1 375 477 12	7 254 476	1 853 085 13	6 229 747	1 206 799 40	3 957 058	965 396 20	-	-	26 747 931	5 815 682
361	1 674 233 20	7 554 821	1 966 080 17	7 639 485	1 512 673 60	15 969 598	3 831 258 06	-	-	40 806 962	9 212 821
584	1 664 090 85	6 601 142	1 799 224 12	8 739 715	1 844 611 96	16 032 297	4 023 293 57	-	-	41 185 762	9 540 967
919	1 610 196 14	7 398 929	1 958 935 75	12 898 106	2 651 992 67	18 391 954	4 821 758 05	55 015	13 273 30	49 233 072	11 461 388
840	1 815 299 29	8 557 633	2 136 358 88	14 423 677	3 046 931 11	22 281 273	5 788 666 57	150 693	38 844 08	56 394 762	13 167 241
781	$11 083 683 04	52 616 362	$13 855 747 80	56 833 555	$11 505 517 24	76 632 180	$19 430 372 45	205 798	$52 117 38	261 359 297	$59 177 541
346	$ 1 266 706 63	6 013 299	$ 1 583 514 03	6 495 264	$ 1 314 916 25	8 757 963	$ 2 220 614 00	23 510	$ 5 956 27	29 869 624	$ 6 [illegible]
923	$ 1 995 330 83	9 128 718	$ 2 274 676 74	17 631 087	$ 3 704 538 87	24 170 883	$ 6 362 171 62	201 076	$52 833 23	63 686 819	$14 688 26

[fol. 15411] Exhibit 181 Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Net Additions To Gas Plant — Per Books
From October 1, 1938 To December 31, 1941

Supplements Ex 72

Line No.	(A)	Amount (B)
1	Production System Property	
2	Production System Leaseholds	
3	Gas Wells and Equipment	$ 23 764 52
4	Production System Structures	451 179 38
5	Drilling and Cleaning Equipment	17 888 74
		7 558 23
6	Total Production System	437 755 37
7	Transmission System Property	
8	Transmission System Land	
9	Transmission System Right of Way	10 306 50
10	Transmission Measuring and Regulating Station Structures	75 536 98
11	Other Transmission System Structures	14 933 39
12	Transmission Measuring and Regulation Station Equipment	123 221 58
13	Transmission Mains	77 742 14
14	Compressor Stations	5 052 922 02
15	Other Transmission System Equipment	1 128 254 57
		31 494 31
16	Total Transmission System	6 514 411 49
17	Distribution System Property	
18	Distribution System Right of Way	652 83
19	District Regulator Structures	1 135 18
20	Other Distribution Structures	1 311 87
21	District Regulator Equipment	7 402 85
22	Distribution Mains	295 462 66
23	Services	42 682 07
24	Meters	46 880 [illegible]
25	Meter Installations	4 489 80
26	House Regulators and Installations	12 823 20
27	Other Distribution System Equipment	470 30
28	Total Distribution System	413 315 90
29	Gasoline Production System Property	
30	Gasoline Plant and Dehydration	80 423 21
31	Total Gasoline Production System	80 423 21
32	General System Property	
33	General Office Equipment	19 721 55
34	General Garage Equipment	33 090 69

Line No.		
35	General Laboratory Equipment	319 17
36	General Communication Equipment	3 016 47
37	General Tools and Implements	21 525 45
38	Other General Property	2 097 05
39	Total General Property	79 732 02
40	Intangible Fixed Capital	
41	Preliminary and Organization Expense	34 683 11
42	Construction Work in Progress	2 835 878 02
43	Total	$9 500 201 10

[fol. 15412] Exhibit 182 Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Comparative Statement Of Depreciation, Depletion And Amortization Of Unoperated Leases Authorized By Board Of Directors And The Amount Booked For The Years 1937, 1938, 1939, 1940 And 1941

Line No.	Year (A)	Depreciation, Depletion and Amortization of Unoperated Leases: Authorized By Board of Directors (B)	Depreciation, Depletion and Amortization of Unoperated Leases: Amount Booked (C)
1	1937	$1 350 000	$1 384 387 07
2	1938	1 700 000	1 728 607 16
3	1939	1 800 000	1 870 699 86
4	1940	1 900 000	1 880 889 87
5	1941	2 100 000	2 102 857 31

[fol. 15413] Exhibit 183 Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement Showing Amount Of Depreciation Claimed in Federal Income Tax Returns And Settlement Basis For The Nine Months Ended December 31, 1932 And The Years 1933 To 1940, Inclusive

Line No.	Period (A)	Per Returns (B)	Settlement Basis (C)
1	Nine months ended December 31, 1932	$1 153 541 97	—(1)
2	Year 1933	1 550 071 34	—(1)
3	Year 1934	1 227 146 14	—(1)
4	Year 1935	1 226 955 42	—(1)

Year 1936		1 603 350 20	$1 516 747 08
Year 1937		2 102 724 38	1 925 222 82
Year 1938		2 367 216 03	2 175 488 11
Year 1939		2 381 293 48	2 186 243 66
Year 1940		2 640 225 34	2 301 752 34 (2)

Notes:

(1) Returns filed during these periods were not examined as there was not any net income subject to tax.

(2) Return for the year 1940 has not been examined but depreciation has been computed on the settlement basis.

[fol. 15414] Exhibit 184.

Comparative Statement Of State, Local And Miscellaneous Federal Taxes Paid With Amounts Accrued Years 1936, 1937, 1938, 1939 And 1940

Year	Taxes Accrued	Taxes Paid	Difference
1936	$ 360 293 90	$ 316 612 07	$43 681 83
1937	412 961 36	380 394 06	32 567 30
1938	577 888 16	603 090 72	25 202 56
1939	675 477 83	641 883 01	33 594 82
1940	612 871 48	627 962 62	15 091 14
	$2 639 492 73	$2 569 942 48	$69 550 25 (1)

(1) Includes $56,220.34 State Income Tax expensed in years 1936 and 1937, the accrual for which was transferred to account entitled, "Other Reserves".

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	(A)	1936 (B)	1937 (C)	1938 (D)	
1	Federal Income and Excess Profits				
2	Federal Income	$149 790 03	$ 426 21	$ 541 792 37	$
3	Federal Excess - Profits				
4	Total Federal Income and Excess Profits	149 790 03	426 21	541 792 37	
5	State, Local and Miscellaneous Federal				
6	Ad valorem	263 519 68	283 103 57	466 925 40	4
7	Franchise	4 186 26	6 455 32	11 435 96	
8	Sales and Use	20 91	3 846 29	3 139 71	
9	Production	8 658 56	12 954 68	14 490 12	
10	Social Security	5 714 71	28 442 29	35 752 69	
11	State Income	3 277 54	48 84	18 440 16	
12	Federal Capital Stock	31 095 00	45 087 00	52 800 00	
13	Miscellaneous	139 41	456 07	106 68	
14	Total State, Local and Miscellaneous Federal	316 612 07	380 394 06	603 090 72	6
15	Total Taxes Paid	$466 402 10	$380 820 27	$1 144 883 09	$1 4

EXHIBIT 185 15415

WITNESS WATKINS

STATEMENT OF TAXES PAID
FOR THE YEARS
1936, 1937, 1938, 1939 AND 1940

RY COMPANIES

	1938 (D)	1939 (E)	1940 (F)
	$ 541 792 37	$ 824 496 52	$1 375 275 49
			321 119 26
	541 792 37	824 496 52	1 696 394 75
	466 925 40	471 248 13	441 430 89
	11 435 96	12 110 21	13 817 35
	3 139 71	12 312 96	7 490 05
	14 490 12	19 126 47	22 116 22
	35 752 69	38 757 75	42 540 56
	18 440 16	34 709 21	31 430 46
	52 800 00	53 568 00	69 094 30
	106 68	50 28	42 79
	603 090 72	641 883 01	627 962 62
	$1 144 883 09	$1 466 379 53	$2 324 357 37

Exhibit 186

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
RECONCILEMENT FEDERAL INCOME AND FEDERAL EXCESS-PROFITS TAXES PAID WITH AMOUNTS ACCRUED
YEARS 1936, 1937, 1938, 1939 AND 1940

	1936	1937	1938	1939	1940
Federal Income Taxes - Per Statement of Taxes Paid	$149 790 03	$ 426 21	$541 792 37	$824 496 52	$1 375 275
Add:					
Taxes expensed, the accrual for which was transferred to account entitled, "Other Reserves"	76 580 60	492 000 00			
Amount refunded in year 1942 at completion of Revenue Agents examination	3 629 37				
Taxes applicable to years other than in which accrued			640 09	601 53	
Taxes accrued and unpaid pending Revenue Agents examination					61 924
	230 000 00	492 426 21	542 432 46	825 098 05	1 437 200
Deduct:					
Additional assessments paid in year 1942 at completion of Revenue Agents examination			29 006 25	4 598 05	
Taxes applicable to years other than in which paid		426 21		213 88	601
Federal Income Tax - Per Exhibit 49, Schedule 1, Line 19	$230 000 00	$492 000 00	$513 426 21	$820 286 12	$1 436 598
Federal Excess-Profits - Per Statement of Taxes Paid					$321 119
Add:					
Taxes accrued and unpaid pending Revenue Agents examination					239 880
Federal Excess-Profits Tax - Per Exhibit 49, Schedule 1, Line 20					$561 000

(Col. 15417) Exhibit 187 Page 1
Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Statement Concerning Contract With
Missouri Power & Light Company

Line No.		
1	Date of original contract	May 19, 1930
2	Original contract with	Panhandle Eastern Pipe Line Company
3	Date of first service	May 7, 1931
4	Date of subsequent amendment	August 19, 1935
5	Service now rendered under	Rate Schedule FPC No. 28

Statement Of Sales

	Year	MCF	Amount
8	1931	83 201	$ 25 545 48
9	1932	505 845	119 186 49
10	1933	1 171 433	226 679 93
11	1934	1 509 973	269 779 70
12	1935	1 803 559	315 757 94
13	1936	2 472 792	462 487 62
14	1937	3 094 421	546 699 85
15	1938	2 968 936	521 843 52
16	1939	3 215 133	585 605 80
17	1940	3 524 163	635 958 67
18	1941	3 287 981	721 817 13
19	Totals	24 137 530	$4 464 362 13

(Col. 15430) Exhibit 187 Page 2
Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Statement Concerning Contract With
Illinois Iowa Power Company
(Formerly Illinois Power & Light Company)

Line No.		
1	Date of original contract	May 19, 1930
2	Original contract with	Panhandle Eastern Pipe Line Company
3	Date of assignment	August 22, 1930 From
4		Panhandle Eastern Pipe Line Company to
5		Panhandle Illinois Pipe Line Company
6	Date of first service	January 2, 1932
7	Service now rendered under	Rate Schedule FPC No. 5

Statement of Sales

Year	MCF	Amount
1932	506 215	$ 183 518 95
1933	764 597	263 953 45
1934	1 286 751	451 710 27
1935	1 035 645	329 751 35
1936	1 350 048	418 693 33
1937	1 341 015	419 951 35
1938	1 258 788	405 370 64
1939	1 440 548	437 287 97
1940	1 698 668	475 685 61
1941	1 848 878	511 994 43
Totals	12 531 153	$3 897 917 35

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Panhandle Eastern Pipe Line Company And Subsidiary Companies
Statement Concerning Contract With
Caterpillar Tractor Company

Line No.		
1	Date of original contract	June 20, 1930
2	Original contract with	Missouri-Kansas Pipe Line Company
3	Date of assignment	August 22, 1930 From
4		Missouri-Kansas Pipe Line Company to
5		Panhandle Illinois Pipe Line Company
6	Original contract cancelled	February 6, 1933
7	Initial service	Through Central Illinois Light Company
8		under contract dated October 3, 1932 to
9		September 9, 1938, then under filed
10		rate schedules
11	Service now rendered under	Rate Schedule FPC No. 4

Statement Of Sales

Year	MCF	Amount
1932	(1)	(1)
1933	38 485	$ 8 719 80
1934	70 233	14 441 94
1935	135 810	26 245 80
1936	220 134	41 424 12
1937	261 249	48 708 79
1938	182 282	34 184 76

1939	273 835	50 664 30
1940	337 941	60 597 33
1941	401 526	70 395 90
Totals	1 920 695	$355 472 34

(1) Deliveries started late in 1932 through Central Illinois Light Company and sales not separated until 1933.

[Cal. 15445] Exhibit 187 Page 4
Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Statement Concerning Contract With
Keystone Steel & Wire Company

Line No.		
1	Date of original contract	June 12, 1930
2	Original contract with	Missouri-Kansas Pipe Line Company
3	Date of assignment	August 22, 1930 — From
4		Missouri-Kansas Pipe Line Company to
5		Panhandle Illinois Pipe Line Company
6	Original contract cancelled	February 2, 1933
7	Initial service	Through Central Illinois Light Company
8		under contract dated October 3, 1931
9		to September 9, 1933, then under filed
10		rate schedules
11	Service now rendered under	Rate Schedule FPC No. 4

Statement Of Sales

Year	MCF	Amount
1932	(1)	(1)
1933	987 382	$ 157 622 59
1934	1 537 047	239 557 05
1935	2 034 822	314 223 30
1936	2 342 597	364 372 02
1937	2 298 576	403 772 89
1938	1 597 573	272 959 56
1939	1 789 060	304 554 94
1940	1 906 541	318 902 11
1941	2 066 051	340 944 99
Totals	16 559 649	$2 714 909 45

(1) Deliveries started in October 1932 through Central Illinois Light Company and sales not separated until 1933.

[fol. 15449] Exhibit 187 Page 5

Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement Concerning Contract With

R. Herschel Manufacturing Company

Line No.		
1	Date of original contract	June 20, 1930
2	Original contract with	Missouri-Kansas Pipe Line Company
3	Date of assignment	August 22, 1930 From
4		Missouri-Kansas Pipe Line Company to
5		Panhandle Illinois Pipe Line Company
6	Original contract cancelled	February 3, 1933.
7	Initial sale	Through Central Illinois Light Company
8		under contract dated October 3, 1931 to
9		September 9, 1933, then under filed
10		rate schedules.
11	Service now rendered under	Rate Schedule FPC No. 4
12		Statement Of Sales

13	Year	MCF.	Amount
14	1932	(1)	(1)
15	1933		
16	1934	5 936	$ 2 247 60
17	1935	31 796	7 454 46
18	1936	32 272	7 392 40
19	1937	31 248	7 448 33
20	1938	21 328	5 437 56
21	1939	26 332	5 863 86
22	1940	28 910	6 254 92
23	1941	27 536	5 872 68
24	Totals	208 358	$ 47 671 81

25 (1) Deliveries started in 1932 through Central Illinois Light Company
26 on experimental basis and regular deliveries began in 1934.

[fol. 15452] Exhibit 187.

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Witness Watkins.

Panhandle Eastern Pipe Line Company and Subsidiary Companies.

Statement Concerning Contract With Peoria Malleable Castings Company.

Line No.	
1	Date of original contract June 19, 1930

2 Original contract with Missouri-Kansas Pipe Line Company

3 Date of assignment August 22, 1930—From

4 Missouri-Kansas Pipe Line Company to

5 Panhandle Illinois Pipe Line Company

6 Contract cancelled February 6, 1933

7 Sales None

* * * * * * * * *

[fol. 15458] Exhibit 188.

Annual Report for 1940.

Panhandle Eastern Pipe Line Company.

To The Stockholders:

This is the Annual Report of operations of your Company for the year 1940. Included in this report is the consolidated balance sheet of the Company and its subsidiaries as of December 31, 1940, together with consolidated income statement, surplus account and operating statistics (main line system only) for the year 1940, with certain explanatory notes attached thereto. For comparison the income statement and operating statistics for the year 1939 are also given.

Operations.

Gross revenues for the year 1940 were again the largest in the history of the Company and amounted to $13,535,452.79, as compared with $11,996,769.23 in 1939, an increase of $1,538,683.56 or about 13%.

Notwithstanding the very large increase ($1,177,000) in Federal Taxes during the year 1940, referred to elsewhere in this report, net income for the year, after all charges but before dividends on any class of stock, was $4,548,323.98, as compared with $4,363,399.34 in 1939.

Provision for Depreciation, Depletion and Amortization.

The provision for depreciation, depletion and amortization (including amortization of gas sales and purchase con-[fol. 15459] tracts) for the year 1940 was $2,210,000, substantially the same as for the previous year. Your manage-

ment's judgment that this amount is a reasonable provision for this purpose has been confirmed by an independent consulting engineer.

Taxes.

The total amount which had to be set aside from the operations of your Company for the payment of taxes for the year 1940 was $2,610,469.95. Out of every dollar of Gross Revenue, approximately 20 cents had to be put aside for taxes.

Federal taxes increased approximately $1,177,000, of which approximately $929,000 resulted from new Federal taxes, principally excess profit taxes and an increase in rates during the year 1940.

Construction.

Continuing the Company's policy of expanding its facilities to serve its market requirements, your Company, during the year 1940, authorized a $2,900,000 construction program in addition to the $3,500,000 program authorized near the end of 1939. These programs included the addition of approximately 245 miles of 24 inch, 22 inch, 20 inch and 18 inch main pipe line continuing the looping program of our original line, the construction of a new 3,900 horsepower Compressor Station at Hanford, Texas, the installation of an additional 1,500 horsepower unit at the Sneed, Texas Compressor Station, the installation of an additional 1,000 horsepower unit at the Glenarm, Illinois Compressor Station, and the enlargement of the combination gasoline and dehydration plant near Liberal, Kansas. The completion of these construction programs substantially increased the transmission capacity. In addition the Company expended approximately $500,000 for normal routine items.

Capital Changes.

The 1,285 unsubscribed shares of the Company's Common Stock referred to in the 1939 Annual Report are still in litigation.

Since the end of the year 1940 your Company consummated the refinancing of its First Mortgage and First Lien Bonds, Series A, 4%, due March 1, 1952, through the sale

of $5,000,000 principal amount of Serial Notes, due serially [fol. 15460] November 1, 1942 to November 1, 1945, inclusive, $6,250,000 principal amount of First Mortgage and First Lien Bonds, Series A, due serially November 1, 1946 to November 1, 1950, inclusive, and $12,000,000 principal amount of First Mortgage and First Lien 3% Bonds, Series B, due November 1, 1960, and on February 3, 1941 your Company authorized the redemption of its 4% Bonds prior to or after redemption date of March 5, 1941.

The general effect of these transactions was to lower the interest rate on your Company's outstanding long-term debt (the cost of the new money averaging approximately 2.71%). Also, among other things, it effected a change in the sinking fund provisions so as to make available added amounts of cash during the next few years, extended the final maturity of the funded debt to twenty years, and in the judgment of your management provided an improved medium for possible future senior financing.

Dividends

During the year 1940 the Company paid dividends on its Preferred and Common Stock amounting to $3,485,784.51, of which $660,000 represented regular dividends at the rate of $6.00 per share on the Class A and Class B Preferred Stock, $493,683.51 represented Participating Dividends on the Class A Preferred Stock, and $2,422,101 on the Common Stock which amounted to $3.00 per share on the 807,367 shares of such stock outstanding.

On January 25, 1941 a dividend of one share of the Capital Stock of Central Distributing Company, at a valuation of forty-two cents (42¢) per share, to and for each share of Common Stock of your Company, was declared and paid. The aggregate valuation of such dividend was $339,094.14.

General.

By virtue of the declaration of its shares as a dividend on the Common Stock of your Company, as above referred to, Central Distributing Company ceased to be a subsidiary of your Company on January 25, 1941. This is another step in corporate simplification.

The maximum obligation of your Company for deliveries under its contract dated August 31, 1935, with Michigan [fol. 15461] Consolidated Gas Company (formerly Detroit City Gas Company), was changed on June 29, 1940, through a supplemental contract, from one hundred million (100,000,000) to one hundred twenty-five million (125,000,000) cubic feet of gas per day.

The year end finds the Company in a comfortable financial position.

By Order of the Board of Directors

J. D. CREVELING,
President.

Dover, Delaware, February 28, 1941.

* * * * * * * *

[fol. 15472] Exhibit 189

Annual Report for 1941.

Panhandle Eastern Pipe Line Company.

To the Stockholders:

This is the Annual Report of operations of your Company for the year 1941. Included in this report is the consolidated balance sheet of the Company and its subsidiary as of December 31, 1941, together with consolidated income statement, surplus account and operating statistics (main line system only) for the year 1941, with certain explanatory notes attached thereto. For comparison the income statement and operating statistics for the year 1940 are also given.

Operations.

Gross revenues for the year 1941 amounted to $15,434,856.73, as compared with $13,535,452.79 in 1940, and were again the largest in the history of the Company. The increase amounted to $1,899,403.94, or 14%. Had not the Company had the benefit for tax purposes of special deductions amounting to $823,881.49, referred to elsewhere in this report, there would have been an increase of slightly more than $1,535,000 in Federal taxes during the year 1941.

Net income was $4,804,492.74, as compared with $4,548,323.98 in 1940.

Provision for Depreciation, Depletion and Amortization.

The amount set aside during the year 1941 as provision for depreciation, depletion and amortization (including amortization of gas sales and purchase contracts) was $2,435,000. This compared with $2,210,000 for the previous year. The basis was unchanged, the increase resulting from a greater amount of depreciable properties. The judgment of your management that this amount is a rea- [fol. 15473] sonable provision for this purpose has been confirmed by an independent consulting engineer.

Taxes.

Through an unbroken sequence of years your Company's tax bill has grown steadily until for the year 1941 the total amount set aside from its operations for the payment of taxes for that year amounted to $3,323,622.93 and had not it had the benefit for tax purposes of deductions for discount, premium and expense resulting from the refinancing of long-term debt (the tax equivalent of which is shown in the comparative consolidated income statement on Page 13 as "Charges in lieu of Federal income and excess profits taxes) the total tax cost for the year 1941 would have been $4,147,504.42, an increase of $1,537,034.47 over the year 1940 and would have represented 27 cents out of every dollar of Gross Revenue and would have lacked only $656,988.32 of being as much as the total net income for the year 1941.

Market Development.

During the year your management has pursued a conservative yet constructive course in its efforts to achieve a part of its goal with respect to ultimate economic market development which it reasonably could hope and expect to reach and as a consequence entered into a contract with Consumers Power Company whereby, among other things, it has agreed to supply a major part of the natural gas requirements of the Power Company for distribution in its Flint, Pontiac, Jackson, Kalamazoo, Owosso and Battle Creek Divisions. In addition, it consummated a contract

with Citizens Gas Fuel Company and Battle Creek Gas Company pursuant to which the natural gas requirements of Adrian and Battle Creek, Michigan will be supplied to these Companies. The construction of facilities necessary to connect these markets is expected to be completed by the middle of the year 1942.

Deliveries began during the year 1941 to Richmond Gas Corporation and Greenfield Gas Company, Inc. for distribution in Richmond and Greenfield, Indiana, respectively.

Illinois Natural Gas Company, your Company's wholly owned subsidiary, is constructing lateral lines in the State of Illinois for the purpose of supplying the natural gas requirements of Galesburg, Abingdon and Knoxville, Illinois and hopes to be able to commence the construction of a lateral line to Bloomington, Illinois as soon as material is available.

[fol. 15474] Construction.

In order to extend natural gas service to a number of communities in the States of Illinois, Indiana and Michigan and to continue your Company's policy of expanding its facilities to adequately serve presently connected markets, it authorized certain construction work during the year 1941 involving expenditures in excess of $9,000,000, a large part of which is now in progress. This program included the construction of approximately 256 miles of 20", 18", 16" and 12¾" transmission lines in the State of Michigan for the purpose of fulfilling contractual obligations mentioned elsewhere herein and the construction of 146 miles of 26" 24" and 20" transmission lines as a continuation of the looping program of the Company's original line, as well as the installation of additional gas driven compressors in the Company's Pleasant Hill, Glenarm and Tuscola Compressor Stations. This was in addition to expenditures of approximately $700,000 for normal routine items. Your management expects that all of this construction work will be completed during the summer of 1942.

Property Acquisitions.

With the approval of the Securities and Exchange Commission, your Company, on February 6, 1942, sold and

issued, after competitive bidding, $10,000,000 principal amount of its First Mortgage and First Lien 3% Bonds, Series C, and $15,000,000 aggregate par value of its 5.60% Cumulative Preferred Stock and with the proceeds has now redeemed its $10,000,000 aggregate par value of Class A Preferred Stock and has acquired all of the stock and indebtedness of Michigan Gas Transmission Corporation and of Indiana Gas Distribution Corporation, and certain pipe lines previously belonging to The Ohio Fuel Gas Company, the amount paid by your Company for such properties being approximately $11,207,000. The Bonds were sold at 100.02% of principal amount and accrued interest, and the new Preferred Stock was sold at $100.2789 per share and accrued dividends. The balance of the net proceeds of the financing amounting to approximately $3,600,000, will be applied to the payment of a part of the cost of construction work now in progress.

Michigan Gas Transmission Corporation owns a system of natural gas transmission lines, compressor stations and equipment located in the States of Indiana, Ohio and Michigan. Its principal lines and stations consist of two lines (1—20" line and 1—24" line) extending from the former eastern terminus of your Company's system (a point in Vermillion County, Indiana near Dana, In-
[fol. 15475] diana) to a point near Zionsville, Indiana, a distance of approximately 70 miles, an 18" line extending therefrom to a point near Muncie, Indiana, a distance of approximately 52 miles, a 22" line extending from near Zionsville, Indiana, to a point at or near Detroit, Michigan, a distance of approximately 230 miles, and three compressor stations in Indiana-Montezuma (7800 horsepower), Zionsville (6500 horsepower), and Edgerton (6500 horsepower).

Indiana Gas Distribution Corporation distributes natural gas at retail to approximately 1800 residential and commercial customers located in various small towns in Indiana.

The principal transmission lines acquired from The Ohio Fuel Gas Company consist of approximately 33 miles of 16" line extending generally eastward from a point near Muncie, Indiana, to a point approximately 2½ miles east

of the Indiana-Ohio boundary, together with certain laterals branching therefrom. The principal branch lines are a 10" line approximately 13 miles in length extending to a point near Richmond, Indiana, and a 6" and 6⅝" line approximately 7 miles in length extending to Winchester, Indiana.

The effect of the acquisition of these properties by your Company will be to increase earnings, remove operating problems and enable your management to deal directly with the distributing organizations in the States of Indiana, Ohio and Michigan.

Capital Changes:

The 1,285 unsubscribed shares of the Company's Common Stock referred to in the Annual Reports of 1939 and 1940 are still in litigation.

A report of the refinancing consummated by your Company on February 3, 1941 was included in the Annual Report for the year 1940 and there is included elsewhere in this report a brief description of the new securities (3% Bonds and 5.60% Cumulative Preferred Stock) issued and sold as of February 6, 1942, together with the fact of the redemption of the Class A Preferred Stock.

Regulatory Matters:

Public Utility Holding Company Act of 1935:

Following hearings before the Securities and Exchange Commission under the Public Utility Holding Company [fol. 15476] Act of 1935, your Company was held to be, for the purposes of such Act, a subsidiary of Columbia Gas & Electric Corporation (a registered holding company) and of Columbia Oil & Gasoline Corporation.

Federal Power Commission:

In May, 1941, the Federal Power Commission instituted a proceeding with respect to the reasonableness of the rates charged by your Company and Michigan Gas Transmission Corporation. A similar proceeding was instituted by the City of Detroit and the County of Wayne, and these two proceedings have been consolidated by the Commis-

sion and testimony is being taken therein. Also, Michigan Consolidated Gas Company has instituted a proceeding with respect to your Company's rates, and hearings have been concluded but the Commission has not yet issued its order thereon. Your Company is unable now to determine the extent to which its rates, business or earnings will be affected by the Natural Gas Act or as a result of these proceedings.

Unamortized Debt Discount and Expense.

During the year your Board of Directors authorized the charging to earned surplus of the unamortized debt discount and expense and call premiums applicable to refunded issues and the discount and expense applicable to outstanding issues amounting to $1,960,748.37. Amortization of these amounts out of earnings had been at the rate of approximately $300,000 per year.

Dividends.

During the year 1941 the Company paid dividends on its Preferred and Common Stock amounting to $3,353,914.56, of which $660,000 represented regular dividends at the rate of $6.00 per share on the Class A and Class B Preferred Stock, $336,402.92 represented Participating Dividends on the Class A Preferred Stock, and $2,357,511.64 representing dividends on the Common Stock which amounted to $2.50 per share in cash and forty-two cents (42c) per share in property (Capital Stock of Central Distributing Company) on the 807,367 shares of such stock outstanding.

General.

In cooperation with law enforcement authorities and to more fully insure an uninterrupted supply of gas for defense production and for essential purposes your Company took special precautions during the year for the protection of its properties. We will undoubtedly face many serious problems as a result of the entrance of the United States into World War II, the exact effect of such conditions upon the business and operations of your Company cannot now be foretold, but as in the past we shall strive to properly meet these problems as they arise and at the same time maintain the same safe continuity of service to the Company's customers as heretofore.

fol. 15477

While this has been a trying year because of special problems presented, such problems have not been permitted to interfere with operations -work perhaps of a less spectacular nature but of no less importance to the stockholders. The year has been a productive period for which each individual member of your organization is entitled to credit, and it is pleasing for your management to have this opportunity to acknowledge with thanks their unflagging interest, contribution of time, thought and energy.

The year end finds the Company in a comfortable financial position.

By Order of the Board of Directors

J. D. CREVELING,
President.

Dover, Delaware, February 25, 1942.

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Comparative Statement Of Operation And Maintenance Expenses

Line No.		(A)	Year Ended December 31, 1940 (B)	1941 (C)
1		Natural Gas Production Expenses		
2		Operation:		
3	733	Supervision and Engineering	$ 21 805 63	$ 24 354 19
4	734 1	Gas well labor	6 631 74	6 062 97
5	734 2	Field line labor	11 634 85	12 559 39
6	734 31	Field compressor station labor	—	46 00
7	734 32	Field measuring and regulating station		
8		labor	12 583 54	11 525 85
9	734 4	Other production labor	11 493 18	11 139 71
10	735 1	Gas well supplies and expenses	6 382 74	5 450 42
11	735 2	Field line supplies and expenses	4 088 34	5 191 97
12	735 31	Field compressor station supplies and		
13		expenses	—	40 21
14	735 32	Field measuring and regulating station		
15		supplies and expenses	4 326 10	4 042 30
16	735 4	Other supplies and expenses	4 857 20	7 654 62
17	510	Delay rentals	101 344 57	116 780 63
18	745	Gas well royalties	143 341 99	171 043 82
19	746	Natural gas rents	325 00	400 09
20		Total Operation	328 814 97	376 292 17
21		Maintenance:		
22	739	Supervision and Engineering	3 684 72	7 537 37
23	740 22	Field measuring and regulating station		
24		structures	628 22	210 35
25	740 3	Other production system structures	1 605 56	2 297 42
26	741	Producing gas well equipment	10 467 78	6 800 41
27	742 1	Field lines	3 840 50	8 027 48
28	742 21	Compressor station equipment	—	8 50
29	742 22	Field measuring and regulating station		
30		equipment	1 835 84	1 865 17
31	743	Drilling and cleaning equipment	49 99	311 72
32	744	Other natural gas property	69 10	64 67
33		Total Maintenance	22 181 71	27 123 09
34		Other Production Expenses:		
35	747 2	Residuals operation expenses	189 488 61	212 878 28
36	754 1	Gas purchased — natural gas	1 090 106 83	1 180 917 63
37	755	Purchased gas expense	28 753 87	25 270 25
38		Total Other Production Expenses	1 308 349 31	1 419 066 16
39		Total Natural Gas Production Expenses		
40		Before Duplicate Charges — Credit	1 659 345 99	1 822 481 42
41		Less: Duplicate Charges — Credit	616 931 62	645 534 52
42		Total Natural Gas Production Expenses	$1 042 414 37	$1 176 946 90

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Comparative Statement Of Operation And Maintenance Expenses

Line No.		(A)	Year Ended December 31: 1940 (B)	1941 (C)
1		Transmission Expenses		
2		Operation:		
3	758	Supervision and Engineering	$ 78 637 64	$ 93 608 95
4	759 111	Pumping station — labor	262 016 06	312 647 90
5	759 112	Measuring and regulating station — labor	22 555 44	22 328 47
7	759 121	Pumping station — supplies and expenses	540 564 92	584 212 67
8	759 122	Measuring and regulating station — supplies and expenses	10 948 79	12 080 54
10	759 21	Transmission mains — labor	65 733 59	84 944 95
11	759 22	Transmission mains — supplies and expenses	36 732 65	51 314 77
12	763 2	Rents	6 620 67	7 463 28
13		Total Operation	1 023 809 76	1 168 601 53
14		Maintenance		
15	760	Supervision and Engineering	33 652 96	37 821 93
16	761 1	Pumping station structures	16 081 05	19 679 66
17	761 2	Measuring and regulating station structures	2 818 06	2 874 73
18	761 3	Other transmission system structures	3 005 12	2 459 45
19	762 1	Mains	33 643 85	71 574 61
20	762 21	Pumping station equipment	116 225 73	131 865 33
21	762 22	Measuring and regulating station equipment	14 031 59	15 252 87
22	762 23	Other transmission system equipment	5 045 44	5 455 11
23		Total Maintenance	224 003 80	286 983 69
24		Total Transmission Expenses before Joint Expenses Credit	1 247 813 56	1 455 585 22
25		Less: Joint Expenses — Credit	18 000 00	13 200.00
26		Total Transmission Expenses	$1 229 813 56	$1 442 385 22
27		Distribution Expenses		
28		Operation	$ 19 966 22	
29		Maintenance	5 063 03	
30		Total Distribution Expenses	$ 25 029 25	

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Comparative Statement Of Operation And Maintenance Expenses

Line No.		(A)	Year Ended December 31, 1940 (B)	1941 (C)
1		Customers' Accounting and Collecting		
2		Expenses		
3	780 1	Customers' contracts and orders	$ 12 75	
4	780 3	Meter reading	9 032 52	$ 6 565 43
5	780 4	Collecting	2 378 46	302 88
6	781	Customers' billing and accounting	8 740 83	6 296 21
7	782	Miscellaneous expenses	2 186 02	
8	783	Uncollectible accounts	10 800 00	10 800 00
9		Total Customers' Accounting and Collecting		
10		Expenses	33 150 58	23 963 52
11		Sales Promotion Expenses		
12	785	Supervision	11 410 88	11 779 46
13	786	Salaries and commissions	9 970 63	10 697 24
14	787 2	Advertising	232 74	5 00
15	787 3	Miscellaneous sales expenses		

Line No.					
3	758		Supervision and Engineering	$ 78 637 64	$ 93 608 95
4	759	111	Pumping station — labor	262 016 06	312 647 90
5	759	112	Measuring and regulating station —		
6			labor	22 555 44	22 328 47
7	759	121	Pumping station — supplies and expenses	540 564 92	584 212 67
8	759	122	Measuring and regulating station —		
9			supplies and expenses	10 948 79	12 080 54
10	759	21	Transmission mains — labor	65 733 59	84 944 95
11	759	22	Transmission mains — supplies and		
12			expenses	36 732 65	51 314 77
13	763	2	Rents	6 620 67	7 463 28
14			Total Operation	1 023 809 76	1 168 601 53
15			Maintenance		
16	760		Supervision and Engineering	33 652 96	37 821 93
17	761	1	Pumping station structures	16 081 05	19 679 66
18	761	2	Measuring and regulating station		
19			structures	2 818 06	2 874 73
20	761	3	Other transmission system structures	3 005 12	2 459 45
21	762	1	Mains	33 643 85	71 574 61
22	762	21	Pumping station equipment	116 225 73	131 865 33
23	762	22	Measuring and regulating station		
24			equipment	14 031 59	15 252 87
25	762	23	Other transmission system equipment	5 045 44	5 455 11
26			Total Maintenance	224 003 80	286 983 69
27			Total Transmission Expenses Before Joint		
28			Expenses—Credit	1 247 813 56	1 455 585 22
29			Less: Joint Expenses — Credit	18 000 00	13 200 00
30			Total Transmission Expenses	$1 229 813 56	$1 442 385 22
31			Distribution Expenses		
32			Operation	$ 19 966 22	
33			Maintenance	5 063 03	
34			Total Distribution Expenses	$ 25 029 25	

[fol. 15488]

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Panhandle Eastern Pipe Line Company And Subsidiary Companies

Comparative Statement Of Operation And Maintenance Expenses

Line No.			(A)	Year Ended December 31, 1940 (B)	1941 (C)
1			Customers' Accounting and Collecting		
2			Expenses		
3	780	1	Customers' contracts and orders	$ 12 75	
4	780	3	Meter reading	9 032 52	$ 6 565 43
5	780	4	Collecting	2 378 46	302 88
6	781		Customers' billing and accounting	8 740 83	6 296 21
7	782		Miscellaneous expenses	2 186 02	
8	783		Uncollectible accounts	10 800 00	10 800 00
9			Total Customers' Accounting and Collecting		
10			Expenses	33 150 58	22 964 52
11			Sales Promotion Expenses		
12	785		Supervision	11 410 88	11 779 46
13	786		Salaries and commissions	9 970 63	10 697 24
14	787	2	Advertising	232 74	5 00
15	787	3	Miscellaneous sales expenses	452 12	239 39
16			Total Sales Promotion Expenses	$ 22 066 37	$ 22 721 09

[fob 15489]

Exhibit 190

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Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Comparative Statement Of Operation And Maintenance Expenses

Line No.		(A)	Year Ended December 31, 1940 (B)	1941 (C)
1		Administrative and General Expenses		
2	790	Salaries of general officers and executives	$ 88 000 00	$ 94 654 17
4	791	Other general office salaries	135 156 75	158 681 49
5	792	Expenses of general officers and general office employees	30 889 22	27 136 40
7	793	General office supplies and expenses	46 021 09	36 021 80
8	795	Special services	19 572 84	22 358 80
9	796	Special legal services	76 018 19	53 322 07
10	798	Insurance	10 602 38	12 054 52
11	799	Injuries and damages	30 120 70	27 412 49
12	800	Employees' welfare and pension expenses	179 778 46	190 148 01
14	801	Miscellaneous general expenses	50 449 56	63 482 26
15	802 2	Maintenance of office furniture and equipment	2 571 83	1 242 18
17	803	Rents	27 804 40	32 879 13
18	805	Franchise requirements	363 68	
19		Total Administrative and General Expenses Before Credits	697 349 10	719 393 32
21		Less: Duplicate Miscellaneous Charges and Administrative and General Expenses Transferred — Credit	57 540 54	3 570 94
24		Total Administrative and General Expenses	639 808 56	715 822 38
25		Non-Operating Revenue Deductions	8 481 83	10 986 94
26		Total Operation and Maintenance Expenses	$3 000 764 52	$3 392 827 05

(fol. 15490)

Exhibit 191

Panhandle Eastern Pipe Line Company

Reconcilement Of Net Income Per Books With Net Income Per Federal Income Tax Return
For The Year 1939

Line No.	(A)		(B)	(C)
1	Net income per books			$4 347 696 70
2	Additions:			
3	Provision for Federal income tax		$ 800 000 00	
4	Provision for injuries and damages		9 600 00	
5	Provision for uncollectible accounts		4 800 00	
6	Gain from sale of business assets, credited			
7	to depreciation reserve on books		103 86	
8	Excess of book provision for amortization of			
9	unoperated leaseholds over deduction claimed		10 318 31	
10	Excess of book provision for state income taxes			
11	over deduction claimed		15 886 72	
12	Excess of book provision for amortization of			
13	debt discount and expense over deduction claimed		191 141 67	
14	Expenses in connection with capital stock issue			
15	not an allowable deduction for income tax			
16	purposes		20 902 77	
17	Gain from sale of gas purchase contract deferred			
18	on books		2 000 00	
19	Protested Texas franchise tax for years 1938 and			
20	1939 expensed on books but not deducted on return:			
21	Year 1938	$13 305 38		
22	Year 1939	10 310 40	23 615 78	
23	Deductions claimed in prior year return (1938),			
24	expensed on books		19 421 72	1 097 790 83
25				5 445 487 53
26	Deductions:			
27	Excess of deduction claimed for depreciation			
28	over book provision		$ 153 053 56	
29	Excess of deduction claimed for depletion			
30	over book provision		127 221 41	
31	Cost of acidizing gas wells capitalized		35 625 51	
32	Productive well drilling costs capitalized		145 733 55	
33	Expense in connection with surrendering leases		22 35	
34	Unrecovered cost of leases surrendered		1 938 31	
35	Federal capital stock tax adjustment		3 203 00	
36	Damages to property sustained		550 00	
37	Uncollectible accounts charged-off		37 50	
38	Amortization of Creve Couer line extension costs		4 061 04	
39	Inventory adjustments		2 315 17	
40	Collections on balances in closed banks previously			
41	charged-off on books but not deducted on returns		174 30	473 935 70
42	Net income per Federal income tax return as adjusted			
43	by Bureau of Internal Revenue			$4 971 551 83

[fol. 15491] Exhibit 192

Panhandle Eastern Pipe Line Company

Reconcilement Of Net Income Per Books With Net Income Per Federal Income Tax Return For The Year 1940

Line	(A)		(B)	(C)
1	Net income per books			$4 451 742 42
2	Additions:			
3	Provision for Federal income tax		$1 400 000 00	
4	Provision for Federal excess-profits tax		560 000 00	
5	Provision for injuries and damages		12 000 00	
6	Provision for uncollectible accounts		7 200 00	
7	Gain from sale of business assets, credited			
8	to depreciation reserve on books		89 13	
9	Excess of book provision for amortization of			
10	unoperated leaseholds over deduction claimed		6 166 83	
11	Excess of book provision for state income			
12	taxes over deduction claimed		14 701 04	
13	Refinancing costs incurred in 1940 and charged			
14	expense on books, allowable for tax purposes			
15	only through amortization over the life of			
16	the issue		67 053 00	
17	Excess of book provision for amortization of			
18	debt discount and expense over deduction			
19	claimed		188 997 70	2 256 207 70
20				6 707 950 12
21	Deductions:			
22	Excess of deduction claimed for depreciation			
23	over book provision		715 162 16	
24	Excess of deduction claimed for depletion			
25	over book provision		172 205 81	
26	Cost of acidizing gas wells capitalized		7 831 68	
27	Social security taxes capitalized		6 012 46	
28	Interest expense capitalized		36 827 80	
29	Productive well drilling costs capitalized		79 224 75	
30	Property removal costs		2 368 89	
31	Expense in connection with surrendering leases		59 41	
32	Unrecovered cost of leases surrendered		15 057 71	
33	Federal capital stock tax adjustment		21 337 00	
34	Damages to property sustained		64 44	
35	Uncollectible accounts charged-off		3 00	
36	Amortization of Creve Coeur line extension			
37	costs		4 055 40	
38	Collections on balances in closed banks pre-			
39	viously charged off on books but not de-			
40	ducted on returns		83 45	
41	Gain from sale of gas purchase contract reported			
42	as income in 1939 return but reported on books			
43	in 1940		2 000 00	
44	Refund of 1938 and 1939 protested Texas fran-			
45	chise taxes not expensed in prior returns as			
46	adjusted by Internal Revenue Agent:			
47	Year 1938	$11 820 38		
48	Year 1939	10 310 40	22 130 78	1 084 424 74
49	Net income per Federal income tax return			$5 623 525 38
50	Note: The Federal income and excess-profits tax returns for			
51	the year 1940 have not been examined by the Bureau of Internal Revenue.			

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES (1)

Line No.	(A)	December 31, 1932 (B)	1933 (C)	1934 (D)	1935 (E)	1936 (F)	1937 (G)	1938 (H)
1	Balance Beginning of Period	$292 914 29	$456 482 03	$963 977 36	$1 528 075 10	$2 072 859 67	$2 629 318 41	$3 629 990 5
2	Retirements							
3	Production	16 170 67	72 338 04	19 883 20	43 394 51	24 255 23	59 739 83	6 863 0
4	Transmission	133 958 82	30 886 56	27 004 76	27 243 31	78 375 42	144 137 47	25 884 3
5	General	-	1 323 80	2 415 69	77 75	897 40	1 598 32	1 562 6
6		150 129 49	104 548 40	49 303 65	70 715 57	103 528 05	205 475 62	34 310 0
7		142 784 80	351 933 63	914 673 71	1 457 359 53	1 969 331 62	2 423 842 79	3 595 680 4
8	Anmual Provision	313 697 23	612 043 73	613 401 39	615 500 14	659 986 79	1 206 147 71	1 566 061 7
9	Balance End of Period	$456 482 03	$963 977 36	$1 528 075 10	$2 072 859 67	$2 629 318 41	$3 629 990 50	$5 161 742 2

10 Notes

11 (1) Includes Only:

12 Panhandle Eastern Pipe Line Company

13 Illinois Natural Gas Company

14 Panhandle Illinois Pipe Line Company

15 Texas Interstate Pipe Line Company

EXHIBIT 19 = 15492

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WITNESS WATKINS

DIARY COMPANIES (1)

ANALYSIS OF RESERVE
FOR DEPRECIATION OF GAS PLANT

ber 31 1936 (F)	1937 (G)	1938 (H)	1939 (I)	1940 (J)	June 30, 1941 (K)
072 859 67	$2 629 318 41	$3 629 990 50	$5 161 742 23	$6 860 826 16	$8 345 186 09
24 255 23	59 739 83	6 863 00	17 462 56	23 152 36	3 734 23
78 375 42	144 137 47	25 884 39	26 290 97	195 763 37	10 027 53
897 40	1 598 32	1 562 67	4 586 60	5 469 31	1 705 50
103 528 05	205 475 62	34 310 06	48 340 13	224 385 04	15 467 26
969 331 62	2 423 842 79	3 595 680 44	5 113 402 10	6 636 441 12	8 329 718 83
59 986 79	1 206 147 71	1 566 061 79	1 747 424 06	1 708 744 97	992 870 00
029 318 41	$3 629 990 50	$5 161 742 23	$6 860 826 16	$8 345 186 09	$9 322 588 83

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
ANALYSIS OF RETIREMENTS
CHARGED TO RESERVE FOR DEPRECIATION OF GAS PLANT

Line No.	(A)	Production (B)	Transmission (C)	General (D)	Total (E)
1	Year 1932 (Nine months be-				
2	ginning March 31)				
3	Cost of Gas Plant	$143 258 65	$154 360 34	$ 29 75	$297 648 74
4	Cost of Removal	17 782 03	2 266 63	-	20 048 66
5		161 040 68	156 626 97	29 75	317 697 40
6	Less Salvage	144 870 01	22 668 15	29 75	167 567 91
7	Net Charge to Reserve	16 170 67	133 958 82	-	150 129 49
8	Year 1933				
9	Cost of Gas Plant	89 532 98	35 710 77	5 184 84	130 428 59
10	Cost of Removal	3 543 26	665 76	-	4 209 02
11		93 076 24	36 376 53	5 184 84	134 637 61
12	Less Salvage	20 738 20	5 489 97	3 861 04	30 089 21
13	Net Charge to Reserve	72 338 04	30 886 56	1 323 80	104 548 40
14	Year 1934				
15	Cost of Gas Plant	48 742 44	41 653 01	2 680 27	93 075 72
16	Cost of Removal	3 571 55	2 627 55	-	6 199 10
17		52 313 99	44 280 56	2 680 27	99 274 82
18	Less Salvage	32 430 79	17 275 80	264 58	49 971 17
19	Net Charge to Reserve	19 883 20	27 004 76	2 415 69	49 303 65
20	Year 1935				
21	Cost of Gas Plant	61 648 03	45 769 87	166 74	107 584 64
22	Cost of Removal	2 768 82	2 601 27	-	5 370 09
23		64 416 85	48 371 14	166 74	112 954 73
24	Less Salvage	21 022 34	21 127 83	88 99	42 239 16
25	Net Charge to Reserve	43 394 51	27 243 31	77 75	70 715 57
26	Year 1936				
27	Cost of Gas Plant	72 600 13	128 840 97	1 837 16	203 278 26
28	Cost of Removal	3 556 15	8 248 40	26 37	11 830 92
29		76 156 28	137 089 37	1 863 53	215 109 18
30	Less Salvage	51 901 05	58 713 95	966 13	111 581 13
31	Net Charge to Reserve	24 255 23	78 375 42	897 40	103 528 05
32	Year 1937				
33	Cost of Gas Plant	79 417 02	228 703 03	1 705 79	309 825 84
34	Cost of Removal	3 202 36	14 228 37	-	17 430 73
35		82 619 38	242 931 40	1 705 79	327 256 57
36	Less Salvage	22 879 55	98 793 93	107 47	121 780 95
37	Net Charge to Reserve	59 739 83	144 137 47	1 598 32	205 475 62

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WITNESS WATKINS

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
ANALYSIS OF RETIREMENTS
CHARGED TO RESERVE FOR DEPRECIATION OF GAS PLANT

Line No.	(A)	Production (B)	Transmission (C)	General (D)	Total (E)
1	Year 1938				
2	Cost of Gas Plant	$ 39 288 46	$ 27 517 30	$ 3 662 20	$ 70 467 96
3	Cost of Removal	4 685 40	1 440 24	122 35	6 247 99
4		43 973 86	28 957 54	3 784 55	76 715 95
5	Less Salvage	37 110 86	3 073 15	2 221 88	42 405 89
6	Net Charge to Reserve	6 863 00	25 884 39	1 562 67	34 310 06
7	Year 1939				
8	Cost of Gas Plant	36 144 13	36 618 44	5 215 22	76 977 79
9	Cost of Removal	2 478 78	2 735 42	34 58	2 248 78
10		37 622 91	39 353 86	5 249 80	82 226 57
11	Less Salvage	20 160 35	13 062 89	663 20	33 886 44
12	Net Charge to Reserve	17 462 56	26 290 97	4 586 60	48 340 13
13	Year 1940				
14	Cost of Gas Plant	42 216 14	251 411 40	6 302 64	299 930 18
15	Cost of Removal	3 406 59	8 762 58	-	12 169 17
16		45 622 73	260 173 98	6 302 64	312 099 35
17	Less Salvage	22 470 37	64 410 61	833 33	87 714 31
18	Net Charge to Reserve	23 152 36	195 763 37	5 469 31	224 385 04
19	Year 1941 (Six months ending				
20	June 30)				
21	Cost of Gas Plant	12 206 12	15 945 42	1 963 98	30 115 52
22	Cost of Removal	1 431 39	679 21	18 83	2 129 43
23		13 637 51	16 624 63	1 982 81	32 244 95
24	Less Salvage	9 903 28	6 597 10	277 31	16 777 69
25	Net Charge to Reserve	3 734 23	10 027 53	1 705 50	15 467 26

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EXHIBIT 194

PAGE 1

WITNESS WATKI

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
PRO FORMA CONSOLIDATED BALANCE SHEET
AS OF DECEMBER 31, 1941
GIVING EFFECT TO FINANCING TRANSACTIONS
CONSUMMATED ON FEBRUARY 6, 1942
AND THE ACQUISITION ON THAT DATE OF CAPITAL STOCK AND DEBT OF
MICHIGAN GAS TRANSMISSION CORPORATION AND
INDIANA GAS DISTRIBUTION CORPORATION
AND PURCHASE OF CERTAIN PROPERTY OF OHIO FUEL GAS COMPANY

A S S E T S	Combined	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Consolidated
GAS PLANT	$82 652 330 74	$ 439 326 08(2)	$ 139 500 00(6)	$82 952 156 82
INVESTMENTS AND FUND ACCOUNTS				
Investment in Securities of Associated Companies	2 635 391 43	8 331 715 02(2)	10 967 106 45(6)	-
Advance to Associated Companies		2 435 000 00(2)	2 435 000 00(6)	-
Other Investments	2 954 498 52			2 954 498 52(1)
Total Investments and Fund Accounts	5 589 889 95	10 766 715 02	13 402 106 45	2 954 498 52
CURRENT AND ACCRUED ASSETS				
			11 206 937 50(2)	
Cash	4 168 198 55	25 156 842 93(1)	10 059 178 03(3)	8 058 925 90
Special Deposits	102 593 14			102 593 14
Working Funds (Petty Cash and Advances)	16 672 08			16 672 08
			685 092 26(4)	
Accounts Receivable	3 148 098 20		574 078 57(5)	1 888 927 37
Interest and Dividends Receivable	8 388 47			8 388 47
Material and Supplies	491 234 58			491 234 58
Prepayments	101 380 78			101 380 78
Total Current and Accrued Assets	8 036 565 80	25 156 842 93	22 525 286 41	10 668 122 32
DEFERRED DEBITS				
Clearing Accounts	5 392 99			5 392 99
Other Work in Progress	181 008 54	896 40(2)		181 904 94
Other Deferred Debits	42 641 45			42 641 45
Total Deferred Debits	229 042 98	896 40		229 939 38
TOTAL ASSETS AND OTHER DEBITS	$96 507 829 47	$36 363 780 43	$36 066 892 86	$96 804 717 04

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
PRO FORMA CONSOLIDATED BALANCE SHEET
AS OF DECEMBER 31, 1941
GIVING EFFECT TO FINANCING TRANSACTIONS
CONSUMMATED ON FEBRUARY 6, 1942
AND THE ACQUISITION ON THAT DATE OF CAPITAL STOCK AND DEBT OF
MICHIGAN GAS TRANSMISSION CORPORATION AND
INDIANA GAS DISTRIBUTION CORPORATION
AND PURCHASE OF CERTAIN PROPERTY OF OHIO FUEL GAS COMPANY

L I A B I L I T I E S	Combined	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Consolidated
CAPITAL STOCK				
Common Stock	$25 060 566 43	$ 4 876 391 43(6)		$20 184 175 00
Preferred Capital Stock	11 000 000 00	10 000 000 00(3)	$15 000 000 00(1)	16 000 000 00
Premium and Assessment on Capital Stock	-		42 489 91(1)	42 489 91
Total Capital Stock	36 060 566 43	14 876 391 43	15 042 489 91	36 226 664 91
LONG-TERM DEBT				
Bonds	18 250 000 00		10 000 000 00(1)	28 250 000 00
Advances on Notes	6 026 500 00	6 026 500 00(6)		-
Advances on Open Account	2 435 000 00	2 435 000 00(6)		-
Miscellaneous Long-Term Debt	5 009 789 19			5 009 789 19
Total Long-Term Debt	31 721 289 19	8 461 500 00	10 000 000 00	33 259 789 19
CURRENT AND ACCRUED LIABILITIES				
Accounts Payable	1 857 551 54	685 092 26(4)		1 172 459 28
Accounts Payable to Associated Companies	574 078 57	574 078 57(5)		-
Dividends Declared	905 086 42			905 086 42
Matured Long-Term Debt	96 822 14			96 822 14
Matured Interest	4 230 00			4 230 00
Customers Deposits	1 495 00			1 495 00
Taxes Accrued	3 639 192 80			3 639 192 80
Interest Accrued	90 231 55		29 166 63(1)	119 398 18
Other Current and Accrued Liabilities	5 441 43		83 186 39(1)	88 627 82
Total Current and Accrued Liabilities	7 174 129 45	1 259 170 83	112 353 02	6 027 311 64
DEFERRED CREDITS				
Other Deferred Credits	43 982 92		2 000 00(1)	45 982 92
RESERVES				
Reserve for Depreciation of Gas Plant	11 770 748 00	36 000 00(6)		11 734 748 00
Reserve for Amortization and Depletion of Producing Natural Gas Land and Land Rights	447 164 67			447 164 67
Reserve for Abandoned Leases	415 074 53			415 074 53
Reserve for Uncollectible Accounts	54 156 24			54 156 24
Injuries and Damages	128 118 38			128 118 38
Other Reserves	944 337 88			944 337 88
TOTAL RESERVES	13 759 599 70	36 000 00		13 723 599 70
CONTRIBUTIONS IN AID OF CONSTRUCTION	55 015 53			55 015 53
SURPLUS				
Capital Surplus	166 162 76	166 162 76(6)		-
		59 178 08(3)		
Earned Surplus	7 527 083 49	1 552 26(6)		7 466 353 15(2)
Total Surplus	7 693 246 25	226 893 10		7 466 353 15
TOTAL LIABILITIES AND OTHER CREDITS	$96 507 829 47	$24 859 955 36	$25 156 842 93	$96 804 717 04

[fol. 15496] Exhibit 194.

Page 3.

Witness Watkins.

Panhandle Eastern Pipe Line Company and Subsidiary Companies:

Notes to Pro Forma Balance Sheet.

(1) Including $2,750,000 principal amount of United States Treasury Notes of Texas, Series B—1943 (Tax Anticipation Notes).

(2) Surplus at December 31, 1941, was restricted by the Certificate of Incorporation as to payment of common stock and participating dividends, in the amount of $3,581,379.41.

[fol. 15497] Exhibit 194 Page 4

Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Pro Forma Balance Sheet

December 31, 1941

Adjusting Journal Entries

(1)

Cash	$25 156 842 93	
Preferred Capital Stock		$15 000 000 00
Premium and Assessment on Capital Stock		42 489 91
Bonds		10 000 000 00
Interest Accrued		29 166 63
Other Current and Accrued Liabilities (Accrued Dividends)		83 186 39
Other Deferred Credits		2 000 00

To record the sale of $15,000,000 principal amount of 5.00% Cumulative Preferred Stock and $10,000,000 principal amount of First Mortgage and First Lien 3% Bonds, Series C.

(2)

Gas Plant in Service	$ 439 326 08	
Investments in Securities of Associated Companies	8 331 715 02	
Advances to Associated Companies	2 435 000 00	
Other Work in Progress	896 40	
Cash		$11 206 937 50

To record the purchase of stock and debt of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation and certain properties of Ohio Fuel Gas Company.

(3)

Preferred Capital Stock	$10 000 000 00	
Earned Surplus	59 178 08	
Cash		$10 059 178 08

To [illegible] the redemption of the Company's [illegible] Preferred Stock and the payment of [illegible] dividends thereon to date of redemption.

(4)

Accounts Payable	$ 685 092 26	
Accounts Receivable		$ 685 092 26

To eliminate amount of accounts payable to Panhandle Eastern Pipe Line Company for collections to be made for Panhandle's account by Michigan Gas Transmission Corporation.

[fol. 15498]

(5)

Accounts Payable to Associated Companies	$ 574 078 57	
Accounts Receivable		$ 574 078 57

To eliminate current indebtedness due from Subsidiary Companies

(6)

Common Stock	$ 4 876 391 43	
Advances on Notes	6 026 500 00	
Advances on Open Account	2 435 000 00	
Reserve for Depreciation of Gas Plant	36 000 00	
Capital Surplus	166 162 76	
Earned Surplus	1 552 26	
Gas Plant		$ 139 500 00
Investments in Associated Companies		10 967 106 45
Advances to Associated Companies		2 435 000 00

To eliminate investment of Panhandle Eastern Pipe Line Company in Illinois Natural Gas Company, Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation.

5505 15499 EXHIBIT 19

PAGE 1

WITNESS

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
PRO FORMA CONSOLIDATED INCOME ACCOUNT (NOTE A)
FOR THE YEAR ENDED DECEMBER 31, 1941

	Combined	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Consolidated
INCOME				
Operating Revenues				
Gas	$22 502 407 95	$5 460 222 08 (4)		$17 042 185 87
Gasoline	735 077 94			735 077 94
Miscellaneous	12 309 09			12 309 09
Total Operating Revenues	23 249 794 98	5 460 222 08		17 789 572 90
Operating Revenues Deductions				
Operation and Maintenance	9 289 833 61		$5 460 222 08 (4)	3 829 611 53
Depreciation (Including Amortization)	2 308 521 00			2 308 521 00
Amortization and Depletion of Producing Natural Gas Land and Land Rights	90 177 06			90 177 06
Abandoned Leases	74 685 45			74 685 45
Amortization of Other Limited Term Gas Investments	332 142 69			332 142 69
Charges in Lieu of Federal Income and Excess-Profits Taxes	823 881 49			823 881 49
Taxes				
State, Local and Miscellaneous Federal	901 387 31			901 387 31
Federal Income	1 922 068 72	87 000 00 (1)		2 009 068 72
Federal Excess-Profits	994 278 91	13 000 00 (1)		1 007 278 91
Total Operating Revenues Deductions	16 736 976 24	100 000 00	5 460 222 08	11 376 754 16
Net Operating Revenues	6 512 818 74	5 560 222 08	5 460 222 08	6 412 818 74
OTHER INCOME				
Interest Revenues	18 798 71			18 798 71
Gross Income	6 531 617 45	5 560 222 08	5 460 222 08	6 431 617 45
INCOME DEDUCTIONS				
Interest on Long-Term Debt	1 163 593 65	300 000 00 (2)	511 690 00 (3)	951 903 65
Amortization of Debt Discount and Expense	27 486 70			27 486 70
Other Interest Charges	18 818 68			18 818 68
Interest Charged to Construction (Credit)	15 953 18			15 953 18
Total Income Deductions	1 193 945 85	300 000 00	511 690 00	982 255 85
NET INCOME	$ 5 337 671 60	$5 860 222 08	$5 971 912 08	$5 449 361 60

[fol. 15500] Exhibit 195 Page 2

Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Adjustments And Eliminations

Pro Forma Consolidated Income Account

For The Year Ended December 31, 1941

Adjustments		
(1)		
Increase in Federal income taxes of Panhandle Eastern Pipe Line Company resulting from changes in Net Income		
Federal Income—		
On dividends $533,178.86 x 15% x 31%	$ 25 000 00	
On net interest $211,690 x 12.4%	27 000 00	
Increase due to adjustment in excess-profits taxes	35 000 00	$ 87 000 00
Federal Excess Profits—		
On net interest $211,690 x 60%	127 000 00	
Less Credit due to adjustment in excess-profits credit based on income, resulting from change in company's capital structure	114 000 00	13 000 00
(2)		
Increase in interest on long-term debt resulting from the issuance of $10,000,000 principal amount of First Mortgage and First Lien 3% Bonds, Series C	$ 300 000 00	
(3)		
Decrease in interest on long-term debt as the result of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation becoming subsidiaries of Panhandle Eastern Pipe Line Company	$ 511 690 00	
Eliminations		
(4)		
Operating Revenue — Gas	$ 5 400 222 08	
Operation and Maintenance		$5 400 222 08
To eliminate gas sold to Subsidiary Companies		

[fol. 15501]

Exhibit 195.

Page 3.

Witness Watkins.

Panhandle Eastern Pipe Line Company and Subsidiary Companies, Note A to the Pro Forma Consolidated Income Account for the Year Ended December 31, 1941.

The condensed pro forma statement of consolidated income of the company and its subsidiary, and Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation has been prepared from the books of the companies (1) on the basis that the financing of the cost of the acquisition of the outstanding stock and indebtedness of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, which resulted in annual interest costs of $300,000, and which was consummated on February 6, 1942, had been effected January 1, 1941, that the interest expense shown as applicable to obligations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to Columbia Gas and Electric Corporation, their then parent, would have aggregated the same amount had the Panhandle Eastern Pipe Line Company been the parent company and that dividends had been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to the extent of their net income for the year and (2) after giving effect to estimated increases in Federal income taxes, which would have resulted had such interest and dividends been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, to Panhandle Eastern Pipe Line Company to the full extent of their net income.

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EXHIBIT 196

PAGE 1

WITNESS WATKINS

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
PRO FORMA CONSOLIDATED INCOME ACCOUNT (NOTE A)
FOR THE YEAR ENDED DECEMBER 31, 1941
AS ADJUSTED TO GIVE EFFECT TO FEDERAL INCOME AND FEDERAL EXCESS-PROFITS TAX RATES PROPOSED IN RECOMMENDATION OF SECRETARY OF TREASURY MORGENTHAU ON MARCH 3, 1942, BEFORE HOUSE WAYS AND MEANS COMMITTEE

	Combined	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Consolidated
INCOME				
Operating Revenues				
Gas	$22 502 407 95	$5 460 222 08 (5)		$17 042 185 87
Gasoline	735 077 94			735 077 94
Miscellaneous	12 309 09			12 309 09
Total Operating Revenues	23 249 794 98	5 460 222 08		17 789 572 90
Operating Revenues Deductions				
Operation and Maintenance	9 289 833 61		$5 460 222 08 (5)	3 829 611 53
Depreciation (Including Amortization)	2 308 521 00			2 308 521 00
Amortization and Depletion of Producing Natural Gas Land and Land Rights	90 177 06			90 177 06
Abandoned Leases	74 685 45			74 685 45
Amortization of Other Limited Term Gas Investments	332 142 69			332 142 69
Charges in Lieu of Federal Income and Excess-Profits Taxes	823 881 49	186 118 51 (1)		1 010 000 00
State, Local and Miscellaneous Federal	901 387 31			901 387 31
Federal Income	1 922 068 72	1 325 931 28 (1) 152 000 00 (2)		3 400 000 00
Federal Excess-Profits	994 278 91	274 721 09 (1) 16 000 00 (2)		1 285 000 00
Total Operating Revenues Deductions	16 736 976 24	1 954 770 88	5 460 222 08	13 231 525 04
Net Operating Revenues	6 512 818 74	7 414 992 96	5 460 222 08	4 558 047 86
OTHER INCOME				
Interest Revenues	18 798 71			18 798 71
Gross Income	6 531 617 45	7 414 992 96	5 460 222 08	4 576 846 57
INCOME DEDUCTIONS				
Interest on Long-Term Debt	1 163 593 65	300 000 00 (3)	511 690 00 (4)	951 903 65
Amortization of Debt Discount and Expense	27 486 70			27 486 70
Other Interest Charges	18 818 68			18 818 68
Interest Charged to Construction (Credit)	15 953 18			15 953 18
Total Income Deductions	1 193 945 85	300 000 00	511 690 00	982 255 85
NET INCOME	$ 5 337 671 60	$7 714 992 96	$5 971 912 08	$3 594 590 72

[fol. 15503] Exhibit 196.

Page 2.

Witness Watkins.

Panhandle Eastern Pipe Line Company and Subsidiary Companies, Note A to the Pro Forma Consolidated Income Account for the year ended December 31, 1941.

The condensed pro forma statement of consolidated income of the company and its subsidiary and Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation has been prepared from the books of the companies (1) on the basis that the financing of the cost of the acquisition of the outstanding stock and indebtedness of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, which resulted in annual interest costs of $300,000, and which was consummated on February 6, 1942, had been effected January 1, 1941, that the interest expense shown as applicable to obligations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to Columbia Gas and Electric Corporation, their then parent, would have aggregated the same amount had the Panhandle Eastern Pipe Line Company been the parent company and that dividends had been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to the extent of their net income for the year and (2) after giving effect to estimated increases in Federal income taxes, which would have resulted had such interest and dividends been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, to Panhandle Eastern Pipe Line Company to the full extent of their net income.

[fol. 15504] Exhibit 196 Page 3

Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Adjustments And Eliminations

Pro Forma Consolidated Income Account
For The Year Ended December 31, 1941

Giving Effect To Federal Income And Federal
Excess-Profits Tax Rates Proposed In
Recommendation Of Secretary Of Treasury Morgenthau

On March 3, 1942,

Before House Ways And Means Committee

Adjustments

(1)

Increases in Federal Income Tax, Federal Excess-Profits Tax and Charges in Lieu of Federal Income and Excess-Profits Taxes of Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company, Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation resulting from the application of tax rates recommended by Secretary of Treasury Morgenthau on March 3, 1942.

Federal Income Taxes	$1 325 931 28	
Federal Excess-Profits Taxes	274 721 39	
Charges in Lieu of Federal Income and Excess-Profits Taxes	186 118 51	

(2)

Increase in Federal Income Taxes of Panhandle Eastern Pipe Line Company resulting from changes in Net Income

Federal Income —		
On dividends $533,178.86 x 15% x 55%	$ 44 000 00	
On net interest $211,690 x 13.75%	29 000 00	
Increase due to adjustment in excess-profits taxes	79 000 00	$152 000 00
Excess Profits —		
On net interest $211,690 x 75%	159 000 00	
Less: Credit due to adjustment in excess-profits credit based on income, resulting from change in company's capital structure	143 000 00	16 000 00

(3)

Increase in interest on long-term debt resulting from the issuance of $10,000,000 principal amount of First Mortgage and First Lien 3% Bonds, Series C	$ 300 000 00

	(4)
Decrease in interest on long-term debt as the result of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation becoming subsidiaries of Panhandle Eastern Pipe Line Company.	$ 511 680 00

[Vol. 15305]

Eliminations

	(5)	
Operating Revenue — Gas	$5 460 222 08	
Operation and Maintenance		$5 460 222 08

To eliminate gas sold to Subsidiary Companies

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
BALANCE SHEET - PER BOOKS
FEBRUARY 28, 1942

A S S E T S	Combined	Inter-Company Eliminations Debit	Inter-Company Eliminations Credit	Consolidated	
GAS PLANT	$ 85 137 855 47	$	$ 139 500 00	$84 998 355 47	
INVESTMENTS AND FUND ACCOUNTS					
Investments in Securities of Associated Companies	11 044 568 47		11 044 568 47	-	
Advance to Associated Companies	2 435 000 00		2 435 000 00	-	
Other Investments	2 938 862 66		-	2 938 862 66	(1)
Total Investments and Fund Accounts	16 418 431 13		13 479 568 47	2 938 862 66	
CURRENT AND ACCRUED ASSETS					
Cash	6 756 730 52			6 756 730 52	
Special Deposits	100 017 25			100 017 25	
Working Funds (Petty Cash and Advances)	18 197 66			18 197 66	
			769 966 13	(2)	
Accounts Receivable	3 749 885 82		626 220 16	(3)	2 353 699 53
Interest and Dividends Receivable	8 035 66			8 035 66	
Material and Supplies	515 951 74			515 951 74	
Prepayments	208 856 96			208 856 96	
Total Current and Accrued Assets	11 357 675 61		1 396 186 29	9 961 489 32	
DEFERRED DEBITS					
Clearing Accounts	14 671 40			14 671 40	
Retirement Work in Progress	2 701 47			2 701 47	
Other Work in Progress	275 487 49			275 487 49	
Other Deferred Debits	60 841 49			60 841 49	
Total Deferred Debits	353 701 85			353 701 85	
TOTAL ASSETS AND OTHER DEBITS	$113 267 664 06	$	$15 015 254 76	$98 252 409 30	

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
BALANCE SHEET - PER BOOKS
FEBRUARY 28, 1942

LIABILITIES	Combined	Inter-Company Eliminations Debit	Inter-Company Eliminations Credit	Consolidated
CAPITAL STOCK				
Common Stock	$ 25 060 566 43	$ 4 876 391 43(1)	$	$20 184 175 00
Preferred Capital Stock	16 000 000 00			16 000 000 00
Premium and Assessment on Capital Stock	42 489 93			42 489 93
Total Capital Stock	41 103 056 36	4 876 391 43		36 226 664 93
LONG TERM DEBT				
Bonds	28 250 000 00			28 250 000 00
Advances on Notes	6 026 500 00	6 026 500 00(1)		-
Advances on Open Account	2 435 000 00	2 435 000 00(1)		-
Miscellaneous Long Term Debt	5 006 445 52			5 006 445 52
Total Long Term Debt	41 717 945 52	8 461 500 00		33 256 445 52
CURRENT AND ACCRUED LIABILITIES				
Accounts Payable	663 120 02			663 120 02
		769 966 13(2)		
Accounts Payable to Associated Companies	1 396 186 29	626 220 16(3)		-
Dividends Declared				-
Matured Long Term Debt	94 781 25			94 781 25
Matured Interest	3 720 00			3 720 00
Customers' Deposits	1 550 00			1 550 00
Taxes Accrued	4 992 151 66			4 992 151 66
Interest Accrued	230 348 94			230 348 94
Other Current and Accrued Liabilities	91 909 52			91 909 52
Total Current and Accrued Liabilities	7 473 767 68	1 396 186 29		6 077 581 39
DEFERRED CREDITS				
Other Deferred Credits	45 469 99			45 469 99
RESERVES				
Reserve for Depreciation of Gas Plant	12 240 093 89	36 000 00(1)		12 204 093 89
Reserve for Amortization and Depletion of Producing Natural Gas Land and Land Rights	~~726 268 39~~ 466,787.94			~~726 268 39~~ 466,7
Reserve for Abandoned Leases	~~167 522 83~~ 427,502.68			~~167 522 83~~ 427,5
Reserve for Uncollectible Accounts	57 165 28			57 165 28
Injuries and Damages	132 025 81			132 025 81
Other Reserves	956 731 74			956 731 74
Total Reserves	14 279 807 34	36 000 00		14 243 807 34
CONTRIBUTIONS IN AID OF CONSTRUCTION	55 015 53			55 015 53
SURPLUS				
Capital Surplus	166 162 76	166 162 76(1)		-
Earned Surplus	8 426 438 88	79 014 28(1)		8 347 424 60(2)
Total Surplus	8 592 601 64	245 177 04		8 347 424 60
TOTAL LIABILITIES AND OTHER CREDITS	$113 267 664 06	$15 015 254 76	$	$98 252 409 30

[fol. 15508] Exhibit 197.

Page 3.

Witness Watkins.

Panhandle Eastern Pipe Line Company and Subsidiary Companies.

Notes to Balance Sheet.

February 28, 1942.

(1) Including $2,750,000 principal amount of United States Treasury Notes of Texas, Series B—1943 (Tax Anticipation Notes).

(2) Surplus at February 28, 1942, was restricted by the provisions of the First Supplemental Indenture as to payment of common stock dividends, in the amount of $2,906,540.64.

[fol. 15509] Exhibit 197 Page 4

Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Balance Sheet — Per Books

February 28, 1942

Inter-Company Eliminations

	(1)	
Common Stock	$4 876 391 43	
Advances on Notes	6 026 500 00	
Advances on Open Account	2 435 000 00	
Reserve for Depreciation of Gas Plant	36 000 00	
Capital Surplus	166 162 76	
Earned Surplus	79 014 28	
Gas Plant		$ 139 500 00
Investments in Associated Companies		11 044 368 47
Advances to Associated Companies		2 435 000 00

To eliminate investment of Panhandle Eastern Pipe Line Company in Illinois Natural Gas Company, Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation.

320—12 466

(2)

Accounts Payable	$ 769 966 13	
Accounts Receivable		$ 769 966 13

To eliminate amount of accounts payable to Panhandle Eastern Pipe Line Company for collections to be made for Panhandle's account by Michigan Gas Transmission Corporation.

(3)

Accounts Payable to Associated Companies	$ 626 220 16	
Accounts Receivable		$ 626 220 16

To eliminate current indebtedness due from Subsidiary Companies

5519 15510

EXHIBIT 198

PAGE 1

WITNESS WATKI

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
PRO FORMA CONSOLIDATED INCOME ACCOUNT (NOTE A)
FOR THE TWELVE MONTHS ENDED FEBRUARY 28, 1942

	Combined	Adjustments and Eliminations Debits	Adjustments and Eliminations Credits	Consolidated
INCOME				
Operating Revenues				
Gas	$21 231 359 22	$3 683 887 84(4)		$17 547 471 38
Gasoline	816 417 10			816 417 10
Miscellaneous	14 489 09			14 489 09
Total Operating Revenues	22 062 265 41	3 683 887 84		18 378 377 57
Operating Revenues Deductions				
Operation and Maintenance Expenses	7 625 150 62		3 683 887 84(4)	3 941 262 78
Depreciation (Including Amortization)	2 317 962 82			2 317 962 82
Amortization and Depletion of Producing Natural Gas Land and Land Rights	92 277 05			92 277 05
Abandoned Leases	74 459 60			74 459 60
Amortization of Other Limited Term Gas Investments	332 950 65			332 950 65
Charges in Lieu of Federal Income and Excess-Profits Taxes	664 881 49			664 881 49
Taxes				
State, Local and Miscellaneous Federal	895 845 63			895 845 63
Federal Income	2 125 511 20	83 000 00(1)		2 208 511 20
Federal Excess-Profits	1 491 979 63		3 000 00(1)	1 488 979 63
Total Operating Revenues Deductions	15 621 018 69	83 000 00	3 686 887 84	12 017 130 85
Net Operating Revenues	6 441 246 72	3 766 887 84	3 686 887 84	6 361 246 72
OTHER INCOME				
Interest Revenues	55 601 34	35 256 25(5)		20 345 09
Gross Income	6 496 848 06	3 802 144 09	3 686 887 84	6 381 591 81
INCOME DEDUCTIONS				
Interest on Long-Term Debt	1 043 226 38	279 166 66(2)	464 561 25(2)	857 831 79
Interest on Debt to Associated Companies	35 256 25		35 256 25(5)	-
Other Interest Charges	26 321 18			26 321 18
Interest Charged to Construction (Credit)	47 823 10			47 823 10
Total Income Deductions	1 056 980 71	279 166 66	499 817 50	836 329 87
NET INCOME	$5 439 867 35	$4 081 310 75	$4 186 705 34	$5 545 261 94

[fol. 15511] Exhibit 198.

Page 2.

Witness Watkins.

Panhandle Eastern Pipe Line Company and Subsidiary Companies, Note A to the Pro Forma Consolidated Income Account for the 12 Months Ended February 28, 1942.

The condensed pro forma statement of consolidated income of the company, Illinois Natural Gas Company, Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation has been prepared from the books of the companies (1) on the basis that the financing of the cost of the acquisition of the outstanding stock and indebtedness of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, which resulted in annual interest costs of $300,000, and which was consummated on February 6, 1942, had been effected March 1, 1941; that the interest expense shown as applicable to obligations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to Columbia Gas and Electric Corporation, their parent company until February 6, 1942, would have aggregated the same amount had the Panhandle Eastern Pipe Line Company been the parent company and that dividends had been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to the extent of their net income for the 12 months ended February 28, 1942 and (2) after giving effect to estimated increases in Federal income taxes, which would have resulted had such interest and dividends been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, to Panhandle Eastern Pipe Line Company to the full extent of their net income.

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Adjustments And Eliminations

Pro Forma Consolidated Income Account

For The Twelve Months Ended February 28, 1942

Adjustments			
(1)			
Increase in Federal Income Taxes of Panhandle Eastern Pipe Line Company resulting from changes in Net Income			
Federal Income			
On Dividends $532,509.38 x 15% x 31%		$ 25 000	
On Net Interest $185,394.59 x 12.4%		23 000	
Increase due to adjustment in Excess Profits taxes		35 000	$83 000
Federal Excess Profits			
On Net Interest $185,394.59 x 60%		111 000	
Less: Credit due to adjustment in Excess Profits credit based on income resulting from change in Company's capital structure		114 000	3 000
(2)			
Increase in interest on Long-Term Debt resulting from issuance of $10,000,000 principal amount of First Mortgage and First Lien 3% Bonds, Series C			279 166 66
(3)			
Decrease in interest on Long-Term Debt as the result of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation becoming subsidiaries of Panhandle Eastern Pipe Line Company			464 561 25
Eliminations			
(4)			
Operating Revenue – Gas		3 683 887 84	
Operation and Maintenance			3 683 887 84
To eliminate gas sold to subsidiary companies.			
(5)			
Interest Revenue		35 256 25	
Interest on Debt to Associated Companies			35 256 25
To eliminate interest due from subsidiary companies.			

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EXHIBIT 199

PAGE 1

WITNESS WATKIN

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
PRO FORMA CONSOLIDATED INCOME ACCOUNT (NOTE A)
FOR THE TWELVE MONTHS ENDED FEBRUARY 28, 1942
AS ADJUSTED TO GIVE EFFECT TO FEDERAL INCOME AND FEDERAL EXCESS PROFITS TAX RATES PROPOSED IN RECOMMENDATION OF SECRETARY OF TREASURY MORGENTHAU ON MARCH 3, 1942 BEFORE HOUSE WAYS AND MEANS COMMITTEE

	Combined	Adjustments and Eliminations Debits	Adjustments and Eliminations Credits	Consolidated
INCOME				
Operating Revenues				
Gas	$21 231 359 22	$3 683 887 84(5)		$17 547 471 38
Gasoline	816 417 10			816 417 10
Miscellaneous	14 489 09			14 489 09
Total Operating Revenues	22 062 265 41	3 683 887 84		18 378 377 57
Operating Revenues Deductions				
Operation and Maintenance Expenses	7 625 150 62		$3 683 887 84(5)	3 941 262 78
Depreciation (Including Amortization)	2 317 962 82			2 317 962 82
Amortization and Depletion of Producing Natural Gas Land and Land Rights	92 277 05			92 277 05
Abandoned Leases	74 459 60			74 459 60
Amortization of Other Limited Term Gas Investments	332 950 65			332 950 65
Charges in Lieu of Federal Income and Excess Profits Taxes	664 881 49	150 118 51(1)		815 000 00
Taxes				
State, Local and Miscellaneous Federal	895 845 63			895 845 63
		149 000 00(2)		
Federal Income	2 125 511 20	1 235 488 80(1)		3 510 000 00
Federal Excess-Profits	1 491 979 63	384 020 37(1)	4 000 00(2)	1 872 000 00
Total Operating Revenues Deductions	15 621 018 69	1 918 627 68	3 687 887 84	13 851 758 53
Net Operating Revenues	6 441 246 72	5 602 515 52	3 687 887 84	4 526 619 04
OTHER INCOME				
Interest Revenues	55 601 34	35 256 25(6)		20 345 09
Gross Income	6 496 848 06	5 637 771 77	3 687 887 84	4 546 964 13
INCOME DEDUCTIONS				
Interest on Long Term Debt	1 043 226 38	279 166 66(3)	464 561 25(4)	857 831 79
Interest on Debt to Associated Companies	35 256 25		35 256 25(6)	
Other Interest Charges	26 321 18			26 321 18
Interest Charged to Construction (Credit)	47 823 10			47 823 10
Total Income Deductions	1 056 980 71	279 166 66	499 817 50	836 329 87
NET INCOME	$ 5 439 867 35	$5 916 938 43	$4 187 705 34	$ 3 710 634 26

{fol. 15544}

Exhibit 199.

Page 2.

Witness Watkins.

Panhandle Eastern Pipe Line Company and Subsidiary Companies, Note A to the Pro Forma Consolidated Income Account for the 12 Months Ended February 28, 1942.

The condensed pro forma statement of consolidated income of the company, Illinois Natural Gas Company, Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation has been prepared from the books of the companies (1) on the basis that the financing of the cost of the acquisition of the outstanding stock and indebtedness of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, which resulted in annual interest costs of $300,000, and which was consummated on February 6, 1942, had been effected March 1, 1941, that the interest expense shown as applicable to obligations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to Columbia Gas and Electric Corporation, their parent company until February 6, 1942, would have aggregated the same amount had the Panhandle Eastern Pipe Line Company been the parent company and that dividends had been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to the extent of their net income for the 12 months ended February 28, 1942 and (2) after giving effect to estimated increases in Federal income taxes, which would have resulted had such interest and dividends been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, to Panhandle Eastern Pipe Line Company to the full extent of their net income.

[fol. 15515] Exhibit 199.

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Adjustments And Eliminations

Pro Forma Consolidated Income Account

For The Twelve Months Ended February 28, 1942

Giving Effect To Federal Income And Federal Excess-Profits Tax Rates Proposed In Recommendation Of Secretary Of Treasury Morgenthau On March 3, 1942

Before House Ways And Means Committee

Adjustments

(1)

Increases in Federal Income Tax, Federal Excess-Profits Tax and Charges in Lieu of Federal Income and Excess-Profits Taxes of Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company, Michigan Gas Transmission Corporation, and Indiana Gas Distribution Corporation resulting from the application of tax rates recommended by Secretary of Treasury Morgenthau on March 3, 1942

Federal Income Taxes	$1 235 488 80
Federal Excess-Profits Taxes	384 020 37
Charges in Lieu of Federal Income and Excess-Profits Taxes	150 418 51

(2)

Increase in Federal Income Taxes of Panhandle Eastern Pipe Line Company resulting from changes in Net Income

Federal Income		
On Dividends $532,509.38 x 15% x 55%	$ 44 000	
On Net Interest $185,394.59 x 13.75%	25 000	
Increase due to adjustment in Excess-Profits taxes	80 000	149 000 00
Federal Excess-Profits		
On Net Interest $185,394.59 x 75%	139 000	
Less: Credit due to adjustment in Excess-Profits Credit based on income,		

(3)

Increase in Interest on Long-Term Debt resulting from issuance of $10,000,000 principal amount of First Mortgage and First Lien 3% Bonds, Series C		279 166 66

(4)

Decrease in Interest on Long-Term Debt as the result of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation becoming subsidiaries of Panhandle Eastern Pipe Line Company		464 561 25

[fol. 15516] Eliminations

(5)

Operating Revenue — Gas	3 683 887 84	
Operation and Maintenance		3 683 887 84

To eliminate gas sold to subsidiary companies.

(6)

Interest Revenue	35 256 25	
Interest on Debt to Associated Companies		35 256 25

To eliminate interest due from subsidiary companies.

Exhibit 200

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
(INCLUDING MICHIGAN GAS TRANSMISSION CORPORATION AND INDIANA GAS DISTRIBUTION CORPORATION)

COMPARA
DECEMBER 31,
1941, DECEMBE

	December 31, 1939	December 31, 1940	June 30, 1941	December 31, 1941
INTANGIBLE PLANT				
Organization	$ 126 744 25	$ 126 744 25	$ 125 625 13	$ 125 625 13
Franchises and consents	355 56	355 56	355 56	355 56
Miscellaneous intangible plant	182 597 78	182 597 78	149 033 79	149 033 79
Totals Intangible Plant	309 697 59	309 697 59	275 014 48	275 014 48
PRODUCTION PLANT				
(a) Natural Gas Production Plant				
Natural gas producing leaseholds - drilled	949 880 70	996 613 19	1 010 996 84	1 017 993 19
Natural gas producing leaseholds - not drilled	865 472 36	759 239 20	734 210 55	747 784 12
Other land and land rights	299 00	299 00	299 00	299 00
Other production system structures	46 768 78	46 426 96	46 808 76	47 797 15
Producing gas wells - well construction	1 937 811 04	2 023 739 02	2 027 024 28	2 067 934 08
Producing gas wells - well equipment	565 682 80	592 983 63	593 266 66	604 915 00
Drilling and cleaning equipment	19 971 18	20 762 34	20 676 46	20 691 46
Purification and residual refining equipment	629 652 39	658 355 27	699 866 27	704 263 18
Other production equipment	-	399 08	399 08	826 16
Totals Natural Gas Production Plant	5 015 538 25	5 098 817 69	5 133 547 90	5 212 503 34
TRANSMISSION PLANT				
Land	144 018 02	143 113 74	144 758 45	142 659 72
Land rights	1 347 633 26	1 429 658 97	1 432 238 42	1 437 141 90
Pumping station structures	1 317 532 82	1 615 740 81	1 749 083 21	1 867 468 88
Measuring and regulating station structures	101 481 02	119 920 41	122 036 57	127 237 32
Other transmission structures	389 308 04	398 229 59	447 915 55	516 364 59
Mains	49 855 002 24	55 979 211 40	56 016 132 77	56 224 705 78
Pumping station equipment	8 869 399 29	9 783 622 91	10 246 876 58	10 808 322 98
Measuring and regulating station equipment	618 533 23	653 752 05	658 625 14	681 981 26
Other transmission equipment	42 562 38	52 014 94	49 071 45	48 022 42
Totals Transmission Plant	$62 685 470 24	$70 175 264 82	$70 866 738 14	$71 853 904 85

PANIES
RIBUTION CORPORATION)

COMPARATIVE STATEMENT OF GAS PLANT
DECEMBER 31, 1939, DECEMBER 31, 1940, JUNE 30, 1941, DECEMBER 31, 1941 AND FEBRUARY 28, 1942

June 30, 1941	December 31, 1941	February 28, 1942
$ 125 625 13	$ 125 625 13	$ 125 625 13
355 56	355 56	355 56
149 033 79	149 033 79	149 033 79
275 014 48	275 014 48	275 014 48
1 010 996 84	1 017 993 19	1 028 207 96
734 210 55	747 784 12	739 087 60
299 00	299 00	299 00
46 808 76	47 797 15	47 797 15
2 027 024 28	2 067 934 08	2 078 745 48
593 266 66	604 915 00	609 397 59
20 676 46	20 691 46	20 696 46
699 866 27	704 263 18	704 263 18
399 08	826 16	826 16
5 133 547 90	5 212 503 74	5 223 320 58
144 756 45	142 659 72	142 944 68
1 432 238 42	1 437 141 90	1 437 486 61
1 749 083 21	1 867 468 88	1 867 471 96
122 036 57	127 237 32	127 432 34
447 915 55	516 364 59	516 656 91
56 016 132 77	56 224 705 78	56 267 158 75
10 246 876 58	10 808 322 98	10 809 048 48
658 625 14	681 981 26	682 223 21
49 071 45	48 022 42	48 022 42
$70 866 738 14	$71 853 904 85	$71 898 445 36

Exhibit 200

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
(INCLUDING MICHIGAN GAS TRANSMISSION CORPORATION AND INDIANA GAS DISTRIBUTION CORPORATION)

COMPARATIVE
DECEMBER 31, 193
1941, DECEMBER 3

	December 31, 1939	December 31, 1940	June 30, 1941	December 31, 194
DISTRIBUTION PLANT				
Land and land rights	$ 1 140 80	$ 1 101 06	$ 565 62	$ 641 17
Structures and improvements	3 040 29	3 040 29	1 041 15	1 041 15
Mains	368 996 86	382 376 24	67 205 23	68 446 61
Pumping and regulating equipment	9 474 79	9 861 33	1 789 91	1 789 91
Services	71 179 02	77 176 95	26 160 57	28 387 99
Meters	68 926 58	74 873 32	16 704 95	19 770 72
Meter installations	9 617 21	10 278 49	5 175 90	5 510 49
House regulators and installations	29 620 45	32 340 07	16 238 83	17 495 79
Other distribution equipment	691 17	670 67	194 31	194 31
Totals Distribution Plant	362 687 17	591 718 42	135 076 50	143 278 17
GENERAL PLANT	-	-	-	-
General office structures				
Office furniture and equipment	86 415 21	96 311 31	95 049 79	104 814 65
Transportation equipment	124 986 61	146 870 18	146 230 49	166 532 35
Stores equipment	1 237 95	1 335 56	1 645 88	1 979 30
Shop equipment	-	-	-	-
Laboratory equipment	6 619 88	6 619 88	6 550 71	6 550 71
Tools and work equipment	37 272 65	46 321 78	54 451 22	59 178 14
Communication equipment	369 088 82	369 365 07	371 355 85	371 000 80
Miscellaneous equipment	101 86	101 86	-	2 097 05
Totals General Plant	625 722 88	666 925 64	675 283 94	712 153 00
OTHER UNDISTRIBUTED GAS PLANT				
Undistributed gas plant	19 730 34	19 730 34	19 730 34	19 730 34
Gas plant purchased	-	-	-	-
Totals Other Undistributed Gas Plant	19 730 34	19 730 34	19 730 34	19 730 34
Total Gas Plant Classified	69 218 846 47	76 862 154 50	77 105 391 30	73 216 554 18
Construction work in progress	467 974 13	693 888 95	496 609 65	2 910 734 48
Gas sales and purchase contracts	2 930 286 40	2 930 286 40	2 930 286 40	2 930 286 40
Reserve for amortization of gas sales and purchase contracts	1 172 114 40 *	1 465 143 00 *	1 611 657 30 *	1 758 171 60
Other gas sales and purchase contracts	386 197 00	372 006 38	365 334 99	352 897 28
Consolidation reduction in investment in subsidiary company	-		-	139 500 00
GAS PLANT	$71 831 189 60	$79 393 193 23	$79 285 965 04	$82 512 830 74

*. Denotes red figure

ARY COMPANIES
AS DISTRIBUTION CORPORATION)

COMPARATIVE STATEMENT OF GAS PLANT
DECEMBER 31, 1939, DECEMBER 31, 1940, JUNE 30, 1941, DECEMBER 31, 1941 AND FEBRUARY 28, 1942

40	June 30, 1941	December 31, 1941	February 28, 1942
	$ 565 62	$ 641 17	$ 641 17
	1 041 18	1 041 18	1 041 18
	67 205 23	68 446 61	68 446 61
	1 789 91	1 789 91	1 789 91
	26 160 57	28 387 99	28 387 99
	16 704 95	19 770 72	18 976 52
	5 175 90	5 510 49	5 510 49
	16 238 83	17 495 79	17 477 93
	194 31	194 31	194 31
	135 076 50	143 278 17	142 466 11
	95 049 79	104 814 65	104 713 40
	146 230 49	166 532 35	171 458 54
	1 645 88	1 979 30	1 979 30
	6 550 71	6 550 71	6 550 71
	54 451 22	59 178 14	59 384 13
	371 355 85	371 000 80	371 000 80
		2 097 05	2 097 05
	675 283 94	712 153 00	717 183 33
	19 730 34	19 730 34	19 730 34
			432 325 08
	19 730 34	19 730 34	452 056 42
	77 105 391 30	73 216 584 18	78 715 ~~508 01~~ 486 88
	496 509 65	2 910 734 48	4 944 820 83
	2 930 286 40	2 930 286 40	2 930 286 40
	1 611 657 30	1 758 171 60	1 807 009 70
	365 334 99	352 897 28	354 271 06
		139 500 00	139 500 00
	$79 285 965 04	$82 512 830 74	$84 998 ~~[illegible]~~ 855.47

MICHIGAN GAS TRANSMISSION CORPORATION

Line No.	Item (A)	1931 (B)	1932 (C)	1933 (D)	1934 (E)	1935 (F)	1936 (G)	1937 (H)	1938 (I)
1	INTANGIBLE PLANT								
2	Organization	$ 299 76	$ 299 76	$ 299 76	$ 299 76	$ 299 76	$ 10 332 75	$ 10 332 75	$ 10 33
3	Miscellaneous Intangible Plant	-	-	-	-	-	41 100 94	73 667 17	73 66
4	Totals - Intangible Plant	299 76	299 76	299 76	299 76	299 76	51 433 69	83 999 92	83 99
5	TRANSMISSION PLANT								
6	Land	-	-	-	185 82	185 82	20 586 57	21 233 25	21 72
7	Land Rights	72 423 05	75 949 52	76 052 52	76 052 52	76 092 48	205 755 13	223 596 44	223 61
8	Pumping Station Structures	-	-	-	-	-	67 615 48	228 695 63	228 76
9	Measuring & Regulating								
10	Station Structures	-	-	-	265 24	771 37	18 129 44	31 906 45	32 56
11	Other Transmission Systen								
12	Structures	-	-	-	-	-	3 676 95	32 954 64	33 139
13	Mains	2 267 630 45	2 276 016 34	2 276 679 13	2 277 249 09	2 277 701 32	7 071 580 18	7 507 864 36	7 533 34
14	Pumping Sta. Equipment	-	-	-	-	-	270 615 29	977 081 29	978 159
15	Measuring and Regulat-								
16	ing Equipment	-	-	-	815 41	3 234 22	28 146 36	85 055 69	88 377
17	Other Transmission Equipment	-	-	-	-	-	12 097 17	-	
18	Totals - Transmission								
19	Plant	2 340 053 50	2 351 965 86	2 352 731 65	2 354 568 08	2 357 985 21	7 698 202 57	9 108 387 75	9 139 698
20	GENERAL PLANT								
21	Office Furniture and								
22	Equipment	-	15 00	15 00	15 00	15 00	6 604 53	11 788 35	12 388
23	Transportation Equipment	-	1 787 22	-	-	-	10 583 27	15 990 05	15 414
24	Stores Equipment	-	-	-	-	-	-	-	
25	Tools & Work Equipment	-	99 60	136 84	181 67	240 47	3 605 39	6 075 17	7 945
26	Totals - General Plant	-	1 901 82	151 84	196 67	255 47	20 793 19	33 853 57	36 348
27	Total Gas Plant								
28	Classified	2 340 353 26	2 354 167 44	2 353 183 25	2 355 064 51	2 358 540 44	7 770 429 45	9 226 241 24	9 260 046
29	Construction Work in								
30	Progress	-	-	-	2 386 10	39 339 96	-	-	
31	GAS PLANT	$2 340 353 26	$2 354 167 44	$2 353 183 25	$2 357 450 61	$2 397 880 40	$7 770 429 45	$9 226 241 24	$9 260 046

EXHIBIT 15519
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WITNESS WATKINS

GAS PLANT

b e r 3 1					
936 (G)	1937 (H)	1938 (I)	1939 (J)	1940 (K)	1941 (L)
10 332 75 $	10 332 75 $	10 332 75 $	10 332 75 $	10 332 75 $	10 332 75
41 100 94	73 667 17	73 667 17	73 667 17	73 667 17	73 667 17
51 433 69	83 999 92	83 999 92	83 999 92	83 999 92	83 999 92
20 586 57	21 233 25	21 724 00	27 449 07	26 099 30	24 472 10
25 755 13	223 596 44	223 616 06	230 621 81	247 859 43	249 139 74
57 615 48	228 695 63	228 765 44	230 611 94	434 329 42	502 280 01
18 129 44	31 906 45	32 569 93	35 590 80	50 408 72	52 009 39
3 676 95	32 954 64	33 139 64	33 392 72	38 729 46	62 981 24
71 580 18	7 507 864.36	7 533 346 85	8 044 905 93	9 408 885 24	9 542 084 59
70 615 29	977 081 29	978 159 13	979 044 28	1 810 164 17	2 068 014 53
28 146 36	85 055 69	88 377 51	105 162 50	124 791 59	137 260 04
12 097 17	-	-	-	121 09	1 843 11
98 202 57	9 108 387 75	9 139 698 56	9 686 779 05	12 141 388 42	12 635 884 75
6 604 53	11 788 35	12 988 25	14 062 70	15 504 14	17 932 52
10 583 27	15 990 05	15 414 55	19 031 17	35 630 82	37 194 08
-	-	-	1 237 95	1.335 56	1 979 30
3 605 39	6 075 17	7 945 29	7 324 77	12 961 30	15 709 51
20 793 19	33 853 57	36 348 09	41 656 59	65 431 82	72 815 41
70 429 45	9 226 241 24	9 260 046 57	9 812 435 56	12 290 820 16	12 792 700 08
-	-	-	-	5 076 83	11 641 08
70 429 45	$9 226 241 24	$9 260 046 57	$9 812 435 56	$12 295 896 99	$12 804 341 16

$139,500 Items is included
See testimony of W. T. Rein
Morning 4/17 for disallowed
by SEC as intercompany
profit. Ex 201 reflects
to be R without adjustment

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	(A)	Panhandle Eastern Pipe Line Company (B)	(C)	(D)	Illinois Natural Gas Company (E)	(F)	(G)	Michigan Gas Transmis Corporation (H)	(I)
1	Estimated Excess Profits Net Income		$7 350 000			$128 000			$811 000
2	Less:								
3	Specific exemption	$ 5 000			$ 5 000			$ 5 000	
4	Excess profits credit based on income	4 618 000			-			603 000	
5	Excess profits credit based on invested capital	-			182 000			-	
7	Excess profits credit carry-over	-	4 623 000		36 000	223 000		-	608 000
8	Adjusted Excess Profits Net Income Subject to Tax		2 727 000			None			203 000
10	Excess Profits Tax:	Net Income	Tax		Net Income	Tax		Net Income	Tax
11	First $ 20 000 at 35%	20 000	7 000					20 000	7 000
12	Next 30 000 at 40%	30 000	12 000					30 000	12 000
13	Next 50 000 at 45%	50 000	22 500					50 000	22 500
14	Next 150 000 at 50%	150 000	75 000					103 000	51 500
15	Next 250 000 at 55%	250 000	137 500						
16	All Over 500 000 at 60%	2 227 000	1 336 200						
17		2 727 000			None			203 000	
18	Estimated Excess Profits Tax			$1 590 200			None		$
19	Normal Tax and Surtax								
20	Excess Profits Net Income	7 350 000			128 000			811 000	
21	Less: Excess Profits Tax	1 590 200			-			93 000	
22	Estimated Normal Tax and Surtax Net Income	5 759 800			128 000			718 000	
24	Normal Tax:								
25	Corporations with net income slightly over $25,000								
27	First $ 5 000 at 15%								
28	Next 15 000 at 17%								
29	Next 5 000 at 19%								
30	Next 8 445 at 37%								
31									
32	Corporations with net income over $25,000								
33	Flat Rate 24%	1 382 552			30 720			172 320	
34	Surtax:								
35	First $25 000 at 0%	1 500			1 500			1 500	
36	All Over 25 000 at 7%	401 436			7 210			48 510	
37	Estimated Normal Tax and Surtax		1 785 288			$39 430			$
38	Estimated Federal Income and Excess Profits Taxes		$3 375 488			$39 430			$

15520 EXHIBIT 202

PAGE 1

WITNESS WATKINS

STATEMENT OF ESTIMATED FEDERAL INCOME AND EXCESS-PROFITS TAXES FOR THE YEAR 1941
(BASED ON REVENUE ACT OF 1941)

BSIDIARY COMPANIES

Natural mpany (F)	(G)	Michigan Gas Transmission Corporation (H)	(I)	(J)	Indiana Gas Distribution Corporation (K)	(L)	(M)	Total Taxes (N)
28 000			$811 000			$36 000		
		$ 5 000			$ 5 000			
		603 000			23 700			
		-			-			
23 000		-	608 000		-	28 700		
None			203 000			7 300		
Tax		Net Income	Tax		Net Income	Tax		
		20 000	7 000		7 300	2 555		
		30 000	12 000					
		50 000	22 500					
		103 000	51 500					
		203 000			7 300			
	None			$ 93 000			$ 2 555	$ 95 755
28 000			811 000			36 000		
-			93 000			2 555		
28 000			718 000			33 445		
						750		
						2 550		
						950		
						3 125		
						7 375		
30 720			172 320					
1 500			1 500			1 500		
7 210			48 510			591		
	$39 430			222 330			9 466	2 056 514
	$39 430			$315 330			$12 021	$3 742 269

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

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Line No.	(A)	Panhandle Eastern Pipe Line Company (B)	(C)	(D)	Illinois Natural Gas Company (E)	(F)	(G)	Michigan Gas Transmission Corporation (H)	(I)	(J)
1	Estimated Excess Profits Net Income		$7 350 000			$128 000			$811 000	
2	Less:									
3	Specific Exemption	$ 5 000			$ 5 000			$ 5 000		
4	Excess profits credit based on income	4 618 000			-			603 000		
5	Excess profits credit based on in-									
6	vested capital	-			182 000			-		
7	Excess profits credit carry-over	-	4 623 000		36 000	223 000		-	608 000	
8	Adjusted Excess Profits Net Income Sub-									
9	ject to Tax		2 727 000			None			203 000	
10	Excess Profits Tax:	Net Income	Tax		Net Income	Tax		Net Income	Tax	
11	First $ 20 000 at 50%	20 000	10 000					20 000	10 000	
12	Next 30 000 at 55%	30 000	16 500					30 000	16 500	
13	Next 50 000 at 60%	50 000	30 000					50 000	30 000	
14	Next 150 000 at 65%	150 000	97 500					103 000	66 950	
15	Next 250 000 at 70%	250 000	175 000							
16	All Over 500 000 at 75%	2 227 000	1 670 250							
17		2 727 000			None			203 000		
18	Estimated Excess Profits Tax			$1 999 250			None			$123 4
19	Normal Tax and Surtax									
20	Excess Profits Net Income		7 350 000			128 000			811 000	
21	Less: Excess Profits Tax		1 999 250			-			123 450	
22	Estimated Normal Tax and Surtax Net Income		5 350 750			128 000			687 550	
23	Normal Tax:									
24	Corporations with net income slightly									
25	over $25,000									
26	First $ 5 000 at 15%									
27	Next 15 000 at 17%									
28	Next 5 000 at 19%									
29	Next 7 350 at 37%									
30	Corporations with net income over $25,000									
31	Flat Rate - 24%		1 284 180			30 720			165 012	
32	Surtax:									
33	Corporations with net income slightly									
34	over $25,000									
35	First $25 000 at 16%									
36	Next 7 350 at 31%									
37	Corporations with net income over $25,000									
38	Rate - 31%		1 658 733			39 680			213 141	
39	Estimated Normal Tax and Surtax			2 942 913			$70 400			378 1
40	Estimated Federal Income and Excess									
41	Profits Taxes			$4 942 163			$70 400			$501 6

EXHIBIT 2 Ø15521

PAGE 2

WITNESS WATKINS

RY COMPANIES

STATEMENT OF ESTIMATED FEDERAL INCOME AND EXCESS PROFITS TAXES FOR THE YEAR 1941 (BASED ON RATES PROPOSED IN RECOMMENDATION BY SECRETARY OF TREASURY MORGENTHAU ON MARCH 3, 1942 BEFORE THE WAYS AND MEANS COMMITTEE

Natural Gas Company (G)	Michigan Gas Transmission Corporation (H)	(I)	(J)	Indiana Gas Distribution Corporation (K)	(L)	(M)	Total Taxes (N)
00		$811 000			$36 000		
	$ 5 000			$ 5 000			
	603 000			23 700			
	-			-			
00	-	608 000		-	28 700		
-		203 000			7 300		
	Net Income	Tax		Net Income	Tax		
	20 000	10 000		7 300	3 650		
	30 000	16 500					
	50 000	30 000					
	103 000	66 950					
	203 000			7 300			
- None			$123 450			$ 3 650	$2 126 350
00		811 000			36 000		
		123 450			3 650		
00		687 550			32 350		
					750		
					2 550		
					950		
					2 720		
					6 970		
00		165 012					
					4 000		
					2 279		
00		213 141					
	$70 400		378 153			13 249	3 404 715
	$70 400		$501 603			$16 899	$5 531 065

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

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Line No.	(A)	Panhandle Eastern Pipe Line Company (B)	(C)	(D)	Illinois Natural Gas Company (E)	(F)	(G)	Michigan Gas Transmission Corporation (H)	(I)	(J)	I
1	Estimated Excess Profits Net Income As Recomputed		$8 094 869			$128 000			$811 000		
2	Less: Dividends received		533 179			-			-		
3			7 561 690			128 000			811 000		
4	Less: Specific Exemption	$ 5 000			$ 5 000			$ 5 000			$
5	Excess profits credit based on income	4 618 000			-			603 000			
6	Excess profits credit based on in-										
7	vested capital	-			182 000			-			
8	Excess profits credit carry-over	-			36 000			-			
9	Additional excess profits credit based										
10	on income resulting from net new										
11	capital financing	190 000	4 813 000		-	223 000		-	608 000		
12	Adjusted Excess Profits Net Income Sub-										
13	ject To Tax		2 748 690			None			203 000		
14	Excess Profits Tax:	Net Income	Tax		Net Income	Tax		Net Income	Tax		Net
15	First $ 20 000 at 35%	20 000	7 000					20 000	7 000		
16	Next 30 000 at 40%	30 000	12 000					30 000	12 000		
17	Next 50 000 at 45%	50 000	22 500					50 000	22 500		
18	Next 150 000 at 50%	150 000	75 000					103 000	51 500		
19	Next 250 000 at 55%	250 000	137 500								
20	All Over 500 000 at 60%	2 248 690	1 349 214								
21		2 748 690			None			203 000			
22	Estimated Excess Profits Tax			$1 603 214			None			$ 93 000	
23	Normal Tax and Surtax										
24	Excess Profits Net Income As Recomputed		8 094 869			128 000			811 000		
25	Less: Excess Profits Tax	1 603 214			-			93 000			
26	85% of dividends received	453 202	2 056 416		-	-		-	93 000		
27	Estimated Normal Tax and Surtax Net Income		6 038 453			128 000			718 000		
28	Normal Tax:										
29	Corporations with net income slightly										
30	over $25,000										
31	First $ 5 000 at 15%										
32	Next 15 000 at 17%										
33	Next 5 000 at 19%										
34	Next 8 445 at 37%										
35	Corporations with net income over $25,000										
36	Flat Rate - 24%		1 449 229			30 720			172 320		
37	Surtax:										
38	First $25 000 at 6%		1 500			1 500			1 500		
39	All Over 25 000 at 7%		420 942			7 210			48 510		
40	Estimated Normal Tax and Surtax			1 871 671			$39 430			222 330	
41	Estimated Federal Income and Excess										
42	Profits Taxes			$3 474 885			$39 430			$315 330	

EXHIBIT 202 15522

PAGE 3

WITNESS WATKINS

IDIARY COMPANIES

STATEMENT OF ESTIMATED FEDERAL INCOME AND EXCESS PROFITS TAXES FOR THE YEAR 1941 RECOMPUTED AS EXPLAINED IN PAGE 5 OF THIS EXHIBIT
(BASED ON REVENUE ACT OF 1941)

ls Natural Company (F)	(G)	Michigan Gas Transmission Corporation (H)	(I)	(J)	Indiana Gas Distribution Corporation (K)	(L)	(M)	Total Taxes (N)
28 000			$811 000			$36 000		
-			-			-		
28 000			811 000			36 000		
		$ 5 000			$ 5 000			
		603 000			23 700			
		-			-			
		-			-			
23 000		-	608 000		-	28 700		
None			203 000			7 300		
Tax		Net Income	Tax		Net Income	Tax		
		20 000	7 000		7 300	2 555		
		30 000	12 000					
		50 000	22 500					
		103 000	51 500					
		203 000			7 300			
	None			$ 93 000			$ 2 555	$1 698 769
28 000			811 000			36 000		
		93 000			2 555			
-		-	93 000		-	2 555		
28 000			718 000			33 445		
						750		
						2 550		
						950		
						3 125		
						7 375		
30 720			172 320					
1 500			1 500			1 500		
7 210			48 510			591		
	$39 430			222 330			9 466	2 142 897
	$39 430			$315 330			$12 021	$3 841 666

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	(A)	Panhandle Eastern Pipe Line Company (B)	(C)	(D)	Illinois Natural Gas Company (E)	(F)	(G)	Michigan Gas Trans Corporation (H)	(I)
1	Estimated Excess Profits Net Income as Recomputed		$8 094 869			$128 000			$811 000
2	Less: Dividends received		533 179			-			-
3			7 561 690			128 000			811 000
4	Less:								
5	Specific exemption	$ 5 000			$ 5 000			$ 5 000	
6	Excess profits credit based on income	4 618 000			-			603 000	
7	Excess profits credit based on invested capital	-			182 000			-	
8	Excess profits credit carry-over	-			36 000			-	
9	Additional excess profits credit based on income resulting from net new capital financing	190 000	4 813 000		-	223 000		-	608 000
10	Adjusted Excess Profits Net Income Subject to Tax		2 748 690			None			203 000
11	Excess Profits Tax:	Net Income	Tax		Net Income	Tax		Net Income	Tax
12	First $ 20,000 at 50%	20 000	10 000					20 000	10 000
13	Next 30,000 at 55%	30 000	16 500					30 000	16 500
14	Next 50,000 at 60%	50 000	30 000					50 000	30 000
15	Next 150,000 at 65%	150 000	97 500					103 000	66 950
16	Next 250,000 at 70%	250 000	175 000						
17	All Over 500,000 at 75%	2 248 690	1 686 518						
18		2 748 690			None			203 000	
19	Estimated Excess Profits Tax			$2 015 518			None		
20	Normal Tax and Surtax								
21	Excess Profits Net Income as Recomputed		8 094 869			128 000			811 000
22	Less: Excess Profits Tax	2 015 518			None			123 450	
23	85% of dividends received	453 202	2 468 720		-	-		-	123 450
24	Estimated Normal Tax & Surtax Net Income		5 626 149			128 000			687 550
25	Normal Tax								
26	Corporations with net income slightly over $25,000								
27	First $ 5,000 at 15%								
28	Next 15,000 at 17%								
29	Next 5,000 at 19%								
30	Next 7,000 at 37%								
31	Corporations with net income over $25,000								
32	Flat Rate - 24%		1 350 276			30 720			165 012
33	Surtax								
34	Corporations with net income slightly over $25,000								
35	First $25,000 at 16%								
36	Next 7,350 at 31%								
37	Corporations with net income over $25,000								
38	Rate 31%		1 744 106			39 680			213 141
39	Estimated Normal Tax and Surtax			3 094 382			$70 400		
40	Estimated Federal Income and Excess Profits Taxes			$5 109 900			$70 400		$501 603

EXHIBIT 202 15523
PAGE 4
WITNESS WATKINS

STATEMENT OF ESTIMATED FEDERAL INCOME AND EXCESS PROFITS TAXES FOR THE YEAR 1941 RECOMPUTED AS EXPLAINED IN PAGE 5 OF THIS EXHIBIT (BASED ON RATES PROPOSED IN RECOMMENDATION BY SECRETARY OF TREASURY MORGENTHAU ON MARCH 3, 1942 BEFORE THE WAYS AND MEANS COMMITTEE)

ARY COMPANIES

Natural pany.		Michigan Gas Transmission Corporation			Indiana Gas Distribution Corporation			Total Taxes
(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
$ 000			$811 000			$36 000		
-			-			-		
$ 000			811 000			36 000		
		$ 5 000			$ 5 000			
		603 000			23 700			
		-			-			
		-			-			
3 000		-	608 000		-	28 700		
one			203 000			7 300		
Tax		Net Income	Tax		Net Income	Tax		
		20 000	10 000		7 300			
		30 000	16 500					
		50 000	30 000					
		103 000	66 950					
		203 000			7 300			
—	None			$123 450			$ 3 650	$2 142 618
$ 000			811 000			36 000		
		123 450			3 650			
-		-	123 450		-	3 650		
8 000			687 550			32 350		
						750		
						2 550		
						950		
						2 720		
						6 970		
.0 720			165 012					
						4 000		
						2 279		
9 680			213 141	378 153			13 249	3 556 184
	$70 400							
	$70 400			$501 603			$16 899	$5 698 802

(Pet. 15524) Exhibit 202

Page 5
Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Reconcilement Of Estimated Net Taxable Income For The Year 1941, Of Panhandle Eastern Pipe Line Company, As Shown By Pages 1 And 2 Of This Exhibit With The Recomputed Net Taxable Income For The Year 1941 As Shown By Pages 3 And 4 Of This Exhibit

Line No.	(A)	(B)	(C)	(D)
1	The excess-profits net income of			
2	Panhandle Eastern Pipe Line Company			
3	is recomputed to give effect to the			
4	inclusion of Michigan Gas Transmis-			
5	sion Corporation and Indiana Gas			
6	Distribution Corporation had they			
7	have been subsidiaries of Panhandle			
8	Eastern Pipe Line Company during the			
9	entire year 1941 and that the neces-			
10	sary financing of the cost of acqui-			
11	sition of these companies had been			
12	consummated on January 1, 1941. De-			
13	tails follow			
14	Estimated excess-profits net income			
15	for year 1941 before recomputation			$7 350 000
16	Adjustments:			
17	Additions—			
18	Dividends from Michigan Gas			
19	Transmission Corporation and			
20	Indiana Gas Distribution Cor-			
21	poration	$533 179		
22	Interest income from Michigan Gas			
23	Transmission Corporation and In-			
24	diana Gas Distribution Corporation	511 690		
25	Total additions		$1 044 869	
26	Deductions—			
27	Additional interest expense re-			
28	sulting from issuance of			
29	$10,000,000 principal amount			
30	of 3% bonds		300 000	
31	Net additions			744 869
32	Estimated excess profits net income for			
33	year 1941 as recomputed			$8 094 869

[fol. 15525] Exhibit 203 Page 1
Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement Of Operation And Maintenance Expenses
Year 1941

(Restated To Include Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation For Entire Year)

Line No.		(A)	(B)
1		Natural Gas Production Expenses	
2		Operation:	
3	733	Supervision and Engineering	$ 21 354 19
4	734 1	Gas well labor	6 062 97
5	734 2	Field line labor	12 559 39
6	734 31	Field compressor station labor	46 00
7	734 32	Field measuring and regulating station labor	11 525 85
8	734 4	Other production labor	14 139 71
9	735 1	Gas well supplies and expenses	5 450 42
10	735 2	Field line supplies and expenses	5 191 97
11	735 31	Field compressor station supplies and expenses	40 21
12	735 32	Field measuring and regulating station supplies	
13		and expenses	4 042 30
14	735 4	Other supplies and expenses	7 654 62
15	510	Delay rentals	116 780 63
16	745	Gas well royalties	171 643 82
17	746	Natural gas rents	400 00
18		Total Operation	376 292 17
19		Maintenance:	
20	739	Supervision and Engineering	7 537 37
21	740 22	Field measuring and regulating station structures	210 35
22	740 3	Other production system structures	2 297 42
23	741	Producing gas well equipment	6 800 41
24	742 1	Field lines	8 027 48
25	742 21	Compressor station equipment	8 50
26	742 22	Field measuring and regulating station equipment	1 865 17
27	743	Drilling and cleaning equipment	311 72
28	744	Other natural gas property	64 67
29		Total Maintenance	27 123 69
30		Other Production Expenses:	
31	747 2	Residual operation expenses	212 878 28
32	754 1	Gas purchased — natural gas	1 180 917 63
33	755	Purchased gas expense	25 820 05
34		Total Other Production Expenses	1 419 615 96

Line No.			(A)	(B)
35			Total Natural Gas Production Expenses	
36			Before Duplicate Charges — Credit	$ 1 823 031 22
37			Less: Duplicate Charges — Credit	748 011 50
38			Total Natural Gas Production Expenses	$1 075 019 72

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement Of Operation And Maintenance Expenses
Year 1941

(Restated To Include Michigan Gas Transmission Corporation And Indiana Gas Distribution Corporation For Entire Year)

Line No.			(A)	(B)
1			Transmission Expenses	
2			Operation	
3	758		Supervision and Engineering	$ 134 205 46
4	759	111	Pumping station — labor	396 061 13
5	759	112	Measuring and regulating station — labor	60 230 64
6	759	121	Pumping station — supplies and expenses	697 746 96
7	759	122	Measuring and regulating station —	
8			supplies and expenses	24 200 00
9	759	21	Transmission mains — labor	124 264 38
10	759	22	Transmission mains — supplies and expenses	62 268 81
11	763	2	Rents	10 874 26
12			Total Operation	1 509 851 64
13			Maintenance:	
14	760		Supervision and Engineering	48 127 64
15	761	1	Pumping station structures	23 897 91
16	761	2	Measuring and regulating station structures	2 874 73
17	761	3	Other transmission system structures	4 387 50
18	762	1	Mains	94 212 01
19	762	21	Pumping station equipment	142 181 18
20	762	22	Measuring and regulating station equipment	17 921 19
21	762	23	Other transmission system equipment	5 455 11
22			Total Maintenance	339 057 27
23			Total Transmission Expenses Before Joint	
24			Expenses — Credit	1 848 908 91
25			Less: Joint Expenses — Credit	13 200 00
26			Total Transmission Expenses	1 835 708 91

27		Distribution Expenses	
28		Operation	7 088 66
29		Maintenance	1 980 35
30		Total Distribution Expenses	$ 9 069 01

[fol. 15527] Exhibit 203

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Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement Of Operation And Maintenance Expenses

Year 1941

(Restated To Include Michigan Gas Transmission Corporation And Indiana Gas Distribution Corporation For Entire Years

Line No.		(A)	(B)
1		Customers' Accounting and Collecting Expenses	
2	779	Supervision	$ 860 12
3	780 1	Customers' contracts and orders	79 66
4	780 3	Meter reading	7 521 46
5	780 4	Collecting	1 588 92
6	781	Customers' billing and accounting	7 633 30
7	782	Miscellaneous expenses	94 85
8	783	Uncollectible accounts	10 800 00
9	784	Rents	181 83
10		Total Customers' Accounting and Collecting Expenses	28 760 08
11		Sales Promotion Expenses	
12	785	Supervision	13 007 48
13	786	Salaries and commissions	19 396 88
14	787 2	Advertising	70 65
15	787 3	Miscellaneous sales expenses	249 39
16		Total Sales Promotion Expenses	832 722 40

[fol. 15528] Exhibit 203 Page 4
Witness Watkins

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Statement Of Operation And Maintenance Expenses

Year 1941

(Restated To Include Michigan Gas Transmission Corporation And Indiana Gas Distribution Corporation For Entire Year

Line No.		(A)	(B)
1		Administrative and General Expenses	
2	790	Salaries of general officers and executives	$ 104 541 17
3	791	Other general office salaries	179 162 61

4	792	Expenses of general officers and general office employees	31 499 87
6	793	General office supplies and expenses	40 951 94
7	794	Management and supervision fees and expenses	13 203 30
8	795	Special services	48 323 46
9	796	Special legal services	56 390 21
10	797	Regulatory commission expenses	6 011 82
11	798	Insurance	15 086 87
12	799	Injuries and damages	44 201 49
13	800	Employees' welfare and pension expenses	191 764 68
14	801	Miscellaneous general expenses	78 130 20
15	802 2	Maintenance of office furniture and equipment	1 328 56
16	803	Rents	37 251 51
17		Total Administrative and General Expenses Before Credits	847 847 69
19		Less: Duplicate Miscellaneous Charges and Administrative and General Expenses Transferred — Credit	10 967 61
22		Total Administrative and General Expenses	836 880 08
23		Non-Operating Revenue Deductions	11 949 33
24		Total Operation and Maintenance Expenses	$3 829 611 53

[fol. 13520]

Exhibit 204

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

1942 Construction and Retirement Budgets

Summary By Companies

	Cash Involved	Materials and Supplies (1)	Additions to Gas Plant	Net Charge To Retirement Work In Progress
1942 New Work:				
Construction Items				
Panhandle Eastern Pipe Line Co.	$ 424 100	$48 700	$ 472 800	
Illinois Natural Gas Company	38 500	2 200	40 700	
Total — Construction Items	462 600	50 900	513 500	—
Retirement Items				
Panhandle Eastern Pipe Line Co.	800	88 100	250 800	$162 100
Illinois Natural Gas Company	1 300	2 800	4 700	3 200
Total — Retirement Items	500	91 200	256 100	165 300
All 1942 Items				
Panhandle Eastern Pipe Line Co.	423 300	40 700	221 500	162 100
Illinois Natural Gas Company	39 800	4 000	36 000	3 200
Total — All 1942 Items	463 100	44 700	257 500	165 300
1941 Carry-Overs				
Panhandle Eastern Pipe Line Co.	7 668 300	2 150	7 658 025	7 825
Illinois Natural Gas Company	412 100	—	412 100	—
	$8 080 400	$ 2 150	$8 070 125	$ 7 825

(1) Black — Material and Supplies — Excess Available
Red — Salvaged Materials

PANHANDLE EASTERN PIPE LINE COMPANY AND ITS SUBSIDIARY COMPANY

	January	February	March	April	May	June	July	August	September
PANHANDLE EASTERN PIPE LINE COMPANY									
1942 New Work	$ 14 600	$ 10 300	$ 16 500	$ 30 200	$ 56 800	$ 82 500	$ 64 200	$67 800	$35 100
1941 Carry-Overs	1 911 700	956 100	1 704 700	969 400	896 400	951 000	279 000	-	-
ILLINOIS NATURAL GAS COMPANY									
1942 New Work	2 800	2 900	2 600	3 400	- 3 600	3 500	4 500	5 300	3 100
1941 Carry-Overs	43 300	95 000	165 000	56 500	52 300	-	-	-	-
TOTAL - PANHANDLE EASTERN PIPE LINE COMPANY AND ITS SUBSIDIARY COMPANY									
1942 New Work and 1941 Carry-Overs	$1 972 400	$1 064 300	$1 890 800	$1 059 500	$1 009 100	$1 037 000	$347 700	$73 100	$38 200

CASH EXPENDITURES BY MONTHS
1942 CONSTRUCTION AND RETIREMENT BUDGETS

ITS SUBSIDIARY COMPANY

June	July	August	September	October	November	December	Total Cash Involved
2 500	$ 64 200	$67 800	$35 100	$23 700	$ 9 600	$10 000	$ 423 300
1 000	279 000	-	-	-	-	-	7 668 300
3 500	4 500	5 300	3 100	2 700	2 800	2 600	39 800
-	-	-	-	-	-	-	412 100
7 000	$347 700	$73 100	$38 200	$26 400	$12 400	$12 600	$8 543 500

[fol. 15531]

Panhandle Eastern Pipe Line Company And Subsidiary Companies

1942 Construction And Retirement Budget

Inter-Company Transactions

Budget Item No.	Title	Cash Involved
O (PE)	Transfer of Equipment Inter-Company Panhandle Group	0
XO (PE)	Transfer of Equipment Inter-Company Panhandle Group — Retirement	0

The above budget items are prepared to provide for the transfer of nonfixed items of property between companies within the Panhandle Group, such transfer to be made to facilitate operations within this Group, the transfer to be recorded at book cost of the seller.

[fol. 15532]

Panhandle Eastern Pipe Line Company

And Its Subsidiary Company

Construction And Retirement Budget

Summary — By Companies

1942 New Work

	1942 New Work		
	Construction Items	Retirement Items	Total Estimated Cash Expenditures
Panhandle Eastern Pipe Line Company	$424 100	$ 800	$423 300
Illinois Natural Gas Company	38 300	1 300	39 800
Total — Panhandle Eastern Pipe Line Company and Its Subsidiary Company	$462 400	$ 500	$463 100

Exhibit 264

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

1942 Construction And Retirement Budget

Panhandle Eastern Pipe Line Company

Budget Item No.		Cash Involved	Materials and Supplies (1)	Additions to Gas Plant	Net Charge To Retirement Work In Progress
	Construction Items				
	Blanket Budgets				
	Production	$204 100	$15 400	$219 500	—
	Transmission	97 600	29 600	127 200	—
	General	38 300	—	38 300	—
	Total — Blanket	340 000	45 000	385 000	—
	Specific Budgets				
	Regular				
565	Prospective New Customers	25 000	—	25 000	—
567	Construct Warehouse, Paola, Kansas	6 700	2 900	9 600	—
568	Communication Line to Paola, Kansas	1 000	—	1 000	—
570	Transmission Line — Missouri -	700	800	1 500	—
571	Dwellings — Sneed Camp	22 700	—	22 700	—
572	Dwellings — Hansford Station	19 000	—	19 000	—
573	Boarding House — Liberal Station	7 500	—	7 500	—
605	Purchase Warehouse — Iuka, Kansas	1 500	—	1 500	—
	Total — Specific	84 100	3 700	87 800	—
	Total Construction Items	$424 100	$48 700	$472 800	—

(1) Black — Materials and Supplies — Excess Available
Red — Salvaged Materials

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

1942 Construction And Retirement Budget

Panhandle Eastern Pipe Line Company

	Cash Involved	Materials and Supplies (1)	Additions to Gas Plant	Net Charge to Retirement Work In Progress
Retirement Items				
Blanket Budgets				
Production	$ 1 200	$ [illegible]	$ [illegible]	$ 68 475
Transmission	8 100	[illegible]	[illegible]	59 925
General	[illegible]	[illegible]	[illegible]	13200
Total — Blanket	[illegible]	[illegible]	[illegible]	141 600
Specific Budgets				
Regular				
Retire Warehouse Pada, Kansas	300	[illegible]	[illegible]	2 000
Retire Missouri Illinois Check Measuring Station	2 000	[illegible]	[illegible]	18 500
Total — Specific	2 300	[illegible]	[illegible]	20 500
Total Retirement Items	[illegible]	[illegible]	[illegible]	162 100
All 1942 Items				
Blanket Budgets				
Production	202 900	[illegible]	106 400	68 475
Transmission	105 700	[illegible]	42 400	59 925
General	[illegible] 300	[illegible]	15 000	13 200
Total — Blanket	336 900	[illegible]	163 800	141 600
Specific Budgets				
Total — Specific	86 400	[illegible]	57 700	20 500
	$423 300	$ [illegible]	$221 500	$162 100

(1) Black — Materials and Supplies — Excess Available
Red — Salvaged Materials

Exhibit 204

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

1942 Construction And Retirement Budget

Illinois Natural Gas Company

Budget Item No.		Cash Involved	Materials and Supplies (1)	Additions to Gas Plant	Net Charge to Retirement Work In Progress
	Construction Items				
	Blanket Budget				
	Transmission	$12 200	$2 200	$14 400	
	General	1 300		1 300	
	Total Blanket	13 500	2 200	15 700	
	Specific Budget				
	Transmission Facilities — Prospective New Customers	25 000		25 000	
	Total Construction Budget	38 500	2 200	40 700	
	Retirement Budget				
	Transmission	1 300	[illegible]	[illegible]	$3 100
	General	—	—	[illegible]	100
	Total Retirement Budget	1 300	[illegible]	[illegible]	3 200
	All 1942 Budgets				
	Transmission	14 800	[illegible]	11 000	3 200
	Specific	25 000		25 000	
	Total All 1942 Budgets	$39 800	$ [illegible]	$36 000	$3 200

(1) Black — Materials and Supplies — Excess Available
Red — Salvaged Materials

Exhibit 204

Panhandle Eastern Pipe Line Company And Its Subsidiary Company
1941 Construction And Retirement Carry-Overs

Budget Item No.		Cash Involved	Materials and Supplies	Additions to Gas Plant	Net Charge to Retirement Work in Progress
	Construction	Illinois Natural Gas Company			
67	Galesburg Lateral	$ 118 300		$ 118 300	
68	Abingdon Lateral	37 000		37 000	
69	Knoxville Lateral	2 500		2 500	
70	Bloomington Lateral	254 300		254 300	
	Totals	412 100		412 100	
		Panhandle Eastern Pipe Line Company			
	Regular				
BP-32	Drill Wacker Well — Oklahoma	15 300		15 300	
521	Compressor Units for wells	200		200	
523	Cathodic Protection Units	1 300		1 300	
524	Independent Gravel Lateral	1 300		1 300	
533	Furnaces for Glenarm Cottages	1 100		1 100	
534	Tuscola Compressor Station	5 900		5 900	
556	Measuring and Regulating Stations	1 300		1 300	
557R	Horizontal Condensate Separators	3 000		3 000	
559	Chain link fencing	14 500		14 500	
560	Compressor Station Yard Lighting	5 400		5 400	
561	Adrain, Michigan Lateral	30 800		30 800	
562	Hercules Powder Lateral	31 000		31 000	
564	Greenfield, Indiana Lateral	8 600		8 600	
	Total — Regular	119 700		119 700	
	Expansion				
543R	Haven Loop	103 700		103 700	
544R	Louisburg Loop	260 300		260 300	
545R	Houstonia Loop	423 900		423 900	
546R	Centralia Loop	591 200		591 200	
547R	Mississippi River Crossing	128 200		128 200	
548R	Pleasant Hill Loop	725 100		725 100	
549R	Illinois River Crossing	113 600		113 600	
550R	Glenarm Loop	914 100		914 100	
551R	Tuscola Loop	284 600		284 600	
552R	Michigan — North Line	2 452 700		2 452 700	
553R	Michigan — West Line	1 575 400		1 575 400	
	Total — Expansion	7 572 800		7 572 800	
	Totals	7 692 500		7 692 500	
	Total Construction	8 104 600		8 104 600	
	Retirement				
X-554	Sale of Transmission Lines L A				$6 600
X-555	Change Locations of Measuring and Regulating Stations	100			500
X-558	Fencing of Compressor Stations	100			725

[fol. 15537]

Exhibit 205

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Statement Of Certain Estimated Construction Expenditures For Year 1942

On Projects Approved in Year 1941 Which Were Unfinished at December 31, 1941.

Panhandle Eastern Pipe Line Company	$6 941 000
Illinois Natural Gas Company	411 000
Michigan Gas Transmission Corporation	81 000
Total	$7 433 000

On Projects Approved in Year 1941 Which Were Unfinished at February 28, 1942.

Panhandle Eastern Pipe Line Company	$4 993 000
Illinois Natural Gas Company	380 000
Michigan Gas Transmission Corporation	23 000
Total	$5 396 000

[fol. 15783]

Exhibit 208.

Federal Power Commission, Docket No. G-200- G-207

Exhibit No. 208 (For Identification)

Date Identified 4-1-42

Financial Statement

of

Panhandle Eastern Pipe Line Company
and Subsidiary Companies

For period ended December 31, 1941.

(Signed) T. F. PAXTON,
Assistant Secretary.

Date February 21, 1942

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Balance Sheet as of December 31, 1941

	Acc't. No.		Detail on Page		Increase Over Previous Month	Increase Since January First
1		Gas Plant				
2	100-1	Gas Plant in Service	11A	7 349 586 98	536 586 35	1 736 771 36
3	100-3	Construction Work in Progress	11A	2 899 093 40	1 161 576 71	2 210 281 28
4	100-4	Gas Plant Held for Future Use	11			
5	100-6	Gas Plant in Process of Reclassification	11A	59 401 352 25*	+44 752 72	+1 203 409 77
6						
7						
8						
9						
10		Total Gas Plant	11A	69 650 032 63	1 653 410 34	2 743 612 87
11						
12						
13		Investment And Fund Accounts				
14	110	Other Physical Property	11			
15	111-1	Investment in Securities of Associated Companies	11			
16	111-2	Advances To Associated Companies	11			
17	112	Other Investments	11B	204 498 52	+ 1 684 27	+31 099 58
18						
19						
20						
21						
22		Total Investment And Fund Accounts		204 498 52	+ 1 684 27	+31 099 58
23						
24						
25						
26		Current And Accrued Assets				
27	120	Cash	x x	3 984 032 18	+1 159 791 59	239 838 12
28	121	Special Deposits	11B	102 580 14	+ 3 240 88	93 454 39
29	122	Working Funds	11B	11 572 08	+636 85	2 383 08
30	123	Temporary Cash Investments	11B	2 750 000 00		2 750 000 00
31	124	Notes Receivable	11			+ 2 150 63
32	125-1	Accounts Receivable–Customers	x x	1 556 044 31	105 077 18	161 455 04
33	125-2	Other Accounts Receivable	12A	77 231 19	+ 4 029 75	26 378 43
34	126-3	Accounts Receivable from Associated Companies	11			
35	128	Interest and Dividends Receivable	x x	8 388 47	1 344 10	4 586 69
36	131-1	Materials and Supplies–Gas	12A	363 941 05	31 312 04	158 133 09
37	131-2	Materials and Supplies–Gasoline	x x	9 848 40	+878 52	4 426 92
38	131-3	Materials and Supplies–Gasoline on Hand	x x	1 049 64	337 02	+ 35 34
39	132	Prepayments	12A	94 732 18	+22 291 56	29 813 30
40						
41						
42						
43						
44						
45		Total Current And Accrued Assets		8 959 419 64	+1 052 768 81	3 468 283 29
46						
47						
48		Deferred Debits				
49	140	Unamortized Debt Discount and Expense	12A	—	+1 800 164 03	+2 229 322 74
50	143	Clearing Accounts	12A	6 760 57	2 107 99	6 760 57
51	144	Retirement Work in Progress	12A	—	+ 302 003 55	—
52	145	Other Work in Progress	12A	176 649 80	60 173 60	173 645 89
53	146	Other Deferred Debits	12A	4 068 91	48 02	3 231 83
54						
55						
56						
57						
58						
59		Total Deferred Debits		187 449 28	+2 039 837 97	+2 045 686 45
60						

39	132	Prepayments	12A	94 732 18	*22 291 56	29 813 50
40						
41						
42						
43						
44						
45		Total Current And Accrued Assets		8 959 419 64	*1 052 768 81	3 468 283 29
46						
47						
48		Deferred Debits				
49	140	Unamortized Debt Discount and Expense	12A	—	*1 800 164 03	*2 229 322 74
50	143	Clearing Accounts	12A	6 760 57	2 107 99	6 760 57
51	144	Retirement Work in Progress	12A	—	* 302 003 55	—
52	145	Other Work in Progress	12A	176 619 80	60 173 60	173 643 89
53	146	Other Deferred Debits	12A	4 068 91	.48 02	3 231 83
54						
55						
56						
57						
58						
59		Total Deferred Debits		187 449 28	*2 039 837 97	*2 045 686 45
60						
61						
62						
63		Total Assets		79 001 400 67	*1 440 880 71	4 135 140 13
				(A)	(B)	(C)

*Balance after Reserve for Amortization of Gas Sales and Purchase Contracts $1,758,171.60
*Indicates red figures.

And Subsidiary Companies

Balance Sheet as of December 31, 1941

Acc't No.		Detail on Page		Increase Over Previous Month	Increase Since January First	
	Capital Stocks					1
200	Common No Par	x x	20 184 175 00			2
	810 000 Shs. Auth. 807,367 Shs. Outstdg.	x x				3
201	Preferred $100 Par	x x				4
	Class A 100,000 Shs. Auth. & Outstdg.	x x	10 000 000 00			5
	Class B 10,000 " " "	x x	1 000 000 00			6
						7
						8
						9
	Total Capital Stocks		31 184 175 00			10
						11
	Long-Term Debt					12
210	Bonds	11B	18 250 000 00		+4 250 000 00	13
212-1	Advances on Notes	11				14
212-2	Advances on Open Accounts	11				15
213	Miscellaneous Long-Term Debt	11B	5 009 789 19	+ 1 746 91	4 979 640 19	16
						17
	Total Long-Term Debt		23 259 789 19	+ 1 746 91	729 640 19	18
						19
	Current And Accrued Liabilities					20
220	Notes Payable	11				21
222	Accounts Payable	11B	1 083 337 88	- 65 160 64	719 814 45	22
223-2	Accounts Payable to Associated Companies	11				23
224-1	Dividends Declared—Preferred	x x	165 000 00	165 000 00		24
224-2	Dividends Declared—Common	x x				25
225	Matured Long-Term Debt	11B	96 822 14	+ 2 040 88	96 822 14	26
226	Matured Interest	12B	4 230 00	+ 1 260 00	1 810 00	27
227	Customers' Deposits	x x		—	+ 3 885 00	28
228	Taxes Accrued	12B	3 218 503 42	+454 983 35	884 624 47	29
229-1	Interest Accrued—Long Term Debt	12B	90 104 18	45 052 09	+209 895 82	30
229-2	Interest Accrued—Other	12				31
230	Other Current and Accrued Liabilities	12B	3 433 42	1 406 45	234 41	32
224-3	Dividends Declared—Participating (Class A Preferred and Common Stocks)		740 086 42	538 244 67	740 086 42	33
						34
	Total Current & Accrued Liabilities		5 401 517 46	356 639 62	2 229 611 07	35
						36
	Deferred Credits					37
241	Customers' Advances for Construction	x x		—	+ 9 339 48	38
242	Other Deferred Credits	12B	43 414 51	+ 222 12	+ 937 23	39
						40
						41
	Total Deferred Credits		43 414 51	+ 222 12	+10 276 71	42
						43
	Reserves					44
250-6	Depreciation, Depletion and Amortization In Process of Reclassification	12C	10 908 023 25	41 791 02	1 718 522 01	45
254	Uncollectible Accounts	12C	50 219 88	900 00	10 131 22	46
256	Injuries and Damages	12D	100 923 74	1 500 00	+ 6 484 63	47
258	Other Reserves	12D	624 800 94			48
						49
						50
						51
	Total Reserves		11 683 967 81	43 991 02	1 722 168 60	52
						53
265	Contributions in Aid of Construction	12D	42 062 57		490 66	54

							40
							41
	Total Deferred Credits		43 414 51	+ 222 12	+10 276 71		42
							43
	Reserves						44
250-6	Depreciation, Depletion and Amortization In Process of Reclassification	12C	10 908 023 25	41 791 02	1 718 522 01		45 46
254	Uncollectible Accounts	12C	50 219 88	900 00	10 131 22		47
256	Injuries and Damages	12D	100 923 74	1 300 00	+ 6 484 63		48
258	Other Reserves	12D	624 800 94				49
							50
							51
	Total Reserves		11 683 967 81	43 991 02	1 722 168 60		52
							53
265	Contributions in Aid of Construction	12D	42 062 57		490 66		54
							55
	Surplus						56
271	Earned Surplus—						57
	Prior to December 31, 1935				1 444 35		58
	Since December 31, 1935		7 386 473 53	+1 839 542 32	+537 938 03		59
							60
							61
	Total Surplus	10	7 386 473 53*	+1 839 542 32	+536 493 68*		62
	Total Liabilities		79 001 400 07	+1 440 880 71	4 135 140 13		63
			(D)	(E)	(F)		

*For restriction as to payment of dividends and segregation of surplus, see Page 2A

+Indicates red figures.

[fol. 15786]

Description				
Surplus:				
Restricted as to payment of common stock and participating dividends as provided in (2) on Page 4 of the Certificate of Amendment of Certificate of Incorporation filed June 5, 1936			3 581 379 41(1)	
Unrestricted			3 805 094 12	
Total Page 2, Line 62			7 386 473 53	

(1) Section 10 of Article IV of the Mortgage and Deed of Trust dated November 1, 1940 provides for restrictions as to the payment of dividends, determined as follows:

Earned Surplus at January 1, 1940		6 825 003 08
Less:		
The sum specified in Section 10 of Article IV	1 500 000 00	
The Charge to earned surplus of the balance, as of February 3, 1941, of the unamortized debt, discount and expense applicable to the funded debt of the Company existing prior to January 1, 1940 and the unamortized premium paid in connection with the redemption of such funded debt	1 797 994 55	
Amount of dividend on common stock declared during year 1940 in respect to earnings for the year 1939, specifically exempted in sub-paragraph (d)	1 211 050 50	4 509 045 05
Restricted under Mortgage and Deed of Trust dated November 1, 1940		2 315 958 03

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Earnings
Summary 3

Month of December 1941

	Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
		Month Of December			1
Gross Revenues					2
Gas	4A	1 542 237 25	1 388 216 48	154 020 77	3
Gasoline	5A	109 259 58	39 829 52	69 430 06	4
Non-Operating	7	2 450 24	931 99	1 518 25	5
					6
Total Revenues		1 653 947 07	1 428 977 99	224 969 08	7
Operating Expenses					8
Operation	x x	324 519 92	334 935 56	*10 415 64	9
Maintenance	x x	32 772 18	27 760 31	5 011 87	10
Depreciation, Depletion and Amortization	x x	266 807 43	221 568 41	45 239 02	11
Taxes—Federal Income	x x	186 306 77	186 200 00	106 77	12
Taxes—Federal Excess Profits	x x	99 774 72	100 000 00	*225 28	13
Taxes—Other	x x	43 298 44	*21 228 83	64 527 27	14
Total Expenses		953 479 46	849 235 45	104 244 01	15
Net Operating Revenue		700 467 61	579 742 54	120 725 07	16
Other Income	9	2 130 92	1 194 86	936 06	17
Gross Corporate Income		702 598 53	580 937 40	121 661 13	18
Other Deductions	9	45 263 29	101 602 75	*56 339 46	19
Less: Interest Charged to Construction	9	6 531 14	2 735 12	3 796 02	20
Net Income		663 866 38	482 069 77	181 796 61	21
		Months Ended			22
Gross Revenues					23
Gas	4B				24
Gasoline	5B				25
Non-Operating	7				26
					27
Total Revenues					28
Operating Expenses					29
Operation	x x				30
Maintenance	x x				31
Depreciation, Depletion and Amortization	x x				32
Taxes—Federal Income	x x				33
Taxes—Federal Excess Profits	x x				34
Taxes—Other	x x				35
Total Expenses					36
Net Operating Revenue					37
Other Income	9				38
Gross Corporate Income					39
Other Deductions	9				40
Less: Interest Charged to Construction	9				41
Net Income					42
		12 Months Ended December 31			43
Gross Revenues					44
Gas	4C	14 688 263 44	13 167 241 73	1 521 021 71	45
Gasoline	5C	735 077 94	355 722 01	379 355 93	46
Non-Operating	7	11 515 35	12 489 05	*973 70	47
					48
Total Revenues		15 434 856 73	13 535 452 79	1 899 403 94	49
Operating Expenses					50
Operation	x x	3 068 933 30	2 738 130 87	330 802 43	51
Maintenance	x x	323 893 75	262 633 65	61 260 10	52
Depreciation, Depletion and Amortization	x x	2 435 000 00	2 210 000 00	225 000 00	53
Taxes—Federal Income	x x	1 831 106 77(1)	1 436 598 47	394 508 30	54
Taxes—Federal Excess Profits	x x	1 582 774 72(1)	561 000 00	1 021 774 72	55
Taxes—Other	x x	733 622 93	612 871 48	120 751 45	56
Total Expenses		9 975 331 47	7 821 234 47	2 154 097 00	57
Net Operating Revenue		5 459 525 26	5 714 218 32	*254 693 06	58

Other Deductions	9				
Less: Interest Charged to Construction	9				41
Net Income					42

		12 Months Ended December 31			43
Gross Revenues					44
Gas	4C	14 688 233 44	13 167 241 73	1 521 021 71	45
Gasoline	5C	735 077 94	355 722 01	379 355 93	46
Non-Operating	7	11 515 35	12 489 05	*973 70	47
					48
Total Revenues		15 434 856 73	13 535 452 79	1 899 403 94	49
Operating Expenses					50
Operation	x x	3 068 933 30	2 738 130 87	330 802 43	51
Maintenance	x x	323 893 75	262 633 65	61 260 10	52
Depreciation, Depletion and Amortization	x x	2 435 000 00	2 210 000 00	225 000 00	53
Taxes—Federal Income	x x	1 831 106 77(1)	1 436 598 47	394 508 30	54
Taxes—Federal Excess Profits	x x	1 582 774 72(1)	561 000 00	1 021 774 72	55
Taxes—Other	x x	733 622 93	612 871 48	120 751 45	56
Total Expenses		9 975 331 47	7 821 234 47	2 154 097 00	57
Net Operating Revenue		5 459 525 26	5 714 218 32	*254 693 06	58
Other Income	9	18 541 89	13 427 53	5 114 36	59
Gross Corporate Income		5 478 067 15	5 727 645 85	*249 578 70	60
Other Deductions	9	685 348 92	1 216 149 67	*530 800 75	61
Less: Interest Charged to Construction	9	11 774 51	36 827 80	*25 053 29	62
Net Income		4 804 492 74(2)	4 548 323 98	256 168 76	63
		(A)	(B)	(C)	

(1) Includes charges in lieu of taxes, See Page 14A.

(2) For restrictions as to payment of dividends and segregation of surplus, See Page 2A.

*Indicates red figures.

Acc't No.		Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
	Operating Revenue—Gas					1
600	Residential Sales	x x	1 203 40	23 048 78	+21 845 38	2
602-1	Commercial Sales	x x	31 60	10 714 09	+10 682 49	3
602-2	Industrial Sales	x x	93 922 49	65 137 85	28 784 64	4
605-1	Sales to Gas Utilities	x x	1 447 073 76	1 289 310 36	157 763 40	5
608-1	Other Sales—Field	x x	6 00	5 40	60	6
						7
	Total		1 542 237 25	1 388 216 48	154 020 77	8
						9
605-2	Sales to Associated Companies	x x				10
						11
	Total Revenue—Gas		1 542 237 25	1 388 216 48	154 020 77	12
						13
	Operating Revenue Deductions					14
	Production—Operation	15	38 222 71	29 657 76	8 564 95	15
	" —Maintenance	15	2 373 47	3 599 22	+ 1 225 75	16
	Gas Prurchased—Associated Companies	15				17
	Gas Purchased—Others	15	115 996 43	117 754 74	+ 1 758 31	18
	Purchased Gas Expense—Operation	15	2 318 35	2 134 80	183 55	19
	" " " —Maintenance	15	129 29	343 31	+ 214 02	20
	Transmission—Operation	17	148 035 48	102 142 07	45 893 41	21
	" —Maintenance	17	29 991 63	22 450 67	7 540 96	22
	Distribution—Operation	17		1 699 02	+ 1 699 02	23
	" —Maintenance	18		276 49	+ 276 49	24
	Customers' Accounting and Collecting	18	2 267 89	3 089 14	+ 821 25	25
	Sales Promotion	18	2 379 96	2 286 75	93 21	26
	Administrative and General—Operation	19	68 155 62	180 988 61	+112 832 99	27
	" " " —Maintenance	19	6 04	912 57	+906 53	28
	Gas Used in Operations, Etc., includes	19				29
	overhead charged to constr.	19	+78 669 64	+125 867 03	47 197 39	30
	Total Operation And Maintenance		331 207 23	371 468 12	+10 260 89	31
	Total Operation	19	298 706 80	313 885 86	+15 179 06	32
	Total Maintenance	19	32 500 43	27 582 26	4 918 17	33
503-1	Depreciation	x x	216 354 80	173 174 97	43 179 83	34
503-2	Amortization and Depletion—Producing Leases	x x	9 533 31	7 879 99	1 653 32	35
512	Amortization Non-Producing Leases	x x	6 193 39	6 237 50	+44 11	36
504	Amortization—Other	x x	27 595 93	27 345 95	249 98	37
507	Taxes—Federal Income	x x	186 306 77	186 200 00	106 77	38
507	Taxes—Federal Excess Profits	x x	99 774 72	160 000 00	+225 28	39
507	Taxes—Other	x x	42 937 70	+21 600 67	64 538 37	40
	Total Operating Revenue Deductions		919 903 85	820 795 86	99 197 99	41
	Net Operating Revenue—Gas		622 333 40	567 510 62	54 822 78	42
	Statistics					43
						44
MCF	—Sales to Public	25	6 519 498	5 924 778	594 720	45
"	Sales—Associated Companies	25				46
						47
"	Total Sales	25	6 519 498	5 924 778	594 720	48
"	Company Use—Compressor Stations	25	402 687	348 980	53 707	49
"	Other Company Use	25	90 636	97 221	+6 585	50
"	Exchange Gas Delivered	25				51
			20 210	—	20 210	52
	Total Deliveries	25	7 033 031	6 370 979	662 052	53
						54
MCF	—Produced	25	3 177 779	2 626 658	551 121	55
"	Purchased—Associated Companies	25				56
"	" —Others	25	2 946 920	2 974 860	+27 940	57

Net Operating Revenue—Gas			[illegible]	[illegible]	[illegible] 42
Statistics					43
					44
MCF—Sales to Public	25	6 519 498	5 924 778	594 720	45
" Sales—Associated Companies	25				46
" Total Sales	25	6 519 498	5 924 778	594 720	47
" Company Use—Compressor Stations	25	402 687	348 980	53 707	48
" Other Company Use	25	90 636	97 221	+6 585	49
" Exchange Gas Delivered	25				50
		20 210		20 210	51
Total Deliveries	25	7 033 031	6 370 979	662 052	52
MCF—Produced	25	3 177 779	2 626 658	551 121	53
" Purchased—Associated Companies	25				54
" " —Others	25	2 946 920	2 974 860	+27 940	55
" Exchange Gas Received	25	6 732	6 919	+187	56
					57
" Total Produced And Purchased	25	6 131 431	5 608 437	522 994	58
MCF (14.9*) Total Deliveries	25	6 860 684	6 220 683	640 001	59
" " Total Available for Deliveries	25	6 748 188	6 172 512	575 676	60
" " Unaccounted For (Losses in Black)	25	+112 496	+48 171	+64 325	61
		(A)	(B)	(C)	62

+Indicates red figures.

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Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Gas 4 C
12 Months Ended December 31, 1941

Acc't No.		Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
	Operating Revenue—Gas					1
600	Residential Sales	x x	9 446 77	186 018 44	+176 571 67	2
602-1	Commercial Sales	x x	290 39	76 497 50	+76 207 11	3
602-2	Industrial Sales	x x	910 723 20	673 091 89	237 631 31	4
605-1	Sales to Gas Utilities	x x	13 767 475 58	12 222 934 95	1 544 540 63	5
608-1	Other Sales—Field	x x	327 50	8 698 95	+8 371 45	6
						7
	Total		14 688 263 44	13 167 241 73	1 521 021 71	8
						9
605-2	Sales to Associated Companies	x x				10
						11
	Total Revenue—Gas		14 688 263 44	13 167 241 73	1 521 021 71	12
						13
	Operating Revenue Deductions					14
	Production—Operation	15	376 292 17	328 814 97	47 477 20	15
	" —Maintenance	15	27 123 09	22 181 71	4 941 38	16
	Gas Purchased—Associated Companies	15				17
	Gas Purchased—Others	15	1 180 917 63	1 090 106 83	90 810 80	18
	Purchased Gas Expense—Operation	15	22 710 64	24 919 24	+2 208 60	19
	" " " —Maintenance	15	2 559 61	3 834 63	+1 275 02	20
	Transmission—Operation	17	1 168 601 53	1 023 809 76	144 791 77	21
	" —Maintenance	17	286 983 69	224 003 80	62 979 89	22
	Distribution—Operation	17		19 966 22	+19 966 22	23
	" —Maintenance	18		5 063 03	+5 063 03	24
	Customers' Accounting and Collecting	18	23 964 52	33 150 58	+9 186 06	25
	Sales Promotion	18	22 721 09	22 066 37	654 72	26
	Administrative and General—Operation	19	718 151 14	694 777 27	23 373 87	27
	" " " —Maintenance	19	1 242 18	2 571 83	+1 329 65	28
	Gas Used in Operations, Etc., includes	19				29
	overhead charged to constr.	19	+662 305 46	+692 472 16	30 166 70	30
	Total Operation And Maintenance		3 168 961 83	2 802 794 08	366 167 75	31
	Total Operation	19	2 851 053 26	2 545 139 08	305 914 18	32
	Total Maintenance	19	317 908 57	257 655 00	60 253 57	33
503-1	Depreciation	x x	1 871 994 80	1 654 744 97	217 249 83	34
503-2	Amortization and Depletion—Producing Leases	x x	90 177 06	79 736 27	10 440 79	35
512	Amortization Non-Producing Leases	x x	74 685 45	80 408 63	+5 723 18	36
504	Amortization—Other	x x	332 142 69	329 110 13	3 032 56	37
507	Taxes—Federal Income	x x	1 831 106 77	1 436 598 47	394 508 30	38
507	Taxes—Federal Excess Profits	x x	1 582 774 72	561 000 00	1 021 774 72	39
507	Taxes—Other	x x	729 107 16	608 370 61	120 736 55	40
	Total Operating Revenue Deductions		9 680 950 48	7 552 763 16	2 128 187 32	41
	Net Operating Revenue—Gas		5 007 312 96	5 614 478 57	+607 165 61	42
		Statistics				43
						44
MCF	Sales to Public	25	63 686 819	56 394 762	7 292 057	45
"	Sales—Associated Companies	25	-			46
						47
"	Total Sales	25	63 686 819	56 394 762	7 292 057	48
"	Company Use—Compressor Stations	25	3 375 784	3 170 695	205 089	49
"	Other Company Use	25	947 071	955 458	+8 387	50
"	Exchange Gas Delivered	25	33 892	79 099	+45 207	51
						52
	Total Deliveries	25	68 043 566	60 600 014	7 443 552	53
						54
MCF	Produced	25	30 059 021	26 578 757	3 480 264	55
"	Purchased—Associated Companies	25	-			56
"	" —Others	25	30 137 469	27 537 768	2 599 641	57
"	Exchange Gas Received	25	78 520	69 412	9 108	58
						59
"	Total Produced And Purchased	25	60 274 [illegible]			

Net Operating Revenue—Gas

	Statistics				
					43
					44
MCF—Sales to Public	25	63 686 819	56 394 762	7 292 057	45
" Sales—Associated Companies	25				46
					47
" Total Sales	25	63 686 819	56 394 762	7 292 057	48
" Company Use—Compressor Stations	25	3 375 784	3 170 695	205 089	49
" Other Company Use	25	947 071	955 458	+8 387	50
" Exchange Gas Delivered	25	33 892	79 099	+45 207	51
					52
Total Deliveries	25	68 043 566	60 600 014	7 443 552	53
					54
MCF—Produced	25	30 059 021	26 578 757	3 480 264	55
" Purchased—Associated Companies	25				56
" " —Others	25	30 137 409	27 537 768	2 599 641	57
" Exchange Gas Received	25	78 520	69 412	9 108	58
					59
" Total Produced And Purchased	25	60 274 950	54 185 937	6 089 013	60
MCF ((14:9*) Total Deliveries	25	66 363 284	58 727 422	7 635 862	61
" " Total Available for Deliveries	25	66 336 729	59 635 475	6 701 254	62
" " Unaccounted For (Losses in Black)	25	+26 555	908 053	+934 608	63
		(A)	(B)	(C)	

*Indicates red figures.

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Gasoline 5 A
1 Months Ended December 31, 1941

Acc't No.		Detail on Page	This Year	Cents per Gallon	Last Year	Cents per Gallon	Increase or Decrease	
	Gross Sales—Gasoline							1
5501	Natural Gasoline	x x	110 216 14	4 21	40 198 27	1 77	70 017 87	2
								3
								4
								5
								6
	Total Gross Sales		110 216 94	4 21	40 198 27	1 77	70 017 87	7
	Deductions From Gross Sales							8
5510	" Discounts and Allowance	x x	956 56	04	368 75	02	587 81	9
								10
								11
								12
	Total Deductions		956 56	04	368 75	02	587 81	13
	Total Net Sales		109 259 58	4 17	39 829 52	1 75	69 430 06	14
	Cost Of Sales							15
5511	Natural Gasoline	x x	22 630	86	19 901 26	87	2 728 95	16
5512	Inventory Adjustments	x x						17
								18
								19
	Total Cost Of Sales		22 630 21	86	19 901 26	87	2 728 95	20
	Gross Profit		86 629 37	3 31	19 928 26	88	66 701 11	21
	Operating Expenses							22
x x	Marketing	20	312 41	01	358 53	02	* 46 12	23
x x	General	20	544 17	02	465 37	02	78 80	24
5540	Depreciation	x x	7 130 00	27	6 930 00	30	200 00	25
5541-1	Taxes—Federal Income	x x						26
5541-2	Taxes—Federal Excess Profits	x x						27
5542	Taxes—Other		360 74	02	371 84	02	* 11 10	28
								29
								30
	Total Operating Expenses		8 347 32	32	8 125 74	36	221 58	31
	Net Operating Profit—Gasoline		78 282 05	2 99	11 802 52	52	66 479 53	32
			(A)	(B)	(C)	(D)	(E)	33
								34
	Statistics							35
								36
								37
				Gallons Or MCF				38
			This Year		Last Year		Increase or Decrease	39
	Gallons On Hand Beginning Of Period		97 861		129 791		*31 930	40
	" Natural Gasoline Produced		2 642 454		2 266 973		375 481	41
								42
								43
								44
	" To Be Accounted For		2 740 315		2 396 764		343 551	45
								46
	" Natural Gasoline Sold		2 618 843		2 272 851		345 992	47
	" Inventory Adjustments							48
								49
								50
	" Total Sold And Used		2 618 843		2 272 851		345 992	51
	" On Hand End Of Period		121 472		123 913		*2 441	52
								53
	Gas Treated—MCF		6 493 823		5 841 626		652 197	54
	Average Yield Per Million Cu. Ft.—Gals.		406 92		388 07		18 85	55

	(A)	(B)	(C)	(D)	(E)	
Statistics						
			Gallons Or MCF			
	This Year		Last Year		Increase or Decrease	
Gallons On Hand Beginning Of Period	97 861		129 791		*31 930	
" Natural Gasoline Produced	2 642 454		2 266 973		375 481	
" To Be Accounted For	2 740 315		2 396 764		343 551	
" Natural Gasoline Sold	2 618 843		2 272 851		345 992	
" Inventory Adjustments						
" Total Sold And Used	2 618 843		2 272 851		345 992	
" On Hand End Of Period	121 472		123 913		*2 441	
Gas Treated—MCF	6 493 823		5 841 626		652 197	
Average Yield Per Million Cu. Ft.—Gals.	406 92		388 07		18 85	
Gas Fuel—MCF	23 645		22 202		1 443	
Gas Shrinkage—MCF	66 063		56 670		9 393	
Cu. Ft. of Fuel Used Per Gallon Extracted	8 95		9 79		*84	

(F) (G) (H)

*Indicates red figures.

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Acc't No.		Detail on Page	This Year Amount	This Year Cents per Gallon	Last Year Amount	Last Year Cents per Gallon	Increase or Decrease Amount	
	Gross Sales—Gasoline							1
5501	Natural Gasoline	x x	742 112 40	2 92	359 471 22	1 75	382 641 18	2
								3
								4
								5
								6
	Total Gross Sales		742 112 40	2 92	359 471 22	1 73	382 641 18	7
	Deductions From Gross Sales							8
5510	Discounts and Allowances	x x	7 034 46	03	3 749 21	02	3 285 25	9
								10
								11
								12
	Total Deductions		7 034 46	03	3 749 21	02	3 285 25	13
	Total Net Sales		735 077 94	2 89	355 722 01	1 71	379 355 93	14
	Cost Of Sales							15
5511	Natural Gasoline	x x	202 622 79	80	180 680 23	87	21 942 56	16
5512	Inventory Adjustments	x x			39 87	—	*39 87	17
								18
								19
	Total Cost Of Sales		202 622 79	80	180 720 10	87	21 902 69	20
	Gross Profit		532 455 15	2 09	175 001 91	84	357 453 24	21
	Operating Expenses							22
x x	Marketing	20	3 359 02	01	3 063 67	01	295 35	23
x x	General	20	6 896 47	03	5 704 84	03	1 191 63	24
5540	Depreciation	x x	66 000 00	26	66 000 00	32	—	25
5541-1	Taxes—Federal Income	x x						26
5541-2	Taxes—Federal Excess Profits	x x						27
5542	Taxes—Other		4 515 77	02	4 500 87	02	14 90	28
								29
								30
	Total Operating Expenses		80 771 26	32	79 269 38	38	1 501 88	31
	Net Operating Profit—Gasoline		451 683 89	1 77	95 732 53	46	355 951 36	32
			(A)	(B)	(C)	(D)	(E)	33
								34
	Statistics							35
								36
								37
				Gallons Or MCF				38
			This Year		Last Year		Increase or Decrease	39
	Gallons On Hand Beginning Of Period		123 913		163 097		*39 184	40
	" Natural Gasoline Produced		25 423 109		20 793 278		4 629 831	41
								42
								43
								44
	" To Be Accounted For		25 547 022		20 956 375		4 590 647	45
								46
	" Natural Gasoline Sold		25 425 550		20 827 942		4 597 608	47
	" Inventory Adjustments		—		4 520		*4 520	48
								49
								50
	" Total Sold And Used		25 425 550		20 832 462		4 593 088	51
	" On Hand End Of Period		121 472		123 913		*2 441	52
								53
	Gas Treated—MCF		62 632 791		54 671 339		7 961 452	54
	Average Yield Per Million Cu. Ft.—Gals.		405 91		380 33		25 58	55
	Gas Fuel—MCF.		240 895		216 122		24 773	56
	Gas Shrinkage—MCF		635 706		519 828		115 878	57
	Cu. Ft. of Fuel Used Per Gallon Extracted		9 48		10 39		*91	58

	(A)	(B)	(C)	(D)	(E)	
		Statistics				
				Gallons Or MCF		
	This Year		Last Year		Increase or Decrease	
Gallons On Hand Beginning Of Period	123 913		163 097		+39 184	
" Natural Gasoline Produced	25 423 109		20 793 278		4 629 831	
" To Be Accounted For	25 547 022		20 956 375		4 590 647	
" Natural Gasoline Sold	25 425 550		20 827 942		4 597 608	
" Inventory Adjustments			4 520		+4 520	
" Total Sold And Used	25 425 550		20 832 462		4 593 088	
" On Hand End Of Period	121 472		123 913		+2 441	
Gas Treated—MCF	62 632 791		54 671 339		7 961 452	
Average Yield Per Million Cu. Ft.—Gals.	405 91		380 33		25 58	
Gas Fuel—MCF	240 895		216 122		24 773	
Gas Shrinkage—MCF	635 706		519 828		115 878	
Cu. Ft. of Fuel Used Per Gallon Extracted	9 48		10 39		+ 91	
	(F)		(G)		(H)	

+Indicates red figures.

5321

Acc't No.			Amount This Year	Amount Last Year	Amount Increase or Decrease	
						1
	Month of December					2
	Gross Revenue—Non-Operating					3
520-1	Revenue from Jobbing and Contract Work		1 756 99	319 01	1 437 98	4
522	Revenue from Lease of Other Physical Property		687 04	607 22	79 82	5
526	Miscellaneous Non-Operating Revenues		6 21	5 76	45	6
						7
						8
						9
						10
	Total Revenue—Non-Operating		2 450 24	931 99	1 518 25	11
	Operating Expenses					12
520-2	Jobbing and Contract Work	—Labor	1 331 63	53 27	1 278 36	13
520-3	Jobbing and Contract Work	—S. & E.	861 62	140 25	721 37	14
527-1	Operation—Leased Property		133 08	131 02	2 06	15
527-2	Maintenance—Leased Property		271 75	178 05	93 70	16
						17
						18
						19
	Total Expenses		2 598 08	502 59	2 095 49	20
	Net Revenue—Non-Operating		+147 84	429 40	+577 24	21
						22
	Months Ended					23
	Gross Revenue—Non-Operating					24
520	Revenue from Jobbing and Contract Work					25
522	Revenue from Lease of Other Physical Property					26
526	Miscellaneous Non-Operating Revenues					27
						28
						29
						30
						31
	Total Revenue—Non-Operating					32
	Operating Expenses					33
520-2	Jobbing and Contract Work	—Labor				34
520-3	Jobbing and Contract Work	—S. & E.				35
527-1	Operation—Leased Property					36
527-2	Maintenance—Leased Property					37
						38
						39
						40
	Total Expenses					41
	Net Revenue—Non-Operating					42
						43
	12 Months Ended December 31					44
	Gross Revenue—Non-Operating					45
520-1	Revenue from Jobbing and Contract Work		3 421 51	2 978 78	442 73	46
522	Revenue from Lease of Other Physical Property		8 005 55	7 176 87	828 68	47
526	Miscellaneous Non-Operating Revenues		88 29	2 333 40	+2 245 11	48
						49
						50
						51
						52
	Total Revenue—Non-Operating		11 515 35	12 489 05	+973 70	53
	Operating Expenses					54
520-2	Jobbing and Contract Work	—Labor	1 555 98	1 018 24	537 74	55
520-3	Jobbing and Contract Work	—S. & E.	1 636 17	1 211 27	424 90	56
527-1	Operation—Leased Property		1 809 61	1 273 67	535 94	57
527-2	Maintenance—Leased Property		5 985 18	4 978 65	1 006 53	58
						59
						60
						61

					38
					39
					40
	Total Expenses				41
	Net Revenue—Non-Operating				42
					43
	12 Months Ended December 31				44
	Gross Revenue—Non-Operating				45
520-1	Revenue from Jobbing and Contract Work	3 421 51	2 978 78	442 73	46
522	Revenue from Lease of Other Physical Property	8 005 55	7 176 87	828 68	47
526	Miscellaneous Non-Operating Revenues	88 29	2 333 40	+2 245 11	48
					49
					50
					51
					52
	Total Revenue—Non-Operating	11 515 35	12 489 05	+973 70	53
	Operating Expenses				54
520-2	Jobbing and Contract Work —Labor	1 555 98	1 018 24	537 74	55
520-3	Jobbing and Contract Work —S. & E.	1 636 17	1 211 27	424 90	56
527-1	Operation—Leased Property	1 809 61	1 273 67	535 94	57
527-2	Maintenance—Leased Property	5 985 18	4 978 65	1 006 53	58
					59
					60
					61
	Total Expenses	10 986 94	8 481 83	2 505 11	62
	Net Revenue—Non-Operating	528 41	4 007 22	+3 478 81	63
		(A)	(B)	(C)	

+Indicates red figures.

Acc't No.		Detail on Page	Amount This Year	Amount Last Year	Amount Increase or Decrease	
			Other Income			1
						2
						3
			Month Of December			4
523	Dividend Revenues—Associated Companies	14				5
524-1	Interest on Securities Owned	14	2 130 92	1 185 22	945 70	6
524-21	Interest Revenues—Associated Companies	14				7
524-22	Interest Revenues—Other	14		9 64	+9 64	8
						9
						10
						11
	Total Other Income	14	2 130 92	1 194 86	936 06	12
						13
			Months Ended			14
523	Dividend Revenues—Associated Companies	14				15
524-1	Interest on Securities Owned	14				16
524-21	Interest Revenues—Associated Companies	14				17
524-22	Interest Revenues—Other	14				18
						19
						20
						21
	Total Other Income	14				22
						23
			12 Months Ended December 31			24
523	Dividend Revenues—Associated Companies	14				25
524-1	Interest on Securities Owned	14	17 434 95	13 186 64	4 248 31	26
524-21	Interest Revenues—Associated Companies	14				27
524-22	Interest Revenues—Other	14	1 106 94	240 89	866 05	28
						29
						30
						31
	Total Other Income	14	18 541 89	13 427 53	5 114 36	32
						33
						34
			Other Deductions			35
						36
						37
			Month Of December			38
530	Interest on Long-Term Debt	14	45 052 09	75 000 00	+29 947 91	39
531	Amortization of Debt Discount and Expense	14		25 768 77	+25 768 77	40
533	Taxes Assumed on Interest	14	211 20	120 53	90 67	41
534	Interest on Debt to Associated Companies	14				42
535	Other Interest Charges	14		713 45	+713 45	43
	Total Other Deductions	14	45 263 29	101 602 75	+56 339 46	44
536	Interest Charged to Construction		6 531 14	2 735 12	3 796 02	45
						46
			Months Ended			47
530	Interest on Long-Term Debt	14				48
531	Amortization of Debt Discount and Expense	14				49
533	Taxes Assumed on Interest	14				50
534	Interest on Debt to Associated Companies	14				51
535	Other Interest Charges	14				52
	Total Other Deductions	14				53
536	Interest Charged to Construction					54
						55
			12 Months Ender December 31			56
530	Interest on Long-Term Debt	14	651 903 65	903 333 32	+251 429 67	57

						36
						37
		Month Of December				38
530	Interest on Long-Term Debt	14	45 952 09	75 000 00	+29 947 91	39
531	Amortization of Debt Discount and Expense	14	—	25 768 77	+25 768 77	40
533	Taxes Assumed on Interest	14	211 20	120 53	90 67	41
						42
534	Interest on Debt to Associated Companies	14				43
535	Other Interest Charges	14	—	713 45	+713 45	44
	Total Other Deductions	14	45 263 29	101 602 75	+56 339 46	45
536	Interest Charged to Construction		6 531 14	2 735 12	3 796 02	46
						47
		Months Ended				48
530	Interest on Long-Term Debt	14				49
531	Amortization of Debt Discount and Expense	14				50
533	Taxes Assumed on Interest	14				51
534	Interest on Debt to Associated Companies	14				52
535	Other Interest Charges	14				53
	Total Other Deductions	14				54
536	Interest Charged to Construction					55
						56
		12 Months Ender December 31				
530	Interest on Long-Term Debt	14	651 903 65	903 333 32	+251 429 67	57
531	Amortization of Debt Discount and Expense	14	27 486 70	310 029 24	+282 542 54	58
533	Taxes Assumed on Interest	14	1 614 71	1 001 02	613 69	59
534	Interest on Debt to Associated Companies	14				60
535	Other Interest Charges	14	4 343 86	1 786 09	2 557 77	61
	Total Other Deductions	14	685 348 92	1 216 149 67	+530 800 75	62
536	Interest Charged to Construction		11 774 51	36 827 80	+25 053 29	63
			(A)	(B)	(C)	

+Indicates red figures.

12 Months Ended December 31, 1941

Surplus—January 1, 1941				x x x x x x x x	7 922 967 21	1
Surplus—Prior to December 31, 1935				1 444 35		2
Surplus—Since December 31, 1935				7 924 411 56		3
						4
Additions:						5
						6
Net Income 12 Months Ended Dec. 31, 1943 As Shown by Earnings Summary				x x x x x x x x	4 804 492 74	7
						8
Other Credits						9
						10
						11
Surplus prior to December 31, 1935 eliminated as the result of Central Distributing Company ceasing to be a subsidiary of Panhandle Eastern Pipe Line Company as of January 1, 1941					1 444 35	12
						13
						14
						15
						16
						17
						18
						19
						20
						21
						22
						23
						24
						25
						26
						27
Total				x x x x x x x x	12 728 904 30	28
Deductions:						29
		Date				30
Dividends	No.	Declared	Record	Payment		31
Preferred	21	1/25/41	3/15/41	4/ 1/41	165 000 00	32
"	22	5/20/41	6/14/41	7/ 1/41	165 000 00	33
"	23	9/29/41	9/29/41	10/ 1/41	165 000 00	34
"	24	12/19/41	12/19/41	1/ 1/42	165 000 00	35
					660 000 00	
Common	8	1/25/41	1/25/41	1/25/41	339 094 14	36
"	9	2/28/41	3/ 5/41	3/20/41	403 683 50	37
"	10	5/20/41	5/24/41	6/ 9/41	403 683 50	38
"	11	9/29/41	10/ 2/41	10/17/41	807 367 00	39
					1 953 828 14	
Participating (Preferred)	5	9/29/41	10/ 2/41	10/17/41	201 841 75	40
"	6	12/19/41	12/22/41	1/ 6/42	538 244 67	41
					740 086 42	
Other Charges						42
Surplus since December 31, 1935 eliminated as the result of Central Distributing Company ceasing to be a subsidiary of Panhandle Eastern Pipe Line Company as of January 1, 1941					27 767 84	43
						44
						45
						46
Other Charges						47
Unamortized Debt Discount and Expense:						48
Twenty-year Sinking Fund Mortgage Bonds,						49
Series A, 6%, due October 1, 1950				890 386 60		50
First Mortgage and First Lien Bonds,						51
Series A, 4%, due March 1, 1952				791 676 91		52
First Mortgage and First Lien Bonds,						53
Series A, 4%, due March 1, 1952 — Call Premium				115 931 04		54
First Mortgage and First Lien Bonds,						55
Series A, due Serially November 1, 1946 to Nov. 1, 1950				56 255 05		56
First Mortgage and First Lien 3% Bonds,						57
Series B, due November 1, 1960				72 152 04		58
Serial Notes, Series A, B, C and D,						59
Due Serially November 1, 1942 to November 1, 1945				34 346 73	1 960 748 37	60
						61
Total Deductions				x x x x x x x x	5 342 430 77	62
Surplus December 31, 1941				x x x x x x x x	[illegible]	63

Participating	(Preferred)	5	9/29/41	10/ 2/41	10/17/41	201 841 75		41
"		6	12/19/41	12/22/41	1/ 6/42	538 244 67	740 086 42	41
Other Charges								42
Surplus since December 31, 1935 eliminated as the result of Central Distributing Company ceasing to be a subsidiary of Panhandle Eastern Pipe Line Company as of January 1, 1941							27 767 84	43 44 45 46
Other Charges								47
Unamortized Debt Discount and Expense:								48
Twenty-year Sinking Fund Mortgage Bonds,								49
Series A, 6%, due October 1, 1950						890 386 60		50
First Mortgage and First Lien Bonds,								51
Series A, 4%, due March 1, 1952						791 676 91		52
First Mortgage and First Lien Bonds,								53
Series A, 4%, due March 1, 1952 — Call Premium						115 931 04		54
First Mortgage and First Lien Bonds,								55
Series A, due Serially November 1, 1946 to Nov. 1, 1950						56 255 05		56
First Mortgage and First Lien 3% Bonds,								57
Series B, due November 1, 1966						72 152 04		58
Serial Notes, Series A, B, C and D,								59
Due Serially November 1, 1942 to November 1, 1945						34 346 73	1 960 748 37	60
								61
Total Deductions						x x x x x x x x	5 342 430 77	62
Surplus December 31, 1941						x x x x x x x x	7 386 473 53*	63
						(A)	(B)	

*For restriction as to payment of dividends and segregation of surplus, see Page 2A.

*Indicates red figures.

[fol. 15795]

Description			Over Previous Month	Since January First	
Gas Plant					1
Gas Plant in Service (Installed Since January 1, 1940)					2
Main Line System (Texas to Indiana)					3
Illinois Natural Gas Company		152 788 99	3 040 18	136 833 61	4
Panhandle Eastern Pipe Line Company		7 093 217 50	528 174 18	1 568 464 10	5
Total		7 246 006 49	531 214 36	1 705 297 71	6
					7
Other Leaseholds, Wells, Lines, Compressors, etc.					8
Central Distributing Company		—	—	+23 017 29	9
Panhandle Eastern Pipe Line Company (Local Area)		68 365 17	5 893 66	41 737 52	10
Total		68 365 17	5 893 66	18 720 23	11
					12
Other Gas Sales and Purchase Contracts					13
Panhandle Eastern Pipe Line Company		35 215 32	+521 67	12 753 42	14
					15
Total Page 1, Line 2		7 349 586 98	536 586 35	1 736 771 36	16
					17
Construction Work in Progress					18
Illinois Natural Gas Company		230 664 37	120 670 14	215 757 33	19
Panhandle Eastern Pipe Line Company		2 668 429 03	1 040 906 57	1 994 523 95	20
					21
Total Page 1, Line 3		2 899 093 40	1 161 576 71	2 210 281 28	22
					23
Gas Plant in Process of Reclassification					24
Main Line System (Texas to Indiana)					25
Illinois Natural Gas Company		2 724 666 73	+30 00	+1 090 99	26
Panhandle Eastern Pipe Line Company		53 352 283 11	+14 712 33	+346 298 41	27
Total		56 076 949 84	+14 742 33	+347 389 40	28
					29
Other Leasehold, Wells, Lines, Compressors, etc.					30
Central Distributing Company		—	—	+472 633 80	31
Panhandle Eastern Pipe Line Company (Local Area)		1 834 605 65	+2 936 13	+58 495 45	32
Total		1 834 605 65	+2 936 13	+531 129 25	33
					34
Gas Sales and Purchase Contracts					35
Panhandle Eastern Pipe Line Company	2 930 286 40				36
Less — Reserve for Amortization	1 758 171 60	1 172 114 80	+24 419 05	+293 028 60	37
					38
Other Gas Sales and Purchase Contracts					39
Panhandle Eastern Pipe Line Company		317 681 96	+2 655 21	+31 862 52	40
					41
Total Page 1, Line 5		59 401 352 25	+44 752 72	+1 203 409 77	42
					43
Total Page 1, Line 10		69 650 032 63	1 653 410 34	2 743 642 87	44
					45
					46
					47
	(A)	(B)	(C)	(D)	

Investment And Fund Accounts		1
Other Investments		2
Panhandle Eastern Pipe Line Company		3
Total Page 1, Line 17	204 498 52	4
		5
		6
Current And Accrued Assets		7
Special Deposits		8
Panhandle Eastern Pipe Line Company		9
Total Page 1, Line 28	102 580 14	10
		11
		12
Working Funds		13
Illinois Natural Gas Company	323 03	14
Panhandle Eastern Pipe Line Company	11 249 05	15
		16
Total Page 1, Line 29	11 572 08	17
		18
		19
Temporary Cash Investments		20
Panhandle Eastern Pipe Line Company		21
Total Page 1, Line 30	2 750 000 00	22
		23
		24
Long-Term Debt		25
Bonds		26
Panhandle Eastern Pipe Line Company		27
Total Page 2, Line 13	18 250 000 00	28
		29
Miscellaneous Long-Term Debt		30
Panhandle Eastern Pipe Line Company		31
Total Page 2, Line 16	5 009 789 19	32
		33
Current And Accrued Liabilities		34
Accounts Payable		35
Illinois Natural Gas Company	9 791 72	36
Panhandle Eastern Pipe Line Company	1 073 546 16	37
		38
Total Page 2, Line 22	1 083 337 88	39
		40
Matured Long-Term Debt		41
Panhandle Eastern Pipe Line Company		42
Total Page 2, Line 26	96 822 14	43
		44
		45
		46
		47

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month: Debits	Changes During Month: Credits	Balance End of Month	
	Current And Accrued Assets							1
125-2	Other Accounts Receivable							2
	Illinois Natural Gas Company			1 514 28	2 029 00	112 59	3 430 69	3
	Panhandle Eastern Pipe Line Company			79 746 66	119 908 76	125 854 92	73 800 50	4
								5
	Total Page 1, Line 33			81 260 94	121 937 76	125 967 51	77 231 19	6
								7
131-1	Materials and Supplies—Gas							8
	Illinois Natural Gas Company			1 421 88	277 88	307 32	1 392 39	9
	Panhandle Eastern Pipe Line Company			331 177 13	53 447 70	22 076 17	362 548 66	10
								11
	Total Page 1, Line 36			332 599 01	53 725 53	22 383 49	363 941 05	12
								13
132	Prepayments							14
	Panhandle Eastern Pipe Line Company							15
	Total Page 1, Line 39			117 023 74	12 468 23	34 759 79	94 732 18	16
								17
	Deferred Debits							18
140	Unamortized Debt Discount and Expense							19
	Panhandle Eastern Pipe Line Company							20
	Total Page 1, Line 49			1 800 164 03		1 800 164 03	—	21
								22
143	Clearing Accounts							23
	Panhandle Eastern Pipe Line Company							24
	Total Page 1, Line 50			4 652 58	172 765 87	170 657 88	6 760 57	25
								26
144	Retirement Work in Progress							27
	Illinois Natural Gas Company			1 026 69	42 18	1 068 87	—	28
	Panhandle Eastern Pipe Line Company			300 976 86	43 837 77	344 814 63	—	29
								30
	Total Page 1, Line 51			302 003 55	43 879 95	345 883 50	—	31
								32
145	Other Work in Progress							33
	Illinois Natural Gas Company			1 556 25	1 115 31	2 671 56	—	34
	Panhandle Eastern Pipe Line Company			114 889 95	83 258 24	21 528 39	176 619 80	35
								36
	Total Page 1, Line 52			116 446 20	84 373 55	24 199 95	176 619 80	37
								38
146	Other Deferred Debits							39
	Panhandle Eastern Pipe Line Company							40
	Total Page 1, Line 53			4 020 89	48 02	—	4 068 91	41
								42
								43
								44
								45
								46
								47
		(A)	(B)	(C)	(D)	(E)	(F)	

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month: Debits	Changes During Month: Credits	Balance End of Month
	Current And Accrued Liabilities						
226	Matured Interest						
	Panhandle Eastern Pipe Line Company						
	Total Page 2, Line 27			5 430 00	1 200 00	—	4 230 00
228	Taxes Accrued						
	Illinois Natural Gas Company			66 270 39	8 724 32	7 778 44	65 324 51
	Panhandle Eastern Pipe Line Company			3 607 216 38	779 922 22	325 884 75	3 153 178 91
	Total Page 2, Line 29			3 673 486 77	788 646 54	333 663 19	3 218 503 42
229-1	Interest Accrued Long-Term Debt						
	Panhandle Eastern Pipe Line Company						
	Total Page 2, Line 30			45 052 09	—	45 052 09	90 104 18
230	Other Current and Accrued Liabilities						
	Panhandle Eastern Pipe Line Company						
	Total Page 2, Line 32			2 026 97	14 784 31	16 190 76	3 433 42
	Deferred Credits						
242	Other Deferred Credits						
	Panhandle Eastern Pipe Line Company						
	Total Page 2, Line 39			43 636 63	270 14	48 02	43 444 51

[fol. 15799]

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month: Debits	Changes During Month: Credits	Balance End of Month	
	Reserves							1
250 6	Depreciation, Depletion and Amortization							2
	In Process of Reclassification							3
	Property, Plant and Equipntent							4
	Illinois Natural Gas Company			496 242 23	766 58	7 500 00	502 975 65	5
	Panhandle Eastern Pipe Line Company			9 499 954 11	198 979 02	215 984 80	9 516 959 89	6
				9 996 196 34	199 745 60	223 484 80	10 019 935 51	7 8
	Gas Sales and Purchase Contracts							9
	Panhandle Eastern Pipe Line Comapany	old		—	24 419 05*	24 419 05	—	10
	Other Gas Sales and Purchase Contracts	24,419 05						11
	Panhandle Eastern Pipe Line Company	12		—	2 655 21	2 655 21	—	12 13
		293,028 60						14
				—	27 074 26	27 074 26	—	15
	Automobiles							16
	Panhandle Eastern Pipe Line Company			23 521 39	1 245 21	3 572 33	25 848 51	17 18
	Amortization of Leaseholds							19
	Panhandle Eastern Pipe Line Company			537 233 79	2 00		537 231 79	20 21
	Gas Plant in Service							22
	Other Gas Sales and Purchase Contracts							23
	Panhandle Eastern Pipe Line Company			—	521 67	521 67	—	24 25
	Producing Natural Gas Land and Gas Rights							26
	Panhandle Eastern Pipe Line Company			160 380 02	—	9 533 31	169 913 33	27 28
	Abandoned Leases							29
	Panhandle Eastern Pipe Line Company			148 900 69	—	6 193 39	155 094 08	29 30 31
	Total Page 2, Line 46			10 866 232 23	228 588 74	270 379 76	10 908 923 25	32 33
254	Uncollectible Accounts							34
	Illinois Natural Gas Company			12 300 00		300 00	12 600 00	35 36
	Panhandle Eastern Pipe Line Company			37 019 88		600 00	37 619 88	37
	Total Page 2, Line 47			49 319 88	—	900 00	50 219 88	38 39
								40 41 42 43 44 45 46
								47

*Applied as a reduction of asset account

(A) (B) (C) (D) (E) (F)

[fol. 15800]

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month: Debits	Changes During Month: Credits	Balance End of Month	
	Reserves (Cont.)							1
256	Injuries and Damages							2
	Illinois Natural Gas Company			10 500 00	—	300 00	10 800 00	3
	Panhandle Eastern Pipe Line Company			89 123 74	—	1 000 00	90 123 74	4
								5
	Total Page 2, Line 48			99 623 74	—	1 300 00	100 923 74	6
								7
258	Other Reserves							8
	Panhandle Eastern Pipe Line Company							9
	Total Page 2, Line 49			624 800 94	—	—	624 800 94	10
								11
	Contributions In Aid Of Construction							12
265	Contributions in Aid of Construction							13
	Illinois Natural Gas Company			6 261 51	—	—	6 261 51	14
	Panhandle Eastern Pipe Line Company			35 801 06	—	—	35 801 06	15
								16
	Total Page 2, Line 54			42 062 57	—	—	42 062 57	17
								18
								19
								20
								21
								22
								23
								24
								25
								26
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								45
								46
								47
		(A)	(B)	(D)	(E)	(E)	(F)	

[fol. 15801]

Acc't No.	Description	Current Month		Months To Date		Twelve Months To Date		
		This Year	Last Year	This Year	Last Year	This Year	Last Year	
	Taxes—Federal							1
	Income	186 306 77	186 200 00			1 690 000 00	1 436 598 47	2
	Excess Profits	99 774 72	100 000 00			900 000 00	561 000 00	3
	Total Federal Income and Excess Profits Taxes	286 081 49	286 200 00			2 590 000 00	1 997 598 47	4 5 6
	Charges In Lieu Of Taxes							7
	Federal Income							8
	Federal Excess Profits					141 106 77	—	9
						682 774 72	—	10
	Total Charges in lieu of Taxes*	—	—			823 881 49*	—	11 12
	Total Page 3, Lines 12 and 13, 54 and 55	286 081 49	286 200 00			3 413 881 49	1 997 598 47	13 14 15
	Taxes — Other							16
	Ad valorem	36 988 57	*18 263 05					17
	Gross Production, Receipts, etc.	4 488 12	1 859 03			492 918 15	437 745 73	18
	Franchise					52 810 88	23 330 88	19
	State Income	*9 000 00	*9 500 00			7 860 14	*14 055 82	20
	Unemployment Compensation—States	25 90	*1 889 76			35 000 00	46 425 77	21
	Capital Stock Tax—State	560 00	1 475 00			21 111 57	25 034 06	22
	Federal Capital Stock	9 910 00	6 160 00			7 962 39	8 662 96	23
	Federal Excise—Old Age Benefits	240 70	*825 94			103 200 00	74 494 30	24
	Federal Excise—Unemployment Ins.	85 15	*244 11			9 769 06	8 594 67	25
						2 991 04	2 638 93	26
	Total Page 3, Lines 14 and 56	43 298 44	*21 228 83			733 622 93	612 871 48	27 28 29

*Charges in lieu of Federal Income and Excess Profits Taxes represent an amount equivalent to income taxes which would have been payable on current earnings if Panhandle Eastern Pipe Line Company had not had the benefit for tax purpose, of deductions for discount, premium and expense resulting from the refinancing of long term debt. Such amounts have been credited to Unamortized Debt Discount and Expense as a partial offset to the items included therein applicable to the bonds which were retired.

(A) (B) (C) (D) (E) (F)

*Indicates red figures.

[fol. 15802]

Acc't No.	Description	Current Month		Months To Date		Twelve Months To Date		
		This Year	Last Year	This Year	Last Year	This Year	Last Year	
	Other Income							1
524-1	Interest on Securities Owned							2
	Panhandle Eastern Pipe Line Co.							3
	Total Page 9, Lines 6 and 26	2 130 92	1 185 22			17 434 95	13 186 64	4
								5
524-22	Interest Revenue—Other							6
	Central Distributing Co.		9 64				171 34	7
	Illinois Natural Gas Co.		—			6 94	—	8
	Panhandle Eastern Pipe Line Co.	—	—			1 100 00	69 55	9
								10
	Total Page 9, Lines 8 and 28	—	9 64			1 106 94	240 89	11
								12
	Total Page 9, Lines 12 and 32	2 130 92	1 194 86			18 541 89	13 427 53	13
								14
	Other Deductions							15
530	Interest on Long-Term Debt							16
	Panhandle Eastern Pipe Line Co.							17
	Total Page 9, Lines 39 and 57	45 052 09	75 000 00			651 903 65	903 333 32	18 19
								20
531	Amortization Debt Discount Expense							21
	Panhandle Eastern Pipe Line Co.							22
	Total Page 9, Lines 40 and 58	—	25 768 77			27 486 70	310 029 24	23 24
								25
533	Taxes Assumed on Interest							26
	Panhandle Eastern Pipe Line Co.							27
	Total Page 9, Lines 41 and 59	211 20	120 53			1 614 71	1 001 02	28 29
								30
535	Other Interest Charges							31
	Central Distributing Co.		24 75				114 41	32
	Illinois Natural Gas Co.		—			—	4 75	33
	Panhandle Eastern Pipe Line Co.	—	688 70			4 343 86	1 666 93	34
								35
	Total Page 9, Lines 43 and 61		713 45			4 343 86	1 786 09	36 37
								38
	Total Page 9, Lines 44 and 62	145 263 29	101 602 75			685 348 92	1 216 149 67	39 40
								41
								42
								43
								44
								45
								46
								47
		(A)	(B)	(C)	(D)	(E)	(F)	

12 Months To Date This Year	12 Months To Date Last Year	Acc't No.	Production		Current Month This Year	Current Month Last Year	
			Operation				1
21 421 78	19 248 79	733-1	Supervision & Engineering	—Labor	3 076 04	1 754 82	2
2 932 41	2 556 84	733-2	" "	—S. & E.	329 65	150 15	3
6 062 97	6 631 74	734-1	Gas Well	—Labor	488 56	431 21	4
5 450 42	6 382 74	735-1	" "	—S. & E.	443 26	652 59	5
12 559 39	11 634 85	734-2	Field Lines	—Labor	2 027 00	1 243 94	6
5 191 97	4 088 34	735-2	" "	—S. & E.	598 10	544 27	7
46 00		734-31	Field Compressor Station	—Labor	46 00		8
40 21		735-31	" " "	—S. & E.	40 21		9
11 525 85	12 583 54	734-32	Field Measuring Station	—Labor	1 589 34	1 086 57	10
4 042 30	4 326 10	735-32	" " "	—S. & E.	377 75	404 83	11
5 626 01	5 214 20	734-41	Other Production	—Labor	885 04	488 22	12
2 433 31	2 214 75	735-41	" "	—S. & E.	193 27	222 81	13
5 513 70	6 278 98	734-42	Land Department	—Labor	734 75	428 58	14
5 221 31	2 642 54	735-42	" "	—S. & E.	365 68	144 81	15
171 043 82	143 341 99	745	Gas Well Royalties		18 400 03	14 457 86	16
400 09	325 00	746	Natural Gas Rents		36 75	30 00	17
116 780 63	101 344 57	510	Delay Rentals		8 591 28	7 617 10	18
							19
376 292 17	328 814 97		Total Operation		38 222 71	29 657 76	20
			Maintenance				21
6 633 64	3 236 38	739-1	Supervision & Engineering	—Labor	530 12	330 42	22
903 73	448 34	739-2	" "	—S. & E.	72 18	30 41	23
		740-211	Field Compressor Station Struct.	—Labor			24
		740-212	" " " "	—S. & E.			25
120 18	365 04	740-221	Field Measuring Station Struct.	—Labor			26
90 17	263 18	740-222	" " " "	—S. & E.	—	5 05	27
1 491 67	981 21	740-31	Other Prod. System Struct.	—Labor	358 01	118 40	28
805 75	624 35	740-32	" " " "	—S. & E.	110 02	43 36	29
2 476 52	3 051 35	741-1	Producing Gas Well Equip.	—Labor	127 03	400 72	30
4 323 89	7 416 43	741-2	" " " "	—S. & E.	403 71	2 151 93	31
4 546 34	1 863 45	742-11	Field Lines	—Labor	239 55	202 33	32
3 481 14	1 977 05	742-12	" "	—S. & E.	276 94	176 32	33
		742-211	Field Compressor Station Equip.	—Labor			34
8 50	—	742-212	" " " "	—S. & E.	8 50	—	35
1 107 79	1 055 06	742-221	Field Measuring Station Equip.	—Labor	426 80	77 31	36
757 38	780 79	742-222	" " " "	—S. & E.	66 02	62 97	37
35 08	36 08	743-1	Drilling & Cleaning Equip.	—Labor			38
276 64	13 91	743-2	" " "	—S. & E.			39
54 59	69 10	744-1	Other Natural Gas Property	—Labor	54 59	—	40
10 08	—	744-2	" " " "	—S. & E.			41
							42
27 123 09	22 181 71		Total Maintenance		2 373 47	3 599 22	43
403 415 26	350 996 68		Total Production Expenses—Gas		40 596 18	33 256 98	44
30 059 021	26 578 757		Total MCF Produced		3 177 779	2 626 658	45
1.34¢	1.32¢		Average Cost Per MCF		1.28¢	1.27¢	46
							47
			Gas Purchased				48
			Operation				49
		754-11	Gas Purchased—Associated Companies				50
1 180 917 63	1 090 106 83	754-12	" " —Others		115 996 43	117 754 74	51
11 539 35	12 211 56	755-1	Purchased Gas Exp.—Measurement	—Labor	1 288 45	1 042 19	52
4 530 41	4 458 27	755-2	" " " "	—S. & E.	513 80	398 02	53
4 367 59	5 716 85	755-3	Purchased Gas Exp.—Other	—Labor	365 55	427 65	54
2 273 29	2 532 56	755-4	" " " "	—S. & E.	150 55	266 94	55
1 203 628 27	1 115 026 07		Total Operation		118 314 78	119 889 54	56
			Maintenance				57
1 512 91	2 222 75	755-5	Purchase Measuring Station	—Labor	88 06	195 33	58
1 046 70	1 611 88	755-6	" " "	—S. & E.	41 23	147 98	59
2 559 61	3 834 63		Total Maintenance		129 29	343 31	60
1 206 187 88	1 118 860 70		Total Gas Purchased		118 444 07	120 232 85	61
30 137 409	27 537 768		Total MCF Purchased		2 946 921	2 [illegible]	

10 08	—	744-2	" " " " —	—S. & E.			41
							42
27 123 09	22 181 71		Total Maintenance		2 373 47	3 599 22	43
403 415 26	350 996 68		Total Production Expenses—Gas		40 596 18	33 256 98	44
30 059 021	26 578 757		Total MCF Produced		3 177 779	2 626 658	45
1.34¢	1.32¢		Average Cost Per MCF		1.28¢	1.27¢	46
							47
			Gas Purchased				48
			Operation				49
		754-11	Gas Purchased—Associated Companies				50
1 180 917 63	1 090 106 83	754-12	" " —Others		115 996 43	117 754 74	51
11 539 35	12 211 56	755-1	Purchased Gas Exp.—Measurement	—Labor	1 288 45	1 042 19	52
4 530 41	4 458 27	755-2	" " " "	—S. & E.	513 80	398 02	53
4 367 59	5 716 85	755-3	Purchased Gas Exp.—Other	—Labor	365 55	427 65	54
2 273 29	2 532 56	755-4	" " " "	—S. & E.	150 55	266 94	55
1 203 628 27	1 115 026 07		Total Operation		118 314 78	119 889 54	56
			Maintenance				57
1 512 91	2 222 75	755-5	Purchase Measuring Station	—Labor	88 06	195 33	58
1 046 70	1 611 88	755-6	" " "	—S. & E.	41 23	147 98	59
2 559 61	3 834 63		Total Maintenance		129 29	343 31	60
1 206 187 88	1 118 860 70		Total Gas Purchased		118 444 07	120 232 85	61
30 137 409	27 537 768		Total MCF Purchased		2 946 920	2 974 860	62
4.01¢	4.06¢		Average Cost Per MCF		4.02¢	4.04¢	63
(A)	(B)				(C)	(D)	

12 Months To Date This Year	12 Months To Date Last Year	Acc't No.	Transmission		Current Month This Year	Current Month Last Year	
			Operation				1
76 475 56	64 451 08	758-	Supervision & Engineering	—Labor	10 677 04	5 552 90	2
17 133 39	14 186 56	758-2	" "	—S. & E.	1 347 55	1 297 28	3
312 647 90	262 016 06	759-111	Pumping Station	—Labor	43 468 44	22 696 41	4
77 845 07	64 960 67	759-1211	" "	—S. & E.	7 231 04	6 503 98	5
506 367 60	475 604 25	759-1212	" "	—Power	60 403 05	52 347 00	6
15 327 13	14 344 95	759-1121	Measuring Station	—Labor	2 242 50	1 062 30	7
9 101 98	8 459 90	759-1221	" "	—S. & E.	739 03	861 22	8
7 001 32	8 210 49	759-1122	Regulator Station	—Labor	699 76	808 14	9
2 978 56	2 488 89	759-1222	" "	—S. & E.	275 42	427 61	10
74 866 67	58 734 71	759-211	Transmission Mains	—Labor	14 680 60	4 843 41	11
40 968 38	32 220 69	759-221	" "	—S. & E.	4 082 96	3 909 29	12
10 078 28	6 998 88	759-212	Other Transmission System	—Labor	571 59	872 01	13
10 346 39	4 511 96	759-222	" " "	—S. & E.	1 162 25	780 98	14
7 463 28	6 620 67	763	Rents		454 25	179 54	15
							16
							17
1 168 601 53	1 023 809 76		Total Operation		148 035 48	102 142 07	18
			Maintenance				19
30 539 34	27 549 82	760-1	Supervision & Engineering	—Labor	2 542 84	2 449 80	20
7 282 59	6 103 14	760-2	" "	—S. & E.	573 16	482 65	21
11 637 61	10 348 47	761-11	Pumping Station Structures	—Labor	581 78	747 31	22
8 042 03	5 732 58	761-12	" " "	—S. & E.	188 03	243 76	23
1 063 06	737 27	761-211	Measuring Station	—Labor	37 62	415 91	24
802 41	763 45	761-221	" "	—S. & E.	51 29	28 96	25
580 08	346 75	761-212	Regulator Station	—Labor	85 56	36 66	26
429 18	470 59	761-222	" "	—S. & E.	5 72	16 93	27
1 170 39	1 915 10	761-31	Other Transmission System Struct.	—Labor	324 09	274 15	28
1 289 06	1 090 02	761-32	" " " "	—S. & E.	16 09	409 89	29
36 217 74	22 124 47	762-11	Transmission Mains	—Labor	1 985 76	1 732 02	30
35 356 87	11 519 38	762-12	" "	—S. & E.	13 152 58	722 37	31
67 176 64	60 178 41	762-211	Pumping Station Equipment	—Labor	4 054 56	3 465 07	32
64 688 69	56 047 32	763-212	" " "	—S. & E.	3 738 46	10 153 49	33
6 405 88	6 240 42	762-2211	Measuring Station Equipment	—Labor	578 02	449 31	34
4 007 63	4 825 79	762-2221	" " "	—S. & E.	502 20	430 92	35
3 015 09	1 332 24	762-2212	Regulator Station Equipment	—Labor	282 77	183 55	36
1 824 27	1 633 14	762-2222	" " "	—S. & E.	447 87	300 22	37
2 378 76	2 519 84	762-231	Other Trans. System Equipment	—Labor	566 77	97 21	38
3 076 35	2 525 60	762-232	" " " "	—S. & E.	256 46	110 49	39
							40
286 983 69	224 003 80		Total Maintenance		29 991 63	22 450 67	41
1 455 585 22	1 247 813 56		Total Transmission Expenses		178 027 11	124 592 74	42
			Distribution				43
							44
			Operation				45
—	4 911 38	765-1	Supervision & Engineering	—Labor	—	441 90	46
—	971 37	765 2	" "	—S. & E.	—	138 15	47
—	554 71	766-2	Other Distribution Office	—S. & E.	—	58 85	48
—	4 872 56	767-1	Distribution Lines	—Labor	—	301 75	49
—	1 782 32	767-2	" "	—S. & E.	—	102 98	50
—	1 960 08	768-11	Removing & Resetting Meters	—Labor	—	159 65	51
—	688 81	768-12	" " "	—S. & E.	—	57 38	52
—	1 055 59	768-21	Miscellaneous Meter Expense	—Labor	—	164 18	53
—	170 34	768-22	" " "	—S. & E.	—	25 32	54
—	1 878 81	769-1	Services On Customers Premises	—Labor	—	139 07	55
—	505 13	769-2	" " " "	—S. & E.	—	49 67	56
—	615 12	776	Rents		—	60 12	57
							58
							59
							60
							61
							62
—	19 966 22		Total Operation		—	1 699 02	63

983 69	224 003 80		Total Maintenance		29 991 63	22 450 67	41
585 22	1 247 813 56		Total Transmission Expenses		178 027 11	124 592 74	42
			Distribution				43
							44
			Operation				45
—	4 911 38	765-1	Supervision & Engineering	—Labor	—	441 90	46
—	971 37	765-2	" "	—S. & E.	—	138 15	47
—	554 71	766-2	Other Distribution Office	—S. & E.	—	58 85	48
—	4 872 56	767-1	Distribution Lines	—Labor	—	301 75	49
—	1 782 32	767-2	" "	—S. & E.	—	102 98	50
—	1 960 08	768-11	Removing & Resetting Meters	—Labor	—	159 65	51
—	688 81	768-12	" " "	—S. & E.	—	57 38	52
—	1 055 59	768-21	Miscellaneous Meter Expense	—Labor	—	164 18	53
—	170 34	768-22	" " "	—S. & E.	—	25 32	54
—	1 878 81	769-1	Services On Customers Premises	—Labor	—	139 07	55
—	505 13	769-2	" " "	—S. & E.	—	49 67	56
—	615 12	776	Rents		—	60 12	57
							58
							59
							60
							61
							62
—	19 966 22		Total Operation		—	1 699 02	63
(A)	(B)				(C)	(D)	

12 Months To Date		Acc't No.	Distribution		Current Month		
This Year	Last Year				This Year	Last Year	
			Maintenance				1
		771-1	Supervision & Engineering	—Labor			2
		771-2	" "	—S. & E.			3
—	78 83	772-1	Structures & Improvements	—Labor			4
—	40 45	772-2	" "	—S. & E.			5
—	1 140 58	773-11	Mains	—Labor	—	29 57	6
—	240 18	773-12	"	—S. & E.	—	13 10	7
—	569 68	773-31	Services	—Labor	—	9 41	8
—	292 35	773-32	"	—S. & E.	—	17 26	9
—	920 92	773-41	Meters	—Labor	—	75 31	10
—	746 16	773-42	"	—S. & E.	—	15 33	11
—	407 26	773-51	House Regulators	—Labor	—	60 66	12
—	190 82	773-52	" "	—S. & E.	—	28 18	13
—	370 11	775-1	Other Distribution Equipment	—Labor	—	21 96	14
—	65 69	775-2	" " "	—S. & E.	—	5 71	15
							16
							17
							18
							19
							20
							21
							22
—	5 063 03		Total Maintenance		—	276 49	23
—	25 029 25		Total Distribution Expenses		—	1 975 51	24
							25
			Customers' Accounting & Collecting				26
		779-1	Supervision	—Salaries			27
		779-2	" "	—S. & E.			28
		780-11	Customers' Contracts & Orders	—Labor			29
—	12 75	780-12	" " "	—S. & E.			30
5 315 47	7 112 30	780-31	Meter Reading	—Labor	428 04	628 18	31
1 249 96	1 920 22	780-32	" "	—S. & E.	118 25	186 31	32
—	1 842 47	780-41	Collecting	—Labor	—	190 97	33
302 88	535 99	780-42	"	—S. & E.	—	58 56	34
6 702 01	8 054 13	781-41	Customers Billing & Acct'ng	—Labor	862 82	907 00	35
*405 80	686 70	781-2	" " "	—S. & E.	*41 22	36 82	36
—	2 186 02	782	Miscellaneous Expenses		—	181 30	37
10 800 00	10 800 00	783	Uncollectible Accounts		900 00	900 00	38
		784	Rents				39
							40
							41
							42
							43
							44
							45
							46
23 964 52	33 150 58		Total Customers' Accounting & Collecting		2 267 89	3 089 14	47
							48
			Sales Promotion				49
9 093 77	8 721 25	785-1	Supervision	—Salaries	1 153 03	733 30	50
2 685 69	2 689 63	785-2	"	—S. & E.	129 96	155 27	51
7 387 88	6 609 62	786-1	Industrial Engineers	—Salaries	886 20	590 00	52
3 309 36	3 361 01	786-2	" "	—S. & E.	150 57	317 17	53
5 00	232 74	787-2	Advertising		—	200 94	54
239 39	452 12	787-3	Miscellaneous Sales Expenses		60 20	290 07	55
							56
							57
							58
							59
							60
							61
							62
22 721 09	22 066 37		Total Sales Promotion Expenses		2 379 96	2 286 75	63
(A)	(B)				(C)	(D)	

*Indicates red figures

							39
							40
							41
							42
							43
							44
							45
							46
23 964 52	33 150 58		Total Customers' Accounting & Collecting		2 267 89	3 089 14	47
			Sales Promotion				48
							49
9 093 77	8 721 25	785-1	Supervision	—Salaries	1 153 03	733 30	50
2 685 69	2 689 63	785-2	"	—S. & E.	129 96	155 27	51
7 387 88	6 609 62	786-1	Industrial Engineers	—Salaries	886 20	590 00	52
3 309 36	3 361 01	786-2	" "	—S. & E.	150 57	317 17	53
5 00	232 74	787-2	Advertising			200 94	54
239 39	452 12	787-3	Miscellaneous Sales Expenses		60 20	290 07	55
							56
							57
							58
							59
							60
							61
							62
22 721 09	22 066 37		Total Sales Promotion Expenses		2 379 86	2 286 75	63
(A)	(B)				(C)	(D)	

*Indicates red figures.

12 Months To Date		Acc't No.	Administrative & General		Current Month		
This Year	Last Year				This Year	Last Year	
			Operation				1
94 654 17	88 000 60	790	General Officers	—Salaries	11 562 51	7 333 34	2
21 685 49	15 976 21	791-1	General Law	—Salaries	2 950 76	1 670 84	3
10 479 50	8 904 50	791-2	Rate, Survey and Valuation	—Salaries	1 330 00	752 50	4
126 516 50	110 276 04	791-3	Other General Office Employees	—Salaries	16 622 07	10 864 78	5
12 258 97	17 880 29	792-1	General Officers	—Expense	711 41	2 567 18	6
3 676 40	2 323 32	792-21	General Law	—Expense	599 63	858 80	7
—	1 826 86	792-22	Rate, Survey and Valuation	—Expense			8
11 201 03	8 858 75	792-23	Other Gen. Office Employees	—Expense	792 96	1 677 30	9
13 982 40	26 679 09	793-1	General Office Stationery and Printing		1 305 00	17 604 96	10
22 039 40	19 342 00	793-2	General Office Supplies and Expenses		2 458 75	4 731 34	11
22 358 80	19 572 84	795	Special Services		5 170 89	11 010 79	12
53 322 07	76 018 19	796	Special Legal Services		1 865 65	37 637 11	13
		797	Regulatory Commission Expenses				14
12 054 52	10 602 38	798	Insurance—General		1 292 51	943 94	15
11 812 49	11 520 70	799-1	Insurance—Claims for Injuries and Damages		*1 583 09	*8 859 78	16
15 600 00	18 600 00	799-2	Injuries and Damages		1 300 00	1 550 00	17
1 931 92	2 456 33	800-11	Accident Prevention		132 68	376 80	18
7 421 24	6 257 88	800-12	Insurance—Group Life		638 00	557 15	19
2 899 16	2 304 25	800-13	Employees' Welfare Expenses—Other		22 55	22 00	20
177 895 69	168 760 00	800-2	Pensions		14 733 33	77 313 37	21
4 781 51	5 037 33	801-1	Dues, Donations and Subscriptions		706 45	165 20	22
58 700 75	45 412 23	801-2	Other Miscellaneous General Expenses		2 780 23	9 873 16	23
32 879 13	27 804 40	803	Rents		2 763 33	2 315 00	24
—	363 68	805	Franchise Requirements		—	23 13	25
							26
							27
							28
							29
							30
							31
							32
							33
							34
718 151 14	694 777 27		Total Operation		68 155 62	180 988 61	35
			Maintenance				36
		802-21	General Office Equipment	—Labor			37
1 242 18	2 571 83	802-22	" " "	—S. & E.	6 04	912 57	38
							39
							40
							41
							42
							43
1 242 18	2 571 83		Total Maintenance		6 04	912 57	44
719 393 32	697 349 10		Total Administrative & Gen'l Exp.		68 161 66	181 901 18	45
							46
			Operating Deductions				47
131 490 15	110 392 50	667	Interdepartmental Gas Sales		13 456 20	11 830 80	48
1 096 52	1 002 57	749-1	Gas Used in Company Buildings		139 45	163 32	49
506 367 60	475 604 25	749-2	Gas Used for Power		60 403 05	52 347 00	50
—	1 748 19	749-3	Gas Used in Other Operations				51
6 580 25	28 184 20	749-4	Gas Used in Construction		—	2 622 75	52
13 200 00	18 000 00	764-2	Joint Transmission Expense Transferred		1 100 00	1 500 00	53
—	160 51	806	Duplicate Miscellaneous Charges		—	23 13	54
3 570 94	57 388 03	807	Administrative & General Expense Transferred		3 570 94	57 380 03	55
		809	Joint Admstr. & Gen. Exp. Transferred				56
							57
							58
							59
662 305 46	692 472 16		Total Operating Deductions		78 669 64	125 867 03	60
							61
2 851 053 26	2 545 139 08		Total Operation		298 706 80	313 885 86	62

						40
						41
						42
						43
1 242 18	2 571 83		Total Maintenance	6 04	912 57	44
719 393 32	697 349 10		Total Administrative & Gen'l Exp.	68 161 66	181 901 18	45
						46
			Operating Deductions			47
131 490 15	110 392 50	607	Interdepartmental Gas Sales	13 456 20	11 830 80	48
1 096 52	1 002 57	749-1	Gas Used in Company Buildings	139 45	163 32	49
506 367 60	475 604 25	749-2	Gas Used for Power	60 403 05	52 347 00	50
—	1 748 10	749-3	Gas Used in Other Operations			51
6 580 25	28 184 20	749-4	Gas Used in Construction	—	2 622 75	52
13 200 00	18 000 00	764-2	Joint Transmission Expense Transferred	1 100 00	1 500 00	53
—	160 51	806	Duplicate Miscellaneous Charges	—	23 13	54
3 570 94	57 380 03	807	Administrative & General Expense Transferred	3 570 94	57 380 03	55
		809	Joint Admstr. & Gen. Exp. Transferred			56
						57
						58
						59
662 305 46	692 472 16		Total Operating Deductions	78 669 64	125 867 03	60
						61
2 851 053 26	2 545 139 08		Total Operation	298 706 80	313 885 86	62
317 908 57	257 655 00		Total Maintenance	32 500 43	27 582 26	63
(A)	(B)			(C)	(D)	

*Indicates red figures.

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Gasoline Expenses 20

Month of December 1941

12 Months To Date This Year	12 Months To Date Last Year	Acc't No.	Production		Current Month This Year	Current Month Last Year	
			Operation				1
2 521 03	2 669 69	5514	Supervision and Engineering	—Labor	401 44	180 37	2
328 03	53 27	5515	" "	—S. & E.	45 00	5 00	3
10 747 52	9 084 83	5516	Extraction Plant Labor		2 123 47	740 20	4
10 868 71	8 736 22	5517	Other Labor		613 97	588 40	5
36 134 25	32 418 30	5518	Fuel—Gas		3 546 75	3 330 30	6
5 048 83	5 274 18	5519	Absorption—Oil		636 45	602 40	7
24 315 24	29 539 51	5520	Other Supplies and Expense		3 449 29	4 568 34	8
95 355 90	77 974 20	5521	Shrinkage—Gas		9 909 45	8 500 50	9
							10
							11
							12
							13
185 319 51	165 744 20		Total Operation		20 725 82	18 515 51	14
			Maintenance				15
314 23	359 27	5522	Supervision and Engineering	—Labor	28 12	27 50	16
		5523	"	—S. & E.			17
1 218 63	716 04	5524	Structures	—Labor	131 36	90 72	18
520 96	258 89	5525		—S. & E.	89 86	55 07	19
6 812 32	6 915 20	5526	Equipment	—Labor	844 01	599 56	20
8 401 80	6 511 60	5527	"	—S. & E.	1 148 06	499 39	21
							22
							23
							24
17 267 94	14 761 00		Total Maintenance		2 241 41	1 272 24	25
202 587 45	180 505 20		Total Production Cost		22 967 23	19 787 75	26
202 587 45	180 505 20	3528	Production Transferred to Inventory		22 967 23	19 787 75	27
25 423 109	20 793 278		Total Gallons Produced		2 642 454	2 266 973	28
80¢	87¢		Avg. Cost Per Gallon (Cents)		87¢	87¢	29
240 895	216 122		MCF Fuel		23 645	22 202	30
635 706	519 828		MCF Shrinkage		66 063	56 670	31
							32
			Marketing				33
3 282 48	3 112 50	5529	Salaries and Expense		312 41	319 27	34
		5530	Freight and Hauling				35
76 54	48 83	5531	Other Miscellaneous Expense			39 26	36
							37
							38
							39
							40
3 359 02	3 063 67		Total Marketing Expenses		312 41	358 53	41
							42
			General				43
1 500 00	1 500 00	5550	Other General Office Employees—Sal. and Exp.		125 00	125 00	44
600 00	600 00	5551	General Office Supplies and Expense		50 00	50 00	45
300 00	300 00	5552	General Office Rent		25 00	25 00	46
		5553	Injuries and Damages				47
476 17	439 92	5554	Insurance—General		54 82	36 66	48
733 51	845 92	5555	Insurance—Claims for Injuries and Damages		65 35	61 71	49
288 00	254 00	5556	Insurance—Group Life		24 00	22 00	50
2 973 79	1 740 00	5557	Pensions		200 00	145 00	51
		5558	Dues, Donations and Subscriptions				52
25 00	25 00	5559	Other General Expense				53
							54
							55
6 896 47	5 704 84		Total General Expenses		544 17	465 37	56
10 255 49	8 768 51		Total Mktg. And Gen. Expenses		856 58	823 90	57
							58

						39
						40
3 359 02	3 063 67		Total Marketing Expenses	312 41	358 53	41
						42
			General			43
1 500 00	1 500 00	5550	Other General Office Employees—Sal. and Exp.	125 00	125 00	44
600 00	600 00	5551	General Office Supplies and Expense	50 00	50 00	45
300 00	300 00	5552	General Office Rent	25 00	25 00	46
		5553	Injuries and Damages			47
476 17	439 92	5554	Insurance—General	54 82	36 66	48
733 51	845 92	5555	Insufance—Claims for Injuries and Damages	65 35	61 71	49
288 00	254 00	5556	Insurance—Group Life	24 00	22 00	50
2 973 79	1 740 00	5557	Pensions	200 00	145 00	51
		5558	Dues, Donations and Subscriptions			52
25 00	25 00	5559	Other General Expense			53
						54
						55
6 896 47	5 704 84		Total General Expenses	544 17	465 37	56
10 255 49	8 768 51		Total Mktg. And Gen. Expenses	856 58	823 90	57
						58
						59
						60
						61
						62
						63
(A)	(B)			(C)	(D)	

*Indicates red figures.

[fol. 15822] (Part of Exhibit 208.)

Financial Statement

of

Illinois Natural Gas Company

For period ended December 31, 1941.

(Signed) T. F. PAXTON,
Assistant Secretary.

Date February 21, 1942.

Balance Sheet as of December 31, 1941

Acc't No.		Detail on Page		Increase Over Previous Month	Increase Since January First
	Gas Plant				
100-1	Gas Plant in Service	11	152 788 99	3 040 18	136 833 61
100-3	Construction Work in Progress	11	230 664 37	120 670 14	215 757 33
100-4	Gas Plant Held for Future Use	11			
100-6	Gas Plant in Process of Reclassification	11	2 724 666 73	+30 00	+1 090 99
	Total Gas Plant	11	3 108 120 09	123 680 32	351 499 95
	Investment And Fund Accounts				
110	Other Physical Property	11			
111-1	Investment in Securities of Associated Companies	11			
111-2	Advances To Associated Companies	11			
112	Other Investments	11			
	Total Investment And Fund Accounts				
	Current And Accrued Assets				
120	Cash	x x	331 741 90	+81 675 69	+126 788 66
121	Special Deposits	11			
122	Working Funds	11	323 03	+17 77	48 81
123	Temporary Cash Investments	11			
124	Notes Receivable	11			
125-1	Accounts Receivable—Customers	x x	239 644 00	10 498 61	+1 013 15
125-2	Other Accounts Receivable	12	3 430 69	1 916 41	+423 75
126-2	Accounts Receivable from Associated Companies	11			
128	Interest and Dividends Receivable	x x			
131-1	Materials and Supplies—Gas	12	1 392 39	+29 49	1 392 39
131-2	Materials and Supplies—Gasoline	x x			
131-3	Materials and Supplies—Gasoline on Hand	x x			
132	Prepayments	12			
	Total Current And Accrued Assets		576 532 01	+69 307 93	+126 784 36
	Deferred Debits				
140	Unamortized Debt Discount and Expense	12			
143	Clearing Accounts	12			
144	Retirement Work in Progress	12		+1 026 69	—
145	Other Work in Progress	12		+1 556 25	—
146	Other Deferred Debits	12			
	Total Deferred Debits			+2 582 94	—

39	132	Prepayments	12			
40						
41						
42						
43						
44						
45		Total Current And Accrued Assets		576 532 01	*69 307 93	*126 784 36
46						
47						
48		Deferred Debits				
49	140	Unamortized Debt Discount and Expense	12			
50	143	Clearing Accounts	12			
51	144	Retirement Work in Progress	12		*1 026 69	—
52	145	Other Work in Progress	12		*1 556 25	—
53	146	Other Deferred Debits	12			
54						
55						
56						
57						
58						
59		Total Deferred Debits			*2 582 94	—
60						
61						
62						
63		Total Assets		3 684 652 10 (A)	51 789 45 (B)	224 715 59 (C)

*Indicates red figures.

5901

Balance Sheet as of December 31, 1941

Acc't No.			Detail on Page		Increase Over Previous Month	Increase Since January First	
	Capital Stocks						1
200	Common	No Par	x x	2 635 391 43			2
	28,000 Shs. Auth. 28,000	Shs. Outstanding	x x				3
201	Preferred	$100 Par	x x				4
			x x				5
			x x				6
							7
							8
							9
	Total Capital Stocks			2 635 391 43			10
							11
	Long-Term Debt						12
210	Bonds		11				13
212-1	Advances on Notes		11				14
212-2	Advances on Open Accounts		11				15
213	Miscellaneous Long-Term Debt		11				16
							17
							17
	Total Long-Term Debt						18
							19
	Current And Accrued Liabilities						20
220	Notes Payable		11				21
222	Accounts Payable		11	9 791 72	+3 823 97	7 893 25	22
223-2	Accounts Payable to Associated Companies		11	220 573 95	33 733 61	9 795 93	23
224-1	Dividends Declared—Preferred		x x				24
224-2	Dividends Declared—Common		x x				25
225	Matured Long-Term Debt		11				26
226	Matured Interest		12				27
227	Customers' Deposits		x x				28
228	Taxes Accrued		12	65 824 51	+945 88	10 344 82	29
229-1	Interest Accrued—Long Term Debt		12				30
229-2	Interest Accrued—Other		12				31
230	Other Current and Accrued Liabilities		12				32
							33
							34
	Total Current & Accrued Liabilities			295 690 18	28 963 76	28 034 00	35
							36
	Deferred Credits						37
241	Customers' Advances for Construction		x x				38
242	Other Deferred Credits		12				39
							40
							41
	Total Deferred Credits						42
							43
	Reserves						44
250-6	Depreciation, Depletion and Amortization In Process of Reclassification		12	502 975 65	6 733 42	74 230 99	45 46
254	Uncollectible Accounts		12	12 600 00	300 00	3 600 00	47
256	Injuries and Damages		12	10 800 00	300 00	3 600 00	48
258	Other Reserves		12				49
							50
							51
	Total Reserves			526 375 65	7 333 42	81 430 99	52
							53
265	Contributions in Aid of Construction		12	6 261 51			54

						40
						41
	Total Deferred Credits					42
						43
	Reserves					44
250-6	Depreciation, Depletion and Amortization In Process of Reclassification	12	502 975 65	6 733 42	74 230 99	45 46
254	Uncollectible Accounts	12	12 600 00	300 00	3 600 00	47
256	Injuries and Damages	12	10 800 00	300 00	3 600 00	48
258	Other Reserves	12				49
						50
						51
	Total Reserves		526 375 65	7 333 42	81 430 99	52
						53
265	Contributions in Aid of Construction	12	6 261 51			54
						55
	Surplus					56
271	Earned Surplus— Since December 31, 1935		220 933 33	15 492 27	115 250 60	57 58
						59
						60
						61
	Total Surplus	10	220 933 33	15,492 27	115 250 60	62
	Total Liabilities		3 684 652 10 (D)	51 789 45 (E)	224 715 59 (F)	63

*Indicates red figures.

Vol. XIII

TRANSCRIPT OF RECORD

(Pages 5605 to 5967)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1941.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. XIII.

TRANSCRIPT OF RECORD.

A

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

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PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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Order entered June 10, 1941 permitting the Michigan Public Service Commission to intervene in Federal Power Commission, Docket No. G-200	16718	7024
Petition of Panhandle Eastern Pipe Line Company filed June 26, 1941 for Continuance of Hearing in Docket No. G-200	16720	7025
Concurring Petition of Michigan Gas Transmission Corporation filed July 3, 1941 for Continuance of Hearing in Docket No. G-200	16728	7030

	Original	Print
Objection of City of Detroit and County of Wayne to Defendant's Petition for Continuance of Hearing filed July 3, 1941 in Docket No. G-200	16733	7032
Federal Power Commission's Designation of Trial Examiner	16736	7034
Order entered July 8, 1941 denying Petitions for Continuance of Hearing in Docket No. G-200	16737	7034
Petition of Michigan Consolidated Gas Company for Leave to intervene filed July 10, 1941 in Docket No. G-200	16739	7035
Petition of Intervention	16744	7038
Order entered July 12, 1941 permitting Michigan Consolidated Gas Company to intervene in Docket No. G-200	16755	7046
Answer of Michigan Gas Transmission Corporation to Petition of Intervenor, Michigan Consolidated Gas Company	16757	7047
Answer of Panhandle Eastern Pipe Line Company to Petition of Michigan Consolidated Gas Company, Intervenor, filed August 18, 1941 in Docket No. G-200	16762	7051
Motion to Dismiss filed by Panhandle Eastern Pipe Line Company on August 20, 1941 in Docket No. G-200	16771	7058
Motion to Dismiss filed by Michigan Gas Transmission Corporation on August 21, 1941 in Docket No. G-200	16773	7059
Order of Federal Power Commission denying Motions to Dismiss of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation	16775	7060
Order of Federal Power Commission entered May 22, 1941 instituting Investigation in Docket No. G-207	16776	7061
Order of Federal Power Commission entered September 2, 1941 consolidating Proceedings for Purposes of Hearing, Dockets Nos. G-200 and G-207	13779	7064
Petition of Panhandle Eastern Pipe Line Company filed February 4, 1942 for Continuance of Hearing	16799	7065
Objection of City of Detroit and County of Wayne filed February 11, 1942 to petition for Continuance of Hearing	16809	7070
Order of Federal Power Commission entered February 17, 1942 denying Petition for Continuance and Changing Place of Hearing in Dockets Nos. G-200 and G-207	16811	7072
Petition for Continuance of Hearing filed by Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation on February 28, 1942	16814	7073
Exhibit A, Limitation Order L-31 to curtail Consumption of Natural Gas	16823	7079
Exhibit A, Areas subject to Prohibitions contained in Paragraph (e) of Limitation Order L-31	16828	7084
Order of Federal Power Commission entered March 26, 1942 enlarging Investigation and making Illinois Natural Gas Company a Party Respondent in Proceeding Designated Docket No. G-207	16834	7088
Motion of Counsel for Federal Power Commission filed April 27, 1942 praying that the Federal Power Commission enter an immediate Order fixing just and reasonable Rates	16839	7091
Motion filed by Michigan Consolidated Gas Company on April 27, 1942 praying that the Federal Power Commission enter an immediate Order reducing Rates	16849	7098

	Original	Print
Motion filed by City of Detroit and County of Wayne on April 27, 1942 praying that the Federal Power Commission enter an immediate Order reducing Rates	16853	7100
Amendment to Motion for Order reducing Rates filed by Michigan Consolidated Gas Company on April 28, 1942	16860	7104
Statement relating to Excess Return for year 1941 and Reduction of Gross Revenues required to eliminate Excess Return	16865	7107
Excess Return for year 1941, before Adjustment of Claim for Replacements	16866	7107
Rate Base for year 1941	16867	7109
Income Statement — year 1941	16868	7111
Amortization of Investment	16871	7114
Annual Accrual Rate for Amortization of Property as of June 30, 1941	16872	7115
Annual Accrual for Amortization of Property at June 30, 1941	16873	7116
Depletion	16874	7116
Excess Return for year 1941	16875	7117
Rate Base for year 1941	16876	7118
Income Statement — year 1941	16877	7119
Adjustments to 1941 Income Statement for Changes in Operating Expenses not fully effective for Entire Calendar year 1941	16878	7121
Stipulation of Counsel for the various Parties and Federal Power Commission Counsel consenting to withdrawal of Federal Power Commission Counsel's Motion for Immediate Order reducing Rates filed May 11, 1942	16881	7123
Motion of Counsel for Federal Power Commission for Immediate Order reducing Rates filed on May 11, 1942	16882	7125
Opinion Number 80 of Federal Power Commission, Memorandum as to Order of Federal Power Commission reducing Rates, September 23, 1942, Memorandum as to	16892	7133
Petition of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company filed October 9, 1942 requesting an extension of time within which to file new Schedules of Rates and Charges	16934	7134
Order of Federal Power Commission of October 12, 1942 granting Extensions of Time to Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company to file new Schedules of Rates and Charges	16938	7137
Petition of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company filed October 23, 1942 for stay of the Federal Power Commission's order of September 23, 1942	16940	7138
Petition of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company filed October 23, 1942 requesting a rehearing in Dockets Nos. G-200 and G-207	16944	7141
Order of Federal Power Commission of October 30, 1942 denying Petitions for Rehearing and for Stay in Dockets Nos. G-200 and G-207	16954	7150

	Original	Print
Certificate to Transcript of Federal Power Commission	16955	7151
Order of United States Circuit Court of Appeals directing Respondents to Show Cause why Petition for Stay of Rate Order should not be granted	16986	7179
Order of United States Circuit Court of Appeals denying Petition for Stay of Operation of Rate Order without prejudice, etc.	16987	7180
Order of United States Circuit Court of Appeals granting Stay pending further hearing of application therefor	16988	7181
Order of United States Circuit Court of Appeals granting Stay of Order of Federal Power Commission dated September 23, 1942, requiring reduction in rates and charges for gas furnished by Petitioners, etc.	16989	7182
Order of United States Circuit Court of Appeals appointing John G. Hughes as Custodian of Funds to be impounded under provisions of Stay Order	16991	7184
Order of United States Circuit Court of Appeals as to form of record to be printed and fixing time for filing designations therefor	16992	7185
Order of United States Circuit Court of Appeals instructing Custodian as to manner of handling funds and securities in his possession	16993	7186
Order of United States Circuit Court of Appeals authorizing Custodian to purchase certain securities as investments	16995	7187
Order of United States Circuit Court of Appeals directing Petitioners to pay to Custodian certain sums to cover Bond premium, etc.	16997	7188
Order of United States Circuit Court of Appeals requiring Custodian to set up Account No. 1 and Account No. 2, etc.	16999	7189
Order of United States Circuit Court of Appeals authorizing Custodian to purchase certain securities, etc.	17001	7190
Stipulation that coloring matter appearing on certain Exhibits may be omitted from copies inserted in printed record, etc.	17003	7191
Appearances of Counsel for Petitioners	7193	7193
Appearances of Counsel for Respondents	7195	7194
Order of Submission	7199	7196
Order for Resubmission of Case	7200	7196
Order resetting case for argument	7201	7197
Order of Resubmission	7202	7197
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Order allowing certiorari	7230	7221

Illinois Natural Gas Company

Earnings Summary 3

Month of December 1941

	Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
Month Of December					
Gross Revenues					1
Gas	4A	238 603 07	238 855 70	*252 63	2
Gasoline	5A				3
Non-Operating	7	1 707 99	8 00	1 699 99	4
					5
Total Revenues		240 311 06	238 863 70	1 447 36	6
Operating Expenses					7
Operation	x x	208 594 94	202 783 47	5 811 47	8
Maintenance	x x	1 208 86	1 507 11	*298 25	9
Depreciation, Depletion and Amortization	x x	7 500 00	6 770 00	730 00	10
Taxes—Federal Income	x x	5 200 00	5 700 00	*500 00	11
Taxes—Federal Excess Profits	x x				12
Taxes—Other	x x	2 314 99	3 102 89	*787 90	13
Total Expenses		224 818 79	219 863 47	4 955 32	14
Net Operating Revenue		15 492 27	19 000 23	*3 507 96	15
Other Income	9				16
Gross Corporate Income		15 492 27	19 000 23	*3 507 96	17
Other Deductions	9				18
Less: Interest Charged to Construction	9				19
Net Income		15 492 27	19 000 23	*3 507 96	20
					21
Months Ended					22
Gross Revenues					23
Gas	4B				24
Gasoline	5B				25
Non-Operating	7				26
					27
Total Revenues					28
Operating Expenses					29
Operation	x x				30
Maintenance	x x				31
Depreciation, Depletion and Amortization	x x				32
Taxes—Federal Income	x x				33
Taxes—Federal Excess Profits	x x				34
Taxes—Other	x x				35
Total Expenses					36
Net Operating Revenue					37
Other Income	9				38
Gross Corporate Income					39
Other Deductions	9				40
Less: Interest Charged to Construction	9				41
Net Income					42
					43
12 Months Ended December 31					
Gross Revenues					44
Gas	4C	2 274 676 74	2 136 358 88	138 317 86	45
Gasoline	5C				46
Non-Operating	7	2 206 31	1 427 88	778 43	47
					48
Total Revenues		2 276 883 05	2 137 786 76	139 096 29	49
Operating Expenses					50
Operation	x x	2 000 553 06	1 855 757 88	144 795 18	51
Maintenance	x x	13 571 79	12 131 67	1 440 12	52
Depreciation, Depletion and Amortization	x x	75 000 00	72 000 00	3 000 00	53
Taxes—Federal Income	x x	40 000 00	33 398 47	6 601 53	54
Taxes—Federal Excess Profits	x x				55
Taxes—Other	x x	32 514 54	30 977 03	1 537 51	56
Total Expenses		2 161 639 39	2 004 265 05	157 374 34	57
Net Operating Revenue		115 243 66	133 521 71	*18 278 05	58
Other Income	9	6 37		6 94	59

Less: Interest Charged to Construction	9				41
Net Income					42
	12 Months Ended December 31				43
Gross Revenues					44
Gas	4C	2 274 676 74	2 136 358 88	138 317 86	45
Gasoline	5C				46
Non-Operating	7	2 206 31	1 427 88	778 43	47
					48
Total Revenues		2 276 883 05	2 137 786 76	139 096 29	49
Operating Expenses					50
Operation	x x	2 000 553 06	1 855 757 88	144 795 18	51
Maintenance	x x	13 571 79	12 131 67	1 440 12	52
Depreciation, Depletion and Amortization	x x	75 000 00	72 000 00	3 000 00	53
Taxes—Federal Income	x x	40 000 00	33 398 47	6 601 53	54
Taxes—Federal Excess Profits	x x				55
Taxes—Other	x x	32 514 54	30 977 03	1 537 51	56
Total Expenses		2 161 639 39	2 004 265 05	157 374 34	57
Net Operating Revenue		115 243 66	133 521 71	+18 278 05	58
Other Income	9	6 94	—	6 94	59
Gross Corporate Income		115 250 60	133 521 71	+18 271 11	60
Other Deductions	9	—	4 75	+4 75	61
Less: Interest Charged to Construction	9				62
Net Income		115 250 60	133 516 96	+18 266 36	63
		(A)	(B)	(C)	

+Indicates red figures.

Acc't No.		Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
	Operating Revenue—Gas					1
600	Residential Sales	x x	240 96	181 53	59 43	2
602-1	Commercial Sales	x x				3
602-2	Industrial Sales	x x	4 012 60	2 128 60	1 884 00	4
605-1	Sales to Gas Utilities	x x	234 349 51	236 545 57	*2 196 06	5
608-1	Other Sales—Field	x x				6
						7
	Total		238 603 07	238 855 70	*252 63	8
						9
605-2	Sales to Associated Companies	x x				10
						11
	Total Revenue—Gas		238 603 07	238 855 70	*252 63	12
						13
	Operating Revenue Deductions					14
	Production—Operation	15				15
	" —Maintenance	15				16
	Gas Purchased—Associated Companies	15	194 761 15	195 094 17	*333 02	17
	Gas Purchased—Others	15				18
	Purchased Gas Expense—Operation	15				19
	" " " —Maintenance	15				20
	Transmission—Operation	17	4 218 37	1 862 88	2 355 49	21
	" —Maintenance	17	1 208 86	1 507 11	*298 25	22
	Distribution—Operation	17				23
	" —Maintenance	18				24
	Customers' Accounting and Collecting	18	853 23	872 41	*19 18	25
	Sales Promotion	18	1 096 00	1 115 41	*19 41	26
	Administrative and General—Operation	19	5 476 64	3 842 57	1 634 07	27
	" " " —Maintenance	19				28
	Gas Used in Operations, Etc.	19				29
						30
	Total Operation And Maintenance		207 614 25	204 294 55	3 319 70	31
	Total Operation	19	206 405 39	202 787 44	3 617 95	32
	Total Maintenance	19	1 208 86	1 507 11	*298 25	33
503-1	Depreciation	x x	7 500 00	6 770 00	730 00	34
503-2	Amortization and Depletion—Producing Leases	x x				35
512	Amortization Non-Producing Leases	x x				36
504	Amortization—Other	x x				37
507	Taxes—Federal Income	x x	5 200 00	5 700 00	*500 00	38
507	Taxes—Federal Excess Profits	x x				39
507	Taxes—Other	x x	2 314 99	3 102 89	*787 90	40
	Total Operating Revenue Deductions		222 629 24	219 867 44	2 761 80	41
	Net Operating Revenue—Gas		15 973 83	18 988 26	*2 014 43	42
						43
	Statistics					44
MCF	—Sales to Public	25	913 649	886 315	27 334	45
"	Sales—Associated Companies	25				46
						47
"	Total Sales	25	913 649	886 315	27 334	48
"	Company Use—Compressor Stations	25				49
"	Other Company Use	25				50
"	Exchange Gas Delivered	25				51
						52
	Total Deliveries	25	913 649	886 315	27 334	53
						54
MCF	—Produced	25				55
"	Purchased—Associated Companies	25	878 861	853 542	25 319	56
"	" —Others	25				57
"	Exchange Gas Received	25				58
						59
"	Total Produced And Purchased	25	878 861	853 542	25 319	60
			888 449	881 622	26 827	61

Net Operating Revenue—Gas		15 973 83	18 988 26	+3 014 43	42
					43
Statistics					44
MCF—Sales to Public	25	913 649	886 315	27 334	45
" Sales—Associated Companies	25				46
					47
" Total Sales	25	913 649	886 315	27 334	48
" Company Use—Compressor Stations	25				49
" Other Company Use	25				50
" Exchange Gas Delivered	25				51
					52
Total Deliveries	25	913 649	886 315	27 334	53
					54
MCF—Produced	25				55
" Purchased—Associated Companies	25	878 861	853 542	25 319	56
" " —Others	25				57
" Exchange Gas Received	25				58
					59
" Total Produced And Purchased	25	878 861	853 542	25 319	60
MCF (14.9*) Total Deliveries	25	888 449	861 622	26 827	61
" " Total Available for Deliveries	25	878 861	853 542	25 319	62
" " Unaccounted For (Losses in Black)	25	+9 588	+8 080	+1 508	63
		(A)	(B)	(C)	

+Indicates red figures.

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Acc't No.		Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
	Operating Revenue—Gas					1
600	Residential Sales	x x	1 715 84	1 598 95	116 89	2
602-1	Commercial Sales	x x				3
602-2	Industrial Sales	x x	44 475 40	22 844 20	21 631 20	4
605-1	Sales to Gas Utilities	x x	2 228 485 50	2 111 915 73	116 569 77	5
608-1	Other Sales—Field	x x				6
						7
	Total		2 274 676 74	2 136 358 88	138 317 86	8
						9
605-2	Sales to Associated Companies	x x				10
						11
	Total Revenue—Gas		2 274 676 74	2 136 358 88	138 317 86	12
						13
	Operating Revenue Deductions					14
	Production—Operation	15				15
	" —Maintenance	15				16
	Gas Purchased—Associated Companies	15	1 890 862 47	1 764 902 01	126 860 46	17
	Gas Purchased—Others	15				18
	Purchased Gas Expense—Operation	15				19
	" " " —Maintenance	15				20
	Transmission—Operation	17	31 501 04	24 348 01	7 153 03	21
	" —Maintenance	17	13 559 19	12 019 05	1 540 14	22
	Distribution—Operation	17				23
	" —Maintenance	18				24
	Customers' Accounting and Collecting	18	9 227 99	8 234 65	993 34	25
	Sales Promotion	18	10 203 74	9 112 15	1 091 59	26
	Administrative and General—Operation	19	56 363 41	48 862 94	7 500 47	27
	" " " —Maintenance	19	12 60	—	12 60	28
	Gas Used in Operations, Etc.	19				29
						30
	Total Operation And Maintenance		2 011 730 44	1 866 578 81	145 151 63	31
	Total Operation	19	1 998 158 65	1 854 559 76	143 598 89	32
	Total Maintenance	19	13 571 79	12 019 05	1 552 74	33
503-1	Depreciation	x x	75 000 00	72 000 00	3 000 00	34
503-2	Amortization and Depletion—Producing Leases	x x				35
512	Amortization Non-Producing Leases	x x				36
504	Amortization—Other	x x				37
507	Taxes—Federal Income	x x	40 000 00	33 398 47	6 601 53	38
507	Taxes—Federal Excess Profits	x x				39
507	Taxes—Other	x x	32 514 54	30 977 03	1 537 51	40
	Total Operating Revenue Deductions		2 159 244 98	2 002 954 31	156 290 67	41
	Net Operating Revenue—Gas		115 431 76	133 404 57	17 972 81	42
						43
	Statistics					44
MCF	Sales to Public	25	9 128 718	8 557 633	571 085	45
"	Sales—Associated Companies	25				46
						47
"	Total Sales	25	9 128 718	8 557 633	571 085	48
"	Company Use—Compressor Stations	25				49
"	Other Company Use	25				50
"	Exchange Gas Delivered	25				51
						52
	Total Deliveries	25	9 128 718	8 557 633	571 085	53
						54
MCF	Produced	25				55
"	Purchased—Associated Companies	25	8 879 688	8 377 462	502 226	56
"	" —Others	25				57
"	Exchange Gas Received	25				58
						59
"	Total Produced & Purchased	25	8 879 688	8 377 462	502 226	60

Net Operating Revenue—Gas			115 431 76	133 404 57	*17 972 81	42
						43
	Statistics					44
MCF—Sales to Public		25	9 128 718	8 557 633	571 085	45
" Sales—Associated Companies		25				46
						47
" Total Sales		25	9 128 718	8 557 633	571 085	48
" Company Use—Compressor Stations		25				49
" Other Company Use		25				50
" Exchange Gas Delivered		25				51
						52
Total Deliveries		25	9 128 718	8 557 633	571 085	53
						54
MCF—Produced		25				55
" Purchased—Associated Companies		25	8 879 688	8 377 462	502 226	56
" " —Others		25				57
" Exchange Gas Received		25				58
						59
" Total Produced And Purchased		25	8 879 688	8 377 462	502 226	60
MCF (14.9#) Total Deliveries		25	8 877 554	8 431 492	446 062	61
" " Total Available for Deliveries		25	8 879 688	8 377 462	502 226	62
" " Unaccounted For (Losses in Black)		25	2 134	*54 030	56 164	63
			(A)	(B)	(C)	

*Indicates red figures.

5609

Month of December 1941

Acc't No.			Amount This Year	Amount Last Year	Increase or Decrease	
						1
	Month Of December					2
	Gross Revenue—Non-Operating					3
520-1	Revenue from Jobbing and Contract Work		1 699 99	—	1 699 99	4
522	Revenue from Lease of Other Physical Property		8 00	8 00	—	5
526	Miscellaneous Non-Operating Revenues					6
						7
						8
						9
						10
	Total Revenue—Non-Operating		1 707 99	8 00	1 699 99	11
	Operating Expenses					12
520-2	Jobbing and Contract Work	—Labor	1 331 63	—	1 331 63	13
520-3	Jobbing and Contract Work	—S. & E.	857 92	*3 97	861 89	14
527-1	Operation—Leased Property					15
527-2	Maintenance—Leased Property					16
						17
						18
						19
	Total Expenses		2 189 55	*3 97	2 193 52	20
	Net Revenue—Non-Operating		*481 56	11 97	*493 53	21
						22
	Months Ended					23
	Gross Revenue—Non-Operating					24
520	Revenue from Jobbing and Contract Work					25
522	Revenue from Lease of Other Physical Property					26
526	Miscellaneous Non-Operating Revenues					27
						28
						29
						30
						31
	Total Revenue—Non-Operating					32
	Operating Expenses					33
520-2	Jobbing and Contract Work	—Labor				34
520-3	Jobbing and Contract Work	—S. & E.				35
527-1	Operation—Leased Property					36
527-2	Maintenance—Leased Property					37
						38
						39
						40
	Total Expenses					41
	Net Revenue—Non-Operating					42
						43
	12 Months Ended December 31					44
	Gross Revenue—Non-Operating					45
520	Revenue from Jobbing and Contract Work		2,110 31	1 331 88	778 43	46
522	Revenue from Lease of Other Physical Property		96 00	96 00	—	47
526	Miscellaneous Non-Operating Revenues					48
						49
						50
						51
						52
	Total Revenue—Non-Operating		2 206 31	1 427 88	778 43	53
	Operating Expenses					54
520-2	Jobbing and Contract Work	—Labor	1 389 19	636 30	752 89	55
520-3	Jobbing and Contract Work	—S. & E.	1 005 22	561 82	443 40	56
527-1	Operation—Leased Property					

	Total Expenses				41
	Net Revenue—Non-Operating				42
					43
	12 Months Ended December 31				44
	Gross Revenue—Non-Operating				45
520	Revenue from Jobbing and Contract Work	2 110 31	1 331 88	778 43	46
522	Revenue from Lease of Other Physical Property	96 00	96 00	—	47
526	Miscellaneous Non-Operating Revenues				48
					49
					50
					51
					52
	Total Revenue—Non-Operating	2 206 31	1 427 88	778 43	53
	Operating Expenses				54
520-2	Jobbing and Contract Work —Labor	1 389 19	636 30	752 89	55
520-3	Jobbing and Contract Work —S. & E.	1 005 22	561 82	443 40	56
527-1	Operation—Leased Property				57
527-2	Maintenance—Leased Property	—	112 62	*112 62	58
					59
					60
					61
	Total Expenses	2 394 41	1 310 74	1 083 67	62
	Net Revenue—Non-Operating	*188 10	117 14	*305 24	63
		(A)	(B)	(C)	

*Indicates red figures.

Month of December 1941

Acc't No.		Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
						1
	Other Income					2
						3
	Month Of					4
523	Dividend Revenues—Associated Companies	14				5
524-1	Interest on Securities Owned	14				6
524-21	Interest Revenues—Associated Companies	14				7
524-22	Interest Revenues—Other	14				8
						9
						10
						11
	Total Other Income	14				12
						13
	Months Ended					14
523	Dividend Revenues—Associated Companies	14				15
524-1	Interest on Securities Owned	14				16
524-21	Interest Revenues—Associated Companies	14				17
524-22	Interest Revenues—Other	14				18
						19
						20
						21
	Total Other Income	14				22
						23
	12 Months Ended December 31					24
523	Dividend Revenues—Associated Companies	14				25
524-1	Interest on Securities Owned	14				26
524-21	Interest Revenues—Associated Companies	14				27
524-22	Interest Revenues—Other	14	6 94		6 94	28
						29
						30
						31
	Total Other Income	14	6 94	—	6 94	32
						33
						34
	Other Deductions					35
						36
	Month Of					37
						38
530	Interest on Long-Term Debt	14				39
531	Amortization of Debt Discount and Expense	14				40
533	Taxes Assumed on Interest	14				41
534	Interest on Debt to Associated Companies					42
535	Other Interest Charges	14				43
	Total Other Deductions					44
536	Interest Charged to Construction					45
						46
	Months Ended					47
530	Interest on Long-Term Debt	14				48
531	Amortization of Debt Discount and Expense	14				49
533	Taxes Assumed on Interest	14				50
534	Interest on Debt to Associated Companies	14				51
535	Other Interest Charges	14				52
	Total Other Deductions	14				53
536	Interest Charged to Construction					54
						55
	12 Months Ended December 31					56
530	Interest on Long-Term Debt	14				57

		Month Of				37
						38
530	Interest on Long-Term Debt	14				39
531	Amortization of Debt Discount and Expense	14				40
533	Taxes Assumed on Interest	14				41
534	Interest on Debt to Associated Companies					42
535	Other Interest Charges	14				43
	Total Other Deductions					44
536	Interest Charged to Construction					45
						46
		Months Ended				47
530	Interest on Long-Term Debt	14				48
531	Amortization of Debt Discount and Expense	14				49
533	Taxes Assumed on Interest	14				50
534	Interest on Debt to Associated Companies	14				51
535	Other Interest Charges	14				52
	Total Other Deductions	14				53
536	Interest Charged to Construction					54
						55
		12 Months Ended December 31				56
530	Interest on Long-Term Debt	14				57
531	Amortization of Debt Discount and Expense	14				58
533	Taxes Assumed on Interest	14				59
534	Interest on Debt to Associated Companies	14				60
535	Other Interest Charges	14	4 75		*4 75	61
	Total Other Deductions	14	4 75		*4 75	62
536	Interest Charged to Construction					63
			(A)	(B)	(C)	

*Indicates red figures.

	12 Months Ended December 31, 1941			
Surplus—January 1, 1941				1
Earned—Since December 31, 1935		105 682 73		2
				3
Additions:				4
				5
				6
Net Income 12 Months Ended Dec. 31 1941 As shown By Earnings Summary			115 250 60	7
Other Credits				8
				9
				10
				11
				12
				13
				14
				15
				16
				17
				18
				19
				20
				21
				22
				23
				24
				25
				26
				27
Total			220 933 33	28
Deductions:				29
Dividends				30
				31
				32
				33
				34
				35
				36
				37
				38
				39
				40
				41
				42
				43
				44
				45
Other Charges				46
				47
				48
				49
				50
				51
				52
				53
				54
				55
				56
				57
				58
				59
				60
				61
Total Deductions				62
Surplus December 31, 1941			220 933 33	63
		(A)	(B)	

5515

[fol. 15831]

Description		
Current And Accrued Assets		
Working Funds		
Petty Cash Funds		
Total Page 1, Line 29	323 03	
Current And Accrued Liabilities		
Accounts Payable		
Vouchers Payable	7 557 20	
Federal Old Age Benefits		
Deduction from Employees	79 54	
Other (Withheld from Contractors)	2 154 98	
Total Page 2, Line 22	9 791 72	
Accounts Payable to Associated Company		
Panhandle Eastern Pipe Line Company		
Total Page 2, Line 23	220 573 95	

[fol. 15832]

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month — Debits	Changes During Month — Credits	Balance End of Month	
	Current And Accrued Assets							1
125-2	Other Accounts Receivable							2
	Total Page 1, Line 33			1 514 28	2 029 00	112 59	3 430 69	3
								4
131-1	Materials and Supplies — Gas							5
	Total Page 1, Line 36			1 421 88	277 83	307 32	1 392 39	6
								7
	Deferred Debits							8
144	Retirement Work in Progress							9
	Total Page 1, Line 51			1 026 69	42 18	1 068 87	—	10
								11
145	Other Work in Progress							12
	Total Page 1, Line 52			1 556 25	1 115 31	2 671 56	—	13
								14
	Current And Accrued Liabilities							15
228	Taxes Accrued							16
	Ad valorem — Illinois 1941			15 400 00	—	1 400 00	16 800 00	17
	Retailers Occupation (Sales)	Contingent on Sales		—	260 97	260 97	—	18
	Capital Stock — Illinois 1941			6 160 00	—	560 00	6 720 00	19
	Federal Capital Stock — 1942	2 520 00	6	1 050 00	—	210 00	1 260 00	20
	Federal Excise — Old Age Benefits	Contingent on pay roll		50 71	—	36 87	87 58	21
	Federal Excise — Unemployment Insurance	Contingent on pay roll		62 79	—	11 06	73 85	22 23
	Unemployment Compensation — Illinois	Contingent on pay roll		136 [illegible]	—	99 54	236 48	24 25
	Federal Income — 1940			8 609 95	8 463 35	—	146 60	26
	Federal Income — 1941			34 800 00	—	5 200 00	40 000 00	27
								28
	Total Page 2, Line 29			66 270 39	8 724 32	7 778 44	65 324 51	29
								30
	Reserves							31
250-6	Depreciation, Depletion and Amortization							32
	Gas Plant in Process of Reclassification							33
	Property, Plant and Equipment							34
	Total Page 2, Line 46			496 242 23	766 58	7 500 00	502 975 65	35
								36
254	Uncollectible Accounts							37
	Accounts Receivable — Customer							38
	Total Page 2, Line 47			12 300 00	—	300 00	12 600 00	39
								40
256	Injuries and Damages							41
	Total Page 2, Line 48			10 500 00	—	300 00	10 800 00	42
								43
	Contribution In Aid Of Construction							44
265	Contribution in Aid of Construction							45
	Total Page 2, Line 54			6 261 51	—	—	6 261 51	46
								47
		(A)	(B)	(C)	(D)	(E)	(F)	

[fol. 15833]

Acc't No.	Description	Current Month — This Year	Current Month — Last Year	Months To Date — This Year	Months To Date — Last Year	Twelve Months To Date — This Year	Twelve Months To Date — Last Year	
	Taxes — Other							1
	Ad Valorem	1 400 00	1 250 00			17 643 31	15 395 72	2
	Gross Production, Sales, etc.	260 97	89 84			1 455 04	756 43	3
	Franchise	—	—			1 317 70	1 317 70	4
	Unemployment Compensation — States	*39 29	91 68			1 572 38	1 868 21	5
	Capital Stock — State	560 00	1 475 00			7 962 39	8 662 96	6
	Federal Capital Stock	210 00	210 00			2 500 00	2 769 80	7
	Federal Excise — Old Age Benefit	*58 99	*10 49			49 03	158 60	8
	Federal Excise — Unemployment Insurance	*17 70	*3 14			14 69	47 61	9 10
	Total Page 3, Lines 14 and 56	2 314 99	3 102 89			32 514 54	30 977 03	11 12 13
								14 15 16 17
	Gas Purchased — Associated Companies							18
	Panhandle Eastern Pipe Line Co.							19
	Total Pages 4A and 4C Line 17	194 761 15	195 094 17			1 890 862 47	1 764 002 01	20 21
								22 23 24 25 26
	Other Income							27
524-22	Interest Revenues — Other							28
	County Clerk of Sangamon County Illinois							29 30
	Total Page 9, Line 28	—	—			6 94	—	31
								32 33 34
	Other Deductions							35
535	Other Interest Charges							36
	Federal Treasury Department on Income Tax Adjustments							37 38
	Total Page 9, Line 61	—	—			—	4 75	39
								40 41 42 43 44 45 46 47

(A)	(B)	(C)	(D)	(E)	(F)

Detail Of
Taxes — Other, Gas Purchased, Other Income and Other Deductions

Illinois Natural Gas Company

Month of December 1941

14

*Indicates red figures.

12 Months To Date This Year	12 Months To Date Last Year	Acc't No.	Production		Current Month This Year	Current Month Last Year	
			Operation				1
		733-1	Supervision & Engineering	—Labor			2
		733-2	" "	—S. & E.			3
		734-1	Gas Well	—Labor			4
		735-1	" "	—S. & E.			5
		734-2	Field Lines	—Labor			6
		735-2	" "	—S. & E.			7
		734-31	Field Compressor Station	—Labor			8
		735-31	" " "	—S. & E.			9
		734-32	Field Measuring Station	—Labor			10
		735-32	" " "	—S. & E.			11
		734-41	Other Production	—Labor			12
		735-41	" "	—S. & E.			13
		734-42	Land Department	—Labor			14
		735-42	" "	—S. & E.			15
		745	Gas Well Royalties				16
		750	Natural Gas Rents				17
		510	Delay Rentals				18
							19
			Total Operation				20
			Maintenance				21
		739-1	Supervision & Engineering	—Labor			22
		739-2	" " "	—S. & E.			23
		740-211	Field Compressor Station Struct.	—Labor			24
		740-212	" " " "	—S. & E.			25
		740-221	Field Measuring Station Struct.	—Labor			26
		740-222	" " " "	—S. & E.			27
		740-31	Other Prod. System Struct.	—Labor			28
		740-32	" " " "	—S. & E.			29
		741-1	Producing Gas Well Equip.	—Labor			30
		741-2	" " " "	—S. & E.			31
		742-11	Field Lines	—Labor			32
		742-12	" "	—S. & E.			33
		742-211	Field Compressor Station Equip.	—Labor			34
		742-212	" " " "	—S. & E.			35
		742-221	Field Measuring Station Equip.	—Labor			36
		742-222	" " " "	—S. & E.			37
		743-1	Drilling & Cleaning Equip.	—Labor			38
		743-2	" " "	—S. & E.			39
		744-1	Other Natural Gas Property	—Labor			40
		744-2	" " "	—S. & E.			41
							42
			Total Maintenance				43
			Total Production Expenses—Gas				44
			Total MCF Produced				45
			Average Cost Per MCF				46
							47
			Gas Purchased				48
			Operation				49
1 890 862 47	1 764 002 01	754-11	Gas Purchased—Associated Companies		194 761 15	195 094 17	50
		754-12	" " —Others				51
		755-1	Purchased Gas Exp.—Measurement	—Labor			52
		755-2	" " " "	—S. & E.			53
		755-3	Purchased Gas Exp.—Other	—Labor			54
		755-4	" " " "	—S. & E.			55
1 890 862 47	1 764 002 01		Total Operation		194 761 15	195 094 17	56
			Maintenance				57
		755-5	Purchase Measuring Station	—Labor			58
		755-6	" " "	—S. & E.			59
			Total Maintenance				60
1 890 862 47	1 764 002 01		Total Gas Purchased		194 761 15	195 094 17	61
8 879 688	8 377 462		Total MCF Purchased		878 861	853 542	62

			Total Maintenance				42
			Total Production Expenses—Gas				43
			Total Mc F Produced				44
			Average Cost Per MCF				45
							46
			Gas Purchased				47
							48
			Operation				
1 890 862 47	1 764 002 01	754-11	Gas Purchased—Associated Companies		194 761 15	195 094 17	49
		754-12	" " —Others				50
		755-1	Purchased Gas Exp.—Measurement	—Labor			51
		755-2	" " "	—S. & E.			52
		755-3	Purchased Gas Exp.—Other	—Labor			53
		755-4	" " "	—S. & E.			54
1 890 862 47	1 764 002 01		Total Operation		194 761 15	195 094 17	55
							56
			Maintenance				
		755-5	Purchase Measuring Station	—Labor			57
		755-6	" " "	—S. & E.			58
							59
			Total Maintenance				60
1 890 862 47	1 764 002 01		Total Gas Purchased		194 761 15	195 094 17	61
8 879 688	8 377 462		Total MCF Purchased		878 861	853 542	62
21 29¢	21 06¢		Average Cost Per MCF		22 16¢	22 86¢	63
(A)	(B)				(C)	(D)	

Month of December 1941

12 Months To Date This Year	12 Months To Date Last Year	Acc't No.	Transmission		Current Month This Year	Current Month Last Year	
			Operation				1
8 298 40	6 961 84	758-1	Supervision & Engineering	Labor	1 110 07	596 27	2
1 508 85	731 99	758-2	" "	S. & E.	171 69	73 56	3
		759-111	Pumping Station	Labor			4
		759-1211	" "	S. & E.			5
		759-1212	" "	Power			6
5 299 32	4 354 46	759-1121	Measuring Station	Labor	850 15	338 07	7
2 945 37	2 315 04	759-1221	" "	S. & E.	276 12	155 13	8
2 226 74	2 510 40	759-1122	Regulator Station	Labor	195 42	166 49	9
804 90	685 49	759-1222	" "	S. & E.	69 08	100 37	10
5 878 16	4 845 71	759-211	Transmission Mains	Labor	1 114 11	313 85	11
2 835 33	1 143 61	759-221	" "	S. & E.	253 02	119 14	12
127 21	—	759-212	Other Transmission System	Labor	26 63	—	13
658 59	41 80	759-222	" "	S. & E.	127 08	—	14
918 17	757 67	763	Rents		25 00	—	15
							16
							17
31 501 04	24 348 01		Total Operation		4 218 37	1 862 88	18
			Maintenance				19
3 325 81	3 983 61	760-1	Supervision & Engineering	Labor	281 94	257 54	20
586 31	321 32	760-2	" "	S. & E.	65 66	22 98	21
		761-11	Pumping Station Structures	Labor			22
		761-12	" " "	S. & E.			23
300 11	221 70	761-211	Measuring Station	Labor	24 26	—	24
292 86	173 77	761-221	" "	S. & E.	39 67	1 70	25
223 60	97 24	761-212	Regulator Station	Labor	25 99	—	26
153 48	94 58	761-222	" "	S. & E.	28 59	—	27
15 87	429 65	761-31	Other Transmission System Struct.	Labor	4 91	83 83	28
22 89	243 74	761-32	" " " "	S. & E.	—	156 86	29
1 640 42	1 301 48	762-11	Transmission Mains	Labor	85 02	501 17	30
1 063 50	713 73	762-12	" "	S. & E.	100 64	58 77	31
		762-211	Pumping Station Equipment	Labor			32
		762-212	" " "	S. & E.			33
2 934 36	2 778 42	762-2211	Measuring Station Equipment	Labor	231 46	199 78	34
1 584 11	1 386 21	762-2221	" " "	S. & E.	252 41	118 58	35
1 031 81	493 53	762-2212	Regulator Station Equipment	Labor	71 95	49 08	36
328 61	513 09	762-2222	" " "	S. & E.	48 54	49 50	37
	165 98	762-231	Other Trans. System Equipment	Labor			38
55 45	101 00	762-232	" " " "	S. & E.	5 00	7 10	39
							40
13 559 19	12 019 05		Total Maintenance		1 208 86	1 507 11	41
45 060 23	36 367 06		Total Transmission Expenses		5 427 23	3 369 99	42
							43
			Distribution				44
			Operation				45
		765-1	Supervision & Engineering	Labor			46
		765-2	" "	S. & E.			47
		766-2	Other Distribution Office	S. & E.			48
		767-1	Distribution Lines	Labor			49
		767-2	" "	S. & E.			50
		768-11	Removing & Resetting Meters	Labor			51
		768-12	" " "	S. & E.			52
		768-21	Miscellaneous Meter Expense	Labor			53
		768-22	" " "	S. & E.			54
		769-1	Services On Customers Premises	Labor			55
		769-2	" " " "	S. & E.			56
		776	Rents				57
							58
							59
							60
							61
							62
			Total Operation				63

(A) (B) (C) (D)

*Indicates red figure

(A)	(B)				(C)	(D)	
13 559 19	12 019 05		Total Maintenance		*1 208 86	1 507 11	41
45 060 23	36 367 06		Total Transmission Expenses		5 427 23	3 369 99	42
							43
			Distribution				44
			Operation				45
		765-1	Supervision & Engineering	Labor			46
		765-2	" "	S. & E.			47
		766-2	Other Distribution Office	S. & E.			48
		767-1	Distribution Lines	Labor			49
		767-2	" "	S. & E.			50
		768-11	Removing & Resetting Meters	Labor			51
		768-12	" " "	S. & E.			52
		768-21	Miscellaneous Meter Expense	Labor			53
		768-22	" " "	S. & E.			54
		769-1	Services On Customers Premises	Labor			55
		769-2	" " " "	S. & E.			56
		776	Rents				57
							58
							59
							60
							61
							62
			Total Operation				63

*Indicates red figures.

Month of December 1941

12 Months To Date		Acc't No.	Distribution		Current Month		
This Year	Last Year				This Year	Last Year	
			Maintenance				1
		771-1	Supervision & Engineering	—Labor			2
		771-2	" "	—S. & E.			3
		772-1	Structures & Improvements	—Labor			4
		772-2	" "	—S. & E.			5
		773-11	Mains	—Labor			6
		773-12	"	—S. & E.			7
		773-31	Services	—Labor			8
		773-32	"	—S. & E.			9
		773-41	Meters	—Labor			10
		773-42	"	—S. & E.			11
		773-51	House Regulators	—Labor			12
		773-52	" "	—S. & E.			13
		775-1	Other Distribution Equipment	—Labor			14
		775-2	" " "	—S. & E.			15
							16
							17
							18
							19
							20
							21
							22
			Total Maintenance				23
			Total Distribution Expenses				24
							25
			Customers' Accounting & Collecting				26
		779-1	Supervision	—Salaries			27
		779-2	"	—S. & E.			28
		780-11	Customers' Contracts & Orders	—Labor			29
		780-12	" " "	—S. & E.			30
2 371 36	2 209 44	780-31	Meter Reading	—Labor	184 82	189 98	31
437 11	412 62	780-32	" "	—S. & E.	37 96	39 53	32
		780-41	Collecting	—Labor			33
302 88	16 30	780-42	"	—S. & E.			34
2 516 64	1 996 29	781-1	Customers' Billing & Acct'ng	—Labor	330 45	342 90	35
		781-2	" " " "	—S. & E.			36
		782	Miscellaneous Expenses				37
3 600 00	3 600 00	783	Uncollectible Accounts		300 00	300 00	38
		784	Rents				39
							40
							41
							42
							43
							44
							45
							46
9 227 99	8 234 65		Total Customers' Accounting & Collecting		853 23	872 41	47
							48
			Sales Promotion				49
2 803 16	2 703 13	785-1	Supervision	—Salaries	329 15	229 15	50
1 644 12	1 640 67	785-2	"	—S. & E.	121 70	101 75	51
4 100 52	3 160 97	786-1	Industrial Engineers	—Salaries	525 00	319 56	52
1 610 36	1 229 46	786-2	" "	—S. & E.	120 15	180 00	53
		787-2	Advertising				54
45 58	377 92	787-3	Miscellaneous Sales Expenses		—	284 95	55
							56
							57
							58
							59
							60

Month of December 1941.

12 Months To Date		Acc't	Distribution		Current Month		
This Year	Last Year	No.			This Year	Last Year	
			Maintenance				1
		771-1	Supervision & Engineering	—Labor			2
		771-2	" " "	—S. & E.			3
		772-1	Structures & Improvements	—Labor			4
		772-2	" "	—S. & E.			5
		773-11	Mains	—Labor			6
		773-12	"	—S. & E.			7
		773-31	Services	—Labor			8
		773-32	"	—S. & E.			9
		773-41	Meters	—Labor			10
		773-42	"	—S. & E.			11
		773-51	House Regulators	—Labor			12
		773-52	" "	—S. & E.			13
		775-1	Other Distribution Equipment	—Labor			14
		775-2	" " "	—S. & E.			15
							16
							17
							18
							19
							20
							21
							22
			Total Maintenance				23
			Total Distribution Expenses				24
							25
			Customers' Accounting & Collecting				26
		779-1	Supervision	—Salaries			27
		779-2	"	—S. & E.			28
		780-11	Customers' Contracts & Orders	—Labor			29
		780-12	" " "	—S. & E.			30
2 371 36	2 209 44	780-31	Meter Reading	—Labor	184 82	189 98	31
437 11	413 62	780-32	" "	—S. & E.	37 96	39 53	32
		780-41	Collecting	—Labor			33
302 88	16 30	780-42	"	—S. & E.			34
2 516 64	1 996 29	781-1	Customers' Billing & Acct'ng	—Labor	330 45	342 90	35
		781-2	" " "	—S. & E.			36
		782	Miscellaneous Expenses				37
3 600 00	3 600 00	783	Uncollectible Accounts		300 00	300 00	38
		784	Rents				39
							40
							41
							42
							43
							44
							45
							46
9 227 99	8 234 65		Total Customers' Accounting & Collecting		853 23	872 41	47
							48
			Sales Promotion				49
2 803 16	2 703 13	785-1	Supervision	—Salaries	329 15	229 15	50
1 644 12	1 640 67	785-2	"	—S. & E.	121 70	101 75	51
4 100 52	3 160 97	786-1	Industrial Engineers	—Salaries	525 00	319 56	52
1 610 36	1 229 46	786-2	" "	—S. & E.	120 15	180 00	53
		787-2	Advertising				54
45 58	377 92	787-3	Miscellaneous Sales Expenses		—	284 95	55
							56
							57
							58
							59
							60

							41
							42
							43
							44
							45
							46
9 227 99	8 234 65		Total Customers' Accounting & Collecting		838 23	872 41	47
			Sales Promotion				48
							49
2 803 16	2 703 13	785-1	Supervision	—Salaries	329 15	229 15	50
1 644 12	1 640 67	785-2	"	—S. & E.	121 70	101 75	51
4 100 52	3 160 97	786-1	Industrial Engineers	—Salaries	525 00	219 56	52
1 610 36	1 229 46	786-2	" "	—S. & E.	120 15	180 00	53
		787-2	Advertising				54
45 53	377 92	787-3	Miscellaneous Sales Expenses			284 95	55
							56
							57
							58
							59
							60
							61
							62
10 203 74	9 112 15		Total Sales Promotion Expenses		1 096 00	1 115 41	63
(A)	(B)				(C)	(D)	

Month of December 1941

12 Months To Date This Year	12 Months To Date Last Year	Acc't No.	Administrative & General	Current Month This Year	Current Month Last Year	
			Operation			1
15 637 50	14 400 00	790	General Officers —Salaries	1 912 50	1 200 00	2
2 850 00	2 462 50	791-1	General Law —Salaries	325 00	225 00	3
1 860 00	1 843 44	791-2	Rate, Survey and Valuation —Salaries	225 00	135 00	4
13 662 50	13 720 45	791-3	Other General Office Employees —Salaries	1 237 50	1 140 00	5
—	221 73	792-1	General Officers —Expense			6
1 213 52	65 85	792-21	General Law —Expense	506 01	28 90	7
—	251 53	792-22	Rate, Survey and Valuation —Expense			8
109 10	54 15	792-23	Other Gen. Office Employees —Expense			9
963 77	988 96	793-1	General Office Stationery and Printing	83 75	75 09	10
2 298 27	1 822 32	793-2	General Office Supplies and Expenses	276 97	206 08	11
645 50	495 75	795	Special Services	10 00	16 50	12
2 118.92	973 18	796	Special Legal Services			13
		797	Regulatory Commission Expenses			14
360 00	360 00	798	Insurance—General	30 00	30 00	15
253 85	1 016 28	799-1	Insurance—Claims for Injuries and Damages	+189 69	+93 51	16
3 600 00	3 600 00	799-2	Injuries and Damages	300 00	300 00	17
48 05	—	800-11	Accident Prevention	10 00		18
180 00	120 00	800-12	Insurance—Group Life	15 00	10 00	19
		800-13	Employees' Welfare Expenses—Other			20
6 895 63	2 688 00	800-2	Pensions	400 00	224 00	21
305 80	418 80	801-1	Dues, Donations and Subscriptions	54 60	65 60	22
1 00	—	801-2	Other Miscellaneous General Expenses			23
3 360 00	3 360 00	803	Rents	280 00	280 00	24
		805	Franchise Requirements			25
						26
						27
						28
						29
						30
						31
						32
						33
						34
56 363 41	48 862 94		Total Operation	5 476 64	3 842 57	35
			Maintenance			36
		802-21	General Office Equipment —Labor			37
12 60		802-22	" " " —S. & E.			38
						39
						40
						41
						42
						43
12 60			Total Maintenance			44
56 376 01	48 862 94		Total Administrative & Gen'l Exp.	5 476 64	3 842 57	45
						46
			Operating Deductions			47
		607	Interdepartmental Gas Sales			48
		749-1	Gas Used in Company Buildings			49
		749-2	Gas Used For Power			50
		749-3	Gas Used in Other Operations			51
		749-4	Gas Used in Construction			52
		764-2	Joint Transmission Expense Transferred			53
		806	Duplicate Miscellaneous Charges			54
		807	Administrative & General Expense Transferred			55
		809	Joint Admstr. & Gen. Exp. Transferred			56
						57
						58
						59
			Total Operating Deductions			60
						61
1 908 458 65	1 854 559 76		Total Operation	206 405 39	202 787 44	62
13 571 79	12 019 05		Total Maintenance	1 208 86	1 507 11	63
(A)	(B)			(C)	(D)	

+Indicates a Credit

						41
						42
						43
12 60			Total Maintenance			44
56 376 01	48 862 94		Total Administrative & Gen'l Exp.	5 476 64	3 842 57	45
						46
			Operating Deductions			47
		607	Interdepartmental Gas Sales			48
		749-1	Gas Used in Company Buildings			49
		749-2	Gas Used For Power			50
		749-3	Gas Used in Other Operations			51
		749-4	Gas Used in Construction			52
		764-2	Joint Transmission Expense Transferred			53
		806	Duplicate Miscellaneous Charges			54
		807	Administrative & General Expense Transferred			55
		809	Joint Admstr. & Gen. Exp. Transferred			56
						57
						58
						59
			Total Operating Deductions			60
						61
1 998 158 65	1 854 539 76		Total Operation	206 405 39	202 787 44	62
13 571 79	12 019 05		Total Maintenance	1 208 86	1 507 11	63
(A)	(B)			(C)	(D)	

*Indicates red figures.

[fol. 15838] (Part of Exhibit 208.)

Financial Statement

of

Panhandle Eastern Pipe Line Company

For Period ended December 31, 1941

(Signed) T. F. PAXTON,
Assistant Secretary.

Balance Sheet as of December 31, 1941

	Acct No.		Detail on Page		Increase Over Previous Month	Increase Since January First
1		Gas Plant				
2	100-1	Gas Plant in Service	11A	7 196 797 99	533 546 17	1 622 955 04
3	100-3	Construction Work in Progress	11A	2 668 429 03	1 040 906 57	1 994 523 95
4	100-4	Gas Plant Held for Future Use	11			
5	100-6	Gas Plant in Process of Reclassification	11A	56 676 685 52*	+44 722 72	+729 684 98
6						
7						
8						
9						
10		Total Gas Pant	11A	66 541 912 54	1 529 730 02	2 887 794 01
11						
12						
13		Investment And Fund Accounts				
14	110	Other Physical Property	11			
15	111-1	Investment in Securities of Associated Companies	11A	2 635 391 43		+59 000 43
16	111-2	Advances to Associated Companies	11			+275 000 00
17	112	Other Investments	11A	204 498 52	+1 684 27	+31 099 58
18						
19						
20						
21						
22		Total Investment And Fund Accounts		2 839 889 95	+1 684 27	+365 100 01
23						
24						
25						
26		Current And Accrued Assets				
27	120	Cash	x x	3 652 290 28	+1 078 115 90	369 389 64
28	121	Special Deposits	11B	102 580 14	+3 240 [illegible]	93 552 14
29	122	Working Funds	11B	11 249 05	+649 08	2 499 27
30	123	Temporary Cash Investments	11C	2 750 000 00	—	2 750 000 00
31	124	Notes Receivable	11			
32	125-1	Accounts Receivable—Customers	x x	1 316 400 31	94 578 57	196 273 69
33	125-2	Other Accounts Receivable	12A	73 800 50	+5 946 16	26 806 25
34	126-2	Accounts Receivable from Associated Companies	11C	220 573 95	33 733 61	+15 328 44
35	128	Interest and Dividends Receivable	x x	8 388 47	1 344 10	4 777 68
36	131-1	Materials and Supplies—Gas	12A	362 548 66	31 371 53	461 045 16
37	131-2	Materials and Supplies—Gasoline	x x	9 848 40	+878 52	4 426 92
38	131-3	Materials and Supplies—Gasoline on Hand	x x	1 049 64	337 02	+35 34
39	132	Prepayments	12A	94 732 18	+22 291 56	29 813 50
40						
41						
42						
43						
44						
45		Total Current And Accrued Assets		8 603 461 58	+949 727 27	3 623 220 47
46						
47						
48		Deferred Debits				
49	140	Unamortized Debt Discount and Expense	12A		+1 800 164 03	+2 229 322 74
50	143	Clearing Accounts	12B	6 760 57	2 107 99	6 760 57
51	144	Retirement Work in Progress	12B		+300 976 86	
52	145	Other Work in Progress	12B	176 619 80	61 729 85	173 643 89
53	146	Other Deferred Debits	12B	4 068 91	48 02	3 234 83
54						
55						
56						
57						
58						
59		Total Deferred Debits		187 449 28	+2 657 255 03	+2 045 683 45

	Acc't No.		Detail on Page		Over Previous Month	Since January First
1		Gas Plant				
2	100-1	Gas Plant in Service	11A	7 196 797 99	533 546 17	1 622 955 04
3	100-3	Construction Work in Progress	11A	2 668 429 03	1 040 906 57	1 994 523 95
4	100-4	Gas Plant Held for Future Use	11			
5	100-6	Gas Plant in Process of Reclassification	11A	56 676 685 52*	+44 722 72	+729 684 98
6						
7						
8						
9						
10		Total Gas Plant	11A	66 541 912 54	1 529 730 02	2 887 794 01
11						
12						
13		Investment And Fund Accounts				
14	110	Other Physical Property	11			
15	111-1	Investment in Securities of Associated Companies	11A	2 635 391 43		+59 000 43
16	111-2	Advances to Associated Companies	11			+275 000 00
17	112	Other Investments	11A	204 498 52	+1 684 27	+31 099 58
18						
19						
20						
21						
22		Total Investment And Fund Accounts		2 839 889 95	+1 684 27	+365 100 01
23						
24						
25						
26		Current And Accrued Assets				
27	120	Cash	x x	3 652 290 28	+1 078 115 90	369 389 64
28	121	Special Deposits	11B	102 580 14	+3 240 88	93 552 14
29	122	Working Funds	11B	11 249 05	+619 08	2 499 27
30	123	Temporary Cash Investments	11C	2 750 000 00	—	2 750 000 00
31	124	Notes Receivable	11			
32	125-1	Accounts Receivable—Customers	x x	1 316 400 31	94 578 57	196 273 69
33	125-2	Other Accounts Receivable	12A	73 800 50	+5 946 16	26 806 25
34	126-2	Accounts Receivable from Associated Companies	11C	220 573 95	33 733 61	+15 328 44
35	128	Interest and Dividends Receivable	x x	8 388 47	1 344 10	4 777 68
36	131-1	Materials and Supplies—Gas	12A	362 548 66	31 371 53	161 045 16
37	131-2	Materials and Supplies—Gasoline	x x	9 848 40	+878 52	4 426 92
38	131-3	Materials and Supplies—Gasoline on Hand	x x	1 049 64	337 02	+35 34
39	132	Prepayments	12A	94 732 18	+22 291 56	29 813 59
40						
41						
42						
43						
44						
45		Total Current And Accrued Assets		8 603 461 58	+949 727 27	3 623 220 47
46						
47						
48		Deferred Debits				
49	140	Unamortized Debt Discount and Expense	12A		+1 800 164 03	+2 239 322 74
50	143	Clearing Accounts	12B	6 760 57	2 107 99	6 760 57
51	144	Retirement Work in Progress	12B		+300 976 86	
52	145	Other Work in Progress	12B	176 619 80	61 729 85	173 643 89
53	146	Other Deferred Debits	12B	4 068 91	48 02	3 234 83
54						
55						
56						
57						
58						
59		Total Deferred Debits		187 449 28	+2 037 255 03	+2 045 683 45
60						
61						
62						
63		Total Assets		78 172 713 35	+1 458 936 55	4 100 231 02
				(A)	(B)	(C)

*Balance after Reserve for Amortization of Gas Sales and Purchase Contracts $1,758,171.60

+Indicates red figures.

Balance Sheet as of December 31, 1941

Acc't No.		Detail on Page		Increase Over Previous Month	Increase Since January First	
	Capital Stocks					1
200	Common No Par	x x	20 184 175 00			2
	810,000 Shs. Auth. 807,367 Shs. Outstdg.	x x				3
201	Preferred $100 Par	x x				4
	Class A 100,000 Shs. Auth. & Outstdg.	x x	10 000 000 00			5
	Class B 10,000 " " " "	x x	1 000 000 00			6
						7
						8
						9
	Total Capital Stocks		31 184 175 00			10
						11
	Long-Term Debt					12
210	Bonds	11C	18 250 000 00		+4 250 000 00	13
212-1	Advances on Notes	11				14
212-2	Advances on Open Accounts	11				15
213	Miscellaneous Long-Term Debt	11C	5 009 789 19	+1 746 91	4 979 640 19	16
						17
	Total Long-Term Debt		23 259 789 19	+1 746 91	729 640 19	18
						19
	Current And Accrued Liabilities					20
220	Notes Payable	11				21
222	Accounts Payable	11D	1 073 546 46	68 984 61	744 148 16	22
223-2	Accounts Payable to Associated Companies	11				23
224-1	Dividends Declared — Preferred	x x	165 000 00	165 000 00		24
224-2	Dividends Declared — Common	x x				25
225	Matured Long-Term Debt	11D	96 822 14	+2 040 88	96 822 14	26
226	Matured Interest	12B	4 230 00	+1 200 00	1 810 00	27
227	Customers' Deposits	x x				28
228	Taxes Accrued	12C	3 153 178 91	+454 037 47	880 664 14	29
229-1	Interest Accrued — Long Term Debt	12D	90 104 18	45 052 09	+209 895 82	30
229-2	Interest Accrued — Other	12				31
230	Other Current and Accrued Liabilities	12D	3 433 42	1 406 45	487 18	32
224-3	Dividends Declared — Participating (Class A Preferred and Common Stocks)		740 086 42	538 244 67	740 086 42	33
						34
	Total Current & Accrued Liabilities		5 326 401 23	361 409 47	2 224 122 22	35
						36
	Deferred Credits					37
241	Customers' Advances for Construction	x x				38
242	Other Deferred Credits	12D	43 414 51	+222 12	+937 23	39
						40
						41
	Total Deferred Credits		43 414 51	+222 12	+937 23	42
						43
	Reserves					44
						45
250-6	Depreciation, Depletion and Amortization In Process of Reclassification	12E	10 405 047 60	35 057 60	1 752 186 97	46
254	Uncollectible Accounts	12F	37 619 88	600 00	7 200 00	47
256	Injuries and Damages	12F	90 123 74	1 000 00	11 974 00	48
258	Other Reserves	12F	624 800 94			49
						50
						51
	Total Reserves		11 157 592 16	36 657 60	1 771 360 97	52
						53
265	Contributions in Aid of Construction	12F	35 801 06	—	1 465 66	54

	Class B [illegible]	x x	2 000 000 00			6
						7
						8
						9
	Total Capital Stocks		31 184 175 00			10
						11
	Long-Term Debt					12
210	Bonds	11C	18 250 000 00	—	+4 250 000 00	13
212-1	Advances on Notes	11				14
212-2	Advances on Open Accounts	11				15
213	Miscellaneous Long-Term Debt	11C	5 009 789 19	+1 746 91	4 979 640 19	16
						17
	Total Long-Term Debt		23 259 789 19	+1 746 91	729 640 19	18
						19
	Current And Accrued Liabilities					20
220	Notes Payable	11				21
222	Accounts Payable	11D	1 073 546 16	68 984 61	714 148 16	22
223-2	Accounts Payable to Associated Companies	11				23
224-1	Dividends Declared — Preferred	x x	165 000 00	165 000 00	—	24
224-2	Dividends Declared — Common	x x				25
225	Matured Long-Term Debt	11D	96 822 14	+2 040 88	96 822 14	26
226	Matured Interest	12B	4 230 00	+1 200 00	1 810 00	27
227	Customers' Deposits	x x				28
228	Taxes Accrued	12C	3 153 178 91	+454 037 47	880 664 14	29
229-1	Interest Accrued — Long Term Debt	12D	90 104 18	45 052 09	+209 895 82	30
229-2	Interest Accrued — Other	12				31
230	Other Current and Accrued Liabilities	12D	3 433 42	1 406 45	487 18	32
224-3	Dividends Declared — Participating (Class A Preferred and Common Stocks)		740 086 42	538 244 67	740 086 42	33
						34
	Total Current & Accrued Liabilities		5 326 401 23	361 409 47	2 224 122 22	35
						36
	Deferred Credits					37
241	Customers' Advances for Construction	x x				38
242	Other Deferred Credits	12D	43 414 51	+222 12	+937 23	39
						40
						41
	Total Deferred Credits		43 414 51	+222 12	+937 23	42
						43
	Reserves					44
250-6	Depreciation, Depletion and Amortization In Process of Reclassification	12E	10 405 047 60	35 057 60	1 752 186 97	45 46
254	Uncollectible Accounts	12F	37 619 88	660 00	7 200 00	47
256	Injuries and Damages	12F	90 123 74	1 000 00	11 974 00	48
258	Other Reserves	12F	624 800 94			49
						50
						51
	Total Reserves		11 157 592 16	36 657 60	1 771 360 97	52
						53
265	Contributions in Aid of Construction	12F	35 801 06	—	1 465 66	54
						55
	Surplus					56
271	Earned Surplus —					57
	Prior to December 31, 1935					58
	Since December 31, 1935		7 165 540 20	+1 855 034 59	+625 420 79	59
						60
						61
	Total Surplus	10	7 165 540 20*	+1 855 034 59	+625 420 79	62
	Total Liabilities		78 172 713 35	+1 458 936 55	4 100 231 02	63
			(D)	(E)	(F)	

*For restriction as to payment of dividends and segregation of surplus, see Page 2A.

+Indicates red figures.

Description			
Surplus:			
Restricted as to payment of common stock and participating dividends as provided in (2) on Page 4 of the Certificate of Amendment of Certificate of Incorporation filed June 5 1936			3 581 379 41(1)
Unrestricted			3 584 160 79
Total Page 2 Line 62			7 165 540 20

(1) Section 10 of Article IV of the Mortgage and Deed of Trust dated November 1, 1940 provides for restrictions as to the payment of dividends determined as follows:

Earned Surplus at January 1, 1940		6 825 003 08
Less:		
The sum specified in Section 10 of Article IV	1 500 000 00	
The charge to earned surplus of the balance, as of February 3, 1941, of the unamortized debt, discount and expense applicable to the funded debt of the Company existing prior to January 1, 1940 and the unamortized premium paid in connection with the redemption of such funded debt	1 797 994 55	
Amount of dividend on common stock declared during year 1940 in respect to earnings for the year 1939 specifically exempted in sub-paragraph (d)	1 211 050 50	4 509 045 05
Restricted under Mortgage and Deed of Trust dated November 1, 1940		2 315 958 03

Month of December 1941

	Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
		Month Of December			1
Gross Revenues					2
Gas	4A	1 498 395 33	1 332 682 58	165 712 75	3
Gasoline	5A	109 259 58	39 829 52	69 430 06	4
Non-Operating	7	742 25	863 99	*121 74	5
					6
Total Revenues		1 608 397 16	1 373 376 09	235 021 07	7
Operating Expenses					8
Operation	x x	310 686 13	323 092 71	*12 406 58	9
Maintenance	x x	31 563 32	25 976 71	5 586 61	10
Depreciation, Depletion and Amortization	x x	259 307 43	213 298 41	46 009 02	11
Taxes—Federal Income	x x	181 106 77	179 000 00	2 106 77	12
Taxes—Federal Excess Profits	x x	99 774 72	99 000 00	774 72	13
Taxes—Other	x x	40 983 45	*24 998 70	65 982 15	14
Total Expenses		923 421 82	815 369 13	108 052 69	15
Net Operating Revenue		684 975 34	558 006 96	126 968 38	16
Other Income	9	2 130 92	5 069 38	*2 938 46	17
Gross Corporate Income		687 106 26	563 076 34	124 029 92	18
Other Deductions	9	45 263 29	101 578 00	*56 314 71	19
Less: Interest Charged to Construction	9	6 531 14	2 735 12	3 796 02	20
Net Income		648 374 11	464 233 46	184 140 65	21
		Months Ended			22
Gross Revenues					23
Gas	4B				24
Gasoline	5B				25
Non-Operating	7				26
					27
Total Revenues					28
Operating Expenses					29
Operation	x x				30
Maintenance	x x				31
Depreciation, Depletion and Amortization	x x				32
Taxes—Federal Income	x x				33
Taxes—Federal Excess Profits	x x				34
Taxes—Other	x x				35
Total Expenses					36
Net Operating Revenue					37
Other Income	9				38
Gross Corporate Income					39
Other Deductions	9				40
Less: Interest Charged to Construction	9				41
Net Income					42
		12 Months Ended December 31			43
Gross Revenues					44
Gas	4C	14 304 449 17	12 685 263 24	1 619 185 93	45
Gasoline	5C	735 077 94	355 722 01	379 355 93	46
Non-Operating	7	9 309 04	10 643 67	*1 334 63	47
					48
Total Revenues		15 048 836 15	13 051 628 92	1 997 207 23	49
Operating Expenses					50
Operation	x x	2 959 242 71	2 598 578 28	360 664 43	51
Maintenance	x x	310 321 96	245 438 95	64 883 01	52
Depreciation, Depletion and Amortization	x x	2 360 000 00	2 126 000 00	234 000 00	53
Taxes—Federal Income	x x	1 791 106 77(1)	1 400 000 00	391 106 77	54

Total Revenues		1 608 397 16	1 373 376 09	235 021 07	7
Operating Expenses					8
Operation	x x	310 696 13	323 092 71	+12 406 58	9
Maintenance	x x	31 563 32	25 976 71	5 586 61	10
Depreciation, Depletion and Amortization	x x	259 307 43	213 298 41	46 009 02	11
Taxes—Federal Income	x x	181 106 77	179 000 00	2 106 77	12
Taxes—Federal Excess Profits	x x	99 774 72	99 000 00	774 72	13
Taxes—Other	x x	40 983 45	+24 998 70	65 982 15	14
Total Expenses		923 421 82	815 369 13	108 052 69	15
Net Operating Revenue		684 975 34	558 006 96	126 968 38	16
Other Income	9	2 130 92	5 069 38	+2 938 46	17
Gross Corporate Income		687 106 26	563 076 34	124 029 92	18
Other Deductions	9	45 263 29	101 578 00	+56 314 71	19
Less: Interest Charged to Construction	9	6 531 14	2 735 12	3 796 02	20
Net Income		648 374 11	464 233 16	184 140 65	21
	Months Ended				22
Gross Revenues					23
Gas	4B				24
Gasoline	5B				25
Non-Operating	7				26
					27
Total Revenues					28
Operating Expenses					29
Operation	x x				30
Maintenance	x x				31
Depreciation, Depletion and Amortization	x x				32
Taxes—Federal Income	x x				33
Taxes—Federal Excess Profits	x x				34
Taxes—Other	x x				35
Total Expenses					36
Net Operating Revenue					37
Other Income	9				38
Gross Corporate Income					39
Other Deductions	9				40
Less: Interest Charged to Construction	9				41
Net Income					42
	12 Months Ended December 31				43
Gross Revenues					44
Gas	4C	14 304 449 17	12 685 263 24	1 619 185 93	45
Gasoline	5C	735 077 94	355 722 01	379 355 93	46
Non-Operating	7	9 309 04	10 643 67	+1 334 63	47
					48
Total Revenues		15 048 836 15	13 051 628 92	1 997 207 23	49
Operating Expenses					50
Operation	x x	2 959 212 71	2 598 578 28	360 664 43	51
Maintenance	x x	310 221 96	245 438 95	64 883 01	52
Depreciation, Depletion and Amortization	x x	2 360 000 00	2 126 000 00	234 000 00	53
Taxes—Federal Income	x x	1 791 106 77(1)	1 400 000 00	391 106 77	54
Taxes—Federal Excess Profits	x x	1 582 774 72(1)	560 000 00	1 022 774 72	55
Taxes—Other	x x	701 108 39	576 787 74	124 320 65	56
Total Expenses		9 704 554 55	7 506 804 97	2 197 749 58	57
Net Operating Revenue		5 344 281 60	5 544 823 95	+200 542 35	58
Other Income	9	18 534 95	86 121 18	+67 586 23	59
Gross Corporate Income		5 362 816 55	5 630 945 13	+268 128 58	60
Other Deductions	9	685 348 92	1 216 030 51	+530 681 59	61
Less: Interest Charged to Construction	9	11 774 51	36 827 80	+25 053 29	62
Net Income		4 689 242 14(2)	4 451 742 42	237 499 72	63
		(A)	(B)	(C)	

(1) Includes charges in lieu of taxes. See page 14A

(2) For restriction as to payment of dividends and segregation of surplus, see Page 2A

+Indicates red figures.

12 Months Ended December 31, 1941

Acc't No.		Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
	Operating Revenue — Gas					1
600	Residential Sales	x x	962 44	492 09	470 35	2
602-1	Commercial Sales	x x	31 60	39 02	*7 42	3
602-2	Industrial Sales	x x	89 909 89	63 009 25	26 900 64	4
605-1	Sales to Gas Utilities	x x	1 212 724 25	1 052 764 79	159 959 46	5
608-1	Other Sales — Field	x x	6 00	5 40	60	6
						7
	Total		1 303 634 18	1 116 310 55	187 323 63	8
						9
605-2	Sales to Associated Companies	x x	194 761 15	216 372 03	*21 610 88	10
						11
	Total Revenue — Gas		1 498 395 33	1 332 682 58	165 712 75	12
						13
	Operating Revenue Deductions					14
	Production — Operation	15	38 222 71	29 657 76	8 564 95	15
	" — Maintenance	15	2 373 47	3 599 22	*1 225 75	16
	Gas Purchased — Associated Companies	15				17
	Gas Purchased — Others	15	115 996 43	117 754 74	*1 758 31	18
	Purchased Gas Expense — Operation	15	2 318 35	2 134 80	*183 55	19
	" " " — Maintenance	15	129 29	343 31	*214 02	20
	Transmission — Operation	17	143 817 11	100 279 19	43 537 92	21
	" — Maintenance	17	28 782 77	20 943 56	7 839 21	22
	Distribution — Operation	17				23
	" — Maintenance	18				24
	Customers' Accounting and Collecting	18	1 414 66	1 263 57	151 09	25
	Sales Promotion	18	1 283 96	864 28	419 68	26
	Administrative and General — Operation	19	62 678 98	175 981 20	*113 302 22	27
	" " " — Maintenance	19	6 04	912 57	*906 53	28
	Gas Used in Operations, Etc., Includes Overhead Charged to Constr.	19	*78 669 64	*125 791 68	47 122 04	29 30
	Total Operation And Maintenance		318 354 13	327 942 52	*9 588 39	31
	Total Operation	19	287 062 56	302 143 86	*15 081 30	32
	Total Maintenance	19	31 291 57	25 798 66	5 492 91	33
503-1	Depreciation	x x	208 854 80	164 904 97	43 949 83	34
503-2	Amortization and Depletion — Producing Leases	x x	9 533 31	7 879 99	1 653 32	35
512	Amortization Non-Producing Leases	x x	6 193 39	6 237 50	*44 11	36
504	Amortization — Other	x x	27 595 93	27 345 95	249 98	37
507	Taxes — Federal Income	x x	181 106 77	179 000 00	2 106 77	38
507	Taxes — Federal Excess Profits	x x	99 774 72	99 000 00	774 72	39
507	Taxes — Other	x x	40 622 71	*25 370 54	65 993 25	40
	Total Operating Revenue Deductions		892 035 76	786 940 39	105 095 37	41
	Net Operating Revenue — Gas		606 359 57	545 742 19	60 617 38	42
						43
	Statistics					44
MCF	Sales to Public	25	5 605 849	4 975 008	630 841	45
	Sales — Associated Companies	25	878 861	919 983	*41 122	46
						47
	Total Sales	25	6 484 710	5 894 991	589 719	48
	Company Use — Compressor Stations	25	402 687	348 980	53 707	49
	Other Company Use	25	90 636	97 098	*6 462	50
	Exchange Gas Delivered	25	20 210	—	20 210	51
						52
	Total Deliveries	25	6 998 243	6 341 069	657 174	53
						54
MCF	Produced	25	3 177 779	2 626 658	551 121	55
	[illegible]	[illegible]				56

602-2	Industrial Sales	x x	89 909 89	63 009 25	26 900 64		4
605-1	Sales to Gas Utilities	x x	1 212 724 25	1 052 764 79	159 959 46		5
608-1	Other Sales — Field	x x	6 00	5 40	60		6
							7
	Total		1 303 634 18	1 116 310 55	187 323 63		8
							9
605-2	Sales to Associated Companies	x x	194 761 15	216 372 03	+21 610 88		10
							11
	Total Revenue — Gas		1 498 395 33	1 332 682 58	165 712 75		12
							13
	Operating Revenue Deductions						14
	Production — Operation	15	38 222 71	29 657 76	8 564 95		15
	" — Maintenance	15	2 373 47	3 599 22	+1 225 75		16
	Gas Purchased — Associated Companies	15					17
	Gas Purchased — Others	15	115 996 43	117 754 74	+1 758 31		18
	Purchased Gas Expense — Operation	15	2 318 35	2 134 80	183 55		19
	" " " — Maintenance	15	129 29	343 31	+214 02		20
	Transmission — Operation	17	143 817 11	100 279 19	43 537 92		21
	" — Maintenance	17	28 782 77	20 943 56	7 839 21		22
	Distribution —Operation	17					23
	" — Maintenance	18					24
	Customers' Accounting and Collecting	18	1 414 66	1 263 57	151 09		25
	Sales Promotion	18	1 283 96	864 28	419 68		26
	Administrative and General —Operation	19	62 678 98	175 981 20	+113 302 22		27
	" " " — Maintenance	19	6 04	912 57	+906 53		28
	Gas Used in Operations, Etc., Includes	19					29
	Overhead Charged to Constr.		+78 669 64	+125 791 68	47 122 04		30
	Total Operation And Maintenance		318 354 13	327 942 52	+9 588 39		31
	Total Operation	19	287 062 56	302 143 86	+15 081 30		32
	Total Maintenance	19	31 291 57	25 798 66	5 492 91		33
503-1	Depreciation	x x	208 854 80	164 904 97	43 949 83		34
503-2	Amortization and Depletion — Producing Leases	x x	9 533 31	7 879 99	1 653 32		35
512	Amortization Non-Producing Leases	x x	6 193 39	6 237 50	+44 11		36
504	Amortization — Other	x x	27 595 93	27 345 95	249 98		37
507	Taxes — Federal Income	x x	181 106 77	179 000 00	2 106 77		38
507	Taxes — Federal Excess Profits	x x	99 774 72	99 000 00	774 72		39
507	Taxes — Other	x x	40 622 71	+25 370 54	65 993 25		40
	Total Operating Revenue Deductions		892 035 76	786 940 39	105 095 37		41
	Net Operating Revenue — Gas		606 359 57	545 742 19	60 617 38		42
							43
	Statistics						44
MCF	Sales to Public	25	5 605 849	4 975 008	630 841		45
"	Sales — Associated Companies	25	878 861	919 983	+41 122		46
							47
"	Total Sales	25	6 484 710	5 894 991	589 719		48
"	Company Use — Compressor Stations	25	402 687	348 980	53 707		49
"	Other Company Use	25	90 636	97 098	+6 462		50
"	Exchange Gas Delivered	25	20 210	—	20 210		51
							52
	Total Deliveries	25	6 998 243	6 341 069	657 174		53
							54
MCF	Produced	25	3 177 779	2 626 658	551 121		55
"	Purchased — Associated Companies	25					56
"	" — Others	25	2 946 920	2 974 860	+27 940		57
"	Exchange Gas Received	25	6 732	6 919	+187		58
							59
"	Total Produced And Purchased	25	6 131 431	5 608 437	522 994		60
MCF (14.9#)	Total Deliveries	25	6 851 096	6 215 539	635 557		61
" "	Total Available for Deliveries	25	6 748 188	6 172 512	575 676		62
" "	Unaccounted For (Losses in Black)	25	+102 908	+43 027	+59 881		63
			(A)	(B)	(C)		

+Indicates red figures.

12 Months Ended December 31, 1941

Acc't No		Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
	Operating Revenue — Gas					1
600	Residential Sales	x x	7 730 93	4 452 46	3 278 47	2
602-1	Commercial Sales	x x	290 39	340 13	*49 74	3
602-2	Industrial Sales	x x	866 247 80	650 247 69	216 000 11	4
605-1	Sales to Gas Utilities	x x	11 538 990 08	10 111 019 22	1 427 970 86	5
608-1	Other Sales — Field	x x	327 50	8 698 95	*8 371 45	6
						7
	Total		12 413 586 70	10 774 758 45	1 638 828 25	8
						9
605-2	Sales to Associated Companies	x x	1 890 862 47	1 910 504 79	*19 642 32	10
						11
	Total Revenue — Gas		14 304 449 17	12 685 263 24	1 619 185 93	12
						13
	Operating Revenue Deductions					14
	Production — Operation	15	376 292 17	328 814 97	47 477 20	15
	" — Maintenance	15	27 123 09	22 181 71	4 941 38	16
	Gas Purchased — Associated Companies	15				17
	Gas Purchased — Others	15	1 180 917 63	1 090 106 83	90 810 80	18
	Purchased Gas Expense — Operation	15	22 710 64	24 919 24	*2 208 60	19
	" " " — Maintenance	15	2 559 61	3 834 63	*1 275 02	20
	Transmission — Operation	17	1 137 100 49	999 461 75	137 638 74	21
	" — Maintenance	17	273 424 50	211 984 75	61 439 75	22
	Distribution — Operation	17				23
	" — Maintenance	18				24
	Customers' Accounting and Collecting	18	14 736 53	13 672 87	1 063 66	25
	Sales Promotion	18	12 571 35	11 754 38	762 97	26
	Administrative and General — Operation	19	661 787 73	630 391 94	31 395 79	27
	" " " — Maintenance	19	1 229 58	2 571 83	*1 342 25	28
	Gas Used in Operations, Etc., Includes	19				29
	Overhead Charged to Constr.	19	*662 305 46	*691 990 24	29 684 78	30
	Total Operation and Maintenance		3 048 093 86	2 647 704 66	400 389 20	31
	Total Operation	19	2 743 757 08	2 407 131 74	336 625 34	32
	Total Maintenance	19	304 336 78	240 572 92	63 763 86	33
503-1	Depreciation	x x	1 796 994 80	1 570 744 97	226 249 83	34
503-2	Amortization and Depletion — Producing Leases	x x	99 177 06	79 736 27	10 440 79	35
512	Amortization Non-Producing Leases	x x	74 685 45	80 408 63	*5 723 18	36
504	Amortization — Other	x x	332 142 69	329 110 13	3 032 56	37
507	Taxes — Federal Income	x x	1 791 106 77	1 400 000 00	391 106 77	38
507	Taxes — Federal Excess Profits	x x	1 582 774 72	560 000 00	1 022 774 72	39
507	Taxes — Other	x x	696 592 62	572 286 87	124 305 75	40
	Total Operating Revenue Deductions		9 412 567 97	7 239 991 53	2 172 576 44	41
	Net Operating Revenue — Gas		4 891 881 20	5 445 271 71	*553 390 51	42
	Statistics					43
						44
MCF	— Sales to Public	25	54 558 101	47 395 855	7 162 246	45
"	Sales — Associated Companies	25	8 879 688	8 840 644	39 044	46
						47
"	Total Sales	25	63 437 789	56 236 499	7 201 290	48
"	Company Use — Compressor Stations	25	3 375 784	3 170 695	205 089	49
"	Other Company Use	25	947 071	954 704	*7 633	50
"	Exchange Gas Delivered	25	33 892	79 099	*45 207	51
						52
	Total Deliveries	25	67 794 536	60 440 997	7 353 539	53
						54
MCF	— Produced	25	30 059 021	26 578 757	3 480 264	55
"	Purchased — Associated Companies	25				56
"	" " — Others	25	30 137 409	27 537 768	2 599 641	57
"	Exchange Gas Received	25	78 520	69 412	9 108	58
						59
"	Total Produced And Purchased	25	60 274 950	[illegible]		

Acct. No.		Detail on Page		This Year	Last Year	Increase or Decrease	
	Operating Revenue — Gas						1
600	Residential Sales		x x	7 780 93	4 452 46	3 278 47	2
602-1	Commercial Sales		x x	290 39	340 13	+49 74	3
602-2	Industrial Sales		x x	866 247 80	650 247 69	216 000 11	4
605-1	Sales to Gas Utilities		x x	11 538 990 08	10 111 019 22	1 427 970 86	5
608-1	Other Sales — Field		x x	327 50	8 698 95	+8 371 45	6
							7
	Total			12 413 586 70	10 774 758 45	1 638 828 25	8
							9
605-2	Sales to Associated Companies		x x	1 890 862 47	1 910 504 79	+19 642 32	10
							11
	Total Revenue — Gas			14 304 449 17	12 685 263 24	1 619 185 93	12
							13
	Operating Revenue Deductions						14
	Production — Operation		15	376 292 17	328 814 97	47 477 20	15
	" — Maintenance		15	27 123 09	22 181 71	4 941 38	16
	Gas Purchased — Associated Companies		15				17
	Gas Purchased — Others		15	1 180 917 63	1 090 106 83	90 810 80	18
	Purchased Gas Expense — Operation		15	22 710 64	24 919 24	+2 208 60	19
	" " " — Maintenance		15	2 559 61	3 834 63	+1 275 02	20
	Transmission — Operation		17	1 137 100 49	999 461 75	137 638 74	21
	" — Maintenance		17	273 424 50	211 984 75	61 439 75	22
	Distribution — Operation		17				23
	" — Maintenance		18				24
	Customers' Accounting and Collecting		18	14 736 53	13 672 87	1 063 66	25
	Sales Promotion		18	12 571 35	11 754 38	762 97	26
	Administrative and General — Operation		19	661 787 73	630 391 94	31 395 79	27
	" " " " — Maintenance		19	1 229 58	2 571 83	+1 342 25	28
	Gas Used in Operations, Etc., Includes		19				29
	Overhead Charged to Constr.		19	+662 305 46	+691 990 24	29 684 78	30
	Total Operation and Maintenance			3 048 093 86	2 647 704 66	400 389 20	31
	Total Operation.		19	2 743 757 08	2 407 131 74	336 625 34	32
	Total Maintenance		19	304 336 78	240 572 92	63 763 86	33
503-1	Depreciation		x x	1 796 994 80	1 570 744 97	226 249 83	34
503-2	Amortization and Depletion — Producing Leases		x x	90 177 06	79 736 27	10 440 79	35
512	Amortization Non-Producing Leases		x x	74 685 45	80 408 63	+5 723 18	36
504	Amortization — Other		x x	332 242 69	329 110 13	3 032 56	37
507	Taxes — Federal Income		x x	1 791 106 77	1 400 000 00	391 106 77	38
507	Taxes — Federal Excess Profits		x x	1 582 774 72	560 000 00	1 022 774 72	39
507	Taxes — Other		x x	696 592 62	572 286 87	124 305 75	40
	Total Operating Revenue Deductions			9 412 567 97	7 239 991 53	2 172 576 44	41
	Net Operating Revenue — Gas			4 891 881 20	5 445 271 71	+553 390 51	42
	Statistics						43
							44
MCF	Sales to Public		25	54 558 101	47 395 855	7 162 246	45
"	Sales — Associated Companies		25	8 879 688	8 840 644	39 044	46
							47
"	Total Sales		25	63 437 789	56 236 499	7 201 290	48
"	Company Use — Compressor Stations		25	3 375 784	3 170 695	205 089	49
"	Other Company Use		25	947 071	954 704	+7 633	50
"	Exchange Gas Delivered		25	33 892	79 099	+45 207	51
							52
	Total Deliveries		25	67 794 536	60 440 997	7 353 539	53
							54
MCF	Produced		25	30 059 021	26 578 757	3 480 264	55
"	Purchased — Associated Companies		25				56
"	" — Others		25	30 137 409	27 537 768	2 599 641	57
"	Exchange Gas Received		25	78 520	69 412	9 108	58
							59
"	Total Produced And Purchased		25	60 274 950	54 185 937	6 089 013	60
MCF	(14.9#) Total Deliveries		25	66 365 418	58 694 393	7 671 025	61
"	" Total Available for Deliveries		25	66 336 729	59 635 475	6 701 254	62
"	" Unaccounted For (Losses in Black)		25	+28 689	941 082	+969 771	63
					(A) (B)	(C)	

+Indicates red figures.

Panhandle Eastern Pipe Line Company

Gasoline 5A

1 Months Ended December 31 1941

Acc't No.		Detail on Page	This Year Amount	This Year Cents per Gallon	Last Year Amount	Last Year Cents per Gallon	Increase or Decrease Amount	
	Gross Sales—Gasoline							1
5501	Natural Gasoline	x x	110 216 14	4 21	40 198 27	1 77	70 017 87	2
								3
								4
								5
								6
	Total Gross Sales		110 216 14	4 21	40 198 27	1 77	70 017 87	7
	Deductions From Gross Sales							8
5510	Discounts and Allowances	x x	956 56	04	368 75	02	587 81	9
								10
								11
								12
	Total Deductions		956 56	04	368 75	02	587 81	13
	Total Net Sales		109 259 58	4 17	39 829 52	1 75	69 430 06	14
	Cost Of Sales							15
5511	Natural Gasoline	x x	22 630 21	86	19 901 26	87	2 728 95	16
5512	Inventory Adjustments	x x						17
								18
								19
	Total Cost Of Sales		22 630 21	86	19 901 26	87	2 728 95	20
	Gross Profit		86 629 37	3 31	19 928 26	88	66 701 11	21
	Operating Expenses							22
x x	Marketing	20	312 41	01	358 53	02	*46 12	23
x x	General	20	544 17	02	465 37	02	78 80	24
5540	Depreciation	x x	7 130 00	27	6 930 00	30	200 00	25
5541-1	Taxes—Federal Income	x x						26
5541-2	Taxes—Federal Excess Profits	x x						27
5542	Taxes—Other		360 74	02	371 84	02	*11 10	28
								29
								30
	Total Operating Expenses		8 347 32	32	8 125 74	36	221 58	31
	Net Operating Profit—Gasoline		78 282 05	2 99	11 802 52	52	66 479 53	32
			(A)	(B)	(C)	(D)	(E)	33
	Statistics							34
								35
								36
								37
				Gallons Or MCF				38
				This Year	Last Year		Increase or Decrease	39
	Gallons On Hand Beginning Of Period			97 861	129 791		*31 930	40
	" Natural Gasoline Produced			2 642 454	2 266 973		375 481	41
								42
								43
								44
	" To Be Accounted For			2 740 315	2 396 764		343 551	45
								46
	" Natural Gasoline Sold			2 618 843	2 272 851		345 992	47
	" Inventory Adjustments							48
								49
								50
	" Total Sold And Used			2 618 843	2 272 851		345 992	51
	" On Hand End Of Period			121 472	123 913		*2 441	52
								53
	Gas Treated—MCF			6 493 823	5 841 626		652 197	54

							4
							5
							6
	Total Gross Sales		110 216 14	4.21	40 198 27	1.77	70 017 87	7
	Deductions From Gross Sales							8
5510	Discounts and Allowances	x x	956 56	.04	368 75	.02	587 81	9
								10
								11
								12
	Total Deductions		956 56	.04	368 75	.02	587 81	13
	Total Net Sales		109 259 58	4.17	39 829 52	1.75	69 430 06	14
	Cost Of Sales							15
5511	Natural Gasoline	x x	22 630 21	.86	19 901 26	.87	2 728 95	16
5512	Inventory Adjustments	x x						17
								18
								19
	Total Cost Of Sales		22 630 21	.86	19 901 26	.87	2 728 95	20
	Gross Profit		86 629 37	3.31	19 928 26	.88	66 701 11	21
	Operating Expenses							22
x x	Marketing	20	312 41	.01	358 53	.02	+46 12	23
x x	General	20	544 17	.02	465 37	.02	-78 80	24
5540	Depreciation	x x	7 130 00	.27	6 930 00	.30	-200 00	25
5541-1	Taxes—Federal Income	x x						26
5541-2	Taxes—Federal Excess Profits	x x						27
5542	Taxes—Other		360 74	.02	371 84	.02	+11 10	28
								29
								30
	Total Operating Expenses		8 347 32	.32	8 125 74	.36	-221 58	31
	Net Operating Profit—Gasoline		78 282 05	2.99	41 802 52	.52	66 479 53	32
			(A)	(B)	(C)	(D)	(E)	33
								34
	Statistics							35
								36
								37

		Gallons Or MCF			
		This Year	Last Year	Increase or Decrease	
					38
Gallons On Hand Beginning Of Period		97 861	129 791	+31 930	39
" Natural Gasoline Produced		2 642 454	2 266 973	375 481	40
					41
					42
					43
					44
" To Be Accounted For		2 740 315	2 396 764	343 551	45
					46
" Natural Gasoline Sold		2 618 843	2 272 851	345 992	47
" Inventory Adjustments					48
					49
					50
" Total Sold And Used		2 618 843	2 272 851	345 992	51
" On Hand End Of Period		121 472	123 913	+2 441	52
					53
Gas Treated—MCF		6 493 823	5 841 626	652 197	54
Average Yield Per Million Cu. Ft.—Gals.		406.92	388.07	18.85	55
Gas Fuel—MCF		23 645	22 202	1 443	56
Gas Shrinkage—MCF		66 063	56 670	9 393	57
Cu. Ft. of Fuel Used Per Gallon Extracted		8.95	9.79	+.84	58
					59
					60
					61
					62
					63

	(F)	(G)	(H)	

Acc't No.		Detail on Page	This Year Amount	This Year Cents per Gallon	Last Year Amount	Last Year Cents per Gallon	Increase or Decrease Amount	
	Gross Sales—Gasoline							1
5501	Natural Gasoline	x x	742 112 40	2.92	359 471 22	1.73	382 641 18	2
								3
								4
								5
								6
	Total Gross Sales		742 112 40	2.92	359 471 22	1.73	382 641 18	7
	Deductions From Gross Sales							8
5510	Discounts and Allowances	x x	7 034 46	.03	3 749 21	.02	3 285 25	9
								10
								11
								12
	Total Deductions		7 034 46	.03	3 749 21	.02	3 285 25	13
	Total Net Sales		735 077 94	2.89	355 722 01	1.71	379 355 93	14
	Cost Of Sales							15
5511	Natural Gasoline	x x	202 622 79	.80	180 680 23	.87	21 942 56	16
5512	Inventory Adjustments	x x	—	—	39 87	—	+39 87	17
								18
								19
	Total Cost Of Sales		202 622 79	.80	180 720 10	.87	21 902 69	20
	Gross Profit		532 455 15	2.09	175 001 91	.84	357 453 24	21
	Operating Expenses							22
x x	Marketing	20	3 359 02	.01	3 063 67	.01	295 35	23
x x	General	20	6 896 47	.03	5 704 84	.03	1 191 63	24
5540	Depreciation	x x	66 000 00	.26	66 000 00	.32	—	25
5541-1	Taxes—Federal Income	x x						26
5541-2	Taxes—Federal Excess Profits	x x						27
5542	Taxes—Other		4 515 77	.02	4 500 87	.02	14 90	28
								29
								30
	Total Operating Expenses		80 771 26	.32	79 269 38	.38	1 501 88	31
	Net Operating Profit—Gasoline		451 683 89	1.77	95 732 53	.46	355 951 36	32
			(A)	(B)	(C)	(D)	(E)	33
								34
	Statistics							35
								36
								37

	Gallons Or MCF This Year	Gallons Or MCF Last Year	Increase or Decrease	
				38
Gallons On Hand Beginning Of Period	123 913	163 097	+39 184	40
" Natural Gasoline Produced	25 423 109	20 793 278	4 629 831	41
				42
				43
				44
" To Be Accounted For	25 547 022	20 956 375	4 590 647	45
				46
" Natural Gasoline Sold	25 425 550	20 827 942	4 597 608	47
" Inventory Adjustments	—	4 520	+4 520	48
				49
				50
" Total Sold And Used	25 425 550	20 832 462	4 593 088	51
" On Hand End Of Period	121 472	123 913	+2 441	52

				36
				37
	Gallons Or MCF			38
	This Year	Last Year	Increase or Decrease	39
Gallons On Hand Beginning Of Period	123 913	163 097	+39 184	40
" Natural Gasoline Produced	25 423 109	20 793 278	4 629 831	41
				42
				43
				44
" To Be Accounted For	25 547 022	20 956 375	4 590 647	45
				46
" Natural Gasoline Sold	25 425 550	20 827 942	4 597 608	47
" Inventory Adjustments	—	4 520	+4 520	48
				49
				50
" Total Sold And Used	25 425 550	20 832 462	4 593 088	51
" On Hand End Of Period	121 472	123 913	+2 441	52
				53
Gas Treated—MCF	62 632 791	54 671 339	7 961 452	54
Average Yield Per Million Cu. Ft.—Gals.	405.91	380.33	25.58	55
Gas Fuel—MCF	240 895	216 122	+24 773	56
Gas Shrinkage—MCF	635 706	519 828	+115 878	57
Cu. Ft. of Fuel Used Per Gallon Extracted	9.48	10.39	+ .91	58
				59
				60
				61
				62
				63
	(F)	(G)	(H)	

+Indicates red figures.

Month of December 1941

Acc't No.			Amount This Year	Amount Last Year	Increase or Decrease	
						1
	Month Of December					2
	Gross Revenue—Non-Operating					3
520-1	Revenue from Jobbing and Contract Work		57 00	259 01	+202 01	4
522	Revenue from Lease of Other Physical Property		679 04	599 22	79 82	5
526	Miscellaneous Non-Operating Revenues		6 21	5 76	45	6
						7
						8
						9
						10
	Total Revenue—Non-Operating		742 25	863 99	+121 74	11
	Operating Expenses					12
520-2	Jobbing and Contract Work	—Labor	—	12 38	+12 38	13
520-3	Jobbing and Contract Work	—S. & E.	3 70	80 29	+76 59	14
527-1	Operation—Leased Property		133 08	131 02	2 06	15
527-2	Maintenance—Leased Property		271 75	178 05	93 70	16
						17
						18
						19
	Total Expenses		408 53	401 74	6 79	20
	Net Revenue—Non-Operating		333 72	462 25	+128 53	21
						22
	Months Ended					23
	Gross Revenue—Non-Operating					24
520	Revenue from Jobbing and Contract Work					25
522	Revenue from Lease of Other Physical Property					26
526	Miscellaneous Non-Operating Revenues					27
						28
						29
						30
						31
	Total Revenue—Non-Operating					32
	Operating Expenses					33
520-2	Jobbing and Contract Work	—Labor				34
520-3	Jobbing and Contract Work	—S. & E.				35
527-1	Operation—Leased Property					36
527-2	Maintenance—Leased Property					37
						38
						39
						40
	Total Expenses					41
	Net Revenue—Non-Operating					42
						43
	12 Months Ended December 31					44
	Gross Revenue—Non-Operating					45
520-1	Revenue from Jobbing and Contract Work		1 311 20	1 229 40	81 80	46
522	Revenue from Lease of Other Physical Property		7 909 55	7 080 87	828 68	47
526	Miscellaneous Non-Operating Revenues		88 29	2 333 40	+2 245 11	48
						49
						50
						51
						52
	Total Revenue—Non-Operating		9 309 04	10 643 67	+1 334 63	53
	Operating Expenses					54
520-2	Jobbing and Contract Work	—Labor	166 79	286 95	+120 16	55
520-3	Jobbing and Contract Work	—S. & E.	630 95	397 31	233 64	56
527-1	Operation—Leased Property		1 809 61	1 273 67	535 94	57
527-2	Maintenance—Leased Property		5 985 18	4 866 03	1 119 15	58
						59

						1
		Month Of December				2
	Gross Revenue—Non-Operating					3
520-1	Revenue from Jobbing and Contract Work		57 00	259 01	†202 01	4
522	Revenue from Lease of Other Physical Property		679 04	599 22	79 82	5
526	Miscellaneous Non-Operating Revenues		6 21	5 76	45	6
						7
						8
						9
						10
	Total Revenue—Non-Operating		742 25	863 99	†121 74	11
	Operating Expenses					12
520-2	Jobbing and Contract Work	—Labor	—	12 38	†12 38	13
520-3	Jobbing and Contract Work	—S. & E.	3 70	80 29	†76 59	14
527-1	Operation—Leased Property		133 08	131 02	2 06	15
527-2	Maintenance—Leased Property		271 75	178 05	93 70	16
						17
						18
						19
	Total Expenses		408 53	401 74	6 79	20
	Net Revenue—Non-Operating		333 72	462 25	†128 53	21
						22
		Months Ended				23
	Gross Revenue—Non-Operating					24
520	Revenue from Jobbing and Contract Work					25
522	Revenue from Lease of Other Physical Property					26
526	Miscellaneous Non-Operating Revenues					27
						28
						29
						30
						31
	Total Revenue—Non-Operating					32
	Operating Expenses					33
520-2	Jobbing and Contract Work	—Labor				34
520-3	Jobbing and Contract Work	—S. & E.				35
527-1	Operation—Leased Property					36
527-2	Maintenance—Leased Property					37
						38
						39
						40
	Total Expenses					41
	Net Revenue—Non-Operating					42
						43
		12 Months Ended December 31				44
	Gross Revenue—Non-Operating					45
520-1	Revenue from Jobbing and Contract Work		1 311 20	1 229 40	81 80	46
522	Revenue from Lease of Other Physical Property		7 909 55	7 080 87	828 68	47
526	Miscellaneous Non-Operating Revenues		88 29	2 333 40	†2 245 11	48
						49
						50
						51
						52
	Total Revenue—Non-Operating		9 309 04	10 643 67	†1 334 63	53
	Operating Expenses					54
520-2	Jobbing and Contract Work	—Labor	166 79	286 95	†120 16	55
520-3	Jobbing and Contract Work	—S. & E.	630 95	397 31	233 64	56
527-1	Operation—Leased Property		1 809 61	1 273 67	535 94	57
527-2	Maintenance—Leased Property		5 985 18	4 866 03	1 119 15	58
						59
						60
						61
	Total Expenses		8 592 53	6 823 96	1 768 57	62
	Net Revenue—Non-Operating		716 51	3 819 71	†3 103 20	63
			(A)	(B)	(C)	

†Indicates red figures.

Panhandle Eastern Pipe Line Company

Other Income
Other Deductions 9

Month of December 1941

Acc't No.		Detail on Page	Amount This Year	Amount Last Year	Increase or Decrease	
						1
	Other Income					2
						3
	Month Of December					4
523	Dividend Revenues—Associated Companies	14				5
524-1	Interest on Securities Owned	14B	2 130 92	1 185 22	945 70	6
524-21	Interest Revenues—Associated Companies	14B	—	3 884 16	*3 884 16	7
524-22	Interest Revenues—Other	14				8
						9
						10
						11
	Total Other Income	14B	2 130 92	5 069 38	*2 938 46	12
						13
	Months Ended					14
523	Dividend Revenues—Associated Companies	14				15
524-1	Interest on Securities Owned	14				16
524-21	Interest Revenues—Associated Companies	14				17
524-22	Interest Revenues—Other	14				18
						19
						20
						21
	Total Other Income	14				22
						23
	12 Months Ended December 31					24
523	Dividend Revenues—Associated Companies	14B	—	56 000 00	*56 000 00	25
524-1	Interest on Securities Owned	14B	17 434 95	13 186 64	4 248 31	26
524-21	Interest Revenues—Associated Companies	14B	—	16 864 99	*16 864 99	27
524-22	Interest Revenues—Other	14B	1 100 00	69 55	1 030 45	28
						29
						30
						31
	Total Other Income	14B	18 534 95	86 121 18	*67 586 23	32
						33
						34
	Other Deductions					35
						36
						37
	Month Of December					38
530	Interest on Long-Term Debt	14C	45 052 09	75 000 00	*29 947 91	39
531	Amortization of Debt Discount and Expense	14C	—	25 768 77	*25 768 77	40
533	Taxes Assumed on Interest	14C	211 20	120 53	90 67	41
534	Interest on Debt to Associated Companies	14				42
535	Other Interest Charges	14C	—	688 70	*688 70	43
	Total Other Deductions	14C	45 263 29	101 578 00	*56 314 71	44
536	Interest Charged to Construction		6 531 14	2 735 42	3 796 02	45
						46
	Months Ended					47
530	Interest on Long-Term Debt	14				48
531	Amortization of Debt Discount and Expense	14				49
533	Taxes Assumed on Interest	14				50
534	Interest on Debt to Associated Companies	14				51
535	Other Interest Charges	14				52
	Total Other Deductions	14				53
536	Interest Charged to Construction					54
						55

523	Dividend Revenues—Associated Companies	14				5
524-1	Interest on Securities Owned	14B	2 130 92	1 185 22	945 70	6
524-21	Interest Revenues—Associated Companies	14B	—	3 884 16	+3 884 16	7
524-22	Interest Revenues—Other	14				8
						9
						10
						11
	Total Other Income	14B	2 130 92	5 069 38	+2 938 46	12
						13
	Months Ended					14
523	Dividend Revenues—Associated Companies	14				15
524-1	Interest on Securities Owned	14				16
524-21	Interest Revenues—Associated Companies	14				17
524-22	Interest Revenues—Other	14				18
						19
						20
						21
	Total Other Income	14				22
						23
	12 Months Ended December 31					24
523	Dividend Revenues—Associated Companies	14B	—	56 000 00	+56 000 00	25
524-1	Interest on Securities Owned	14B	17 434 95	13 186 64	4 248 31	26
524-21	Interest Revenues—Associated Companies	14B	—	16 864 99	+16 864 99	27
524-22	Interest Revenues—Other	14B	1 100 00	69 55	1 030 45	28
						29
						30
						31
	Total Other Income	14B	18 534 95	86 121 18	+67 586 23	32
						33
						34
	Other Deductions					35
						36
						37
	Month Of December					38
530	Interest on Long-Term Debt	14C	45 052 09	75 000 00	+29 947 91	39
531	Amortization of Debt Discount and Expense	14C	—	25 768 77	+25 768 77	40
533	Taxes Assumed on Interest	14C	211 20	120 53	90 67	41
534	Interest on Debt to Associated Companies	14				42
535	Other Interest Charges	14C	—	688 70	+688 70	43
	Total Other Deductions	14C	45 263 29	101 578 00	+56 314 71	44
536	Interest Charged to Construction		6 531 14	2 735 12	3 796 02	45
						46
	Months Ended					47
530	Interest on Long-Term Debt	14				48
531	Amortization of Debt Discount and Expense	14				49
533	Taxes Assumed on Interest	14				50
534	Interest on Debt to Associated Companies	14				51
535	Other Interest Charges	14				52
	Total Other Deductions	14				53
536	Interest Charged to Construction					54
						55
	12 Months Ended December 31					56
530	Interest on Long-Term Debt	14C	651 903 65	903 333 32	+251 429 67	57
531	Amortization of Debt Discount and Expense	14C	27 486 70	310 029 24	+282 542 54	58
533	Taxes Assumed on Interest	14C	1 614 71	1 001 02	613 69	59
534	Interest on Debt to Associated Companies	14				60
535	Other Interest Charges	14C	4 343 86	1 666 93	2 676 93	61
	Total Other Deductions	14C	685 348 92	1 216 030 51	+530 681 59	62
536	Interest Charged to Construction		11 774 51	36 827 80	+25 053 29	63
			(A)	(B)	(C)	

+Indicates red figures.

					12 Months Ended December 31, 1941		
Surplus — January 1, 1941					x x x x x x x x	7 790 960 99	1
Surplus — Prior to December 31, 1935							2
Surplus — Since December 31, 1935					7 790 960 99		3
							4
Additions:							5
							6
Net Income 12 Months Ended Dec. 31, 1941, As Shown By Earnings Summary					x x x x x x x x	4 689 242 14	7
							8
Other Credits							9
							10
							11
							12
							13
							14
							15
							16
							17
							18
							19
							20
							21
							22
							23
							24
							25
							26
							27
Total					x x x x x x x x	12 480 203 13	28
Deductions:							29
							30
Dividends			Date				31
	No.	Declared	Record	Payment			32
Preferred	21	1/25/41	3/15/41	4/ 1/41	165 000 00		33
"	22	5/20/41	6/14 41	7/ 1/41	165 000 00		34
"	23	9 29/41	9/29/41	10/ 1/41	165 000 00		35
"	24	12/19/41	12/19/41	1/ 1/42	165 000 00	660 000 00	36
							37
Common	8	1/25/41	1/25/41	1/25/41	339 094 14		38
"	9	2/28/41	3/ 5/41	3/20/41	403 683 50		39
"	10	5/20/41	5/24/41	6/ 9/41	403 683 50		40
"	11	9/29/41	10/ 2/41	10/17/41	807 367 00	1 953 828 14	41
							42
Participating (Preferred)	5	9/29/41	10/ 2/41	10/17/41	201 841 75		43
"	6	12/19/41	12/22/41	1/ 6/42	538 244 67	740 086 42	44
							45
							46
Other Charges							47
Unamortized Debt Discount and Expense:							48
Twenty-Year Sinking Fund Mortgage Bonds,							49
Series A, 6%, due October 1, 1950					890 386 60		50
First Mortgage and First Lien Bonds,							51
Series A, 4%, due March 1, 1952					791 676 91		52
First Mortgage and First Lien Bonds,							53
Series A, 4%, due March 1, 1952 — Call Premium					115 931 04		54
First Mortgage and First Lien Bonds,							55
Series A, due serially November 1, 1946 to Nov. 1, 1950					56 255 05		56
First Mortgage and First Lien 3% Bonds,							57
Series B, due November 1, 1960					72 152 04		58
Serial Notes, Series A, B, C and D							59
Due serially November 1, 1942 to November 1, 1945					34 346 73	1 960 748 37	60
							61
Total Deductions					x x x x x x x x	5 314 662 93	62
Surplus December 31, 1941					x x x x x x x x	7 165 540 20*	63
					(A)	(B)	

*For restriction as to payment of dividends and segregation of surplus, see Page 2A.

[fol. 15850]

Description			Over Previous Month	Since January First	
Gas Plant					1
Gas Plant in Service (Installed since January 1, 1940)					2
Main Line System (Texas to Indiana)		7 093 217 50	528 174 18	1 568 464 10	3
					4
Other Leaseholds, Wells, Lines, Compressors, etc. (Local Area)		68 365 17	5 893 66	41 737 52	5
					6
Other Gas Sales and Purchase Contracts		35 215 32	*521 67	12 753 42	7
					8
Total Page 1, Line 2		7 196 797 99	533 546 17	1 622 955 04	9
					10
					11
Construction Work in Progress					12
Total Page 1, Line 3		2 668 429 03	1 040 906 57	1 994 523 95	13
					14
					15
Gas Plant in Process of Reclassification					16
Main Line System (Texas to Indiana)		53 352 283 11	*14 712 33	*346 298 41	17
					18
Other Leaseholds, Wells, Lines, Compressors, etc. (Local Area)		1 834 605 65	*2 936 13	*58 495 45	19
					20
Gas Sales and Purchase Contracts	2 930 286 40				21
Less — Reserve for Amortization	1 758 171 60	1 172 114 80	*24 419 05	*293 028 60	22
					23
					24
Other Gas Sales and Purchase Contracts		317 681 96	*2 655 21	*31 862 52	25
					26
Total Page 1, Line 5		56 676 685 52	*44 722 72	*729 684 98	27
					28
Total Page 1, Line 10		66 541 912 54	1 529 730 02	2 887 794 01	29
					30

						31
						32
Investments And Fund Accounts			Par			33
Investment in Securities of Associated Company	Description	Shares	Value	Cost		34
Illinois Natural Gas Company	Common Stock	28,000*	None	2 635 391 43		35
Total Page 1, Line 15					2 635 391 43	36
						37
						38
Other Investments	Description					39
The Southwest Kansas Oil and Gas Company and The Saturn Oil and Gas Company	(Four notes of equal amounts dated January 6, 1936, one note due each year, 1943 to 1946)				48 819 24	40 41
The Southwest Kansas Oil and Gas Company and The Saturn Oil and Gas Company (Drilling Account)	Balance 1/1/41	Debits	Credits		155 679 28	42 43
						44
Total Page 1, Line 17					204 498 52	45
						46

*Pledged with City Bank Farmers Trust Company as Corporate Trustee under Mortage and Deed of Trust dated November 1, 1940 47

*Indicates red figures.

[fol. 15851]

Description	(A)	(B)	(C)	(D)	
Current and Accrued Assets					1
Special Deposits					2
Interest Special Deposits:					3
First Mortgage and First Lien Bonds, Series A, 4%,					4
due March 1, 1952, City Bank Farmers Trust Company —					5
Paying Agent (Called for redemption March 1, 1941)			3 720 00		6
First Mortgage and First Lien 3% Bonds, Series B,					7
due November 1, 1960, City Bank Farmers Trust					8
Company — Paying Agent			510 00	4 230 00	9
Miscellaneous Special Deposits:					10
Sinking Fund — First Mortgage and First Lien Bonds					11
Series A, 4%, due March 1, 1952, City Bank Farmers Trust					12
Company — Paying Agent (Called for redemption March 1,					13
1941)			6 000 00		14
Trust Fund for Redemption of First Mortgage and First Lien					15
Bonds, Series A, 4%, due March 1, 1952, City Bank Farmers					16
Trust Company — Paying Agent (Called for redemption					17
March 5, 1941)			90 822 14		18
Funds in Escrow —					19
Service Deposits:					20
City of Belton, Missouri		5 00			21
City Hugoton, Kansas		40 00			22
Missouri Public Service Company		5 00			23
Kansas Utilities Company		3 00	53 00		24
Right of Way Deposit:					25
Jackson County, Missouri Highway Department		50 00			26
State Treasurer of Missouri		325 00			27
Macon County, Illinois, Department of Highways		500 00	875 00		28
Deposit for Guaranty of Insurance Premium:					29
Zurich General Accident and Liability Insurance Company			600 00	98 350 14	30
					31
Total Page 1, Line 28				102 580 14	32
					33
Working Funds					34
Cash Advances — Employees					35
Traveling Expense				4 510 00	36
Petty Cash Funds				5 739 05	37
Deposits — Payroll Accounts				1 000 00	38
					39
Total Page 1, Line 29				11 249 05	40
					41
					42
					43
					44
					45
					46
					47

Description

Current And Accrued Assets (Cont.)				1
Temporary Cash Investments				2
U. S. Treasury Notes of Tax Series "B"—1943				3
(In safekeeping at The National City Bank of New York)				4
Total Page 1, Line 30			2 750 000 00	5
				6
				7
Accounts Receivable from Associated Company				8
Accounts Receivable				9
Illinois Natural Gas Company				10
Total Page 1, Line 34			220 573 95	11
				12
				13
Long-Term Debt				14
Bonds				15
First Mortgage and First Lien Bonds,				16
Series A, due Serially November 1, 1946				17
to November 1, 1950, inclusive:				18
Maturity	Interest Rate			19
November 1, 1946	1 65	1 250 000 00		20
November 1, 1947	1 85	1 250 000 00		21
November 1, 1948	2 00	1 250 000 00		22
November 1, 1949	2 15	1 250 000 00		23
November 1, 1950	2 30	1 250 000 00	6 250 000 00	24
				25
First Mortgage and First Lien 3% Bonds,				26
Series B, due November 1, 1960			12 000 000 00	27
				28
Total Page 2, Line 13			18 250 000 00	29
				30
Miscellaneous Long-Term Debt				31
Serial Notes, Series A, B, C and D				32
due serially November 1, 1942 to				33
November 1, 1945, inclusive:				34
Series	Maturity	Interest Rate		35
A	November 1, 1942	0 75	1 250 000 00	36
B	November 1, 1943	1 00	1 250 000 00	37
C	November 1, 1944	1 25	1 250 000 00	38
D	November 1, 1945	1 50	1 250 000 00	39
				40
Leasehold Purchase Obligation:				41
J. T. Sneed, Jr. and Elizabeth Sneed Pool				42
Principal Amount $62,000, unpaid balance due August 1, 1946			9 789 19	43
				44
Total Page 2, Line 16			5 009 789 19	45
				46
				47

Description		
Current And Accrued Liabilities		
Accounts Payable		
Vouchers Payable	838 655 82	
Gas Accounts Payable	141 057 05	
Suspended Gas Purchase Accounts	3 142 23	
Federal Old Age Benefits — Deductions from Employees	2 878 19	
Deductions from Other Producers — Texas	3 583 35	
Deductions from Other Producers — Kansas	606 62	
Retailers' Sales Tax — Kansas	69 57	
Retail Sales Tax — Missouri	1 742 91	
Group Life Insurance Adjustment	11 36	
Other — Withheld from Contractors	81 799 56	
Total Page 2, Line 22	1 073 546 16	
Matured Long-Term Debt		
First Mortgage and First Lien Bonds, Series A, due March 1, 1952 (Called for Redemption March 1, 1941 to satisfy Sinking Fund requirement)	6 000 00	
Liquidation Account — First Mortgage and First Lien Bonds, Series A, 4%, due March 1, 1952 (Called for Redemption March 5, 1941)	90 822 14	
Total Page 2, Line 26	96 822 14	

(A) Detail of	(B)	(C)	(D)

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month — Debits	Changes During Month — Credits	Balance End of Month	
	Current And Accrued Assets							1
125-2	Other Accounts Receivable							2
	Phillips Petroleum Company (Gasoline Sales)			61 836 30	109 259 58	116 111 35	54 984 53	3
	Michigan Gas Transmission Corp. (Advance for Change-Over Costs)			1 202 05	—	331 25	870 80	4
	Personal Loans			374 50	50 00	116 50	308 00	5
	Other Accounts Receivable			16 333 81	10 599 18	9 295 82	17 637 17	6
								7
	Total Page 1, Line 33			79 746 66	119 908 76	125 854 92	73 800 50	8
								9
								10
131-1	Materials and Supplies — Gas			331 177 13				11
	Purchased				38 017 07			12
	Returned				15 430 63			13
	Issued					22 076 17	362 548 66	14
								15
	Total Page 1, Line 36			331 177 13	53 447 70	22 076 17	362 548 66	16
								17
								18
132	Prepayments							19
	Insurance — General			49 488 53	413 23	1 928 12	47 973 64	20
	Insurance — Group Life			4 599 42	—	657 06	3 942 36	21
	Insurance — Group Annuities			8 333 33	—	8 333 33	—	22
	Lease Rentals			36 996 51	11 996 00	8 591 28	40 401 23	23
	Rents — River Crossing			2 500 00	—	250 00	2 250 00	24
	Legal Services			15 000 00	—	15 000 00	—	25
	Automobile Licenses			105 95	59 00	—	164 95	26
								27
	Total Page 1, Line 39			117 023 74	12 468 23	34 759 79	94 732 18	28
								29
	Deferred Debits							30
140	Unamortized Debt Discount and Expense							31
	Twenty-year Sinking Fund Mortgage Bonds							32
	Series A, 6%, due October 1, 1950 (Redeemed March 1, 1937)			814 097 11	—	814 097 11	—	33
	First Mortgage and First Lien Bonds,							34
	Series A, 4%, due March 1, 1952 (Redeemed March 5, 1941)							35
	Discount and Expense			674 334 63	—	674 334 63	—	36
	Call Premium			101 305 88	—	101 305 88	—	37
	First Mortgage and First Lien Bonds, Series A,							38
	due Serially November 1, 1946 to November 1, 1950:							39
	First Mortgage and First Lien 3% Bonds, Series B,							40
	due November 1, 1960; Serial Notes, Series							41
	A, B, C and L, due Serially November 1, 1942							42
	to November 1, 1945			210 426 41	—	210 426 41	—	43
								44
	Total Page 1, Line 49			1 800 164 03	—	1 800 164 03	—	45
								46
								47

[fol. 15855]

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month: Debits	Changes During Month: Credits	Balance End of Month	
	Deferred Debits (Cont.)							1
143	Clearing Accounts							2
	Transportion Expenses (Company Owned Fleet)			4 652 58	10 132 88	8 024 89	6 760 57	3
	Pay Roll			—	162 632 99	162 632 99	—	4
								5
	Total Page 1, Line 50			4 652 58	172 765 87	170 657 88	6 760 57	6
								7
144	Retirement Work in progress							8
	Total Page 1, Line 51			300 976 86	43 837 77	344 814 63	—	9
								10
145	Other Work in Progress							11
	Total Page 1, Line 52			114 889 95	83 258 24	21 528 39	176 619 80	12
								13
146	Other Deferred Debits							14
	Dormant Cash			2 00	—	—	2 00	15
	Aetna Life Insurance Company			4 018 89	48 02	—	4 066 91	16
								17
	Total Page 1, Line 53			4 020 89	48 02	—	4 068 91	18
								19
								20
	Current And Accrued Liabilities							21
226	Matured Interest							22
	First Mortgage and First Lien Bonds,							23
	Series A, 4%, due March 1, 1952			3 720 00	—	—	3 720 00	24
	First Mortgage and First Lien 3% Bonds							25
	Series B, due November 1, 1960			1 710 00	1 200 00	—	510 00	26
								27
	Total Page 2, Line 27			5 430 00	1 200 00	—	4 230 00	28
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[fol. 15856]

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month: Debits	Changes During Month: Credits	Balance End of Month	
	Current And Accrued Liabilities (Cont.)							1
228	Taxes Accrued							2
	Ad valorem:							3
	Texas—1941			2 185 33	—	*739 86	1 445 47	4
	Oklahoma—1941			8 231 55	2 768 43	73 75	5 536 87	5
	Kansas—1941			239 796 93	257 665 58	17 868 65	—	6
	Missouri—1940—1941			96 681 29	100 920 94	4 286 03	46 38	7
	Missouri—1941—1942	100 800 00	5	50 400 00	—	8 400 00	58 800 00	8
	Illinois—1941			62 700 00	—	5 700 00	68 400 00	9
	Gross Production—Texas			3 448 83	3 448 83	3 649 74	3 649 74	10
	Conservation Assessment—Kansas			273 59	341 32	385 62	317 89	11
	Compensating Tax (Excise) Kansas			—	191 79	191 79	—	12
	Federal Capital Stock—1941—1942	92 400 00	6	36 500 00	—	9 700 00	46 200 00	13
	Federal Excise—Old Age Benefits			1 890 25	—	1 274 64	3 164 89	14
	Federal Excise—Unemployment Insurance			3 005 15	—	395 33	3 400 48	15
	Unemployment Compensation:							16
	Texas			101 97	—	63 09	165 06	17
	Kansas			1 221 58	—	851 86	2 073 44	18
	Missouri			1 606 87	—	1 109 24	2 716 11	19
	Illinois			807 65	—	595 26	1 402 91	20
	Michigan			345 84	—	171 31	517 15	21
	New York			43 91	—	26 81	70 72	22
	State Income—1939			15 418 21	—	—	15 418 21	23
	State Income—1940			14 069 54	—	—	14 069 54	24
	State Income—1941			44 000 00	—	*9 000 00	35 000 00	25
	Federal Income—1938			24 242 22	—	—	24 242 22	26
	Federal Income—1939			14 883 18	—	—	14 883 18	27
	Federal Income—1940			396 333 43	334 555 52	—	61 777 91	28
	Federal Income—1941			1 468 893 23	—	181 106 77	1 650 000 00	29
	Federal Excess Profits—1940			319 910 55	80 029 81	—	239 880 74	30
	Federal Excess Profits—1941			800 225 28	—	99 774 72	900 000 00	31
								32
	Total Page 2, Line 29			3 607 216 38	779 922 22	325 884 75	3 153 178 91	33

*Indicates red figures.

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Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month — Debits	Changes During Month — Credits	Balance End of Month	
	Current And Accrued Liabilities (Cont.)							1
229 1	Interest Accrued Long-Term Debt							2
	First Mortgage and First Lien Bonds, Series A, due Serially			10 364 59	—	10 364 59	20 729 18	3 4 5
	First Mortgage and First Lien 3% Bonds, Series B, due November 1, 1960.			30 000 00		30 000 00	60 000 00	6 7 8
	Serial Notes, Series A, B, C and D, due Serially			4 687 50	—	4 687 50	9 375 00	9 10
	Total Page 2, Line 30			45 052 09	—	45 052 09	90 104 18	11 12
								13 14
230	Other Current and Accrued Liabilities							15
	Workmen's Compensation Insurance			1 102 23	—	1 407 43	2 509 66	16
	Aetna Life Insurance Co.—Group Annuity			—	14 783 33	14 783 33	—	17
	Unclaimed Checks			802 14	98	—	801 16	18
	Unclaimed Wages			122 60	—	—	122 60	19
	Total Page 2, Line 32			2 026 97	14 784 31	16 190 76	3 433 42	20 21
								22 23
	Deferred Credits							24
242	Other Deferred Credits							25
	Aetna Life Insurance Company			4 018 89	—	48 02	4 066 91	26
	Walter Kuhn and Howard Kuhn—Nix Lease			18 319 74	82 28	—	18 237 46	27
	Walter Kuhn and Howard Kuhn—Younggren Lease			21 298 00	187 86	—	21 110 14	28
	Total Page 2, Line 39			43 636 63	270 14	48 02	43 414 51	29 30
								31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

[fol. 15858]

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month: Debits	Changes During Month: Credits	Balance End of Month	
	Reserves							1
250-6	Depreciation, Depletion and Amortization							2
	In Process of Reclassification							3
	Property, Plant and Equipment			9 499 954 11	198 979 02	215 984 80	9 516 959 89	4
	Gas Sales and Purchase Contracts	2 930 286 40	48	—	24 419 05*	24 419 05	—	5
	Other Gas Sales and Purchase Contracts	371 076 00	120	—	2 046 51	2 046 51	—	6 7
	Other Gas Sales and Purchase Contracts	73 047 98	117	—	445 41	445 41	—	8 9
	Other Gas Sales and Purchase Contracts	12 875 58	120	—	88 79	88 79	—	10 11
	Other Gas Sales and Purchase Contracts	2 961 50	117	—	19 10	19 10	—	12 13
	Other Gas Sales and Purchase Contracts	4 672 74	119	—	31 36	31 36	—	14 15
	Other Gas Sales and Purchase Contracts	4 116 77	140	—	24 04	24 04	—	16 17
	Automobiles	Expected Life		23 521 39	1 245 21	3 572 33	25 848 51	18
	Amortization of Leaseholds			537 233 79	2 00	—	537 231 79	19
	Gas Plant in Service							20
	Other Gas Sales and Purchase Contracts	14 723 20	120	—	101 53	101 53	—	21 22
	Other Gas Sales and Purchase Contracts	875 49	120	—	6 34	6 34	—	23 24
	Other Gas Sales and Purchase Contracts	1 154 88	120	—	8 42	8 42	—	25 26
	Other Gas Sales and Purchase Contracts	753 88	120	—	6 03	6 03	—	27 28
	Other Gas Sales and Purchase Contracts	2 156 00	120	—	15 97	15 97	—	29 30
	Other Gas Sales and Purchase Contracts	10 449 51	22	—	290 26	290 26	—	31 32
	Other Gas Sales and Purchase Contracts	8 149 99	140	—	53 02	53 02	—	33 34
	Other Gas Sales and Purchase Contracts	5 053 13	120	—	40 10	40 10	—	35 36
	Producing Natural Gas Land and Gas Rights	Contingent on Production		160 380 02	—	9 533 31	169 913 33	37 38
	Abandoned Leases			148 900 69	—	6 193 39	155 094 08	39
	Total Page 2, Line 46			10 369 990 00	227 822 16	262 879 76	10 405 047 60	40 41
								42 43 44 45 46
	*Applied as a reduction of asset account							47

[fol. 15859]

Acc't No.	Title of Account and Description	Total Amount Basis	Months to Run	Balance Beginning of Month	Changes During Month Debits	Changes During Month Credits	Balance End of Month	
	Reserves							1
254	Uncollectible Accounts							2
	Total Page 2, Line 47			37 019 88	—	600 00	37 619 88	3
								4
256	Injuries and Damages							5
	Total Page 2, Line 48			89 123 74		1 000 00	90 123 74	6
								7
258	Other Reserves							8
	Undetermined or Disputed Income Taxes							9
								10
	Total Page 2, Line 49			624 800 94	—	—	624 800 94	11
								12
	Contributions In Aid Of Construction							13
265	Contributions in Aid of Construction							14
	Total Page 2, Line 54			35 801 06	—	—	35 801 06	15
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[fol. 15860]

Acc't No.	Description	Current Month This Year	Current Month Last Year	Months To Date This Year	Months To Date Last Year	Twelve Months To Date This Year	Twelve Months To Date Last Year	
	Taxes—Federal							1
	Income	181 106 77	179 000 00			1 650 000 00	1 400 000 00	2
	Excess Profits	99 774 72	99 000 00			900 000 00	560 000 00	3
	Total Federal Income and Excess Profits Taxes	280 881 49	278 000 00			2 550 000 00	1 960 000 00	4 5 6
	Charges In Lieu Of Taxes							7
	Federal Income	—	—			141 106 77	—	8 9
	Federal Excess Profits	—	—			682 774 72	—	10
	Total Charges in Lieu of Taxes*	—	—			823 881 49*	—	11 12
	Total Page 3, Lines 12 and 13, 54 and 55	280 881 49	278 000 00			3 373 881 49	1 960 000 00	13 14 15
	Taxes—Other							16
	Ad valorem	35 588 57	+19 807 67			475 274 84	419 063 58	17 18
	Gross Production, Receipts, etc.	4 227 15	1 762 31			51 355 54	22 513 69	19
	Franchise	—	—			6 542 44	+15 540 76	20
	State Income	+9 000 00	+10 000 00			35 000 00	45 925 77	21
	Unemployment Compensation States	65 19	+1 890 64			19 539 19	22 647 69	22
	Federal Capital Stock	9 700 00	5 950 00			100 700 00	71 400 00	23
	Federal Excise—Old Age Benefits	299 69	+781 81			9 720 03	8 244 15	24
	Federal Excise—Unemployment Insurance	102 85	+230 89			2 976 35	2 533 71	25 26
	Total Page 3, Lines 14 and 56	49 983 45	+24 998 70			701 108 39	576 787 74	27 28
								29 30 31 32
605-2	Sales To Associated Companies							33 34
	Central Distributing Co.	—	21 277 86			—	146 502 78	35
	Illinois Natural Gas Co.	194 761 15	195 094 17			1 890 862 47	1 764 002 01	36
	Total Pages 4A and 4C Line 10	194 761 15	216 372 03			1 890 862 47	1 910 504 79	37 38

*Charges in lieu of Federal income and excess profits taxes represent an amount equivalent to income taxes which would have been payable on current earnings if the company had not had the benefit for tax purposes of deductions for discount, premium and expense resulting from the refinancing of long term debt. Such amounts have been credited to unamortized debt discount and expense as a partial offset to the items included therein applicable to the bonds which were retired. 39 40 41 42 43

+Indicates red figures. 44 45 46 47

[fol. 15861]

Acc't No.	Description	Current Month		Months To Date		Twelve Months To Date		
		This Year	Last Year	This Year	Last Year	This Year	Last Year	
	Other Income							1
523	Dividends Revenues—Associated Co.							2
	Illinois Natural Gas Company							3
	Total Page 9, Line 25	—	—			—	56 000 00	4
								5
524–1	Interest on Securities Owned							6
	U. S. Treasury Notes of Tax							7
	Series B—1943	1 100 00	—			4 400 00	—	8
	The Southwest Kansas Oil and							9
	Gas Company and The Saturn							10
	Oil and Gas Company:							11
	Notes Receivable	244 10	305 11			3 061 17	3 846 48	12
	Accounts Receivable	786 82	880 11			9 973 78	9 840 16	13
	Total Page 9, Lines 6 and 26	2 130 92	1 185 22			17 434 95	13 186 64	14 15
								16
524–21	Interest Revenues—Associated Companies							17
	Central Distributing Company:							18
	Income Demand Note Receivable	—	3 750 00			—	15 000 00	19
	Loans Receivable	—	134 16			—	1 864 99	20
	Total Page 9, Lines 7 and 27	—	3 884 16			—	16 864 99	21 22 23
								24
524–22	Interest Revenues—Other							25
	Central Distributing Company:							26
	Note	—	—			1 000 00	—	27
	Loan	—	—			100 00	—	28
	Refunded Texas Franchise							29
	Taxes paid under protest							30
	years 1937 and 1938		—			—	69 55	31
	Total Page 9, Line 28	—	—			1 100 00	69 55	32
								33
	Total Page 9, Lines 12 and 32	2 130 92	5 069 38			18 534 95	86 121 18	34 35
								36
								37
								38
								39
								40
								41
								42
								43
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								47
		(A)	(B)	(C)	(D)	(E)	(F)	

Acc't No.	Description	Current Month This Year	Current Month Last Year	Months To Date This Year	Months To Date Last Year	Twelve Months To Date This Year	Twelve Months To Date Last Year	
	Other Deductions							1
530	Interest on Long-Term Debt							2
	First Mortgage and First Lien Bond							3
	Series A, 4%, due March 1, 1952	—	75 000 00			159 334 22	903 333 32	4
	First Mortgage and First Lien Bond							5
	Series A, due Serially	10 364 59	—			113 319 43	—	6
	First Mortgage and First Lien 3% Bonds							7
	Series B, due November 1, 1965	30 000 00	—			328 000 00	—	8
	Serial Notes, Series A, B, C, and							9
	D, due Serially	4 687 50	—			51 250 00	—	10
	Total Page 9, Lines 39 and 57	45 052 09	75 000 00			651 903 65	903 333 32	11 12
531	Amortization Debt Discount Expense							13 14
	Twenty-Year Sinking Fund							15
	Mortgage Bonds, Series A, 6%							16
	due October 1, 1951 (Redeemed							17
	March 1, 1937)	—	7 680 15			8 192 16	92 161 80	18
	First Mortgage and First Lien							19
	Bonds, Series A, 4%, due March							20
	1952 (Redeemed March 5, 1941)	—	18 088 62			19 294 54	217 867 44	21
	Total Page 9, Lines 40 and 58	—	25 768 77			27 486 70	310 029 24	22 23
533	Taxes Assumed on Interest							24 25
	Total Page 9, Lines 41 and 59	211 20	120 53			1 614 71	1 001 02	26
535	Other Interest Charges							27 28
	Income Tax—State	—	—			45 44	250 30	29
	Income Tax—Federal	—	688 70			4 298 42	756 63	30
	Capital Stock Tax—Federal	—	—			—	660 00	31
	Total Page 9, Lines 43 and 61	—	688 70			4 343 86	1 666 93	32 33
	Total Page 9, Lines 44 and 62	45 263 29	101 578 00			685 348 92	1 216 030 51	34 35 36
								37 38 39 40 41 42 43 44 45 46 47

Detail Of Other Deductions	(A)	(B)	(C)	(D)	(E)	(F)
	Panhandle Eastern Pipe Line Company				Month of December 1941	14 C.

12 Months To Date This Year	12 Months To Date Last Year	Acc't No.	Production		Current Month This Year	Current Month Last Year	
			Operation				1
21 421 78	19 248 79	733-1	Supervision & Engineering	—Labor	3 076 04	1 754 82	2
2 932 41	2 556 84	733-2	" "	—S. & E.	329 65	150 15	3
6 062 97	6 631 74	734-1	Gas Well	—Labor	488 56	431 21	4
5 450 42	6 382 74	735-1	" "	—S. & E.	443 26	652 59	5
12 559 39	11 634 85	734-2	Field Lines	—Labor	2 027 00	1 243 94	6
5 191 97	4 088 34	735-2	" "	—S. & E.	598 10	544 27	7
46 00	—	734-31	Field Compressor Station	—Labor	46 00	—	8
40 21	—	735-31	" " "	—S. & E.	40 21	—	9
11 525 85	12 583 54	734-32	Field Measuring Station	—Labor	1 589 34	1 086 57	10
4 042 30	4 326 10	735-32	" " "	—S. & E.	377 76	404 83	11
5 626 01	5 214 20	734-41	Other production	—Labor	885 04	488 22	12
2 433 31	2 214 75	735-41	" "	—S. & E.	193 27	222 81	13
5 513 70	6 278 98	734-42	Land Department	—Labor	734 75	428 58	14
5 221 31	2 642 54	735-42	" "	—S. & E.	365 68	144 81	15
171 043 82	143 341 99	745	Gas Well Royalties		18 400 03	14 457 86	16
400 00	325 00	746	Natural Gas Rents		36 75	30 00	17
116 780 83	101 344 57	510	Delay Rentals		8 591 28	7 617 10	18
							19
376 292 17	328 814 97		Total Operation		38 222 71	29 657 76	20
			Maintenance				21
6 633 64	3 236 38	739-1	Supervision & Engineering	—Labor	530 12	330 42	22
903 73	448 31	739-2	" "	—S. & E.	72 18	30 41	23
		740-211	Field Compressor Station Struct.	—Labor			24
		740-212	" " " "	—S. & E.			25
120 18	365 04	740-221	Field Measuring Station Struct.	—Labor			26
90 17	263 18	740-222	" " " "	—S. & E.	—	5 05	27
1 491 67	981 21	740-31	Other Prod. System Struct.	—Labor	358 01	118 40	28
805 75	624 35	740-32	" " " "	—S. & E.	110 02	43 36	29
2 476 52	3 051 35	741-1	Producing Gas Well Equip.	—Labor	127 03	400 72	30
4 323 89	7 416 43	741-2	" " " "	—S. & E.	403 71	2 151 93	31
4 546 34	1 863 45	742-11	Field Lines	—Labor	239 55	202 33	32
3 481 14	1 977 05	742-12	" "	—S. & E.	276 94	176 32	33
		742-211	Field Compressor Station Equip.	—Labor			34
8 50	—	742-212	" " " "	—S. & E.	8 50	—	35
1 107 79	1 055 05	742-221	Field Measuring Station Equip.	—Labor	126 80	77 31	36
757 38	780 79	742-222	" " " "	—S. & E.	66 02	62 97	37
35 08	—	743-1	Drilling & Cleaning Equip.	—Labor			38
276 64	36 08	743-2	" " "	—S. & E.			39
54 59	13 91	744-1	Other Natural Gas Property	—Labor	54 59	—	40
10 08	69 10	744-2	" " " "	—S. & E.			41
							42
27 123 09	22 181 71		Total Maintenance		2 373 47	3 599 22	43
403 415 26	350 996 68		Total Production Expenses — Gas		40 596 18	33 256 98	44
30 059 021	26 578 757		Total MCF Produced		3 177 779	2 626 658	45
1 34¢	1 32¢		Average Cost Per MCF		1 28¢	1 27¢	46
							47
			Gas Purchased				48
			Operation				49
		754-11	Gas Purchased—Associated Companies				50
1 180 917 63	1 090 106 83	754-12	" " —Others		115 996 43	117 754 74	51
11 539 35	12 211 56	755-1	Purchased Gas Exp. — Measurement	—Labor	1 288 45	1 042 19	52
4 530 41	4 458 27	755-2	" " "	—S. & E.	513 80	398 02	53
4 367 59	5 716 85	755-3	Purchased Gas Exp.—Other	—Labor	365 55	427 65	54
2 273 29	2 532 56	755-4	" " " "	—S. & E.	150 55	96 94	55
1 203 628 27	1 115 026 07		Total Operation		118 314 78	119 889 54	56
			Maintenance				57
1 512 91	2 222 75	755-5	Purchase Measuring Station	—Labor	88 06	195 33	58
1 046 70	1 611 88	755-6	" " "	—S. & E.	41 23	147 98	59
2 559 61	3 834 63		Total Maintenance		129 29	343 31	60

This Year	Last Year	Acc't No.	Production		Current Month This Year	Current Month Last Year	
			Operation				1
21 421 78	19 248 79	733-1	Supervision & Engineering	—Labor	3 076 04	1 754 82	2
2 932 41	2 556 84	733-2	" "	—S. & E.	329 65	150 15	3
6 062 97	6 631 74	734-1	Gas Well	—Labor	488 56	431 21	4
5 450 42	6 382 74	735-1	" "	—S. & E.	443 26	652 59	5
12 559 39	11 634 85	734-2	Field Lines	—Labor	2 027 00	1 243 94	6
5 191 97	4 088 34	735-2	" "	—S. & E.	598 10	544 27	7
46 00	—	734-31	Field Compressor Station	—Labor	46 00	—	8
40 21	—	735-31	" " "	—S. & E.	40 21	—	9
11 525 85	12 583 54	734-32	Field Measuring Station	—Labor	1 589 34	1 086 57	10
4 042 30	4 326 10	735-32	" " "	—S. & E.	377 75	404 83	11
5 626 01	5 214 20	734-41	Other production	—Labor	885 04	488 22	12
2 433 31	2 214 75	735-41	"	—S. & E.	193 27	222 81	13
5 513 70	6 278 98	734-42	Land Department	—Labor	734 75	428 58	14
5 221 31	2 692 54	735-42	" "	—S. & E.	365 68	144 81	15
171 043 82	143 341 99	745	Gas Well Royalties		18 400 03	14 457 86	16
400 09	325 00	746	Natural Gas Rents		36 75	30 00	17
116 780 66	101 344 57	510	Delay Rentals		8 591 28	7 617 10	18
							19
376 292 17	328 814 97		Total Operation		38 222 71	29 657 76	20
			Maintenance				21
6 633 64	3 236 38	739-1	Supervision & Engineering	—Labor	530 12	330 42	22
903 73	448 34	739-2	" "	—S. & E.	72 18	30 41	23
		740-211	Field Compressor Station Struct.	—Labor			24
		740-212	" " " "	—S. & E.			25
120 18	365 04	740-221	Field Measuring Station Struct.	—Labor			26
90 17	263 18	740-222	" " " "	—S. & E.	—	5 05	27
1 491 67	981 21	740-31	Other Prod. System Struct.	—Labor	358 01	118 40	28
805 75	624 35	740-32	" " " "	—S. & E.	110 02	43 36	29
2 476 52	3 051 35	741-1	Producing Gas Well Equip.	—Labor	127 03	400 72	30
4 323 89	7 416 43	741-2	" " " "	—S. & E.	403 71	2 151 93	31
4 546 34	1 863 45	742-11	Field Lines	—Labor	239 55	202 33	32
3 481 14	1 977 05	742-12	" "	—S. & E.	276 94	176 32	33
		742-211	Field Compressor Station Equip.	—Labor			34
8 50	—	742-212	" " " "	—S. & E.	8 50	—	35
1 107 79	1 055 05	742-221	Field Measuring Station Equip.	—Labor	126 80	77 31	36
757 38	780 79	742-222	" " " "	—S. & E.	66 02	62 97	37
35 08	—	743-1	Drilling & Cleaning Equip.	—Labor			38
276 64	36 08	743-2	" " "	—S. & E.			39
54 59	13 91	744-1	Other Natural Gas Property	—Labor	54 59	—	40
10 08	69 10	744-2	" " "	—S. & E.			41
—							42
27 123 09	22 181 71		Total Maintenance		2 373 47	3 599 22	43
403 415 26	350 996 68		Total Production Expenses — Gas		40 596 18	33 256 98	44
30 059 021	26 578 757		Total MCF Produced		3 177 779	2 626 658	45
1 34¢	1 32¢		Average Cost Per MCF		1 28¢	1 27¢	46
							47
			Gas Purchased				48
			Operation				49
		754-11	Gas Purchased—Associated Companies				50
1 180 917 63	1 090 106 83	754-12	" " " — Others		115 996 43	117 754 74	51
11 539 35	12 211 56	755-1	Purchased Gas Exp. — Measurement	—Labor	1 288 45	1 042 19	52
4 530 41	4 458 27	755-2	" " " "	—S. & E.	513 80	398 02	53
4 367 59	5 716 85	755-3	Purchased Gas Exp. —Other	—Labor	365 55	427 65	54
2 273 29	2 532 56	755-4	" " " "	—S. & E.	150 55	266 94	55
1 203 628 27	1 115 026 07		Total Operation		118 314 78	119 889 54	56
			Maintenance				57
1 512 91	2 222 75	755-5	Purchase Measuring Station	—Labor	88 06	195 33	58
1 046 70	1 611 88	755-6	" " "	—S. & E.	41 23	147 98	59
2 559 61	3 834 63		Total Maintenance		129 29	343 31	60
1 206 187 88	1 118 860 70		Total Gas Purchased		118 444 07	120 232 85	61
30 137 409	27 537 768		Total MCF Purchased		2 946 920	2 974 860	62
4 00¢	4 06¢		Average Cost Per MCF		4 02¢	4.04¢	63
(A)	(B)				(C)	(D)	

12 Months To Date This Year	12 Months To Date Last Year	Acc't No.	Transmission		Current Month This Year	Current Month Last Year	
			Operation				1
68 177 16	57 489 24	758-1	Supervision & Engineering	—Labor	9 566 97	4 956 63	2
15 624 54	13 454 57	758-2	" "	—S. & E.	1 175 86	1 223 72	3
312 647 90	262 016 06	759-111	Pumping Station	—Labor	43 468 44	22 696 41	4
77 845 07	64 960 67	759-1211	" "	—S. & E.	7 231 04	6 503 98	5
506 367 60	475 604 25	759-1212	" "	—Power	60 403 05	52 347 00	6
10 027 83	9 990 49	759-1121	Measuring Station	—Labor	1 392 35	724 23	7
6 156 61	6 144 86	759-1221	" "	—S. & E.	462 91	706 09	8
4 774 58	5 700 09	759-1122	Regulator Station	—Labor	504 34	641 65	9
2 173 66	1 803 40	759-1222	" "	—S. & E.	206 34	327 24	10
68 988 51	53 889 00	759-211	Transmission Mains	—Labor	13 566 49	4 529 56	11
38 133 05	31 077 08	759-221	" "	—S. & E.	3 829 94	3 790 15	12
9 951 07	6 998 88	759-212	Other Transmission System	—Labor	544 96	872 01	13
9 687 80	4 470 16	759-222	" " "	—S. & E.	1 035 17	780 98	14
6 545 11	5 863 00	763	Rents		429 25	179 54	15
							16
							17
1 187 100 49	999 461 75		Total Operation		143 817 11	100 279 19	18
			Maintenance				19
27 213 53	24 566 21	760-1	Supervision & Engineering	—Labor	2 260 90	2 192 26	20
6 696 28	5 781 82	760-2	" "	—S. & E.	507 50	459 67	21
11 637 61	10 348 47	761-11	Pumping Station Structures	—Labor	581 78	747 31	22
8 042 05	5 732 58	761-12	" " "	—S. & E.	188 03	243 76	23
762 95	515 57	761-211	Measuring Station	—Labor	33 36	115 91	24
509 55	589 68	761-221	" "	—S. & E.	11 62	27 26	25
356 48	249 51	761-212	Regulator Station	—Labor	59 57	36 66	26
275 70	376 01	761-222	" "	—S. & E.	34 31	16 93	27
1 154 52	1 485 45	761-31	Other Transmission System Structures	—Labor	319 18	190 32	28
1 266 17	846 28	761-32	" " "	—S. & E.	16 09	253 03	29
34 577 32	20 822 90	762-11	Transmission Mains	—Labor	1 900 74	1 230 85	30
34 293 37	10 805 65	762-12	" "	—S. & E.	13 051 94	663 60	31
67 176 64	60 178 41	762-211	Pumping Station Equipment	—Labor	4 054 56	3 465 07	32
64 688 69	56 047 32	762-212	" " "	—S. & E.	3 738 46	10 153 49	33
3 471 52	3 462 00	762-2211	Measuring Station Equipment	—Labor	346 56	249 61	34
2 423 52	3 439 58	762-2221	" " "	—S. & E.	249 79	312 3[illegible]	35
1 983 28	838 71	762-2212	Regulator Station Equipment	—Labor	210 82	134 47	36
1 495 66	1 120 05	762-2222	" " "	—S. & E.	399 33	250 72	37
2 378 76	2 353 86	762-231	Other Trans. System Equipment	—Labor	566 77	97 21	38
3 020 90	2 424 60	762-232	" " " "	—S. & E.	251 46	103 09	39
							40
273 424 50	211 984 75		Total Maintenance		28 782 77	20 943 56	41
1 410 524 99	1 211 446 50		Total Transmission Expenses		172 599 88	121 222 75	42
							43
			Distribution				44
			Operation				45
		765-1	Supervision & Engineering	—Labor			46
		765-2	" "	—S. & E.			47
		766-2	Other Distribution Office	—S. & E.			48
		767-1	Distribution Lines	—Labor			49
		767-2	" "	—S. & E.			50
		768-11	Removing & Resetting Meters	—Labor			51
		768-12	" " "	—S. & E.			52
		768-21	Miscellaneous Meter Expense	—Labor			53
		768-22	" " "	—S. & E.			54
		769-1	Services On Customers Premises	—Labor			55
		769-2	" " "	—S. & E.			56
		776	Rents				57
							58
							59
							60
							61
							62
			Total Operation				63

(A) (B) (C) (D)

5581

Month of December 1941

12 Months To Date		Acc't	Distribution		Current Month		
This Year	Last Year	No.			This Year	Last Year	
			Maintenance				1
		771-1	Supervision & Engineering	—Labor			2
		771-2	" " "	—S. & E.			3
		772-1	Structures & Improvements	—Labor			4
		772-2	" "	—S. & E.			5
		773-11	Mains	—Labor			6
		773-12	"	—S. & E.			7
		773-31	Services	—Labor			8
		773-32	"	—S. & E.			9
		773-4	Meters	—Labor			10
		773-42	" "	—S. & E.			11
		773-51	House Regulators	—Labor			12
		773-52	" "	—S. & E.			13
		775-1	Other Distribution Equipment	—Labor			14
		775-2	" " "	—S. & E.			15
							16
							17
							18
							19
							20
							21
							22
			Total Maintenance				23
			Total Distribution Expenses				24
							25
			Customers' Accounting & Collecting				26
		779-1	Supervision	—Salaries			27
		779-2	"	—S. & E.			28
		780-11	Customers' Contracts & Orders	—Labor			29
		780-12	" " "	—S. & E.			30
2 944 11	2 690 89	780-31	Meter Reading	—Labor	243 22	270 10	31
812 85	705 63	780-32	" "	—S. & E.	80 29	80 67	32
		780-41	Collecting	—Labor			33
—	5 71	780-42	"	—S. & E.			34
4 185 37	3 045 60	781-1	Customers' Billing & Acct'ng	—Labor	532 37	314 10	35
*405 80	25 04	781-2	" " "	—S. & E.	*41 22	*1 30	36
		782	Miscellaneous Expenses				37
7 200 00	7 200 00	783	Uncollectible Accounts		600 00	600 00	38
		784	Rents				39
							40
							41
							42
							43
							44
							45
							46
14 736 53	13 672 87		Total Customers' Accounting & Collecting		1 414 66	1 263 57	47
							48
			Sales Promotion				49
6 290 61	5 118 12	785-1	Supervision	—Salaries	823 88	429 15	50
1 041 57	1 000 96	785-2	"	—S. & E.	8 26	17 52	51
3 287 36	3 448 65	786-1	Industrial Engineers	—Salaries	361 20	270 44	52
1 699 00	2 131 55	786-2	" "	—S. & E.	30 42	137 17	53
5 00	10 00	787-2	Advertising		—	10 00	54
193 81	45 10	787-3	Miscellaneous Sales Expenses		60 20	—	55
							56
							57
							58
							59

This Year	Last Year	Acc't No.	Distribution		This Year	Last Year	
			Maintenance				1
		771-1	Supervision & Engineering	—Labor			2
		771-2	"	—S. & E.			3
		772-1	Structures & Improvements	—Labor			4
		772-2	" "	—S. & E.			5
		773-11	Mains	—Labor			6
		773-12	"	—S. & E.			7
		773-31	Services	—Labor			8
		773-32	"	—S. & E.			9
		773-41	Meters	—Labor			10
		773-42	"	—S. & E.			11
		773-51	House Regulators	—Labor			12
		773-52	" "	—S. & E.			13
		775-1	Other Distribution Equipment	—Labor			14
		775-2	" " "	—S. & E.			15
							16
							17
							18
							19
							20
							21
							22
			Total Maintenance				23
			Total Distribution Expenses				24
							25
			Customers' Accounting & Collecting				26
		779-1	Supervision	—Salaries			27
		779-2	"	—S. & E.			28
		780-11	Customers' Contracts & Orders	—Labor			29
		780-12	" " "	—S. & E.			30
2 944 11	2 690 89	780-31	Meter Reading	—Labor	243 22	270 10	31
812 85	705 63	780-32	" "	—S. & E.	80 29	80 67	32
		780-41	Collecting	—Labor			33
	5 71	780-42	"	—S. & E.			34
4 185 37	3 045 60	781-1	Customers' Billing & Acct'ng	—Labor	532 37	314 10	35
*405 80	25 04	781-2	" " "	—S. & E.	*41 22	*1 30	36
		782	Miscellaneous Expenses				37
7 200 00	7 200 00	783	Uncollectible Accounts		600 00	600 00	38
		784	Rents				39
							40
							41
							42
							43
							44
							45
							46
14 736 53	13 672 87		Total Customers' Accounting & Collecting		1 414 66	1 263 57	47
							48
			Sales Promotion				49
6 290 61	5 118 12	785-1	Supervision	—Salaries	823 88	429 15	50
1 041 57	1 000 96	785-2	"	—S. & E.	8 26	17 52	51
3 287 36	3 448 65	786-1	Industrial Engineers	—Salaries	361 20	270 34	52
1 699 00	2 131 55	786-2	" " "	—S. & E.	30 42	137 17	53
5 00	10 00	787-2	Advertising		—	10 00	54
193 81	45 10	787-3	Miscellaneous Sales Expenses		60 20	—	55
							56
							57
							58
							59
							60
							61
							62
12 517 35	11 754 38		Total Sales Promotion Expenses		1 282 96	864 28	63
(A)	(B)				(C)	(D)	

*Indicates red figures

12 Months To Date		Acc't No.	Administrative & General		Month of December 1941 Current Month		
This Year	Last Year				This Year	Last Year	
			Operation				1
79 016 67	71 200 00	790	General Officers	—Salaries	9 650 01	5 933 34	2
18 835 49	12 551 21	791-1	General Law	—Salaries	2 625 76	1 345 84	3
8 619 50	6 761 06	791-2	Rate, Survey and Valuation	—Salaries	1 105 00	592 50	4
112 854 00	92 955 59	791-3	Other General Office Employees	—Salaries	15 384 57	9 424 78	5
12 258 97	17 658 56	792-1	General Officers	—Expense	711 41	2 567 18	6
2 462 88	2 257 47	792-21	General Law	—Expense	93 62	829 60	7
—	1 575 33	792-22	Rate, Survey and Valuation	—Expense			8
11 091 93	8 793 55	792-23	Other Gen. Office Employees	—Expense	792 96	1 677 30	9
13 018 63	25 026 43	793-1	General Office Stationery and Printing		1 221 25	17 470 16	10
19 741 13	16 910 98	793-2	General Office Supplies and Expenses		2 181 78	4 475 26	11
21 713 30	18 627 09	795	Special Services		5 160 89	10 994 29	12
51 203 15	75 045 01	796	Special Legal Services		1 865 65	37 637 11	13
		797	Regulatory Commission Expenses				14
11 694 52	10 122 38	798	Insurance — General		1 262 51	903 94	15
11 558 64	10 029 90	799-1	Insurance — Claims for Injuries and Damages		+1 393 40	+8 696 29	16
12 000 00	12 000 00	799-2	Injuries and Damages		1 000 00	1 000 00	17
1 883 87	2 456 33	800-11	Accident Prevention		122 68	376 80	18
7 241 24	6 017 88	800-12	Insurance — Group Life		623 00	537 15	19
2 899 16	2 304 25	800-13	Employees' Welfare Expenses — Other		22 55	22 00	20
171 000 06	165 088 00	800-2	Pensions		14 333 33	77 007 37	21
4 475 71	4 370 93	801-1	Dues, Donations and Subscriptions		651 85	78 60	22
58 6[illegible]5	45 395 59	801-2	Other Miscellaneous General Expenses		2 780 23	9 869 27	23
29 [illegible]13	23 244 40	803	Rents		2 483 33	1 935 00	24
		805	Franchise Requirements				25
							26
							27
							28
							29
							30
							31
							32
							33
							34
661 787 73	630 391 94		Total Operation		62 678 98	175 981 20	35
			Maintenance				36
		802-21	General Office Equipment	—Labor			37
1 229 58	2 571 83	802-22	" " "	—S. & E.	6 04	912 57	38
							39
							40
							41
							42
							43
1 229 58	2 571 83		Total Maintenance		6 04	912 57	44
663 017 31	632 963 77		Total Administrative & Gen'l Exp.		62 685 02	176 893 77	45
							46
			Operating Deductions				47
431 490 15	110 392 50	667	Interdepartmental Gas Sales		13 456 20	11 830 80	48
1 096 52	681 16	749-1	Gas Used in Company Buildings		139 45	121 10	49
506 367 60	475 604 25	749-2	Gas Used For Power		60 403 05	52 347 00	50
—	1 748 10	749-3	Gas Used in Other Operations				51
6 580 25	28 184 20	749-4	Gas Used in Construction			2 622 75	52
13 200 00	18 000 00	764-2	Joint Transmission Expense Transferred		1 100 00	1 500 00	53
		806	Duplicate Miscellaneous Charges				54
3 570 94	57 380 03	807	Administrative & General Expense Transferred		3 570 94	57 380 03	55
		809	Joint Admstr. & Gen. Exp. Transferred				56
							57
							58
							59
662 305 46	691 990 24		Total Operating Deductions		78 669 44	125 791 68	60
							61
2 743 757 08	2 407 131 74		Total Operation		287 062 56	302 143 86	62
304 336 78 (A)	240 572 92 (B)		Total Maintenance		31 291 57 (C)	25 798 66 (D)	63

+Indicates Red figures

12 Months To Date This Year	12 Months To Date Last Year	Acc't No.	Production		Month of December 1941 Current Month This Year	Month of December 1941 Current Month Last Year	
			Operation				1
2 521 03	2 669 69	5514	Supervision and Engineering	—Labor	401 44	180 37	2
328 03	53 27	5515	" "	—S. & E.	45 00	5 00	3
10 747 52	9 084 83	5516	Extraction Plant Labor		2 123 47	740 20	4
10 868 71	8 730 22	5517	Other Labor		613 97	588 40	5
36 134 25	32 418 30	5518	Fuel — Gas		3 546 75	3 330 30	6
5 048 83	5 274 18	5519	Absorption — Oil		636 45	602 40	7
24 315 24	29 539 51	5520	Other Supplies and Expense		3 449 29	4 568 34	8
95 355 90	77 974 20	5521	Shrinkage — Gas		9 909 45	8 500 50	9
							10
							11
							12
							13
185 319 51	165 744 20		Total Operation		20 725 82	18 515 51	14
			Maintenance				15
314 23	359 27	5522	Supervision and Engineering	—Labor	28 12	27 50	16
		5523	" "	—S. & E.			17
1 218 63	716 04	5524	Structures	—Labor	131 36	90 72	18
520 96	258 89	5525	"	—S. & E.	89 86	55 07	19
6 812 32	6 915 20	5526	Equipment	—Labor	844 01	599 56	20
8 401 80	6 511 60	5527	"	—S. & E.	1 148 06	499 39	21
							22
							23
							24
17 267 94	14 761 00		Total Maintenance		2 241 41	1 272 24	25
202 587 45	180 505 20		Total Production Cost		22 967 23	19 787 75	26
202 587 45	180 505 20	5528	Production Transferred to Inventory		22 967 23	19 787 75	27
25 423 109	20 793 278		Total Gallons Produced		2 642 454	2 266 973	28
80¢	.87¢		Avg. Cost Per Gallon (Cents)		.87¢	.87¢	29
240 895	216 122		MCF Fuel		23 645	22 202	30
635 706	519 828		MCF Shrinkage		66 063	36 670	31
							32
			Marketing				33
3 282 48	3 112 50	5529	Salaries and Expense		312 41	319 27	34
		5530	Freight and Hauling				35
76 54	48 83	5531	Other Miscellaneous Expense			39 26	36
							37
							38
							39
							40
3 359 02	3 063 67		Total Marketing Expenses		312 41	358 53	41
							42
			General				43
1 500 00	1 500 00	5550	Other General Office Employees—Sal. and Exp.		125 00	125 00	44
600 00	600 00	5551	General Office Supplies and Expense		50 00	50 00	45
300 00	300 00	5552	General Office Rent		25 00	25 00	46
		5553	Injuries and Damages				47
176 17	439 92	5554	Insurance — General		54 82	36 66	48
733 51	845 92	5555	Insurance — Claims for Injuries and Damages		65 35	61 71	49
288 00	254 00	5556	Insurance — Group Life		24 00	22 00	50
2 973 79	1 740 00	5557	Pensions		200 00	145 00	51
		5558	Dues, Donations and Subscriptions				52
25 00	25 00	5559	Other General Expense				53
							54
							55
6 896 47	5 704 84		Total General Expenses		544 17	465 37	56
10 255 49	8 768 51		Total Mktg. And Gen. Expenses		856 58	823 90	57
							58

			Operation				
2 521 03	2 669 69	5514	Supervision and Engineering	—Labor	401 44	180 37	
328 03	55 27	5515	"	—S. & E.	45 00	5 00	
10 747 52	9 084 83	5516	Extraction Plant Labor		2 123 47	740 20	
10 868 71	8 730 22	5517	Other Labor		613 97	588 40	
36 134 25	32 418 30	5518	Fuel — Gas		3 546 75	3 330 30	
5 048 83	5 274 18	5519	Absorption — Oil		636 45	602 40	
24 315 24	29 539 51	5520	Other Supplies and Expense		3 449 29	4 568 34	
95 355 90	77 974 20	5521	Shrinkage — Gas		9 909 45	8 500 50	
185 319 51	165 744 20		Total Operation		20 725 82	18 515 51	
			Maintenance				
314 23	359 27	5522	Supervision and Engineering	—Labor	28 12	27 50	
		5523	"	—S. & E.			
1 218 63	716 04	5524	Structures	—Labor	131 36	90 72	
520 96	258 89	5525	"	—S. & E.	89 86	55 07	
6 812 32	6 915 20	5526	Equipment	—Labor	844 01	599 56	
8 401 80	6 511 60	5527	"	—S. & E.	1 148 06	199 39	
17 267 94	14 761 00		Total Maintenance		2 241 41	1 272 24	
202 587 45	180 505 20		Total Production Cost		22 967 23	19 787 75	
202 587 45	180 505 20	5528	Production Transferred to Inventory		22 967 23	19 787 75	
25 423 109	20 793 278		Total Gallons Produced		2 642 454	2 266 973	
80¢	87¢		Avg. Cost Per Gallon (Cents)		87¢	87¢	
240 895	216 122		MCF Fuel		23 645	22 202	
635 706	519 828		MCF Shrinkage		66 063	36 670	
			Marketing				
3 282 48	3 112 50	5529	Salaries and Expense		312 41	319 27	
		5530	Freight and Hauling				
76 54	48 83	5531	Other Miscellaneous Expense		—	39 26	
3 359 02	3 063 67		Total Marketing Expenses		312 41	358 53	
			General				
1 500 00	1 500 00	5550	Other General Office Employees—Sal. and Exp		125 00	125 00	
600 00	600 00	5551	General Office Supplies and Expense		50 00	50 00	
300 00	300 00	5552	General Office Rent		25 00	25 00	
		5553	Injuries and Damages				
476 17	439 92	5554	Insurance — General		54 82	36 66	
733 51	845 92	5555	Insurance — Claims for Injuries and Damages		65 35	61 71	
288 00	254 00	5556	Insurance — Group Life		24 00	22 00	
2 973 79	1 740 00	5557	Pensions		200 00	145 00	
		5558	Dues, Donations and Subscriptions				
25 00	25 00	5559	Other General Expense				
6 896 47	5 704 84		Total General Expenses		544 17	465 37	
10 255 49	8 768 51		Total Mktg. And Gen. Expenses		856 58	823 90	
(A)	(B)				(C)	(D)	

[fol. 15868] (Part of Exhibit 208.)

Statistical Report

of

Panhandle Eastern Pipe Line Company
and Subsidiary Companies

For period ended December 31, 1941.

(Signed) T. F. PAXTON,
Assistant Secretary.

Date February 21, 1942.

Deliveries	Customers This Year	Customers Current Month Last Year	Current Month This Year	Current Month Last Year	Months To Date This Year	Months To Date Last Year	12 Months To Date This Year	12 Months To Date Last Year	
Retail.									1
									2
Residential	152	3 840	1 927	38 631			13 780	278 037	3
Commercial	1	732	59	25 959			531	172 617	4
Industrial	15	13	534 592	391 627			5 358 169	4 039 833	5
Field	5	2	60	54			3 275	62 430	6
									7
									8
Total Retail Sales	173	4 587	536 648	456 271			5 375 755	4 552 917	9
Wholesale									10
Gas Utilities	39	32	5 982 850	5 468 507			58 311 064	51 841 845	11
Others									12
									13
Total Sales To Public	212	4 619	6 519 498	5 924 778			63 686 819	56 394 762	14
									15
Associated Companies									16
									17
									18
Total Sales			6 519 498	5 924 778			63 686 819	56 394 762	19
Miscellaneous Deliveries									20
Company Use, Compressor Stations			402 687	348 980			3 375 784	3 170 695	21
Other Company Use			90 636	97 193			947 071	355 240	22
Free and Other			—	28			—	218	23
Exchange Gas Delivered			20 210	—			33 892	79 099	24
									25
Total Miscellaneous Deliveries			513 533	446 201			4 356 747	4 205 252	26
Total Gas Deliveries			7 033 031	6 370 979			68 043 566	60 600 014	27
Available For Deliveries									28
									29
Produced			3 177 779	2 626 658			30 059 021	26 578 757	30
									31
									32
									33
Total Gas Produced			3 177 779	2 626 658			30 059 021	26 578 757	34
									35
Purchased-Associated Companies									36
									37
Purchased—Others			2 946 920	2 974 860			30 137 409	27 537 768	38
									39
									40
Total Gas Purchased			2 946 920	2 974 860			30 137 409	27 537 768	41
Miscellaneous—Exchange Gas Received			6 732	6 919			78 520	69 412	42
Total Gas Available For Deliveries			6 131 431	5 608 437			60 274 950	54 185 937	43
									44
MCF (14.9+) Total Deliveries			6 860 684	6 220 683			66 363 284	58 727 422	45
" " " Total Available for Deliveries			6 748 188	6 172 512			66 336 729	59 635 475	46
" " " Unaccounted For (Losses in Black)			+112 496	+48 171			+26 555	908 053	47
			(A)	(B)	(C)	(D)	(E)	(F)	

+Indicates red figures.

Deliveries	Customers Current Month This Year	Customers Current Month Last Year	Current Month This Year	Current Month Last Year	Months To Date This Year	Months To Date Last Year	12 Months To Date This Year	12 Months To Date Last Year	
Retail									1
Residential	123	63	1 573	788			11 547	6 648	2
Commerical	1	1	59	76			531	641	3
Industrial	12	10	514 529	380 984			5 135 792	3 928 434	4
Field	5	2	60	54			3 275	62 430	5
									6
									7
									8
Total Retail Sales	141	76	516 221	381 902			5 151 145	3 998 153	9
Wholesale									10
Gas Utilities	30	24	5 089 628	4 593 106			49 406 956	43 397 702	11
Others									12
									13
Total Sales To Public	171	100	5 605 849	4 975 008			54 558 101	47 395 855	14
									15
Associated Companies			878 861	919 983			8 879 688	8 840 644	16
									17
									18
Total Sales			6 484 710	5 894 991			63 437 789	56 236 499	19
Miscellaneous Deliveries									20
Company Use, Compressor Stations			402 687	348 980			3 375 784	3 170 695	21
Other Company Use			90 636	97 098			947 071	954 704	22
Free and Other									23
Exchange Gas Delivered			20 210				33 892	79 099	24
									25
Total Miscellaneous Deliveries			512 533	446 078			4 356 747	4 204 498	26
Total Gas Deliveries			6 998 243	6 341 069			67 794 536	60 440 997	27
Available For Deliveries									28
									29
Produced			3 177 779	2 626 658			30 059 021	26 578 757	30
									31
									32
									33
Total Gas Produced			3 177 779	2 626 658			30 059 021	26 578 757	34
									35
Purchased—Associated Companies									36
									37
Purchased—Others			2 946 920	+2 974 860			30 137 409	27 537 768	38
									39
									40
Total Gas Purchased			2 946 920	2 974 860			30 137 409	27 537 768	41
Miscellaneous—Exchange Gas Received			6 732	6 919			78 520	69 412	42
Total Gas Available For Deliveries			6 131 431	5 608 437			60 274 950	54 185 937	43
									44
MCF (14.9#) Total Deliveries			6 851 096	6 215 539			66 365 418	58 694 393	45
" " Total Available for Deliveries			6 748 188	6 172 512			66 336 729	59 635 475	46
" " Unaccounted For (Losses in Black)			+102 908	+43 027			+28 689	941 082	47
			(A)	(B)	(C)	(D)	(E)	(F)	

+Indicates red figures.

Deliveries	Customers Current Month This Year	Customers Current Month Last Year	Current Month This Year	Current Month Last Year	Months To Date This Year	Months To Date Last Year	12 Months To Date This Year	12 Months To Date Last Year	
Retail									1
Residential	29	22	364	271			2 233	2 091	2
Commercial									3
Industrial	3	3	20 063	10 643			222 377	111 399	4
Field									5
									6
									7
									8
Total Retail Sales	32	25	20 427	10 914			224 610	113 490	9
Wholesale									10
Gas Utilities	9	8	893 222	875 401			8 904 108	8 444 143	11
Others									12
									13
Total Sales To Public	41	33	913 649	886 315			9 128 718	8 557 633	14
									15
Associated Companies									16
									17
									18
Total Sales			913 649	886 315			9 128 718	8 557 633	19
Miscellaneous Deliveries									20
Company Use, Compressor Stations									21
Other Company Use									22
Free and Other									23
Exchange Gas Delivered									24
									25
Total Miscellaneous Deliveries									26
Total Gas Deliveries			913 649	886 315			9 128 718	8 557 633	27
Available For Deliveries									28
									29
Produced									30
									31
									32
									33
Total Gas Produced									34
									35
Purchased—Associated Companies									36
Panhandle Eastern Pipe Line Co.			878 861	853 542			8 879 688	8 377 462	37
Purchased—Others									38
									39
									40
Total Gas Purchased			878 861	853 542			8 879 688	8 377 462	41
Miscellaneous—Exchange Gas Received									42
Total Gas Available For Deliveries			878 861	853 542			8 879 688	8 377 462	43
									44
MCF (14.9) Total Deliveries			888 449	861 622			8 877 654	8 431 492	45
" " " Total Available for Deliveries			878 861	853 542			8 879 688	8 377 462	46
" " " Unaccounted For (Losses in Black)			+9 588	+8 080			2 134	+54 030	47
			(A)	(B)	(C)	(D)	(E)	(F)	

+Indicates red figures

[fol. 15872]

Deliveries	Customers Current Month This Year	Customers Current Month Last Year	Current Month This Year	Current Month Last Year	Months To Date This Year	Months To Date Last Year	12 Months To Date This Year	12 Months To Date Last Year	
									1
Retail									2
Residential	3 755		37 572				269 298		3
Commercial	731		25 883				171 976		4
Industrial									5
Field									6
									7
									8
Total Retail Sales	4 486		63 455				441 274		9
Wholesale									10
Gas Utilities									11
Others									12
									13
Total Sales to Public	4 486		63 455				441 274		14
									15
Associated Companies									16
									17
									18
Total Sales			63 455				441 274		19
Miscellaneous Deliveries									20
Company Use, Compressor Stations									21
Other Company Use			95				536		22
Free and Other			28				218		23
Exchange Gas Delivered									24
									25
Total Miscellaneous Deliveries			123				754		26
Total Gas Deliveries			63 578				442 028		27
Available For Deliveries									28
									29
Produced									30
									31
									32
									33
Total Gas Produced									34
									35
Purchased—Associated Companies									36
Panhandle Eastern Pipe Line Co.			66 441				463 182		37
Purchased—Others									38
									39
									40
Total Gas Purchased			66 441				463 182		41
Miscellaneous—Exchange Gas Received									42
Total Gas Available For Deliveries			66 441				463 182		43
									44
MCF (14.9+) Total Deliveries			62 547				439 482		45
" " " Total Available for Deliveries			65 483				460 483		46
" " " Unaccounted For (Losses in Black)			2 936				21 001		47

[fol. 15873]

5697

	Current Month			Months To Date			12 Months To Date			
	No. of Accounts	M C F	Amount	Average Rate	M C F	Amount	Average Rate	M C F	Amount	Average Rate	
Retail Sales											1
Residential—Main Line											2
Illinois	29	364	240 96	66 20				2 233	1 715 84	76 84	3
											4
Industrial—Main Line											5
Illinois (Quincy)											6
Black White Lime Co.	1	3 047	609 40	20 00				32 517	6 503 40	20 00	7
Marblehead Lime Co.	1										8
Marblehead and Quincy		11 985	2 397 00	20 00				139 130	27 826 00	20 00	9
Menke Stone & Lime Co.	1	5 031	1 006 20	20 00				50 730	10 146 00	20 00	10
Total Industrial	3	20 063	4 012 60	20 00				222 377	44 475 40	20 00	11
											12
Total Retail Sales	32	20 427	4 253 56	20 82				224 610	46 191 24	20 57	13
											14
Gas Utilities—Main Line											15
Illinois											16
Central Illinois Elec. & Gas. Co.	1										17
Lincoln		10 493	2 934 34	27 96				105 921	28 866 98	27 25	18
Central Illinois Light Co.	1										19
Peoria Group											20
Keystone Steel & Wire Co.		177 812	29 316 86	16 49				2 066 051	340 944 99	16 50	21
Other		287 277	79 690 43	27 74				2 964 403	774 323 60	26 12	22
Springfield		89 862	29 267 48	32 57				844 744	266 707 27	31 57	23
Central Illinois Public Serv.	1										24
Canton, Hoopeston, Quincy &											25
Taylorville		93 753	26 657 41	28 43				910 060	255 090 31	28 03	26
Citizens Gas Co.	1										27
Arthur, Atwood, Chrisman, Newman											28
Tuscola and Villa Grove		12 234	4 033 50	32 97				81 040	25 680 74	31 69	29
City of Pittsfield	1										30
Pittsfield		2 916	986 99	33 85				24 146	8 025 25	33 24	31
City of Roodhouse	1										32
Roodhouse		1 792	606 95	33 87				15 016	4 973 94	33 12	33
City of White Hall	1										34
White Hall		1 438	483 93	33 65				11 741	3 866 65	32 93	35
Illinois Iowa Power Co.	1										36
Champaign—Urbana, Clinton, Dan-											37
ville, Decatur and Jacksonville		211 670	59 276 73	28 00				1 848 878	511 994 43	27 69	38
Morton Municipal Gas Co.	1										39
Morton		3 975	1 094 89	27 54				32 108	8 011 29	24 95	40
Total Gas Utilities	9	893 222	234 349 51	26 24				8 904 108	2 228 485 50	25 03	41
											42
Total Sales To Public	41	913 649	238 603 07	26 12				9 128 718	2 274 676 74	24 92	43
											44
											45
											46
											47

Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: MCF	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: M C F	12 Months To Date: Amount	12 Months To Date: Average Rate	
Retail Sales											1
Residential — Main Line											2
Panhandle Eastern Pipe Line Co.											3
Texas	31	398	237 50	59 67				2 819	1 799 24	63 83	4
Oklahoma	1	19	10 90	57 37				135	82 13	60 84	5
Kansas	61	779	464 70	59 65				5 773	3 712 54	64 31	6
Missouri	28	352	236 27	67 12				2 593	2 014 22	77 68	7
Total	121	1 548	949 37	61 33				11 320	7 608 13	67 21	8
											9
Illinois Natural Gas Co.											10
Illinois	29	364	240 96	66 20				2 233	1 715 84	76 84	11
Total Residential—Main Line	150	1 912	1 190 33	62 26				13 553	9 323 97	68 80	12
Residential—Local Area											13
Panhandle Eastern Pipe Line Co.											14
Kansas	1	11	5 50	50 00				117	58 58	50 07	15
Missouri	1	14	7 57	54 07				110	64 22	58 38	16
Total Residential—Local Area	2	25	13 07	52 28				227	122 80	54 10	17
Total Residential	152	1 937	1 203 40	62 13				13 780	9 446 77	68 55	18
											19
Commercial—Main Line											20
Panhandle Eastern Pipe Line Co.											21
Missouri	1	59	31 60	53 56				531	290 39	54 69	22
											23
Industrial—Main Line											24
Illinois Natural Gas Co.											25
Illinois	3	20 063	4 012 60	20 00				222 377	44 475 40	20 00	26
Panhandle Eastern Pipe Line Co.											27
Kansas	1	18 321	3 007 61	16 42				247 442	40 490 86	16 36	28
Missouri	10	485 053	84 505 79	17 42				4 854 186	819 381 01	16 88	29
Total	11	503 374	87 513 40	17 39				5 101 628	859 871 87	16 85	30
Total Industrial—Main Line	14	523 437	91 526 00	17 49				5 324 005	904 347 27	16 99	31
Industrial—Local Area											32
Panhandle Eastern Pipe Line Co.											33
Missouri	1	11 155	2 396 49	21 48				34 164	6 375 93	18 66	34
Total Industrial	15	534 592	93 922 49	17 57				5 358 169	910 723 20	17 00	35
											36
Field—Main Line											37
Panhandle Eastern Pipe Line Co.											38
Kansas	5	60	6 00	10 00				3 275	327 50	10 00	39
											40
Total Retail Sales	173	536 648	95 163 49	17 73				5 375 755	920 787 86	17 13	41
											42
											43
											44
											45
											46
											47
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	

Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: MCF	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: M C F	12 Months To Date: Amount	12 Months To Date: Average Rate	
Retail											1
Residential—Main Line											2
Texas	31	398	237 50	59 67				2 819	1 799 24	63 83	3
Oklahoma	1	19	10 90	57 37				135	82 13	60 84	4
Kansas	61	779	464 70	59 65				5 773	3 712 54	64 31	5
Missouri	28	352	236 27	67 12				2 593	2 014 22	77 68	6
Total Residential—Main Line	121	1 548	949 37	61 33				11 320	7 608 13	67 21	7
											8
Residential—Local Area											9
Kansas	1	11	5 50	50 00				117	58 58	50 07	10
Missouri	1	14	7 57	54 07				110	64 22	58 38	11
Total Residential—Local Area	2	25	13 07	52 28				227	122 80	54 10	12
											13
Total Residential	123	1 573	962 44	61 18				11 547	7 730 93	66 95	14
											15
Commercial—Main Line											16
Missouri	1	59	31 60	53 56				531	290 39	54 69	17
Industrial—Main Line											18
Kansas											19
Osawatomie State Hospital	—										20
Osawatomie		—	—					40 964	6 554 24	16 00	21
Phillips Petroleum Co.*	1										22
Paola		8 469	1 391 95	16 44				93 816	15 443 66	16 46	23
Sharpe		9 852	1 615 66	16 40				112 662	18 492 96	16 41	24
Total Kansas	1	18 321	3 007 61	16 42				247 442	40 490 86	16 36	25
Missouri											26
Edwards Conley Brick & Tile	1										27
Columbia		1 573	352 12	22 39				27 069	6 001 60	22 17	28
Fayette Brick & Tile	1										29
Fayette		1 935	429 68	22 21				16 289	3 706 24	22 75	30
John Freiling	1										31
Hannibal		133	47 94	36 05				1 383	476 26	34 44	32
Harbison Walker Refractories	1										33
Fulton		44 094	9 423 07	21 37				479 182	103 881 44	21 68	34
Vandalia		74 964	16 008 29	21 35				745 006	161 344 28	21 66	35
Mexico Refractories Co.	1										36
Mexico		63 253	13 510 10	21 36				615 736	133 384 38	21 66	37
North American Refractories	—										38
Faber		—	—					55 203	12 252 66	22 20	39
Phillips Petroleum Co.*	1										40
Harrisonville		5 847	1 264 18	21 62				67 919	12 964 46	19 09	41
Jefferson City		6 196	1 338 65	21 61				72 346	13 781 62	19 05	42
Leeton		5 514	1 193 16	21 64				67 490	12 866 52	19 06	43
The W. J. Small Co., Inc.	1										44
Boonville		251	40 61	16 18				29 449	4 766 75	16 19	45
Liberty		27	10 80	40 00				65 339	10 652 72	16 30	46
Total Missouri Forward	7	203 787	43 618 60	—				2 242 411	476 078 93	—	47
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	

*Formerly Phillips Pipe Line Company

[fol. 15876]

Deliveries	No. of Accounts	Current Month MCF	Current Month Amount	Current Month Average Rate	Months To Date MCF	Months To Date Amount	Months To Date Average Rate	12 Months To Date MCF	12 Months To Date Amount	12 Months To Date Average Rate	
Gas Utilities—Main Lines											1
Illinois Natural Gas Co.											2
Illinois	9	893 222	234 349 51	26.24				8 904 108	2 228 485 50	25.03	3
Panhandle Eastern Pipe Line Co.											4
Texas	1	969	327 75	33.82				8 766	2 938 10	33.52	5
Kansas	3	171 577	14 688 42	8.56				1 233 829	109 996 43	8.92	6
Missouri	9	526 580	119 144 62	22.63				5 192 297	1 071 684 80	20.64	7
Indiana	3	1 697 539	373 327 55	21.99				17 631 087	3 704 538 87	21.01	8
Michigan	2	2 595 379	677 994 84	26.12				24 170 883	6 362 171 62	26.32	9
Ohio	4	25 563	7 097 42	27.76				201 676	52 833 23	26.28	10
Total	22	5 017 607	1 192 580 60	23.77				48 437 938	11 304 163 05	23.34	11
Total Gas Utilities—Main Line	31	5 910 829	1 426 930 11	24.14				57 342 046	13 532 648 55	23.60	12 13
Gas Utilities—Local Area											14
Panhandle Eastern Pipe Line Co.											15 16
Kansas	5	31 540	7 335 75	23.26				663 976	139 306 77	20.98	17
Missouri	3	40 481	12 807 90	31.64				305 042	95 520 26	31.31	18
Total Gas Utilities—Local Area	8	72 021	20 143 65	27.97				969 018	234 827 03	24.23	19 20
Total Gas Utilities	39	5 982 850	1 447 073 76	24.19				58 311 064	13 767 475 58	23.61	21 22
Total Sales To Public	212	6 519 498	1 542 237 25	23.66				63 686 819	14 688 263 44	23.06	23 24
Miscellaneous Deliveries											25
Company Use											26
Compressor Stations—Main Line											27
Panhandle Eastern Pipe Line Co.											28 29
Texas	2	56 696	8 504 40	15.00				495 609	74 341 35	15.00	30
Kansas	5	207 722	31 158 30	15.00				1 691 959	253 793 85	15.00	31
Missouri	2	59 733	8 959 95	15.00				512 467	76 870 05	15.00	32
Illinois	3	73 371	11 005 65	15.00				606 632	99 994 80	15.00	33
Total Compressor Use—Main Line	12	397 522	59 628 30	15.00				3 306 667	496 000 05	15.00	34 35
Compressor Stations—Local Area											36 37
Panhandle Eastern Pipe Line Co.											38
Kansas	2	4 986	747 90	15.00				57 685	8 652 75	15.00	39
Missouri	1	179	26 85	15.00				11 432	1 714 80	15.00	40
Total Compressor Use—Local Area	3	5 165	774 75	15.00				69 117	10 367 55	15.00	41 42
Total Company Use Compressor Stations	15	402 687	60 403 05	15.00				3 375 784	506 367 60	15.00	43 44 45

[fol. 15877]

Available For Deliveries	Current Month: No. of Accounts	Current Month: MCF	Current Month: Amount	Current Month: Average Rate	Months To Date: MCF	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: MCF	12 Months To Date: Amount	12 Months To Date: Average Rate
Purchased—Associated Companies—Main Line										
Panhandle Eastern Pipe Line Co.		878 861	194 761.15	22.16				8 879 688	1 890 862 47	21.29
MCF (14.9#) Total Deliveries		888 449						8 877 554		
" " Total Available for Deliveries		878 861						8 879 688		
" " Unaccounted for*		*9 588						2 134		

*Losses in Black

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J)

Detail Of
Gas Statistics (MCF)

*Indicates red figures.

[fol. 15878]

Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: MCF	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: M C F	12 Months To Date: Amount	12 Months To Date: Average Rate	
Retail (Cont.)											1
Industrial (Cont.)											2
Total Missouri Forwarded	7	203 787	43 618 60	21.40				2 242 411	476 078 93	21.23	3
United Brick & Tile Co.—Vale	—	—	—	—				92 770	15 913 56	17.15	4
Universal Atlas Cement Co.	1										5
Hannibal		244 947	33 105 78	13.52				2 197 092	257 773 58	11.73	6
Walsh Refractories Co.	1										7
Vandalia		20 094	4 303 37	21.42				191 825	41 664 59	21.72	8
Wellsville Fire Brick Co.	1										9
Wellsville		16 225	3 478 04	21.44				130 088	27 950 35	21.49	10
Total Missouri	10	485 053	84 505 79	17.42				4 854 186	819 381 01	16.88	11
Total Industrial—Main Line	11	503 374	87 513.40	17.39				5 101 628	859 871 87	16.85	12
Industrial—Local Area											13
United Brick & Tile Co.—Vale	1	11 155	2 396 49	21.48				34 164	6 375.93	18.66	14
Total Industrial	12	514 529	89 909 89	17.47				5 135 792	866 247 80	16.87	15
Field—Main Line											16
Kansas	5	60	6 00	10.00				3 275	327 50	10.00	17
Missouri	—	—	—	—				—	—	—	18
Total Field	5	60	6 00	10.00				3 275	327 50	10.00	19
											20
Total Retail Sales	141	516 221	90 909 93	17.61				5 151 145	874 596 62	16.98	21
Gas Utilities—Main Line											22
Texas											23
ø Panhandle Power & Light Co.	1										24
Gruver		969	327 75	33.82				8 766	2 938 10	33.52	25
Kansas											26
American Gas Co.	1										27
v Hartford		429	140 61	32.78				3 850	1 237 78	32.15	28
v Waverly		395	129 47	32.78				3 908	1 265 52	32.38	29
v v Williamsburg		194	63 59	32.78				1 952	629 54	32.25	30
Argus Natural Gas Co., Inc.	1										31
ø Various Towns		154 811	9 295 58	6.00				1 099 777	67 335 40	6.13	32
Central Distributing Co.	1										33
ø Various Towns (15)		15 748	5 059 17	32.13				121 903	38 746 96	31.79	34
v Kansas Gas & Fuel Co.	—										35
v Kincaid and Mildred			—	—				2 439	751 23	30.80	36
Total Kansas	3	171 577	14 688 42	8.56				1 233 829	109 996 43	8.92	37
Missouri											38
v Bowling Green Gas Co.	1										39
v v Bowling Green		6 692	2 222 75	33.22				49 838	16 362 79	32.83	40
Central Distributing Co.	1										41
v Various Towns		11 506	3 772 46	32.79				95 266	30 840 69	32.37	42
v Central West Utility Co.	1										43
v Liberty		19 304	6 233 86	32.29				125 415	38 974 72	31.08	44
v Citizens Gas Company	1										45
v Hannibal		40 912	10 468 37	25.59				346 294	90 047 71	26.00	46
Total Missouri Forward	4	78 414	22 697 44	—				616 813	176 225 91	—	47
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	

[fol. 15879]

Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: M C F	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: M C F	12 Months To Date: Amount	12 Months To Date: Average Rate	
Miscellaneous Deliveries (cont.)											1
Other Company Use											2
Compan, Buildings—Main Line											3
Panhandle Eastern Pipe Line Co.											4
Texas	6	277	41 59	15 01				1 947	291 83	14 99	5
Kansas	10	572	86 00	15 03				4 726	709 68	15 02	6
Missouri	1	23	3 49	15 17				250	37 33	14 93	7
Indiana	1	56	8 37	14 95				384	57 68	15 02	8
											9
Total Company Buildings	18	928	139 45	15 03				7 307	1 096 52	15 01	10
											11
Gasoline Plant—Main Line											12
Panhandle Eastern Pipe Line Co.											13
Kansas	1	89 708	13 456 20	15 00				876 601	131 490 15	15 00	14
Construction											15
Panhandle Eastern Pipe Line Co.											16
Texas	—	—	—	—				57 884	5 788 40	10 00	17
Oklahoma	—	—	—	—				—	—	—	18
Kansas	2	—	—	—				5 279	791 85	15 00	19
Missouri	—	—	—	—				—	—	—	20
Illinois	—	—	—	—				—	—	—	21
											22
Total Construction	—	—	—	—				63 163	6 580 25	10 42	23
											24
Total Other Company Use	19	90 636	13 595 65	15 00				947 071	139 166 92	14 69	25
											26
Exchange Gas Delivered—Main Line											27
Panhandle Eastern Pipe Line Co.											28
Missouri	1	20 210	—	—				33 892	—	—	29
											30
Total Miscellaneous Deliveries	35	513 333	—	—				4 356 747	—	—	31
											32
Total Gas Deliveries	247	7 033 031	—	—				68 043 566	—	—	33
											34
											35
											36
											37
											38
											39
											40
											41
											42
											43
											44
											45
											46
											47

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)

[fol. 15880]

Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: MCF	Months To Date: Amount	Months To Date: Average Rate	12 Months to Date: M C F	12 Months to Date: Amount	12 Months to Date: Average Rate	
Gas Utilities—Main Line (Cont.)											1
Total Missouri Forwarded	4	78 414	22 697 44	—				616 813	176 225 91	—	2
√ √ City of Fulton	1	6 863	2 320 46	33 81				47 830	15 689 68	32 80	3
√ Interstate Gas Co.	1										4
√ Harrisonville		5 058	1 837 84	36 34				48 616	14 744 12	30 33	5
√ Missouri Edison Co.	1										6
√ Louisiana		9 852	3 167 68	32 15				96 728	28 811 25	29 79	7
Missouri Power & Light Co.	1										8
Regular											9
Boonville		17 250						141 696			10
Centralia		4 807						49 697			11
Excelsior Springs		8 578						71 908			12
Jefferson City		44 604						356 089			13
Mexico		15 802						128 770			14
Moberly		7 830						84 604			15
Other Towns (9)		5 677						48 509			16
Total Regular		104 548	33 649 56	32 19				881 273	278 504 70	31 60	17
Industrial											18
Boonville Power Plant		—	—					171 619	18 794 55	10 95	19
Jefferson City Power Plant		125 243	15 220 48	12 15				1 408 304	155 695 94	11 06	20
Mexico Power Plant		9 934	1 231 20	12 39				125 068	14 101 61	11 28	21
Moberly Power Plant		2 010	269 85	13 43				25 151	3 099 74	12 32	22
Total Power Plants		137 187	16 721 53	12 19				1 730 142	191 691 84	11 08	23
A. P. Green		126 930	23 182 83	18 26				1 316 155	210 491 04	18 27	24
North American Refractories		10 628	1 959 40	18 44				60 414	11 129 55	18 42	25
Total Industrial		274 745	41 863 76	15 24				3 106 711	443 312 43	14 27	26
Total Missouri Pr. & Lt. Co.	1	379 293	75 513 32	19 91				3 987 984	721 817 13	18 10	27
Missouri Utilities Co.	1										28
√ √ Columbia		47 100	13 607 88	28 8				394 326	114 396 71	29 01	29
Total Missouri	9	526 580	119 144 62	22 63				5 192 297	1 071 684 80	20 64	30
Indiana											31
√ √ Kentucky Natural Gas Corp.	1	478 839	41 219 41	23 05				2 001 912	443 377 18	22 15	32
Michigan Gas Trans. Corp.	1										33
Residential and Commercial											34
Shannahan Group		417 041	113 574 88	27 23				3 746 034	952 837 39	25 44	35
Others (Includes Co. Use & Unaccounted For)		190 795	48 065 39	25 19				1 412 784	363 044 31	25 70	36 37
Industrial		887 718	164 826 55	18 37				10 421 513	1 933 314 37	18 55	38
√ √ Total Michigan Gas Trans. Corp.	1	1 495 554	326 466 82	21 83				15 580 331	3 249 196 07	20 85	39
√ √ Richmond Gas Corporation	1	23 146	5 641 32	24 37				48 841	11 965 62	24 50	40
Total Indiana	3	1 697 539	373 327 55	21 99				17 631 087	3 704 538 87	21 01	41
Michigan											42
Michigan Consolidated Gas Co.	1										43
√ √ Ann Arbor		40 539	11 274 09	27 81				358 943	93 719 26	26 11	44
√ √ Detroit		2 523 077	659 273 70	26 13				23 698 153	6 241 128 12	26 34	45
√ √ National Utilities Co. of Mich.	1	31 763	7 447 05	23 45				113 787	27 324 24	24 01	46
Total Michigan	2	2 595 379	677 994 84	26 12				24 170 883	6 362 171 62	26 32	47
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	

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[fol. 15881]

Available For Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: M C F	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: M C F	12 Months To Date: Amount	12 Months To Date: Average Rate
Gas Produced										
Panhandle Eastern Pipe Line Co.										
Main Line		3 175 773						30 025 743		
Local Area		2 006						33 278		
Total Gas Produced		3 177 779						30 059 021		
Gas Purchased										
Panhandle Eastern Pipe Line Co.										
Others—Main Line	18	2 869 914	109 800 80	3.83				29 003 767	1 089 923 85	3.76
Others—Local Area	86	77 006	6 195 63	8.05				1 133 642	90 993 78	8.03
Total Gas Purchased	104	2 946 920	115 996 43	3.94				30 137 409	1 180 917 63	3.92
Miscellaneous										
Exchange Gas Received—Main Line Panhandle Eastern Pipe Line Co.	2	6 732						78 520		
Total Gas Available For Deliveries		6 131 431						60 274 950		
MCF (14.9#) Deliveries										
Illinois Natural Gas Co.		888 449						8 877 554		
Panhandle Eastern Pipe Line Co.		5 972 235						57 485 730		
Total Deliveries		6 860 684						66 363 284		
MCF (14.9#) Available for Deliveries										
Illinois Natural Gas Co.		878 861						8 879 688		
Panhandle Eastern Pipe Line Co.		5 869 327						57 457 041		
Total Available For Deliveries		6 748 188						66 336 729		
MCF (14.9#) Unaccounted For*		*112 496						*26 555		

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J)

*Losses in Black

Detail Of
Gas Statistics (MCF)

*Indicates red figures.

[fol. 15882]

Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: MCF	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: M C F	12 Months To Date: Amount	12 Months To Date: Average Rate	
Miscellaneous Deliveries											1
Company Use											2
Compressor Stations—Main Line											3
Texas											4
Sneed	1	33 153	4 972 95	15.00				346 937	52 040 55	15.00	5
Hansford	1	23 543	3 531 45	15.00				148 672	22 300 80	15.00	6
Total Texas	2	56 696	8 504 40	15.00				495 609	74 341 35	15.00	7
Kansas											8
Liberal	1	51 692	7 753 80	15.00				488 807	73 321 05	15.00	9
Greensburg	1	43 250	6 487 50	15.00				278 118	41 717 70	15.00	10
Haven	1	34 542	5 181 30	15.00				322 000	48 300 00	15.00	11
Olpe	1	43 746	6 561 90	15.00				298 963	44 844 45	15.00	12
Louisburg	1	34 492	5 173 80	15.00				304 071	45 610 65	15.00	13
Total Kansas	5	207 722	31 158 30	15.00				1 691 959	253 793 85	15.00	14
Missouri											15
Houstonia	1	29 684	4 452 60	15.00				23 921	85 238 15	15.00	16
Centralia	1	30 049	4 507 35	15.00				277 546	41 631 90	15.00	17
Total Missouri	2	59 733	8 959 95	15.00				512 467	76 870 05	15.00	18
Illinois											19
Pleasant Hill	1	26 024	3 903 60	15.00				218 151	32 722 65	15.00	20
Glenarm	1	25 382	3 807 30	15.00				225 424	33 813 60	15.00	21
Tuscola	1	21 965	3 294 75	15.00				183 057	24 458 55	15.00	22
Total Illinois	3	73 371	11 005 65	15.00				606 632	90 994 80	15.00	23
Total Compressor Use Main Line	12	397 522	59 628 30	15.00				3 306 667	496 000 05	15.00	24 25
Compressor Stations—Local Area											26
Kansas											27
Rantoul	1	242	36 30	15.00				3 496	524 40	15.00	28
Wea	1	4 744	711 60	15.00				54 189	8 128 35	15.00	29
Total Kansas	2	4 986	747 90	15.00				57 685	8 652 75	15.00	30
Missouri											31
Dodson	1	179	26 85	15.00				11 432	1 714 80	15.00	32
Total Compressor Use—Local Area	3	5 165	774 75	15.00				69 117	10 367 55	15.00	33
Total Company Use Compressor Stations	15	402 687	60 403 05	15.00				3 375 784	506 367 60	15.00	34 35
											36
											37
											38
											39
											40
											41
											42
											43
											44
											45
											46
											47
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	

[fol. 15883]

Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: M C F	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: M C F	12 Months To Date: Amount	12 Months To Date: Average Rate	
Gas Utilities—Main Line (Cont.)											1
Ohio											2
Central States Natural Gas Co.	1	975	259 87	26 65				10 977	2 852 38	25 99	3
Ohio Gas, Light and Coke Co.	1	20 200	5 682 34	28 13				154 955	41 057 06	26 50	4
Toledo Edison Co.	1	3 356	876 49	26 12				31 557	7 989 31	25 32	5
Western Ohio Public Service Co.	1	1 032	278 72	27 01				3 587	934 48	26 05	6
Total Ohio	4	25 563	7 097 42	27 76				201 076	52 883 23	26 28	7
Total Gas Utilities—Main Line	22	5 017 607	1 192 580 60	23 77				48 437 938	11 304 163 05	23 34	8
											9
Gas Utilities—Local Area											10
Kansas											11
American Pipe Line Co.*	1										12
71st Street		3	60	20 00				413 662	82 732 42	20 00	13
Central Distributing Co.	1										14
Various Towns (1)		2 206	731 50	33 16				15 193	5 117 10	33 68	15
Gas Service Co.	1										16
Osawatomie		13 835	3 143 65	22 72				126 458	27 176 60	21 49	17
Paola		13 084	2 877 90	22 00				94 346	20 888 80	22 14	18
Rantoul		418	83 60	20 00				3 078	615 60	20 00	19
Louisburg Gas Co.	1										20
Louisburg		1 891	472 75	25 00				10 097	2 524 25	25 00	21
Prairie Pipe Line Co.	1										22
Stanley		103	25 75	25 00				1 142	252 00	22 07	23
Total Kansas	5	31 540	7 335 75	23 26				663 976	139 366 77	20 98	24
Missouri											25
American Pipe Line Co.	1										26
Main Line Domestic		2 700	540 00	20 00				21 835	4 366 98	20 00	27
Central Distributing Co.	1										28
Various Towns-(5)		29 631	9 548 51	32 22				218 442	70 438 76	32 25	29
Lee's Summit Gas Co.	1										30
Lee's Summit		8 150	2 719 39	33 37				62 775	20 475 72	32 62	31
Missouri Power & Light Co.											32
Excelsior Springs		—	—	—				1 990	238 80	12 00	33
Total Missouri	3	40 481	12 807 90	31 64				305 042	95 520 26	31 31	34
Total Gas Utilities—Local Area	8	72 021	20 143 65	27 97				969 018	234 827 63	24 23	35
											36
Total Gas Utilities	30	5 089 628	1 212 724 25	23 83				49 406 956	11 538 990 08	23 35	37
											38
Total Sales To Public	171	5 605 849	1 303 634 18	23 25				54 558 101	12 413 586 70	22 75	39
											40
Associated Company—Main Line											41
Illinois Natural Gas Company											42
Illinois	1	878 861	194 761 15	22 16				8 879 688	1 890 862 47	21 29	43
											44
Total Sales	172	6 484 710	1 498 395 33	23 11				63 437 789	14 304 449 17	22 55	45
											46
*Cities Service Gas Company											47

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J)

[fol. 15884]

Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: M C F	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: M C F	12 Months To Date: Amount	12 Months To Date: Average Rate	
Miscellaneous Deliveries (Cont.)											1
Other Company Use—Main Line											2
Company Buildings											3
Texas	6	277	41 59	15.01				1 947	291 83	14.99	4
Kansas	10	572	86 00	15.03				4 726	709 68	15.02	5
Missouri	1	23	3 49	15.17				250	37 33	14.93	6
Indiana	1	56	8 37	14.95				384	57 68	15.02	7
Total—Company Buildings	18	928	139 45	15.03				7 307	1 096 52	15.01	8
											9
											10
Gasoline Plant											11
Kansas	1										
Fuel		23 645	3 546 75	15.00				240 895	36 134 25	15.00	12
Shrinkage		66 063	9 909 45	15.00				635 706	95 355 90	15.00	13
Total Gasoline Plant	1	89 708	13 456 20	15.00				876 601	131 490 15	15.00	14
											15
											16
Construction											
Texas	—	—	—	—				57 884	5 788 40	10.00	17
Oklahoma	—	—	—	—				—	—	—	18
Kansas	—	—	—	—				5 279	791 85	15.00	19
Total Construction	—	—	—	—				63 163	6 580 25	10.42	20
											21
Total Other Company Use	19	90 636	13 595 65	15.00				947 071	139 166 92	14.69	22
											23
Exchange Gas Delivered—Main Line											24
Missouri											25
Cities Service Gas Company	1	20 210						33 892			26
Total Exchange Gas Delivered	1	20 210						33 892			27
											28
Total Miscellaneous Deliveries	35	513 533						4 356 747			29
											30
Total Gas Deliveries	207	6 998 243						67 794 536			31
											32
											33
											34
											35
											36
											37
											38
											39
											40
											41
											42
											43
											44
											45
											46
											47

Available For Deliveries	Current Month: No. of Accounts	Current Month: M C F	Current Month: Amount	Current Month: Average Rate	Months To Date: MCF	Months To Date: Amount	Months To Date: Average Rate	12 Months To Date: M C F	12 Months To Date: Amount	12 Months To Date: Average Rate	
Gas Produced—Main Line											1
Texas		2 293 322						22 708 705			2
Kansas											3
For Main Line		727 640						6 217 261			4
For Argus Natural Gas Co., In		154 811						1 099 777			5
Total Kansas		882 451						7 317 038			6
Total Produced—Main Line		3 175 773						30 025 743			7
											8
Gas Produced—Local Area											9
Kansas		1 922						25 218			10
Missouri		84						8 060			11
Total Produced—Local Area		2 006						33 278			12
											13
Total Gas Produced		3 177 779						30 059 021			14
											15
Gas Purchased											16
Others—Main Line											17
Texas	5	1 675 459	58 006 88	3.46				18 519 753	642 606 50	3.47	18
Oklahoma	1	73 068	2 922 72	4.00				611 175	22 152 12	3.63	19
Kansas	12	1 121 387	48 871 20	4.36				9 872 839	425 165 23	4.31	20
Total Others—Main Line	18	2 869 914	109 800 80	3.83				29 003 767	1 089 923 85	3.76	21
Others—Local Area											22
Kansas	77	75 695	6 090 75	8.05				1 090 005	87 502 82	8.02	23
Missouri	9	1 311	104 88	8.00				43 637	3 490 96	8.00	24
Total Others—Local Area	86	77 006	6 195 63	8.05				1 133 642	90 993 78	8.03	25
											26
Total Gas Purchased	104	2 946 920	115 996 43	3.94				30 137 409	1 180 917 63	3.92	27
											28
Miscellaneous—Exchange Gas Received											29
Kansas											30
Cities Service Gas Co.	1	75						871			31
Missouri											32
Cities Service Gas Co.	1	6 657						77 649			33
											34
Total Exchange Gas Received	2	6 732						78 520			35
											36
Total Gas Available											37
For Deliveries		6 131 431						60 274 950			38
											39
MCF (14.9) Deliveries		6 851 096						66 365 418			40
" " Available											41
for Deliveries		6 748 188						66 336 729			42
											43
" " Unaccounted for*		+102 908						+28 689			44
											45
											46
											47
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	

*Losses in Black +Indicates red figures

[fol. 15886]

Main Line	Operated Acres			Unoperated Acres			
	This Year	Last Year	Increase or Decrease	This Year	Last Year	Increase or Decrease	
100% Owned							1
Acreage January 1st	49 416 65	46 776 65	2 640 00	179 549 30	185 936 00	+6 386 70	2
Acquired Since January 1st	560 00	80 00	480 00	28 648 74	9 827 40	18 821 34	3
Surrendered " " "				1 200 00	13 654 10	+12 454 10	4
Transferred " " "	1 360 60	2 560 00	+1 199 40	+172 60	+2 560 00	2 387 40	5
Total Acreage	51 337 25	49 416 65	1 920 60	206 825 44	179 549 30	27 276 14	6
50%							7
Acreage January 1st	22 679 41	20 119 41	2 560 00	6 016 50	8 176 50	+2 160 00	8
Acquired Since January 1st	480 00		480 00	240 00	1 440 00	+1 200 00	9
Surrendered " " "				800 00	1 040 00	+240 00	10
Transferred " " "	240 00	2 560 00	+2 320 00	+1 428 00	+2 560 00	1 132 00	11
Total Acreage	23 399 41	22 679 41	720 00	4 028 50	6 016 50	+1 988 00	12
							13
Acreage January 1st							14
Acquired Since January 1st							15
Surrendered " " "							16
Transferred " " "							17
Total Acreage							18
Local Area							19
Acreage January 1st	1 177 95*	2 480 78*	+1 302 83*				20
Acquired Since January 1st							21
Surrendered " " "	45 00	1 302 83	+1 257 83				22
Transferred " " "							23
Total Acreage	1 132 95*	1 177 95*	+45 00				24
							25
Acreage January 1st							26
Acquired Since January 1st							27
Surrendered " " "							28
Transferred " " "							29
Total Acreage							30
Total Main Line and Local Area							31
Acreage January 1st	73 274 01	69 376 84	3 897 17	185 565 80	194 112 50	+8 546 70	32
Acquired Since January 1st	1 040 00	80 00	960 00	28 888 74	11 267 40	17 621 34	33
Surrendered " " "	45 00	1 302 83	+1 257 83	2 000 00	14 694 10	+12 694 10	34
Transferred " " "	1 600 60	5 120 00	+3 519 40	+1 600 60	+5 120 00	3 519 40	35
Total Acreage	75 869 61	73 274 01	2 595 60	210 853 94	185 565 80	25 288 14	36
Acreage By States							37
							38
Kansas	44 233 36*	42 873 36*	1 360 00*	86 424 64	73 124 90	13 299 74	39
Missouri	349 95	394 95	+45 00				40
Oklahoma				88 823 00	76 594 00	12 229 00	41
Texas	31 286 30	30 005 70	1 280 60	35 606 30	35 846 90	+240 60	42
							43
							44
							45
							46
Total Acreage By States	75 869 61	73 274 01	2 595 60	210 853 94	185 565 80	25 288 14	47
+Indicates red figures.	(A)	(B)	(C)	(D)	(E)	(F)	

*80 acres partially owned with others—Local Area.

[fol. 15887]

Local Area	Wells Being Drilled	Additions: Wells Completed	Additions: Purchased	Additions: Total	Deductions: Dry Holes	Deductions: Abandoned	Deductions: Sold	Deductions: Total	Total Productive Wells	
										1
Total Productive Wells January 1st	x x x	x x x x	x x x x	x x x x x	x x x x	x x x x	x x x x	x x x x x		2
January 1st to End of Preceding Month	x x x									3
Current Month										4
										5
Total Productive Wells	x x x									6
Kansas 100% Owned										7
Total Productive Wells January 1st	x x x	x x x x	x x x x	x x x x x	x x x x	x x x x	x x x x	x x x x x	13*	8
January 1st to End of Preceding Month	x x x					2		2	+2	9
Current Month										10
Total Productive Wells	x x x					2		2	11*	11
Missouri 100% Owned										12
Total Productive Wells January 1st	x x x	x x x x	x x x x	x x x x x	x x x x	x x x x	x x x x	x x x x x	11	13
January 1st to End of Preceding Month	x x x									14
Current Month							3	3	+3	15
Total Productive Wells	x x x						3	3	8	16
Total Local Area 100% Owned										17
Total Productive Wells January 1st	x x x	x x x x	x x x x	x x x x x	x x x x	x x x x	x x x x	x x x x x	24*	18
January 1st to End of Preceding Month	x x x					2			+2	19
Current Month							3	3	+3	20
Total Productive Wells	x x x					2	3	5	19*	21
										22
Total Productive Wells January 1st	x x x	x x x x	x x x x	x x x x x	x x x x	x x x x	x x x x	x x x x x		23
January 1st to End of Preceding Month	x x x									24
Current Month										25
Total Productive Wells	x x x									26
Total Main Line and Local Area										27
Total Productive Wells January 1st	x x x	x x x x	x x x x	x x x x x	x x x x	x x x x	x x x x	x x x x x	159*	28
January 1st to End of Preceding Month	x x x	2		2		2				29
Current Month	1						3	3	+3	30
Total Productive Wells	x x x	2		2		2	3	5	156*	31
										32
Total Productive Wells January 1st	x x x	x x x x	x x x x	x x x x x	x x x x	x x x x	x x x x	x x x x x		33
January 1st to End of Preceding Month	x x x									34
Current Month										35
Total Productive Wells	x x x									36
										37
Total Productive Wells January 1st	x x x	x x x x	x x x x	x x x x x	x x x x	x x x x	x x x x	x x x x x		38
January 1st to End of Preceding Month	x x x									39
Current Month										40
Total Productive Wells	x x x									41
										42
Total Productive Wells January 1st	x x x	x x x x	x x x x	x x x x x	x x x x	x x x x	x x x x	x x x x x		43
January 1st to End of Preceding Month	x x x									44
Current Month										45
										46
Total Productive Wells	x x x									47
*Indicates red figures	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	

*One Well partially-owned with others—Local Area Gas Well Statistics

[fol. 15888]

Main Line	Wells Being Drilled	Additions: Wells Completed	Additions: Purchased	Additions: Total	Deductions: Dry Holes	Deductions: Abandoned	Deductions: Sold	Deductions: Total	Total Productive Wells	
Kansas 100% Owned										1
Total Productive Wells January 1st	xxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	34	2
January 1st to End of Preceding Month	xxx									3
Current Month										4
										5
Total Protective Wells	xxx			0					34	6
Texas 100% Owned										7
Total Productive Wells January 1st	xxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	55	8
January 1st to End of Preceding Month	xxx	2		2					2	9
Current Month										10
Total Productive Wells	xxx	2		2					57	11
Oklahoma 100% Owned										12
Total Productive Wells January 1st	xxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx		13
January 1st to End of Preceding Month	xxx									14
Current Month	1									15
Total Productive Wells	xxx									16
Total 100% Owned										17
Total Productive Wells January 1st	xxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	89	18
January 1st to End of Preceding Month	xxx	2		2					2	19
Current Month										20
Total Productive Wells	xxx	2		2					91	21
Kansas 50% Owned										22
Total Productive Wells January 1st	xxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	46	23
January 1st to End of Preceding Month	xxx									24
Current Month										25
Total Productive Wells	xxx								46	26
Total Main Line										27
Total Productive Wells January 1st	xxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	135	28
January 1st to End of Preceding Month	xxx	2		2					2	29
Current Month	1									30
Total Productive Wells	xxx	2		2					137	31
										32
Total Productive Wells January 1st	xxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx		33
January 1st to End of Preceding Month	xxx									34
Current Month										35
Total Productive Wells	xxx									36
										37
Total Productive Wells January 1st	xxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx		38
January 1st to End of Preceding Month	xxx									39
Current Month										40
Total Productive Wells	xxx									41
										42
Total Productive Wells January 1st	xxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx		43
January 1st to End of Preceding Month	xxx									44
Current Month										45
										46
Total Productive Wells	xxx									47
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	

Number and Title of Account		Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
Undistributed Intangible Fixed Capital						1
						2
200	Organization	116 291 98	*1 119 12		115 172 86	3
203	Miscellaneous Intangible Capital	97 991 71	*33 563 99		64 427 72	4
						5
						6
						7
						8
						9
Production System Property						10
205	Production System Land	299 00			299 00	11
208	Production System Leaseholds	*1 755 852 39	27 291 72	17 366 80	1 765 777 31*	12
211	Gas Wells	2 616 722 65	61 238 92	5 112 49	2 672 849 08	13
218	Other Production System Structures	46 426 96	1 709 11	338 92	47 797 15	14
230	Drilling and Cleaning Equipment	20 762 31	*70 88		20 691 46	15
231	Other Production System Equipment	399 08	427 08		826 16	16
209	Production System Rights of Way	561 67	868 96		1 430 63	17
214	Field Measuring Station Structures	1 831 56	1 086 48	6 83	2 911 21	18
228	Gathering Lines	53 520 94	38 563 04	793 22	91 290 76	19
229	Field Measuring Station Equipment	12 087 93	5 527 09	482 87	17 132 15	20
						21
						22
	*Operated $1 017 993 19					23
	Unoperated 747 784 12					24
						25
						26
						27
						28
						29
						30
						31
Transmission System Property						32
235	Transmission System Land	117 014 44	1 644 71	471 53	118 187 62	33
237	Transmission System Rights of Way	1 178 559 98	17 165 17	11 828 26	1 183 896 89	34
238	Compressor Station Structures	1 181 411 39	196 613 98	12 836 50	1 365 188 87	35
239	Transmission Measuring Station Structures	67 680 13	5 939 67	1 303 08	72 316 72	36
240	Other Transmission System Structures	359 500 13	94 327 87	444 65	453 383 35	37
241	Compressor Station Equipment	7 973 458 74	784 598 76	17 749 05	8 740 308 45	38
242	Transmission Measuring Station Equipment	516 872 53	32 782 80	18 066 26	531 589 07	39
243	Transmission Mains	46 481 152 36	372 011 21	297 546 92	46 555 616 65	40
244	Other Transmission System Equipment	12 117 41	619 70	2 839 29	9 897 82	41
244-1	Cathodic Protection Equipment	39 776 44	767 14	4 062 09	36 481 49	42
						43
						44
						45
						46
	Amount Carried Forward	62 650 291 76	1 608 429 42	391 248 76	63 867 472 42	47
		(A)	(B)	(C)	(D)	

*Indicates red figures.

Detail Of Property, Plant And Equipment Gas

Panhandle Eastern Pipe Line Company And Subsidiary Companies

For Period Ended December 31, 1941

[fol. 15890]

Number and Title of Account	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
					1
Undistributed Intangible Fixed Capital					2
200 Organization					3
203 Miscellaneous Intangible Capital					4
					5
					6
					7
					8
					9
Production System Property					10
205 Production System Land					11
208 Production System Leaseholds					12
211 Gas Wells					13
218 Other Production System Structures					14
230 Drilling and Cleaning Equipment					15
231 Other Production System Equipment					16
					17
					18
					19
					20
					21
					22
					23
					24
					25
					26
					27
					28
					29
					30
					31
Transmission System Property					32
235 Transmission System Land	1 688 34			1 688 34	33
237 Transmission System Rights of Way	158 252 74	12 328 10	63 09	170 517 75	34
238 Compressor Station Structures					35
239 Transmission Measuring Station Structures	7 572 24	3 475 32		11 047 56	36
240 Other Transmission System Structures	6 283 64			6 283 64	37
241 Compressor Station Equipment					38
242 Transmission Measuring Station Equipment	116 153 83	13 774 78	503 85	129 424 76	39
243 Transmission Mains	2 450 885 08	107 125 81	518 03	2 557 492 86	40
244 Other Transmission System Equipment					41
					42
					43
					44
					45
					46
Amount Carried Forward	2 740 835 87	136 704 01	1 084 97	2 876 454 91	47
	(A)	(B)	(C)	(D)	

[fol. 15891]

Number and Title of Account	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
Amount Brought Forward	59 874 772 78	1 506 408 52	390 163 79	60 991 017 51	1
Distribution System Property					2
252 Distribution System Rights of Way					3
254 District Regulator Structures					4
255 Other Distribution System Structures					5
256 Gas Receivers and District Regulators					6
257 Distribution Mains					7
258 Services					8
259 Meters					9
260 Meter Installations					10
261 House Regulators					11
262 Other Distribution System Equipment					12
					13
					14
General Property					15
271 Other General Land					16
274 General Office Structures					17
276 General Office Equipment	78 480 47	10 627 33	4 014 70	85 093 10	18
278 General Shop Equipment					19
280 General Garage Equipment	108 097 47	98 325 03	80 403 64	126 018 86	20
281 General Laboratory Equipment	6 550 71			6 550 71	21
282 General Communication Equipment	369 365 07	1 771 91	76 18	371 060 80	22
283 General Tools and Implements	27 711 56	15 747 12	758 80	42 699 88	23
284 Other General Equipment		2 097 05		2 097 05	24
					25
				633 460 40	26
Undistributed Construction Expenditures					27
290 Engineering and Superintendence During Construction					28
291 Law Expenditures During Construction					29
292 Injuries and Damages During Construction					30
293 Interest During Construction					31
294 Taxes During Construction					32
295 Miscellaneous Construction Expenditures					33
					34
					35
Other Undistributed Fixed Capital					36
298 Cost of Fixed Capital Purchased					37
299 Undistributed Fixed Capital	19 730 34			19 730 34	38
					39
					40
Total Property, Plant And Equipment—Gas	60 484 708 40	1 634 916 96	475 417 11	61 644 208 25	41
					42
Construction Work in Progress	673 905 08	1 994 523 95		2 668 429 03	43
Gas Sales and Purchase Contracts	1 465 143 40		293 028 60	1 172 114 80*	44
Other Gas Sales and Purchase Contracts	372 006 38	20 004 99	39 114 09	352 897 28	45
					46
Total Property, Plant And Equipment—Gas	62 995 763 26	3 649 445 90	807 559 80	65 837 649 36	47
	(A)	(B)	(C)	(D)	

*Balance after Amortization Reserve ($1,758,171.60)

Number and Title of Account	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
Amount Brought Forward	2 740 835 87	136 704 01	1 084 97	2 876 454 91	1
Distribution System Property					2
252 Distribution System Rights of Way					3
254 District Regulator Structures					4
255 Other Distribution System Structures					5
256 Gas Receivers and District Regulators					6
257 Distribution Mains					7
258 Services					8
259 Meters					9
260 Meter Installations					10
261 House Regulators					11
262 Other Distribution System Equipment					12
					13
					14
General Property					15
271 Other General Land					16
274 General Office Structures					17
276 General Office Equipment	877 23	153 58	30 00	1 000 81	18
278 General Shop Equipment					19
280 General Garage Equipment					20
281 General Laboratory Equipment					21
282 General Communication Equipment					22
283 General Tools and Implements					23
284 Other General Equipment					24
					25
					26
Undistributed Construction Expenditures					27
290 Engineering and Superintendence During Construction					28
291 Law Expenditures During Construction					29
292 Injuries and Damages During Construction					30
293 Interest During Construction					31
294 Taxes During Construction					32
295 Miscellaneous Construction Expenditures					33
					34
					35
Other Undistributed Fixed Capital					36
298 Cost of Fixed Capital Purchased					37
299 Undistributed Fixed Capital					38
					39
					40
Total Property, Plant And Equipment—Gas	2 741 713 10	136 857 59	1 114 97	2 877 455 72	41
					42
Construction Work in Progress	14 907 04	215 757 33		230 664 37	43
					44
					45
					46
Total Property, Plant And Equipment—Gas	2 756 620 14	352 614 92	1 114 97	3 108 120 09	47
	(A)	(B)	(C)	(D)	

Number and Title of Account	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
Amount Brought Forward	62 650 291 76	1 608 429 42	391 248 76	63 867 472 42	1
Distribution System Property					2
252 Distribution System Rights of Way	634 44	*634 44			3
254 District Regulator Structures	1 033 32	*1 033 32			4
255 Other Distribution System Structures	965 79	*965 79			5
256 Gas Receivers and District Regulators	7 976 42	*7 976 42			6
257 Distribution Mains	315 171 01	*315 171 01			7
258 Services	51 003 90	*51 003 90			8
259 Meters	56 777 98	*56 777 98			9
260 Meter Installations	5 102 59	*5 102 59			10
261 House Regulators	16 113 72	*16 113 72			11
262 Other Distribution System Equipment	476 36	*476 36			12
					13
					14
General Property					15
271 Other General Land					16
274 General Office Structures					17
276 General Office Equipment	80 018 95	10 119 66	4 044 70	86 093 91	18
278 General Shop Equipment					19
280 General Garage Equipment	108 097 47	98 325 03	80 403 64	126 018 86	20
281 General Laboratory Equipment	6 619 88	*69 17		6 550 71	21
282 General Communication Equipment	369 365 07	1 711 91	76 18	371 000 80	22
283 General Tools and Implements	32 591 73	10 866 95	758 80	42 699 88	23
284 Other General Equipment	101 86	1 995 19		2 097 05	24
					25
					26
Undistributed Construction Expenditures					27
290 Engineering and Superintendence During Construction					28
291 Law Expenditures During Construction					29
292 Injuries and Damages During Construction					30
293 Interest During Construction					31
294 Taxes During Construction					32
295 Miscellaneous Construction Expenditures					33
					34
					35
Other Undistributed Fixed Capital					36
298 Cost of Fixed Capital Purchased					37
299 Undistributed Fixed Capital	19 730 34			19 730 34	38
					39
					40
Total Property, Plant And Equipment—Gas	63 722 072 59	1 276 123 46	476 532 08	64 521 663 97	41
					42
Construction Work in Progress	688 812 12	2 210 281 28		2 899 093 40	43
Gas Sales and Purchase Contracts	1 465 143 40		293 028 60	1 172 114 80*	44
Other Gas Sales and Purchase Contracts	372 006 38	20 004 99	39 114 09	352 897 28	45
					46
Total Property, Plant And Equipment—Gas	66 248 034 49	3 506 409 73	808 674 77	68 945 769 45	47
Balance after Amortization of Reserve ($1,758,171.60)	(A)	(B)	(C)	(D)	

Detail Of
Property, Plant And Equipment
Gas

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

For Period Ended December 1941 32

*Indicates red figures.

[fol. 15894]

Number and Title of Account	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
					1
Undistributed Intangible Fixed Capital					2
703 Miscellaneous Intangible Capital					3
					4
					5
					6
Production System Property					7
725 Extraction Plant Land	3 812 98			3 812 98	8
727 Extraction Plant Structures	53 956 05	63 71		54 019 76	9
729 Extraction Plant Equipment	547 624 30	45 844 20		593 468 50	10
730 Extraction Plant Storage Tanks	45 631 13			45 631 13	11
734 Other Gasoline Production System Equipment	7 330 81			7 330 81	12
					13
					14
					15
					16
					17
					18
Undistributed Construction Expenditures					19
790 Engineering and Superintendence During Construction					20
793 Interest During Construction					21
794 Taxes During Construction					22
795 Miscellaneous Construction Expenditures					23
					24
					25
					26
Total Property, Plant And Equipment—Gasoline	658 355 27	45 907 91		704 263 18	27
					28
					29
					30
					31
Construction Work In Progress					32
					33
					34
					35
					36
					37
					38
					39
					40
					41
					42
					43
					44
(Includes Investment in Dehydration Facilities)					45
					46
Total Property, Plant And Equipment—Gasoline	658 355 27	45 907 91		704 263 18	47
	(A)	(B)	(C)	(D)	

[fol. 15895]

Number and Title of Account	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period
Undistributed Intangible Fixed Capital				
200 Organization	115 172 86	—		115 172 86
203 Miscellaneous Intangible Capital	64 427 72			64 427 72
Production System Property				
205 Production System Land	200 00			200 00
208 Production System Leaseholds	[illegible]	[illegible]	[illegible]	[illegible]
211 Gas Wells	[illegible]	[illegible]	[illegible]	[illegible]
218 Other Production System Structures	[illegible]	[illegible]	[illegible]	[illegible]
220 Dwelling and Cleaning Equipment	[illegible]	[illegible]	[illegible]	[illegible]
221 Other Production System Equipment	[illegible]	[illegible]	[illegible]	[illegible]
209 Production System Rights of Way	[illegible]	[illegible]	[illegible]	[illegible]
214 Field Measuring Station Structures	[illegible]	[illegible]	[illegible]	[illegible]
228 Gathering Lines	[illegible]	[illegible]	[illegible]	[illegible]
229 Field Measuring Station Equipment	[illegible]	[illegible]	[illegible]	[illegible]
Operated	[illegible]			
Unoperated	[illegible]			
Transmission System Property				
235 Transmission System Land	[illegible]	[illegible]	[illegible]	[illegible]
237 Transmission System Rights of Way	[illegible]	[illegible]	[illegible]	[illegible]
238 Compressor Station Structures	[illegible]	[illegible]	[illegible]	[illegible]
239 Transmission Measuring Station Structures	[illegible]	[illegible]	[illegible]	[illegible]
240 Other Transmission System Structures	[illegible]	[illegible]	[illegible]	[illegible]
241 Compressor Station Equipment	[illegible]	[illegible]	[illegible]	[illegible]
242 Transmission Measuring Station Equipment	[illegible]	[illegible]	[illegible]	[illegible]
243 Transmission Mains	[illegible]	[illegible]	[illegible]	[illegible]
244 Other Transmission System Equipment	[illegible]	[illegible]	[illegible]	[illegible]
244.1 Cathodic Protection Equipment	[illegible]	[illegible]	[illegible]	[illegible]
Accounts Carried Elsewhere	[illegible]	[illegible]	[illegible]	[illegible]

Number and Title of Account	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period
Undistributed Intangible Fixed Capital				
200 Organization	10 018 14			10 018 14
203 Miscellaneous Intangible Capital				
Production System Property				
205 Production System Land				
208 Production System Leaseholds				
211 Gas Wells	3 842 02		731 72	3 110 30
218 Other Production System Structures				
230 Drilling and Cleaning Equipment				
231 Other Production System Equipment				
209 Production System Rights of Way	182 58	137 84		320 42
214 Field Measuring Station Structures	418 30	282 63	6 83	694 10
228 Gathering Lines	14 549 61	9 719 09	485 35	23 783 35
229 Field Measuring Station Equipment	5 172 09	2 517 86	415 78	7 274 17
Transmission System Property				
235 Transmission System Land	1 490 75			1 490 75
237 Transmission System Rights of Way	13 670 42	439 09	478 76	13 630 75
238 Compressor Station Structures	349 38			349 38
239 Transmission Measuring Station Structures	4 129 55	490 57	224 15	4 395 97
240 Other Transmission System Structures	5 688 14	497 72		6 185 86
241 Compressor Station Equipment	125 971 72	71 99		126 043 71
242 Transmission Measuring Station Equipment	46 443 61	4 381 75	5 538 35	45 287 01
243 Transmission Mains	1 665 085 38	24 242 68	51 110 63	1 638 217 43
244 Other Transmission System Equipment	196 80			196 80
Amount Carried Forward	1 897 208 49	42 781 22	58 991 57	1 880 998 14
	(A)	(B)	(C)	(D)

[fol. 15897]

Number and Title of Account	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
Amount Brought Forward	1 897 208 49	42 781 22	58 991 57	1 880 998 14	1
Distribution System Property					2
252 Distribution System Rights of Way					3
254 District Regulator Structures					4
255 Other Distribution System Structures					5
256 Gas Receivers and District Regulators					6
257 Distribution Mains					7
258 Services					8
259 Meters					9
260 Meter Installations					10
261 House Regulators					11
262 Other Distribution System Equipment					12
					13
					14
General Property					15
271 Other General Land					16
274 General Office Structures					17
276 General Office Equipment					18
278 General Shop Equipment					19
280 General Garage Equipment	502 58	+502 58			20
281 General Laboratory Equipment	2 242 34			2 242 34	21
282 General Communication Equipment					22
283 General Tools and Implements					23
284 Other General Equipment					24
					25
					26
Undistributed Construction Expenditures					27
290 Engineering and Superintendence During Construction					28
291 Law Expenditures During Construction					29
292 Injuries and Damages During Construction					30
293 Interest During Construction					31
294 Taxes During Construction					32
295 Miscellaneous Construction Expenditures					33
					34
					35
Other Undistributed Fixed Capital					36
298 Cost of Fixed Capital Purchased					37
299 Undistributed Fixed Capital	19 730 34			19 730 34	38
					39
					40
Total Property, Plant and Equipment—Gas	1 919 683 75	42 278 64	58 991 57	1 902 970 82	41
					42
Construction Work in Progress					43
					44
					45
					46
Total Property, Plant And Equipment—Gas					47
	(A)	(B)	(C)	(D)	

Detail Of
Property, Plant And Equipment
Gas

Panhandle Eastern Pipe Line Company For Period Ended December 1941 32
Supplemental Information—Other Leaseholds, Well Lines, Compressors, Etc. (Local Area)

+Indicates red figures.

[fol. 15898]

Number and Title of Account	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
					1
Undistributed Intangible Fixed Capital					2
703 Miscellaneous Intangible Capital					3
					4
					5
					6
Production System Property					7
725 Extraction Plant Land	3 812 98			3 812 98	8
727 Extraction Plant Structures	53 956 05	63 71		54 019 76	9
729 Extraction Plant Equipment	547 624 30	45 844 20		593 468 50	10
730 Extraction Plant Storage Tanks	45 631 13			45 631 13	11
7[illegible] Other Gasoline Production System Equipment	7 330 81			7 330 81	12
					13
					14
					15
					16
					17
					18
Undistributed Construction Expenditures					19
790 Engineering and Superintendence During Construction					20
793 Interest During Construction					21
794 Taxes During Construction					22
795 Miscellaneous Construction Expenditures					23
					24
					25
					26
Total Property, Plant And Equipment—Gasoline	658 355 27	45 907 91		704 263 18	27
					28
					29
					30
					31
Construction Work In Progress					32
					33
					34
					35
					36
					37
					38
					39
					40
					41
					42
					43
					44
(Includes Investment in Dehydration Facilities)					45
					46
Total Property, Plant And Equipment—Gasoline	658 355 27	45 907 91		704 263 18	47
	(A)	(B)	(C)	(D)	

Detail Of
Property, Plant And Equipment
Gasoline

Panhandle Eastern Pipe Line Company

For Period Ended December 1941 33

[fol. 15899] (Exhibit 209.)

Panhandle Eastern Pipe Line Company

Sixty-One Broadway

New York

March 30, 1936

Detroit City Gas Company,
415 Clifford Street,
Detroit, Michigan.

Dear Sirs:

In order to carry out the Gas Contract between us dated August 31, 1935, we have made arrangements whereby Michigan Gas Transmission Corporation, a subsidiary of Columbia Gas & Electric Corporation, has agreed to construct, own and operate a pipe line extending from the eastern terminus of our existing pipe line adjacent to the Illinois-Indiana state line, to the Place of Delivery specified in said Gas Contract.

There is enclosed for your information a copy of a Gas Contract dated March 17, 1936 between the undersigned and Michigan Gas Transmission Corporation, pursuant to which Michigan Gas Transmission Corporation is to receive from us at the southern end of its pipe line and to deliver to you at the northern end thereof the natural gas which we have agreed to sell to you pursuant to our Gas Contract dated August 31, 1935.

In order to facilitate operations under said Contracts Michigan Gas Transmission Corporation will give to you on our behalf all notices, statements and other communications which we are required or permitted to give to you under said Gas Contract dated August 31, 1935, and you are hereby authorized and requested to give to Michigan Gas Transmission Corporation all notices, statements and other communications which you are required or permitted to give to us thereunder.

You are also authorized and requested to make directly to Michigan Gas Transmission Corporation the payments for monthly deliveries of gas pursuant to Section 1 of Ar-

ticle IX of said Gas Contract, subject to the reservation of our right to revoke the authority of Michigan Gas Transmission Corporation to receive payments directly from you, as provided in Section 2 of Article IX of our Gas Contract with Michigan Gas Transmission Corporation dated March 17, 1936.

Will you kindly acknowledge receipt of this notification and advise us that the foregoing provisions relative to [fol. 15900] your dealing directly with Michigan Gas Transmission Corporation are agreeable to you, by signing the confirmation at the foot of the enclosed copy of this letter and returning said copy to the undersigned.

Yours very truly,

PANHANDLE EASTERN PIPE LINE COMPANY,

By Leith V. Watkins, Secretary.

We hereby acknowledge receipt of the foregoing notification and it is agreeable to us to deal directly with Michigan Gas Transmission Corporation as requested, subject to the reservation of our right to revoke this acceptance at any time.

DETROIT CITY GAS COMPANY,

By Wm. G. Woolfolk, President.

[fol. 15901]

(Exhibit 210.)

Index Numbers Of Wholesale Prices Of

Commodities By Groups

(1926 = 100)

Groups	Aug. 1939	Aug. 1940	Dec. 1940	Mar. 1941	Sept. 20 1941	Mar. 21 1942	Increase Aug. 1939 to Mar. 21, 1942
All Commodities	75.0	77.4	80.6	81.5	91.5	97.2	29.6
Farm Products	61.0	65.6	69.7	71.6	91.2	103.1	69.0
Foods	67.2	70.1	73.5	75.2	88.5	95.5	42.1
Hides	92.7	96.9	102.3	102.6	111.7	116.6	25.8
Textile Products	67.8	72.3	74.8	78.4	89.2	95.9	41.4
Fuel and Lighting	72.6	71.1	71.7	72.0	80.0	78.2	7.7
Metals and Metal Products	93.2	94.9	97.6	97.7	98.7	103.7	11.3
Building Materials	89.6	93.3	99.3	99.5	106.2	110.4	23.2
Chemicals and Allied Products	74.2	76.7	77.7	79.8	87.8	97.1	30.9
House Furnishings	85.6	88.5	88.9	89.5	98.0	104.1	21.6
Miscellaneous	73.3	76.7	77.3	77.6	85.0	89.7	22.4

Source: United States Department of Labor, Bureau of Labor Statistics.

[fol. 15902] (Exhibit 211.)

U. S. Department of Labor
Bureau of Labor Statistics
Washington

For Immediate Release
March 26, 1942
(LS 42-844)

Wholesale Prices for Week Ended March 21, 1942

Prices for commodities in primary markets edged fractionally higher during the week ended March 21, largely because of advances in quotations for grains and livestock. The Bureau of Labor Statistics' comprehensive index of nearly 900 price series rose 0.1 percent to the highest point since the Autumn of 1928. At 97.2 percent of the 1926 level the index shows a gain of 0.7 percent over the corresponding week of February and is 19 percent above a year ago.

The index for the farm products group advanced 0.8 percent; miscellaneous commodities, 0.3 percent; and hides and leather products and building materials, 0.2 per cent. With lower quotations for fruits and vegetables and for pork, food prices declined 0.3 percent on the average during the week.

Marked increases in prices for livestock, except hogs, together with higher quotations for most grains and for cotton and tobacco brought average prices for farm products in primary markets to the highest level since October 1929. Quotations were lower for barley, rye, and hogs. In the past month, farm product prices have risen 1.2 percent and are nearly 43 percent higher than at this time last year.

A sharp decline for bananas together with lower prices for oranges, eggs, flour and for potatoes, cheese and pork in the Chicago market accounted for the slight decrease in average prices for foods. Higher prices were reported for butter, corn cereals, rice, apples, lemons sweet potatoes, onions, canned corn and beans, for cured beef, mutton and for peanut butter. Notwithstanding the decline, food prices in primary markets are 0.7 percent higher than

for the corresponding week of February. Average prices for cattle feed advanced 4.8 percent during the week.

Minor increases were reported in prices for shoes, luggage and for goatskins. Gasoline quotations in the Mid-continent area continued to drop.

The increase in building materials resulted from higher prices for brick, linseed oil and for maple flooring, red cedar shingles, yellow pine boards and certain types of spruce and white pine lumber. Prices were lower for most types of yellow pine lumber and for turpentine and rosin.

The following tables show (1) index numbers for the principal groups of commodities for the past 3 weeks, for February 21, 1942 and March 22, 1941 and the percentage changes from a week ago, a month ago, and a year ago (2) percentage changes in subgroup indexes from March 14 to March 21, 1942.

Wholesale Prices For Week Ended March 21, 1942
(1926 = 100)

Commodity groups	Mar. 21 1942	Mar. 14 1942	Mar. 7 1942	Feb. 21 1942	Mar. 22 1941	Percentage changes to March 21, 1942 from — Mar. 14 1942	Feb. 21 1942	Mar. 22 1941
All Commodities	97.2	97.1	96.9	96.5	81.6	†0.1	†0.7	†19.1
Farm products	103.1	102.3	101.5	101.9	72.3	†0.8	†1.2	†42.6
Foods	95.5	95.8	95.8	94.8	75.6	−0.3	†0.7	†26.3
Hides and leather products	116.6	116.4	116.4	116.1	103.3	†0.2	†0.4	†12.9
Textile products	95.9	95.9	95.1	93.7	78.2	0	†2.3	†22.6
Fuel and lighting materials	78.2	78.2	78.5	78.5	72.5	0	−0.4	†7.9
Metals and metal products	103.7	103.7	103.7	103.6	97.8	0	†0.1	†6.0
Building materials	110.4	110.2	109.9	109.7	99.5	†0.2	†0.6	†11.0
Chemicals and allied products	97.1	97.1	97.1	96.9	80.0	0	†0.2	†21.4
Housefurnishing goods	104.1	104.1	104.1	104.1	90.9	0	0	†14.5
Miscellaneous commodities	89.7	89.4	89.2	89.1	77.5	†0.3	†0.7	†15.7
Raw materials	97.6	97.4	97.1	97.2	75.6	†0.2	†0.4	†29.1
Semimanufactured articles	92.2	92.1	92.0	91.9	83.6	†0.1	†0.8	†10.3
Manufactured products	97.9	97.9	97.7	97.1	84.5	0	†0.8	†15.9
All commodities other than farm products	95.9	95.9	95.9	95.3	83.7	0	†0.6	†14.6
All commodities other than farm products and foods	95.3	95.2	95.1	94.8	85.1	†0.1	†0.5	†12.0

Percentage Changes In Subgroup Indexes From March 14, 1942 To March 21, 1942

Increases

Cattle Feed	4.8	Other building materials	0.2
Livestock and poultry	1.2	Shoes	0.1
Grains	1.0	Leather	0.1
Hides and skins	0.6	Other leather products	0.1
Other farm products	0.3	Hosiery and underwear	0.1
Cotton goods	0.2	Brick and tile	0.1
Lumber	0.2	Paint and paint materials	0.1
Mixed fertilizer	0.1		

Decreases

Fruits and vegetables	1.9	Other foods	0.6
Petroleum products	0.7	Dairy products	0.2
Bituminous coal	0.1		

[fol. 15904]

(Exhibit 212.)

U. S. Department of Labor

3135)

Bureau Of Labor Statistics
Washington

Index Numbers Of Wholesale Prices Of All Commodities
By Months, 1890 To 1940
(1926 = 100)

Years	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1890	54 7	54 8	55 0	55 1	55 6	55 4	55 7	57 8	58 4	58 1	57 1	56 6	56 2
1891	56 1	56 6	57 8	58 2	57 5	55 8	55 5	55 4	54 8	54 6	54 3	53 8	55 8
1892	52 7	52 4	51 6	50 5	50 8	50 7	51 9	52 4	52 5	53 0	54 0	55 0	52 2
1893	56 6	57 2	56 2	55 6	55 0	53 2	51 9	50 3	52 0	52 9	51 2	50 4	53 4
1894	49 6	48 6	47 5	47 3	47 0	47 2	47 5	48 3	49 6	48 2	47 9	47 5	47 9
1895	47 2	46 9	47 2	49 6	50 1	50 4	50 0	49 5	49 0	49 4	49 0	48 3	48 8
1896	48 0	47 5	46 9	46 7	46 0	45 5	45 1	45 1	45 3	46 6	48 1	47 6	46 5
1897	46 7	46 3	46 3	45 8	45 5	45 0	45 3	47 1	48 5	48 1	47 9	48 1	46 6
1898	48 0	48 6	48 8	48 9	51 8	48 3	48 0	48 0	47 8	47 7	48 0	48 3	48 5
1899	48 9	49 7	49 8	50 6	50 7	51 3	51 9	53 0	54 6	55 4	55 8	56 7	52 2
1900	57 0	57 3	57 3	57 2	56 1	55 5	55 8	55 7	56 1	55 3	55 4	55 1	56 1
1901	55 2	54 7	54 5	54 4	54 1	54 1	54 5	55 4	56 1	56 1	56 6	57 7	55 3
1902	56 8	56 7	56 5	57 4	58 3	58 8	59 1	58 0	58 7	63 2	60 7	61 5	58 9
1903	62 6	62 0	60 3	60 0	59 0	59 0	58 6	58 8	59 5	58 7	58 3	58 2	59 6
1904	59 7	60 7	60 5	59 3	58 5	58 4	58 5	59 2	59 8	59 9	60 7	61 1	59 7
1905	60 6	61 0	60 3	60 4	59 3	59 3	59 4	60 1	59 6	59 9	60 1	61 0	60 1
1906	61 1	60 8	60 6	61 1	61 3	61 3	59 7	61 2	61 7	62 8	63 6	64 3	61 8
1907	64 0	64 9	64 3	64 5	65 6	66 1	66 1	66 1	66 5	66 9	64 6	63 2	65 2
1908	62 3	61 4	61 8	62 2	62 2	62 6	63 1	63 0	63 3	63 5	64 1	64 8	62 9
1909	64 6	64 9	65 2	66 2	67 3	67 8	67 9	68 2	68 9	70 2	70 9	71 6	67 6
1910	71 1	71 3	72 9	73 2	72 0	71 0	71 0	70 8	69 9	67 9	66 4	66 6	70 4
1911	66 1	64 1	64 7	63 3	63 0	63 0	63 9	65 5	66 1	66 2	65 9	65 3	64 9
1912	66 0	66 7	67 5	69 7	70 0	69 0	68 9	69 7	70 5	70 8	70 2	70 1	69 1
1913	70 3	69 8	69 9	69 7	68 9	69 0	69 5	69 7	70 6	70 4	70 1	69 1	69 8
1914	68 6	68 3	68 0	67 6	67 4	67 4	67 3	69 6	70 2	68 0	67 5	67 3	68 1
1915	68 1	68 6	68 2	68 7	69 0	68 3	69 3	68 6	68 3	70 2	71 7	74 0	69 5
1916	77 0	78 5	80 4	81 7	82 5	82 9	83 4	85 1	86 9	91 1	97 4	99 2	85 5
1917	102 1	104 5	107 7	114 1	120 7	122 0	123 0	124 8	123 5	122 2	122 8	122 9	117 5
1918	125 0	122 7	126 4	128 3	128 1	129 0	132 0	134 3	137 5	136 3	136 3	136 3	131 3
1919	134 4	129 8	131 3	133 0	135 3	135 6	141 1	144 3	141 1	141 6	144 5	150 5	138 6
1920	157 7	157 1	158 6	165 5	167 2	166 5	165 8	161 4	155 2	144 2	133 4	120 7	154 4
1921	114 0	104 9	102 4	98 9	96 2	93 4	93 4	93 5	93 4	94 1	94 2	92 9	97 6
1922	91 4	92 9	92 8	93 2	96 1	96 3	99 4	98 6	99 3	99 6	100 5	100 7	96 7
1923	102 0	103 3	104 5	103 9	101 9	100 3	98 4	97 8	99 7	99 4	98 4	98 1	100 6
1924	99 6	99 7	98 5	97 3	95 9	94 9	95 6	97 0	97 1	98 2	99 1	101 5	98 1
1925	102 9	104 0	104 2	101 9	101 6	103 0	104 3	103 9	103 4	103 6	104 5	103 4	103 5
1926	103 2	102 0	100 6	100 3	100 5	100 4	99 5	99 1	99 7	99 4	98 4	97 9	100 0
1927	96 5	95 8	94 7	94 1	94 2	94 1	94 3	95 2	96 3	96 6	96 3	96 4	95 4
1928	96 4	95 8	95 5	96 6	97 5	96 7	97 4	97 6	98 6	96 7	95 8	95 8	96 7
1929	95 9	95 4	96 1	95 5	94 7	95 2	96 5	96 3	96 1	95 1	93 5	93 3	95 3
1930	92 5	91 4	90 2	90 0	88 8	86 8	84 1	84 3	84 4	83 0	81 3	79 6	86 4
1931	78 2	76 8	76 0	74 8	73 2	72 1	72 0	72 1	71 2	70 3	70 2	68 6	73 0
1932	67 3	66 3	66 0	65 5	64 4	63 9	64 5	65 2	65 3	64 4	63 9	62 6	64 8
1933	61 0	59 8	60 2	60 4	62 7	65 0	68 9	69 5	70 8	71 2	71 1	70 8	65 9
1934	72 2	73 6	73 7	73 3	73 7	74 6	74 8	76 4	77 6	76 5	76 5	76 9	74 9
1935	78 8	79 5	79 4	80 1	80 2	79 8	79 4	80 5	80 7	80 5	80 6	80 9	80 0
1936	80 6	80 6	79 6	79 7	78 6	79 2	80 5	81 6	81 6	81 5	82 4	84 2	80 8

[fol. 15905] (Exhibit 213.)

Average Hourly Earnings And Average Actual Hours Per Week Per Wage Earner In 25 Manufacturing Industries 1914-1942

Date	Average Hourly Earnings	Average Actual Hours per Week per Wage Earner
1914, July	$ .247	51.5
1920		
June	.603	49.4
July	.602	49.5
August	.606	49.3
September	.611	48.7
October	.611	48.3
November	.608	46.4
December	.601	45.8
Average*	.606	48.2
1921		
January	.581	44.2
February	.566	44.2
March	.553	45.0
April	.545	44.7
May	.533	44.5
June	.526	44.6
July	.512	45.2
August	.507	45.8
September	.499	46.0
October	.492	47.7
November	.490	47.1
December	.486	47.6
Average	.524	45.6
1922		
July	.478	48.0
August	.483	48.7
September	.495	49.0
October	.500	49.6
November	.502	49.7
December	.505	49.9
Average**	.494	49.2
1923		
January	.503	50.0
February	.508	49.7
March	.512	50.1
April	.530	50.2

May	.548	49.9
June	.549	49.5
July	.548	49.2
August	.551	48.8
September	.560	48.0

*Average of 7 months.
**Average of 6 months.

[fol. 15906]

Date	Average Hourly Earnings	Average Actual Hours per Week per Wage Earner
1923 (continued)		
October	$ .561	48.5
November	.560	48.2
December	.561	48.2
Average	.511	49.2
1924		
January	.559	48.2
February	.561	48.2
March	.562	47.6
April	.562	47.7
May	.562	46.6
June	.558	45.7
July	.561	45.0
August	.560	45.5
September	.567	46.4
October	.563	47.5
November	.564	46.9
December	.563	48.0
Average	.562	46.9
1925		
January	.560	48.5
February	.559	48.5
March	.562	48.6
April	.564	48.1
May	.564	48.0
June	.562	47.4
July	.559	47.4
August	.559	47.6
September	.560	48.4
October	.562	48.4
November	.560	48.6
December	.562	49.0
Average	.561	48.2

1926		
January	.559	48.4
February	.562	49.0
March	.565	48.8
April	.566	48.1
May	.568	47.9
June	.570	47.9
July	.568	47.5
August	.568	47.5
September	.573	48.5
October	.573	48.7
November	.575	47.6
December	.572	47.7
Average	.568	48.1
1927		
January	.571	48.1
February	.575	48.4

[fol. 15907]

Date	Average Hourly Earnings	Average Actual Hours per Week per Wage Earner
1927 (continued)		
March	$.573	48.3
April	.576	47.9
May	.577	48.2
June	.578	47.7
July	.577	47.0
August	.578	47.6
September	.580	47.7
October	.580	47.4
November	.575	47.1
December	.575	47.3
Average	.576	47.7
1928		
January	.573	48.0
February	.573	48.4
March	.577	48.2
April	.579	47.4
May	.578	47.7
June	.578	48.0
July	.577	47.6
August	.580	47.9
September	.585	48.3
October	.588	47.9
November	.581	47.7
December	.580	48.0
Average	.579	47.9

1929		
January	585	48.6
February	587	49.1
March	586	49.0
April	590	48.8
May	592	48.6
June	590	48.4
July	587	48.4
August	590	48.3
September	594	48.8
October	593	49.3
November	592	46.2
December	590	46.6
Average	590	48.3
1930		
January	592	46.2
February	592	46.7
March	592	45.9
April	595	45.8
May	591	44.9
June	590	44.5
July	590	42.9
August	591	42.4
September	589	42.4

[fol. 15908]

Date	Average Hourly Earnings	Average Actual Hours per Week per Wage Earner
1930 (continued)		
October	$ .585	42.6
November	.582	41.0
December	.579	41.4
Average	.589	43.9
1931		
January	.578	40.2
February	.573	42.3
March	.574	42.3
April	.574	41.9
May	.571	42.8
June	.567	41.3
July	.564	40.1
August	.568	39.7
September	.562	39.4
October	.554	38.1
November	.541	37.8
December	.540	38.4
Average	.564	40.4

1932		
January	540	35.9
February	527	37.7
March	522	36.1
April	513	34.2
May	508	33.7
June	495	32.8
July	490	31.9
August	486	32.1
September	480	35.2
October	474	36.5
November	469	36.5
December	467	35.1
Average	498	34.8
1933		
January	466	35.1
February	462	35.6
March	459	32.1
April	460	34.0
May	453	37.6
June	450	41.5
July	456	42.9
August	507	38.2
September	536	36.3
October	542	36.1
November	546	33.8
December	550	33.8
Average	491	36.4
934		
January	552	34.0
February	556	35.6

909]

Date	Average Hourly Earnings	Average Actual Hours per Week per Wage Earner
4 (continued)		
Feb		
April	$ .562	36.4
May	.581	35.8
June	.585	35.4
July	.585	35.5
August	.587	34.1
September	.587	33.5
	.589	33.4

327—12,466

October	591	33 9
November	592	33 7
December	590	35 1
Average	580	34 7

1935

January	591	36 3
February	592	37 2
March	594	36 8
April	597	36 8
May	599	36 0
June	601	36 1
July	601	36 3
August	604	37 0
September	603	37 9
October	602	38 6
November	605	38 5
December	604	38 4
Average	599	37 2

1936

January	610	38 1
February	609	37 8
March	612	38 3
April	615	39 1
May	617	39 0
June	619	39 0
July	618	38 8
August	618	39 8
September	620	40 3
October	620	40 8
November	626	41 1
December	638	41 4
Average	619	39 5

1937

January	639	40 3
February	643	41 3
March	662	41 4
April	692	40 6
May	701	40 2
June	708	39 8
July	712	38 7
August	715	38 5
September	716	37 9

[fol. 15910]

Date	Average Hourly Earnings	Average Actual Hours per Week per Wage Earner
1937 (continued)		
October	$.718	37.4
November	.716	35.2
December	.715	33.6
Average	.695	38.7
1938		
January	.714	32.2
February	.714	33.1
March	.720	33.0
April	.718	32.7
May	.718	32.5
June	.719	32.9
July	.714	33.7
August	.714	35.5
September	.715	36.0
October	.715	36.8
November	.714	36.7
December	.713	36.6
Average	.716	34.3
1939		
January	.713	36.7
February	.713	36.9
March	.716	37.1
April	.718	36.7
May	.719	36.5
June	.722	37.2
July	.721	37.1
August	.720	37.9
September	.722	38.2
October	.724	39.0
November	.727	39.1
December	.730	39.1
Average	.720	37.6
1940		
January	.727	38.7
February	.728	38.0
March	.731	37.7
April	.734	37.6
May	.737	37.5
June	.740	38.0

July	740	38 1
August	741	38 5
September	742	39 0
October	744	38 9
November	747	39 6
December	754	40 1
Average	739	38 6

[fol. 15911]

Date	Average Hourly Earnings	Average Actual Hours per Week per Wage Earner
1941		
January	$ 759	40 2
February	764	41 0
March	769	41 2
April	784	40 7
May	799	41 3
June	818	41 7
July	822	41 0
August	828	41 2
September	845	41 6
October	853	41 7
November	860	41 5
December	868	41 6
1942		
January	882	42 4

Source: National Industrial Conference Board Publications.

1. "Wages, Hours, and Employment in the United States 1914 to 1936" pages 44 to 47 (inclusive) for the month of July, 1914; and June, 1920 to December, 1933.

2. "The Conference Board Economic Record," March, 1940 covering period from January, 1934 to December, 1939; pages 115 and 116.

3. For period January, 1940 and including Jan. 1941 monthly issues of the Economic Record.

4. For period Feb., 1941 to and including January 1942, March 1942 issue of The Conference Board Management Record.

Exhibit 214

AVERAGE HOURLY EARNINGS AND AVERAGE ACTUAL HOURS PER WEEK PER WORKER IN 25 MANUFACTURING INDUSTRIES 1914 to 1942

HOURS PER WEEK

85
80
75
70
65
60
55
50
45
40
35
30
25
20

JULY 1919

JULY 1929

AVERAGE HOURLY EARNINGS

AVERAGE ACTUAL HOURS PER WEEK PER WORKER

SOURCE: NATIONAL INDUSTRIAL CONFERENCE BOARD

1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942

their forces 33 per cent and paid out 30 per cent more in total payrolls. Dry goods and general merchandise stores employed 19 per cent larger forces on payrolls which were 21 per cent higher than in November. Variety and 5 and 10-to-a-dollar stores increased their forces 30 per cent and paid out 25 per cent more in total payrolls. Family clothing stores also reported good gains of 17 per cent in employment and 13 per cent in payrolls. Shoe stores were employing 13 per cent greater forces on pay-

EMPLOYMENT, PAYROLLS AND AVERAGE WEEKLY EARNINGS IN REPRESENTATIVE NEW YORK STATE FACTORIES, 1914-1941

EMPLOYMENT

(Index numbers with average 1925–1927 as 100)

Years	Average for year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1914							101.8	98.2	98.5	97.8	97.0	96.9	98.7
1915	99.0	99.3	98.7	98.8	98.4	98.3	99.3	98.3	97.6	102.9	103.4	107.8	109.5
1916	117.1	111.4	123.8	118.1	117.0	114.8	115.8	114.7	116.4	119.3	120.3	123.8	124.0
1917	122.1	122.7	123.3	123.0	122.1	122.2	120.7	120.1	118.1	120.2	122.6	123.6	124.0
1918	124.1	123.4	125.3	125.5	125.2	124.8	125.2	127.2	126.6	124.2	118.5	122.4	121.4
1919	115.8	115.3	114.9	113.2	113.2	113.1	111.8	114.7	117.1	118.3	118.6	119.8	124.0
1920	120.1	120.8	124.8	127.6	126.9	124.0	123.5	122.8	120.4	118.8	116.6	110.3	108.2
1921	98.9	94.4	96.2	97.1	98.2	98.3	91.4	89.8	89.7	92.1	96.4	96.3	96.3
1922	101.0	98.8	98.7	97.9	98.6	97.4	99.0	99.0	101.2	103.4	103.7	109.1	110.8
1923	111.9	110.7	112.0	114.6	114.3	112.3	112.3	111.4	110.4	110.9	112.4	110.7	109.4
1924	102.0	103.1	102.2	102.6	103.0	101.7	99.9	98.1	95.2	98.9	100.1	100.1	100.9
1925	101.2	102.4	102.2	102.3	101.3	100.0	99.3	98.2	98.5	101.1	102.1	103.7	104.3
1926	101.4	102.4	104.1	104.4	103.0	100.8	100.4	98.0	98.8	101.2	102.3	101.0	100.0
1927	97.3	98.2	99.3	99.9	98.5	97.1	98.8	98.2	98.9	97.9	98.0	98.1	94.4
1928	98.4	98.4	98.4	98.8	98.7	97.9	98.0	97.7	98.1	99.9	100.4	98.1	94.3
1929	97.9	94.8	97.4	99.2	98.7	97.9	98.0	97.7	98.1	99.9	100.4	98.1	94.3
1930	88.0	92.1	91.6	91.4	89.9	89.3	88.7	88.4	83.7	84.6	83.2	80.6	77.5
1931	73.4	75.4	76.6	77.8	77.2	78.6	73.4	71.9	71.5	73.6	71.3	68.8	67.7
1932	68.2	65.6	65.0	64.6	62.2	67.6	65.6	62.4	64.3	67.8	69.5	68.9	67.1
1933	61.8	65.3	68.3	65.7	65.3	67.1	69.5	62.1	65.7	69.6	69.6	67.4	68.3
1934	70.8	65.8	69.6	72.2	73.2	73.1	71.1	69.7	70.4	71.4	72.0	70.9	71.1
1935	74.4	70.6	73.1	74.3	74.8	73.7	72.5	72.1	73.8	76.8	77.8	76.9	76.3
1936	79.0	76.3	78.3	77.3	77.5	77.6	76.9	77.5	79.5	83.3	86.7	84.8	85.5
1937	88.1	86.5	87.3	89.7	89.5	89.6	89.4	88.3	89.9	91.4	89.8	85.1	81.6
1938	77.0	76.9	77.7	77.4	75.6	72.9	71.7	72.3	76.5	80.3	82.5	80.3	81.3
1939	84.5	80.9	81.9	82.7	82.0	80.4	80.9	80.6	84.0	87.8	90.9	91.6	91.6
1940	98.7	89.9	91.1	91.8	89.6	88.7	88.9	89.6	93.3	97.5	99.7	101.0	105.6
1941	117.5	103.5	107.2	110.1	112.0	113.8	115.9	118.4	122.8	126.4	126.9	126.4	126.8

PAYROLLS

(Index numbers with average 1925–1927 as 100)

1914							44.4	42.3	40.2	42.1	41.2	40.4	40.7
1915	44.7	40.8	41.4	42.2	42.1	43.5	44.0	43.8	43.9	45.7	47.6	50.3	51.3
1916	55.6	52.3	54.3	55.7	57.4	56.6	57.8	56.1	58.2	61.4	63.3	64.8	66.7
1917	69.3	65.0	65.4	66.4	66.1	68.1	67.8	67.3	67.3	70.7	73.6	75.8	76.1
1918	67.4	71.9	76.7	82.0	82.4	88.1	88.7	91.8	91.6	96.0	91.9	91.8	97.5
1919	94.6	90.1	87.2	87.2	86.7	88.4	87.3	91.8	96.8	101.8	98.7	105.3	113.1
1920	117.1	115.3	113.8	123.2	121.2	122.2	123.1	121.3	119.7	118.3	116.9	109.7	100.4
1921	83.7	90.3	89.2	90.8	88.4	83.6	81.5	78.6	79.0	80.9	81.1	80.3	80.3
1922	87.8	79.4	81.0	83.4	80.9	83.1	85.5	85.0	88.1	92.1	94.7	96.8	101.3
1923	105.6	100.6	100.4	106.9	107.0	108.4	108.3	106.4	103.8	105.4	108.0	106.1	106.1
1924	97.9	104.2	104.5	108.9	101.8	97.1	93.3	89.2	90.4	96.1	95.5	98.0	98.8
1925	99.2	98.4	99.0	101.8	97.1	97.3	98.1	95.2	96.2	99.2	102.0	103.0	103.0
1926	102.0	104.2	103.2	105.1	102.9	100.2	100.8	97.8	98.8	102.7	104.1	102.0	102.2
1927	98.8	100.4	101.3	103.1	99.6	98.1	97.9	95.5	97.4	100.3	99.4	95.8	96.8
1928	95.4	98.6	96.4	96.4	92.4	92.8	94.0	92.1	94.0	97.1	99.3	98.6	99.6
1929	101.7	97.6	101.3	104.4	102.9	101.9	101.9	100.9	102.3	105.5	104.7	100.4	97.1
1930	85.6	94.7	93.2	94.4	91.4	88.7	88.7	82.1	81.6	84.5	80.4	76.3	73.7
1931	67.1	70.4	72.6	73.1	72.9	70.4	68.7	65.5	65.0	66.5	62.3	59.4	57.8
1932	58.5	54.6	53.9	53.8	50.1	44.9	42.6	39.4	41.1	44.9	46.4	44.2	42.6
1933	46.5	40.5	40.7	38.4	40.1	42.4	45.1	47.9	51.0	55.0	54.1	51.8	51.3
1934	56.7	51.8	54.7	58.3	59.0	58.2	57.0	55.7	56.9	57.3	57.2	56.1	58.0
1935	62.6	58.3	60.9	63.1	62.9	61.2	60.2	59.5	62.5	65.9	66.3	64.3	65.9
1936	69.7	64.5	66.5	67.2	66.4	66.6	66.4	67.5	71.1	72.4	75.3	75.2	79.3
1937	83.3	78.8	81.1	86.1	86.5	86.4	86.4	84.8	87.2	88.5	84.5	78.7	74.3
1938	70.0	69.0	70.7	70.7	67.5	64.4	63.7	64.9	70.0	75.3	75.0	72.9	73.8
1939	80.1	74.4	76.8	79.4	78.4	74.4	75.9	73.8	80.2	82.7	87.7	88.0	89.6
1940	92.4	83.5	87.0	89.5	85.3	85.4	88.7	87.6	92.8	98.2	100.5	101.5	108.2
1941	135.5	108.2	113.6	119.2	122.6	129.0	134.2	137.5	146.4	152.6	151.6	151.0	157.4

AVERAGE WEEKLY EARNINGS

(Includes all employees in both office and shop)

1914							$12.70	$12.54	$12.53	$12.48	$12.26	$12.22	$12.69
1915	$12.85	$12.44	$12.41	$12.66	$12.54	$12.74	12.81	12.68	12.89	12.86	13.30	13.45	13.49
1916	14.43	13.53	13.77	13.86	14.15	14.24	14.41	14.11	14.44	14.87	14.95	15.16	15.51
1917	16.37	15.28	15.31	15.79	15.50	16.08	16.30	16.17	16.44	16.97*	17.33	17.69	17.71
1918	20.35	18.81	17.88	18.71	19.25	19.91	20.44	20.78	21.23	22.31	22.34	21.80	23.18
1919	23.80	23.08	22.07	22.20	22.11	22.23	22.51	23.10	23.85	24.83	24.41	25.37	26.22
1920	28.15	26.82	26.47	27.67	27.80	28.45	28.77	28.49	28.71	28.72	28.03	28.70	28.38
1921	25.72	27.61	26.77	26.97	26.20	25.88	25.71	25.25	25.43	25.07	24.53	24.33	24.91
1922	25.04	24.43	24.17	24.57	24.15	24.80	24.91	24.77	25.10	25.71	25.61	26.04	26.89
1923	27.24	26.21	25.87	26.92	27.00	27.63	27.87	27.84	27.12	27.41	27.72	27.84	27.98
1924	27.68	27.81	27.73	28.16	27.70	27.86	27.21	27.08	27.40	28.05	27.53	27.86	28.25
1925	28.26	28.20	27.96	28.45	27.67	28.07	27.94	27.98	28.10	28.32	28.57	28.67	29.05
1926	29.02	29.06	28.61	29.04	28.85	28.69	28.99	28.81	28.88	29.31	29.25	29.15	29.47
1927	29.20	29.53	29.20	29.78	29.17	29.18	29.17	28.96	29.20	29.57	29.28	29.75	29.67
1928	29.44	29.21	29.16	29.64	29.79	29.19	29.43	29.15	29.38	29.72	29.78	29.82	30.12
1929	29.99	29.71	29.99	30.35	30.07	30.02	30.02	29.80	30.09	30.47	30.08	29.84	29.75
1930	28.81	29.80	29.48	29.90	29.44	29.10	28.96	28.80	28.59	28.94	28.03	27.43	27.83
1931	26.42	27.01	27.44	27.96	27.35	26.96	26.24	26.29	26.22	26.16	25.34	24.89	24.76
1932	22.73	24.35	24.68	24.14	23.28	22.69	22.20	21.83	21.69	22.80	22.55	21.74	21.62
1933	21.82	20.96	20.95	20.72	21.62	21.69	21.86	22.34	22.48	22.67	22.69	22.28	22.48
1934	22.19	22.79	22.78	23.89	23.34	23.28	23.24	23.12	23.43	23.24	23.02	22.92	23.62
1935	24.38	23.92	24.11	24.62	24.38	24.65	24.64	23.98	24.52	24.68	24.68	24.24	25.02
1936	25.34	24.82	24.80	25.21	24.82	24.88	25.01	25.25	25.79	25.19	25.75	25.68	26.84
1937	27.36	26.69	26.90	27.78	27.97	27.92	28.00	27.41	28.00	27.41	27.24	26.12	26.36
1938	26.39	25.98	26.35	26.48	25.88	25.68	25.71	25.99	26.80	27.16	26.88	26.27	26.90
1939	27.38	26.82	27.08	27.65	26.84	26.62	27.06	27.09	27.82	27.16	27.80	27.72	28.19
1940	28.40	27.74	27.84	28.11	27.44	27.77	28.18	28.18	28.67	29.11	29.08	28.94	30.09
1941	33.07	30.14	30.86	31.20	31.45	32.08	33.39	33.46	34.35	34.81	34.43	34.43	35.78

Note.—The average weekly earnings are obtained by dividing the total weekly payroll by the total number of employees on the payroll for the given week. Reports cover the week including the fifteenth of the month.

[fol. 15914]

(Exhibit 216.)

Indexes of Wholesale Prices And Cost of Living For Certain Months, 1913 to 1942

(1935 to 1939 = 100)

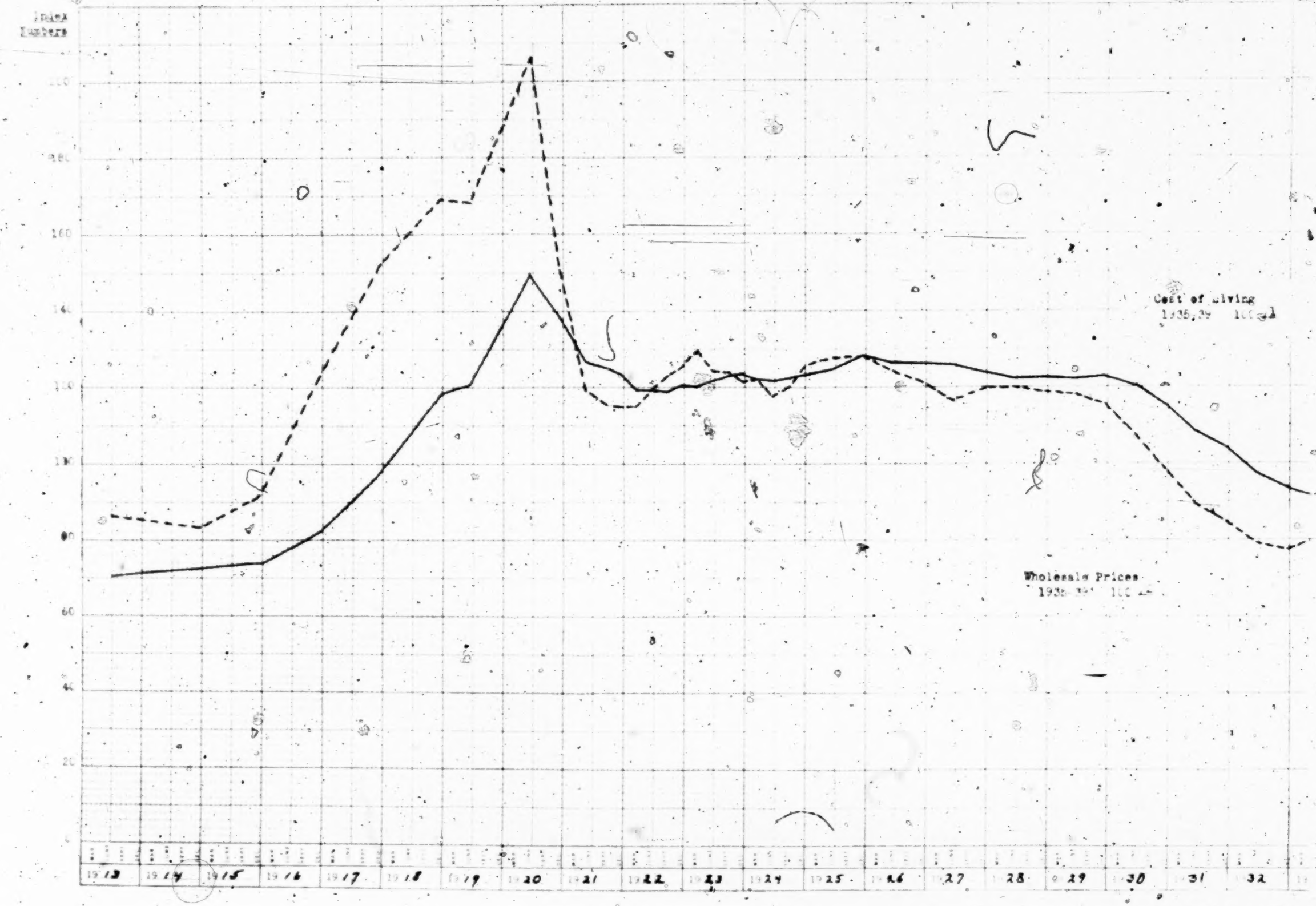
Date	Cost of Living	Wholesale Prices*
1913 — Average	70.7	86.5
1914 — Dec.	72.6	83.5
1915 — Dec.	74.0	91.7
1916 — Dec.	82.4	122.9
1917 — Dec.	97.8	152.3
1918 — Dec.	118.0	168.9
1919 — June	121.0	168.0
Dec.	135.3	186.5
1920 — June	149.4	206.3
Dec.	138.3	149.6
1921 — May	126.6	119.2
Sept.	125.3	115.7
Dec.	123.6	115.1
1922 — March	119.3	115.0
June	119.5	119.3
Sept.	118.7	123.0
Dec.	120.4	124.8
1923 — March	120.2	129.5
June	121.6	124.3
Sept.	123.1	123.5
Dec.	123.5	121.6
1924 — March	122.0	122.1
June	121.8	117.6
Sept.	122.2	120.3
Dec.	123.2	125.8
1925 — June	124.9	127.6
Dec.	128.2	128.1
1926 — June	126.4	124.4
Dec.	126.1	121.3
1927 — June	125.7	116.6
Dec.	123.8	119.5
1928 — June	122.1	119.8
Dec.	122.4	118.7
1929 — June	122.1	118.0
Dec.	122.8	115.6
1930 — June	120.3	107.6
Dec.	115.3	98.6
1931 — June	108.2	89.3
Dec.	104.2	85.0
1932 — June	97.9	79.2
Dec.	93.5	77.6

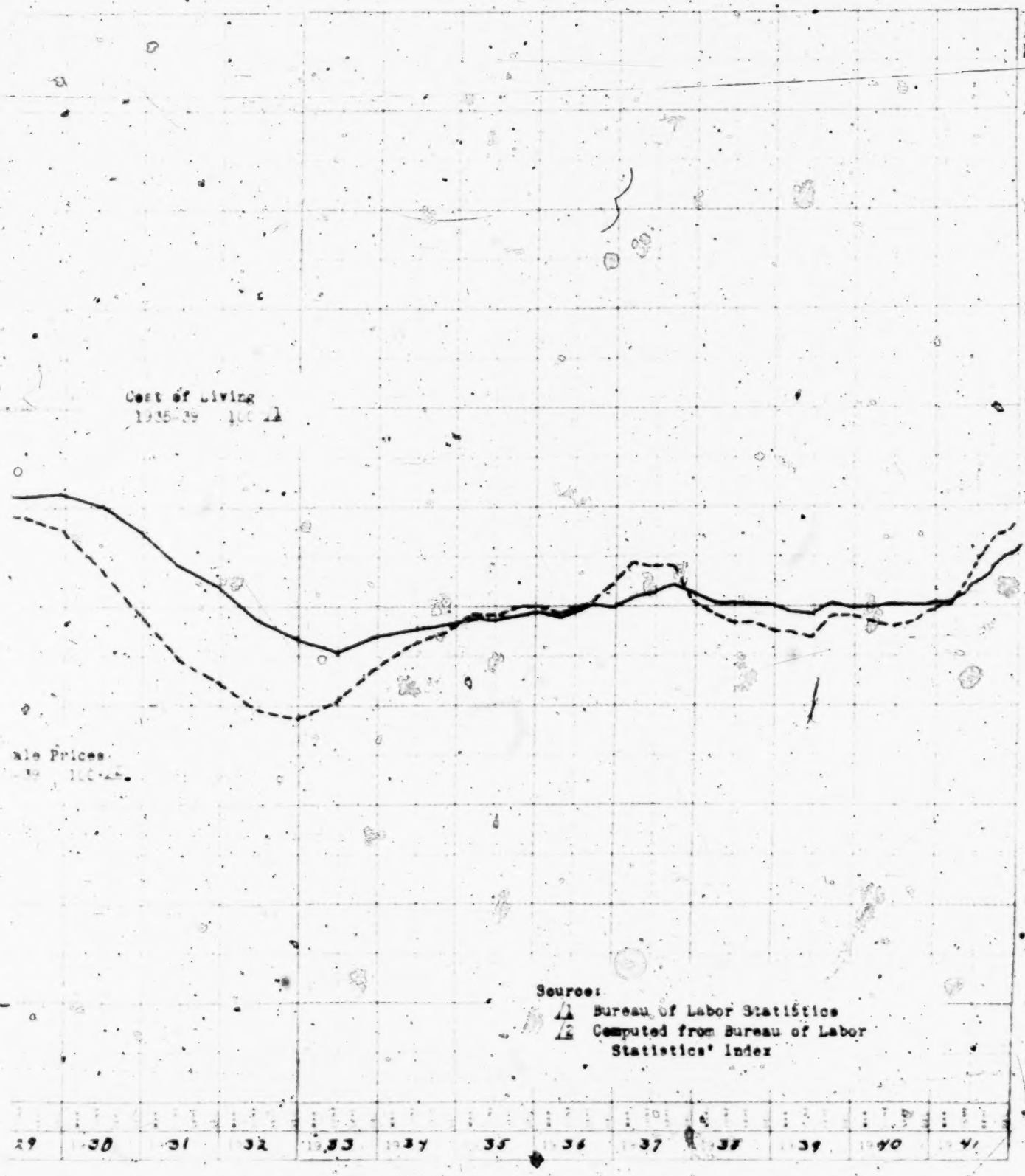
1933 — June		90.8	80.5
	Dec.	93.9	87.7
[fol. 15915]	1934 — June	95.3	92.4
	Nov.	96.2	94.8
1935 — March		97.8	98.4
	July	97.6	98.4
	Oct.	98.0	99.8
1936 — Jan.		98.8	99.9
	April	97.8	98.8
	July	99.4	99.8
	Sept.	100.4	101.1
	Dec.	99.8	104.3
1937 — March		101.8	108.8
	June	102.8	108.1
	Sept.	104.3	108.3
	Dec.	103.0	101.2
1938 — March		100.9	98.8
	June	100.9	97.0
	Sept.	100.7	97.0
	Dec.	100.2	95.4
1939 — March		99.1	95.0
	June	98.6	93.7
	Sept.	100.6	98.0
	Dec.	99.6	98.1
1940 — March		99.8	97.1
	June	100.5	96.0
	Sept.	100.4	96.7
	Oct.	100.2	97.5
	Nov.	100.1	98.6
	Dec.	100.7	99.1
1941 — Jan.		100.8	100.1
	Feb.	100.8	99.9
	March	101.2	101.0
	April	102.2	103.1
	May	102.9	105.2
	June	104.6	107.9
	July	105.3	110.0
	Aug.	106.2	111.9
	Sept.	108.1	113.9
	Oct.	109.3	114.6
	Nov.	110.2	114.9
	Dec.	110.5	116.2
1942 — Jan.		111.9	

Source: Bureau of Labor Statistics.

Note: *Computed from Bureau of Labor Statistics Indexes.

Exhibit 217


Index Numbers
160
140
120
100
80
60
40
20
0
Cost of Living
1935,39 100=1
Wholesale Prices
1913 100=1
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932


Index Numbers
Cost of Living
1935-39 100
ale Prices
Source:
1 Bureau of Labor Statistics
2 Computed from Bureau of Labor Statistics' Index
29
30
31
32
33
34
35
36
37
38
39
40
41

[fol. 15917] (Exhibit 218.)

Testimony of Mr. Joe D. Creveling Before the Securities and Exchange Commission on November 29, 1941, In the Matter of Columbia Gas & Electric Corporation, et al., File No. 59-33, etc.

[fol. 15917-a) Before the Securities and Exchange Commission.

In the Matter of
Columbia Gas & Electric Corporation, et al.
File No. 59-33 etc.

Hearing Room 1102
Securities and Exchange Commission Building,
Washington, D. C.
Saturday, November 29, 1941.

Met, pursuant to adjournment, at 10 o'clock a. m.

Before:
James G. Ewell, Examiner.

Appearances:

Ambrose Selig, William R. Nowlin and Sidney Willner, Appearing for the Securities and Exchange Commission.

William H. Button, James B. Alley and Charles R. Lowther, Appearing for Columbia Oil & Gasoline Corporation.

Wayne Johnson, Jr., Edward S. Pinney, William Wemple, and Frederick S. Beebe, of Cravath, DeGersdorff, Swaine, & Wood, Appearing for Columbia Gas & Electric Corp., Michigan Gas Transmission Corporation, and Indiana Gas Distribution Corporation.

Robert J. Bulkley, Arthur Logan, and Russell Hardy, and Richard B. Hand, 111 Broadway, New York, Appearing for Missouri-Kansas Pipe Line Company.

Edwin N. Goodwin and William L. Glenn, appearing for Panhandle Eastern Pipe Line Company.

[fol. 15918] The Examiner: It may be so marked.

(Commission's Exhibit A-8 was marked for identification.)

Mr. Laylin: May I have the same opportunity Mr. Alley has?

The Examiner: Yes.

Mr. Selig: May I call Mr. Creveling to the stand for the purpose of cross-examination.

Mr. Goodwin: Mr. Examiner, it was agreed on the record, I believe yesterday, that these proceedings were closed except for cross-examination of the witnesses that had testified in connection with the Panhandle Eastern financial program.

Mr. Creveling was not one of those witnesses, but he was produced here today, and I would just like to have it made clear that Mr. Creveling's testimony is to relate only to Panhandle Eastern's financial program.

Mr. Selig: That is the only testimony I hope to elicit from Mr. Creveling.

Whereupon, JOE D. CREVELING, a witness previously called on behalf of Applicant, and duly sworn, resumed the stand and testified further as follows:

Cross-Examination.

By Mr. Selig:

Q. Mr. Creveling, what is the estimated gas reserves [fol. 15919] of the Amarillo and Hugoton fields from which Panhandle Eastern derives its gas?

A. I do not know.

Q. Isn't it a fact that it is stated in this application that the gas reserves are estimated, as an estimated life of 25 years?

A. That, Mr. Selig—I may have misunderstood your former question. If you mean the estimate of the reserves under the acreage owned or controlled by Panhandle Eastern, that I do know.

Q. Yes. What is that?

A. That is the Amarillo field, in round figures, 700,000,000,000 cubic feet and in the Hugoton field, 1,700,000,000,000-one trillion, seven hundred billion cubic feet, or a total of about two and one-half trillion cubic feet of recoverable reserves.

Q. Is that known and unknown portions of the field?

A. That is under our acreage which we consider that we definitely can estimate reserves as existing.

Q. And what is the estimated life of that field?

A. That I do not know because that depends entirely on the rate of withdrawals.

Q. What would you estimate the life of that reserve under present rates of withdrawal?

A. The present rate of withdrawal of the Panhandle [fol. 15920] Eastern Pipe Line Company from that area, meaning the two fields, is approximately 62 billion; that is for 1941. For 1942 it will be higher than that, and might easily be assumed over a reasonable period of time to be 80 billion cubic feet. If you will divide two and one-half trillion—we are getting into big figures here, but, of course, seeing the national debt, we are getting more or less used to it—if you divide two and one-half trillion by an estimated requirement of 80 billion for the market's present and prospective of Panhandle Eastern, you would get a life of something around thirty years, maybe a little over.

Q. Now, in the application filed here in Panhandle Eastern financing, it is stated that the estimated life is 25 years.

A. That is correct. I believe that statement, made by independent geologists, as well as by our own, is that it is at least 25 years.

Q. At least 25 years?

A. Yes.

Q. Now, in arriving at that estimate, did you consider the factor of competition as sucking out the gas from the common reserve?

A. We did.

Q. In considering that factor there is a competitive condition there as between the company drawing from [fol. 15921] that common reserve, isn't that so?

A. That is theoretically correct, but is more practically correct in the Amarillo today than in the Hugoton areas.

Q. That factor is so variable, depending upon how much each company which draws from that common reserve draws out of it, isn't that correct?

A. Our acreage and our wells are so located that all we are estimating in taking from under that acreage, is the gas in place there at the present time. We believe that acreage is so blocked and located that if any drainage were to happen the flow would be towards our acreage rather than away from it.

Q. Outside of the Amarillo field and the Hugoton field, have you any other reserve?

A. That depends on your definition of the Hugoton field, Mr. Selig.

Q. Well, what is your definition of the Hugoton field?

A. We are now using as a definition of the Hugoton field, not only that part of the producing area in Kansas, but also in the Oklahoma Panhandle, and extending over into Hansford County, Texas, but to date not joined with the Amarillo field, which is entirely in Texas.

Q. And that adjoining is unproven today?

[fol. 15922] A. No, it is proven. We believe that that is all a part of a common reservoir, therefore we are now calling it the Hugoton area, while probably it should have been named something else in order to keep from confusion as to the original Hugoton field, which was in southwestern Kansas. The answer to your question is except in those two areas we have no other sizeable reserve at this time.

Q. Are you acquiring any new acreage?

A. We are.

Q. And will you tell us approximately where you are acquiring that acreage?

A. We are acquiring that acreage entirely in the Hugoton area.

Q. What effect will that have upon reserve?

A. That will increase the reserves.

Q. Is it estimated approximately how much that will tend to increase?

A. No, that has not been done because that policy was really only started in the past few months.

Q. Now, considering the factors—

A. I do not want to be misunderstood on that. We have been rearranging and reblocking our acreage for many

years. As a matter of fact, when I went with the company in 1936, we had under lease about 195,000 acres and under purchase contract for the life of commercial production [fol. 15923] about 23,000 acres. As of June 30, of this year, we had under lease about 250,000 acres and something over 72,000 acres under purchase contracts.

We had until we began to interpret it in terms of reserve requirements the effect of the present defense program, considered that we were in very good shape for all times to come. We still think we are in good shape, but when we saw what that was doing to our market requirements we started gradually building up this acreage and we are carrying on that program at this time.

Q. Are you contemplating a new line into Michigan?

A. I presume you are referring to some construction work now in progress to serve distribution systems owned largely by the Consumers Power Company. If you are, that is in process of construction now.

Q. And in the sale of gas to those two customers how will that affect the reserves?

A. The volume required to serve that market is included in the figures I have given you.

Q. Mr. Creveling, you said that you are purchasing contracts or other portions of property for the purpose of strengthening your reserve?

A. That is right.

Q. Could you tell us to what extent, or what limitations there are in purchasing those properties to increase [fol. 15924] your reserve?

A. That is rather a difficult question to answer, Mr. Selig.

We are strengthening our reserves in more than one way. Not only are we acquiring some additional acreage which has not yet obtained the position of being subject to any great drilling programs, and we are also blocking acreage by trading as well as by acquisition, in order to have satisfactory drillings in the Hugoton field.

We have a program, I think, in our budget, as I recall the figure as $40,000, and probably will have some such an

item in our 1942 budget, although of course that has not been before the Board for approval, and we will keep acquiring acreage and blocking acreage as our business judgment indicates we should.

Q. And that is in the same Hugoton area?

A. That is correct, but it is getting away from that part of it in which the production, major part of the production is now coming.

Q. And could you tell us what limitations there would be in acquiring this extra acreage?

A. I could give you my thought on that matter. My thought is that we should acquire property, as much as 25 or 30 thousand acres of additional reserve within the next couple of years.

[fol. 15925] Q. Well, is there any limitation upon your opportunity to acquire that amount of acreage?

A. That is the reason, one of the reasons why we are doing it at this time, one, because the acreage is available now to the greatest extent anyone could figure we would need additional reserve, and, second, it is not in demand today by other existing or potential projects, and therefore it can be acquired on a more favorable basis.

Q. Mr. Creveling, if it would be your program to get a reserve to last for that 25 years, say for 35 years, would you be able to get it in that field?

A. I have no hesitancy at all in stating that it is my best judgment that we could, if you will accept my definition of the Hugoton area.

Q. Well, will you describe the limitations, boundaries of the Hugoton area?

A. If I had a map I could show you. Roughly it includes all southwestern Kansas, the Oklahoma Panhandle, particularly Texas County, and Sherman and Hansford Counties, Texas.

Mr. Selig: Off the record, for the time being.

(Short discussion off the record.)

Mr. Selig: On the record.

The Witness: A. The general Hugoton area includes the counties of southwestern Kansas, and in addition [fol. 15926] Texas County, Oklahoma, and parts of Sher-

man and Hansford Counties of Texas; and with that definition of the Hugoton area it is my judgment that if I were assigned the problem of obtaining additional gas reserves to meet the present indicated requirements of this company for 30 or 35 years, it could be done on a favorable and economical basis.

By Mr. Selig:

Q. It is my understanding, Mr. Creveling, that you have a construction program in the next five years that will require an expenditure of approximately $40,000,000 and in that construction program you would draw upon your gas reserves?

A. That is correct.

Q. Will you please state on the record just what effect that will have upon gas reserves?

A. First, I would like to say, Mr. Selig, that such construction program is only one that the management continues to develop looking forward to its future requirements and its ability to meet its public obligation.

In the figures I have already given you as to probable market requirements of the future, in addition to what they have been and are now, that construction program has been given full weight.

To be more specific I indicated our present market requirements were about 62 billion cubic feet per year. That [fol. 15927] will go to seventy, will then go to eighty, and possibly a little above eighty billion cubic feet per year, and the ultimate amount of that probable requirement is determined by this construction program.

Q. In other words, the construction program is taken into consideration in estimating the life of gas reserve?

A. That is correct.

Q. And in estimating that gas reserve, you are increasing it by virtue of the fact that you are going to have a big construction program?

A. That is exactly correct.

Q. Now, when there is an estimate made on the life of gas reserve, there are many variable factors, such as the competition sucking out gas from a common reservoir. Under such circumstances, isn't it a fact that it is impos-

sible to make a scientific estimate of the life of the gas reserve?

A. I do not know how exact science is. All things are approximations. Probably the best they can be is scientific guesses.

Q. Because of these probabilities that come into the estimate, is that correct?

A. Yes.

Now, we have to do some crystal gazing, if you please, as to what is going to happen along lines over which we do [fol. 15928] not have complete control, such as the probable takes of others out of the common pool, as you term it, and we have given what we think is proper weight to the effect of takes from this common pool on the reserve under our acreage, and that controlled through purchase contracts in arriving at this judgment figure.

Q. Do you know how many other companies are drawing from this common pool?

A. I probably could name all the large ones, if you would like to have them in the record.

Q. Approximately, you do not have to name them.

A. Well, there are four or five major pipe line companies out of the Amarillo area, and only one other large one at the present time that I recall out of the Hugoton area.

Q. And how about the Amarillo field?

A. There are four or five out of the Amarillo area.

Q. Are these companies comparable in size to Panhandle Eastern?

A. I should say that Panhandle Eastern is as large on requirements as any of them, and larger than some of them.

Q. Now Mr. Creveling, in the event that the source of supply is depleted in the known areas in the Hugoton field, and you would have to seek another source of supply, that [fol. 15929] is, another known source of supply, which probably would be somewhere in Louisiana, or in a place remote from the present Panhandle line, what effect would that have upon the transmission lines from the Texas Panhandle to your important areas?

A. That would all depend on the approximate location of this other source of supply.

Q. I realize that that question has that factor in it, but I want to ask you, taking into consideration the remoteness of the new source of supply and the location of that source of supply.

A. A partial answer to your question, Mr. Selig, I think is this: In case pending before the Federal Power Commission known as Docket G-207, I have the misfortune of being a witness.

Q. I think you are fortunate in being a witness here.

A. In that case we did not consider this theoratical, or this possible failure of the supply in the areas from which we are now taking our reserve of sufficient importance to claim it as a hazard in asking for a more than a fair rate of return on our investment.

Q. And you were not called upon in that case to give an answer to that question?

A. That is correct.

Q. You are more fortunate in this case?

[fol. 15930] A. That, of course, would be a serious proposition from the standpoint of any pipe line company as long as this pipe line company is. We might have to go —well, we would have to go where the supply is or fold up. We might go to the, farther down in Texas, or we might go into the Louisiana area, and get a part or all of our requirements, but I hope that does not happen while I am still president of Panhandle Eastern.

Q. In order to ease your mind on that question, I am going to ask you this: On the present state of facts as known by you, that is a very, very remote contingency?

A. It most definitely is, Mr. Selig. I would say if there were any chance of it being a contingency, I would have claimed it a hazard in the case I just mentioned.

[fol. 15930-a] Mr. Selig: I have no further question. Thank you, Mr. Creveling.

The Examiner: Does anyone else wish to ask the witness any questions?

Mr. Logan: I have one or two questions.

By Mr. Logan:

Q. Mr. Creveling, you were here this morning when Mr. Watkins was on the stand, were you not?

A. Yes, sir.

Q. You heard the questions and answers when he was on the stand?

A. Yes, sir.

Q. You are familiar with the resolution [e] were discussing at that time which was read into the record?

A. Yes, sir.

Q. As President of the Company do you know of any objections which the Company as such could have to a vote being given on the Preferred Stock on a share for share basis equal to the vote on the Common?

A. You mean from the Corporation's standpoint?

Q. Yes?

A. No, sir; I know of none.

Q. In your judgment could the Company, Panhandle Eastern, be hurt in any way by having a vote placed on this new proposed preferred stock?

[fol. 15930-b] A. I know of no way in which the corporation could be hurt.

Q. When you say a vote, you mean a share for share vote, a full vote?

A. That would not be an unreasonable allocation.

Q. If the Securities and Exchange Commission should determine that such a vote should be placed upon this Preferred Stock, and they should make that a term or condition for these securities to secure the exemption you request under 6-B, would you be willing as President and a Director, to recommend that that be done?

A. If I understand your question, it is that the SEC would make that a condition to approval of the financial plan.

Q. Yes?

A. If that were a condition necessary to carry out the project, I would unqualifiedly recommend that it be done.

Mr. Morgan: That is all.

Mr. Selig: That is all.

Mr. Laylin: I have one or two questions.

By Mr. Laylin:

Q. Now, none of your answers, I take it, are to be construed to mean that if the condition is not imposed that you would recommend it?

A. That is correct.

Mr. Laylin: That is all.

[fol. 15930-c] The Examiner: Any other questions?

Mr. Button: May I ask one or two questions?

The Examiner: Yes.

By Mr. Button:

Q. You say that the corporation could not be hurt by this stock having a vote. Couldn't it be hurt if that stock fell into the wrong hands, from a business standpoint?

A. Mr. Button, I answered that question purely from the position I occupy as President of the Corporation, and I trust you will take the answer to only go to that extent.

Q. That is, theoretically you are correct?

A. That is correct.

Q. But practically you might be wrong?

A. That might possibly happen.

Mr. Button: That is all.

The Examiner: Mr. Creveling is excused.

(Witness excused.)

[fol. 15931] (Exhibit 219.)

Panhandle Eastern Pipe Line Company

Gas Sales and Purchase Contracts

Copy of Report by Bureau of Internal Revenue and Related Correspondence

[fol. 15932] #607444

Treasury Department
Internal Revenue Service

St. Louis, Missouri
December 9, 1941

Office of
Internal Revenue Agent in Charge
St. Louis Division

Panhandle Eastern Pipe Line Co.,
1100 Midland Building,
Kansas City, Missouri.

Supplemental Report

In re:
Date of Report:
Year (s) Examined:

Income Tax
November 25, 1941
1936, 1937, 1938, 1939

Gentlemen:

There is enclosed for your information and files a copy of a report covering the examination of your income tax return(s) for the year(s) indicated, recently made by a representative of this office. You have indicated your agreement to the adjustment of tax liability shown in the report.

The item checked below explains briefly how settlement of the agreed tax liability will be accomplished through the office of Collector of Internal Revenue for your district.

Respectfully,

EARL E. WATERS,
Acting Internal Revenue Agent in Charge.

Enclosure:

Form of Acknowledgment.

Report of Examination.

Deficiency: The Collector will present to you at an early date a bill for payment of the tax, together with interest, at which time remittance should be made to that official, provided you have not already paid the full amount due.

(XX) Net Deficiency: After the overassessment(s) have been certified to the Collector by the Commissioner of Internal Revenue, you will be presented with a bill for the amount due, at which time remittance should be made to the Collector.

Net Overassessment: After the overassessment(s) have been certified to the Collector by the Commissioner of Internal Revenue, you will be advised as to how the overassessments have been applied, and will receive a check for the amount due you.

Overassessment: After the overassessment(s) have been certified to the Collector by the Commissioner of Internal Revenue, you will receive a check in payment of the overassessment and interest, provided there are no outstanding taxes against which the amount should be credited.

HCW:MLF

Form 892
(Revised August 1939) GPO 16—11497

[fol. 15933] In re: Panhandle Eastern Pipe Line Co.

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[fol. 15934] #607444

Examining Officer: Wm. R. Morris Date of report: November 25, 1941

Name of taxpayer — Panhandle Eastern Pipe Line Co.

Statement of Total Tax Liability

Year	Tax Previously Assessed	Deficiency	Overassessment	Correct Tax Liability
Income Tax				
*1936	$ 153,419 40	$	$ 3,629 37	$ 149,790 03
1937	-0-	-0-	-0-	-0-
1938	504,991 69	30,014 56		535,006 25
1939	785,116 82	19,481 23		804,598 05
Totals	$1,443,527 91	$ 49,495 79	$ 3,629 37	$1,489,394 33

*In lieu of overassessment of $23,233.91 recommended in Revenue Agent's report dated June 9, 1939.

Year — 1938

Original tax	$468,639 69
Deficiency assessed, 1939	36,352 00
Tax previously assessed	$504,991 69

Preliminary Statement

The principal causes of the change in tax liability are the disallowance of amortization of gas sales and purchase contracts acquired from predecessor company without recoverable basis, adjustment of percentage depletion and disallowance of excess accrual for Texas franchise taxes as allowed in original reports referred to in attached schedules.

The changes were discussed with Leith V. Watkins, Secretary, N. F. Paxton, Assistant Secretary, and Arthur Anderson & Co., Accountants. Form 874 has been executed.

The statements made in the taxpayer's claim for refund for 1936 in the amount of $39,057.17 filed May 7, 1938, have been considered in connection with this redetermination of the tax liability for that year. Its partial allowance in the amount of $3,629.37 in lieu of the $23,233.91 recommended in the original Revenue Agent's report dated June 9, 1939, is now allowable. Accordingly,

the difference, $35,427.80, is recommended for disallowance.

[fol. 15935] In re: Panhandle Eastern Pipe Line Co.

Schedule 1
1936
Adjustments to Net Income

Net income as disclosed by Revenue Agent's report dated 6-9-1939		$ 875,636.61
As corrected		1,006,333.57
Net adjustment as computed below		130,696.96
Unallowable deductions and additional income:		
(a) Amortization of gas sales and purchase contracts disallowed	$119,920.11	
(b) Depletion allowance decreased	10,776.85	
Total		$ 130,696.96
Nontaxable income and additional deductions:		-0-
Net adjustment as above		$ 130,696.96

Schedule 1-A
1936
Explanation of Items

(a) In original Revenue Agent's reports for 1936, 1937, 1938 and 1939, an amortization of the book value of gas purchase and sales contracts computed on a composite life of 20 years was allowed in computing the taxable income subject to approval and verification by the Valuation Section of the Internal Revenue Bureau in Washington. It has since been disclosed that this book value exceeded the taxable basis recoverable by $2,398,402.19, which is the value at which a portion of the contracts were received from the Missouri-Kansas Pipe Line Co. in October, 1930. The latter company at that time owned all the stock of Panhandle Eastern Pipe Line Company, and as provided in Section 113 (a) (8) of the Revenue Act of 1928 the taxpayer has a taxable basis to be recovered the same as in the hands of the transferor. Further investigation discloses that these contracts were acquired for stock from a partnership, Shippey, Maddin and Parish Gas Company, which at that time in 1928 owned all the stock of Missouri-Kansas Pipe Line. It has been also disclosed that the partnership had no cost in acquiring the contracts and reported no taxable profit on the transfer of the contracts to the corporation for stock. See Exhibits B and B (1).

[fol. 15936]

Under the circumstance described the amortization allowed on the book value set up on the contracts received from the Missouri-Kansas Pipe Line Co. in the original report is being eliminated.

Book value of contracts received from Missouri-Kansas Pipe Line Company on October 23, 1930		$2,398,402 19
Amortization allowed at 5% on above amount in original report eliminated	$ 119,920 11	

(b) In the original report percentage depletion was computed and allowed in computing taxable income at 27½% of the gross income limited to 50% of the net income from the properties. The properties were grouped in respect to the three fields in which the gas was produced for this computation.

However, in computing the 50% of the net income from the properties, productive well drilling costs and interest expense applicable to the properties was not deducted. It is now held that these are proper deductions in computing this limitation and this has been done in Exhibit C and results in reducing the allowable depletion by the amount indicated. In this connection see Helvering vs. Wilshire Oil Company, 1939-2 C.B. 213.

In computing interest deductible in arriving at the net income from the property the total interest paid has been allocated to the gas production property on the ration of the book value of such property to the book value of the total assets of the company. On this basis the interest is considered as applying to all property and assets ratably.

[fol. 15937]

Exhibit "A"

Comparison of Values of Assets Transferred to Panhandle Eastern Pipe Line Co. On October 23, 1930, By Missouri-Kansas Pipe Line Co., As Reported by Latter Company As Basis In Computing Loss on Sale In Return For Fiscal Year Ended May 31, 1931, With Values Taken Up On Books of Panhandle Eastern.

	Cost Reported By Missouri-Kansas Pipe Line Co.		Taken Up By Panhandle Eastern		Increase or (Decrease)
Plant and Property	$2,200,356.26		$2,197,475.40		
Construction	217,592.26		220,473.12		
		$2,417,948.52		$2,417,948.52	$ —
Investment in affiliated companies		913,831.42		940,251.05	26,419.63
Inter-company accounts		—		476,513.89	476,513.89
Misc. deferred charges		73,724.50		—	(73,724.50)
Prepaid accounts		3,565.19		3,565.19	—
Material and supplies		46,140.41		46,140.41	—
Liabilities assumed		—		(32,635.62)	(32,635.62)
Sub-Total		$3,455,210.04		$2,851,783.44	$ 396,573.40
Value of gas purchase and sales contracts		926,250.00		2,398,402.19	1,472,152.19
Total		$4,381,460.04		$6,250,185.63	
Total Net Increase					$1,868,725.59

5789

(fol. 15938)

Exhibit "B"

Schedule Showing Sales Of Various Units Of Pipe Line Construction Sold By Shippey, Maddin and Parish Gas Company, a Co-partnership To Missouri-Kansas Pipe Line Company In 1928 Showing Cost And Sale Price Of Each Unit As Included For Tax Purposes In Revenue Agent's Report On Partnership For 1928.

		Cost	Cash Received	Profit Taxed
	Ten inch pipe line	$ 154,462 24	$ 213,965 83	$59,503 59
	Six inch pipe line	154,580 15	238,481 93	83,901 78
	Unit at Paola	21,803 11	27,580 93	5,777 82
	Stillwell compressor station	118,903 55	150,412 99	31,509 44
	Rantoul compressor station	40,148 61	60,000 00	19,851 39
(a)	Missouri-Kansas Pipe Line	413,047 28	630,000 00	216,952 72 (7)
	Additional work on 1st contract Missouri-Kansas Pipe Line Co.	146,512 78	246,536 19	100,023 41
	Totals	$1,049,457 72	$1,566,977 87	
	Total Profit Taxed To Co-Partnership			$517,520 15

(a) As per agreement of May 28, 1928, referred to in resolution of Board of Directors, copy attached.

[fol. 15939] Exhibit "B-1"

Resolution of Board of Directors of Missouri-Kansas Pipe Line Company in re acquisition of pipe line construction and gas purchase and sales contracts from Shippey, Maddin & Parish Gas Company, a co-partnership.

Whereas, C. S. Shippey, S. J. Maddin, and Frank P. Parish, co-partners doing business under the firm name of Shippey, Maddin and Parish Gas Company, have made a written offer to this company dated May 28, 1938, offering to assign transfer and set over to this company as of the close of business on April 30, 1928, all of the pipe lines, gas purchase and gas sales contracts and other property mentioned in said written offer upon the terms and for the consideration therein stated, and,

Whereas, the Board of Directors is of the opinion based upon the engineers report of Brokaw, Garner, Dixon and McKee and from other investigations and study that said properties and contracts and rights and privileges mentioned in said written offer have a fair market value of more than $1,800,000, and that the acceptance of said written offer is advisable and in the best interests of the company, now therefore be it,

Resolved that said written offer of C. S. Shippey, S. J. Maddin and Frank P. Parish, Co-partners doing business under the firm name of Shippey, Maddin and Parish Gas Co., be and the same hereby accepted and the president or vice-president and the secretary be and they are hereby authorized, empowered and directed to do all such things as they deem necessary or desirable for the purpose of carrying out the terms of said written offer into full force and effect and upon the delivery to the company of good and sufficient instruments of conveyance, assignment and transfer setting over to the company the pipe lines and other properties and the gas purchase and gas sales, contracts and other rights and privileges mentioned in said written offer and also upon said C. S. Shippey, S. J. Maddin and Frank P. Parish performing the other terms set forth in said written offer the company shall and hereby does assume the obligations not exceeding $630,000.00 in amount mentioned in said written offer and said officers are authorized and directed to execute and deliver

to said C. S. Shippey, S. J. Maddin and Frank P. Parish or their nominees certificates evidencing 185,000 shares of the fully paid and non-assessable common stock of the company of the par value of $5.00 each, and be it further,

Resolved that the assignment and transfer to the company of said gas purchase and gas sales contracts and other property mentioned in said written offer, and the performance by said C. S. Shippey, S. J. Maddin and Frank P. Parish of the other terms set forth therein be accepted by the company in full payment and satisfaction of the original subscriptions of said persons to 200 shares of the common stock of the company and that said 200 shares of common stock so subscribed be included in the shares of stock issued pursuant to the terms of said written offer.

The president announced that said resolutions had been adopted by the unanimous vote of all of the directors of the company.

[fol. 15940] Panhandle Eastern Pipe Line Company
Ninety Broad Street
New York

November 7, 1941

Mr. N. F. Paxton, Assistant Secretary,
Panhandle Eastern Pipe Line Company,
1221 Baltimore Avenue,
Kansas City, Missouri.

Dear Mr. Paxton:

Federal Income Taxes
Years 1936, 1938 and 1939

It is my understanding that having made the adjustments in taxable net income, suggested in both reports by and conferences with the Internal Revenue Department's examiners, for the items we have satisfied ourselves are proper additions or deductions to the reported net taxable income, as well as for the items with respect to the propriety of which there has been some doubt in our minds, there is involved additional taxes amounting to

$45,866.42, represented by additional assessments of $30,014.56 and $19,481.23 for the years 1938 and 1939, respectively, less an overassessment for the year 1936 to $3,629.37—1937 was a loss year.

As you know, much consideration has been given to the procedural and technical aspects of attempting to prove a depreciable basis of certain assets; that the surrounding direct and indirect circumstances which might possibly be involved in contesting the Government's position have been explored; and that thought has been directed to estimating the net effect on the income taxes for the past and for the income and excess profits taxes for the future by ourselves, the tax representatives of Messrs. Arthur Andersen & Co., and Mr. B. H. Bartholow of the firm of Dunnington, Bartholow & Miller. You are likewise familiar with the fact that all of these matters and questions have been discussed with Messrs. Creveling and Nenner several times.

At the meeting of the Board of Directors held October 30, 1941, I gave a resume of the situation as to the open years during which it was stated that in the light of the circumstances there was an unanimity of opinion by the Company's officers that the Company should forego any further effort of sustaining as proper deductions any item now in dispute, and that in the absence of a contrary view by the Board or of further favorable developments [fol. 15941] the officers would execute whatever forms were required by the Revenue Department agreeing to the imposition of the additional taxes.

There was no contrary view expressed and as further favorable developments now seem most remote, it is requested that you arrange with the Internal Revenue Department's Kansas City office for the presentation for execution of the required forms to accomplish this disposition.

Yours very truly,

LEITH V. WATKINS,
Secretary-Controller.

[fol. 15942] Panhandle Eastern Pipe Line Co. 6th Missouri
1100 Midland Building,
Kansas City, Missouri.

Form 874
Treasury Department
Internal Revenue Service
(Revised August 1937)

(Date Received

Waiver Of Restrictions On Assessment
And Collection Of Deficiency In Tax
And Acceptance Of Overassessment

Pursuant to the provisions of Section 272 (d) of the Revenue Act of 1938 and/or the corresponding provisions of prior Revenue Acts, the restrictions provided in Section 272 (a) of the Revenue Act of 1936, and/or the corresponding provisions of prior Revenue Acts, as amended, are hereby waived and consent is given to the assessment and collection of the following deficiency or deficiencies in tax:

taxable year ended December 31, 1938	income tax in the sum of	$ 30,014.5
taxable year ended December 31, 1939	income tax in the sum of	$ 19,481.2
taxable year ended	excess-profits tax in the sum of	$
taxable year ended	in the sum of	$
amounting to the total sum of		$ 49,495.7

together with interest thereon as provided by law, and the following overassessment or overassessments of tax are accepted as correct:

taxable year ended December 31, 1936	income tax in the sum of	$ 3,629.3
taxable year ended	income tax in the sum of	$
taxable year ended	excess-profits tax in the sum of	$
taxable year ended	in the sum of	$
amounting to the total sum of		$ 3,629.3

Panhandle Eastern Pipe Line Company
(Taxpayer)

Leith V. Watkins
(Taxpayer

(Corporate Seal)

(Address)

Date November 19, 1941 By Secretary-Controller

Note.—The execution and filing of this waiver at the address shown in the accompanying letter will expedite the adjustment of your tax liability as indicated above. It is not, however, a final closing agreement under Section 606 of the Revenue Act of 1928 and does not, therefore, preclude the assertion of a further deficiency in the manner provided by law should it subsequently

be determined that additional tax is due, nor does it extend the statutory period of limitation for refund, assessment, or collection of the tax.

[fol. 15943]

If this waiver is executed with respect to a year for which a Joint Return Of A Husband And Wife was filed, it must be signed by both spouses, except that one spouse may sign as the agent for the other.

Where the taxpayer is a corporation, the waiver shall be signed with the corporate name, followed by the signature and title of such officer or officers of the corporation as are empowered to sign for the corporation, in addition to which the seal of the corporation must be affixed.

2 — 13445 U.S. Government Printing Office

[fol. 15944]

Treasury Department

Washington

April 11, 1940

Office of
Chief Counsel,
Bureau of
Internal Revenue
GC:R:MFK
C1-336576

Panhandle Eastern Pipe Line Company,
300 Fairfax Building,
Kansas City, Mo.

Dear Sirs:

This office has before it for consideration a proposed certificate of overassessment in your favor for the calendar year 1936. A preliminary review of the certificate discloses that the cause of the overassessment is the allowance of additional depreciation. Inasmuch as the information available is inadequate to enable this office to approve the overassessment it is requested that you submit the following data at your earliest possible convenience in order that the matter may be disposed of expeditiously:

1. List of gas purchase contracts and leases acquired at any time up to December 31, 1938, showing for each contract separately.

(a) Date of lease or contract

(b) Name of lessor

(c) Description of property, including acreage and location in township and state

(d) Terms of lease or contract

(e) Duration of contract

(f) Date acquired by your Company

(g) From whom acquired

(h) Consideration paid for lease or contract and to whom. If the consideration paid was not in cash complete description of consideration and manner of arriving at the value thereof should be furnished.

2. List of gas sale contracts acquired at any time up to December 31, 1938, showing for each contract separately

(a) Date of contract

(b) Names and titles of all contracting parties

(c) Duration of contract

(d) Commodity to be sold and territory covered

(e) Terms of contract

(f) Date acquired by your Company

(g) From whom acquired

[fol. 15945] (h) Consideration paid for contract and to whom. If the consideration paid was not in cash complete description of consideration and manner of arriving at the value thereof should be furnished. The information submitted under paragraphs "1" and "2" should cover the entire amount of $3,053,391.53, claimed as the cost of "Gas Sales and Purchase Contracts" as of January 1, 1936 and additional costs in the years 1936, 1937 and 1938.

3. Map showing rights-of-way held as of January 1, 1936 and pipe lines as of the same date, with additions for each of the years 1936, 1937 and 1938. An accompanying schedule should set forth the term of any of these rights-of-way that are for periods of less than 40 years.

4. With regard to each of the following depreciable asset accounts, Nos. 203, 211, 237, 238, 239, 240, 241, 242, 243, 282 and "Gas Sales and Purchase Contracts", statement of the evidence supporting the respective depreciation rates which were claimed in the amended 1936 return.

5. In the cases of depreciable assets sold, scrapped or otherwise disposed of up to December 31, 1936, record by accounts, by years, in dollars, showing:

(a) Total book cost (undepreciated) of assets disposed of

(b) Amounts charged to depreciation reserves as representing losses sustained on basis of difference between depreciated cost and salvage value of assets disposed of, if any.

(c) Amounts charged to depreciation reserves as representing the accumulated depreciation on the particular assets

(d) Amounts charged to profit and loss, if any

The "Registration Statement, under Securities Act of 1933" submitted by you to the Securities and Exchange Commission on February 12, 1937, in connection with the proposed issuance of $24,000,000 Principal amount, First Mortgage and First Lien Bonds, Series A, 4%, due March 1, 1952, contains the following comparison between deductions for depreciation accrued on your books and depreciation deducted in income tax returns:

[fol. 15946]

Period	Depreciation per* Federal Income Tax Returns	Provisions for Retirements and Renewals Charged to Income and Clearing Accounts
Year ended —		
March 31, 1931	$ 77,430 13	$ 65,686 42
March 31, 1932	646,297 16	220,240 26
Nine months ended —		
December 31, 1932	887,779 34	230,166 78
Year ended —		
December 31, 1933	1,185,674 89	446,049 06
December 31, 1934	927,286 30	436,576 84
December 31, 1935	923,829 05	432,964 22

*Exclusive of Depreciation "Gas Sales and Purchase Contracts"

It is requested that you submit a detailed statement by accounts, by years, of the amounts making up the totals of "Provisions for Retirements and Renewals Charged to Income and Clearing Accounts" with detailed explanations as to the reasons for the differences between the amounts thus listed and the amounts deducted in income tax returns. This statement should also include the year 1936.

Very truly yours,

J. P. WENCHEL,
Chief Counsel.

[fol. 15947] Panhandle Eastern Pipe Line Company

August 21, 1940

Registered Mail
Return Receipt Requested.

Mr. J. P. Wenchel, Chief Counsel,
Bureau of Internal Revenue,
Treasury Department,
Washington, D. C.

Dear Sir:

Overassessment of Federal Income Tax

For the Year 1936

GC:R:MFK

CL-336576

The additional information you recently requested to enable you to approve the overassessment of Federal Income Tax against this Company for the year 1936, is enclosed.

The lists, tables, maps and explanations requested are all indicated by item numbers to conform to your letter dated April 11, 1940.

This matter has been pending for some time now and we sincerely trust this rather voluminous additional data

will be sufficient to enable you promptly to execute the certificate of overassessment.

Yours very truly,

LEITH V. WATKINS,
Secretary-Controller.

LVW:mem

cc-Mr. N. F. Paxton

Arthur Andersen & Co.

Item I Of Letter Dated April 11, 1940

(GC: R: MFK: CL-336576)

Summary Of Gas Purchase Contracts

Panhandle Eastern Pipe Line Company

	Detail on			Consideration		
	List	Sheets No.	Acres	Cash	Other	Total
Gas purchase contracts acquired from Missouri-Kansas Pipe Line Company September 1, 1930	A	1 to 18	50 851.15	—	(1)	(1)
Gas purchase contracts acquired subsequent to September 1, 1930 and prior to December 31, 1938	B	1 to 20	144 437.80	—	(2)	(2)
Totals			195 288.95			

Notes:

(1) These gas purchase contracts were acquired by Panhandle Eastern Pipe Line Company on September 1, 1930 with certain gas sale contracts (shown on separate lists, see Item 2) from the predecessor company, Missouri-Kansas Pipe Line Company, as a contribution of capital, upon which the Board of Directors of Panhandle Eastern Pipe Line Company placed a fair market value of $2,398,402.19.

(2) These gas purchase contracts were acquired by Panhandle Eastern Pipe Line Company subsequent to September 1, 1930 and prior to December 31, 1938, direct from the sellers. The cost of acquisition of these contracts was not capitalized.

[fol. 15949]

Item 2 Of Letter Dated April 11, 1940

(GC: R: MFK CL-336576)

Summary Of Gas Sale Contracts
Panhandle Eastern Pipe Line Company

	Detail on Sheets No.	Number of Contracts	Consideration		
			Cash	Other	Total
Gas sale contracts acquired from Missouri-Kansas Pipe Line Company September 1, 1930:	1 & 2	23	—	(1)	(1)
Gas sale contracts acquired May 19, 1930 to March 31, 1932 for Cash consideration	2 & 3	6	$ 654 989 34	—	$ 654 989 34
Gas sale contracts acquired September 20, 1930 to December 31, 1938	3 & 4	21	—	(2)	(2)
Gas sale contracts acquired after January 1, 1936 for cash consideration:					
Costs incurred in 1936	3	1	371 076 00	—	371 076 00
Costs incurred in 1937	3	1	16 940 00	—	16 940 00
Costs incurred in 1938	4	2	76 649 11	—	76 649 11
Totals		54	$1 119 654 45	(1) & (2)	$1 119 654 45

Notes:

(1) These gas sale contracts were acquired by Panhandle Eastern Pipe Line Company on September 1, 1930 with certain gas purchase contracts (shown on separate lists, see Item 1) from the predecessor company, Missouri-Kansas Pipe Line Company, as a contribution of capital, upon which the Board of Directors of Panhandle Eastern Pipe Line Company placed a fair market value of $2,398,402.19.

(2) These gas sale contracts were acquired by Panhandle Eastern Pipe Line Company subsequent to September 20, 1930 and prior to December 31, 1938, direct from the buyers. The cost of acquisition of these contracts was not capitalized.

Recapitulation Of Cost Of Gas Sale And Purchase Contracts

	Consideration		
	Cash	Other	Total
Gas sale and purchase contracts acquired from Missouri-Kansas Pipe Line Company September 1, 1930	—	$2 398 402 19	$2 398 402 19
Gas sale contracts acquired May 19, 1930 to March 31, 1932	$ 654 989 34	—	654 989 34
Total cost of gas sale and purchase contracts at January 1, 1936	$ 654 989 34	$2 398 402 19	$3 053 391 53
Gas sale contracts acquired subsequent to January 1, 1936 as follows:			
Year 1936	$ 371 076 00	—	371 076 00
Year 1937	16 940 00	—	16 940 00
Year 1938	76 649 11	—	76 649 11
Total cost of gas sale and purchase contracts at December 31, 1938	$1 119 654 45	$2 398 402 19	$3 518 056 64

ITEM 2 OF LETTER DATED APRIL 11, 1940
(GC: R: MFK CL-336576)

LIST OF GAS SALE CONTRACTS ACQUIRED FROM MAY 19, 1930 TO DECEMBER 3.,
PANHANDLE EASTERN PIPE LINE COMPANY

Date of Contract	Contracting Parties: Buyer	Contracting Parties: Seller	Duration of Contract	Commodity Sold	Territory Covered	Terms of Contract
3/20/29	American Pipe Line Co. Kansas City, Missouri	Missouri-Kansas Pipe Line Company	12 years	Natural Gas	Kansas City, Missouri	Sale of up to 12,000, cu. ft. daily for re
3/20/29	Cities Service Gas Co. Kansas City, Missouri	Missouri-Kansas Pipe Line Company	12 years	"	Ottawa, Kansas	Daily domestic requir ments of Ottawa
12/26/28	Jackson County Light, Heat & Power Co., Independence, Missouri	Missouri-Kansas Pipe Line Company	5 yrs. with option of additional 5 yrs. with buyer	"	Independence & Sugar Creek, Mo. & environs	Entire daily require- ments for re-sale
5/ 9/28	Louisburg Gas Company Louisburg, Kansas	Missouri-Kansas Pipe Line Company	As long as gas available from local field	"	Louisburg, Kansas	Entire daily domestic quirements
12/ /27	Miami County Gas Co. Kansas City, Missouri.	Jacob Weisser Westline, Missouri	Indefinite duration	"	Paola and Osawatomie, Kansas	Requirements of Paol Osawatomie
11/18/26	Illinois Power & Light Co. Jacksonville, Illinois	Meridian Oil & Gas Co., Pittsburgh, Pa.	10 years	"	Jacksonville, Illinois	Amount required for ing with manufactured
12/11/26	City of Chanute Chanute, Kansas	Willis Brothers Chanute, Kansas	As long as commercial production in Chanute field	"	Chanute, Kansas	All gas that can be d livered up to entire quirements
4/13/28	Midwest Gas Corp. Neodesha, Kansas	Willis Gas Company Chanute, Kansas	60 days & as long thereafter as mutually satisfactory	"	Neodesha, Kansas	Surplus gas up to req ments of Midwest Gas
5/29/28	Shippey, Maddin and Parish Kansas City, Missouri	Missouri-Kansas Pipe Line Company	As long as commercial production in local fields	"	Belton, Grandview, Martin City, Raymore, Pleasant Hill, Lees Summit, Greenwood, Peculiar, Harrisonville, Cleveland, West Line, Drexel & Freeman, Mo.	Up to entire requiren of all towns and cit served.
3/6/23	Prairie Pipe Line Co. Independence, Kansas	Arthur Barnes, Greeley, Kansas, Frank Barnes, Tulsa, Oklahoma	Indefinite-can be cancelled on 6 mos. notice	"	Pump station at Greeley, Kansas	Natural gas for fuel quirements at pump st tion
5/12/30	Johnson County Brick Co. Knobnoster, Missouri	Missouri-Kansas Pipe Line Company	5 yrs. from January 1, 1931	"	Brick plant at Knobnoster, Missouri	Entire industrial gas fuel requirements

L 11, 1940
36576)
9, 1930 TO DECEMBER 31, 1938
E COMPANY

Terms of Contract	Acquired Date	Acquired From Whom	Consideration Cash	Consideration Other	Consideration Total
Sale of up to 12,000,000 cu. ft. daily for re-sale	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Daily domestic requirements of Ottawa	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire daily requirements for re-sale	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire daily domestic requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Requirements of Paola and Osawatomie	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Amount required for blending with manufactured gas	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
All gas that can be delivered up to entire requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Surplus gas up to requirements of Midwest Gas Corp.	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Up to entire requirements of all towns and cities served.	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Natural gas for fuel requirements at pump station	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)

Date of Contract	Contracting Parties: Buyer	Contracting Parties: Seller	Duration of Contract	Commodity Sold	Territory Covered	Terms of Contract	Acq Date	Acq
5/20/30	Missouri Fire Brick Co. Vandalia, Missouri	Missouri-Kansas Pipe Line Company	10 yrs. from January 1,1931	Natural Gas	Fire brick plant at Vandalia, Missouri	Entire industrial gas fuel requirements	9/ 1/30	Mis
6/ 3/30	Edwards-Conley Brick & Tile Co.,Columbia, Mo.	Missouri-Kansas Pipe Line Company	10 yrs. from Jan. 1, 1931	" "	Brick & tile plant at Columbia, Mo.	Entire industrial gas fuel requirements	9/ 1/30	Mis
6/ 5/30	Consolidated Cement Corp. Chicago, Illinois	Missouri-Kansas Pipe Line Company	3 yrs. from October 5,1930	" "	Kilns at Mildred, Kansas plant	Entire industrial gas fuel requirements	9/ 1/30	Mis
6/18/30	Harbison-Walker Ref. Co. Pittsburgh, Pa.	Missouri-Kansas Pipe Line Company	10 yrs. from Jan. 1, 1931	" "	Brick plants at Fulton & Vandalia, Mo.	Entire industrial gas fuel requirements	9/ 1/30	Mis
7/15/30	Fayette Brick & Tile Co. Fayette, Missouri	Missouri-Kansas Pipe Line Company	10 yrs. from Jan. 1, 1931	" "	Brick plant at Fayette, Missouri	Entire industrial gas fuel requirements	9/ 1/30	Mis.
7/21/30	Mexico Refractories Co. Mexico, Missouri	Missouri-Kansas Pipe Line Company	10 yrs. from Jan. 1, 1931	" "	Brick plant north of Mexico, Missouri	Entire industrial gas fuel requirements	9/ 1/30	Mis
7/14/30	The Gregory Laboratory White Hall, Illinois	Missouri-Kansas Pipe Line Company	10 yrs. from Jan. 1, 1931	" "	Laboratory at White Hall, Illinois	Entire industrial gas fuel requirements	9/ 1/30	Mis
5/23/30	Illinois China Co. Lincoln, Illinois	Missouri-Kansas Pipe Line Company	10 yrs. from Jan. 1, 1931	" "	China Ware Pottery plant at Lincoln,Ill.	Entire industrial gas fuel requirements	9/ 1/30	Mis
6/26/30	The Morton Pottery Co. Morton, Illinois	Missouri-Kansas Pipe Line Company	5 yrs. from May 1, 1931	" "	Pottery plant at Morton, Illinois	Entire industrial gas fuel requirements	9/ 1/30	Mis
6/19/30	Poston Springfield Brick Co.,Springfield, Illinois	Missouri-Kansas Pipe Line Company	10 yrs. from Jan. 1, 1931	" "	Brick plant in Springfield, Illinois	Entire industrial gas fuel requirements	9/ 1/30	Mis
6/25/30	Springfield Clay Products Springfield, Illinois	Missouri-Kansas Pipe Line Company	10 yrs. from Jan. 1, 1931	" "	Clay products plant in Springfield, Ill.	Entire industrial gas fuel requirements	9/ 1/30	Mis
7/30/30	Western Brick Company Danville, Illinois	Missouri-Kansas Pipe Line Company	10 yrs. from Jan. 1, 1931	" "	Brick plants in Danville, Illinois	Entire industrial gas fuel requirements	9/ 1/30	Mis
5/19/30	Missouri Power & Light Co. Kansas City, Missouri	Panhandle Eastern Pipe Line Company	20 years	" "	15 cities & towns in Mo., including Boonville,Jefferson City, and Mexico	Natural gas for re-sale up to requirements for cities & towns served	5/19/30	Bur
5/19/30	Illinois Power & Light Co. Chicago, Illinois	Panhandle Eastern Pipe Line Company	20 years	" "	Champaign,Urbana,Danville,Decatur,Jacksonville, & Clinton, Ill.	Natural gas for re-sale up to requirements for cities & towns served	5/19/30	Bur

Terms of Contract	Acquired Date	Acquired From Whom	Consideration Cash	Consideration Other	Consideration Total
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Entire industrial gas fuel requirements	9/ 1/30	Missouri-Kansas Pipe Line Company	-	(1)	(1)
Natural gas for re-sale up to requirements for cities & towns served	5/19/30	Buyer	$556 786 30	-	$556 786 30
Natural gas for re-sale up to requirements for cities & towns served	5/19/30	Buyer			

(20

Date of Contract	Contracting Parties: Buyer	Contracting Parties: Seller	Duration of Contract	Commodity Sold	Territory Covered	Terms of Contract	Date
6/19/30	Peoria Mallable Castings Co., Peoria, Illinois	Missouri-Kansas Pipe Line Company	10 years	Natural Gas	Plant at Peoria, Ill.	Gas for industrial use	9/ 1/
6/12/30	Keystone Steel & Wire Co. Bartonville, Illinois	Missouri-Kansas Pipe Line Company	10 years	" "	Plant at Bartonville, Illinois	Gas for industrial use	9/ 1/
6/20/30	Caterpillar Tractor Co. Peoria, Illinois	Missouri-Kansas Pipe Line Company	5 years	" "	Plant at Peoria, Ill	Gas for industrial use	9/ 1/
6/20/30	R. Herschel Mfg. Co. Peoria, Illinois	Missouri-Kansas Pipe Line Company	5 years	" "	Plant at Peoria, Ill.	Gas for industrial use	9/ 1/
-	Payroll and expense in connection with securing gas sale and purchase contracts between January 1, 1931 and March 31, 1932						-
2/6/31	American Gas Company Bartlesville, Oklahoma	Panhandle Eastern Pipe Line Company	10 yrs. from May 5, 1931	Natural Gas	Hartford, Waverly, & Williamsburg, Kansas	Entire gas requirements	2/ 6/
1/18/29	Arthur K. Lee, Trustee	W. L. Sidwell & W. M. McNabb, Winfield, Kansas	20 years	" "	Dodge City, Garden City & 13 other cities and towns in Kansas	Entire gas requirements for cities & towns served	10/31/
12/23/30	Bowling Green Gas Co. Bowling Green, Mo.	Panhandle Eastern Pipe Line Company	10 yrs. from May 14, 1931	" "	Bowling Green, Mo.	Entire gas requirements	12/23/
11/ 4/35	Central West Utility Co. Kansas City, Missouri	Panhandle Eastern Pipe Line Company	10 yrs. from Jan. 1, 1936	" "	Avondale, Smithville & Liberty, Missouri	At least 75% of annual gas requirements	11/ 4/
4/ 2/31	Citizens' Gas Company Hannibal, Missouri	Panhandle Eastern Pipe Line Company	10 yrs. from Sept. 25, 1931	" "	Hannibal, Missouri	Entire gas requirements	4/ 2/
2/ 6/33	Freiling Greenhouse Hannibal, Missouri	Panhandle Eastern Pipe Line Company	2 years	" "	Greenhouse at Hannibal, Missouri	Entire gas fuel requirements	2/ 6/
11/30/35	City of Fulton Fulton, Missouri	Panhandle Eastern Pipe Line Company	10 yrs. from May 13, 1936	" "	Fulton, Missouri	Entire gas requirements	11/30/
5/ 1/38	Interstate Gas Company Harrisonville, Missouri	Panhandle Eastern Pipe Line Company	1 year	" "	Harrisonville, Mo.	50% of annual gas requirements	5/ 1/
3/ 5/31	John J. Griffin Iola, Kansas	Panhandle Eastern Pipe Line Company	10 yrs. from Aug. 26, 1931	" "	Kincaid and Mildred, Kansas	Entire gas requirements	3/ 5/
1/27/31	Lees Summit Gas Co. Lees Summit, Missouri	Panhandle Eastern Pipe Line Company	4 months	" "	Lees Summit, Missouri	Gas requirements	1/27/
8/31/35	Michigan Consolidated Gas Co., Detroit, Michigan	Panhandle Eastern Pipe Line Company	15 yrs. from Jan. 1, 1937	" "	Detroit, Michigan	Gas requirements	8/31/
7/31/36	Michigan Gas Transmission Corp., Detroit, Michigan	Panhandle Eastern Pipe Line Company	5 years	" "	Indiana and Ohio	All requirements of 10 distributing companies & industrial customers	7/31/

Terms of Contract	Acquired Date	Acquired From Whom	Consideration Cash	Consideration Other	Consideration Total
Gas for industrial use	9/ 1/30	Missouri-Kansas Pipe Line Company			
Gas for industrial use	9/ 1/30	Missouri-Kansas Pipe Line Company	$ 85 500 00	-	$ 85 500 00
Gas for industrial use	9/ 1/30	Missouri-Kansas Pipe Line Company			
Gas for industrial use	9/ 1/30	Missouri-Kansas Pipe Line Company			
1931 and March 31, 1932	-	-	12 703 04	-	12 703 04
Entire gas requirements	2/ 6/31	Buyer	-	(2)	(2)
Entire gas requirements for cities & towns served	10/31/36	Texas-Interstate Pipe Line Co. (a subsidiary)	-	(2)	(2)
Entire gas requirements	12/23/30	Buyer	-	(2)	(2) (21)
At least 75% of annual gas requirements	11/ 4/35	"	-	(2)	(2)
Entire gas requirements	4/ 2/31	"	-	(2)	(2)
Entire gas fuel requirements	2/ 6/33	"	-	(2)	(2)
Entire gas requirements	11/30/35	"	-	(2)	(2)
50% of annual gas requirements	5/ 1/38	"	-	(2)	(2)
Entire gas requirements	3/ 5/31	"	-	(2)	(2)
Gas requirements	1/27/31	"	-	(2)	(2)
Gas requirements	8/31/35	"	371 076 00	-	371 076 00
All requirements of 10 distributing companies & industrial customers	7/31/36	"	16 940 00	-	16 940 00

Date of Contract	Contracting Parties: Buyer	Contracting Parties: Seller	Duration of Contract	Commodity Sold	Territory Covered	Terms of Contract	A Dat
10/ 1/36	Michigan Gas Transmission Corp., Detroit, Michigan	Panhandle Eastern Pipe Line Company	15 years	Natural Gas	Indiana	All requirements of four Indiana Public Service Companies	10/ 1
9/20/30	Missouri Edison Company Louisiana, Missouri	Panhandle Eastern Pipe Line Company	10 yrs. from Aug. 31, 1931	"	Louisiana, Missouri & vicinity	Entire gas requirements	9/20
3/17/31	Missouri Utilities Co. Columbia, Missouri	Panhandle Eastern Pipe Line Company	10 yrs. from July 23, 1932	"	Columbia and California, Missouri	Entire gas requirements	3/17
12/23/30	Panhandle Power & Light Co., Gruver, Texas	Panhandle Eastern Pipe Line Company	10 yrs. from Mar. 17, 1931	"	Gruver, Texas	At least 75% of daily requirements	12/2
11/ 6/35	Phillips Pipe Line Co. Bartlesville, Oklahoma	Panhandle Eastern Pipe Line Company	5½ years	"	5 pump stations in Kansas and Missouri	Entire gas fuel requirements	11/ 6
7/27/31	United Brick & Tile Co. Kansas City, Missouri	Panhandle Eastern Pipe Line Company	2 years	"	Brick plant at Vale, Missouri	Fuel requirements	7/27
6/17/38	Kentucky Natural Gas Co. Owensboro, Kentucky	Panhandle Eastern Pipe Line Company	15 years	"	Towns in Indiana and Kentucky	Requirements up to 140,000 therms per day.	6/17
1/14/33	Universal Atlas Cement Co. Chicago, Illinois	Panhandle Eastern Pipe Line Company	21 mos. from Feb. 1, 1933	"	Cement plant at Hannibal, Missouri	Entire gas fuel requirements	1/14
12/ 5/31	Wellsville Fire Brick Co. Wellsville, Missouri	Panhandle Eastern Pipe Line Company	3 years	"	Brick plant near Wellsville, Missouri	Entire fuel requirements except boiler fuel	12/
2/ /34	The LaCygne Gas Co. LaCygne, Kansas	Panhandle Eastern Pipe Line Company	As long as commercial production	"	LaCygne, Kansas	Requirements over and above buyer's own supply	2/
2/ 3/36	Osawatomie State Hospital Osawatomie, Kansas	Panhandle Eastern Pipe Line Company	One year from Jan. 1, 1936	"	State Hospital at Osawatomie, Kansas	Entire requirements	2/
5/13/32	Kansas Gas & Gasoline Co. Topeka, Kansas	Panhandle Eastern Pipe Line Company	Month-to-month cancellable by*	"	Various	For re-sale by buyer to another company	5/1

Notes:

(1) These gas sale contracts were acquired by Panhandle Eastern Pipe Line Company on September 1, 1930 with certain gas purchase the predecessor company, Missouri-Kansas Pipe Line Company, as a contribution of capital, upon which the Board of Directors o market value of $2,398,402.19.

(2) These gas sale contracts were acquired by Panhandle Eastern Pipe Line Company subsequent to September 20, 1930 and prior to D of acquisition of these contracts was not capitalized.

* Should read "Cancellable by 60 day notice."

Terms of Contract	Acquired Date	Acquired From Whom	Consideration Cash	Consideration Other	Consideration Total
All requirements of four Indiana Public Service Companies	10/ 1/36	Buyer	$ 76 009 48	-	$ 76 009 48
Entire gas requirements	9/20/30	"	-	(2)	(2)
Entire gas requirements	3/17/31	"	-	(2)	(2)
At least 75% of daily requirements	12/2?/30	"	-	(2)	(2)
Entire gas fuel requirements	11/ 6/35	"	-	(2)	(2)
Fuel requirements	7/27/31	"	-	(2)	(2)
Requirements up to 140,000 therm day	6/17/38	"	639 63	-	639 63
Entire gas fuel requirements	1/14/33	"	-	(2)	(2)
Entire fuel requirements except boiler fuel	12/ 5/31	"	-	(2)	(2)
Requirements over and above buyer's own supply	2/ /34	"	-	(2)	(2)
Entire requirements	2/ 3/36	"	-	(2)	(2)
For re-sale by buyer to another company	5/13/32	"	-	(2)	(2)

22

1930 with certain gas purchase contracts (shown on separate lists, see Item I) from on which the Board of Directors of Panhandle Eastern Pipe Line Company placed a fair

September 20, 1930 and prior to December 31, 193?, direct from the buyers. The cost

[fol. 15954] Treasury Department

Washington

October 3, 1940

Office of
Chief Counsel
Bureau of
Internal Revenue

(Received October 7, 1940
Treasury Department)

GC:R:MFK
C1-336576

Panhandle Eastern Pipe Line Company,
300 Fairfax Building,
Kansas City, Missouri.

Dear Sirs:

Further reference is made to the consideration of a proposed certificate of overassessment for the calendar year 1936. Review of the schedules submitted with your letter of August 21, 1940 discloses that additional information will be necessary in order to pass on the merits of your claim. It is accordingly requested that you submit the following data at your earliest possible convenience in order that the matter may be disposed of expeditiously:

1. Complete details of the valuations by the Board of Directors of Panhandle Eastern Pipe Line Company of:

(a) The individual gas purchase contracts, and

(b) The individual gas sale contracts acquired from Missouri-Kansas Pipe Line Company on September 1, 1930, accompanied by record of comparable sales and other evidence serving as the basis for such valuations.

2. The statements accompanying the lists of gas purchase contracts and gas sale contracts acquired subsequent to September 20, 1930 and prior to December 31, 1938,

Item 1, List B, and Item 2, Sheets 3 and 4, attached to your letter of August 21, 1940, set forth that "The cost of acquisition of these contracts was not capitalized." It is requested that you submit a detailed statement for each of the years 1930 to 1938, inclusive, of all costs incurred in obtaining these contracts, setting out the manner in which such costs were charged to expense.

[fol. 15955] 3. The list of gas sale contracts (Item 2), attached to your letter of August 21, 1940, does not show under "Terms of Contract" the agreed selling price or prices of the gas engaged to be sold. It is requested that this information be furnished.

Very truly yours,

J. P. WENCHEL,
Chief Counsel.

[fol. 15956] Panhandle Eastern Pipe Line Company

February 24, 1941

Registered Mail
Return Receipt Requested

Mr. J. P. Wenchel, Chief Counsel,
Bureau of Internal Revenue,
Treasury Department,
Washington, D. C.

Dear Mr. Wenchel:

Overassessment of Federal Income Tax

For the Year 1936

GC:R:MFK

CL-336576

The additional information requested in your letter dated October 3, 1940, to enable you to approve the overassessment of Federal Income Tax against this Company for year 1936, is enclosed.

The tables, explanations and comments are indicated by item numbers to conform to your request.

Yours very truly,

LEITH V. WATKINS,
Secretary-Controller.

LVW:HA

cc-Mr. N. F. Paxton

Arthur Andersen & Co., KCO

[fol. 15957] Item No. 1 of Letter Dated October 3, 1940
(GC. R: MFK CL-336576)
The Details of the Valuations of
(a) The Individual Gas Purchase Contracts
and (b) the Individual Gas Sale Contracts
Acquired by Taxpayer from
Missouri-Kansas Pipe Line Company
on September 1, 1930

The aggregate value of the gas sale and purchase contracts acquired from Missouri-Kansas Pipe Line Company on September 1, 1930, together with other assets acquired as at the same date, was determined by the sale by Missouri-Kansas Pipe Line Company, through which these contracts were acquired by the Taxpayer. A recital of further particulars follows:

In 1930, the Taxpayer (a wholly-owned subsidiary of Missouri-Kansas Pipe Line Company) was engaged in the construction of a natural gas pipe line from Texas to Illinois which construction was being financed by Missouri-Kansas Pipe Line Company. In connection with the financing, as of September 30, 1930, a three party contract was entered into by Missouri-Kansas Pipe Line Company, the National City Company and Columbia Oil & Gasoline Corporation which provided, among other things, for the following:

Missouri-Kansas Pipe Line Company would (a) transfer to Taxpayer certain of its properties and assets as of September 1, 1930; (b) cancel any obligation or debt to it owing by Taxpayer or its subsidiary companies at that date; and (c) pay all other debts and obligations of Taxpayer and its subsidiaries existing at that date.

Columbia Oil & Gasoline Corporation would purchase from Missouri-Kansas Pipe Line Company 5,000 shares (50% of the total outstanding stock) of the common stock of the Taxpayer. The consideration for such stock was to be one-half of the aggregate of (a) the cash investment of Missouri-Kansas in Taxpayer and its subsidiaries; (b) the amount of obligations and debts of Taxpayer and its subsidiaries to be liquidated by Missouri-Kansas; (c) the agreed value, $7,333,000, of the property and other assets to be transferred by Missouri-Kansas to Taxpayer; and (d) interest on certain of these items.

By supplemental agreement dated October 23, 1930 it was agreed that the purchase price per share was to be computed exactly as set forth above except that the figure of $7,333,000 was to be reduced to $6,453,000 and the computation of interest was to be correspondingly adjusted.

[fol. 15958] The property and assets of Missouri-Kansas Pipe Line Company which were to be transferred to the Taxpayer and which were valued at $6,453,000 for the purpose of computing the price to be paid by Columbia Oil & Gasoline Corporation for 50% of the stock of Taxpayer, were carried on the books of Missouri-Kansas Pipe Line Company as follows:

Property, plant and equipment (including construction work in progress)	$2,417,948.52
Gas purchase and sale contracts	1,106,250.00
Investment in affiliated companies	913,831.42
Materials and supplies	46,140.41
Inter-company accounts receivable	476,513.89
Prepaid accounts	3,565.19
Total	$4,964,249.43

In determining the values to be placed on the respective items on the books of Taxpayer, it was recognized that the property had been but recently acquired or constructed and market value would therefore closely approximate the costs expended; that the investment in affiliated companies should be stated according to the companies' net worth at that date and that materials and supplies and inter-company accounts were equivalent in value to their

face amount. Therefore, in determining such values, the distribution of the cost established by the contract was as follows:

Total agreed consideration as per contract of September 17, 1930 as amended October 23, 1930	$6,453,000.00
Deduct—Current liabilities of the four subsidiary companies acquired	170,178.75
Total	$6,282,821.25

Values assigned to assets acquired—Property, plant and equipment, as above	$2,417,948.52
Investment in affiliated companies, at net worth of companies at that date	940,251.05
Materials and supplies, as above	46,140.41
Inter-company accounts receivable, as above	476,513.89
Prepaid accounts, as above	3,565.19
Gas sales and purchase contracts	2,398,402.19
Total, as above	$6,282,821.25

[fol. 15959] This valuation of assets was adopted by the Board of Directors on February 3, 1931 as follows:

"The Chairman stated that on October 23, 1930, the Company had acquired from Missouri-Kansas Pipe Line Company without cost to the Company, certain physical property, gas purchase and sale contracts, stocks of subsidiary companies, supplies, accounts receivable from subsidiary companies and prepaid accounts, subject to the assumption of accrued taxes and deferred liabilities on the Jacksonville property. He stated that it was desirable for the Board to place a valuation on the property so acquired to guide the Treasurer in setting up the acquisition on the books. He submitted a proposed valuation prepared by the Treasury Department and explained in detail how the valuation was arrived at. Said proposed valuation was as follows:

Property, Plant and Equipment		$2,197,475 40
Purchase and Sales Contracts		2,398,402 19
Total Property, Plant and Equipment		4,595,877 59
Construction Work in Progress		220,473 12
Total Fixed Capital		4,816,350 71
Investments in Affiliated Companies:		
Missouri-Kansas Gas Company	$627,661 22	
Central States Gas Utilities Co.	112,420 74	
J. D. Judd and Company (51%)	35,266 72	
Shale Gas Corporation (51%)	164,902 37	940,251 05
General Supplies		46,140 41
Inter-Company Accounts:		
Notes Receivable:		
J. D. Judd and Company	57,500 00	
Accounts Receivable:		
Central States Gas Utilities Co.	16,094 21	
Missouri-Kansas Gas Company	387,564 75	
J. D. Judd and Company	10,354 93	
Missouri-Kansas Gas Company	5,000 00	476,513 89
Prepaid Accounts		3,565 19
Total Assets		$6,282,821 25
Less Liabilities Assumed:		
Accrued Taxes	$ 14,066 06	
Deferred Liabilities, Jacksonville Property	18,569 56	32,635 62
Net Value Of Property Received		$6,250,185 63

"After discussion on motion duly made and seconded, and unanimously carried, the Treasurer was authorized to enter the acquisition on the books of the Company accordingly."

[fol. 15960] It will be noted from the foregoing that the value of the gas sale and purchase contracts, together with the value of other assets acquired, was determined by the sale agreement dated September 30, 1930, as amended, and that the valuations affirmed by the Board of Directors of Taxpayer were in agreement therewith. Taxpayer has no record of valuations assigned to individual gas sale and purchase contracts.

[fol. 15961] Item No. 2 of Letter Dated October 3, 1940
(GC: R: MFK CL-336576)

Statement Pertaining to Cost of Acquisition of Gas Purchase and Sale Contracts, Subsequent to September 1, 1930, and Prior to December 31, 1938

Taxpayer regrets that the wording, "The costs of acquisition of these contracts was not capitalized" in its letter dated August 21, 1940, was not clearly understandable and was such as to imply that consideration for gas purchase and sale contracts was charged to expense for certain periods and capitalized in other periods.

The contracts herein in question were acquired directly by the Taxpayer through the services of its regular employees in the Land, Industrial Sale and Business Promotion Departments. No consideration was paid for the acquisition of such contracts and the only costs which might be considered incident thereto would be automobile expense, traveling expense, telephone and telegraph expense, etc., and the portion of the salaries of employees which might be allocated in relation to the actual time spent in securing such contracts.

Such costs, in any event, could be considered only as overheads applicable to such contracts and not a party of consideration given therefor. The accounting procedures of Taxpayer did not provide for capitalization of such overheads subsequent to completion of construction of its original pipe line.

It is submitted by the Taxpayer that this policy of not making an attempt to capitalize and subsequently amortize such overheads has worked to the disadvantage of Taxpayer for tax purposes as most of the costs were incurred in loss years and the amortization would be available in subsequent profitable years. If it is the desire of the Treasury Department that costs of such nature should be capitalized and amortized over a reasonable number of subsequent years Taxpayer would be pleased to attempt to prepare an estimate of such costs, either on its own initiative or in collaboration with representatives of the Treasury Department.

[fol. 15962] (Exhibit 220.)

Panhandle Eastern Pipe Line Company

Excerpts from Minutes of Meetings of Board of Directors, Relating to Provisions for Depreciation, Depletion and Amortization

Excerpt from Minutes of Meeting of Board of Directors

[fol. 15963] February 24, 1942

Panhandle Eastern Pipe Line Company

Provision for Depreciation, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) for the Year 1942

The Chairman stated that it was in order for this Board to consider and act upon the Annual Provision for Depreciation, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) for the year 1942. After discussion, on motion duly made and seconded, the proper officers of the Company were unanimously authorized and directed to cause an Annual Provision for Depreciation, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company for the year 1942 to be made out of earnings on the basis of the present estimated volume of sales in an amount of approximately $2,200,000, which amount is not to be confused with the amount claimed for this purpose for Federal Income Tax purposes.

[fol. 15964] Excerpt from Minutes of Board of Directors Meeting, January 25, 1941

Panhandle Eastern Pipe Line Company

Provision for Depreciation, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) for the Year 1941

The Chairman stated that it was in order for this Board to consider and act upon the Annual Provision for Depreciation, Depletion and Amortization (other than

Amortization of Gas Sales and Purchase Contracts) for the year 1941. After discussion, on motion duly made and seconded, Messrs. Robert J. Bulkley, A. Feison Dixon and William G. Maguire not voting, the proper officers of the Company were authorized and directed to cause an Annual Provision for Depreciation, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) of Panhandle Eastern Pipe Line Company and Subsidiary Companies for the year 1941 to be made out of earnings on the basis of the present estimated volume of sales in an amount of approximately $2,100,000, which amount is not to be confused with the amount claimed for this purpose for Federal Income Tax purpose.

[fol. 15963] Excerpt from Minutes of Board of Directors Meeting, December 14, 1939

Panhandle Eastern Pipe Line Company

Provision for Renewals, Retirements, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) for the Year 1940

The Chairman stated that it was in order for this Board to consider and act upon the Annual Provision for Renewals, Retirements, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) for the year 1940. After discussion, on motion duly made and seconded, the proper officers of the Company were unanimously authorized and directed to cause an Annual Provision for Renewals, Retirements, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) of Panhandle Eastern Pipe Line Company and Subsidiary Companies for the year 1940 to be made out of earnings on the basis of the present estimated volume of sales in an amount of approximately $1,900,000, which amount is not to be confused with the amount claimed for this purpose for Federal Income Tax purposes.

[fol. 15966] Excerpt From Minutes of Board of Directors Meeting December 22, 1937

Panhandle Eastern Pipe Line Company

After full discussion during which Mr. Creveling described the items in further detail, on motion duly made and seconded, the 1938 Annual Ordinary Construction and Retirement Budgets of this Company, as above set forth were unanimously approved, and the 1938 Annual Ordinary Construction and Retirement Budgets for the respective Subsidiary Companies were unanimously recommended to their respective Boards for approval.

Provision for Renewals, Retirements, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) for the Year 1938

The Chairman stated that it was in order for this Board to consider and act upon the Annual Provision for Renewals, Retirements, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) for the year 1938. After discussion, on motion duly made and seconded, the proper officers of the Company were unanimously authorized and directed to cause an Annual Provision for Renewals, Retirements, Depletion and Amortization (other than Amortization of Gas Sales and Purchase Contracts) of Panhandle Eastern Pipe Line Company and Subsidiary Companies for the year 1938 to be made out of earnings on the basis of the present estimated volume of sales in an amount of approximately $1,700,000, which amount is not to be confused with the amount claimed for this purpose for Federal Income Tax purposes.

[fol. 15967] Excerpt From Minutes of Board of Directors Meeting February 13, 1936

Panhandle Eastern Pipe Line Company

Minutes of a Special Meeting of the Board of Directors of Panhandle Eastern Pipe Line Company, held at No. 61

Broadway, New York, N. Y., at 11:00 o'clock A. M. on Thursday, February 13, 1936, pursuant to due notice.

Present:

Messrs. Gano Dunn,
James L. Harrop,
Dean Mathey,
William P. Philips and
Harold F. Reindel,

being a majority of the Directors and constituting a quorum.

The President, Mr. William P. Philips, presided, and Mr. Leith Y. Watkins, Secretary of the Company, acted as secretary of the meeting.

The Secretary stated that notice of the meeting had been mailed to each Director at least 5 days before the time fixed for the meeting.

Minutes of Last Preceding Meetings

On motion duly made and seconded, the reading of the minutes of the last preceding meetings of the Board, held February 4, 1936 and January 31, 1936, was dispensed with.

Report of Action Since Previous Meetings

The Secretary then reported the status of matters authorized and considered at previous meetings of the Board, as follows:

Revised Plan of Readjustment of Funded Debt and Capitalization, dated June 19, 1935: On February 6, 1936, steps and action required to carry out this Company's Revised Plan of Readjustment of Funded Debt and Capitalization, dated June 19, 1935, were taken pursuant to resolutions adopted by this Board at its meeting held January 31, 1936.

Provision for Renewals, Retirements and Depletion (including amortization of unoperated leaseholds)

The Chairman stated that, as one of the matters precedent to the semi-annual payment to be made February 18, 1936, as and for the Sinking Fund, it was now in order for this Board to consider and act upon the amount actually appropriated for provision of renewals, retirements and depletion (including amortization of unoperated leaseholds), for the preceding calendar year, and submitted a report prepared by the Treasurer, which is as follows:

[Vol. 15968]

Panhandle System

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Suggested Provision For Renewals, Retirements And Depletion (Including Amortization Of Unoperated Leaseholds) For The Calendar Years 1935 And 1936

	Proposed Annual Rate 1935-1936	Approximate Average Base for Year 1935	Actual or Estimated Charge to Operations: Actual for Calendar Year 1935	Actual or Estimated Charge to Operations: Estimated for Calendar Year 1936
Central Distributing Company:				
Total Property Account	2 1/2%	$ 422,000	$ 10,550.68	$ 10,800
Macon Gas And Electric Light Company:				
Property Abandoned	10%	$ 12,000	$ 1,175.28	$ 1,200
Other Property Account	2 1/2%	89,000	2,200.00	2,200
Total Property Account	—	$ 101,000	$ 3,395.28	$ 3,400
Missouri-Kansas Gas Company:				
(Dissolved during October, 1935)	—	—	$ 2,268.62	—
Panhandle Eastern Pipe Line Company:				
Gas Sales and Purchase Contracts:				
(1) Operated Contracts of a 20-Year Life	5%	$ 642,000	$ 32,114.40	$ 32,100
(2) Other Contracts (From Records of Predecessor Company)	—	2,411,000	(See Note A)	—
Intangible Items (Organization, Engineering, Legal Expenses, Taxes during Construction, etc.)	—	2,140,000	(See Note A)	—
Fixed Property	1 1/2%	28,198,000	422,970.49	422,700
Total Property Account	—	$33,391,000	$455,084.89	$454,800
Panhandle Illinois Pipe Line Company:				
Intangible Items	—	$ 461,000	(See Note A)	—
Fixed Property	1 1/2%	7,788,000	$116,816.61	$116,800
Total Property Account	—	$ 8,249,000	$116,816.61	$116,800
Texas-Interstate Pipe Line Company:				
Leaseholds, etc.:				
Operated	.003¢ per MCF Produced	$ 346,000	$ 24,807.38	$ 25,800
Unoperated	6%	1,326,000	79,560.90	77,600
Intangible Items	—	393,000	(See Note A)	—
Other Property (Wells, Camps, etc.)	6%	1,262,000	75,713.04	78,000
Total Property Account	—	$ 3,327,000	$180,081.32	$181,400
Total Panhandle Eastern System	—	$45,490,000	$768,197.40	$767,200

Note:

(A) No reserve provision recommended at this time.

Leith V. Watkins
Treasurer

[fol. 5969] After discussion, on motion duly made and seconded, it was unanimously

Resolved that the provision for renewals, retirements and depletion (including amortization of unoperated leaseholds) for the preceding calendar year as previously recorded on the books of Panhandle Eastern Pipe Line Company and each of its Subsidiary Companies, amounting to, in all, an aggregate of $768,197.40, be and hereby is determined to be, in all respects, approved, ratified and confirmed; and that the provision for the renewals, retirements and depletion (including amortization of unoperated leaseholds) for the calendar year 1936 be made on the basis adopted at this meeting for the calendar year 1935.

Statement under Section 17 of Mortgage Trust Indenture

The Chairman stated that as one of the matters precedent to the semi-annual payment to be made as and for a compulsory Sinking Fund for the purchase or redemption of Bonds of Series A, on February 18, 1936, it was necessary for the Company to file a summarized statement with the Trustee under this Company's Mortgage Trust Indenture, dated as of October 1, 1930, as supplemented and amended, showing:

(a) The amount actually appropriated by the Board of Directors of the Company for provision for renewals, retirements and depletion (including amortization of unoperated leaseholds for the preceding calendar year or the amount of earnings available, therefor, which ever shall be less;

(b) The consolidated net earnings (as such term is generally understood in standard accounting practice) from all sources (excluding profits derived from and losses incurred by the sale of Fixed Assets properly carried in capital account) of the Company and all its Subsidiary Companies (after eliminating all inter-company items) for said preceding calendar year, after deducting all charges including income taxes and including provision for renewals, retirements and depletion (including amortization of unoperated leaseholds) at such rates as shall have been actual-

ly determined by the Board of Directors of the Company; and

(c) An amount equal to one-half of the amount specified in the foregoing subdivision (a) plus the amount specified in the foregoing subdivision (b).

After discussion, on motion duly made and seconded, it was unanimously

Resolved that the proper Officers of this Company be and they hereby are authorized and directed to file with the City Bank Farmers Trust Company, Trustee under this Company's Mortgage Trust Indenture, dated as of October 1, 1930, as supplemented and amended, on or before February 18, 1936, a summarized statement showing:

[fol. 15970] January 17, 1933.

Excerpt From Minutes Of Board Of Directors Meeting

February 15, 1933

Panhandle Eastern Pipe Line Company
And Subsidiaries

To The Directors Of Panhandle Eastern Pipe Line Company And Subsidiaries:

Pursuant to instructions of the Board of Directors, I have reviewed the property reserves of the Panhandle System Companies and recommend that provision for depreciation, amortization of leaseholds and depletion, be provided for the Panhandle Eastern Pipe Line Company and Subsidiary Companies for the year 1933, in accordance with the rates shown in the following schedule.

		Estimated Charge to Operations	
	Proposed Annual Rate—1933	Base Nov. 30, 1932 Book Values	Estimated Accrual for Year 1933
Central States Gas Utilities Company:			
Total Property Account	2 1/2%	$ 375,000	$ 9,400
Macon Gas And Electric Light Company:			
Property Abandoned	10%	$ 11,000	$ 1,100
Other Property	2%	92,000	2,300
Total Property Account		$ 103,000	$ 3,400
Missouri-Kansas Gas Company:			
Total Property Account	—	$ 279,000	(See Note B)
Panhandle Eastern Pipe Line Company:			
Gas Sales and Purchase Contracts:			
(1) Operated Contracts of a 20-Year Life	5%	$ 642,000	$ 32,100
(2) Other Contracts (From Records of Predecessor Company	—	2,411,000	(See Note A)
Intangible Items (Organization, Engineering, Legal Expenses, and Taxes during Construction, etc.)	—	2,186,000	(See Note A)
Fixed Property	1 1/2%	28,498,000	$ 427,500
Total Property Account		$33,737,000	$ 459,600
Panhandle Illinois Pipe Line Company:			
Intangible Items	—	$ 453,000	(See Note A)
Fixed Property	1 1/2%	7,626,000	$114,400
Total Property Account		$ 8,079,000	$ 114,400
Texas-Interstate Pipe Line Company:			
Leaseholds, Etc.:	003¢ Per MCF		
Operated	Produced	$ 256,000	$ 12,200
Unoperated	6%	1,513,000	90,800
Intangible Items	—	393,000	(See Note A)
Other Property (Wells, Camps, etc.)	6%	1,238,000	74,300
Total Property Account		$ 3,400,000	$ 177,300
Total — Panhandle Eastern System		$45,973,000	$ 764,100

Notes:

(A) No reserve provision recommended at this time.

(B) Missouri-Kansas Gas Company: This company's properties are being exhausted somewhat more rapidly than provision for retirement and depletion can be made out of present earnings, and recapitalization or revaluation of its no-par stock will be required to meet this situation. Pending such recapitalization, it is recommended that any "net income" before depreciation be in the future credited to reserves.

F. B. Flahive

[fol. 15971]

January 17, 1933.

Excerpt From Minutes Of Board Of Directors Meeting

February 15, 1933

Panhandle Eastern Pipe Line Company
And Subsidiaries

To The Directors Of Panhandle Eastern Pipe Line Company And Subsidiaries:

Pursuant to instructions of the Board of Directors, I have reviewed the property reserves of the Panhandle System Companies and recommend that provision for depreciation, amortization of leaseholds and depletion, be provided for the Panhandle Eastern Pipe Line Company and Subsidiary Companies for the nine months ended December 31, 1932 in accordance with the rates shown in the following schedule.

	Proposed Annual Rate—1932	Estimated Charge to Operations: Base, November 30, 1932 Book Values	Estimated Charge to Operations: Estimated Accrual 9 Months to Dec. 31, 1932
Cental States Gas Utilities Company:			
Total Property Account	2 1/2%	$ 375,000	$ 7,000
Macon Gas And Electric Light Company:			
Property Abandoned	—	$ 11,000	(See Note A)
Other Property	2 1/2%	92,000	$ 1,700
Total Property Account		$ 103,000	$ 1,700
Missouri-Kansas Gas Company:			
Total Property Account	—	$ 279,000	(See Note B)
Panhandle Eastern Pipe Line Company:			
Gas Sales and Purchase Contracts:			
(1) Operated Contracts of a 20 Year Life	5%	$ 642,000	$ 24,100
(2) Other Contracts (From Records of Predecessor Company)	—	2,411,000	(See Note A)
Intangible Items (Organization, Engineering, Legal Expenses, and Taxes during Construction, etc.)	—	2,186,000	(See Note A)
Fixed Property	1%	28,498,000	$ 213,800
Total Property Account		$33,737,000	$ 327,900
Panhandle Illinois Pipe Line Company:			
Intangible Items	—	$ 453,000	(See Note A)
Fixed Property	1%	7,626,000	$ 57,200
Total Property Account		$ 8,079,000	$ 57,200
Texas-Interstate Pipe Line Company:			
Leaseholds, Etc.:	.003¢ Per MCF Produced		
Operated		$ 256,000	$ 7,000
Unoperated	6%	1,513,000	68,100
Intangible Items	—	393,000	(See Note A)
Other Property (Wells, Camps, etc.)	6%	1,238,000	55,700
Total Property Account	Y	$ 3,400,000	$ 130,800
Total — Panhandle Eastern System		$45,973,000	$ 434,600

Notes:

(A) No reserve provision recommended at this time.

(B) Missouri-Kansas Gas Company: This Company's properties are being exhausted somewhat more rapidly than provision for retirement and depletion can be made out of present earnings, and recapitalization or revaluation of its no-par stock will be required to meet this situation. Pending such recapitalization, it is recommended that any "net income" before depreciation be credited to reserves.

F. B. Flahive.

[fol. 15972] Excerpt From Minutes of Board of Directors Meeting May 5, 1932

Panhandle Eastern Pipe Line Company and Subsidiaries
Rates for Establishing Depreciation and Other Reserves

It is recommended, now that the construction work of main line system has been completed, that reserves be provided out of income to cover depreciation of equipment and structures and for the amortization of gas rights and leaseholds, and also of the book value of gas purchase and sales contracts, at the following rates per annum:

(1) 1% of the approximate book value of the main transmission and lateral lines, compressing stations and related properties, exclusive of undistributed items such as interest, taxes, legal expenses during construction, etc.

(2) 6% on the approximate value of wells and structures.

(3) 4% on the approximate value of unoperated leaseholds.

(4) $.003 per M. C. F. of gas produced for amortization of the gas rights in operated acreage.

(5) Gas purchase and sales contracts valued on books @ $3,053,391.53, as follows:

(a) 5% of the value of gas sales contracts now carried as an asset in amount of $642,286.30 as it applies largely to specific contracts of 20 year life.

(b) No action on the value of other gas purchase and sales contracts, ($2,411,105.23) pending further review of the basis and reason for establishing this asset, (a part of which first appeared on the records of a predecessor company) when a more definite recommendation will be made as to the disposition of this item.

(6) 2½% of the approximate value of gas distribution property.

(7) A flat rate of $60,000 per annum for the Missouri-Kansas Gas Company, pending completion of the inventory of physical property now in progress, at which time further recommendations will be submitted.

[fol. 15973] (8) A flat rate of $12,000. per annum for J. D. Judd & Company. This is at the rate of approximately 12% of book value of this Company's property account. Included in this Company's plant account is value of dry wells, which with lessened drilling and greater drain on the present production facilities, requires a relatively greater accrual for this reserve.

(9) A flat amount of $6,900. per annum for the Shale Gas Corporation, pending further review of the necessity of recapitalizing this Company, some two-thirds of the stock of which was issued a few years ago for certain gas acreage, all of which acreage so purchased, has since been surrendered, or the leases have expired.

The foregoing rates for creating reserves for depreciation, amortization of leaseholds and gas rights, and the amortization of the value of gas purchase and sales contracts, are recommended for the period ended December 31, 1932, at which time the subject should be reviewed and new recommendations submitted for future periods. If approved, these recommendations will be made effective as of April 1, 1932. The foregoing rates of accrual will produce a credit to reserves and corresponding charge against income of approximately $625,000. per annum, which based on the book value of consolidated Property Account of $45,700,000., represents a rate of about 1.4% per annum.

F. B. FLAHIVE.

5/5/32. Held over for further consideration at next meeting.

[fol. 15974] Panhandle Eastern Pipe Line Company and Subsidiaries

Value of Gas Sales Contracts—$642,286.30

There appears on the books of account of Panhandle Eastern Pipe Line Company an item of $642,286.30*, representing payment for services in connection with obtaining contracts for the sale of natural gas, including contracts with Illinois Power and Light Company and Missouri Power and Light Corporation.

As the major portion of this sum represents the value of contracts for the sale of natural gas to customers now on the lines, under 20 year agreements, it is recommended that this sum be amortized out of income at the rate of 5% per annum for the remainder of the year 1932, at which time the subject shall be reviewed and further recommendation submitted.

F. B. FLAHIVE.

*This is the balance of the $11,000,000 of value of contracts as determined by Brokaw, Dixon, Garner & McKee and entered on the books by order of the Directors at their meeting held September 3, 1930, less $10,357,713.70 written off, as instructed by the Directors at their meeting held March 29, 1932.

5/5/32 Held over for further consideration at next meeting.

[fol. 15975] (Exhibit 221.)

Docket G-207 Panhandle Eastern Pipe Line Company And Subsidiary Company

Computation Of Working Capital Requirement

Cash Working Capital:		
Total Operation and Maintenance — 1941 Ex. 173, line 9, Col. M.	$3,392,827.05	
Deduct: Cost of Gas Purchased Ex. 178, line 14, Col. M.	1,180,917.63	
	$2,211,909.42	
Average cash required for operation and maintenance 45/365 of $2,211,909.42.		$272,701.00
Prepaid Items — Dec. 31, 1941 Ex. 172, line 14, Col. M.		94,732.00
Average cash Working Capital required		367,433.00
Materials and Supplies Inventory — 12/31/41, Ex. 172, line 13, Col. M.		374,839.00
Total Working Capital Requirement		$742,272.00
Use $750,000		

[fol. 15976] Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Due And Payment Dates On Major Gas Sales Contracts

Sales Contracts	Date Due (on or Before)	Date Paid
Panhandle Eastern Pipe Line Company		
Central Distributing Company	15	21-23
Cities Service Gas Company	25	21-24
Harbison-Walker Refract., Co.	15	10-14
Kentucky Natural Gas Company	20	15-18
Mexico Refractories Co.	15	20-30
Michigan Consolidated Gas Co.	20	23-25
Michigan Gas Transmission Corp.	20	23-25
Missouri Power and Light Co.	15	9-14
Universal Atlas Cement Co.	15	13-20
Illinois Natural Gas Company		
Central Illinois Light Co.	15	14-23
Central Illinois Public Service Co.	15	21-28
Illinois Iowa Power Co.	15	10-27

Due and Payment Dates on Major Gas Purchase Contracts

Due date 25th of month. Payments usually made from 19th to 21st.

[fol. 15977] Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Materials And Supplies — Gas
1941

1941	Balance beginning of month	Debits	Credits	Balance End of Month
Jan.	$205,807.96	$ 18,565.03	$ 13,297.25	$ 211,075.74
Feb.	211,075.74	33,927.53	12,093.01	232,910.26
Mar.	232,910.26	37,019.03	16,487.92	253,441.37
April	253,441.37	56,336.92	29,292.67	280,485.62
May	280,485.62	76,311.76	45,106.43	311,690.95
June	311,690.95	25,944.75	74,670.06	262,965.64
July	262,965.64	27,441.08	33,279.25	257,127.47
Aug.	257,127.47	50,678.46	11,662.40	296,143.53
Sept.	296,143.53	32,423.57	13,734.86	314,832.24
Oct.	314,832.24	26,734.81	15,248.42	326,318.63
Nov.	326,318.63	24,238.57	17,958.19	332,599.01
Dec.	332,599.01	53,725.53	22,383.49	363,941.05
Totals		$463,347.04	$305,213.95	$3,443,531.51
Average				286,961.00

[fol. 15978]

Panhandle Eastern Pipe Line Company
And Illinois Natural Gas Company

Accrued Taxes — 1941

1941	Balance Beginning of Month	Debits	Credits	Balance End of Month
Jan.	$2,333,878.95	$ 36,838.36	$357,640.12	$2,654,680.71
Feb.	2,654,680.71	5,054.76	351,333.08	3,000,959.03
March	3,000,959.03	381,154.21	355,394.64	2,975,199.46
April	2,975,199.46	58,448.81	292,940.23	3,209,690.88
May	3,209,690.88	83,650.41	242,592.35	3,368,632.82
June	3,368,632.82	413,600.68	221,742.27	3,176,774.41
July	3,176,774.41	95,458.95	224,053.14	3,305,368.60
Aug.	3,305,368.60	2,721.54	220,588.06	3,523,235.12
Sept.	3,523,235.12	430,693.82	716,283.90	3,808,825.20
Oct.	3,808,825.20	962,137.39	366,122.79	3,213,810.60
Nov.	3,213,810.60	10,918.29	470,594.46	3,673,486.77
Dec.	3,673,486.77	788,646.54	333,663.19	3,218,503.42

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Gas Used in Testing Lines (Capitalized) Year 1931

	MCF	Average Rate per MCF	Amount	
Panhandle East. Pipe Line Co.	752,635	4¢	$30,788.27	(1)
Panhandle Ill. Pipe Line Co.	218,417	18¢	39,320.46	
Total			$70,108.73	

(1) After credits $15,190.20 resulting from sales made during 1931.

[fol. 15979]

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Gas Used In Construction Of Pipe Line
March 31, 1932 To December 31, 1941

	MCF	Amount
March 1, 1932 to December 31, 1935		None
Year 1936	5,435	$ 1,028.38
Year 1937	58,893	9,082.15
Year 1938	109,802	16,470.30
Year 1939		None
Year 1940	168,953	25,342.95
Year 1941	5,279	791.85
Totals March 31, 1932 to December 31, 1941	348,362	$52,715.63

[fol. 15980]

Docket G-207 (Exhibit 222.)

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Computation of Average Return Earned on Net Investment
For the Period April 1, 1932 to December 31, 1941.

Line No.	Account	Cumulative Total (Exh. 173)	Adjustment for Items Admittedly Not Cost	As Adjusted	Average 1932-1941 9-3/4 years
	(a)	(b)	(c)	(d)	(e)
1	Statement Of Net Operating Revenue				
2	Operating Revenues:				
3	Gas	$73,865,810		$73,865,810	$ 7,575,980
4	Gasoline	2,433,240		2,433,240	249,563
5	Pipe Line Rentals	735,716		735,716	75,458
6	Miscellaneous	213,493		213,493	21,897
7	Total Operating Revenues	$77,248,259		$77,248,259	$ 7,922,898
8					
9	Operating Revenue Deductions:				
10	Operation and Maintenance				
11	Expenses	19,036,829		19,036,829	1,952,495
12	Depreciation	11,042,369		11,042,369	1,132,552
13	Depletion	444,666		444,666	45,607
14	Abandoned Leases	859,746		859,746	88,179
15	Amortization of Other				
16	Limited Term Gas Investments	2,061,549	$1,231,870	829,679	85,095
17	Charges in Lieu of Federal				
18	Income and Excess Profits Taxes	823,882	823,882	—	—
19	State, Local and Miscellan-				
20	eous Federal Taxes	4,406,423	69,550	4,336,873	444,807
21	Federal Income Taxes	5,182,311	600,530	4,581,781	469,926
22	Federal Excess Profits Taxes	1,461,000	219,881	1,241,119	127,294
23	Total Operating Revenue Deductions	45,318,775	2,945,713	42,373,062	4,345,955
24					
25	Net Operating Revenue	$31,929,484	$2,945,713	$34,875,197	$ 3,576,943
26					
27	Average Net Investment				$47,774,469
28	Average Return Earned (Line 25 ÷ line 27)				7-1/2%

[fol. 15981]

Docket G-207

Source of Figures Used on Page 1

Year Ended Dec. 31	Gas Plant Per Ex. 176 Line 38	Add: Gas Sales Contracts	Deduct: Reserves for Depr. and Depl.	Net Investment
1932	$42,568,283		$ 605,167	$41,963,116
1933	42,435,049		1,169,253	41,265,796
1934	42,594,692		1,824,880	40,769,812
1935	42,441,201		2,437,455	40,003,746
1936	46,387,074	$371,076	3,005,610	43,752,540
1937	58,071,907	358,658	4,104,956	54,325,609
1938	58,751,335	401,443	5,736,427	53,416,351
1939	59,226,065	386,197	7,598,278	52,013,984
1940	64,380,428	372,006	9,189,501	55,562,933
1941	65,225,927	352,897	10,908,023	54,670,801
				$477,744,688
	Average Net Investment shown on line 27, Col. (e)			$ 47,774,469

Adjustments:

Amortization of Limited Term Gas Investments:	
Gas sales and purchase contracts — old	$654,989 34
Other Gas sales and purchase contracts	174,689 20
Total shown in line 16, Col. (d)	$829,678 54
State, Local and Miscellaneous Federal Taxes from Ex. 184 shown in line 20, Col. (c)	$69,550 25
Federal Income Taxes:	
Year 1936 (Ex. 185)	$149,790 03
1937 (Ex. 185)	426 21
1938 (Ex. 185)	541,792 37
1939 (Ex. 185)	824,496 52
1940 (Ex. 185)	1,375,275 49
1941 (Ex. 173)	1,690,000 00
Total shown in line 21, Col. (d)	$4,581,780 62
Federal Excess Profits Taxes	
Year 1940 (Ex. 185)	$ 321,119 26
1941 (Ex. 173)	920,000 00
Total shown in line 22, Col. (d)	$1,241,119 26

[fol. 15982]

(Exhibit 222A.)

Docket G-207

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Comparison of Average Return Earned on Net Investment
For the Periods April 1, 1932 to Dec. 31, 1936 and Jan. 1, 1937 to Dec. 31, 1941

	Cumulative Total as Adjusted Ex 222 (col.d)	Period 1932-1936 Cumulative Total	Period 1932-1936 Average (4-3/4 yrs.)	Period 1937-1941 Cumulative Total	Period 1937-1941 Average (5 years)
Statement of Net Operating Revenue					
Operating Revenues:					
Gas	$73,865,810	$15,795,126	$3,325,290	$58,070,684	$11,614,137
Gasoline	2,433,240	46,319	9,751	2,386,921	477,384
Pipe Line Rentals	735,716	735,716	154,888	—	—
Miscellaneous	213,493	133,980	28,206	79,513	15,903
Total Operating Revenues	$77,248,259	16,711,141	3,518,135	60,537,118	12,107,424
Operating Revenue Deductions:					
Operation and Maintenance	19,036,829	5,363,901	1,129,242	13,672,928	2,734,586
Depreciation	11,042,369	2,877,206	605,728	8,165,163	1,633,033
Depletion	444,666	105,608	22,233	339,058	67,811
Abandoned Leases	859,746	396,526	83,479	463,220	92,644
Amortization of Gas Contracts	829,679	327,495	68,946	502,184	100,437
State, Local and Misc. Federal Taxes	4,336,873	1,349,920	284,194	2,986,953	597,391
Federal Income Taxes	4,581,781	149,790	31,535	4,431,991	886,398
Federal Excess Profits Taxes	1,241,119	—	—	1,241,119	248,224
Total Operating Expenses	42,373,062	10,570,446	2,225,357	31,802,616	6,360,524
Net Operating Revenue	$34,875,197	$6,140,695	$1,292,778	28,734,502	$5,746,900
Average Net Investment			$41,551,002		$53,997,936
Average Return Earned			3.1%		10.64%

[fol. 15983] Exhibit 223

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Substitute Estimate (Less Economic) Of Additional
Capital Expenditures South And West Of Liberal Compressor Station
Required To Meet Peak Day Sales Of 307,000 MCF

Line No.	Item (A)	Description (B)	Amount (C)	Total Cost (D)
		1942		
1	(A)	Gas Wells — Texas Panhandle	3	$ 61 377
2	(B)	Install liners in old wells — Texas	2	918
3	(C)	Install Tubing in old wells — Texas	2	6 900
4	(D)	Acidize Wells — Texas	10	15 500
5	(E)	Lay well lines for 3 new wells —		
6		Panhandle Field	4.25 mi.	13 775
7	(F)	Construct measuring stations for new wells	3	2 070
8	(G)	Install additional Horse Power at Sneed	2 600 H.P.	362 800
9	(H)	Install additional Horse Power at Hansford	1 300 H.P.	121 200
10	(I)	Acidize Wells — Kansas 100%	10	15 500
11		50%	10	15 500
12	(J)	Office Building — Hugoton	1	7 000
13	(K)	Compressor Station Near Hugoton, Kansas	4 000 H.P.	552 560
14	(L)	Dehydration Plant	1	60 000
15	(M)	Loop existing lines	3.5 mi.	25 967
16		Hugoton Field	4.0 mi.	38 636
17	(N)	Purchase Pickup Trucks	2	1 650
18				1 301 351
19	(O)	Additional Buildings		
20		Sneed	3	
21		Hansford	3	41 700
22		Garage	1	
23				1 343 051
24		Less Credit On Acid from Joint Owner		7 750
25		Net Expenditures		1 335 301
26		1943		
27	(A)	Gas Wells — Texas Panhandle	2	45 086
28	(B)	Lay well lines	.5 mi.	1 620
29	(C)	Construct Measuring Stations	2	1 380
30	(D)	Install liners in old wells—Panhandle Field	3	1 746
31	(E)	Acidize wells – Panhandle	5	7 750
32	(F)	Acidize wells — Kansas 100%	6	7 680
33		Net Expenditures		$ 65 262

[fol. 15984] Exhibit 224

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Substitute Estimate (Less Economies) Of Additional
Capital Expenditures South And West Of Liberal Compressor Station
Required To Meet Peak Day Sales Of 338,000 MCF.

Line No.	Item (A)	Description (B)	Amount (C)	Total Cost (D)
		1942		
1	(A)	Drill Gas Wells — Panhandle	3	$ 61 377
2	(B)	Install liners in old wells — Texas	2	916
3	(C)	Install tubing in old wells — Texas	2	6 900
4	(D)	Acidize Wells — Texas	10	15 500
5	(E)	Lay well lines 3 new wells — Texas	4.25 mi.	13 775
6	(F)	Construct Measuring Stations — Texas	3	2 070
7	(G)	Install additional H.P. at Sneed Station	2 600 H.P.	362 800
8	(H)	Install additional H.P.	1 300	121 200
9	(I)	Acidize Wells — Kansas 100%	10	15 500
10		50%	10	15 500
11	(J)	Office Building — Hugoton	1	7 009
12	(K)	Compressor Station near Hugoton	4 000 H.P.	552 560
13	(L)	Dehydration Plant near Hugoton		60 000
14	(M)	Compressor Station near Santanta	4 000 H.P.	552 560
15	(N)	Telephone line	34 mi.	29 410
16	(O)	Dehydration Plant near Santanta		60 000
17	(P)	Loop existing lines	3.5 mi.	25 967
18		Hugoton Field	4.0 mi.	38 636
19	(Q)	Purchase Pickup Trucks	3	2 475
20	(R)	Additional Dwellings		
21		Sneed	3)	
22		Hansford	3)	41 700
23	(S)	Garages — Sneed	1)	
24				1 985 846
25		Less Credit On Acid from Joint-Owner		7 750
26		Total Net		1 978 096
27		1943		
28	(A)	Gas Wells	2	45 086
29	(B)	Lay Well Lines	.5 mi.	1 620
30	(C)	Measuring Stations	2	1 380
31	(D)	Install Liners — Old Wells Panhandle Field	3	1 746
32	(E)	Acidize Wells — Panhandle	5	7 750
33	(F)	Acidize Wells — Kansas 100%	6	7 680
34		Total Net		$ 65 262

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Estimate Of Operation And Maintenance Costs
South And West Of Liberal Compressor Station
Panhandle Field
307,000 MCF Continuous Daily Sales Capacity
Operation At 70% (Approximately Normal) Capacity Factor

Line No.	Department (A)	1942-1943 With Economic Expenditures (B)	1942-1943 With Less Economic Expenditures (C)	1943-1944 With Economic Expenditures (D)	1943-1944 With Less Economic Expenditures (E)
1	Transmission				
2	Operation	$ 27 078	$ 27 000	$ 27 678	$ 27 000
3	Maintenance	13 530	11 500	13 920	12 000
4	Total	40 608	38 500	40 998	39 000
5	Measurement				
6	Company Operation	12 217	12 500	12 749	12 750
7	Company Maintenance	1 886	1 800	1 932	1 850
8	Purchase Operation	6 868	7 470	7 162	7 470
9	Purchase Maintenance	557	606	581	606
10	Total	21 528	22 376	22 424	22 676
11	Compressor				
12	Operation — Hansford	24 471	26 000	24 910	26 000
13	Maintenance — Hansford	13 191	15 000	13 850	15 000
14	Operation — Sneed	44 108	46 000	44 548	46 000
15	Maintenance — Sneed	14 089	16 000	14 794	16 000
16	Total	95 859	103 000	98 102	103 000
17	Production				
18	Operation	24 500	24 000	26 300	24 500
19	Maintenance	11 750	15 000	13 300	15 000
20	Total	36 250	39 000	39 600	39 500
21	Land and Lease				
22	Operation	3 800	3 800	3 800	3,800
23	Royalties	232 099	160 823	232 099	162 797
24	Rents	325	325	325	325
25	Delay Rentals	4 932	11 031	3 097	9 101
26	Renewal Bonus	800	800	800	800
27	Gas Purchase Costs	650 209	763 335	650 209	749 306
28	Total	892 165	939 814	890 330	926 129
29	Dehydration Plant				
30	Sneed				
31	Operation	5 836	6 400	5 945	6 400
32	Maintenance	787	850	804	850
33	Total	6 623	7 250	6 749	7 250
34	Taxes				
35	Ad Valorem	30 278	25 610	31 365	27 574
36	Gross Production	65 698	40 590	65 698	41 165
37	Total	95 976	66 200	97 063	68 739
38	Total — Panhandle Field	$1 189 099	$1 216 140	$1 195 266	$1 206 294

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Estimate Of Operation And Maintenance Costs
South And West Of Liberal Compressor Station
Hugoton Field
307 000 MCF Continuous Daily Sales Capacity
Operation At 70% (Approximately Normal) Capacity Factor

Line No.	Department (A)	1942-1943 With Economic Expenditures (B)	1942-1943 With Less Economic Expenditures (C)	1943-1944 With Economic Expenditures (D)	1943-1944 With Less Economic Expenditures (E)
1	Transmission				
2	Operation	$ 38 450	$ 32 000	$ 39 550	$ 32 500
3	Maintenance	13 085	13 000	13 555	13 500
4	Total	51 535	45 000	53 105	46 000
5	Measurement				
6	Company Operation	13 973	12 500	15 633	13 500
7	Company Maintenance	2 887	2 500	3 264	2 750
8	Purchase Operation	7 124	7 200	7 218	7 500
9	Purchase Maintenance	862	850	878	900
10	Total	24 846	23 050	26 993	24 650
11	Compressor				
12	Operation — Hugoton	—	20 000	—	20 000
13	Maintenance — Hugoton	—	3 000	—	4 000
14	Operation — Satanta	—	—	—	—
15	Maintenance — Satanta	—	—	—	—
16	Total	—	23 000	—	24 000
17	Production				
18	Operation	18 983	16 500	21 283	17 500
19	Maintenance	6 900	6 500	7 500	7 000
20	Total	25 883	23 000	28 783	24 500
21	Land and Lease				
22	Operation	8 000	8 000	8 500	8 500
23	Royalties	58 794	59 537	58 794	59 537
24	Rents	—	—	—	—
25	Delay Rentals	102 167	106 244	99 047	105 244
26	Renewal Bonus	46 292	55 465	46 292	55 465
27	Gas Purchase Costs	293 498	701 922	293 498	701 922
28	Total	508 751	931 168	506 131	931 668
29	Taxes				
30	Ad Valorem	91 665	60 308	93 046	76 899
31	Gross Production	5 000	5 000	5 000	5 000
32	Total	96 657	65 308	98 046	81 899
33	Total — Hugoton Field	707 680	1 110 526	713 058	1 132 717
34	Total — Panhandle Field	1 189 009	1 216 140	1 195 266	1 206 294
35	Grand Total — Both Fields	$1 896 689	$2 326 666	$1 908 324	$ 2 339 011
36 37	Net Increase — Operation and Maintenance Cost		$ 429 977		$ 430 687

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Estimate Of Operation And Maintenance Costs
South And West Of Liberal Compressor Station
Panhandle Field
307,000 MCF Continuous Daily Sales Capacity
Operation At 90% Capacity Factor

Line No.	Department (A)	1942-1943 With Economic Expenditures (B)	1942-1943 With Less Economic Expenditures (C)	1943-1944 With Economic Expenditures (D)	1943-1944 With Less Economic Expenditures (E)
1	Transmission				
2	Operation	$ 27 078	$ 27 000	$ 27 078	$ 27 000
3	Maintenance	13 920	11 500	13 920	12 000
4	Total	40 998	38 500	40 998	39 000
5	Measurement				
6	Company Operation	13 306	12 500	13 306	12 500
7	Company Maintenance	1 981	1 800	1 981	1 800
8	Purchase Operation	7 470	7 470	7 470	7 470
9	Purchase Maintenance	606	606	606	606
10	Total	23 363	22 376	23 363	22 376
11	Compressor				
12	Operation — Hansford	25 407	26 000	25 407	26 000
13	Maintenance — Hansford	14 543	15 000	14 543	15 500
14	Operation — Sneed	45 051	46 000	45 051	46 500
15	Maintenance — Sneed	15 534	16 000	15 534	16 000
16	Total	100 535	103 000	100 535	104 000
17	Production				
18	Operation	27 100	24 000	27 100	24 500
19	Maintenance	14 100	15 000	14 100	15 500
20	Total	41 200	39 000	41 200	40 000
21	Land and Lease				
22	Operation	3 800	3 800	3 800	3 800
23	Royalties	232 099	160 523	232 099	162 797
24	Rents	325	325	325	325
25	Delay Rentals	3 097	11 033	8 007	9 101
26	Renewal Bonus	800	800	800	800
27	Gas Purchase Costs	650 209	763 335	650 209	749 306
28	Total	890 330	939 814	890 330	926 129
29	Dehydration Plant				
30	Sneed				
31	Operation	6 485	6 400	6 485	6 400
32	Maintenance	878	850	878	850
33	Total	7 363	7 250	7 363	7 250
34	Taxes				
35	Ad Valorem	31 365	25 610	31 365	27 574
36	Gross Production	65 698	40 590	65 698	41 165
37	Total	97 063	66 200	97 063	68 739
38	Total — Panhandle Field	$1 200 852	$1 216 140	$1 200 852	$1 207 494

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Estimate Of Operation And Maintenance Costs
South And West Of Liberal Compressor Station
Hugoton Field
307,000 MCF Continuous Daily Sales Capacity
Operation At 90% Capacity Factor

Line No.	Department (A)	1942–1943 With Economic Expenditures (B)	1942–1943 With Less Economic Expenditures (C)	1943–1944 With Economic Expenditures (D)	1943–1944 With Less Economic Expenditures (E)
1	Transmission				
2	Operation	$ 44 350	$ 37 500	$ 44 350	$ 38 000
3	Maintenance	16 740	13 500	16 740	14 000
4	Total	61 090	51 000	61 090	52 000
5	Measurement				
6	Company Operation	20 057	15 000	20 057	15 500
7	Company Maintenance	4 070	3 000	4 070	3 000
8	Purchase Operation	7 845	7 845	7 845	7 845
9	Purchase Maintenance	968	968	968	968
10	Total	32 940	26 813	32 940	27 313
11	Compressor				
12	Operation — Hugoton	14 200	29 000	14 200	30 000
13	Maintenance — Hugoton	6 250	8 000	6 250	10 000
14	Operation — Satanta	—	29 000	—	30 000
15	Maintenance — Satanta	—	8 000	—	10 000
16	Total	20 450	74 000	20 450	80 000
17	Production				
18	Operation	20 143	16 500	20 143	17 500
19	Maintenance	8 300	6 500	8 300	7 000
20	Total	28 443	23 000	28 443	24 500
21	Land and Lease				
22	Operation	8 500	8 500	8 500	8 500
23	Royalties	135 042	109 086	135 042	109 086
24	Rents	—	—	—	—
25	Delay Rentals	92 047	106 244	92 047	106 244
26	Renewal Bonus	26 660	55 465	26 660	55 465
27	Gas Purchase Costs	674 128	1 286 102	674 128	1 286 102
28	Total	936 377	1 565 397	936 377	1 565 397
29	Taxes				
30	Ad Valorem	99 483	60 308	99 483	69 461
31	Gross Production	6 000	6 000	6 000	6 000
32	Total	105 483	66 308	105 483	75 461
33	Total — Hugoton Field	1 184 783	1 806 518	1 184 783	1 824 671
34	Total — Panhandle Field	1 200 852	1 216 140	1 200 852	1 207 494
35	Grand Total — Both Fields	$2 385 635	$3 022 658	$2 385 635	$3 032 165
36	Net Increase — Operation				
37	and Maintenance Cost		$ 637 023		$ 646 530

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(Exhibit 227.)

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Estimate Of Operation And Maintenance Costs
South And West Of Liberal Compressor Station
Panhandle Field
338,000 MCF Continuous Daily Sales Capacity
Operation At 70% (Approximately Normal) Capacity Factor

Line No.	Department (A)	1942–1943 With Economic Expenditures (B)	1942–1943 With Less Economic Expenditures (C)	1943–1944 With Economic Expenditures (D)	1943–1944 With Less Economic Expenditures (E)
1	Transmission				
2	Operation	$ 27 078	$ 27 000	$ 27 078	$ 27 000
3	Maintenance	13 530	11 500	13 920	12 000
4	Total	40 608	38 500	40 998	39 000
5	Measurement				
6	Company Operation	12 217	12 500	12 749	12 750
7	Company Maintenance	1 886	1 800	1 932	1 850
8	Purchase Operation	6 868	7 470	7 162	7 470
9	Purchase Maintenance	557	606	581	606
10	Total	21 528	22 376	22 424	22 676
11	Compressor				
12	Operation — Hansford	24 471	26 000	24 910	26 000
13	Maintenance — Hansford	13 191	15 000	13 850	15 000
14	Operation — Sneed	44 108	46 000	44 548	46 000
15	Maintenance — Sneed	14 089	16 000	14 794	16 000
16	Total	95 859	103 000	98 162	103 000
17	Production				
18	Operation	24 500	24 000	26 300	24 500
19	Maintenance	11 750	15 000	13 300	15 000
20	Total	36 250	39 000	39 600	39 500
21	Land and Lease				
22	Operation	3 800	3 800	3 800	3 800
23	Royalties	232 099	160 523	232 099	162 797
24	Rents	325	325	325	325
25	Delay Rentals	4 932	11 031	3 097	9 201
26	Renewal Bonus	800	800	800	800
27	Gas Purchase Costs	650 209	763 335	650 209	749 306
28	Total	892 165	939 814	890 330	926 129
29	Dehydration Plant				
30	Sneed,				
31	Operation	5 836	6 400	5 945	6 400
32	Maintenance	787	850	804	850
33	Total	6 623	7 250	6 749	7 250
34	Taxes				
35	Ad Valorem	30 278	25 610	31 365	27 374
36	Gross Production	65 698	40 590	65 698	41 165
37	Total	95 976	66 200	97 063	68 739
38	Total — Panhandle Field	$1 189 009	$1 216 140	$1 195 266	$1 206 294

Estimate Of Operation And Maintenance Costs
South And West Of Liberal Compressor Station
Hugoton Field
338,000 MCF Continuous Daily Sales Capacity
Operation At 70% (Approximately Normal) Capacity Factor

Line No.	Department (A)	1942–43 With Economic Expenditures (B)	1942–43 With Less Economic Expenditures (C)	1943–44 With Economic Expenditures (D)	1943–44 With Less Economic Expenditures (E)
1	Transmission				
2	Operation	$ 39 550	$ 34 000	$ 42 250	$ 34 500
3	Maintenance	13 555	13 000	15 590	13 500
4	Total	53 105	47 000	57 840	48 000
5	Measurement				
6	Company Operation	15 623	13 000	17 357	13 500
7	Company Maintenance	3 264	3 000	3 530	3 250
8	Purchase Operation	7 218	7 200	7 525	7 500
9	Purchase Maintenance	878	850	931	900
10	Total	26 983	24 050	29 343	25 150
11	Compressor				
12	Operation — Hugoton	—	20 000	—	20 000
13	Maintenance — Hugoton	—	3 000	—	4 000
14	Operation — Satanta	—	20 000	—	20 000
15	Maintenance — Satanta	—	3 000	—	4 000
16	Total	—	46 000	—	48 000
17	Production				
18	Operation	21 283	17 000	21 343	18 000
19	Maintenance	7 500	7 000	7 950	7 500
20	Total	28 783	24 000	29 293	25 500
21	Land Lease				
22	Operation	8 500	8 500	8 500	8 500
23	Royalties	90 007	59 537	79 821	59 537
24	Rents	—	—	—	—
25	Delay Rentals	98 947	106 244	98 947	106 244
26	Renewal Bonus	26 660	55 465	26 660	55 465
27	Gas Purchase Costs	449 315	941 066	449 315	941 066
28	Total	673 429	1 170 812	663 243	1 170 812
29	Taxes				
30	Ad Valorem	93 046	60 308	96 668	76 899
31	Gross Production	6 000	6 000	6 000	6 000
32	Total	99 046	66 308	102 668	82 899
33	Total — Hugoton Field	881 346	1 378 170	882 387	1 400 361
34	Total — Panhandle Field	1 189 009	1 216 140	1 195 266	1 206 294
35	Grand Total — Both Fields	$2 070 355	$2 594 310	$2 077 653	$2 606 655
36	Net Increase — Operation				
37	and Maintenance Cost		$ 523 955		$ 529 002

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Estimate Of Operation And Maintenance Costs
South And West Of Liberal Compressor Station
Panhandle Field.
338,000 MCF Continuous Daily Sales Capacity
Operation At 90% Capacity Factor

Line No.	Department (A)	1942–43 With Economic Expenditures (B)	1942–43 With Less Economic Expenditures (C)	1943–44 With Economic Expenditures (D)	1943–44 With Less Economic Expenditures (E)
1	Transmission				
2	Operation	$ 27 078	$ 27 000	$ 27 078	$ 27 000
3	Maintenance	13 920	11 500	13 920	12 000
4	Total	40 998	38 500	40 998	39 000
5	Measurement				
6	Company Operations	13 306	12 500	13 306	12 500
7	Company Maintenance	1 981	1 800	1 981	1 800
8	Purchase Operation	7 470	7 470	7 470	7 470
9	Purchase Maintenance	606	606	606	606
10	Total	23 363	22 376	23 363	22 376
11	Compressor				
12	Operation — Hansford	25 407	26 000	25 407	26 000
13	Maintenance — Hansford	14 543	15 000	14 543	15 500
14	Operation — Sneed	45 051	46 000	45 051	46 500
15	Maintenance — Sneed	15 534	16 000	15 534	16 000
16	Total	100 535	103 000	100 535	104 000
17	Production				
18	Operation	27 100	24 000	27 100	24 500
19	Maintenance	14 100	15 000	14 100	15 500
20	Total	41 200	39 000	41 200	40 000
21	Land and Lease				
22	Operation	3 800	3 800	3 800	3 800
23	Royalties	232 099	160 523	232 099	162 797
24	Rents	325	325	325	325
25	Delay Rentals	3 097	11 031	3 097	9 101
26	Renewal Bonus	800	800	800	800
27	Gas Purchase Costs	650 209	763 335	650 209	749 306
28	Total	890 330	939 814	890 330	926 129
29	Dehydration Plant				
30	Sneed				
31	Operation	6 485	6 400	6 485	6 400
32	Maintenance	878	850	878	850
33	Total	7 363	7 250	7 363	7 250
34	Taxes				
35	Ad Valorem	31 365	25 610	31 365	27 574
36	Gross Production	65 698	40 590	65 698	41 165
37	Total	97 063	66 200	97 063	38 739
38	Total — Panhandle Field	$1 200 852	$1 216 140	$1 200 852	$1 207 494

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Estimate Of Operation And Maintenance Costs
South And West Of Liberal Compressor Station
Hugoton Field
338,000 MCF Continuous Daily Sales Capacity
Operation At 90% Capacity Factor

Line No.	Department (A)	1942–43 With Economic Expenditures (B)	1942–43 With Less Economic Expenditures (C)	1943–44 With Economic Expenditures (D)	1943–44 With Less Economic Expenditures (E)
1	Transmission				
2	Operation	$ 44 350	$ 38 000	$ 44 350	$ 38 500
3	Maintenance	16 740	13 500	16 740	14 000
4	Total	61 090	51 500	61 090	52 500
5	Measurement				
6	Company Operation	20 057	16 000	20 057	16 500
7	Company Maintenance	4 070	3 000	4 070	3 000
8	Purchase Operation	7 845	7 845	7 845	7 845
9	Purchase Maintenance	968	968	968	968
10	Total	32 940	27 813	32 940	28 313
11	Compressor				
12	Operation — Hugoton	14 200	30 000	14 200	30 500
13	Maintenance — Hugoton	6 250	8 000	6 250	10 500
14	Operation — Satanta	—	30 000	—	30 500
15	Maintenance — Satanta	—	8 000	—	10 500
16	Total	20 450	76 000	20 450	82 000
17	Production				
18	Operation	20 143	17 500	20 143	18 500
19	Maintenance	8 300	7 500	8 300	8 000
20	Total	28 443	25 000	28 443	26 500
21	Land and Lease				
22	Operation	8 500	8 500	8 500	8 500
23	Royalties	175 173	160 523	175 173	160 523
24	Rents	—	—	—	—
25	Delay Rentals	92 047	106 244	92 047	106 244
26	Renewal Bonus	26 660	55 465	26 660	55 465
27	Gas Purchase Costs	874 462	1 593 570	874 462	1 593 570
28	Total	1 176 842	1 924 302	1 176 842	1 924 302
29	Taxes				
30	Ad Valorem	99 483	60 308	99 483	76 899
31	Gross Production	7 000	7 000	7 000	7 000
32	Total	106 483	67 308	106 483	83 899
33	Total — Hugoton Field	1 426 248	2 171 923	1 426 248	2 197 514
34	Total — Panhandle Field	1 200 852	1 216 140	1 200 852	1 207 494
35	Grand Total — Both Fields	$2 627 100	$3 388 063	$2 627 100	$3 405 008
36	Net Increase — Operation				
37	and Maintenance Cost		$ 760 963		$ 777 908

[fol. 15993] Exhibit 229.

Capacity Study—April 7, 1942

Continuous Daily Delivery Capacity—307,000 MCF

Scope

A summary of additional facilities required and the investment necessary to increase the continuous daily delivery capacity of Panhandle Eastern and Michigan Gas Transmission Systems to 307,000 MCF.

Design Data

Maximum operating pressure, 500# Gauge, West of Zionsville, Indiana, 600# Gauge East of Zionsville.

Construction Procedure

All facilities required are in addition to certain projects now under construction.

Gas Delivered, Used and Unaccounted For — Peak Day (Firm Basis)

Sales:	MCF	MCF	MCF
Detroit Area	133 000		
Indiana, Ohio and Michigan	90 000		
Illinois, Missouri and Kansas	84 000		
Total Sales		307 000	
Fuel		19 680	
Gasoline Dehydration Plant		2 640	
Unaccounted For		1 540	
Total Gas Requirements (Liberal Station)			330 860

[fol. 15094]

Capacity Study — April 7, 1942

Continuous Daily Delivery Capacity — 307,000 MCF

Investment

Additional Capital Expenditures — Compressor Stations and Main Line System

Compressor Stations

Compressor Stations	Cost	
Liberal		
Liberal Dehydration Plant	$ 40 000	
Hugoton, Kansas (New 4000 Horsepower Station Including Dehydration Plant)	120 000	
	612 560	
Total — Compressor Station Additions		$ 772 560

Main Line

Main Line Loops	Diameter	Length	Cost Per Mi.	Cost	
Edgerton	24"x5/16"	9 94	$26 400	$ 262 400	
Zionsville	24"x5/16"	46 67	26 400	1 232 100	
Sub-Total M.G.T.					
Olpe	26"x9/32"	26 64	29 429	784 080	$1 494 500
Haven	26"x9/32"	15 53	30 219	469 300	
Greensburg	26"x9/32"	20 19	30 673	619 300	
Liberal	26"x9/32"	23 37	30 320	708 600	
Sub-Total P.E.P.L.					
Total — Loop Lines					2 581 200
Total Investment — Compressor Stations and Main Line Loops					4 075 700

[fol. 15995]

Capacity Study — April 7, 1942

Continuous Daily Delivery Capacity — 307,000 MCF

Investment

Additional Capital Expenditures — Continued

Field Pipe Lines		
Kansas Gathering Lines	$64 600	
Total		$ 64 600
Summary		
Total Investment — Field Pipe Lines		$ 64 600
Carried Forward from Page -2-		
Total Investment — Compressor Stations and Main Line System		4 848 260
Total Estimated Capital Expenditures (Exclusive Standby Compressor Units, Gas Wells and Other Field Costs)		$4 912 860

[fol. 15996]

Capacity Study — April 7, 1942

Continuous Daily Delivery Capacity — 307,000 MCF

	Pipe Tonnage	
Loops		
Edgerton	2 080 Tons	
Zionsville	9 740 "	
Sub-Total M.G.T.		11 820 Tons
Olpe	5 449 Tons	
Haven	3 168 "	
Greensburg	4 119 "	
Liberal	4 766 "	
Sub-Total P.E.P.L.		17 502 Tons
Field System		
Kansas Gathering Lines	502 Tons.	
Sub-Total		502 Tons
Total Tonnage Pipe Requirements PEPL System (Exclusive Compressor Station Additions, Gas Well Casing and Well Lines)		29 824 Tons

[fol. 15997]

Capacity Study — April 7, 1942

Continuous Daily Delivery Capacity — 307,000 MCF

Estimated Cost of Adding a Standby Compressor at Each Main Line Station

Compressor Station	Additional H.P.	Cost/H.P.	Cost	
Edgerton	1 300	$ 140	$182 000	
Zionsville	1 300	130	169 000	
Montezuma	1 300	130	169 000	
Sub-Total M.G.T.				$ 520 000
Tuscola	1 300	126	164 600	
Glenarm	1 000	145	145 000	
Pleasant Hill	1 300	125	162 500	
Centralia	1 300	128	166 400	
Houstonia	1 300	120	156 000	
Louisburg	1 000	138	138 000	
Olpe	1 300	120	156 000	
Haven	1 300	120	156 000	
Greensburg	1 300	120	156 000	
Liberal	1 000	140	140 000	
Sub-Total P.E.P.L.				1 540 500
Total				$2 060 500

5861

[fol. 15998] Exhibit 230.

Capacity Study—April 7, 1942.

Completely Looped and Economically Powered Main Line System With Economic Production-Transmission Expenditures.

Scope

A summary of additional facilities required and investment necessary to increase the continuous daily delivery capacity of Panhandle Eastern and Michigan Gas Transmission Systems to 338,000 MCF.

Design Data

Maximum operating pressure, 500# Gauge, West of Zionsville, Indiana. 600# Gauge East of Zionsville.

Construction Procedure

All facilities required are in addition to certain projects now under construction.

Gas Delivered, Used and Unaccounted For — Peak Day (Firm Basis)

Sales:	MCF	MCF	MCF
Detroit Area	164 000		
Indiana, Ohio and Michigan	90 000		
Illinois, Missouri and Kansas	84 000		
Total Sales		338 000	
Fuel		25 200	
Gasoline-Dehydration Plant		3 375	
Unaccounted For		2 327	
Total Gas Requirements (Liberal Station)			368 912

Power Data

Compressor Station	Present H.P.	H.P. Required	Additional Umts
Edgerton	6 500	6 500	—
Zionsville	6 500	6 500	—
Montezuma	7 800	8 400	—
Tuscola	5 700	6 000	1-1300
Glenarm	7 000	8 000	1-1000
Pleasant Hill	7 800	9 100	1-1300
Centralia	6 500	9 650	2-1300
Houstonia	6 500	10 150	2-1300
Louisburg	7 000	9 500	2-1000
Olpe	7 800	11 000	2-1300
Haven	7 800	11 050	2-1300
Greensburg	7 800	11 600	2-1300
Liberal	10 000	11 240	1-1000

(fol. 15999)

Capacity Study — April 7, 1942

Investment

Additional Capital Expenditures — Liberal Station and Eastward

Compressor Station	Add'l H.P.	Cost Per H.P.	Cost	
Tuscola	1 300	126	$ 164 600	
Glenarm	1 000	175	175 300	
Pleasant Hill	1 300	130	169 700	
Centralia	2 600	124	322 650	
Houstonia	2 600	135	351 000	
Louisburg	2 000	134	267 400	
Olpe	2 600	130	338 000	
Haven	2 600	130	338 000	
Greensburg	2 600	130	338 000	
Liberal	1 000	145	145 000	
Liberal Gasoline — Dehydration Plant			349 500	
Total — Compressor Station Additions				$2 959 150

Main Line Loops	Diameter	Length	Cost Per Mi.	Cost		
Edgerton	24"x5/16"	9 94	$26 400	$ 262 416		
Zionsville	24"x5/16"	46 67	26 400	1 232 088		
Sub-Total M.G.T.					$1 494 504	
Olpe	26"x9/32"	26 64	29 429	784 000		
Haven	26"x9/32"	15 53	30 219	469 300		
Greensburg	26"x9/32"	20 19	30 673	619 290		
Liberal	26"x9/32"	23 37	30 320	708 570		
Sub-Total P.E.P.L.					2 581 160	
Total — Loop Lines						4 075 664
Telephone Lines West of Dana, Indiana					522 800	
Telephone Lines East of Dana, Indiana					324 000	
Total						846 800
Total Investment — Liberal Station and Eastward						$7 881 614

[fol. 16000]

Capacity Study — April 7, 1942

Investment

Additional Capital Expenditures — South and West Liberal Station

Field Pipe Lines and Measuring Stations

Tex. — Well Lines and Meas. Stas.	$ 64 151	
Tex. — Gathering Lines	457 729	
Tex. — Trunk Lines	672 133	
Okla. — Well Lines and Meas. Stas.	97 040	
Okla. — Gathering Lines	959 556	
Okla. — Trunk Lines	834 209	
Ks. — Well Lines and Meas. Stas.	15 702	
Ks. — Trunk Lines	560 403	
Total		$3 660 923

Summary

Total Investment, South and West of Liberal — Exclusive Gas Wells and Other Field Costs		$3 660 923
Carried Forward from Page 2 — Total Investment — Liberal Station and Eastward		7 881 614
Total Estimated Capital Expenditures (Exclusive Standby Compressor Units, Gas Wells and Other Field Costs)		$11 542 537

5865

[fol. 16001] Capacity Study — April 7, 1942

Pipe Tonnage

Loops		
Edgerton	2 080 Tons	
Zionsville	9 740 "	
Sub-Total M.G.T.		11 820 Tons
Olpe	5 449 "	
Haven	3 168 "	
Greensburg	4 119 "	
Liberal	4 766 "	
Sub-Total P.E.P.I.		17 502 "
Field System		
Texas Well Lines	379 "	
Texas Gathering Lines	3 784 "	
Texas Trunk Lines	5 360 "	
Oklahoma Well Lines	515 "	
Oklahoma Gathering Lines	8 151 "	
Oklahoma Trunk Lines	6 500 "	
Kansas Well Lines	86 "	
Kansas Trunk Lines	5 030 "	
Sub-Total	29 805 "	
Total Tonnage Pipe Requirements PEPI — MGT Systems (Exclusive Compressor Station Additions and Gas Well Casing)		59 127 Tons

[fol. 16002] Capacity Study — April 7, 1942

Estimated Cost of Adding a Standby Compressor at Each Main Line Station

Compressor Station	Additional H. P.	Cost H.P.	Cost
Edgerton	1 300	$ 140	$ 182 000
Zionsville	1 300	130	169 000
Montezuma	1 300	130	169 000
Sub-Total M.G.T.			$ 520 000
Tuscola	1 300	115	149 500
Glenarm	1 000	135	135 000

Pleasant Hill	1 300	115	149 500*	
Centralia	1 300	110	143 000*	
Houstonia	1 300	110	143 000*	
Louisburg	1 000	128	128 000*	
Olpe	1 300	110	143 000*	
Haven	1 300	110	143 000*	
Greensburg	1 300	110	143 000*	
Liberal	1 000	130	130 000*	
Sub-Total P.E.P.L.				1 407 000
Total				$1 927 000

*These prices assume this work will be done in conjunction with the additions of other units required.

[Fol. 16003] Exhibit 231.

Capacity Study—April 7, 1942, Revised

Competely Looped and Economically Powered Main Line System with Less Economic Production-Transmission Expenditures.

Scope

A summary of additional facilities required and investment necessary to increase the continuous daily delivery capacity of Panhandle Eastern and Michigan Gas Transmission Systems to 338,000 MCF involving a minimum quantity of steel for pipe lines and no trunk telephone lines.

Design Data

Maximum operating pressure, 500# Gauge, West of Zionsville, Indiana, 600# Gauge East of Zionsville.

Construction Procedure

All facilities required are in addition to certain projects now under construction.

Gas Delivered, Used and Unaccounted For — Peak Day (Firm Basis)

Sales:	MCF	MCF	MCF
Detroit Area	164 000		
Indiana, Ohio and Michigan	90 000		
Illinois, Missouri and Kansas	84 000		
Total Sales		338 000	
Fuel		25 210	
Gasoline-Dehydration Plant		3 375	
Unaccounted For		2 327	
Total Gas Requirements (Liberal Station)			368 912

Power Data

Compressor Station	Present H.P.	H.P. Required	Additional Units
Edgerton	6 500	6 500	—
Zionsville	6 500	6 500	—
Montezuma	7 800	8 400	—
Tuscola	5 700	6 000	1-1300
Glenarm	7 000	8 000	1-1000
Pleasant Hill	7 800	9 100	1-1300
Centralia	6 500	9 650	2-1300
Houstonia	6 500	10 150	2-1300
Louisburg	7 000	9 500	2-1000
Olpe	7 800	11 000	2-1300
Haven	7 800	11 050	2-1300
Greensburg	7 800	11 600	2-1300
Liberal	10 000	11 240	1-1000
Hugoton	—	4 000	4-1000
Satanta	—	4 000	4-1000

Capacity Study. — April 7, 1942, Revised

Investment

Additional Capital Expenditures — Compressor Stations and Main Line Loops

Compressor Stations	Add'l H.P.	Cost Per H.P.	Cost		
Tuscola	1 300	126	$ 164 600		
Glenarm	1 000	175	175 300		
Pleasant Hill	1 300	130	169 700		
Centralia	2 600	124	322 650		
Houstonia	2 600	135	351 000		
Louisburg	2 000	134	267 400		
Olpe	2 600	130	338 000		
Haven	2 600	130	338 000		
Greensburg	2 600	130	338 000		
Liberal	1 000	145	145 000		
Liberal Gasoline — Dehydration Plant			349 500		
Hugoton, Ks. (New 4000 Horsepower Station Including Dehydration Plant)			612 560		
Satanta, Ks. (New 4000 Horsepower Station Including Dehydration Plant)			612 560		
Total Compressor Station Additions					$4 184 270

Main Line Loops	Diameter	Length	Cost Per Mi.	Cost		
Edgerton	24"x5/16"	9 94	$26 400	$ 262 416		
Zionsville	24"x5/16"	46 67	26 400	1 232 088		
Sub-Total M.G.T.					$1 494 504	
Olpe	26"x9/32"	26 64	29 429	784 000		
Haven	26"x9/32"	15 53	30 219	469 300		
Greensburg	26"x9/32"	20 49	30 673	619 290		
Liberal	26"x9/32"	23 37	30 320	708 570		
Sub-Total P.E.P.L.					2 581 160	
Total — Loop Lines						4 075 664
Total Investment Compressor Stations and Main Line Loops						$8 259

[fol. 16005] Capacity Study — April 7, 1942, Revised

Investment

Additional Capital Expenditures — Continued

Field Pipe Lines		
Kansas — Gathering Lines	$64 600	
Total		$ 64 600
Summary		
Total Investment, Field Pipe Lines		$ 64 600
Carried Forward from Page 2 — Total Investment — Compressor Stations and Main Line Loops		8 259 934
Total Estimated Capital Expenditures (Exclusive Standby Compressor Units, Gas Wells and Other Field Costs)		$8 324 534

[fol. 16006] Capacity Study — April 7, 1942, Revised

Pipe Tonnage

Loops		
Edgerton	2 080 Tons	
Zionsville	9 740 "	
Sub-Total M.G.T.		11 820 Tons
Olpe	5 449 "	
Haven	3 168 "	
Greensburg	4 119 "	
Liberal	4 766 "	
Sub-Total P.E.P.L.		17 502 Tons
Field System		
Kansas Gathering Lines	502 "	
Sub-Total		502 Tons
Total Tonnage Pipe Requirements PEPL — MGT Systems (Exclusive Compressor Station Additions and Gas Well Casing)		29 824 Tons

[fol. 16007] Capacity Study — April 7, 1942, Revised

Estimated Cost of Adding Standby Compressor at Each Main Line Station

Compressor Station	Additional H. P.	Cost/H.P.	Cost	
Edgerton	1 300	$ 140	$ 182 000	
Zionsville	1 300	130	169 000	
Montezuma	1 300	130	169 000	
Sub-Total M.G.T.				$ 520 000
Tuscola	1 300	115	149 500*	
Glenarm	1 000	135	135 000*	
Pleasant Hill	1 300	115	149 500*	
Centralia	1 300	110	143 000*	
Houstonia	1 300	110	143 000*	
Louisburg	1 000	128	128 000*	
Olpe	1 300	110	143 000*	
Haven	1 300	110	143 000*	
Greensburg	1 300	110	143 000*	
Liberal	1 000	130	130 000*	
Sub-Total P.E.P.L.				1 407 000
Grand Total				$1 927 000

*These prices assume this work will be done in conjunction with the additions of other units required.

[fol. 16008]
Docket G-207

(Exhibit 232.)

Michigan Gas Transmission Corporation

Computation of Average Return Earned on Net Investment
For the Period March 1, 1936 to December 31, 1941

Account	Cumulative Total (Ex. 99 and 163)	Adjustment for Taxes Not Paid	As Adjusted	Average (5-5/6 yrs.)
Statement of Net Operating Revenue				
Operating Revenues:				
Gas	$15,654,257		$15,654,257	$2,683,740
Miscellaneous Rents	2,670		2,670	458
Transportation of Gas	6,407,745		6,407,745	1,098,533
Total Operating Revenue	22,064,672		22,064,672	3,782,731
Operating Revenue Deductions:				
Operation	14,345,675		14,345,675	2,459,399
Maintenance	242,007		242,007	41,489
Depreciation	1,539,930		1,539,930	264,003
Taxes: Federal Income	633,291	54,794	578,497	99,177
Fed. Excess Profits	239,654	135,595	104,059	17,840
State, Local and Misc. Federal	712,817		712,817	122,204
Total Operating Expenses	17,743,374	190,389	17,522,985	3,004,112
Net Operating Revenue	$ 4,351,298		$ 4,541,687	$ 778,619
Average Net Investment				$9,134,568
Average Return Earned				8 1/2%

Average Net Investment:

Year Ended Dec. 31	Gas Plant Per Ex. 201	Depreciation Reserve Ex. 88 and 163	Net Adjustment For Intercompany Profit	Net Investment
1936	$ 7,770,429	$ 275,878	$121,500	$ 7,373,051
1937	9,226,241	511,336	117,900	8,597,005
1938	9,260,047	787,284	114,300	8,358,463
1939	9,812,436	1,057,725	110,700	8,644,011
1940	12,290,820	1,340,075	107,100	10,843,645
1941	12,792,700	1,697,966	103,500	10,991,234
Total				$54,807,409
Average (6 years)				$ 9,134,568

EXHIBIT 233.

PROSPECTUS

5875

Panhandle Eastern Pipe Line Company

$10,000,000
FIRST MORTGAGE AND FIRST LIEN 3% BONDS,
SERIES C, DUE JANUARY 1, 1962

and

150,000 SHARES 5.60% CUMULATIVE PREFERRED STOCK
(PAR VALUE $100 PER SHARE)

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION

Panhandle Eastern Pipe Line Company has registered these securities by filing certain information with the Commission. The Commission has not passed on the merits of any securities registered with it.

EXHIBIT 233.

April 2, 1942

SUPPLEMENTAL INFORMATION

To Be Read in Connection with Prospectus, Dated Febru ry 3, 1942

PANHANDLE EASTERN PIPE LINE COMPANY

$10,000,000
First Mortgage and First Lien 3% Bonds, Series C
Due January 1, 1962
and
150,000 shares 5.60% Cumulative Preferred Stock
(par value $100 per share)

On and after April 2, 1942, the public offering price of the Preferred Stock will be $100 per share flat.

Certain of the Purchasers named in the Prospectus are making available for sale to approved Dealers shares of such Preferred Stock at such public offering price less a concession of $1.50 per share payable to such Dealers, provided that any Preferred Stock purchased by such Dealers shall not be repurchased by the Representatives for the account of the several Purchasers at or below such public offering price prior to May 15, 1942 or such earlier date as the Representatives may determine. Each of such approved Dealers will agree that it will not offer any shares of the Preferred Stock at any price below such public offering price.

The agreement with the Selected Stock Dealers referred to on page 8[illegible] of the above mentioned Prospectus was terminated on April 1, 1942.

Prospectus relates will be first offered to certain of the Company's Common Stockholders. As to any of such shares purchased by such stockholders, upon such offering, the Company will receive $104 per share plus accrued dividends and will pay no underwriting discounts or commissions.

Glore, Forgan & Co. **Kidder, Peabody & Co.**

No person has been authorized to give any information or to make any representations, other than those contained in this Prospectus, in connection with the offers contained in this Prospectus, and if given or made, such information or representation must not be relied upon as having been authorized by the Company or by any of the Underwriters. This Prospectus does not constitute an offer by any Underwriter to sell any of the securities in any State to any person to whom it is unlawful for such Underwriter to make such offer in such State.

The date of this Prospectus is February 3, 1942.

APPLICATION OF PROCEEDS

The net proceeds to be received by the Company from the issue and sale of the Series C Bonds and the Cumulative Preferred Stock (First Series), estimated to amount to $25,043,835, exclusive of accrued interest and dividends, which net proceeds, after deducting expenses in connection with the issue and sale of said Bonds and Preferred Stock, will amount to approximately $24,893,835, are to be applied approximately as follows:

1. To the purchase from Columbia Gas & Electric Corporation of all the outstanding securities (stock and indebtedness) of Michigan Gas Transmission Corporation, as more fully explained herein unde caption "Certain Proposed Acquisitions"	$10,676,000*
2. To the purchase from Columbia Gas & Electric Corporation of all the outstanding securities (stock and indebtedness) of Indiana Gas Distribution Corporation, as more fully explained herein under caption "Certain Proposed Acquisitions"	$ 154,000*
3. To the purchase from The Ohio Fuel Gas Company of certain natural gas pipe lines in Indiana and Ohio, as more fully explained herein under caption "Certain Proposed Acquisitions"	$ 439,000
4. To the redemption of all of the Company's outstanding Class A Preferred Stock (now owned beneficially by Columbia Oil & Gasoline Corporation), exclusive of accrued dividends which will be paid out of the Company's general funds	$10,000,000
5. To the payment of part of the cost of construction work now authorized as more fully described under the caption "Property"	$ 3,624,835**
	$24,893,835

* This figure will be adjusted upward or downward in an amount equal to the increase or decrease, as the case may be, of the surplus of this corporation during the period between September 30, 1941 and the date of purchase.

** The balance (estimated at $4,946,000 as of September 30, 1941) of the payments of the cost of construction work now authorized is to be made from the general funds of the Company.

The consideration to be received for the shares of Cumulative Preferred Stock (First Series) (other than accrued dividends) is, to the extent of the par value of such shares, to be credited to capital and, to the extent of any excess of such consideration over such par value, is to be credited to premium on capital stock as provided in the Uniform System of Accounts prescribed by the Federal Power Commission for Natural Gas Companies.

CAPITALIZATION AND FUNDED DEBT

Upon the issue and sale of the Series C Bonds and the Cumulative Preferred Stock (First Series), and upon the redemption for retirement of the Class A Preferred Stock, the outstanding funded debt and capitalization of the Company, tabulated as of September 30, 1941, will be as follows:

	Amount Authorized	To Be Outstanding as Above
First Mortgage and First Lien Bonds, Series A, due serially November 1, 1946-1950(1)	$ 6,250,000(2)	$ 6,250,000
First Mortgage and First Lien 3% Bonds, Series B, due November 1, 1960	12,000,000(2)	12,000,000
First Mortgage and First Lien 3% Bonds, Series C, due January 1, 1962	10,000,000(2)	10,000,000
Serial Notes, due serially November 1, 1942-1945(3)	5,000,000	5,000,000
Leasehold Purchase Obligation(4)	62,000	14,256
Capital Stock:		
5.60% Cumulative Preferred Stock (par value $100 per share)	(5)	150,000 shs.
Class B Preferred Stock (6% cumulative, par value $100 per share)	10,000 shs.(6)	10,000 shs.
Common Stock, without par or stated value	810,000 shs.(7)	807,367 shs.

(1) The Series A Bonds mature and bear interest as follows: $1,250,000, due November 1, 1946, bear interest at 1.65%; $1,250,000, due November 1, 1947, bear interest at 1.85%; $1,250,000, due November 1, 1948, bear interest at 2.00%; $1,250,000, due November 1, 1949, bear interest at 2.15%; and $1,250,000, due November 1, 1950, bear interest at 2.30%.

(2) Under the Indenture, the issuance of Series A Bonds, Series B Bonds and Series C Bonds is limited to $6,250,000, $12,000,000 and $10,000,000, principal amount, respectively. Bonds of other series may be issued without limit as to amount, subject to the restrictions in the Indenture under which the Bonds are issued. See caption "Description of Series C Bonds", sub-caption "Additional Issuance of Bonds".

(3) The Serial Notes mature and bear interest as follows: $1,250,000, due November 1, 1942, bear interest at 0.75%; $1,250,000, due November 1, 1943, bear interest at 1.00%; $1,250,000, due November 1, 1944, bear interest at 1.25%; and $1,250,000, due November 1, 1945, bear interest at 1.50%.

(4) Payable monthly from gas produced, unpaid balance payable August 31, 1946.

(5) The 5.60% Cumulative Preferred Stock offered hereby is part of an authorized issue of 250,000 shares of Cumulative Preferred Stock. The remaining authorized shares are issuable from time to time in one or more series varying with respect to rate of dividend, redemption price, preference on voluntary liquidation and in other respects, all as determined from time to time by the Board of Directors of the Company prior to the issuance of shares of a particular series.

(6) The three members of the Company's Board of Directors representing thereon Missouri-Kansas Pipe Line Company have voted against the payment of dividends on the Company's Class B Preferred Stock on the ground that such stock is not validly outstanding. In the opinion of Edward N. Goodwin, Esq., General Counsel for the Company, such stock is validly outstanding. A copy of such opinion is filed as an exhibit to the Registration Statement, to which opinion reference is hereby made.

(7) Reference is hereby made to the caption "Certain Other Phases of Corporate History", for a description of certain litigation concerning an obligation of Columbia Oil & Gasoline Corporation to purchase 1,285 shares of Common Stock of the Company.

On December 19, 1941, the Board of Directors of the Company declared dividends in the aggregate amount of $299,561.17 on the outstanding Preferred Stock, and in the aggregate amount of $406,683.50 on the outstanding Common Stock, payable in January, 1942.

EARNINGS

The following condensed statement of consolidated earnings has been prepared by the Company from the Statement of Consolidated Income of the Company and its subsidiaries certified by Messrs. Arthur Andersen & Co. for the three years and nine months ended September 30, 1941, and has been reviewed by Messrs. Arthur Andersen & Co. The summary is subject to, and should be read in conjunction with, the notes relating to the Statement of Consolidated Income and the certificate of Messrs. Arthur Andersen & Co., all of which are set forth hereinafter on pages 61, 68, 69 and 70.

Particulars	Year Ended December 31, 1938	1939	1940	Nine Months Ended September 30, 1941
Operating revenues:				
Gas sales	$9,540,967.85	$11,461,388.31	$13,167,241.73	$10,518,678.44
Gasoline sales	353,128.71	513,940.99	355,722.01	432,677.73
Miscellaneous	13,032.46	21,439.93	12,489.05	7,424.68
Total operating revenues	$9,907,129.02	$11,996,769.23	$13,535,452.79	$10,958,780.85
Operating expenses and taxes:				
Operation	$2,169,294.96	$ 2,399,426.95	$ 2,723,369.87	$ 2,181,455.91
Maintenance	217,207.07	299,483.39	277,394.65	252,460.29
Depreciation, depletion and amortization	2,055,500.00	2,200,000.00	2,210,000.00	1,733,206.53
Taxes—State, local and miscellaneous Federal	577,888.16	675,477.83	612,871.48	543,777.17
Charges in lieu of Federal normal income and excess profits taxes	—	—	—	587,000.00
Taxes—Federal normal income and excess profits taxes	513,426.21	820,286.12	1,997,598.47	1,850,000.00
Total operating expenses and taxes	$5,533,316.40	$ 6,394,674.29	$ 7,821,234.47	$ 7,147,899.90
Net earnings from operations	$4,373,812.62	$ 5,602,094.94	$ 5,714,218.32	$ 3,810,880.95
Interest Deductions:				
Interest on funded debt	$ 944,233.34	$ 923,333.32	$ 903,333.32	$ 437,080.31
Other interest deductions (net)	51,956.55	509.41	10,640.42*	6,773.95*
Amortization of debt discount and expense**	319,676.50	314,852.87	310,029.24	223,298.61
Interest charged to construction	1,277.51*	—	36,827.80*	1,275.92*
Total interest deductions	$1,314,588.88	$ 1,238,695.60	$ 1,165,894.34	$ 652,329.05
Net income	$3,059,223.74	$ 4,363,399.34	$ 4,548,323.98	$ 3,158,551.90

* Denotes red figure.

** Pursuant to a resolution adopted by the Board of Directors on December 19, 1941, the unamortized balance of debt discount and expense has been charged to earned surplus.

The maximum aggregate annual interest requirements on the First Mortgage and First Lien Bonds, Series A, on the First Mortgage and First Lien 3% Bonds, Series B, on the First Mortgage and First Lien 3% Bonds, Series C, and on the Serial Notes, will be $840,625.

The maximum annual dividend requirement on the Cumulative Preferred Stock (First Series) will amount to $840,000, and on the Class B Preferred Stock amounts to $60,000.

TENTATIVE PRO FORMA EARNINGS

The following condensed pro forma statement of consolidated income of the Company and its subsidiaries and Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation has been prepared by the Company as to the three years ended December 31, 1940 from the respective statements of income hereinafter set forth on pages 68, 75 and 78 and, from the books of the companies as to the twelve months ended September 30, 1941, (1) on the basis that the financing of the cost of the acquisition of the outstanding stock and indebtedness of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation had been accomplished by the issuance of securities which would have resulted in an increase of $300,000 per annum in the aggregate amount of interest and amortization cost to the Company; that the interest expense shown as applicable to obligations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to Columbia Gas & Electric Corporation, their parent, would have aggregated the same amount had the Company been the parent company; and that dividends had been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation in each year to the extent of the net income for that year; and (2) after giving effect to estimated increases in Federal income taxes, which would have resulted had such interest and dividends been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to the Company in each year to the full extent of their net income. Such statement is subject to the notes appended to the statements of income of the Company and its subsidiaries and of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, respectively.

	Year Ended December 31,			Twelve Months Ended September 30, 1941
	1938	1939	1940	
Operating revenues:				
Gas sales	$10,980,859.00	$13,258,845.62	$15,250,648.43	$16,475,707.15
Gasoline sales	353,128.71	513,940.99	355,722.01	566,775.88
Miscellaneous	14,638.29	22,578.34	13,408.14	11,641.58
Total operating revenues	$11,348,626.00	$13,795,364.95	$15,619,778.58	$17,054,124.61
Operating expenses and taxes:				
Operation	$ 2,476,169.74	$ 2,665,426.44	$ 3,005,868.89	$ 3,309,320.80
Maintenance	259,788.68	344,398.68	332,018.89	385,489.63
Depreciation, depletion and amortization	2,334,261.07	2,479,762.98	2,506,307.68	2,685,255.69
Charges in lieu of Federal normal income and excess profits taxes	—	—	—	587,000.00
Taxes—State, local and miscellaneous Federal	692,722.52	807,469.23	776,515.90	815,249.82
Taxes — Federal normal income and excess profits taxes	599,414.04	968,927.45	2,449,723.69	2,975,020.21
Total operating expenses and taxes	$ 6,362,356.05	$ 7,265,984.78	$ 9,070,435.05	$10,757,336.15
Net earnings from operations	$ 4,986,269.95	$ 6,529,380.17	$ 6,549,343.53	$ 6,296,788.46
Interest Deductions:				
Interest on funded debt	$ 1,244,233.34	$ 1,223,333.32	$ 1,203,333.32	$ 962,080.31
Other interest deduction (net)	52,953.24	11,327.32	5,207.17*	1,518.48
Amortization of debt discount and expense**	319,676.50	314,852.87	310,029.24	300,604.92
Interest charged to construction	1,288.33*	3,912.97*	64,947.45*	38,139.64*
Total interest deductions	$ 1,615,574.75	$ 1,545,600.54	$ 1,443,207.94	$ 1,226,064.07
Net income	$ 3,370,695.20	$ 4,983,779.63	$ 5,106,135.59	$ 5,070,724.39

* Denotes red figure.

** Pursuant to a resolution adopted by the Board of Directors on December 19, 1941, the unamortized balance of debt discount and expense has been charged to earned surplus.

SINKING FUND AND REDEMPTION PROVISIONS OF THE SERIES C BONDS

Sinking Fund Provision

In the Supplemental Indenture mentioned under the caption "Description of Series C Bonds" the Company will covenant to deliver to the Corporate Trustee or to redeem, for the sinking fund, (a) on July 1, 1942, $250,000 aggregate principal amount of Bonds of Series C, (b) on July 1, 1943 and on each July 1 thereafter to and including July 1, 1960, $500,000 aggregate principal amount of Series

C Bonds, and (c) on July 1, 1961, $250,000 aggregate principal amount of Bonds of Series C. The amount of Series C Bonds required so to be retired on any such July 1 may be partly so delivered to the Corporate Trustee and partly called for redemption, and each such sinking fund instalment may be anticipated in whole or in part as stated below. The Series C Bonds will be redeemable for the sinking fund on each such July 1, on at least 30 days published notice, at their principal amount and accrued interest thereon to the date of redemption, together with the following premium on such principal amount:

if redeemed on or before July 1, 1945, 1¼%;
if redeemed thereafter and on or before July 1, 1949, 1%;
if redeemed thereafter and on or before July 1, 1953, ¾%;
if redeemed thereafter and on or before July 1, 1957, ½%;
if redeemed thereafter and on or before July 1, 1961, ¼%.

Series C Bonds so to be redeemed are to be selected by lot by the Corporate Trustee.

The Company is to have the right to anticipate at any time or from time to time all or any part of such sinking fund requirements by delivering Series C Bonds to the Corporate Trustee or by redeeming and paying Series C Bonds upon the notice and at the respective redemption prices hereinafter under the subcaption "Redemption Provisions" set forth with respect to the redemption of Series C Bonds at the election of the Company. To the extent that the Company shall at any time so anticipate such sinking fund requirements, it shall be entitled to credit on account of such sinking fund requirements for the principal amount of Series C Bonds so delivered to the Corporate Trustee or so redeemed and paid.

All Series C Bonds delivered to the Corporate Trustee or redeemed for the sinking fund are to be cancelled and no Bonds may be issued under the Indenture in lieu thereof or in exchange therefor.

(See Article III of the Supplemental Indenture.)

Redemption Provisions

The Series C Bonds will also be subject to redemption at the election of the Company in whole or in part (selected by lot by the Corporate Trustee) at any time in amounts of not less than $500,000, on at least 30 days published notice, at their principal amount and accrued interest thereon to the date of redemption, together with the following premiums on such principal amount:

if redeemed on or before December 31, 1944, 3¼%;
if redeemed thereafter and on or before December 31, 1947, 3⅛%;
if redeemed thereafter and on or before December 31, 1950, 2½%;
if redeemed thereafter and on or before December 31, 1953, 1⅞%;
if redeemed thereafter and on or before December 31, 1956, 1¼%;
if redeemed thereafter and on or before December 31, 1959, ⅝%;
if redeemed thereafter and on or before December 31, 1960, ⅜%;
if redeemed on or after January 1, 1961, no premium.

(See Article II of the Supplemental Indenture.)

See the foregoing sub-caption "Sinking Fund Provision" for information concerning redemption of Series C Bonds through the sinking fund therefor, and the redemption prices applicable in such instances.

DIVIDEND RATE AND REDEMPTION PRICES FOR CUMULATIVE PREFERRED STOCK (FIRST SERIES)

The holders of the 5.60% Cumulative Preferred Stock (hereinafter called the Cumulative Preferred Stock, (First Series)) shall be entitled to receive out of the net profits or the net assets of the Company applicable to dividends, when and as declared by the Board of Directors, dividends in cash at the rate of 5.60% of the par value thereof per annum, and no more, payable on the first days of January, April, July and October. For further information with respect to the dividend rights of the holders of such stock, reference is made to the caption "Description of Cumulative Preferred Stock (First Series)".

The redemption price of the Cumulative Preferred Stock (First Series) applicable to shares of said stock called for redemption through operation of the sinking fund therefor is $105 per share plus accrued dividends.

The redemption price of Cumulative Preferred Stock (First Series) applicable to shares of said stock called for redemption other than through operation of the sinking fund is $108 per share plus accrued dividends.

HISTORY AND BUSINESS

The Company is engaged in the production, purchase, transmission and sale of natural gas, the major part of which is sold to gas transmission companies and to gas distribution companies for resale. The Company's principal natural gas transmission system, which was placed in practical operation in the early part of 1932, extends from the Amarillo gas field in the Texas Panhandle and from the Hugoton gas field in Southwestern Kansas through the States of Oklahoma, Kansas, Missouri and Illinois, to a point near Dana, Indiana, adjacent to the Illinois-Indiana boundary. The Company also operates, as a separate unit, a minor transmission system located in the general vicinity of Kansas City, Missouri.

The Company intends to use a part of the proceeds of the sale of securities being offered hereby to acquire all of the outstanding securities of Michigan Gas Transmission Corporation (a wholly-owned subsidiary of Columbia Gas & Electric Corporation). The natural gas pipe line system of Michigan Gas Transmission Corporation is located in the States of Indiana, Ohio and Michigan, and consists principally of pipe lines extending from the present eastern terminus of the Company's system at Dana, Indiana, to points near Detroit, Michigan, and Muncie, Indiana.

The Company produces approximately one-half of its gas requirements and purchases the remainder from others.

The Company's largest customer is Michigan Consolidated Gas Company (formerly Detroit City Gas Company), which company purchases from the Company the natural gas it resells through its distribution systems in Detroit and Ann Arbor, Michigan, and environs. Natural gas sold to Michigan Consolidated Gas Company is delivered by the Company to Michigan Gas Transmission Corporation at the latter's western terminus near Dana, Indiana, for transmission and redelivery to Michigan Consolidated Gas Company. During the 12 months ended September 30, 1941, such sales in M.C.F. to Michigan Consolidated Gas Company amounted to approximately 39% of the Company's total sales.

The Company has entered into a contract with Consumers Power Company in which it has, among other things, agreed to construct certain pipe lines in Michigan and to supply a major part of the natural gas requirements of Consumers Power Company for distribution in its Flint, Pontiac, Jackson, Kalamazoo, Owosso and Battle Creek Divisions. Natural gas to be sold through the Company's proposed Michigan pipe lines will be transported by Michigan Gas Transmission Corporation from a point near Dana, Indiana, to the point of connection of that company's system with the Company's proposed Michigan lines.

The Company supplies natural gas to a number of communities in central Indiana and in northwestern Ohio, the more important customers being Central Indiana Gas Company and Richmond Gas Corporation. Deliveries of natural gas to the Company's customers located in Indiana and in Ohio are also made through Michigan Gas Transmission Corporation.

The Company also sells gas to Michigan Gas Transmission Corporation for resale by that company to certain distributing companies and municipalities in Indiana. The more important of such distributing companies include Northern Indiana Public Service Company, Kokomo Gas and Fuel Company and Public Service Company of Indiana.

The Company sells Kentucky Natural Gas Corporation (a minority of the voting stock of which is owned by Missouri-Kansas Pipe Line Company) certain of its gas requirements, delivery being made at the Company's Dana, Indiana, measuring station.

Illinois Natural Gas Company (a wholly owned subsidiary of the Company) sells natural gas to certain distributing companies and industrial customers in Illinois. The principal customers so served are Central Illinois Light Company, Illinois Iowa Power Company and Central Illinois Public Service Company. All gas sold by Illinois Natural Gas Company is purchased from the Company.

The more important distributing companies in Missouri obtaining natural gas from the Company are Missouri Power & Light Company, Citizens Gas Company of Hannibal and Missouri Utilities Company.

Delivery of gas by the Company and its wholly owned subsidiary, Illinois Natural Gas Company, directly to industries and to other gas companies for resale to industrial customers is, in most instances, subject to curtailment, interruption or discontinuance in the event of an insufficiency in the supply of gas.

It is estimated that approximately 705,000 gas consumers are supplied directly and indirectly with gas from the Company's system, of which approximately 450,000 are customers of Michigan Consolidated Gas Company.

The following tabulation shows for the Company and its wholly-owned subsidiary companies the sales of gas in M.C.F. (thousands of cubic feet) and the revenues from the sale of gas for the 12 months ended September 30, 1941:

Classification	Sales Volume in M.C.F.	Revenue from Sales
Residential	85,610	$ 57,409.16
Commercial	46,801	20,888.36
Industrial	4,925,435	831,124.98
Other Gas Companies	56,763,102	13,333,776.91
Total	61,820,948	$14,243,199.41

Substantially all the gas included in the foregoing table under the classifications "Residential" and "Commercial" was sold by the Company to its former subsidiary, Central Distributing Company, and resold at retail by such subsidiary. On January 25, 1941, the Company disposed of such subsidiary, but has continued to supply gas to it for resale.

The Company's contracts for the supply of natural gas to distributing companies for resale in Liberty, Smithville, Avondale, Excelsior Springs and Harrisonville, Missouri, and Paola, Louisburg and Osawatomie, Kansas, are for only a part of the natural gas requirements thereof. The Company's combined revenues from sales to such distributing companies for resale in the above named communities during the 12 months ended September 30, 1941 amounted to approximately $125,000.

The Company is engaged as an incident to its natural gas business, in the extraction, processing and sale of natural gasoline.

The Company is not contemplating any change in the general character of its business or of the business of its subsidiary.

In order to supply additional markets and to meet increased demands of markets already connected, the Company increased the capacity of its transmission system during the years 1936, 1937 and 1940 by the construction of additional pipe lines and compressor stations and the enlarging of existing compressor stations. This expansion of facilities also included, among other things, the acquisition of additional gas reserves, the drilling of additional wells, and the construction of a gasoline extraction and gas dehydration plant. During this period approximately $21,000,000 was expended by the Company and its subsidiary for such expansion of facilities. During the year 1941 the Company authorized certain construction work of a similar nature, a large part of which is now in progress, involving expenditures then estimated at approximately $9,000,000. It is anticipated that the ultimate cost of such work may exceed such estimate by approximately 10%. At the present time the Company has priority ratings for material involved in such construction work considered by it to be generally satisfactory.

The following tabulation shows for the past 5 calendar years, and for the 12 months ended September 30, 1941, for the Company and its wholly owned subsidiary companies the sales of gas in M.C.F. (thousands of cubic feet) to customers by states and groups of states:

Year	Texas, Oklahoma and Kansas	Missouri	Illinois	Indiana and Ohio*	Michigan	Total
1936	2,500,332	6,803,511	7,257,283	6,229,747	3,957,058	26,747,931
1937	2,366,788	7,276,270	7,554,821	7,639,485	15,969,598	40,806,962
1938	2,955,385	6,857,223	6,601,142	8,739,715	16,032,297	41,185,762
1939	2,479,149	8,009,919	7,398,929	12,953,121	18,391,954	49,233,072
1940	2,120,646	8,860,840	8,557,633	14,574,370	22,281,273	56,394,762
12 months ended September 30, 1941	2,180,719	9,887,598	8,959,441	17,034,842	23,758,348	61,820,948

*Sales of gas in Ohio commenced in the year 1939 and amounted to 55,015 M.C.F. for that year and amounted to 150,693 M.C.F. in the year 1940. For the 12 months ended September 30, 1941, sales of gas in Ohio amounted to 182,924 M.C.F.

A considerable part of the increase in sales of gas indicated by the above table has been due to the commencement of natural gas service to communities not theretofore served with natural gas from the Company's system. Since January 1, 1936 such new natural gas service (directly and indirectly from the Company's system) has been extended to 64 communities having an aggregate population of approximately 2,323,000.

EXHIBIT 233.

5889

CERTAIN PROPOSED ACQUISITIONS

Michigan Gas Transmission Corporation

The Company proposes, contemporaneously with the issuance and sale of the securities being offered hereby, to acquire from Columbia Gas & Electric Corporation, 61 Broadway, New York, N. Y. all of the outstanding stock and indebtedness of Michigan Gas Transmission Corporation (herein sometimes called "Michigan Gas"). Said stock and indebtedness, as of September 30, 1941, amounted to:

	Amount
Notes and Loans payable to Columbia Gas & Electric Corporation—	
Demand Notes—6%	$5,900,500.00
Demand Loans—6%	2,420,000.00
Common Stock, without par value	44,800 shares*

*Stated on the books of Michigan Gas at $2,240,000.00.

The Company understands that Michigan Gas owns a system of natural gas pipe lines, compressor stations and equipment located in the States of Indiana, Ohio and Michigan; that the principal lines and stations consist of two pipe lines (1—20" line and 1—24" line) extending from the present eastern terminus of the Company's system (a point in Vermillion County, Indiana near Dana, Indiana) to a point near Zionsville, Indiana, a distance of approximately 70 miles; an 18" pipe line extending from said point near Zionsville, Indiana, to a point near Muncie, Indiana, a distance of approximately 52 miles; a 22" pipe line extending from said point near Zionsville, Indiana, to a point at or near Detroit, Michigan, a distance of approximately 230 miles and that said system includes three compressor stations in Indiana; namely, Montezuma (7800 horsepower), Zionsville (6500 horsepower), and Edgerton (6500 horsepower).

Substantially all of the natural gas sold or transported by Michigan Gas is obtained from the Company as more fully set forth above under the caption "History and Business".

Reference is hereby made to the financial statements of Michigan Gas contained herein for further information.

Indiana Gas Distribution Corporation

The Company proposes, contemporaneously with the issuance and sale of the securities being offered hereby, to acquire from Columbia Gas & Electric Corporation all of the outstanding stock and indebtedness of Indiana Gas Distribution Corporation (herein sometimes called "Indiana Gas"). Said stock and indebtedness, as of September 30, 1941, amounted to:

	Amount
Notes and Loans payable to Columbia Gas & Electric Corporation:	
Demand Notes—6%	$120,000.00
Demand Loans—6%	15,000.00
Common Stock, without par value	20 shares*

*Stated on the books of Indiana Gas at $1,000.00.

Indiana Gas distributes natural gas at retail to residential and commercial customers located in Brownsburg, Carmel, Dana, Danville, North Salem, Rockville and Zionsville, all in the State of Indiana, and to one industrial customer located at or near Winchester, Indiana. Indiana Gas supplies approximately 1,800 customers with natural gas which it purchases from either Michigan Gas or the Company. The Company understands that the principal properties owned by Indiana Gas consist of gas distribution systems in the aforementioned communities and certain short pipe lines connecting said distribution systems with the pipe line system of Michigan Gas.

The Ohio Fuel Gas Company Lines

The Company proposes, contemporaneously with the issuance and sale of the securities being offered hereby, to acquire certain natural gas pipe lines from The Ohio Fuel Gas Company, 99 North Front Street, Columbus, Ohio. The principal lines to be acquired consist of approximately 33 miles of 16" pipe line extending generally eastward from a point near Muncie, Indiana, to a point approximately 2½ miles east of the Indiana-Ohio boundary together with certain pipe lines branching therefrom. The principal branch lines are a 10" line approximately 13 miles in length extending to a point near Richmond, Indiana, and a 6" and 6⅝" line approximately 7 miles in length extending to Winchester, Indiana.

The Ohio Fuel Gas Company is a subsidiary of Columbia Gas & Electric Corporation. Reference is hereby made to the caption "Management and Control" hereof for a statement of the relationship of the Company to Columbia Gas & Electric Corporation.

The Company considers that all of the consideration to be paid in connection with the acquisition of the properties described above will be for tangible property (such acquisition being indirect in the case of Michigan Gas and Indiana Gas) except that the accounts of Michigan Gas and of Indiana Gas, as of September 30, 1941, include intangibles (organization expense and miscellaneous intangibles) in the amounts of $83,999.92 and $11,413.98 respectively.

The Company understands that the cost to Columbia Gas & Electric Corporation of the above mentioned stock and indebtedness of Michigan Gas Transmission Corporation and of Indiana Gas Distribution Corporation amounts to $10,842,000.00.

The Company has been informed that the book value of the natural gas pipe lines to be acquired from The Ohio Fuel Gas Company is shown on the books of said company as $670,330.46, representing the amount shown on the books of the Logan Gas Company at the time this property was acquired by it from said company.

PROPERTY

Production Property and Gas Reserves

The Company, as of September 30, 1941, owned or controlled oil and gas leaseholds on approximately 271,000 acres in the Amarillo and Hugoton gas fields located in the Panhandle of Texas, Southwestern Kansas and Texas County, Oklahoma, and in addition controlled through gas purchase contracts the gas production from approximately 67,000 acres in this territory. The Company is currently producing gas from certain of these leaseholds by means of 57 gas wells in the Amarillo gas field and 80 gas wells (including 46 gas wells in which the Company has only a 50% interest) in the Hugoton gas field.

Ralph E. Davis, Inc., Engineers, have made a survey of the natural gas supply available to the Company from the Amarillo and Hugoton fields. Their letter with respect to such natural gas supply follows:

RALPH E. DAVIS, INC.
ENGINEERS

Petroleum and Natural Gas
1710 Union Bank Building
Pittsburgh

New York
150 Broadway

December thirteenth,
Nineteen forty-one.

Board of Directors,
Panhandle Eastern Pipe Line Company,
New York, N. Y.

Gentlemen:

In accordance with your request we have, during the past two months, completed a study as of June 30, 1941 of the natural gas supply available to your Company. The natural gas available to your Company is obtained almost entirely in the Amarillo field of northwest Texas and in the Hugoton field situated in southwestern Kansas, in the Oklahoma Panhandle and in Sherman and Hansford Counties, Texas. These two fields constitute one of the largest known reserves of natural gas.

The conclusions stated herein are based upon engineering and geological studies we have made of both of these fields since they each became important as a source of natural gas. We have from time to time in the past made several studies of your Company's gas supply. In the present study we have relied upon information furnished by officials of your Company regarding acreage controlled, wells owned or under gas purchase contract, production of these wells, their pressure history, et cetera.

Our most recent study of the Amarillo field indicates that the proven gas acreage covers an area of approximately 1,467,000 acres and that the recoverable gas reserves as of December 31, 1940 were not less than 16.8 trillion cubic feet. The total past production to December 31, 1940 is estimated at 8.326 trillion cubic feet. We have estimated the average top of well pressure in the field at December 31, 1940 to be approximately 318 pounds. The virgin average pressure as measured at the top of the wells was approximately 430 pounds. It is thus seen that during the withdrawal of more than 8 trillion cubic feet of gas there has been an average approximate decline in pressure of 112 pounds.

Your Company owned on June 30, 1941 leases in the Panhandle field which we consider proven for natural gas production covering a total of 41,736 acres. Your Company held gas purchase contracts good for the life of production covering an additional 23,233 acres which we consider proven for natural gas production. The above acreage is centrally located in the field, being largely in what we consider the best productive area.

In our study of the reserves available from the above acreage we have considered as a unit an area of 295,488 acres within which is located the major portion of Panhandle's lease and contract acreage, to the end that we might observe the relation between the productiveness of the acreage from which the Company is securing its supply as compared to the immediately surrounding acreage. The

results of this study show that during the 6-year period from July 1, 1935 to June 30, 1941 the average weighted pressure of the selected area dropped from 378 pounds as of July-August, 1935 to 333 pounds as of July-August, 1941, or an average of 7½ pounds per year. The total gas withdrawal from the area during the 6-year period was 738,184,846 M cubic feet, of which Panhandle Eastern produced 87,024,001 M cubic feet and purchased 77,871,301 M cubic feet, thus withdrawing from the area 22.3% of its total production from approximately a like percentage of the acreage within the area.

It is evident from the very substantial production obtained with a modest decline in pressure that the acreage upon which your Company controls its gas supply in the Amarillo field has a very substantial productive capacity. The total proven acreage controlled through leasehold and gas purchase contracts, namely 64,969 acres, is located in the heart of the field and is equal to about 4.4 per cent of the total proven area of the Amarillo field. It is our judgment that your Company thus controls as of June 30, 1941 approximately this percentage of the total recoverable reserve, that is—not less than 700 billion cubic feet.

Of the above mentioned 41,736 acres proven for gas and controlled by your Company through leasehold contracts, 31,286 acres are classed as operated and had proven recoverable reserve as of June 30, 1941 estimated by us at 350 billion cubic feet. The above mentioned 23,233 proven acres controlled through gas purchase contract are classed as operated, and had a recoverable gas reserve on June 30, 1941 estimated by us at not less than 230 billion cubic feet.

The reserves controlled in a field such as the Amarillo field should, we believe, be considered with regard to the total available reserve of the field and the total annual or expected annual withdrawal. Having in mind that your Company is rapidly increasing its gas withdrawal from the field, the total having increased from 15,835,666 M cubic feet in the year ending June 30, 1936 to 39,985,134 M cubic feet for the year ending June 30, 1941, and having in mind the expectancy that further very substantial increases may be expected, we are of the opinion that this gas supply may be counted upon as a source of major production for a period of approximately fifteen years.

Our most recent study of the Hugoton field indicates the proven and semi-proven area to include not less than two million acres and the total recoverable gas reserves as of December 31, 1940 to be not less than 15 trillion cubic feet.

Your Company owned as of June 30, 1941 full interest leases covering a total of more than 175,000 acres in the proven or semi-proven portion of the Hugoton field, having a proven gas reserve estimated by us at not less than 1,250 billion cubic feet. In addition, the Company owned on said date a one-half interest in an additional 26,867 acres in the above area, having a total proven reserve estimated by us at not less than 200 billion cubic feet. Your Company also controlled under gas purchase contracts good for the life of production an additional 35,075 acres in this area, having an estimated proven reserve of not less than 260 billion cubic feet. The total proven reserves controlled by your Company in the Hugoton field are thus estimated by us to be not less than 1,700 billion cubic feet.

Of the above mentioned 175,000 acres controlled by your Company in the proven or semi-proven portion of the Hugoton field, 19,170 acres are classed as operated and had on June 30, 1941 a proven recoverable reserve estimated by us at not less than 137 billion cubic feet. Of the 26,867 acres located in the proven or semi-proven area and in which your Company owns a one-half interest, 17,320 acres are classed as operated and had on June 30, 1941 a recoverable gas reserve estimated by us at not less than 129 billion cubic feet. The 35,075 acres controlled under gas purchase contracts are classed as operated, and had a recoverable gas reserve as of June 30, 1941 estimated by us at not less than 260 billion cubic feet.

Both the Amarillo and Hugoton fields constitute reserves of gas from which gas withdrawals will not necessarily be proportional to the reserves controlled by the various producers. The reserves are, we believe, sufficient to meet the combined anticipated requirements for pipe line, carbon black and other uses for a period of more than 25 years. The combined gas supply controlled by your Company in the Amarillo and Hugoton fields is, in our judgment, adequate to supply its estimated market requirements for a period of more than 25 years.

Very truly yours,

RALPH E. DAVIS, INC.
by RALPH E. DAVIS,
President.

The Company also owns oil and gas leaseholds on (a) certain acreage outside proven limits of the Amarillo and Hugoton fields and (b) approximately 1,100 acres on which is located one well and a half interest in approximately 10,000 acres on which are located twelve wells in the Hugoton field, the gas from which is sold under contract to the Argus Natural Gas Company, Incorporated.

P. McDONALD BIDDISON
CONSULTING ENGINEER
Dallas Gas Building
Dallas, Texas

November 13, 1941

Board of Directors
Panhandle Eastern Pipe Line Company

Gentlemen:

On several occasions beginning in March 1937, I have been engaged in studies and investigations of the business and properties of your company and of its Subsidiary Company, Illinois Natural Gas Company. These studies and investigations have included the reviewing of construction plans, determining safe operating pressures and system capacities, the preparation of property valuations, and studies of property depreciation.

I have examined a great deal of the property and have inspected plans and specifications under which it was constructed. The Company owns or controls under purchase contracts, gas reserves in the largest gas fields ever known, adequate for the requirements now in prospect, for a term of at least twenty-five years. The compressor stations on the main system are carefully designed, their equipment is first class in all respects, they present a neat and attractive appearance and are maintained in excellent condition. All these features tend to produce reliability and economy of operation. The main transmission system has been constructed with a margin of safety as to pressure so that it may safely be operated at 500 pounds compressor station discharge pressure. Stream crossing locations have been carefully selected and multiple lines across streams have been so located and installed as to leave very slight probability of interruption at such locations. The transmission lines have been well located and well laid to secure stability and are carefully maintained. The main line loops provide additional protection against service interruption and this protection will be enhanced by the loop extensions now under construction. The Gasoline Plant at Liberal is of modern design and the dehydration plant in connection with it is an effective preventive of interruptions of service from freezing of lines. Measuring and Regulating Stations are of up to date equipment, are carefully maintained and the stations are neat and clean. Little evidence of deterioration in the main line property can be found. Pipe exposed in making connections for 1937 and 1940 additions did not indicate interior corrosion. Flow tests of the main lines in 1937 and 1938 showed some fouling, not corrosion, of the old lines westward from Olpe Station to Liberal Station. This condition has been effectively remedied as evidenced by subsequent flow tests and by capacity obtained under routine operations. My inspection of pipe in transmission mains in 1941 disclosed that there was little deterioration of protective coating and that pitting of pipe existed only in a few very restricted areas. Such areas are being protected cathodically as they develop.

My study of the system's capacity indicates a continuous sales capacity of the main line system as of November 1, 1941, including the delivery at Dana, Indiana, and with the distribution of the deliveries west of Dana as then indicated, of, in round numbers 250,000 M.C.F. per 24 hours. A main line looping program of 146 miles of loops, completing the double line eastward from Louisburg Station (near Kansas-Missouri state line) on which construction has begun and which is scheduled for completion in the Spring of 1942 (based upon the delivery schedule of pipe purchased under priority orders) will provide additional insurance against service interruptions and will give an additional sales capacity for short periods of approximately 30,000 M.C.F. per 24 hours. The completion of the main line loops, requiring 85 additional miles of main line construction (thus making a continuous double line from Liberal Station to Dana) which is contemplated as part of the 1942 construction program will provide a continuous sales capacity in excess of 300,000 M.C.F. per 24 hours.

Yours very truly,

P. McDONALD BIDDISON

P. McDONALD BIDDISON
Consulting Engineer

Character of Ownership

The statements under this caption "Property" with respect to ownership are made upon the authority of Glenn W. Clark, Esq., head of the Company's legal department. In his opinion, based in part upon opinions of various local counsel, the above-mentioned production property and transmission property are owned by the Company or by its wholly owned subsidiary (Illinois Natural Gas Com-

EXHIBIT 233.

5897

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANY

NOTES TO THE BALANCE SHEETS

ATTACHED TO AND MADE AN INTEGRAL PART OF THE BALANCE SHEET (COMPANY ONLY) AND OF THE CONSOLIDATED BALANCE SHEET AS OF SEPTEMBER 30, 1941

A. (1) Property, plant and equipment and intangibles are stated at cost except for $4,816,350.71 thereof which was recorded at the amount assigned by the Board of Directors to assets acquired as of August 31, 1930 as a capital contribution. It is the belief of the present management of the Company that the amount assigned to the capital contribution represented the value of the assets contributed as determined by the donor, Missouri-Kansas Pipe Line Company. Of the total, $2,417,948.52, representing the amount at which the contributed tangible property was recorded on the books of Missouri-Kansas Pipe Line Company, was assigned to property, plant and equipment, and the balance of $2,398,402.19 was assigned to gas sales and purchase contracts.

(2) Investment in subsidiary company is stated at cost. The securities representing such investment are pledged as collateral to the First Mortgage and First Lien Bonds. In January, 1941, the Company received 807,367 shares of common stock, of a par value of 42 cents each, of Central Distributing Company in exchange for its former investment in that company (represented by no par common stock of $59,000.43, a note receivable of $250,000.00 and a demand loan of $25,000.00) and $5,093.71 additional cash investment. These shares were then distributed as a dividend to the Company's common stockholders, on a share for share basis, with a concurrent charge to earned surplus of $339,094.14.

(3) The amounts at which property, plant and equipment, intangibles and investment in subsidiary company are stated do not purport to represent the current realizable value thereof.

B. Debt discount and expense in process of amortization at September 30, 1941 consists of:

Discount and expense applicable to 6% bond issue redeemed in 1937 prior to original maturity of October 1, 1950 in process of amortization over the original life of such issue	$ 829,457.41
Items being amortized on the basis of bonds outstanding over the life of the 4% bond issue redeemed in 1941 prior to original maturity of March 1, 1952—	
Call premium on 6% issue	471,822.61
Debt discount and expense on 4% issue	374,436.79
Items being amortized on the basis of bonds outstanding over the lives of present outstanding issues—	
Call premium on 4% issue	190,061.40
Debt discount and expense on present outstanding issues	215,706.85
	$2,081,485.06

On December 19, 1941, the Board of Directors authorized the charging to earned surplus, as of the date of refunding, February 3, 1941, of the unamortized balance of debt discount, expense and call premiums applicable to refunded issues and the discount and expenses applicable to outstanding issues.

C. Surplus is restricted by the Mortgage and Deed of Trust dated November 1, 1940 as to payment of dividends, in the amount of $4,113,952.58. In the opinion of counsel for the Company, the requirements of Delaware law impose no restrictions on surplus by reason of the excess ($1,100,000 at September 30, 1941) of the liquidating value over the par value of its preferred stock. Class A preferred stock may be redeemed at any time in whole or in part at $100 per share if redeemed on or before January 1, 1942 or $110 per share thereafter.

D. At September 30, 1941 there were 1,285 unissued shares available for exercise of purchase option at $25.00 a share.

E. Contingent liabilities:

Effective January 1, 1940, the Company adopted a retirement annuity plan for employees (including officers) who had not attained age sixty-five on that date, by means of a group annuity

EXHIBIT 233.

5899

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

NOTES TO THE INCOME ACCOUNT

ATTACHED TO AND MADE A PART OF THE CONSOLIDATED INCOME ACCOUNT FOR THE YEARS ENDED DECEMBER 31, 1938, 1939, AND 1940 AND THE NINE MONTHS ENDED SEPTEMBER 30, 1941

A. The formulae consistently used by the Company and its subsidiaries beginning with the year 1937 to develop an amount to be recommended to the Board of Directors as a proper provision for depreciation, depletion, and amortization gives consideration to the "wasting asset" theory and provides depletion on operated leaseholds on the basis of units of gas withdrawn, amortization of investment in unoperated land rights by the use of a composite life of ten years for such land rights, amortization of gas sales and purchase contracts at a specific monthly rate as provided in the Company's Certificate of Incorporation and in amounts to conform to the contract period in certain instances, and an amount for the other transmission system properties determined by its Board of Directors which recognizes amortization in addition to a composite rate based on the age and estimated life of the properties. The propriety of the aggregate annual provision, as well as the reasonableness of the total reserves provided to date, has been substantiated by P. McDonald Biddison, an independent Consulting Engineer of Dallas, Texas. The Company's Certificate of Incorporation, as amended, provides substantially that no dividends on the common stock or any participating dividends on the preferred and common stocks may be paid except out of net surplus earned subsequent to December 31, 1935 remaining after there shall have been deducted therefrom as provisions for depreciation, depletion and amortization of property, plant and equipment, an aggregate accrual equal to one-third of 1% per month (on monthly balances) of the consolidated tangible property of the Company and its subsidiaries; the provisions for depreciation, depletion and amortization of tangible property as computed in accordance with the Company's Certificate of Incorporation would have amounted to $2,337,597.71, $2,354,588.33, $2,378,393.37, and $1,993,360.66 for the years 1938, 1939, 1940, and the nine months ended September 30, 1941, respectively. The amounts claimed by the Company and its subsidiaries for depreciation for Federal income tax purposes are larger than the provisions as set forth in the income account.

B. The Company has provided amortization of gas sales and purchase contracts in the amount of $24,419.05 per month, which will extinguish the net ledger balance at December 31, 1935 ($2,930,286.40) over a period of ten years. Of the original amount of gas sales contracts—other, $371,076.00 is being amortized over a period of fifteen years from January 1, 1937 and the remainder is being amortized primarily over the lives of the respective contracts. No provision has been made for the amortization of organization expense and miscellaneous intangibles.

C. It is the practice of the Company to charge to maintenance the repairs of property and replacements and renewals of items determined to be less than units of property. Replacements and renewals of items considered to be units of property are charged to the property, plant and equipment accounts. At the time properties are disposed of, the cost (or estimated cost), less net salvage value, of property retired is charged to the reserve for depreciation, depletion and amortization of property, plant and equipment.

D. Charges in lieu of Federal income and excess profits taxes represent an amount equivalent to such taxes which would have been payable on current earnings if the Company had not had the benefit for tax purposes of deductions for discount, premium and expense resulting from the refinancing of long-term debt. Such amounts have been credited to unamortized debt discount and expense as a partial offset to the items included therein applicable to the bonds which were refunded.

E. Consists of—

	1938	1939	1940	Nine Months Ended September 30, 1941
On issue due October 1, 1950, redeemed in 1937—				
Amortization of debt discount and expense	$ 92,161.80	$ 92,161.80	$ 92,161.80	$ 69,121.35
Amortization of call premium	91,251.89	89,317.23	87,382.56	61,913.94
On issue due March 1, 1952, redeemed in 1941—				
Amortization of debt discount and expense	136,262.81	133,373.84	130,484.88	52,570.64
Amortization of call premium	—	—	—	12,978.60
On present outstanding issues—				
Amortization of debt discount and expense	—	—	—	26,714.08
	$319,676.50	$314,852.87	$310,029.24	$223,298.61

[fol. 16095] (Exhibit 234.)

Summary of Construction and Retirement Budget and Work Order Procedure.

The initial work in connection with the Construction and Retirement budgets begins in the various departments late in the year preceding that in which the construction or retirement work is to take place. This work embraces a study on the part of departmental representatives prior to departmental determination of such requirements. When the anticipated requirements of a department have been considered along with the general system requirements, such tabulations are then ready for further study and consideration by the local management.

Upon receipt by the local management of the preliminary estimates from the various departments, these tentative recommendations are reviewed in much detail both from a departmental standpoint and from a system viewpoint as well. Having determined any necessary deletions or additions, the tentative budget is then ready for consideration by all of the senior officers.

At a meeting or meetings held in the Kansas City office, the proposed budget is then considered item by item by the entire management, and meeting all tests or requirements is then put in final form for presentation to the Board of Directors.

Action by the Directors under normal conditions usually occurs at a Board meeting held very early in the year in which the work is to be undertaken or later in the preceding year. To the extent that Board approval is had, work orders are then issued for routine or blanket budget items, and the work on such projects then follows in the order and to the extent thought necessary by department heads with the approval of the local management.

Notwithstanding approval by the Board, actual construction on major projects does not begin until the necessity for such work is again reviewed by the management generally, and only then after final approval by the President:

Work Orders:

The actual inception of work authorized by an approved budget item takes place only after a properly approved work order request, which originates in the department to benefit by the proposed work, has been obtained. Such work order request contains, among other things, an estimate of the job in substantial detail. When the project is completed the construction forces file a completion report containing an itemized record of materials used with the [fol. 16096] general accounting office where a comparison is made with the recorded costs and original estimate. If no major difference is found the completion report is accepted, engineering data taken off, and the order is closed.

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

OF DE

AS

Depreciation

Line No.	(A)	Depreciable Property Costs: Balance Beginning of Period (B)	Balance End of Period (C)	Average Balance (Depreciation Base) (D)	Rate (E)	Amount (F)
1	Panhandle Eastern Pipe Line Company					
2	Transmission Property					
3	At date of completion of line, Mar.31,1932	$32 047 648 65	$32 010 034 24	$32 028 841 44	4.0000%	$1 281 153
4	Additions for 9 months ended Dec.31,1932	577 797 98	576 018 21	576 908 10	4.1237%	23 789
5	Additions for year ended Dec. 31, 1933	141 397 03	141 673 58	141 535 31	4.3011%	6 087
6	Additions for year ended Dec. 31, 1934	34 619 57	33 630 56	34 125 06	4.4944%	1 533
7	Additions for year ended Dec. 31, 1935	46 811 40	43 760 83	45 286 11	4.7059%	2 131
8	Additions for year ended Dec. 31, 1936	3 851 682 10	3 875 639 83	3 863 660 97	4.9383%	190 799
9	Additions for year ended Dec. 31, 1937	10 688 851 27	10 685 268 39	10 687 059 83	5.1948%	555 171
10	Additions for year ended Dec. 31, 1938	464 819 57	461 209 30	463 014 44	5.4795%	25 370
11	Additions for year ended Dec. 31, 1939	-	225 032 40	112 516 20	5.7971%	6 522
12	Totals Transmission Property	47 853 627 57	48 052 267 34	47 952 947 46	-	2 092 560
13	Other Property					
14	Gasoline extraction plant structures and equipment	614 067 80	619 113 85	616 590 83	10%	61 659
15	Office and laboratory equipment and drilling and cleaning equipment	101 959 07	96 700 86	99 329 96	10%	9 933
16	Tools and implements, trailers and winches	29 877 34	35 941 46	32 909 40	20%	6 470
17	Gas well equipment - main line	513 615 30	565 976 02	539 795 66	8%	43 183
18	Gas well equipment - local area	7 488 41	5 672 47	6 580 44	16%	1 052
19	Cost of attaching business	113 027 41	113 027 41	113 027 41	5%	5 651
20	Automobiles and trucks	84 018 60	91 422 49	87 720 54	Book Basis	22 627
21	Totals Other Property	1 464 053 93	1 527 854 56	1 495 954 24	-	150 577
22	Totals Panhandle Eastern Pipe Line Company	49 317 681 50	49 580 121 90	49 448 901 70	-	2 243 137
23	Illinois Natural Gas Company					
24	Transmission Property	2 603 796 51	2 621 207 30	2 612 501 90	4%	104 500
25	Other Property (office equipment)	849 33	877 23	863 28	10%	86
26	Totals Illinois Natural Gas Company	2 604 645 84	2 622 084 53	2 613 365 18		104 586
27	Central Distributing Company					
28	All Property	Not Available			-	17 754
29	Total depreciation claimed in 1939 returns per line 8, Column B of Exhibit 183					

* Denotes red figure

5903 16097

EXHIBIT 235

STATEMENT SHOWING THE COMPUTATION
OF DEPRECIATION FOR FEDERAL INCOME TAX PURPOSES
FOR THE YEAR 1939
AS CLAIMED IN FEDERAL INCOME TAX RETURNS

	Depreciation			
			Net Adjustment of Depreciation Applicable to Property Retired in 1939	
	Rate (E)	Amount (F)	(G)	Total (H)
	4.0000%	$1 281 153 66	$11 553 79	$1 292 707 45
	4.1237%	23 789 96	330 80	24 120 76
	4.3011%	6 087 58	51 13	6 036 45
	4.4944%	1 533 72	130 74	1 664 46
	4.7059%	2 131 12	674 79	2 805 91
	4.9383%	190 799 17	1 734 68	192 533 85
	5.1948%	555 171 38	657 62	555 829 00
	5.4795%	25 370 88	601 73	25 972 61
	5.7971%	6 522 66	181 57	6 704 25
	-	2 092 560 15	15 814 59	2 108 374 74
	10%	61 659 09	-	61 659 09
	10%	9 933 00	-	9 933 00
	20%	6 470 41	-	6 470 41
	8%	43 183 65	-	43 183 65
	16%	1 052 87	-	1 052 87
	5%	5 651 37	-	5 651 37
	ok Basis	22 627 43	-	22 627 43
	-	150 577 82	-	150 577 82
	-	2 243 137 97	15 814 59	2 258 952 56
	4%	104 500 07	-	104 500 07
	10%	86 33	-	86 33
		104 586 40	-	104 586 40
	-	17 754 52	-	17 754 52
				$2 381 293 48

EXHIBIT 5905

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
STATEMENT SHOWING THE COMPUTATION OF DEPRECIATION FOR
FEDERAL INCOME TAX PURPOSES FOR THE YEAR 1939 ON THE BASIS
AS SETTLED WITH THE BUREAU OF INTERNAL REVENUE

Line No.	(A)	Depreciable Property Costs: Balance Beginning of Period (B)	Depreciable Property Costs: Balance End of Period (C)	Depreciable Property Costs: Average Balance (Depreciation Base) (D)	Depreciation: Rate (E)	Depreciation: Amount (F)
1	Panhandle Eastern Pipe Line Company					
2	Transmission Property					
3	Right of ways consideration	$ 477 954 28	$ 480 642 56	$ 479 298 42	3%	$ 14
4	All other transmission property	47 375 673 29	47 571 624 78	47 473 649 04	4%	1 898
5	Totals Transmission Property	47 853 627 57	48 052 267 34	47 952 947 46	-	1 913
6	Other Property					
7	Gasoline extraction plant structures and equipment	614 067 80	619 113 85	616 590 83	10%	61
8	Office and laboratory equipment and drilling					
9	and cleaning equipment	101 959 07	96 700 86	99 329 96	10%	9
10	Tools and implements, trailers and winches	29 877 34	35 941 46	32 909 40	20%	6
11	Gas well equipment - main line	513 615 30	565 976 02	539 795 66	8%	43
12	Gas well equipment - local area	7 488 41	5 672 47	6 580 44	16%	1
13	Cost of attaching business	113 027 41	113 027 41	113 027 41	5%	5
14	Automobiles and trucks	84 018 60	91 422 49	87 720 54	Book Basis	22
15	Totals Other Property	1 434 053 93	1 527 854 56	1 495 954 24	-	150
16	Totals Panhandle Eastern Pipe Line Company	49 317 681 50	49 580 121 90	49 448 901 70	-	2 063
17	Illinois Natural Gas Company					
18	Transmission Property	2 603 796 51	2 621 207 30	2 612 501 90	4%	104
19	Other Property (office equipment)	849 33	877 23	863 28	10%	
20	Totals Illinois Natural Gas Company	2 604 645 84	2 622 084 53	2 613 365 18	-	104
21	Central Distributing Company					
22	All Property		Not Available		-	17
23	Total depreciation computed on settlement basis for year					
24	1939 per line 8, column C of Exhibit 183					$2 186

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES — OF DEP

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Line No.	(A)	Depreciable Property Costs: Balance Beginning of Period (B)	Balance End of Period (C)	Average Balance (Depreciation Base) (D)	Rate (E)	D e p r e Amount (F)
1	Panhandle Eastern Pipe Line Company					
2	Transmission Property					
3	At date of completion of line, Mar.31,1932	$32 010 034 24	$31 803 520 31	$31 906 777 27	4.0000%	$1 276 271
4	Additions for nine months ended Dec.31,1932	576 018 21	575 046 62	575 532 42	4.1237%	23 733
5	Additions for year ended December 31, 1933	141 673 58	140 046 98	140 860 28	4.3011%	6 058
6	Additions for year ended December 31, 1934	33 630 56	29 632 63	31 631 60	4.4944%	1 421
7	Additions for year ended December 31, 1935	43 760 83	42 778 63	43 269 73	4.7059%	2 036
8	Additions for year ended December 31, 1936	3 875 639 83	3 865 486 43	3 870 563 13	4.9383%	191 140
9	Additions for year ended December 31, 1937	10 685 268 39	10 674 216 80	10 679 742 60	5.1948%	554 791
10	Additions for year ended December 31, 1938	461 209 30	452 118 03	456 663 66	5.4795%	25 022
11	Additions for year ended December 31, 1939	225 032 40	222 832 88	223 932 64	5.7971%	12 981
12	Additions for year ended December 31, 1940	-	5 235 661 27	2 617 830 63	6.1538%	161 096
13	Totals Transmission Property	48 052 267 34	53 041 340 58	50 546 803 96	-	2 254 552
14	Other Property					
15	Gasoline extraction plant structures and equipment	619 113 85	647 721 76	633 417 81	10%	63 341
16	Office and laboratory equipment and drilling and cleaning equipment	96 700 86	105 797 58	101 249 22	10%	10 124
17	Tools and implements, trailers and winches and other production system equipment	35 941 46	39 432 28	37 686 87	20%	6 485
18	Gas well equipment - main line	565 976 02	595 107 30	580 541 66	8%	46 443
19	Gas well equipment - local area	5 672 47	3 842 02	4 757 24	16%	761
20	Cost of attaching business	113 027 41	113 027 41	113 027 41	5%	5 651
21	Automobiles and trucks	91 422 49	96 763 96	94 093 23	Book Basis	25 012
22	Totals Other Property	1 527 854 56	1 601 692 31	1 564 773 44	-	157 820
23	Totals Panhandle Eastern Pipe Line Company	49 580 121 90	54 643 032 89	52 111 577 40	-	2 412 373
24	Illinois Natural Gas Company					
25	Transmission Property	2 621 207 30	2 636 059 27	2 628 633 29	4%	105 145
26	Other Property (office equipment)	877 23	877 23	877 23	10%	87
27	Totals Illinois Natural Gas Company	2 622 084 53	2 636 936 50	2 629 510 52	-	105 233
28	Central Distributing Company					
29	All Property	Not Available			-	17 713
30	Total depreciation claimed in 1940 returns per line 9, Column B of Exhibit 183					

EXHIBIT 237

5907 16099

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STATEMENT SHOWING THE COMPUTATION OF DEPRECIATION FOR FEDERAL INCOME TAX PURPOSES FOR THE YEAR 1940 AS CLAIMED IN FEDERAL INCOME TAX RETURN

Depreciation			
Rate (E)	Amount (F)	Net Adjustment of Depreciation Applicable to Property Retired in 1940 (G)	Total (H)
4.0000%	$1 276 271 09	$ 91 640 58	$1 367 911 67
4.1237%	23 733 23	94 91	23 828 14
4.3011%	6 058 54	10 87	6 069 41
4.4944%	1 421 65	657 04	2 078 69
4.7059%	2 036 23	160 54	2 196 77
4.9383%	191 140 02	3 287 43	194 427 45
5.1948%	554 791 27	6 712 42	561 503 69
5.4795%	25 022 89	1 772 79	26 795 68
5.7971%	12 981 60	504 08	13 485 68
6.1538%	161 096 06	64 41	161 160 47
-	2 254 552 56	104 905 07	2 359 457 63
10%	63 341 79	-	63 341 79
10%	10 124 93	-	10 124 93
20%	6 485 92	-	6 485 92
6%	46 443 33	-	46 443 33
16%	761 16	-	761 16
5%	5 651 37	-	5 651 37
Book Basis	25 012 33	-	25 012 33
-	157 820 83	-	157 820 83
-	2 412 373 41	104 905 07	2 517 278 48
4%	105 145 33	-	105 145 33
10%	87 72	-	87 72
-	105 233 05	-	105 233 05
-	17 713 81	-	17 713 81
			$2 640 225 34

EXHIBIT 138

5909 161

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
STATEMENT SHOWING THE COMPUTATION OF DEPRECIATION FOR
FEDERAL INCOME TAX PURPOSES FOR THE YEAR 1940 ON THE BASIS
AS SETTLED WITH THE BUREAU OF INTERNAL REVENUE

Line No.	(A)	Depreciable Property Costs: Balance Beginning of Period (B)	Balance End of Period (C)	Average Balance (Depreciation Base) (D)	Depreciation: Rate (E)	Amount (F)
1	Panhandle Eastern Pipe Line Company					
2	Transmission Property	$48 052 267 34	$53 041 340 58	$50 546 803 96	4%	$2 021 872 16
3	Other Property					
4	Gasoline extraction plant structures and equipment	619 113 85	647 721 76	633 417 81	10%	63 341 79
5	Office and laboratory equipment and drilling and cleaning equipment	96 700 86	105 797 56	101 249 22	10%	10 124 93
6	Tools and implements, trailers and winches and other production system equipment	35 941 46	39 432 28	37 686 87	20%	5 [illegible] 41
7	Gas well equipment - main line	565 976 82	595 107 50	580 541 66	8%	46 443 33
8	Gas well equipment - local area	5 672 47	5 842 02	4 757 24	16%	761 15
9	Cost of attaching business	113 027 41	113 027 41	113 027 41	5%	5 651 37
10	Automobiles and trucks	91 422 49	96 763 96	94 093 27	Book Basis	25 012 33
11	Totals Other Property	1 527 859 56	1 601 692 31	1 564 773 44	-	156 [illegible] 38
12	Totals Panhandle Eastern Pipe Line Company	49 580 127 90	54 643 032 89	52 111 577 40	-	2 178 [illegible] 46
13	Illinois Natural Gas Company					
14	Transmission Property	2 621 207 30	2 636 059 27	2 628 633 29	4%	105 145 33
15	Other Property (office equipment)	877 23	877 23	877 23	10%	87 72
16	Totals Illinois Natural Gas Company	2 622 084 53	2 636 936 50	2 629 510 52	-	105 233 05
17	Central Distributing Company					
18	All Property		Not Available		-	17 713 81
19	Total depreciation computed on settlement basis for year 1940 per Line 9, Column C of Exhibit 133					$2 301 752 34(1)

(1) Returns have not been examined. Depreciation has been computed on basis of settlement prior year.

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	(A)	Panhandle Eastern Pipe Line Company (B)	(C)	(D)	Illinois Natural Gas Company (E)	(F)	(G)	Michigan Transmission C (H)	(I)
1	Estimated Excess Profits Net Income as Recomputed		$8 658 903(1)			$128 000			$811 00
2	Less: Dividends received		532 509			-			-
3			8 126 394			128 000			811 00
4	Less: Specific Exemption	$ 5 000			$ 5 000			$ 5 000	
5	Excess-profits credit based on income	4 618 000			-			603 000	
6	Excess-profits credit based on invested capital	-			182 000			-	
7	Excess-profits credit carry-over	-			36 000			-	
8	Additional excess-profits credit based on income resulting from net new capital financing	190 000	4 813 000		-	223 000		-	608 00
9	Adjusted Excess-Profits Net Income Subject to Tax		3 313 394			None			203 00
10									
11	Excess-Profits Tax:	Net Income	Tax		Net Income	Tax		Net Income	Tax
12	First $ 20 000 at 35%	20 000	7 000					20 000	7 00
13	Next 30 000 at 40%	30 000	12 000					30 000	12 00
14	Next 50 000 at 45%	50 000	22 500					50 000	22 50
15	Next 150 000 at 50%	150 000	75 000					103 000	51 50
16	Next 250 000 at 55%	250 000	137 500						
17	All over 500 000 at 60%	2 813 394	1 688 036						
18		3 313 394			None			203 000	
19	Estimated Excess-Profits Tax Before Additional Accrual			$1 942 036			None		
20	Additional accrual			24 000			-		
21	Estimated Excess-Profits Tax			1 966 036			None		
22	Normal Tax and Surtax								
23	Excess-Profits Net Income as Recomputed		8 658 093			128 000			811 000
24	Less: Excess-Profits Tax	1 942 036			-			93 000	
25	85% of dividends received	452 633	2 394 669		-	-		-	93 000
26	Estimated Normal Tax and Surtax Net Income		6 263 424			128 000			718 000
27	Normal Tax:								
28	Corporations with net income slightly over $25,000								
29	First $ 5 000 at 15%								
30	Next 15 000 at 17%								
31	Next 5 000 at 19%								
32	Next 8 445 at 37%								
33	Corporations with net income over $25,000								
34	Flat Rate 24%		1 503 222			30 720			172 320
35	Surtax:								
36	First $ 25 000 at 6%		1 500			1 500			1 500
37	All over 25 000 at 7%		436 690			7 210			48 510
38	Estimated Normal Tax and Surtax Before Additional								
39	Accrual			1 941 412			$39 430		
40	Additional Accrual			88 000			-		
41	Estimated Normal Tax and Surtax			2 029 412			39 430		
42	Estimated Federal Income and Excess Profits Taxes per								
43	Page 1 of Exhibit 198			$3 995 448			$39 430		

STATEMENT OF ESTIMATED FEDERAL INCOME AND EXCESS-PROFITS TAXES FOR THE TWELVE MONTHS ENDED FEBRUARY 28, 1942 (BASED ON REVENUE ACT OF 1941)

IES

nois Natural as Company		Michigan Gas Transmission Corporation			Indiana Gas Distribution Corporation			Total Taxes
(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
$128 000			$811 000			$36 000		
-			-			-		
128 000			811 000			36 000		
		$ 5 000			$ 5 000			
		603 000			23 700			
		-			-			
		-			-			
223 000		-	608 000		-	28 700		
None			203 000			7 300		
ne Tax		Net Income	Tax		Net Income	Tax		
		20 000	7 000		7 300	2 555		
		30 000	12 000					
		50 000	22 500					
		103 000	51 500					
		203 000			7 300			
	None			$ 93 000			$ 2 555	
	-			-			-	
	None			93 000			2 555	$2 061 591
128 000			811 000			36 000		
		93 000			2 555			
-		-	93 000		-	2 555		
128 000			718 000			33 445		
						750		
						2 550		
						950		
						3 125		
						7 375		
30 720			172 320					
1 500			1 500			1 500		
7 210			48 510			591		
	$39 430			222 330			9 466	
	-			-			-	
	39 430			222 330			9 466	2 300 638
	$39 430			$315 330			$12 021	$4 362 229

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PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	(A)	Panhandle Eastern Pipe Line Company (B)	(C)	(D)	Illinois Natural Gas Company (E)	(F)	(G)	Michigan Gas Transmission Corp. (H)	(I)
1	Estimated Excess-Profits Net Income as Recomputed		$8 658 903(1)			$128 000			$811 000
2	Less: Dividends received		532 509			-			-
3			8 126 394			128 000			811 000
4	Less:								
5	Specific exemption	$ 5 000			$ 5 000			$ 5 000	
6	Excess-profits credit based on income	4 618 000			-			603 000	
7	Excess-profits credit based on invested capital	-			182 000			-	
8	Excess-profits credit carry-over	-			36 000			-	
9	Additional excess-profits credit based on income resulting from net new capital financing	190 000	4 813 000		-	223 000		-	608 000
10			3 313 394			None			203 000
11	Adjusted Excess-Profits Net Income Subject to Tax								
12	Excess-Profits Tax:	Net Income	Tax		Net Income	Tax		Net Income	Tax
13	First $ 20 000 at 50%	20 000	10 000					20 000	10 000
14	Next 30 000 at 55%	30 000	16 500					30 000	16 500
15	Next 50 000 at 60%	50 000	30 000					50 000	30 000
16	Next 150 000 at 65%	150 000	97 500					103 000	66 950
17	Next 250 000 at 70%	250 000	175 000						
18	All Over 500 000 at 75%	2 813 394	2 110 046						
19		3 313 394			None			203 000	
20	Estimated Excess-Profits Tax			$2 439 046			None		$
21	Normal Tax and Surtax								
22	Excess-Profits Net Income as Recomputed		8 658 093			128 000			811 000
23	Less: Excess-Profits Tax	2 439 046			None			123 450	
24	85% of dividends received	452 633	2 891 679		-	-		-	123 450
25	Estimated Normal Tax and Surtax Net Income		5 766 414			128 000			687 550
26	Normal Tax:								
27	Corporations with net income slightly over $25,000								
28	First $ 5 000 at 15%								
29	Next 15 000 at 17%								
30	Next 5 000 at 19%								
31	Next 7 350 at 37%								
32	Corporations with net income over $25,000								
33	Flat Rate 24%		1 383 939			30 720			165 012
34	Surtax:								
35	Corporations with net income slightly over $25,000								
36	First $ 25 000 at 16%								
37	Next 7 350 at 31%								
38	Corporations with net income over $25,000								
39	Rate 31%		1 787 588			39 680			213 141
40	Estimated Normal Tax and Surtax			3 171 527			$70 400		
41									
42	Estimated Federal Income and Excess-Profits Taxes per Page 1 of Exhibit 199			$5 610 573			$70 400		$

STATEMENT OF ESTIMATED FEDERAL INCOME AND EXCESS-PROFITS TAXES FOR THE TWELVE MONTHS ENDED FEBRUARY 28, 1942. (BASED ON RATES PROPOSED IN RECOMMENDATION BY SECRETARY OF TREASURY MORGENTHAU ON MARCH 3, 1942 BEFORE THE WAYS AND MEANS COMMITTEE)

Michigan Gas Transmission Corporation (H)	(I)	(J)	Indiana Gas Distribution Corporation (K)	(L)	(M)	Total Taxes (N)
	$811 000			$36 000		
	-			-		
	811 000			36 000		
$ 5 000			$ 5 000			
603 000			23 700			
-			-			
-			-			
-	608 000		-	28 700		
	203 000			7 300		
Net Income	Tax		Net Income	Tax		
20 000	10 000		7 300	3 650		
30 000	16 500					
50 000	30 000					
103 000	66 950					
203 000		$123 450	7 300		$ 3 650	$2 566 146
	811 000			36 000		
123 450			3 650			
-	123 450		-	3 650		
	687 550			32 350		
				750		
				2 550		
				850		
				2 720		
				6 970		
	165 012					
				4 000		
				2 279		
	213 141					
		378 153			13 249	3 633 329
		$501 603			$16 899	$6 199 475

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Note (1) Reconcilement Of Estimated Taxable Net Income
For The Twelve Months Ended February 28, 1942
Of Panhandle Eastern Pipe Line Company,
As Shown On Pages 1 And 2 Of This Exhibit
With The Estimated Taxable Net Income For The Year 1941
As Shown By Pages 1 And 2 Of Exhibit 202

Line No.	(A)	(B)	(C)	(D)
1	The excess-profits net income of Panhandle			
2	Eastern Pipe Line Company is recomputed			
3	to give effect to the inclusion of			
4	Michigan Gas Transmission Corporation and			
5	Indiana Gas Distribution Corporation had			
6	they have been subsidiaries of Panhandle			
7	Eastern Pipe Line Company during the entire			
8	twelve months ended February 28, 1942 and			
9	that the necessary financing of the cost of			
10	acquisition of these companies had been			
11	consummated on January 1, 1941. Details			
12	follow:			
13	Estimated excess-profits net income for			
14	year 1941 as shown by Pages 1 and 2 of			
15	Exhibit 202			$7 350 000
16	Add — Increase in book net income before			
17	Federal income and excess-profits tax in			
18	the two months ended February 28, 1942 over			
19	the two months ended February 28, 1941			591 000
20	Estimated excess-profits net income for the			
21	twelve months ended February 28, 1942, be-			
22	fore recomputation			7 941 000
23	Adjustments:			
24	Additions —			
25	Dividends from Michigan Gas Transmission			
26	Corporation and Indiana Gas Distribution			
27	Corporation	$532 500		
28	Interest income from Michigan Gas Trans-			
29	mission Corporation and Indiana Gas Dis-			
30	tribution Corporation	464 561		
31	Total additions		$997 070	
32	Deductions —			
33	Additional interest expense resulting from			
34	issuance of $10,000,000 principal amount			
35	of 3% bonds		279 167	
36	Net additions			717 903
37	Estimated excess-profits net income for			
38	twelve months ended February 28, 1942 as			
39	recomputed			$8 658 903

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Statement Of Budget Items Included In Exhibit No. 205
Federal Power Commission Combined Dockets G200 And G207
Projects Approved in Year 1941 which were
—Unfinished at the Dates Shown Below:

Line No.	Budget Item No. (A)	(B)	December 31, 1941 (C)	February 28, 1942 (D)
1		Panhandle Eastern Pipe Line Company		
2		Regular		
3	BP-32	Drill Wackers Well — Oklahoma	$ 15 900	$ 1 600
4	521	Compressor Units for Wells	1 400	1 000
5	523	Cathodic Protection Units	1 400	1 000
6	524	Independent Gravel Lateral	1 200	
7	556	Measuring and Regulating Stations	1 800	1 000
8	557R	Horizontal Condensate Separators	2 000	200
9	559	Chain Link Fencing	14 300	14 300
10	560	Compressor Station Yard Lighting	5 400	5 400
11	562	Hercules Powder Lateral	31 000	31 000
12	564	Greenfield, Indiana Lateral	3 400	1 300
13		Total—Regular	78 000	57 000
14		Expansion		
15	534	Tuscola Compressor Station	2 900	
16	543R	Haven Loop	75 200	
17	544R	Louisburg Loop	109 300	90 800
18	545R	Houstonia Loop	384 000	173 000
19	546R	Centralia Loop	587 500	237 800
20	547R	Mississippi River Crossing	128 100	113 000
21	548R	Pleasant Hill Loop	720 700	302 000
22	549R	Illinois River Crossing	113 400	112 000
23	550R	Glenarm Loop	579 500	307 700
24	551R	Tuscola Loop	223 400	211 900
25	552R	Michigan-North Line	2 338 200	1 819 500
26	553R	Michigan-West Line	1 571 000	1 539 000
27	561	Adrian, Michigan Lateral	30 800	29 300
28		Total—Expansion	6 863 000	4 936 000
29		Totals	$6 941 000	$4 993 000

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Statement Of Budget Items Included In Exhibit No. 205
Federal Power Commission Combined Dockets G200 And G207

Line No.	Budget Item No. (A)	(B)	December 31, 1941 (C)	February 28, 1942 (D)
1		Illinois Natural Gas Company		
2	67	Galesburg Lateral	$ 119 000	$ 90 000
3	68	Abingdon Lateral	35 600	33 600
4	69	Knoxville Lateral	2 100	2 100
5	70	Bloomington Lateral	254 300	254 300
6		Totals	411 000	380 000
7		Michigan Gas Transmission Corporation		
8	107R	Warehouse—Bluffton, Indiana	1 600	1 200
9	110	Compressor Station Addition —		
10		Edgerton, Indiana	20 000	1 000
11	114	Gas Scrubbers — Montezuma Compressor		
12		Station, Indiana	13 500	5 100
13	115	9 miles 6-5/8" Loop to Fort Wayne,		
14		Indiana	14 000	11 700
15	117	Measuring Station Facilities —		
16		Richmond, Indiana	6 200	2 100
17	119	Measuring Station Facilities —		
18		Greenfield, Ind.	2 700	1 900
19	120	Measuring Station Facilities —		
20		Lenawee Co., Michigan	21 200	—
21	122	Water Well Site — Zionsville		
22		Compressor Station, Indiana	1 800	—
23		Totals	81 000	23 000
24		Totals (Per Exhibit 204)	$7 433 000	$5 396 000

5319

[fol. 16110]

Agreement

Between

Columbia Gas & Electric Corporation

and

Panhandle Eastern Pipe Line Company

Dated February 5, 1942

[fol. 16111] This Agreement, made and entered into this 5th day of February, 1942, by and between Columbia Gas & Electric Corporation, a Delaware corporation (hereinafter called Columbia Gas), and Panhandle Eastern Pipe Line Company, a Delaware corporation (hereinafter called Panhandle Eastern),

Witnesseth:

Columbia Gas represents and warrants that it owns with power to sell the entire outstanding capital stocks and certain other indebtedness as hereinafter stated (such capital stocks, notes and other indebtedness being sometimes hereinafter referred to as the "holdings" of Columbia Gas), of the following companies to wit:

44,800 shares of Common Stock, no par value, $5,900,500, principal amount, of 6% Demand Notes, $2,420,000, principal amount, of 6% Demand Loans, (open account) of Michigan Gas Transmission Corporation, a Delaware corporation; and 20 shares of Common Stock, no par value, $126,000, principal amount, of 6% Demand Notes, $15,000, principal amount, of 6% Demand Loans, (open account) of Indiana Gas Distribution Corporation, an Indiana corporation.

The Securities and Exchange Commission, by an order entered January 21, 1942, In the Matter of Columbia Gas & Electric Corporation, et al., has duly authorized the sale by Columbia Gas to Panhandle Eastern of the aforementioned holdings of Columbia Gas in Michigan Gas Transmission Corporation (hereinafter called Michigan Gas) and Indiana Gas Distribution Corporation (herein-[fol. 16112] after called Indiana Gas) at the prices hereinafter provided for.

Columbia Gas agrees to sell and Panhandle Eastern agrees to purchase the entire aforementioned holdings of Columbia Gas in Michigan Gas and Indiana Gas on the terms and conditions set forth below:

(a) Delivery of, and payment of the first instalment for, such holdings of Columbia Gas shall be made at the closing to be held on February 6, 1942, at 9:30 A.M. at the office of City Bank Farmers Trust Company, 22 William Street, New York, N. Y., or at any proper adjournment thereof. (The date on which the closing is to take place is hereinafter sometimes referred to as the "Closing Date".) It is agreed that all right, title and interest of Columbia Gas in and to its aforementioned holdings in Michigan Gas and Indiana Gas will pass to Panhandle Eastern upon the payment of such first instalment and the making of such delivery all in the manner hereinafter set forth. Payment of such first instalment, the amount thereof being that set forth in paragraph (c) below, shall be made by certified or bank cashier's check payable, in New York Clearing House funds, to the order of Columbia Gas, against delivery (i) of said 44,800 shares of Common Stock, no par value, of Michigan Gas and said 20 shares of Common Stock, no par value, of Indiana Gas, duly endorsed in blank for transfer, with all proper stock transfer tax stamps thereto attached, (ii) said $5,900,500, principal amount, of 6% Demand Notes of Michigan Gas and said $126,000, principal amount, of 6% Demand Notes of Indiana Gas duly endorsed without recourse by Columbia Gas and (iii) assignments of said $2,420,000, principal amount, of 6% Demand Loans (open account) of Michigan Gas and said $15,000, principal amount, of 6% Demand Loans (open account) of Indiana Gas in the form of the form of assignment attached hereto as Exhibit A.

[fol. 16113] (b) The price to be paid by Panhandle Eastern for the aforementioned holdings of Columbia Gas in Michigan Gas and Indiana Gas shall equal the sum of (i) $10,700,000, which is the amount of the investment of Columbia Gas in its aforementioned holdings of Michigan Gas plus (ii) $142,900, which is the amount of the investment of Columbia Gas in its aforementioned holdings of Indiana Gas plus (iii) all undistributed surpluses of Michigan Gas and Indiana Gas (other than Special Capital

Surplus of Michigan Gas) at the close of business on February 5, 1942, minus (iv) $103,500, such amount of $103,509 being the undepreciated portion of an item of $139,424 paid by the predecessor of Michigan Gas to an affiliated corporation and required by said order of the Securities and Exchange Commission to be excluded from the price to be paid by Panhandle Eastern to Columbia Gas in respect of Columbia Gas' holdings in Michigan Gas. Columbia Gas agrees that it will not, prior to the Closing Date, increase or reduce the amount of its investment in Michigan Gas or Indiana Gas. However, Columbia Gas expects that, on or before the Closing Date, Michigan Gas and Indiana Gas, respectively, will declare dividends in the amount of all Earned Surplus Since December 31, 1937, shown on unaudited balance sheets, as of December 31, 1941, annexed hereto prepared by Michigan Gas and Indiana Gas, respectively, payable in cash to Columbia Gas. Columbia Gas agrees that Michigan Gas and Indiana Gas, prior to the Closing Date, will pay no dividends out of surplus earned subsequent to December 31, 1941.

(c) The purchase price for the aforementioned holdings is to be paid in two instalments and there is to be an adjustment of the purchase price in accordance with the provisions of the next two succeeding paragraphs. The first instalment, to be paid on the Closing Date, is to be $10,766,715.02, which amount is equal to the sum of (i) the amount of the investment of Columbia Gas in its hold-[fol. 16114] ings in Michigan Gas and Indiana Gas plus (ii) the amount of the Earned Surplus Prior to January 1, 1938, and Capital Surplus Prior to January 1, 1938, of Michigan Gas, minus (iii) the aforementioned amount of $103,500. In addition to said first instalment, Panhandle Eastern agrees to pay to Columbia Gas, on or before the Closing Date, $896.00 in respect of New York State taxes on the transfer of the aforesaid shares of capital stock of Michigan Gas and Indiana Gas. The second instalment, to be paid at the office of Columbia Gas & Electric Corporation, 61 Broadway, New York, N. Y., on or before the fifteenth day after the enactment of the Federal Revenue Act applicable to the 1942 incomes of Michigan Gas and Indiana Gas, is to be an amount which shall be equal to the net incomes of Michigan Gas and Indiana Gas for the

period January 1, 1942 to February 5, 1942, inclusive. It is agreed that the amount of the net income of such companies for such period shall be considered to be the sum of (i) the net income of Michigan Gas and Indiana Gas for the period January 1, 1942 to January 31, 1942, inclusive, plus (ii) 5/28th of the amount of the net income of Michigan Gas and Indiana Gas for the period February 1, 1942 to February 28, 1942, inclusive. Such net income for such periods shall be computed on the basis of proper accounting principles followed by Michigan Gas and Indiana Gas in computing their net income for the year ended December 31, 1941, as it will be reflected on the balance sheets to be certified to by Messrs. Arthur Andersen & Co., referred to in paragraph (d) below. It is agreed that any dispute between Panhandle Eastern and Columbia Gas as to the amount of such net income for such periods will be submitted to Messrs. Arthur Andersen & Co., independent public accountants, whose determination of the amount thereof will be final and binding upon Panhandle Eastern and Columbia Gas. The charges of Messrs. Arthur Andersen & Co. in respect of the determination of any such [fol. 16115] question will be borne equally by Panhandle Eastern and Columbia Gas.

(d) Messrs. Arthur Andersen & Co., independent public accountants, are presently engaged in making an examination of the balance sheets of Michigan Gas and Indiana Gas as of December 31, 1941, and the balance sheets of such companies as of that date, certified to by such accountants, will be available on or before the date when the second instalment on the purchase price is due. Columbia Gas agrees that on the date when the second instalment on the purchase price is due, it will pay to Panhandle Eastern any amount by which the dividends paid by Michigan Gas or Indiana Gas prior to the Closing Date, based on their unaudited balance sheets as of December 31, 1941, exceeds the amount of Earned Surplus Since December 31, 1937, shown on such certified balance sheets as of December 31, 1941. Panhandle Eastern agrees that on the date when the second instalment on the purchase price is due, it will pay to Columbia Gas any amount by which the Earned Surplus Since December 31, 1937, of Michigan Gas or Indiana Gas, as shown on such certified balance sheets

as of December 31, 1941, exceeds the amount of dividends paid by Michigan Gas or Indiana Gas prior to the Closing Date, based on their unaudited balance sheets as of December 31, 1941.

(e) Michigan Gas and Indiana Gas follow the practice of charging to their respective earnings and setting up on their respective books of account in accounts entitled "Accrued Taxes" amounts estimated to represent accrued liabilities for Federal and other taxes and, in addition, Michigan Gas and Indiana Gas follow the practice of charging to their earnings and setting up on their books of account in accounts entitled "Reserve For Undetermined Federal And Other Taxes" amounts estimated to be sufficient to meet any deficiency in their "Accrued Taxes" accounts. The amounts so accrued by [fol. 16116] Michigan Gas and Indiana Gas are hereinafter sometimes referred to as the "Tax Provisions" of Michigan Gas and Indiana Gas. Columbia Gas is unable to state whether such Tax Provisions ultimately will be found to represent the actual tax liability of Michigan Gas and Indiana Gas, respectively, in respect of their operations prior to February 6, 1942, and, accordingly, an adjustment of the purchase price may be required when the actual tax liability in respect of such operations shall have been determined in order that the purchase price may represent the true investment of Columbia Gas in Michigan Gas and Indiana Gas at the date of the sale plus the respective undistributed surpluses of Michigan Gas and Indiana Gas at that date minus the aforementioned $103,500. Therefore, Columbia Gas agrees that it will promptly pay to Michigan Gas or Indiana Gas (as the case may be) any amount by which the Federal or other taxes (including interest or penalties applicable thereto) paid by Michigan Gas and Indiana Gas, respectively, subsequent to the Closing Date, in respect of their respective operations prior to February 6, 1942, shall exceed their respective Tax Provisions as of February 5, 1942. Panhandle Eastern agrees that it will promptly pay, or cause Michigan Gas or Indiana Gas (as the case may be) promptly to pay to Columbia Gas any amount by which the respective Tax Provisions of Michigan Gas and Indiana Gas at February 5, 1942, exceed the Federal or other taxes (including in-

terest or penalties applicable thereto) paid subsequent to the Closing Date by Michigan Gas and Indiana Gas, respectively, in respect of their operations prior to February 6, 1942. Columbia Gas and Panhandle Eastern agree that Columbia Gas is to be responsible for the conduct and cost of and in the name and on behalf of Michigan Gas and Indiana Gas entitled to undertake and conduct all negotiations with tax authorities and any litigation concerning taxes of Michigan Gas and Indiana Gas in respect of their respective operations prior to February 6, 1942. Pan- [fol. 16117] handle Eastern agrees that it will cooperate with Columbia Gas and cause Michigan Gas and Indiana Gas to cooperate with Columbia Gas in working out a procedure whereby Columbia Gas will be able effectively to assume such responsibility and Columbia Gas agrees in the conduct of such matters, to cooperate and consult with Panhandle Eastern with respect to such phases thereof as may affect the tax liability of Panhandle Eastern itself.

(f) Panhandle Eastern agrees that it will cause Michigan Gas and Indiana Gas to give to Columbia Gas any and all requested consents which shall be necessary to authorize or permit Columbia Gas to file consolidated Federal income or excess profits tax returns in which will be included the taxes of Michigan Gas and Indiana Gas for the whole or any portion of the period of ownership of their outstanding stocks by Columbia Gas.

COLUMBIA GAS & ELECTRIC CORPORATION,
By Walter C. Beckjord,
(Corporate Seal) Vice President.
Attest:
Robert H. Delafield,
Assistant Secretary.

PANHANDLE EASTERN PIPE LINE COMPANY,
By J. D. Creveling,
(Corporate Seal) President.
Attest:
Leith V. Watkins,
Secretary.

[fol. 16118] Form of Assignment

Know all Men by These Presents, that the undersigned, Columbia Gas & Electric Corporation, a Delaware corporation, in consideration of the sum of $1 to it in hand paid by Panhandle Eastern Pipe Line Company, a Delaware corporation, receipt of which is hereby acknowledged, and of other good and valuable consideration, has assigned, transferred and set over and does hereby assign, transfer and set over unto said Panhandle Eastern Pipe Line Company; its successors and assigns, to it and their use and benefit, all the right, title and interest of the undersigned in and to all moneys owed on open account or otherwise, to the undersigned by Michigan Gas Transmission Corporation, a Delaware corporation, and Indiana Gas Distribution Corporation, an Indiana corporation.

In Witness Whereof, Columbia Gas & Electric Corporation has caused this assignment to be executed by its duly authorized officer and its corporate seal to to be affixed this day of February, 1942.

COLUMBIA GAS & ELECTRIC CORPORATION,

By.....
President.

Attest:

.....
Assistant Secretary.

[fol. 16119] MICHIGAN GAS TRANSMISSION CORPORATION
Balance Sheet as of December 31, 1941

Assets

Fixed Assets		$12,804,341 16
Current and Working Assets:		
Cash in Banks and on Hand	$ 177,485 11	
Accounts Receivable—Service	358,812 54	
Accounts Receivable—Other	875,369 66	
Current Amounts Due from Affiliated Companies	29,323 77	
Inventories at Cost:		
Construction, Operation and Maintenance Materials and		

Prepaid Expenses:		
Insurance		4,922 18
Taxes		187 16
Rents		1,048 79
Other Items		206 48
Total Current and Working Assets		$ 1,562,409 59
Special Funds		$ 13 00
Deferred Charges (primarily deferred rate case expense)		$ 42,953 87
		$14,409,717 62

LIABILITIES

Notes and Loans Payable to Columbia Gas & Electric Corporation (Parent Company):		
Demand Notes—6%		$ 5,900,500 00
Demand Loans—6%		2,420,000 00
Total Notes and Loans Payable		$ 8,320,500 00
Current and Accrued Liabilities:		
Accounts Payable		$ 1,090,729 74
Accrued Taxes		403,080 15
Current Amounts Payable to Affiliated Companies		7,866 69
Other Accrued Liabilities		1,970 14
Total Current and Accrued Liabilities		$ 1,503,646 72
Reserves:		
Retirements		$ 1,697,965 73
Injuries and Damages		18,216 86
Contributions for Construction		9,352 96
Contingencies—Undetermined Federal and Other Taxes		317,648 19
Other Reserves		2,591 01
Total Reserves		$ 2,045,774 75
Capital Stock and Surplus:		
Common Stock (No Par):		
Authorized —60,000 shares		
Outstanding—44,800 shares		$ 2,240,000 00
Surplus:		
Special Capital Surplus		139,500 00
Capital Surplus Prior to January 1, 1938		26,662 76
Earned Surplus Prior to January 1, 1938		1,552 26
Earned Surplus Since December 31, 1937		132,081 13
Total Capital Stock and Surplus		$ 2,539,796 15
		$14,409,717 62

[fol. 16120] MICHIGAN GAS TRANSMISSION CORPORATION

Income Statement Year Ended December 31, 1941

Gross Revenues:	
Gas	$5,527,664 76
Other Operations	130 00
Total Gross Revenues	$5,527,794 76
Operating Expenses:	
Purchased Gas (Including expenses incidental thereto)	$3,249,693 88
Transmission Expenses	341,250 11
Sales Promotion Expenses	8,069 93
General and Administrative Expenses	124,948 78
Miscellaneous Duplicate Charges—Credit	*109,097 33*
	$3,614,865 37
Maintenance and Repairs	52,159 96
Provision for Retirements	366,785 40
Taxes Other than Federal Income	158,027 67
Provision for Federal Income and Excess Profits Taxes(1)	314,464 59
Total Operating Expenses	$4,506,302 99
Net Operating Revenue	$1,021,491 77
Other Income:	
Interest	$ 227 42
Gross Corporate Income	$1,021,719 19
Other Deductions:	
Interest on Notes and Loans	$ 503,230 00
Interest—Other	12,769 04
Less: Interest Capitalized	*4,178 67*
Total Other Deductions	$ 511,820 37
Net Income	$ 509,898 82

Italics indicate red figures.

(1) Includes provision for excess profits taxes in the amount of $91,756.60.

[fol. 16121] INDIANA GAS DISTRIBUTION CORPORATION

Balance Sheet as of December 31, 1941

Assets

Fixed Assets	$197,956 95
Current and Working Assets:	
Cash in Banks and on Hand	$ 11,781 26
Accounts Receivable—Service	29,548 94
Accounts Receivable—Appliance	769 74

Accounts Receivable—Other	1 75
Less—Reserve for Doubtful Accounts	*3,936 36*
Current Amounts Due from Affiliated Companies	422 35
Inventories at Cost:	
Construction, Operation and Maintenance Materials and Supplies	1,176 93
Gas Appliances	164 66
Prepaid Expenses—Insurance	283 99
Total Current and Working Assets	$ 40,213 26
Other Deferred Charges	$ 7 41
	$238,177 62

Liabilities

Notes and Loans Payable to Columbia Gas & Electric Corporation (Parent Company):	
Demand Notes—6%	$126,000 00
Demand Loan—6%	15,000 00
Total Notes and Loans Payable	$141,000 00
Current and Accrued Liabilities:	
Accounts Payable	$ 1,553 67
Accrued Taxes	17,609 23
Customers' Service Deposits and Accrued Interest thereon	1,622 37
Current Amounts Payable to Affiliated Companies	27,606 05
Total Current and Accrued Liabilities	$ 48,391 32
Reserves:	
Retirements	$ 27,069 92
Injuries and Damages	8,977 78
Contributions for Construction	3,000 00
Contingencies—Undetermined Federal and Other Taxes	688 75
Other Reserves	473 28
Total Reserves	$ 40,809 73
Capital Stock and Surplus:	
Common Stock (No Par):	
Authorized —10,000 shares	
Outstanding —20 shares	$ 1,000 00
Earned Surplus Since December 31, 1937	6,976 57
Total Capital Stock and Surplus	$ 7,976 57
	$238,177 62

There are no known unrecorded Contingent Liabilities.
Italics indicate red figures.

[fol. 16122] INDIANA GAS DISTRIBUTION CORPORATION

Income Statement Year Ended December 31, 1941

Gross Revenues:	
Gas	$395,617.28
Other Operations	663.74
Total Gross Revenues	$396,281.02
Operating Expenses:	
Purchased Gas (including expenses incidental thereto)	$320,215.53
Distribution Expenses	7,088.66
Customers' Accounting and Collecting Expenses	4,850.39
Sales Promotion Expenses	2,066.04
General and Administrative Expenses	3,419.21
Other Operating Expenses	274.90
Miscellaneous Duplicate Charges—Credit	*776.32*
	$337,138.41
Maintenance and Repairs	1,980.35
Provision for Retirements	3,740.80
Taxes other than Federal Income	9,736.71
Provision for Federal Income and Excess Profits Taxes (1)	11,883.04
Total Operating Expenses	$364,479.31
Net Operating Revenue	$ 31,801.71
Other Income:	
Miscellaneous	$ 29.40
Gross Corporate Income	$ 31,831.11
Other Deductions:	
Interest on Notes and Loans	$ 8,460.00
Interest—Other	73.44
Miscellaneous	17.63
Total Other Deductions	$ 8,551.07
Net Income	$ 23,280.04

Italics indicate red figures.

(1) Includes provision for excess profits taxes in the amount of $2,522.31.

[fol. 16123] Exhibit 246.

Panhandle Eastern Pipe Line Company and Subsidiary Companies.

Preliminary Determination of the Second Installment of Purchase Price to be paid to Columbia Gas and Electric Corporation Computed in Accordance with Provision (Paragraph (c)) of the Agreement Between Columbia Gas and Electric Corporation and Panhandle Eastern Pipe Line Company Dated February 5, 1942.

Amount equal to Net Incomes of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation (Before Adjustments Resulting from the Enactment of Federal Revenue Act applicable to year 1942). Period January 1, 1942 to February 5, 1942, Inclusive.

Michigan Gas Transmission Corporation		
January	$61,752 83	
February (5/28 x $71,844.79)	12,829 43	$74,582 26
Indiana Gas Distribution Corporation		
January	$ 2,358 32	
February (5/28 x $2,920.04)	521 44	2,879 76
Total		$77,462 02

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	Particulars (A)	Annual Amount (B)	Amount of Authorization included in expense year 1941 May (C)	June (D)	July (E)	Aug. (F)	Sept. (G)	Oct. (H)	Nov. (I)	Dec. (J)	Total (K)	Amount Annual Authoriza not ful Included Expens Year 19 (L)
1	Pay roll increases authorized:											
2	Field employees of Panhandle Eastern Pipe											
3	Line Company and Illinois Natural Gas											
4	Company May 1 and July 1, 1941	$ 22 800	$1 600	$1 600	$1 900	$ 1 900	$ 1 900	$ 1 900	$1 900	$ 1 900	$14 600	$ 8 200
5												
6	Employees of Michigan Gas Transmission											
7	Corporation July 1, 1941	22 800			1 900	1 900	1 900	1 900	1 900	1 900	11 400	11 400
8												
9												
10	Resulting from change of hours of work											
11	week - field employees Panhandle											
12	Eastern Pipe Line Company and Illinois											
13	Natural Gas Company	92 400				7 700	7 700	7 700	7 700	7 700	38 500	53 900
14												
15												
16	Emergency property protection											
17	Panhandle Eastern Pipe Line Company											
18	and Illinois Natural Gas Company	156 000								6 500	6 500	149 500
19	Michigan Gas Transmission Corporation	72 000										72 000
20												
21	Rate Case Expense:											
22	Combined annual amortization Panhandle											
23	Eastern Pipe Line Company and Michigan											
24	Gas Transmission Corporation											
25	(1/5 of $350,000)	70 000			1 000	1 000	1 000	1 000	1 000	1 000	6 000	64 000
26												
27	Increased Cost of Employees Welfare and											
28	Pension Expense - Michigan Gas Transmission											
29	Corporation	30 000										30 000
30												
31	Totals	$466 000	$1 600	$1 600	$4 800	$12 500	$12 500	$12 500	$12 500	$19 000	$77 000	$389 000

EXHIBIT 247

DIARY COMPANIES

CERTAIN INCREASED COSTS NOT FULLY PRESENT IN INCOME ACCOUNT (EXHIBITS 195 AND 196) FOR YEAR 1941

e year 1941				Amount of Annual Authorization not fully Included in Expense Year 1941	Will be charged to Federal Power Commission Account		
ct. H)	Nov. (I)	Dec. (J)	Total (K)	(L)	(M)		(N)
900	$1 900	$ 1 900	$14 600	$ 8 200	759.111	Pumping Station - Labor	$ 4 000
					759-21	Operation of Transmission Mains - Labor	4 200
900	1 900	1 900	11 400	11 400	759-111	Pumping Station - Labor	5 700
					759-21	Operation of Transmission Mains - Labor	5 700
700	7 700	7 700	38 500	53 900	759-111	Pumping Station - Labor	35 000
					759-21	Operation of Transmission Mains - Labor	18 900
		6 500	6 500	149 500	759-111	Pumping Station - Labor	86 000
				72 000	759-21	Operation of Transmission Mains - Labor	135 500
000	1 000	1 000	6 000	64 000	797	Regulatory Commission Expenses	64 000
				30 000	800	Employees Welfare Expense and Pensions	30 000
500	$2 500	$19 000	$77 000	$389 000			

PRO FORM
FOR THE YEA

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES

Line No.	(A)	Totals from "Consolidated Column" Page 1, Exhibit No. 195 (B)	Adjustments Debit (C)	Adjustments Cre (D)
1	Income			
2	Operating Revenues			
3	Gas	$17 042 185 87		
4	Gasoline	735 077 94		
5	Miscellaneous	12 309 09		
6	Total Operating Revenues	17 789 572 90		
7	Operating Revenues Deductions			
8	Operations and Maintenance	3 829 611 53	$389 000 (1)	
9	Depreciation (Including Amortization)	2 308 521 00		
10	Amortization and Depletion of Producing Natural Gas Land and Land Rights	90 177 06		
11	Abandoned Leases	74 685 45		
12	Amortization of Other Limited Term Gas Investments	332 142 69		
13	Charges in Lieu of Federal Income and Excess-Profits Taxes	823 881 49		
14	Taxes			
15	State, Local and Miscellaneous Federal	901 387 31		
16	Federal Income	2 009 068 72		$ 48
17	Federal Excess-Profits	1 007 278 91		234
18	Total Operating Revenues Deductions	11 376 754 16	389 000	282
19	Net Operating Revenues	6 412 818 74	389 000	282
20	Other Income			
21	Interest Revenues	18 798 71		
22	Gross Income	6 431 617 45	389 000	282
23	Income Deductions			
24	Interest on Long-Term Debt	951 903 65		
25	Amortization of Debt Discount and Expense	27 486 70		
26	Other Interest Charges	18 818 68		
27	Interest Charged to Construction (Credit)	15 953 18		
28	Total Income Deductions	982 255 85		
29	Net Income	$ 5 449 361 60	$389 000	$282

PRO FORMA CONSOLIDATED INCOME ACCOUNT
FOR THE YEAR ENDED DECEMBER 31, 1941 (NOTE A)

Adjustments		
Debit (C)	Credit (D)	Consolidated (E)
		$17 042 185 87
		735 077 94
		12 309 09
		17 789 572 90
$389 000 (1)		4 218 611 53
		2 308 521 00
		90 177 06
		74 685 45
		332 142 69
		823 881 49
		901 387 31
	$ 48 000 (2)	1 961 068 72
	234 000 (2)	773 278 91
389 000	282 000	11 483 754 16
389 000	282 000	6 305 818 74
		18 798 71
389 000	282 000	6 324 617 45
		951 903 65
		27 486 70
		18 818 68
		15 953 18
		982 255 85
$389 000	$282 000	$ 5 342 361 60

[fol. 16126] Panhandle Eastern Pipe Line Company and Subsidiary Companies Note A to the Pro Forma Consolidated Income Account for the Year Ended December 31, 1941

This condensed pro forma statement of consolidated income of the company and its subsidiary, Illinois Natural Gas Company, and Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation has been prepared from the books of the companies (1) on the basis that the financing of the cost of the acquisition of the outstanding stock and indebtedness of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation resulted in annual interest costs of $300,000, and which was consummated on February 6, 1942, had been effected January 1, 1941, that the interest expense applicable to obligations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to Columbia Gas and Electric Corporation, their then parent, would have aggregated the same amount had the Panhandle Eastern Pipe Line Company been the parent company and that dividends had been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation to the extent of their net income for the year and (2) after giving effect (a) to estimated increases in Federal income taxes, which would have resulted had such interest and dividends been paid by Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, to Panhandle Eastern Pipe Line Company to the full extent of their net income and (b) to the inclusion of certain authorized increased costs, not fully included in expense for the year 1941.

[fol. 16127] Panhandle Eastern Pipe Line Company and Subsidiary Companies Adjustments Pro Forma Consolidated Income Account For the Year Ended December 31, 1941

	(1)
Increase in Operation and Maintenance Expenses resulting from the inclusion of certain authorized costs not fully included in expense for year 1941	$389,000

(2)

Decrease in Federal income taxes and Federal excess-profits taxes resulting from reduction in Net Taxable Income by the inclusion of the amount shown in Adjustment No. 1

Federal Income Taxes	(389,000 X 12.4%)	48,000
Federal Excess-Profits Taxes	(389,000 X 60%)	234,000

Vol. XIV

TRANSCRIPT OF RECORD

(Pages 5969 to 6243)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. XIV.

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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	Original	Print
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	Original	Print
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	Original	Print
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	Original	Print
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- CHART NO. 2 -

TREND OF REVENUE AND EXPENSES OF PANHANDLE EASTERN PIPE LINE COMPANY—1932-1941 & PRO FORMA

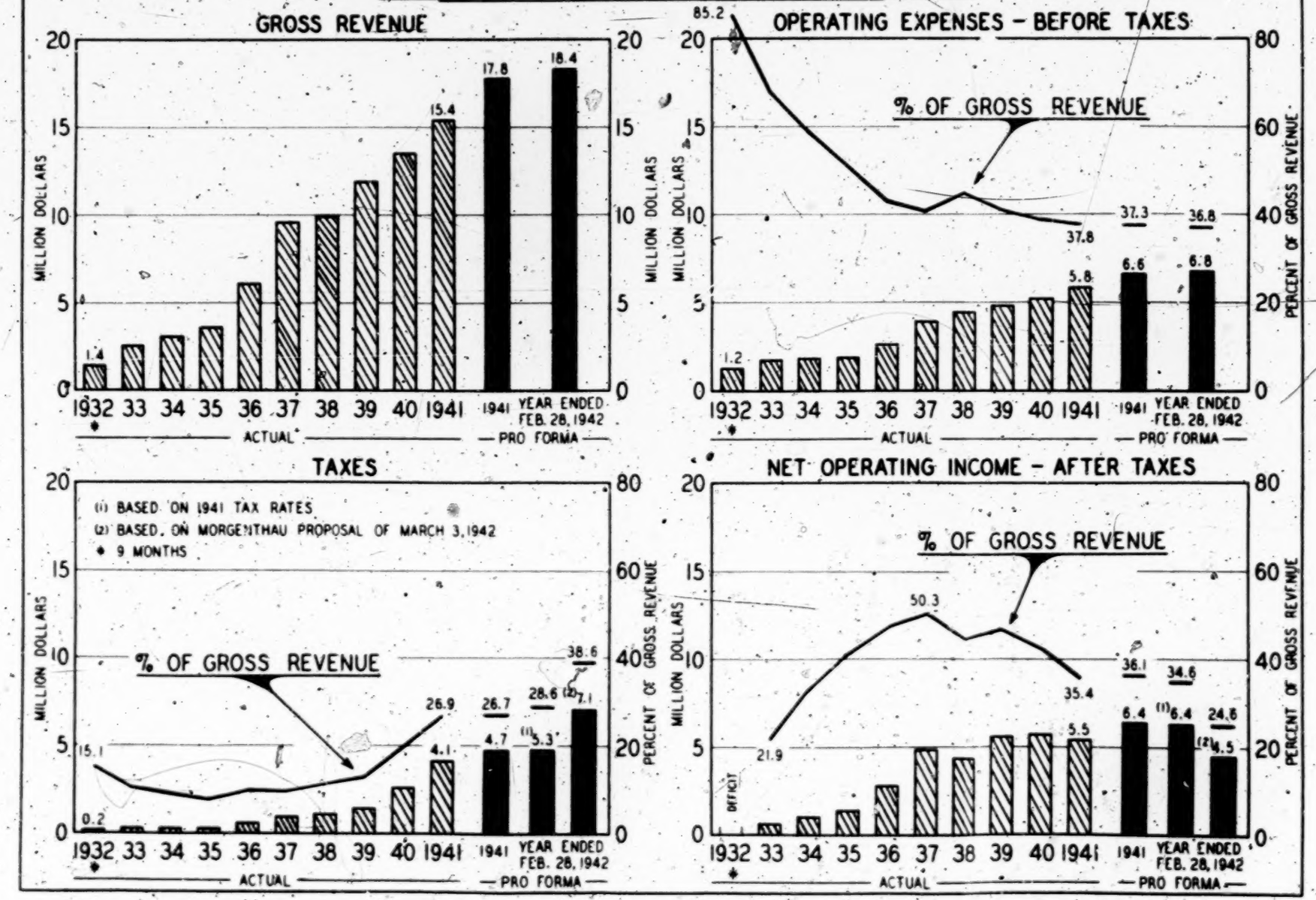
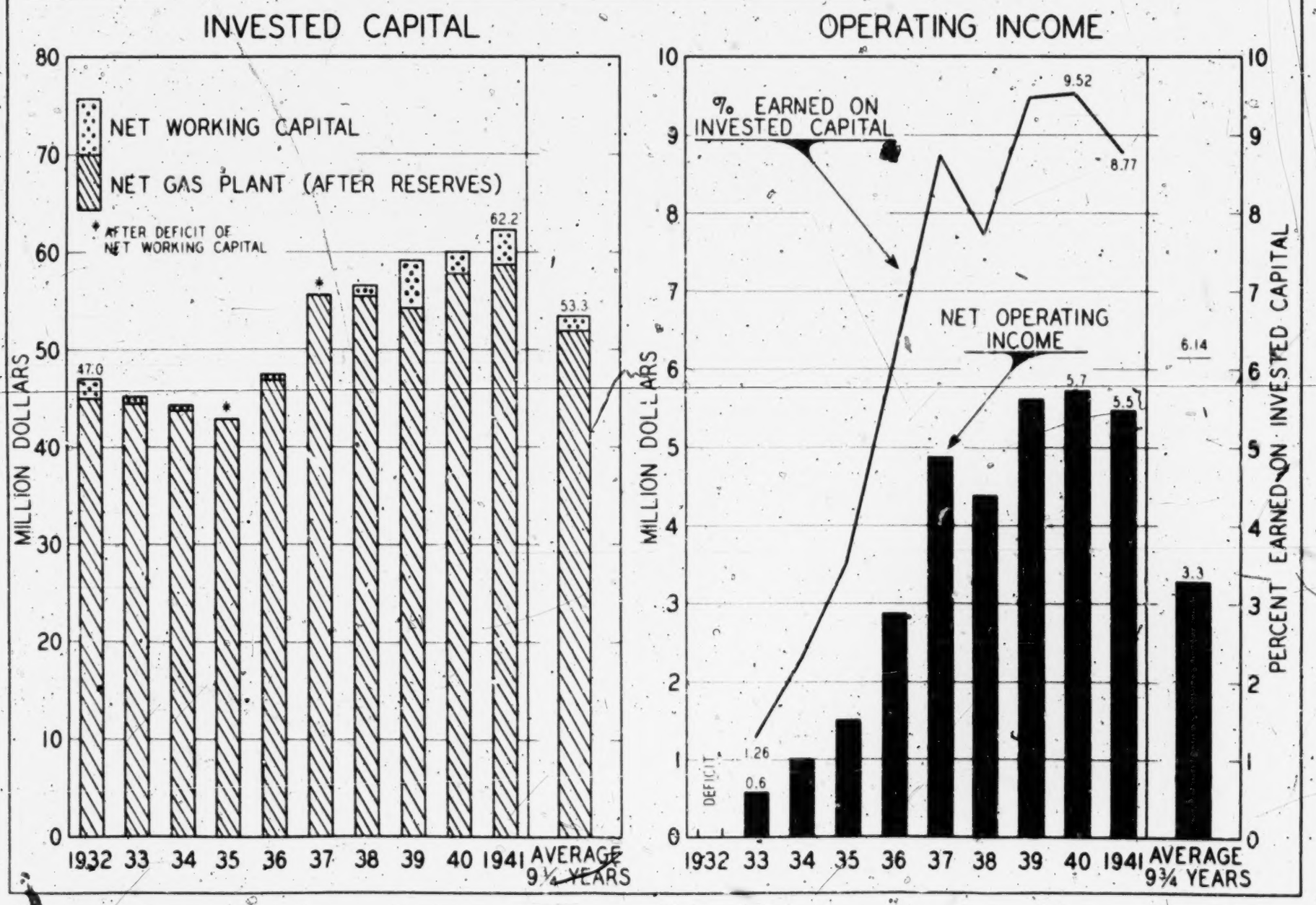


EXHIBIT 253:

- CHART NO. 3 -

PERCENT EARNED ON INVESTED CAPITAL OF PANHANDLE BASED UPON NET GAS PLANT AND WORKING CAPITAL – 1932-1941



- CHART NO. 4 -

PERCENT EARNED ON INVESTED CAPITAL OF PANHANDLE BASED UPON CAPITAL STRUCTURE.—1932-1941

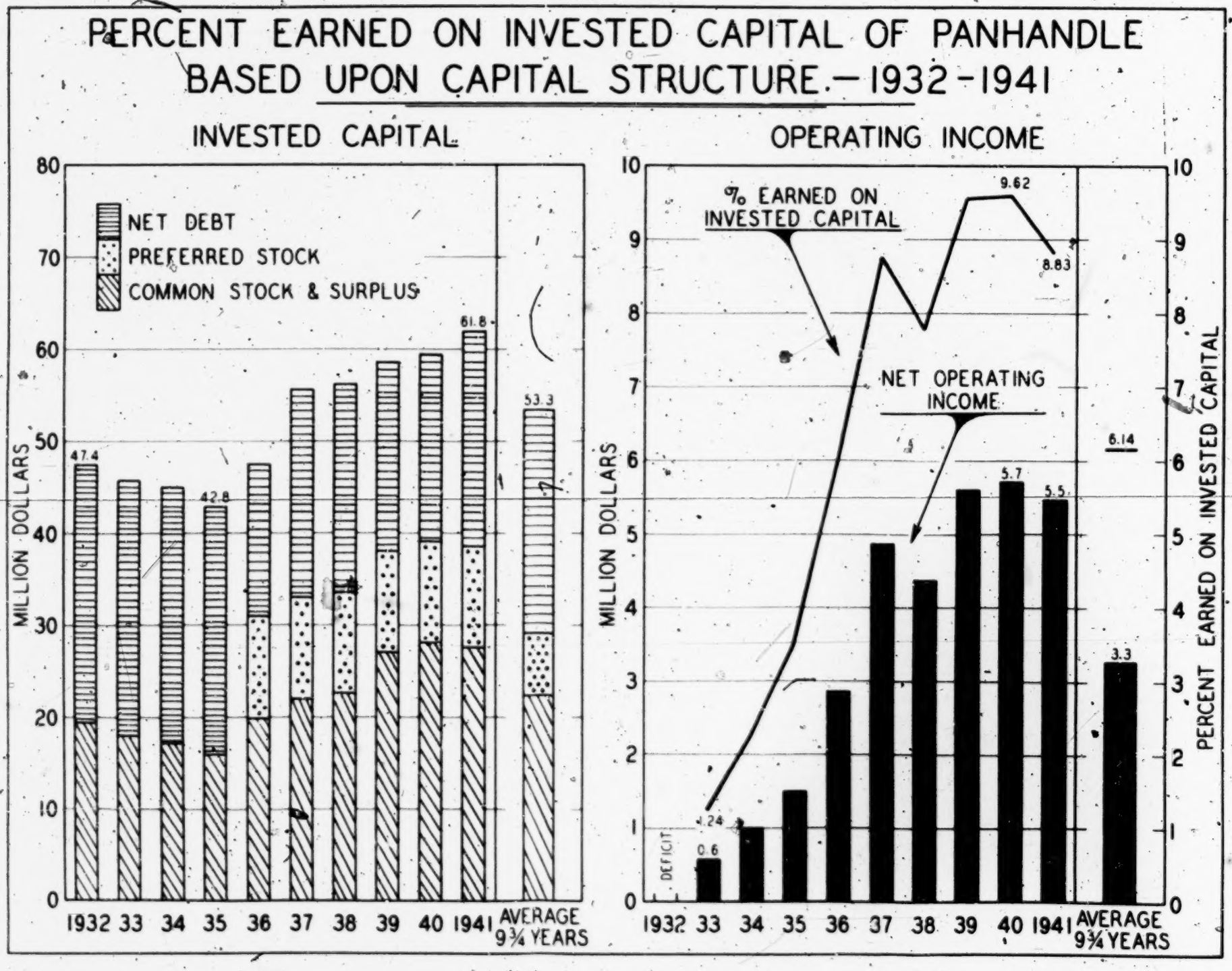
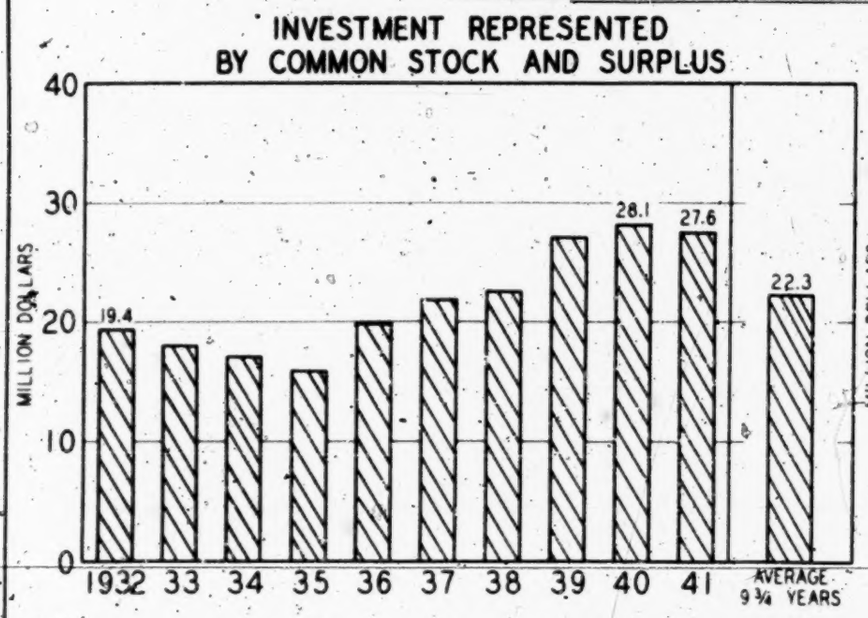
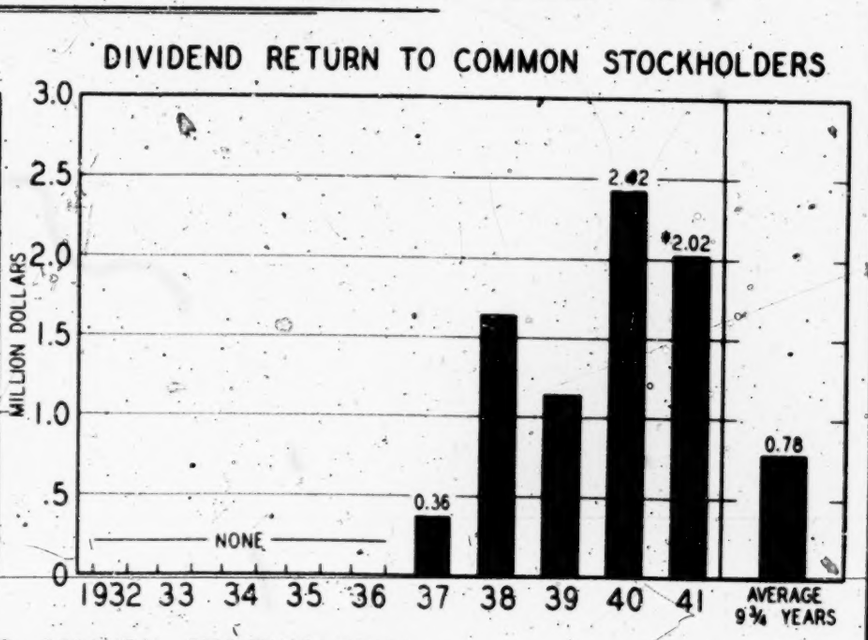


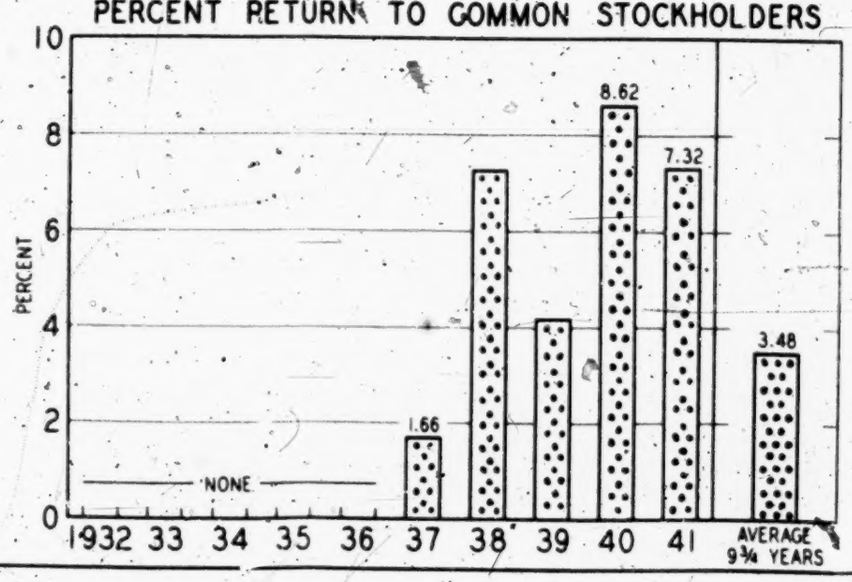
EXHIBIT 253.

-CHART NO. 5-

RETURN TO COMMON STOCKHOLDERS OF PANHANDLE EASTERN PIPE LINE COMPANY — 1932-1941







* EXCLUDES DIVIDEND PAID IN STOCK OF CENTRAL DISTRIBUTING COMPANY

EXHIBIT 253. 5977

- CHART NO. 6 -

PERCENT EARNED ON INVESTED CAPITAL OF PANHANDLE PRO FORMA FOR 12 MONTHS ENDED FEB. 28, 1942

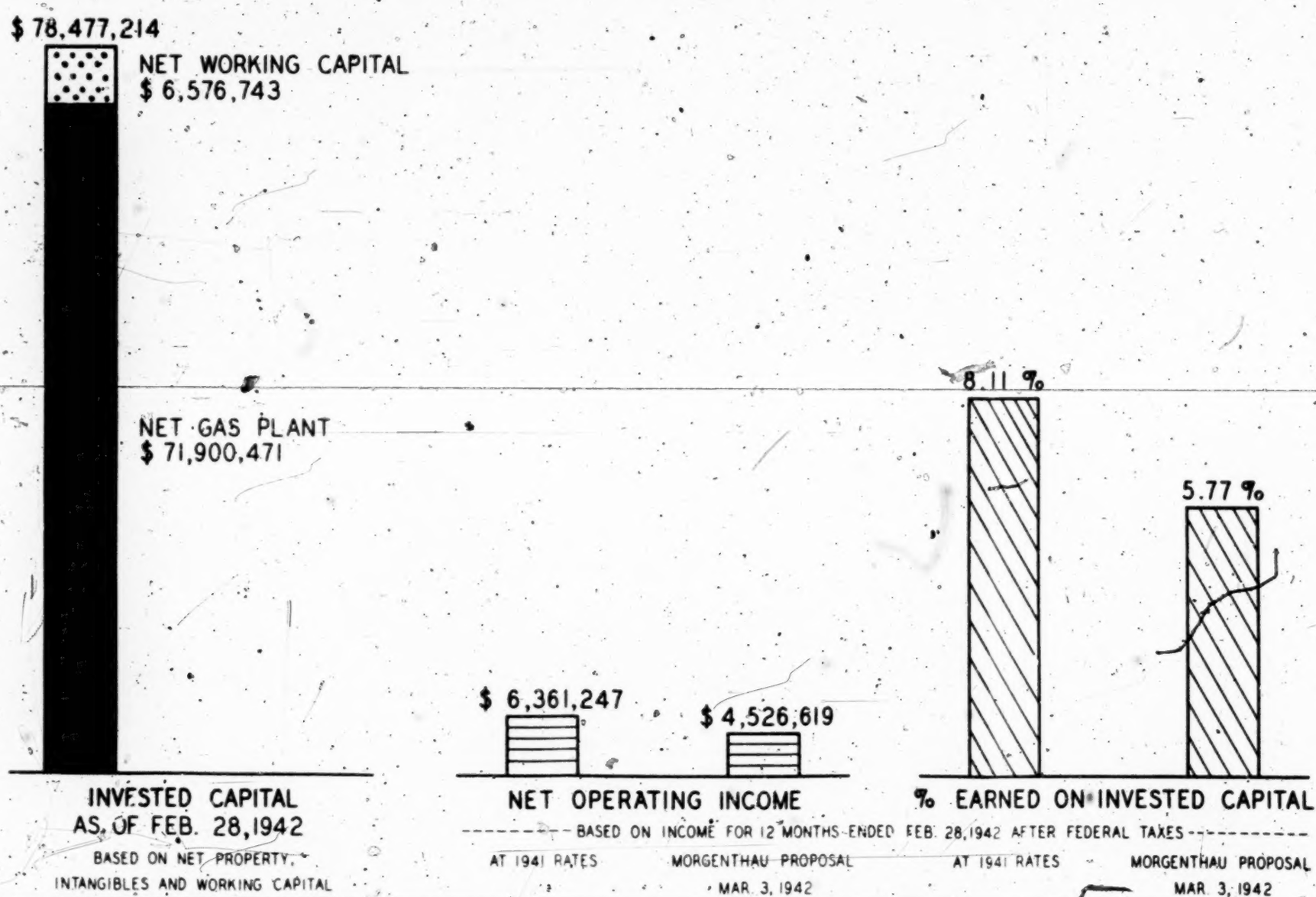
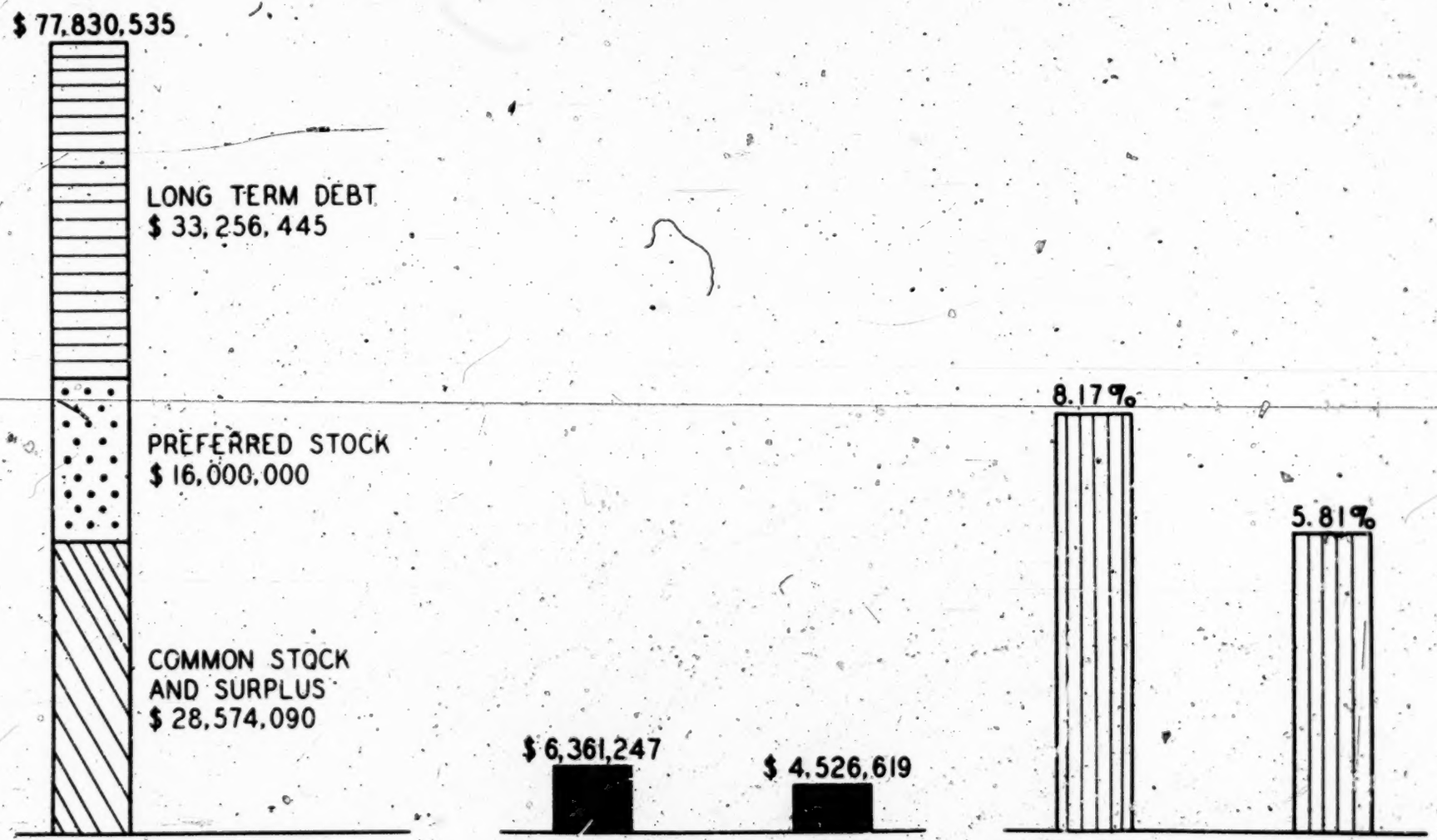


EXHIBIT 253.

- CHART NO. 7 -

PERCENT EARNED ON INVESTED CAPITAL OF PANHANDLE PRO FORMA FOR 12 MONTHS ENDED FEB. 28, 1942



5981

EXHIBIT 253.

- CHART NO. 8 -

WORKING CAPITAL OF PANHANDLE EASTERN PIPE LINE CO. IS BEING REINVESTED IN FIXED ASSETS

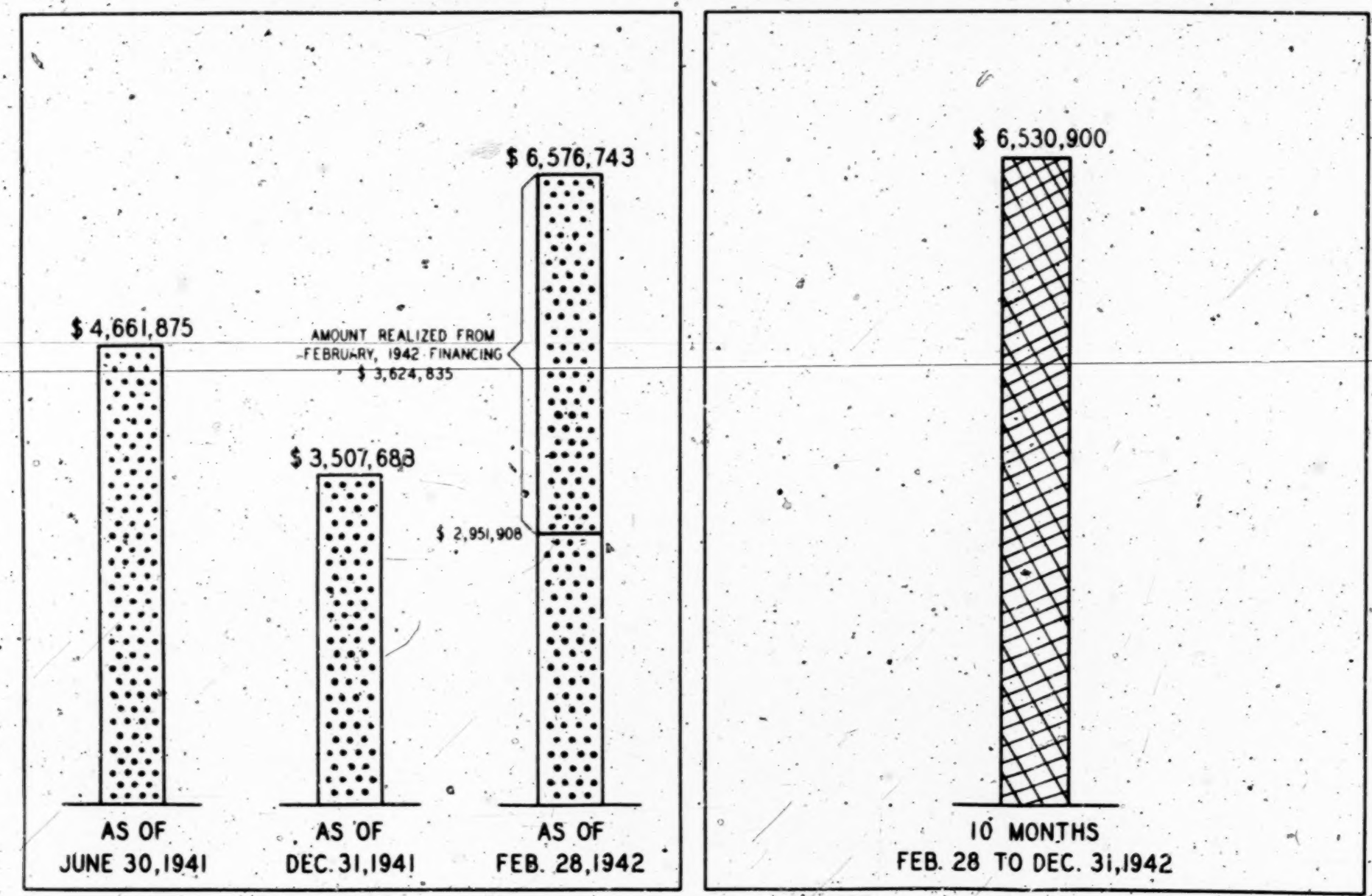


EXHIBIT 253.

– CHART NO. 9 –

EFFECT OF SINKING FUND AND MATURITY PROVISIONS OF DEBT AND PREFERRED STOCK OF PANHANDLE EASTERN PIPE LINE CO.

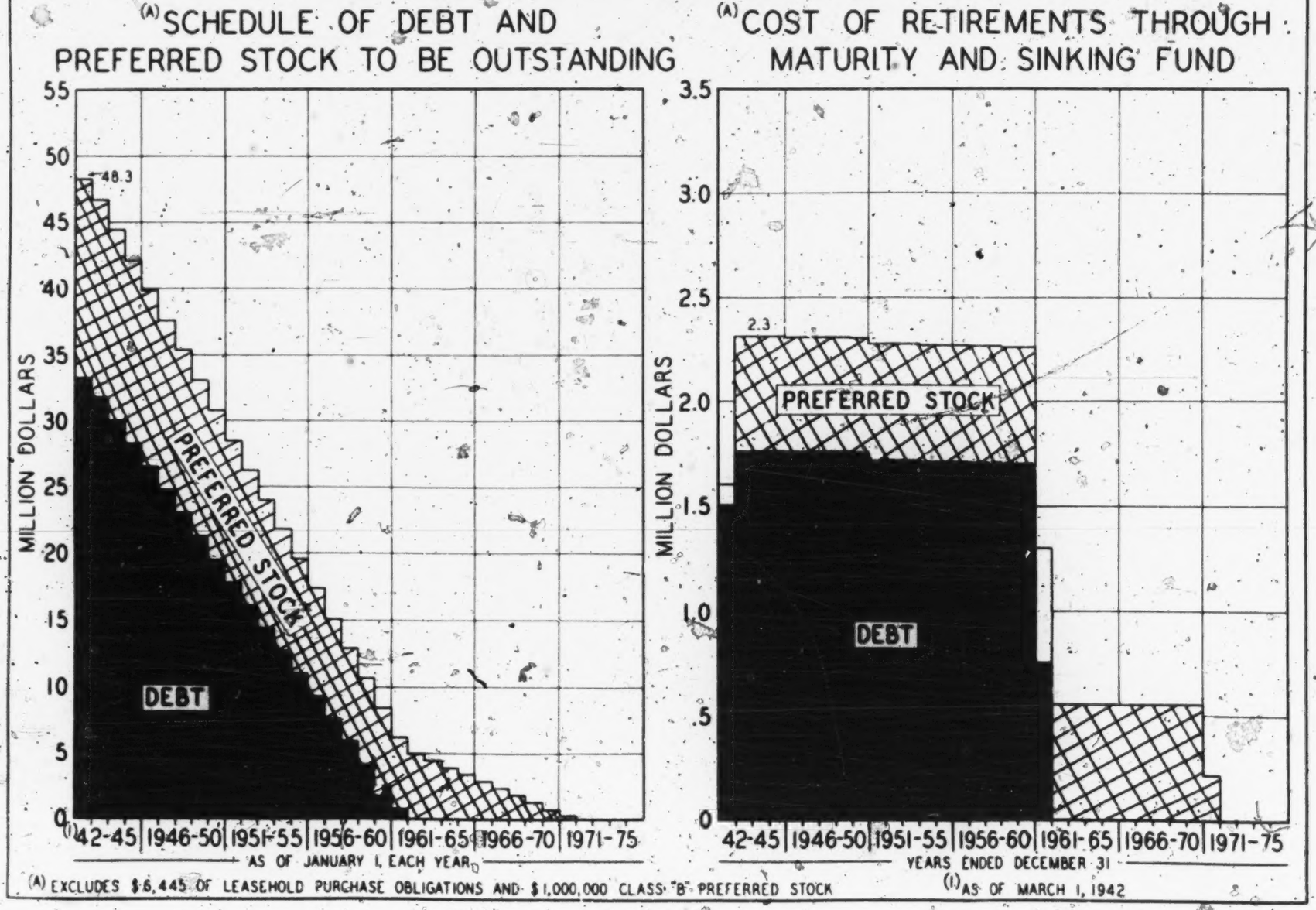


EXHIBIT 253.

- CHART NO. 10 -

INVESTORS' APPRAISAL OF OVERALL CAPITAL RISKS IN VARIOUS DIVISIONS OF THE UTILITY INDUSTRY — 1937-1941

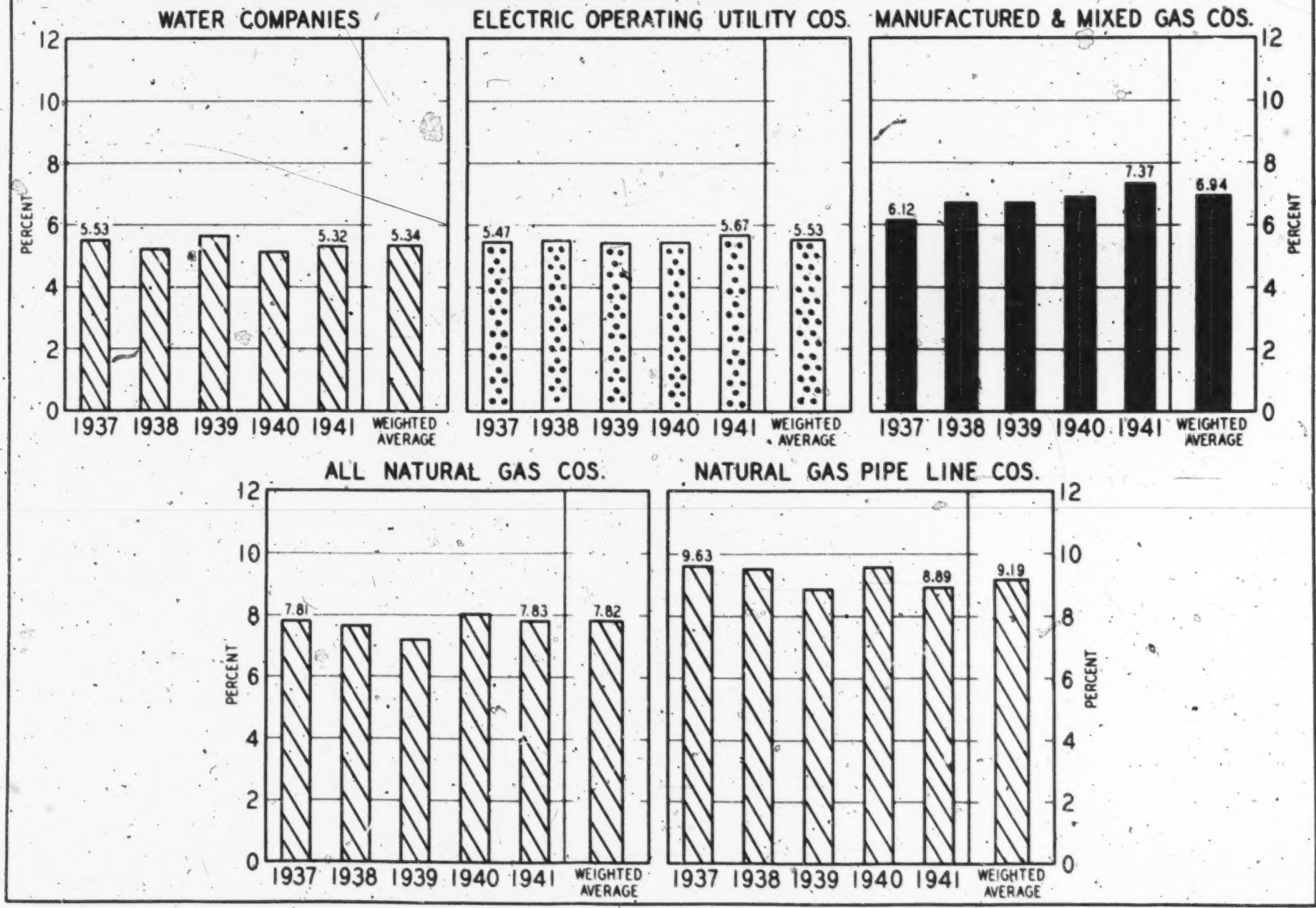
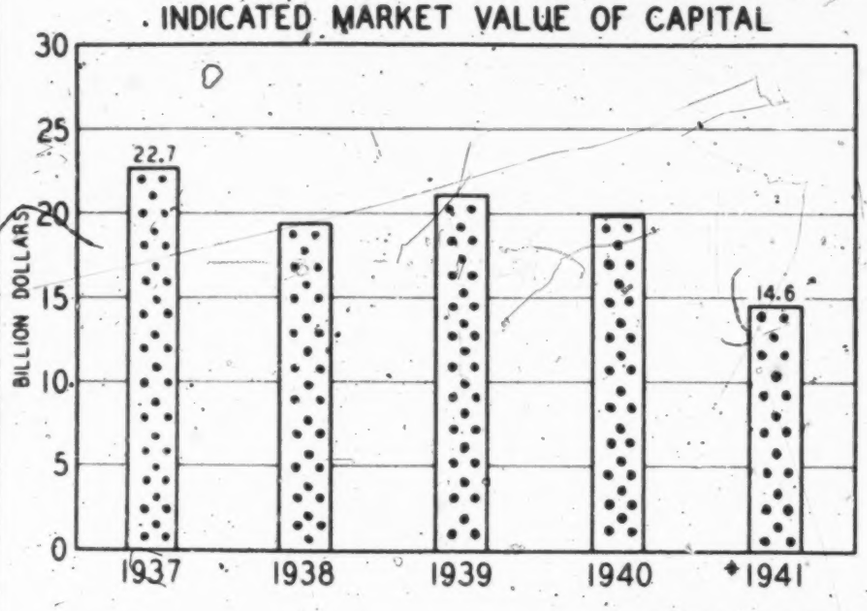
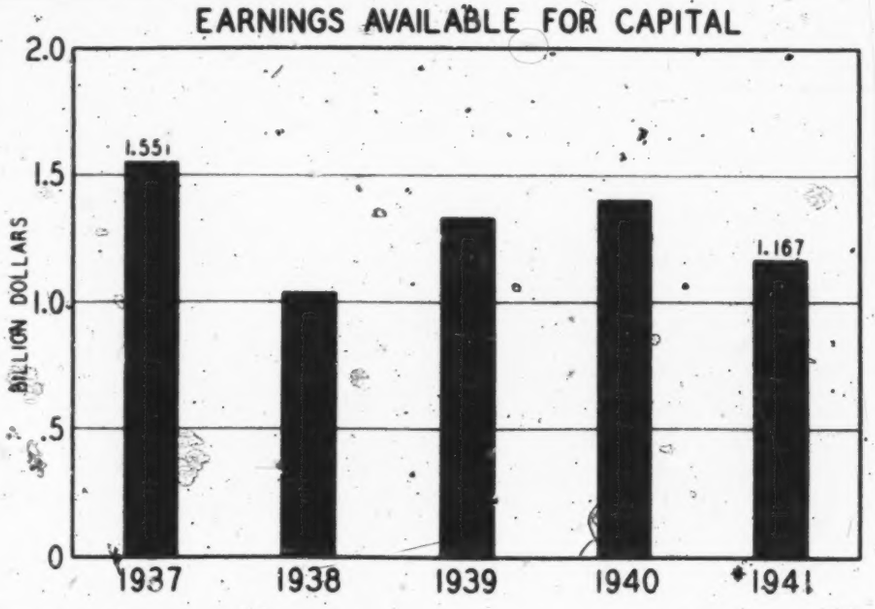


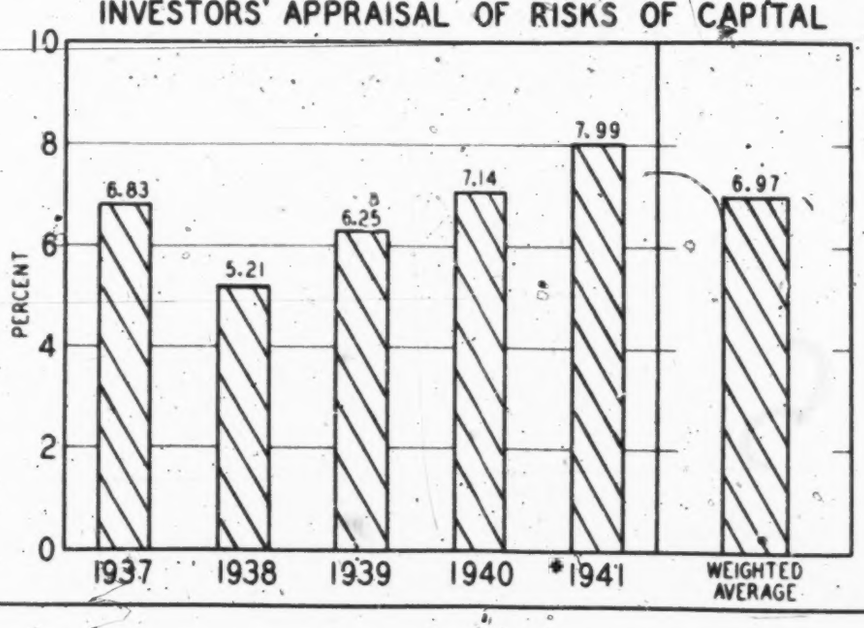
EXHIBIT 253.

CHART NO. 11

INVESTORS' APPRAISAL OF OVERALL CAPITAL RISKS
153 STABLE INDUSTRIAL COMPANIES







*BASED ON 119 COMPANIES FOR WHICH 1941 ANNUAL REPORTS WERE AVAILABLE PRIOR TO APRIL 1, 1942

EXHIBIT 253.

-CHART NO. 12-

PANHANDLE EASTERN PIPE LINE COMPANY
INVESTED CAPITAL AS OF FEBRUARY 28, 1942

	PRINCIPAL AMOUNT OR SHARES	BOOK VALUE	PER CENT OF TOTAL	(1) MARKET PRICE	MARKET VALUE	PER CENT OF TOTAL
LONG-TERM DEBT						
1ST MTGE. & 1ST LIEN S.F. "C" 3's, 1962	$10,000,000	$10,000,000		(4) 100.75	$10,075,000	
1ST MTGE. & 1ST LIEN S.F. "B" 3's, 1960	12,000,000	12,000,000		(5) 101.50	12,180,000	
1ST MTGE. & TRUST LIEN "A", 1.65-2.30%, 1946-50	6,250,000	6,250,000		(2) 100.00	6,250,000	
SERIAL NOTES, A, B, C & D, 0.75-1.50%, DUE 11/1/42-45	5,000,000	5,000,000		(2) 100.00	5,000,000	
LEASEHOLD PURCHASE OBLIGATIONS	6,445	6,445		(3) 100.00	6,445	
TOTAL DEBT		33,256,445	42.73%		33,511,445	45.70%
PREFERRED STOCKS						
5.60% CUM. PFD. $100 PAR	150,000 SHS.	15,000,000		(5) 100.00	15,000,000	
$6 CUM. PFD. CLASS "B", NON-PARTICIPATING AND NON-REDEEMABLE	10,000 SHS.	1,000,000		(3) 100.00	1,000,000	
TOTAL PREFERRED STOCKS		16,000,000	20.56%		16,000,000	21.82%
COMMON STOCKS AND SURPLUS						
COMMON STOCK (NO PAR)	807,367 SHS.	20,184,175		(5) 29.50	23,817,326	
PREMIUM AND ASSESSMENT ON CAPITAL STOCK	-	42,490			-	
EARNED SURPLUS	-	8,347,425			-	
TOTAL COMMON STOCK AND SURPLUS		28,574,090	36.71%		23,817,326	32.48%
TOTAL INVESTED CAPITAL		$77,830,535	100.00%		$73,328,771	100.00%

NOTES: (1) BASED UPON MARKET PRICES AS OF APRIL 6, 1942.

(2) PRICES ESTIMATED. SOLD PRIVATELY IN JANUARY 1941 AT 100 TO SEVERAL BANKING INSTITUTIONS AND ONE INSURANCE COMPANY.

(3) PRICE ESTIMATED.

(4) ORIGINAL OFFERING PRICE IN 1942.

(5) PRICE FROM NATIONAL QUOTATION BUREAU.

SOURCE: COMPILED BY STANDARD & POOR'S CORPORATION.

EXHIBIT 253.

-CHART NO. 13-

COST OF FINANCING PANHANDLE EASTERN PIPE LINE COMPANY 1ST. LIEN AND 1ST. MORTGAGE SERIES "C" S. F. 3's DUE JAN. 1, 1962

(OFFERED TO PUBLIC ON FEBRUARY 3, 1942)

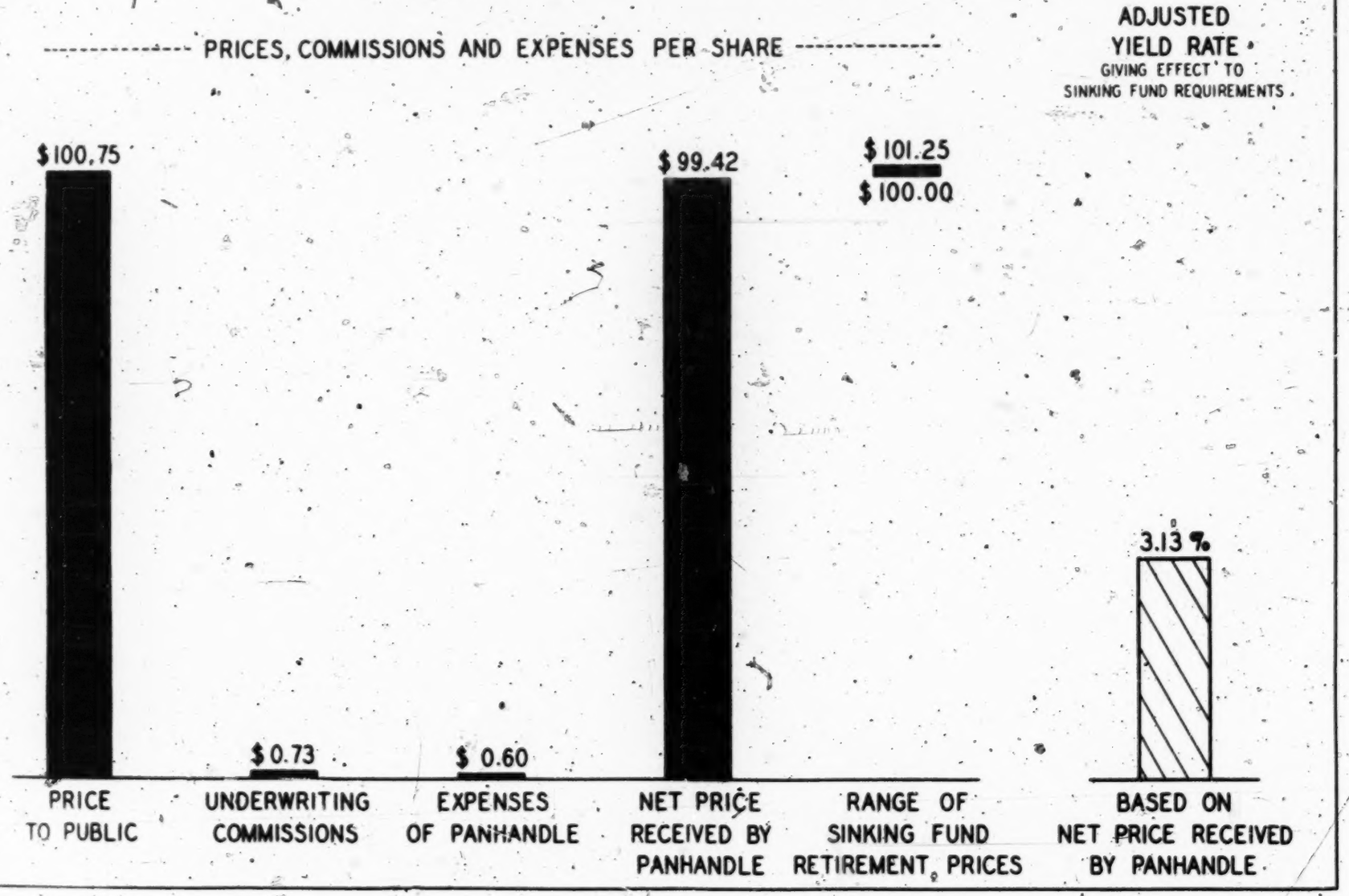


EXHIBIT 253.

- CHART NO. 14 -

HISTORICAL COSTS OF DEBT CAPITAL OF PANHANDLE EASTERN PIPE LINE COMPANY — 1930-1942

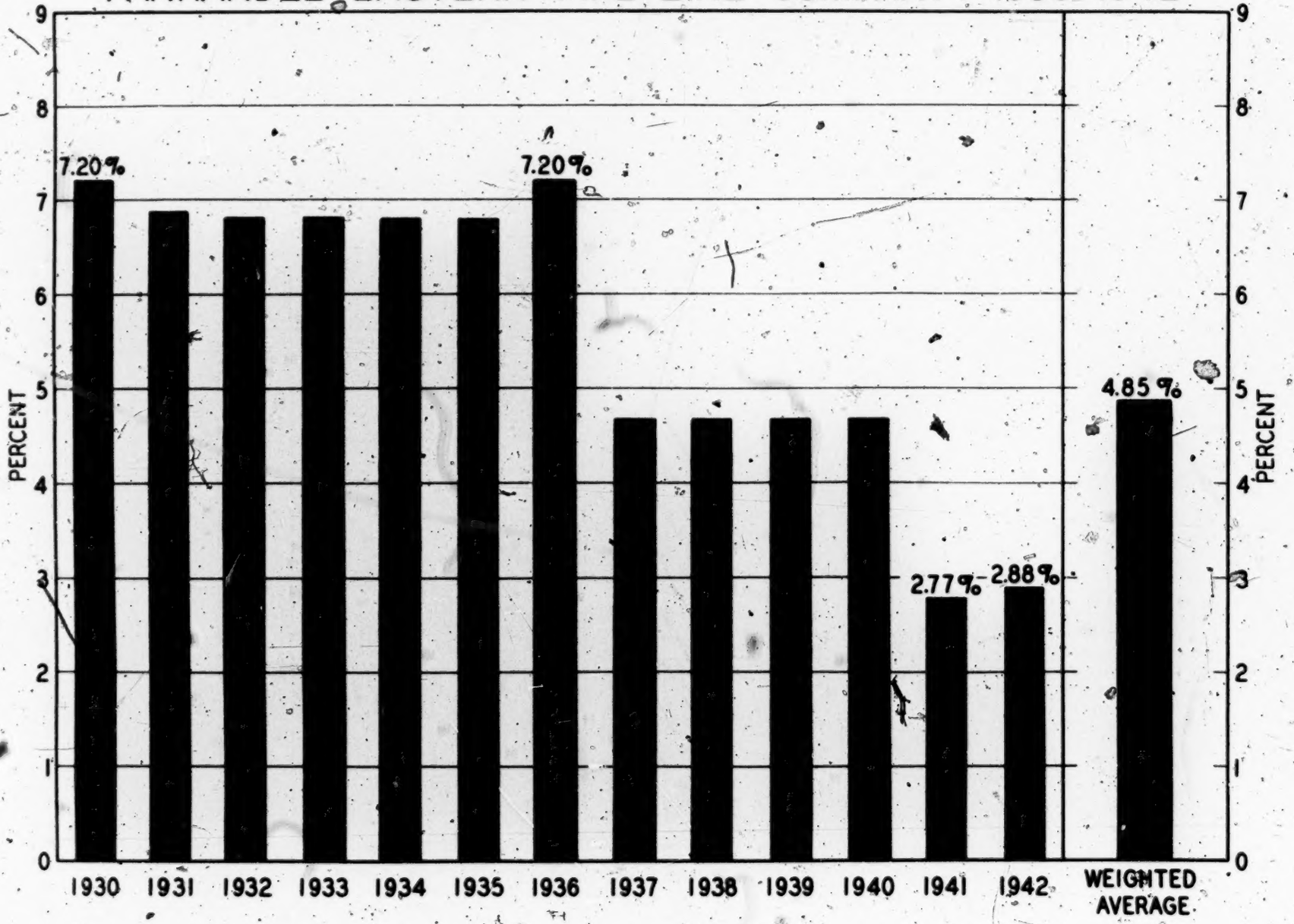


EXHIBIT 253.

-CHART NO. 15-

COST OF FINANCING PANHANDLE EASTERN PIPE LINE COMPANY
5.60% PREFERRED STOCK

OFFERED TO PUBLIC ON FEBRUARY 3, 1942

---------- PRICES, COMMISSIONS AND EXPENSES PER SHARE ----------

ADJUSTED YIELD RATE GIVING EFFECT TO SINKING FUND REQUIREMENTS

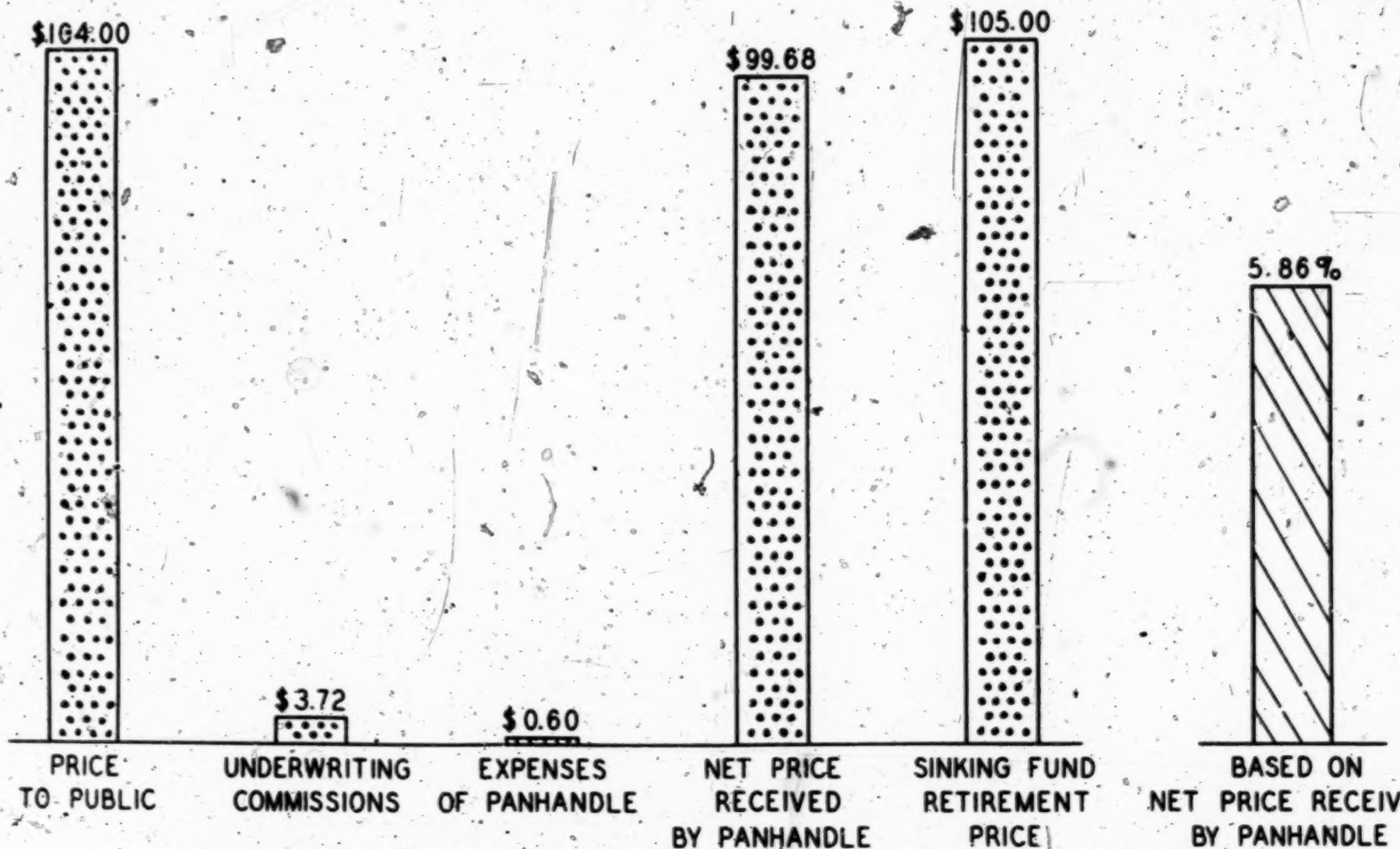


EXHIBIT 253.

- CHART NO. 16 -

HISTORICAL COSTS OF PREFERRED STOCK CAPITAL OF PANHANDLE EASTERN PIPE LINE COMPANY — 1936-1942

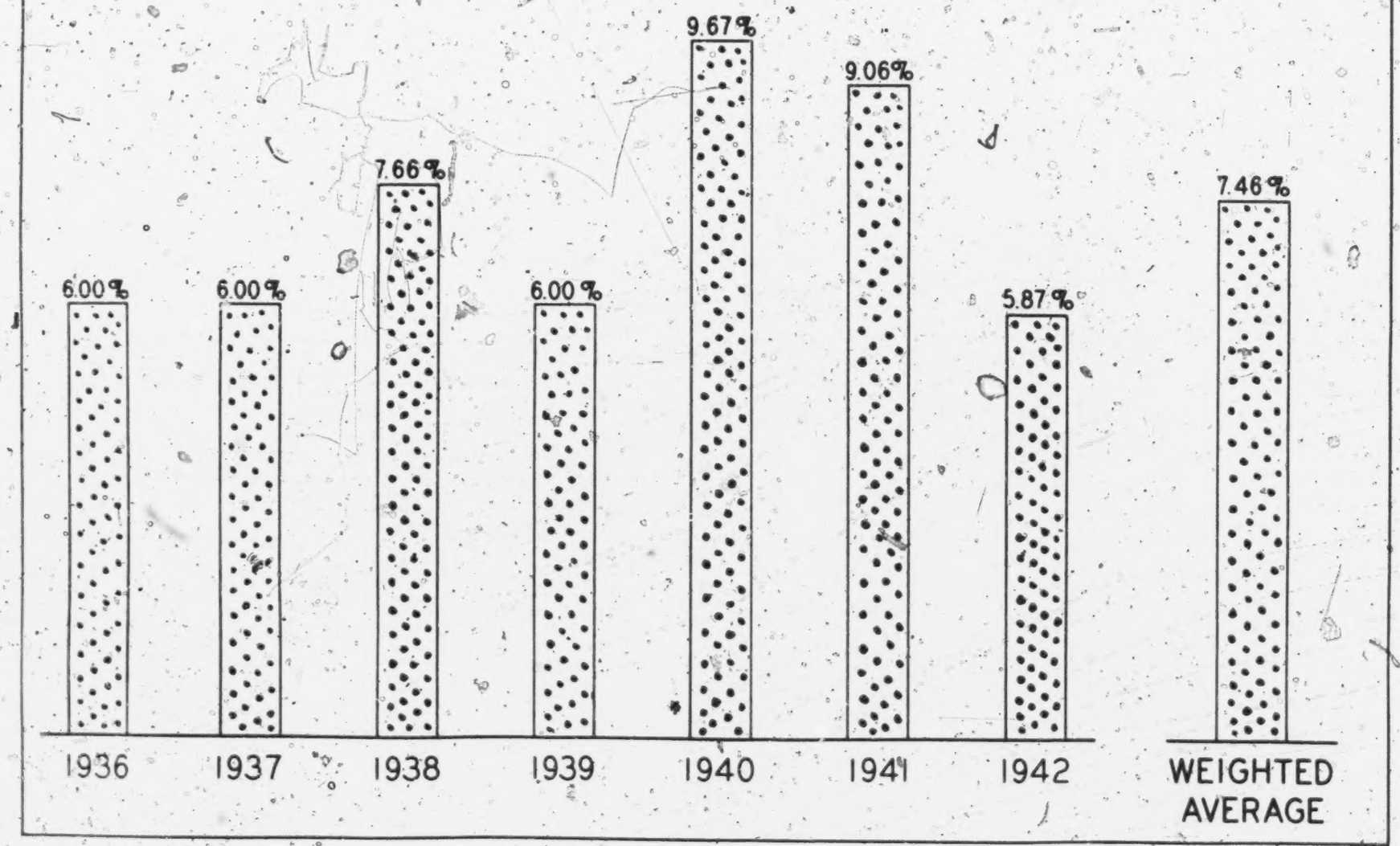


EXHIBIT 253.

- CHART NO. 17 -

RECORD OF SALES OF PANHANDLE EASTERN PIPE LINE COMPANY 5.60% PREFERRED STOCK TO PUBLIC – FEB. 4 TO MARCH 30, 1942

PUBLIC OFFERING PRICE ——— $104.00 PER SHARE

REPORT TO DEALERS AND SELLING GROUP MEMBERS

GLORE, FORGAN & CO.
38 WALL STREET
NEW YORK, N. Y.

KIDDER, PEABODY & CO.
17 WALL STREET
NEW YORK, N. Y.

150,000 Shares
PANHANDLE EASTERN PIPE LINE COMPANY
5.60% Cumulative Preferred Stock
(Par Value $100 Per Share)

To Dealers and Selling Group Members:

March 30, 1942

It has been our policy to keep you advised of sales progress and we have sent you reports covering certain dates. We again give you below the sales totals as reported to you previously together with the figure of this date.

	Reported Sales
February 4	74,000 shares
February 7	83,000 shares
February 14	93,000 shares
February 19	97,000 shares
February 28	103,000 shares
March 14	110,000 shares
March 30	115,000 shares

This continued progress, in the face of adverse news, is further evidence to us that this offering will be successfully concluded.

Very truly yours,

GLORE, FORGAN & CO.
KIDDER, PEABODY & CO.

ANALYSIS OF SALES
FEBRUARY 4, 1942 TO MARCH 30, 1942

PERIOD	TRADING DAYS (EXCL. SUNDAYS AND HOLIDAYS)	SHARES SOLD DURING EACH PERIOD	DAILY AVERAGE SALES
FEBRUARY			
4	1	74,000	74,000
5-7	3	9,000	3,000
9-14	5	10,000	2,000
15-19	4	4,000	1,000
20-28	7	6,000	857
MARCH			
2-14	12	7,000	583
15-30	13	5,000	385
TOTALS	45	115,000	—

NUMBER OF SHARES UNSOLD ON APRIL 1, 1942 ——— 35,000

EXHIBIT 253.

- CHART NO. 18 -

PRICE TO PUBLIC OF PANHANDLE EASTERN PIPE LINE COMPANY 5.60% PREFERRED STOCK REDUCED ON APRIL 2, 1942

FORMER PRICE - $104.00 PER SHARE

NEW PRICE $100.00 PER SHARE

TELEGRAM SENT TO SELLING GROUP DEALERS APRIL 1, 1942

BY DIRECT WIRE FROM
WESTERN UNION

NE300097 NL

NEW YORK NY APR 1 1942=

STANDARD AND POORS CORPN
345 HUDSON ST NYK=

THE FOLLOWING IS A COPY OF WIRE SENT TO SELLING GROUP DEALERS TODAY=

QUOTE YOU ARE HEREBY NOTIFIED THAT SELLING AGREEMENT DATED FEBRUARY 4 1942 FOR PANHANDLE EASTERN PIPE LINE COMPANY 5.60% CUMULATIVE PREFERRED STOCK IS TERMINATED EFFECTIVE CLOSE OF BUSINESS APRIL 1 1942 A LIMITED AMOUNT OF SUCH STOCK HAS BEEN MADE AVAILABLE BY CERTAIN OF THE ORIGINAL PURCHASERS FOR OFFERING TO APPROVED DEALERS SUBJECT TO CONFIRMATION BY THE UNDERSIGNED AS REPRESENTATIVES AND TO YOUR AGREEMENT THAT NO SUCH STOCK WILL BE OFFERED BELOW THE PUBLIC OFFERING PRICE ON AND AFTER APRIL2 1942 THE PUBLIC OFFERING PRICE WILL BE $100 FLAT=A CONCESSION OF $1.50 PER SHARE WILL BE ALLOWED TO YOU ON STOCK CONFIRMED TO YOU PROVIDED SUCH SHARES ARE NOT REPURCHASED FOR THE ACCOUNT OF THE SEVERAL PURCHASERS IN THE MARKET AT OR BELOW THE PUBLIC OFFERING PRICE OF $100 FLAT PRIOR TO MAY 15 1942 OR SUCH EARLIER DATE AS WE MAY DETERMINE=

STICKERS FOR ALL PROSPECTUSES USED HEREAFTER MAY BE OBTAINED FROM THE UNDERSIGNED (UNQUOTE)

=GLORE FORGAN AND CO=
KIDDER PEABODY AND CO

EXHIBIT 253.

-CHART NO. 19-

RECORD OF SALES OF PANHANDLE EASTERN PIPE LINE COMPANY 5.60% PREFERRED STOCK TO PUBLIC – APRIL 2 TO APRIL 10, 1942

PUBLIC OFFERING PRICE ——— $100.00 PER SHARE

NUMBER OF SHARES UNSOLD ON APRIL 1, 1942 WHEN PRICE WAS REDUCED FROM $104.00 TO $100.00 ——— 35,000 SHARES

SHARES SOLD FROM APRIL 2 TO APRIL 10, 1942 AT REDUCED PRICE OF $100.00 ——— 20,000 SHARES

SHARES UNSOLD ON APRIL 11, 1942 AFTER SEVEN TRADING DAYS AT REDUCED PRICE OF $100.00 ——— 15,000 SHARES

EXHIBIT 253.

-CHART NO. 20-

ASSUMED COST OF FINANCING
PANHANDLE EASTERN PIPE LINE CO. 5.60% PREFERRED STOCK

BASED ON PRESENT PRICE TO PUBLIC OF $100.00 AND ASSUMED PRICE TO COMPANY OF $95.68

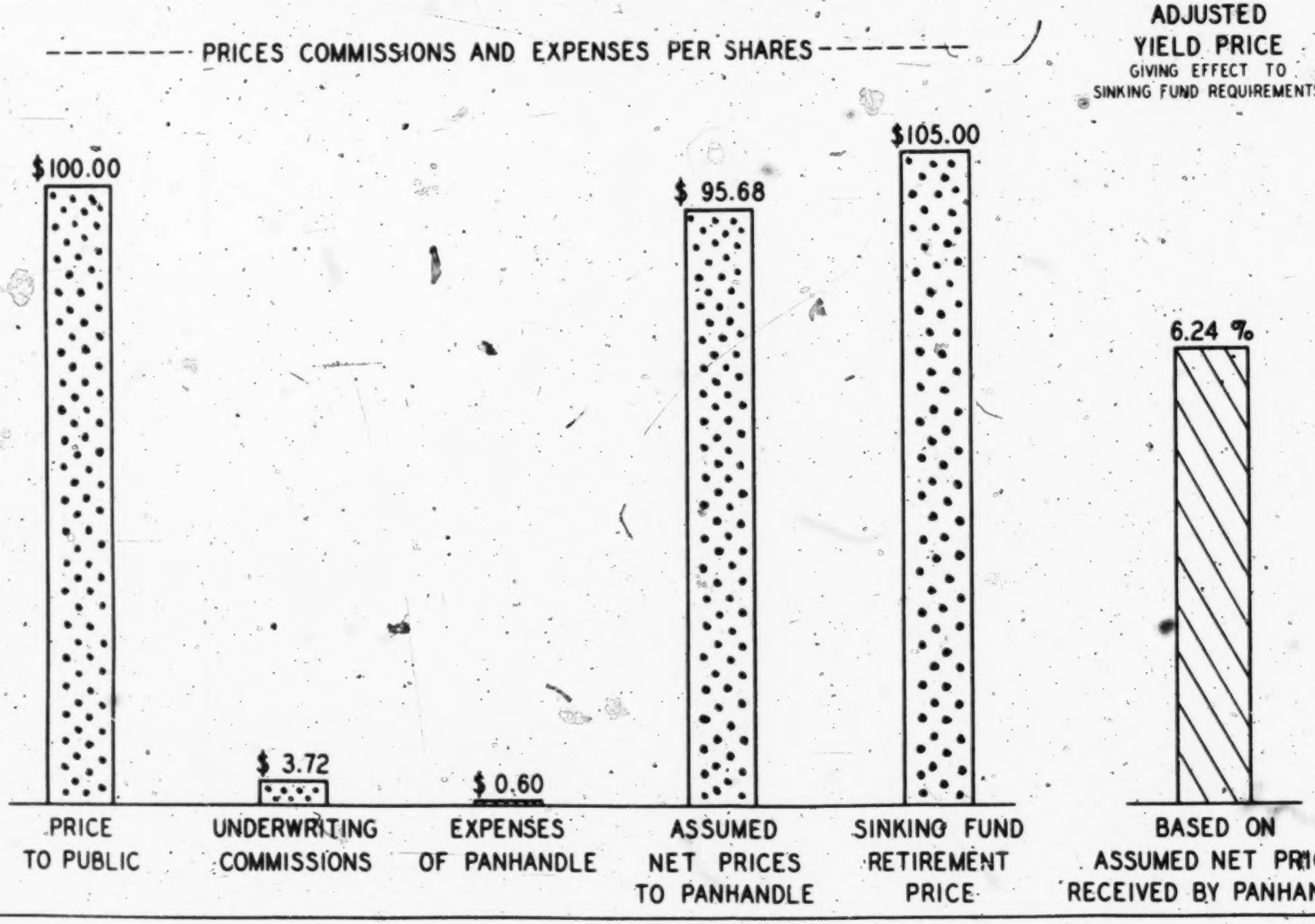


EXHIBIT 253.

- CHART NO. 21-

EARNINGS-PRICE RATIOS OF NATURAL GAS PIPE LINE COMPANY COMMON STOCKS — 1937-1941

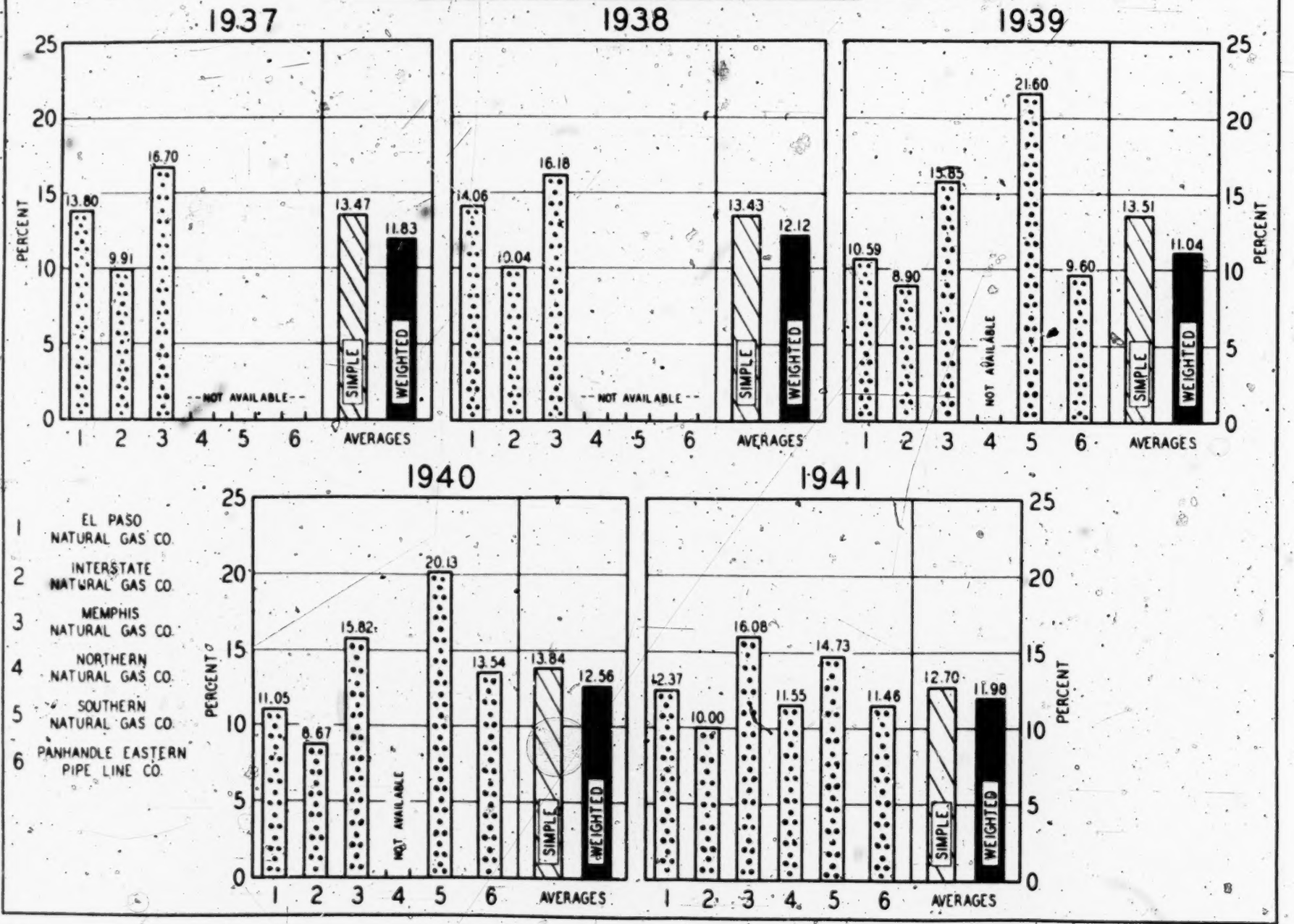


EXHIBIT 253.

-CHART NO. 22-

AVERAGE EARNINGS-PRICE RATIOS OF NATURAL GAS PIPE LINE COMPANY COMMON STOCKS—1937-1941

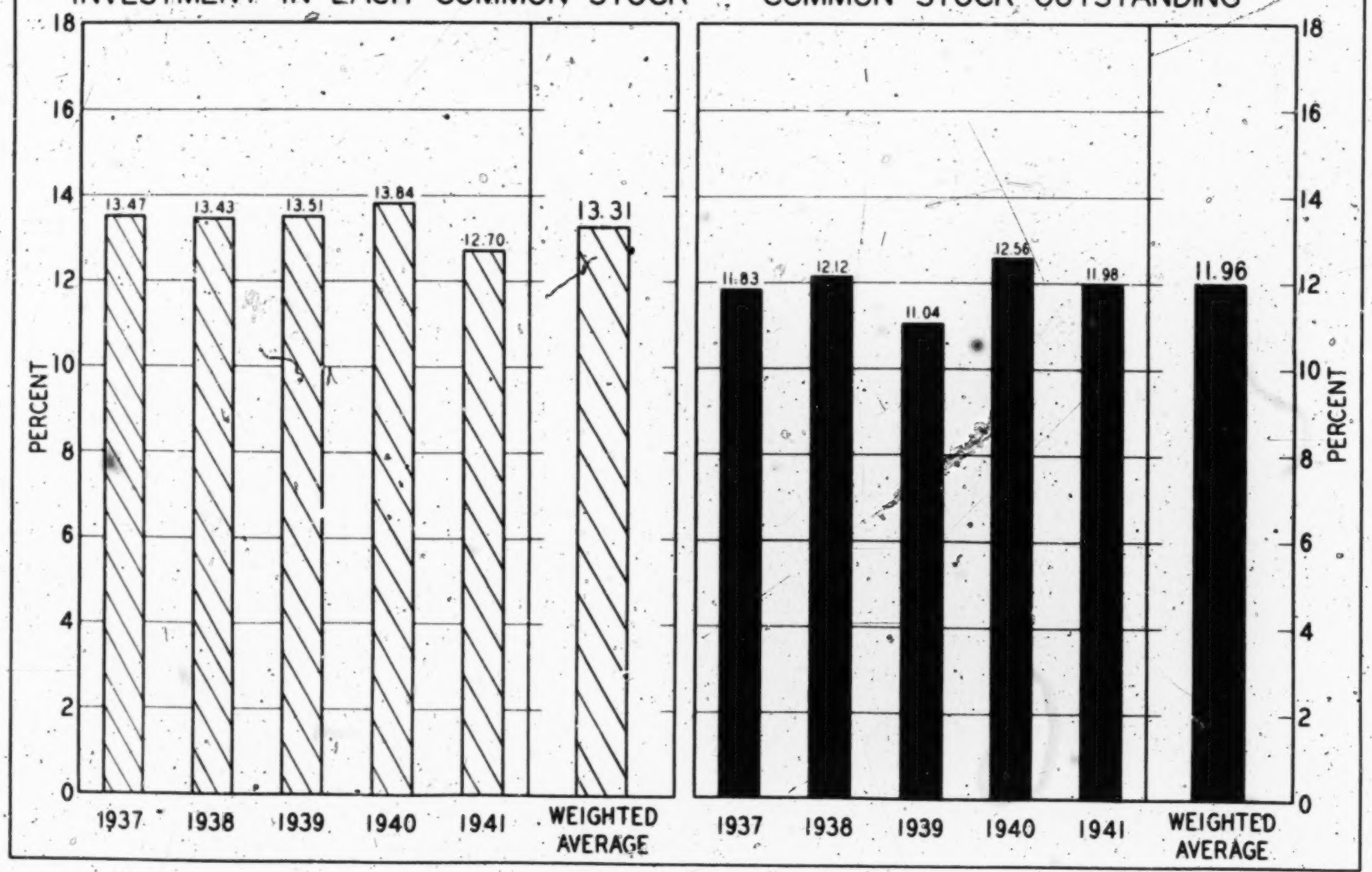


EXHIBIT 253.

-CHART NO. 23-

ACCEPTED EARNINGS-PRICE RATIO FOR PANHANDLE EASTERN PIPE LINE CO. COMMON STOCK

EXHIBIT 253.

-CHART NO. 24-

MINIMUM EARNINGS REQUIRED FOR COMMON STOCK OF PANHANDLE EASTERN PIPE LINE COMPANY

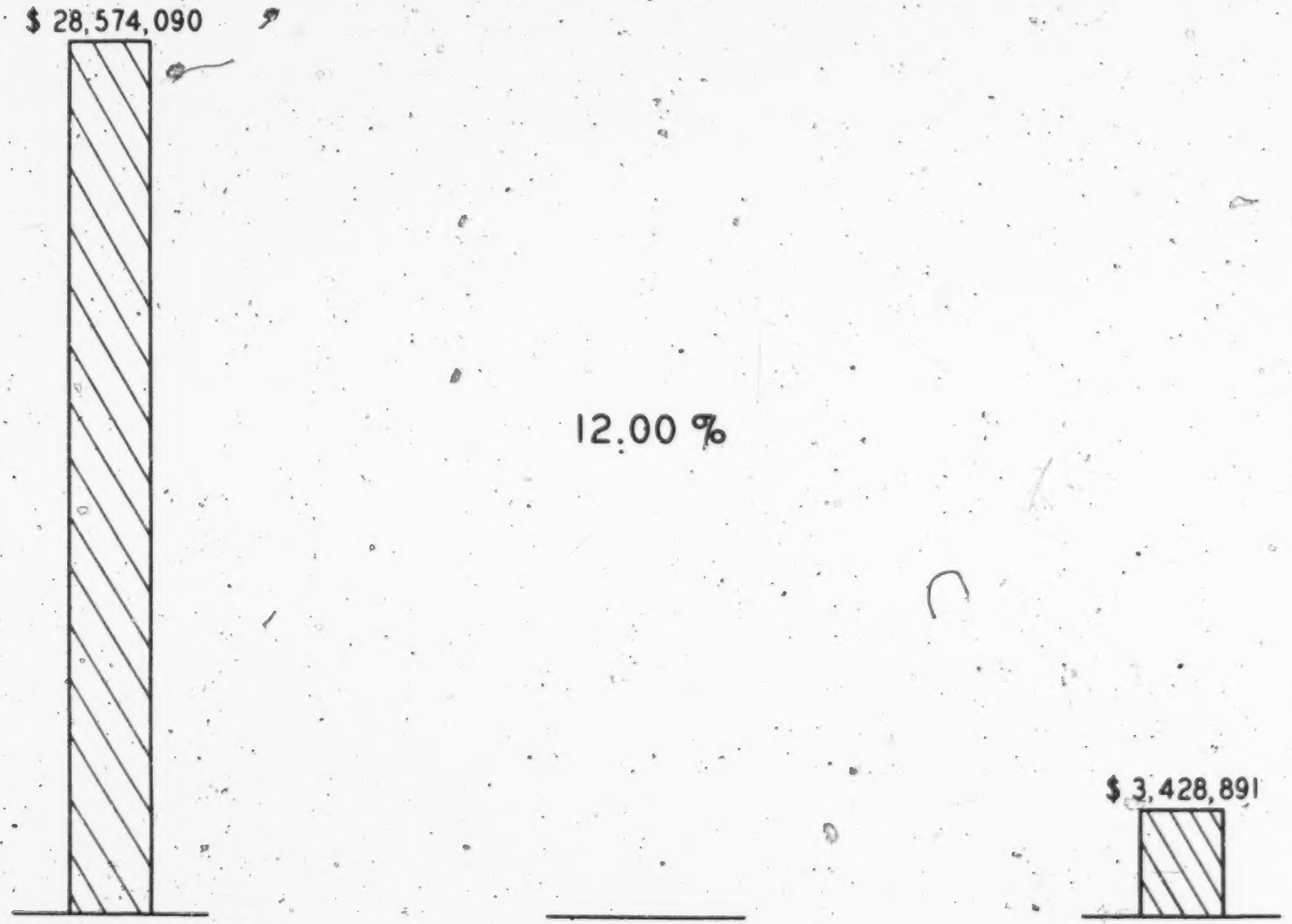


EXHIBIT 253.

-CHART NO. 25-

MINIMUM EARNINGS REQUIRED TO MAINTAIN CREDIT POSITION OF PANHANDLE EASTERN PIPE LINE COMPANY

BASED ON ACTUAL COST OF BONDS AND PREFERRED STOCK AND INVESTORS' APPRAISAL OF COMMON STOCK

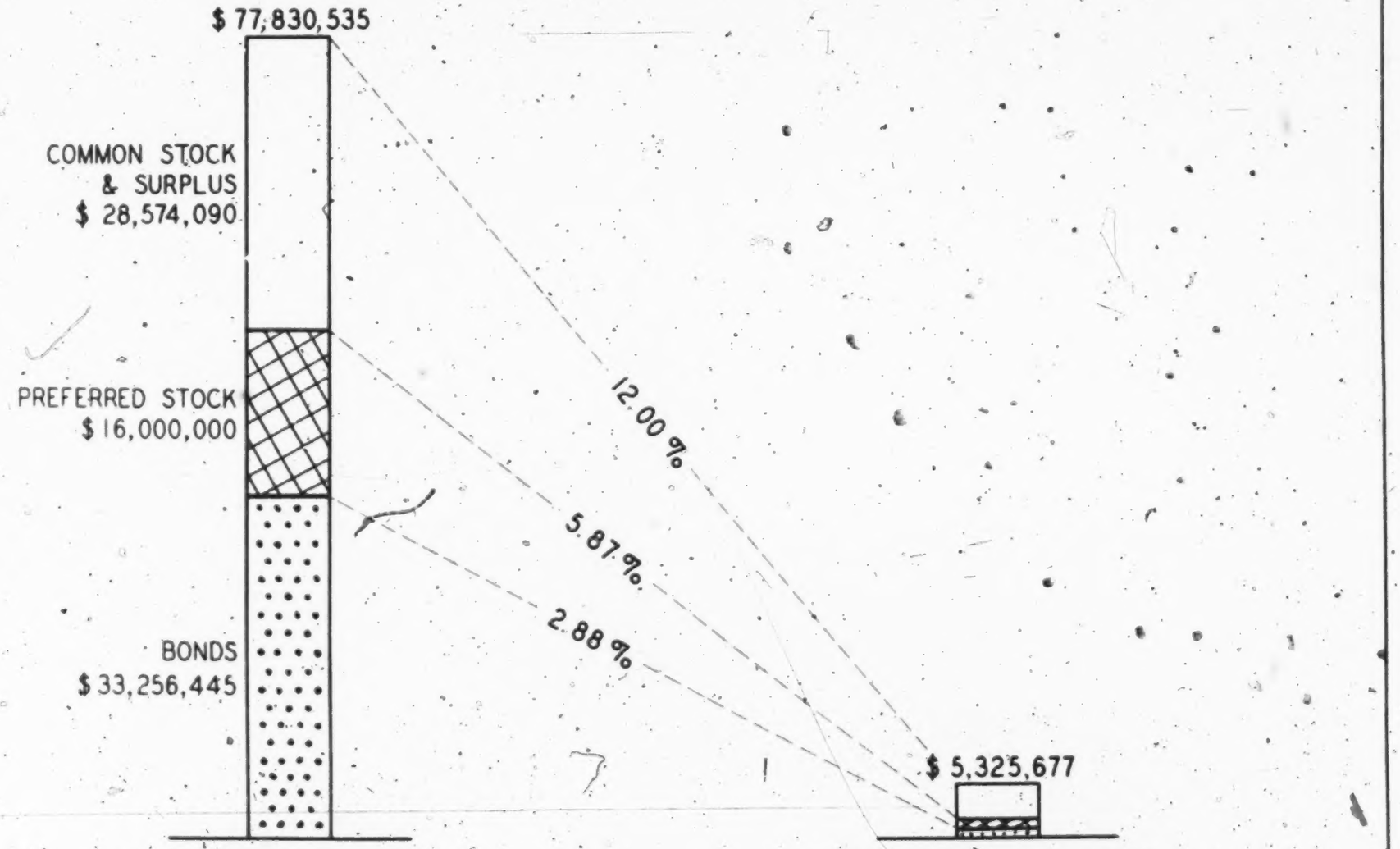


EXHIBIT 253.

- CHART NO. 26 -

MINIMUM EARNINGS REQUIRED TO MAINTAIN CREDIT POSITION OF PANHANDLE EASTERN PIPE LINE COMPANY

BASED ON ACTUAL COST OF BONDS AND INVESTORS' APPRAISAL OF PREFERRED AND COMMON STOCK

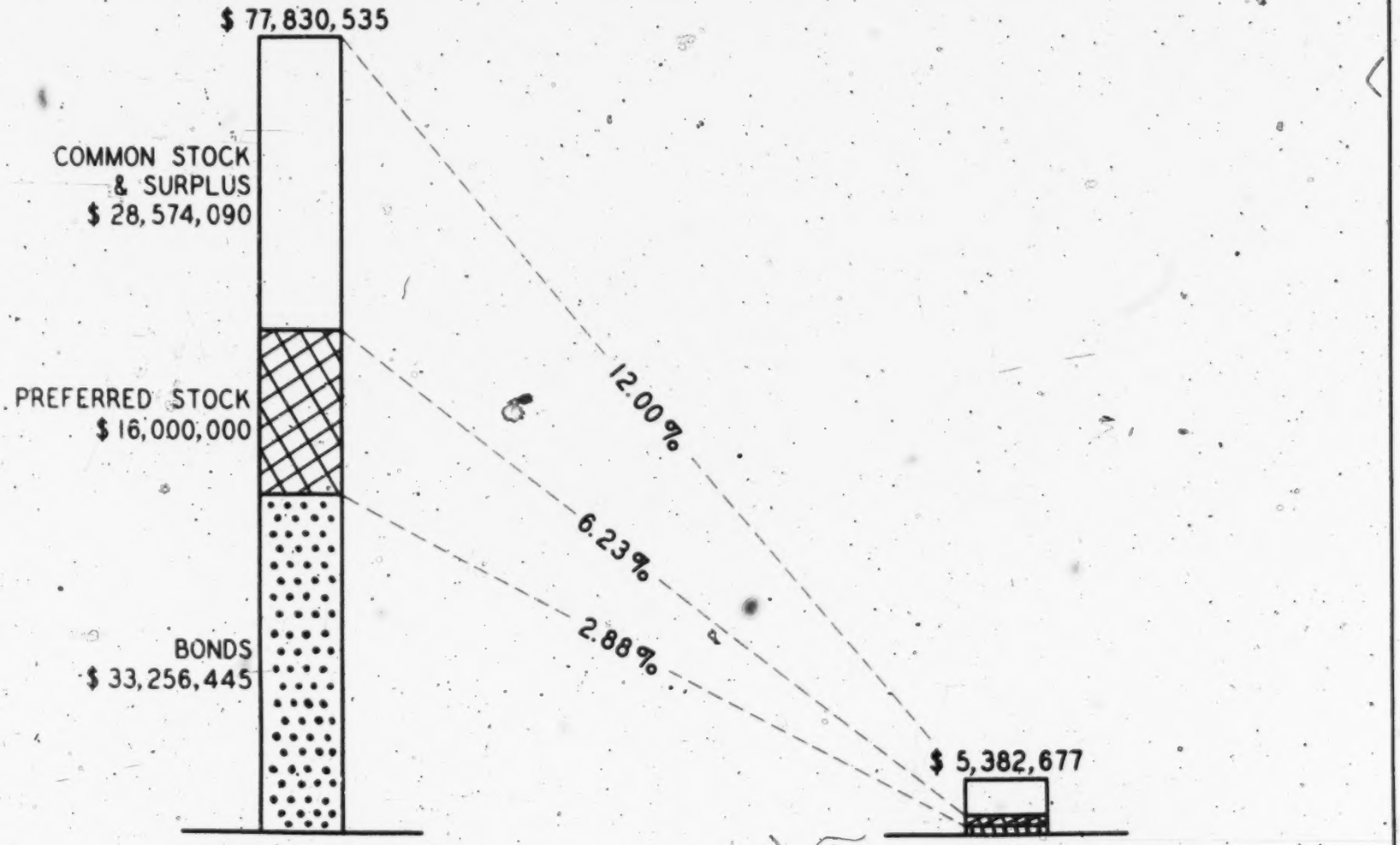


EXHIBIT 253.

- CHART NO. 27 -

PRIME MONEY RATES
MONTHLY, 1930 TO MARCH, 1942

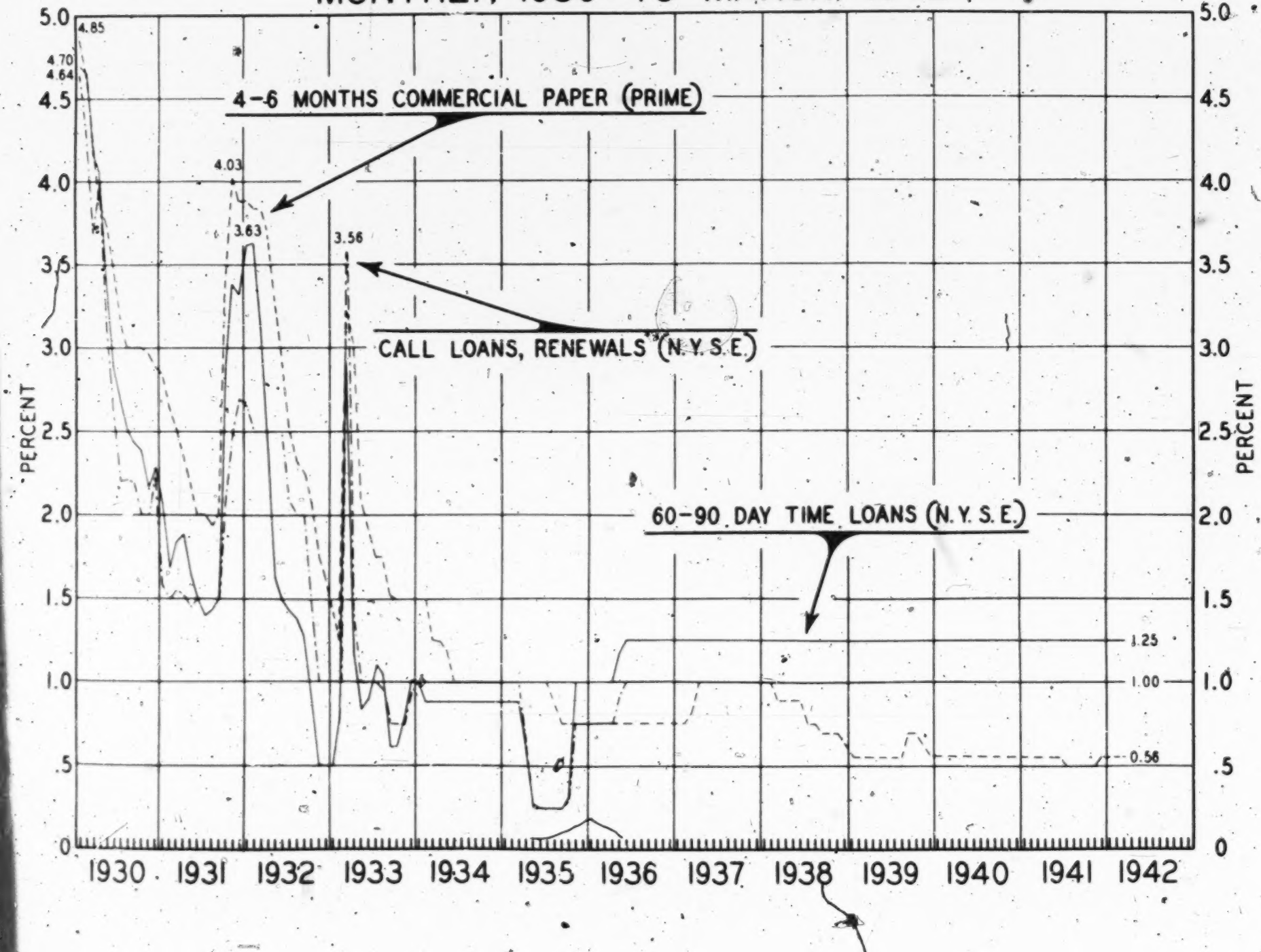


EXHIBIT 253.

-CHART NO. 28-

COMMERCIAL LOAN RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES—MONTHLY, 1930—1942

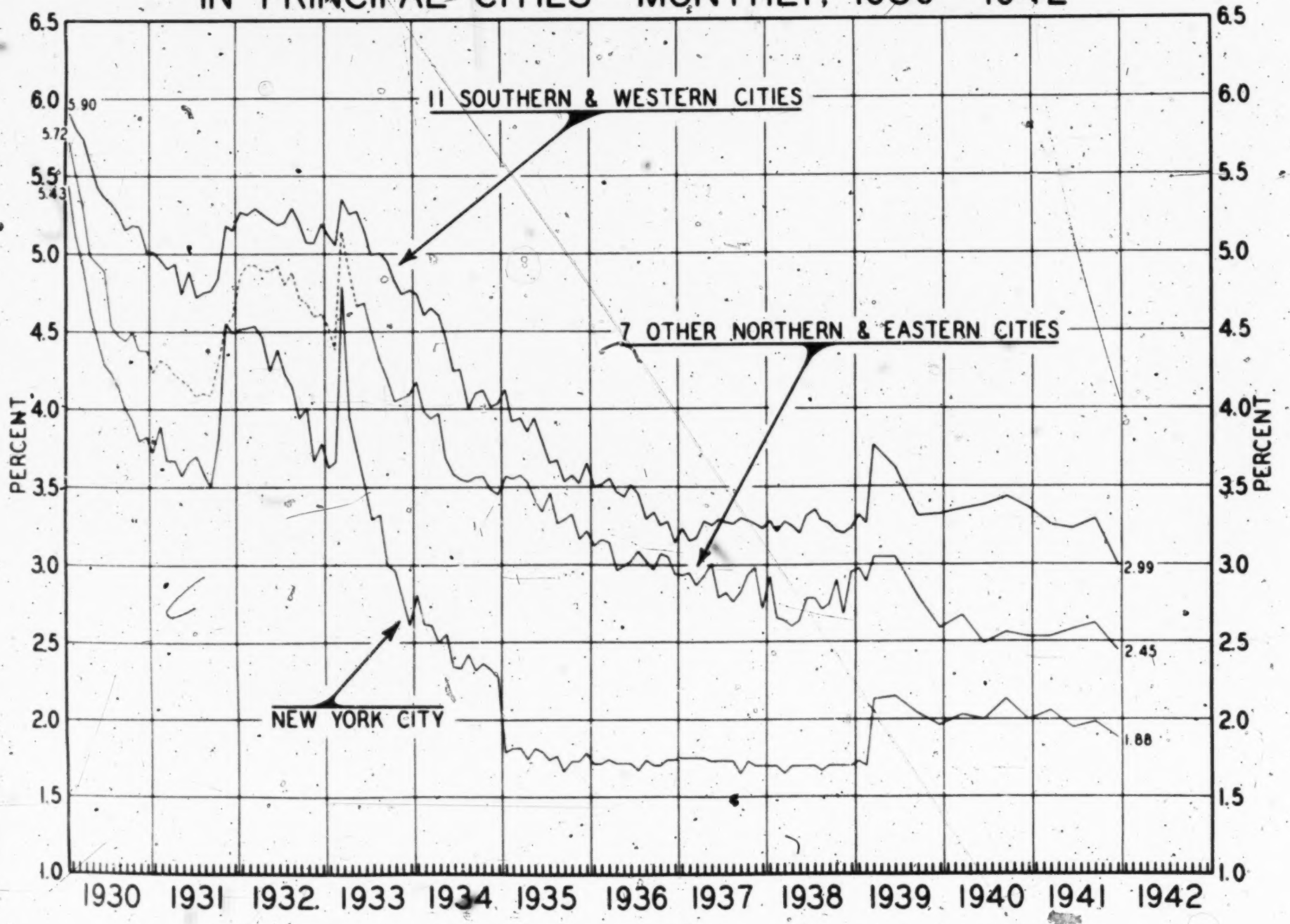


EXHIBIT 253.

-CHART NO. 29-

YIELDS ON U. S. GOVERNMENT & HIGH GRADE MUNICIPAL BONDS MONTHLY 1930 TO MARCH, 1942

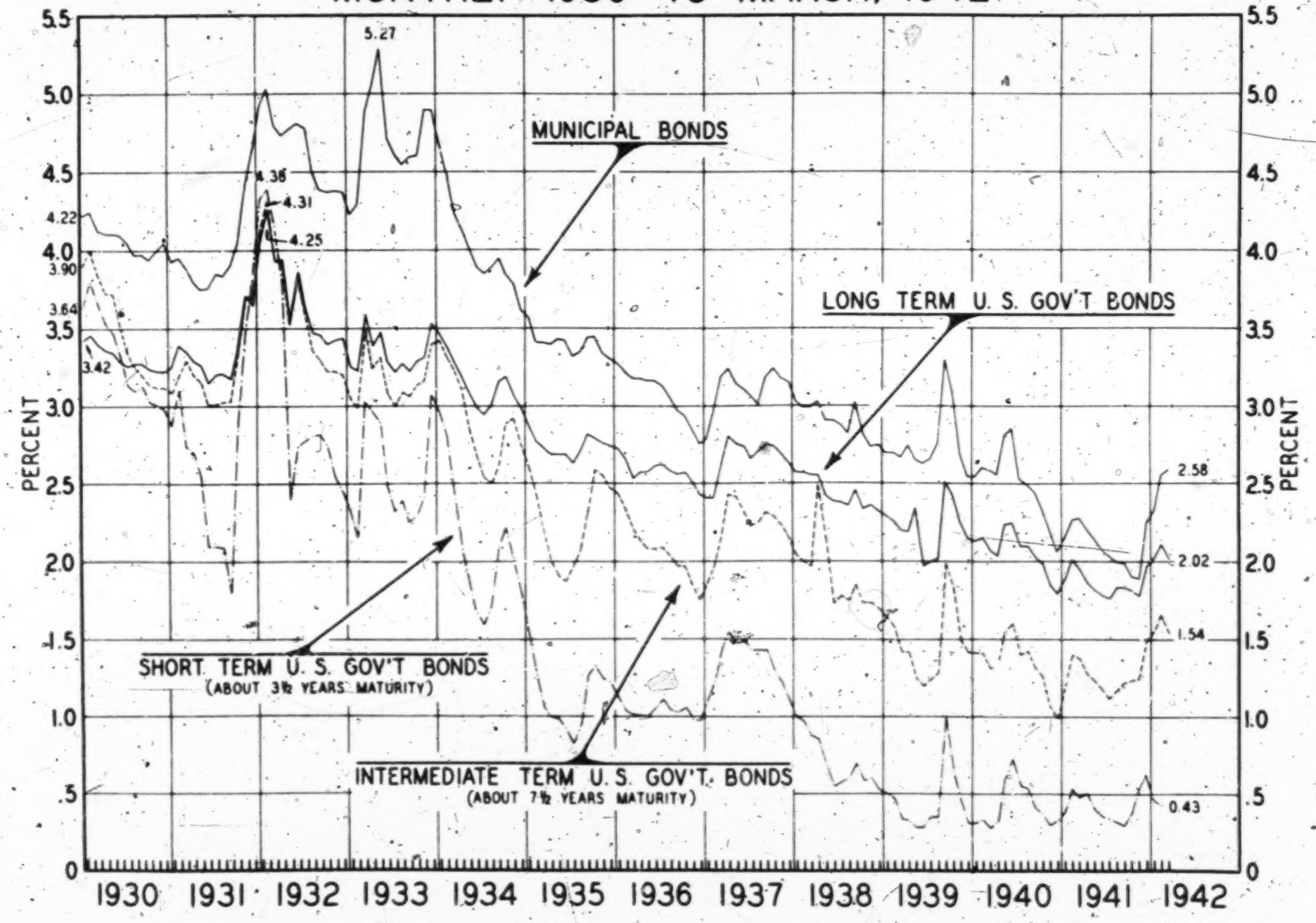


EXHIBIT 253.

-CHART NO. 30-

STANDARD'S HIGHEST GRADE (AI+) CORPORATE BOND YIELDS MONTHLY, 1930 TO MARCH, 1942

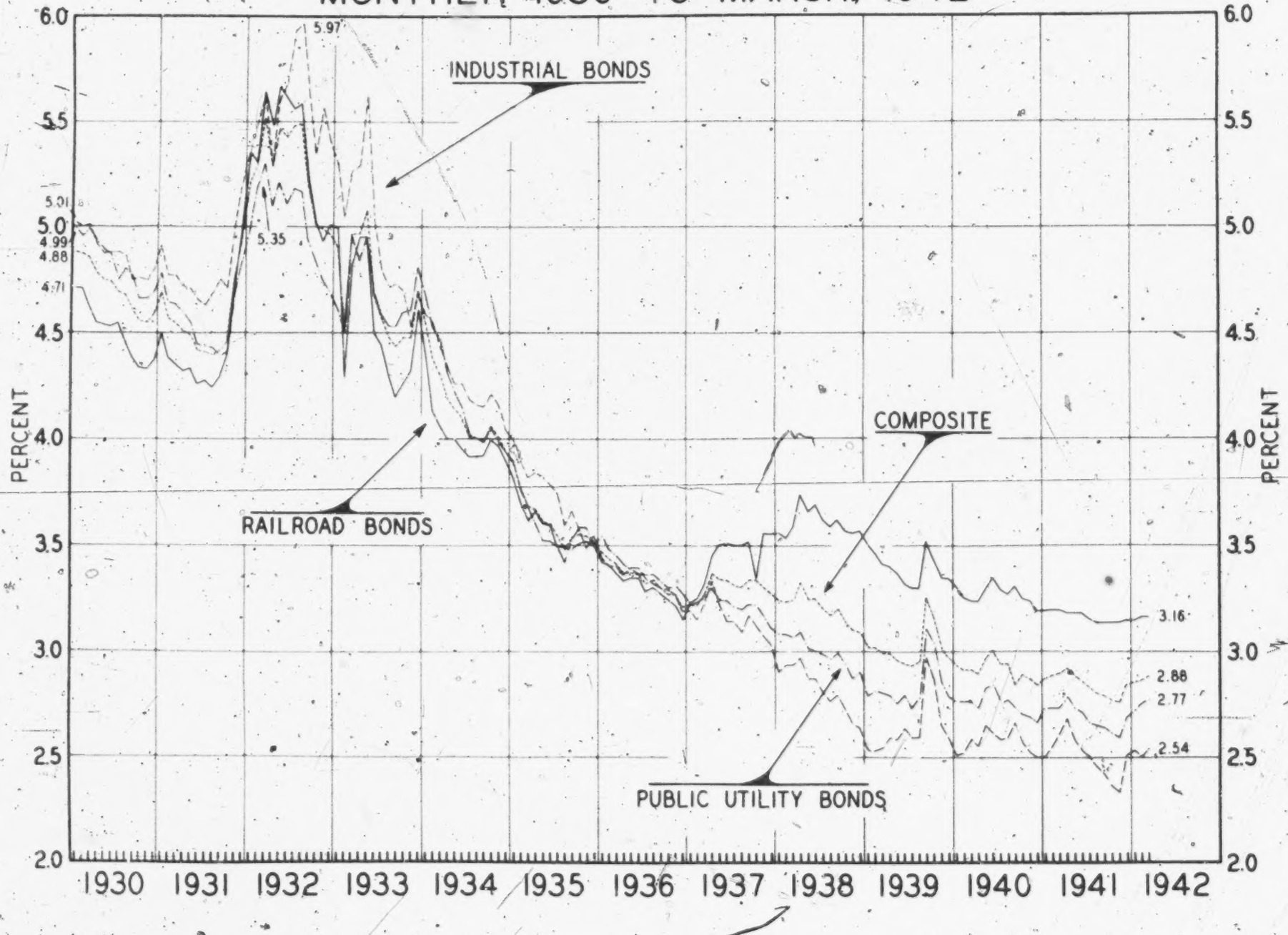


EXHIBIT 253.

-CHART NO. 31-

STANDARD'S CORPORATE BOND YIELDS — BY QUALITY RATING MONTHLY, 1937 TO MARCH, 1942

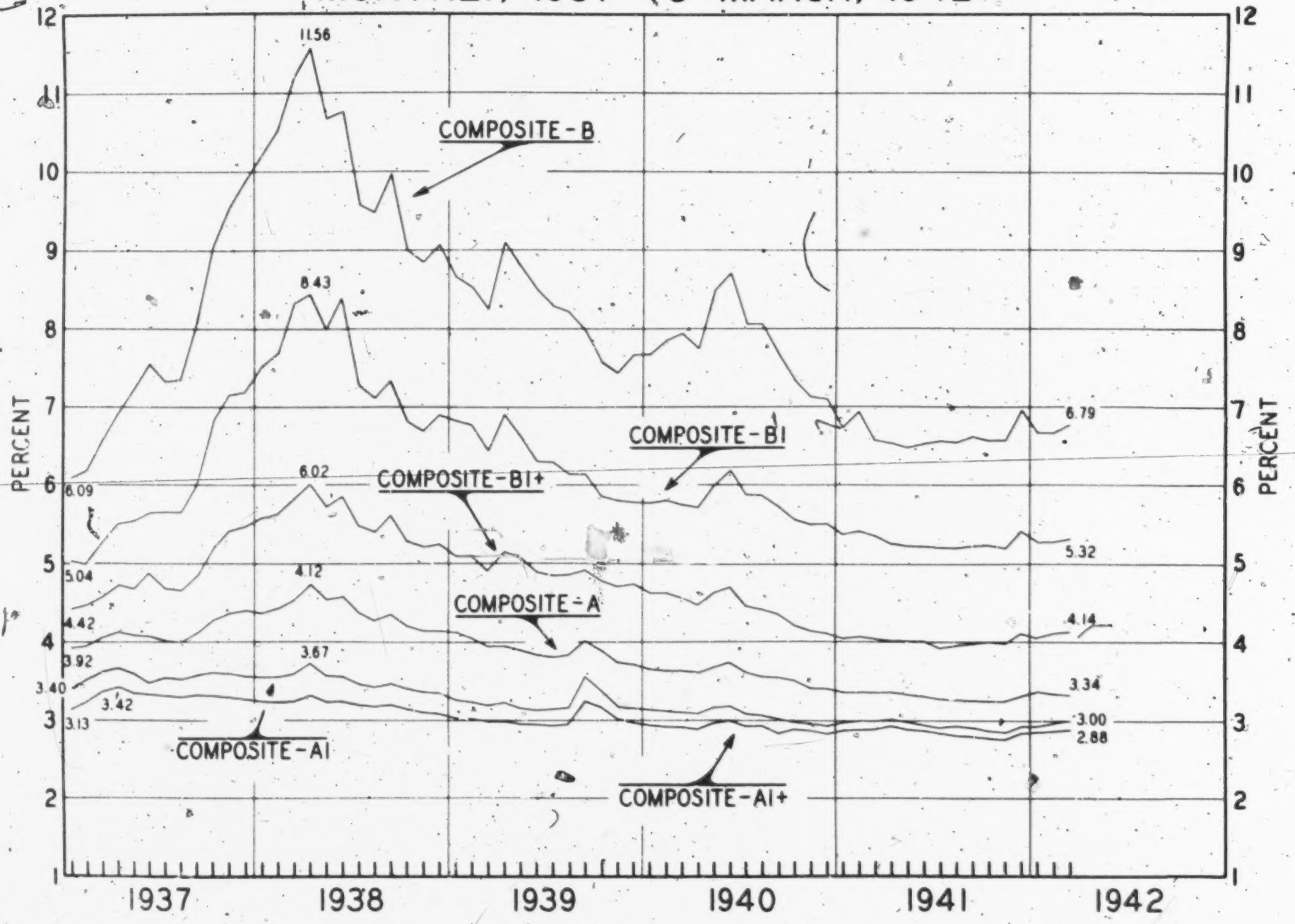


EXHIBIT 253.

-CHART NO. 32-

STANDARD'S PUBLIC UTILITY BOND YIELDS - BY QUALITY RATING MONTHLY, 1937 TO MARCH, 1942

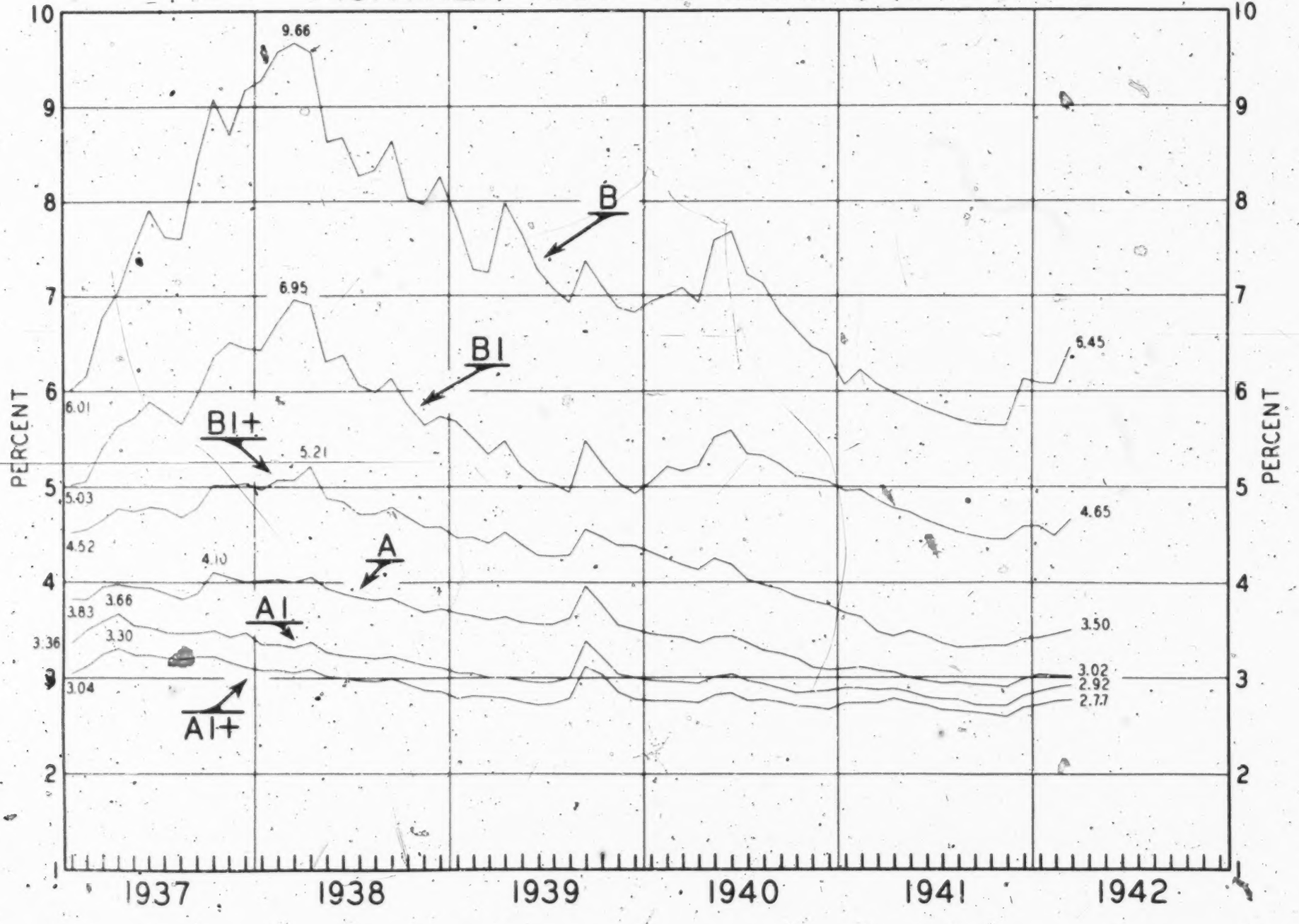


EXHIBIT 253.

-CHART NO. 33-

BONDS, DEBENTURES AND NOTES ISSUED BY NATURAL GAS COMPANIES—1936-1941

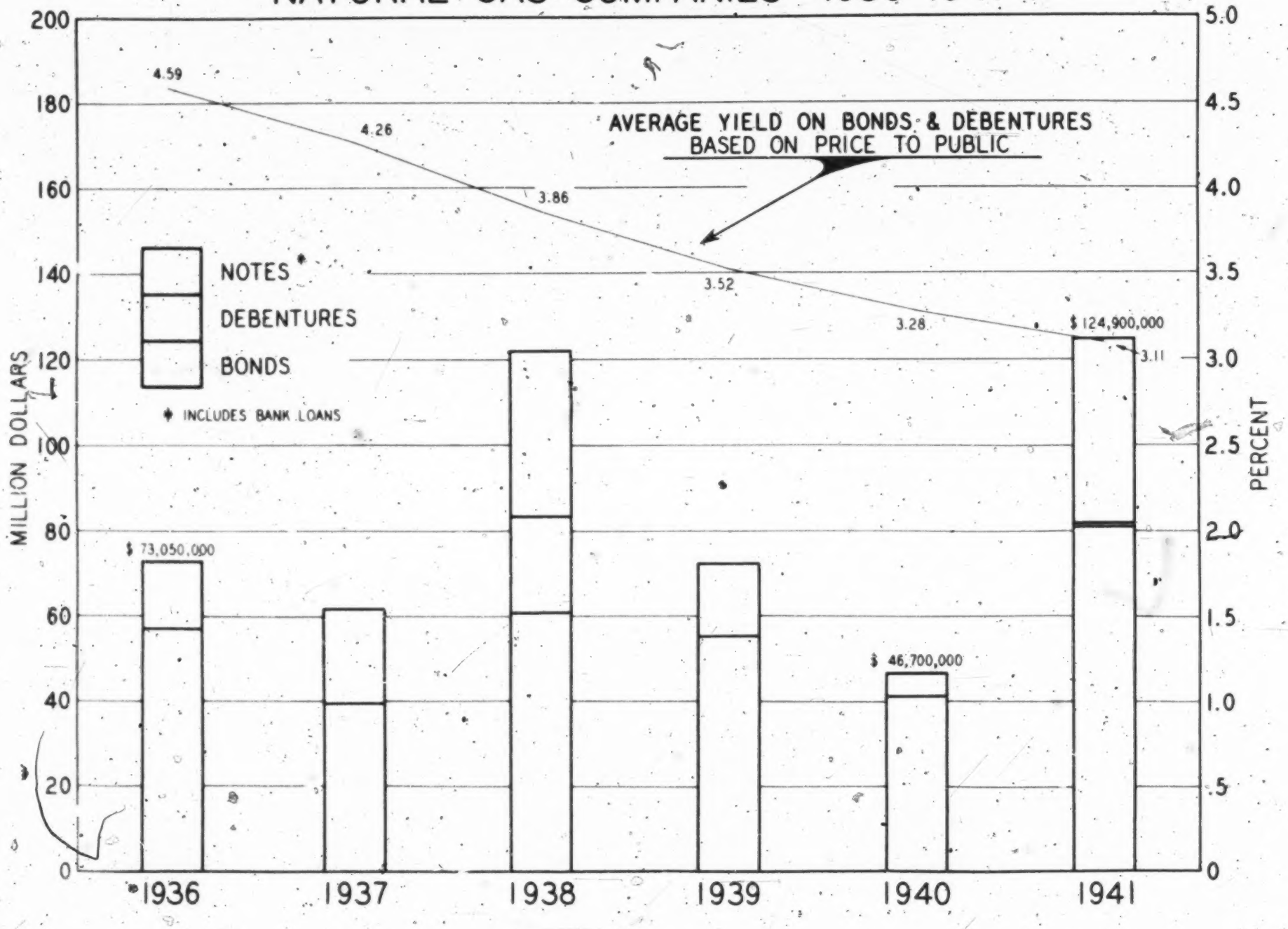


EXHIBIT 253.

-CHART NO. 34-

BONDS AND DEBENTURES OF NATURAL GAS COMPANIES SOLD FROM JANUARY 1, 1936 TO DECEMBER 31, 1941

Company	Issue	Approximate Offering Date	Principal Amount	Standard Rating	Net Price to Company		Price to Public	
						Cost %		Yield %
1936								
Northern Natural Gas Company	1st Mtge. & 1st Lien Ser. B 4 1/4%, 1947	Jan.	$ 2,000,000	*None	(a)	(a)	100.00	4.25
Northern Oklahoma Gas Company	1st Mtge. & C. Tr. S.F. 5%, 1946	Mar. 3	1,000,000	Bl	93.5*	5.55	100.00	5.00
El Paso Natural Gas Company	1st Mtge. S.F. Ser. A 4 1/2%, 1951	June 4	7,500,000	Bl+	94.14	5.08	98.50	4.64
El Paso Natural Gas Company	Conv. Debentures 4 3/4%, 1946	June 4	3,750,000	Bl	95.16	5.38	100.00	4.75
Oklahoma Natural Gas Company	1st Mtge. S.F. Ser. A 4 1/2%, 1951	June 11	20,000,000	Bl+	94.69	4.99	98.50	4.64
Oklahoma Natural Gas Company	Conv. Debentures 5%, 1946	June 11	10,000,000	B	95.72	5.56	100.00	5.00
Arkansas-Louisiana Gas Company	1st Mtge. S.F. 4%, 1951	July 22	10,000,000	A	93.59	4.82	98.00	4.44
Alabama Gas Company	1st Mtge. 4 1/2%, 1951	Sept.16	1,500,000	Bl+	93.62	5.71	98.50	4.64
Montana-Dakota Utilities Company	Conv. Debentures 4 1/2%, 1946	Nov. 1	2,500,000	B	98.19	4.99	100.00	4.50
Southern Natural Gas Company	1st Mtge. Pipe Line S.F. 4 1/2%, 1951	Nov. 18	10,000,000	Bl+	96.79	4.85	100.00	4.50
	TOTAL AND WEIGHTED AVERAGE		75,080,000			5.08		4.82
1937								
New Mexico Gas Company	1st Mtge. Conv. A 5%, 1951	Feb. 16	$ 1,500,000	Bl+	(b)	(b)	99.00	5.10
Mississippi River Fuel Company	1st Mtge. S.F. 4%, 1958	Feb.	10,000,000	*None	(c)	(c)	100.00	4.00
Kansas Pipe Line & Gas Company	1st Mtge. Conv. S.F. 5%, 1952	Mar. 19	1,000,000	None	93.66	5.61	100.00	5.00
Panhandle Eastern Pipe Line Company	1st Mtge. & 1st Lien S.F. 4%, 1952	Mar. 30	24,000,000	Bl+	95.02	4.46	97.50	4.23
Exeon Gas Company	1st Mtge. 4 1/2%, 1952	June 22	750,000	Bl+	85.32	5.96	98.00	5.98
Atlanta Gas Light Company	General Mortgage 4 1/2%, 1955	July (a)	625,000	Bl+	(a)86.68	4.81	(a) 99.75	(a)4.52
El Paso Natural Gas Company	1st Mtge. S.F. B 4%, 1958	Oct. 1	1,800,000	*None	(a)	(a)	97.75	4.90
Southern Natural Gas Corporation	1st Mtge. Pipe Line S.F. 4 1/2%, 1952	Dec.	850,000	*None	(a)	(a)	97.75	4.71
	TOTAL AND WEIGHTED AVERAGE		39,725,000			5.32		4.92
1938								
Northern Natural Gas Company	Debenture 4 1/2%, 1948	July	$ 3,000,000	*None	(a)	(a)	100.00	4.50
Lone Star Gas Corporation	Debenture S.F. 3 1/2%, 1958	Aug. 25	30,000,000	A1	99.36	3.56	102.00	3.53
Michigan Consolidated Gas Company	1st Mtge. 4%, 1963	Oct. 6	34,000,000	A	93.62	4.41	97.50	4.16
El Paso Natural Gas Company	1st Mtge. S.F. 3 1/2%, 1953	Dec. 15	6,000,000	*None	(a)	(a)	98.50	3.63
Arkansas Western Gas Company	1st Mtge. S.F. A 4%, 1953	Dec. 23	750,000	B	89.76	7.19	97.50	6.38
Cities Service Gas Company	1st Pipe Line S 3%, Serially 1947-54	Dec.	20,000,000	*None	(a)	(a)	100.00	3.75
	TOTAL AND WEIGHTED AVERAGE		93,750,000			3.71		3.66
1939								
Montana-Dakota Utilities Company	1st Mtge. S.F. 4 1/2%, 1954	May 23	$ 9,000,000	Bl+	96.01	4.68	101.00	4.41
Northern Natural Gas Company	1st Mtge. & 1st Lien A 3 1/4%, 1964	Aug. 15	18,000,000	*None	98.64	3.35	100.00	3.25
Oklahoma Natural Gas Company	1st Mtge. S.F. B 3 3/4%, 1954	Aug. 17	17,000,000	Bl+	100.68	3.66	102.50	3.46
Kansas Public Service Company	1st Mtge. 4%, Serially 1941-60	Aug. 18	350,000	None	98.93	4.78	100.00	4.00
Arkansas-Louisiana Gas Company	1st Mtge. A 3 3/4%, Serially 1940-44	Sept.28	3,300,000	*None	99.70	3.01	100.00	2.75
Arkansas-Louisiana Gas Company	1st Mtge. B 3 1/2%, Serially 1945-54	Sept.28	2,700,000	*None	99.20	3.58	100.00	3.50
	TOTAL AND WEIGHTED AVERAGE		50,350,000			3.73		3.62
1940								
New Mexico Gas Company	1st Mtge. S.F. B 5%, 1954	Jan. 4	$ 850,000	*None	97.00	5.30	100.50	4.95
Michigan Consolidated Gas Company	1st Mtge. 4%, 1963	Mar. 15	2,000,000	* A	101.00	3.93	101.50	3.90
Montana-Dakota Utilities Company	1st Mtge. S.F. 4 1/2%, 1956	July	1,800,000	*None	(a)	(a)	104.00	4.16
El Paso Natural Gas Company	1st Mtge. S.F. 3%, 1955	June-July	3,000,000	*None	(a)	(a)	98.50	3.13
Hewston Natural Gas Corporation	1st Mtge. S.F. 4%, 1955	Sept.11	3,500,000	Bl+	98.19	4.44	100.00	4.00
Southern California Gas Company	1st Mtge. S.F. 3 1/4%, 1970	Sept.25	30,000,000	A1	101.13	3.19	103.50	3.07
Southern Gas Company	1st Mtge. A 5%, 1956	Dec. 18	300,000	None	90.00	6.08	100.00	5.00
Arkansas Western Gas Company	1st Mtge. S.F. 4 1/2%, 1955	Dec. 17	800,000	B	94.19	5.08	100.00	4.80
	TOTAL AND WEIGHTED AVERAGE		41,050,000			3.98		3.88
1941								
Montana-Dakota Utilities Company	1st Mtge. S.F. 3 1/2%, 1961	Jan. 6	$ 7,500,000	Bl+	100.64	3.45	103.50	3.24
Montana-Dakota Utilities Company	1st Mtge. 2 1/2%, Serially 1942-46	Jan. 6	2,500,000	Bl+	(f)100.64	(f)2.37	(f)100.50	(f)1.99
Southern Counties Gas Co. of California	1st Mtge. S.F. 3%, 1971	Jan. 23	11,500,000	A1	98.43	3.08	101.00	2.95
Panhandle Eastern Pipe Line Company	1st Mtge. & 1st Lien S.F. 2 3/4%, 1960	Jan. 30	12,000,000	A1	99.02	3.07	102.00	2.86
Panhandle Eastern Pipe Line Company	1st Mtge. & 1st Lien A due serially 1942-60 with various interest rates 1.65% - 2.30%	Jan. 30	6,250,000	*None	99.02	(f)2.03	100.00	(f)2.00
Texas Southwestern Gas Company	1st Mtge. S.F. 4 3/4%, 1956	Mar. 20	850,000	Bl	93.60	5.37	100.00	4.75
Atlanta Gas Light Company	Genl. Mtge. Bonds 3 1/2%, Series 1961	Mar.	2,200,000	*None	(a)	(a)	100.00	3.50
Southern California Gas Company	1st Mtge. 3 1/4%, 1970	Apr. 9	8,000,000	A1	101.74	3.16	104.75	3.05
Rio Grande Valley Gas Company	1st Mtge. A 4%, 1961	Apr.	2,900,000	*None	(a)	(a)	100.00	4.00
Kansas-Nebraska Natural Gas Company	1st Mtge. S.F. 4%, 1957	Apr. 15	3,000,000	Bl+	99.43	4.04	103.00	3.75
Consol. Gas Utilities Co.	Debenture 6%, 1961	Apr. 23	700,000	*None	(a)	(a)	100.00	6.00
Consol. Gas Utilities Co.	1st Mtge. S.F. 4%, 1956	Apr. 23	6,500,000	*None	(a)	(a)	100.00	4.00
Southern Natural Gas Co.	1st Mtge. S.F. 3 1/4%, 1966	June 11	13,000,000	A	100.38	3.22	103.00	3.00
Oklahoma Natural Gas Co.	1st Mtge. Ser. C 3%, 1956	Aug. 30	4,500,000	*None	(a)	(a)	(a)100.00	3.00
Southwest Natural Gas Co.	1st Mtge. Ser. A 3 3/4%, 1966	Nov. 18	1,850,000	*None	(a)	(a)	(a)100.00	3.75
Mobile Gas Service Corp.	1st Mtge. 3 3/4%, 1961	Dec. 16	1,400,000	Bl+	98.90	3.82	104.62	3.48
	TOTAL AND WEIGHTED AVERAGE		101,850,000			3.19		3.11

Notes: * Issue sold privately. (a) Details not available. (b) Offered for account of others. (c) In addition $850,000 was sold privately at $99.25 to yield 4.80%. (e) Estimated. (f) Average.

Source: Compiled by Standard & Poor's Corporation from prospectuses of companies, Standard Corporation Records, Moody's Public Utility Manuals and the S.E.C. release entitled "Security Issues of Electric and Gas Utilities, 1938-1941."

EXHIBIT 253.

-CHART NO. 35-

YIELDS ON NEW SECURITY ISSUES OF NATURAL GAS COMPANIES ACCORDING TO QUALITY RATING — 1936-1941

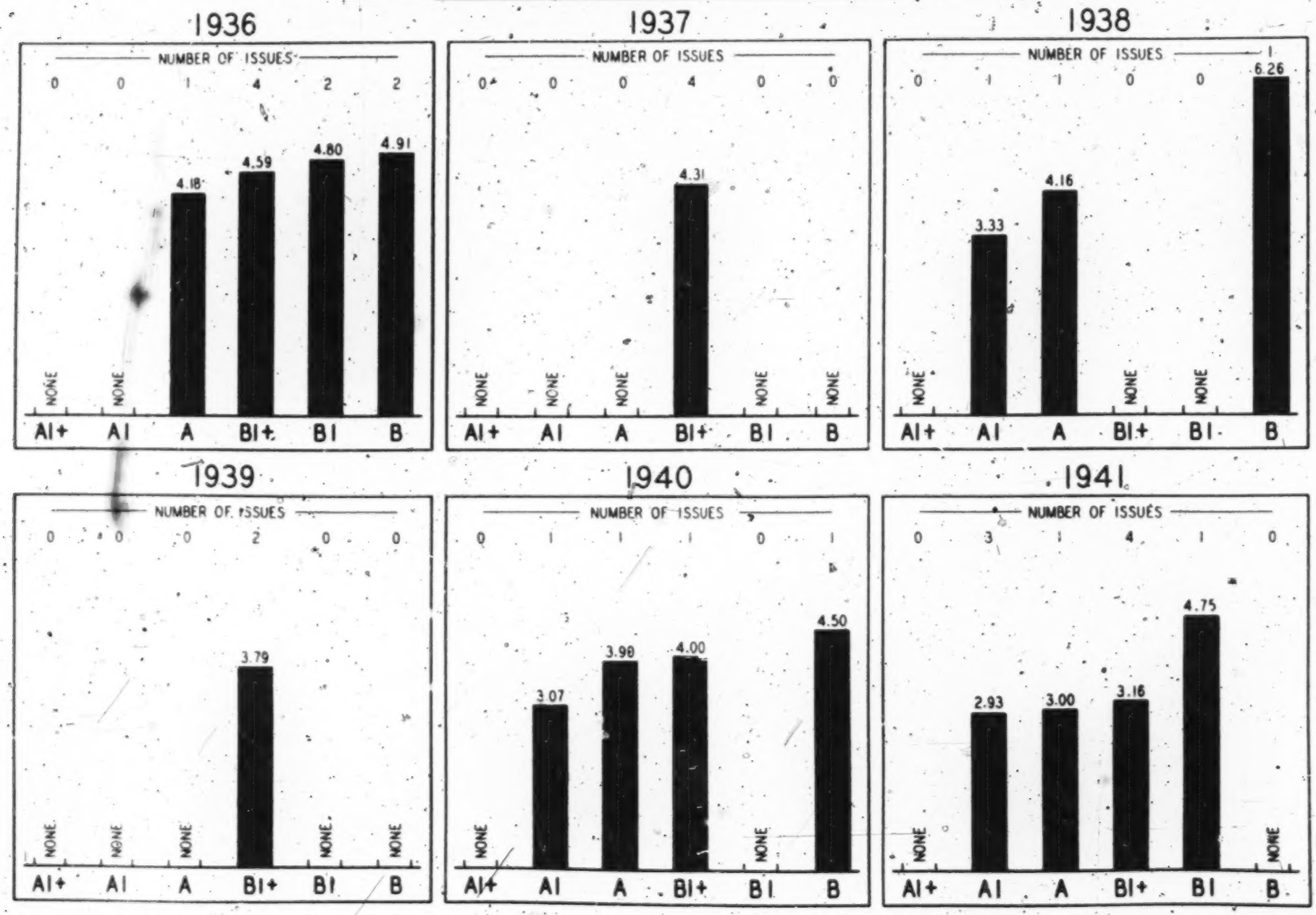


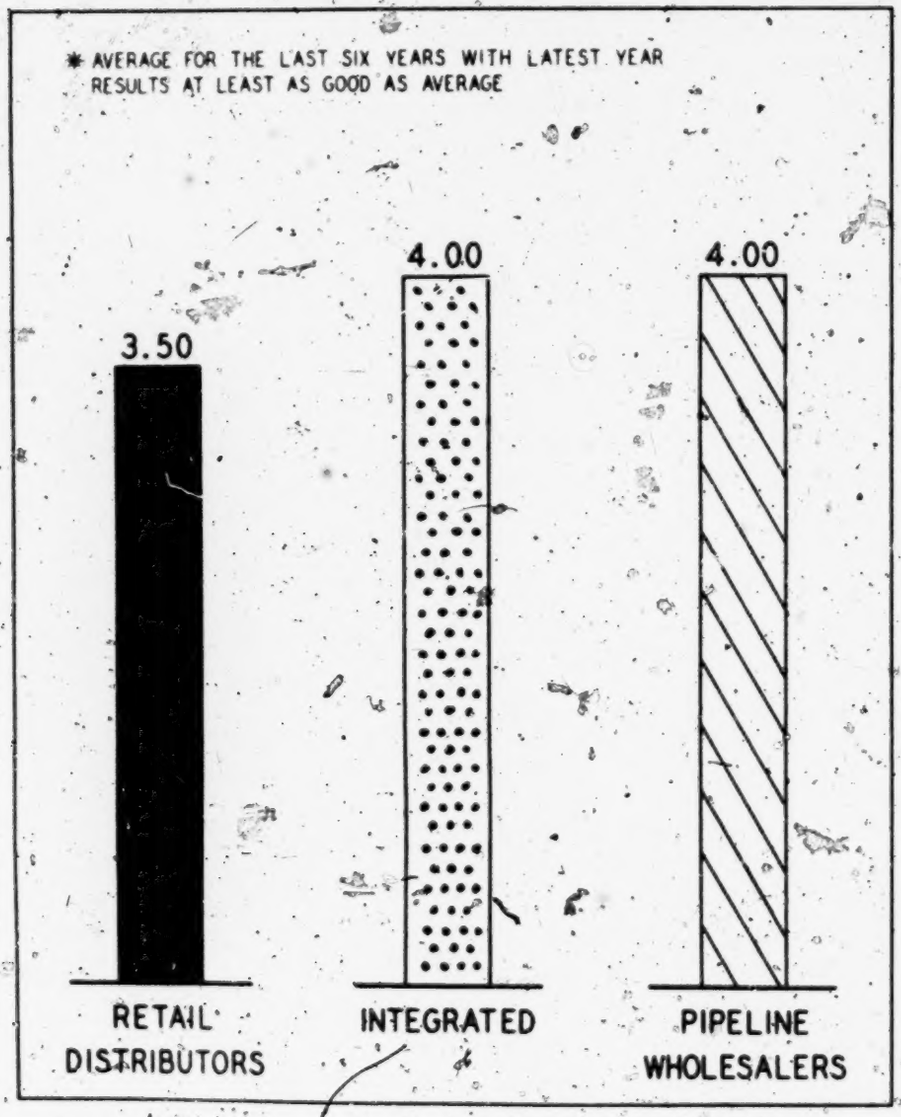
EXHIBIT 253.

-CHART NO. 36-

IDEAL EARNINGS COVERAGE RATIOS FOR HIGH GRADE (A GROUP) NATURAL GAS COMPANY BONDS

AS SUBMITTED TO THE NEW YORK STATE BANKERS ASSOCIATION FOR QUALIFYING HIGH GRADE BONDS

* FIXED CHARGES TIMES EARNED



* INCOME AVAILABLE FOR FIXED CHARGES TO PAR VALUE OF FIXED DEBT

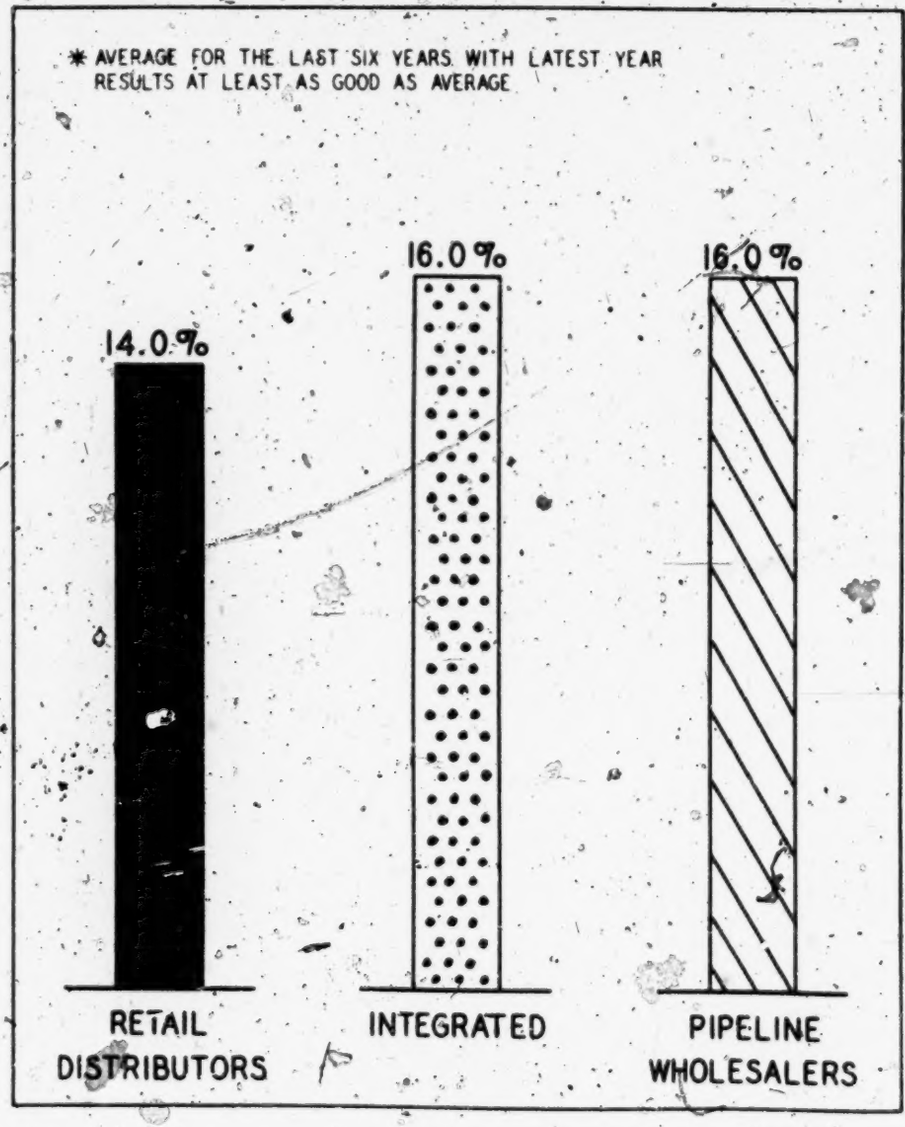


EXHIBIT 253.

-CHART NO. 37-

DEBT COVERAGE RATIOS FOR EL PASO NATURAL GAS COMPANY ACTUAL AND ADJUSTED TO A 6½% RATE OF RETURN

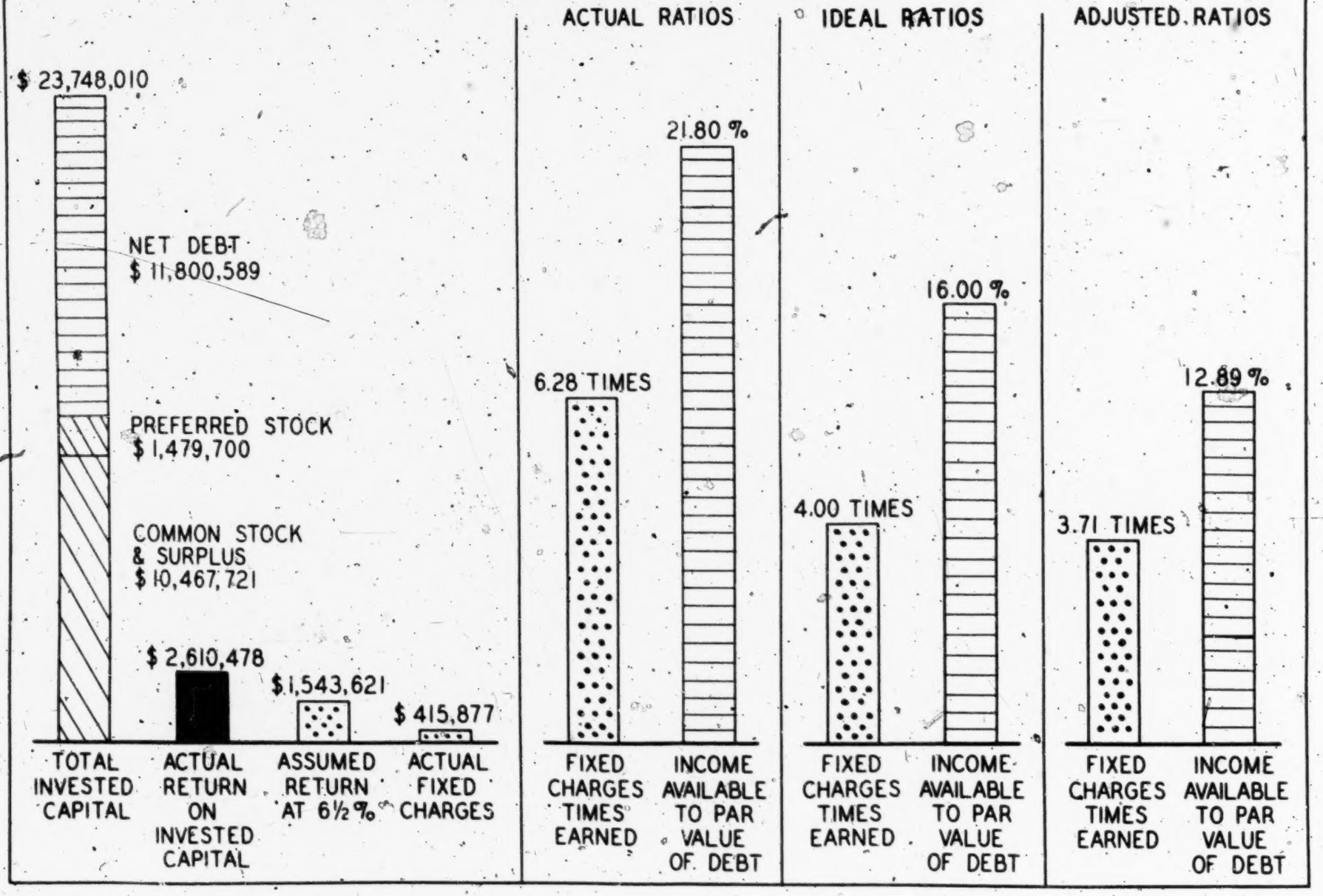


EXHIBIT 253.

-CHART NO. 38-

DEBT COVERAGE RATIOS FOR NORTHERN NATURAL GAS COMPANY ACTUAL AND ADJUSTED TO A 6½% RATE OF RETURN

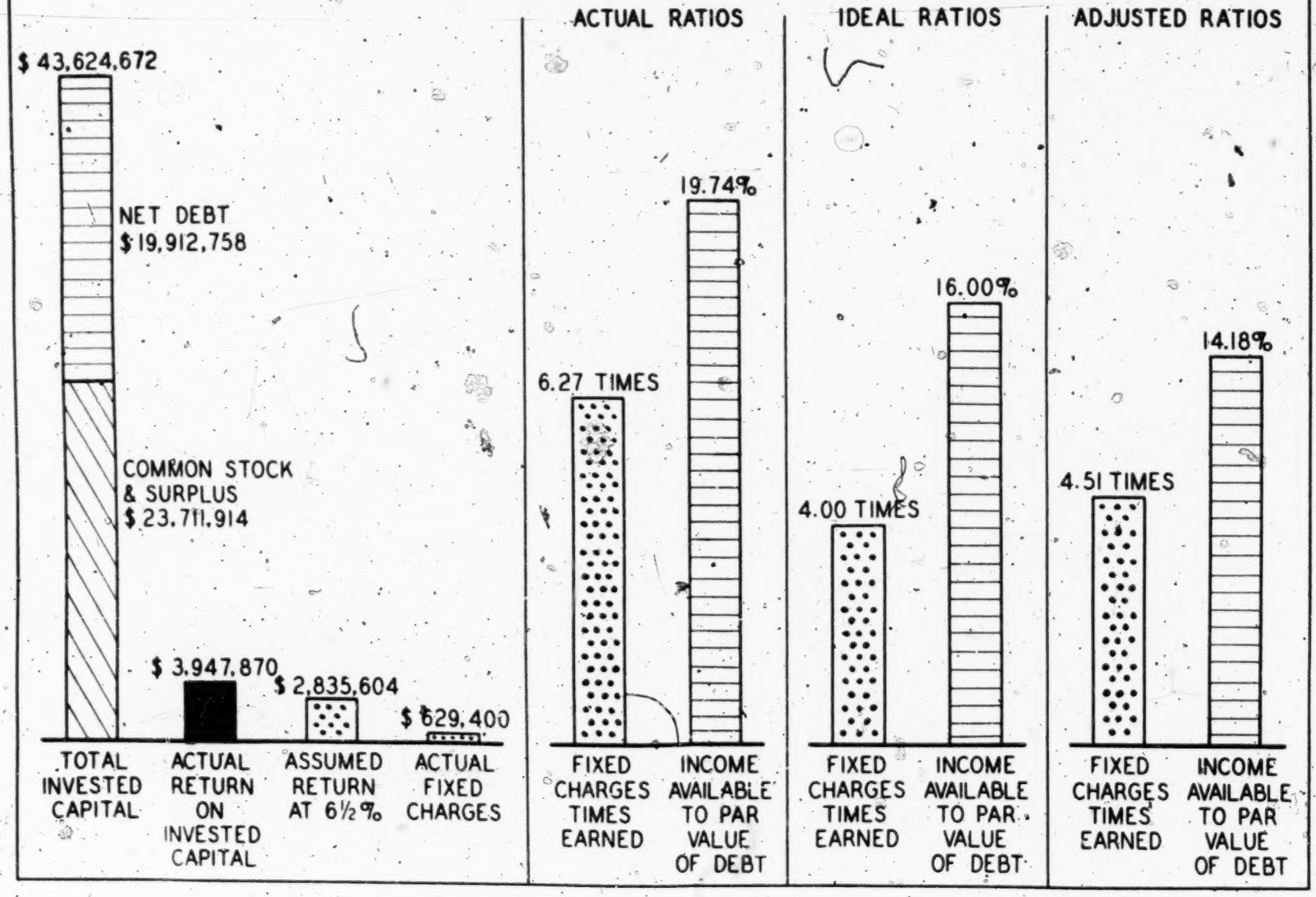


EXHIBIT 253.

- CHART NO. 39 -

DEBT COVERAGE RATIOS FOR SOUTHERN NATURAL GAS COMPANY ACTUAL AND ADJUSTED TO A 6½% RATE OF RETURN

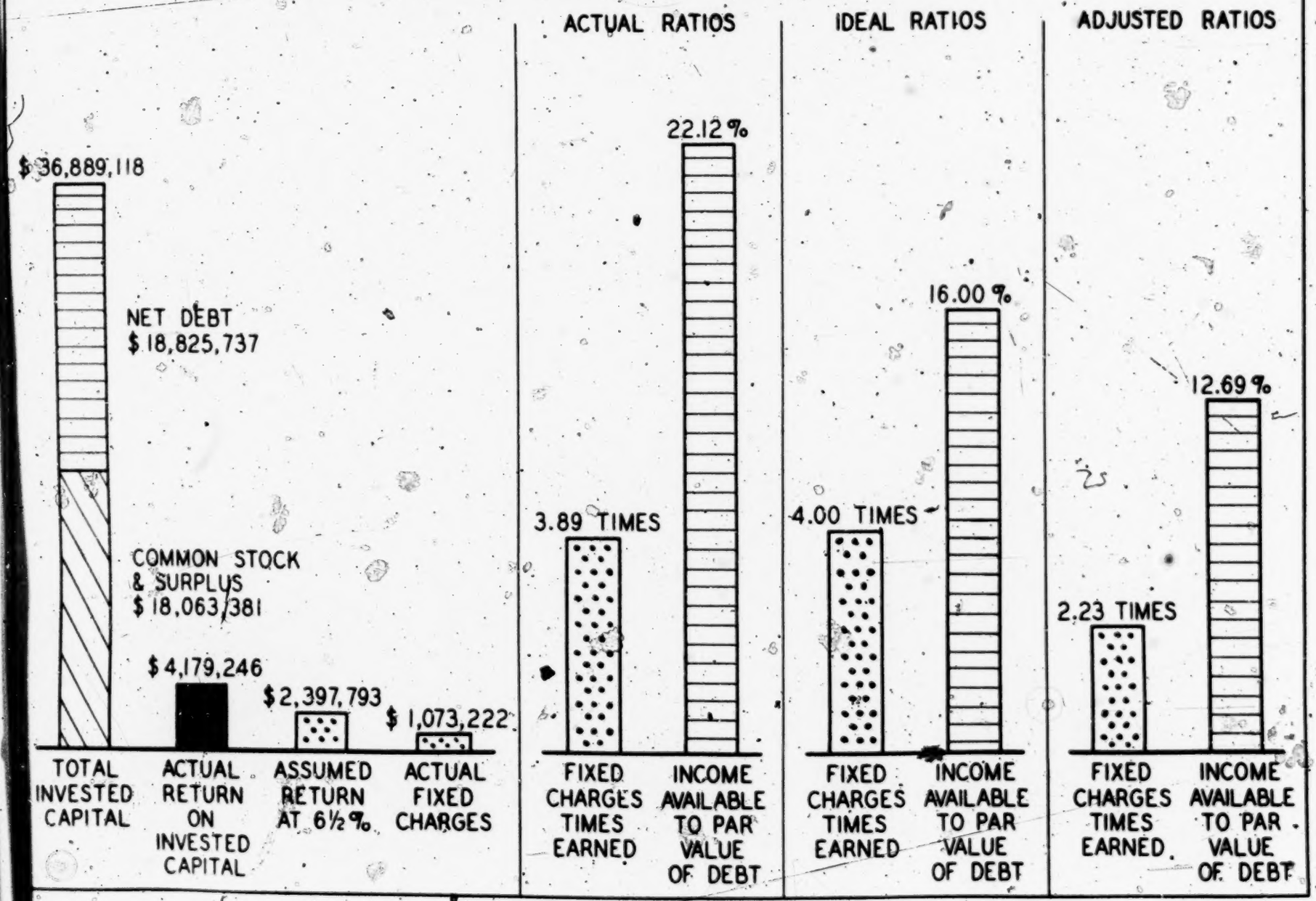


EXHIBIT 253.

-CHART NO. 40-

DEBT /COVERAGE RATIOS FOR CITIES SERVICE GAS COMPANY ACTUAL AND ADJUSTED TO A 6 1/2% RATE OF RETURN

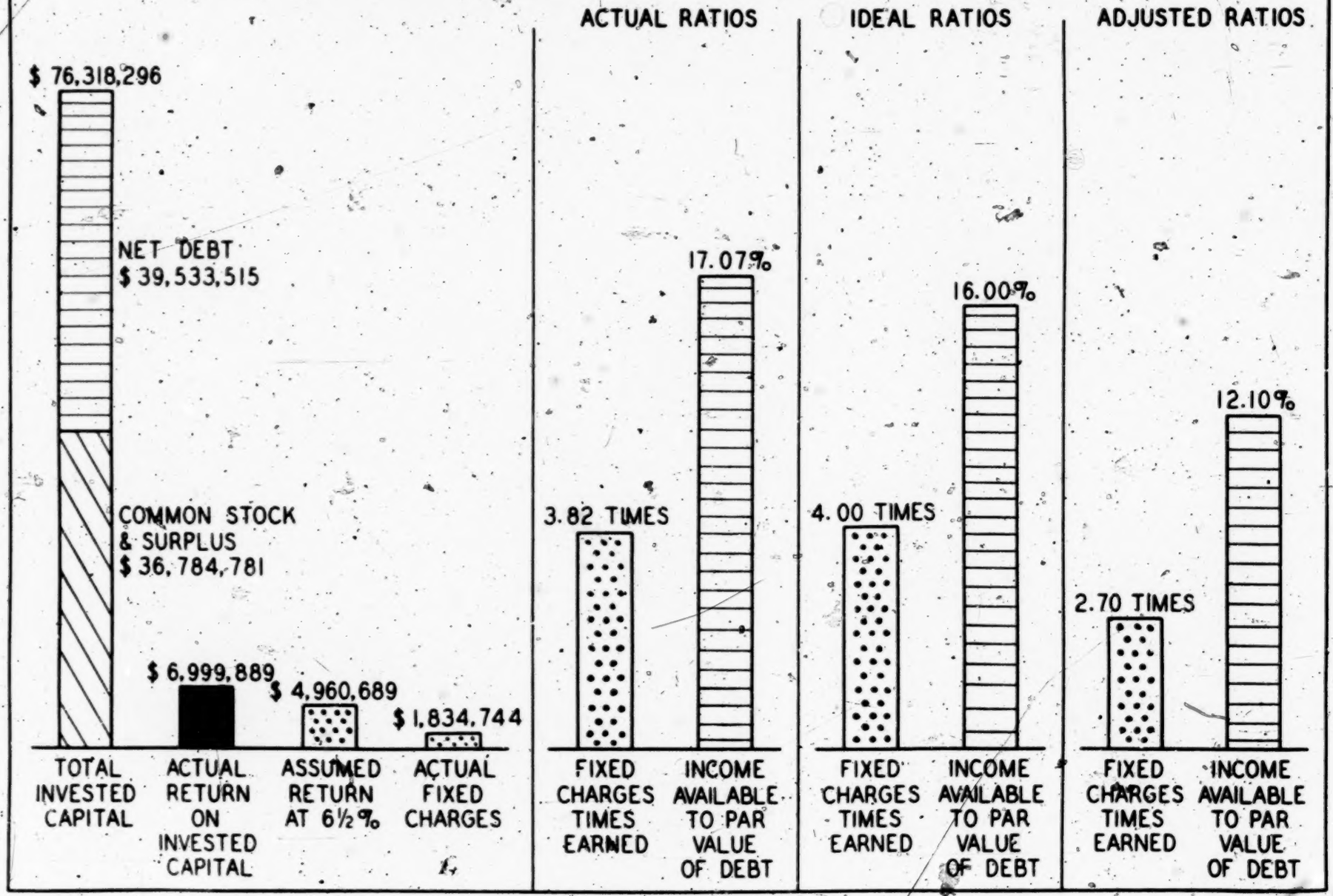


EXHIBIT 253.

-CHART NO. 41-

DEBT COVERAGE RATIOS FOR MISSISSIPPI RIVER FUEL CORP. ACTUAL AND ADJUSTED TO A 6½% RATE OF RETURN

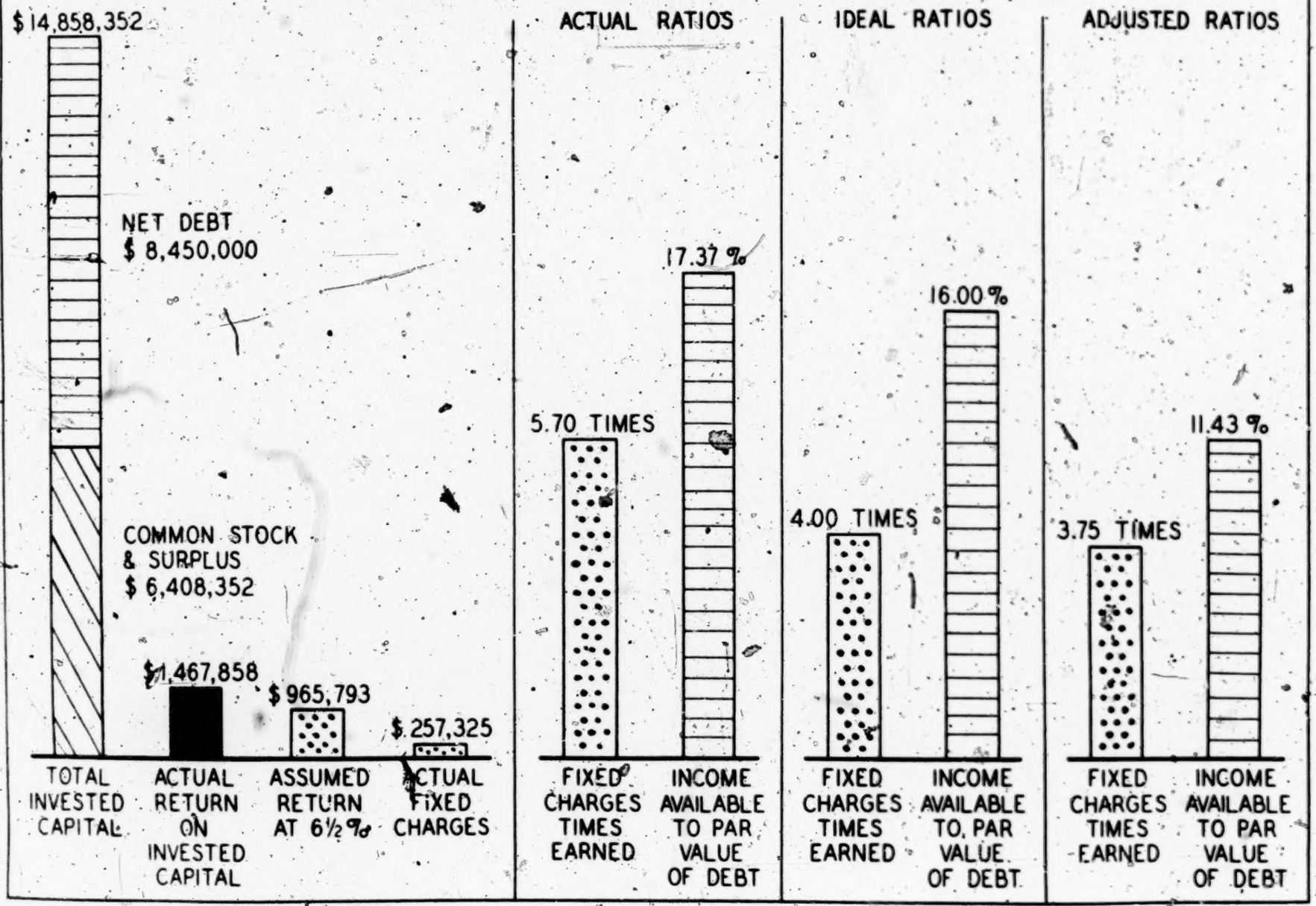


EXHIBIT 253.

-CHART NO. 42-

DEBT COVERAGE RATIOS FOR NATURAL GAS COMPANIES ADJUSTED TO 6 1/2% RETURN ON NET PROPERTY AND WORKING CAPITAL

	EL PASO NATURAL GAS COMPANY (JANUARY 31, 1942)		NORTHERN NATURAL GAS COMPANY (DECEMBER 31, 1941)		SOUTHERN NATURAL GAS COMPANY (SEPTEMBER 30, 1941)		CITIES SERVICE GAS COMPANY (DECEMBER 31, 1940)		MISSISSIPPI RIVER FUEL CORPORATION (DECEMBER 31, 1941)	
	$	$	$	$	$	$	$	$	$	$
INVESTED CAPITAL BASED UPON NET PROPERTY ACCOUNT (INCLUDING INTANGIBLES AND WORKING CAPITAL)										
PLANT, PROPERTIES AND EQUIPMENT	28,745,336		57,658,305		43,332,517		86,926,590		22,641,496	
LESS: RESERVE FOR DEPRECIATION, DEPLETION, ETC.	4,623,995		13,924,997		9,678,649		12,973,056		8,343,156	
NET PLANT, ETC.		24,121,341		43,727,308		33,653,867		73,953,534		14,298,340
WORKING CAPITAL:										
CURRENT ASSETS	1,723,066		3,769,983		5,148,804		5,282,191		1,909,294	
LESS: CURRENT LIABILITIES	1,714,765		3,793,160		2,238,558		2,759,697		1,376,050	
NET WORKING CAPITAL		8,761		(23,167)		2,909,246		2,482,494		533,244
TOTAL INVESTED CAPITAL		21,130,122		43,704,141		36,563,113		76,436,028		14,831,584
RETURN ON INVESTED CAPITAL AND RATIOS										
	ACTUAL YEAR ENDED JAN.31,1942	ASSUMING 6 1/2% RETURN	ACTUAL YEAR ENDED DEC.31,1941	ASSUMING 6 1/2% RETURN	ACTUAL YEAR ENDED SEPT.30,1941	ASSUMING 6 1/2% RETURN	ACTUAL YEAR ENDED DEC.31,1940	ASSUMING 6 1/2% RETURN	ACTUAL YEAR ENDED DEC.31,1941	ASSUMING 6 1/2% RETURN
	$	$	$	$	$	$	$	$	$	$
AVAILABLE FOR FIXED CHARGES	2,610,478	1,373,456	3,047,870	2,640,769	4,179,246	2,376,602	6,999,889	4,967,041	1,487,858	964,053
ACTUAL FIXED CHARGES (INTEREST AND AMORTIZATION)	415,877	415,877	629,400	629,400	1,073,222	1,073,222	1,834,744	1,834,744	287,325	287,325
BOND QUALITY RATIOS:										
FIXED CHARGES TIMES EARNED (TIMES)	6.28	3.30	6.27	4.81	3.89	2.21	3.82	2.71	5.70	3.75
INCOME AVAILABLE TO PAR VALUE OF DEBT	21.80%	11.47%	19.74%	14.80%	22.19%	12.58%	17.07%	12.11%	17.37%	11.41%

IDEAL RATIOS

FIXED CHARGES TIMES EARNED — 4.00 TIMES

INCOME AVAILABLE TO PAR VALUE OF DEBT — 16.00%

NOTE: PARENTHESES INDICATE RED FIGURE.

SOURCE: COMPILED BY STANDARD & POOR'S CORPORATION FROM DATA APPEARING IN COMPANY'S PUBLISHED STATEMENTS IN ALL CASES EXCEPT CITIES SERVICE GAS COMPANY, THE BASIC DATA FOR WHICH WAS TAKEN FROM MOODY'S PUBLIC UTILITY MANUAL FOR 1941.

EXHIBIT 253:

- CHART NO. 43 -

DEBT COVERAGE RATIOS OF PANHANDLE EASTERN PIPE LINE CO. AT VARIOUS LEVELS OF NET OPERATING REVENUE

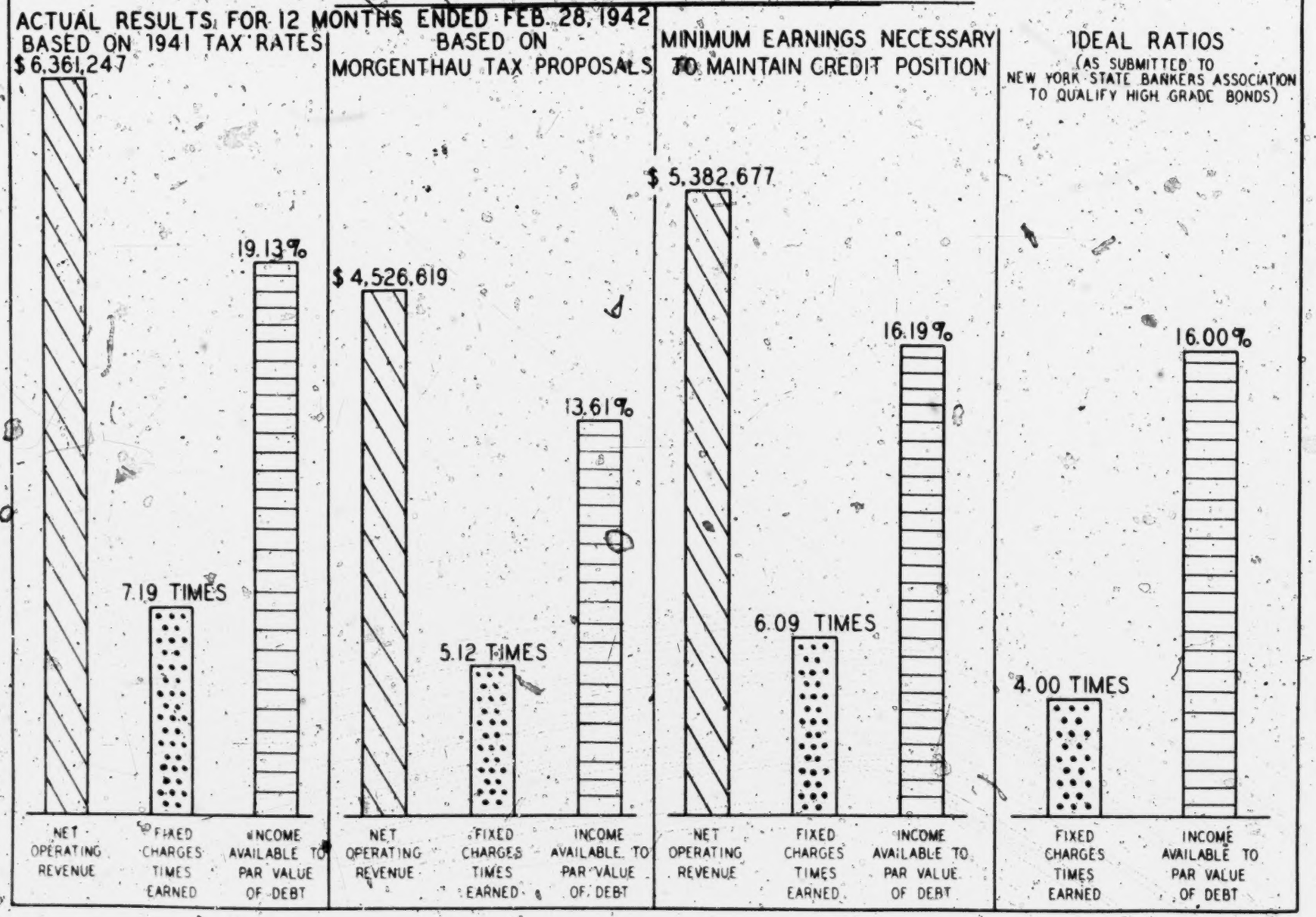


EXHIBIT 253.

— CHART NO. 44 —

DEBT COVERAGE RATIOS OF PANHANDLE EASTERN PIPE LINE CO. AT VARIOUS LEVELS OF NET OPERATING REVENUE

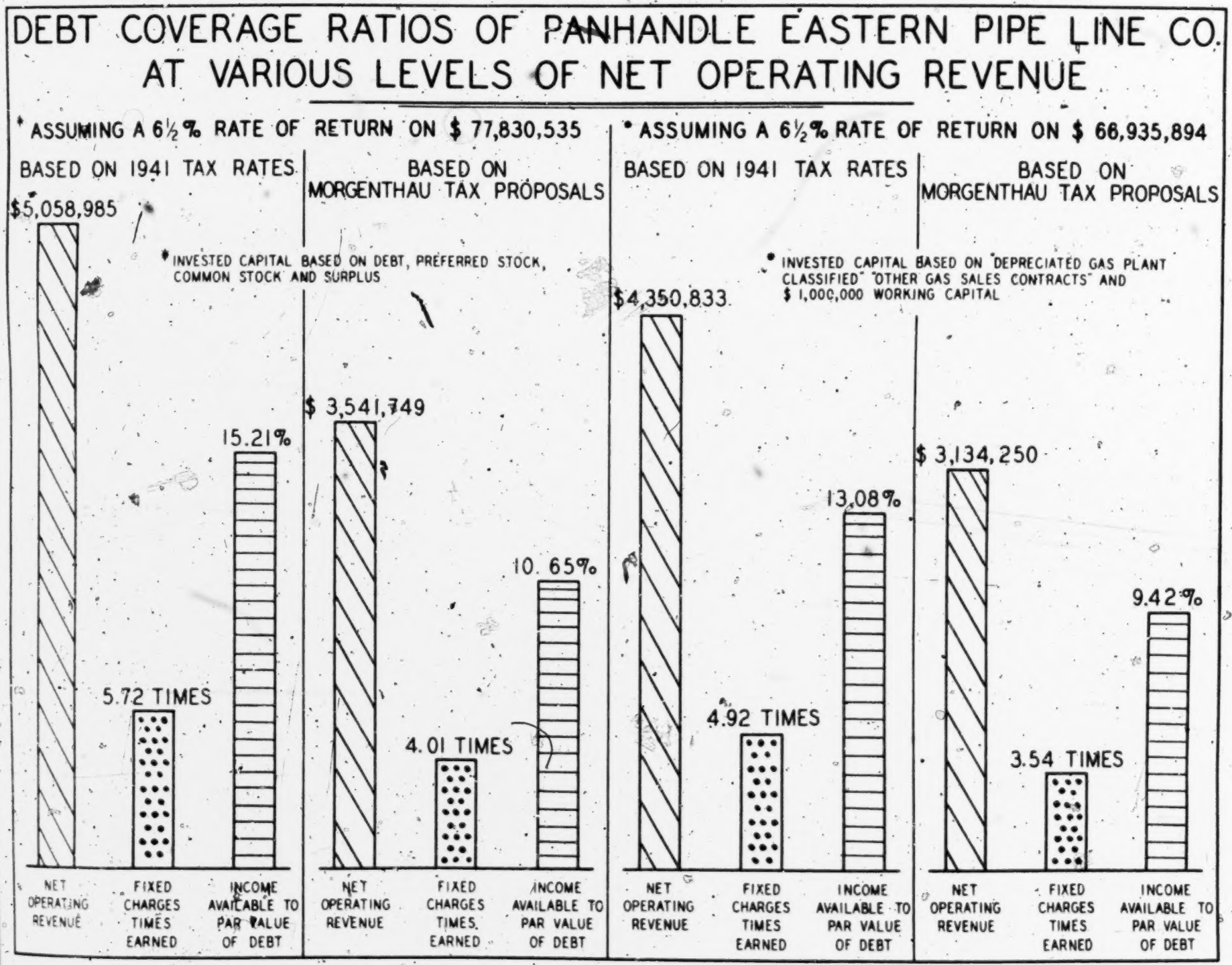


EXHIBIT 253.

- CHART NO. 45 -

EFFECT OF INCREASED GROSS REVENUE AND TAXES UPON PANHANDLE'S NET OPERATING REVENUE

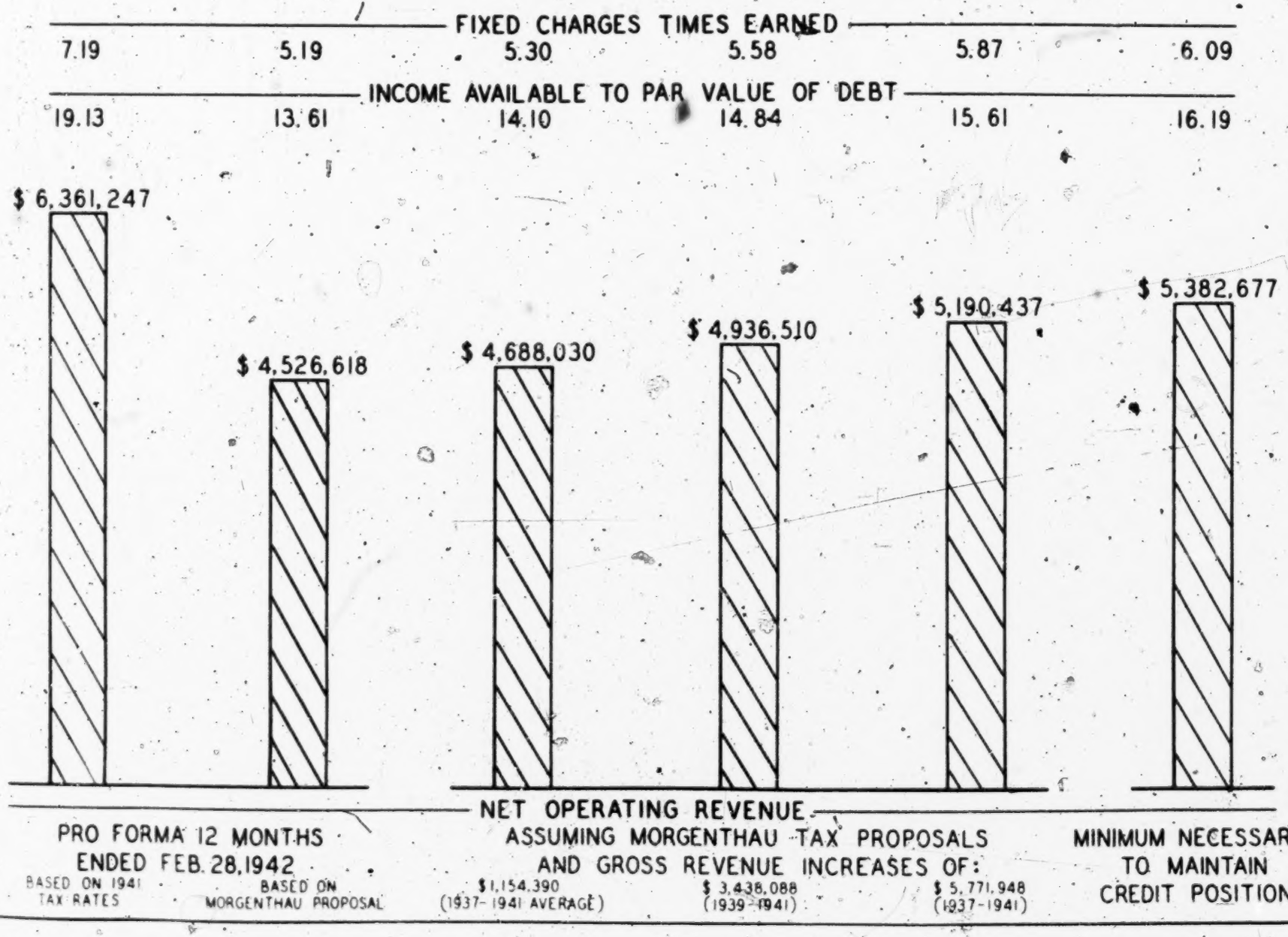


EXHIBIT 253.

- CHART NO. 46 -

CALCULATION TO SHOW RATE OF RETURN NECESSARY TO PRODUCE $5,382,677 — ASSUMING VARIOUS RATE BASES

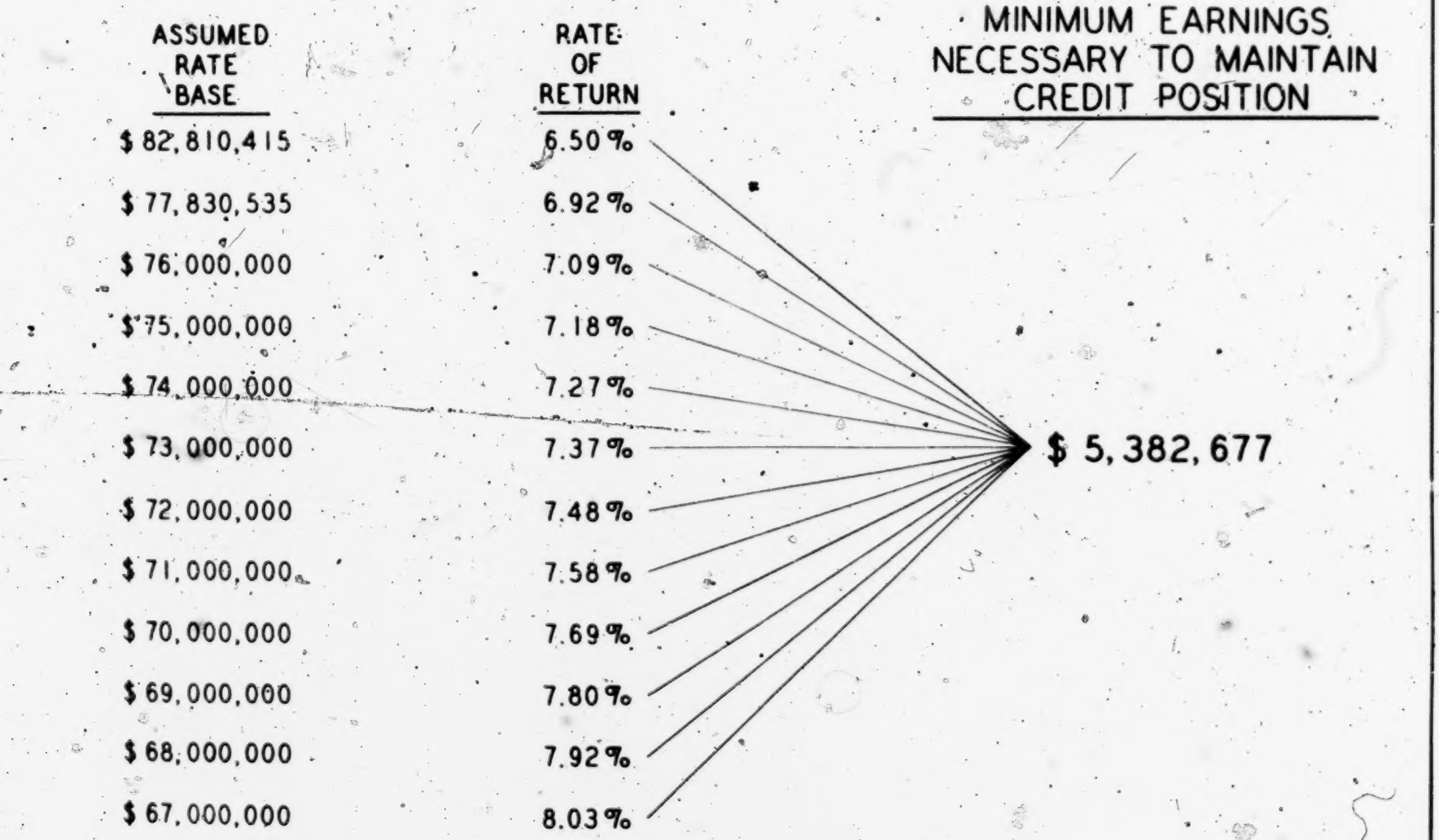


Exhibit 253

SUPPORTING TABLES

Exhibit 253

Table Supporting Chart No. 2

PANHANDLE EASTERN PIPE LINE COMPANY

TREND OF REVENUE AND EXPENSES

	Gross Revenues	Operating Expenses (Excluding Taxes)	Taxes: State, Local & Misc. Federal	Taxes: Federal Income	Taxes: Federal Excess Profits	Taxes: Total Taxes	Net Operating Income
	$	$	$	$	$	$	$
	(IN DOLLARS)						
1932 (9 mos.)	1,427,494	1,215,832	216,130	-	-	216,130	(4,468)
1933	2,585,397	1,755,999	262,375	-	-	262,375	567,022
1934	3,048,518	1,774,210	270,204	-	-	270,204	1,004,104
1935	3,611,865	1,832,606	284,598	-	-	284,598	1,494,661
1936	6,037,868	2,588,132	360,294	230,000	-	590,294	2,859,441
1937	9,662,909	3,898,876	412,961	492,000	-	904,961	4,859,072
1938	9,907,129	4,442,002	577,888	513,426	-	1,091,314	4,373,813
1939	11,996,769	4,898,910	675,478	820,286	-	1,495,764	5,602,095
1940	13,535,453	5,210,765	612,872	1,436,598	561,000	2,610,470	5,714,218
1941	15,434,857	5,827,828	733,623	* 1,831,107	* 1,582,774	(b)4,147,504	5,459,525
1941(a)	17,789,573	6,635,138	901,387	(e) -	(e) -	(b)4,741,616	6,412,819
1942(c)	18,378,378	6,758,914	895,846	(e) -	(e) -	(b)5,258,218	6,361,247
1942(d)	18,378,378	6,758,914	895,846	(e) -	(e) -	(b)7,092,845	4,526,619
	(% OF GROSS REVENUE)						
1932 (9 mos)	100.00%	85.17%				15.14%	(0.31)%
1933	100.00	67.92				10.15	21.93
1934	100.00	58.20				8.86	32.94
1935	100.00	50.74				7.88	41.38
1936	100.00	42.86				9.78	47.36
1937	100.00	40.35				9.37	50.28
1938	100.00	44.84				11.02	44.14
1939	100.00	40.84				12.47	46.69
1940	100.00	38.50				19.29	42.21
1941	100.00	37.76				26.87	35.37
1941(a)	100.00	37.30				26.65	36.05
1942(c)	100.00	36.78				28.61	34.61
1942(d)	100.00	36.78				38.59	24.63

Notes: * Details of 1941 Federal taxes taken from published annual report to stockholders.
(a) Pro Forma.
(b) Includes charges in lieu of taxes.
(c) Pro Forma for twelve months ended February 28, 1942 (based on 1941 tax rates).
(d) Pro Forma for twelve months ended February 28, 1942 (based on Morgenthau Proposal of March 3, 1942).
(e) Full detail not available.
Parentheses indicate red figures.

Source: "Watkins" Exhibits Nos. 173, 195, 198 and 199. Computations by Standard & Poor's Corp.

Table Supporting Chart No. 3

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

PERCENT EARNED ON INVESTED CAPITAL (BASED UPON NET GAS PLANT AND WORKING CAPITAL)

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	Average 9 3/4 Years 1938-1941
Invested Capital Based Upon Net Property Account (Including Intangibles) and Working Capital											
Gas Plant (including Net Intangibles)	45,606,714	42,685,712	45,525,158	45,495,363	49,863,822	60,977,186	61,214,797	61,838,381	66,906,390	69,650,033	56,687,812
Less: Retirement, Renewal, Depreciation and Amortization Reserves	605,167	1,169,253	1,824,880	2,437,455	3,005,910	4,104,956	5,736,427	7,598,278	9,189,501	10,908,023	4,777,390
Net Gas Plant	45,001,547	44,456,459	43,700,278	43,057,908	46,857,912	56,872,230	55,478,370	54,240,103	57,716,889	58,742,010	51,910,422
Working Capital: Current Assets (Net after Reserve for Uncollectible Accounts)	2,740,875	1,468,907	1,958,723	1,624,098	2,229,111	2,862,224	2,776,460	7,009,161	5,451,048	48,909,200	3,797,923
Less: Current Liabilities	749,648	750,854	1,537,464	1,923,630	1,699,246	4,165,416	1,701,689	2,109,307	3,171,906	5,401,817	2,360,068
Net Working Capital	1,991,227	718,053	421,259	(299,532)	529,865	(1,303,192)	1,074,771	4,899,854	2,279,142	3,507,683	1,437,861
Total Invested Capital	46,992,774	45,174,512	44,121,537	42,758,376	47,387,777	55,569,038	56,553,141	59,139,957	59,996,031	62,249,693	53,347,984
Net Operating Income	(4,468)	567,092	1,004,106	1,494,661	2,859,441	4,859,072	4,373,813	5,602,095	5,714,218	5,459,525	3,274,813
Percent Earned on Invested Capital	(Deficit)	1.25%	2.27%	3.50%	6.03%	8.74%	7.73%	9.47%	9.52%	8.77%	6.14

Notes: • Current Assets as shown above includes investment of $2,750,000 (principal amount) in tax anticipation notes.

Parentheses indicate red figures.

Source: "Watkins" Exhibits Nos. 172 and 173. Percentages and averages computed by Standard & Poor's Corp.

Table Supporting Chart No. 4

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

PERCENT EARNED ON INVESTED CAPITAL (BASED UPON CAPITAL STRUCTURE)

Invested Capital Based Upon Capital Structure	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	Average 9 3/4 Years 1932-1941
Debt:											
20 Yr. S.F. Mtge. "A" 6s, 1950	20,000,000	19,400,000	19,400,000	18,200,000	17,589,000	-	-	-	-	-	9,701,436
Promissory Notes 6s, 1950	9,891,000	9,891,000	9,891,000	9,891,000	-	-	-	-	-	-	4,057,846
Mortgage Notes Payable, etc.	-	102,500	90,595	85,670	110,244	82,599	-	-	-	-	48,370
Leasehold Purchase Obligations	-	-	-	-	62,000	76,250	62,664	41,438	30,149	9,789	28,953
1st Mtge. & 1st Lien "A" 4s, 1952	-	-	-	-	-	23,546,000	23,500,000	23,000,000	22,500,000	-	9,491,897
Bank Loans, due 1939	-	-	-	-	-	2,000,000	2,000,000	-	-	-	410,256
Serial Notes 0.75-1.50%, due 11/1/42-45	-	-	-	-	-	-	-	-	-	5,000,000	512,821
1st Mtge. & 1st Lien "A" 1.65-2.30%, due 11/1/46-50	-	-	-	-	-	-	-	-	-	6,250,000	641,026
1st Mtge. & 1st Lien "B" 3s, due 11/1/60	-	-	-	-	-	-	-	-	-	12,000,000	1,230,769
Total Debt	29,891,000	29,393,500	29,381,595	28,176,670	17,761,244	25,704,849	25,562,664	23,041,438	22,530,149	23,259,789	26,123,374
Less: Debt Discount and Expense	1,860,157	1,702,748	1,601,091	1,406,686	1,267,228	3,173,881	2,854,205	2,539,352	2,229,323	-	1,911,248
Net Debt	28,030,843	27,690,752	27,780,504	26,769,984	16,494,018	22,530,968	22,708,459	20,502,086	20,300,826	23,259,789	24,212,126
Preferred Stock:											
$6 Cum. Class A, Part. & Redeemable (no par)	-	-	-	-	-	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	6,153,846
$6 Cum. Class B, Non-Part. & Non-Redeemable (no par)	-	-	-	-	-	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	615,385
Total Preferred Stock	-	-	-	-	-	11,000,000	11,000,000	11,000,000	11,000,000	11,000,000	6,769,231
Common Stock and Surplus:											
Common Stock (no par)	1,199,000	1,199,000	1,199,000	1,199,000	18,216,300	18,216,300	18,216,300	20,134,175	20,184,175	20,184,175	12,307,428
Capital Surplus	19,294,625	19,294,625	19,285,867	18,582,942	46,665	46,365	46,365	-	-	-	7,856,118
Earned Surplus	(1,105,755)	(2,492,578)	(3,354,373)	(3,797,090)	1,672,455	3,716,452	4,289,364	6,860,428	7,922,967	7,386,474	2,163,892
Total Common Stock & Surplus	19,387,870	18,001,047	17,130,094	15,984,852	19,935,120	21,979,117	22,552,029	27,044,603	28,107,142	27,570,649	22,327,438
Total Invested Capital	47,418,713	45,691,799	44,910,598	42,754,836	47,429,138	55,510,085	56,260,488	58,546,687	59,407,968	61,830,438	53,308,795
Net Operating Income	(4,468)	567,022	1,004,104	1,494,661	2,859,442	4,859,071	4,373,813	5,602,065	5,714,218	5,439,525	3,274,819
Percent Earned on Invested Capital	(Deficit)	1.24%	2.24%	3.50%	6.03%	8.75%	7.77%	9.57%	9.62%	8.83%	6.14%

Source: "Watkins" Exhibits Nos. 172 and 173. Averages computed by Standard & Poor's Corp.

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

RETURN TO COMMON STOCKHOLDERS 1932 TO 1941, BOTH INCLUSIVE

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	Average 9 3/4 Years 1932-1941
	$	$	$	$	$	$	$	$	$	$	$
Common Stock	1,199,000	1,199,000	1,199,000	1,199,000	18,216,300	18,216,300	18,216,300	20,184,175	20,184,175	20,184,175	12,307,428
Surplus, Capital and Earned	18,188,870	16,802,047	15,931,095	14,785,852	1,718,820	3,762,817	4,335,728	6,860,488	7,922,967	7,386,474	10,020,010
Total Common Stock and Surplus	19,387,870	18,001,047	17,130,095	15,984,852	19,935,120	21,979,117	22,552,028	27,044,663	28,107,142	27,570,649	22,327,438
Dividend Return to Common Stock	None	None	None	None	None	364,326	1,639,467	1,132,336	2,422,081*	2,018,417(a)	777,087
% Return on Book Value of Common Stock and Surplus	None	None	None	None	None	1.66%	7.27%	4.19%	8.62%	7.32%	3.48%

Notes: * Of this amount, $1,211,081 was paid on January 31, 1940 to holders of record January 19, 1940 as a special dividend out of 1939 earnings. If this amount is included in 1939 the % return would be 8.66% for that year and 4.31% for 1940.
(a) Excludes dividend paid in stock of Central Distributing Company.

Source: "Watkins" Exhibits Nos. 172 and 174. Average and percentage computations by Standard & Poor's Corp.

Table Supporting Chart No. 6

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

PERCENT EARNED ON INVESTED CAPITAL

PRO FORMA FOR 12 MONTHS ENDED FEBRUARY 28, 1942

		As of February 28, 1942
Invested Capital Based on Net Property, Intangibles and Working Capital		
Gas Plant (including intangibles)	$84,998,355	
Less: Reserves for Depreciation, Depletion, Amortization, etc.	13,097,884	
Net Gas Plant (including intangibles)		$71,900,471
Working Capital:		
Current Assets (Net after Reserve for Uncollectible Accounts)	12,654,324*	
Less: Current Liabilities	6,077,581	
Net Working Capital		6,576,743
Total Invested Capital		$78,477,214
Net Operating Income (12 Months ended February 28, 1942)		
Based on Federal Income and Excess Profits Tax computed at rate levied by Revenue Act of 1941		$6,361,247
Based on Federal Income and Excess Profits Tax computed at rate proposed by Secretary of Treasury Morgenthau on March 3, 1942 before House Ways and Means Committee		$4,526,619
Percent Earned on Invested Capital		
Based on Earnings computed after taxes at 1941 rates		8.11%
Based on Earnings computed after taxes at 1942 proposed rates		5.77%

Note: * Current Assets as shown above includes investment of $2,750,000 (principal amount) in tax anticipation notes.

Source: Computed by Standard & Poor's Corp. from pro forma data furnished by company ("Watkins" Exhibits No. 197/199 Inclusive).

Table Supporting Chart No. 7

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

PERCENT EARNED ON INVESTED CAPITAL

PRO FORMA FOR 12 MONTHS ENDED FEBRUARY 28, 1942

	As of February 28, 1942	
Invested Capital Based Upon Capital Structure		
Debt:		
Serial Notes 0.75-1.50% due 11/1/42-45	$ 5,000,000	
1st Mtge. & 1st Lien "A" 1.65-2.30% due 11/1/46-50	6,250,000	
1st Mtge. & 1st Lien "B" 3s, 1960	12,000,000	
1st Mtge. & 1st Lien "C" 3s, 1962	10,000,000	
Leasehold Purchase Obligations	6,445	
Total Long Term Debt		$33,256,445
Preferred Capital Stock, Cumulative, $100 Par Value:		
$6 Class "B", Non-Participating and Non-Redeemable	1,000,000	
5.60% Non-Participating and Redeemable	15,000,000	
Total Preferred Capital Stock		16,000,000
Common Stock and Surplus:		
Common Capital Stock, without par value	20,184,175	
Premium and Assessment on Capital Stock	42,490	
Earned Surplus	8,347,425	
Total Common Stock and Surplus		28,574,090
Total Invested Capital		$77,830,535
Net Operating Income (12 Months ended February 28, 1942)		
Based on Federal Income and Excess Profits Tax computed at rate levied by Revenue Act of 1941		$6,361,247
Based on Federal Income and Excess Profits Tax computed at rate proposed by Secretary of Treasury Morganthau on March 3, 1942 before House Ways and Means Committee		$4,526,619
Percent Earned on Invested Capital		
Based on Earnings computed after taxes at 1941 rates		8.17%
Based on Earnings computed after taxes at 1942 proposed rates		5.81%

Source: Computed by Standard & Poor's Corp. from pro forma data furnished by company ("Watkins" Exhibits No. 197/199 Inclusive).

Table Supporting Chart No.

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

NET WORTH CAPITAL vs. BUDGETED PLANT EXPENDITURES DURING LAST 10 MONTHS OF 1942

	Amount
Net Working Capital of Panhandle Eastern Pipe Line Co. as of:	
(1) June 30, 1941 (excludes prepayments not shown separately on statement)	$4,661,875
(2) December 31, 1941	3,507,683
(3) February 28, 1942 (of which $3,624,835 was realized from new financing in 1942 as per Prospectus dated February 3, 1942)	6,576,743
Estimated plant expenditures for the 10 months from February 28, 1942 to December 31, 1942 (includes the balance appropriated but not yet spent on account of the company's 1941 expansion program of looping and extending its lines in Michigan; Michigan Gas Transmission Corporation's expansion budget; and Panhandle Eastern Pipe Line Company's normal construction budget for 1942)	6,530,900

Source: (1) Company's published interim statements (unaudited).
(2) Compiled from "Watkins" Exhibit No. 172.
(3) Compiled from "Watkins" Exhibit No. 197.

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

SCHEDULE OF SINKING FUND RETIREMENT REQUIREMENTS OF FUNDED DEBT AND PREFERRED STOCK

	Funded Debt				Preferred Stock				Total Funded Debt and Preferred Stock			
	*Par Amount O/S at Beginning of Year	Retirements During Year	Cost of Retirements	Accumulated Costs	*Par Amount O/S at Beginning of Year	Retirements During Year	Cost of Retirements	Accumulated Costs	*Par Amount O/S at Beginning of Year	Retirements During Year	Cost of Retirements	Accumulated Costs
Mar. 1, 1942	33,250,000	1,500,000	1,503,125	1,503,125	15,000,000	95,200	99,960	99,960	48,250,000	1,595,200	1,603,085	1,603,085
Jan. 1, 1943	31,750,000	1,750,000	1,756,250	3,259,375	14,904,800	525,000	551,250	651,210	46,654,800	2,275,000	2,307,500	3,910,585
1944	30,000,000	1,750,000	1,756,250	5,015,625	14,379,800	525,000	551,250	1,202,460	44,379,800	2,275,000	2,307,500	6,218,085
1945	28,250,000	1,750,000	1,756,250	6,771,875	13,854,800	525,000	551,250	1,753,710	42,104,800	2,275,000	2,307,500	8,525,585
1946	26,500,000	1,750,000	1,756,000	8,528,875	13,329,800	525,000	551,250	2,304,960	39,829,800	2,275,000	2,306,250	10,831,835
1947	24,750,000	1,750,000	1,756,000	10,281,875	12,804,800	525,000	551,250	2,856,210	37,554,800	2,275,000	2,306,250	13,138,085
1948	23,000,000	1,750,000	1,755,000	12,036,875	12,279,800	525,000	551,250	3,407,460	35,279,800	2,275,000	2,306,250	15,444,335
1949	21,250,000	1,750,000	1,755,000	13,791,875	11,754,800	525,000	551,250	3,958,710	33,004,800	2,275,000	2,306,250	17,750,585
1950	19,500,000	1,750,000	1,755,750	15,548,625	11,229,800	525,000	551,250	4,509,960	30,729,800	2,275,000	2,306,000	20,056,585
1951	17,750,000	1,700,000	1,721,750	17,267,375	10,704,800	525,000	551,250	5,061,210	28,454,800	2,225,000	2,273,000	22,329,585
1952	16,050,000	1,700,000	1,721,750	18,989,125	10,179,800	525,000	551,250	5,612,460	26,229,800	2,225,000	2,273,000	24,601,585
1953	14,350,000	1,700,000	1,721,750	20,710,875	9,654,800	525,000	551,250	6,163,710	24,004,800	2,225,000	2,273,000	26,874,585
1954	12,650,000	1,700,000	1,714,500	22,425,375	9,129,800	525,000	551,250	6,714,960	21,779,800	2,225,000	2,265,750	29,140,335
1955	10,950,000	1,700,000	1,714,500	24,139,875	8,604,800	525,000	551,250	7,266,210	19,554,800	2,225,000	2,265,750	31,406,085
1956	9,250,000	1,700,000	1,714,500	25,854,375	8,079,800	525,000	551,250	7,817,460	17,329,800	2,225,000	2,265,750	33,671,835
1957	7,550,000	1,700,000	1,708,500	27,562,875	7,554,800	525,000	551,250	8,368,710	15,104,800	2,225,000	2,259,750	35,931,585
1958	5,850,000	1,700,000	1,707,500	29,270,375	7,029,800	525,000	551,250	8,919,960	12,879,800	2,225,000	2,258,750	38,190,335
1959	4,150,000	1,700,000	1,701,250	30,971,625	6,504,800	525,000	551,250	9,471,210	10,654,800	2,225,000	2,252,500	40,442,835
1960	2,450,000	1,700,000	1,701,250	32,672,875	5,979,800	525,000	551,250	10,022,460	8,429,800	2,225,000	2,252,500	42,695,335
1961	750,000	750,000	750,622	33,423,500	5,454,800	525,000	551,250	10,573,710	6,204,800	1,275,000	1,301,875	43,997,210
1962	-	-	-	-	4,929,800	525,000	551,250	11,124,960	4,929,800	525,000	551,250	44,548,460
1963	-	-	-	-	4,404,800	525,000	551,250	11,676,210	4,404,800	525,000	551,250	45,099,710
1964	-	-	-	-	3,879,800	525,000	551,250	12,227,460	3,879,800	525,000	551,250	45,650,960
1965	-	-	-	-	3,354,800	525,000	551,250	12,778,710	3,354,800	525,000	551,250	46,202,210
1966	-	-	-	-	2,829,800	525,000	551,250	13,329,960	2,829,800	525,000	551,250	46,753,460
1967	-	-	-	-	2,304,800	525,000	551,250	13,881,210	2,304,800	525,000	551,250	47,304,710
1968	-	-	-	-	1,779,800	525,000	551,250	14,432,460	1,779,800	525,000	551,250	47,855,960
1969	-	-	-	-	1,254,800	525,000	551,250	14,983,710	1,254,800	525,000	551,250	48,407,210
1970	-	-	-	-	729,800	525,000	551,250	15,534,960	729,800	525,000	551,250	48,958,460
1971	-	-	-	-	204,800	204,800	215,040	15,750,000	204,800	204,800	215,040	49,173,500

Note: * Par Amount excludes from funded debt $6,445 of leasehold purchase obligations and from preferred stock $1,000,000 class "B" preferred stock.

Source: Compiled by Standard & Poor's Corp.

Table Supporting Chart No. 10

Exhibit 253

INVESTORS' APPRAISAL OF OVERALL CAPITAL RISKS IN VARIOUS DIVISIONS OF THE UTILITY INDUSTRY

Year	Water Companies			Electric Operating Utility Companies			Manufactured and Mixed Gas Companies		
	Average Rate %	Weight	Weighted Percent	Average Rate %	Weight	Weighted Percent	Average Rate %	Weight	Weighted Percent
1937	5.53	1	5.53	5.47	1	5.47	6.12	1	6.12
1938	5.24	2	10.48	5.52	2	11.04	6.72	2	13.44
1939	5.64	3	16.92	5.42	3	16.26	6.72	3	20.16
1940	5.13	4	20.52	5.46	4	21.84	6.89	4	27.56
1941	5.32	5	26.60	5.67	5	28.35	7.37	5	36.85
		15	80.05		15	82.96		15	104.13
Weighted Average Percent			5.34			5.53			6.94

Year	All Natural Gas Companies			Natural Gas Pipe Line Companies		
	Average Rate %	Weight	Weighted Percent	Average Rate %	Weight	Weighted Percent
1937	7.81	1	7.81	9.63	1	9.63
1938	7.68	2	15.36	9.52	2	19.04
1939	7.60	3	22.80	8.84	3	26.52
1940	8.03	4	32.12	9.55	4	38.20
1941	7.83	5	39.15	8.89	5	44.45
		15	117.24		15	137.84
Weighted Average Percent			7.82			9.19

Note: "Investors' Appraisal of Overall Capital Risks" as used here represents the percentage obtained by dividing "Total Earnings Available for Capital" of each group of companies by the "Total Market Value of Capital" as represented by bonds, preferred stocks and common stocks. The methods of selecting companies, as well as all working papers covering the years 1937, 1938, 1939 and 1940 have already been presented in these Hearings in Exhibits Nos. 63 and 64. Working papers for 1941 appear in Section IV of the accompanying exhibit.

Source: Compiled by Standard & Poor's Corp.

Table Supporting Chart No. 11

A

Exhibit 253

INVESTORS' APPRAISAL OF OVERALL CAPITAL RISK

153 STABLE INDUSTRIAL COMPANIES

	Indicated Market Value of Capital ($1,000)	Earnings Available for Capital ($1,000)	Investors' Appraisal of Risks of Capital %	Weights	Weighted Percent %
1937	22,692,237	1,550,677	6.83	1	6.83
1938	19,423,780	1,011,742	5.21	2	10.42
1939	21,058,280	1,315,905	6.25	3	18.75
1940	19,871,449	1,418,677	7.14	4	28.56
1941*	14,601,745	1,166,698	7.99	5	39.95
				15	104.51
			Weighted Average Percent		6.97%

Note: * Based on 119 companies for which 1941 annual reports were available prior to April 1, 1942.

Source: Compiled by Standard & Poor's Corp. Represents data covering all industrial companies which paid common dividends in each year of the ten-year period 1932-1941, both inclusive and whose common stocks were listed on the New York Stock Exchange throughout the period. Working papers are presented in the accompanying book entitled "Investors' Appraisal of the Risks of Capital in 153 Stable Industrial Companies."

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

PROJECTION OF AVERAGE INTEREST COST ON DEBT ISSUED IN THE 1942 FINANCING
(1ST MTGE. AND 1ST LIEN SERIES "C" S. F. 3s, DUE JANUARY 1, 1962)

NET PRICE TO COMPANY - $99.42 (AFTER $60,000 ESTIMATED EXPENSES)

Scheduled Retirements			Effective Yield Based Upon Price of 99.42	Funds Available to Company			Total Cost of Capital Based on Effective Yield Rate
Par Amount	Date July 1	Price		Amount	Length of Time	Equivalent Amount for 1 yr.	
$			%	$		$	$
1	2	3	4	5	6	7=5x6	8=7x4
250,000	1942	101.25	6.70	248,550	1/2 yrs.	124,275	8,326
500,000	1943	101.25	4.21	497,100	1 1/2	745,650	31,392
500,000	1944	101.25	3.72	497,100	2 1/2	1,242,750	46,230
500,000	1945	101.25	3.51	497,100	3 1/2	1,739,850	61,069
500,000	1946	101.00	3.35	497,100	4 1/2	2,236,950	74,938
500,000	1947	101.00	3.28	497,100	5 1/2	2,734,050	89,677
500,000	1948	101.00	3.24	497,100	6 1/2	3,231,150	104,689
500,000	1949	101.00	3.20	497,100	7 1/2	3,728,250	119,304
500,000	1950	100.75	3.16	497,100	8 1/2	4,225,350	133,521
500,000	1951	100.75	3.14	497,100	9 1/2	4,722,450	148,285
500,000	1952	100.75	3.13	497,100	10 1/2	5,219,550	163,372
500,000	1953	100.75	3.12	497,100	11 1/2	5,716,650	178,359
500,000	1954	100.50	3.09	497,100	12 1/2	6,213,750	192,005
500,000	1955	100.50	3.09	497,100	13 1/2	6,710,850	207,365
500,000	1956	100.50	3.08	497,100	14 1/2	7,207,950	222,005
500,000	1957	100.50	3.08	497,100	15 1/2	7,705,050	237,316
500,000	1958	100.25	3.05	497,100	16 1/2	8,202,150	250,166
500,000	1959	100.25	3.05	497,100	17 1/2	8,699,250	265,327
500,000	1960	100.25	3.05	497,100	18 1/2	9,196,350	280,489
250,000	1961	100.25	3.04	248,550	19 1/2	4,846,725	147,340
500,000	1/1/62	100.00	3.04	497,100	20	9,942,000	302,237
Totals 10,000,000				9,942,000		104,391,000	3,263,412

Average Annual Interest Cost 3.13%

Source: Compiled by Standard & Poor's Corp.

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

COMPUTATION OF WEIGHTED AVERAGE COST RATIO OF ALL BOND ISSUES 1930-1942

Year	Average Rate %	Weight	Weighted Percent %
1930	7.20	1	7.20
1931	6.86	2	13.72
1932	6.80	3	20.40
1933	6.79	4	27.16
1934	6.79	5	33.95
1935	6.78	6	40.68
1936	7.20	7	50.40
1937	4.66	8	37.28
1938	4.66	9	41.94
1939	4.66	10	46.60
1940	4.66	11	51.26
1941	2.77	12	33.24
1942	2.88	13	37.44
Totals		91	441.27
Weighted Average Percent			4.85

Source: Compiled by Standard & Poor's Corp. from data appearing in Moody's Manuals, Company's Published Annual Reports and Bond Indentures.

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

PROJECTION OF AVERAGE INTEREST COST ON DEBT ISSUED IN THE 1941 FINANCING

(SERIAL NOTES AND 1ST LIEN AND 1ST MTGE. SERIES A AND SERIES B BONDS)

Issue	Scheduled Retirements: Par Amount $	Scheduled Retirements: Date Nov. 1	Scheduled Retirements: Price $	Effective Yield Rate %	Funds Available to Company: Amount $	Funds Available to Company: Length of Time	Funds Available to Company: Equivalent Amount for 1 yr. $	Total Cost of Capital Based on Effective Yield Rate $
	1	2	3	4	5	6	7=6x5	8=7x4
Serial Notes 0.75% to 1.50% due November 1, 1942 to 1945 (Net Price to Company - 100)	1,250,000	1942	100.00	0.75	1,250,000	2 yrs.	2,500,000	18,750
	1,250,000	1943	100.00	1.00	1,250,000	3	3,750,000	37,500
	1,250,000	1944	100.00	1.25	1,250,000	4	5,000,000	62,500
	1,250,000	1945	100.00	1.50	1,250,000	5	6,250,000	93,750
	5,000,000				5,000,000		17,500,000	212,500
1st Mtge. & 1st Lien "A" 1.65% to 2.30% due November 1, 1946 to 1950 (Net Price to Company - 100)	1,250,000	1946	100.00	1.65	1,250,000	6	7,500,000	123,750
	1,250,000	1947	100.00	1.65	1,250,000	7	8,750,000	161,875
	1,250,000	1948	100.00	2.00	1,250,000	8	10,000,000	200,000
	1,250,000	1949	100.00	2.15	1,250,000	9	11,250,000	241,875
	1,250,000	1950	100.00	2.30	1,250,000	10	12,500,000	287,500
	6,250,000				6,250,000		50,000,000	1,015,000
1st Mtge. & 1st Lien "B" S.F. 3's, November 1, 1960 (Net Price to Company - 99.02)	1,200,000	1951	101 1/2	3.22	1,188,240	11	13,070,640	420,875
	1,200,000	1952	101 1/2	3.20	1,188,240	12	14,258,880	456,284
	1,200,000	1953	101 1/2	3.18	1,188,240	13	15,447,120	491,218
	1,200,000	1954	101	3.14	1,188,240	14	16,635,360	522,350
	1,200,000	1955	101	3.13	1,188,240	15	17,823,600	557,879
	1,200,000	1956	101	3.13	1,188,240	16	19,011,840	595,071
	1,200,000	1957	100 1/2	3.10	1,188,240	17	20,200,080	626,202
	1,200,000	1958	100 1/2	3.10	1,188,240	18	21,388,320	663,038
	1,200,000	1959	100	3.07	1,188,240	19	22,576,560	693,100
	1,200,000	1960	100	3.06	1,188,240	20	23,764,800	727,203
	12,000,000				11,882,400		184,177,200	5,753,220
Average Annual Interest Cost of Above Issue								3.12%
GRAND TOTAL	23,250,000				23,132,400		251,677,200	6,980,720
Average Annual Interest Cost of All Issues								2.77%

Source: Compiled by Standard & Poor's Corp.

Exhibit 253

Table Supporting Chart No. 15

16209

PANHANDLE EASTERN PIPE LINE COMPANY

COST OF FINANCING AS INDICATED BY SALE OF $15,000,000 5.60% CUMULATIVE SINKING FUND PREFERRED STOCK ($100 PAR)

DATED - JANUARY 1, 1942: PRICE RECEIVED - $99.68 (AFTER $90,000 ESTIMATED EXPENSES)

SINKING FUND: FIXED AND CONTINGENT SINKING FUND PAYMENTS WILL RETIRE ANNUALLY 3 1/2% OF THE GREATEST AMOUNT OUTSTANDING. CALL PRICE FOR THE SINKING FUND IS $105.

	Scheduled Retirements			Effective Yield Based Upon Price of 99.68	Funds Available to Company			Total Cost of Capital Based on Effective Yield Rate
	Par Amount	Date July 1	Price		Amount	Length of Time	Equivalent Amount for 1 yr.	
	$		$	%	$		$	$
	1	2	3	4	5	6	7=5x6	8=7x4
(a)	95,200	1942	105	16.22	94,895	1/2 yrs.	47,448	7,696
	525,000	1943	105	10.82	523,320	1 1/2	784,980	84,935
	525,000	1944	105	9.03	523,320	2 1/2	1,308,300	118,139
	525,000	1945	105	6.97	523,320	3 1/2	1,831,620	127,664
	525,000	1946	105	6.65	523,320	4 1/2	2,354,940	156,604
	525,000	1947	105	6.43	523,320	5 1/2	2,878,260	185,072
	525,000	1948	105	6.29	523,320	6 1/2	3,401,580	213,959
	525,000	1949	105	6.18	523,320	7 1/2	3,924,900	242,559
	525,000	1950	105	6.10	523,320	8 1/2	4,448,220	271,341
	525,000	1951	105	6.04	523,320	9 1/2	4,971,540	300,281
	525,000	1952	105	5.99	523,320	10 1/2	5,494,860	329,142
	525,000	1953	105	5.94	523,320	11 1/2	6,018,180	357,480
	525,000	1954	105	5.91	523,320	12 1/2	6,541,500	386,603
	525,000	1955	105	5.88	523,320	13 1/2	7,064,820	415,411
	525,000	1956	105	5.85	523,320	14 1/2	7,588,140	443,906
	525,000	1957	105	5.83	523,320	15 1/2	8,111,460	472,898
	525,000	1958	105	5.81	523,320	16 1/2	8,634,780	501,681
	525,000	1959	105	5.79	523,320	17 1/2	9,158,100	530,254
	525,000	1960	105	5.78	523,320	18 1/2	9,681,420	559,586
	525,000	1961	105	5.77	523,320	19 1/2	10,204,740	588,813
	525,000	1962	105	5.75	523,320	20 1/2	10,728,060	616,863
	525,000	1963	105	5.74	523,320	21 1/2	11,251,380	645,829
	525,000	1964	105	5.73	523,320	22 1/2	11,774,700	674,690
	525,000	1965	105	5.72	523,320	23 1/2	12,298,020	703,447
	525,000	1966	105	5.72	523,320	24 1/2	12,821,340	733,381
	525,000	1967	105	5.71	523,320	25 1/2	13,344,660	761,980
	525,000	1968	105	5.70	523,320	26 1/2	13,867,980	790,475
	525,000	1969	105	5.70	523,320	27 1/2	14,391,300	820,304
	525,000	1970	105	5.69	523,320	28 1/2	14,914,620	848,642
	204,800	1971	105	5.69	204,145	29 1/2	6,022,277	342,668
Totals	15,000,000				14,962,000		225,864,125	13,232,303

Average Cost of Financing 5.86%

Note: (a) Amount to be retired at call price of $105 with initial $100,000 deposit in sinking fund.

Source: Compiled by Standard & Poor's Corp. from data contained in the Offering Prospectus.

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

HISTORICAL COST OF PREFERRED STOCK

Issue	1936 $	1937 $	1938 $	1939 $	194- $	1941 $	1942 $
$6 Class A pfd. stock, participating and redeemable ($100 par)	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	-
$6 Class B pfd. stock, non-participating and non-redeemable ($100 par)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
5.60% Cum. pfd. ($100 par)	-	-	-	-	-	-	15,000,000
Total	11,000,000	11,000,000	11,000,000	11,000,000	11,000,000	11,000,000	16,000,000
Dividend Requirements							
$6 Class A pfd. - regular	(a) 600,000	600,000	600,000	600,000	600,000	600,000	-
- participating	-	-	182,163	-	403,684	336,403	-
$6 Class B pfd.	(a) 60,000	60,000	60,000	60,000	60,000	60,000	60,000
5.60% Cum. pfd. ($100 par)	-	-	-	-	-	-	(b) 879,000
Total	660,000	660,000	842,163	660,000	1,063,684	996,403	939,000
Percent Cost	6.00%	6.00%	7.66%	6.00%	9.67%	9.06%	5.87%

Notes: (a) Paid May 3, 1937.
(b) Based on average cost considering requirement to retire issue at sinking fund price of 105.

	Weighted Average		
Year	%	Weight	Total
1936	6.00	1	6.00
1937	6.00	2	12.00
1938	7.66	3	22.98
1939	6.00	4	24.00
1940	9.67	5	48.35
1941	9.06	6	54.36
1942	5.87	7	41.09
		28	208.78
	Weighted Average Yield		7.46%

Source: Compiled by Standard & Poor's Corp.

6091

16211

Exhibit 253

Table Supporting Chart No. 20

PANHANDLE EASTERN PIPE LINE COMPANY

ASSUMED COST OF FINANCING $15,000,000 5.60% CUMULATIVE SINKING FUND PREFERRED STOCK ($100 PAR)

ASSUMED PRICE TO PUBLIC $100 PER SHARE INSTEAD OF $104 -
ASSUMED NET PRICE TO COMPANY $95.68 PER SHARE INSTEAD OF $99.68

SINKING FUND: FIXED AND CONTINGENT SINKING FUND PAYMENTS WILL RETIRE 3 1/2% OF THE GREATEST AMOUNT OUTSTANDING: CALL PRICE FOR THE SINKING FUND IS $105

	Scheduled Retirements			Effective Yield Based Upon Price of 95.68	Funds Available to Company			Total Cost of Capital Based on Effective Yield Rate
	Par Amount	Date July 1	Price		Amount	Length of Time	Equivalent Amount for 1 yr.	
	$		$	%	$		$	$
	1	2	3	4	5	6	7=5x6	8=7x4
(a)	95,200	1942	105	23.79	91,087	1/2 yrs.	45,544	10,835
	525,000	1943	105	11.75	502,320	1 1/2	753,480	88,534
	525,000	1944	105	9.31	502,320	2 1/2	1,255,800	116,915
	525,000	1945	105	8.26	502,320	3 1/2	1,758,120	145,221
	525,000	1946	105	7.68	502,320	4 1/2	2,260,440	173,602
	525,000	1947	105	7.30	502,320	5 1/2	2,762,760	201,681
	525,000	1948	105	7.04	502,320	6 1/2	3,265,080	229,862
	525,000	1949	105	6.85	502,320	7 1/2	3,767,400	258,067
	525,000	1950	105	6.70	502,320	8 1/2	4,269,720	286,071
	525,000	1951	105	6.59	502,320	9 1/2	4,772,040	314,477
	525,000	1952	105	6.50	502,320	10 1/2	5,274,360	342,833
	525,000	1953	105	6.42	502,320	11 1/2	5,776,680	370,863
	525,000	1954	105	6.36	502,320	12 1/2	6,279,000	399,344
	525,000	1955	105	6.30	502,320	13 1/2	6,781,320	427,223
	525,000	1956	105	6.25	502,320	14 1/2	7,283,640	455,228
	525,000	1957	105	6.22	502,320	15 1/2	7,785,960	484,287
	525,000	1958	105	6.19	502,320	16 1/2	8,288,280	513,045
	525,000	1959	105	6.15	502,320	17 1/2	8,790,600	540,622
	525,000	1960	105	6.13	502,320	18 1/2	9,292,920	569,656
	525,000	1961	105	6.10	502,320	19 1/2	9,795,240	597,510
	525,000	1962	105	6.08	502,320	20 1/2	10,297,560	626,092
	525,000	1963	105	6.06	502,320	21 1/2	10,799,880	654,473
	525,000	1964	105	6.05	502,320	22 1/2	11,302,200	683,783
	525,000	1965	105	6.05	502,320	23 1/2	11,804,520	711,813
	525,000	1966	105	6.02	502,320	24 1/2	12,306,840	740,872
	525,000	1967	105	6.00	502,320	25 1/2	12,809,160	768,550
	525,000	1968	105	5.99	502,320	26 1/2	13,311,480	797,358
	525,000	1969	105	5.98	502,320	27 1/2	13,813,800	826,065
	525,000	1970	105	5.97	502,320	28 1/2	14,316,120	854,672
	204,800	1971	105	5.96	196,953	29 1/2	5,780,614	344,525
Totals	15,000,000				14,352,000		216,800,558	13,534,079

Average Cost of Financing 6.24%

Note: (a) Amount to be retired at call price of $105 with initial $100,000 deposit in sinking fund.

Source: Compiled by Standard & Poor's Corp. from data obtained from the Bankers Syndicate.

Table Supporting Chart No. 21

Exhibit 253

EARNINGS-PRICE RATIOS OF NATURAL GAS PIPE LINE COMPANY COMMON STOCKS

1937 - 1941

	1937	1938	1939	1940	1941
Earnings Available for Common Stocks					
	$	$	$	$	$
El Paso Natural Gas	1,782,425	1,980,110	2,254,619	2,256,959	2,038,333
Interstate Natural Gas	2,385,513	2,032,488	2,014,221	1,972,286	2,049,129
Memphis Natural Gas	710,342	585,737	601,185	636,710	* 636,710
Southern Natural Gas	(a)	(a)	1,765,412	2,194,126	2,439,711
Panhandle Eastern	(b)	(b)	3,080,312	3,219,006	3,411,132
Northern Natural	(c)	(c)	(c)	(c)	3,346,878
Total	4,876,280	4,598,335	9,715,749	10,279,087	13,921,893
Aggregate Market Price of Common Stocks (Based on Average of High and Low Market Prices)					
	$	$	$	$	$
El Paso Natural Gas	12,913,910	14,083,994	21,284,396	20,418,100	16,471,644
Interstate Natural Gas	24,062,063	20,250,251	22,632,634	22,756,518	20,488,490
Memphis Natural Gas	4,253,488	3,619,599	3,794,148	4,023,818	3,959,511
Southern Natural Gas	(a)	(a)	8,172,166	10,896,527	16,558,241
Panhandle Eastern	(b)	(b)	32,092,838	23,768,884	29,775,695
Northern Natural	(c)	(c)	(c)	(c)	28,988,400
Total	41,229,461	37,953,844	87,976,182	81,865,847	116,241,981
Earnings Price Ratios					
	%	%	%	%	%
El Paso Natural Gas	13.80	14.06	10.59	11.05	12.37
Interstate Natural Gas	9.91	10.04	8.90	8.67	10.00
Memphis Natural Gas	16.70	16.18	15.85	15.82	16.08
Southern Natural Gas	-	-	21.60	20.13	14.73
Panhandle Eastern	-	-	9.60	13.54	11.46
Northern Natural	-	-	-	-	11.55
Weighted Average (Obtained by dividing Total Earnings Available for Common Stocks by Total Market Price of Common Stocks)	11.83	12.12	11.04	12.56	11.98
Simple Average (Represents an average of Earnings-Price Ratios of each company)	13.47	13.43	13.51	13.84	12.70

Notes: (*) Represents 1940 Earnings. 1941 Earnings not Available.
(a) Prior to May 1939 there were two classes of common outstanding, Class A and Class B.
(b) No stock was held by public prior to September, 1939.
(c) No stock was held by public prior to September, 1941.

Source: Compiled by Standard & Poor's Corp. from Annual Reports of the various companies and market prices obtained from Moody's Utility Manuals and the National Quotation Bureau.

Table Supporting Chart No. 22

Exhibit 253

AVERAGE EARNINGS PRICE RATIOS OF NATURAL GAS PIPE LINE COMPANY COMMON STOCKS

	Assuming an Equal Dollar Investment in Each Common Stock			Assuming Purchase of all Common Stock Outstanding		
	Percent	Weight	Weighted Percent	Percent	Weight	Weighted Percent
1937	13.47	1	13.47	11.83	1	11.83
1938	13.43	2	26.86	12.12	2	24.24
1939	13.51	3	40.53	11.04	3	33.12
1940	13.84	4	55.36	12.56	4	50.24
1941	12.70	5	63.50	11.98	5	59.90
		15	199.72		15	179.33
Weighted Average Percent			13.31			11.96

Source: Compiled by Standard & Poor's Corp. from data on preceding table.

Table Supporting Chart No. 25

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

MINIMUM EARNINGS REQUIRED TO MAINTAIN CREDIT POSITION

(BASED ON ACTUAL COST OF BONDS AND PREFERRED STOCK AND INVESTORS' APPRAISAL OF COMMON STOCK)

Invested Capital as of February 28, 1942	Principal Amount $	Yield Rate %	Earnings Requirements $
Long-Term Debt			
Serial Notes A, B, C & D 0.75-1.50%, 11/1/42-45	5,000,000		
1st Mtge. & Trust Lien "A" 1.65-2.30%, 1946-50	6,250,000		
1st Mtge. & 1st Lien S. F. "B" 3's, 1960	12,000,000		
1st Mtge. & 1st Lien S. F. "C" 3's, 1962	10,000,000		
Leasehold Purchase Obligations	6,445		
Total Long-Term Debt	33,256,445	(a) 2.88	957,786
Preferred Stock			
5.60% Cum. Pfd. ($100 par) (150,000 shs.)	15,000,000	(b) 5.86	879,000
$6 Cum. Pfd. Class "B" (10,000 shs.)	1,000,000	6.00	60,000
	16,000,000	5.87	939,000
Common Stock and Surplus (807,367 shs.)	28,574,090	(c) 12.00	3,428,891
Total Invested Capital	77,830,535	6.84	5,325,677

Notes: (a) Based upon average annual cost of senior capital raised in 1941 and 1942 financing.
(b) Based upon cost of preferred stock giving weight to sinking fund retirement price of 105.
(c) Based upon estimated cost of common stock financing.

Source: Compiled by Standard & Poor's Corp.

Table Supporting Chart No. 26

Exhibit 253

PANHANDLE EASTERN PIPE LINE COMPANY

MINIMUM EARNINGS REQUIRED TO MAINTAIN CREDIT POSITION

(BASED ON ACTUAL COST OF BONDS AND INVESTORS' APPRAISAL OF PREFERRED STOCK AND COMMON STOCK)

Invested Capital as of February 28, 1942	Principal Amount $	Yield Rate %	Earnings Requirements $
Long-Term Debt			
Serial Notes A, B, C & D 0.75-1.50%, 11/1/42-45	5,000,000		
1st Mtge. & Trust Lien "A" 1.65-2.30%, 1946-50	6,250,000		
1st Mtge. & 1st Lien S. F. "B" 3's, 1960	12,000,000		
1st Mtge. & 1st Lien S. F. "C" 3's, 1962	10,000,000		
Leasehold Purchase Obligations	6,445		
Total Long-Term Debt	33,256,445	(a) 2.88	957,786
Preferred Stock			
5.60% Cum. Pfd. ($100 par) (150,000 shs.)	15,000,000	(b) 6.24	936,000
$6 Cum. Pfd. Class "B" (10,000 shs.)	1,000,000	6.00	60,000
	16,000,000	6.23	996,000
Common Stock and Surplus (807,367 shs.)	28,574,090	(c) 12.00	3,428,891
Total Invested Capital	77,830,535	6.92	5,382,677

Notes: (a) Based upon average annual cost of senior capital raised in 1941 and 1942 financing.
(b) Based upon revised prices for preferred stock indicated by action of bankers syndicate in lower public offering price of $4.00 per share and giving effect to sinking fund retirement price of $105.
(c) Based upon estimated cost of common stock financing.

Source: Compiled by Standard & Poor's Corp.

Exhibit 253

Table Supporting Chart No. 27

16216

PRIME MONEY RATES
60-90 DAY TIME LOANS (N.Y.S.E.)
4-6 MONTHS COMMERCIAL PAPER (PRIME)
CALL LOANS, RENEWALS (N.Y.S.E.)
MONTHLY, 1930 TO MARCH, 1942, INCLUSIVE

	Jan. %	Feb. %	Mar. %	Apr. %	May %	June %	July %	Aug. %	Sept. %	Oct. %	Nov. %	Dec. %	Avg. %
60-90 Day Time Loans (N.Y.S.E.)													
1930	4.70	4.66	4.16	4.05	3.41	2.88	2.68	2.50	2.44	2.38	2.16	2.28	3.19
1931	2.07	1.68	1.84	1.88	1.66	1.50	1.40	1.43	1.50	2.88	3.38	3.33	2.05
1932	3.62	3.63	3.13	2.45	1.63	1.49	1.43	1.38	1.27	0.90	0.51	0.50	1.83
1933	0.50	0.78	2.91	1.18	0.84	0.90	1.11	1.05	0.62	0.63	0.77	1.01	1.03
1934	1.00	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
1935	0.88	0.88	0.88	0.61	0.27	0.25	0.25	0.25	0.25	0.31	1.00	1.00	0.57
1936	1.00	1.00	1.00	1.00	1.17	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.16
1937	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1938	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1939	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1940	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1941	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1942	1.25	1.25	1.25										
4-6 Months Commercial Paper (Prime)													
1930	4.85	4.63	4.19	3.88	3.72	3.50	3.13	3.00	3.00	3.00	2.97	2.88	3.56
1931	2.84	2.84	2.52	2.38	2.18	2.00	2.00	1.94	2.01	3.29	4.03	3.88	2.64
1932	3.88	3.84	3.63	3.70	3.27	2.94	2.53	2.32	2.25	2.07	1.75	1.65	2.84
1933	1.45	1.25	3.21	3.03	2.08	1.92	1.75	1.75	1.53	1.50	1.50	1.50	1.87
1934	1.50	1.50	1.26	1.25	1.19	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.14
1935	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.75	0.75	0.75	0.75	0.91
1936	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
1937	0.75	0.75	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94
1938	1.00	1.00	0.88	0.88	0.88	0.88	0.75	0.75	0.69	0.69	0.69	0.63	0.81
1939	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.69	0.69	0.63	0.56	0.59
1940	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
1941	0.56	0.56	0.56	0.56	0.56	0.56	0.50	0.50	0.50	0.50	0.50	0.56	0.54
1942	0.56	0.56	0.56										
Call Loans, Renewals (N.Y.S.E.)													
1930	4.64	4.32	3.69	4.00	3.12	2.62	2.20	2.21	2.19	2.00	2.00	2.23	2.94
1931	1.57	1.50	1.55	1.52	1.45	1.50	1.50	1.50	1.50	2.10	2.50	2.70	1.74
1932	2.65	2.50	2.50	2.50	2.50	2.50	2.08	2.00	2.00	1.39	1.00	1.00	2.05
1933	1.00	1.00	3.56	1.43	1.00	1.00	1.00	0.94	0.75	0.75	0.75	0.94	1.18
1934	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1935	1.00	1.00	1.00	0.64	0.25	0.25	0.25	0.25	0.25	0.29	0.75	0.75	0.56
1936	0.75	0.75	0.75	0.75	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91
1937	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1938	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1939	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1940	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1941	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1942	1.00	1.00	1.00										

Source: Standard Trade & Securities - Statistical Section.

Exhibit 253

Table Supporting Chart No. 28

16217

COMMERCIAL LOAN RATES

BANK RATES TO CUSTOMERS IN PRINCIPAL CITIES

MONTHLY, 1930-1941

	Jan. %	Feb. %	Mar. %	Apr. %	May %	June %	July %	Aug. %	Sept. %	Oct. %	Nov. %	Dec. %	Avg. %
In New York City													
1930	5.49	5.10	4.91	4.61	4.44	4.28	4.22	4.14	4.00	3.92	3.79	3.82	4.39
1931	3.74	3.89	3.67	3.67	3.57	3.66	3.70	3.58	3.50	3.82	4.55	4.48	3.82
1932	4.51	4.52	4.53	4.46	4.24	4.38	4.22	4.14	3.94	4.01	3.66	3.78	4.20
1933	3.62	3.66	4.79	3.94	3.71	3.51	3.29	3.32	3.00	2.96	2.80	2.61	3.43
1934	2.81	2.62	2.61	2.50	2.55	2.34	2.33	2.42	2.32	2.36	2.32	2.27	2.45
1935	1.79	1.81	1.81	1.74	1.81	1.79	1.74	1.76	1.66	1.73	1.73	1.78	1.76
1936	1.71	1.71	1.74	1.71	1.71	1.71	1.67	1.74	1.70	1.70	1.74	1.74	1.72
1937	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.65	1.73	1.70	1.70	1.73
1938	1.70	1.70	1.65	1.70	1.70	1.70	1.70	1.67	1.70	1.70	1.70	1.70	1.69
1939	1.73	1.70	2.15			2.15			2.04			1.96	2.07
1940			2.03			2.00			2.14			2.00	
1941			2.06			1.95			1.98			1.88	
In 7 Other Northern and Eastern Cities													
1930	5.72	5.55	5.30	4.98	4.93	4.89	4.53	4.47	4.44	4.49	4.38	4.38	4.84
1931	4.23	4.31	4.29	4.22	4.19	4.15	4.08	4.10	4.09	4.30	4.53	4.60	4.26
1932	4.86	4.93	4.93	4.89	4.89	4.92	4.80	4.88	4.71	4.68	4.60	4.61	4.81
1933	4.53	4.38	5.14	4.88	4.66	4.68	4.50	4.31	4.20	4.05	4.07	4.09	4.46
1934	4.17	3.98	3.94	3.97	3.68	3.59	3.55	3.53	3.56	3.56	3.48	3.45	3.71
1935	3.57	3.55	3.57	3.53	3.41	3.34	3.46	3.26	3.29	3.32	3.16	3.22	3.39
1936	3.12	3.16	3.14	2.96	2.99	3.02	3.09	3.02	2.97	3.07	3.05	2.94	3.04
1937	2.93	2.96	2.87	2.93	3.01	2.79	2.82	2.76	2.83	2.93	2.98	2.72	2.88
1938	2.92	2.65	2.64	2.60	2.64	2.78	2.78	2.71	2.74	2.90	2.68	2.95	2.75
1939	2.97	2.69	3.09			3.05			2.78			2.59	2.87
1940			2.67			2.49			2.56			2.53	
1941			2.53			2.58			2.62			2.45	
In 11 Southern and Western Cities													
1930	5.90	5.80	5.73	5.56	5.42	5.36	5.31	5.25	5.15	5.18	5.17	5.01	5.40
1931	5.01	4.96	4.90	4.93	4.74	4.89	4.72	4.75	4.76	4.85	5.18	5.15	4.90
1932	5.26	5.25	5.29	5.25	5.22	5.18	5.20	5.29	5.20	5.07	5.07	5.19	5.21
1933	5.11	5.05	5.35	5.25	5.27	5.15	4.99	5.00	4.95	4.82	4.74	4.76	5.04
1934	4.74	4.60	4.65	4.60	4.46	4.24	4.25	4.00	4.10	4.12	4.01	4.03	4.32
1935	4.12	3.92	3.94	3.85	3.94	3.80	3.65	3.67	3.53	3.57	3.52	3.65	3.76
1936	3.50	3.56	3.58	3.46	3.43	3.51	3.45	3.29	3.33	3.25	3.27	3.14	3.40
1937	3.23	3.15	3.17	3.28	3.25	3.29	3.27	3.26	3.30	3.28	3.26	3.23	3.25
1938	3.28	3.21	3.28	3.25	3.20	3.31	3.38	3.28	3.26	3.21	3.20	3.23	3.26
1939	3.32	3.26	3.77			3.62			3.31			3.32	3.51
1940			3.35			3.38			3.43			3.36	
1941			3.25			3.23			3.29			2.99	

Source: Federal Reserve Board - Survey of Current Business.

Exhibit 253

YIELDS ON U. S. GOVERNMENT AND MUNICIPAL BONDS

MONTHLY, 1930 TO MARCH, 1942, INCLUSIVE

	Jan. %	Feb. %	Mar. %	Apr. %	May %	June %	July %	Aug. %	Sept. %	Oct. %	Nov. %	Dec. %	Avg. %
Long Term U. S. Government Bonds													
1930	3.42	3.46	3.40	3.36	3.34	3.28	3.26	3.27	3.27	3.24	3.22	3.22	3.31
1931	3.25	3.38	3.35	3.29	3.26	3.15	3.20	3.21	3.17	3.38	3.71	3.68	3.34
1932	4.06	4.25	3.93	3.94	3.56	3.86	3.63	3.47	3.46	3.40	3.42	3.43	3.70
1933	3.26	3.22	3.59	3.39	3.47	3.28	3.22	3.27	3.22	3.28	3.31	3.53	3.34
1934	3.47	3.38	3.28	3.18	3.08	2.99	2.95	3.01	3.16	3.18	3.07	2.99	3.14
1935	2.87	2.77	2.73	2.69	2.69	2.68	2.63	2.71	2.81	2.79	2.76	2.74	2.74
1936	2.72	2.66	2.58	2.57	2.57	2.61	2.62	2.58	2.56	2.57	2.51	2.45	2.58
1937	2.41	2.41	2.62	2.80	2.75	2.73	2.68	2.70	2.75	2.73	2.68	2.63	2.66
1938	2.57	2.57	2.55	2.55	2.42	2.39	2.38	2.36	2.46	2.33	2.36	2.32	2.44
1939	2.29	2.26	2.20	2.19	2.34	1.98	2.00	2.02	2.51	2.42	2.26	2.15	2.19
1940	2.13	2.15	2.07	2.04	2.24	2.25	2.10	2.10	2.03	1.98	1.85	1.79	2.06
1941	1.89	2.02	1.95	1.86	1.82	1.78	1.76	1.83	1.83	1.81	1.78	1.97	1.86
1942	2.03	2.11	2.02										
Intermediate Term U. S. Government Bonds (about 7 1/2 years maturity)													
1930	3.90	4.00	3.88	3.73	3.72	3.52	3.35	3.25	3.20	3.14	3.12	3.12	3.49
1931	3.09	3.20	3.29	3.20	3.15	3.01	3.01	3.02	3.03	3.34	3.70	3.65	3.22
1932	4.12	4.31	3.93	3.92	3.52	3.82	3.59	3.56	3.30	3.22	3.22	3.20	3.63
1933	3.05	2.96	3.49	3.24	3.31	3.08	3.00	3.09	3.06	3.13	3.16	3.40	3.17
1934	3.42	3.31	3.23	3.10	2.85	2.68	2.54	2.50	2.62	2.88	2.91	2.74	2.90
1935	2.60	2.42	2.21	2.01	1.91	1.87	1.96	2.07	2.31	2.58	2.55	2.47	2.25
1936	2.43	2.34	2.21	2.13	2.08	2.08	2.09	2.03	1.97	1.97	1.84	1.75	2.08
1937	1.87	1.96	2.16	2.43	2.41	2.31	2.23	2.25	2.32	2.29	2.24	2.16	2.22
1938	2.04	2.00	1.97	2.48	2.15	1.73	1.78	1.75	1.85	1.74	1.74	1.70	1.91
1939	1.65	1.58	1.42	1.42	1.25	1.20	1.24	1.28	1.99	1.84	1.49	1.42	1.48
1940	1.41	1.41	1.31	1.32	1.55	1.60	1.40	1.42	1.32	1.26	1.07	0.99	1.34
1941	1.18	1.40	1.38	1.28	1.24	1.18	1.12	1.17	1.22	1.24	1.25	1.48	1.26
1942	1.56	1.66	1.54										

Source: Standard Trade & Securities - Statistical Section

Exhibit 253

YIELDS ON U. S. GOVERNMENT AND MUNICIPAL BONDS

MONTHLY, 1930 TO MARCH, 1942, INCLUSIVE

	Jan. %	Feb. %	Mar. %	Apr. %	May %	June %	July %	Aug. %	Sept. %	Oct. %	Nov. %	Dec. %	Avg. %
Short Term U. S. Government Bonds (About 3 1/2 years maturity)													
1930	3.64	3.80	3.65	3.53	3.47	3.33	3.14	3.10	3.13	3.03	3.01	2.97	3.32
1931	2.88	3.10	2.74	2.70	2.55	2.10	2.10	2.09	1.80	2.90	3.45	3.80	2.68
1932	4.52	4.38	4.15	3.80	2.40	2.74	2.42	2.80	2.81	2.75	2.55	2.45	3.13
1933	2.34	2.16	3.30	2.96	2.89	2.49	2.32	2.39	2.25	2.29	2.43	3.07	2.57
1934	2.97	2.82	2.48	2.08	1.86	1.69	1.60	1.72	2.09	2.21	2.02	1.81	2.11
1935	1.57	1.29	1.08	1.00	0.97	0.92	0.82	0.94	1.26	1.32	1.25	1.22	1.14
1936	1.12	1.04	1.01	1.01	1.00	1.05	1.10	1.04	1.03	1.06	0.98	0.98	1.03
1937	1.12	1.22	1.45	1.54	1.47	1.49	1.42	1.42	1.42	1.29	1.22	1.11	1.35
1938	1.00	0.97	0.88	0.85	0.68	0.55	0.58	0.60	0.69	0.58	0.60	0.53	0.71
1939	0.50	0.47	0.34	0.32	0.29	0.29	0.35	0.35	0.99	0.66	0.46	0.31	0.44
1940	0.31	0.33	0.28	0.32	0.60	0.72	0.55	0.54	0.41	0.37	0.30	0.32	0.42
1941	0.39	0.53	0.48	0.51	0.41	0.36	0.34	0.32	0.30	0.38	0.53	0.62	0.43
1942	0.46	0.43											
Municipal Bonds													
1930	4.22	4.24	4.19	4.11	4.11	4.10	4.05	3.97	3.97	3.94	4.00	4.05	4.07
1931	3.92	3.95	3.89	3.80	3.75	3.76	3.85	3.83	3.91	4.35	4.42	4.64	4.01
1932	4.92	5.03	4.79	4.73	4.77	4.81	4.78	4.50	4.39	4.37	4.38	4.37	4.65
1933	4.23	4.28	4.88	5.05	5.27	4.71	4.60	4.54	4.59	4.60	4.89	4.89	4.71
1934	4.67	4.48	4.23	4.12	4.00	3.88	3.85	3.88	3.94	3.84	3.78	3.61	4.03
1935	3.57	3.41	3.41	3.40	3.43	3.42	3.32	3.35	3.44	3.45	3.34	3.31	3.41
1936	3.27	3.22	3.18	3.17	3.16	3.16	3.13	3.06	2.97	2.94	2.85	2.76	3.07
1937	2.79	2.96	3.19	3.24	3.14	3.11	3.07	3.01	3.18	3.24	3.17	3.15	3.10
1938	3.03	2.99	2.99	3.03	2.91	2.91	2.87	2.82	3.02	2.82	2.74	2.75	2.91
1939	2.70	2.70	2.67	2.75	2.66	2.63	2.65	2.75	3.29	3.08	2.69	2.56	2.76
1940	2.54	2.60	2.58	2.56	2.81	2.85	2.54	2.49	2.44	2.32	2.18	2.07	2.50
1941	2.16	2.27	2.28	2.20	2.14	2.08	2.03	2.02	1.99	1.91	1.90	2.25	2.10
1942	2.33	2.58	2.58										

Source: Standard Trade & Securities - Statistical Section.

Exhibit 253

STANDARD'S HIGHEST GRADE (A1+) CORPORATE BOND YIELDS - BY INDUSTRY

MONTHLY, 1930 TO MARCH, 1942, INCLUSIVE

	Jan. %	Feb. %	Mar. %	Apr. %	May %	June %	July %	Aug. %	Sept. %	Oct. %	Nov. %	Dec. %	Avg. %
Composite													
1930	4.88	4.87	4.85	4.78	4.75	4.74	4.69	4.68	4.61	4.56	4.55	4.59	4.71
1931	4.69	4.57	4.55	4.51	4.49	4.42	4.41	4.40	4.42	4.46	4.77	4.95	4.55
1932	5.21	5.29	5.52	5.29	5.47	5.43	5.48	5.49	5.20	5.01	4.99	4.97	5.28
1933	4.90	4.53	4.97	4.97	5.08	4.68	4.57	4.48	4.44	4.48	4.48	4.70	4.69
1934	4.54	4.38	4.30	4.19	4.14	4.10	4.01	4.00	3.99	4.06	4.01	3.94	4.14
1935	3.89	3.76	3.68	3.67	3.61	3.60	3.54	3.48	3.53	3.55	3.54	3.51	3.61
1936	3.47	3.43	3.41	3.37	3.37	3.36	3.32	3.33	3.30	3.27	3.27	3.21	3.34
1937	3.22	3.22	3.27	3.37	3.34	3.33	3.31	3.30	3.33	3.33	3.30	3.27	3.30
1938	3.24	3.23	3.24	3.32	3.24	3.25	3.20	3.17	3.20	3.14	3.10	3.09	3.20
1939	3.02	3.02	2.99	2.99	2.96	2.94	2.93	2.95	3.25	3.16	3.01	2.97	3.02
1940	2.93	2.91	2.91	2.89	2.97	3.00	2.93	2.93	2.84	2.89	2.87	2.84	2.91
1941	2.87	2.88	2.89	2.92	2.88	2.86	2.83	2.80	2.79	2.77	2.76	2.84	2.84
1942	2.85	2.86	2.88										
Industrial Bonds													
1930	5.01	5.00	5.01	4.92	4.87	4.88	4.88	4.86	4.75	4.76	4.75	4.80	4.87
1931	4.91	4.77	4.77	4.72	4.71	4.66	4.63	4.68	4.75	4.71	5.00	5.19	4.79
1932	5.36	5.48	5.63	5.29	5.60	5.68	5.93	5.97	5.66	5.35	5.57	5.41	5.58
1933	5.30	5.05	5.26	5.29	5.62	5.04	4.80	4.72	4.73	4.70	4.53	4.68	4.98
1934	4.59	4.56	4.43	4.34	4.26	4.26	4.18	4.16	4.15	4.21	4.16	4.04	4.28
1935	4.00	3.89	3.82	3.84	3.82	3.78	3.74	3.69	3.66	3.57	3.48	3.54	3.72
1936	3.44	3.40	3.40	3.36	3.39	3.39	3.34	3.32	3.30	3.29	3.27	3.19	3.34
1937	3.19	3.15	3.23	3.33	3.22	3.14	3.14	3.09	3.17	3.12	3.07	3.03	3.16
1938	2.90	2.93	2.93	2.97	2.87	2.87	2.81	2.76	2.79	2.72	2.66	2.64	2.82
1939	2.63	2.63	2.64	2.59	2.58	2.63	2.59	2.59	2.97	2.87	2.65	2.59	2.64
1940	2.61	2.62	2.58	2.55	2.65	2.61	2.58	2.59	2.66	2.57	2.52	2.50	2.57
1941	2.50	2.55	2.61	2.68	2.58	2.53	2.50	2.45	2.42	2.36	2.33	2.51	2.50
1942	2.53	2.50	2.54										

Source: Standard Trade & Securities - Statistical Section.

Exhibit 253

STANDARD'S HIGHEST GRADE (A1+) CORPORATE BOND YIELDS - BY INDUSTRY

MONTHLY, 1930 TO MARCH, 1942, INCLUSIVE

	Jan. %	Feb. %	Mar. %	Apr. %	May %	June %	July %	Aug. %	Sept. %	Oct. %	Nov. %	Dec. %	Avg. %
Railroad Bonds													
1930	4.71	4.71	4.65	4.55	4.54	4.53	4.55	4.46	4.38	4.34	4.33	4.37	4.51
1931	4.50	4.38	4.35	4.32	4.33	4.26	4.27	4.24	4.29	4.39	4.73	4.97	4.42
1932	5.35	5.31	5.64	5.48	5.67	5.62	5.56	5.58	5.23	5.02	4.93	5.01	5.47
1933	4.99	4.29	4.82	4.95	4.95	4.50	4.45	4.30	4.20	4.26	4.32	4.61	4.55
1934	4.39	4.13	4.06	4.00	4.00	3.96	3.92	3.92	3.92	3.99	3.97	3.90	4.01
1935	3.82	3.70	3.61	3.66	3.60	3.59	3.49	3.49	3.48	3.51	3.52	3.50	3.58
1936	3.42	3.40	3.37	3.33	3.34	3.34	3.28	3.30	3.27	3.24	3.22	3.15	3.31
1937	3.23	3.25	3.32	3.45	3.50	3.51	3.50	3.50	3.52	3.54	3.55	3.55	3.45
1938	3.56	3.53	3.58	3.73	3.66	3.69	3.62	3.58	3.62	3.56	3.55	3.56	3.60
1939	3.50	3.47	3.41	3.40	3.37	3.32	3.30	3.30	3.32	3.43	3.34	3.34	3.39
1940	3.30	3.25	3.23	3.23	3.29	3.34	3.28	3.27	3.30	3.24	3.23	3.18	3.26
1941	3.19	3.19	3.19	3.18	3.18	3.18	3.16	3.13	3.13	3.13	3.13	3.14	3.16
1942	3.14	3.16	3.16										
Public Utility Bonds													
1930	4.99	4.96	4.98	4.93	4.89	4.87	4.74	4.80	4.77	4.67	4.67	4.70	4.83
1931	4.78	4.65	4.63	4.60	4.56	4.45	4.44	4.43	4.39	4.41	4.70	4.82	4.57
1932	4.99	5.18	5.35	5.10	5.21	5.11	5.18	5.17	4.94	4.84	4.75	4.70	5.04
1933	4.61	4.51	4.97	4.84	4.95	4.69	4.58	4.53	4.53	4.60	4.61	4.81	4.69
1934	4.67	4.53	4.47	4.31	4.21	4.15	4.02	4.00	3.98	4.05	3.98	3.94	4.19
1935	3.90	3.76	3.68	3.60	3.52	3.52	3.49	3.42	3.52	3.58	3.58	3.50	3.59
1936	3.54	3.48	3.45	3.41	3.39	3.36	3.36	3.36	3.33	3.30	3.31	3.27	3.38
1937	3.22	3.23	3.25	3.30	3.24	3.24	3.21	3.20	3.22	3.22	3.17	3.11	3.22
1938	3.08	3.08	3.06	3.09	3.01	3.00	2.98	2.96	2.99	2.94	2.87	2.85	2.99
1939	2.79	2.81	2.80	2.79	2.75	2.79	2.73	2.78	3.11	3.04	2.85	2.78	2.83
1940	2.76	2.76	2.76	2.73	2.82	2.84	2.75	2.76	2.73	2.70	2.69	2.66	2.75
1941	2.73	2.73	2.73	2.78	2.73	2.71	2.66	2.65	2.64	2.61	2.59	2.69	2.69
1942	2.72	2.75	2.77										

Source: Standard Trade & Securities - Statistical Section.

Exhibit 253

Table Supporting Chart No. 31

16222

STANDARD'S CORPORATE BOND YIELDS - BY QUALITY RATINGS

MONTHLY, 1937 TO MARCH, 1942, INCLUSIVE

	Jan. %	Feb. %	Mar. %	Apr. %	May %	June %	July %	Aug. %	Sept. %	Oct. %	Nov. %	Dec. %	Avg. %
Composite - A1+													
1937	3.13	3.23	3.36	3.42	3.34	3.33	3.31	3.30	3.33	3.32	3.30	3.27	3.30
1938	3.24	3.23	3.24	3.32	3.24	3.25	3.20	3.17	3.20	3.14	3.10	3.09	3.20
1939	3.02	3.02	2.99	2.99	2.96	2.94	2.93	2.95	3.25	3.16	3.01	2.97	3.02
1940	2.93	2.91	2.91	2.89	2.97	3.00	2.93	2.93	2.84	2.89	2.87	2.84	2.91
1941	2.87	2.88	2.89	2.92	2.88	2.86	2.83	2.80	2.79	2.77	2.76	2.84	2.84
1942	2.85	2.86	2.88										
Composite - A1													
1937	3.40	3.51	3.62	3.67	3.60	3.58	3.54	3.52	3.58	3.62	3.60	3.56	3.57
1938	3.56	3.56	3.60	3.73	3.57	3.57	3.47	3.42	3.48	3.40	3.36	3.35	3.51
1939	3.26	3.24	3.20	3.24	3.16	3.13	3.14	3.17	3.57	3.38	3.19	3.16	3.24
1940	3.13	3.12	3.11	3.08	3.16	3.18	3.09	3.07	3.02	2.99	2.96	2.94	3.07
1941	2.97	3.00	3.00	3.02	2.99	2.94	2.90	2.92	2.91	2.87	2.85	2.93	2.94
1942	2.94	2.98	3.00										
Composite - A													
1937	3.92	3.95	4.05	4.12	4.08	4.07	4.01	4.00	4.11	4.28	4.36	4.40	4.11
1938	4.39	4.43	4.54	4.74	4.55	4.58	4.38	4.28	4.36	4.21	4.15	4.15	4.40
1939	4.12	4.05	3.95	3.96	3.90	3.84	3.82	3.83	4.02	3.90	3.75	3.71	3.90
1940	3.66	3.64	3.64	3.61	3.69	3.74	3.62	3.57	3.55	3.51	3.42	3.41	3.59
1941	3.36	3.37	3.36	3.37	3.33	3.31	3.27	3.27	3.26	3.25	3.25	3.33	3.31
1942	3.37	3.35	3.34										
Composite - B1+													
1937	4.42	4.47	4.57	4.71	4.67	4.69	4.68	4.66	4.85	5.20	5.42	5.48	4.82
1938	5.59	5.63	5.83	6.02	5.71	5.84	5.49	5.41	5.62	5.28	5.21	5.25	5.57
1939	5.10	5.10	4.92	5.16	5.07	4.89	4.84	4.86	4.91	4.79	4.72	4.75	4.93
1940	4.63	4.63	4.57	4.48	4.64	4.71	4.49	4.43	4.37	4.22	4.15	4.12	4.54
1941	4.05	4.07	4.05	4.02	4.02	4.02	3.93	3.96	3.99	4.00	3.99	4.12	4.02
1942	4.06	4.11	4.14										
Composite - B1													
1937	5.04	5.00	5.27	5.50	5.54	5.64	5.65	5.65	6.00	6.77	7.15	7.19	5.87
1938	7.51	7.68	8.32	8.43	8.00	8.38	7.29	7.11	7.34	6.82	6.70	6.90	7.54
1939	6.82	6.77	6.46	6.90	6.65	6.32	6.31	6.16	6.15	5.86	5.80	5.79	6.33
1940	5.78	5.81	5.74	5.72	6.00	6.18	5.89	5.89	5.73	5.59	5.51	5.52	5.78
1941	5.39	5.43	5.37	5.27	5.24	5.23	5.22	5.21	5.24	5.24	5.20	5.42	5.29
1942	5.27	5.27	5.32										
Composite - B													
1937	6.09	6.18	6.55	6.90	7.22	7.55	7.32	7.34	8.08	9.03	9.52	9.87	7.64
1938	10.21	10.51	11.20	11.86	10.68	10.76	9.58	9.48	9.96	9.00	8.85	9.07	10.07
1939	8.66	8.53	8.25	9.10	8.80	8.50	8.30	8.22	7.98	7.59	7.55	7.69	8.26
1940	7.69	7.86	7.94	7.75	8.49	8.70	8.07	8.07	7.68	7.35	7.14	7.10	7.82
1941	6.73	6.95	6.89	6.55	6.50	6.54	6.57	6.56	6.63	6.59	6.59	6.96	6.66
1942	6.88	6.88	6.79										

Source: Standard Trade & Securities - Statistical Section.

Exhibit 253

Table Supporting Chart No. 32

16223

STANDARD'S PUBLIC UTILITY BOND YIELDS
BY QUALITY RATING
MONTHLY, 1936 TO MARCH, 1942, INCLUSIVE

	Jan. %	Feb. %	Mar. %	Apr. %	May %	June %	July %	Aug. %	Sept. %	Oct. %	Nov. %	Dec. %	Avg. %
Aa1+													
1936	3.26	3.18	3.18	3.18	3.16	3.13	3.11	3.12	3.10	3.09	3.04	3.00	3.13
1937	3.04	3.12	3.25	3.30	3.24	3.24	3.21	3.20	3.22	3.22	3.17	3.11	3.19
1938	3.08	3.08	3.06	3.09	3.01	3.00	2.98	2.96	2.99	2.94	2.87	2.85	3.00
1939	2.79	2.81	2.80	2.79	2.75	2.71	2.73	2.78	3.11	3.04	2.85	2.78	2.83
1940	2.76	2.76	2.76	2.73	2.82	2.84	2.75	2.76	2.73	2.70	2.69	2.66	2.75
1941	2.73	2.73	2.73	2.78	2.73	2.71	2.66	2.65	2.64	2.61	2.59	2.69	2.69
1942	2.72	2.75	2.77										
Aa1													
1936	3.65	3.62	3.65	3.64	3.62	3.60	3.59	3.60	3.54	3.51	3.48	3.47	3.58
1937	3.36	3.50	3.59	3.66	3.54	3.53	3.49	3.47	3.48	3.50	3.44	3.49	3.50
1938	3.36	3.36	3.32	3.38	3.27	3.24	3.22	3.20	3.23	3.18	3.14	3.11	3.25
1939	3.06	3.05	3.00	3.00	2.97	2.95	2.95	3.00	3.38	3.23	3.04	3.00	3.06
1940	2.97	2.96	2.95	2.93	3.00	3.03	2.96	2.93	2.89	2.84	2.85	2.86	2.93
1941	2.90	2.90	2.87	2.88	2.85	2.79	2.76	2.79	2.78	2.71	2.70	2.61	2.81
1942	2.86	2.90	2.92										
A													
1936	4.23	4.21	4.12	4.14	4.08	4.06	4.07	4.02	3.96	3.94	3.85	3.85	4.04
1937	3.83	3.82	3.95	3.97	3.95	3.93	3.88	3.82	3.89	4.10	4.05	4.00	3.93
1938	4.01	4.03	4.00	4.06	3.93	3.89	3.84	3.81	3.83	3.76	3.69	3.71	3.88
1939	3.68	3.64	3.60	3.63	3.57	3.56	3.56	3.62	3.95	3.77	3.55	3.50	3.64
1940	3.46	3.43	3.42	3.36	3.42	3.44	3.36	3.29	3.26	3.20	3.11	3.09	3.32
1941	3.10	3.11	3.08	3.08	3.00	2.96	2.93	2.95	2.92	2.92	2.90	2.99	2.99
1942	3.03	3.02	3.02										
Baa1+													
1936	4.80	4.73	4.68	4.70	4.73	4.60	4.57	4.57	4.53	4.54	4.53	4.53	4.63
1937	4.52	4.55	4.65	4.77	4.73	4.78	4.76	4.68	4.78	5.01	5.01	5.03	4.77
1938	4.96	5.07	5.07	5.21	4.89	4.85	4.71	4.71	4.79	4.68	4.57	4.57	4.84
1939	4.46	4.47	4.40	4.52	4.39	4.29	4.27	4.28	4.55	4.49	4.39	4.38	4.41
1940	4.31	4.25	4.18	4.14	4.25	4.19	4.03	3.98	3.92	3.85	3.80	3.75	4.06
1941	3.68	3.64	3.59	3.53	3.49	3.43	3.36	3.31	3.31	3.33	3.33	3.40	3.45
1942	3.42	2.46	3.50										
Baa1													
1936	5.59	5.51	5.51	5.61	5.59	5.47	5.29	5.22	5.14	5.17	5.18	5.10	5.37
1937	5.03	5.06	5.40	5.63	5.71	5.88	5.78	5.65	5.95	6.36	6.51	6.45	5.78
1938	6.43	6.71	6.95	6.91	6.31	6.37	6.06	5.98	6.12	6.85	5.64	5.72	6.26
1939	5.67	5.50	5.33	5.47	5.23	5.08	5.04	4.94	5.49	5.23	5.06	4.92	5.25
1940	5.05	5.21	5.16	5.22	5.51	5.58	5.34	5.33	5.24	5.11	5.08	5.06	5.24
1941	4.95	4.96	4.86	4.77	4.72	4.65	4.59	4.52	4.49	4.45	4.45	4.57	4.67
1942	4.54	4.49	4.65										
Baa													
1936	6.01	5.86	6.33	6.48	6.45	6.25	6.04	5.98	5.94	5.91	5.99	6.17	6.13
1937	6.01	6.16	6.77	7.04	7.50	7.90	7.61	7.60	8.41	9.07	8.70	9.18	7.66
1938	9.29	9.58	9.66	9.57	8.61	8.67	8.27	8.31	8.62	8.02	7.95	8.25	8.73
1939	7.80	7.28	7.24	7.98	7.68	7.29	7.07	6.93	7.37	7.10	6.87	6.82	7.28
1940	6.92	7.00	7.09	6.93	7.59	7.68	7.21	7.13	6.81	6.64	6.47	6.39	6.99
1941	6.06	6.21	6.07	5.99	5.90	5.82	5.76	5.70	5.65	5.64	5.64	6.11	5.88
1942	6.09	6.08	6.45										

Source: Standard Trade & Securities - Statistical Section.

Exhibit 253

BONDS, DEBENTURES AND NOTES ISSUED BY NATURAL GAS COMPANIES

1936 - 1941

	Bond Issues	Debentures	*Notes	Total	Average Yield on Bonds and Debentures (Based on Price to Public)
1936	$57,000,000	$16,050,000	$ -	$ 73,050,000	4.59%
1937	39,725,000	-	22,000,000	61,975,000	4.26
1938	60,750,000	23,000,000	38,300,000	122,050,000	3.86
1939	55,350,000	-	17,000,000	72,350,000	3.52
1940	41,050,000	-	5,650,000	46,700,000	3.28
1941	80,950,000	900,000	43,050,000	124,900,000	3.11

Note: * Includes Bank Loans.

Source: Compiled by Standard & Poor's Corp. from "Security Issues of Electric & Gas Utilities 1935-1941" report of Public Utilities Division of S.E.C., Prospectuses of Companies, Moody's Public Utility Manuals and Standard Corporation Records.

Exhibit 253

NOTES ISSUED BY NATURAL GAS COMPANIES 1936-1941

		Approx. Offering Date	Principal Amount	Price to Public $	Price to Public Yield %
1936					
None					
1937					
Montana-Dakota Utilities Co.	4 1/4% Serial Bank Loans 1938 - 1942	Mar.	$ 1,500,000	100.00	4.25
Detroit City Gas Co.	Unsecured 25 mos. 3%	July 3	500,000	100.00	3.50
Detroit City Gas Co.	Secured 3 yrs. 3 1/2%	July 3	4,000,000	100.00	3.00
Lone Star Gas Corp.	Unsecured Bank Loan Notes:				
	1 3/4-4% 1938-1942	July	10,000,000	100.00	-
	1 3/4-4% 1938-1942	July	6,000,000	100.00	-
	Total		$22,000,000		
1938					
Lone Star Gas Corp.	Serial Notes 2 7/8% 1939-1945	Aug. 22	$11,300,000	100.00	2.88
Michigan Consol. Gas Corp.	Serial Notes 4% 1939-1948	Oct. 6	8,000,000	101.00(a)	3.80(a)
El Paso Natural Gas Co.	Bank Loan Notes 3% due serially	Dec. 15	4,000,000	100.00	3.00
Cities Service Gas Co.	Serial Notes to Banks 3 1/4% 1940-1941	Dec.	15,000,000	100.00	3.25
	Total		$38,300,000		
1939					
Southern Natural Gas Co.	4 1/2% Collateral Notes	Mar.	$ 900,000	Not available	
Montana-Dakota Utilities Co.	4 1/4% Promissory Notes Serially 1941-1946	May 23	2,100,000	100.00	4.25
Northern Natural Gas Co.	Notes 2 1/8% 1940-1946	Aug. 15	6,000,000	100.00	2.13
Oklahoma Natural Gas Co.	Unsecured Notes 2.10% to 2 3/4% 1941-46	Aug. 17	8,000,000	100.00	-
	Total		$17,000,000		
1940					
New Mexico Gas Co.	Notes - Installment 5% 1940-1945	Jan. 4	$ 150,000	100.00(a)	5.00(a)
El Paso Natural Gas Co.	Bank Loan 2 3/4% Serially 1941-1944	Feb.	1,000,000	100.00	2.75
Montana-Dakota Utilities Co.	Promissory Notes 4 1/2%	June	350,000	100.00	4.50
Montana-Dakota Utilities Co.	Serial Notes 1 1/2%-3 1/2%, 1941-1950	Nov.-Dec.	3,900,000	100.00	-
Arkansas Western Gas Co.	Promissory Notes 4% 1941-1950	Dec. 17	250,000	100.00	4.00
	Total		$ 5,650,000		
1941					
Mississippi River Fuel Co.	Bank Loan 2 3/4% Serially to 1946	Jan.	$ 7,300,000	100.00	2.75
Lone Star Gas Corp.	Bank Loan Notes 2% 1941-1950	Jan. 29	21,850,000	100.00	2.00
Lone Star Gas Corp.	Bank Loan Notes 2 1/4% 1951	Jan. 29	4,150,000	100.00	2.25
Panhandle Eastern Pipe Line Co.	Notes 0.75%-1.50% 1942-1945	Jan. 30	5,000,000	100.00	-
Texas Southwestern Gas Co.	Promissory Notes 4% 1941-1946	Mar. 20	250,000	100.00	4.00
Southern Natural Gas Co.	2 1/2% Serial Notes 1942-1947	June 1	4,500,000	100.00	2.50
	Total		$43,050,000		

Note: (a) Prices averaged.
Source: "Security Issues of Electric & Gas Utilities 1935-1941" report of Public Utilities Division of S.E.C., Prospectuses of Companies, Moody's Public Utility Manuals and Standard Corporation Records.

Exhibit 253

ANNUAL INTEREST COST OF NATURAL GAS MORTGAGE BONDS AND DEBENTURES

SOLD BETWEEN JANUARY 1, 1936 AND DECEMBER 31, 1941

1936	No. of Issues	Par Value $	Weighted Avg. Yields Based on Net Price to Company %	Based on Price to Public %
Private Sales	1	2,000,000	(a)	4.25
Not Rated	0	-	-	-
Al+	0	-	-	-
Al	0	-	-	-
A	1	10,000,000	4.62	4.18
Bl+	4	44,000,000	4.96	4.59
Bl	2	4,750,000	5.37	4.80
B	2	12,300,000	5.45	4.91
Total or Average	10	73,050,000	5.03	4.52

1937				
Private Sales	3	11,850,000	(a)	4.06
Not Rated	1	1,000,000	5.61	5.00
Al+	0	-	-	-
Al	0	-	-	-
A	0	-	-	-
Bl+	4	26,875,000	*4.51	4.31
Bl	0	-	-	-
B	0	-	-	-
Total or Average	8	39,725,000	4.56	4.26

* Based on 3 issues only.

1938				
Private Sales	3	29,000,000	(a)	3.80
Not Rated	0	-	-	-
Al+	0	-	-	-
Al	1	20,000,000	3.56	3.33
A	1	34,000,000	4.41	4.16
Bl+	0	-	-	-
Bl	0	-	-	-
B	1	750,000	7.12	6.26
Total or Average	6	83,750,000	4.14	3.86

1939				
Private Sales	3	29,000,000	3.39	3.28
Not Rated	1	350,000	4.78	4.00
Al+	0	-	-	-
Al	0	-	-	-
A	0	-	-	-
Bl+	2	26,000,000	4.10	3.79
Bl	0	-	-	-
B	0	-	-	-
Total or Average	6	55,350,000	3.73	3.52

1940				
(b)Private Sales	3	4,450,000	(a)	3.51
Not Rated	1	300,000	6.02	5.00
Al+	0	-	-	-
Al	1	30,000,000	3.19	3.07
A	1	2,000,000	3.93	3.90
Bl+	1	3,500,000	4.44	4.00
Bl	0	-	-	-
B	1	800,000	5.06	4.50
Total or Average	8	41,050,000	3.42	3.28

(b). Does not include one issue sold privately which was rated "A".

1941				
Private Sales	7	25,100,000	(a)	3.30
Not Rated	0	-	-	-
Al+	0	-	-	-
Al	3	28,500,000	3.09	2.93
A	1	13,000,000	3.22	3.00
Bl+	4	14,400,000	3.42	3.16
Bl	1	850,000	5.37	4.75
B	0	-	-	-
Total or Average	16	81,850,000	3.12	3.11

Note: (a) Not available.

Source: Data shown on preceding chart.

Table Supporting Chart No. 37

16227

Exhibit 253

EL PASO NATURAL GAS COMPANY

EARNINGS RATIOS - ACTUAL AND ASSUMING A 6 1/2% RATE OF RETURN ON INVESTED CAPITAL

Invested Capital (Excluding Reserves) as of January 31, 1942

Debt:		
First Mortgage 3 1/2s, due 1953	$ 6,000,000	
First Mortgage 3s, due 1955	2,700,000	
3% Serial Notes Payable to Banks due to 1945	1,175,000	
2 3/4% Serial Notes Payable to Banks due to 1944	750,000	
2 1/2% Serial Notes Payable to Banks due to 1946	1,350,000	
Par Value of Debt	11,975,000	
Less: Debt Discount and Expense	174,411	
Net Debt		$11,800,589
Preferred Stock:		
7% Cumulative Preferred Stock (Par Value $100)		1,479,700
Common Stock and Surplus:		
Common Stock (Par Value $3) 601,594 shares	1,804,782	
Premium on Common Stock	3,497,212	
Earned Surplus	5,165,727	
Total Common Stock and Surplus		10,467,721
Total Invested Capital		$23,748,010

Return on Invested Capital and Ratios

	Actual Year Ended Jan. 31, 1942	Assuming 6 1/2% Rate of Return
Available for Fixed Charges	$2,610,478	$1,543,621
Actual Fixed Charges (Interest and Amortization)	415,877	415,877
Bond Quality Ratios:		
Fixed Charges Times Earned	6.28 Times	3.71 Times
Income Available to Par Value of Debt	21.80%	12.89%

Source: Compiled by Standard & Poor's Corp. from data appearing on company's published interim statements.

Table Supporting Chart No. 38

Exhibit 253

NORTHERN NATURAL GAS COMPANY

EARNINGS RATIOS - ACTUAL AND ASSUMING A 6 1/2% RATE OF RETURN ON INVESTED CAPITAL

Invested Capital (Excluding Reserves) as of December 31, 1941

Debt:		
1st Mtge. and 1st Lien "A" S.F. 3 1/4s due July 1, 1954	$16,000,000	
Bank Loan 2 1/8% due semi-annually to January 1, 1946	4,000,000	
Par Value of Debt	20,000,000	
Less: Debt Discount and Expense	87,242	
Net Debt		$19,912,758
Preferred Stock:		
None		
Common Stock and Surplus:		
Common Stock ($20 par) 1,015,000 shares	20,300,000	
Surplus	3,411,914	
Total Common Stock and Surplus		23,711,914
Total Invested Capital		$43,624,672

Return on Invested Capital and Ratios

	Actual Year Ended Dec. 31, 1941	Assuming 6 1/2% Rate of Return
Available for Fixed Charges	$3,947,870	$2,835,604
Actual Fixed Charges (Interest and Amortization)	629,400	629,400
Bond Quality Ratios:		
Fixed Charges Times Earned	6.27 times	4.51 times
Income Available to Par Value of Debt	19.74%	14.18%

Source: Compiled by Standard & Poor's Corp. from data appearing in Company's Annual Report to Stockholders.

Table Supporting Chart No. 30

Exhibit 253

SOUTHERN NATURAL GAS COMPANY

EARNINGS RATIOS - ACTUAL AND ASSUMING A 6 1/2% RATE OF RETURN ON INVESTED CAPITAL

Invested Capital (Excluding Reserves) as of September 30, 1941

Debt:		
1st Mtge. Pipeline S.F. 3 1/4s, due Apr. 1, 1956	$13,000,000	
2 1/2% Serial Notes due semi-annually to May 1, 1947	4,500,000	
Alabama Gas Co. 1st Mtge. 4 1/2s, 1951	1,351,000	
Alabama Natural Gas Corp. City of Talladega 5s, 1947	40,000	
Par Value of Debt	18,891,000	
Less: Debt Discount and Expense	65,263	
Net Debt		$18,825,737
Preferred Stock:		
None		
Common Stock and Surplus:		
Common Stock (Par Value $7.50) 1,409,212 153/1030 shares	10,569,091	
Premium on Common Stock	2,380,275	
Capital Surplus	1,276,020	
Earned Surplus	3,837,995	
Total Common Stock and Surplus		18,063,381
Total Invested Capital		$36,889,118

Return on Invested Capital and Ratios

	Actual 12 Mos. Ended Sept. 30, 1941	Assuming 6 1/2% Rate of Return
Available for Fixed Charges	$4,179,246	$2,397,793
Actual Fixed Charges (Interest and Amortization)	1,073,222	1,073,222
Bond Quality Ratios:		
Fixed Charges Times Earned	3.89 Times	2.23 Times
Income Available to Par Value of Debt	22.12%	12.69%

Source: Compiled by Standard & Poor's Corp. from data appearing on company's published interim statements.

Exhibit 253

CITIES SERVICE GAS COMPANY

EARNINGS RATIOS - ACTUAL AND ASSUMING A 6 1/2% RATE OF RETURN ON INVESTED CAPITAL

Invested Capital (Excluding Reserves) as of December 31, 1940

Debt:		
First Pipeline 3 3/4s, 1947-54	$20,000,000	
Debenture 5 1/2s, 1956	8,000,000	
Secured Notes Payable (Secured by an equal par amount of First Pipeline 3 1/4s, due serially as follows: $2,000,000 each March 20 to 1946, inclusive and $1,000,000 September 20, 1946	13,000,000	
Par Value of Debt	41,000,000	
Less: Debt Discount and Expense	1,466,485	
Net Debt		$39,533,515
Preferred Stock: None		
Common Stock and Surplus:		
Common Stock (no par) 300,000 shares	30,000,000	
Surplus	6,784,781	
Total Common Stock and Surplus		36,784,781
Total Invested Capital		$76,318,296

Return on Invested Capital and Ratios

	Actual Year Ended Dec. 31, 1940	Assuming 6 1/2% Rate of Return
Available for Fixed Charges	$6,999,889	$4,960,689
Actual Fixed Charges (Interest and Amortization)	1,834,744	1,834,744
Bond Quality Ratios:		
Fixed Charges Times Earned	3.82 times	2.70 times
Income Available to Par Value of Debt	17.07%	12.10%

Source: Compiled by Standard & Poor's Corp. from data appearing in Moody's Public Utility Manual for 1941.

Table Supporting Chart No. 41

Exhibit 253

MISSISSIPPI RIVER FUEL CORPORATION

EARNINGS RATIOS - ACTUAL AND ASSUMING A 6 1/2% RATE OF RETURN ON INVESTED CAPITAL

Invested Capital (Excluding Reserves) as of December 31, 1941

Debt:		
Notes Payable to Bank:		
2 3/4%, due November 30, 1947	$2,200,000	
2 3/4%, due quarterly $250,000 to February 1, 1948	6,250,000	
Net Debt		$ 8,450,000
Preferred Stock:		
None		
Common Stock and Surplus:		
Common Stock (Par $10) 655,220 shares	6,552,200	
Surplus (Deficit)	(143,848)	
Total Common Stock and Surplus		6,408,352
Total Invested Capital		$14,858,352

Return on Invested Capital and Ratios

	Actual Year Ended Dec. 31, 1941	Assuming 6 1/2% Rate of Return
Available for Fixed Charges	$1,467,858	$965,793
Actual Fixed Charges (Interest and Amortization)	257,325	257,325
Bond Quality Ratios:		
Fixed Charges Times Earned	5.70 Times	3.75 Times
Income Available to Par Value of Debt	17.37%	11.43%

Parentheses indicate red figures.

Source: Compiled by Standard & Poor's Corp. from data appearing in company's annual report to stockholders.

Exhibit 253

Table Supporting Chart No. 43

16232

DEBT COVERAGE RATIOS OF PANHANDLE EASTERN PIPE LINE CO.

AT VARIOUS LEVELS OF NET OPERATING REVENUE - ACTUAL AND IDEAL

Invested Capital (Excluding Reserves) as of February 28, 1942

Debt - Serial Notes 0.75-1.50% due Nov. 1, 1942-1945	$ 5,000,000	
1st Mtge. & 1st Lien "A" 1.65%-2.30% due Nov. 1, 1946-1950	6,250,000	
1st Mtge. & 1st Lien "B" S.F. 3's, due Nov. 1, 1940-1960	12,000,000	
1st Mtge. & 1st Lien "C" S.F. 3's, due Jan. 1, 1942-1962	10,000,000	
Leasehold Purchase Obligations	6,445	
Par Value of Debt		$33,256,445
Preferred Stock:		
$6 Class B Cum. Pfd., no par	1,000,000	
5.60% Cum. Pfd. $100 par	15,000,000	
Total Preferred Stock		16,000,000
Common Stock and Surplus:		
Common Capital Stock (no par) 807,367 shares	20,184,175	
Premium and Assessments on Capital Stock	42,490	
Earned Surplus	8,347,425	
Total Common Stock and Surplus		28,574,090
Total Invested Capital		$77,830,535

Return on Invested Capital and Ratios

	Actual Year Ended Feb. 28, 1942		Minimum Earnings Necessary to Maintain Credit Position	Ideal Ratios
	Taxes at 1941 Rates	Taxes at Morgenthau Proposal		
Operating Revenue before Taxes	$10,723,619	$10,723,619		
Federal Taxes	4,362,372*	6,197,000*		
Net Operating Revenue	$ 6,361,247	$ 4,526,619	$5,382,677	
Fixed Charges	884,153**	884,153**	884,153**	
Bond Quality Ratios:				
Fixed Charges Times Earned	7.19 Times	5.12 Times	6.09 Times	4.00 Times
Income Available to Par Value of Debt	19.13%	13.61%	16.19%	16.00%

Notes: * Includes charges in lieu of Federal Income and Excess Profits Taxes.
** Excludes credit for interest charged to construction of $47,823.

Source: Compiled by Standard & Poor's Corp.

Table Supporting Chart No. 44
Page 1 of 3

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Exhibit 253

DEBT COVERAGE RATIOS OF PANHANDLE EASTERN PIPE LINE COMPANY

AT VARIOUS LEVELS OF NET OPERATING REVENUES - ASSUMING A 6 1/2% RATE OF RETURN

Invested Capital (Excluding Reserves) as of February 28, 1942

Debt:		
Serial Notes 0.75%-1.50%, due Nov. 1, 1942-1945	$ 5,000,000	
1st Mtge. & 1st Lien. "A" 1.65%-2.30% due Nov. 1, 1946-1950	6,250,000	
1st Mtge. & 1st Lien "B" S.F. 3's, due Nov. 1, 1960	12,000,000	
1st Mtge. & 1st Lien "C" S.F. 3's, due Jan. 1, 1962	10,000,000	
Leasehold Purchase Obligations	6,445	
Total Debt		$33,256,445
Preferred Stock:		
$6 Class B. Cum. Pfd. (no par)	1,000,000	
5.60% Cum. Pfd. ($100 par).	15,000,000	
Total Preferred Stock		16,000,000
Common Stock and Surplus:		
Common Cap. Stock (no par) 807,367 shs.	20,184,175	
Premium and Assessment on Capital Stock	42,490	
Earned Surplus	8,347,425	
Total Common Stock and Surplus		28,574,090
Total Invested Capital		$77,830,535

Invested Capital as of February 28, 1942

		Source
Total Gas Plant Classified	$78,715,508	"Watkins" Exhibit 200
Add: Gas Sale Contracts (Other)	354,271	" " 200
	79,069,779	
Deduct: Reserves for Depreciation & Depletion	13,133,885	" " 197
Net Investment in Plant	65,935,894	
Add: Working Capital per Commission for Rate Making Purposes	1,000,000	Estimated
	66,935,894	

Return on Invested Capital and Ratios

	Assumed 6 1/2% Rate of Return		Assumed 6 1/2% Rate of Return	
	Taxes at 1941 Rates	Taxes at Morgenthau Proposal	Taxes at 1941 Rates	Taxes at Morgenthau Proposal
Operating Revenue before Federal Taxes	$7,455,564	$7,455,564	$6,001,555	$6,001,555
Federal Taxes	2,396,579	3,913,815	1,650,722	2,867,305
Net Operating Revenue	5,058,985	3,541,749	4,350,833	3,134,250
Fixed Charges	884,153	884,153	884,153	884,153
Net Income	$4,174,832	$2,657,596	$3,466,680	$2,250,097
Bond Quality Ratios:				
Fixed Charges Times Earned	5.72 Times	4.01 Times	4.92 Times	3.54 Times
Income Available to Par Value of Debt	15.21%	10.65%	13.08%	9.42%

Source: Compiled by Standard & Poor's Corp.

Table Supporting Chart No. 44
No. 2 of 3

Exhibit 253

FEDERAL EXCESS PROFITS & INCOME TAXES

BASED ON 1941 RATES

Net Before Taxes	$6,001,555	Panhandle	$4,142,552
Fixed Charges	884,153	Illinois	128,000
		Michigan	811,000
		Indiana	36,000
Excess Profits Net	$5,117,402		$5,117,552

Net Before Taxes	$7,455,564	Panhandle	$5,600,000
Fixed Charges	884,411	Illinois	128,000
		Michigan	811,000
		Indiana	36,000
Excess Profits Net	$6,571,153		$6,575,000

	Panhandle	Illinois	Michigan	Indiana		Panhandle	Illinois	Michigan	Indiana	
Excess Profits Net Income	$4,142,552	$128,000	$811,000	$36,000		$5,600,000	$128,000	$811,000	$36,000	
Less:										
Specific Exemptions	5,000	5,000	5,000	5,000		5,000	5,000	5,000	5,000	
Credit Based on Income	4,618,000	-	603,000	23,700		4,618,000	-	603,000	23,700	
Credit Based on Invested Capital	-	182,000	-	-		-	182,000	-	-	
Carry Over	-	36,000	-	-		-	36,000	-	-	
Additional Credit Based on Income Resulting from New Capital Financing	190,000	-	-	-		190,000	-	-	-	
Adjusted Excess Profits Net Income	None	None	$203,000	$ 7,300		$ 787,000	None	$203,000	$ 7,300	
Excess Profit Tax:										
First $ 20,000 at 25%			$ 7,000	$ 2,555		$ 7,000		$ 7,000	$ 2,555	
Next 30,000 at 40%			12,000			12,000		12,000		
Next 50,000 at 45%			22,500			22,500		22,500		
Next 150,000 at 50%			51,500			78,000		51,500		
Next 250,000 at 55%						137,000				
Over 500,000 at 60%						172,200				
Total Excess Profits Tax	None	None	$ 93,000	$ 2,555	$95,555	$ 426,200	None	$ 93,000	$ 2,555	$521,755
Normal & Surtax:										
Excess Profits Net Income	$4,142,552	$128,000	$811,000	$36,000		$5,600,000	$128,000	$811,000	$36,000	
Less: Excess Profits Tax	-	-	93,000	2,555		426,200	-	93,000	2,555	
Subject to Normal Tax & Surtax	$4,142,552	$128,000	$718,000	$33,445		$5,173,800	$128,000	$718,000	$33,445	
Normal Tax:										
Corporations with Income Slightly Over $25,000										
First $ 5,000 at 15%				$ 750					$ 750	
Next 15,000 at 17%				2,550					2,550	
Next 5,000 at 19%				950					950	
Next 8,447 at 27%				2,125					2,125	
Corporations with Income Over $25,000 at 24%	$ 994,212	$ 30,720	$172,300			$1,241,712	$ 30,720	$172,300		
Surtax:										
First $ 25,000 at 6%	1,500	1,500	1,500	1,500		1,500	1,500	1,500	1,500	
Over 25,000 at 7%	288,829	7,210	48,510	591		360,416	7,210	48,510	591	
Total Normal & Surtax	$1,283,941	$ 39,430	$222,300	$ 9,466	$1,555,167	$1,603,628	$ 39,430	$222,300	$ 9,466	$1,874,824
Total Federal Taxes	$1,283,941	$ 39,430	$315,300	$12,021	$1,650,722	$2,029,828	$ 39,430	$315,330	$12,021	$2,396,579

Source: Compiled by Standard & Poor's Corporation.

Exhibit 253

FEDERAL EXCESS PROFITS & INCOME TAXES

BASED ON MORGENTHAU PROPOSAL

Net before Taxes	$6,001,555	Panhandle	$4,142,552		Net before Taxes	$7,455,564	Panhandle	$5,600,000	
Fixed Charges	884,153	Illinois	128,000		Fixed Charges	884,411	Illinois	128,000	
		Michigan	811,000				Michigan	811,000	
		Indiana	36,000				Indiana	36,000	
Excess Profits Net	$5,117,402		$5,117,552		Excess Profits Net	$6,571,153		$6,575,000	

	Panhandle	Illinois	Michigan	Indiana		Panhandle	Illinois	Michigan	Indiana	
Excess Profits Net Income	$4,142,552	$128,000	$811,000	$36,000		$5,600,000	$128,000	$811,000	$36,000	
Less:										
Specific Exemption	5,000	5,000	5,000	5,000		5,000	5,000	5,000	5,000	
Credit based on Income	4,618,000	-	603,000	25,700		4,618,000	-	603,000	25,700	
Credit based on Invested Capital	-	182,000	-	-		-	182,000	-	-	
Carry-Over	-	36,000	-	-		-	36,000	-	-	
Additional Credit based on Income from New Capital Financing	190,000	-	-	-		190,000	-	-	-	
Adjusted Excess Profits Net Income	None	None	203,000	7,300		787,000	None	203,000	7,300	
Excess Profits Tax:										
$ 20,000 at 50%			10,000	3,650		10,000		10,000	3,650	
30,000 at 55%			16,500			16,500		16,500		
50,000 at 60%			30,000			30,000		30,000		
130,000 at 65%			66,950			97,500		66,950		
250,000 at 70%						175,000				
Over $500,000 at 75%						215,250				
Excess Profits Tax	None	None	123,450	3,650	$ 127,000	544,250	None	123,450	3,650	$ 671,350
Normal and Surtax:										
Excess Profits Net Income	4,142,552	128,000	811,000	36,000		5,600,000	128,000	811,000	36,000	
Less: Excess Profits Tax	-	-	123,450	3,650		544,250	-	123,450	3,650	
Subject to Normal & Surtax	4,142,552	128,000	687,550	32,350		5,055,750	128,000	687,550	32,350	
Normal Tax:										
Corporations with Income slightly over $25,000:										
$ 5,000 at 15%				750					750	
15,000 at 17%				2,550					2,550	
5,000 at 19%				950					950	
at 37%				2,720					2,720	
Corporations over $25,000 at 24%	994,212	30,720	165,012			1,213,380	30,720	165,012		
Surtax:										
Corporations with Income slightly over $25,000:										
$25,000 at 1%				4,000					4,000	
at 3%				2,279					2,279	
Corporations over $25,000 at 3%	1,284,191	39,680	213,141			1,567,283	39,680	213,141		
Total Normal & Surtax	2,278,403	70,400	378,153	13,249	2,740,205	2,780,663	70,400	378,153	13,249	3,243,465
Total Federal Taxes	$2,278,403	$ 70,400	$501,603	$16,899	$2,867,305	$3,324,913	$ 70,400	$501,603	$16,899	$3,913,815

Source: Compiled by Standard & Poor's Corp.

Exhibit 253

EFFECT OF INCREASED GROSS REVENUE AND TAXES UPON PANHANDLE'S NET OPERATING REVENUE

	Pro Forma Income Account Year Ended Feb. 28, 1942			*Estimated Increase in Gross Operating Revenue			Minimum Earnings Necessary to Maintain Credit Position
	Based on 1941 Tax Rates	Based on Morgenthau Tax Proposal		of $1,154,390	of $3,438,088	of $5,771,948	
	$	$		Assuming Morgenthau Tax Proposal			$
Gross Operating Revenue	18,378,378	18,378,378		19,532,768	21,816,466	24,150,326	
Operating Expenses (excluding Taxes)	6,758,914	6,758,914	36.8%	7,188,059	8,028,459	8,887,320	
State, Local & Misc. Taxes	895,846	895,846	4.9%	957,106	1,069,007	1,183,366	
Net before Federal Taxes	10,723,618	10,723,618		11,387,603	12,719,000	14,079,640	
Federal Excess Profits Taxes	(4,362,371	6,197,000		7,978,921	8,876,684	4,794,187	
Federal Income Taxes	(			3,720,652	3,905,806	4,095,016	
Net Operating Revenue	6,361,247	4,526,618		4,688,030	4,936,510	5,190,437	5,382,677
Bond Quality Ratios							
Actual Fixed Charges - $884,153 (excluding credit for interest charged to construction of $47,823):							
Fixed Charges Times Earned	7.19	5.12		5.30	5.58	5.87	6.09
Actual Par Value of Debt - $33,256,445							
Income Available for Charges to Par Value of Debt	19.13%	13.61%		14.10%	14.64%	15.61%	16.19%

Note: * Estimated as follows:

Gross Operating Revenue for Years Ended December 31:

1937	$9,662,909
1938	9,907,129
1939	11,996,769
1940	13,535,453
1941	15,434,857

Increase - year 1941 over 1937 - $5,771,948
Increase - year 1941 over 1939 - $3,438,088
Average Annual Increase 1937-41 $1,154,390

Source: Compiled by Standard & Poor's Corp.

Exhibit 253

ESTIMATED EXCESS PROFITS NET INCOME

	Pro Forma Income Account Feb. 28, 1942		Increase in Gross Revenue of $5,771,948	Increase in Gross Revenue of $3,438,068	Increase in Gross Revenue of $1,154,390
	$		$	$	$
Net before Federal Taxes	10,723,618		14,079,640	12,719,000	11,387,603
Interest Revenue	20,345		20,345	20,345	20,345
	10,743,963		14,099,985	12,739,345	11,407,948
Income Deductions	836,330		884,153*	884,153*	884,153*
	9,907,633		13,215,832	11,855,192	10,523,795
Excess Profits Tax Net Income	9,633,903	97.24%	12,850,103	11,527,016	10,232,366
Panhandle	8,658,903	89.88%	11,549,673	10,360,482	9,196,851
Illinois	128,000	1.33%	170,906	153,309	136,090
Michigan	811,000	8.42%	1,081,979	970,575	861,565
Indiana	36,000	0.37%	47,545	42,650	37,860
Excess Profits Tax Net Income Illinois) Michigan) Indiana)	975,000		1,300,430	1,166,534	1,035,515
Dividends Received by Panhandle	532,509 54.6%		710,035	636,928	565,391
Excess Profits Taxes	2,566,146		4,794,187	3,876,684	2,978,921
Normal and Surtax Tax	3,633,329		4,095,016	3,905,806	3,720,652
Total Federal Taxes	6,199,475		8,889,203	7,782,490	6,699,573

Note: * Excludes credit for interest on construction of $47,823.

Source: Compiled by Standard & Poor's Corp.

Exhibit 253

FEDERAL TAXES ASSUMING AN INCREASE OF $3,438,088 IN GROSS REVENUE

	Panhandle		Illinois		Michigan		Indiana		
Estimated Excess Profits Net Income as Recomputed		10,360,482		153,309		970,575		42,650	
Less: Dividends Received		636,928		-		-		-	
		9,723,554		153,309		970,575		42,650	
Less:									
Specific exemption	5,000		5,000		5,000		5,000		
Excess Profits Credit based on Income	4,618,000		-		603,000		23,700		
Excess Profits Credit based on Invested Capital	-		182,000		-		-		
Excess Profits Credit Carry-over	-		36,000		-		-		
Additional Excess Profits Credit based on Income resulting from Net New Capital Financing	190,000	4,813,000	-	223,000	-	608,000	-	28,700	
Adjusted Excess Profits Net Income Subject to Tax		4,910,554		None		362,575		13,950	
Excess Profits Tax:	Net Income	Tax			Net Income	Tax	Net Income	Tax	
First $20,000 at 80%	20,000	10,000			20,000	10,000	13,950	6,975	
Next 30,000 at 85%	30,000	16,500			30,000	16,500			
Next 50,000 at 80%	50,000	30,000			50,000	30,000			
Next 150,000 at 65%	150,000	97,500			150,000	97,500			
Next 250,000 at 70%	250,000	175,000			112,575	78,803			
All over $500,000 at 75%	4,410,554	3,307,906							
Estimated Excess Profits Tax		3,636,906		None		232,803		6,975	$3,876,684
Normal Tax and Surtax:									
Excess Profits Net Income as Recomputed		10,360,482		153,309		970,575		42,650	
Less: Excess Profits Tax	3,636,906	-		-	232,803	-	6,975	-	
85% of Dividends Received	541,389	4,178,295	-	-	-	232,803	-	6,975	
Estimated Normal Tax and Surtax Net Income		6,182,187		153,309		737,772		35,675	
Normal Tax:									
Corporations with Net Income slightly over $25,000:									
First $ 5,000 at 15%								750	
Next 15,000 at 17%								2,550	
Next 5,000 at 19%								950	
Next 10,675 at 37%								3,950	
Corporations with Net Income over $25,000:									
Flat Rate 24%		1,483,725		36,794		177,065			
Surtax:									
Corporations with Net Income slightly over $25,000:									
First $25,000 at 18%								4,000	
Next 10,675 at 31%								3,309	
Corporations with Net Income over $25,000 at 31%		1,916,478		47,626		228,709			
Estimated Normal Tax and Surtax		3,400,203		84,380		405,774		15,509	3,905,806
Estimated Total Federal Taxes		7,037,109		84,380		638,577		22,484	$7,782,490

Source: Compiled by Standard & Poor's Corporation.

Exhibit 253

FEDERAL TAXES ASSUMING AN INCREASE OF $5,771,948 IN GROSS REVENUE

	Panhandle		Illinois		Michigan		Indiana		
Estimated Excess Profits Net Income as Recomputed		11,549,673		170,906		1,081,979		47,545	
Less: Dividends Received		710,035		-		-		-	
		10,839,638		170,906		1,081,979		47,545	
Less:									
Specific exemption	5,000		5,000		5,000		5,000		
Excess Profits Credit based on Income	4,618,000		-		603,000		23,700		
Excess Profits Credit based on Invested Capital	-		132,000		-		-		
Excess Profits Credit Carry-over	-		36,000		-		-		
Additional Excess Profits Credit based on Income resulting from Net New Capital Financing	190,000	4,813,000	-	223,000	-	608,000	-	28,700	
Adjusted Excess Profits Net Income Subject to Tax		6,026,638		None		473,979		18,845	
Excess Profits Tax:	**Net Income**	**Tax**			**Net Income**	**Tax**	**Net Income**	**Tax**	
First $ 20,000 at 50%	20,000	10,000			20,000	10,000	18,845	9,423	
Next 30,000 at 55%	30,000	16,500			30,000	16,500			
Next 50,000 at 60%	50,000	30,000			50,000	30,000			
Next 150,000 at 65%	150,000	97,500			150,000	97,500			
Next 250,000 at 70%	250,000	175,000			223,979	156,785			
All Over $500,000 at 75%	5,826,638	4,144,979							
Estimated Excess Profits Tax		4,473,979		None		310,785		9,423	$4,794,187
Normal Tax and Surtax:									
Excess Profits Net Income as Recomputed		11,549,673		170,906		1,081,979		47,545	
Less: Excess Profits Tax	4,473,979				310,785		9,423		
85% of Dividends Received	603,530	5,077,509	-	-	-	310,785	-	9,423	
Estimated Normal Tax and Surtax Net Income		6,472,164		170,906		771,194		38,122	
Normal Tax:									
Corporations with Net Income slightly over $25,000:									
First $ 5,000 at 15%								750	
Next 15,000 at 17%								2,550	
Next 5,000 at 19%								950	
Next 13,122 at 37%								4,855	
Corporations with Net Income over $25,000:									
Flat Rate 24%		1,553,319		41,017		185,066			
Surtax:									
Corporations with Net Income over $25,000:									
First $25,000 at 10%								4,000	
Next 13,122 at 31%								4,067	
Corporations with Net Income over $25,000 - 31%		2,006,371		52,981		239,070			
Estimated Normal Tax and Surtax		3,559,690		93,998		424,136		17,172	4,095,016
Estimated Total Federal Taxes		8,033,669		93,998		734,941		26,595	$8,889,203

Source: Compiled by Standard & Poor's Corporation.

Exhibit 253

FEDERAL TAXES ASSUMING AN INCREASE OF $1,154,390 IN GROSS REVENUE

	Panhandle		Illinois		Michigan		Indiana		
Estimated Excess Profits Net Income as Recomputed		9,196,851		136,090		861,565		37,860	
Less: Dividends Received		565,391		-		-		-	
		8,631,460		136,090		861,565		37,860	
Less:									
Specific exemption	5,000		5,000		5,000		5,000		
Excess Profits Credit based on Income	4,618,000		-		603,000		23,700		
Excess Profits Credit based on Invested Capital	-		182,000		-		-		
Excess Profits Credit Carry-over	-		36,000		-		-		
Additional Excess Profits Credit based on Income resulting from Net New Capital Financing	190,000	4,813,000	-	223,000	-	608,000	-	28,700	
Adjusted Excess Profits Net Income Subject to Tax		3,818,460		None		253,565		9,160	
Excess Profits Tax:	**Net Income**	**Tax**			**Net Income**	**Tax**	**Net Income**	**Tax**	
First $ 20,000 at 50%	20,000	10,000			20,000	10,000	9,760	4,580	
Next 30,000 at 55%	30,000	16,500			30,000	16,500			
Next 50,000 at 60%	50,000	30,000			50,000	30,000			
Next 150,000 at 65%	150,000	97,500			150,000	97,500			
Next 250,000 at 70%	250,000	175,000			3,565	2,496			
All Over $500,000 at 75%	3,318,460	2,488,845							
Estimated Excess Profits Tax		2,817,845		None		156,496		4,580	$2,978,921
Normal Tax and Surtax:									
Excess Profits Net Income as Recomputed		9,196,851		136,090		861,565		37,860	
Less: Excess Profits Tax	2,817,845		-		156,496		4,580		
85% of Dividends Received	480,582	3,298,427	-	-	-	156,496	-	4,580	
Estimated Normal Tax and Surtax Net Income		5,898,424		136,090		705,069		33,280	
Normal Tax:									
Corporations with Net Income slightly over $25,000:									
First $ 5,000 at 15%								750	
Next 15,000 at 17%								2,550	
Next 5,000 at 19%								950	
Next 8,280 at 37%								3,064	
Corporations with Net Income over $25,000:									
Flat Rate 24%		1,415,622		32,662		169,217			
Surtax:									
Corporations with Net Income slightly over $25,000:									
First $25,000 at 16%								4,000	
Next 8,280 at 31%								2,567	
Corporations with Net Income over $25,000 - 31%		1,828,811		42,188		218,671			
Estimated Normal Tax and Surtax		3,244,133		74,850		387,888		13,881	3,720,652
Estimated Total Federal Taxes		6,061,978		74,850		544,384		18,461	$6,699,573

Source: Compiled by Standard & Poor's Corporation.

Exhibit 253

STATISTICS FOR 1941 RELATIVE TO CHARTS NUMBER 2 TO 9

INCLUSIVE OF EXHIBIT NO. 65

Exhibit No. 65
Chart No.

2 **Growth of Natural Gas in U. S. A.** - Comparable figures for 1941 not available.

3 **F. R. B. Index** -

Table shows		Latest figures are
1938	88	89
1939	108	108
1940	122	123
1941		135

Consumption of Natural Gas in U. S. A. - Comparable figures for 1941 not available.

4 **Revenue from Natural Gas Consumed in U. S. A.** - Comparable figures for 1941 not available.

5 **Average Revenue per M.C.F. from Natural Gas Consumed in U. S. A.** - Comparable figures for 1941 not available.

Average Price per M.C.F. Received by Panhandle Eastern Pipe Line Co.

	Total Gas Sales M.C.F.	Gross Revenue $	Cents Per M.C.F.
41	63,686,819	14,688,283	23.06

6 **Panhandle's Natural Gas Sales by States - 1941**

	Michigan	Illinois	Indiana & Ohio	Missouri	Texas, Oklahoma & Kansas	Total	Industry Consumption
M.C.F.	24,170,883	9,128,718	19,852,163	10,388,923	2,166,132	63,686,819	N.A.

7 & 8 **Gross Revenue and Operating Ratios of Panhandle Compared with Other Pipe Line Companies**

1941	Gross Revenue	In Relatives 1934 = 100	Operating Expenses Excl. Taxes	Ratio	Operating Expenses Incl. Taxes	Ratio
Panhandle Eastern Pipe Line Co.	$15,434,857	506.31	$6,651,706	43.10	$9,975,331	64.63
Cities Service Gas	N.A.	-	N.A.	-	N.A.	-
El Paso Natural Gas	6,691,934	329.69	2,895,965	43.28	4,101,431	61.29
Interstate Natural Gas	N.A.	-	N.A.	-	N.A.	-
Memphis Natural Gas	N.A.	-	N.A.	-	N.A.	-
Mississippi River Fuel	N.A.	-	N.A.	-	N.A.	-
Northern Natural	N.A.	-	N.A.	-	N.A.	-
Southern Natural Gas	N.A.	-	N.A.	-	N.A.	-
Total Other Pipe Line Cos.	N.A.	-	N.A.	-	N.A.	-
Total Industry	N.A.	-	N.A.	-	N.A.	-

9 **Panhandle Eastern Pipe Line Co. - 1941 Revenue and Expenses**

	Gross Revenue	Operating Expenses Excl. Taxes	Taxes: State, Local & Misc. Fed.	Taxes: Federal Income	Taxes: Federal Excess Profits	Taxes: Total	Net Operating Income
1941	$15,434,857	$6,651,706	$733,623	$1,690,000	$900,000	$3,233,623	$5,459,525
% of Gross Revenue	100.00	43.10				21.53	35.37

Source: Compiled by Standard & Poor's Corporation.

6153

16242

Exhibit 254

INVESTORS' APPRAISAL OF THE RISKS OF CAPITAL IN

[illegible] INDUSTRIAL COMPANIES

FOR THE YEARS 1937-1941, INCLUSIVE

(Also contains [illegible] per cent data for the railroad industry supplemental to Exhibit 69 and 69-A)

Prepared by

[illegible]

of

[illegible]

Exhibit 254

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INVESTORS' APPRAISAL OF THE RISKS OF CAPITAL IN 153 STABLE INDUSTRIAL COMPANIES

1. Purpose of this Exhibit
2. Method of Selecting Companies to be Included in Study
3. Method of Procedure
4. Summary of the Analyses

SECTION I

Complete List of Industrial Companies Whose Common Stocks Were Listed on the New York Stock Exchange from January 1, 1932 to April 1, 1942 and Selection Showing Such Companies Which Paid Common Dividends in Each Year 1932-1941, Inclusive

SECTION II

Summary Showing Computation of "Investors' Appraisal of the Risks of Capital" Represented by 153 Stable Industrial Companies

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Working Papers Showing the Computation of "Investors' Appraisal of the Risks of Capital" of Each of the 153 Stable Industrial Companies

SECTION IV

Working Papers Showing the Computation of "Investors' Appraisal of the Risks of Capital" in the Natural Gas Industry as Compared with Other Divisions of the Utility Industry for the Full Year 1941 Supplemental to Data for the Years 1937, 1938, 1939 and 1940 Already Filed in these Proceedings as Exhibits Nos. 63 and 64

Exhibit 254

INVESTORS' APPRAISAL OF THE RISKS OF CAPITAL IN 153 STABLE INDUSTRIAL COMPANIES

1. Purpose of this Exhibit:

The purpose of this exhibit is to present data showing the investors' appraisal of the risks of capital in stable industrial companies which, it was believed, would be a helpful addition to the material already prepared and presented in these Hearings as Exhibits Nos. 63 and 64 covering the natural gas industry as compared with other divisions of the utility industry.

2. Method of Selecting Companies to be Included in Study:

Throughout the United States there are operating thousands upon thousands of industrial companies whose securities are outstanding in the hands of the general public and upon which the "Investors' Appraisal of Overall Capital Risks" could be computed. For the present purpose, however, I was not interested in the appraisal of risk that might be shown for highly speculative ventures. Rather, I wished to ascertain what the investing public was demanding by way of rate of return on overall earnings-price ratio from stable industrial companies with a long record of profitable operation.

Many methods can be propounded for making a selection of such companies. The test of stability over a period of years, however, it seems to me, lies in the dividend paying ability of a company through periods of depression and prosperity. Therefore, for the purpose of this study I decided to limit the analyses to companies which had paid dividends not only on preferred stocks but also on common stocks in each year of the decade, 1932-1941, inclusive. This period was selected since it included the worst year of depression ever experienced in the United States and was sufficiently long to eliminate from consideration those companies with only a short successful background.

In past studies of "Investors' Appraisal" criticism has sometimes been levied at findings on the score that marketability of stocks was in some instances rather thin and that the results shown therefore did not necessarily present an accurate picture. While I do not agree with such criticism, in order to avoid its recurrence in the present study, I confined my selection of companies to those whose common stocks had been listed on the New York Stock Exchange for at least the ten year period, 1932-1941, inclusive, and for which there could be no question as to their marketability.

As is shown in Section I of this exhibit, there were 470 companies whose common stocks were listed on the New York Stock Exchange throughout the complete

period from January 1, 1932 to April 1, 1942. Of these 470 companies, a total of 153 paid dividends in each year of the decade 1932-1941, inclusive.

3. Method of Procedure:

The method of procedure followed here was exactly identical to that used to determine the "Investors' Appraisal of the Risks of Capital in the Natural Gas Industry as Compared with Other Divisions of the Utility Industry" and outlined fully in Exhibit No. 68, pages 5-8, inclusive. In summary, such method was as follows:

(1) For each of the years, 1937-1941, inclusive, the indicated total market value of all of the securities of a single company was determined by multiplying the number of each class of security (bonds, preferred and common stocks as the case may be) outstanding at the end of each year by the average of its high and low market quotations in that year.

(2) Next there was determined for the individual company the total earnings available for distribution to the securities after taxes, depreciation and all other miscellaneous charges, as reported in the particular company's reports to stockholders.

(3) The earnings so determined under (2) above were then divided by the indicated market value of all securities as determined under (1) above and a rate for the period in question was thus obtained.

(4) Having determined in the manner described above the investors' appraisal of the risks of capital employed in each company selected, the indicated market value of the 153 industrial companies determined under (1) was added to obtain the indicated market value of the capital securities of the entire group. Similarly, the earnings available for distribution to the securities of each of the companies, as determined under (2) were added to obtain the total earnings available for distribution to securities of the entire group. The latter figure was then divided by the former in order to obtain the investors' overall appraisal of the risks of all capital in the group. This was done for each of the years 1937-1941, inclusive.

4. Summary of the Analyses:

A summary of the analyses of the 153 stable industrial companies is contained in the following table:

Investors' Appraisal of Overall Capital Risk
153 Stable Industrial Companies

	Indicated Market Value of Capital	Earnings Available for Capital	Investors' Appraisal of Risks of Capital
	($1,000)	($1,000)	%
1937	22,692,237	1,550,677	6.83
1938	19,423,780	1,011,742	5.21
1939	21,068,880	1,315,905	6.25
1940	19,871,449	1,418,677	7.14
1941*	14,601,745	1,166,698	7.99
(a) Weighted Average Percent			6.97%

Notes: * Based on 119 companies for which 1941 annual reports were available prior to April 1, 1942.
(a) Based on applying weights of 1 to 5 respectively to the years 1937-1941 respectively.

SIGNED AT NEW YORK CITY, APRIL , 1942

PAUL B. COFFMAN

Exhibit 254

SECTION I

COMPLETE LIST OF INDUSTRIAL COMPANIES

WHOSE COMMON STOCKS WERE LISTED ON THE NEW YORK STOCK EXCHANGE

FROM JANUARY 1, 1932 TO APRIL 1, 1942

AND

SELECTION SHOWING SUCH COMPANIES WHICH PAID COMMON DIVIDENDS

IN EACH YEAR 1932-1941, INCLUSIVE

Exhibit 254

6103

COMPLETE LIST OF INDUSTRIAL COMPANIES WHOSE COMMON STOCKS WERE LISTED ON THE NEW YORK STOCK EXCHANGE

FROM JANUARY 1, 1932 TO APRIL 1, 1942

		Companies Which Paid Common Dividends Each Year 1932-1941, Incl.
1	Abraham & Straus, Inc.	X
2	Adams-Millis Corp.	X
3	Addressograph-Multigraph Corp.	
4	Air Reduction Co., Inc.	X
5	Air-Way Elec. Appliance Corp.	
6	Alaska Juneau Gold Mining Corp.	X
7	Allied Chemical & Dye Corp.	X
8	Allis-Chalmers Mfg. Co.	
9	Alpha Portland Cement Co.	
10	Amalgamated Leather Co., Inc.	
11	Amerada Petroleum Corp.	X
12	American Agricultural Chem. Co.	
13	American Bank Note Co.	
14	American Brake Shoe & Foundry Co.	X
15	American Can Co.	X
16	American Car & Foundry Co.	
17	American Chain & Cable Co., Inc.	
18	American Chicle Co.	X
19	American Coal Co. of Alleghany Co.	
20	American Colortype Co.	
21	American Commercial Alcohol Corp.	
22	American Encaustic Tiling Co., Inc.	
23	American Hawaiian Steamship Co.	X
24	American Hide & Leather Co.	
25	American Home Products Corp.	X
26	American Ice Co.	
27	American Locomotive Co.	
28	American Mach. & Foundry Co.	X
29	American Mach. & Metals, Inc.	
30	American Metal Co., Ltd.	
31	American Radiator & Standard Sanitary Corp.	
32	American Rolling Mill Co.	
33	American Safety Razor Corp.	X
34	American Seating Co.	
35	American Ship Building Co.	X
36	American Smelting & Refining Co.	
37	American Snuff Co.	X
38	American Steel Foundries	
39	American Stores Co.	
40	American Sugar Refining Co.	
41	American Sumatra Tobacco Corp.	
42	American Tobacco Co.	X
43	American Woolen Co.	
44	American Zinc, Lead & Smelting Co.	
45	Anaconda Copper Mining Co.	
46	Anaconda Wire & Cable Co.	
47	Andes Copper Mining Co.	
48	A. P. W. Paper Co., Inc.	
49	Archer-Daniels-Midland Co.	X
50	Armour & Co.	
51	Arnold Constable Corp.	
52	Artloom Corp.	
53	Associated Dry Goods Corp.	
54	Atlantic Gulf & W. Indies S.S. Lines	
55	Atlantic Refining Co.	X
56	Atlas Powder Co.	
57	Atlas Tack Corp.	
58	Austin, Nichols Co., Inc.	
59	Aviation Corp.	
60	Barker Bros. Corp.	
61	Barnsdall Oil Co.	
62	Bayuk Cigars, Inc.	
63	Beatrice Creamery Co.	
64	Beech-Nut Packing Co.	X
65	Belding-Hemingway Co.	
66	Bendix Aviation Corp.	
67	Best & Co., Inc.	X
68	Bethlehem Steel Corp.	
69	Bigelow-Sanford Carpet Co., Inc.	
70	Blaw-Knox Co.	
71	Bloomingdale Bros., Inc.	
72	Blumenthal & Co., Inc.	
73	Bohn Aluminum & Brass Corp.	X
74	Borden Co.	X
75	Borg-Warner Corp.	X
76	Briggs Mfg. Co.	
77	Briggs & Stratton Corp.	X
78	Brown Shoe Co., Inc.	X
79	Brunswick-Balke-Collender Co.	
80	Bucyrus-Erie Co.	
81	Budd Mfg. Co. (E. G.)	
82	Budd Wheel Co.	
83	Bullard Co.	
84	Bulova Watch Co., Inc.	
85	Burroughs Adding Mach. Co.	X
86	Butte Copper & Zinc Co.	
87	Byers (A. M.) Co.	
88	California Packing Corp.	
89	Callahan Zinc-Lead Co.	
90	Calumet & Hecla Cons. Copper Co.	
91	Campbell, Wyant & Cannon Foundry Co.	
92	Canada Dry Ginger Ale, Inc.	
93	Cannon Mills Co.	X
94	Case (J. I.) Co.	
95	Caterpillar Tractor Co.	X
96	Celanese Corp. of Amer.	
97	Central Aguirre Associates	X
98	Century Ribbon Mills, Inc.	
99	Cerro de Pasco Copper Corp.	
100	Certain-teed Products Corp.	
101	Checker Cab Mfg. Corp.	
102	Chicago Pneumatic Tool Co.	
103	Chicago Yellow Cab Co., Inc.	X
104	Chickasha Cotton Oil Co.	
105	Childs Co.	
106	Chile Copper Co.	
107	Chrysler Corp.	X
108	City Ice & Fuel Co.	X
109	City Stores Co.	
110	Clark Equipment Co.	
111	Cluett, Peabody & Co., Inc.	X
112	Coca-Cola Co.	X
113	Colgate-Palmolive-Peet Co.	X
114	Collins & Aikman Corp.	
115	Columbian Carbon Co.	X
116	Commercial Solvents Corp.	
117	Conde Nast Publications, Inc.	
118	Congoleum Nairn, Inc.	X
119	Consolidated Cigar Corp.	
120	Consolidated Film Industries, Inc.	
121	Consolidated Laundries Corp.	
122	Container Corp. of Amer.	
123	Continental Baking Co.	
124	Continental Can Co., Inc.	X
125	Continental-Diamond Fibre Co.	
126	Continental Motors Corp.	
127	Continental Oil Co.	
128	Corn Products Refining Co.	X
129	Coty, Inc.	
130	Cream of Wheat Corp.	X
131	Crosley Corp.	
132	Crown Cork & Seal Co., Inc.	
133	Crown Zellerbach, Inc.	
134	Crucible Steel Co. of Amer.	
135	Cuban-Amer. Sugar Co.	
136	Cudahy Packing Co.	
137	Curtis Publishing Co.	
138	Curtiss-Wright Corp.	
139	Cutler-Hammer, Inc.	
140	Deere & Co.	
141	Devoe & Raynolds, Inc.	
142	Diamond Match Co.	X
143	Dome Mines, Ltd.	X
144	Douglas Aircraft Co., Inc.	
145	Dresser Mfg. Co.	
146	Dunhill International, Inc.	
147	Duplan Corp.	X
148	Du Pont de Nemours (E.I.) & Co.	X
149	Eastern Rolling Mill Co.	
150	Eastman Kodak Co.	X
151	Eaton Mfg. Co.	X
152	Electrical & Musical Industries, Ltd.	
153	Electric Auto-Lite Co.	
154	Electric Boat Co.	
155	Electric Storage Battery Co.	X
156	Endicott Johnson Corp.	X
157	Equitable Office Bldg. Corp.	
158	Eureka Vacuum Cleaner Co.	
159	Evans Products Co.	
160	Exchange Buffet Corp.	
161	Fair (The)	
162	Fairbanks Morse & Co.	
163	Federal Mining & Smelting Co.	
164	Federal Motor Truck Co.	
165	Federated Department Stores, Inc.	X
166	Filene's (Wm.) Sons, Co.	X
167	Firestone Tire & Rubber Co.	X
168	First National Stores, Inc.	X
169	Florsheim Shoe Co.	
170	Food Machinery Corp.	
171	Foster Wheeler Corp.	
172	Franklin Simon & Co., Inc.	
173	Freeport Sulphur Co.	X

Exhibit 254

COMPLETE LIST OF INDUSTRIAL COMPANIES WHOSE COMMON STOCK WERE LISTED ON THE NEW YORK STOCK EXCHANGE

FROM JANUARY 1, 1932 TO APRIL 1, 1942

		Companies Which Paid Common Dividends Each Year 1932-1941, Incl.
174	Gabriel Co.	
175	Gamewell Co.	
176	General American Transp. Corp.	X
177	General Baking Co.	X
178	General Bronze Corp.	
179	General Cable Corp.	
180	General Cigar Co., Inc.	X
181	General Elec. Co.	X
182	General Foods Corp.	X
183	General Mills, Inc.	X
184	General Motors Corp.	X
185	General Outdoor Adv. Co., Inc.	
186	General Printing Ink Corp.	X
187	General Railway Signal Co.	
188	General Refractories Co.	
189	Gillette Safety Razor Co.	X
190	Gimbel Bros., Inc.	
191	Glidden Co.	
192	Gobel (Adolph), Inc.	
193	Goodrich (B. F.) Co.	
194	Goodyear Tire & Rubber Co.	
195	Gotham Silk Hosiery Co., Inc.	
196	Graham-Paige Motors Corp.	
197	Granby Consol. Min. & Smelt. & Pwr. Co.	
198	Granite City Steel Co.	X
199	Grant (W.T.) Co.	X
200	Great Northern Iron Ore Properties	
201	Great Western Sugar Co.	
202	Guantanamo Sugar Co.	
203	Hall (W. F.) Printing Co.	
204	Hamilton Watch Co.	
205	Harbison-Walker Refractories Co.	
206	Hayes Mfg. Corp.	
207	Helme (G. W.) Co.	X
208	Hercules Motor Corp.	
209	Hercules Powder Co.	X
210	Hershey Chocolate Corp.	X
211	Holland Furnace Co.	
212	Holland (A.) & Son, Inc.	
213	Homestake Mining Co.	X
214	Houdaille-Hershey Corp.	
215	Houston Oil Co. of Texas	
216	Howe Sound Co.	
217	Hudson Motor Car Co.	
218	Hupp Motor Car Corp.	
219	Indian Refining Co.	
220	Industrial Rayon Corp.	
221	Ingersoll-Rand Co.	X
222	Inland Steel Co.	
223	Inspiration Consol. Copper Co.	
224	Intercontinental Rubber Co.	
225	Interlake Iron Corp.	
226	International Bus. Mach. Corp.	X
227	International Harvester Co.	X
228	International Mercantile Marine Co.	
229	International Nickel Co. Canada, Ltd.	
230	International Salt Co.	X
231	International Shoe Co.	X
232	International Silver Co.	
233	Interstate Dept. Stores, Inc.	
234	Intertype Corp.	
235	Island Creek Coal Co.	X
236	Jewel Tea Co., Inc.	X
237	Johns-Manville Corp.	
238	Jones & Laughlin Steel Corp.	
239	Kaufmann Dept. Stores, Inc.	X
240	Kayser (Julius) & Co.	
241	Kennecott Copper Corp.	
242	Kimberly-Clark Corp.	
243	Kinney (G. R.) Co., Inc.	
244	Kresge (S. S.) Co.	X
245	Kresge Dept. Stores, Inc.	
246	Kress (S. H.) & Co.	X
247	Kroger Grocery & Baking Co.	X
248	Lambert Co.	X
249	Lane Bryant, Inc.	
250	Lee Rubber & Tire Corp.	
251	Lehigh Portland Cement Co.	
252	Lehigh Valley Coal Corp.	
253	Lehn & Fink Products Corp.	X
254	Libbey-Owens-Ford Glass Co.	
255	Liggett & Myers Tobacco Co.	X
256	Lily-Tulip Cup Corp.	X
257	Lima Locomotive Wks., Inc.	
258	Link-Belt Co.	X
259	Liquid Carbonic Corp.	
260	Loew's, Inc.	X
261	Loose-Wiles Biscuit Co.	X
262	Lorillard (P.) Co.	X
263	MacAndrews & Forbes Co.	X
264	Mack Trucks, Inc.	X
265	Macy (R. H.) & Co., Inc.	X
266	Madison Square Garden Corp.	
267	Magma Copper Co.	X
268	Mandel Bros., Inc.	
269	Manhattan Shirt Co.	
270	Maracaibo Oil Exploration Corp.	
271	Marshall Field & Co.	
272	Martin-Parry Corp.	
273	Matieson Alkali Works	X
274	May Dept. Stores Co.	X
275	Maytag Co.	
276	McCall Corp.	X
277	McGraw-Hill Publishing Co., Inc.	
278	McIntyre Porcupine Mines, Ltd.	X
279	McLellan Stores Co.	
280	Melville Shoe Corp.	X
281	Mengel Co.	
282	Mesta Mach. Co.	X
283	Miami Copper Co.	
284	Mid-Continent Petroleum Corp.	
285	Midland Steel Products Co.	
286	Minneapolis-Honeywell Regulator Co.	X
287	Minneapolis-Moline Power Imp. Co.	
288	Mohawk Copper Mills, Inc.	
289	Monsanto Chemical Co.	X
290	Montgomery Ward & Co., Inc.	
291	Morrell (John) & Co.	X
292	Motor Products Corp.	
293	Motor Wheel Corp.	
294	Mullins Mfg. Corp.	
295	Munsingwear, Inc.	
296	Murray Corp. of Amer.	
297	Myers (F. E.) & Bro. Co.	X
298	Nash-Kelvinator Corp.	
299	National Acme Co.	
300	National Biscuit Co.	X
301	National Cash Register Co.	
302	National Dairy Prod. Corp.	X
303	National Distillers Prod. Corp.	
304	National Enameling & Stamping Co.	
305	National Lead Co.	X
306	National Steel Corp.	X
307	National Supply Co.	
308	National Tea Co.	
309	Neisner Bros., Inc.	
310	Newport Industries, Inc.	
311	New York Air Brake Co.	
312	New York Dock Co.	
313	New York Shipbuilding Corp.	
314	North American Aviation, Inc.	
315	North American Co.	
316	Norwalk Tire & Rubber Co.	
317	Ohio Oil Co.	
318	Omnibus Corp.	
319	Oppenheim, Collins & Co., Inc.	
320	Otis Elevator Co.	X
321	Otis Steel Co.	
322	Outlet Co.	X
323	Owens-Illinois Glass Co.	X
324	Pacific Coast Co.	
325	Pacific Mills	
326	Packard Motor Car Co.	
327	Pan-American Petroleum & Transport. Co.	
328	Panhandle Producing & Refining Co.	
329	Park & Tilford, Inc.	
330	Park Utah Consol. Mines Co.	
331	Parmelee Trans. Co.	
332	Patino Mines & Enterprises Consol., Inc.	
333	Penick & Ford, Ltd., Inc.	X
334	Penney (J. C.) Co.	X
335	Pennsylvania-Dixie Cement Corp.	
336	Peoples Drug Stores, Inc.	X
337	Pet Milk Co.	X
338	Petroleum Corp. of Amer.	
339	Phelps Dodge Corp.	
340	Phillips-Jones Corp.	
341	Phillips Petroleum Co.	
342	Philip Morris Co., Ltd., Inc.	X
343	Phoenix Hosiery Co.	
344	Pillsbury Flour Mills Co.	X
345	Pittsburgh Coal Co.	
346	Pittsburgh Screw & Bolt Corp.	
347	Pittston Co.	

Exhibit 254

COMPLETE LIST OF INDUSTRIAL COMPANIES WHOSE COMMON STOCKS WERE LISTED ON THE NEW YORK STOCK EXCHANGE

FROM JANUARY 1, 1932 TO APRIL 1, 1942

		Companies Which Paid Common Dividends Each Year 1932-1941, Inc.
348	Poor & Co.	
349	Procter & Gamble Co.	X
350	Pullman, Inc.	X
351	Pure Oil Co.	
352	Purity Bakeries Corp.	X
353	Radio Corporation of America	
354	Radio-Keith-Orpheum Corp.	
355	Raybestos-Manhattan, Inc.	X
356	Real Silk Hosiery Mills, Inc.	
357	Remington Rand, Inc.	
358	Republic Steel Corp.	
359	Revere Copper & Brass, Inc.	
360	Reynolds Metals Co.	
361	Reynolds Spring Co.	
362	Reynolds (R. J.) Tobacco Co.	X
363	Ritter Dental Mfg. Co., Inc.	
364	Safeway Stores, Inc.	X
365	St. Joseph Lead Co.	
366	Savage Arms Corp.	
367	Scott Paper Co.	X
368	Seaboard Oil Co. (Del.)	X
369	Seagrave Corp.	
370	Sears, Roebuck & Co.	
371	Servel, Inc.	
372	Sharon Steel Corp.	
373	Sharp & Dohme, Inc.	
374	Shattuck (Frank G.) Co.	X
375	Shell Union Oil Corp.	
376	Simmons Co.	
377	Skelly Oil Co.	
378	Sloss-Sheffield Steel & Iron Co.	
379	Snider Packing Corp.	
380	Socony-Vacuum Oil Co., Inc.	X
381	South Porto Rico Sugar Co.	
382	Sparks-Withington Co.	
383	Spear & Co.	
384	Spencer Kellogg & Sons, Inc.	X
385	Spicer Mfg. Corp.	
386	Spiegel, Inc.	
387	Standard Brands, Inc.	X
388	Standard Oil of California	X
389	Standard Oil of N. J.	X
390	Starrett (L. S.) Co.	
391	Stewart-Warner Corp.	
392	Stone & Webster, Inc.	
393	Sun Oil Co.	X
394	Superheater Co.	X
395	Superior Oil Corp.	
396	Superior Steel Corp.	
397	Telautograph Corp.	X
398	Tennessee Corp.	
399	Texas Company	X
400	Texas Gulf Sulphur Co.	X
401	Texas Pacific Coal & Oil Co.	
402	Thatcher Mfg. Co.	
403	Thermoid Co.	
404	Thompson (John R.) Co.	
405	Thompson Products, Inc.	
406	Thompson-Starrett Co., Inc.	
407	Tide Water Associated Oil Corp.	
408	Timken-Detroit Axle Co.	
409	Timken-Roller-Bearing Co.	X
410	Transue & Williams Steel Forging Corp.	
411	Truax-Traer Coal Co.	
412	Truscon Steel Co.	
413	Underwood-Elliott Fisher Co.	X
414	Union Bag & Paper Corp.	
415	Union Carbide & Carbon Corp.	X
416	Union Oil Co. of Calif.	X
417	Union Tank Car Co.	X
418	United Biscuit Co. of Amer.	X
419	United Carbon Co.	
420	United Dyewood Corp.	
421	United Electric Coal Cos.	
422	United Fruit Co.	X
423	United Paper Board Co., Inc.	
424	U. S. Freight Co.	
425	U. S. Gypsum Corp.	X
426	U. S. Hoffman Mach. Corp.	
427	U. S. Industrial Alcohol Co.	
428	U. S. Leather Co.	
429	U. S. Pipe & Foundry Co.	X
430	U. S. Realty & Improvement Co.	
431	U. S. Rubber Co.	
432	U. S. Smelt., Refin. & Mining Co.	X
433	U. S. Steel Corp.	
434	U. S. Tobacco Co.	X
435	United Stores Corp.	
436	Universal Leaf Tobacco Co., Inc.	X
437	Vadsco Sales Corp.	
438	Van Raalte Co., Inc.	
439	Vanadium Corp. of Amer.	
440	Virginia-Carolina Chemical Corp.	
441	Vulcan-Detinning Co.	
442	Waldorf System, Inc.	X
443	Walgreen Co.	
444	Walworth Co.	
445	Ward Baking Co.	
446	Warner Bros. Pictures, Inc.	
447	Warren Bros. Co.	
448	Warren Foundry & Pipe Corp.	
449	Wesson Oil & Snowdrift Co., Inc.	X
450	Westinghouse Air Brake Co.	X
451	Westinghouse Elec. & Mfg. Co.	
452	Weston Elec. Instrument Corp.	
453	Westvaco Chlorine Prod. Corp.	X
454	Wheeling Steel Corp.	
455	White Motor Co.	
456	White Rock Mineral Springs Co.	
457	White Sewing Machine Corp.	
458	Wilcox (H. F.) Oil & Gas Co.	
459	Willys-Overland Motors, Inc.	
460	Wilson & Co., Inc.	
461	Woolworth (F. W.) Co.	X
462	Worthington Pump & Machinery Corp.	
463	Wright Aeronautical Corp.	
464	Wrigley (Wm. Jr.) Co.	X
465	Yale & Towne Mfg. Co.	X
466	Yellow Truck & Coach Mfg. Co.	
467	Young (L. A.) Spring & Wire Corp.	
468	Youngstown Sheet & Tube Co.	
469	Zenith Radio Corp.	
470	Zonite Products Corp.	

Exhibit 254

SECTION II

SUMMARY SHOWING COMPUTATION OF "INVESTORS' APPRAISAL
OF THE RISKS OF CAPITAL
REPRESENTED BY 163 STABLE INDUSTRIAL COMPANIES"

Exhibit 254

SUMMARY SHOWING COMPUTATION OF "INVESTORS' APPRAISAL OF THE RISKS OF CAPITAL"

REPRESENTED BY 153 STABLE INDUSTRIAL COMPANIES

	Indicated Market Value of Capital					Earnings Available for Capital				
	1937	1938	1939	1940	1941	1937	1938	1939	1940	1941
	In Thousands of Dollars					In Thousands of Dollars				
Abraham & Straus, Inc.	13,223	10,612	9,963	9,847	-	918	906	1,079	1,121	-
Adams-Millis Corp.	4,147	3,003	3,432	3,402	3,276	475	536	553	472	624
Air Reduction Co., Inc.	160,079	138,302	145,199	128,284	108,034	7,327	3,769	5,077	6,447	7,117
Alaska Juneau Gold Mining Co.	17,672	16,482	12,093	8,181	-	1,911	1,572	917	722	-
Allied Chemical & Dye Corp.	448,894	355,363	389,681	351,488	335,170	24,771	13,111	21,042	20,885	21,417
Amerada Petroleum Corp.	65,810	52,447	49,095	38,251	-	2,400	1,634	1,231	1,778	-
American Brake Shoe & Foundry Co.	49,171	35,735	41,656	35,548	37,898	3,411	1,061	2,121	2,988	3,185
American Can Co.	302,215	286,992	324,932	331,529	266,780	17,928	13,545	18,556	17,791	19,244
American Chicle Co.	44,188	46,682	52,695	55,007	45,888	3,619	3,297	3,835	3,671	3,528
American-Hawaiian Steamship Co.	6,471	5,244	9,833	16,016	-	(31)	613	993	3,431	-
American Home Products Corp.	55,534	31,638	44,845	48,310	44,931	2,945	3,063	4,317	4,383	4,552
American Machine & Foundry Co.	19,366	13,424	13,120	12,198	10,912	1,038	893	953	1,327	1,374
American Safety Razor Corp.	13,440	8,621	8,849	4,841	2,976	1,294	806	777	383	666
American Ship Building Co.	5,307	3,717	4,603	4,134	4,443	453	428	(208)	226	598
American Snuff Co.	29,758	28,371	33,156	31,176	23,300	1,573	1,655	1,536	1,377	1,374
American Tobacco Co.	477,223	461,948	508,342	496,846	448,185	27,074	26,473	27,533	29,640	25,247
Archer-Daniels-Midland Co.	22,056	17,480	19,061	15,939	16,318	2,967	438	1,859	3,047	3,103
Atlantic Refining Co.	89,892	101,328	98,791	105,324	196,763	10,140	4,539	5,820	7,014	15,143
Beech-Nut Packing Co.	44,960	46,273	51,059	50,096	51,190	2,741	2,527	2,473	2,890	2,709
Best & Co., Inc.	14,760	13,125	14,140	9,722	8,507	1,257	1,047	1,068	1,132	1,076
Bohn Aluminum & Brass Corp.	12,180	8,084	7,841	9,473	-	1,773	183	759	1,442	-
Borden Co.	96,727	78,107	84,639	90,704	100,198	6,291	6,641	7,980	7,583	8,511
Borg-Warner Corp.	84,461	60,866	59,306	45,285	-	8,348	(20)	5,684	6,730	-
Briggs & Stratton Corp.	11,217	7,447	10,697	10,177	9,563	1,274	642	944	1,041	1,185
Brown Shoe Co., Inc.	14,091	12,072	11,907	10,934	11,241	934	328	882	581	1,064
Burroughs Adding Machine Co.	126,550	91,900	74,400	49,400	37,800	8,163	2,707	2,201	3,146	4,771
Cannon Mills Co.	44,204	31,116	35,067	34,573	-	2,232	2,278	3,596	3,632	-
Caterpillar Tractor Co.	143,550	94,365	101,435	97,171	84,557	10,169	3,236	6,117	7,960	7,853
Central Aguirre Associates	23,498	17,414	18,157	16,064	14,207	2,947	1,973	1,119	1,203	1,516
Chicago Yellow Cab Co., Inc.	5,100	3,114	2,868	2,907	-	76	58	313	312	-
Chrysler Corp.	394,604	289,509	321,984	315,718	247,492	50,729	18,798	36,880	37,808	40,114
City Ice & Fuel Co.	37,144	28,622	30,568	29,898	29,450	3,472	2,930	3,131	2,241	3,136
Cluett, Peabody & Co., Inc.	18,751	16,366	24,501	28,751	28,101	728	1,111	3,056	2,774	3,041
Coca-Cola Co.	562,100	531,215	511,186	496,700	-	24,682	25,571	29,030	28,885	-
Colgate-Palmolive-Peet Co.	60,308	47,801	50,259	43,979	-	893	5,013	6,721	4,130	-
Columbian Carbon Co.	51,258	40,913	48,411	45,615	39,499	4,466	2,758	2,857	3,069	3,589
Congoleum-Nairn, Inc.	45,525	31,011	34,319	28,674	22,240	2,525	1,265	2,112	1,617	2,017
Continental Can Co., Inc.	173,685	144,307	141,724	139,684	110,015	8,914	7,102	8,836	8,954	8,071
Corn Products Refining Co.	193,771	198,082	194,989	176,310	166,384	8,101	9,754	10,120	9,581	10,766
Cream of Wheat Corp.	17,400	15,336	17,736	15,078	8,850	1,203	1,245	1,079	1,141	1,055
Diamond Match Co.	40,202	39,948	46,361	44,369	40,004	2,112	2,074	2,137	1,962	2,041
Dome Mines, Ltd.	44,900	60,347	52,813	34,067	-	4,117	4,055	3,842	4,007	-
Duplan Corp.	5,891	4,657	5,223	5,197	-	331	420	414	298	-
Du Pont de Nemours (E. I.) & Co.	1,738,752	1,560,412	1,941,786	2,087,648	1,877,889	88,088	55,244	93,271	86,967	96,401
Eastman Kodak Co.	394,588	357,378	411,887	361,624	339,571	22,347	17,339	21,538	20,077	21,589
Eaton Manufacturing Co.	18,562	12,623	16,286	20,758	22,474	2,569	23	2,707	2,995	4,365
Electric Storage Battery Co.	30,185	25,764	26,553	26,499	27,634	2,110	949	1,821	2,168	3,312
Endicott Johnson Corp.	26,721	23,359	25,508	24,235	25,688	1,521	852	1,611	1,664	2,351
Federated Department Stores, Inc.	43,491	39,483	40,728	39,000	-	2,979	3,082	3,780	3,595	-
Filene's (Wm.) Sons Co.	22,720	16,763	15,670	15,511	-	784	247	967	671	-
Firestone Tire & Rubber Co.	116,089	130,243	138,748	125,272	122,340	9,934	8,871	8,791	10,784	13,711
First National Stores, Inc.	32,286	27,787	36,510	32,130	-	2,705	2,774	2,739	2,509	-
Freeport Sulphur Co.	21,360	20,658	24,606	28,484	-	2,704	1,506	2,274	3,123	-
General American Transportation Corp.	93,009	75,788	83,202	78,016	79,389	5,765	4,308	4,421	5,303	4,779
General Baking Co.	31,326	25,096	26,565	22,326	19,289	1,508	2,713	1,507	1,924	1,176
Totals Forward	6,632,743	5,822,016	6,503,811	6,353,748	4,976,189	411,922	278,233	386,501	392,774	350,814

Exhibit 254

SUMMARY SHOWING COMPUTATION OF "INVESTORS' APPRAISAL OF THE RISKS OF CAPITAL"

REPRESENTED BY 183 STABLE INDUSTRIAL COMPANIES

	Indicated Market Value of Capital					Earnings Available for Capital				
	1937	1938	1939	1940	1941	1937	1938	1939	1940	1941
	In Thousands of Dollars					In Thousands of Dollars				
Totals Forward	6,632,743	5,822,016	6,503,811	6,353,748	4,976,189	411,922	279,233	386,501	392,774	350,814
General Cigar Co., Inc.	23,837	17,516	15,670	13,770	15,199	1,674	1,207	879	1,369	1,667
General Electric Co.	1,422,168	1,083,159	1,088,681	966,986	861,441	63,547	27,729	41,236	56,241	57,197
General Foods Corp.	189,997	183,073	238,852	235,482	216,787	9,206	12,577	15,118	15,244	14,183
General Mills, Inc.	64,847	70,250	85,184	86,021	-	4,111	6,451	5,639	5,252	-
General Motors Corp.	2,329,095	1,918,159	2,217,544	2,243,027	1,897,733	196,437	102,190	183,290	195,622	201,683
General Printing Ink Corp.	13,685	10,551	10,264	9,278	8,064	1,181	664	894	827	943
Gillette Safety Razor Co.	50,480	33,677	28,754	22,147	19,714	4,500	2,942	3,286	2,601	3,122
Granite City Steel Co.	13,507	7,525	9,791	8,761	6,525	298	(266)	516	488	628
Grant (W. T.) Co.	50,723	39,563	46,207	47,961	-	3,510	2,884	3,945	3,548	-
Heinz (H. J.) Co.	30,430	28,071	31,368	28,966	22,913	1,678	1,639	1,667	1,474	1,454
Hercules Powder Co.	86,448	96,889	119,848	122,998	106,989	4,440	3,089	5,325	5,808	6,099
Hershey Chocolate Corp.	61,310	57,851	68,262	66,874	58,173	932	4,126	6,233	5,908	5,944
Homestake Mining Co.	92,934	114,650	114,529	95,702	82,883	7,189	6,941	7,104	6,091	5,683
Howe Sound Co.	30,204	18,213	22,003	18,627	15,040	4,753	2,114	2,491	1,724	1,808
Ingersoll-Rand Co.	108,679	90,976	109,538	96,305	-	9,725	5,219	6,011	6,999	-
International Business Machines Corp.	137,783	142,711	147,444	159,077	161,991	8,390	9,135	9,566	9,861	10,216
International Harvester Co.	490,826	375,408	375,822	343,769	241,391	32,492	18,472	12,360	23,161	20,635
International Salt Co.	9,836	9,987	11,540	10,980	13,371	728	684	657	1,082	901
International Shoe Co.	132,543	106,489	120,359	111,136	95,696	6,267	4,268	6,588	6,474	7,207
Island Creek Coal Co.	18,065	15,340	18,626	19,257	-	1,528	1,025	1,800	2,347	-
Jewel Tea Co., Inc.	18,644	16,372	21,803	24,079	26,560	1,452	1,424	1,582	1,577	1,519
Kaufmann Department Stores, Inc.	16,818	13,677	13,574	13,197	13,440	1,581	890	1,266	1,480	1,280
Kresge (S. S.) Co.	128,116	107,016	130,706	127,181	130,888	10,884	9,102	10,239	10,204	10,538
Kress (S. H.) & Co.	90,197	71,582	70,280	70,155	68,697	5,856	3,668	4,964	5,339	5,122
Kroger Grocery & Baking Co.	34,988	31,092	45,580	53,245	49,547	2,950	3,742	5,515	4,607	4,970
Lambert Co.	12,733	19,516	11,987	10,546	9,188	1,152	1,278	1,262	1,173	1,250
Lehn & Fink Products Corp.	5,828	4,217	4,562	4,661	5,082	533	420	625	704	770
Liggett & Meyers Tobacco Co.	371,185	352,799	383,384	373,123	318,920	22,699	21,872	22,009	21,634	19,137
Lily-Tulip Cup Corp.	3,696	3,116	3,317	3,743	-	241	225	682	644	-
Link-Belt Co.	36,341	30,215	30,649	27,151	26,445	3,232	1,106	1,733	2,514	2,913
Loew's, Inc.	147,634	117,682	120,131	94,640	100,578	16,128	11,561	11,443	10,470	12,625
Loose-Wiles Biscuit Co.	20,047	14,001	14,906	12,633	9,164	734	988	1,084	1,191	1,176
Lorillard (P.) Co.	69,416	61,532	70,093	68,956	59,038	2,988	4,717	4,845	4,846	4,070
MacAndrews & Forbes Co.	12,080	10,620	12,150	11,865	-	886	724	870	912	-
Mack Trucks, Inc.	23,780	14,485	15,459	14,563	17,736	1,285	(929)	683	1,806	3,944
Macy (R. H.) & Co., Inc.	81,846	72,412	66,924	51,658	-	4,668	2,774	4,284	4,282	-
Magma Copper Co.	16,626	11,987	13,284	12,138	10,283	1,456	654	1,386	1,133	1,492
Mathieson Alkali Works, (Inc.)	30,052	27,262	28,002	26,226	27,157	1,664	999	1,096	1,588	1,744
May Department Stores Co.	67,150	56,600	65,222	64,971	-	5,274	4,091	4,876	5,438	-
McGall Corp.	13,615	6,509	6,964	7,065	5,940	673	562	740	839	802
McIntyre Porcupine Mines, Ltd.	26,975	36,663	39,208	29,327	-	2,598	2,713	3,719	3,819	-
Melville Shoe Corp.	31,789	20,549	37,741	37,621	38,567	1,874	1,484	2,175	3,211	2,924
Mesta Machine Co.	52,363	36,684	51,744	50,874	50,133	4,668	2,910	2,715	3,083	3,608
Minneapolis-Honeywell Regulator Co.	57,204	46,398	43,684	30,270	28,089	2,929	1,008	2,159	2,529	2,737
Monsanto Chemical Co.	104,809	121,326	135,498	134,840	126,211	4,999	3,151	5,429	5,827	6,663
Morrell (John) & Co.	12,921	11,691	15,268	15,249	15,393	(671)	1,016	2,150	1,995	1,706
Myers (F. E.) & Bro. Co.	11,500	9,126	9,550	9,400	8,550	1,063	822	800	971	1,090
National Biscuit Co.	197,550	176,250	196,903	169,230	140,777	11,895	12,800	12,834	11,149	10,732
National Dairy Products Corp.	196,112	159,822	165,752	168,184	160,949	12,866	13,749	15,273	13,199	14,313
National Lead Co.	141,311	120,568	115,710	103,378	96,631	4,887	4,283	5,781	6,103	5,378
National Steel Corp.	228,843	204,640	212,244	200,231	-	20,200	9,047	14,993	16,927	-
Otis Elevator Co.	74,025	52,003	51,746	38,430	36,928	3,592	1,913	2,751	2,771	2,590
Outlet Co.	6,650	5,238	5,362	5,437	-	817	104	567	602	-
Owens-Illinois Glass Co.	221,243	168,696	171,672	151,869	129,590	9,586	5,907	8,860	7,650	9,292
Penick & Ford Ltd., Inc.	18,638	18,380	19,764	19,468	17,989	272	1,140	1,456	1,074	1,897
Totals Forward	14,574,142	12,461,374	13,765,588	13,276,183	10,608,508	943,218	628,271	863,374	907,327	858,207

Exhibit 254

SUMMARY SHOWING COMPUTATION OF "INVESTORS' APPRAISAL OF THE RISKS OF CAPITAL"

REPRESENTED BY 183 STABLE INDUSTRIAL COMPANIES

	Indicated Market Value of Capital					Earnings Available for Capital				
	1937	1938	1939	1940	1941	1937	1938	1939	1940	1941
	In Thousands of Dollars					In Thousands of Dollars				
Totals Forward	14,574,142	12,461,374	13,765,558	13,275,183	10,608,805	943,218	625,271	863,374	907,327	836,207
Penney (J.C.) Co.	205,121	178,715	214,661	229,809	222,819	16,575	13,739	16,481	16,231	17,128
Peoples Drug Stores, Inc.	12,029	7,061	7,779	9,328	11,046	1,060	859	1,020	1,069	1,110
Pet Milk Co.	10,644	6,795	11,692	9,206	11,860	761	953	1,156	1,275	1,516
Philip Morris & Co., Ltd., Inc.	41,662	65,883	79,488	89,480	-	5,663	6,551	7,436	7,361	-
Pillsbury Flour Mills Co.	19,364	18,841	20,566	19,372	-	258	1,938	1,116	1,011	-
Procter & Gamble Co.	368,499	336,381	388,539	414,740	372,324	26,803	15,262	25,300	28,628	27,582
Pullman, Inc.	186,462	116,745	122,972	93,824	80,921	12,276	2,296	4,009	7,484	10,919
Purity Bakeries Corp.	16,929	13,767	16,876	15,025	12,178	804	1,479	1,933	1,426	1,669
Raybestos-Manhattan, Inc.	17,993	12,248	12,548	12,091	11,111	1,925	322	1,606	1,697	2,053
Reynolds (R.J.) Tobacco Co.	503,170	416,050	415,000	389,250	305,340	27,602	23,734	25,648	25,848	23,239
Safeway Stores, Inc.	57,368	44,291	62,439	66,991	-	3,443	4,873	6,919	5,364	-
Scott Paper Co.	27,267	32,173	36,692	34,237	30,182	1,354	1,558	1,946	1,750	1,940
Seaboard Oil Co. (Delaware)	43,528	26,754	24,813	19,147	17,367	2,447	1,896	1,746	1,301	1,257
Shattuck (Frank G.) Co.	15,262	12,110	11,390	7,428	6,256	833	537	558	298	882
Socony-Vacuum Oil Co., Inc.	692,582	553,535	522,989	442,212	-	55,946	44,479	38,507	40,095	-
Spencer Kellogg & Sons, Inc.	14,070	10,979	9,420	9,706	9,996	1,429	363	662	1,395	1,862
Standard Brands, Inc.	171,110	117,376	100,010	102,554	68,739	9,865	8,721	7,586	9,906	7,759
Standard Oil Co. of California	501,467	390,126	407,334	300,554	-	41,255	28,876	18,043	23,025	-
Standard Oil Co. of New Jersey	1,767,668	1,583,506	1,517,742	1,316,365	-	154,818	84,126	98,323	133,040	-
Sun Oil Co.	162,456	160,921	163,261	166,975	197,407	9,870	3,336	7,555	8,562	16,904
Superheater Co.	36,040	27,426	26,132	18,269	15,014	2,088	466	603	1,329	1,633
Telautograph Corp.	1,403	1,106	1,119	993	596	137	118	83	101	109
Texas Company	614,565	515,981	559,458	560,544	564,405	57,370	25,823	36,494	35,086	38,344
Texas Gulf Sulphur Co.	130,099	122,880	123,840	123,110	132,480	11,889	6,964	7,847	9,141	9,016
Timken-Roller-Bearing Co.	128,654	104,606	106,792	105,818	107,873	10,837	1,428	7,288	8,995	8,477
Underwood-Elliott Fisher Co.	52,926	40,937	36,899	24,415	23,909	4,913	1,768	1,857	2,226	3,740
Union Carbide & Carbon Corp.	786,286	710,879	781,110	716,862	675,288	43,581	26,186	37,087	43,489	42,813
Union Oil Co. of California	127,077	112,757	212,510	108,636	102,694	12,949	7,699	7,019	8,989	7,613
Union Tank Car Co.	31,585	25,608	25,898	29,036	30,610	2,016	1,365	2,411	2,446	2,239
United Biscuit Co. of America	16,682	15,477	14,717	17,202	-	1,218	1,328	1,389	1,197	-
United Fruit Co.	208,061	170,175	228,107	213,360	203,239	12,033	10,273	14,102	14,921	15,443
U. S. Gypsum Co.	126,105	114,616	119,372	98,690	77,812	8,421	4,728	7,366	7,053	7,034
U. S. Pipe & Foundry Co.	34,818	25,881	28,449	20,836	18,136	2,269	1,688	2,370	2,404	2,615
U. S. Smelting, Refining and Mining Co.	72,848	60,340	61,217	59,493	62,697	6,683	4,114	5,216	5,950	4,916
U. S. Tobacco Co.	60,913	64,056	65,808	67,274	52,727	3,463	3,358	9,152	9,743	3,061
Universal Leaf Tobacco Co., Inc.	19,004	18,904	20,188	17,332	16,891	1,638	1,538	1,529	1,520	1,445
Waldorf System, Inc.	5,599	3,040	2,878	3,210	3,422	503	265	291	554	510
Wesson Oil & Snowdrift Co., Inc.	46,266	41,009	32,853	32,510	32,713	3,994	3,067	(526)	1,609	3,771
Westinghouse Air Brake Co.	117,103	76,001	87,836	88,803	82,237	6,253	994	2,766	5,592	6,089
Westvaco Chlorine Products Corp.	11,824	10,088	15,824	18,223	17,526	785	804	1,275	1,216	1,296
Woolworth (F. W.) Co.	492,172	445,498	429,099	372,691	301,861	33,321	28,885	29,620	24,585	26,698
Wrigley (Wm. Jr.) Co.	131,774	136,438	167,424	163,009	128,172	8,744	7,654	8,651	8,227	8,090
Yale & Towne Manufacturing Co.	20,505	14,641	12,683	9,796	9,128	1,326	69	1,024	1,411	1,669
Grand Total	28,692,237	19,423,780	21,058,680	19,871,442	14,601,745	1,850,677	1,011,742	1,315,906	1,418,677	1,166,698

Exhibit 254

SECTION III

WORKING PAPERS SHOWING THE COMPUTATION OF "INVESTORS' APPRAISAL OF THE RISKS OF CAPITAL" OF EACH OF THE 153 STABLE INDUSTRIAL COMPANIES

Note: Unless otherwise indicated all market price ranges on bonds were obtained from Standard & Poor's Corp. (formerly Standard Statistics Company, Inc.) Bond Guides dated January 7, 1942, January, 1941, January, 1940, January, 1939 and January, 1938; and all market price ranges on stocks were obtained from the Commercial and Financial Chronicle - Bank & Quotation Section, issue of January each year 1938-1942, both inclusive.

All company data, i.e., amount of capital securities outstanding and earnings available for capital were taken directly from published annual reports of the various companies.

16255

Exhibit 254

ABRAHAM & STRAUS, INC.

	Outstanding January 31st	Price Range for Year High	Low	Average	Value	Outstanding January 31st	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	155,155 shs.	69	37	53.00	$8,225,215	155,155 shs.	48	30 1/4	37.63	$5,838,485
Preferred Stock ($100 par) 4 3/4% Cumulative	25,000 shs.			(a)100.00	2,500,000	22,739 shs.			(a)100.00	2,273,900
Fifteen Year 4% Notes, 1950	$2,500,000			(a)100.00	2,500,000	$2,500,000			(a)100.00	2,500,000
Total Indicated Market Value					$13,225,215					$10,612,385
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$683,796					$694,239
Dividends Declared on Preferred Stock					118,750					110,695
Net Income for fiscal years ended January 31, as reported					802,546					804,934
Add: Interest and Amortization of Debt Discount and Expense					115,860					102,621
Total Earnings Available for Capital					$918,406					$907,555
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.9%					8.55%
Dividends Declared on Common Stock					$465,465					$310,310
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	155,155 shs.	49 1/2	33 1/2	41.50	$6,438,933	155,155 shs.	48 1/2	30	43.25	$6,710,454
Preferred Stock ($100 par) 4 3/4% Cum.	21,739 shs.			(a)100.00	2,173,900	21,387 shs.			(a)100.00	2,138,700
Fifteen Year 4% Notes, 1950	$1,350,000			(a)100.00	1,350,000					
Fifteen Year 3% Notes, 1950						$1,000,000			(a)100.00	1,000,000
Total Indicated Market Value					$9,962,833					$9,847,154
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$ 902,507					$ 970,708
Dividends Declared on Preferred Stock					106,838					101,936
Net Income for fiscal years ended January 31, as reported					1,008,142					1,072,643
Add: Interest and Amortization of Debt Discount and Expense					70,972					48,165
Total Earnings Available for Capital					$1,079,114					$1,120,808
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.83%					11.38%
Dividends Declared on Common Stock					$465,465					$543,043

Notes: (a) Price estimated.
• Outstanding January 31 of following year.

Exhibit 254

ADAMS-MILLIS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	156,000 shs.	28 5/8	17 1/2	23.06	$3,597,360	156,000 shs.	24	14 1/2	19.25	$3,003,000
(a) First Preferred 7% Cum. Stock ($100 par)	5,000 shs.			110.00	550,000					
Total Indicated Market Value of Capital					$4,147,360					
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 431,893					$ 400,635
Dividends declared on Preferred Stock					43,750					38,000
Net Income for years ended December 31, as reported					$ 478,343					$ 438,635
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.48%					17.84%
Dividends Declared on Common Stock					$ 390,000					$ 195,000
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	156,000 shs.	25	19	22.00	$3,432,000	156,000 shs.	27 1/2	16 1/8	21.81	$3,402,360
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported.					$ 555,163					$ 472,250
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					16.18%					13.88%
Dividends Declared on Common Stock					$ 156,000					$ 156,000

Note: (a) Price Estimated at Call Price - called November 1, 1938.

16257

Exhibit 254

ADAMS-MILLIS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	156,000 shs.	24 1/4	17 3/4	21.00	$3,276,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 624,232
					19.05%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Common Stock					$ 195,000

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Exhibit 254

AIR REDUCTION COMPANY, INCORPORATED

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,560,191 shs.	80 1/4	44 1/2	62.38	$160,078,995	2,563,991 shs.	67 7/8	40	53.94	$138,301,675
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 7,326,835					$ 3,709,337
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.58%					2.73%
Dividends Declared on Common Stock					$ 7,671,592					$ 3,204,990
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,563,991 shs.	68	45 1/4	56.63	$145,198,810	2,711,137 shs.	58 1/8	36 1/2	47.31	$128,263,891
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 5,076,825					$ 6,446,680
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.50%					5.03%
Dividends Declared on Common Stock					$ 3,845,988					$ 5,423,701

Exhibit 254

AIR REDUCTION COMPANY, INCORPORATED

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,713,737 shs.	45	34 5/8	39.81	$108,033,870
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 7,116,677
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.59%
Dividends Declared on Common Stock					$ 5,427,574

Exhibit 254

ALASKA JUNEAU GOLD MINING CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	1,487,500 shs.	15 3/4	8	11.88	$17,671,500	1,487,500 shs.	13 3/8	8 3/4	11.06	$16,451,750
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 1,911,289					$ 1,572,197
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.82%					9.56%
Dividends Declared on Common Stock					$ 2,015,250					$ 1,710,625
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	1,487,500 shs.	10	6 1/4	8.13	$12,090,975	1,487,500 shs.	7	4	5.50	$ 8,181,250
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 916,338					$ 721,698
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.58%					8.82%
Dividends Declared on Common Stock					$ 1,041,250					$ 899,313

Exhibit 254

ALLIED CHEMICAL & DYE CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,214,099 shs.	258 1/2	145	201.75	$446,694,473	2,214,099 shs.	197	124	160.50	$355,362,890
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 24,770,845					$ 13,111,024
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.55%					3.69%
Dividends Declared on Common Stock					$ 13,003,611					$ 13,284,594
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,214,099 shs.	200 1/2	151 1/2	176.00	$389,681,424	2,214,099 shs.	182	135 1/2	158.75	$351,488,216
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 21,042,711					$ 20,985,270
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.40%					5.94%
Dividends Declared on Common Stock					$ 13,926,891					$ 17,718,792

Exhibit 254

ALLIED CHEMICAL & DYE CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,214,099 shs.	167 1/2	135 1/4	151.38	$335,170,307
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 21,416,566
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.39%
Dividends Declared on Common Stock					$ 17,712,792

6193

Exhibit 254

ARKANSAS PETROLEUM CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	----------1 9 3 7----------					----------1 9 3 8----------				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	788,675 shs.	114 7/8	51 1/2	82.19	$65,609,873	788,675 shs.	78	55	66.50	$52,446,688
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for year ended December 31, as reported					$2,400,028					$1,534,496
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.66%					2.92%
Dividends Declared on Common Stock					$1,577,350					$1,577,350
	----------1 9 3 9----------					----------1 9' 4 0----------				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	788,675 shs.	74 1/2	50	62.25	$49,095,019	788,675 shs.	58½	38½	48.50	$38,250,738
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for year ended December 31, as reported					$1,230,784					$1,775,734
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					2.51%					4.64%
Dividends Declared on Common Stock					$1,577,350					$1,577,350

Exhibit 254

THE AMERICAN BRAKE SHOE AND FOUNDRY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	769,092 shs.	80 3/4	28	54.38	$41,823,223	769,092 shs.	52	23 1/4	37.62	$28,933,841
Preferred Stock, 5½% Cum. Conv. ($100 par)	54,633 shs.	160	109	134.50	7,348,139	54,633 shs.	138	114	124.50	6,801,809
Total Indicated Market Value of Capital					$49,171,362					$35,735,650
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$3,080,966					$793,896
Dividends Declared on Preferred Stock					329,834					286,823
Net Income for the Years Ended December 31, as Reported					$3,410,799					$1,080,719
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.94%					3.04%
Dividends Declared on Common Stock					$2,827,626					$769,092
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	769,092 shs.	57 3/4	31 3/4	44.75	$34,416,867	769,092 shs.	45 3/4	28	36.88	$28,364,113
Preferred 5½% Cum. Conv. ($100 par)	54,633 shs.	149	125	132.50	7,238,873	54,633 shs.	135	128	131.50	7,184,240
Total Indicated Market Value of Capital					$41,655,740					$35,548,353
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$1,834,360					$2,681,675
Dividends Declared on Preferred Stock					286,823					286,823
Net Income for the Years Ended December 31, as Reported					$2,121,173					$2,968,498
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.09%					8.35%
Dividends Declared on Common Stock					$961,365					$1,616,093

Exhibit 254

THE AMERICAN BRAKE SHOE AND FOUNDRY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	769,092 shs.	39	26 1/2	32.75	$25,187,763
Preferred Stock, 5½% Cum. ($100 par)	98,000 shs.	130 3/4	122 1/2	126.63	12,409,740
Total Indicated Market Value of Capital					$37,597,503
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$2,737,292
Dividends Declared on Preferred Stock					457,581
Net Income for Year Ended December 31, as Reported					$3,194,873
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.50%
Dividends Declared on Common Stock					$1,892,002

Exhibit 254

AMERICAN CAN COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	2,473,998 shs.	121	69	95.00	$235,029,810	2,473,998 shs.	105 1/8	70 3/4	87.94	$217,563,384
Preferred Stock ($100 par) 7% Cum.	412,333 shs.	174	151 7/8	162.94	67,186,539	412,333 shs.	176 1/2	160 1/4	168.38	69,428,630
Total Indicated Market Value of Capital					$302,216,349					$286,992,014
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 15,041,502					$ 10,759,168
Dividends declared on Preferred Stock					2,886,331					2,886,331
Net Income for years ended December 31, as reported					$ 17,927,833					$ 13,645,499
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.93%					4.75%
Dividends Declared on Common Stock					$ 9,895,992					$ 9,895,992
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	2,473,998 shs.	116 1/2	83 1/4	99.88	$247,102,920	2,473,998 shs.	116 1/8	85 1/4	100.88	$249,576,918
Preferred Stock ($100 par) 7% Cum.	412,333 shs.	179	150	164.50	67,828,779	412,333 shs.	185	164	174.50	71,952,109
(a) Ten Year 2 3/4% debentures due 2/1/1949	$10,000,000			100.00	10,000,000	$10,000,000			100.00	10,000,000
Total Indicated Market Value of Capital					$324,931,699					$331,529,027
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 15,398,633					$ 14,554,575
Dividends declared on Preferred Stock					2,886,331					2,886,331
Net Income for years ended December 31, as reported					18,284,964					17,440,906
(b) Add: Interest expense					271,016					350,384
Total earnings available for capital					$ 18,555,980					$ 17,791,290
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.71%					5.37%
Dividends Declared on Common Stock					$ 9,895,992					$ 9,895,992

Note: (a) Prices Estimated - offered privately.
(b) Obtained from Moody's Industrial Manual.

Exhibit 254

AMERICAN CAN COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par value)	2,473,998 shs.	95 1/4	55 1/4	75.25	$186,168,350
Preferred Stock ($100 par value) 7% Cum.	412,333 shs.	185	157 1/2	171.25	70,612,026
(a) Ten Year 2% debentures, due February 1, 1951	$10,000,000			100.00	10,000,000
Total Indicated Market Value of Capital					$266,780,376
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 15,959,500
Dividends declared on preferred stock					2,886,331
Net Income for year ended December 31, as reported					18,845,831
Add: Interest and exchange					397,934
Total Earnings Available for Capital					$ 19,243,765
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.21%
Dividends Declared on Common Stock					$ 9,895,992

(a) Prices Estimated - Offered privately.

Exhibit 254

AMERICAN CHICLE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	437,500 shs.	112	90	101.00	$44,187,500	437,300 shs.	125	88 1/2	106.75	$46,681,775
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years ended December 31, as Reported					$3,619,078					$3,297,495
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.19%					7.06%
Dividends Declared on Common Stock					$3,071,300					$2,406,350
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	436,400 shs.	132	109 1/2	120.75	$52,695,300	435,700 shs.	140 1/2	112	126.25	$55,007,125
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as reported					$3,834,565					$3,670,700
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.28%					6.67%
Dividends Declared on Common Stock					$2,731,100					$2,832,750

Exhibit 254

AMERICAN CHICLE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	433,925 shs.	121	90 1/2	105.75	$45,887,569
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the Year Ended December 31, as Reported					$3,527,775
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.69%
Dividends Declared on Common Stock					$3,042,900

6207

Exhibit 254

AMERICAN-HAWAIIAN STEAMSHIP COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	450,000 shs.	21	7 3/4	14.38	$6,471,000	437,000 shs.	15	9	12.00	$5,244,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					($ 30,501)					$ 615,135
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					———					11.69%
Dividends Declared on Common Stock					$ 436,280					$ 437,825
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	437,000 shs.	33	12	22.50	$9,832,500	436,800 shs.	50 1/2	23	36.75	$16,015,680
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 992,824					$ 3,431,162
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.09%					21.42%
Dividends Declared on Common Stock					$ 655,500					$ 1,526,360

Note: Parentheses indicate red figure.

Exhibit 254

16271

AMERICAN HOME PRODUCTS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($1 par)	741,060 shs.	52-3/8	32-1/4	42.31	$31,354,249	805,842 shs.	45-1/2	30-3/4	38.13	$30,726,755
(b) Notes Payable	$1,750,000			100.00	1,750,000	$500,000			100.00	500,000
(b) Purchase Money Mortgages Payable	$ 430,069			100.00	430,069	$ 410,775			100.00	410,775
Total Indicated Market Value of Capital					$33,534,318					$31,637,530
EARNINGS AVAILABLE FOR CAPITAL										
Net income for years ended December 31, as reported					$ 2,875,399					$ 3,025,505
(a) Add: Interest on long-term debt					69,554					37,146
Total Earnings Available for Capital					$ 2,944,953					$ 3,062,651
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.78%					9.68%
Dividends Declared on Common Stock					$ 1,926,758					$ 1,846,735
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($1 par)	804,157 shs.	60	41-3/4	50.88	$40,915,508	808,857 shs.	66-1/4	45-1/2	55.88	$45,087,169
(b) Notes payable - bank	$3,600,000			100.00	3,600,000	$2,899,781			100.00	2,899,781
(b) Purchase Money Mortgages Payable	$ 329,750			100.00	329,750	$ 322,750			100.00	322,750
Total Indicated Market Value of Capital					$44,845,258					$48,309,700
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for year ended December 31, as reported					$ 4,207,426					$ 4,291,241
(a) Add: Interest on long-term debt					109,785					91,860
Total Earnings Available for Capital					$ 4,317,211					$ 4,383,101
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.63%					9.07%
Dividends Declared on Common Stock					$ 2,131,616					$ 2,177,854

Notes:
(a) Interest estimated at 3-1/2% on notes payable and 6% on mortgages.
(b) Prices estimated by Standard & Poor's Corporation

Exhibit 254

AMERICAN HOME PRODUCTS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($1 par)	852,372 shs.	51-1/4	42-1/8	46.69	$39,797,249
(b) 15 yr. 3-1/2% Sinking Fund Deb.	$4,821,000			100.00	4,821,000
(c) Mortgage Payable	$ 313,125			100.00	313,125
Total Indicated Market Value of Capital					$44,931,374
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 4,364,560
(a) Add: Interest on long-term debt					187,522
Total Earnings Available for Capital					$ 4,552,082
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.13%
Dividends Declared on Common Stock					$ 2,296,229

(a) Interest estimated at 6% on mortgage
(b) Issue sold privately to Metropolitan Life Insurance Co. at par
(c) Price estimated by Standard & Poor's Corporation

Exhibit 254

AMERICAN MACHINE & FOUNDRY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	980,542 shs.	29 3/8	10 1/8	19.75	$19,365,705	980,542 shs.	17 3/8	10	13.69	$13,423,620
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 1,038,348					$ 892,922
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.36%					6.65%
Dividends Declared on Capital Stock					$ 978,842					$ 784,434
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	980,542 shs.	15 3/4	11	13.38	$13,119,652	980,542 shs.	14 7/8	10	12.44	$12,197,942
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 955,448					$ 1,326,879
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.27%					10.86%
Dividends Declared on Capital Stock					$ 784,434					$ 784,434

Exhibit 254

AMERICAN MACHINE & FOUNDRY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	980,452 shs.	13 3/4	8 1/2	11.13	$10,912,431
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 1,374,032
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
					12.59%
Dividends Declared on Capital Stock					$ 921,709

Exhibit 254

16275

AMERICAN SAFETY RAZOR CORP.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (par $18.50)	524,400 shs.	38	15 1/4	25.63	$13,440,372	524,400 shs.	20 7/8	12	16.44	$8,621,136
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 1,294,243					$ 806,238
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.63%					9.35%
Dividends Declared on Common Stock					$ 1,048,800					$ 891,480
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (par $18.50)	524,400 shs.	15 3/8	10 3/4	13.06	$ 6,848,664	523,400 shs.	12 3/4	5 3/4	9.25	$4,841,450
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 776,777					$ 383,443
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.34%					7.92%
Dividends Declared on Common Stock					$ 629,280					$ 366,440

Exhibit 254

AMERICAN SAFETY RAZOR CORP.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (par $1^{a}.50)	523,400 shs.	7	4 3/8	5.69	$2,978,146
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 666,052
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					22.36%
Dividends Declared on Common Stock					$ 261,700

6221

Exhibit 254

AMERICAN SHIP BUILDING COMPANY

	Outstanding June 30	Price Range for Year High	Low	Average	Value	Outstanding June 30	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	127,683 shs.	58	24 1/2	41.25	$5,266,924	126,263 shs.	35 1/2	22 3/4	29.13	$3,678,041
(a)Preferred Stock -7% nom.cum.($100Par)	393 shs.	105 1/4	99	102.13	40,137	393 shs.	108	92	100.00	39,300
Total Indicated Market Value of Capital					$5,307,061					$3,717,341
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 447,015					$ 424,923
Dividends declared on Preferred Stock					5,302					2,751
Net Income for years ended June 30, as reported					$ 452,317					$ 427,674
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.53%					11.50%
Dividends Declared on Common Stock					$ 383,049					$ 380,034

	Outstanding June 30	Price Range for Year High	Low	Average	Value	Outstanding June 30	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	126,863 shs.	46 1/4	26	36.13	$4,581,882	127,044 shs.	41 1/2	23	32.25	$4,097,169
Preferred Stock -7% nom.cum.($100Par)	393 shs.	106	102 1/2	104.25	40,970	339 shs.	110	106	108.00	36,612
Total Indicated Market Value of Capital					$4,602,852					$4,133,781
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					*					$ 223,811
Dividends declared on Preferred Stock										2,373
Net Income for years ended June 30, as reported					($ 207,722)					$ 226,184
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					*					5.47%
Dividends Declared on Common Stock					$ 189,395					$ 190,176

Notes: * No dividends paid on Preferred Stock, as preferred dividends are payable only from current earnings.
Parentheses indicate red figure.
(a) High and low bids from National Quotation Bureau.

Exhibit 254

AMERICAN SHIP BUILDING COMPANY

	Outstanding June 30	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	127,044 shs.	40 3/8	29	34.68	$4,405,886
Preferred Stock 7% - non-cum.(par $100)	339 shs.	112	106	109.00	36,951
Total Indicated Market Value of Capital					$4,442,837
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 595,702
Dividends declared on Preferred Stock					2,373
Net Income for the year ended June 30, as reported					$ 598,075
					13.46%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Common Stock					$ 127,044

6225

Exhibit 254

AMERICAN SNUFF COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
1937					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	434,100 shs.	68 1/2	46	57.25	$24,852,225
Preferred Stock ($100 par)	35,939 shs.	148	125	136.50	4,905,674
Total Indicated Market Value					$29,757,899
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$1,357,048
Dividends declared on preferred stock					215,634
Net income for years ended December 31, as reported					$1,572,682
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.28%
Dividends Declared on Common Stock					$1,410,825
1938					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	434,100 shs.	61 3/4	45 3/4	53.75	$23,332,875
Preferred Stock ($100 par)	35,989 shs.	150	130	140.00	5,038,460
Total Indicated Market Value					$28,371,335
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$1,439,200
Dividends declared on preferred stock					215,784
Net income for years ended December 31, as reported					$1,654,984
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.83%
Dividends Declared on Common Stock					$1,410,825
1939					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	434,100 shs.	69	59 1/2	64.25	$27,890,925
Preferred ($100 par)	36,589 shs.	153	140	146.50	5,265,064
Total Indicated Market Value					$33,155,989
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$1,317,861
Dividends declared on preferred stock					218,484
Net income for years ended December 31, as reported					$1,536,365
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.63%
Dividends Declared on Common Stock					$1,410,825
1940					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	434,100 shs.	70	49 1/2	59.75	$25,937,475
Preferred ($100 par)	36,589 shs.	152 1/2	139	145.75	5,238,109
Total Indicated Market Value					$31,175,584
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$1,156,966
Dividends declared on preferred stock					219,534
Net income for years ended December 31, as reported					$1,376,500
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.42%
Dividends Declared on Common Stock					$1,410,825

Exhibit 254

AMERICAN SNUFF COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	434,100 shs.	54	29 3/8	41.69	$18,097,629
Preferred Stock ($100 par)	38,789 shs.	150 1/2	139	144.75	5,202,170
Total Indicated Market Value of Capital					$23,299,799
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 1,146,101
Dividends declared on preferred stock					227,934
Net income for the year ended December 31, as reported					$ 1,374,035
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.90%
Dividends Declared on Common Stock					$ 1,410,825

6229

Exhibit 254

16281

AMERICAN TOBACCO COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	1,898,496 shs.	99	57	78.00	$124,682,688	1,884,336 shs.	88 1/4	58	73.13	$118,982,492
Common Stock B ($25 par)	2,976,548 shs.	99 7/8	58 3/4	79.31	236,070,022	2,971,841 shs.	91 5/8	58 3/4	76.19	223,482,725
6% Cum. Pref. ($100 par)	526,997 shs.	150 1/2	128 1/4	139.38	73,482,842	526,997 shs.	152	130	141.00	74,308,877
Serial Debentures:										
(c) 3 1/4% due Feb. 1, 1940	$ 1,792,000			100.00	1,792,000	(a)$18,532,000			100.00	18,532,000
(c) 3 1/2% due 1941 to 1948	16,740,000			100.00	16,740,000					
(b) 6% Bonds due Oct. 1, 1944	126,650	121	112	116.50	147,547	(a) 124,650	121 1/2	117 1/2	119.50	148,987
4% Bonds due Aug. 1, 1951	831,250	113	104	108.50	901,906	831,250	112	106	109.00	906,063
(b) Notes Payable to Bank due Feb.1,1939	25,436,000			100.00	25,436,000	28,739,000			100.00	28,739,000
Total Indicated Market Value of Capital					$477,823,008					$461,847,814
EARNINGS AVAILABLE FOR CAPITAL										
(d) Earnings available for Common Stock					$ 23,036,511					$ 22,273,661
Dividends declared on Preferred Stock					3,161,982					3,161,982
Net Income for years ended December 31, as reported					26,197,493					25,435,643
Add: Interest, Discount, etc.					876,433					1,037,475
Total Earnings Available for Capital					$ 27,073,926					$ 26,473,118
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.67%					5.73%
(d)Dividends Declared on Common Stock					$ 22,934,186					$ 22,839,886

See Notes on following page.

Exhibit 254

AMERICAN TOBACCO COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	---1939---					---1940---				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	1,575,250 shs.	87 1/2	73	80.25	$126,734,812	1,560,870 shs.	89 1/2	66 1/2	78.00	$121,747,860
Common Stock B ($25 par)	2,967,822 shs.	89 3/4	75 1/4	82.50	244,845,315	2,967,822 shs.	91 3/4	68 3/4	80.25	238,167,716
6% Cum. Pref. ($100 par)	526,997 shs.	153 1/4	132	142.65	75,165,582	526,997 shs.	153 1/2	136	144.75	76,282,816
(c) Serial Debentures 2.48% due 1941-1948	$18,532,000			100.00	18,532,000	$16,740,000			100.00	16,740,000
6% Bonds due Oct. 1, 1944	116,650	121	116	118.50	137,045	102,650	121	117	119.00	122,154
4% Bonds due Aug. 1, 1951	831,250	116	107	111.50	926,844	831,250	116 1/2	108 1/2	112.50	935,156
(c) 2% Notes Payable to Bank, due 1941-45	42,000,000			100.00	42,000,000	42,850,000			100.00	42,850,000
Total Indicated Market Value of Capital					$508,341,598					$496,845,702
EARNINGS AVAILABLE FOR CAPITAL										
(d) Earnings available for Common Stock					$ 25,265,982					$ 25,149,801
Dividends declared on Preferred Stock					3,161,982					3,161,982
Net Income for years ended December 31, as reported					26,427,934					28,311,783
Add: Interest, Discount, etc.					1,104,639					1,328,031
Total Earnings available for Capital					$ 27,532,573					$ 29,639,814
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.42%					5.97%
(d) Dividends Declared on Common Stock					$ 22,788,242					$ 22,718,411

Notes: (a) Interest rates on Serial Debentures reduced from 3 1/4% and 3 1/2% to 2.48% during 1938.
(b) Quotations from Moody's Industrial Manuals.
(c) Prices estimated.
(d) Common Stock and Common Stock B have equal rights, share-for-share, in matter of dividends and distribution of assets.

Exhibit 254

AMERICAN TOBACCO COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	1,560,870 shs.	73 1/2	43 7/8	58.69	$ 91,608,634
Common Stock B ($25 par)	2,967,825 shs.	74 1/2	43 7/8	59.19	175,665,562
6% Cum. Preferred Stock ($100 par)	526,997 shs.	159	143	151.00	79,576,547
(a) Serial Debentures 2.45% due 1942-48	$14,891,000			100.00	14,891,000
6% Bonds due Oct. 1, 1944	95,650	123	112	117.50	112,389
4% Bonds due Aug. 1, 1951	831,250	123	113	118.00	980,875
(a) 2% Notes Payable to Banks, due 1942-1945	85,350,000			100.00	85,350,000
Total Indicated Market Value of Capital					$448,185,007
EARNINGS AVAILABLE FOR CAPITAL					
(b) Earnings available for Common Stock					$ 20,721,878
Dividends declared on Preferred Stock					3,161,982
Net Income for year ended December 31, as reported					23,883,860
Add: Interest, Discount, etc.					1,363,097
Total Earnings Available for Capital					$ 25,246,957
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.63%
(b)Dividends Declared on Common Stock					$ 20,379,125

Note: (a) Price estimated.
(b) Common Stock and Common Stock B have equal rights, share-for-share, in matter of dividends and distribution of assets.

16284

Exhibit 254

ARCHER-DANIELS-MIDLAND COMPANY

	Outstanding June 30	Price Range for Year High	Low	Average	Value	Outstanding June 30	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	548,296 shs.	46	22	34.00	$18,642,064	545,416 shs.	31 1/2	20	25.75	$14,044,462
Preferred Stock - 7% Cumulative ($100 par)	28,686 shs.	121 1/4	116 3/4	119.00	3,413,634	28,686 shs.	122 1/8	116	119.06	3,416,355
Total Indicated Market Value of Capital					$22,055,698					$17,459,817
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$2,756,830					$ 836,936
Dividends declared on Preferred Stock					210,466					200,802
Net Income for years ended June 30, as reported					$2,967,296					$ 637,738
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.45%					3.65%
Dividends Declared on Common Stock					$1,646,017					$ 987,958
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	544,916 shs.	37	21	29.00	$15,802,564	544,916 shs.	35 1/2	23	29.26	$15,936,793
(a) Preferred Stock - 7% Cumulative ($100 par)	27,500 shs.	121 1/4	115	118.13	3,248,438					
Total Indicated Market Value of Capital					$19,051,002					$15,936,793
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 1,642,929					$ 2,980,785
Dividends declared on Preferred Stock					196,853					96,250
Net Income for years ended June 30, as reported					$ 1,838,498					$ 3,047,035
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.65%					19.12%
Dividends Declared on Common Stock					$ 548,291					$ 708,381

Note: (a) High is to October 27, 1939. Low is retirement price at which stock was called November 1, 1939.

Exhibit 254

ARCHER-DANIELS-MIDLAND COMPANY

	Outstanding June 30	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	544,916 shs.	33 7/8	26	29.94	$16,314,785
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended June 30, as reported					$ 3,103,167
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					19.02%
Dividends Declared on Common Stock					$ 844,620

6239

Exhibit 254

THE ATLANTIC REFINING CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
1937					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	2,663,999 shs.	37	18	27.50	$73,259,973
Preferred Stock ($100 Par) Conv. 4% Series A	148,000 shs.	116 1/2	101 3/8	108.94	16,123,120
(a) Purchase Obligations (not due within one year)	$ 509,858			100.00	506,858
15 Year 3% Debs. due Sept. 1, 1953	—				—
Total Indicated Market Value					$89,891,951
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$9,343,045
Dividends Declared on Preferred Stock					592,000
Net Income for years ended December 31, as reported (after deducting minority interest)					9,935,045
Add: Interest and Discount on Long Term Debt					205,379
Total Earnings Available for Capital					$10,140,424
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.28%
Dividends Declared on Common Stock					$2,663,999

	Outstanding December 31	Price Range for Year High	Low	Average	Value
1938					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	2,663,999 shs.	27 3/8	17 3/4	22.56	$59,423,017
Preferred Stock ($100 Par) Conv. 4% Series A	148,000 shs.	109 1/4	101 7/8	105.56	15,622,880
(a) Purchase Obligations (not due within one year)	$ 406,849			100.00	406,849
15 Year 3% Debs. due Sept. 1, 1953	25,000,000	104 3/4	102 1/4	103.50	25,875,000
Total Indicated Market Value					$101,327,746
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$3,718,659
Dividends Declared on Preferred Stock					592,000
Net Income for years ended December 31, as reported (after deducting minority interest)					4,310,659
Add: Interest and Discount on Long Term Debt					228,566
Total Earnings Available for Capital					$4,539,225
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.48%
Dividends Declared on Common Stock					$2,663,999

	Outstanding December 31	Price Range for Year High	Low	Average	Value
1939					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	2,663,999 shs.	24 3/4	18 1/8	21.44	$57,116,139
Preferred Stock ($100 par) 4% Conv. Series A	148,000 shs.	110 1/2	104 1/4	107.38	15,892,240
15 Year 3% Debs. due Sept. 1, 1953	$25,000,000	106 1/4	98	102.13	25,532,500
(a) Purchase Obligations (not due within one year)	249,849			100.00	249,849
Total Indicated Market Value					$98,790,728
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$4,431,282
Dividends Declared on Preferred Stock					592,000
Net Income for the years ended December 31, as reported (after deducting minority interest)					5,023,282
Add: Interest and Discountson Long Term Debt					796,547
Total Earnings Available for Capital					$5,819,829
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.89%
Dividends Declared on Common Stock					$2,663,999

	Outstanding December 31	Price Range for Year High	Low	Average	Value
1940					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	2,696,642 shs.	27 1/8	18 1/4	22.69	$61,186,806
Preferred Stock ($100 par) 4% Conv. Series A	148,000 shs.	111	102	106.50	15,762,000
15 Year 3% Debs. due Sept. 1, 1953	$25,000,000	107 1/2	102 1/2	105.00	26,250,000
(a) Purchase Obligations (not due within one year)	124,849			100.00	124,849
Total Indicated Market Value					$103,323,655
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$5,625,453
Dividends Declared on Preferred Stock					592,000
Net Income for the years ended December 31, as reported (after deducting minority interest)					6,217,453
Add: Interest and Discountson Long Term Debt					796,776
Total Earnings Available for Capital					$7,014,229
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.79%
Dividends Declared on Common Stock					$2,663,999

Note: (a) Prices estimated.

Exhibit 254

ATLANTIC REFINING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	2,663,998 shs.	28 1/8	19 1/2	23.81	$ 63,429,792
Cum. Preferred Stock 4% Conv. Series A ($100 par)	148,000 shs.	111 1/8	107	109.06	16,140,880
15 Year 3% Deb. due Sept. 1, 1953	$25,000,000.	106 1/2	103	104.75	26,187,500
(a) Purchase obligations (not due within one year)	$ 24,849			100.00	24,849
Total Indicated Market Value of Capital					$105,783,021
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 13,754,229
Dividends declared on Preferred Stock					592,000
Net Income for year ended December 31, as reported					14,346,229
Add: Interest and discount on Long Term Debt					796,655
Total Earnings Available for Capital					$ 15,142,884
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					14.31%
Dividends Declared on Common Stock					$ 5,327,996

Note: (a) Price estimated.

Vol. XV

TRANSCRIPT OF RECORD

(Pages 6245 to 6725)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

VOL. XV.
TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals
EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

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vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

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	Original	Print
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Exhibit 254

16288

BEECH-NUT PACKING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	437,524 shs.	114 3/4	90 3/4	102.75	$44,955,591	437,524 shs.	117	94 1/2	105.75	$46,268,163
Preferred Stock, Class A ($100 par)	45 shs.			(a)100.00	4,500	45 shs.			(a)100.00	4,500
					$44,960,091					$46,272,663
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$2,740,889					$2,526,628
Dividends Declared on Preferred Stock					315					315
Net Income for the Years December 31, as Reported					$2,741,204					$2,527,143
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.10%					5.46%
Dividends Declared on Common Stock					$2,625,144					$2,406,382
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	437,524 shs.	128 1/2	104 7/8	116.69	$51,054,676	437,524 shs.	127	102	114.50	$50,096,498
Preferred Stock, Class A ($100 par)	40 shs.			(a)100.00	4,000					
Total Indicated Market Value of Capital					$51,058,676					$50,096,498
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$2,472,352					$2,889,870
Dividends Declared on Preferred Stock					306					70
Net Income for the Years ended December 31, as reported					$2,472,658					$2,889,940
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.84%					5.77%
Dividends Declared on Common Stock					$2,815,765					$2,734,525

Note: (a) Price estimated.

Exhibit 254

BEECH-NUT PACKING COMPANY

	Outstanding December 31	Price Range for Ye High	Low	
		1 9 4 1		
INDICATED MARKET VALUE OF CAPITAL				
Common Stock ($20 par)	437,524 shs.	126	108	1
EARNINGS AVAILABLE FOR CAPITAL				
Net Income for the Year Ended December 31, as Reported				
INVESTORS' APPRAISAL OF RISKS OF CAPITAL				
Dividends Declared on Common Stock				

16290

Exhibit 254

BEST & CO., INC.

	Outstanding January 31*	Price Range for Year High	Low	Average	Value	Outstanding January 31*	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	300,000 shs.	62 3/4	29	45.88	$13,764,000	300,000 shs.	36	26 7/8	41.44	$12,432,000
(a) Preferred Stock ($100 par) 6% Cum.	3,456 shs.			100.00	345,600	3,425 shs.			100.00	342,500
(b) Mortgage on Real Estate	$350,000			100.00	350,000	$350,000			100.00	350,000
Total Indicated Market Value					$14,789,600					$13,124,500
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$1,197,448					$1,004,813
Dividends Declared on Preferred Stock					20,697					21,200
Net Income for fiscal years, as reported					1,218,185					1,026,025
Add: Interest on Mortgage, estimated at 6% by S. & P.					39,000					21,000
Total Earnings Available for Capital					$1,257,105					$1,047,025
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.50%					7.98%
Dividends Declared on Common Stock					$900,000					$555,000
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	300,000 shs.	57 1/2	32	44.75	$13,425,000	300,000 shs.	39	22 1/2	30.75	$9,225,000
(a) Preferred Stock ($100 par) 6% Cum.	3,651 shs.			100.00	365,100	1,473 shs.			100.00	147,300
(b) Mortgage on Real Estate	$350,000			100.00	350,000	$350,000			100.00	350,000
Total Indicated Market Value					$14,140,100					$9,722,300
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$1,084,799					$1,088,145
Dividends Declared on Preferred Stock					22,209					23,253
Net Income for fiscal years, as reported					1,047,004					1,111,398
Add: Interest on Mortgage estimated at 6% by S. & P.					21,000					21,000
Total Earnings Available for Capital					$1,068,004					$1,132,398
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.55%					11.65%
Dividends Declared on Common Stock					$555,000					$600,000

Notes: (a) Issued to employees only; price estimated. (b) Price estimated. * Outstanding January 31 of following year.

16291

Exhibit 254

BEST & CO., INC.

	Outstanding Jan.31,1942	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	300,000 shs.	34 3/4	19 5/8	27.19	$8,157,000
(a) Mortgage on Real Estate	$350,000			100.00	350,000
Total Indicated Market Value					$8,507,000
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$1,046,901
Dividends Declared on Preferred Stock					8,593
Net Income for fiscal year, as reported					1,055,494
Add: Interest on Mortgage, estimated at 6% by Standard & Poor's Corp.					21,000
Total Earnings Available for Capital					$1,076,494
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.65%
Dividends Declared on Common Stock					$600,000

Note: (a) Price estimated.

16292

Exhibit 254

BOHN ALUMINUM & BRASS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($5 par)	352,418 shs.	48 1/8	21	34.56	$12,179,566	352,418 shs.	30 1/2	15 3/8	22.94	$8,084,469
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 1,773,462					$ 182,714
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					14.56%					2.26%
Dividends Declared on Capital Stock					$ 1,409,736					$ 176,209

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($5 par)	352,418 shs.	28 1/2	16	22.25	$ 7,841,301	352,418 shs.	34	19 3/4	26.88	$ 9,472,996
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 758,928					$ 1,441,789*
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.68%					15.22%
Dividends Declared on Capital Stock					$ 352,418					$ 528,627

Note: * Does not include proportion of net profit of a partly owned subsidiary (amount $20,453).

Exhibit 254

THE BORDEN COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($15 par)	4,396,704 shs.	28	16	22.00	$96,727,488	4,396,704 shs.	19 5/8	15	17.31	$76,106,946
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$6,290,652					$6,641,805
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.50%					8.73%
Dividends Declared on Common Stock					$7,034,726					$6,155,386
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($15 par)	4,396,704 shs.	22	16 1/2	19.25	$84,636,552	4,396,704 shs.	24 1/4	17	20.63	$90,704,004
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Year Ended December 31, as Reported					$7,974,838					$7,582,617
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.43%					8.36%
Dividends Declared on Common Stock					$6,155,386					$6,155,386

Exhibit 254

THE BORDEN COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($15 par)	4,396,704 shs.	21 7/8	18 1/4	20.06	$88,197,882
2% Serial Notes	$12,000,000			(a) 100.00	12,000,000
Total Indicated Market Value of Capital					$100,197,882
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the Year Ended December 31, as Reported					$8,270,572
Add: (b) Interest on Serial Notes					240,000
Total Earnings Available for Capital					$8,510,572
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.49%
Dividends Declared on Common Stock					$6,155,386

Notes: (a) Price estimated.
(b) Estimated by Standard & Poor's Corporation.

Exhibit 254

BORG-WARNER CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	2,302,028 shs.	50 5/8	22 3/4	36.69	$84,461,407	2,302,040 shs.	36 3/8	16 1/2	26.44	$60,865,936
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 8,348,089					$ (19,266)
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.88%					-
Dividends Declared on Common Stock					$ 5,755,019					$ 575,510
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock $5 par)	2,336,710 shs.	32	18 3/4	25.38	$ 59,305,700	2,336,913 shs.	32 7/8	12 7/8	19.38	$45,285,498
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years ended December 31, as reported.					$ 5,683,801					$ 6,730,462
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.58%					14.86%
Dividends Declared on Common Stock.					$ 3,145,890					$3,505,070

Note: Parentheses indicate red figure

Exhibit 254

BRIGGS & STRATTON CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	297,149 shs.	53 1/2	22	37.75	$11,217,375	297,149 shs.	37 3/8	12 3/4	25.06	$7,446,554
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 1,274,400					$ 842,114
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.36%					8.62%
Dividends Declared on Capital Stock					$ 1,040,018					$ 891,444
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	297,149 shs.	41	31	36.00	$10,697,364	297,149 shs.	41 1/2	27	34.25	$10,177,353
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 943,800					$ 1,041,134
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.82%					10.23%
Dividends Declared on Capital Stock					$ 891,444					$ 991,482

Exhibit 254

BRIGGS & STRATTON CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	297,149 shs.	41	23 1/2	32.25	$9,583,055
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$1,154,759
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.05%
Dividends Declared on Capital Stock					$ 891,444

6263

16298

Exhibit 254

BROWN SHOE COMPANY, INC.

	Outstanding October 31	Price Range for Year High	Low	Average	Value	Outstanding October 31	Price Range for Year High	Low	Average	Value
	1 9 3 7					1 9 3 8				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	247,400 shs.	60	34	42.00	$10,390,800	247,000 shs.	41	27 3/4	34.38	$8,491,860
(a) Fifteen-Year 3 3/4% S. F. Debs.	$3,700,000			100.00	3,700,000	$3,580,000			100.00	3,580,000
Total Indicated Market Value of Capital					$14,090,800					$12,071,860
EARNINGS AVAILABLE FOR CAPITAL										
Net income for the years ended October 31, as reported (available for common)					$793,251					$191,471
Add: Interest on S. F. Debs.					140,479					136,500
Total Earnings Available for Capital					$933,730					$327,971
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.63%					2.72%
Dividends Declared on Common Stock					$744,375					$494,450
	1 9 3 9					1 9 4 0				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	247,000 shs.	41	31 1/8	36.06	$8,906,820	246,000 shs.	37 1/2	27	32.25	$7,933,500
(a) Ten-Year Note due 1949	$3,000,000			100.00	3,000,000	$3,000,000			100.00	3,000,000
Total Indicated Market Value of Capital					$11,906,820					$10,933,500
EARNINGS AVAILABLE FOR CAPITAL										
Net income for the years ended October 31, as reported (available for common)					$773,589					$498,132
Add: Interest on long term debt					108,263					82,800
Total Earnings Available for Capital					$881,852					$580,932
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.41%					5.31%
Dividends declared on common stock					$494,000					$492,850

Note: (a) Prices estimated.

Exhibit 254

BROWN SHOE COMPANY, INC.

	Outstanding October 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	246,000 shs.	37	30	33.50	$8,241,000
(a) Ten-Year Note due 1949	$3,000,000			100.00	3,000,000
Total Indicated Market Value of Capital					$11,241,000
EARNINGS AVAILABLE FOR CAPITAL					
Net income for the fiscal year ended October 31, as reported (available for common)					$1,012,118
Add: Interest on long term debt					71,793
Total Earnings Available for Capital					$1,083,911
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.64%
Dividends declared on Common Stock					$492,000

Note: (a) Price estimated.

16300

Exhibit 254

BURROUGHS ADDING MACHINE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	5,000,000 shs.	35 5/8	15	25.31	$126,550,000	5,000,000 shs.	22 1/4	14 1/2	18.38	$91,900,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 8,163,404					$ 2,706,965
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.45%					2.95%
Dividends Declared on Common Stock					$ 7,000,000					$ 2,500,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	5,000,000 shs.	18 3/4	11	14.88	$ 74,400,000	5,000,000 shs.	12 1/2	7 1/4	9.88	$49,400,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 2,200,814					*$ 3,146,248
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					2.96%					6.37%
Dividends Declared on Common Stock					$ 2,000,000					$ 2,500,000

Note: * Parent company only, includes dividends from subsidiaries.

Exhibit 254

BURROUGHS ADDING MACHINE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET OF CAPITAL					
Common Stock (no par)	5,000,000 shs.	9 3/8	5 3/4	7.56	$37,800,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported - (Parent company only)					$ 4,771,305
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.62%
Dividends Declared on Capital Stock					$ 3,500,000

6271

Exhibit 254

CANNON MILLS COMPANY

16302

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	987,800 shs.	61-1/2	28	44.75	$44,204,050	987,800 shs.	42	21	31.50	$31,115,700
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the year ended December 31, as reported					$ 2,231,759					$ 2,277,580
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.05%					7.31%
Dividends Declared on Common Stock					$ 1,975,862					$ 1,234,727
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	987,800 shs.	41-1/2	29-1/2	35.50	$35,066,900	987,800 shs.	40-1/2	29-1/2	35.00	$34,573,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the year ended December 31, as reported					$ 3,595,536					$ 3,831,858
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.25%					11.08%
Dividends Declared on Common Stock					$ 1,975,574					$ 1,975,585

16303

Exhibit 254

CATERPILLAR TRACTOR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,882,240 shs.	100	40	70.00	$131,756,800	1,882,240 shs.	58	29 5/8	43.18	$82,460.934
Preferred Stock, 5% Cum.($100 par)	116,615 shs.	105 1/4	97	101.13	11,793,275	115,152 shs.	106 5/8	100 1/8	103.38	11,904,414
Total Indicated Market Value of Capital					$143,550,075					$94,365,348
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 9,873,931					$ 2,660,742
Dividends Declared on preferred stock					294,759					574,967
Net Income for the years ended December 31, as reported					$ 10,168,690					$ 3,235,709
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.08%					3.43%
Dividends Declared on Common Stock					$ 3,764,480					$ 3,764,480

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,882,240 shs.	64 1/2	38 1/2	51.50	$96,935,360	1,882,240 shs.	56 1/2	42 1/2	49.50	$93,170,880
Notes payable to banks	$4,500,000		(a)	100.00	4,500,000	$4,000,000			100.00	4,000,000
Total Indicated Market Value of Capital					$101,435,360					$97,170,880
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 6,004,890					$ 7,839,117
Add: Interest on bank loans					(a) 118,500					121,167
Total Earnings available for capital					$ 6,117,390					$ 7,960,284
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.03%					8.19%
Dividends Declared on Common Stock					$ 3,764,480					$ 3,764,480

(a) Price estimated.

Exhibit 254

CATERPILLAR TRACTOR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	1,882,240 shs.	50 5/8	36	43.33	$81,557,459
Notes Payable to Banks	$3,000,000			(a)100.00	3,000,000
Total Indicated Market Value of Capital					$84,557,459
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 7,784,483
Add: Interest on bank loans					68,023
Total Earnings Available for Capital					$ 7,852,506
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.29%
Dividends Declared on Common Stock					$ 3,764,480

(a) Price estimated.

Exhibit 254

CENTRAL AGUIRRE ASSOCIATES

	Outstanding July 31	Price Range for Year High	Low	Average	Value	Outstanding July 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	742,913 shs.	39 1/4	24	31.63	$23,498,338	742,913 shs.	28	16 7/8	23.44	$17,413,881
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended July 31, as reported					$ 2,947,043					$ 1,973,026
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.54%					11.33%
Dividends Declared on Common Stock					$ 1,857,100					$ 1,578,366
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	742,913 shs.	30 3/4	18 1/8	24.44	$18,156,794	742,874 shs.	26 1/4	17	21.63	$16,064,038
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the fiscal years ended July 31, as reported					$ 1,119,220					$ 1,202,596
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.16%					7.49%
Dividends Declared on Common Stock					$ 1,116,354					$ 1,116,321

Exhibit 254

CENTRAL AGUIRRE ASSOCIATES

	Outstanding July 31	Price Range for Year High	Low	Average	Value
		1 9 4 1			
DICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	742,674 shs.	22 3/4	15 1/2	19.13	$14,207,354
NINGS AVAILABLE FOR CAPITAL					
Net Income for the fiscal year ended July 31, as reported					$ 1,515,822
ESTORS' APPRAISAL OF RISKS OF CAPITAL					10.67%
vidends Declared on Common Stock					$ 1,116,321

Exhibit 254

CHICAGO YELLOW CAB COMPANY, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (No par)	300,000 shs.	27 1/2	6 1/2	17	$5,100,000	300,000 shs.	12 3/4	8	10.38	$3,114,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 75,798					$ 58,425
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					1.4%					1.8%
Dividends Declared on Common Stock					$ 450,000					$ 300,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (No par)	300,000 shs.	9 5/8	7 1/2	8.56	$2,568,000	300,000 shs.	11 1/2	7 7/8	9.69	$2,907,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 313,443					$ 312,074
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.2%					10.7%
Dividends Declared on Common Stock					$ 300,000					$ 300,000

Exhibit 254

CHRYSLER CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($5.00 Par)	4,351,132 shs.	135 1/4	46 1/8	90.69	$394,604,161	4,351,132 shs.	88 1/2	35 3/8	61.94	$269,509,116
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 50,729,211					$ 18,798,294
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.86%					6.98%
Dividends Declared on Capital Stock					$ 43,520,620					$ 8,702,264
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($5.00 Par)	4,351,132 shs.	94 3/8	53 5/8	74.00	$321,983,768	4,351,132 shs.	91 5/8	53 1/2	72.56	$315,718,138
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 36,879,829					$ 37,802,279
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.45%					11.97%
Dividends Declared on Capital Stock					$ 21,755,660					$ 23,931,225

Exhibit 254

CHRYSLER CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock ($5 par)	4,351,132 shs.	72 1/8	41 5/8	56.88	$247,492,388
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 40,114,420
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					16.21%
Dividends Declared on Capital Stock					$ 26,106,792

Exhibit 254

THE CITY ICE & FUEL COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par value)	1,157,000 shs.	21 3/8	11	16.19	$18,731,830	1,157,000 shs.	13 1/2	7 3/4	10.63	$12,298,910
Preferred Stock ($100 par value)										
6 1/2% Cumulative	198,429 shs.	92	57	74.50	14,782,961	196,899 shs.	80	59	69.50	13,684,481
(a) Notes Payable - Banks 3%	$2,100,000			100.00	2,100,000	$1,400,000			100.00	1,400,000
Detroit City Ice and Fuel Company										
First Mortgage 4%										
Sinking Fund Bonds, due 8/1/1948	$1,643,900	99 1/2	78	88.75	1,458,961	$1,608,450	82	72	77.00	1,238,507
(a) Real Estate Mortgage	$ 70,000			100.00	70,000					
Total Indicated Market Value of Capital					$37,143,752					$28,621,898
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$ 2,008,286					$ 1,528,358
Dividends declared on preferred stock					1,293,869					1,288,284
Net Income for years ended December 31, as reported					$ 3,301,855					$ 2,816,642
Add: Interest and Discount on long term debt and loans					170,561					112,106
Total Earnings Available for Capital					$ 3,472,416					$ 2,929,750
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.35%					10.24%
Dividends Declared on common stock					$ 2,308,650					$ 1,620,406
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par value)	1,152,288 shs.	14 7/8	9	11.94	$13,758,319	1,149,194 shs.	14 1/4	8 7/8	11.56	$13,296,243
Preferred Stock ($100 par value)										
6 1/2% Cumulative	171,232 shs.	97 1/2	79	88.25	15,111,224	163,765 shs.	98	85	91.50	14,984,498
(a) Notes Payable - Banks 3%	$ 700,000			100.00	700,000					
Detroit City Ice and Fuel Company										
First Mortgage 4%										
Sinking Fund Bonds, due 8/1/1948	$1,232,350	84	78	81.00	998,204	$1,207,250	87 1/2	81	84.25	1,017,108
Total Indicated Market Value of Capital					$30,567,747					$29,297,849
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$ 1,842,869					$ 1,072,889
Dividends declared on preferred stock					1,198,183					1,091,551
Net Income for years ended December 31, as reported					$ 3,041,052					$ 2,164,740
Add: Interest and discount on long-term debt and loans					90,216					76,137
Total earnings available for capital					$ 3,131,268					$ 2,240,877
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.24%					7.65%
Dividends Declared on common stock					$ 1,385,575					$ 1,380,444

Note: (a) Prices estimated

Exhibit 254

THE CITY ICE & FUEL COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par value)	1,150,176 shs.	10 3/4	8	9.38	$10,788,651
Preferred Stock ($100 par value) 6 1/2% Cumulative	117,383 shs.	104 1/2	92	98.25	11,532,880
(a) Notes Payable - Banks	$6,134,000			100.00	6,134,000
Detroit City Ice and Fuel Company First Mortgage 4% Sinking Fund Bonds, due 8/1/1948	$1,130,050	92	84	88.00	994,444
Total Indicated Market Value of Capital					$29,449,975
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 2,068,050
Dividends declared on preferred stock					909,286
Net Income for years ended December 31, as reported					2,977,336
Add: Interest and amortization of discount					158,913
Total earnings available for capital					$ 3,136,249
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.65%
Dividends declared on common stock					$ 1,380,356

Note: (a) Prices estimated

Exhibit 254

CLUETT, PEABODY & CO., INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	677,844 shs.	29 7/8	15 1/4	21.86	$14,814,317	667,844 shs.	25 3/4	10 1/2	18.13	$12,289,312
Pref. 7% Cum. S.F. Stock ($100 par)	33,990 shs.	132 7/8	110 1/2	121.69	4,136,243	33,990 shs.	129	111	120.00	4,076,800
Total Indicated Market Value of Capital					$18,750,560					$16,366,112
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 490,311					$ 873,035
Dividends declared on Preferred Stock					237,930					237,930
Net Income for years ended December 31, as reported					$ 728,241					$ 1,110,965
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.88%					6.79%
Dividends Declared on Common Stock					$ 480,140					$ 576,149
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	677,844 shs.	38	21 1/4	29.63	$20,084,518	677,844 shs.	45 1/2	25 1/2	35.50	$24,063,462
Pref. 7% Cum. S.F. Stock ($100 par)	33,970 shs.	135	125	130.00	4,416,100	33,970 shs.	145	131	138.00	4,687,860
Total Indicated Market Value of Capital					$24,500,618					$28,751,322
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 2,880,340					$ 2,536,059
Dividends declared on Preferred Stock					237,860					237,790
Net Income for years ended December 31, as reported					$ 3,068,200					$ 2,773,849
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.49%					9.65%
Dividends Declared on Common Stock					$ 1,864,071					$ 1,864,071

Exhibit 254

CLUETT, PEABODY & CO., INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	677,844 shs.	39 7/8	28 1/2	34.19	$23,175,486
Preferred Stock 7% Cum. S.F. ($100 par)	33,970 shs.	148	142	145.00	4,925,650
Total Indicated Market Value of Capital					$28,101,136
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 2,806,304
Dividends declared on Preferred Stock					237,790
Net Income for year ended December 31, as reported					$ 3,044,094
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.83%
*Dividends Declared on Common Stock					$ 2,033,532

Exhibit 254

THE COCA-COLA COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	3,991,900 shs.	170 1/2	93 3/4	132.13	$527,449,747	3,991,900 shs.	142 3/4	105 1/2	124.13	$495,514,547
Preferred Stock (no par) - Class A	600,000 shs.	59	56 1/2	57.75	34,650,000	600,000 shs.	61 1/2	57 1/2	59.50	35,700,000
Total Indicated Market Value of Capital					$562,099,747					$531,214,547
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$22,881,616					$23,770,877
Dividends Declared on Preferred Stock					1,800,000					1,800,000
Net Income for the Years Ended December 31, as reported					$24,681,616					$25,570,877
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.38%					4.81%
Dividends Declared on Common Stock					$17,963,550					$17,963,550
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	3,991,900 shs.	133	105	119.00	$475,036,100	4,000,000 shs.	131	99 1/2	115.25	$461,000,000
Preferred Stock (no par) - Class A	600,000 shs.	62 1/2	58	60.25	36,150,000	600,000 shs.	63	56	59.50	35,700,000
Total Indicated Market Value of Capital					$511,186,100					$496,700,000
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$27,230,375					$27,084,752
Dividends Declared on Preferred Stock					1,800,000					1,800,000
Net Income for the Years Ended December 31, as reported					$29,030,375					$28,884,752
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.68%					5.82%
Dividends Declared on Common Stock					$19,959,500					$19,959,500

Exhibit 254

COLGATE - PALMOLIVE - PEET COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common stock (no par)	1,962,807 shs.	25 3/4	8 1/2	17.13	$33,622,884	1,962,807 shs.	17	7 1/8	12.06	$23,671,452
Preferred stock ($100 par) 6% Cumulative	243,787 shs.	104 1/2	95	99.75	24,317,753	233,099 shs.	104 1/4	78	91.13	21,242,312
(a) Palmolive Building Corp. 4% Serial First Mortgage Notes	$2,362,500			100.00	2,362,500	$2,287,500			100.00	2,287,500
Total Indicated Market Value of Capital					$60,303,137					$47,201,264
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					($ 692,843)					$ 3,478,464
Dividends declared on preferred stock					1,475,093					1,443,457
(b) Net Income for years ended December 31, as reported					$ 782,250					$ 4,921,921
(c) Add: Interest on mortgage notes					110,250					92,500
Total Earnings Available for Capital					$ 892,500					$ 5,013,421
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					1.48%					10.62%
Dividends Declared on Common Stock					$ 980,348					$ 490,702
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,962,807 shs.	18	11 1/2	14.75	$28,951,403	1,962,807 shs.	20	10 1/8	15.06	$29,559,873
Preferred Stock ($100 par) 6% Cumulative	180,249 shs.	110	101 7/8	105.94	19,095,579	-				-
(a) Palmolive Building Corp. 4% Serial First Mortgage Notes	$2,212,500			100.00	2,212,500	$2,137,500			100.00	2,137,500
Preferred Stock (no par) $4.25 Cumulative.	-				-	125,000 shs.	102 1/2	94	98.25	12,281,250
Total Indicated Market Value of Capital					$50,259,482					$43,978,623
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 5,374,224					$ 3,392,081
Dividends declared on preferred stock					1,258,431					652,679
Net Income for years ended December 31, as reported					$ 6,632,655					(d) $ 4,044,760
(b) Interest on mortgage notes					88,500					85,500
Total Earnings Available for Capital					$ 6,721,155					$ 4,130,260
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.37%					9.39%
Dividends declared on Common Stock					$ 1,962,858					$ 1,962,858

Notes: (a) Price estimated. Privately held.
(b) Computed by Standard & Poor's Corporation.
(c) After deduction of $1,896,296, net adjustment for special items.
(d) Excludes income of English and Continental European subsidiaries not consolidated in 1940, and dividends of $1,138,671 received from such companies in 1940 and credited to reserve for contingencies.
Parentheses indicate red figure.

16316

Exhibit 254

COLUMBIAN CARBON COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	537,406 shs.	125 3/4	65	95.38	$51,257,784	537,406 shs.	98 1/2	53 3/4	76.13	$40,918,719
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 4,466,250					$ 2,757,540
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.71%					6.74%
Dividends Declared on Common Stock					$ 3,489,415					$ 2,149,056

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	537,406 shs.	96	73	84.50	$45,410,807	(A) 537,406 shs.	98 3/4	71	84.88	$45,619,081
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 2,857,103					(A) $ 3,068,799
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.29%					6.73%
Dividends Declared on Common Stock					$ 2,418,387					$ 2,472,966

Note: (A) Source: Moody's Industrial Manual, 1941

Exhibit 254

COLUMBIAN CARBON COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par value)	537,406 shs.	85	64	73.50	$39,499,341
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 3,529,159
					8.93%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Common Stock					$ 2,525,808

6303

Exhibit 254

CONSOLIDATED-HAIRE, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,390,000 shs.	45 1/2	20	32.75	$45,522,500	1,390,000 shs.	29 5/8	15	22.31	$31,010,900
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Years Ended December 31, as reported					$2,524,930					$1,265,439
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.55%					4.08%
Dividends Declared on Common Stock					$2,486,000					$932,250
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,390,000 shs.	30 3/8	19	24.69	$34,319,100	1,390,000 shs.	24 3/8	14	19.19	$26,674,100
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Years Ended December 31, as reported					$2,111,618					$1,617,208
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.15%					6.06%
Dividends Declared on Common Stock					$1,864,800					$1,553,750

Exhibit 254

CONGOLEUM-NAIRN, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL.					
Common Stock (no par)	1,390,000 shs.	18 3/4	13 1/4	16.00	$22,240,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Year Ended December 31, as reported					$2,016,779
					9.07%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Common Stock					$1,864,500

6307

Exhibit 254

CONTINENTAL CAN COMPANY, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	2,853,971 shs.	69 1/8	37 1/2	53.31	$152,145,194	2,853,971 shs.	49	36 1/2	42.75	$122,007,260
$4.50 Cumulative Preferred Stock (no par)	200,000 shs.	108 1/2	106 7/8	107.69	21,538,000	200,000 shs.	116	107	111.50	22,300,000
Total Indicated Market Value of Capital					$173,683,194					$144,307,260
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 8,721,026					$ 6,201,973
Dividends declared on Preferred Stock					192,500					900,000
Net Income for years ended December 31, as reported					$ 8,913,526					$ 7,101,973
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.13%					4.92%
Dividends Declared on Common Stock					$ 8,560,512					$ 5,707,108
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	2,853,971 shs.	51 1/4	32 1/2	41.88	$119,524,305	2,853,971 shs.	49 1/4	33	41.13	$117,383,827
(a) $4.50 Cumulative Preferred Stock (no par)	200,000 shs.	116	106	111.00	22,200,000	200,000 shs.	116 1/2	106 1/2	111.50	22,300,000
Total Indicated Market Value of Capital					$141,724,305					$139,683,827
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 7,735,787					$ 8,053,632
Dividends declared on Preferred Stock					900,000					900,000
Net Income for years ended December 31, as reported					$ 8,635,787					$ 8,953,632
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.09%					6.41%
Dividends Declared on Common Stock					$ 5,707,178					$ 5,707,424

Note: (a) Retired January 2, 1941. Debentures were issues on December 31, 1941 to replace Preferred Stock.

Exhibit 254

CONTINENTAL CAN COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($20 par)	2,853,971 shs.	40 1/2	21 7/8	31.19	$89,015,355
(a) 25 year 3% S.F. debentures	$21,000,000			100.00	21,000,000
Total Indicated Market Value of Capital					$110,015,355
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 7,469,684
Add: Interest on debentures, net of premium amortization					601,786
Total Earnings Available for Capital					$ 8,071,470
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.34%
Dividends Declared on Common Stock					$ 5,707,874

Note: (a) Prices Estimated. Sold Privately to 3 insurance companies.

Exhibit 254

CORN PRODUCTS REFINING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	2,530,000 shs.	71 1/4	50 1/2	60.83	$153,899,900	2,530,000 shs.	70 3/4	53	61.83	$156,429,900
Preferred Stock, 7% Cum. ($100 par)	245,738 shs.	171 1/2	153	162.25	39,870,991	245,738 shs.	177	162	169.80	41,652,591
Total Indicated Market Value of Capital					$193,770,891					$198,082,491
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$6,380,356					$8,033,503
Dividends Declared on Preferred Stock					1,720,166					1,720,166
Net Income for the Years Ended December 31, as Reported					$8,100,522					$9,753,669
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.18%					4.92%
Dividends Declared on Common Stock					$7,590,000					$7,590,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	2,530,000 shs.	67 1/2	54 7/8	61.19	$154,810,700	2,530,000 shs.	65 1/8	40 1/4	52.69	$133,305,700
Preferred Stock, 7% Cum. ($100 par)	245,738 shs.	177	150	163.50	40,178,163	245,738 shs.	185	165	175.00	43,004,150
Total Indicated Market Value of Capital					$194,988,863					$176,309,850
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$8,400,232					$7,860,888
Dividends Declared on Preferred Stock					1,720,166					1,720,166
Net Income for the Years Ended December 31, as Reported					$10,120,398					$9,581,054
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.19%					5.43%
Dividends Declared on Common Stock					$7,590,000					$7,590,000

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Exhibit 254

CORN PRODUCTS REFINING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	2,530,000 shs.	54	42 1/2	48.25	$122,072,500
Preferred Stock, 7% Cum. ($100 par)	245,738 shs.	182 1/2	170	176.25	43,311,323
Total Indicated Market Value of Capital					$165,383,823
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$8,545,861
Dividends Declared on Preferred Stock					1,720,166
Net Income for the Year Ended December 31, as Reported					$10,266,027
					6.21%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Common Stock					$7,590,000

6315.

Exhibit 254

THE CREAM OF WHEAT CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	600,000 shs.	37	21	29.00	$17,400,000	600,000 shs.	29 1/2	21 5/8	25.56	$15,336,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$1,204,745					$1,245,436
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.91%					8.12%
Dividends Declared on Capital Stock					$1,200,390					$1,200,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($2 par)	600,000 shs.	32 1/2	26 5/8	29.56	$17,736,000	600,000 shs.	32 3/4	17 1/2	25.13	$15,078,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$1,079,018					$1,140,997
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.08%					7.57%
Dividends Declared on Capital Stock					$1,200,000					$1,080,000

Exhibit 254

THE CREAM OF WHEAT CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock ($2 par)	600,000 shs.	19	10 1/2	14.75	$8,850,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the Year ended December 31, as Reported					$1,054,811
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.92%
Dividends Declared on Capital Stock					$960,000

Exhibit 254

16326

DIAMOND MATCH COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	700,000 shs.	36 1/2	18 1/4	27.38	$19,166,000	700,000 shs.	30 3/8	20 3/4	25.56	$17,892,000
6% cum.& part.pref.st.(par $25)	600,000 shs.	40 1/8	30	35.08	21,036,000	600,000 shs.	42	31 1/2	36.75	22,050,000
Total Indicated Market Value of Capital					$40,202,000					$39,942,000
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 911,958					$ 873,861
Dividends declared on Preferred Stock					1,200,000					1,200,000
Net Income for the years ended December 31, as reported					$ 2,111,958					$ 2,073,861
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.25%					5.19%
Dividends Declared on Common Stock					$ 2,100,000					$ 2,625,000

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	700,000 shs.	34 1/2	28	31.25	$21,875,000	700,000 shs.	36 3/8	25 7/8	31.13	$21,791,000
6% cum. & part.pref.st.(par $25)	600,000 shs.	44 7/8	36 3/4	40.61	24,486,000	600,000 shs.	43 1/4	32	37.63	22,578,000
Total Indicated Market Value of Capital					$46,361,000					$44,369,000
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 1,236,750					$ 1,062,394
Dividends declared on Preferred Stock					900,000					900,000
Net income for the years ended December 31, as reported					$ 2,136,750					$ 1,962,394
INVESTORS' AVAILABLE FOR CAPITAL					4.61%					4.42%
Dividends declared on Common Stock					$ 1,050,000					$ 1,050,000

Exhibit 254

DIAMOND MATCH COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	700,000 shs.	29 7/8	21	25.44	$17,808,000
6% cum. & part.pref.st.(par $25)	600,000 shs.	41	33	37.00	22,200,000
Total Indicated Market Value of Capital					$40,008,000
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 1,141,268
Dividends declared on Preferred Stock					900,000
Net Income for the year ended December 31, as reported					$ 2,041,268
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.10%
Dividends declared on Common Stock					$ 1,050,000

6323

16328

Exhibit 254

DOME MINES, LTD.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	973,334 shs.	57 1/4	35	46.13	$44,899,897	1,946,668 shs.	34 7/8	27 1/8	31.00	$60,346,708
EARNINGS AVAILABLE FOR CAPITAL										
(a) Net Income for years ended December 31, as reported					$ 4,116,602					$ 4,055,153
INVESTORS APPRAISAL OF RISKS OF CAPITAL					9.17%					6.72%
Dividends Declared on Capital Stock					$ 3,353,337					$ 3,893,336
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,946,668 shs.	34	20 1/4	27.13	$52,813,103	1,946,668 shs.	23 7/8	11 1/8	17.50	$34,066,690
EARNINGS AVAILABLE FOR CAPITAL										
(a) Net Income for years ended December 31, as reported					$ 3,842,405					$ 4,006,736
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.28%					11.76%
Dividends Declared on Capital Stock					$ 3,893,336					$ 3,893,336

Note: (a) No depletion of mining property charged against income.

Exhibit 254

16329

DUPLAN CORPORATION

	Outstanding May 31	Price Range for Year High	Low	Average	Value	Outstanding May 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	267,500 shs.	17 1/2	10	13.75	$3,678,125	267,500 shs.	12	8 1/2	10.25	$2,741,875
8% Cum. Pref. Stock ($100 par)	17,655 shs.	122	106	114.00	2,012,784	17,655 shs.	115	102	108.50	1,915,568
Total Indicated Market Value of Capital					$5,690,909					$4,657,443
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 190,028					$ 278,934
Dividends declared on Preferred Stock					141,408					141,248
Net Income for years ended May 31, as reported					$ 331,436					$ 420,182
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.89%					9.02%
Dividends Declared on Common Stock					$ 269,060					$ 267,900
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	270,000 shs.	14	10	12.00	$3,240,000	270,000 shs.	13 3/4	9 1/2	11.63	$3,140,100
8% Cum. Pref. Stock ($100 par)	17,655 shs.	116 5/8	108	112.31	1,982,833	17,655 shs.	120	113	116.50	2,056,808
Total Indicated Market Value of Capital					$5,222,833					$5,196,908
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 272,788					$ 156,729
Dividends declared on preferred stock					141,240					141,240
Net Income for years ended May 31, as reported					$ 414,028					$ 297,969
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.93%					5.73%
Dividends Declared on Common Stock					$ 270,000					$ 135,000

Note: Outstanding May 31 of the following year.

Exhibit 254

E. I. DU PONT DE NEMOURS & COMPANY

16330

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	11,021,425 shs.	180 1/2	98	139.25	$1,534,733,431	11,047,162 shs.	154 3/4	90 1/2	122.63	$1,354,715,470
Preferred Stock (no par)										
$4.50 Cumulative	500,000 shs.	112	107 1/2	109.75	54,875,000	500,000 shs.	120 1/2	109 1/2	115.00	57,500,000
Debenture Stock ($100 par)	1,092,948 shs.	135 1/2	130	132.75	145,088,847	1,092,948 shs.	138 1/2	130 3/4	134.63	147,143,589
5% Bonds, First Mortgage due June 1, 1940 (assumed debt of Wilmington Trust Building Corp., dissolved subsidiary)	$1,055,000			(A)100.00	1,055,000	$1,055,000			(A)100.00	1,055,000
Total Indicated Market Value of Capital					$1,735,752,278					$1,560,412,059
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 80,236,857					$ 46,384,260
Dividends on Debenture Stock					6,557,586					6,557,581
Dividends on Preferred Stock					1,237,500					2,250,000
Net Income for years ended December 31, as reported					$ 88,031,943					55,190,827
Add: Interest on Funded Debt					56,417					52,750
Total Earnings Available for Capital					$ 88,088,360					$ 55,243,577
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.07%					3.54%
Dividends Declared on Common Stock					$ 68,950,975					$ 55,904,214
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	11,033,768 shs.	188 1/2	126 1/4	157.38	$1,736,494,408	11,032,465 shs.	189 1/4	146 1/2	167.88	$1,852,130,224
Preferred Stock (no par)										
$4.50 Cumulative	1,688,850 shs.	124 1/8	112	118.06	199,385,631	1,688,850 shs.	129 3/8	114	121.69	205,516,157
Debenture Stock ($100 par)	36,192 shs.	142	126 1/16	134.03	4,850,814					
5% Bonds, First Mortgage due June 1, 1940 (assumed debt of Wilmington Trust Building Corp., dissolved subsidiary)	$1,055,000			(A)100.00	1,055,000					
Total Indicated Market Value of Capital					$1,941,785,853					$2,057,646,381
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 94,658,756					$ 79,317,048
Dividends declared on Debenture Stock					4,972,452					
Dividends declared on Preferred Stock					3,587,456					7,599,825
Net Income for years ended December 31, as reported					$ 93,218,664					$ 86,945,173
Add: Interest on Funded Debt					52,750					21,979
Total Earnings Available for Capital					$ 93,271,414					$ 86,967,152
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.80%					4.23%
Dividends Declared on Common Stock					$ 77,359,046					$ 77,304,923

Note: (A) Price estimated.

Exhibit 254

E. I. DU PONT DE NEMOURS & COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($20 par)	11,086,861 shs.	164 3/4	136 1/4	150.50	$1,668,572,581
Preferred Stock (no par) $4.50 Cumulative	1,688,850 shs.	127	120 7/8	123.94	209,316,069
Total Indicated Market Value of Capital					$1,877,888,650
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 82,801,645
Dividends declared on Preferred Stock					7,599,825
Net Income for year ended December 31 as reported					$ 90,401,470
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.81%
Dividends Declared on Common Stock					$ 77,452,648

Exhibit 254

EASTMAN KODAK CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,250,921 shs.	198	144	171.00	$384,907,491	2,250,921 shs.	187	121 1/2	154.25	$347,204,564
6% Cum. Preferred Stock (par $100)	61,657 shs.	164	150	157.00	9,680,149	61,657 shs.	173	157	165.00	10,173,405
Total Indicated Market Value of Capital					$394,587,640					$357,377,969
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$21,977,403					$16,969,466
Dividends Declared on Preferred Stock					369,942					369,942
Net Income for the Years Ended December 31, as reported					$22,347,345					$17,339,408
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.66%					4.85%
Dividends Declared on Common Stock					$18,007,368					$13,505,526
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,476,013 shs.	186 1/8	138 1/8	162.13	$401,435,988	2,476,013 shs.	166 3/4	117	141.88	$351,296,724
6% Cum. Preferred Stock (par $100)	61,657 shs.	183 1/2	155 1/2	169.50	10,450,862	61,657 shs.	180	155	167.50	10,327,548
Total Indicated Market Value of Capital					$411,886,850					$361,624,272
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 21,167,635					$ 19,706,797
Dividends declared on Preferred Stock					369,942					369,942
Net Income for the Years Ended December 31, as reported					$ 21,537,577					$ 20,076,739
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.23%					5.56%
Dividends Declared on Common Stock					$ 14,818,440					$ 14,556,978

Exhibit 254

EASTMAN KODAK CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,476,013 shs.	145 1/2	120 1/4	132.88	$329,012,607
6% Cum. Preferred Stock (par $100)	61,657 shs.	182 1/2	160	171.25	10,558,761
Total Indicated Market Value of Capital					$339,571,368
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 21,218,848
Dividends declared on Preferred Stock					369,942
Net Income for year ended December 31, as reported					$ 21,588,790
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
					6.36%
Dividends Declared on Common Stock					$ 17,332,091

3339

Exhibit 254

EATON MANUFACTURING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($4 par)	703,646 shs.	37 1/2	15 1/4	26.38	$18,562,181	703,646 shs.	25 3/8	10 1/2	17.94	$12,623,409
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years ended December 31, as reported					$ 2,568,961					$ 23,154
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.84%					0.18%
Dividends Declared on Capital Stock					$ 1,921,902					$ 175,912
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($4 par)	703,646 shs.	30 7/8	15 1/4	23.06	$16,226,077	703,646 shs.	37	22	29.30	$20,757,557
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years ended December 31, as reported					$ 2,707,340					$ 2,994,657
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					16.69%					14.43%
Dividends Declared on Capital Stock					$ 1,759,115					$ 2,110,938

Exhibit 254

EATON MANUFACTURING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock ($4 Par)	703,646 shs.	36 7/8	27	31.94	$22,474,453
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 4,364,696
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					19.42%
Dividends declared on capital stock					$ 2,110,938

Exhibit 254

16336

THE ELECTRIC STORAGE BATTERY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	906,554 shs.	44 1/2	22	33.25	$30,148,981	906,554 shs.	38	21 3/4	28.38	$25,728,003
(a) Preferred Stock, 1% Cum. ($25 par)	1,256 shs.			33.25	41,762	1,256 shs.			28.38	35,645
Total Indicated Market Value of Capital					$30,184,583					$25,763,648
EARNINGS AVAILABLE FOR CAPITAL										
(b) Net Income for years ended December 31, as reported					$ 2,110,084					$ 848,838
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.00%					3.29%
Dividends Declared on Preferred and Common Stocks					$ 2,269,281					$ 1,816,440
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	906,554 shs.	38	23 1/2	29.25	$26,516,705	906,554 shs.	33 1/2	24 7/8	29.19	$26,462,311
(a) Preferred Stock 1% Cum. ($25 par)	1,256 shs.			29.25	36,738	1,256 shs.			29.19	36,663
Total Indicated Market Value of Capital					$26,553,443					$26,498,974
EARNINGS AVAILABLE FOR CAPITAL										
(b) Net Income for the years ended December 31, as reported					$ 1,820,681					$ 2,167,598
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.85%					8.18%
Dividends Declared on Preferred and Common Stocks					$ 1,816,436					$ 1,816,808

Notes: (a) Prices used are quotations for Common Stock. Preferred participates equally with Common in dividends & is convertible share-for-share into Common Stock.
(b) Available to Preferred and Common Stocks on a share-for-share basis.

16337

Exhibit 254

THE ELECTRIC STORAGE BATTERY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
ICATED MARKET VALUE OF CAPITAL					
ommon Stock (no par)	907,810 shs.	34 3/8	28 1/2	30.44	$27,633,736
NINGS AVAILABLE FOR CAPITAL					
et Income for the year ended December 31, as reported					$ 3,312,414
ESTORS' APPRAISAL OF RISKS OF CAPITAL					11.98%
idend's Declared on Common Stock					$ 379,705

6343

Exhibit 254

ENDICOTT JOHNSON CORP.

	Outstanding November 30	Price Range for Year High	Low	Average	Value	Outstanding November 30	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($50 par)	405,360 shs.	60	33	46.50	$18,849,240	405,360 shs.	45 1/8	33	39.00	$15,533,362
Preferred Stock ($100 par) 5% Cum.	73,060 shs.	115 1/2	100	107.75	7,872,215	73,060 shs.	111 1/2	94 1/2	103.00	7,525,180
Total Indicated Market Value of Capital					$26,721,455					$23,358,542
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$1,155,416					$491,891
Dividends Declared on Preferred Stock					365,300					365,300
Net Income for year ended November 30, as reported					$1,520,716					$857,191
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.69%					3.67%
Dividends Declared on Common Stock					$1,216,080					$1,216,080
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($50 par)	405,360 shs.	55	32 1/4	43.63	$17,685,657	405,360 shs.	46	35	40.50	$16,417,080
Preferred Stock (no par) 5% Cum.	73,060 shs.	111	103 1/8	107.06	7,821,604	73,060 shs.	112	102	107.00	7,817,420
Total Indicated Market Value of Capital					$25,507,661					$24,234,500
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$1,246,067					$1,298,016
Dividends Declared on Preferred Stock					365,300					365,300
Net Income for year ended November 30, as reported					$1,611,367					$1,664,316
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.32%					6.87%
Dividends Declared on Common Stock					$1,216,080					$1,216,080

Exhibit 254

ENDICOTT JOHNSON CORP.

	Outstanding November 30	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($50 par)	405,360 shs.	47 1/2	39 1/2	43.50	$17,633,160
Preferred Stock (no par) 5% Cum.	73,060 shs.	113	107 1/2	110.25	8,054,865
Total Indicated Market Value of Capital					$25,688,025
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$1,985,810
Dividends Declared on Preferred Stock					365,300
Net Income for year ended November 30, as reported					$2,351,110
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.15%
Dividends Declared on Common Stock					$1,216,080

6347

Exhibit 254

16340

FEDERATED DEPARTMENT STORES, INC.

	Outstanding January 31*	Price Range for Year High	Low	Average	Value	Outstanding January 31*	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	920,163 shs.	43 3/4	14 3/4	29.25	$26,914,788	920,163 shs.	29	12 1/4	20.63	$18,982,965
Preferred Stock ($100 par) 4 1/4% Cum.	122,050 shs.	108 7/8	65	86.94	10,611,027	117,650 shs.	90 5/8	67 7/8	79.25	9,323,763
R. H. White Co.:										
4 1/2% 1st Mtges Bonds ext. 1959	$1,500,000			(a)100.00	1,500,000					
" " " " 1959						$1,500,000			(a)100.00	1,500,000
" " " " 1946						511,000			(a)100.00	511,000
Abraham & Straus, Inc.:										
Fifteen Year 4% Notes, 1950	2,500,000			(a)100.00	2,500,000	2,500,000			(a)100.00	2,500,000
John Shillito Co.:										
1st Mtge. Bonds 4 1/4%, 1952	1,965,000			(a)100.00	1,965,000	1,925,000			(a)100.00	1,925,000
Notes (all held by ins. co.)						1,490,000			(a)100.00	1,490,000
F. & R. Lazarus & Co.:										
4-4 1/4% Notes (all held by ins.co.)						3,250,000			(a)100.00	3,250,000
Total Indicated Market Value					$43,490,795					$39,482,728
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$2,185,070					$2,250,672
Dividends Declared on Preferred Stock					524,149					508,551
Net Income for fiscal years ended January 31, as reported					2,709,219					2,756,223
Add: Interest and Amortization of Debt Discount and Expense					270,040					289,135
Total Earnings Available for Capital					$2,979,259					$3,045,358
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.85%					7.71%
Dividends Declared on Common Stock					$1,608,532					$1,150,204
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	920,898 shs.	27 1/2	18 3/4	23.13	$21,300,371	937,293 shs.	23	15	20.00	$18,745,860
Preferred Stock ($100 par) 4 1/4% Cum.	112,250 shs.	89 3/4	82 3/4	86.25	9,681,563	109,350 shs.	98 1/8	79	88.56	9,684,036
R. H. White Co.:										
4-4 1/2% 1st Mtge. Bonds, 1959	$1,500,000			(a)100.00	1,500,000	$1,470,000			(a)100.00	1,470,000
4 1/2% 1st Mtge. Bonds, 1946	499,000			(a)100.00	499,000	487,000			(a)100.00	487,000
Abraham & Straus, Inc.:										
Fifteen Year 4% Notes, 1950	1,350,000			(a)100.00	1,350,000	(3%)1,000,000			(a)100.00	1,000,000
John Shillito Co.:										
4 1/4% Serial Notes	1,450,000			(a)100.00	1,450,000	1,464,500			(a)100.00	1,464,500
3 1/4% Serial Notes						1,775,000			(a)100.00	1,775,000
F. & R. Lazarus & Co.:										
4-4 1/4% Notes	3,250,000			(a)100.00	3,250,000	2,930,000			(a)100.00	2,930,000
Other Long Term Payables, Unidentified	1,695,000			(a)100.00	1,695,000	1,443,731			(a)100.00	1,443,731
Total Indicated Market Value					$40,725,934					$39,000,127
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$2,853,797					$2,721,929
Dividends Declared on Preferred Stock					486,487					470,170
Net Income for fiscal years ended January 31, as reported					3,340,284					3,192,099
Add: Interest and Amortization of Debt Discount and Expense					439,808					402,792
Total Earnings Available for Capital					$3,780,089					$3,594,891
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.28%					9.22%
Dividends Declared on Common Stock					$1,150,871					$1,399,406

Notes: (a) Price estimated. Sold mainly to insurance companies.
* Outstanding January 31 of following year.

Exhibit 254

WM. FILENE'S SONS COMPANY

	Outstanding January 31e	Price Range for Year High	Low	Average	Value	Outstanding January 31e	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	500,000 shs.	39 3/4	25 1/8	32.44	$16,220,000	500,000 shs.	25	15	20.00	$10,000,000
Preferred Stock ($100 par) 4 3/4% Cum.	50,000 shs.			(a)100.00	5,000,000	47,520 shs.			(a)100.00	4,752,000
R. H. White Co.:										
4 1/2% Mtge. Payable, ext. 1939	$1,500,000			(a)100.00	1,500,000					
4-4 1/4% Mtge. Payable, 1959						$1,500,000			(a)100.00	1,500,000
4 1/2% Mtge. Payable, 1946						511,000			(a)100.00	511,000
Total Indicated Market Value of Capital					$22,720,000					$16,763,000
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$474,054					$446,289
Dividends Declared on Preferred Stock					237,500					228,665
Net Income for fiscal years ended January 31, as reported					711,554					674,954
Add: Interest Paid on Mortgages					72,022					72,306
Total Earnings Available for Capital					$783,576					$747,262
INVESTORS' APPRAISAL OR RISKS OF CAPITAL					3.45%					4.46%
Dividends Declared on Common Stock					$750,000					$500,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	500,000 shs.	21 1/2	16 1/8	18.81	$ 9,405,000	500,000 shs.	22 1/2	14	18.25	$ 9,125,000
Preferred Stock ($100 par) 4 3/4% Cum.	44,662 shs.			(a)100.00	4,466,200	44,290 shs.			(a)100.00	4,429,000
R. H. White Co.:										
4-4 1/4% Mtge. Payable, 1959	$1,500,000			(a)100.00	1,500,000	$1,470,000			(a)100.00	1,470,000
4 1/2% Mtge. Payable, 1946	499,000			(a)100.00	499,000	487,000			(a)100.00	487,000
Total Indicated Market Value of Capital					$15,870,200					$15,511,000
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$656,952					$375,079
Dividends Declared on Preferred Stock					220,288					210,819
Net Income for fiscal years ended January 31, as reported					877,240					585,898
Add: Interest Paid on Mortgages					89,341					84,732
Total Earnings Available for Capital					$966,581					$670,630
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.09%					4.32%
Dividends Declared on Common Stock					$500,000					$500,000

Notes. (a) Price estimated.
• Outstanding January 31 of following year.

Exhibit 254

THE FIRESTONE TIRE & RUBBER COMPANY

16342

	Outstanding October 31	Price Range for Year High	Low	Average	Value	Outstanding October 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	1,941,303 shs.	41 3/8	16 1/2	28.94	$ 56,181,309	1,936,458 shs.	24 1/8	16 1/4	20.19	$ 39,097,087
Preferred Stock ($100 par) 6% Cum.	466,134 shs.	107 1/2	90	98.75	46,030,753	466,934 shs.	98 7/8	76	87.44	40,741,269
Firestone Tire & Rubber Co. of Calif. 5% S.F., 1942	$5,500,000	105 3/4	103 1/2	104.63	5,754,650	-				-
Firestone Cotton Mills - 20 yr. 5% S.F., 1948	$7,800,000	105 1/2	102 3/4	104.13	8,122,140	-				-
Ten Year 3 1/2% Debentures (due October 1, 1948)	-				-	$50,000,000	102 1/8	99 1/2	100.81	50,405,000
Total Indicated Market Value of Capital					$116,088,832					$130,243,356
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 6,472,373					$ 2,461,687
Dividends declared on Preferred Stock					2,796,804					2,796,354
Net Income for the years ended October 31, as reported					9,269,177					5,258,041
Add: Interest on Funded Debt and Discount and Expense					(a) 665,000					1,313,297
Total Earnings Available for Capital					$ 9,934,177					$ 6,571,338
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.56%					5.05%
Dividends Declared on Common Stock					$ 4,831,713					$ 2,322,403
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	1,933,992 shs.	25 1/2	17 5/8	21.56	$ 41,696,868	1,936,393 shs.	21 3/4	12 1/4	17.00	$ 32,918,681
Preferred Stock ($100 par) 6% Cum.	466,934 shs.	108 1/2	99 1/4	102.38	47,702,323	466,934 shs.	106	84	95.00	44,263,730
Ten Year 3 1/2% Debentures (due October 1, 1948	$48,000,000	106 1/2	97	101.75	49,348,750	$45,800,000	107	103	105.00	48,090,000
Total Indicated Market Value of Capital					$138,747,941					$125,272,411
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 3,926,442					$ 5,857,004
Dividends declared on Preferred Stock					2,795,604					2,795,604
Net Income for the years ended October 31, as reported					6,722,046					8,652,608
Add: Interest and Debenture Discount and Expense					2,069,310					2,131,870
Total Earnings Available for Capital					$ 8,791,356					$ 10,784,478
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.34%					8.61%
Dividends Declared on Common Stock					$ 1,926,988					$ 1,929,403

Note: (a) 1937 charge estimated by Standard and Poor's Corporation.

16343

Exhibit 254

THE FIRESTONE TIRE & RUBBER COMPANY

	Outstanding October 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	1,937,026 shs.	18 1/2	12 3/4	15.62	$ 30,256,346
Preferred Stock ($100 par) 6% Cum.	465,934 shs.	105	90	97.50	45,428,565
Twenty-Year 3% Debentures (due May 1, 1961)	$50,000,000	99 5/8	87	93.31	46,655,000
					$122,339,911
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 8,466,824
Dividends declared on Preferred Stock					2,795,604
Net Income for the years ended October 31, as reported					11,262,428
Add: Interest and Debenture Discount & Expense					2,448,864
Total Earnings Available for Capital					$ 13,711,292
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.21%
Dividends Declared on Common Stock					$ 2,403,279

16344

Exhibit 254

FIRST NATIONAL STORES, INC.

	Outstanding Apr. 2,1938	Price Range for Year 1937 High	Low	Average	Value	Outstanding Apr. 2,1939	Price Range for Year 1938 High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	817,577 shs.	52 1/4	26 1/2	39.38	$32,196,182	816,077 shs.	43 1/4	24 1/2	33.88	$27,716,449
Preferred Stock ($10 par) 8%	7,007 shs.			(a)10.00	70,070	7,007 shs.			(a)10.00	70,070
Total Indicated Market Value					$32,266,252					$27,786,519
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$2,569,077					$2,768,760
Dividends Declared on Preferred Stock					136,114					5,606
Net Income for fiscal years, as reported					$2,705,191					$2,774,366
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.38%					9.98%
Dividends Declared on Common Stock					$2,042,975					$2,044,226

	Outstanding Mar.30,1940	Price Range for Year 1939 High	Low	Average	Value	Outstanding Mar.29,1941	Price Range for Year 1940 High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	818,577 shs.	51	38 1/2	44.56	$36,475,791	818,577 shs.	46	32 1/2	39.25	$32,129,147
Preferred Stock ($10 par) 8%	3,423 shs.			(a)10.00	34,230	110 shs.			(a)10.00	1,100
Total Indicated Market Value					$36,510,021					$32,130,247
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$2,734,912					$2,506,817
Dividends Declared on Preferred Stock					4,163					1,903
Net Income for fiscal years, as reported					$2,739,075					$2,508,720
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.50%					7.81%
Dividends Declared on Common Stock					$2,045,478					$2,046,417

Note: (a) Price estimated.

Exhibit 254

FREEPORT SULPHUR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	796,381 shs.	32 1/4	18	25.13	$20,013,068	796,380 shs.	32	19 7/8	25.94	$20,658,097
Preferred Stock 6% Cum. Conv. ($100 par)	12,301 shs.	117	102	109.50	1,346,960					
Total Indicated Market Value of Capital					$21,360,018					$20,658,097
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 2,629,936					$ 1,496,833
Dividend declared on Preferred Stock					73,806					9,226
Net Income for years ended December 31, as reported					$ 2,703,742					$ 1,506,059
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.66%					7.29%
Dividends Declared on Common Stock					$ 1,194,559					$ 1,592,760
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	796,380 shs.	36	18 1/4	27.13	$21,605,789	796,380 shs.	39 1/4	24 3/4	32.00	$25,484,160
Twenty-Year 5% Debentures due September 1, 1959	$3,000,000		(A)	100.00	3,000,000	$3,000,000			(A) 100.00	3,000,000
Total Indicated Market Value of Capital					$24,605,789					$28,484,160
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 2,200,762					$ 3,033,472
Add: Interest on Funded Debt					23,250					90,000
Total Earnings Available for Capital					$ 2,224,012					$ 3,123,472
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.04%					10.97%
Dividends Declared on Common Stock					$ 1,194,570					$ 1,592,760

Note: (A) Price estimated. Held by two Insurance Companies.

Exhibit 254

GENERAL AMERICAN TRANSPORTATION CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	1,022,095 shs.	86 1/2	31 1/2	59.00	$60,303,605	1,032,315 shs.	59 1/4	29	44.13	$45,556,061
(a)Equipment Trust Certificates	$9,735,000			100.00	9,735,000	$10,551,000			100.00	10,551,000
(a)Serial 3% Notes, 1942	$17,500,000			100.00	17,500,000	$14,000,000			100.00	14,000,000
(a)10-Year Notes	$5,340,000			100.00	5,340,000	$5,340,000			100.00	5,340,000
(a)Purchase Contracts	$ 129,922			100.00	129,922					
(a)Obligations, due Serially						$ 340,991			100.00	340,991
Total Indicated Market Value of Capital					$93,008,527					$76,788,052
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$4,842,656					$3,004,899
Add: Interest Paid					1,208,466					1,109,177
Amortization of Debt Discount and Expense					233,737					193,741
Total Earnings Available for Capital					$5,984,861					$4,307,817
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.43%					5.61%
Dividends Declared on Common Stock					$3,577,333					$2,322,709
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	1,032,315 shs.	65	40	52.50	$54,196,538	1,032,315 shs.	57 1/4	38 3/4	46.50	$48,002,648
(a)Equipment Trust Certificates	$13,168,000			100.00	13,168,000	$17,673,500			100.00	17,673,500
(a)10-Year Notes	$ 5,340,000			100.00	5,340,000	$5,340,000			100.00	5,340,000
(a)Serial 2% Notes	$ 7,000,000			100.00	7,000,000	$7,000,000			100.00	7,000,000
(a)Serial 3% Notes	$ 3,500,000			100.00	3,500,000					
					$83,201,538					$78,016,148
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$3,214,043					$4,242,406
Add: Interest Paid					1,049,080					896,934
Amortization of Debt Discount and Expense					157,494					163,308
Total Earnings Available for Capital					$4,420,617					$5,302,647
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.31%					6.80%
Dividends Declared on Common Stock					$2,481,748					$3,096,946

Note: (a) Prices estimated.

Exhibit 254

GENERAL AMERICAN TRANSPORTATION CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($5 par)	1,040,964 shs.	55 3/4	39 1/8	47.44	$49,383,332
(a)Equipment Trust Certificates	$19,507,500			100.00	19,507,500
(a)Serial 2% Notes	10,498,000			100.00	10,498,000
Total Indicated Market Value of Capital					$79,388,832
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Year Ended December 31, as Reported					$3,905,635
Add: Interest Paid					760,442
Amortization of Debt Discount and Expense					113,072
Total Earnings Available for Capital					$4,779,149
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.02%
Dividends Declared on Common Stock					$3,122,892

Note: (a) Prices estimated.

Exhibit 254

GENERAL BAKING COMPANY

	Outstanding December 25	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	1,588,697 shs.	19 1/2	8	12.25	$19,461,538	1,588,697 shs.	11 1/8	6 1/2	8.81	$13,996,421
8% Cum. Pref. Stock (no par)	87,883 shs.	153	117	135.00	11,864,206	87,88 shs.	136	118	125.50	11,029,316
Total Indicated Market Value of Capital					$31,325,743					$25,025,737
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$801,749					$2,010,359
Dividends Declared for Preferred Stock					703,064					703,064
Net Income for Fiscal Years as Reported					$1,504,813					$2,713,423
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.80%					10.84%
Dividends Declared on Common Stock					$1,191,523					$1,270,957

	Outstanding December 30	Price Range for Year High	Low	Average	Value	Outstanding December 28	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	1,588,697 shs.	11	7 1/8	9.06	$14,393,599	1,578,697 shs.	8 1/4	5 3/8	6.81	$10,819,027
8% Cum. Pref. Stock (no par)	87,883 shs.	149	128	138.50	12,171,796	87,503 shs.	145	118	131.50	11,506,645
					$26,565,391					$22,325,672
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$803,963					$1,221,622
Dividends Declared for Preferred Stock					703,064					702,304
Net Income for Fiscal Years, as Reported					$1,507,027					$1,923,926
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.67%					8.62%
Dividends Declared on Common Stock					$953,218					$952,318

Exhibit 254

GENERAL BAKING COMPANY

	Outstanding December 27	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($5 par)	1,578,697 shs.	7 1/4	3 1/8	5.18	$8,177,650
$8 Cum. Preferred Stock (no par)	85,803 shs.	144	115	129.50	11,111,489
Total Indicated Market Value of Capital					$19,289,139
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$485,741
Dividends Declared for Preferred Stock					690,284
Net Income for the Fiscal Year, as Reported					$1,176,025
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.10%
Dividends Declared on Common Stock					$710,414

6367

Exhibit 254

GENERAL CIGAR COMPANY, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	472,982 shs.	52 1/4	22	37.13	$17,561,822	472,982 shs.	28	20 7/8	24.44	$11,559,680
7% Cum. Pref. Stock ($100 par)	50,000 shs.	152	99	125.50	6,275,000	50,000 shs.	130	108 1/4	119.13	5,956,500
Total Indicated Market Value					$23,836,822					$17,516,180
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$1,323,930					$1,032,181
Dividends declared on preferred stock					350,000					175,000
Net income for the years ended December 31, as reported					$1,673,930					$1,207,181
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.02%					6.89%
Dividends Declared on Common Stock					$1,418,946					$ 945,964

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	472,982 shs.	25 1/4	16	20.63	$9,757,619	472,982 shs.	22	12 3/4	17.38	$8,220,427
7% Cum. Pref. Stock ($100 par)	50,000 shs.	130 1/2	106	118.25	5,912,500	50,000 shs.	120	102	111.00	5,550,000
Total Indicated Market Value					$15,670,119					$13,770,427
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$529,248					$1,019,481
Dividends declared on preferred stock					350,000					350,000
Net income for the years ended December 31, as reported					$879,248					$1,369,481
INVESTORS' APPRAISAL OF THE RISKS OF CAPITAL					5.61%					9.95%
Dividends declared on common stock					$827,719					$945,964

Exhibit 254

GENERAL CIGAR COMPANY, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	472,982 shs.	22	16	19.00	$ 8,986,658
7% Cum. Pref. Stock ($100 par)	50,000 shs.	130 1/2	118	124.25	6,212,500
Total Indicated Market Value					$15,199,158
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 1,317,290
Dividends declared on preferred stock					350,000
Net income for the year ended December 31, as reported					$ 1,667,290
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.97%
Dividends Declared on Common Stock					$ 1,064,209

6371

Exhibit 254

GENERAL ELECTRIC COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	28,765,534 shs.	64 7/8	34	49.44	$1,422,168,001	28,784,457 shs.	48	27 1/4	37.63	$1,083,159,117
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for yearsended December 31, as reported					$ 63,546,782					$ 27,729,329
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.47%					2.56%
Dividends Declared on Common Stock					$ 63,273,795					$ 25,898,648
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	28,792,664 shs.	44 5/8	31	37.81	$1,088,650,626	28,813,651 shs.	41	26 1/8	33.56	$ 966,986,128
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for yearsended December 31, as reported					$ 41,235,644					$ 56,241,083
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.79%					5.82%
Dividends Declared on Common Stock					$ 40,305,054					$ 33,294,446

Exhibit 254

GENERAL ELECTRIC CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	28,772,250 shs.	55 1/8	24 3/4	29.94	$861,441,165
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 57,197,499
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.64%
Dividends Declared on Common Stock					$ 50,427,125

6375

Exhibit 254

GENERAL FOODS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	5,251,440 shs.	44 1/4	28 1/8	36.18	$189,997,099	5,251,440 shs.	40 3/8	22 7/8	31.63	$166,103,047
$4.50 Cum. Preferred (no par)						150,000 shs.	117 1/2	108 3/4	113.13	16,969,500
Total Indicated Market Value of Capital					$189,997,099					$183,072,547
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$9,206,295					$13,085,825
Dividends Declared on Preferred Stock										491,250
Net Income for the Years Ended December 31, as Reported					$9,206,295					$13,577,075
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.85%					7.42%
Dividends Declared on Common Stock					$10,502,880					$10,502,880
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	5,251,440 shs.	47 7/8	36 5/8	42.25	$221,873,340	5,251,440 shs.	49 3/8	33 3/4	41.56	$218,249,846
$4.50 Cum. Preferred (no par)	150,000 shs.	118 5/8	107 3/4	113.19	16,978,500	150,000 shs.	118 5/8	111 1/8	114.88	17,232,000
Total Indicated Market Value of Capital					$238,851,840					$235,481,846
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$14,443,063					$14,569,077
Dividends Declared on Preferred Stock					675,000					675,000
Net Income for the Years Ended December 31, as Reported					$15,118,063					$15,244,077
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.33%					6.47%
Dividends Declared on Common Stock					$11,815,740					$10,502,880

Exhibit 254

GENERAL FOODS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	5,251,440 shs.	42 3/8	33 5/8	38.00	$199,554,720
$4.50 Cum. Pfd. (no par)	150,000 shs.	117 1/4	112 1/2	114.88	17,232,000
Total Indicated Market Value of Capital					$216,786,720
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$13,478,400
Dividends Declared on Preferred Stock					675,000
Net Income for the Year Ended December 31, as Reported					$14,153,400
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.53%
Dividends Declared on Common Stock					$10,502,880

Exhibit 254

GENERAL MILLS, INC.

	Outstanding *May 31	Price Range for Year High	Low	Average	Value	Outstanding May 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	665,054 shs.	65 7/8	48	56.94	$37,868,175	665,054 shs.	79	50 3/4	64.88	$43,148,704
Preferred Stock, 6% Cum. ($100 par)	223,057 shs.	124	117	120.50	26,878,369	223,057 shs.	125	118	121.50	27,101,426
Total Indicated Market Value of Capital					$64,746,544					70,250,130
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$2,772,289					$5,001,355
Dividends Declared on Preferred Stock					1,338,342					1,449,871
Net Income for Fiscal Years Ended May 31, as Reported					$4,110,631					$6,451,226
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.35%					9.18%
Dividends Declared on Common Stock					$1,995,162					$2,909,611
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	665,054 shs.	99	72 1/2	85.75	$57,028,381	665,054 shs.	101	71 3/4	86.38	$57,447,365
Preferred Stock, 5% Cum. ($100 par)	221,473 shs.	128 3/4	125 1/2	127.13	28,156,862	221,473 shs.	131	118	124.50	27,573,389
Total Indicated Market Value of Capital					$85,184,243					$85,020,754
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$4,416,420					$4,144,368
Dividends Declared on Preferred Stock					1,222,854					1,107,365
Net Income for Fiscal Years ended May 31, as Reported					$5,639,274					$5,251,733
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.61%					6.18%
Dividends Declared on Common Stock					$2,078,294					$2,660,216

* Outstanding May 31 of the following year.

Exhibit 254

GENERAL MOTORS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
1937					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 Par)	42,668,955 shs.	70 1/2	28 5/8	49.56	$2,114,673,410
Preferred Stock (no par) $5	1,835,644 shs.	122 5/8	111	116.81	214,421,576
Total Indicated Market Value of Capital					$2,329,094,986
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 187,258,378
Dividends declared on preferred stock					9,178,220
Net Income for the years ended December 31, as reported					$ 196,436,598
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.43%
Dividends Declared on Common Stock					$ 160,549,862
1938					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	42,862,281 shs.	53 7/8	25 1/2	39.69	$1,701,203,933
Preferred Stock (no par) $5	1,835,644 shs.	124 1/2	111 7/8	118.19	216,954,764
Total Indicated Market Value of Capital					$1,918,158,697
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 93,011,787
Dividends declared on preferred stock					9,178,220
Net Income for the years ended December 31, as reported					$ 102,190,007
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.33%
Dividends Declared on Common Stock					$ 64,386,421
1939					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	42,930,920 shs.	56 3/4	36 3/8	46.56	$1,999,863,635
Preferred Stock (no par) $5	1,835,644 shs.	126 1/4	112	119.15	218,680,270
Total Indicated Market Value of Capital					$2,217,543,905
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 173,347,150
Dividends declared on preferred stock					9,943,072
Net Income for the years ended December 31, as reported					$ 183,290,222
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.27%
Dividends declared on common stock					$ 150,319,682
1940					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	43,150,729 shs.	56 3/8	37 1/4	46.81	$2,019,885,624
Preferred Stock (no par) $5	1,835,644 shs.	127 1/8	116	121.56	223,140,885
Total Indicated Market Value of Capital					$2,243,026,509
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 186,443,501
Dividends declared on preferred stock					9,178,280
Net Income for the years ended December 31, as reported					$ 195,621,781
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.72%
Dividends declared on common stock					$ 161,864,923

Exhibit 254

GENERAL MOTORS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 Par)	43,288,260 shs.	48 1/2	28 5/8	38.56	$1,669,195,306
Preferred Stock (no par) $5	1,835,644 shs.	127 1/2	121 1/2	124.50	228,537,678
Total Indicated Market Value of Capital					$1,897,732,984
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 192,474,288
Dividends declared on preferred stock					9,178,220
Net Income for the year ended December 31, as reported					$ 201,652,508
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.63%
Dividends declared on common stock					$ 162,608,296

6385

Exhibit 254

GENERAL PRINTING INK CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($1 par)	735,960 shs.	19	8 1/2	13.75	$10,119,450	735,960 shs.	13 1/8	6 3/4	9.44	$ 6,947,462
Preferred Stock (no par) $6 Cum.	34,116 shs.	110	99	104.50	3,566,122	34,116 shs.	110	101 1/4	108.62	3,603,673
Total Indicated Market Value of Capital					$13,684,572					$10,551,135
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 974,872					$ 456,971
Dividends declared on preferred stock					205,896					204,696
Net Income for years ended December 31, as reported					$ 1,180,768					$ 663,667
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.63%					6.29%
Dividends Declared on Common Stock					$ 772,758					$ 367,980
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($1 par)	735,000 shs.	10 7/8	7	8.94	$ 6,570,900	735,000 shs.	10	5 1/2	7.75	$ 5,696,250
Preferred Stock (no par) $6 Cum.	34,116 shs.	111 1/2	105	108.25	3,693,057	34,116 shs.	110	100	105.00	3,582,180
Total Indicated Market Value of Capital					$10,263,957					$ 9,278,430
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 689,672					$ 632,159
Dividends declared on preferred stock					205,696					204,696
Net Income for years ended December 31, as reported					$ 884,368					$ 836,855
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.71%					9.02%
Dividends Declared on Common Stock					$ 588,112					$ 441,000

Exhibit 254

GENERAL PRINTING INK CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($1 par)	735,000 shs.	7 1/2	4 7/8	6.19	$4,549,650
Preferred Stock (no par) $6 Cum.	34,116 shs.	110 1/2	105 1/2	113.00	3,513,948
Total Indicated Market Value of Capital					$8,063,598
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 738,374
Dividends paid on preferred stock					204,696
Net Income for year ended December 31, as reported					$ 943,070
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.70%
Dividends Declared on Common Stock					$ 429,750

6389

Exhibit 254

GILLETTE SAFETY RAZOR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,998,769 shs.	20 7/8	8	14.44	$28,862,224	1,998,769 shs.	11 1/8	6 1/2	8.81	$17,609,155
$5 dividend conv. preference stock (no par)	300,000 shs.	88 1/8	56	72.06	21,618,000	300,000 shs.	61	46 1/8	53.56	16,068,000
Total Indicated Market Value of Capital					$50,480,224					$33,677,155
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 3,000,160					$ 1,441,890
Dividends declared on Preferred Stock					1,500,000					1,500,000
Net Income for years ended December 31, as reported					$ 4,500,160					$ 2,941,890
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.91%					8.74%
Dividends Declared on Common Stock					$ 1,999,769					$ 1,399,138
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,998,769 shs.	8 3/8	5 3/4	7.06	$14,111,309	1,998,769 shs.	6 3/4	3	4.88	$ 9,753,993
$5 dividend conv. preference stock (no par)	300,000 shs.	64	43 5/8	48.81	14,643,000	300,000 shs.	51 7/8	30 3/4	41.31	12,393,000
Total Indicated Market Value of Capital					$28,754,309					$22,146,993
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 1,784,797					$ 1,101,094
Dividends declared on Preferred Stock					1,500,000					1,500,000
Net Income for years ended December 31, as reported					$ 3,284,797					$ 2,601,094
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.42%					11.74%
Dividends Declared on Common Stock					$ 1,199,261					$ 779,568

Exhibit 254

GILLETTE SAFETY RAZOR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	1,998,769 shs.	4 3/8	2 1/8	3.25	$6,495,999
$5 dividend conv.preference stock (no par)	300,000 shs.	54	34 1/8	44.06	13,218,000
Total Indicated Market Value of Capital					$19,713,999
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 1,623,264
Dividends Declared on Preferred Stock					1,500,000
Net Income for year ended December 31, as reported					$ 3,123,264
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					15.84%
Dividends Declared on Common Stock					$ 899,446

Exhibit 254

GRANITE CITY STEEL CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	382,488 shs.	48 1/8	13	30.56	$11,688,833	382,488 shs.	22 3/8	10 1/8	16.25	$6,215,430
(A) Long term notes payable	$1,818,131			100.00	1,818,131	$1,810,000			100.00	1,810,000
Total Indicated Market Value of Capital					$13,506,964					$8,025,430
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 254,224					($ 380,270)
(B) Add: Interests on notes payable					43,710					44,334
Total Earnings Available for Capital					$ 297,934					($ 336,036)
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					2.21%					-
Dividends Declared on Common Stock					$ 460,296					$ 95,622
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	382,488 shs.	22 1/2	10	16.25	$6,215,430	382,488 shs.	16 3/4	10	13.38	$5,117,684
(A) 1st mortgage 3.8% real estate notes due 1941-45	$3,576,030			100.00	3,576,030	$3,643,400			100.00	3,643,400
Total Indicated Market Value of Capital					$ 9,791,460					$8,761,084
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 347,940					$ 315,258
(C) Add: Interest on Long term notes payable					169,861					173,162
Total Earnings Available for Capital					$ 517,801					$ 488,420
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.29%					5.57%
Dividends Declared on Common Stock					$ 47,814					$ 95,622

Note: (A) Price estimated.
(B) Includes interest on $738,131 and $660,000 in 1938 and 1937 respectively, which is interest on current note payable.
(C) Interest calculated by Standard & Poor's Corporation.
Parentheses indicate red figures.

Exhibit 254

GRANITE CITY STEEL CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	382,488 shs.	12 3/4	5	8.88	$3,396,493
(A) First mtge. 3.8% real estate notes	$3,128,777			100.00	3,128,777
Total Indicated Market Value of Capital					$6,525,270
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 479,247
(B) Add: Interest on Long term notes payable					148,617
Total Earnings Available for Capital					$ 627,864
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.62%
Dividends Declared on Common Stock					$ 133,871

Notes: (A) Price estimated.
(B) Interest calculated by Standard & Poor's Corp.

Exhibit 254

W. T. GRANT COMPANY

	Outstanding January 31*	Price Range for Year High	Low	Average	Value
1937					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	1,189,354 shs.	47 5/8	22	34.61	$41,401,413
Preferred Stock ($20 par) 5% Cum.	348,885 shs.	22 1/8	19 3/4	20.94	7,305,652
(a) Real Estate Mtges. Payable	2,015,650			100.00	2,015,650
Total Indicated Market Value					$50,722,715
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$3,314,447
Dividends Declared on Preferred Stock					87,278
Net Income for years ended January 31, as reported					3,401,725
(b) Add: Interest Paid					108,040
Total Earnings Available for Capital					$3,509,765
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.92%
Dividends Declared on Common Stock					$2,266,493
1938					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	1,189,354 shs.	30	19	24.50	$29,139,173
Preferred Stock ($20 par) 5% Cum.	348,858 shs.	24 3/8	20	22.19	7,741,159
(a) Real Estate Mtges. Payable	2,682,750			100.00	2,682,750
Total Indicated Market Value					$39,563,082
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$2,417,794
Dividends Declared on Preferred Stock					348,630
Net Income for years ended January 31, as reported					2,766,424
(b) Add: Interest Paid					117,618
Total Earnings Available for Capital					$2,884,042
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.29%
Dividends Declared on Common Stock					$1,962,434
1939					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	1,189,354 shs.	35	24 3/4	29.88	$35,527,320
Preferred Stock ($100 par) 5% Cum.	348,851 shs.	25	22 7/8	23.94	8,351,493
(a) Real Estate Mtges. Payable	$2,328,375			100.00	2,328,375
Total Indicated Market Value					$46,207,188
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$3,476,313
Dividends Declared on Preferred Stock					348,683
Net Income for years ended January 31, as reported					3,824,996
(c) Add: Interest Paid					120,292
Total Earnings Available for Capital					$3,945,288
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.54%
Dividends Declared on Common Stock					$2,606,486
1940					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	1,189,354 shs.	36 3/4	26	31.38	$37,321,929
Preferred Stock ($100 par) 5% Cum.	348,844 shs.	25 1/8	21 1/4	23.19	8,089,692
(a) Real Estate Mtges. Payable	$2,539,175			100.00	2,539,175
Total Indicated Market Value					$47,950,796
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$3,193,381
Dividends Declared on Preferred Stock					348,830
Net Income for years ended January 31, as reported					3,542,211
(c) Add: Interest Paid					106,183
Total Earnings Available for Capital					$3,648,394
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.61%
Dividends Declared on Common Stock					$1,665,096

Notes: (a) Prices estimated. (b) Source: Moody's Industrial Manual. (c) Source: Standard Corporation Records. * Outstanding January 31 of the following year.

Exhibit 254

GEORGE W. HELME COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	240,000 shs.	126	86	106.00	$25,440,000	240,000 shs.	111	80 1/2	98.75	$22,980,000
Preferred Stock ($100 par)	33,829 shs.	166	129	147.50	4,989,778	33,829 shs.	161	140	150.50	5,091,268
Total Indicated Market Value of Capital					$30,429,778					$28,071,268
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$1,441,301					$1,402,233
Dividends declared on preferred stock					236,803					236,803
Net income for years ended December 31, as reported					$1,678,104					$1,639,036
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.51%					5.84%
Dividends Declared on Common Stock					$1,680,000					$1,680,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	240,000 shs.	117	100	108.50	$26,040,000	240,000 shs.	110	86	98.00	$23,520,000
Preferred Stock ($100 par)	33,829 shs.	167	148	157.50	5,328,068	33,829 shs.	167	155	161.00	5,445,469
Total Indicated Market Value of Capital					$31,368,068					$28,966,469
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$1,429,842					$1,236,714
Dividends declared on preferred stock					236,803					236,803
Net income for the years ended December 31, as reported					$1,666,645					$1,473,517
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.31%					5.09%
Dividends Declared on Common Stock					$1,680,000					$1,680,000

Exhibit 254

GEORGE W. HELME COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	240,000 shs.	96	50 1/8	73.06	$17,534,490
Preferred Stock ($100 par)	33,829 shs.	168	159	159	5,378,811
Total Indicated Market Value of Capital					$22,913,211
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 1,215,194
Dividends declared on preferred stock					236,803
Net income for the year ended December 31, as reported					$ 1,451,997
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.34%
Dividends Declared on Common Stock					$ 1,320,000

Exhibit 254

HERCULES POWDER COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,316,710 shs.	64	50	57.00	$75,052,470	1,316,710 shs.	87	42 3/4	64.88	$85,428,145
Preferred Stock ($100 par) 6% Cumulative	87,488 shs.	135 1/2	125	130.25	11,395,312	87,488 shs.	136 1/4	126 3/4	131.00	11,460,928
Total Indicated Market Value of Capital					$86,447,782					$96,889,073
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 3,915,345					$ 2,564,089
Dividends declared on Preferred Stock					524,928					524,928
Net Income for years ended December 31, as reported					$ 4,440,273					$ 3,089,017
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.14%					3.19%
Dividends Declared on Common Stock					$ 3,648,392					$ 1,975,065

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,316,710 shs.	101 1/2	63	82.25	$108,299,398	1,316,710 shs.	100 1/2	69	84.75	$111,591,173
Preferred Stock ($100 par) 6% Cum.	87,488 shs.	135 1/2	128 1/2	132.00	11,548,416	87,488 shs.	133 1/2	126 1/4	130.38	11,406,685
Total Indicated Market Value of Capital					$119,847,814					$122,997,858
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 4,800,084					$ 5,282,842
Dividends declared on preferred stock					524,928					524,928
Net Income for years ended December 31, as reported					$ 5,324,992					$ 5,807,770
INVESTORS APPRAISAL OF RISKS OF CAPITAL					4.44%					4.72%
Dividends declared on Common Stock					$ 3,788,624					$ 3,752,624

Exhibit 254

HERCULES POWDER COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	1,516,710 shs.	80 1/4	65 1/4	72.75	$95,790,653
Preferred Stock ($100 par) 6% Cum.	87,488 shs.	132 1/2	123 1/2	128.00	11,198,464
Total Indicated Market Value of Capital					$106,989,117
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 5,573,784
Dividends paid on preferred stock					524,928
Net Income for years ended December 31, as reported					$ 6,098,712
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.70%
Dividends Declared on Common Stock					$ 3,950,130

6407

Exhibit 254

HERSHEY CHOCOLATE CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	685,749 shs.	67 3/4	39 1/4	53.50	$36,687,572	685,749 shs.	60	40	50.00	$34,287,450
Convertible Preference Stock (no par)	253,844 shs.	111	83	97.00	24,622,868	253,844 shs.	105 1/2	80	92.75	23,544,031
					$61,310,440					$57,831,481
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					($337,111)					$2,857,036
Dividends Declared on Preferred Stock					1,269,220					1,269,220
Net Income for the Year Ended December 31, as Reported					$932,109					$4,126,256
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					1.52%					7.13%
Dividends Declared on Common Stock					$2,069,247					$2,057,247
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	685,749 shs.	65 1/2	54	59.75	$40,973,503	685,749 shs.	67 1/4	50	58.63	$40,205,464
Convertible Preference Stock (no par)	253,844 shs.	115	100	107.50	27,288,230	253,844 shs.	115 1/4	94 7/8	105.06	26,668,851
Total Indicated Market Value of Capital					$68,261,733					$66,874,315
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$4,964,084					$4,638,826
Dividends Declared on Preferred Stock					1,269,220					1,269,220
Net Income for the Year Ended December 31, as Reported					$6,233,304					$5,908,046
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.13%					8.83%
Dividends Declared on Common Stock					$2,057,247					$2,057,247

Note: Parentheses indicate red figures.

Exhibit 254

HERSHEY CHOCOLATE CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	685,749 shs.	56 3/4	33 1/2	45.13	$30,947,852
Convertible Preference Stock (no par)	253,844 shs.	115	99 1/2	107.25	27,224,769
Total Indicated Market Value of Capital					$58,172,621
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$4,674,705
Dividends Declared on Preferred Stock					1,269,220
Net Income for the Year Ended December 31, as Reported					$5,943,925
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.22%
Dividends Declared on Common Stock					$2,057,247

6111

Exhibit 254

HOMESTAKE MINING CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($12.50 par)	2,009,280 shs.	55 3/4	39 3/4	46.75	$93,932,640	2,009,280 shs.	66	48 1/8	57.00	$114,649,517
EARNINGS AVAILABLE FOR CAPITAL										
(a) Net Income for years ended December 31, as reported					$ 7,188,854					$ 6,940,868
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.65%					6.05%
Dividends declared on Common Stock out of depletion reserve					$ 1,845,976					$ 2,101,016
Dividends declared on Common Stock out of surplus					7,197,784					6,940,744
					$ 9,041,760					$ 9,041,760
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($12.50 par)	2,009,280 shs.	56 1/4	47 3/4	57.00	$114,528,960	2,009,280 shs.	60 1/4	35	47.63	$ 95,702,006
EARNINGS AVAILABLE FOR CAPITAL										
(a) Net Income for years ended December 31, as reported					$ 7,103,698					$ 6,091,137
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.20%					6.36%
Dividends declared on Common Stock out of depletion reserve					$ 1,961,444					$ 2,948,451
Dividends declared on Common Stock out of surplus					7,080,316					6,093,309
					$ 9,041,760					$ 9,041,760

Note (a) After depletion of mining property

Exhibit 254

HOMESTAKE MINING CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($12.50 par)	2,009,280 shs.	52 3/8	30 1/8	41.25	$82,882,600
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 5,682,999
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.86%
Dividends declared on Common Stock out of depletion reserve					$ 3,376,857
Dividends declared on Common Stock out of surplus					5,664,903
					$ 9,041,760

6215

Exhibit 254

THE HOWE SOUND CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	473,791 shs.	90 1/2	37	63.75	$30,204,176	473,791 shs.	53 3/8	23 1/2	38.44	$18,212,526
EARNINGS AVAILABLE FOR CAPITAL										
(a) Net Income for years ended December 31, as reported					$ 4,753,044					$ 2,153,662
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					15.74%					11.83%
Dividends Declared on Common Stock					$ 2,842,746					$ 1,658,269
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	474,291 shs.	57	40	48.50	$23,003,114	475,291 shs.	50 3/8	28	39.19	$18,626,654
EARNINGS AVAILABLE FOR CAPITAL										
(a) Net Income for years ended December 31, as reported					$ 2,491,409					$ 1,724,269
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.83%					9.26%
Dividends Declared on Capital Stock					$ 1,896,414					$ 1,782,341

Note: (a) No depletion charged to income account.

Exhibit 254

THE HOWE SOUND CO.

	Outstanding December 31	Price Range for Year 1941 High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($5 par)	469,991 shs.	37 1/2	26 1/2	32.00	$15,039,712
EARNINGS AVAILABLE FOR CAPITAL					
(a) Net Income for year ended December 31, as reported					$ 1,808,223
					12.02%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Capital Stock					$ 1,784,591

Note: (a) No depletion charged to income account.

Exhibit 254

INGERSOLL - RAND COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	974,130 shs.	144	92	108.00	$105,200,040	974,130 shs.	119 1/2	60	89.75	$87,428,168
Preferred Stock 6% Cum. ($100 par)	25,255 shs.	143	132	137.50	3,472,563	25,255 shs.	146	138	140.50	3,548,328
Total Indicated Market Value of Capital					$108,678,603					$90,976,496
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 9,574,893					$ 5,067,670
Dividends declared on Preferred Stock					151,518					151,518
Net Income for the years ended December 31, as reported					$ 9,726,411					$ 5,219,188
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.95%					5.74%
Dividends Declared on Common Stock					$ 5,844,534					$ 5,357,490
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	974,130 shs.	131	80	108.50	$105,693,105	974,130 shs.	118	72	95.00	$92,542,350
Preferred Stock 6% Cum. ($100 par)	25,255 shs.	157	147 1/2	152.25	3,845,074	25,255 shs.	156	140	149.00	3,762,995
Total Indicated Market Value of Capital					$109,538,179					$96,305,345
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 5,859,076					$ 6,847,872
Dividends declared on Preferred Stock					151,518					151,518
Net Income for the years ended December 31, as reported					$ 6,010,594					$ 6,999,390
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.49%					7.27%
Dividends Declared on Common Stock					$ 5,844,558					$ 6,818,665

Exhibit 254

INTERNATIONAL BUSINESS MACHINES CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	775,880 shs.	189	127 1/2	158.25	$122,783,010	814,674 shs.	185	130	157.50	$128,311,155
(a) Ten-Year 3% S.F. Debs., 1946	$10,000,000			100.00	10,000,000	$10,000,000			100.00	10,000,000
(a) Ten-Year 3 1/2% S.F. Debs., 1947	$ 5,000,000			100.00	5,000,000	$ 5,000,000			100.00	5,000,000
Total Indicated Market Value of Capital					$137,783,010					$143,311,155
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 8,082,513					$ 8,660,034
Add: Interest on Bonded Indebtedness					307,292					475,000
Total Earnings Available for Capital					$ 8,389,805					$ 9,135,034
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.09%					6.37%
Dividends Declared on Common Stock					$ 4,645,702					$ 4,875,499
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	855,408 shs.	167	145	156.00	$133,443,648	898,178 shs.	191 1/2	136	163.75	$147,076,648
(a) Ten-Year 3% S.F. Debs., 1946	$9,000,000			100.00	9,000,000	$8,200,000			100.00	8,200,000
(a) Ten-Year 3 1/2% S.F. Debs., 1947	$5,000,000			100.00	5,000,000	$3,800,000			100.00	3,800,000
Total Indicated Market Value of Capital					$147,443,648					$159,076,648
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the year ended December 31, as reported					$ 9,092,692					$ 9,431,013
Add: Interest on Bonded Indebtedness					473,750					430,250
Total Earnings Available for Capital					$ 9,566,442					$ 9,861,263
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.49%					6.20%
Dividends Declared on Common Stock					$ 5,119,788					$ 5,376,817

(a) Prices estimated by Standard & Poor's Corporation. Entire issues sold privately to Prudential Insurance Co. of America at par.

16378

Exhibit 254

INTERNATIONAL BUSINESS MACHINES CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	943,028 shs.	167 1/2	140	153.75	$144,990,555
Ten Year 2 1/4% S.F. Deb. due 1951	$17,000,000			100.00	17,000,000
Total Indicated Market Value of Capital					$161,990,555
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 9,844,633
Add: Interest on Bonded Indebtedness					373,861
Total Earnings Available for Capital					$ 10,218,494
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.31%
Dividends Declared on Common Stock					$ 5,648,577

(a) Price estimated by Standard & Poor's Corporation. Entire issue sold privately to Prudential Insurance Co. of America at par.

Exhibit 254

INTERNATIONAL HARVESTER COMPANY

	Outstanding October 31	Price Range for Year High	Low	Average	Value	Outstanding October 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	4,245,737 shs.	120	53 1/2	86.75	$368,317,685	4,245,730 shs.	70	48	59	$250,498,424
Preferred Stock ($100 par)	816,724 shs.	162	138	150.00	122,508,600	816,724 shs.	164 7/8	141	152.94	124,909,769
Total Indicated Market Value of Capital					$490,826,285					$375,408,193
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 26,775,095					$ 12,754,655
Dividends declared on Preferred Stock					5,717,068					5,717,068
Net Income for the fiscal years ended October 31, as reported					$ 32,492,763					$ 18,471,723
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.62%					4.92%
Dividends Declared on Common Stock					$ 16,981,019					$ 9,173,107
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	4,245,729 shs.	71 5/8	45 7/8	58.75	$249,436,579	4,245,725 shs.	62 3/4	36	50.38	$213,899,135
Preferred Stock ($100 par)	816,724 shs.	160 3/4	142	154.38	126,085,851	816,724 shs.	173	145	159.00	129,859,120
Total Indicated Market Value of Capital					$375,522,430					$343,758,255
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 7,262,991					$ 17,444,048
Dividends declared on Preferred Stock					5,717,068					5,717,068
(a) Net Income for the fiscal year ended October 31, as reported					$ 12,980,059					$ 23,161,116
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.46%					6.74%
Dividends Declared on Common Stock					$ 8,792,376					$ 10,144,504

Note (a) Consolidated in 1939. In 1940 company earnings are reported. In 1939 company earnings amounted to $7,942,810.

Exhibit 254

INTERNATIONAL HARVESTER COMPANY

	Outstanding October 31	Price Range for Year High	Low	Average	Value
		1 9 4 1			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	4,235,721 shs.	57	42 1/4	49.03	$210,715,133
Preferred Stock ($100 par)	816,724 shs.	170	150	160.00	130,675,840
Total Indicated Market Value of Capital					$341,390,973
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 24,917,520
Dividends declared on Preferred Stock					5,717,068
(a) Net Income for the year ended October 31, as reported					$ 30,634,588
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.97%
Dividends Declared on Common Stock					$ 13,160,242

Note: (a) Company earnings only

Exhibit 254

INTERNATIONAL SALT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	233,382 shs.	28 3/4	19 1/2	24.13	$5,631,508	233,382 shs.	30 1/4	19 1/2	24.88	$5,806,544
First and Consolidated Mortgage Collateral Trust Fifty-Year 5% Bonds due October 1, 1951	$3,929,000	109	105	107.00	4,204,030	$3,862,000	109 1/2	107	108.25	4,180,615
Total Indicated Market Value of Capital					$9,835,538					$9,987,159
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 522,315					$ 487,645
Add: Interest on Funded Debt					205,557					193,862
Total Earnings Available for Capital					$ 727,872					$ 681,507
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.40%					6.82%
Dividends Declared on Common Stock					$ 408,430					$ 466,768
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	240,000 shs.	38	29	33.50	$8,040,000	240,000 shs.	39 5/8	26 7/8	33.25	$7,980,000
Twelve-Year 3 1/4% S.F. Debentures, due January 1, 1951	$3,500,000		(a)	100.00	3,500,000	$3,000,000			(a)100.00	3,000,000
Total Indicated Market Value of Capital					$11,540,000					$10,980,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 412,918					$ 949,483
Add: Interest on Funded Debt (including $104,742.50 on 5% Bonds redeemed in 1939)					224,126					113,750
Amortization of Bond Premium and Refunding Expense					19,787					19,800
Total Earnings Available for Capital					$ 656,831					$ 1,083,033
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.69%					9.86%
Dividends Declared on Common Stock					$ 420,000					$ 600,000

Note: (a) Price estimated.

Exhibit 254

INTERNATIONAL SALT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	240,000 shs.	49	38 1/4	43.63	$10,471,200
Twelve-Year 3 1/4% S.F. Debentures	$2,900,000			(a) 100.00	2,900,000
Total Indicated Market Value of Capital					$13,371,200
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 788,244
Add: Interest on Funded Debt					97,500
Amortization of Bond Premium and Refunding Expenses					15,624
Total Earnings Available for Capital					$ 901,368
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.74%
Dividends Declared on Common Stock					$ 720,000

Note: (a) Price estimated.

6133

Exhibit 254

INTERNATIONAL SHOE CO.

	Outstanding November 30	Price Range for Year High	Low	Average	Value
		1937			
INDICATED MARKET VALUE OF CAPITAL					
- Common Stock (no par)	3,340,300 shs.	49 3/8	30	39.68	$132,545,104
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the fiscal years ended November 30, as reported					$ 6,266,992
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.73%
Dividends Declared on Common Stock					$ 6,678,175
		1938			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	3,343,300 shs.	40 3/4	31 1/4	36.00	$120,358,800
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the fiscal years ended November 30, as reported					$ 6,5[illegible]8,209
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.47%
Dividends Declared on Common Stock					$ 5,846,275

	Outstanding November 30	Price Range for Year High	Low	Average	Value
		1938			
INDICATED MARKET VALUE OF CAPITAL					
- Common Stock (no par)	3,340,300 shs.	35 3/4	28	31.88	$106,466,764
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the fiscal years ended November 30, as reported					$ 4,268,296
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.01%
Dividends Declared on Common Stock					$ 5,845,525
		1940			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	3,342,500 shs.	39 5/8	26 7/8	33.25	$111,138,125
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the fiscal years ended November 30, as reported					$ 6,473,612
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.82%
Dividends Declared on Common Stock					$ 5,849,975

16384

Exhibit 254

INTERNATIONAL SHOE CO.

	Outstanding November 30	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	3,342,500 shs.	31 1/4	26	28.63	$95,695,775
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the fiscal year ended November 30, as reported					$ 7,207,038
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.53%
Dividends Declared on Common Stock					$ 6,685,000

6137

Exhibit 254

ISLAND CREEK COAL COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($1 par)	593,865 shs.	30	20 1/2	25.25	$14,995,100	593,865 shs.	24	16	20.00	$11,877,306
$6 Cum.Pref.Stock ($1 par)	25,269 shs.	127	116	121.50	3,070,224	25,269 shs.	124	113.1/4	118.63	2,997,701
(a) Carnegie Coal Corp., 5% mortgage bonds, due October 15, 1945	-				-	$465,000			100.00	465,000
Total Indicated Market Value of Capital					$18,065,324					$15,340,007
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 1,376,152					$ 865,227
Dividends Declared on preferred stock					151,614					151,614
Net Income for the years ended December 31, as reported					1,527,766					1,016,841
Add: Interest on Bonds					-					7,690
Total Earnings available for Capital					$ 1,527,766					$ 1,024,531
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.46%					6.68%
Dividends Declared on Common Stock					$ 1,187,729					$ 1,187,729

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($1 par)	593,865 shs.	32 3/4	18	25.38	$15,072,302	593,865 shs.	53	20 1/8	26.56	$15,773,063
$6 Cum. Pref. Stock ($1 par)	25,269 shs.	135	119 1/2	122.25	3,089,186	25,269 shs.	130	122	126.00	3,183,936
(a) Carnegie Coal Co., 5% Mortgage bonds, due October 15, 1945	$465,000			100.00	465,000	$300,000			100.00	300,000
Total Indicated Market Value of Capital					$18,626,478					$19,256,999
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 1,434,507					$ 2,166,148
Dividends Declared on preferred stock					151,614					151,614
Net Income for the years ended December 31, as reported					1,586,121					2,317,762
Add: Interest on bonds					13,950					9,000
Total Earnings available for Capital					$ 1,600,071					$ 2,326,762
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.59%					12.08%
Dividends Declared on Common Stock					$1,187,729					$1,781,595

Note: (a) Price estimated.

Exhibit 254

JEWEL TEA CO., INC.

	Outstanding Jan. 1, 1938	Price Range for Year High	Low	Average	Value
		1937			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	273,934 shs.	87 1/8	49	68.06	$18,643,948
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended as reported					$1,452,120
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.79%
Dividends Declared on Common Stock					$1,300,945

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1938			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	275,433 shs.	74 5/8	44 1/4	59.44	$16,371,738
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended as reported					$1,423,959
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.70%
Dividends Declared on Common Stock					$1,376,906

	Outstanding December 30	Price Range for Year High	Low	Average	Value
		1939			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	276,866 shs.	89 1/2	68	78.75	$21,803,119
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended as reported					$1,583,178
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.26%
Dividends Declared on Common Stock					$1,658,666

	Outstanding December 28	Price Range for Year High	Low	Average	Value
		1940			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	555,074 shs.	52	34 3/4	43.38	$24,079,110
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended as reported					$1,576,995
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.55%
Dividends Declared on Common Stock					$1,332,044

16387

Exhibit 254

JEWEL TEA CO., INC.

	Outstanding Jan. 3, 1942	Price Range for Year 1941 High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	555,826 shs.	44	31 7/8	37.94	$21,088,038
Preferred Stock ($100 par) 4 1/4% Cumulative	50,000 shs.	111 1/4	107 5/8	109.44	5,472,000
Total Indicated Market Value					$26,560,038
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$1,454,531
Preferred Stock Dividend Requirements					64,340
Net income for year ended, as reported					$1,518,871
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.72%
Dividends Declared on Common Stock					$1,333,508

6153

Exhibit 254

KAUFMANN DEPARTMENT STORES, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($12.50 par)	566,463 shs.	35	15	25.00	$14,161,575					
Common Stock ($1 par)						564,897 shs.	12	11	11.50	$ 6,496,316
Preferred Stock ($100 par):										
5% Cumulative						56,490 shs.	100	100	100.00	5,649,000
(a) 7% Cumulative	5,068 shs.			100.00	506,800	4,317 shs.			100.00	431,700
(a) Instalment Notes Payable to Bank due $300,000 Apr. 1, 1938, 1939 and 1940.	$ 900,000			100.00	900,000	$600,000			100.00	600,000
(a) Notes Payable to Banks	1,250,000			100.00	1,250,000	500,000			100.00	500,000
Total Indicated Market Value of Capital					$16,818,375					$13,677,016
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$1,491,082					$817,035
Dividends Declared on Preferred Stock					41,067					35,429
Net Income for years ended December 31, as reported					1,532,129					852,464
Add: Interest on Notes Payable to Banks					49,110					37,316
Total Earnings Available for Capital					$1,581,239					$889,780
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.40%					6.51%
Dividends Declared on Common Stock					$904,434					$497,708
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($1 par)	566,382 shs.	16 3/4	8 3/8	12.56	$ 7,113,507	552,682 shs.	15 1/2	8	12.25	$ 6,770,110
Preferred Stock ($100 par) 5% Cum.	57,514 shs.	99 7/8	90	94.94	5,480,379	55,239 shs.	104 1/2	92	98.25	5,427,232
(a) Notes Payable to Banks	$1,000,000			100.00	1,000,000	$1,000,000			100.00	1,000,000
Total Indicated Market Value of Capital					$13,573,886					$13,197,342
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$ 944,402					$1,147,568
Dividends Declared on Preferred Stock					(b) 299,115					271,211
Net Income for years ended December 31, as reported					1,243,517					1,418,779
Add: Interest on Notes Payable to Banks					22,349					61,345
Total Earnings Available for Capital					$1,265,866					$1,480,124
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.33%					11.22%
Dividends Declared on Common Stock					$483,127					$406,240

Notes: (a) Prices estimated. (b) Includes $8,366 declared on stock retired in 1939.

Exhibit 254

KAUFMANN DEPARTMENT STORES, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($1 par)	552,662 shs.	14 3/4	9 5/8	12.19	$ 6,736,950
Preferred Stock ($100 par) 5% Cum.	37,235 shs.	104 1/4	100	102.13	3,802,811
(a) Instalment Note, payable $150,000 semi-annually 3/1/43 to 3/1/47	$1,350,000			100.00	1,350,000
(a) Notes Payable to Banks	1,550,000			100.00	1,550,000
Total Indicated Market Value					$13,439,761
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$1,022,006
Dividends Declared on Preferred Stock					208,681
Net Income for year ended December 31, as reported					1,230,687
Add: Interest on Notes Payable					49,649
Total Earnings Available for Capital					$1,280,336
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.53%
Dividends Declared on Common Stock					$580,295

Note: (a) Price estimated.

Exhibit 254

S. S. KRESGE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	5,489,922 shs.	29 5/8	15 1/2	22.56	$123,852,640	5,489,922 shs.	22 3/8	15 1/8	18.75	$102,936,038
(a) Mortgages Payable	$2,909,325			100.00	2,909,325	$2,996,625			100.00	2,996,625
(a) Land Contracts Payable	754,135			100.00	754,135	722,805			100.00	722,805
(a) Mortgages and Land Contracts due within one year	599,884			100.00	599,884	360,583			100.00	360,583
Total Indicated Market Value					$128,115,984					$107,016,051
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$10,712,513					$ 8,997,051
Less: Appropriation to reserve for fire losses					100,000					100,000
Earnings Available for Common Stock					10,612,513					8,897,051
Add: Interest on Mortgages, etc.					271,224					205,148
Total Earnings Available for Capital					$10,883,737					$ 9,102,199
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.50%					8.51%
Dividends Declared on Common Stock					$6,587,833					$6,587,835
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($10 par)	5,489,922 shs.	26 3/8	20	23.19	$127,311,291	5,489,922 shs.	26	19 1/2	22.75	$124,895,726
(a) Mortgages Payable	$2,223,875			100.00	2,223,875)					
(a) Land Contracts Payable	126,305			100.00	126,305)	$751,749			100.00	751,749
(a) Mortgages and Land Contracts - due within one year	1,044,457			100.00	1,044,457	1,533,226			100.00	1,533,226
Total Indicated Market Value					$130,705,928					$127,180,701
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$10,450,624					$10,070,389
Less: Appropriation to reserve for fire losses					400,000					
Earnings Available for Common Stock					10,050,624					10,070,389
Add: Interest on Mortgages, etc.					188,871					133,213
Total Earnings Available for Capital					$10,239,495					$10,203,602
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.83%					8.02%
Dividends Declared on Common Stock					$6,587,839					$7,411,324

Note: (a) Prices estimated.

Exhibit 254

S. S. KRESGE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock ($10 par)	5,489,922 shs.	26 1/4	21	23.62	$129,671,958
(a) Mortgages and Land Contracts Payable	$566,028			100.00	566,028
(a) Mortgages and Land Contracts - due within one year	649,867			100.00	649,867
Total Indicated Market Value					$130,887,853
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$10,478,510
Less: Appropriation to reserve for fire losses					-
Earnings Available for Common Stock					10,478,510
Add: Interest on Mortgages, etc.					60,976
Total Earnings Available for Capital					$10,539,486
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.05%
Dividends Declared on Common Stock					$7,411,327

Note: Prices estimated.

Exhibit 254

S. H. KRESS & COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
1937					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,351,886 shs.	47 1/2	22	34.75	$81,725,954
Special 6% Cum. Pfd. Stock ($10 par)	720,911 shs.	12 5/8	10 7/8	11.75	8,470,704
Total Indicated Market Value					$90,196,658
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$5,424,146
Dividends Declared on Preferred Stock					432,301
Net Income for years ended December 31, as reported					$5,856,447
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.49%
Dividends Declared on Common Stock					$3,782,922
1938					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,351,674 shs.	31 5/8	22	26.61	$63,048,380
Special 6% Cum. Pfd. Stock ($10 par)	720,899 shs.	12 1/2	11 1/8	11.81	8,515,617
Total Indicated Market Value					$71,563,997
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$3,235,907
Dividends Declared on Preferred Stock					432,309
Net Income for years ended December 31, as reported					$3,668,216
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.13%
Dividends Declared on Common Stock					$3,782,921
1939					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,351,674 shs.	28 1/2	23 3/4	26.13	$61,449,842
Special 6% Cum. Pfd. Stock ($10 par)	720,892 shs.	13	11 1/2	12.25	8,830,927
Total Indicated Market Value					$70,280,188
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$4,851,538
Dividends Declared on Preferred Stock					432,332
Net Income for years ended December 31, as reported					$5,283,870
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.52%
Dividends Declared on Common Stock					$3,782,878
1940					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,351,674 shs.	29 1/2	22 1/2	26.00	$61,143,524
Special 6% Cum. Pfd. Stock ($10 par)	720,891 shs.	13 1/2	11 1/2	12.50	9,011,138
Total Indicated Market Value					$70,154,662
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$4,906,816
Dividends Declared on Preferred Stock					432,346
Net Income for years ended December 31, as reported					$5,339,161
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.61%
Dividends Declared on Common Stock					$3,782,878

Exhibit 254

S. H. KRESS & COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,351,674 shs.	28 5/8	22 1/8	25.38	$59,685,486
Special 6% Cum. Pfd. Stock ($10 par)	720,807 shs.	13 1/4	11 3/4	12.50	9,011,088
Total Indicated Market Value					$68,696,574
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$ 4,636,803
Dividends Declared on Preferred Stock					486,408
Net Income for year ended December 31, as reported					$ 5,123,211
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.46%
Dividends Declared on Common Stock					$ 3,762,678

Exhibit 254

THE KROGER GROCERY & BAKING COMPANY

	Outstanding Jan. 1,1938	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,821,989 shs.	24 1/4	14	19.13	$34,854,650	1,821,989 shs.	21 5/8	12 3/8	17.00	$30,973,813
(a) 6% 1st Pfd. Stock ($100 par)	537 shs.	132 1/2	132	132.25	71,018	507 shs.	126	110	117.50	59,573
(a) 7% 2nd Pfd. Stock ($100 par)	480 shs.	131	127	128.00	61,920	480 shs.	124	120	122.00	58,560
Total Indicated Market Value					$34,987,568					$31,091,946
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$2,943,647					$3,735,167
Dividends Declared on 6% Preferred Stock					3,312					3,042
Dividends Declared on 7% Preferred Stock					3,381					3,360
Net Income for fiscal years, as reported					$2,950,340					$3,741,569
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.43%					12.03%
Dividends Declared on Common Stock					$2,915,182					$3,461,772

	Outstanding December 30	Price Range for Year High	Low	Average	Value	Outstanding December 28	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,822,734 shs.	29 5/8	20 1/4	24.94	$45,458,986	1,831,889 shs.	34 1/2	23 1/2	29.00	$53,124,781
(a) 6% 1st Pfd. Stock ($100 par)	507 shs.	128	120	124.00	62,868	507 shs.	126	120	123.00	62,361
(a) 7% 2nd Pfd. Stock ($100 par)	460 shs.	132	120	126.00	57,960	460 shs.	130	120	125.00	57,500
Total Indicated Market Value					$45,579,814					$53,244,642
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$5,508,335					$4,600,664
Dividends Declared on 6% Preferred Stock					3,042					3,042
Dividends Declared on 7% Preferred Stock					3,220					3,220
Net Income for fiscal years, as reported					$5,514,597					$4,607,126
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.10%					8.65%
Dividends Declared on Common Stock					$4,556,839					$4,656,081

Note: (a) Quotation from Moody's Industrial Manual.

Exhibit 254

THE KROGER GROCERY & BAKING COMPANY

	Outstanding December 27	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	1,834,589 shs.	29 7/8	24	26.94	$49,423,628
(a) 6% 1st Pfd. Stock ($100 par)	504 shs.			125.00	63,000
(a) 7% 2nd Pfd. Stock ($100 par)	460 shs.			130.00	59,800
Total Indicated Market Value					$49,546,628
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$4,963,849
Dividends Declared on 6% Preferred Stock					3,033
Dividends Declared on 7% Preferred Stock					3,220
Net Income for fiscal year, as reported					$4,970,102
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.03%
Dividends Declared on Common Stock					$3,668,128

Note: (a) Prices estimated.

Exhibit 254

THE LAMBERT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	746,371 shs.	24	10 1/8	17.06	$12,733,089	746,371 shs.	17	8 1/2	12.75	$9,516,230
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 1,152,187					$1,277,798
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.05%					13.43%
Dividends Declared on Common Stock					$ 1,399,446					$1,119,556
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	746,371 shs.	18 1/8	14	16.06	$11,986,718	746,371 shs.	16 3/8	11 7/8	14.13	$10,546,222
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 1,261,837					$ 1,179,054
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.53%					11.12%
Dividends Declared on Common Stock					$ 1,119,557					$ 1,119,557

Exhibit 254

THE LAMBERT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	746,371 shs.	14 1/2	10 1/8	12.31	$9,187,827
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$1,350,411
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					14.70%
Dividends Declared on Common Stock					$1,119,557

6433

Exhibit 254

LEHN & FINK PRODUCTS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (par $5)	396,700 shs.	21 3/8	8	14.69	$5,827,523	396,700 shs.	14 3/8	6 7/8	10.83	$4,216,921
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 532,623					$ 420,414
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.14%					9.97%
Dividends Declared on Common Stock					$ 500,000					$ 495,875
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (par $5)	396,700 shs.	13 5/8	9 3/8	11.50	$4,562,050	396,700 shs.	14	9 1/2	11.75	$4,661,225
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 624,661					$ 304,354
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.79%					6.53%
Dividends Declared on Common Stock					$ 545,463					$ 198,350

Exhibit 254

LEHN & FINK PRODUCTS CORPORATION

	Outstanding December 31	Price Range for Year 1941 High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($5 par)	596,700 shs.	14 1/4	11 3/8	12.81	$5,081,727
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 770,360
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					15.16%
Dividends Declared on Common Stock					$ 626,815

6137

Exhibit 254

LIGGETT & MYERS TOBACCO COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	859,856 shs.	113 1/4	82	97.63	$83,947,741	859,856 shs.	102	81	91.50	$78,676,884
Common Stock B ($25 par)	2,277,083 shs.	114	83 1/2	98.75	224,861,946	2,277,083 shs.	103 3/4	81 1/2	92.63	210,926,198
Pref. 7% Cum. Stock ($100 par)	208,741 shs.	175	151	163.00	34,024,783	208,741 shs.	176 1/2	157	166.75	34,807,562
7% Bonds, due Oct. 1, 1944	$9,664,800	136	126	131.00	12,660,888	$9,551,700	131	128	129.50	12,369,486
5% Bonds, due Aug. 1, 1951	$12,886,600	126 1/2	117	121.75	15,689,436	$12,886,600	127 1/2	121 1/8	124.31	16,019,332
Total indicated market value of capital					$371,184,794					$368,799,368
EARNINGS AVAILABLE FOR CAPITAL										
(a) Earnings available for common stock and common stock B					$19,914,373					$19,099,697
Dividends declared on preferred stock					1,461,187					1,461,187
Net income for years ended December 31, as reported					21,375,560					20,560,884
Add: Interest on 7% bonds					679,448					667,021
" " 5% "					644,330					644,330
Total earnings available for capital					$22,699,338					$21,872,235
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.12%					6.20%
Dividends Declared on Common Stock					$18,821,634					$18,684,695
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	859,856 shs.	108 1/2	95	101.75	$87,490,348	859,856 shs.	109	87	98.00	$84,265,888
Common Stock B ($25 par)	2,277,083 shs.	109 3/4	95 1/4	102.50	233,401,008	2,277,083 shs.	109 1/2	87	98.25	223,723,406
Preferred 7% Cum. Stock ($100 par)	208,741 shs.	180	162	166.00	34,651,006	208,741 shs.	188 3/8	169	178.69	37,299,929
7% Bonds, due Oct. 1, 1944	$9,438,200	129 7/8	118 1/8	124.00	11,703,368	$9,322,700	127 1/2	121 1/8	124.31	11,589,048
5% Bonds, due Aug. 1, 1951	$12,886,600	131	119	125.00	16,108,250	$12,886,600	131 1/2	120 5/8	126.06	16,244,848
Total indicated market value of capital					$383,353,980					$373,123,118
EARNINGS AVAILABLE FOR CAPITAL										
(a) Earnings available for common stock and common stock B					$19,244,362					$18,878,064
Dividends declared on preferred stock					1,461,187					1,461,187
Net income for years ended December 31, as reported					20,705,549					20,339,841
Add: Interest on 7% bonds					658,668					650,567
" " 5% "					644,330					644,330
Total earnings available for capital					$22,008,567					$21,634,138
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.74%					5.80%
Dividends Declared on Common Stock					$18,684,695					$18,684,695

Note: (a) Common and Common B have equal rights, share for share, as to dividends and distribution of assets.

16401

Exhibit 254

LIGGETT & MYERS TOBACCO COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	859,856 shs.	96 1/2	64 1/4	80.38	$ 69,115,225
Common Stock B ($25 par	2,277,083 shs.	98	64 1/2	81.25	185,012,994
Preferred 7% Cum. Stock ($100 par)	208,741 shs.	189	174	181.50	37,888,492
7% Bonds - due Oct. 1, 1944	$9,202,650	131	121 1/2	126.25	11,618,346
5% Bonds - due Aug. 1, 1951	$12,886,600	123	114 1/4	118.63	15,287,374
Total Indicated Market Value of Capital					$318,920,431
EARNINGS AVAILABLE FOR CAPITAL					
(a) Earnings available for common stock and common stock B					$ 16,389,273
Dividends declared on preferred stock.					1,461,187
Net income for year ended December 31, as reported					17,850,460
Add: Interest on 7% Bonds					642,086
" " 5% "					644,330
Total Earnings Available for Capital					$ 19,136,876
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.00%
Dividends Declared on Common Stock					$ 15,684,695

Note: (a) Common and Common B have equal rights, share for share, as to dividends and distribution of assets.

Exhibit 254

LILY-TULIP CUP CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	189,539 shs.	23 1/2	15 1/2	19.50	$3,696,011	189,539 shs.	18 1/4	14 5/8	16.44	$3,116,021
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 341,409					$ 225,062
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.24%					7.22%
Dividends Declared on Common Stock					$ 284,309					$ 270,093
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	189,539 shs.	19		17.50	$3,316,933	189,539 shs.	26 1/2	16	19.75	$3,743,395
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 682,217					$ 644,119
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					20.57%					17.21%
Dividends Declared on Common Stock					$ 227,447					$ 227,447

Exhibit 254

LINK-BELT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	675,573 shs.	63	33	48.00	$32,427,504	675,573 shs.	50	29	39.50	$26,685,134
(a) Preferred, 6% Cum. ($100 par)	32,478 shs.	121	120	120.50	3,913,599	31,948 shs.	121	100	110.50	3,530,254
Total Indicated Market Value of Capital					$36,341,103					$30,215,388
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$ 3,020,536					$ 843,019
Dividends declared on preferred stock					211,838					263,022
Net Income for the years ended December 31, as reported					$ 3,232,373					$ 1,106,041
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.89%					3.66%
Dividends Declared on Common Stock					$ 2,026,719					$ 1,013,362
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	684,462 shs.	47	31 1/2	39.25	$26,865,134	684,462 shs.	41	27	34.00	$23,271,708
(a) Preferred, 6 1/2% Cum. ($100 par)	31,809 shs.	123	115	119.00	3,784,200	31,800 shs.	124	120	122.00	3,879,600
Total Indicated Market Value of Capital					$30,649,334					$27,151,308
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$ 1,526,384					$ 2,307,681
Dividends declared on preferred stock					206,705					206,700
Net Income for the years ended December 31, as reported					$ 1,733,062					$ 2,514,381
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.65%					9.26%
Dividends Declared on Common Stock					$ 1,024,471					$ 1,368,924

(a) Prices obtained from Moody's Industrial Manual.

Exhibit 254

LINK-BELT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	684,462 shs.	37 1/4	29	33.13	$22,676,226
(a) Preferred, 6-1/2% Cum. ($100 par)	31,800 shs.	122	115	118.50	3,768,300
Total Indicated Market Value of Capital					$26,444,526
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 2,706,615
Dividends declared on preferred stock					206,445
Net Income for the years ended December 31, as reported					$ 2,913,060
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.02%
Dividends Declared on Common Stock					$ 1,549,040

Note: (a) Prices obtained from National Quotation Bureau.

LOEW'S INCORPORATED

	Outstanding August 31	Price Range for Year High	Low	Average	Value	Outstanding August 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,599,053 shs.	87 7/8	43 5/8	65.75	$105,137,735	1,599,053 shs.	62 1/2	33	47.75	$ 76,354,781
Preferred Stock (no par)	136,722 shs.	110	99 3/4	104.88	14,339,403	136,722 shs.	111 1/4	99	103.13	14,098,564
Loew's, Inc. 3 1/2% S.F. Deb. due 8/15/46	$13,857,000	101 1/4	96 1/2	98.38	13,632,517	$13,084,000	102 5/8	94 1/2	98.56	12,895,590
Loew's Theatre & Realty Corp. First Lien S.F. Gold 6s 3/15/47	7,318,300	99	84	91.50	6,696,245	7,047,300	93 1/2	84 1/2	89.00	6,272,097
* Mortgages, etc. of other wholly owned Subsidiaries	9,289,512			84.265	7,827,807	9,239,813			84.265	7,785,928
Total Indicated Market Value of Capital					$147,633,707					$117,981,960
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 13,537,369					$ 9,036,241
Dividends declared on Preferred Stock					888,693					888,693
Net Income for years ended August 31, as reported					14,426,062					9,924,934
Interest on Debentures					498,015					468,647
Interest on Bonds and Mortgages					929,993					905,893
Amortization of Debt Discount and Expense					270,879					261,580
Total Earnings Available for Capital					$ 15,124,949					$ 11,560,715
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.25%					9.8%
Dividends Declared on Common Stock					$ 13,445,129					$ 5,596,195

Note: * Estimates based upon 1930 prices.

Exhibit 254

LOEW'S INCORPORATED

	Outstanding August 31	Price Range for Year 1939 High	Low	Average	Value	Outstanding August 31	Price Range for Year 1940 High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,665,713 shs.	54 1/2	30 1/2	42.50	$70,732,803	1,665,713 shs.	37 5/8	20 1/2	27.06	$45,405,820
Preferred Stock (no par)	136,722 shs.	109 1/2	101 5/8	105.56	14,432,374	136,722 shs.	109 1/2	97	103.78	14,184,908
Loew's, Inc. S.F. deb. 3 1/2's, due 1963	$12,331,000	103 3/4	92	97.88	12,069,583	$11,581,000	105	100 1/2	102.78	11,899,478
(a) Loew's, Inc. 2 3/4% Promissory Note	3,750,000			•100.00	3,750,000	3,000,000			•100.00	3,000,000
(b) Loew's Theatre & Realty Corp. first lien 3 1/2s due 1954	11,250,000			•100.00	11,250,000	11,250,000			•100.00	11,250,000
Seventh & Broadway Co. 1st mtges. 6s due 1942 (called for redemption 1/15/40)	1,440,000			•100.00	1,440,000					
Cleveland Theatres, Inc. 1st leasehold 5.42s due 1944	749,200			• 59.50	445,774	715,200	64	55	59.50	425,544
Cleveland Theatres, Inc. (Stillman Theatre) 1st leasehold 5.42s due 1944	239,500			• 61.50	147,293	230,800	65	58	61.50	141,758
Cleveland Theatres, Inc. 1st & Gen. mtge. leasehold 6s, due 1944	1,036,300			• 58.75	608,826	978,300	62 1/2	55	58.75	574,751
Coney Island Theatre, Inc. 1st mtge. leasehold 4s due 12/10/42 - 6/10/46	601,800	47	42	44.50	267,801	573,500	45 1/2	43	44.25	253,774
Miscellaneous mtges., etc.	4,926,154			•100.00	4,926,154	4,503,942			•100.00	4,503,942
Total Indicated Market Value of Capital					$120,130,608					$94,639,775
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 8,952,838					$ 8,020,782
Dividends declared on Preferred Stock					888,693					887,718
Net Income for years ended August 31, as reported					9,841,531					8,908,470
Interest on Debentures					448,208					423,929
Interest on Bonds and Mortgages					885,692					777,672
Amortization of Debt Discount and Expense					267,161					263,493
Interest on Notes Payable					-					96,913
Total Earnings Available for Capital					$ 11,442,592					$10,470,577
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.53%					11.06%
Dividends Declared on Common Stock					$ 4,097,565					$ 3,331,385

Notes: • Price Estimated
(a) Held by 1st National Bank of Boston; price estimated at par.
(b) Sold Privately in August, 1939 to Metropolitan Life Insurance Co. and Equitable Life Assurance Society; price estimated at par.

LOEW'S INCORPORATED

	Outstanding August 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	1,665,713 shs.	39 3/8	28	33.69	$ 56,117,871
Preferred Stock (no par)	136,022 shs.	110	105	107.50	14,622,365
Loew's, Inc. 3 1/2% S.F. Deb., 1946	$10,831,000	105	102 3/8	103.69	11,230,664
Loew's, Inc. 2 3/4% Promissory Note	2,250,000			* 100.00	2,250,000
(a) Loew's Theatre & Realty Corp. First Lien 3 1/2s, 1954	11,250,000			* 100.00	11,250,000
Cleveland Theatres, Inc. 1st Leasehold 5.42s due 1944	679,200			* 59.50	404,124
Cleveland Theatres, Inc. (Stillman Theatre) 1st Leasehold 5.42s due 1944	216,500			* 61.50	133,148
Cleveland Theatres, Inc. 1st & Gen. mtge. Leasehold 5s due 1944	908,300			* 58.75	533,626
Miscellaneous mtges., etc.	4,035,803			* 100.00	4,035,803
Total Indicated Market Value of Capital					$100,577,601
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 10,250,450
Dividends declared on Preferred Stock					884,143
Net Income for year ended August 31, as reported					11,134,593
Interest on Debentures					397,679
Interest on Note Payable - Loew's, Inc.					75,625
Interest on Bond and Mortgage - Wholly Owned Subsidiaries					779,515
Amortization of Debt Discount and Expense					237,841
Total Earnings Available for Capital					$ 12,625,253
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.55%
Dividends Declared on Common Stock					$ 4,997,084

Notes: * Prices estimated.
(a) Sold privately in August 1939 to Metropolitan Life Insurance Co. and Equitable Life Assurance Society.

16408

Exhibit 254

LOOSE-WILES BISCUIT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	520,000 shs.	43 1/4	17 1/8	30.18	$15,693,600	520,000 shs.	23 1/2	14 3/4	19.13	$9,947,600
Preferred Stock, Cum. 5% ($100 par)	41,260 shs.	110	101	105.50	4,352,930	40,710 shs.	107 1/8	92	99.56	4,053,088
Total Indicated Market Value of Capital					$20,046,530					$14,000,688
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$524,543					$784,274
Dividends Declared on Preferred Stock					209,050					203,800
Net Income for Years Ended December 31, as Reported					$733,593					$988,074
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.66%					7.06%
Dividends Declared on Common Stock					$834,400					$546,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	520,000 shs.	24 1/4	16 1/4	20.25	$10,530,000	512,200 shs.	18 3/4	13 1/2	16.13	$8,261,786
Preferred Stock, Cum. 5% ($100 par)	40,710 shs.	110	106	107.50	4,376,325	40,710 shs.	109 1/2	106 1/4	107.38	4,371,440
Total Indicated Market Value of Capital					$14,906,325					$12,633,226
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$880,516					$987,255
Dividends Declared on Preferred Stock					203,550					203,550
Net Income for Years Ended December 31, as Reported					$1,084,066					$1,190,806
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.27%					9.43%
Dividends Declared on Common Stock					$520,000					$517,000

16409

Exhibit 254

LOOSE-WILES BISCUIT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	510,600 shs.	19	13 3/4	16.38	$8,363,628
(a)3% Promissory Notes	$800,000			100.00	800,000
Total Indicated Market Value of Capital					$9,163,628
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$1,008,900
Dividends Declared on Preferred Stock					101,775
Net Income for Year Ended December 31, as Reported					1,110,675
Add: Interest on Promissory Notes					65,000
Total Earnings Available for Capital					$1,175,675
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.83%
Dividends Declared on Common Stock					$638,650

Note: (a) Price estimated.

Exhibit 254

P. LORILLARD COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10.par)	1,871,862 shs.	28 5/8	15 3/8	22.00	$41,180,964	1,871,877 shs.	21 3/4	13 3/4	17.75	$33,225,617
7% Cum. Pref. Stock ($100 par)	98,000 shs.	147 3/4	125	136.38	13,365,240	98,000 shs.	154	125	139.50	13,671,000
7% Gold Bonds, due Oct. 1, 1944	$5,701,500	135	125	130.00	7,411,950	$5,624,000	129 1/2	126	127.75	7,184,660
5% Gold Bonds, due Oct. 1, 1951	$6,195,450	124 1/4	116 1/2	120.38	7,456,083	$6,195,450	125	115 1/2	120.25	7,450,029
Total Indicated Market Value of Capital					$69,416,237					$61,531,506
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$1,592,036					$3,327,300
Dividends declared on preferred stock					686,000					686,000
Net income for years ended December 31, as reported					2,278,036					4,013,300
Add: Interest on bonds outstanding					709,962					704,087
Total earnings available for capital					$2,987,998					$4,717,387
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.30%					7.67%
Dividends Declared on Common Stock					$2,246,610					$2,621,052

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	1,871,884 shs.	24 3/8	19 1/2	21.94	$41,069,135	1,871,929 shs.	25 1/8	17 1/4	21.19	$39,666,176
7% Cum. Pref. Stock ($100 par)	98,000 shs.	159 1/2	138	148.75	14,577,500	98,000 shs.	163 1/2	138 1/2	151.00	14,798,000
7% Gold Bonds, due Oct. 1, 1944	$5,646,750	129 5/8	117 7/8	123.75	6,864,103	$5,468,000	126 7/8	120 1/2	123.69	6,763,369
5% Gold Bonds, due Oct. 1, 1951	$6,195,450	128 3/4	116	122.38	7,581,992	$6,195,450	129 1/2	120	124.75	7,728,824
Total Indicated Market Value of Capital					$70,092,730					$68,956,369
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$3,160,442					$3,167,050
Dividends declared on preferred stock					686,000					686,000
Net income for years ended Dec. 31, as reported					3,846,442					3,853,050
Add: Interest on bonds outstanding					698,427					692,928
Total earnings available for capital					$4,544,869					$4,545,978
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.48%					6.59%
Dividends Declared on Common Stock					$2,621,111					$2,246,628

Exhibit 254

P. LORILLARD COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	1,871,940 shs.	19 5/8	12 1/2	16.06	$30,063,356
7% Cum. Pref. Stock ($100 par)	98,000 shs.	162	142 1/2	152.25	14,920,500
7% Gold Bonds, due Oct. 1, 1944	$5,386,500	128	121 1/2	124.75	6,719,659
5% Gold Bonds, due Aug. 1, 1951	$6,195,450	122 1/2	114 1/4	118.38	7,334,174
Total Indicated Market Value of Capital					$59,037,689
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 2,697,168
Dividends declared on preferred stock					686,000
Net income for year ended December 31, as reported					3,383,168
Add: Interest on Bonds Outstanding					687,242
Total Earnings Available for Capital					$ 4,070,410
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.89%
Dividends Declared on Common Stock					$ 2,246,630

Exhibit 254

MacANDREWS & FORBES COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	303,894 shs.	38	26 3/4	31.38	$9,536,194	303,894 shs.	32	22	27.00	$8,206,188
6% Cum. Pref. Stock ($100 par)	19,904 shs.	132 1/2	128 1/8	127.81	2,543,930	19,904 shs.	126	116 5/8	121.31	2,414,504
Total Indicated Market Value of Capital					$12,080,124					$10,619,692
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$766,889					$604,518
Dividends declared on preferred stock					119,424					119,424
Net income for years ended December 31, as reported					$886,283					$723,942
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.34%					6.90%
Dividends Declared on Common Stock					$759,735					$607,788

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	303,894 shs.	35	28	31.50	$9,572,661	303,894 shs.	35	25 3/4	30.38	$9,232,300
6% Cum. Pref. Stock ($100 par)	19,904 shs.	135	124	129.50	2,577,568	19,904 shs.	136 1/2	128	132.25	2,632,304
Total Indicated Market Value of Capital					$12,150,229					$11,864,604
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$750,238					$792,490
Dividends declared on preferred stock					119,424					119,424
Net income for the years ended December 31, as reported					$869,662					$911,914
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.16%					7.69%
Dividends Declared on Common Stock					$729,346					$759,735

Exhibit 254

MACK TRUCKS, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	597,335 shs.	62 1/4	17 3/8	39.81	$23,779,906	597,335 shs.	32 1/2	16	24.25	$14,485,373
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 1,284,691					($ 929,171)
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.40%					—%
Dividends Declared on Common Stock					$ 746,668					$ 149,333
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	597,335 shs.	33 3/4	18	25.88	$15,459,030	597,335 shs.	31 3/4	17	24.38	$14,563,027
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$682,987					$1,805,821
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.42%					12.40%
Dividends Declared on Common Stock					$ 298,667					$ 896,002

Note: Parentheses indicate red figure.

16414

Exhibit 254

MACK TRUCKS, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1 9 4 1			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	597,335 shs.	35 3/4	23 5/8	29.69	$17,734,876
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 3,944,320
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					22.24%
Dividends Declared on Common Stock					$ 1,792,004

Exhibit 254

R. H. MACY & CO., INC.

	Outstanding Jan.29,1938	Price Range for Year 1937 High	Low	Average	Value	Outstanding Jan.28,1939	Price Range for Year 1938 High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,655,618 shs.	58 1/4	25	41.63	$68,923,377	1,658,824 shs.	49 1/8	24 7/8	37.00	$61,376,488
(a) Serial Notes Payable	$5,500,000			100.00	5,500,000	$5,000,000			100.00	5,000,000
Mortgages Payable, etc.:										
(a) L. Bamberger & Co.	5,900,000			100.00	5,900,000	4,900,000			100.00	4,900,000
(a) Other Subsidiaries	1,223,000			100.00	1,223,000	1,136,000			100.00	1,136,000
Total Indicated Market Value					$81,546,377					$72,412,488
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for fiscal years, as reported					$4,179,959					$2,350,227
Add: Interest on Mortgages and Notes Payable					487,703					423,963
Total Earnings Available for Capital					$4,667,662					$2,774,190
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.72%					3.83%
Dividends Declared on Common Stock					$3,156,653					$3,313,807

	Outstanding Feb. 3,1940	Price Range for Year 1939 High	Low	Average	Value	Outstanding Feb. 1,1941	Price Range for Year 1940 High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,657,574 shs.	43 1/2	25 1/4	34.38	$56,987,394	1,659,554 shs.	31	20 1/2	25.75	$42,733,516
(a) Serial Notes Payable	$5,000,000			100.00	5,000,000	$5,000,000			100.00	5,000,000
Mortgages Payable, etc.:										
(a) L. Bamberger & Co.	3,900,000			100.00	3,900,000	2,900,000			100.00	2,900,000
(a) Other Subsidiaries	1,036,500			100.00	1,036,500	1,024,500			100.00	1,024,500
Total Indicated Market Value					$66,923,894					$51,658,016
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for fiscal years, as reported					$3,906,639					$3,957,533
Add: Interest on Mortgages and Notes Payable					377,442					294,426
Total Earnings Available for Capital					$4,284,081					$4,251,959
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.40%					8.23%
Dividends Declared on Common Stock					$3,314,123					$3,316,383

Note: (a) Prices estimated.

Exhibit 254

MACMA COPPER COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	408,000 shs.	63	18 1/2	40.75	$ 16,626,000	408,000 shs.	40 1/2	18 1/4	29.38	$ 11,987,040
EARNINGS AVAILABLE FOR CAPITAL										
(a) Net Income for years ended December 31, as reported					$ 1,456,332					$ 654,346
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.76%					5.46%
Dividends Declared on Capital Stock					$ 1,122,000					$ 612,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($10 par)	408,000 shs.	40	25 1/8	32.56	$ 13,284,480	408,000 shs.	38	21 1/2	29.75	$ 12,138,000
EARNINGS AVAILABLE FOR CAPITAL										
(a) Net Income for years ended December 31, as reported					$ 1,385,852					$ 1,132,908
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.43%					9.33%
Dividends Declared on Common Stock					$ 1,122,000					$ 1,020,000

Note: (a) Net Income of year is without Provision for Depletion

16417

Exhibit 254

MAGMA COPPER CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	408,000 shs.	31	19 1/4	25.13	$10,253,040
EARNINGS AVAILABLE FOR CAPITAL					
(a) Net Income for year ended December 31, as reported					$ 1,492,255
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					14.55%
Dividends Declared on Capital Stock					$ 1,020,000

Note: (a) Net Income for year is without Provision for Depletion

6503

Exhibit 254

THE MATHIESON ALKALI WORKS (INC.)

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	828,191 shs.	41 3/4	22	31.88	$26,402,729	828,171 shs.	36 7/8	19 3/4	28.31	$23,445,521
Preferred Stock ($100 par)	23,777 shs.	165	142	153.50	3,649,770	23,777 shs.	165	156	160.50	3,816,209
Total Indicated Market Value of Capital					$30,052,499					$27,261,730
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common stock					$ 1,497,745					$ 833,034
Dividends declared on Preferred stock					166,439					166,439
Net Income for years ended December 31, as reported					$ 1,664,184					$ 999,473
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.54%					3.67%
Dividends Declared on Common Stock					$ 1,369,115					$ 1,242,329
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	828,171 shs.	37 3/8	20 3/4	29.06	$24,066,649	828,171 shs.	32 3/4	21	26.88	$22,261,238
Preferred Stock ($100 par)	23,777 shs.	176	155	165.50	3,935,094	23,777 shs.	173 1/2	160	166.75	3,964,813
Total Indicated Market Value of Capital					$28,001,743					$26,226,051
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common stock					$ 929,523					$ 1,421,373
Dividends declared on Preferred stock					166,439					166,439
Net Income for years ended December 31, as reported					$ 1,095,962					$ 1,587,812
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.91%					6.05%
Dividends Declared on Common Stock					$ 1,242,320					$ 1,242,320

Exhibit 254

THE MATHIESON ALKALI WORKS (INC.)

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	828,171 shs.	31 1/4	24 1/8	27.81	$23,031,436
Preferred Stock ($100 par)	23,777 shs.	176	171	173.50	4,125,310
Total Indicated Market Value of Capital					$27,156,746
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 1,577,189
Dividends declared on Preferred Stock					166,439
Net Income for year ended December 31, as reported					$ 1,743,628
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.42%
Dividends Declared on Common Stock					$ 1,449,363

Exhibit 254

THE MAY DEPARTMENT STORES COMPANY

	Outstanding January 31	Price Range for Year High	Low	Average	Value	Outstanding January 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($10 par value)	1,230,396 shs.	66	33 3/4	49.88	$61,372,152	1,230,396 shs.	53	28 1/2	40.75	$50,138,637
(a) Mortgages Payable, due 1938 to 1947	$5,778,100			100.00	5,778,100	$5,461,850			100.00	5,461,850
Total Indicated Market Value					$67,150,252					$55,600,487
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended January 31, as reported					$4,917,771					$3,809,677
Add: Interest on Mortgage and Other Indebtedness and Amortization of Discount					356,691					281,455
Total Earnings Available for Capital					$5,274,462					$4,091,332
					7.85%					7.36%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL										
Dividends Declared on Capital Stock					$4,813,905					$2,768,345
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($10 par)	1,230,396 shs.	53 3/4	40 3/4	47.25	$58,136,211	1,230,396 shs.	53 1/2	36 3/8	44.94	$55,293,996
(a) Mortgages Payable, due 1940 to 1947	$5,085,600			100.00	5,085,600	$4,676,650			100.00	4,676,650
(a) Bank Loans, due 1942 to 1944	2,000,000			100.00	2,000,000	5,000,000			100.00	5,000,000
Total Indicated Market Value of Capital					$65,221,811					$64,970,646
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended January 31, as reported					$4,402,895					$5,046,799
Add: Interest on Mortgage and Other Indebtedness and Amortization of Discount					272,668					291,258
Total Earnings Available for Capital					$4,675,563					$5,338,057
					7.17%					8.22%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL										
Dividends Declared on Capital Stock					$4,813,910					$2,768,346

Note: (a) Prices estimated
* Outstanding January 31 of the following year.

Exhibit 254

McCALL CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	533,860 shs.	38	11 1/4	23.63	$12,615,112	528,760 shs.	15 7/8	8 3/4	12.31	$6,509,036
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 673,480					$ 561,842
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.34%					8.63%
Dividends Declared on Common Stock					$ 941,797					$ 530,423
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	527,998 shs.	15 1/2	10 7/8	13.19	$ 6,964,294	527,998 shs.	16 1/4	10 1/2	13.38	$7,064,613
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 739,606					$ 739,304
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.62%					11.09%
Dividends Declared on Common Stock					$ 580,785					$ 739,196

16422

Exhibit 254

McCALL CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		----------1 9 4 1----------			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	527,988 shs.	14 1/2	8	11.25	$5,939,978
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 801,620
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.50%
Dividends Declared on Common Stock					$ 739,187

CBS Inc.

Exhibit 254

McINTYRE PORCUPINE MINES LIMITED

	Outstanding March 31	Price Range for Year High	Low	Average	Value	Outstanding March 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	798,000 shs.	42 1/2	30 1/8	36.31	$28,975,380	798,000 shs.	53 7/8	38 1/2	44.69	$35,662,620
EARNINGS AVAILABLE FOR CAPITAL										
(a) Net Income for years ended March 31, as reported					$ 3,527,818					$ 3,712,940
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.18%					10.41%
Dividends Declared on Common Stock					$ 1,995,000					$ 1,197,000
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	798,000 shs.	59 1/4	39	49.13	$39,205,740	798,000 shs.	47 1/2	26	36.75	$29,326,500
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended March 31, as reported					$ 3,719,857					$ 3,819,038
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.49%					13.02%
Dividends Declared on Common Stock					$ 3,192,000					$ 1,771,560

Note: (a) Net Income is without provision for depletion. $1,000,000 of Earned Surplus was transferred to Reserve for Depletion at March 31, 1938 and $743,414 at March 31, 1939. The transfer depleted all the property on the books and it was later set up at a value of $1 in 1940.

* Outstanding March 31 of the following year.

Exhibit 254

16424

MELVILLE SHOE CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
1937					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	404,722 shs.	93 1/2	50	71.75	$29,038,804
(A) Preferred 6% Cumulative ($5.00 par)	499,960 shs.	6	5	5.50	2,749,780
Total Indicated Market Value of Capital					$31,788,584
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended December 31, as reported					$ 1,843,898
Preferred Dividends Paid					29,998
Total Earnings Available for Capital					$ 1,873,896
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.89%
Dividends Declared on Common Stock					$ 2,018,141
1938					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	404,722 shs.	57 1/4	32 1/2	44.88	$18,163,923
(A) Preferred 6% Cumulative ($5.00 par)	499,960 shs.	5 1/8	4 1/2	4.81	2,404,808
Total Indicated Market Value of Capital					$20,568,731
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended December 31, as reported					$ 1,454,063
Preferred Dividends Paid					29,998
Total Earnings Available for Capital					$ 1,484,061
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.22%
Dividends Declared on Common Stock					$ 1,212,675
1939					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($1.00 par)	918,896 shs.	30 3/8	28 1/2	29.31	$26,932,842
(B) Preferred 5% Cumulative Convertible ($100.00 par)	98,259 shs.			110.00	10,808,490
Total Indicated Market Value of Capital					$37,741,332
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended December 31, as reported					$ 2,144,875
Preferred Dividends Paid					29,998
Total Earnings Available for Capital					$ 2,174,873
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.76%
Dividends Declared on Common Stock					$ 1,618,409
1940					
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($1.00 par)	919,711 shs.	34 1/2	24 1/2	29.50	$27,131,475
(B) Preferred 5% Cumulative Convertible ($100.00 par)	94,504 shs.	122	100	111	10,489,944
Total Indicated Market Value of Capital					$37,621,419
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended December 31, as reported					$ 2,725,676
Preferred Dividends Paid					485,285
Total Earnings Available for Capital					$ 3,210,961
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.53%
Dividends Declared on Common Stock					$ 2,068,734

Note: (A) High and low bid prices from National Quotation Bureau.
(B) High and low bid prices from National Quotation Bureau for 1940; 1939 price estimated.

16425

Exhibit 254

MELVILLE SHOE CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1 9 4 1			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($1.00 par)	927,072 shs.	33 5/8	27 1/4	30.44	$28,220,072
(a) Preferred Stock 5% Cumulative Convertible ($100.00 par)	92,383 shs.	117	107	112.00	10,346,896
Total Indicated Market Value of Capital					$38,566,968
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 2,451,951
Preferred Dividends					472,324
Total Earnings Available for Capital					$ 2,924,275
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.58%
Dividends Declared on Common Stock					$ 2,070,030

Note: (a) High and low bid prices from National Quotation Bureau.

Exhibit 254

MESTA MACHINE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	987,979 shs.	72 1/4	33 3/4	53.00	$52,362,887	987,979 shs.	47 1/2	26 3/4	37.13	$36,683,660
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 4,668,029					$ 2,909,957
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.91%					7.93%
Dividends Declared on Common Stock					$ 3,951,916					$ 2,469,948
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	987,979 shs.	39 1/4	25	32.13	$31,743,765	987,979 shs.	38 1/2	24	31.25	$30,874,344
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 2,715,427					$ 3,083,032
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.55%					9.99%
Dividends Declared on Common Stock					$ 1,481,968					$ 1,975,958

Exhibit 254

MESTA MACHINE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($5 par)	987,979 shs.	37	24	30.50	$30,133,360
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 3,607,738
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.97%
Dividends Declared on Common Stock					$ 2,469,948

6523

Exhibit 254

16428

MINNEAPOLIS-HONEYWELL REGULATOR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (No par)	621,900 shs.	120	53	86.50	$53,794,350	621,900 shs.	92	46 1/2	69.25	$43,066,575
Pref. Stock, 4% Conv. Series B ($100 par)	30,700 shs.	124	98 1/8	111.06	3,409,542	30,700 shs.	117	100	108.50	3,330,950
Total Indicated Market Value of Capital					$57,203,892					$46,397,525
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 2,837,149					$ 880,489
Dividends Declared on Preferred Stock					(a) 92,100					122,800
Net Income for years ended December 31, as reported					$ 2,929,249					$ 1,003,289
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.12%					2.16%
Dividends Declared on Common Stock					$ 1,865,700					$ 1,243,800
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (No par)	621,900 shs.	85 1/2	44 1/4	64.88	$40,348,872	621,900 shs.	54	33 1/4	43.63	$27,133,497
Pref. Stock, 4% Conv., Series B ($100 par)	30,700 shs.	114	103 1/4	108.63	3,334,941	30,700 shs.	110	95	102.50	3,146,750
Total Indicated Market Value of Capital					$43,683,813					$30,270,247
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 2,035,782					$ 2,405,802
Dividends Declared on Preferred Stock					122,800					122,800
Net Income for years ended December 31, as reported					$ 2,158,582					$ 2,528,602
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.94%					8.35%
Dividends Declared on Common Stock					$ 1,243,800					$ 1,865,700

Note: (a) Not including dividend declared in 1936 and paid in 1937.

Exhibit 254

MINNEAPOLIS-HONEYWELL REGULATOR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	621,900 shs.	45 1/2	34	39.75	$24,720,525
Preferred Stock 4% Conv. B ($100 par)	30,700 shs.	112	105 1/2	108.75	3,338,625
Total Indicated Market Value of Capital					$28,059,150
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 2,614,495
Dividends Declared on Preferred Stock					122,800
Net Income for year ended December 31, as reported					$ 2,737,295
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.76%
Dividends Declared on Common Stock					$ 1,865,700

6327

Exhibit 254

MONSANTO CHEMICAL COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	1,114,366 shs.	107 1/2	71	89.25	$99,459,129	1,241,616 shs.	110	67	88.50	$109,900,716
Preferred Stock (no par) $4.50 redeemable and cumulative:										
Series A	50,000 shs.	109	105	107.00	5,350,000	50,000 shs.	117 1/2	111	114.25	5,712,500
Series B						50,000 shs.			(c) 114.25	5,712,500
Total Indicated Market Value of Capital					$104,809,129					$121,325,716
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 4,804,559					$ 2,821,093
Dividends declared on preferred stock					194,500					329,500
Net Income for years ended December 31, as reported					$ 4,999,059					$ 3,150,593
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.77%					2.60%
Dividends Declared on Common Stock					$ 3,343,161					$ 2,419,807
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	1,241,712 shs.	114 3/4	84 3/4	99.75	$123,860,772	1,241,694 shs.	119	79	99.00	$122,927,706
Preferred Stock (no par) $4.50 redeemable and cumulative:										
Series A	50,000 shs.	121	110	115.50	5,775,000	50,000 shs.	119	110	114.50	5,725,000
Series B	50,000 shs.	122 1/2	112	117.25	5,862,500	50,000 shs.	122	113 1/2	117.75	5,887,500
Total Indicated Market Value of Capital					$136,498,272					$134,540,206
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 4,978,914					$ 5,017,774
Dividends Declared on Preferred Stock					450,000					450,000
Net Income for years ended December 31, as reported					5,428,914				(a)	5,467,774
Add: Net income of British subsidiary for 1940, as reported									(b)	359,582
Total Earnings Available for Capital					$ 5,428,914					$ 5,827,356
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.01%					4.33%
Dividends Declared on Common Stock					$ 3,725,082					$ 3,725,082

Notes: (a) Figure for 1940 excludes income of and dividends received from wholly-owned British subsidiary not consolidated in 1940 and 1941.
(b) After dividends on preference shares not owned by Monsanto Chemical Company.
(c) Price estimated.

Exhibit 254

MONSANTO CHEMICAL COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	1,241,694 shs.	94	77	85.50	$106,164,837
Preferred Stock (no par) $4.50 redeemable and cumulative					
Series A	50,000 shs.	118 1/4	112	115.13	5,756,500
Series B	50,000 shs.	120	115	119.00	5,950,000
Preferred Stock (no par) Cum. Series C	75,000 shs.	113 1/2	108 7/8	111.19	8,339,250
Total Indicated Market Value of Capital					$126,210,587
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 6,331,436
Dividends declared on preferred stocks (Series A and B					225,000
(Series C					213,000
Net Income for year ended December 31, as reported				(a)	$ 6,769,436
Less: Dividend received from British subsidiary					281,400
					$ 6,488,036
Add: Net Income of British subsidiaries, as reported				(b)	174,689
Total Earnings Available for Capital					$ 6,662,725
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.28%
Dividends Declared on Common Stock					$ 3,725,082

Note: (a) Excludes income of wholly-owned British subsidiary not consolidated in 1940 and 1941.
(b) After dividends on preference shares not owned by Monsanto Chemical Company.

16432

Exhibit 254

JOHN MORRELL & COMPANY

	Outstanding October 30	Price Range for Year High	Low	Average	Value
		1937			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	385,698 shs.	46	21	33.50	$12,920,883
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the years ended October 30 and October 29, as reported					$ (670,542)
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					-
Dividends Declared on Common Stock					$ 462,838

	Outstanding October 29	Price Range for Year High	Low	Average	Value
		1938			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	385,698 shs.	38 3/8	22 1/4	30.31	$11,690,506
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the years ended October 30 and October 29, as reported					$ 1,016,227
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.69 %
Dividends Declared on Common Stock					$ 192,849

	Outstanding October 28	Price Range for Year High	Low	Average	Value
		1939			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	389,000 shs.	47	31 1/2	39.25	$15,268,250
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the years ended October 28th and November 2, as reported					$ 2,149,871
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					14.08%
Dividends Declared on Common Stock					$ 772,146

	Outstanding November 2	Price Range for Year High	Low	Average	Value
		1940			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	389,700 shs.	45	33 1/4	39.13	$15,248,961
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the years ended October 28th and November 2, as reported					$ 1,994,905
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.08%
Dividends Declared on Common Stock					$ 973,560

Note: Parentheses indicate red figure.

Exhibit 254

JOHN MORRELL & COMPANY

	Outstanding November 1	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	389,700 shs.	43 1/2	35 1/2	39.50	$15,393,150
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended November 1, as reported					$ 1,706,261
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.08%
Dividends Declared on Common Stock					$ 1,071,675

Exhibit 254

THE F. E. AYERS & BRO. COMPANY

	Outstanding October 31	Price Range for Year High	Low	Average	Value	Outstanding October 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	200,000 shs.	71	44	57.50	$11,500,000	200,000 shs.	54	37 1/4	45.63	$9,126,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the fiscal years ended October 31, as reported					$ 1,063,195					$ 822,308
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.25%					9.01%
Dividends Declared on Common Stock					$ 900,000					$ 700,000
	1938					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	200,000 shs.	52	43 1/2	47.75	$ 9,550,000	200,000 shs.	53	41	47.00	$9,400,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the fiscal years ended October 31, as reported					$ 800,392					$ 971,128
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.38%					10.33%
Dividends Declared on Common Stock					$ 700,000					$ 800,000

Exhibit 254

THE F. E. MYERS & BRO. COMPANY

	Outstanding October 31	Price Range for Year High	Low	Average	Value
		1 9 4 1			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	200,000 shs.	51 1/2	34	42.75	$8,550,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the fiscal year ended October 31, as reported					$1,090,069
					12.75%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Common Stock					$ 800,000

6539

Exhibit 254

NATIONAL BISCUIT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	6,289,448 shs.	33 3/8	17	25.18	$158,368,301	6,289,448 shs.	28	15 1/2	21.75	$136,795,494
Preferred Stock, 7% Cum. ($100 par)	248,045 shs.	167	148 3/4	157.88	39,161,345	248,045 shs.	168 1/8	150	159.00	39,454,038
Total Indicated Market Value of Capital					$197,529,646					$176,249,532
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$10,159,412					$11,064,072
Dividends Declared on Preferred Stock					1,735,699					1,735,699
Net Income for the Years Ended December 31, as Reported					$11,895,111					$12,799,771
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.02%					7.26%
Dividends Declared on Common Stock					$10,047,809					$10,052,317
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	6,289,448 shs.	28 1/4	21 5/8	24.94	$156,858,833	6,289,448 shs.	24 1/2	16 1/4	20.38	$128,178,950
Preferred Stock, 7% Cum. ($100 par)	248,045 shs.	178	147 7/8	161.44	40,044,385	248,045 shs.	176	155	165.50	41,051,448
Total Indicated Market Value of Capital					$196,903,218					$169,230,398
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$10,599,306					$9,412,665
Dividends Declared on Preferred Stock					1,735,699					1,736,161
Net Income for the Years Ended December 31, as Reported					$12,334,005					$11,148,826
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.26%					6.59%
Dividends Declared on Common Stock					$10,048,717					$10,059,517

Exhibit 254

NATIONAL BISCUIT COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	6,289,448 shs.	18 1/4	13 1/4	15.75	$99,058,806
Preferred 7% Cum. ($100 par)	248,045 shs.	175 1/2	160 7/8	168.19	41,718,689
Total Indicated Market Value of Capital					$140,777,495
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$8,995,822
Dividends Declared on Preferred Stock					1,736,315
Net Income for the Year Ended December 31, as Reported					$10,732,137
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.62%
Dividends Declared on Common Stock					$10,063,117

6543

Exhibit 254

16438

NATIONAL DAIRY PRODUCTS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	6,255,247 shs.	26 1/8	12	19.06	$119,228,008	6,255,247 shs.	16 1/2	11 1/2	14.00	$87,573,458
Pref. Stock, 7% Cum., Class A ($100 par)	57,339 shs.	112 1/2	106 1/2	109.50	6,285,191	57,339 shs.	115 1/4	106 1/2	110.88	6,364,401
Pref. Stock, 7% Cum., Class B ($100 par)	41,370 shs.	112	104 1/2	108.25	4,478,303	41,370 shs.	113 1/2	105 1/4	109.38	4,526,061
(a)Bank Loans, 2%	$4,900,000			100.00	4,900,000	$3,500,000			100.00	3,500,000
Debentures, 3 3/4%, due 1951	60,539,000	107	96 1/4	101.13	61,223,091	58,775,500	104 3/8	92 1/2	98.44	57,868,502
Total Indicated Market Value of Capital					$196,111,885					$159,881,512
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$9,599,769					$10,635,397
Add: Dividends Declared on Preferred Stock					690,965					690,965
(b)Net Income for Years Ended December 31, as Reported					10,290,732					11,326,360
Add: Interest on Funded Debt					2,452,888					2,335,199
(c) Interest on Bank Loans					122,500					87,500
Total Earnings Available for Capital					$12,866,120					$13,749,059
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.56%					8.60%
Dividends Declared on Common Stock					$7,506,296					$6,255,247
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	6,255,247 shs.	18 1/8	12 1/2	15.31	$95,767,832	6,255,247 shs.	18 5/8	11 7/8	15.25	$95,392,517
Preferred Stock, 7% Cum., Class A ($100 par)	57,339 shs.	117 1/2	110	113.75	6,522,311					
Preferred Stock, 7% Cum., Class B ($100 par)	41,370 shs.	114	107	110.50	4,571,385					
Debentures, 3 3/4%, due 1951	$56,899,000	108	99	103.50	58,890,465					
Debentures, 3 1/4%, due 1960						$55,000,000			(e)104.75	57,612,500
Serial Debentures $750,000 due each 6/1 and 12/1 to 12/1/50						15,000,000	102 3/8 to 100		101.19	15,178,500
Total Indicated Market Value					$166,751,993					$168,183,517
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$12,343,194					$10,403,443
Add: Dividends Declared on Preferred Stock					690,963					690,963
Net Income for years ended December 31, as reported					(b)13,034,157					(f)11,094,406
Add: Interest on Funded Debt					2,238,943					2,104,400
Total Earnings Available for Capital					$15,273,100					$13,198,806
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.21%					7.85%
Dividends Declared on Common Stock					$5,004,198					$5,004,198

Notes: (a) Price estimated.
(b) Includes all subsidiaries 90% or more of whose equity stock is owned.
(c) Estimated by Standard & Poor's Corporation.
(e) Price used is original offering price.
(f) Includes only domestic subsidiaries 90% or more of whose equity stock is owned.

Exhibit 254

NATIONAL DAIRY PRODUCTS CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	6,255,247 shs.	16 3/8	12 5/8	14.50	$90,701,082
Debentures, 3¼%, due 1960	$54,450,000	106 1/2	102	104.25	56,764,125
Serial Debentures, maturing semi-annually $750,000 on 6/1 and 12/1 to 12/1/1950	$13,500,000	100 1/2	99 1/4	99.88	13,483,800
Total Indicated Market Value of Capital					$160,949,007
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Year Ended December 31, as Reported					$12,334,734
Add: Interest on Funded Debt					1,978,485
Total Earnings Available for Capital					$14,313,219
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.89%
Dividends Declared on Common Stock					$5,004,198

16440

Exhibit 254

NATIONAL LEAD COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	3,095,100 shs.	44	18	31.00	$ 95,948,100	3,095,100 shs.	31	17 1/8	24.06	$ 74,468,106
Pref. Class A ($100 par)	213,793 shs.	171	153	162.00	34,634,466	213,793 shs.	178 1/2	154	166.25	35,543,086
Pref. Class B ($100 par)	77,462 shs.	150	127	136.50	10,728,487	77,462 shs.	145 1/2	127	136.25	10,554,198
Total Indicated Market Value of Capital					$141,311,053					$120,565,390
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 2,926,628					$ 2,321,817
Dividends declared on Preferred Stock Class A					1,496,561					1,496,561
Dividends declared on Preferred Stock Class B					464,772					464,772
Net Income for year ended December 31, as reported					$ 4,886,961					$ 4,283,149
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.46%					3.55%
Dividends Declared on Common Stock					$ 1,547,550					$ 1,547,550
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	3,095,100 shs.	27 1/2	17 7/8	22.69	$ 70,227,819	3,095,100 shs.	22 1/2	14 1/8	18.31	$ 56,671,281
Pref. Class A ($100 par)	213,793 shs.	173 1/8	152	162.56	34,754,190	213,793 shs.	173 3/8	160	166.69	35,637,155
Pref. Class B ($100 par)	77,462 shs.	145	132	136.50	10,728,487	77,462 shs.	153 3/4	132	142.88	11,067,771
Total Indicated Market Value of Capital					$115,710,496					$103,376,207
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 3,819,177					$ 4,141,379
Dividends declared on Preferred Stock Class A					1,496,561					1,496,561
Dividends declared on Preferred Stock Class B					464,772					464,772
Net Income for year ended December 31, as reported					$ 5,780,500					$ 6,102,702
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.00%					5.90%
Dividends Declared on Common Stock					$ 2,709,213					$ 2,709,213

Exhibit 254

NATIONAL LEAD COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	3,090,664 shs.	19 1/4	12 1/4	15.75	$48,677,958
Pref. Class A ($100 par)	217,793 shs.	178	160 1/2	168.25	36,643,672
Pref. Class B ($100 par)	77,462 shs.	154	138	146.00	11,309,452
Total Indicated Market Value of Capital					$96,631,082
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 3,407,362
Dividends declared on Preferred Stock Class A					1,503,551
Dividends declared on Preferred Stock Class B					464,772
Net Income for year ended December 31, as reported					$ 5,375,685
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.56%
Dividends Declared on Common Stock					$ 1,931,668

Exhibit 254

NATIONAL STEEL CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	2,167,877 shs.	99 1/4	55	77.13	$167,208,358	2,198,767 shs.	81 3/4	44 3/4	63.25	$139,072,013
First (Coll.) Mortgage S.F. Bonds:										
4% Series due June 1, 1965	$48,000,000	107 3/8	102 1/8	104.75	50,280,000	$47,000,000	109	103	106.00	49,820,000
a) 3 3/4% series due June 1, 1965	$ 9,800,000			100.00	9,800,000	$ 9,600,000			100.00	9,600,000
a) Purchase Money Mortgages & Contracts	$ 1,284,781			100.00	1,284,781	$ 6,147,698			100.00	6,147,698
Total Indicated Market Value of Capital					$228,843,134					$204,639,805
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 17,801,893					$ 6,661,682
Add: Interest on Funded and Long Term Debt					2,336,160					2,325,956
Amortization of Bond Discount & Expense					61,993					58,959
Total Earnings Available for Capital					$ 20,200,046					$ 9,046,577
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.84%					4.42%
Dividends Declared on Common Stock					$ 7,884,520					$ 2,168,832

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	2,202,167 shs.	82	52	67.00	$147,545,189	2,204,667 shs.	73 3/4	48	60.88	$134,220,127
First (Coll.) Mortgage Bonds 3% due April 1, 1965	$50,000,000	103 7/8	92 1/2	98.19	49,095,000	$50,000,000	107 3/4	100 1/2	104.13	52,065,000
a) Serial Notes (10 equal annual installments)	$15,000,000			100.00	15,000,000	$13,500,000			100.00	13,500,000
a) Purchase Money Mortgages	$ 603,940			100.00	603,940	$ 445,890			100.00	445,890
Total Indicated Market Value of Capital					$212,244,129					$200,231,017
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 12,581,636					$ 15,066,341
Add: Interest on Funded and Long Term Debt					2,311,732					1,753,128
Amortization of Bond Discount and Expense					99,178					107,729
Total Earnings Available for Capital					$ 14,992,546					$ 16,927,208
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.06%					8.45%
Dividends Declared on Common Stock					$ 3,738,384					$ 5,506,043

Note: (a) Prices estimated. No quotations available.

Exhibit 254

OTIS ELEVATOR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,000,000 shs.	45 1/4	20 1/8	32.69	$65,380,000	2,000,000 shs.	29 1/2	13 3/4	21.65	$43,260,000
Preferred Stock 6% Cum. ($100 par)	65,000 shs.	141	125	133.00	8,645,000	65,000 shs.	147	122	134.50	8,742,500
Total Indicated Market Value of Capital					$74,025,000					$52,002,500
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 3,202,325					$ 1,522,730
Dividends declared on Preferred Stock					390,000					390,000
Net Income for yearsended December 31, as reported					$ 3,592,325					$ 1,912,730
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.85%					3.68%
Dividends Declared on Common Stock					$ 2,799,680					$ 1,199,888
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,000,000 shs.	27 1/8	15 5/8	21.38	$42,760,000	2,000,000 shs.	18 3/8	11 1/8	14.75	$29,500,000
Preferred Stock 6% Cum. ($100 par)	65,000 shs.	148 1/2	128	138.25	8,986,250	65,000 shs.	150	124 3/4	137.38	8,929,700
Total Indicated Market Value of Capital					$51,746,250					$38,429,700
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 2,381,026					$ 2,381,383
Dividends declared on Preferred Stock					390,000					390,000
Net Income for yearsended December 31, as reported					$ 2,771,026					$ 2,771,383
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.31%					7.21%
Dividends Declared on Common Stock					$ 1,799,807					$ 1,999,788

Exhibit 254

OTIS ELEVATOR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,000,000 shs.	17 3/4	9 3/4	13.75	$27,500,000
Preferred Stock 6% Cum. ($100 par)	65,000 shs.	150	140	145.00	9,425,000
Total Indicated Market Value of Capital					$36,925,000
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 2,200,496
Dividends declared on Preferred Stock					390,000
Net Income for year ended December 31, as reported					$ 2,590,496
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.02%
Dividends Declared on Common Stock					$ 1,999,797

Exhibit 254

THE OUTLET COMPANY

	Outstanding January 31	Price Range for Year High	Low	Average	Value	Outstanding January 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	99,420 shs.	75	44	59.50	$5,915,490	99,420 shs.	52	39 1/4	45.63	$4,536,535
Preferred Stock ($100 par):										
1st, 7% Cumulative	4,667 shs.	118	114	114.50	534,372	4,556 shs.	115	115	115.00	523,940
2nd, 6% Cumulative	2,000 shs.			(a)100.00	200,000	1,750 shs.			(a)100.00	175,000
Total Indicated Market Value					$6,649,862					$5,235,475
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$471,623					$60,432
Dividends Declared on Preferred Stocks					45,787					43,522
Net Income for fiscal years ended January 31, as reported					$517,410					(b) $103,954
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.78%					1.99%
Dividends Declared on Common Stock					$397,680					$248,550
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	99,420 shs.	54	40 1/8	47.06	$4,678,705	99,420 shs.	55	47	51.00	$5,070,420
Preferred Stock ($100 par):										
1st, 7% Cumulative	4,556 shs.	120	114 1/4	117.13	533,644	2,056 shs.	120	115 1/8	117.56	241,703
2nd, 6% Cumulative	1,500 shs.			(a)100.00	150,000	1,250 shs.			(a)100.00	125,000
Total Indicated Market Value					$5,362,349					$5,437,123
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$525,302					$570,398
Dividends Declared on Preferred Stock					41,642					31,392
Net Income for fiscal years ended January 31, as reported					$566,944					$601,790
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.57%					11.07%
Dividends Declared on Common Stock					$372,825					$372,825

Notes: (a) Price estimated.
(b) After deducting estimated flood loss of $354,121.
* Outstanding January 31 of the following year.

Exhibit 254

OWENS- ILLINOIS GLASS COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($12.50 par)	2,661,204 shs.	103 3/4	51 1/4	77.50	$206,243,310	2,661,204 shs.	76 1/4	40	58.13	$154,695,789
(A) Fifteen Year 3 1/2% Sinking Fund Debentures, Due 6/1/52	$15,000,000			100.00	15,000,000	$14,000,000			100.00	14,000,000
Total Indicated Market Value of Capital					$221,243,310					$168,695,789
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 9,381,627					$ 5,382,805
Add: Interest on Debentures					524,270					523,639
Total Earnings Available for Capital					$ 9,905,897					$ 5,907,444
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.33%					4.09%
Dividends Declared on Common Stock					$ 8,648,913					$ 3,991,806
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($12.50 par)	2,661,204 shs.	70	50	60.00	$159,672,240	2,661,204 shs.	64 5/8	42	53.31	$141,868,785
(A) Fifteen Year 2 3/4% Sinking Fund Debentures, Due 6/1/52	$12,000,000			100.00	12,000,000	$10,000,000			100.00	10,000,000
Total Indicated Market Value of Capital					$171,672,240					$151,868,785
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 8,434,915					$ 7,223,034
Add: Interest paid on debentures					424,889					307,083
Total Earnings Available for Capital					$ 8,859,804					$ 7,530,117
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.16%					4.96%
Dividends Paid on Common Stock					$ 5,322,408					$ 5,322,408

Note: (A) Price estimated.

Exhibit 254

OWENS - ILLINOIS GLASS COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($12.50 par)	2,661,204 shs.	52 5/8	38 3/4	45.69	$121,590,411
(A) Fifteen Year 2 3/4% Sinking Fund Debentures, Due 8/1/52	$8,000,000			100.00	8,000,000
Total Indicated Market Value of Capital					$129,590,411
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 9,040,149
Add: Interest paid on debentures					252,083
Total Earnings Available for Capital					$ 9,292,232
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.17%
Dividends Declared on Common Stock					$ 6,653,010

Note: (A) Price estimated.

Exhibit 254

FENICK & FORD, LTD., INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	369,000 shs.	64	37	50.50	$18,634,500	369,000 shs.	58 5/8	41	49.81	$18,379,890
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$271,806					$1,139,922
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					1.46%					6.20%
Dividends Declared on Common Stock					$554,825					$1,107,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	369,000 shs.	59 1/2	48	53.56	$19,763,640	369,000 shs.	62 1/2	45	52.75	$19,464,750
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$1,456,456					$1,073,939
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.37%					5.52%
Dividends Declared on Common Stock					$1,476,000					$1,107,000

Exhibit 254

PENICK & FORD, LTD., INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	369,000 shs.	54 1/4	43 1/4	48.75	$17,988,760
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the Year Ended December 31, as Reported					$1,597,343
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.88%
Dividends Declared on Common Stock					$1,476,000

6562

Exhibit 254

J. C. PENNEY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,543,984 shs.	103 3/4	57 1/2	80.63	$205,121,430	2,543,984 shs.	85 1/2	55	70.25	$178,714,876
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$16,575,164					$13,739,160
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.09%					7.69%
Dividends Declared on Common Stock					$13,991,912					$10,811,932
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,543,984 shs.	94 3/4	74	84.38	$214,661,370	2,543,984 shs.	96 1/2	71	83.75	$229,808,660
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported,					$16,481,214					$16,230,604
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.68%					7.06%
Dividends Declared on Common Stock					$12,719,920					$13,419,920

Exhibit 254

J. C. PENNEY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,743,984 shs.	89 1/4	73	81.13	$222,619,482
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$17,128,104
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.69%
Dividends Declared on Common Stock					$13,719,920

6571

Exhibit 254

PEOPLES DRUG STORES, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	245,474 shs.	63	27	45.00	$11,046,330	245,474 shs.	31	19 1/4	25.13	$6,168,762
Preferred Stock ($100 par) 6 1/2% Cumulative	8,655 shs.	116 3/4	110 1/4	113.80	982,343	7,905 shs.	115 3/4	110	112.88	892,316
Total Indicated Market Value					$12,028,673					$7,061,078
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$1,000,177					$803,567
Dividends Declared on Preferred Stock					59,428					55,039
Net Income for years ended December 31, as reported					$1,059,605					$858,606
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.81%					12.16%
Dividends Declared on Common Stock					$613,685					$368,136
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	245,474 shs.	39 3/8	24	31.69	$7,779,071					
Common Stock ($5 par)						490,948 shs.	23	15	19.00	$9,328,012
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$ 981,534					$1,069,108
Dividends declared on Preferred Stock					38,537					
Net Income for years ended December 31, as reported					$1,020,071					$1,069,108
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.11%					11.46%
Dividends Declared on Common Stock					$429,580					$737,791

Exhibit 254

PEOPLES DRUG STORES, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($5 par)	490,948 shs.	25	20	22.50	$11,046,330
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$1,109,510
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.04%
Dividends Declared on Common Stock					$785,517

Exhibit 254

PET MILK COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	441,384 shs.	25	11	18.00	$7,944,372	441,384 shs.	17 3/4	6 1/2	13.13	$5,794,978
(a) Notes Payable to Banks	$2,700,000			100.00	2,700,000	$1,000,000			100.00	1,000,000
Total Indicated Market Value of Capital					$10,644,372					$6,794,978
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Years Ended December 31, as Reported					$699,156					$901,001
Add: Interest paid					62,053					81,846
Total Earnings Available for Capital					$761,208					$982,847
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.15%					14.12%
Dividends Declared on Common Stock					$441,354					$441,354
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	441,384 shs.	25	23	24.00	$10,592,496	441,354 shs.	24	15	19.50	$8,606,403
(a) Notes Payable to Banks	$1,100,000			100.00	1,100,000	$600,000			100.00	600,000
					$11,692,496					$9,206,403
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Years Ended December 31, as Reported					$1,129,888					$1,240,712
Add: Interest Paid					25,838					34,075
Total Earnings Available for Capital					$1,155,726					$1,274,787
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.88%					13.85%
Dividends Declared on Common Stock					$441,354					$441,354

Note: (a) Price estimated

Exhibit 254

PET MILK COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	441,354 shs.	27 3/4	21	24.38	$10,760,211
(a)Notes Payable to Banks	$1,100,000			100.00	1,100,000
Total Indicated Market Value of Capital					$11,860,211
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Year Ended December 31, as Reported					$1,496,407
Add: Interest Paid					19,369
Total Earnings Available for Capital					$1,515,776
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.78%
Dividends on Common Stock					$441,354

Note: (a) Price estimated.

16456

Exhibit 254

PHILIP MORRIS & COMPANY, LTD., INC.

	Outstanding * March 31	Price Range for Year High	Low	Average	Value	Outstanding * March 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
(a) Common Stock ($10 Par)	519,151 shs.	95 1/2	65	80.25	$41,661,868	855,195 shs.	95.83	50.17	73.00	$62,429,235
Cum. Pref. 5% Conv., Series A ($100 par)						26,749 shs.	144 1/4	114	129.13	3,454,098
Total Indicated Market Value of Capital					$41,661,868					$65,883,333
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$5,663,220					$6,274,325
Dividends Declared on Preferred Stock										276,971
Net Income for Years Ended March 31, 1938 and 1939 as reported					$5,663,220					$6,551,296
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.59%					9.94%
Dividends Declared on Common Stock - Payable in Cash					$3,114,906					$3,726,952
Payable in Common Stock										(b)
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	888,360 shs.	103 1/2	74	88.75	$78,812,689	894,010 shs.	97 1/8	68	82.86	$73,808,466
Cum. Pref. 5% Conv. Stock, Series A ($100 par)	8,453 shs.	154	124	139.00	1,174,967					
Cum. Pref. 4½% Series Stock ($100 par)						148,991 shs.	106 3/8	106	(c) 106.18	15,670,873
Total Indicated Market Value of Capital					$79,987,656					$89,480,339
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$7,361,960					$7,278,748
Dividends Declared on Preferred Stock					83,806					84,924
Net Income for Years Ended March 31, 1940 and 1941, as reported					$7,438,766					$7,360,669
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.38%					8.23%
Dividends Declared on Common Stock - Payable in Cash					$4,370,897					$4,454,327

Notes: (a) Price range in 1938 adjusted for 50% stock dividend paid to stockholders of record November 1, 1938.
(b) One half share of common stock for each share of common stock outstanding November 1, 1938.
(c) Issue was offered to public in March, 1941. Prices used are high and low - March, 1941.
* Outstanding March 31 of following year.

Exhibit 254

16457

PILLSBURY FLOUR MILLS COMPANY

	Outstanding May 31	Price Range for Year High	Low	Average	Value
1937					
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock ($25 par)	549,225 shs.	33 3/8	20 1/4	26.81	$14,724,722
1st Mort. 20 Yr. 6% Gold Bonds, 1943	$4,317,000	109 7/8	103	107.94	4,659,770
(a)1st Mort. Bonds, 3 3/4s, 1953					—
Total Indicated Market Value of Capital					$19,384,492
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Fiscal Years Ended May 31, as Reported					($52,605)
Add: Interest on Funded Debt					265,755
Amortization of Bond Discounts and Expense, Plus Premium on Retired Bonds					44,876
Total Earnings Available for Capital					$258,026
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					1.33%
Dividends Declared on Capital Stock					$878,758
1938					
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock ($25 par)	549,225 shs.	26 1/4	20 1/2	23.38	$12,840,861
(a)1st Mort. Bonds, 3 3/4s, 1953	$6,000,000			100.00	6,000,000
Total Indicated Market Value of Capital					$18,840,861
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Fiscal Years Ended May 31, as Reported					$1,692,318
Add: Interest on Funded Debt					236,340
Amortization of Bond Discounts and Expense, Plus Premium on Retired Bonds					8,916
Total Earnings Available for Capital					$1,937,574
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.28%
Dividends Declared on Capital Stock					$878,758
1939					
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock ($25 par)	549,225 shs.	31 1/2	23	27.25	$14,966,381
(a)1st Mort. Bonds, 3 3/4s, 1953	$5,600,000			100.00	5,600,000
					$20,566,381
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Fiscal Years ended May 31, as Reported					$900,914
Add: -Interest on Funded Debt					215,000
Total Earnings Available for Capital					$1,115,914
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.43%
Dividends Declared on Capital Stock					$878,758
1940					
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock ($25 par)	549,225 shs.	28 7/8	22	25.44	$13,972,284
(a)1st Mort. Bonds, 3 3/4s, 1953	$5,400,000			100.00	5,400,000
					$19,372,284
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Fiscal Years ended May 31, as Reported					$810,774
Add: -Interest on Funded Debt					200,115
Total Earnings Available for Capital					$1,010,889
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.22%
Dividends Declared on Capital Stock					$796,375

Notes: (a) Price estimated. Sold privately to Equitable Life Assurance Company in 1938.
• Outstanding May 31 of the following year.
Parentheses indicate red figure.

16458

Exhibit 254

THE PROCTER & GAMBLE COMPANY

	Outstanding June 30	Price Range for Year High	Low	Average	Value	Outstanding June 30	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	6,325,087 shs.	65 1/2	43 1/4	54.38	$343,958,231	6,325,087 shs.	59	39 1/2	49.25	$311,510,636
Preferred Stock ($100 par) 8% Cum.	22,500 shs.	215	211	213.00	4,792,500	22,500 shs.	217	211	214.00	4,815,000
Preferred Stock ($100 par) 5% Cum.	169,517 shs.	118 1/2	114 1/2	116.50	19,748,731	169,517 shs.	122 1/4	114	118.13	20,025,043
Total Indicated Market Value of Capital					$369,499,462					$336,350,678
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 25,775,755					$ 14,234,902
Dividends declared on Preferred Stock					1,027,585					1,027,585
Net Income for years ended June 30, as reported					$ 26,803,340					$ 15,262,487
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.27%					4.54%
Dividends Declared on Common Stock					$ 18,184,024					$ 12,849,784

	Outstanding June 30	Price Range for Year High	Low	Average	Value	Outstanding June 30	Price Range for Year High	Low	Average	Value
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	6,409,418 shs.	66	50 5/8	58.31	$373,733,164	6,409,418 shs.	71 3/4	55	62.38	$399,819,498
Preferred Stock ($100 par) 8% Cum.	22,500 shs.	230	216	223.00	5,017,500	22,500 shs.	235	224.	229.50	5,163,750
Preferred Stock ($100 par) 5% Cum.	84,473 shs.	119 3/4	112	116.88	9,788,731	84,473 shs.	118 1/2	112 1/2	115.50	9,756,439
Total Indicated Market Value of Capital					$388,539,395					$414,739,877
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 24,272,207					$ 28,026,128
Dividends declared on Preferred Stock					1,027,585					602,368
Net Income for years ended June 30, as reported					$ 25,299,792					(a) $ 28,628,493
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.51%					6.90%
Dividends Declared on Common Stock					(b) $ 13,218,898					$ 19,222,558

Notes : (a) Excluding English and Canadian Subsidiaries.
(b) Includes stock dividend of $563,038.

Exhibit 254

THE PROCTER & GAMBLE COMPANY

	Outstanding June 30	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	6,409,418 shs.	61 1/2	50	55.75	$357,325,054
(a) Preferred Stock ($100 par) 8% Cum.	22,500 shs.			225.00	5,062,500
Preferred Stock ($100 par) 5% Cum.	84,473 shs.	120	115 1/4	117.63	9,936,559
Total Indicated Market Value of Capital					$372,324,113
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 26,979,158
Dividends declared on Preferred Stock					602,365
Net Income for year ended June 30, as reported				(b)	$ 27,581,523
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.41%
Dividends Declared on Common Stock					$ 19,224,142

Notes: (a) Price estimated.
(b) Excluding English, Canadian and Javanese Subsidiaries and a shell-loading company incorporated in 1940.

16460

Exhibit 254

PULLMAN, INCORPORATED

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	3,820,189 shs.	72 1/8	28 1/2	48.81	$186,463,425	3,820,189 shs.	39 1/2	21 5/8	30.56	$116,744,976
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$12,278,960					$2,295,629
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.58%					1.97%
Dividends Declared on Capital Stock					$10,508,828					$5,252,941
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	3,820,194 shs.	41 7/8	22 1/2	32.19	$122,972,045	3,820,194 shs.	32 1/4	16 7/8	24.56	$93,832,965
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$4,009,476					$7,484,126
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.26%					7.98%
Dividends Declared on Capital Stock					$3,820,238					$5,730,377

Exhibit 254

PULLMAN, INCORPORATED

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	3,302,897 shs.	29 1/4	19 3/4	24.50	$80,920,977
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the Year Ended December 31, as Reported					$10,918,820
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.49%
Dividends Declared on Capital Stock					$8,515,963

6691

Exhibit 254

PURITY BAKERIES CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	----------1937----------					----------1938----------				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	771,476 shs.	23 3/4	5 3/4	14.75	$11,379,271	771,476 shs.	15 1/8	7	11.06	$8,532,525
20 Yr. 5% S.F. Gold Debs., due 1/1/48	$6,000,000	101	84	92.50	5,550,000	$5,800,000	98	82 1/2	90.25	5,234,500
Total Indicated Market Value of Capital					$16,929,271					$13,767,025
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Years Ended December 31, as Reported					$462,567					$1,170,963
Add: Interest on Debentures					310,013					276,811
Amortization of Debt Discount and Expense					31,496					31,496
Total Earnings Available for Capital					$804,076					$1,479,270
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.75%					10.75%
Dividends Declared on Common Stock					$462,886					$771,476
	----------1939----------					----------1940----------				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	771,476 shs.	18 1/2	10 3/4	14.63	$11,286,694	771,476 shs.	15 5/8	9	12.31	$9,496,870
20 Yr. 5% S.F. Gold Debs., due 1/1/48	$5,600,000	104 1/2	95 1/8	99.81	5,589,360	$5,400,000	106	99 3/4	102.38	5,528,520
Total Indicated Market Value of Capital					$16,876,054					$15,025,390
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as reported					$1,651,813					$1,148,506
Add: Interest on Debentures					249,312					245,650
Amortization of Debt Discount and Expense					31,496					31,496
Total Earnings Available for Capital					$1,932,621					$1,425,651
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.45%					9.49%
Dividends Declared on Common Stock					$1,157,214					$848,624

Exhibit 254

PURITY BAKERIES CORPORATION

	Outstanding December 31	Price Range for Year / High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	771,476 shs.	12 1/2	8 1/2	10.50	$8,100,498
20-Yr. 5% S.F. Gold Debs., 1948	$3,913,000	105 1/4	103	104.13	4,074,607
Total Indicated Market Value of Capital					$12,175,105
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the Year Ended December 31, as Reported					$1,429,379
Add: Interest on Debentures					208,150
Amortization of Debt Discount and Expense					31,496
Total Earnings Available for Capital					$1,669,025
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.71%
Dividends Declared on Common Stock					$925,771

Exhibit 254

RAYBESTOS - MANHATTAN, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	634,000 shs.	37 1/4	19 1/2	28.38	$17,992,920	632,000 shs.	24	14 3/4	19.38	$12,249,160
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 1,924,880					$ 321,713
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.70%					2.63%
Dividends Declared on Capital Stock					$ 1,111,628					$ 585,325
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	631,200 shs.	23 1/2	16 1/4	19.88	$12,548,256	628,100 shs.	23	15 1/2	19.25	$12,090,92[illegible]
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 1,605,296					$ 1,696,92[illegible]
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					12.79%					14.03%
Dividends Declared on Capital Stock					$ 947,254					$ 942,905

* Includes domestic subsidiaries only.

Exhibit 254

RAYBESTOS - MANHATTAN, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	628,100 shs.	21 1/4	14 1/8	17.69	$11,111,089
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 2,053,037*
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					18.48%
Dividends declared on capital stock					$ 1,256,166

* Includes domestic subsidiaries only.

16466

Exhibit 254

R. J. REYNOLDS TOBACCO COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	1,000,000 shs.	67	55	61.00	$61,000,000	1,000,000 shs.	58 1/2	51 1/4	54.88	$54,880,000
Class B Common Stock ($10 par)	9,000,000 shs.	58	40 1/4	49.13	442,170,000	9,000,000 shs.	46 1/2	33 3/4	40.13	361,170,000
Total Indicated Market Value of Capital					$503,170,000					$416,050,000
EARNINGS AVAILABLE FOR CAPITAL										
Net income for years ended December 31, as reported					$27,602,372					$23,734,306
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.49%					5.70%
Dividends Declared on Common Stock and Class B Common Stock					$28,500,000					$23,000,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($10 par)	1,000,000 shs.	58	52	55.00	$55,000,000	1,000,000 shs.	56	52	54.00	$54,000,000
Class B Common Stock ($10 par)	9,000,000 shs.	45	35	40.00	360,000,000	9,000,000 shs.	44	30 1/2	37.25	335,250,000
Total Indicated Market Value of Capital					$415,000,000					$389,250,000
EARNINGS AVAILABLE FOR CAPITAL										
Net income for years ended December 31, as reported					$25,645,455					$25,548,424
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.18%					6.56%
Dividends Declared on Common Stock and Class B Common Stock					$23,000,000					$22,500,000

Exhibit 254

R. J. REYNOLDS TOBACCO COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1949			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	1,000,000 shs.	53 1/2	49 3/4	51.63	$ 51,630,000
Class B Common Stock ($10 par)	9,000,000 shs.	34 1/4	22 1/8	28.19	253,710,000
Total Indicated Market Value of Capital					$305,340,000
EARNINGS AVAILABLE FOR CAPITAL					
Net income for year ended December 31, as reported					$23,239,367
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
					7.61%
Dividends Declared on Common Stock and Class B Common Stock					$21,000,000

6603

Exhibit 254

SAFEWAY STORES, INCORPORATED

16468

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	806,560 shs.	46	18	32.00	$25,809,920	806,559 shs.	99 3/4	12	20.88	$16,840,952
Preferred Stock ($100 par):										
5% Cumulative	23,055 shs.	105	70	86.50	1,994,858	22,327 shs.	83 1/2	58	70.75	1,579,635
6% Cumulative	54,325 shs.	113	86	99.50	5,406,338	53,228 shs.	99	68	83.50	4,444,538
7% Cumulative	77,512 shs.	113	98	105.50	8,117,516	73,157 shs.	108	79	93.50	6,840,180
Ten Year 4% S.F. Debentures, due 1947	$15,000,000	109 3/8	104 1/2	106.94	16,041,000	$14,127,000	106 1/4	100 1/4	103.25	14,586,128
Total Indicated Market Value					$57,368,092					$44,291,433
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$2,111,764					$3,244,239
Dividends Declared on Preferred Stocks					966,283					962,543
Net Income for years ended December 31, as reported					3,078,047					4,206,781
Add: Debenture Interest and Discount					364,784					665,764
Total Earnings Available for Capital					$3,442,831					$4,872,545
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.00%					11.00%
Dividends Declared on Common Stock					* $1,220,636					$1,613,099
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	806,559 shs.	51 3/4	27 3/4	39 75	$32,060,720	806,283 shs.	53	34	43.50	$35,029,811
Preferred Stock ($100 par):										
5% Cumulative	40,942 shs.	109	82 1/2	95.75	3,920,197	185,750 shs.	111 5/8	96	103.81	19,282,708
6% Cumulative	52,178 shs.	113	96	104.50	5,452,601					
7% Cumulative	72,527 shs.	116 1/4	104 1/2	110.38	8,006,530					
(a) Notes Payable - Banks, due 1940 to 1946	$14,000,000			100.00	14,000,000	$12,678,000			100.00	12,678,000
Total Indicated Market Value					$63,439,048					$66,990,519
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$5,332,284					$3,835,208
Dividends Declared on Preferred Stocks					936,078					951,444
Net Income for years ended December 31, as reported					6,268,360					4,786,652
Add: Debt Interest, Discount and Expense					650,624					577,198
Total Earnings Available for Capital					$6,918,984					$5,363,850
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.91%					8.01%
Dividends Declared on Common Stock					** $2,026,808					$2,818,379

Notes: * In addition, a stock dividend of $788,090 in 5% Preferred. ** In addition, a stock dividend of $1,608,860 in 5% Preferred. (a) Prices estimated.

Exhibit 254

SCOTT PAPER COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	570,006 shs.	45 1/4	35 1/2	40.38	$23,016,842	598,686 shs.	50 7/8	34 3/4	42.81	$25,629,748
(a) Preferred Stock (no par) $4.50 Cum.						30,000 shs.	113 3/4	112 1/2	113.13	3,393,900
3 1/4% Debenture Bonds	$4,000,000	110 1/2	102	106.25	4,250,000	$2,812,000	124	100	112.00	3,149,440
Total Indicated Market Value of Capital					$27,266,842					$32,173,088
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock										$ 1,379,951
Dividends declared on Preferred Stock										45,000
Net Income for years ended December 31, as reported					$ 1,254,281					1,424,951
Add: Interest and Amortization of Bond Expense					99,723					130,390
Total Earnings available for Capital					$ 1,354,004					$ 1,555,341
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.97%					4.83%
Dividends Declared on Common Stock					$ 885,474					$ 1,038,340
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	653,406 shs	52 1/8	44 1/2	48.31	$31,566,044	667,956 shs.	49	34	41.50	$27,720,174
Preferred Stock (no par):										
$4.50 Cum.	29,820 shs.	117 1/4	105	111.13	3,313,897	29,820 shs.	115 1/2	107 1/2	111.50	3,324,930
(b) $4.00 Cum.	30,000 shs.			102.75	3,082,500	30,000 shs.	111 1/2	101 1/4	106.38	3,191,400
3 1/4% Debenture Bonds (called 2/5/40)	$606,000	128 1/4	112 1/2	120.38	729,503					
Total Indicated Market Value of Capital					$38,691,944					$34,236,504
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 1,736,094					$ 1,482,329
Dividends declared on Preferred Stock					149,598					254,193
Net Income for years ended December 31, as reported					1,885,692					1,736,522
Add: Interest, Premium and Amortization of Bond Expense					60,711					12,992
Total Earnings Available for Capital					$ 1,946,403					$ 1,749,514
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.03%					5.11%
Dividends Declared on Common Stock					$ 1,178,384					$ 1,238,521

Notes: (a) Quotations from Moody's Industrial Manuals.
(b) Offered in December, 1939. Price used for 1939 is original offering price.

Exhibit 254

SCOTT PAPER COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	667,956 shs.	39 1/2	31	35.25	$23,545,449
Preferred Stock (no par) $4.50 Cum.	29,820 shs.	115 1/4	109 1/2	112.38	3,351,172
Preferred Stock (no par) $4.00 Cum.	30,000 shs.	112	107	109.50	3,285,000
Total Indicated Market Value of Capital					$30,181,621
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 1,685,436
Dividends declared on Preferred Stock					254,193
Net Income for year ended December 31, as reported					$ 1,939,629
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.43%
Dividends Declared on Common Stock					$ 1,302,487

6099

Exhibit 254

SEABOARD OIL COMPANY OF DELAWARE

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,344,383 shs.	54 1/8	16	35.06	$43,628,068	1,244,383 shs.	27 1/2	15 1/2	21.50	$26,754,335
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for year ended December 31, as reported					$ 2,447,130					$ 1,895,790
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.61%					7.09%
Dividends Declared on Common Stock					$ 1,244,383					$ 1,244,383

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,244,383 shs.	24 3/8	15 1/2	19.94	$24,812,997	1,235,283 shs.	20	11	15.50	$19,146,887
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for year ended December 31, as reported					$ 1,746,464					$ 1,300,993
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.04%					6.79%
Dividends Declared on Common Stock					$ 1,244,383					$ 1,239,683

Exhibit 254

SEABOARD OIL COMPANY OF DELAWARE

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	1,229,083	17	11 1/4	14.13	$17,366,943
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 1,257,368
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.24%
Dividends Declared on Common Stock					$ 1,235,068

Exhibit 254

FRANK G. SHATTUCK COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	1,265,500 shs.	17 5/8	6 1/2	12.06	$15,261,930	1,257,500 shs.	12 1/2	6 3/4	9.63	$12,109,725
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$833,170					$536,960
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.46%					4.43%
Dividends Declared on Common Stock					$1,267,795					$630,820
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	1,247,500 shs.	11 3/4	6 1/2	9.13	$11,389,675	1,200,000 shs.	7 5/8	4 3/4	6.19	$7,428,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$557,616					$297,854
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.90%					4.01%
Dividends Declared on Common Stock					$500,720					$492,830

Exhibit 254

FRANK G. SHATTUCK COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	1,150,000 shs.	6 7/8	4	5.44	$6,256,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$882,023
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					14.10%
Dividends Declared on Capital Stock					$700,140

Exhibit 254

SOCONY-VACUUM OIL COMPANY, INC.

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($15 par)	31,150,560 shs.	23 1/8	13	18.06	$562,579,114	31,205,810 shs.	16 3/8	10 3/4	13.56	$423,148,072
15 Yr. 3½% Debentures, due 10/15/50	$50,000,000	107 1/8	100 5/8	103.88	51,940,000	$50,000,000	103 1/2	106	105.75	52,875,000
(a)18 Yr. 3½% S.F. Debs., due 7/1/55	75,000,000			100.00	75,000,000	75,000,000			100.00	75,000,000
(b)Compagnie Industrielle des Petroles 5% Debentures, Maturing 1939-1955	1,396,807			100.00	1,396,807	927,361			100.00	927,361
(b)Purchase Obligations (not due within one year)	1,666,610			100.00	1,666,610	1,584,125			100.00	1,584,125
Total Indicated Market Value of Capital					$692,582,331					$553,534,558
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Years Ended December 31, as Reported					$52,808,264					$40,106,917
Add: Interest and Discount on Funded Debt					3,137,561					4,372,528
Total Earnings Available for Capital					$55,945,825					$44,479,445
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.08%					8.04%
Dividends Declared on Common Stock					$24,920,857					$15,575,536
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($15 par)	31,206,071 shs.	15 1/8	10 1/4	12.89	$396,005,041	31,178,341 shs.	12 1/2	7 1/8	9.81	$305,859,525
(b)18 Yr. 2 7/8% S.F. Debs., due 7/1/55	$75,000,000			100.00	75,000,000	$75,000,000			100.00	75,000,000
25 Yr. 3% S.F. Debs., due 7/1/64	50,000,000	105 1/4	97	101.13	50,565,000	50,000,000	108	102 1/2	106.25	52,626,000
(b)Purchase Obligations (not due within one year)	1,419,256			100.00	1,419,256	1,227,409			100.00	1,227,409
(b)1 1/2% Notes, due 11/15/44						7,500,000			100.00	7,500,000
Total Indicated Market Value of Capital					$522,989,297					$442,211,934
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for year ended December 31, as reported					$34,452,710					$36,409,055
Add: Interest and Discount on Funded Debt					4,054,236					3,685,760
Total Earnings Available for Capital					$38,506,946					$40,094,815
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.36%					9.07%
Dividends Declared on Common Stock					$15,603,036					$15,603,021

Notes: (a) Sold privately to insurance companies at par. Prices estimated.
(b) Prices estimated.

Exhibit 254

SPENCER KELLOGG AND SONS, INC.

	Outstanding August 28	Price Range for Year High	Low	Average	Value	Outstanding August 27	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	509,213 shs.	36	19 1/4	27.63	$14,069,555	509,213 shs.	24	19 1/8	21.56	$10,978,632
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for fiscal years, as reported					$ 1,428,908					$ 393,197
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.15%					3.58%
Dividends Declared on Common Stock					(a) $ 823,304					$ 763,739

	Outstanding September 2	Price Range for Year High	Low	Average	Value	Outstanding August 31	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	509,213 shs.	22 1/2	14 1/2	18.50	$ 9,420,441	509,213 shs.	23 3/4	14 3/8	19.06	$ 9,705,600
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for fiscal years, as reported					$ 668,481					$ 1,395,280
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.09%					14.38%
Dividends Declared on Common Stock					$ 509,213					$ 814,741

Note: (a) Excludes dividend in stock and scrip of $230,325..

Exhibit 254

SPENCER KELLOGG AND SONS, INC.

	Outstanding August 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	509,213 shs.	22	17 1/4	19.63	$9,995,851
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for fiscal year, as reported					$1,861,866
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					18.63%
Dividends Declared on Common Stock					$ 814,741

6623

Exhibit 254

STANDARD BRANDS, INCORPORATED

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	----------1937----------					----------1938----------				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	12,648,108 shs.	16 1/4	7 1/8	11.88	$150,259,523	12,648,108 shs.	9 1/4	6 1/8	7.69	$97,263,961
Pref. Stock, $4.50 Cum. (no par)	200,000 shs.	107 1/2	101	104.25	20,850,000	200,000 shs.	107 1/8	94	100.56	20,112,000
Total Indicated Market Value of Capital					$171,109,523					$117,375,961
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$9,205,893					$7,821,306
*Dividends Declared on $7 Preferred Stock					209,465					
Dividends Declared on $4.50 Preferred Stock					(a)450,000					900,000
Net Income for Years Ended December 31, as Reported					$9,865,358					$8,721,306
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.77%					7.43%
Dividends Declared on Common Stock					$10,117,949					$6,956,790
	----------1939----------					----------1940----------				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	12,648,108 shs.	7 1/4	5 3/8	6.31	$79,809,561	12,648,108 shs.	7 7/8	5	6.44	$81,453,816
Pref. Stock, $4.50 Cum. (no par)	200,000 shs.	108	94	101.00	20,200,000	200,000 shs.	113	98	105.50	21,100,000
Total Indicated Market Value of Capital					$100,009,561					$102,553,816
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$6,456,308					$9,005,523
Dividends Declared on Preferred Stock					900,000					900,000
Net Income for Years Ended December 31, as Reported					$7,356,308					$9,905,523
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.36%					9.66%
Dividends Declared on Common Stock					5,691,975					$6,324,054

Notes: * Redeemed 6/1/37.
(a) Excluding $187,500 applicable to 1938.

Exhibit 254

STANDARD BRANDS, INCORPORATED

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	12,648,108 shs.	6 5/8	3 3/4	5.18	$65,517,199
Preferred Stock (no par) $4.50 Cum.	200,000 shs.	113 1/2	108	110.75	221,500
					$65,738,699
EARNINGS AVAILABLE FOR CAPITAL					
Earnings Available for Common Stock					$6,859,143
Dividends Declared on Preferred Stock					900,000
Net Income for Year Ended December 31, as Reported					$7,759,143
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.80%
Dividends Declared on Common Stock					$5,059,243

7699

Exhibit 254

STANDARD OIL CO. OF CALIF.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	13,004,854 shs.	50	27 1/8	38.56	$501,467,170
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the years ended December 31, as reported					$ 41,254,778
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.23%
Dividends Declared on Common Stock					$ 26,027,428
		1938			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	13,003,953 shs.	33 5/8	24 1/4	28.94	$376,334,400
(a) Long term notes payable	$25,000,000			100.00	25,000,000
Total Indicated Market Value of Capital					$401,334,400
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended December 31, as reported					$ 17,882,505
Add: Interest on long term debt					160,244
Total Earnings Available for Capital					$ 18,042,749
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.50%
Dividends Declared on Common Stock					$ 14,304,348

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1938			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	13,003,953 shs.	34 7/8	25 1/8	30.00	$390,124,590
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the years ended December 31, as reported					$ 28,875,654
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.40%
Dividends Declared on Common Stock					$ 18,206,795
		1940			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	13,003,953 shs.	26 1/8	16 1/4	21.19	$275,583,764
(a) Long term notes payable	$25,000,000			100.00	25,000,000
Total Indicated Market Value of Capital					$300,583,764
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for years ended December 31, as reported					$ 22,487,586
Add: Interest on long term debt					537,291
Total Earnings Available for Capital					$ 23,024,877
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.66%
Dividends Declared on Common Stock					$ 13,003,953

Note: (a) Prices estimated

Exhibit 254

STANDARD OIL COMPANY OF NEW JERSEY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	26,219,846 shs.	76	42	59.00	$1,546,970,914	26,586,639 shs.	58 3/8	39 3/4	49.06	$1,304,340,899
25 Yr. 3% Debentures, due 6/1/61	$85,000,000	102	96	98.50	83,725,000	$86,000,000	105 3/8	100	102.69	87,286,800
(c)Lycoming United Gas Corp.										
5 Yr. 5% Notes, Series B, 1937 extended to 6/15/39	401,788			100.00	401,788	318,433			100.80	318,433
(c)Standard Alcohol Co.										
10 Yr. 5% Notes, due 4/1/46	490,000			100.00	490,000	490,000			100.00	490,000
(c)Le Bitume Liquide, S.A.F.										
Tax Free 6% Debs., redeemable before 1/1/39	109,315			100.00	109,315					
(c)The Carter Oil Co.										
3% Serial Notes, due 3/1/39 to 3/1/89	3,294,900			100.00	3,294,900	3,138,000			100.00	3,138,000
(c)International Petr. Co. Ltd.										
Non-interest-bearing Purch. Oblige.	48,180,000			100.00	48,180,000	19,782,737			100.00	19,782,737
Loans from Trustees of Annuity Trusts	82,703,648			100.00	82,703,648	83,231,147			100.00	83,231,147
15 Yr. 2 3/4% Debs., due 7/1/53						50,000,000	103	98	100.80	50,250,000
(b)Serial Notes, due $7,000,000 each July 1, 1943-1947						35,000,000	103 1/8	100	101.86	35,646,000
(c)Miscellaneous	1,792,832			100.00	1,792,832	1,468,441			100.00	1,468,441
(c)Humble Oil & Refining Co.										
Notes Payable to Banks, due 12/27/43						8,000,000			100.00	8,000,000
Purchase Obligations						1,373,227			100.00	1,373,227
(c)Standard Alcohol Co.										
7½ Yr. 5% Notes, due 4/1/46						280,000			100.00	280,000
Total Indicated Market Value of Capital					$1,767,668,364					$1,683,804,994
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Year Ended December 31, as Reported					$147,993,147					$76,083,170
Add: Interest on Funded and Other Long Term Indebtedness					2,689,633					3,811,196
Interest on Loans from Annuity Trustees					(a) 4,136,182					(a) 4,161,867
Total Earnings Available for Capital					$154,817,962					$84,126,922
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.76%					5.31%
Dividends Declared on Common Stock					$68,649,618					*$39,329,769

Notes: (a) Interest estimated, using an assumed interest rate of 8%.
(b) Average price range for various series.
(c) Price estimated.
* In addition, 3 shares as stock dividend for every 200 shares.

Exhibit 254

STANDARD OIL COMPANY OF NEW JERSEY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	27,245,716 shs.	53 1/2	38	45.75	$1,246,491,507	27,278,666 shs.	46 1/2	29 7/8	38.19	$1,041,772,254
25 Yr. 3% Debentures, due 6/1/61	$85,000,000	104 1/4	97 3/8	101.81	86,538,500	$85,000,000	107	101 1/8	104.06	88,451,000
15 Yr. 2 3/4% Debs., due 7/1/53	50,000,000	106 1/2	94 1/4	100.38	50,190,000	50,000,000	107	100 5/8	103.81	51,905,000
(b)Serial Notes, $7,000,000 due each July 1, from 1943 to 1947	35,000,000	105	98	101.50	35,525,000	35,000,000		(c)100.00		35,000,000
(c)Standard Alcohol Co.										
10 Yr. 5% Notes, due 4/1/46	490,000			100.00	490,000					
7 Yr. 5% Notes, due 4/1/46	280,000			100.00	280,000					
(c)Humble Oil & Refining Co.										
Notes Payable to Bank, due 12/27/43	5,000,000			100.00	5,000,000	5,000,000			100.00	5,000,000
(c)International Petr. Co. Ltd.										
Non-interest-bearing Purch. Obligs.	9,206,588			100.00	9,206,588	7,956,301			100.00	7,956,301
(c)The Carter Oil Co.										
3% Serial Notes, due 3/1/42 to 3/1/59	2,981,100			100.00	2,981,100	2,824,200			100.00	2,824,200
(c)Lycoming United Gas Corp.										
5 Yr. 6% Notes, Series B, 1937, Extended to 6/15/42	209,733			100.00	209,733	166,353			100.00	166,353
(c)Misc. Funded Debt	797,454			100.00	797,454	75,082			100.00	75,082
(c)Loans from Trustees of Annuity Trust	80,031,778			100.00	80,031,778	83,215,245			100.00	83,215,245
Total Indicated Market Value of Capital					$1,517,741,660					$1,316,365,435
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Years Ended December 31, as Reported					$89,128,756					$122,686,346
Add: Interest on Funded and Other Long Term Indebtedness					5,192,401					4,993,093
Interest on Loans from Annuity Trustees					(a)4,001,589					(a)4,160,762
Total Earnings Available for Capital					$98,322,746					$133,840,201
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.43%					10.11%
Dividends Declared on Common Stock					*$83,461,089					$47,733,535

Notes: (a) Interest estimated, using an assumed interest rate of 5%.
(b) Average price range for various series.
(c) Prices estimated.
* In addition, 5 shares as stock dividend for every 200 shares.

Exhibit 254

SUN OIL COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,316,484 shs.	77 1/2	44 1/2	61.00	$141,305,524	2,316,484 shs.	65 1/8	45	55.06	$127,545,609
Preferred Stock, 6% Cum. (par $100)	100,000 shs.	125	118	121.50	12,150,000	100,000 shs.	128	119 1/2	123.75	12,375,000
(a) 2 3/4% Serial Debentures, 1943-1947	$9,000,000			100.00	9,000,000	$ 9,000,000			100.00	9,000,000
(a) 10 yr. 2 7/8% * (Due Dec.1,1948)						$12,000,000			100.00	12,000,000
Total Indicated Market Value of Capital					$162,455,524					$160,920,609
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 8,944,085					$ 2,485,119
Dividends Declared on preferred stock					600,000					600,000
Net Income for year ended December 31, as reported					9,544,085					3,085,119
Add: Interest and discount on funded debt					325,571					251,374
Total Earnings Available for Capital					$ 9,869,656					$ 3,336,493
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.08%					2.07%
Dividends Declared on Common Stock					* $ 2,144,336					$ 2,315,786
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	2,316,918 shs.	66	45 3/4	55.88	$129,481,138	2,434,841 shs.	65 7/8	46 3/4	56.31	$137,105,897
Preferred Stock, 6% Cum. (par $100)	100,000 shs.	126 1/2	116 1/2	123.50	12,350,000	100,000 shs.	125	118 1/2	121.75	12,175,000
(b) 2 3/4% Serial Debentures, 1943-1947	$9,000,000			101.00	9,090,000	$5,400,000			101.00	5,454,000
(b) 10 yr. 2 7/8% * (due Dec. 1, 1948)	$12,000,000			102.00	12,240,000	$12,000,000			102.00	12,240,000
Total Indicated Market Value of Capital					$163,861,138					$166,974,897
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 8,359,677					$ 7,389,068
Dividends on Preferred Stock					600,000					600,000
Net Income for year ended December 31, as reported					8,959,677					7,989,068
Add: Interest and discount on funded debt					595,416					592,853
Total Earnings Available for Capital					$ 7,855,093					$ 8,581,921
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.82%					5.13%
Dividends Declared on Common Stock					$ 2,318,401					** $ 2,405,213

Notes: * In addition, a stock dividend of $5,885,103
** In addition, a stock dividend of $3,980,036
(a) Prices estimated
(b) Prices used are redemption prices

Exhibit 254

SUN OIL COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	2,850,826 shs.	66 1/2	50	58.25	$166,060,614
Preferred Stock, 6% Cum. (par $100)	93,197 shs.	126	117 1/2	121.75	11,346,734
(a) 10 yr. 2 1/4% debentures (due February 15, 1951)	$20,000,000			100.00	20,000,000
					$197,407,348
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 16,014,595
Dividends Declared on preferred stock					517,945
Net Income for year ended December 31, as reported					16,532,540
Add: Interest and discount on Funded Debt					461,928
Total Earnings Available for Capital					$ 16,994,468
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.61%
Dividend Declared on Common Stock					*$ 2,543,593

Notes: (a) Entire issue sold to insurance companies at par. Price estimated.
* In addition, stock dividends of $13,873,702

Exhibit 254

THE SUPERHEATER COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	904,855 shs.	61 3/4	18	39.83	$36,040,375	904,855 shs.	43 1/2	17 1/8	30.31	$27,426,155
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$2,055,989					$465,587
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.70%					1.70%
Dividends Declared on Capital Stock					(a)$2,375,246					$452,436
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	904,855 shs.	38 1/2	19 1/4	28.88	$26,132,212	904,855 shs.	27 7/8	12 1/2	20.19	$18,269,022
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$602,618					$1,329,669
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					2.31%					7.27%
Dividends Declared on Capital Stock					$542,923					$1,266,806

Note: (a) Includes $361,010 arising from profit on sale of treasury stock.

Exhibit 254

THE SUPERHEATER COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	902,855 shs.	21	12 1/4	16.63	$15,014,479
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 1,632,573
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.87%
Dividends Declared on Common Stock					$ 1,356,033

6641

Exhibit 254

TELAUTOGRAPH CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	226,600 shs.	8 3/8	4	6.19	$1,402,654	226,600 shs.	5 1/2	4 1/4	4.88	$1,105,808
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$137,197					$114,815
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.78%					10.38%
Dividends Declared on Common Stock					$137,232					114,380
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($5 par)	226,600 shs.	6 1/4	3 5/8	4.94	$1,119,404	226,600 shs.	5 7/8	2 7/8	4.38	$992,508
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$83,103					$100,547
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.42%					10.13%
Dividends Declared on Common Stock					$45,320					$45,320

Exhibit 254

TELAUTOGRAPH CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($5 par)	226,600 shs.	3 3/4	1 1/2	2.63	$595,958
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$109,478
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					18.37%
Dividends Declared on Common Stock					$ 22,660

6645

Exhibit 254

THE TEXAS COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	10,875,006 shs.	65 1/8	34 3/4	49.94	$543,097,800	10,876,882 shs.	49 5/8	32 5/8	41.13	$447,366,157
3% Debentures (due June 15, 1951)	$60,000,000	108 3/4	100	102.88	61,728,000	$60,000,000	107 3/8	103 1/2	105.44	63,264,000
(a) Other Long-Term Debt	$9,755,649			100.00	9,755,649	$5,350,835			100.00	5,350,835
Total Indicated Market Value of Capital					$614,581,449					$515,980,992
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Years Ended December 31, as Reported					$54,574,319					$23,139,030
Add: Interest on Debt					2,795,912					2,684,020
Total Earnings Available for Capital					$57,370,231					$25,823,050
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.33%					5.00%
Dividends Declared on Common Stock					$26,419,972					$21,750,322
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	10,876,139 shs.	50 3/4	32 1/2	41.63	$452,773,667	10,875,994 shs.	47 5/8	33	40.31	$438,411,318
3% Debentures (due June 15, 1951)	$60,000,000	108 5/8	102	105.31	63,186,000					
3% Debentures (due April 1, 1959)	$40,000,000	105 7/8	95 1/4	100.56	40,224,000	$40,000,000	108 1/4	102	103.13	42,052,000
(a) 1% Notes Payable to Insurance Companies (due Nov. 15, 1944)						$7,500,000			100.00	7,500,000
(a) Other Long Term Debt	$3,274,446			100.00	3,274,446	$9,245,064			100.00	9,245,064
3% Debentures (due May 15, 1965)						$60,000,000	107 3/8	102 3/4	105.56	63,336,000
Total Indicated Market Value of Capital					$559,458,113					$560,544,382
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$32,886,807					$31,547,662
Add: Interest on Debt					3,606,782					3,538,638
Total Earnings Available for Capital					$36,493,589					$35,086,300
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.52%					6.26%
Dividends Declared on Common Stock					$21,752,278					$21,751,988

Notes: * Excludes foreign subsidiaries.

(a) Prices estimated.

Exhibit 254

THE TEXAS COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	10,875,800 shs.	46 3/8	34 1/2	40.44	$439,817,352
3% Debentures, due April 1, 1959	$40,000,000	107 3/4	102 7/8	105.31	42,124,000
3% Debentures, due May 15, 1965	$60,000,000	107 3/4	102 3/4	105.25	63,150,000
(a) 1-3/4% Notes Payable to Banks ($750,000 a year from 4/29/43)	$ 6,750,000			100.00	6,750,000
(a) Other long term debt	$12,563,600			100.00	12,563,600
Total Indicated Market Value of Capital					$564,404,952
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 51,874,681
Add: Interest on debt					3,469,387
Total Earnings Available for Capital					$ 55,344,068
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.81%
Dividends Declared on Common Stock					$ 27,189,500

Notes: (a) Prices estimated.
Excludes foreign subsidiaries.

Exhibit 254

TEXAS GULF SULPHUR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock	3,840,000 shs.	44	23 3/4	33.88	$130,099,200	3,840,000 shs.	38	26	32.00	$122,880,000
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 11,509,281					$ 6,963,633
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.91%					5.67%
Dividends Declared on Common Stock					$ 10,560,000					$ 7,680,000
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	3,840,000 shs.	38 1/2	26	32.25	$123,840,000	3,840,000 shs.	37 1/4	26 7/8	32.06	$123,110,400
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 7,847,483					$ 9,140,888
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.34%					7.42%
Dividends Declared on Common Stock					$ 7,680,000					$ 9,600,000

Exhibit 254

TEXAS GULF SULPHUR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	3,840,000 shs.	38 7/8	30 1/8	34.50	$132,480,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 9,015,775
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.81%
Dividends Declared on Common Stock					$ 9,600,000

6633

Exhibit 254

THE TIMKEN ROLLER BEARING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (No par)	2,411,380 shs.	79	36	57.50	$138,654,350	2,411,380 shs.	55 1/2	31 1/4	43.38	$104,605,664
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 10,837,366					$ 1,427,903
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.82%					1.37%
Dividends Declared on Common Stock					$ 12,056,900					$ 2,411,380
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (No par)	2,413,380 shs.	34 1/4	34 1/4	44.25	$106,792,065	2,415,380 shs.	52 1/2	35 1/8	43.81	$105,817,798
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the years ended December 31, as reported					$ 7,287,911					$ 8,995,211
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.83%					8.50%
Dividends Declared on Common Stock					$ 6,032,950					$ 8,452,830

Exhibit 254

THE TIMKEN ROLLER BEARING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (No Par)	2,417,380 shs.	51 1/4	37 3/4	44.50	$107,573,410
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the Year ended December 31, as reported					$ 9,476,839
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends declared on common stock					8.81%
					$ 8,459,830

Exhibit 254

UNDERWOOD-ELLIOTT FISHER COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	733,084 shs.	100 1/8	47	73.84	$53,925,659	734,300 shs.	70 1/2	41	55.75	$40,937,225
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$4,913,363					$1,767,596
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.11%					4.32%
Dividends Declared on Common Stock					$3,298,878					$1,835,750
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	734,300 shs.	66	34 1/2	50.25	$36,898,575	734,300 shs.	45	21 1/2	33.25	$24,415,475
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$1,857,080					$2,226,255
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.03%					9.12%
Dividends Declared on Common Stock					$1,468,600					$1,652,175

Exhibit 254

UNDERWOOD-ELLIOTT FISHER COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	734,300 shs.	37 7/8	27 1/4	32.56	$23,908,808
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the year ended December 31, as reported					$ 3,740,089
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					15.64%
Dividends Declared on Common Stock					$ 2,570,050

Exhibit 254

UNION CARBIDE & CARBON CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	8,903,138 shs.	111	61 1/4	86.15	$766,827,276	9,073,288 shs.	90 7/8	57	73.94	$670,878,918
Fifteen Year 3 1/2% S.F. Deb. due July 1, 1950	$16,000,000			(a)100.00	16,000,000					
Fifteen Year 3% S.F. Deb. due September 1, 1955						$40,000,000			(a)100.00	40,000,000
Aktieselskabet Saudefaldene 5s, 10/1/55	3,119,000	112	107 3/4	(a)110.88	3,458,347					
Total Indicated Market Value of Capital					$786,286,623					$710,878,918
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 42,782,128					$ 25,173,412
Add: Interest on Funded Debt - Debentures					608,272					1,012,522
Interest on Funded Debt - Mortgage Bonds of Subsidiary					170,397					
Total Earnings Available for Capital					$ 43,560,797					$ 26,185,934
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.54%					3.68%
Dividends Declared on Common Stock					$ 28,808,378					$ 18,066,336
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	9,277,788 shs.	94 1/4	65 1/2	79.88	$741,109,705	9,277,788 shs.	88 3/8	59 7/8	74.13	$687,762,424
Fifteen Year 3% Sinking Fund Deb. due Sept. 1, 1953	$40,000,000			(a)100.00	40,000,000					
Fifteen Year 2 1/2% S.F. Deb. due Sept. 1, 1953						$29,100,000			(a)100.00	29,100,000
Total Indicated Market Value of Capital					$781,109,705					$716,862,424
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 35,847,400					$ 42,247,274
Add: Interest					1,239,972					1,241,728
Total Earnings Available for Capital					$ 37,087,372					$ 43,489,002
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.75%					6.07%
Dividends Declared on Common Stock					$ 18,274,386					$ 23,866,368

Note: (a) Prices estimated.

Exhibit 254

UNION CARBIDE AND CARBON CORPORATION

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1 9 4 1			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	9,277,788 shs.	79 7/8	60	69.94	$648,888,493
Fifteen Year 2 1/2% S.F. Deb. due September 1, 1953	$26,400,000			(a)100.00	26,400,000
Total Indicated Market Value of Capital					$675,288,493
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 42,041,625
Add: Interest					771,136
Total Earnings Available for Capital					$ 42,812,761
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.34%
Dividends Declared on Common Stock					$ 27,833,364

Note: (a) Price estimated.

Exhibit 254

UNION OIL COMPANY OF CALIFORNIA

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	4,666,270 shs.	28 1/4	17 1/2	22.88	$106,764,258	4,666,270 shs.	22 1/2	17 1/8	19.81	$92,438,809
20 Yr. 6% Bonds, Series A, due 5/1/42	$8,026,500	121 7/8	116 1/4	119.06	9,556,351	$8,018,500	119	115 3/4	117.38	9,412,115
15 Yr. 3½% Debentures, due 1/1/52	$10,000,000	114 1/8	101	107.56	10,756,000	$10,000,000	113 1/2	104 5/8	109.06	10,906,000
Total Indicated Market Value of Capital					$127,076,609					$112,756,924
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$12,061,332					$6,862,756
Add: Interest on Funded Debt					887,657					836,148
Total Earnings Available for Capital					$12,948,989					$7,698,906
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.19%					6.82%
Dividends Declared on Common Stock					$6,465,338					$5,599,524
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	4,666,270 shs.	19 3/4	15 1/8	17.44	$81,379,749	4,666,270 shs.	17 1/2	12	14.75	$68,827,483
20 Yr. 6% Bonds, Series A, due 5/1/42	$8,018,500	116 1/4	108 1/2	112.38	90,111,903	$7,988,500	112 3/8	107 9/32	109.83	8,740,821
15 Yr. 3½% Debentures, due 1/1/52	$10,000,000	109 1/4	105 15/32	107.36	10,736,000					
3% Debentures, due 8/1/59	$30,000,000	102 3/8	99 1/2	100.94	30,282,000	$30,000,000	106 7/8	100 1/4	103.56	31,068,000
Total Indicated Market Value of Capital					$212,509,652					$108,636,304
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$5,846,240					$4,606,789
Add: Interest on Funded Debt					1,173,259					1,382,099
Total Earnings Available for Capital					$7,019,499					$5,988,888
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.30%					5.51%
Dividends Declared on Common Stock					$6,066,151					$4,666,270

Exhibit 254

UNION OIL CO. OF CALIFORNIA

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED VALUE OF CAPITAL					
Common Stock ($25 par)	4,666,270 shs.	16	11 1/4	13.63	$ 63,601,260
20 Yr. 6% Bonds, Series A, due 5/1/42	$ 7,480,000	107	101	104.00	7,779,200
3% Debentures, due 8/1/59	$30,000,000	107 1/4	101 1/2	104.38	31,314,000
Total Indicated Market Value or Capital					$102,694,460
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 6,239,232
Add: Interest on Funded Debt					1,374,150
Total Earnings Available for Capital					$ 7,613,382
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.41%
Dividends Declared on Common Stock					$ 4,666,270

Exhibit 254

UNION TANK CAR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	1,180,742 shs.	31 1/2	22	26.75	$31,584,849	1,177,381 shs.	23 1/2	20	21.75	$25,606,037
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$2,016,412					$1,364,734
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.38%					5.33%
Dividends Declared on Capital Stock					$1,893,897					$1,536,960
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	1,167,081 shs.	24 1/4	20 1/8	22.19	$25,897,527	1,103,899 shs.	29 7/8	22 3/4	26.31	$29,035,690
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$2,410,666					$2,446,316
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.31%					8.43%
Dividends Declared on Capital Stock					$1,825,198					$1,980,226

Exhibit 254

UNION TANK CAR COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	1,100,698 shs.	31	24 5/8	27.81	$30,610,411
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Year Ended December 31, as Reported					$2,238,866
					7.31%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Capital Stock					$2,207,196

3700

Exhibit 254

UNITED BISCUIT COMPANY OF AMERICA

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	459,064 shs.	30 1/4	15	22.63	$10,388,392	459,064 shs.	20	14	17.00	$7,803,918
Preferred Stock, 7% Cum. ($100 par)	10,998 shs.	117 3/4	110	113.88	1,252,452	10,998 shs.	118	110 3/8	114.18	1,255,782
5% Deb. Bonds, due 4/1/50	$4,700,000	109	105 1/2	107.28	5,040,750	$4,550,000	108 3/4	103	105.88	4,817,340
Notes Payable to Banks						1,600,000			(a) 100.00	1,600,000
Total Indicated Market Value					$16,681,594					$15,477,210
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$876,326					$953,260
Dividends Declared on Preferred Stock					85,036					76,986
Net Income for the Years Ended December 31, as reported					$961,362					$1,030,246
Add: Interest on Debenture Bonds					238,125					230,816
Amortization of Discount and Expense of Debenture Bonds					13,347					13,347
Interest on Notes Payable to Bank										53,101
Total Earnings Available for Capital					$1,212,834					$1,327,510
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.27%					8.59%
Dividends Declared on Common Stock					$734,486					$527,912
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	459,064 shs.	18 3/4	14 5/8	16.69	$7,661,611	459,064 shs.	18	12 1/2	15.86	$7,000,574
Preferred Stock, 7% Cum. ($100 par)	9,798 shs.	119 1/2	112 1/2	116.00	1,136,568					
5% Deb. Bonds, due 4/1/50	$4,400,000	110	104 1/2	107.25	4,719,000					
Notes Payable to Banks	1,200,000			(a) 100.00	1,200,000					
3½% Debs., due 4/1/55						$7,000,000	108 1/4	104 3/8	106.31	7,441,700
5% Cum. Preferred						25,000 shs.	111 7/8	108 7/8	110.38	2,759,500
Total Indicated Market Value of Capital					$14,717,179					$17,201,774
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$1,017,329					$850,804
Dividends Declared on 7% Preferred Stock					76,636					53,791
Dividends Declared on 5% Preferred Stock										27,083
Net Income for the Years Ended December 31, as Reported					1,093,965					931,678
Add: Interest on Debenture Bonds					223,125					256,931
Amortization of Discount and Expense of Debenture Bonds					13,347					8,251
Interest on Notes Payables to Banks					58,681					
Total Earnings Available for Capital					$1,389,118					$1,196,860
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.44%					6.96%
Dividends Declared on Common Stock					$459,064					$459,064

Note: (a) Price estimated.

16504

Exhibit 254

UNITED FRUIT COMPANY

	Outstanding Jan. 1, 1938	Price Range for Year High	Low	Average	Value	Outstanding Dec.31, 1938	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	2,896,600 shs.	86 3/4	52	69.38	$200,966,108	2,896,600 shs.	67 1/2	60	58.75	$170,175,250
(a)U. S. Govt. Loan	$7,094,500			100.00	7,094,500					
Total Indicated Market Value of Capital					$208,060,608					$170,175,250
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Fiscal Years,as Reported					$11,817,128					$10,272,747
Add: Interest on Government Loan					216,948					
Total Earnings Available for Capital					$12,033,076					10,272,747
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.78%					6.04%
Dividends Declared on Common Stock					$11,610,388					$9,413,940

	Outstanding Dec.30, 1939	Price Range for Year High	Low	Average	Value	Outstanding Jan. 4, 1941	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	2,896,600 shs.	95	62 1/2	78.75	$228,107,250	2,925,000 shs.	85 7/8	60	72.94	$213,349,500
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Fiscal Years,as Reported					$14,101,929					$14,920,736
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.18%					6.99%
Dividends Declared on Common Stock					$11,586,388					$11,654,688

Note: (a) Price estimated

16505

Exhibit 254

UNITED FRUIT COMPANY

	Outstanding Jan. 3, 1942	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	2,924,300 shs.	79	60	69.50	$203,238,850
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for Fiscal Year, as Reported					$15,442,609
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.60%
Dividends Declared on Common Stock					$11,692,189

6679

Exhibit 254

UNITED STATES GYPSUM COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	1,193,156 shs.	137	83	98.00	$113,349,820	1,194,156 shs.	115	85	85.00	$101,503,260
Pref. Stock 7% Cum. Non-callable ($100 par)	78,222 shs.	172	154 1/8	163.06	12,754,879	78,222 shs.	173	162 1/4	167.63	13,112,353
Total Indicated Market Value of Capital					$126,104,699					$114,615,613
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 4,873,456					$ 4,177,943
Dividends declared on Preferred Stock					547,554					547,554
Net Income for yearsended December 31, as reported					$ 5,421,010					$ 4,725,497
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.30%					4.12%
Dividends Declared on Common Stock					$ 2,982,890					$ 2,387,466
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	1,194,600 shs.	113	65 1/4	89.13	$106,484,698	1,195,662 shs.	89	50	69.50	$ 83,098,509
Pref. Stock 7% Cum. Non-callable ($100 par)	78,222 shs.	180	149 3/4	164.88	12,897,243	78,222 shs.	182 1/2	165	173.75	13,591,072
Total Indicated Market Value of Capital					$119,381,941					$ 96,689,581
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 6,818,293					$ 6,505,420
Dividends declared on Preferred Stock					547,554					547,554
Net Income for yearsended December 31, as reported					$ 7,365,847					$ 7,052,974
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.17%					7.29%
Dividends Declared on Common Stock					$ 4,776,624					$ 4,182,360

Exhibit 254

UNITED STATES GYPSUM COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($20 par)	1,196,373 shs.	69 1/2	37 1/2	53.50	$64,005,955
Pref. Stock 7% Cum. Non-callable ($100 par)	78,222 shs.	183	170	176.50	13,806,183
Total Indicated Market Value of Capital					$77,812,138
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 6,486,075
Dividends declared on Preferred Stock					547,554
Net Income for year ended December 31, as reported					$ 7,033,629
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.04%
Dividends Declared on Common Stock					$ 4,184,817

Exhibit 254

UNITED STATES PIPE AND FOUNDRY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	695,923 shs.	72 1/4	24	48.13	$33,494,774	695,923 shs.	49 5/8	21 1/2	35.56	$24,747,022
Ten Year 3 1/2% Conv. Deb. due May 1, 1946	$958,000	170 1/4	106	138.13	1,323,285	$958,000	123 1/2	107	115.25	1,104,095
A Total Indicated Market Value of Capital					$34,818,059					$25,851,117
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 2,235,756					$ 1,654,238
Add: Interest paid on Convertible Debentures					(a) 33,530					(a) 33,530
Total Earnings Available for Capital					$ 2,269,286					$ 1,687,768
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.52%					6.53%
Dividends Declared on Common Stock					$ 2,079,078					$ 1,391,846
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($20 par)	695,923 shs.	49	32 3/4	40.88	$28,449,338	695,923 shs.	38 1/8	21 3/4	29.94	$20,836,235
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$ 2,570,278					$ 2,403,805
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.03%					11.54%
Dividends Declared on Common Stock					$ 1,739,808					$ 1,739,808

Note: (a) Interest computed by Standard and Poor's Corporation.

16509

Exhibit 254

UNITED STATES PIPE AND FOUNDRY COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($20 par)	695,923 shs.	31 7/8	20 1/4	26.06	$18,135,753
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 2,614,586
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					14.42%
Dividends Declared on Common Stock					$ 1,739,807

6887

Exhibit 254

UNITED STATES SMELTING, REFINING AND MINING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($50 par)	528,765 shs.	105	52 1/2	78.75	$41,640,244	528,765 shs.	72 3/4	44 3/4	58.78	$31,064,944
Preferred, 7% Cumulative ($50 par)	467,948 shs.	75 3/8	58	66.69	31,207,452	467,948 shs.	70 1/8	55	62.56	29,274,807
Total Indicated Market Value of Capital					$72,847,696					$60,339,751
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$5,015,506					$2,476,556
Dividends Declared on Preferred Stock					1,637,818					1,637,818
Net Income for Years Ended December 31, as Reported					$6,653,324					$4,114,374
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.13%					6.82%
Dividends Declared on Common Stock					$3,287,600					$2,115,060
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($50 par)	528,765 shs.	68 1/2	48	58.25	$30,800,561	528,765 shs.	67 5/8	39 1/4	53.44	$28,257,209
Preferred Stock, 7% Cum. ($50 par)	467,948 shs.	70	60	65.00	30,416,620	467,948 shs.	72 1/2	60	66.75	31,235,529
Total Indicated Market Value of Capital					$61,217,181					$59,492,738
EARNINGS AVAILABLE FOR CAPITAL										
Earnings Available for Common Stock					$3,578,090					$4,312,757
Dividends Declared on Preferred Stock					1,637,818					1,637,818
Net Income for Years Ended December 31, as Reported					$5,215,908					$5,950,175
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.52%					10.00%
Dividends Declared on Common Stock					$2,908,208					$3,172,560

Exhibit 254

UNITED STATES SMELTING, REFINING AND MINING CO.

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($50 par)	528,765 shs.	65 1/8	43 1/4	54.19	$28,653,775
Preferred Stock 7% Cum. ($50 par)	467,948 shs.	76 1/2	69	72.75	34,043,217
Total Indicated Market Value of Capital					$62,696,992
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 3,278,442
Dividends declared on Preferred Stock					1,637,818
Net Income for year ended December 31, as reported					$ 4,916,260
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.84%
Dividends Declared on Common Stock					$ 2,643,825

1691

16512

Exhibit 254

UNITED STATES TOBACCO COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	457,850 shs.	136	114	125.00	$57,231,250	1,831,400 shs.	36	29 1/2	32.75	$59,978,350
7% Preferred Stock ($100 par)	23,300 shs.	159	147	158.00	3,681,400					
7% Non-Cumulative Preferred Stock ($25 par)						93,200 shs.	47 1/2	40	43.75	4,077,500
Total Indicated Market Value of Capital					$60,912,650					$64,055,850
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$3,299,458					$3,195,035
Dividends declared on preferred stock					163,230					163,100
Net income for years ended December 31, as reported					$3,462,688					$3,358,135
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.68%					5.24%
Dividends Declared on Common Stock					$3,204,950					$3,044,703
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	1,831,400	37 1/2	30	33.75	$61,809,750	1,831,400 shs.	39 1/4	29 1/2	34.38	$62,963,532
7% Non-Cumulative Preferred Stock ($25 par)	93,200	46 3/4	39	42.88	3,996,416	93,200 shs.	50	42 1/2	46.25	4,310,500
Total Indicated Market Value of Capital					$65,806,166					$67,274,032
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$8,989,150					$9,580,160
Dividends declared on preferred stock					163,101					163,102
Net income for years ended December 31, as reported					$9,152,251					$9,743,262
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.91%					14.48%
Dividends Declared on Common Stock					$3,223,264					$3,589,544

Exhibit 254

UNITED STATES TOBACCO COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	1,831,400 shs.	33 3/8	19 1/2	26.44	$48,422,216
7% Non-Cumulative Preferred Stock ($25 par)	93,200	50 3/8	42	46.19	4,304,908
Total Indicated Market Value of Capital					$52,727,124
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 2,888,232
Dividends declared on preferred stock					163,102
Net income for the year ended December 31, as reported					$ 3,051,334
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.79%
Dividends Declared on Common Stock					$ 2,747,100

Exhibit 254

UNIVERSAL LEAF TOBACCO COMPANY,INC.

	Outstanding June 30	Price Range for Calendar Year High	Low	Average	Value	Outstanding June 30	Price Range for Calendar Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (No par)	145,241 shs.	86	47	66.50	$9,658,526	145,241 shs.	86	48	67.00	$9,731,147
Preferred Stock 8% Cum. ($100 par)	62,509 shs.	164	135	149.50	9,345,096	62,509 shs.	159 1/2	134	146.75	9,173,196
Total Indicated Market Value of Capital					$19,003,622					$18,904,343
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$1,136,009					$1,037,410
Dividends declared on preferred stock					500,072					500,072
Net income for years ended June 30, as reported					$1,636,081					$1,537,562
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.61%					8.13%
Dividends Declared on Common Stock					$980,377					$871,446
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (No par)	145,241 shs.	85	60 1/2	72.75	$10,566,283	145,241 shs.	70	45	57.50	$8,351,358
Preferred Stock 8% Cum. ($100 par)	62,379 shs.	163	146	154.50	9,622,106	61,140 shs.	159	134 3/4	146.88	8,980,243
Total Indicated Market Value of Capital					$20,188,389					$17,331,601
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for common stock					$1,029,676					$1,027,488
Dividends declared on preferred stock					499,612					492,556
Net income for years ended June 30, as reported					$1,529,288					$1,520,044
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.57%					8.77%
Dividends Declared on Common Stock					$798,826					$726,203

Exhibit.254

UNIVERSAL LEAF TOBACCO COMPANY, INC.

	Outstanding June 30	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	145,241 shs.	64	43 7/8	53.94	$ 7,834,300
Preferred Stock - 8% Cum. ($100 par)	60,990 shs.	157	140	148.50	9,057,015
Total Indicated Market Value of Capital					$16,891,315
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for common stock					$ 956,629
Dividends declared on preferred stock					488,380
Net income for year ended June 30, as reported					$ 1,445,009
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.55%
Dividends Declared on Common Stock					$ 726,206

6699

16516

Exhibit 254

WALDORF SYSTEM INCORPORATED

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	426,419 shs.	19 5/8	6 5/8	13.13	$5,598,881	426,419 shs.	8 1/2	5 3/4	7.13	$3,040,387
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$502,703					$265,080
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.98%					8.72%
Dividends Declared on Common Stock					$426,116					$213,058
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	426,419 shs.	8	5 1/2	6.75	$2,878,328	424,600 shs.	9 7/8	5 1/4	7.56	$3,209,976
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$390,516					$554,366
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					13.57%					17.27%
Dividends Declared on Common Stock					$255,670					$360,926

16517

Exhibit 254

WALDORF SYSTEM, INCORPORATED

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	424,600 shs.	9 7/8	6 1/4	8.06	$3,422,276
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$509,566
					14.89%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Common Stock					$403,084

Exhibit 254

WESSON OIL & SNOWDRIFT COMPANY, INC.

	Outstanding August 31	Price Range for Year High	Low	Average	Value	Outstanding September 3	Price Range for Year High	Low	Average	Value
				1937					1938	
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	582,000 shs.	56	23 1/4	39.63	$23,064,660.	579,200 shs.	39	25 1/4	32.13	$18,609,696
Preferred Stock (no par) $4 Dividend Cumulative Convertible	294,400 shs.	84 1/2	73 1/8	78.81	23,201,664	292,300 shs.	82 1/4	71	76.63	22,398,949
Total Indicated Market Value of Capital					$46,266,324					$41,008,645
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 2,213,548					$ 1,895,672
Dividends declared on Preferred Stock					1,180,310					1,171,000
Net Income for fiscal years, as reported					$ 3,393,858					$ 3,066,672
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.33%					7.48%
Dividends declared on Common Stock					$ 2,044,188					$ 1,488,000

	Outstanding September 2	Price Range for Year High	Low	Average	Value	Outstanding August 31	Price Range for Year High	Low	Average	Value
				1939					1940	
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	583,129 shs.	28 1/2	16	22.25	$12,974,620	583,129 shs.	29 3/8	15 1/8	22.25	$12,974,620
Preferred Stock (no par) $4 Dividend Cumulative Convertible	292,100 shs.	79	55 1/4	67.13	19,608,673	292,100 shs.	75	58 3/4	66.88	19,535,668
Total Indicated Market Value of Capital					$32,583,293					$32,510,288
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					($ 1,693,774)					$ 440,985
Dividends declared on Preferred Stock					1,168,800					1,168,400
Net Income for fiscal years, as reported					($ 524,974)					$ 1,609,385
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					----					4.95%
Dividends declared on Common Stock					$ 510,238					$ 291,555

Note: Parentheses indicate red figures.

Exhibit 234

WESSON OIL & SNOWDRIFT COMPANY, INC.

	Outstanding August 30	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	583,129 shs.	25 1/2	16 3/4	21.13	$12,321,516
Preferred Stock (no par) $4 Dividend Cumulative Convertible	292,100 shs.	74 1/2	65 1/8	69.81	20,391,501
Total Indicated Market Value of Capital					$32,713,017
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 2,602,542
Dividends declared on Preferred Stock					1,168,400
Net Income for year ended August 30, as reported					$ 3,770,942
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					11.53%
Dividends declared on Common Stock					$ 1,312,940

Exhibit 254

THE WESTINGHOUSE AIR BRAKE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	3,102,063 shs.	57 3/4	17 3/4	37.75	$117,102,878	3,102,063 shs.	33 1/4	15 3/4	24.50	$76,000,544
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$6,253,381					$993,816
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.34%					1.31%
Dividends Declared on Capital Stock					$6,356,917					$388,890
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	3,172,111 shs.	37 1/4	18 1/8	27.69	$87,835,754	3,172,111 shs.	28 1/8	15 1/4	21.69	$68,803,86[illegible]
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$2,765,629					$5,591,506
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					3.1[illegible]%					[illegible]%
Dividends Declared on Capital Stock					$1,575,500					$5,550,486

6709

Exhibit 254

THE WESTINGHOUSE AIR BRAKE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	3,172,111 shs.	24 1/4	15	19.62	$62,236,818
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the Year Ended December 31, as Reported					$6,058,635
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.73%
Dividends Declared on Capital Stock					$5,550,487

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Exhibit 254

16522

WESTVACO CHLORINE PRODUCTS CORPORATION

	Outstanding January 1	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
				1937					1938	
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	339,362 shs.	27 1/4	10 3/4	19.00	$ 6,447,878	339,362 shs.	20 1/8	10	15.06	$ 5,110,792
5% Cum. Conv. Preferred Stock ($30 par)	192,000 shs.	34 7/8	21 1/8	28.00	5,376,000	192,000 shs.	31 1/2	20	25.75	4,944,000
Total Indicated Market Value of Capital					$11,823,878					$10,054,792
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 568,744					$ 515,675
Dividends on Preferred Stocks					216,000					288,000
Net income for years ending January 1, 1938 and December 31, 1938, as reported					$ 784,744					$ 803,675
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.64%					7.93%
Dividends Declared on Common Stock					$ 339,362					$ 339,362

	Outstanding December 30	Price Range for Year High	Low	Average	Value	Outstanding December 28	Price Range for Year High	Low	Average	Value
				1939					1940	
INDICATED MARKET VALUE OF CAPITAL										
Common Stock (no par)	339,362 shs.	39 1/4	15 1/4	27.25	$ 9,247,615	343,132 shs.	38 1/2	27 3/4	33.13	$11,699,263
5% Cum. Conv. Preferred Stock ($30 par)	192,000 shs.	39 1/2	29	34.25	6,576,000					
$4.50 Cum. Preferred Stock (no par)						59,885 shs.	109 7/8	108	108.94	6,523,872
Total Indicated Market Value of Capital					$15,823,615					$18,223,135
EARNINGS AVAILABLE FOR CAPITAL										
Earnings available for Common Stock					$ 915,079					$ 1,028,447
Dividends declared on Preferred Stock 5% Cum.					360,000					220,883
Dividends declared on Preferred Stock $4.50 Cum.										67,371
Net Income for years ending December 30 and December 28, as reported					$ 1,275,079					$ 1,316,401
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.06%					7.22%
Dividends Declared on Common Stock					$ 627,820					$ 762,028

Note: Outstanding January 1 of the following year.

Exhibit 254

WESTVACO CHLORINE PRODUCTS CORPORATION

	Outstanding January 3	Price Range for Year High	Low	Average	Value
		1 9 4			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	353,132 shs.	36 1/2	27 1/4	31.88	$11,257,848
$4.50 Cum. Preferred Stock (no par)	58,415 shs.	112	105	108.50	6,338,028
					$17,595,876
EARNINGS AVAILABLE FOR CAPITAL					
Earnings available for Common Stock					$ 1,092,398
Dividends on Preferred Stock					203,766
Net Income for year ended January 3, 1942, as reported					$ 1,296,164
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.37%
Dividends Declared on Common Stock					$ 529,698

Note: *Outstanding January 3 of the following year.

Exhibit 254

16524

F. W. WOOLWORTH COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($10 par)	9,703,612 shs.	65 3/8	34	49.69	$482,172,480	9,703,610 shs.	53 3/4	36	44.88	$435,496,017
(a) Ten Year 3% Sinking Fund Debentures, due 7/15/47	$10,000,000			100.00	10,000,000	10,000,000			100.00	10,000,000
Total Indicated Market Value of Capital					$492,172,480					$445,496,017
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$33,176,509					$28,584,944
Add: Interest					144,755					300,000
Total Earnings Available for Capital					$33,321,264					$28,884,944
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.77%					6.48%
Dividends Declared on Common Stock					$23,288,670					$23,288,666
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock ($10 par)	9,703,609 shs.	50 3/8	36	43.19	$419,098,873	9,703,609 shs.	42 1/4	30	36.13	$350,591,393
(a) Ten Yr. 3% Sinking Fund Debentures, due 1947	$10,000,000			100.00	10,000,000					
(a) Fifteen Year 2 1/2% Sinking Fund Debentures, due 1955						$22,000,000			100.00	22,000,000
Total Indicated Market Value of Capital					$429,098,873					$372,591,393
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for years ended December 31, as reported					$29,310,353					$24,104,816
Add: Interest					310,102					480,300
Total Earnings Available for Capital					$29,620,455					$24,585,116
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.90%					6.60%
Dividends Declared on Common Stock					$23,288,663					$23,288,662

Note: (a) Prices estimated.

Exhibit 254

F. W. WOOLWORTH COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	9,703,608 shs.	34 1/2	23 1/8	28.81	$279,560,946
(a) Fifteen Year 2 1/2% Sinking Fund Debentures, due 1955	$22,000,000			100.00	22,000,000
Total Indicated Market Value					$301,560,946
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$26,114,373
Add: Interest					583,769
Total Earnings Available for Capital					$26,698,142
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.85%
Dividends Declared on Common Stock					$19,407,217

Note: (a) Prices estimated.

Exhibit 254

WM. WRIGLEY JR. COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
	1937					1938				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	1,959,467 shs.	76	58 1/2	67.25	$131,774,156	1,959,465 shs.	78	61 1/4	69.63	$136,437,548
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for the Years Ended December 31, as Reported					$8,743,591					$7,663,780
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.64%					5.61%
Dividends Declared on Common Stock					$8,327,722					$7,347,990
	1939					1940				
INDICATED MARKET VALUE OF CAPITAL										
Capital Stock (no par)	1,961,667 shs.	85 1/2	75	80.25	$157,423,777	1,963,967 shs.	93	73	83.00	$163,009,261
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for Years Ended December 31, as Reported					$8,650,976					$8,226,648
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.50%					5.05%
Dividends Declared on Common Stock					$8,327,722					$7,855,856

Exhibit 254

WM. WRIGLEY JR. COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	1,964,327 shs.	80	50 1/2	65.25	$128,172,337
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for the Year Ended December 31, as reported					$8,090,413
					6.31%
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					
Dividends Declared on Common Stock					$7,856,126

Exhibit 254

YALE & TOWNE MANUFACTURING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1937					1938			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	486,656 shs.	62 1/2	21 3/4	42.13	$20,502,817	486,656 shs.	39	20 3/4	29.88	$14,541,281
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for yearsended December 31, as reported					$ 1,358,080					$ 88,956
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.47%					0.47%
Dividends Declared on Common Stock					$ 486,656					$ 291,994

	Outstanding December 31	Price Range for Year High	Low	Average	Value	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1939					1940			
INDICATED MARKET VALUE OF CAPITAL										
Common Stock ($25 par)	486,656 shs.	33 1/4	18 3/4	26.00	$12,653,056	486,656 shs.	25	15 1/4	20.13	$ 9,796,388
EARNINGS AVAILABLE FOR CAPITAL										
Net Income for yearsended December 31, as reported					$ 1,024,760					$ 1,411,167
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.09%					14.40%
Dividends Declared on Common Stock					$ 486,656					$ 486,656

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(Pages 6727 to 7221)

Supreme Court of the United States

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICHIGAN, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

PETITION FOR CERTIORARI FILED JULY 28, 1944.

CERTIORARI GRANTED JANUARY 3, 1945.

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TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,466

PANHANDLE EASTERN PIPE LINE COMPANY, A CORPORATION, ILLINOIS NATURAL GAS COMPANY, A CORPORATION, AND MICHIGAN GAS TRANSMISSION CORPORATION, A CORPORATION, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICHIGAN, COUNTY OF WAYNE, MICHIGAN, MICHIGAN CONSOLIDATED GAS COMPANY, A CORPORATION, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS.

PETITION TO REVIEW AND SET ASIDE ORDER OF FEDERAL POWER COMMISSION.

FILED FEBRUARY 6, 1943.

United States Circuit Court of Appeals

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Exhibit 254

YALE & TOWNE MANUFACTURING COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($25 par)	486,656 shs.	22 1/2	15	18.75	$9,124,800
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$1,669,387
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					18.30%
Dividends Declared on Common Stock					$ 486,656

6727

Exhibit 254

SECTION IV

WORKING PAPERS SHOWING THE COMPUTATION OF

"INVESTORS' APPRAISAL OF THE RISKS OF CAPITAL" IN THE NATURAL GAS INDUSTRY

AS COMPARED WITH OTHER DIVISIONS OF THE UTILITY INDUSTRY

FOR THE FULL YEAR 1941

SUPPLEMENTAL TO DATA FOR THE YEARS 1937, 1938, 1939 AND 1940

ALREADY FILED IN THESE PROCEEDINGS AS EXHIBITS NOS. 63 AND 64

WATER COMPANIES.....Begin on Page 1

ELECTRIC OPERATING UTILITY COMPANIES.....Begin on Page 9

MANUFACTURED AND MIXED GAS COMPANIES.....Begin on Page 25

NATURAL GAS COMPANIES.....Begin on Page 36

Exhibit 254

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEAR 1941

WATER COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investors' Appraisal of Risks of Capital
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5=3÷2
Bridgeport Hydraulic Co.	$19,348,280	$ 916,950	December 31, 1941	5.74%
Elizabeth Water Co. Cons.	4,415,069	377,164	December 31, 1941	8.54
Hackensack Water Company	25,960,225	1,509,322	June 30, 1941	5.81
Middlesex Water Co.	3,138,400	198,788	December 31, 1941	6.33
New Haven Water Co.	16,666,200	763,044	December 31, 1941	4.59
Plainfield-Union Water Co.	6,796,030	353,579	December 31, 1941	5.20
Stamford Water Co.	4,719,000	193,878	December 31, 1941	4.11
TOTALS	$81,043,204	$4,312,725		5.32%

6731

Exhibit 254

BRIDGEPORT HYDRAULIC COMPANY

	1941				
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($20 par)	360,000 shs.	37	29	33.00	$11,880,000
(b) "H" 3 1/4's, 1968	$1,490,000			106.00	1,579,400
(c) "I" 3 3/8's, 1974	4,971,000			108.00	5,368,680
(d) "J" 3's, 1970	500,000			104.04	520,200
Total Indicated Market Value					$19,348,280
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$686,051
Add: Interest and Amortization on Debt					230,899
Total Earnings Available for Capital					$916,950
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.7%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price estimated. Sold privately in June, 1938, by Lee Higginson Corp. $106 is call price.
(c) Price estimated. Sold privately in July 1, 1939.
(d) Price estimated. Sold privately in 1940 at $104.04.

Exhibit 254

ELIZABETHTOWN WATER COMPANY CONSOLIDATED

	1941				
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock ($100 par)	39,342 shs.	114	105	109.50	$4,307,949
(a) Raritan Township Water 5's, 1960	$104,000	103	103	103.00	107,120
Total Indicated Market Value					$4,415,069
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$370,336
Add: Deductions from Gross Corporate Income (mainly bond interest)					6,828
Total Earnings Available for Capital					$377,164
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.54%

Note: (a) Quotations from National Quotation Bureau.

Exhibit 254

HACKENSACK WATER COMPANY

	Outstanding Dec.31,1940	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($25 par)	307,500 shs.	33	23 3/4	28.38	$ 8,726,850
(a) 7% Cum. Pref. Stock - A ($25 par)	60,000 shs.	38	33	35.50	2,130,000
(b) Mtge. Bonds Ser. A 3 1/2's, 1968	$14,350,000	-	-	105.25	15,103,375
Total Indicated Market Value					$25,960,225
EARNINGS AVAILABLE FOR CAPITAL					
(c) Net Income for year ended June 30, 1941					$ 982,722
(c) Add: Interest on Funded Debt					501,397
Amortization of Debt Discount, etc.					24,365
Taxes assumed on Interest					838
Total Earnings Available for Capital					$1,509,322
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.81%

Notes: (a) Listed on New York Stock Exchange.
(b) Price estimated. Sold privately in October, 1938, at 105.25.
(c) Computed by adjusting earnings for the calendar year 1940 to give effect to increased net income and decreased interest charges reported for the first six months of 1941 as compared with the first six months of 1940.

Exhibit 254

MIDDLESEX WATER COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	23,500 shs.	51	46	48.50	$1,139,750
(a) 7% Cum. Pref. ($100 par)	2,500 shs.	125	112	118.50	296,250
(a) Cons. Mtge. 5's, 1950	$ 32,000	110	105	107.50	34,400
(c) 1st & Ref. 3 3/4's, 1964	1,668,000			100.00	1,668,000
Total Indicated Market Value					$3,138,400
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$132,078
Add: Interest on Funded Debt					64,155
Amortization of Debt Discount					2,555
Total Earnings Available for Capital					$198,788
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.33%

Notes: (a) Quotations from National Quotation Bureau.
(c) Price estimated. Sold privately to two insurance companies on October 2, 1939.

Exhibit 254

NEW HAVEN WATER COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($50 par)	140,000 shs.	80	60	70.00	$ 9,800,000
(b) Gen. & Ref. "A" 3 1/4's, 1962	$3,960,000			102.00	4,039,200
(c) Gen. & Ref. "B" 3 1/4's, 1975	1,800,000			102.00	1,836,000
(d) Gen. & Ref. "C" 3 1/8's, 1976	550,000			100.00	550,000
(a) 1st & Ref. "D" 4 1/2's, 1983	400,000	112	108 1/2	110.85	441,000
Total Indicated Market Value of Capital					$16,666,200
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$529,316
Add: Interest on Long-Term Debt					227,984
Amortization of Debt Discount (obtained by comparing, as of year-ends, balance sheet items included in income account as "Other Non-Operating Deductions")					5,744
Total Earnings Available for Capital					$763,044
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.5%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price estimated. Sold privately in June, 1937.
(c) Price estimated. Sold privately in June, 1940.
(d) Price estimated. Sold privately in August, 1941.

Exhibit 254

PLAINFIELD-UNION WATER COMPANY

	1941				
	Outstanding Sept. 30, 1941	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock (no par)	57,230 shs.	92	74	83.00	$4,750,060
(b) 1st Mtge. Ser. A, 3 1/4's, 1971	$1,950,000		-	104.92	2,045,940
Total Indicated Market Value					$6,796,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$292,160
Add: Interest on Long Term Debt					63,083
Amortization Deductions					(1,664)
Total Earnings Available for Capital					$353,579
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.20%

Notes: (a) Quotations from National Quotation Bureau.
(b) Entire issue sold privately on April 1, 1941, at 104.92 to three insurance companies. The proceeds were used to retire $1,250,000 1st Mtge. Series A 5's, due 1961.

Parentheses indicate red figures.

Exhibit 254

STAMFORD WATER COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock ($20 par)	100,000 shs.	44 1/2	40	42.25	$4,225,000
1st Mtge. 5's, 1952	$400,000	129	118	123.50	494,000
Total Indicated Market Value					$4,719,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$173,878
Add: Interest requirements on bonds					20,000
Total Earnings Available for Capital					$193,878
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					4.11%

Note: (a) Quotations from National Quotation Bureau.

Exhibit 254

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEAR 1941

ELECTRIC UTILITY OPERATING COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investors' Appraisal of Risks of Capital
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5=3÷2
Bangor Hydro-Electric Co.	$ 19,203,858	$ 1,007,746	December 31, 1941	5.25%
Boston Edison Co.	122,565,765	7,695,210	December 31, 1941	6.28
Central Hudson Gas & Elec. Corp.	38,397,000	2,010,129	December 31, 1941	5.24
Cleveland Elec. Illuminating Co.	164,974,837	8,590,374	December 31, 1941	5.21
Commonwealth Edison Co.	666,043,670	39,204,117	December 31, 1941	5.89
Connecticut Power Co.	36,970,029	2,060,911	December 31, 1941	5.57
Consolidated Edison Co. of N. Y.	948,127,686	52,410,740	December 31, 1941	5.53
Consolidated Gas Elec. Lt. & Pwr. Co. of Baltimore	181,280,332	9,174,115	December 31, 1941	5.06
Detroit Edison Co.	279,454,722	18,632,220	December 31, 1941	6.67
Duke Power Co.	113,067,623	7,123,196	December 31, 1941	6.30
Hartford Electric Light Co.	54,223,400	2,724,423	December 31, 1941	5.02
Pacific Gas & Electric Co.	666,208,676	35,259,364	December 31, 1941	5.29
Pennsylvania Water & Power Co.	45,586,567	2,980,986	December 31, 1941	6.54
Southern California Edison Co.	317,949,616	17,781,113	December 31, 1941	5.59
Tampa Electric Co.	13,800,102	1,484,041	December 31, 1941	10.75
Totals	$3,667,834,283	$208,138,685		5.67%

Exhibit 254

BANGOR HYDRO-ELECTRIC COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($25 par)	217,216 shs.	21 7/8	16	18.94	$ 4,114,071
(a) 7% Cum. Pfd. ($100 par)	25,000 shs.	143	137	140.00	3,500,000
(a) 6% Cum. Pfd. ($100 par)	21,799 shs.	115	111	113.00	2,463,287
1st Mtge. 3 3/4's, 1966	$7,108,000	114	111	112.50	7,996,500
(b) 1st Mtge. 3 1/2's, 1963	600,000			105.00	630,000
(c) 1st Mtge. 3's, 1966	500,000			100.00	500,000
Total Indicated Market Value					$19,203,858
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 691,517
Add: Interest on Funded Debt					299,862
Amortization of Debt Discount, Premium and Expense - Net					16,367
Total Earnings Available for Capital					$1,007,746
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.25%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price used is call price. Sold privately in March, 1938, at 102 3/4.
(c) Price estimated. Sold privately in March, 1941.

Exhibit 254

BOSTON EDISON COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock ($25 par)	2,468,656 shs.	35	20 1/4	27.63	$ 68,208,965
1st Mtge. 2 3/4's, 1970	$53,000,000	105	100 1/8	102.56	54,356,800
Total Indicated Market Value					$122,565,765
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$6,006,126
Add: Interest on Funded Debt					1,467,438
Write-off of Bond Refinancing Charges					274,275
(b) Less: Amortization of Bond Premium					(52,629)
Total Earnings Available for Capital					$7,695,210
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.28%

Notes: (a) Listed on Boston Stock Exchange.
(b) Estimated by Standard & Poor's Corp.

Parentheses indicate red figures.

Exhibit 254

CENTRAL HUDSON GAS & ELECTRIC CORPORATION

	1941				
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	1,500,000 shs.	13 5/8	5 3/8	9.50	$14,250,000
(a) 4 1/2% Cum. Pfd. ($100 par)	70,300 shs.	115	110	112.50	7,908,750
(b) 1st Mtge. 3's, 1971	$13,265,000			105.00	13,928,250
(c) 1st & Ref. Mtge. 3's, 1970	2,200,000			105.00	2,310,000
Total Indicated Market Value					$38,397,000
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$1,463,928
Add: Interest on Bonds					555,708
					2,019,636
Deduct: Amortization of Bond Premium (net)					9,507
Total Earnings Available for Capital					$2,010,129
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.24%

Notes: (a) Quotations from National Quotation Bureau.
(b) Sold privately to seven institutional buyers on May 2, 1941, at 105. Proceeds were used to refund 3 1/2's due 1965 and 1967.
(c) Price Estimated. Sold privately in 1940 at 101.

Exhibit 254

CLEVELAND ELECTRIC ILLUMINATING COMPANY

	1941				
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	2,324,564 shs.	41	30	35.60	$ 82,522,022
(b) $4.50 Cum. Pfd. (no par)	254,989 shs.	115	109 5/8	112.31	28,637,815
1st Mtge. 3's, 1970	$50,000,000	110 1/4	105	107.63	53,815,000
Total Indicated Market Value					$164,974,837
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					7,056,586
Add: Interest on Funded Debt					1,500,000
Amortization of Bond Premiums (net)					33,788
Total Earnings Available for Capital					8,590,374
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.21%

Notes: (a) Listed on New York Curb Exchange.
(b) Listed on New York Stock Exchange.

Exhibit 254

COMMONWEALTH EDISON COMPANY

	1941				
INDICATED MARKET VALUE OF CAPITAL	Outstanding December 31	Price Range for Year High	Low	Average	Value
(a) Capital Stock ($25 par)	12,718,616 shs.	30 1/8	20	25.06	$318,728,517
1st Mtge. Bonds "I", 3 1/4's, 1968	$100,000,000	110 3/4	107 5/8	109.19	109,190,000
(b) 1st Mtge. Bonds "J", 3 1/4's, 1979	114,500,000			105.00	120,225,000
(a) Conv. Deb. 3 1/2's, 1959	26,155,400	119 3/4	107	113.38	29,654,993
Pub. Serv. Co. of No. Ill 1st 3 1/2's, 1968	80,000,000	111 1/8	105 3/8	109.75	87,800,000
(c) Commonwealth Elec. Co. 5's, 1943	152,000	108	106	107.00	162,640
Economy Lt. & Pr. Co. 1st Mtge. 5's, 1956	228,000	128	120	124.00	282,720
Total Indicated Market Value					$666,043,870
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$26,747,901
Add: Interest on Funded Debt					10,956,216
Amortization of Debt Discount and Expense					1,500,000
Total Earnings Available for Capital					$39,204,117
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.89%

Notes: (a) Listed on New York Stock Exchange.
(b) Price estimated. Sold privately in 1939 at 102.
(c) Quotations from National Quotation Bureau.

Exhibit 254

CONNECTICUT POWER COMPANY

	1941 Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($25 par)	662,791 shs.	54 3/4	28 1/2	41.63	$27,591,989
1st Mtge. 5's, 1956	$ 455,000	133	123	128.00	582,400
(b) 1st & Gen. "A" 3 3/4's, 1965	2,380,000			104.00	2,475,200
(c) 1st & Gen. "B" 3 1/4's, 1967	1,922,000			102.00	1,960,440
1st & Gen. "C" 3 1/4's, 1975	4,000,000	111	107	109.00	4,360,000
Total Indicated Market Value					$36,970,029
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$1,776,316
Add: Interest Charges, Amortization, etc.					284,595
Total Earnings Available for Capital					$2,060,911
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.57%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price used is call price. Sold privately October 1, 1935 to nine Hartford insurance companies at 102.
(c) Price used is call price. These bonds were sold privately January 1, 1937 to seven insurance companies

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

1941

	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	11,471,027 shs.	23 3/8	11 3/4	17.56	$201,431,234
(a) $5 Cum. Pref. Stock (no par)	2,184,390 shs.	107 3/8	82	94.69	206,839,889
20 Yr. Deb. 3 1/2's, 1956	$35,000,000	107 5/8	103	105.31	36,858,500
20 Yr. Debs. 3 1/2's, 1958	30,000,000	111 3/4	106	108.88	32,664,000
10 Yr. Debs. 3 1/2's, 1948	60,000,000	107 1/2	104 3/4	106.13	63,678,000
10 Yr. Debs. 3 1/4's, 1946	35,000,000	105 1/4	102	103.63	36,270,500
N.Y. Edison Co. 3 1/4's, 1965	54,990,000	110 1/8	106 3/4	108.44	59,631,156
" " " 3 1/4's, 1966	30,000,000	110 3/4	107 1/8	108.94	32,682,000
N.Y. Gas & Elec. Lt., Heat & Pwr. Co. 5's, 1948	15,000,000	125 3/8	116	120.69	18,103,500
N.Y. Gas & Elec. Lt., Heat & Pwr. Co. 4's, 1949	20,803,000	118 3/4	111 1/4	115.00	23,923,450
Edison Elec. Ill. Co. of N.Y. 5's, 1995	2,188,000	152	149 5/8	150.81	3,299,723
New Amsterdam Gas Co. 5's, 1948	9,806,000	121 1/2	114	117.75	11,546,565
N.Y. & East River Gas Co. 5's, 1944	3,500,000	112	105	108.50	3,797,500
" " " " " " 5's, 1945	1,500,000	113	110	111.50	1,672,500
Westchester Lighting Co. 5's, 1950	8,684,000	128 1/2	122	125.25	10,876,710
" " " 3 1/2's, 1967	25,000,000	111	107 1/4	109.13	27,282,500
N.Y. & Westchester Ltg. Co. 4's, 2004	9,993,000	107 1/2	103	105.25	10,517,632
" " " " " 5's, 1954	2,500,000	115 1/8	114	114.56	2,864,000
N.Y. Steam Corp. 3 1/2's, 1963	27,982,000	108 3/4	105	106.88	29,907,162
(b) Yonkers Elec. Lt. & Pwr. Co. 3 1/2's, 1950	9,515,000			104.00	9,895,600
Kings County Elec. Lt. & Pwr. Co. 6's, 1997	5,123,000	170	161	165.50	8,478,565
Brooklyn Edison Co. 3 1/4's, 1966	55,000,000	111 5/8	103 1/4	107.44	59,092,000
(c) " " " 3's, 1968	4,240,000			104.00	4,409,600
(d) N.Y. & Queens E.L.& P.Co. 3 1/4's, 1968	10,000,000			105.00	10,500,000
N.Y. & Queens E.L.& P.Co. 3 1/2's, 1965	24,970,000	111 1/2	108 1/2	110.00	27,467,000
(e) Consol. Tel. & Elec. Subway Co. 3 1/4's, 1960	13,710,000			104.00	14,258,400
Total Indicated Market Value					$948,127,686
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$33,920,911
Add: Interest on Funded Debt					17,719,877
Amortization of Debt Discount, Other Interest, etc.					769,952
Total Earnings Available for Capital					$52,410,740
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.53%

Notes: (a) Listed on New York Stock Exchange.
(b) Price used is call price. Sold privately in August, 1938, to three insurance companies at 101 3/4.
(c) Price used is call price. Sold privately in December, 1938, to insurance companies at 101.
(d) Price used is call price. Sold privately in May, 1938, to insurance companies at 101.
(e) Price estimated. Sold privately in January, 1940, to insurance companies at a price to yield 3.10% or approximately 102.28.

Exhibit 254

CONSOLIDATED GAS, ELECTRIC LIGHT & POWER COMPANY OF BALTIMORE

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	1,167,397 shs.	73	39 1/2	56.25	$65,666,081
(a) 4 1/2% Pref. Series "B"	222,921 shs.	119 1/4	110 1/4	114.75	25,580,185
(a) 4% Pref. Series "C"	68,928 shs.	111 1/4	105	108.13	7,453,185
1st Ref. Mtge. S.F.-N-3 1/4's, 1971	$21,495,000	112 5/8	107 3/4	110.19	23,685,341
(c) 1st Ref. Mtge. S.F.-O-3 1/4's, 1968	28,440,000			110.00	31,284,000
1st Ref. Mtge. S.F.-P-3's, 1969	7,000,000	111	105 1/4	108.13	7,569,100
(b) 1st Ref. Mtge. S.F.-Q-2 3/4's, 1976	12,000,000	106	100 1/4	103.13	12,375,600
Consol.Gas Co. of Balt. City 4 1/2's, 1954	6,100,000	128 1/4	122 5/8	125.44	7,651,840
(d) Indebtedness to Mayor, City Council of Laurel, Maryland	15,000			100.00	15,000
Total Indicated Market Value					$181,280,332
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$6,701,383
Add: Interest and Amortization on Bonds					2,472,732
Total Earnings Available for Capital					$9,174,115
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.06%

Notes: (a) Listed on New York Curb Exchange.
(b) Offered in January 1941 - $12,000,000 at 103 1/2 and interest. $5,850,000 of proceeds used to refund like principal amount of Series "L" 3 1/2's, 1965.
(c) Price estimated. Sold privately in June, 1938, to a small group of insurance companies.
(d) Price estimated.

Exhibit 254

DETROIT EDISON COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock ($20 par)	6,361,300 shs.	23 1/4	16 5/8	19.94	$126,844,322
Ref. Mtge. Series "F", 4's, 1965	$49,000,000	112 1/4	108 1/8	110.19	53,993,100
" " " "G", 3 1/2's, 1966	35,000,000	112 3/8	109	110.69	38,741,500
" " " "H", 3's, 1970	50,000,000	107 1/2	102 3/8	104.94	52,470,000
(b) Construction Notes, 2 1/4's, due serially to 1945	7,045,000			100.00	7,045,000
Great Lakes Power Co. 6's, 1943	320,000	108	105	106.50	340,800
Total Indicated Market Value					$279,434,722
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$12,443,156
Add: Interest on Funded Debt and Construction Notes					5,298,319
Amortization of Debt Discount and Expense					890,745
Total Earnings Available for Capital					$18,632,220
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.67%

Notes: (a) Listed on New York Stock Exchange. Par Value changed from $100 to $20 on March 25, 1941. Five new shares were issued for each old one.
(b) Price estimated. Interest rate reduced to 2 1/4% on May 1, 1941.

Exhibit 254

DUKE POWER COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($100 par)	1,010,048 shs.	76 1/4	67	71.63	$72,349,738
(a) 7% Cum. Pfd. ($100 par)	2,837 shs.	105	105	105.00	297,885
(b) 1st & Ref. Mtge. 3 1/2's, 1967	$30,000,000			107.00	32,100,000
(c) 1st & Ref. Mtge. 4's, 1967	8,000,000			104.00	8,320,000
Total Indicated Market Value					$113,067,623
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$5,753,196
Add: Interest on Bonds as computed by Standard & Poor's Corp. (not shown separately in report)					1,370,000
Total Earnings Available for Capital					$7,123,196
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.30%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price used is call price. Sold privately in February, 1936, at 100 to the Duke Endowment Trusts
(c) Price used is call price. Sold privately in July, 1935.

Exhibit 254

HARTFORD ELECTRIC LIGHT COMPANY

	1941				
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($25 par)	840,000 shs.	65 1/4	45	55.13	$46,309,200
(b) 30 Yr. 3 Debentures, Series 1937, 1967	$3,220,000			101.00	3,252,200
(c) 30 Yr. 3 1/4 Debentures, 1971	4,200,000	112	110	111.00	4,662,000
Total Indicated Market Value					$54,223,400
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$2,581,798
Add: Interest on Bonds as computed by Standard & Poor's Corp. (not shown separately in report)					142,625
Total Earnings Available for Capital					$2,724,423
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.02%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price used is call price. Sold privately in 1937 at 100 3/4 to six insurance companies.
(c) Registration statement effective July 15, 1941. Offered to stockholders of record July 15, 1941 at par in ratio of $100 principal for each 20 shares of common held. Balance not subscribed by Sept. 2, 1941 to be sold at public or private sale.

Exhibit 254

PACIFIC GAS & ELECTRIC COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Parent Company					
(a) Common Stock ($25 par)	6,261,357 shs.	28 7/8	17 1/4	23.06	$144,386,892
(f)(b) 5% Cum. Pref. ($25 par)	400,000 shs.	27 1/2	25 3/4	26.63	10,652,000
(c) 5 1/2% Cum. Pref. ($25 par)	1,173,163 shs.	31 5/8	28 1/4	29.06	34,092,117
(c) 6% Cum. Pref. ($25 par)	4,197,662 shs.	34 1/2	30 3/8	32.44	136,172,155
Series G 4s, 1964	$ 90,658,000	114 1/4	109 3/4	112.00	101,536,960
" H 3 3/4s, 1961	116,161,000	112 7/8	106 1/2	109.69	127,417,001
" I 3 1/2s, 1966	50,000,000	111 1/2	105	108.25	54,125,000
(d) " J 3s, 1970	19,608,000	106 3/8	99 3/4	103.06	20,208,005
(f)(e) " K 3s, 1971	24,934,000	105	99 3/4	102.38	25,527,429
Subsidiary					
San Joaquin Lt. & Pwr. Corp. "B" 6s, 1952	8,973,000	138 1/2	131	134.75	12,091,117
Total Indicated Market Value					$466,208,676

EARNINGS AVAILABLE FOR CAPITAL		
Net Income for year ended December 31, as reported		$22,463,636
Add: Interest on Funded Debt		11,888,596
Amortization of Bond Discount and Expense		900,382
Taxes Assumed on Interest		8,863
		35,261,477
Deduct: Increase for 1941 in minority interest in surplus		43
Dividends on Capital Stock of subsidiary company		2,070
		2,113
Total Earnings Available for Capital		$35,259,364
INVESTORS' APPRAISAL OF RISKS OF CAPITAL		5.29%

Notes: (a) Listed on New York Stock Exchange.
(b) 400,000 shares offered by the company in July, 1941, at $27.
(c) Listed on San Francisco Exchange.
(d) Sold in March, 1941, at 101 3/4 to supply funds for general corporate purposes and to finance in part a proposed construction program.
(e) Sold on November 25, 1941 at 105 to supply funds for general corporate purposes and to finance in part a proposed construction program.
(f) Prices obtained from National Quotation Bureau.

Exhibit 254

PENNSYLVANIA WATER & POWER COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	429,848 shs.	57 7/8	34 1/2	46.19	$19,854,679
(b) $5 Cum. Pref. (no par)	21,493 shs.	115	108	111.50	2,396,470
Ref. & Coll. Tr. 3 1/4's, 1964	$10,797,000	110 1/2	105	107.75	11,633,768
" " " " 3 1/4's, 1970	10,860,000	110 1/2	105	107.75	11,701,650
Total Indicated Market Value					$45,586,567

EARNINGS AVAILABLE FOR CAPITAL	
Net Income for year ended December 31, as reported	$2,110,690
Add: Interest on Funded Debt	707,113
Taxes Assumed on Interest	
Amortization of Debt Discount, Premium and Expense (net)	163,183
Total Earnings Available for Capital	$2,980,986
INVESTORS' APPRAISAL OF RISKS OF CAPITAL	6.54%

Notes: (a) Listed on New York Curb Exchange.
(b) Quotations from National Quotation Bureau.

Exhibit 254

SOUTHERN CALIFORNIA EDISON COMPANY, LTD.

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($25 par)	3,182,805 shs.	28 3/8	16 1/8	22.25	$ 70,817,411
(b) Original Part. Cum. Pfd. ($25 par)	160,000 shs.	46 1/2	38	42.25	6,760,000
(b) 6% Pfd. Series "B" ($25 par)	1,907,256 shs.	31 1/4	26 3/4	29.00	55,310,424
(b) 5 1/2% Pfd. Series "C" ($25 par)	1,399,601 shs.	29 7/8	24 3/4	27.31	38,223,103
1st & Ref. Mtge. 3's, 1965	$108,000,000	106 1/4	99 1/2	102.88	111,110,400
(c) 1st & Ref. Mtge. 3 1/4's, 1964	30,000,000			105.00	31,500,000
Pacific Lt. & Pr. 1st Mtge. 5's, 1942	4,078,000	106 3/8	101	103.69	4,228,478
Total Indicated Market Value					$317,949,816
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$12,752,788
Add: Interest on Bonds					4,421,542
Amortization of Debt Discount, Redemption Premium and Expense					606,783
Total Earnings Available for Capital					$17,781,113
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.59%

Notes: (a) Listed on New York Stock Exchange.
(b) Listed on New York Curb Exchange.
(c) Price estimated. Sold privately on Sept. 1, 1939, to five insurance companies at 104.37.

Exhibit 254

TAMPA ELECTRIC COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	597,867 shs.	25	17 3/8	21.19	$12,668,802
(b) 7% Cum. Pref. "A" ($100 par)	10,000 shs.	114 1/4	112	113.13	1,131,300
Total Indicated Market Value					$13,800,102
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$ 1,484,041
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.75%

Notes: (a) Listed on New York Curb Exchange
(b) Quotations from National Quotation Bureau.

6229

Exhibit 254

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEAR 1941

MANUFACTURED AND MIXED GAS COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investors' Appraisal of Risks of Capital
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5=3÷2
Bridgeport Gas & Light Company	$ 5,984,750	$ 441,618	December 31, 1940	7.39%
Brooklyn Union Gas Company	57,700,059	4,069,369	December 31, 1941	7.05
Elizabethtown Consolidated Gas Co.	7,452,830	548,277	December 31, 1940	7.36
Hartford Gas Company	5,895,000	376,796	December 31, 1941	6.39
Laclede Gas Light Company	30,224,353	2,732,583	December 31, 1941	9.04
Peoples Gas, Light & Coke Co.	102,698,644	7,551,784	December 31, 1941	7.35
Providence Gas Company	11,623,584	879,309	December 31, 1941	7.56
Seattle Gas Company	4,129,179	419,970	December 31, 1941	10.17
Springfield (Mass.) Gas Light Co.	3,385,712	287,233	December 31, 1941	8.48
Washington Gas & Light Co.	33,671,358	2,058,153	December 31, 1941	6.11
Totals	$262,765,469	$19,365,092		7.37%

Exhibit 254

BRIDGEPORT GAS LIGHT COMPANY

	1941				
	Outstanding Dec.31,1940	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	181,500 shs.	35	18	26.50	$4,809,750
1st Mtge. 4's, 1952	$1,000,000	121	114	117.50	1,175,000
Total Indicated Market Value					$5,984,750

EARNINGS AVAILABLE FOR CAPITAL	
Net Income for year ended December 31, 1940, as reported	$401,618
Add: Interest on Bonds	40,000
Total Earnings Available for Capital	$441,618
INVESTORS' APPRAISAL OF RISKS OF CAPITAL	7.39%

Note: (a) Quotations from National Quotation Bureau.

Exhibit 254

BROOKLYN UNION GAS COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	745,364 shs.	14 1/4	7	10.63	$ 7,923,219
1st Cons. Mtge. 5's, 1945	$14,736,000	111 1/2	104	112.75	16,614,840
1st Lien & Ref. Mtge. "A" 6's, 1947	6,000,000	113 5/8	107	110.33	6,619,800
1st Lien & Ref. Mtge. "B" 5's, 1957	10,000,000	107 1/2	102 1/4	104.88	10,488,000
20 Year Debs. 5's, 1950	18,000,000	95 3/8	83	89.19	15,154,200
Total Indicated Market Value					$57,700,059
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$1,548,942
Add: Interest on funded debt					2,496,800
Amortization of debt discount					28,427
					4,074,169
Deduct: Amortization of debt premium					4,800
Total Earnings Available for Capital					$4,069,369
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.05%

Notes: (a) Listed on N. Y. Stock Exchange.

Exhibit 254

ELIZABETHTOWN CONSOLIDATED GAS COMPANY

	Outstanding Dec.31,1940	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock (no par)	38,716 shs.	805	180	[illegible].50	$7,452,830
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, 1940 as reported					$548,277
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.36%

Notes: (a) Quotations from National Quotation Bureau.

6783

Exhibit 254

HARTFORD GAS COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($25 par)	150,000 shs.	35	24	29.50	$4,425,000
(a) 8% Cum. Pref. ($25 par)	30,000 shs.	50	48	49.00	1,470,000
Total Indicated Market Value					$5,895,000

EARNINGS AVAILABLE FOR CAPITAL

Net income for year ended December 31, as reported — $376,796

INVESTORS' APPRAISAL OF RISKS OF CAPITAL — 6.39%

Notes: (a) Quotations from National Quotation Bureau.

6787

Exhibit 254

LACLEDE GAS LIGHT COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($100 par)	107,000 shs.	17 1/4	5 1/4	11.25	$ 1,203,750
(a) 5% Cum. Pref. ($100 par)	23,330 shs.	45 1/2	17 1/4	31.38	732,095
Ref. & Ext. 5's, 1942	$9,302,000	99 3/8	92 1/4	95.81	8,912,248
" " " 5's, 1939	691,000	101	94	97.50	673,725
(b) " " " 5's, 1934 (not extended)	7,000			96.75	6,773
1st & Coll. Ref. "C" 5 1/2's, 1953	17,500,000	89	56 1/4	72.62	12,708,500
" " " " "D" 5 1/2's, 1960	5,500,000	89	57 1/2	73.25	4,028,750
Coll. Trust Notes 6's Ser.A, 1942	2,345,000	79	49	64.00	1,500,800
" " " 6's Ser.B, 1942	655,000	89 3/4	50	69.88	457,714
Total Indicated Market Value					$30,224,353

EARNINGS AVAILABLE FOR CAPITAL	
Net Income for year ended December 31, as reported	$ 625,085
Add: Interest on Funded Debt	1,945,000
Amortization of Debt Discount	145,406
Taxes on Bonds and Interest	17,092
Total Earnings Available for Capital	$2,732,583
INVESTORS' APPRAISAL OF RISKS OF CAPITAL	9.04%

Notes: (a) Listed on New York Stock Exchange.
(b) Price estimated.

Exhibit 254

PEOPLES GAS LIGHT & COKE COMPANY

	Outstanding December 31	Price Range for Year High	Low	Average	Value
		1941			
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock ($100 par)	656,000 shs.	54	36 3/4	45.36	$ 29,769,280
1st Consol. Mtge. 6's, 1943	912,000	111	107	109.00	994,080
Ref. Mtge. 5's, 1947	20,386,000	118 1/4	112	115.13	23,470,402
(b) 1st & Ref. Mtge. "E" 3 1/4's, 1966	22,000,000			100.00	22,000,000
(b) " " " " "F" 3's, 1956	15,000,000			100.00	15,000,000
Mutual Fuel Gas Co. 1st Mtge. 5's, 1947	4,864,000	117 1/2	115	116.25	5,654,400
Ogden Gas Co. 1st Mtge. 5's, 1945	5,214,000	113 1/2	106	109.75	5,810,482
Total Indicated Market Value					$102,698,644
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$4,283,697
Add: Interest on Long-Term Debt					2,992,682
Premium and Interest to maturity on bonds reacquired and cancelled in 1941					92,491
Amortization of Debt Discount and Expense					70,002
Expense in connection with issuance of bonds in 1941					112,912
Total Earnings Available for Capital					$7,551,784
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.35%

Notes: (a) Listed on New York Stock Exchange.
(b) Prices estimated. Sold privately in August, 1941, to five insurance companies at par. Proceeds were used to retire 1st & Ref. Mtge. "B" 4's of 1981 and "D" 4's of 1961.

Exhibit 254

PROVIDENCE GAS COMPANY

	1941 Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock (no par)	1,074,028 shs.	8 3/4	6 1/2	7.63	$ 8,194,834
1st Mtge. "B" 4s, 1963	$3,250,000	107	104	105.50	3,428,750
Total Indicated Market Value					$11,623,584
EARNINGS AVAILABLE FOR CAPITAL					
Net income for year ended December 31, as reported					$740,129
Add: Deductions from Gross Income					139,160
Total Earnings Available for Capital					$879,309
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					7.56%

Notes: (a) Listed on N. Y. Curb Exchange.

Exhibit 254

SEATTLE GAS COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	23,825 shs.	.25	.01	0.13	$ 3,097
(a) $5 1st Pref. (no par)	47,250 shs.	14	6 1/2	10.25	484,313
(a) $5 2nd Pref. (no par)	27,556 shs.	1 1/2	1/4	0.88	24,249
1st & Ref. 5s, 1954	$4,725,000	82	64	73.00	3,449,250
Seattle Lighting Co. 5s, 1944	158,000	109	104	106.50	168,270
Total Indicated Market Value					$4,129,179
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$172,990
Add: Interest on Funded Debt					244,592
Amortization of Reorganization Expenses applicable to Funded Debt					2,388
Total Earnings Available for Capital					$419,970
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.17%

Notes: (a) Quotations from National Quotation Bureau.

Exhibit 254

SPRINGFIELD GAS LIGHT COMPANY

	1941				
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock ($25 par)	214,404 shs.	13 5/8	10 1/2	12.06	$2,585,712
(b) 10 Year Notes, 3's, 1946	$500,000			100.00	500,000
(b) 10 Year Notes, 3 1/2's, 1947	300,000			100.00	300,000
Total Indicated Market Value					$3,385,712
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$258,268
Add: Interest, etc.					28,965
Total Earnings Available for Capital					$287,233
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.48%

Notes: (a) Quotations from National Quotation Bureau.
(b) Prices estimated.

Exhibit 254

WASHINGTON GAS LIGHT COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	425,000 shs.	24	14	19.00	$ 8,075,000
(b) $4.50 Cum. Pref. (no par)	60,000 shs.	106	102	104.00	6,240,000
Gen. Mtge. 5s, 1960	$5,199,500	132	125	128.50	6,681,358
(c) Ref. Mtge. 4 1/4s, 1956	2,400,000			105.00	2,520,000
(d) Ref. Mtge. 4s, 1963	8,500,000			105.00	8,925,000
Georgetown Gaslight Co. 5s, 1961	1,000,000	125	121	123.00	1,230,000
Total Indicated Market Value					$33,671,358
EARNINGS AVAILABLE FOR CAPITAL					
Net income for year ended December 31, as reported					$1,223,885
Add: Interest on long-term debt.					753,108
Amortization of debt discount and expense. (Includes small amount of other interest and miscellaneous deductions)					81,160
Total Earnings Available for Capital					$2,058,153
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.11%

Notes: (a) Listed on New York Stock Exchange.
(b) Quotations from National Quotation Bureau.
(c) Price is 1941 call price. Offered privately in 1936 to Metropolitan Life Insurance Co., New York
(d) Price is 1941 call price. Offered privately in 1938 to six insurance companies at 101.

Exhibit 254

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEAR 1941

ALL NATURAL GAS COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investors' Appraisal of Risks of Capital
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5 & 12
Consolidated Gas Utilities Corp.	$ 8,675,877	$ 819,589	October 31, 1941	9.45%
El Paso Natural Gas Co.	30,224,572	2,556,174	December 31, 1941	8.46
Houston Natural Gas Corp.	6,293,835	731,845	July 31, 1941	11.63
Interstate Natural Gas Co.	20,488,490	2,049,129	December 31, 1941	10.00
Lone Star Gas Corp.	68,295,511	6,384,254	December 31, 1941	9.35
Memphis Natural Gas Co.	4,359,511	701,853	December 31, 1940	16.10
Montana-Dakota Utilities Co.	27,587,742	1,607,747	December 31, 1941	5.83
Mountain Fuel Supply Co.	10,327,591	950,069	December 31, 1940	9.20
National Fuel Gas Co.	41,683,402	3,491,533	December 31, 1941	8.38
Northern Natural Gas Co.	49,628,400	3,969,863	December 31, 1941	8.00
Oklahoma Natural Gas Co.	49,084,115	3,264,499	August 31, 1941	6.65
Pacific Lighting Corp.	155,989,234	9,322,832	December 31, 1941	5.98
Panhandle Eastern Pipe Line Co.	64,585,484	5,483,884	December 31, 1941	8.49
Southern Natural Gas Co.	36,139,771	3,495,970	September 30, 1941	9.67
Totals (including Panhandle Eastern Pipe Line Co.)	$573,363,535	$44,829,241		7.82%
Totals (excluding Panhandle Eastern Pipe Line Co.)	$508,778,051	$39,345,357		7.73%

Exhibit 254

INVESTORS' APPRAISAL OF RISKS OF CAPITAL

FOR THE YEAR 1941

NATURAL GAS PIPE LINE COMPANIES

Company	Indicated Market Value of Capital	Earnings Available for Distribution to Capital		Investors' Appraisal of Risks of Capital
		Amount	For the 12 Months Ended	
(1)	(2)	(3)	(4)	5=3÷2
El Paso Natural Gas Co.	$ 30,224,572	$ 2,556,174	December 31, 1941	8.46%
Interstate Natural Gas Corp.	20,488,490	2,049,129	December 31, 1941	10.00
Memphis Natural Gas Co.	4,359,511	701,853	December 31, 1940	16.10
Northern Natural Gas Co.	49,628,400	3,969,863	December 31, 1941	8.00
Panhandle Eastern Pipe Line Co.	64,585,484	5,483,884	December 31, 1941	8.49
Southern Natural Gas Co.	36,139,771	3,495,970	September 30, 1941	9.67
Totals (including Panhandle Eastern Pipe Line Co.)	$205,426,228	$18,256,873		8.89%
Totals (excluding Panhandle Eastern Pipe Line Co.)	$140,840,744	$12,772,989		9.07%

Exhibit 254

CONSOLIDATED GAS UTILITIES CORP.

	Outstanding October 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($1 par)	886,026 shs.	1 3/4	1 1/8	1.44	$1,275,877
(b) 1st Mtge. Sinking Fund 4s, 1956	$6,500,000			100.00	6,500,000
(c) Ten Year 5s, 1951	900,000			100.00	900,000
Total Indicated Market Value					$8,675,877
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended October 31 as reported					$398,109
Add: Interest on funded debt					408,331
Refund of state taxes paid by security holders					6,548
Federal income taxes paid under bond covenants					3,071
Amortization of Funded Debt expense					3,533
Total Earnings Available for Capital					$819,589
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.45%

Notes: (a) Listed on N. Y. Curb Exchange.
(b) Prices estimated. Sold privately in April, 1941 at 100 to a group of institutional investors.
(c) Prices estimated. Sold privately in April, 1941 at 100 to individual buyers.

Exhibit 254

EL PASO NATURAL GAS COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($3 par)	601,594 shs.	33	21 3/4	27.38	$16,471,644
(b) Pref. 7% Cum. ($100 par)	14,797 shs.	111 1/2	103 1/2	107.50	1,590,678
(c) 1st Mtge. 3 1/2s, 1953	$6,000,000			102.00	6,120,000
(d) 1st Mtge. 3s, 1955	2,700,000			101.75	2,747,250
(e) 3% Serial Notes due 1940-1945	1,195,000			100.00	1,195,000
(f) 2 3/4% Serial Notes due 1941-1944	750,000			100.00	750,000
(g) 2 1/2% Serial Notes due 1942-1946	1,350,000			100.00	1,350,000
Total Indicated Market Value					$30,224,572
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$2,141,912
Add: Interest					393,226
Amortization of Debt Discount and Expense					21,036
Total Earnings Available for Capital					$2,556,174
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.46%

Notes: (a) Listed on N. Y. Stock Exchange.
(b) Quotations from National Quotation Bureau.
(c) Prices estimated at call price. Privately sold December 15, 1938 to six institutions at 98 1/2.
(d) Prices estimated at call price. Privately sold June, 1940, to six institutions at 98 1/2.
(e) Prices estimated. Privately sold December, 1938, to a N.Y. Bank.
(f) Prices estimated. Privately sold February, 1940 to a N.Y. Bank.
(g) Prices estimated.

Exhibit 254

HOUSTON NATURAL GAS CORP.

	(b)Outstanding July 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	158,289 shs.	17 1/4	9	13.13	$2,078,335
(a) Pref. 7% ($50 par)	10,000 shs.	56 1/4	55 1/2	55.88	558,000
1st Mtge. S.F. 4s, 1955	$3,500,000	106	103	104.50	3,667,500
Total Indicated Market Value					$6,293,835

EARNINGS AVAILABLE FOR CAPITAL

Net Income for year ended July 31, as reported	$575,387
Add: Bond Interest	143,302
Amortization of Bond Discount	11,062
Refunds to bondholders on account of taxes on bond interest, etc.	2,094
Total Earnings Available for Capital	$731,845

INVESTORS' APPRAISAL OF RISKS OF CAPITAL 11.63%

Notes: (a) Quotations from National Quotation Bureau.
(b) Fiscal year changed to end July 31.

Exhibit 254

INTERSTATE NATURAL GAS CO., INC.

	1941			
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock (no par)	952,953 shs.	25	18	21.50	$20,488,490
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$2,049,122
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					10.00%

Notes: (a) Quotations from National Quotation Bureau.

Exhibit 254

LONE STAR GAS CORP.

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock (no par)	5,504,875 shs.	10 1/8	6 1/2	8.31	$45,745,511
(a) Serial Notes, 2s, due to Aug. 1, 1950	$18,400,000			100.00	18,400,000
(a) Notes, 2 1/4s, due Feb. 1, 1951	4,150,000			100.00	4,150,000
Total Indicated Market Value					$68,295,511
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$5,810,977
Add: Interest on Debentures					58,333
Interest on Bank Notes Payable					499,977
Amortization of Debt Discount, etc.					2,628
Taxes Assumed on Interest					12,339
Total Earnings Available for Capital					$6,384,254
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.35%

Notes: (a) Prices Estimated. Sold privately on January 29, 1941 to eight commercial banks.

Exhibit 254

MEMPHIS NATURAL GAS COMPANY

	1941				
	Outstanding Dec.31,1940 Adjusted for 1941 Financing	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($5 par)	918,680 shs.	5 1/8	3 1/2	4.31	$3,959,511
(b) Promissory Notes to Banks	$400,000			100.00	400,000
Total Indicated Market Value					$4,359,511
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, 1940, as reported					$636,710
Add: Interest Paid					53,756
Amortization of Debt Discount					11,387
Total Earnings Available for Capital					$701,853
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					16.10%

Notes: (a) Listed on New York Curb Exchange.
(b) Price estimated. On April 1, 1941, the collateral securing the promissory notes payable to banks was sold and the proceeds applied to the reduction of the notes, leaving the balance of $400,000 outstanding.

Exhibit 254

MONTANA-DAKOTA UTILITIES COMPANY

	1941				
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Common Stock ($10 par)	676,652 shs.	11 1/4	7 1/4	9.25	$6,259,031
(a) Cum. Pref. 6% ($100 par)	17,739 shs.	102 1/2	91 1/2	97.00	1,720,683
(a) Cum. Pref. 5% ($100 par)	59,593 shs.	95 3/4	82 1/2	89.13	5,311,524
1st Mtge. 3 1/2's, 1961	$7,500,000	108	102 7/8	105.44	7,908,000
1st Mtge. Serial 2 1/2's, 1942 to 1949	2,500,000	101	100	100.50	2,512,500
(b) Serial Notes 2 to 3 1/2, 1942 to 1950	3,510,000			100.00	3,510,000
(c) Serial Purchase Contracts	16,004			100.00	16,004
(c) 2 1/2% Purchase Money Notes, due 1943 to 1944	350,000			100.00	350,000
Total Indicated Market Value					$27,587,742

EARNINGS AVAILABLE FOR CAPITAL

Net Income for year ended December 31, as reported	$1,133,749
Add: Interest on Funded Debt	468,619
Interest on Serial Purchase Contracts (estimated at 6%)	960
Amortization of Debt Discount and Expense (net)	4,419
Total Earnings Available for Capital	$1,607,747

INVESTORS' APPRAISAL OF RISKS OF CAPITAL 5.83%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price estimated. Sold privately in November-December, 1940, at $100, to five institutions.
(c) Price estimated.

Exhibit 254

MOUNTAIN FUEL SUPPLY COMPANY

	1941				
	Outstanding Dec.31,1940	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Capital Stock ($10 par)	1,989,902 shs.	6 1/4	4 1/8	5.19	$10,327,591
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, 1940, as reported					$950,069
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.20%

Note: (a) Listed on Pittsburgh Exchange.

Exhibit 254

NATIONAL FUEL GAS COMPANY

	1941			
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
Capital Stock (no par)	3,810,183 shs.	12 3/8	9 1/2	10.94	$41,683,402
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$3,491,533
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					8.38%

Exhibit 254

NORTHERN NATURAL GAS COMPANY

	1941				
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($20 par)	1,015,000 shs.	32 1/8	25	28.56	$28,988,400
(b) Bonds 1st 3 1/4's, A, due 1954	$16,000,000			104.00	16,640,000
(c) Bank Loan, 2 1/8%, due 1946	4,000,000			100.00	4,000,000
Total Indicated Market Value					$49,628,400

EARNINGS AVAILABLE FOR CAPITAL

Net Income for year ended December 31, as reported	$3,346,878
Add: Interest on Bonds	520,000
Interest on Bank Loan	93,854
Amortization of Debt Discount and Expense	9,131
Total Earnings Available for Capital	$3,969,863

INVESTORS' APPRAISAL OF RISKS OF CAPITAL 8.00%

Notes: (a) Quotations from National Quotation Bureau.
(b) Price estimated at call price. Sold privately in August, 1939, at par, to five insurance companies.
(c) Price estimated.

Exhibit 254

OKLAHOMA NATURAL GAS COMPANY

	Outstanding August 31	Price Range for Year 1941 High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($15 par)	550,000 shs.	21 3/4	15	18.38	$10,109,000
(a) Prior Pfd. Conv. $5.50 (no par)	58,000 shs.	116 1/2	107 1/2	112.00	6,496,000
(a) Pfd. $3 Cum. ($50 par)	91,055 shs.	54	47 1/4	50.63	4,610,115
1st Mtge. Series B, 3 3/4's, 1955	$16,700,000	109	105	107.00	17,869,000
(b) 1st Mtge. Series C, 3's, 1956	4,500,000			100.00	4,500,000.
(c) Bank Loans, 2 3/4, Serially to 1946	5,500,000			100.00	5,500,000
Total Indicated Market Value					$49,084,115
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended August 31, as reported					$2,479,844
Deduct: Amortization of Bond Premium					9,670
					2,470,174
Add: Interest on Funded Debt					794,325
Total Earnings Available for Capital					$3,264,499
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					6.65%

Notes: (a) Listed on New York Curb Exchange.
(b) Price estimated. These bonds were sold and the proceeds used to acquire the gas properties of Central States Power & Light Corporation, effective July 31, 1941. The properties acquired had annual gross earnings of approximately $1,300,000, but only one month's income is included in earnings for the twelve months ended August 31, 1941.
(c) Price estimated.

Exhibit 254

PACIFIC LIGHTING CORPORATION

	1941				
	Outstanding December 31	Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock	1,608,631 shs.	40	26 1/8	33.06	$53,181,341
(b) $5 Preferred	200,000 shs.	107 3/4	94 1/2	101.13	20,226,000
(c) Long Term Bank Loans, 3%, 1941-49	$5,500,000			100.00	5,500,000
(d) So. Cal. Gas Co. 6% Pfd. ($25 par)	895,789 shs.	33 3/4	29	31.36	28,091,943
So. Cal. Gas Co. 1st Mtge. 3 1/4's, 1970	$35,000,000	109	103 1/2	106.25	37,187,500
(e) So. Counties Gas Co. of Cal. 1st 3's, 1971	11,500,000	106 1/4	99	102.63	11,802,450
Total Indicated Market Value					$155,989,234
EARNINGS AVAILABLE FOR CAPITAL					
Net Income for year ended December 31, as reported					$7,727,859
Add: Interest on Funded Debt					1,595,090
					9,322,949
Deduct: Dividends on Subsidiary Common Stock					117
Total Earnings Available for Capital					$9,322,832
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					5.98%

Notes: (a) Listed on New York Stock Exchange.
(b) Listed on San Francisco Stock Exchange.
(c) Prices estimated.
(d) Listed on Los Angeles Exchange.
(e) Issued in January, 1941, the proceeds of which were used to redeem the 4 1/2's of 1968.

Exhibit 254

PANHANDLE EASTERN PIPE LINE COMPANY

	Outstanding December 31	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock (no par)	807,387 shs.	41 3/4	32	36.88	$29,775,000
Pref. $6 cum. (no par):					
(b) Class A part. and redeemable	100,000 shs.			100.00	10,000,000
(b) Class B non-part. and non-redeemable	10,000 shs.			150.00	1,500,000
4¼ Mtge. & Ref. Lien "A" 1.M. due 1960	$18,000,000	104 1/4	99 3/8	102.40	18,432,000
(c) 1st Mtge. & Trust Lien "A" 1.41-1.30% 1946-50	8,000,000			100.00	8,000,000
(c) Serial Notes A, B, C & D. 0.75-1.80% due 11/1/42-47	7,000,000			100.00	7,000,000
(d) Other Long-Term Debt	3,783			100.00	3,783
Total Indicated Market Value					$74,710,783
RATIO OF EARNINGS PER CAPITAL					
Net Income for 12 months ended December 31, as reported					$4,804,687
Add: Interest on Funded Debt					631,804
Amortization of Debt Discount and expense					57,697
Total Earnings Available for Capital					$5,494,188
INVESTORS' APPRAISAL OF VALUE OF CAPITAL					8.44%

Notes: (a) Quotations from National Quotation Bureau.
(b) Prices estimated. Amounts used are the prices at which redemption of the stocks is contemplated.
(c) Prices estimated. Sold privately in January, 1941 at 100 to several banking institutions and one insurance company.
(d) Prices estimated.

Exhibit 254

SOUTHERN NATURAL GAS COMPANY

	Outstanding Sept.30,1941	1941 Price Range for Year High	Low	Average	Value
INDICATED MARKET VALUE OF CAPITAL					
(a) Common Stock ($7.50 par)	1,409,212 shs.	13 1/2	10	11.75	$16,558,241
1st Mtge. Pipe Line S.F. 3 1/4's, 1956	$13,000,000	107	103	105.00	13,650,000
(b) Serial Notes 2 1/2's, 1942 to 1947	4,500,000			100.00	4,500,000
Alabama Gas Co. 1st Mtge. 4 1/2's, 1951	1,351,000	105	101	103.00	1,391,530
(c) Alabama Natural Gas Corp. City of Talladega 5's, 1947	40,000			100.00	40,000
Total Indicated Market Value					$36,139,771
EARNINGS AVAILABLE FOR CAPITAL					
(d) Net Income for year ended Sept. 30, 1941, as reported					$2,439,711
Add: Interest on Funded Debt					1,000,406
Amortization of Debt Discount and Expense					55,853
Total Earnings Available for Capital					$3,495,970
INVESTORS' APPRAISAL OF RISKS OF CAPITAL					9.67%

Notes: (a) Listed on New York Stock Exchange.
(b) Prices estimated. Sold privately in May, 1941, to four banking institutions.
(c) Price estimated.
(d) Excludes net income of $700,000 arising from non-recurring tax savings due to refunding.

[fol. 16582] (Exhibit 255.)

Panhandle Eastern Pipe Line Company
1221 Baltimore Ave.
Kansas City, Mo.

April 11, 1942

Mr. Park Chamberlain
815 15th Street, N. W.
Washington, D. C.

Dear Mr. Chamberlain:

In accordance with your request during my cross-examination at the recent hearing in Washington, D. C. on April 2nd, I have checked the calculations on your work sheet comparing demand charges 1941 and 1942 and have noted my agreement with the calculations thereon. There is also attached a tabulation showing our calculation of charges and payments for the fiscal years as well as the calendar years. From a study of these figures I think we can agree that:

(1) Demand charges for either the calendar or fiscal years 1942 will be greater than those of the previous year,

(2) Charges and payments will be less under the original contract than under the supplemental contract for the ensuing fiscal year,

(3) Charges and payments will be less under the original contract than had been assumed by me in the preparation of Exhibit 161.

We were unable to check the figure $4,497,920.16 which you introduced (Page 9440, et seq.). Our figure for this is $4,408,613.32, however, it is not felt that this is important since the difference will not affect the conclusions.

The letter referring to the 150 million cubic feet, requested by your company, was the one written by Mr. Batten to us under date of May 28, 1941.

I am returning your work sheet above mentioned and photostatic copy of the January bill which I inadvertently picked up when on the witness stand.

Yours very truly,

O. W. MORTON.

E:OWM:rd
Enc.

[fol. 16583]

Comparative Statement
Of Demand Charges Under Original And Supplemental Contracts
Panhandle Eastern Pipe Line Company And
Michigan Consolidated Gas Company For Detroit

Demand Charges

	Supplemental		Original and Supplemental	
	Therms	Amount	Therms	Amount
January 1941	1 102 089	$ 418 793 82		
February	1 126 047	427 897 86		
March	1 026 109	389 921 42		
April	911 089	346 213 82		
May	811 487	308 365 06		
June	753 915	286 487 70		
July	742 309	282 077 42		
August	748 481	284 422 78		
September	770 281	292 706 78		
October	892 009	338 963 42		
November	1 054 611	400 752 18		
December	1 162 437	441 726 06		
Total 1941	11 100 864	$4 218 328 32		
January 1942	1 223 725	$ 465 015 50	1 223 725	$ 465 015 50
February	1 333 965	506 906 70	1 333 965	506 906 70
March	1 197 305	454 975 90	1 197 305	454 975 90
Total 12 Months (Fiscal)	(11 601 614)	(4 408 613 32)		
April	1 122 823	426 672 74	1 110 161	421 861 18
May	1 023 221	388 823 98	1 110 161	421 861 18
June	965 649	366 946 62	1 110 161	421 861 18
July	954 043	362 536 34	1 110 161	421 861 18
August	960 215	364 881 70	1 110 161	421 861 18
September	982 015	373 165 70	1 110 161	421 861 18
October	1 103 743	419 422 34	1 110 161	421 861 18
November	1 266 345	481 211 10	1 110 161	421 861 18
December	1 374 171	522 184 98	1 110 161	421 861 18
Total 1942	13 507 220	$5 132 743 60		$5 223 648 72
January 1943	1 435 459	545 474 42	1 110 161	421 861 18
February	1 545 699	587 365 62	1 110 161	421 861 18
March	1 409 039	535 434 82	1 110 161	421 861 18
Total 12 Months (Fiscal)	14 142 422	$5 374 120 33	13 321 932	$5 062 334 16

Note: Prior to March 1942 all figures are actuals.
Subsequent to February 1942 all figures on Original Contract basis are based on Actual Maximum Day Demand and all figures on Supplemental Contract basis are based on Actual Base Load Maximum Demand plus housheating for 25,000 customers estimated same as corresponding month of previous year.

OWM
4-8-42

[fol. 16584]

Calendar Years

239635962
119817981

759453943

1941			
N. G. purchased	239,635,962 therms for		$7,812,868
commodity chge	239,635,962 " @ 1 1/2¢		3,594,539
Demand Chge			$4,218,329
1942			
Demand charge —			
Jan. — Mar. — Supple. Cont.			
Base load demand established			
3-18-41	742,309 therms		
	38		
	5938472		
	2226927		
	282,077 per mo.		
	3		
	846,231	$846,231	
Househeating demand			
Jan. 240,708 x 2 x 38¢ =		182,938	
Feb. 295,828 x 2 x 38 =	224,829		
25,000 Mar. use Mar. 1942.			
H. H. customers 227,498 x 2 x 38 =		172,898	1,426,896
Apr. — Dec. — org. contract			
Org. max. demand	1,110,161 therms		
	38		
	$421,861 per mo.		
	9		
			3,796,749
			$5,223,645
Difference			1,085,316

Note: This correctly shows difference in demand charges — Calendar Year 1941 & Calendar Year 1942-43 assuming March 1942 equal Mar. 1941 since March 1942 figures not available at this time.

4-2-42

O. W. Morton 4/6/42

[fol. 16585] (Exhibit 256.)

New York, N. Y.

September 19, 1930.

Columbia Oil & Gasoline Corporation,
New York City.

National City Co., New York City.

Dear Sirs:

Referring to agreement between you and ourselves, dated September 17, 1930, it is understood and agreed between us as follows:

(1) The reimbursement to Missouri-Kansas Pipe Line Co. by the Panhandle Co. provided for in article IV, paragraph (c) of said agreement, shall be made on the closing date under said agreement.

(2) The City Co. agrees that the credit of three million dollars ($3,000,000) referred to in article VI, paragraph (b) (1) of said agreement, to be arranged by the City Co. from the National City Bank, effective at once, shall be to Missouri-Kansas Pipe Line Co., guaranteed by the Panhandle Co.

(3) We agree to pay off the credit referred to in (2) hereof and to clear the Panhandle Co. of any contingent liability arising from its guaranty referred to in (2) hereof on or before the closing date under said agreement.

(4) The words "closing date under said agreement", as used herein, shall be deemed to mean the date named in article X of said agreement as the closing date thereunder or any date to which said closing date shall be extended by mutual agreement of the parties to said agreement.

Our signature to this letter and your confirmation at the foot thereof will constitute a binding agreement between us to the above effect.

Yours very truly,

MISSOURI-KANSAS PIPE
LINE CO.,
By Frank P. Parish, President.

Confirmed:

COLUMBIA OIL & GASOLINE CORPORATION,
By E. Reynolds, Jr., Vice President.

THE NATIONAL CITY CO.,
By Stanley A. Russell,
Vice President.

[fol. 16586] Contract, this 17th day of September 1930, between Missouri-Kansas Pipe Line Co. (hereinafter referred to as "Pipe Line Co."), party of the first part, the National City Co. (hereinafter referred to as "City Co."), party of the second part, and Columbia Oil & Gasoline Corporation (hereinafter referred to as "Columbia"), party of the third part.

I. The Pipe Line Co. represents to the City Co. and to Columbia as follows:

(a) The Pipe Line Co. is a corporation duly organized and existing under the laws of the State of Delaware, with an authorized capital stock consisting of 5,000,000 shares of common stock of the par value of $5 each and 5,000,000 shares of class B stock of the par value of $1 each. Of the said stock, 1,065,452 shares of common stock (exclusive of dividend scrip) and no more are now outstanding, and 1,598,918 shares of class B stock and no more have been issued and are now deposited under a voting trust agreement. The Pipe Line Co. has no stock of any class, except as above set forth and has no funded indebtedness.

(b) Panhandle Eastern Pipe Line Co (hereinafter referred to as "Panhandle Co.") is a corporation duly organized and existing under the laws of the State of Delaware, having a total authorized share capital consisting of 15,000 shares of preferred stock of the par value of $100 a share, and 10,000 shares of common stock, without par value, all of which preferred stock has heretofore been issued but has since been retired, and all of which common stock is now issued and outstanding and owned by the Pipe Line Co. No options or rights to purchase any of the said stock are now outstanding. All the outstanding indebtedness of the Panhandle Co., except indebtedness for current construction and material costs, has leases and

the like, is owned by the Pipe Line Co., and represents in general advances made to the Panhandle Co. by the Pipe Line Co. for the acquisition and construction of its properties.

(c) The Panhandle Co. has been organized for the purpose of building and operating a gas pipe line from the Panhandle district of the State of Texas to the Indiana-Illinois State line, through the States of Texas, Oklahoma, Kansas, Missouri, and Illinois, with lateral lines. It or its wholly owned subsidiaries, Texas Interstate Pipe Line Co. and/or Panhandle Eastern Pipe Line Co. of Illinois, have acquired the right-of-way for a substantial part of approximately 350 miles, out of a total of approximately 930 miles of the said pipe line and have constructed approximately 200 miles of the pipe line. The said pipe line has and will be constructed of 22-inch pipe from the point of beginning in Moore County, Tex., to Liberal, Kans., of 24-inch pipe from Liberal, Kans., to a point near the Missouri State line, of 22-inch pipe from the Missouri State line to the Peoria branch, and of 20-inch pipe from the said Peoria branch to the Indiana-Illinois State line. Copies of the contracts for the construction of the pipe line, initialed for identification, will be furnished by the officer of the Pipe Line Co. signing this contract.

(d) In addition to the pipe-line property above described, the Panhandle Co., through its said subsidiary, Texas Interstate Pipe Line Co., controls approximately 138,000 acres of natural gas producing lands.

(e) The Pipe Line Co. directly and/or through 100-percent stock ownership in the Missouri-Kansas Gas Co. and Central States Gas Utilities Co. (an Illinois corporation), and/or through a 51-percent stock ownership in J. D. Judd & Co. (A Delaware corporation), and Shale Gas Corporation (a Delaware corporation) owns natural-gas properties including leases or gas purchase contracts in the [fol. 16587] States of Missouri and Kansas, and a system of pipe lines for the supplying of natural gas to the following cities and towns: Kansas City, Mo. (wholesale delivery to American Pipe Line Co.); Independence, Mo.; Belton, Mo.; Loose Springs, Mo.; Morton City, Mo.; Ray-

town, Mo.; Paola, Kans.; Osawatamie, Kans.; Rantoul, Kans.; Imes, Kans.; Greeley, Kans.; Lewisburg, Kans.; Lane, Kans.; Chanute, Kans.

(f) The net asset position of the Panhandle Co. and its subsidiary companies and of the subsidiary companies mentioned in paragraph (e) above (except for inter-company transfers) shall not be substantially less favorable at the closing date than as shown on the pro forma consolidating balance sheet prepared by Arthur Andersen & Co., certified public accountants, as of June 30, 1930. No dividend or other distribution of assets shall be made by the Panhandle Co. or any of the above subsidiary companies pending the closing date.

II. The City Co. represents to the Pipe Line Co. and Columbia that it is a corporation duly organized and existing under the laws of the State of New York and has full corporate power to enter into this contract and to perform its obligations thereunder.

III. Columbia represents to the Pipe Line Co. and the City Co. that it is a corporation duly organized and existing under the laws of the State of Delaware, with an authorized capital stock consisting of 3,175,000 shares of which shares all of the preferred shares are owned by the Columbia Gas & Electric Corporation and all of the common stock is deposited in a voting trust of which P. G. Gossler and G. W. Crawford are the voting trustees. Columbia represents that its net worth is over $35,000,000.

IV. The Pipe Line Co. agrees with the parties hereto as follows:

(a) That it will transfer to the Panhandle Co. all of the natural-gas fields, gas contracts, pipe lines, distributing systems, etc., which it owns wherever located, except those located in Kentucky or southern Indiana, and its stock ownership in all corporations which may own similar property located in the same territory.

(b) That it will sell and deliver to Columbia, 5,000 shares of common stock of the Panhandle Co. (being one-half of its total stock outstanding) at the price per share determined as provided in article VIII hereof.

(c) That it will on or before the closing date pay, without recourse to the original debtor or obliger, all the debts and obligations of the Panhandle Co. and of its subsidiaries, and of the other corporations the stock of which is to be transferred under paragraph (a) of this article, existing on August 31, 1930, as determined by Arthur Andersen & Co., certified public accountants, and that the Pipe Line Co. will cancel any debt or obligation to it of the Panhandle Co., or if its subsidiaries or of any of said corporations referred to in this paragraph (c) as of August 31, 1930. The Panhandle Co. will reimburse the Pipe Line Co. with interest at the rate of 6 percent per annum from the date of such advances to the date of reimbursement for any amounts advanced by the Pipe Line Co. subsequently to corporations the stock of which is to be transferred under paragraph (a) of this article or for account of the properties other than stock, owned directly by it and to be transferred to Panhandle Co. under paragraph (a) of this article IV, other than amounts advanced for the purpose of paying debts or obligations existing on said date as provided heretofore in this paragraph.

[fol. 16588] (d) From time to time as requested by Columbia on or prior to March 15, 1931, the Pipe Line Co. will sell to Columbia all or any part of 2,000 shares of common stock of the Panhandle Co. (said 2,000 shares being 20 percent of its total outstanding stock) at the same price per share as is determined for the purchase by Columbia of the original 5,000 shares of stock of Panhandle Co.

(e) The Pipe Line Co. either directly or through its present and/or future subsidiaries will enter into gas purchase contracts with the Panhandle Co. upon substantially the following terms;

(1) An excess capacity contract for the purchase up to 20,000,000 cubic feet of gas per day at 18 cents per M cubic feet, without limit as to time so long as the Panhandle Co. has any excess capacity; provided, that if the Panhandle Co. can sell all or any gas at a higher price it may reduce proportionately deliveries under this excess capacity contract.

(2) Firm contract, commencing when the Panhandle Co. gives notice to the Pipe Line Co. and Columbia that it

no longer has any excess capacity, for 10 years and thereafter with right of cancellation by either party on 1 year's notice, at the rate of 26½ cents per M cubic feet, deliveries under such contract to be as required by the Pipe Line Co. and to aggregate for each year an amount producing at least a 70 percent annual load factor based on the maximum daily delivery, which maximum shall in no case exceed 20,000,000 cubic feet per day, and after the expiration of 1 year from the effective date of this firm contract such maximum day shall not exceed the maximum day established during said first year.

(f) The Pipe Line Co. will cause the Panhandle Co., pursuant to due corporate action, to create an issue of $20,000,000, aggregate principal amount, of bonds substantially in accordance with schedule A hereto attached.

(g) The Pipe Line Co. will deliver to or on the order of the City Co. 200,000 shares of the Pipe Line Co.'s common stock as presently constituted as consideration for the purchase of the bonds and the arranging of the credits hereinafter in article VI provided for and will cause the Panhandle Co. to sell and deliver to the City Co. the entire issue of $20,000,000 aggregate principal amount, of bonds, above described in schedule A, for the purchase price paid to the Panhandle Co. of $18,000,000, plus accrued interest on the said $20,000,000, aggregate principal amount, of bonds from October 1, 1930, to the date of delivery, and to pay the usual expenses in connection with such financing.

V. Columbia agrees with parties hereto as follows:

(a) That it will purchase the said 5,000 shares of stock of Panhandle and pay therefor the price per share determined as provided in article VIII hereof.

(b) That it will not exercise its right to acquire any of the 2,000 shares of stock of Panhandle referred to in paragraph (d) of article IV hereof unless simultaneously therewith it shall have contracted to sell to one or more oil, gas, or utility companies the stock so to be acquired by Columbia from the Pipe Line Co. and an equal amount of similar stock then owned by Columbia, and unless Columbia and the Pipe Line Co. have agreed otherwise, as a part of the contract the purchaser has agreed to contribute its pro

rata share of any additional financing referred to in article VII, paragraph (a).

[fol. 16589] (c) That it will cause the Columbia Gas & Electric Corporation, either directly or through its present and/or future subsidiaries, to enter into gas-purchase contracts with the Panhandle Co. at or near the Indiana-Illinois State line upon substantially the following terms:

(1) An excess-capacity contract for the purchase up to 20,000,000 cubic feet of gas per day at 18 cents per M cubic feet, without limit as to time so long as the Panhandle Co. has any excess capacity, provided that if the Panhandle Co. can sell all or any gas at a higher price it may reduce proportionately deliveries under this excess-capacity contract.

(2) Firm contract, commencing when the Panhandle Co. gives notice to the Pipe Line Co. and Columbia that it no longer has any excess capacity, for 10 years and thereafter with right of cancellation by either party on 1 year's notice, at the rate of 26½ cents per M cubic feet, deliveries under such contract to be as required by Columbia and to aggregate for each year an amount producing at least a 70-per-cent annual load factor based on the maximum daily delivery, which maximum shall in no case exceed 30,000,000 cubic feet per day, and after the expiration of 1 year from the effective date of this firm contract such maximum day shall not exceed the maximum day established during said first year.

VI. The City Co. agrees with the parties hereto:

(a) That it will purchase the said bonds described in paragraph (f) of article IV and will pay the purchase price therefor on the closing date.

(b) That it will arrange a credit from the National City Bank of New York to the Panhandle Co. of—

(1) $3,000,000, effective at once and running until the closing date in this agreement;

(2) $5,000,000, given on or before October 10, 1930, and running until 30 days after said closing date, provided, that the Panhandle Co. will apply out of the proceeds from the sale of its bonds so much as it may draw down for September construction to the earlier repayments of such credit;

(3) From time to time, so long as any of the proceeds from the sale of said bonds remain in escrow with the trustee, on or before the 10th day of any month, an amount substantially equivalent to the cash which during that month the Panhandle Co. may be entitled to withdraw from escrow for expenditures made by it in the previous month.

VII. The Pipe Line Co. and the Columbia agree with the parties hereto:

(a) That they will, subject to the provisions of article V, paragraph (b) hereof, advance to the Panhandle Co. in equal amounts all cash in excess of that expended or for which liabilities as determined by Arthur Andersen & Co. existed, on August 31, 1930, and of the proceeds of the bond issue, necessary to complete the pipe line under construction from Texas to the Indiana-Illinois State line and take therefor notes and common stock in the ratio of $90 in notes and $10 in two shares of common stock as presently constituted, provided that the notes shall be specifically subordinated to the bonds and shall mature at a date later than the maturity of the bonds.

[fol. 16590] (b) In the event the total cost of the completion of the pipe line heretofore in this article VII referred to is less than $40,000,000, then the Panhandle Co. will deposit with the trustee for the bonds the difference between $40,000,000 and such total cost. Such deposit may be withdrawn from time to time by the Panhandle Co. for 100 percent of capital expenditure subsequently made or such deposit shall be returned to the Panhandle Co. from time to time upon cancelation or redemption of bonds (other than out of sinking-fund moneys) in amounts equal to 200 percent of the principal amount of bonds so canceled or redeemed. In the event such total cost is in excess of $40,000,000, then the Panhandle Co. shall be entitled to have additional bonds delivered to it equal in principal amount to 50 percent of such excess.

(c) That they will cause the Panhandle Co. to put the pipe line into commercial operation as soon as practical after completion and to operate the same at its highest possible efficiency.

VIII. The price per share for the stock of Panhandle to be sold by the Pipe Line Co. and to be purchased by

Columbia under the provisions of this contract shall be ascertained as follows: There shall be determined by Arthur Andersen & Co., the actual cash investment as of August 31, 1930, of the Pipe Line Co. system in the Panhandle Co. and the Panhandle's subsidiary companies as those subsidiaries now exist, such cash investment to be the actual original cash cost to the Pipe Line Co. system, plus interest thereon during construction at the rate of 6 percent per annum, and such cash cost to include the payments made for engineering services by others than companies affiliated with the Pipe Line Co. system, legal expenses, taxes during construction, organization costs, cost of franchises and the $631,000 expended by the Panhandle Co. for gas sale or gas purchase contracts. To such aggregate cash investment shall be added the debts and obligations existing of the Panhandle Co. and its subsidiaries on August 31, 1930, to be paid by the Pipe Line Co. as per article IV paragraph (c) above (these debts and obligations not to include those of the subsidiaries of the Pipe Line Co. whose stock is to be transferred to the Panhandle Co. as per said article IV paragraph (c)). To the sum so ascertained shall be added $7,333,000. The price per share of Panhandle stock shall be obtained by dividing the total sum by 10,000 and adding interest on said price at the rate of 6 percent per annum from August 31, 1930, to the date of payment for each share of stock.

IX. The parties hereto agree that the certificate of incorporation of Panhandle Co. will be amended to restore to the common stock of that company a preemptive right in respect to any further issue of voting stock.

X. The parties hereto agree that delivery and payment for shares of stock and bonds heretofore provided for in paragraph (a) of article V and paragraph (a) of article VI shall be made at the corporate trust department of the City Bank Farmers Trust Co., 52 Wall Street, Borough of Manhattan, city and State of New York, on October 7, 1930, between the hours of 10 a. m. and 12 noon, on that day, which date is sometimes heretofore called the "closing date."

XI. This contract is entered into by the City Co. upon the following conditions:

[fol. 16591] "(a) The legality of the issue of the bonds of the Panhandle Co., referred to in article IV hereof, the title of the Panhandle Co. to its properties, the legality and sufficiency of any and all franchises necessary for their present operations and for operations presently contemplated, and all other legal details in connection with the execution of this contract shall be subject to approval of counsel for the City Co.

"(b) In case Columbia shall for any reason fail to purchase the stock of the Panhandle Co. then the City Co. shall, at its option, have the right to withdraw from this contract and to be relieved from any and all obligation hereunder, upon giving to the Pipe Line Co. notice of exercise of its said option."

XII. Anything herein to the contrary notwithstanding should the City Co. for any reason fail to perform its obligations under this contract, the obligation of Columbia and the Pipe Line Co. hereunder shall continue, in which event Columbia and the Pipe Line Co. will, subject to the provisions of article V, paragraph (b) hereof, advance to the Panhandle Co. in equal amounts all cash in excess of that expended or for which liabilities as determined by Arthur Andersen & Co. existed on August 31, 1930, necessary to complete the pipe line under construction from Texas to the Indiana-Illinois State line and take therefor notes and common stock in the ratio of $90 in notes and $10 in two shares of common stock as presently constituted, provided that the notes shall be specifically subordinated to the bonds and shall mature at a date later than the maturity of the bonds.

XIII. The Pipe Line Co. will cause the Panhandle Co. to deliver to the City Co. a letter signed by the president of the Panhandle Co. descriptive of its properties and the project and of the bonds in reasonable detail and in form satisfactory to the City Co. Columbia will cooperate in the preparation of such letter. From time to time the Pipe Line Co. and Columbia will cause the Panhandle Co. to furnish the City Co. with quarterly statements of operations and balance sheet in reasonable detail.

XIV. If within 15 days after written notice that payment will be required by the Panhandle Co. for the comple-

tion of its pipe line, either Columbia or the Pipe Line Co. shall fail to provide their share of the necessary funds required as provided in article VII, paragraph (a), or in article XII hereof, the party not in default may itself provide such funds and shall be entitled to receive from the Panhandle Co. therefor the same securities as would have been given to the other party so in default if it had made the advance and the right of the party in default to proceed further with such financing shall terminate.

In witness whereof, the parties hereto have executed this contract by their duly authorized officers, the day and year first above written.

MISSOURI-KANSAS PIPE LINE CO.,
By Frank P. Parish, President.

THE NATIONAL CITY CO.,
By Stanley A. Russell, Vice President.

COLUMBIA OIL & GASOLINE CORPORATION,
By Philip G. Gossler, President.

[fol. 16592] Schedule A.—Panhandle-Eastern Pipe Line Bonds

Security.—First mortgage on all fixed property of company except so-called "operating properties" around Kansas City—term 20 years—open and in amount provided that bonds, in addition to the initial amount of series A, may be issued from time to time of the same or different series.

(a) To the extent of 50 percent of the cash cost or fair value of property constructed or acquired and subject to the lien of the first mortgage in excess of the first $40,000,000 expended upon said mortgaged properties, and,

(b) For issuance of bonds subsequent to October 1, 1933, if net earnings, after all operating expenses, deple-

tion, and depreciation charges, for 12 months out of the 15 months immediately preceding the date of issue of additional bonds, shall have been in each case, at least twice the total annual interest charges on the amount of bonds outstanding and proposed to be issued.

Initial issue.—$20,000,000, principal amount, series A bonds, to be dated October 1, 1930, and to mature October 1, 1950, with interest at the rate of 6 percent per annum payable semiannually, in the usual denominations and with the usual provisions regarding taxes, namely, that the company shall pay the normal Federal income tax of 2 percent and Pennsylvania, Connecticut, Maryland, and California security or personal property taxes, and Massachusetts and Wisconsin income taxes, not exceeding 6 per cent. Bonds to be redeemable during the first 15 years of their life at 105 and thereafter at a premium decreasing ½ percent for each year.

Disposition of proceeds.—Proceeds of original issue of bonds to be left with trustee and drawn down to the extent of 100 percent of the cash cost or fair value of property constructed or acquired after August 31, 1930, and subject to the lien of the first mortgage.

Sinking fund.—Beginning April 1, 1933, and semiannually thereafter, the company shall retire either by purchase or redemption on each semiannual interest date $300,000, principal amount of bonds of series A. As an additional sinking fund in any year in which the company pays cash dividends aggregating in excess of $1,000,000, a sum in cash equivalent to the excess dividends so paid shall be utilized in the purchase or redemption of bonds.

Retirement covenant.—All of the series A bonds shall be retired by redemption or purchase through the sinking fund in the event there is any permanent retirement of the investment made or to be made by the common stock interests in the company represented by stock or subordinated notes.

[fol. 16593] New York, N. Y., September 30, 1930.

It is agreed that the closing date mentioned in a certain contract between the undersigned, dated September 17, 1930, be extended to October 14, 1930.

MISSOURI-KANSAS PIPE LINE CO.,
By Frank P. Parish, President.

THE NATIONAL CITY CO.,
By J. P. Ripley, Vice President.

COLUMBIA OIL & GASOLINE CORPORATION,
By P. G. Gossler, President.

New York, N. Y., October 8, 1930.

It is agreed that the closing date mentioned in a certain contract between the undersigned, dated September 17, 1930, which has been extended to October 14, 1930, be further extended to October 22, 1930.

MISSOURI-KANSAS PIPE LINE CO.,
By Frank P. Parish, President.

THE NATIONAL CITY CO.,
By J. P. Ripley, Vice President.

COLUMBIA OIL & GASOLINE CORPORATION,
E. Reynolds, Jr., Vice President.

Memorandum of agreement dated October 23, 1930, between Columbia Oil & Gasoline Corporation (hereinafter called the "Oil Co.") Missouri-Kansas Pipe Line Co. (hereinafter called "Missouri-Kansas"), and the National City Co. (hereinafter called the "City Co.").

The parties hereto have executed a contract under date of September 17, 1930 (hereinafter called the "contract"), as amended by subsequent agreements. Said contracts in article VIII thereof provides for the method in which the

price per share of stock of the Panhandle Eastern Pipe Line Co. (hereinafter called "Panhandle"), to be purchased by the Oil Co. under the provisions of the contract, shall be ascertained.

First. In adjustment of a dispute existing between the parties as to the amount required to be paid by the Oil Co., under the contract for said shares of Panhandle stock, it is agreed that the computation of the purchase price per share of Panhandle stock to be purchased by Columbia is to be computed exactly as set out in article VIII of the contract, except that the figure of $7,333,000 [fol. 16594] therein mentioned shall be reduced to $6,453,000 and the computation of interest therein provided for shall be correspondingly adjusted. The purchase price per share of Panhandle's stock to be paid by Columbia as of the date hereof, before calculating interest from August 31, 1930, is accordingly $1,938.58⅔.

Second. The book value of the property to be transferred by Missouri-Kansas to Panhandle, according to article IV (a) of the contract shall be not less at the closing date than on August 31, 1930 with revaluation of any of the items. Under date of October 22, 1930, Arthur Andersen Co. advised Columbia and Missouri-Kansas that the book value of the items referred to, exclusive of investments, was as follows:

Particulars—August 31, 1930

Book value of assets to be transferred by Missouri-Kansas Pipe Line Co. to Panhandle Eastern Pipe Line Co. (paragraph (a) article IV):

Gas purchase and sales contracts, stated at valuation determined by Messrs. Brokaw, Dixon, Gerner & McKee, geologists and petroleum engineers, and approved by board of directors	$1,106,250.00
Pipe lines, compressors, etc., exclusive of Kentucky division properties	2,417,948.52
Prepaid accounts	3,565.19
Materials and supplies at book values	46,140.41

They further state, with reference thereto, as follows: "The book value of the properties located in Kentucky and Southern Indiana have been determined as accurately as was possible in the time available. As noted above, the book value of the Kentucky division properties has been excluded in the foregoing tabulation at both dates."

Third. The rights and obligations of the parties under the said contract of September 17, 1930, as heretofore and hereby amended, are in full force and effect, notwithstanding the failure of the parties to close the transaction covered thereby on October 22, 1930. The date of October 23, 1930, is the closing date.

Witness the signatures of the above parties.

COLUMBIA OIL & GASOLINE CORPORATION,
By E. Reynolds, Jr., Vice President.

MISSOURI-KANSAS PIPE LINE CO.,
By Frank P. Parish, President.

THE NATIONAL CITY CO.,
By J. P. Ripley, President.

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fol. 16595] (Exhibit 257.)

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Reconcilement Of Net Income Per Books
With Estimated Excess-Profits Net Income For The Year 1941
As Shown On Line 1, Page 1, Column (C) Of Exhibit 202

Panhandle Eastern Pipe Line Company

Line No.	(A)	(B)	(C)
1	Net income per books for the year 1941		$4 689 242
2	Additions:		
3	Provision for Federal income tax	$1 791 107	
4	Provision for Federal excess-profits tax	1 582 775	
5	Provision for injuries and damages	12 000	
6	Provision for uncollectible accounts	7 200	
7	Excess of book provision for amortization		
8	of unoperated leaseholds over deduction		
9	claimed	5 324	3 398 406
10			8 087 648

11	Deductions:		
12	Excess of deduction claimed for depreciation over book provision	166 657	
13			
14	Excess of deduction claimed for depletion over book provision	201 316	
15			
16	Excess of deduction claimed for amortization of debt discount and expense over book provision	86 408	
17			
18			
19	Cost of acidizing gas wells capitalized	8 700	
20	Productive well drilling costs capitalized	34 150	
21	Property removal costs	12 000	
22	Unrecovered cost of extraordinary retirement	85 600	
23			
24	Interest expense capitalized	11 775	
25	Amortization of Creve Couer line extension costs	3 042	
26			
27	Regulatory commission investigation expense deferred on books	128 000	737 648
28			
29	Estimated excess-profits net income as shown on Line 1, Page 1, Column (C) of Exhibit 202		$87 350 00
30			
31			

[fol. 16596]

Panhandle Eastern Pipe Line Company And Subsidiary Companies

Reconcilement Of Net Income Per Books

With Estimated Excess-Profits Net Income For The Year 1941

As Shown On Line 1, Page 1, Column (F) Of Exhibit 202

Illinois Natural Gas Company

Line No.	(A)	(B)	(C)
1	Net income per books for the year 1941		$115 251
2	Additions:		
3	Provision for Federal income tax	$40 000	
4	Provision for injuries and damages	3 600	
5	Provision for uncollectible accounts	3 600	47 200
6			462 451
7	Deductions:		
8	Excess of deduction claimed for depreciation over book provision	33 074	
9			
10	Social security taxes capitalized	789	
11	Property removal costs	129	
12	Federal capital stock tax adjustment	459	34 451
13	Estimated excess-profits net income as shown on Line 1, Page 1, Column (F) of Exhibit 202		$128 000
14			

[fol. 16597]

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Reconcilement Of Net Income Per Books
With Estimated Excess-Profits Net Income For The Year 1941
As Shown On Line 1, Page 1, Column (I) Of Exhibit 202

Michigan Gas Transmission Corporation

Line No.	(A)	(B)	(C)
1	Net income per books for the year 1941		$509 899
2	Additions:		
3	Provision for Federal income tax	$222 708	
4	Provision for Federal excess-profits tax	91 757	
5	Injuries and damages reserved	7 451	
6	Contingent interest expense reserved	12 769	
7	Cost of obtaining contracts expensed on books	7 353	342 038
8			851 937
9	Deductions:		
10	Interest expense capitalized	4 179	
11	Social security taxes capitalized	831	
12	Social security taxes charged depreciation reserve	17	
13	Federal capital stock tax adjustment	1 946	
14	Regulatory commission investigation expense		
15	deferred on books	33 964	40 937
16	Estimated excess-profits net income as shown		
17	on Line 1, Page 1, Column (I) of Exhibit 202		$811 000

[fol. 16598]

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Reconcilement Of Net Income Per Books
With Estimated Excess-Profits Net Income For The Year 1941
As Shown On Line 1, Page 1, Column (L) Of Exhibit 202

Indiana Gas Distribution Corporation

Line No.	(A)	(B)	(C)
1	Net income per books for the year 1941		$23 280
2	Additions:		
3	Provision for Federal income tax	$9 361	
4	Provision for Federal excess-profits tax	2 522	
5	Provision for injuries and damages	1 000	12 883
6			36 163

7	Deductions:	
8	Excess of deduction claimed for depreciation over	
9	book provision	163
10	Estimated excess-profits net income as shown	
11	on Line 1, Page 1, Column (L) of Exhibit 202	$36 000

[fol. 16599] (Exhibit 258.)

Findings and Opinion of the Commission

For Release in Morning Newspapers of Wednesday, April 1, 1942

Securities and Exchange Commission
Philadelphia

Holding Company Act
Release No. 3415

In the Matter of

Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation, Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation, Indiana Gas Distribution Corporation, The Ohio Fuel Gas Company.

File Nos. 59-33, 70-268, 70-371, 70-387, 70-430, 70-431

(Public Utility Holding Company Act of 1935)

Integration of Holding Company System

Where subsidiary company engaged in business of producing, purchasing, transmitting, and selling natural gas buys only a very minor portion of its gas from, sells no gas to, and has no operating interrelationship with any other company in the holding company system, held that non-utility properties of subsidiary are not reasonably incidental, or economically necessary or appropriate to the operations of any integrated utility system retainable by

the holding company; that the utility properties of the subsidiariary cannot be regarded as part of any retainable integrated utility system of the holding company; and that under Section 11 (b)-(1) the subsidiary must be divorced from the holding company system.

Distribution of Voting Power Among Security Holders

Disproportion between Investment and Voting Power

Where preferred stock which represents only 1.32% of total capitalization and 2.35% of capital stock and surplus carries with it the right to elect two directors and a share-for-share vote on all other matters, held that such voting rights are in disproportion to the interest which the stock represents; that the circumstances under which the voting power was acquired are not controlling if, in fact, disproportion exists at the time the issue is presented to the Commission; that at the present time such voting rights constitute an unfair and inequitable distribution of voting power; and that under Section 11 (b) (2) the votings rights must be canceled.

[fol. 16600] Appearances:

William R. Nowlin and Sidney Willner, for the Public Utilities Division of the Commission

William H. Button, James B. Alley, and Charles R. Lowther, for Columbia Oil & Gasoline Corporation.

Wayne Johnson, Jr., and Edward S. Pinney, William Wemple, and Frederick S. Beebe, of Cravath, DeGersdorff, Swaine & Wood, for Columbia Gas & Electric Corporation.

Robert J. Bulkley, Arthur Logan, Russell Hardy, and Richard B. Hand, for Missouri-Kansas Pipe Line Company.

Edwin N. Goodwin and William L. Glenn, for Panhandle Eastern Pipe Line Company.

J. G. Laylin and John F. Meek, for W. H. Danforth.

John D. Ellis, for the City of Cincinnati.

James H. Lee, for the City of Detroit.

Kenneth L. Sater for the Public Utilities Commission of Ohio.

Eugene Bleiweiss, for Abner Goldman.

These proceedings are a consolidation of various applications and declarations filed by the above-named companies and action instituted by the Commission under Sections 11 (b) (1), 11 (b) (2), 12 (c), 12 (f), and 15 (f) of the Public Utility Holding Company Act of 1935. The history and background of the proceedings have been set forth at some length in a prior opinion (Holding Company Act Release No. 3286) and need not be repeated here. [1]

Two questions are now before us for disposition: (1) Whether Panhandle Eastern Pipe Line Company may be retained in or must be divorced from the holding company system of Columbia Gas & Electric Corporation under Section 11 (b) (1) of the Act; and (2) whether by reason of the voting rights of the Class B Preferred Stock of Panhandle Eastern Pipe Line Company there is an unfair or inequitable distribution of voting power which must be rectified under Section 11 (b) (2) of the Act.

The hearings on these two questions have been closed. Briefs have been filed and oral argument has been presented. Various subsidiary questions of jurisdiction and procedure raised by Columbia Oil & Gasoline Corporation were disposed of in our opinion and order of February 10, 1942 (Holding Company Act Release No. 3321).

[fol. 16601] I. Retention of Panhandle Eastern in the Columbia Gas System

Columbia Gas & Electric Corporation is a registered public utility holding company whose subsidiaries include gas utility companies, electric utility companies, a service

[1] See also our statement of tentative conclusions issued in response to the request of Columbia Oil & Gasoline Corporation (Holding Company Act Release No. 3296), and our memorandum opinion and order disposing of various motions filed by Columbia Oil & Gasoline Corporation (Holding Company Act Release No. 3321).

company, and companies which are engaged in the production and transmission of natural gas. The gas companies operate in Ohio, Pennsylvania, West Virginia, Kentucky, New York, Maryland, Virginia, and Indiana.

Panhandle Eastern Pipe Line Company is a subsidiary of Columbia Oil & Gasoline Corporation, which is in turn a subsidiary of Columbia Gas.[2] Panhandle Eastern is engaged in the business of producing, purchasing, transmitting, and selling natural gas. It obtains its gas from the Amarillo and Hugoton fields, and its pipe lines extend through Texas, Oklahoma, Kansas, Missouri, and Illinois to a point on the Indiana-Illinois border near Dana, Indiana, where a connection is made with the lines of Michigan Gas Transmission Corporation, a recently acquired wholly-owned subsidiary. Gas transmitted through these lines is delivered to the Michigan Consolidated Gas Company, a non-affiliate which serves the City of Detroit. Indiana Gas Distribution Corporation, a recently acquired wholly-owned subsidiary of Panhandle Eastern, owns spurs along the Michigan Gas Transmission lines and sells gas at retail in Michigan and Indiana to approximately 1,800 customers, including one large industrial company. Illinois Natural Gas Company, also a wholly-owned subsidiary of Panhandle Eastern, sells gas at wholesale in Illinois. Panhandle Eastern also controls another small line running from Indiana into Ohio and back into Indiana.

There are no connections between the lines of Panhandle Eastern and its subsidiaries and those of any other company in the Columbia Gas system, except for a connection with a line of The Ohio Fuel Gas Company (a Columbia Gas subsidiary) in Ohio. At that point there is a connection separated by a valve which is normally closed. The interchange of gas between Ohio Fuel and the Panhandle Eastern lines is negligible and there are no billings for such interchange. Panhandle Eastern and its subsidiaries buy no other gas from, sell no gas to, and have no operating interrelationship with any other com-

[2] See Panhandle Eastern Pipe Line Company, et al., 9 S. E. C. [illegible] (1941), Holding Company Act Release No. 2778.

pany in the Columbia Gas system. The entire capacity of Panhandle Eastern and its subsidiaries is required for its own customers.

All parties to the proceedings and all persons who have been heard appear to agree that the properties of Panhandle Eastern and its subsidiaries bear no operating relationship to any other properties in the Columbia Gas system and must be divested from the system. Counsel for Columbia Gas have taken the position that they are "willing not to oppose an order of divestiture so long as that order of divestiture was directed not only to Columbia Gas but to Columbia Oil as well." Counsel for Columbia Oil stated at the argument before us: "We want Panhandle out of the Columbia Gas system, but we want the cut between Columbia Gas and Columbia Oil, rather than between Columbia Oil and Panhandle."

[fol. 16602] At this stage of the proceedings we are not concerned with the method by which Panhandle may be divorced from the Columbia Gas System. The question before us at this time is whether, under Section 11 (b) (1), we should require that there be divestment. On the basis of the record we find—and apparently all the parties agree—that the properties of Panhandle Eastern and its subsidiaries bear no operating relationship to the properties of any other company in the Columbia Gas system, specifically that the non-utility properties of Panhandle Eastern and its subsidiaries are not reasonably incidental, or economically necessary or appropriate to the operations of any integrated utility system retainable by Columbia Gas and that the utility properties cannot be regarded as part of any retainable integrated utility system. Accordingly, we find that Section 11 (b) (1) of the Act requires Panhandle Eastern and its subsidiaries to be divorced from the Columbia Gas system. Since Columbia Gas' interest in Panhandle Eastern is held through Columbia Oil, our order will be directed against both Columbia Gas and Columbia Oil. However, we again emphasize that we are not at this time expressing any opinion as to whether divestment should be accomplished by severance between Columbia Gas and Columbia Oil, between Columbia Oil and Panhandle Eastern, or in some other man-

her. The method of divestment will be the subject of future hearings.

II. The Voting Rights of Panhandle Eastern's Class B Preferred Stock

The remaining question to be decided at this time is whether it is necessary or appropriate to require under Section 11 (b) (2) that Panhandle Eastern take steps to rectify any unfair and inequitable distribution of voting power among its security holders.

As of September 30, 1941, the pro forma capitalization of Panhandle Eastern based upon the contemplated acquisitions and security issues which were subsequently consummated was, as follows:

Funded Debt	
First Mortgage Series A, 1946-1950	$ 6,250,000
First Mortgage Series B, S. F. 3's 1960	12,000,000
First Mortgage Series C, S. F. 3's 1962	10,000,000
Serial Notes, 1942-1945	5,000,000
Leasehold Purchase Obligation	14,256
	$33,264,256
Preferred Stock	
Class B—10,000 shares	$1,000,000
Cumulative Preferred—150,000 shares	15,000,000
	$16,000,000
[fol. 16603] **Common Stock and Surplus**	
Common Stock—807,367 shares	20,184,175
Earned Surplus	6,323,041a
	$26,507,216
	$75,771,472

a $2,081,485 of debt discount and expense and call premiums have been written off since September 30, 1941, and have consequently been deducted from this surplus figure.

Of the 807,367 shares of common stock, 404,326 shares, or 50.1%, are held by a trustee for the benefit of Columbia Oil; 339,475 shares, or 42%, are owned by Missouri-Kansas Pipe Line Company (Mokan); and the remaining 7.9% is distributed among 1,700 shareholders. The 150,000 shares of cumulative preferred stock were recently issued for distribution to the public pursuant to applications and declarations filed with us. [3]Columbia Oil is the beneficial owner of the entire block of Class B preferred.

The Class B stock, all of which is beneficially owned by Columbia Oil, represents an interest of $1,000,000 in Panhandle Eastern, or 1.32% of its total capitalization and 2.35% of its capital stock and surplus. This stock carries with it the right to elect two directors of Panhandle Eastern and a share-for-share vote on all other matters. At present there are nine directors of Panhandle Eastern but the charter would seem to permit a revision of the by-laws to change this number.

The circumstances incident to the issuance of this B stock have been explained in an earlier opinion. [4]Prior to the time the stock was issued Columbia Gas and Columbia Oil were the defendants in anti-trust litigation instituted by the Department of Justice. In that litigation it was charged that the defendants were dominating and controlling the management and operation of Panhandle Eastern for the purpose of preventing competition between that company and Columbia Gas, and were thereby creating a restraint of trade in violation of the anti-trust laws. At the same time Columbia Gas and Columbia Oil were also defendants in an action brought by Mokan under the anti-trust laws for treble damages. Panhandle Eastern, moreover, was in severe financial difficulties. In the course of negotiations for a settlement of both the anti-trust actions, Panhandle Eastern was reorganized and refunded. As an incident of the refunding operation, Columbia Oil, upon surrender of $11,000,000 of convertible preferred stock of Panhandle Eastern, received the Class B Stock in question and a Class A Cumulative Participating

[3]See Holding Company Act Release No. 3286.

[4]Holding Company Act Release No. 3286.

Preferred Stock in an amount of $10,000,000. The Class A stock has now been redeemed. Consequently, any equity which may have existed in endowing the Class B stock with the voting privileges described above, and in thereby affording some protection for the $11,000,000 interest, has now been dissipated by the redemption of 90% of that sum. The voting power of the B Stock now remains as a pure device to insure control.

[fol. 16604] In attempting to justify the retention of this voting power, however, counsel for Columbia Oil has urged that Columbia Oil paid adequate consideration therefor and that the only interested parties at the time of the stock issuance acquiesced in its grant. Counsel has also argued that the investors who have since purchased the common stock of Columbia Oil acquired their interests subject to the settlement agreement creating the stock.

We cannot agree with this contention. Acceptance of Columbia Oil's argument would, to a considerable extent, nullify Section 11 (b) (2), for there are few instances in which an existing unfair and inequitable distribution of voting power does not have its origin in the corporate structure created at the organization of the corporation, and all stockholders buying into the corporation thereafter might be presumed, in the same sense that they are here, to have acquiesced in the existing corporate structure. Voting power is generally fixed by the promoters and managers at a time when the public investor is in no position to assert a claim to a fair share of the management of a corporation. If the allocation of voting power under these circumstances is to be considered a contract which subsequent investors cannot question and which the Commission cannot question on their behalf, then Section 11 (b) (2) would become almost wholly meaningless. [5]Section 11

[5]In connection with Columbia Oil's argument that all interested parties in Panhandle Eastern have acquiesced in the present distribution of voting power, it may also be appropriate to point out that a new investing interest has come into Panhandle Eastern—the investing interest which has bought $10,000,000 of preferred stock—and that this new preferred stock was issued and purchased pursuant to approval by this Commission in an opinion in which the Commission indicated that the fairness of the voting power of the new stock should be considered in light of the fact that the voting power of the Class B stock prima facie inequitable and would probably be modified in the pending proceedings under Section 11 (b) (2).

(b) (2) was designed to remove the inequities resulting from the exercise of control through disproportionately small investments. The circumstances under which the voting power was acquired are not controlling if, in fact, disproportion exists at the time the issue is presented to us. In the particular case, even if we assume that the voting power conferred by the B stock was fair and equitable at the time of the original issuance of the A and B stock to Columbia Oil, certainly a patent disproportion between the control and the investment represented by the B stock came into being on liquidation of the A stock.

We find that the voting rights of the Class B Preferred Stock of Panhandle Eastern Pipe Line Company are in disproportion to the investment which this stock represents, and that such voting rights constitute an unfair and inequitable distribution of voting power in Panhandle Eastern Pipe Line Company.

[fol. 16605] A further question remains as to what steps must be taken to rectify this unfair and inequitable distribution of voting power. In our opinion, as long as this B stock remains outstanding, the simplest and most direct method for achieving that result is to require that the voting power of the Class B stock be canceled. Our order will so provide. However, the parties may, if they so desire, submit any alternative plan of action which they deem appropriate to cure the unfair and inequitable distribution of voting power, including any plan for the retirement and redemption of the stock, and if such plan is approved, it will supersede our order in this respect.

Our findings and order herein relate only to the two questions which are now before us for disposition. The remaining issues in the consolidated proceedings will be the subject of future hearings.

An appropriate order will issue.

By the Commission (Chairman Purcell, Commissioners Healy, Pike, Burke, and O'Brien).

FRANCIS P. BRASSOR,
(Seal) Secretary.

[fol. 16606] Order Requiring Divestiture Pursuant to Section 11 (b) (1) and Redistribution of Voting Power Pursuant to Section 11 (b) (2).

United States of America
Before the Securities and Exchange Commission

At a regular session of the Securities and Exchange Commission, held at its office in the City of Philadelphia, Pennsylvania, on the 31st day of March A. D., 1942.

In the Matter of

Columbia Gas & Electric Corporation, Columbia Oil & Gasoline Corporation, Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation, Indiana Gas Distribution Corporation, the Ohio Fuel Gas Company,

Files Nos. 59-33, 70-263, 70-371, 70-387, 70-430, 70-431.
(Public Utility Holding Company Act of 1935).

The Commission having instituted proceedings under Sections 11 (b) (1), 11 (b) (2), 12 (c), 12 (f), and 15 (f) of the Public Utility Holding Company Act of 1935, and having ordered that evidence be taken with respect to (1) whether Panhandle Eastern Pipe Line Company may be retained in, or must be divorced from, the holding company system of Columbia Gas & Electric Corporation under Section 11 (b) (1) of the Act, and (2) whether, by reason of the voting rights of the Class B Preferred Stock of Panhandle Eastern Pipe Line Company, there is an unfair or inequitable distribution of voting power which must be rectified under Section (11) (2) of the Act;

Hearings on these two issues having been held after due notice, the Commission having heard argument with respect to the said issues, having duly considered the record and being fully advised in the premises, and having this day made and filed its findings and opinion herein;

It is Ordered, on the basis of such findings and opinion:

(1) That, pursuant to Section 11 (b) (1) of the Public Utility Holding Company Act of 1935, respondents Columbia Gas & Electric Corporation and Columbia Oil & Gasoline Corporation shall take all necessary and appropriate

steps to sever the relationship of Columbia Gas & Electric Corporation with Panhandle Eastern Pipe Line Company by disposing, or causing the disposition, in any appropriate manner not in contravention of the applicable provisions of the Act or the rules and regulations promulgated thereunder, of Columbia Gas & Electric Corporation's direct and indirect ownership, control, and holding of securities issued by and the properties of Panhandle Eastern Pipe Line Company and its subsidiaries;

(2) That, pursuant to Section 11 (b) (2) of the Public Utility Holding Company Act of 1935, the voting power of the Class B Preferred Stock of Panhandle Eastern Pipe Line Company shall be canceled, provided, however, that the respondents may, if they so desire, submit any alternative plan of action which they deem appropriate to cure the unfair and inequitable distribution of voting power, [fol. 16607] including any plan for the retirement or redemption of the said Class B Preferred Stock and, provided, further, that if such plan is approved, it will supersede our order herein in this respect;

(3) That the respondents, in accordance with Section 11 (c) of the Public Utility Holding Company Act of 1935, shall comply with this order within one year from the date of its entry.

It is provided with respect to our findings, opinion, and order herein, in their entirety and with respect to the entry, publication and service thereof, that they shall be without prejudice to the right of the Commission to enter such other further and appropriate orders, from time to time, as the Commission may deem necessary to secure compliance by the respondents with the provisions of the Act and the pertinent rules and regulations thereunder in carrying out the provisions of this order; and

It is Further Provided that jurisdiction is reserved to the Commission with respect to all issues remaining in the consolidated proceedings herein, and with respect to the institution of such further proceedings as the Commission may deem necessary or appropriate under the provisions of the Pubic Utility Holding Company Act of 1935.

By the Commission.

(Seal) FRANCIS P. BRASSOR,
Secretary.

[fol. 16608] (Exhibit 259.)

Weighted Average Earnings—Price Ratios On Common Stocks*

153 Stable Industrial Companies

	Indicated Market Value of Common Stock	Earnings Available for Common Stock	Earnings-Price Ratios	Weights	Weighted Per Cent
	($1,000)	($1,000)	%		
1937	$20,334,335	$ 1,452,546	7.14	1	7.14
1938	16,896,191	907,166	5.37	2	10.74
1939	18,334,335	1,207,721	6.59	3	19.77
1940	17,198,807	1,313,265	7.64	4	30.56
1941	12,580,332	1,087,691	8.65	5	43.25
				15	111.46
		Weight average earnings-price ratio			7.43

* Based on data submitted by Paul B. Coffman in Exhibit 254 and in Chart No. 11 and the table supporting that chart in Exhibit 253.

Exhibit 260

Panhandle Eastern Pipe Line Company
Status Of Proposed 1942 Construction Program
Production And Gathering System
South And West Of Liberal Station
(Pages 27 And 28 Of Exhibit 42)

Witness Hinton

Item	Description (A)	Estimated Cost (B)	Right of Way Tracts	
			No. Required (C)	No. Taken (D)
a.	Drill 5 wells in Panhandle Field, including acidization and liners, at a cost of	$ 106 463		None Required
b.	Install liners in 2 old wells in Panhandle Field at a cost of	916	None	
c.	Install tubing in 2 old wells in Panhandle Field costing	4 262	None	
d.	Acidize 5 old wells in Panhandle Field, costing	7 750	None	
e.	Lay well lines for 5 new wells in Panhandle Field, costing	15 395	8	7
f.	Construct 5 measuring stations for new wells in Panhandle Field, costing	3 450	None	
g.	Construct trunk gathering line, looping present line from Hansford Station South 31.1 miles, costing	672 133	45	43
h.	Increase capacity of present gathering line by looping existing lines and additional gathering lines, costing	422 464	14	8
i.	Install 2,600 additional H.P. at Sneed Station and increase cooling tower capacity, 1 additional auxiliary engine and one scrubber, costing	362 800	None	
j.	Install 1,300 H.P. at Hansford Station, costing	121 200	None	
k.	Construct 12 additional dwellings for employees, including 3 at Zofness, 3 at Hansford and 6 at Sneed, one of the Hansford dwellings being a 10-room hotel for single employees, at a cost of	81 000	None	

Exhibit 28

Panhandle Eastern Pipe Line Company
Status Of Proposed 1942 Construction Program
Production And Gathering System
South And West Of Liberal Station
(Pages 27 And 28 Of Exhibit 42)

Item	Description (A)	Estimated Cost (B)	Right of Way Tracts	
			No. Required (C)	No. Taken (D)
l.	Build 3 garages, a 3-car garage at Hansford, a 3-car garage at Sneed and a 6-car garage at Zofness, costing	$ 2 760	None	
m.	Drill 19 wells in Texas County, Hugoton Field, including liners and acidization, at a cost of	358 169		None Required
n.	Install liners in 2 old wells in Hugoton Field, at a cost of	762	None	
o.	Acidize 10 wells in Hugoton Field, costing	15 500	None	
p.	Construct Cimarron River Crossing for loop line, costing	220 384	1	1
q.	Construct trunk gathering line from Liberal toward Hansford, looping existing line approximately 32 miles, at a cost of	850 048	63	62
r.	Construct gathering line from Section 31, Township 4, to near Optima in Texas County, Oklahoma, costing	324 180	29	0
s.	Construct gathering line in Oklahoma, connecting with the Optima line, at cost of	856 606	187	0
t.	Construct well lines for 20 new wells, costing	47 610	41	20
u.	Construct and install 10 well dehydrators, at cost of	2 500	None	
v.	Construct 20 measuring stations, at cost of	13 800	20	20
w.	Construct 3 houses for employees at Optima Camp, costing	18 000	—	—

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[fol. 16611]

Exhibit 260

Panhandle Eastern Pipe Line Company
Status Of Proposed 1942 Construction Program
Production And Gathering System
South And West Of Liberal Station
(Pages 27 And 28 Of Exhibit 42)

6870

Item	Description (A)	Estimated Cost (B)	Right of Way Tracts	
			No. Required (C)	No. Taken (D)
x.	Construct office building at Hugoton Camp, costing	$ 7 000	None	
y.	Construct warehouse at Optima Camp, costing	1 000	—	—
z.	Construct one 6-car garage at Optima Camp, costing	1 380	—	—
z-1	Construct telephone line to serve at Optima gathering line, costing	10 830	29	0
z-2	Install 2-way radio station to serve area within 50 mile radius of Hugoton, costing	3 030	None	
z-3	Purchase 3 automobiles (coupes) for serving portions of Hugoton Field, costing	2 756		
z-4	Purchase 1-ton truck for Oklahoma area, costing	1 072		
	Total	$4 535 220		

Notes:

(1) None of the foregoing items are in course of construction.

(2) Work Orders have not been issued for any of the above items.

(3) All material is on hand for items a. and b. No material on hand for other items.

(4) Material on order for items c., i. and j. No priority has been obtained for item c. but an A-2

(5) Budgets have been prepared for submission to the Management for all of the above [illegible]

Exhibit 261

FEDERAL POWER COMMISSION
APR 13 1942
RECEIVED

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
MAIN LINE SYSTEM
APPROXIMATE COINCIDENTAL MAXIMUM DAY SALES
DURING THE WINTER PERIODS OF 1940-41 AND 1941-42

FEDERAL POWER COMMISSION, DOCKET NO. G
EXHIBIT NO. 261
DATE IDENTIFIED 4-23-42

Point of Delivery	No. of Main Line Miles from Compressor Station Discharge: Miles	Compressor Station	Approximate Coincidental Maximum Day Sales - MCF: Winter Period 1940-41 (February 19, 1941): Firm	Interruptible	Total	Winter Period 1941-42 (January 7, 1942): Firm	Interruptible
East of Dana, Indiana							
Rurals - Texas and Oklahoma	Various	Sneed	16		16	37	
Gruver, Texas	32.6	"	47		47	71	
Rurals - Kansas	Various	Liberal	32		32	48	
Kismet, Kansas	434	"	26		26	39	
Minneola, Kansas	46.9	"	71		71	107	
Bloom, Kansas	54.1	"	21		21	34	
Kingsdown, Kansas	62.3	"	24		24	37	
Bucklin, Kansas	68.2	"	68		68	104	
Millinville, Kansas	73.2	"	63		63	100	
Yuka, Kansas	34.0	Greensburg	41		41	62	
Preston, Kansas	44.0	"	63		63	96	
Turon, Kansas	51.2	"	101		101	154	
Langdon, Kansas	57.6	"	34		34	52	
Arlington, Kansas	62.7	"	22		22	33	
Whitewater, Kansas	37.5	Haven	75		75	113	
Yoder, Kansas	39.0	"	8		8	12	
Hutchinson, Kansas	52.1	"	61		61	92	
Nickerson, Kansas	13.7	Olpe	20		20	30	
Phillips Petroleum Co. - Sharpe Plant	28.1	"				397	
Roxbury, Kansas	33.2	"	21		21	32	
Marquisburg, Kansas	41.0	"	12		8	12	
Rurals - Wilfred, Kansas Lateral	56.0	"	14		14	21	
Overbrook, Kansas	58.0	"	25		25	Served by Lateral	
Overbrook, Kansas	26.0	"	14		14		
Lawrence, Kansas	58.0	"	1		1		
Santa Fe State Hospital (Kansas)	70.4	"		300	300		150 A
Phillips Petroleum Co. - Paola Plant	73.5	"		286	286		143 A
Paola Brick & Tile Co.	85.5	"					21 A
Rurals - Liberty, Missouri Lateral	65.6	"	33		33	52	
The Wm. Rockhill Coal Co., Inc.	85.5	"					
Liberty, Missouri	85.5	"	589	189	778 A	1,214	171
Excelsior Springs, Missouri	85.5	"	412	29	441 A	607	29
Rurals - Missouri	Various	Louisburg	20		20	24	
Harrisonville, Missouri	32.1	"	277	23	300	406	21
Phillips Petroleum Co. - Harrisonville Plant	18.7	"		225	225		225 A
Centerview, Missouri	46.3	"	5		5	5	
Phillips Petroleum Co. - Leeton Plant	63.2	"		220	220		201 A
Windsor, Missouri	63.2	"	64		64	90	
Houstonia, Missouri	72.4	"	6		6	8	
Pilot Grove, Missouri	24.0	Houstonia	28		28	40	
Clarksburg, Missouri	33.7	"	1		1	1	

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FEDERAL POWER COMMISSION, DOCKET NO. G-200
EXHIBIT NO. 261 (FOR IDENTIFICATION)
DATE IDENTIFIED 4-23-47

Maximum Day Sales - MCF
Winter Period 1941-42
(January 7, 1942)

Firm	Interruptible	Total
[redacted]		

C 220
261
4-23-47

Exhibit 261

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
MAIN LINE SYSTEM
APPROXIMATE COINCIDENTAL MAXIMUM DAY SALES
DURING THE WINTER PERIODS OF 1940-41 AND 1941-42

Point of Delivery	No. of Main Line Miles from Compressor Station Discharge: Miles	Compressor Station	Approximate Coincidental Maximum Day Sales - MCF: Winter Period 1940-41 (February 19, 1941): Firm	Interruptible	Total	Winter Period 1941-42 (January 7, 1942): Firm	Interruptible	Total
West of Dana, Indiana (Cont.)								
Tipton, Missouri	33.7	Houstonia	56		56	91		91
Phillips Petroleum Co. - Jefferson City Plant	33.7	"	-	256	256	-	235 A	235 A
Jefferson City, Missouri	33.7	"	1 930	4 264	6 194 A	2 852	210	3 062 A
Boonville,	34.8	"	530	779	1 309 A	837	410	1 247 A
[illegible] N. J. Small Co., Inc.	35.9	"	-	-	-	-	-	-
[illegible] Franklin, Missouri	37.2	"	46		46	64		64
[illegible], Missouri	43.8	"	152		152	207		207
[illegible] Brick and Tile Co.	43.8	"	-	80	80	-	-	-
[illegible], Missouri	59.1	"	7		7	11		11
[illegible], Missouri	59.1	"	383	81 A	464 A	500	74 A	574 A
[illegible] Cooley Brick & Tile Co.	60.6	"	-	-	-	-	-	-
[illegible], Missouri	60.6	"	1 557	722	2 279 A	2 378	680	3 058 A
Bellaville, Missouri	66.3	"	3		3	5		5
Centralia, Missouri	0.1	Centralia	211	105	316	264	81	345
[illegible], Missouri	2.7	"	245	18	263	422	19	441 A
Harbison Walker Refractories Co. - Fulton	2.7	"	-	1 083 A	1 083 A	-	1 042 A	1 042 A
Mexico, Missouri	11.8	"	712	4 027	4 739 A	1 150	4 030	5 180 A
Audrain County Home	12.0	"	10		10	14		14
Harbison Walker Refractories Co.	25.7	"	-	1 525 A	1 525 A	-	1 168 A	1 168 A
Laddonia, Missouri	28.5	"	10		10	18		18
Wellsville, Missouri	28.5	"	46		46	85		85
Wellsville Fire Brick Co.	28.5	"	-	-	-	-	353 A	353 A
[illegible], Missouri	28.5	"	6		6	8		8
[illegible]	31.6	"	4	-	4	6	213 A	219
[illegible] Refractories Co.	31.6	"	-	275 A	275 A	Served by Missouri P. & L. Co. Farber, Missouri		
[illegible] Co.	32.7	"	-	535	535	-	466 A	466 A
Vandalia, Missouri	36.3	"	92	39	131	158	42	200
Harbison Walker Refractories Co. - Vandalia	36.3	"	-	2 063 A	2 063 A	-	1 684 A	1 684 A
New London, Missouri	39.0	"	22		22	43		43
Freiling Greenhouse	39.0	"	-	13	13	-	20	20
Universal Atlas Cement Co.	39.0	"	-	5 582 A	5 582 A	-	370 A	370 A
Hannibal, Missouri	39.0	"	1 059	694	1 753 A	1 178	827	2 005 A
Palmyra, Missouri	39.0	"	221		221	310		310
Marblehead Lime Co. - Marblehead and Quincy	39.0	"	-	436 A	436 A	-	346 A	346 A
Marble Stone & Lime Co.	39.0	"	-	97	97	-	76 A	76 A
The Black White Lime Co.	39.0	"	-	101	101	-	98 A	98 A
Quincy, Illinois	39.0	"	1 798 A		1 798 A	2 404 A		2 404 A
Bowling Green, Missouri	51.6	"	273	57	330	486	61	547 A
Louisiana, Missouri	62.9	"	416	53	469 A	593	69	662 A
Various - Illinois	Various	Pleasant Hill	12		12	26		26
Pittsfield, Illinois	7.2	"	158		158	234 A		234

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Maximum Day Sales - MCF
Winter Period 1941-42
(January 7, 1942)

Firm	Interruptible	Total	MCF Interruptible Curtailed January 7, 1942
91		91	
-	235 A	235 A	
2 852	210	3 062 A	4 020
637	410	1 247 A	700
-	-		
64		64	
207		207	
-	-	-	
11		11	
500	74 A	574 A	
-	-	-	
2 378	680	3 058 A	
264	81	345	
422	19	441 A	
-	1 042 A	1 042 A	
1 150	4 030	5 180 A	1 064
14		14	
-	1 168 A	1 168 A	
18		18	940
85		85	
-	353 A	353 A	
6		6	93
6	213 A	219	114
Served by Missouri P. & L. Co. - Farber, Missouri			
-	466 A	466 A	
158	42	200	239
-	1 684 A	1 684 A	
43		43	433
-	20	20	
-	370 A	370 A	
1 178	827	2 005 A	1 552
310		310	201
-	346 A	346 A	
-	76 A	76 A	97
-	98 A	98 A	92
2 404 A		2 404 A	10
486	61	547 A	
593	69	662 A	
26		26	
234 A		234 A	

Exhibit 261

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
MAIN LINE SYSTEM
APPROXIMATE COINCIDENTAL MAXIMUM DAY SALES
DURING THE WINTER PERIODS OF 1940-41 AND 1941-42

Class of Service	Point of Delivery	No. of Main Line Miles from Compressor Station Discharge: Miles	Compressor Station	Approximate Coincidental Maximum Day Sales - MCF: Winter Period 1940-41 (February 19, 1941): Firm	Interruptible	Total	Winter Period 1941-42 (January 7, 1942): Firm	Interruptible	Total
	East of Dana, Indiana (Cont.)								
T	Terre Haute, Illinois	29.5	Pleasant Hill	87		87	232 A		232 A
T	White Hall, Illinois	29.5	" "	66		66	102		102
T	Jacksonville, Illinois	39.5	" "	577	349	926 A	732	389	1 121 A
T	Springfield, Illinois	70.7	" "	4 382	231	4 613 A	5 782	161	5 943 A
T	Lincoln, Illinois	70.7	" "	316	140	458 A	455	166	621 A
T	Clinton, Illinois	70.7	" "	-		-	114 A		114 A
T	Morton, Illinois	70.7	" "	3	72	75	102	103	205 A
T	Washington, Illinois	70.7	" "	-		-	117 A		117 A
T	Pekin, Illinois	70.7	" "	739		739 A	1 068 A		1 068 A
T	Canton, Illinois	70.7	" "	795	1 066 A	1 861 A	1 110	879 A	1 989 A
T	Bartonville, Illinois (Incl. portion of Peoria)	70.7	" "	1 765	4 916 A	6 681 A	2 235	3 324 A	5 559 A
T	Peoria, Illinois	70.7	" "	7 746	4 031	11 777 A	9 070	5 440	14 510 A
T	Taylorville, Illinois	20.2	Glenarm	413 A		413 A	505 A		505 A
T	Decatur, Illinois (Incl. Camp Seymour)	33.2	"	2 291	656	2 947 A	3 947	1 165	4 612 A
T	Arthur, Illinois	33.4	"	-		-	110 A		110 A
T	Arcola, Illinois	33.9	"	-		-	33 A		33 A
T	Tuscola, Illinois	4.0	Tuscola	218	50	268	404	55	459 A
T	Paris, Illinois	6.7	"	72		72	143 A		143 A
T	Georgetown, Ridge, Illinois	6.7	"	2 277	689	2 966 A	2 859	1 145	4 004 A
T	Kansas, Illinois	19.9	"	41		41	74 A		74 A
T	Chrisman, Illinois	30.3	"	43		43	118 A		118 A
T	Danville, Illinois (Incl. Western Brick)	39.6	"	850	283	1 133 A	1 126	186	1 312 A
T	Hoopeston, Illinois	39.6	"	270		270	313		313
	Total East of Dana, Indiana			22 368	37 046	72 414	48 722	26 571	75 293
	Total East of Dana, Indiana	44.0	"			167 980 A			178 868 A
	Total Main Line System					240 394			254 161

Classification:
T - Direct Sales to Industrial Customers.
M - Deliveries to Michigan Gas Transmission Corp. for re-delivery to Kentucky Natural Gas Corp. and Utilities in Indiana, Ohio and Mic
R - Direct Sales to Right of Way Customers and Company Employees.
TR- Sales to Utilities for resale to Domestic, Commercial and Industrial Customers.

Notes: (a) Figures marked A are actual, all others are approximate.

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Maximum Day Sales - MCF

Winter Period 1941-42 (January 7, 1942)			MCF Interruptible Curtailed January 7, 1942
Firm	Interruptible	Total	
232 A		232 A	
102		102	
A 732	389	1 121 A	
A 5 782	161	5 943 A	
A 455	166	621 A	
114 A		114 A	
102	103	205 A	
117 A		117 A	
A 1 068 A		1 068 A	
A 1 110	879 A	1 989 A	
A 2 235	3 324 A	5 559 A	
A 9 070	5 440	14 510 A	
A 505 A		505 A	
A 3 447	1 165	4 612 A	
110 A		110 A	
33 A		33 A	
404	55	459 A	
143 A		143 A	
A 2 859	1 145	4 004 A	
74 A		74 A	
118 A		118 A	
A 1 126	186	1 312 A	
313		313	
48 722	25 571	75 293	20 210
A		17[illegible] 968 A	
		254 161	

d Utilities in Indiana, Ohio and Michigan.

Exhibit 261

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
MAIN LINE SYSTEM
SUPPLEMENTARY STATEMENT INDICATING DETAIL OF SALES TO
UTILITIES FOR RESALE TO INTERRUPTIBLE CUSTOMERS

MCF - February 19, 1941

	Actual	Other Customers Estimated	Total	Actual	
Power Plant	417	362	779		
	-	57	57		
	-	105	105		
	-	722	722		
	-	29	29		
	-	-	-	North American Refractories Co.	
	-	18	18		
	-	604	604		
	-	23	23		
Power Plant	4 066	198	4 264	Power Plant	
	-	169	169		
	-	53	53		
Power Plant	389)			Power Plant	
A. P. Green Brick Co.	3 517)	121	4 027	A. P. Green Brick Co.	2
Power Plant	81	-	81	Power Plant	
	-	39	39		
Keystone Steel & Wire Co.	4 916	-	4 916	Keystone Steel & Wire Co.	
International Harvester Co.	1 066	-	1 066	International Harvester Co.	
	-	689	689		
	-	283	283	Western Brick Co.	
	-	656	656		
	-	349	349		
	-	140	140		
	-	72	72		
Altorfer Bros. Co.	294)			Altorfer Bros. Co.	
Caterpillar Tractor Co.	1 566)			Caterpillar Tractor Co.	2
Commercial Solvents Co.	1 621)			Commercial Solvents Co.	2
R. Herschel Mfg. Co.	222)			R. Herschel Mfg. Co.	
Hiram Walker & Sons	59)	267	4 031	Hiram Walker & Sons	
	-	231	231		
	-	50	50		
Total West of Dana, Indiana	18 216	5 347	23 563		13

Notes: (a) Includes Direct Sales to Missouri Power & Light Company for Power Plants at Boonville, Jefferson City, Mexico and Mo

(b) Includes all gas sold under Interruptible Rate Schedules.

	307		
tor Co.	2 384		
nts Co.	2 121		
Co.	262		
ons	111	355	5 44
	-	161	161
	-	55	
	13 624	6 323	13 [illegible]

y, Mexico and Moberly, Missouri.

FEDERAL POWER COMMISSION
APR 13 1942
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Exhibit 261

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARY COMPANIES
MAIN LINE SYSTEM
DIRECT INDUSTRIAL SALES

	M C F		
	Jan. 6, 1942	Jan. 7, 1942	Jan. 8, 1942
West of Dana, Indiana:			
Phillips Petroleum Co. - Sharpe Plant	342	129	15
Phillips Petroleum Co. - Paola Plant	300	160	176
United Brick and Tile Co.	283	51	-
The W. J. Small Co., Inc. - Liberty	-	-	-
Phillips Petroleum Co. - Harrisonville Plant	225	225	225
Phillips Petroleum Co. - Leeton Plant	171	201	188
Phillips Petroleum Co. - Jefferson City Plant	235	235	35
Jefferson City Power Plant	50	50	50
Boonville Power Plant	-	-	-
The W. J. Small Co., Inc. - Boonville	-	-	-
Fayette Brick and Tile Co.	-	-	-
Moberly Power Plant	81	74	73
Edwards Conley Brick and Tile Co.	-	-	-
Harbison Walker Ref. Co. - Fulton	1 433	1 042	672
Mexico Power Plant	47	-	-
Mexico Refractories Co.	2 108	1 168	1 207
Wellsville Fire Brick Co.	446	353	353
Walsh Refractories Co.	705	466	353
Harbison Walker Ref. Co. - Vandalia	2 117	1 684	1 726
Freiling Greenhouse	20	20	20
Universal Atlas Cement Co.	370	370	370
Marblehead Lime Co. (Marblehead and Quincy)	443	346	234
Menke Stone and Lime Co.	55	76	95
The Black White Lime Co.	108	96	49
Total West of Dana, Indiana	9 539	6 748	5 841
Total Curtailed West of Dana	12 608	15 968	16 861
Total Required West of Dana	22 147	22 716	22 702

Exhibit 262

FEDERAL POWER COMMISSION, DOCKET NO. G - 200
EXHIBIT NO. 262 (FOR IDENTIFICATION)
DATE IDENTIFIED 4-23-40

FEDERAL POWER CO
Docket No. G -
Hearing Exhibit No. 2
Date Introduced 4-

PANHANDLE EASTERN PIPE LINE COMPANY AND ITS SUBSIDIARY COMPANY

Customer	Classification (D - Direct, I - Indirect)	Curtailment Order Date	Curtailment Order Hour	Curtailment Order Per Cent	Curtailment Started Date	Curtailment Started Hour	No. of Days Curtailed	Delivery on Day Before Curtailment	Volume Sun-4th	Volume Mon-5th	Volume Tues-6th	Volume Wed-7th	Volume T
Kansas													
Phillips Chanute	I	7th	# to 12 AM	50	7th	2:15 PM	5.75	342			-	213	
Phillips Neodesha	I	7th	# to 12 AM	50	7th	1:30 PM	5.75	300			-	140	
Missouri													
Mexico Brick & Tile Company													
Phillips Morrisonville (4)		7th	# to 12 AM	50	7th	12:40 PM	5.75	262				232	
Phillips Jefferson City	I	7th	# to 12 AM	50				229					
Jefferson City Boilers	D	4th	1:30 PM	100	6th	11:30 AM	5.00	239					
Fayette Brick & Tile Company	I				4th	2:30 PM	5.75	4 070	2 349	4 020	4 020	4 020	
Edwards Conley Brick & Tile Company	I	Not consuming any gas at this time									-	-	
Harbison Walker - Fulton	I	Not consuming any gas at this time									-	-	
Mexico Boilers	I	7th	# to 12 AM	50	7th	1:00 PM	5.75	1 866			-	-	
K. F. Green	D	4th	1:15 PM	100	4th	3:30 PM	5.75	405	344	345	356	824	
Mexico Refractories	I	7th	# to 12 AM	50	7th	10:30 AM	5.75	4 568			-	468	
Belleville Fire Brick Company	I	7th	# to 12 AM	50	7th	10:30 AM	5.75	2 106			-	661	
North American Refractories Company	I	7th	# to 12 AM	50	7th	4:00 PM	5.50	446			-	940	
Walsh Refractories	I	7th	# to 12 AM	50	7th	11:00 AM	5.75	327			-	93	
Harbison Walker - Vandalia	D	7th	# to 12 AM	50	7th	12:00 AM	5.75	705			-	114	
Marblehead Lime - Hannibal	D	7th	# to 12 AM	50	7th	5:30 PM	5.50	2 117			-	239	
	I	7th	# to 12 AM	50	7th	4:00 PM	5.50	720			-	433	
Illinois												201	
Marblehead Lime - Marblehead	D	7th	# to 12 AM	50	7th	2:45 PM	5.50	437				97	
Marblehead Lime - Quincy	D	Plant down. Gas is being used only for heating bldgs.						6					
Meeker Stone and Lime Company	D	7th	# to 12 AM	50	7th	2:00 PM	5.50	168 Av				92	
The Black White Lime Company	D	7th	# to 12 AM	50	7th	4:20 PM	5.50	102			-	10	
International Harvester - Canton	I	7th	# to 12 AM	50	7th	10:30 AM	5.75	1 725			-	256	
Keystone Steel & Wire - Open Hearth	I	6th	3:45 PM	100	6th	4:00 PM	6.50	3 024			1 775	2 918	
Western Brick Company - Danville	I	7th	# to 12 AM	50	7th	11:00 AM	5.75	184			-	92	
Total								32 447	2 693	4 365	6 151	11 978	
Universal Atlas Cement (1)	D							7 902	7 532	7 532	7 532	7 532	
Boonville Boilers (2)	D							700 Av	700	700	700	700	
Total Curtailed plus (1) and (2)								32 483	10 925	12 297	14 383	20 210	

(1) Voluntarily discontinued use of gas in their kilns January 1, 1940. Continued using approx. 370 MCF per day in driers.
(2) Voluntarily discontinued use of gas October 10, 1941.
(3) Weighted Per Cent
(4) No Butane on hand. Curtailment accomplished at other Phillips Plants.

Note: On the 4th at 4:35 AM Cities Service Johnson Co. Exchange was curtailed from 350 to approx 300 MCF per day
Trans. Gas Dept. - KCO
January 23, 1942

DOCKET NO. G - 200
IDENTIFICATION)
23-42
ARY COMPANY

FEDERAL POWER COMMISSION
Docket No. G - 200
Exhibit No. 242
Date Rec'd 4-23-42

INTERRUPTIBLE CUSTOMERS
CURTAILMENT - JANUARY 6 TO 12, 1942

FEDERAL POWER COMMISSION APR 24 1942 RECEIVED

FEDERAL POWER COMMISSION APR 23 1942 RECEIVED

16617 26 V

				Volume Curtailed									Per Cent
Sun-4th	Mon-5th	Tues-6th	Wed-7th	Thurs-8th	Fri-9th	Sat-10th	Sun-11th	Mon-12th	Total	Curtailed
			213	327	327	327	327	327	1 848	91
			146	124	130	167	146	145	852	49
			232	283	283	283	264	141	1 490	92
				200	235	235	235	235	1 140	97
2 949	4 020	4 020	4 020	4 020	4 020	4 020	4 020	4 020	34 509	97
			824	1 194	1 358	1 057	1 081	645	6 159	57
344	345	356	403	403	403	403	403	403	3 463	98
			661	2 511	2 452	2 374	2 522	2 094	12 614	68
			940	901	922	956	838	631	5 187	43
			93	93	186	186	93	93	744	30
			114	141	141	141	141	141	819	44
			239	352	337	354	371	277	1 930	48
			433	391	1 232	1 359	986	650	5 051	43
			201	434	434	413	391	360	2 233	56
			97	209	239	239	230	181	1 201	50
			92	73	92	54	54	46	411	44
			10	59	59	59	59	34	260	47
			256	547	436	972	972	197	3 382	48
		1 775	2 918	2 854	2 975	3 006	3 002	2 997	19 527	99
			92	103	138	184	152	122	791	75
2 693	4 365	6 151	11 978	15 219	16 401	16 790	16 291	13 743	103 631	59 (3)
7 532	7 532	7 532	7 532	7 532	7 532	7 532	7 532	7 532	67 788	95
700	700	700	700	700	700	700	700	700	6 300	100
10 925	12 227	14 383	20 210	23 451	24 633	25 022	24 523	21 975	178 719	75

Panhandle Eastern Pipe Line Company And Subsidiaries
Allocation Of Adjusted 1941 Costs Between
Regulated And Non-Regulated Sales

Line No.			Total	Proportion Regulated Sales	Proportion Non-Regulated Sales	Allocated To Regulated Sales	Allocated To Non-Regulated Sales
			(A)	(B)	(C)	(D)	(E)
2	Costs:						
3	Proportional to Maximum Day's Sales		$ 5,222,003	.9731	.0269	$5,081,531	$ 140,472
4	Proportional to Annual Sales		5,177,648	.8680	.1320	4,494,198	683,450
5							
6	Other Costs (Indiana G. D. Corp.)		$10,399,651 43,688			$9,575,729	$ 823,922
7	Total Cost		$10,443,339				
8							
9							
10							
11							
12	Maximum Day's Sales:						
13	P.E.P.L. Co.)						
14	Ill. N.G. Co.)	(Exh.)	MCF	75,203	68,545	6,748	
15	Mich. G.T. Corp.	(Exh. 79A)	MCF	175,435	175,435		
16	Total						
17			MCF	250,728	243,980	6,748	
18			%	100.00	97.31	2.69	
19	Annual Sales:	(Exh. 251)					
20			MCF	62,561,726	54,302,700	8,259,026	
21			%	100.00	86.80	13.20	

The term costs as used herein is intended to include all operating revenue deductions of Panhandle Eastern Pipe Line Company and its subsidiaries as shown in Exhibit 195 but does not include return on investment.

6883

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARIES
ALLOCATION OF ADJUSTED 1961 COST AS
PROPORTIONAL TO MAXIMUM DAY'S SALES AND ANNUAL SALES

EXHIBIT 26
WITNESS: Sh

Line No.		1961 Costs (A)	Adjustments (B)	Total To Be Allocated (C)	Allocated As Proportional To: Maximum Day's Sales (D)	Annual Sales (E)	Oth (F
1							
2	Natural Gas Production Expenses:						
3	Operation	$ 376,292.17	$ -	$ 376,292.17	$ -	$ 376,292.17	$ -
4	Maintenance	27,125.09	-	27,125.09	-	27,125.09	-
5	Other Prod. Expenses	1,419,615.96	-	1,419,615.96	-	1,419,615.96	-
6	less: Duplicate Charges - Cr.	* 748,011.50	-	* 748,011.50	-	* 748,011.50	-
7	Total Prod. Expenses	$1,075,019.72	-	$1,075,019.72	-	$1,075,019.72	-
8							
9	Transmission Expenses:						
10	Operation:						
11	Supervision & Engineering	$ 134,206.46	$ -	$ 134,206.46	$ 28,182.95	$ 106,022.51	$ -
12	Transmission Mains Expense	186,533.19	164,000.00	350,533.19	350,533.19	-	-
13	Other	1,189,112.99	130,700.00	1,319,812.99	-	1,319,812.99	-
14	Total	$1,509,851.64	$296,000.00	$1,804,851.64	$ 379,016.14	$1,425,835.50	-
15	Maintenance:						
16	Supervision & Engineering	$ 48,127.64	-	$ 48,127.64	$ 19,538.58	$ 28,589.06	$ -
17	Pumping Station Structures	23,897.91	-	23,897.91	23,897.91	-	-
18	Mains	94,212.01	-	94,212.01	94,212.01	-	-
19	Other	172,819.71	-	172,819.71	-	172,819.71	-
20	Total	$ 339,057.27	-	$ 339,057.27	$ 137,648.50	$ 201,408.77	-
21							
22	Total Before Credit	$1,848,908.91	$296,000.00	$2,143,908.91	$ 516,664.64	$1,627,244.27	$ -
23	less: Joint Expenses - Cr.	* 15,200.00	-	* 15,200.00	-	* 15,200.00	-
24	Total Transmission Expenses	$1,833,708.91	$296,000.00	$2,128,708.91	$ 516,664.64	$1,612,044.27	-
25							
26	Distribution Expenses:						
27	Operation	$ 7,088.86	$ -	$ 7,088.86	$ -	$ -	$ 7,08
28	Maintenance	1,980.85	-	1,980.85	-	-	1,98
29	Total Distribution Expenses	$ 9,069.01	-	$ 9,069.01	-	-	$ 9,06
30							
31	Customer's Accounting & Collecting Expense:						
32	Total	$ 28,790.08	$ -	$ 28,790.08	$ -	$ 23,964.82	$ 4,75
33							
34	Sales Promotion Expenses:						
35	Total	$ 32,734.40	$ -	$ 32,734.40	$ -	$ 30,701.02	$ 1,95
36							
37	Administrative and General Expenses:						
38	Total Before Credits	$ 847,847.69	$ 94,000.00	$ 941,847.69	$ 148,706.77	$ 789,722.71	$ 3,41
39	less: Dupl. Chg's. & Exp's. Transferred	* 10,927.61	-	* 10,927.61	-	* 10,279.14	* 64
40	Total	$ 836,920.08	$ 94,000.00	$ 930,920.08	$ 148,706.77	$ 779,443.57	$ 2,77

PANHANDLE EASTERN PIPE LINE COMPANY AND SUBSIDIARIES
ALLOCATION OF ADJUSTED 1941 COST AS
PROPORTIONAL TO MAXIMUM DAY'S SALES AND ANNUAL SALES

EXHIBIT 263.
WITNESS: Shattuc

Line No.		1941 Costs (A)	Adjustments (B)	Total to Be Allocated (C)	Allocated as Proportional To: Maximum Day's Sales (D)	Allocated as Proportional To: Annual Sales (E)	Allocated as Proportional To: Other (F)
1							
2	Other Revenue Deductions:						
3	Miscellaneous	$ 11,449.33	$ -	$ 11,449.33	$ -	$ 10,986.94	$ 462.39
4							
5	Total Operating & Maintenance Expenses	$ 3,829,611.53	$ 389,000.00	4,218,611.53	665,370.41	3,534,250.04	18,991.08
6							
7	Depreciation, Depletion, & Amortization:						
8	Depletion of Prod. Leaseholds	$ 90,177.06	$ -	$ 90,177.06	$ -	$ 90,177.06	$ -
9	Amort. of Non-Prod. Leaseholds	74,685.45	-	74,685.45	-	74,685.45	-
10	Depreciation of Gas Plant	2,242,521.00	-	2,242,521.00	2,094,360.09	144,420.11	3,740.80
11	Depreciation of Gasoline Plant	66,000.00	-	66,000.00	-	66,000.00	-
12	Amort. of Sales & Purchase Cont.	230,173.96	*230,173.96	0.00	-	-	-
13	"	62,854.64	* 62,854.64	0.00	-	-	-
14	"	39,114.09	-	39,114.09	-	39,114.09	-
15		$ 2,805,526.20	$*293,028.60	$ 2,512,497.60	$2,094,360.09	$ 414,396.71	$ 3,740.80
16							
17	Taxes:						
18	Gross Production & Sales	$ 52,810.58	$ -	$ 52,810.58	$ -	$ 52,810.58	$ -
19	Ad Valorem	633,870.40	-	633,870.40	587,935.87	40,542.10	4,792.43
20	Franchise	8,035.14	-	8,035.14	-	8,035.14	-
21	"Payroll"	44,178.93	-	44,178.93	22,007.86	22,007.86	164.41
22	Capital Stock - Federal	116,095.50	-	116,095.50	57,675.00	57,675.00	745.50
23	" " - State	7,962.39	-	7,962.39	3,981.19	3,981.20	-
24	Income - State	39,034.37	-	39,034.37	17,500.00	17,500.00	4,034.37
25		$ 901,387.31	-	$ 901,387.31	$ 689,099.32	$ 202,551.28	$ 9,736.71
26	Income - Federal	1,922,068.72	39,000.00	1,961,068.72	975,854.00	975,853.99	9,360.73
27	Excess Profits - Federal	994,878.91	*221,000.00	773,878.91	385,378.30	385,378.30	8,522.31
28	Charges in Lieu of Inc. & Excess P	823,881.49	-	823,881.49	411,940.75	411,940.74	-
29		$ 4,641,616.43	$*182,000.00	$ 4,459,616.43	$2,162,272.37	$1,975,784.31	$21,619.75
30							
31	Other Utility Revenues:						
32	Gasoline Sales - Cr.	$* 735,077.94	$ -	$* 735,077.94	$ -	$* 735,077.94	$ -
33	Miscellaneous - Cr.	* 12,309.09	-	* 12,309.09	-	* 11,645.35	* 663.74
34		$* 747,387.03	-	$* 747,387.03	-	$* 746,723.29	$* 663.74
35							
36	TOTAL COST:	$10,589,367.13	$* 86,028.60	$10,443,338.53	$5,222,002.87	$5,177,647.77	$43,687.89
37							
38	*Denotes Negative Figure						

4/23/42

(Exhibit 264.)

Schedule 12.

Gas Contract

Between

Panhandle Eastern Pipe Line Company

and

Detroit City Gas Company

Dated August 31, 1935

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Gas Contract

Panhandle Eastern Pipe Line Company

and

Detroit City Gas Company

Agreement made and entered into this 31st day of August, 1935, by and between Panhandle Eastern Pipe Line Company, a corporation of the State of Delaware

(hereinafter called Seller), party of the first part, and Detroit City Gas Company, a corporation of the State of Michigan (hereinafter called Buyer), party of the second part.

Buyer represents that it owns and operates a gas distribution system in and adjacent to the City of Detroit, Michigan through which it is engaged in the distribution of gas to the public, and that it desires to obtain a supply of natural gas.

Seller represents that it owns, directly or through subsidiaries, natural gas production facilities and gas purchase contracts in the States of Texas and Kansas and a natural gas transmission pipe line extending from its production area to a point on the Illinois-Indiana state line; that subject to the provisions hereof it will be able to have available at said eastern terminus of its pipe line at the Illinois-Indiana state line, sufficient quantities of natural gas to fulfill the requirements of this Agreement; and that, likewise subject, it contemplates constructing or arranging for the construction of a pipe line to connect the eastern terminus of its pipe line with Buyer's distribution system at or near the City of Detroit.

Now, Therefore, in consideration of the mutual convenants and agreements of the parties hereto as herein set forth, the parties hereto covenant and agree as follows:

Article I.

Definitions

Except where the context otherwise indicates another or different meaning or intent, the following terms are intended and used and shall be construed to have meanings as follows:

1. The "Effective Date" of this Agreement shall mean the first day of the calendar month immediately following the date when Buyer shall notify Seller in writing of the completion of the necessary adjustments to all of its customers appliances.

2. The "Date of Initial Delivery" shall mean the date on which Seller shall notify Buyer of the completion of a connecting pipe line from the eastern terminus of its exist-

ing pipe line at the Illinois-Indiana state line to the Buyer's River Rouge plant, and is ready to begin delivery of gas under this contract, which Seller agrees shall not be earlier than July 1, 1936, nor later than September 1, 1936.

3. The term "day", wherever used in this Agreement, shall mean a period of twenty-four (24) consecutive hours beginning and ending at seven o'clock A. M. Standard Time or Daylight Saving Time, whichever shall be in effect at the place of delivery.

4. The term "month", wherever used in this Agreement, shall mean the period beginning at seven o'clock A. M. Standard Time or Daylight Saving Time, whichever shall be in effect at the place of delivery, on the first day of a calendar month and ending at seven o'clock A. M. Standard Time or Daylight Saving Time, whichever shall be in effect at the said place of delivery on the first day of the next succeeding calendar month.

5. The term "Special Industrial Customer" shall mean an industrial customer for the gas supply for whom Seller and Buyer make specific agreement outside of that provided for in Article VII, Section 2 hereof.

Article II.

Scope of Agreement

1. Commencing with the Date of Initial Delivery Buyer will proceed with due diligence to make necessary adjustments of all of its customers appliances and will complete them within six months. Buyer will notify Seller in writing when the adjustment of all of its customers appliances is completed.

2. Commencing with the Effective Date of this Agreement, and for the period provided in Article III hereof, Seller agrees to sell and deliver to Buyer, and Buyer agrees to buy from Seller, all of the natural gas requirements of Buyer for distribution and sale to any and all of its present and future customers and for its own use, but not in excess of ninety million cubic feet or its equivalent, nine hundred twelve thousand six hundred therms, per day which represents all of the gas Seller now believes it can safely contract to furnish Buyer at this time.

3. In consideration of the covenant in the last preceding paragraph, Seller agrees that if at any time in the future, while this Agreement remains in force, Seller, its assignee, or any successor corporation carrying out the terms of this Agreement, has additional gas which it desires to distribute in the territory served by Buyer, Buyer shall, for the balance of the period during which this Agreement shall remain in force, have the right to purchase such gas in such amount as it is willing to take under a firm commitment and at such price and under such terms and conditions as Seller could otherwise obtain for such gas.

The Seller further agrees that if, during the period that this Agreement shall remain in force, it should sell and deliver natural gas at a price less than that charged Buyer under this Agreement to another or others than Buyer for use or resale within the territory now served by Buyer with gas purchased hereunder, it will simultaneously reduce the contract price to Buyer hereunder to the lowest price obtained by it for gas sold to such party or parties. If conditions of sale be different, the amounts being substantial, Seller shall grant Buyer the right to change this Agreement to conform to such conditions in order to obtain such lower price.

4. Seller shall not be required to supply hereunder more than 90 million cubic feet or its equivalent nine hundred and twelve thousand six hundred therms of natural gas in any one day. Buyer agrees to take and pay for not less than the following annual amounts of natural gas, commencing with the Effective Date hereof:

First Year	81,120,000 therms
Second Year	101,400,000 therms
Third Year	121,680,000 therms
Fourth Year	141,960,000 therms
Fifth year and each year thereafter	152,100,000 therms

Buyer agrees that it will not take on its maximum day more than twice the number of therms which it takes on the average day of the twelve month period to which said maximum day applies in the computation of demand

charge. The term "maximum day" is understood to be that day during either December, January, February or March of the said twelve months period upon which the greatest number of therms has been taken.

5. In the event that Buyer shall have a prospective Special Industrial Customer and shall desire to purchase natural gas to serve such customer, the parties hereto will endeavor to negotiate a separate contract to cover the price at which Seller will furnish such gas to Buyer. Each such separate contract shall depend upon Seller's having available a sufficient supply of natural gas and shall include a provision for the temporary curtailment or discontinuance of service thereunder in the event of an insufficiency of Seller's supply for other deliveries under this Agreement.

It is agreed that if Seller shall refuse to furnish Buyer up to 20,800,000 therms of gas per year to serve such Special Industrial Customers at a price not less than the commodity charge specified in Article VII, Section 2, then Buyer's obligation to take the minimum quantities specified in the next preceding Section of this Agreement shall be reduced by such quantities as Seller shall fail to supply Buyer for such industrial customers, but not to exceed 20,800,000 therms per year.

6. Except as otherwise provided in Section 5 of this Article II, all gas sold by Seller to Buyer shall be governed by all the provisions of this Agreement.

7. Inasmuch as the carrying out of this Agreement depends upon the construction of a pipe line connecting the eastern terminus of Seller's existing pipe-line at the Illinois-Indiana state line with the city of Detroit, as well as on the reinforcement of the present pipe line of Seller, since the present line of Seller is inadequate to deliver the quantity of gas called for by this Agreement without reinforcements requiring the expenditure of a large sum of money, and Seller represents that its financial position is such that it cannot construct either said connecting line or said reinforcement without outside financing, it is expressly understood and agreed that, unless the construction of such connecting line shall have been financed on or before February 1, 1936, and unless a contract shall be entered into providing for the financing of said reinforcement of Sell-

er's present pipe line before said date, this Agreement shall be null and void and no obligations hereunder shall exist on the part of either party hereto. Seller agrees to use its best efforts to arrange for financing the construction of such connecting pipe line and such reinforcement of its present pipe line, but does not undertake any firm commitment to do so. If such financing shall be arranged by said date, Seller will construct and place said connecting pipe line in condition for operation on or before the Date of Initial Delivery.

Recognizing the desire of Buyer to obtain a supply of natural gas at the earliest possible moment, as well as the importance thereof to Buyer, Seller agrees that as soon as it becomes apparent to it that it will be unable to finance the construction of the connecting pipe line or construct the same, or that a contract cannot be made for financing the reinforcement of Seller's pipe line, whereby this Agreement would become null and void, it will give to Buyer written notice of such facts and a release of Buyer from any liability hereunder leaving Buyer then free to obtain or contract for a supply elsewhere.

8. In the event that an adequate supply of natural gas sufficient to meet all of Buyer's requirements for the unexpired term of this Agreement is developed by responsible parties other than Seller and is made available to Buyer in its served territory by the actual construction of a pipe line thereto, or in the event that such a supply is similarly made available to a competitor serving and distributing gas in such territory at a schedule of rates which applied to the deliveries of gas to Buyer hereunder during the preceding twelve months would result in a lower amount than under the rates provided by this Agreement, then and in that event Buyer may give notice to Seller of such available gas and with such notice shall furnish to Seller the rate schedules aforesaid, together with other data and particulars pertinent under this Article, and Seller shall have six months after date of receipt of such notice and rate schedules, data and particulars, within which to meet such lower obtainable price of gas, and in the event of the failure of Seller to agree to modify this Agreement accordingly within said six months period Buyer shall have the option to terminate this

Agreement at any time within twelve months after expiration of said six months period upon six months written notice to Seller.

Article III.

Term of Agreement.

The term of this Agreement shall be for a period of fifteen (15) years beginning with the Effective Date and from year to year thereafter, after the expiration of said fifteen (15) year period, until cancelled on eighteen (18) months' notice in writing given by either party to the other.

Article IV.

Quality

1. Seller agrees that the gas delivered hereunder shall be natural gas (a) except that said natural gas shall at all times comply with the requirements as to purity expressed in this Agreement; (b) that Seller may extract or permit the extraction of moisture, helium, natural gasoline, butane, propane, and/or other hydro-carbons (excepting methane) from said natural gas, or may enrich said natural gas to the extent required to meet the gross heating value requirement hereof before delivery thereof to Buyer; and (c) that Seller may subject or permit the subjection of the gas to compression, cooling, cleaning and other processes to such an extent as may be required in its transmission from the wells to the point or points of delivery.

The gas delivered hereunder is assumed but not guaranteed to have a gross heating value of 1014 British thermal units per cubic foot. In no event shall the gross heating value of the gas delivered hereunder fall below 950 British thermal units per cubic foot nor exceed 1100 British thermal units per cubic foot, and the variation in gross heating value shall not be more than 100 British thermal units per cubic foot in any six months period.

2. Seller agrees that the gas delivered hereunder

(a) shall be commercially free from solid and/or liquid matter, dust, gums and or gum forming constituents;

(b) shall not contain more than one (1) grain of hydrogen sulphide per one hundred (100) cubic feet and that

this purity requirement shall be determined by quantitative test after presence of H2S has been indicated by qualitative test which shall consist of exposing a strip of white filter paper recently moistened with a solution of one hundred (100) grains of lead acetate in one hundred (100) cubic centimeters of water, to be exposed to the gas for one and one-half minutes in an apparatus previously purged, through which the gas is flowing at the rate of approximately five cubic feet per hour, the gas not impinging from a jet upon the test paper, and after this exposure the test paper is found not distinctly darker than a second paper freshly moistened with a solution not exposed to the gas;

(c) shall not contain more than twenty (20) grains of total sulphur per hundred (100) cubic feet;

(d) shall not contain an amount of moisture at any time exceeding that corresponding to saturation at the temperature and pressure of the gas in the main pipe line at a point approximately fifty (50) feet in advance of Seller's meter inlet header, and that the water shall not be present in liquid phase; provided that if Buyer or any purchaser from Buyer shall at any time be required by a duly constituted public regulatory authority to deliver to its customers gas containing less hydrogen sulphide and/or less total sulphur than above specified, Seller shall upon reasonable notice from Buyer cause the gas delivered hereunder to conform to such new requirement at Seller's expense.

3. Seller agrees that if the gas offered for delivery by it hereunder shall fail at any time to conform to any of the specifications hereinabove set forth, then Buyer may at its option refuse to accept delivery of or accept delivery of such gas and itself make changes necessary to bring such gas in conformity with such specifications, and Seller shall reimburse Buyer for any reasonable expense incurred by Buyer in effecting such changes, or for any reasonable expense otherwise incurred by Buyer by reason of the failure of the gas to conform to such specifications.

Article V.

Measurements.

1. The sales unit of the gas deliverable under this Agreement shall be the therm, consisting of one hundred thousand (100,000) British thermal units.

2. The number of therms delivered shall be determined by multiplying the number of cubic feet of gas delivered, measured on the measurement basis hereinafter specified and corrected to saturated conditions, by the gross heating value of such gas in British thermal units per cubic foot, and by dividing the product by one hundred thousand (100,000).

3. Measurements of volume and heat value of gas hereunder shall be at the following points:

Volume

(1) The volume of gas delivered by Seller hereunder shall be measured at the meter or meters of Seller, which, together with building and with all other collateral equipment required for the final determination of volume, Seller agrees to install and maintain and which will be operated by Seller at the Place of Delivery.

Heat Value

(2) The heat value of gas delivered by Seller hereunder shall be determined by a calorimeter or calorimeters of Seller which Seller agrees to install and maintain and which shall be operated by Seller at the Place of Delivery. Provided, however, that Buyer shall install and operate, at its own expense, meters to determine the volume of gas delivered each day to each of Buyer's Special Industrial Customers, the measurements to be corrected to the measurement basis specified in Section 4(a) of this Article V.

4. The measurement of volume and heat value of gas hereunder shall be made in the following manner:

Volume

(a) The unit of volume for the purpose of measurement and for the determination of gross heating value shall be one (1) cubic foot of gas saturated with moisture

at thirty (30) inches of mercury pressure and at sixty (60) degrees Fahrenheit temperature.

(b) The average absolute atmospheric (barometric) pressure shall be assumed to be fourteen and four tenths (14.4) pounds to the square inch, irrespective of actual elevation or location of the Place of Delivery above sea level or variations in such barometric pressure from time to time.

(c) The temperature of the gas passing the meters shall be determined by the continuous use of a recording thermometer so installed that it may properly record the temperature of the gas flowing through the meters. The arithmetic average of the temperature recorded each twenty-four (24) hour day shall be used in computing measurements.

(d) The specific gravity of the gas shall be determined monthly by a joint test as near the first of the month as practicable or as much oftener by a joint test as is found necessary in practice. The method of test shall be by Edwards Balance or by such other method as shall be agreed upon by the parties. The regular test at the first of the month shall determine the specific gravity to be used in computations for the measurement of gas deliveries until the end of such month or until changed by subsequent test; any special test to be applicable from the day made until changed by subsequent test. It is provided, however, that by agreement between the parties a suitable continuous method may be adopted.

(e) The relative humidity of the gas delivered hereunder shall be determined by approved methods at the beginning of delivery of gas to Buyer and at such times thereafter as may be agreed upon by both parties.

Heat Value

The gross heating value of the gas per cubic foot, as defined in Section 4 (a) above, shall be determined by taking the arithmetic average of the daily record of a recording calorimeter of a type to be mutually agreed upon, such recording calorimeter to be checked once each day, or at such other intervals as the parties may agree upon by comparison with a manually operated calorimeter of

a type approved by the U. S. Bureau of Standards and operated in accordance with methods recommended by the said Bureau. If upon any test any calorimeter shall be found to be not more than 2% in error, previous readings of such calorimeter shall be considered correct in computing the heat value of gas delivered by Seller to Buyer. If upon any test any calorimeter shall be found to be in error by more than 2%, then any previous readings of such calorimeter shall be corrected to zero error for any period which is definitely known and/or agreed upon, but in case the period is not definitely known or agreed upon, such correction shall be for a period extending over one-half the time elapsed since the date of last calibration, not exceeding a correction period of four (4) days.

Article VI

Metering Equipment

1. Buyer shall provide in all contracts with Special Industrial Customers that Seller shall have the right at all times during business hours to inspect the measuring and recording equipment of Buyer pertaining to sales to such Special Industrial Customers.

2. Each party shall have the right to be present, at its election, at the time of any installing, reading, cleaning, changing, repairing, inspecting or adjusting done in connection with the other party's measuring equipment and each party shall advise the other party of any intended major maintenance operation sufficiently in advance in order that the other party may conveniently have its representative present. The records from such measuring equipment shall remain the property of the party owning the meter, but, upon the request of either party, the party owning the meter will submit to the other party such records and charts together with calculations therefrom for the other party's inspection and verification, subject to return within ten days after receipt thereof.

3. The total capacity of the gas measuring equipment installed by Seller shall be sufficient to permit the testing and withdrawal of any individual meter from service without restricting the delivery of gas or interrupting the

measurement of gas. The installation, maintenance and operation of regulating equipment shall be such as not to affect the accuracy of the gas volume determination made from Seller's meters. The meter or meters of Seller shall be so located or protected as to assure freedom from pulsations, vibrations, or surges at the meter or meters from any cause in so far as such protection is obtainable within practicable limits mutually agreed upon to embody the best knowledge and information available.

4. Either party shall have the right to examine and approve, or object to, the plans of the other for the installation by it of such measuring equipment, and none of said installations shall be placed in service for the measurement of gas hereunder unless and until both parties are satisfied, or it shall be determined by arbitration, that such installation has been made in such manner as to permit of accurate determination of the quantity of gas to be delivered hereunder and to permit ready verification of the accuracy of measurement.

5. Seller agrees to provide without expense to Buyer check measuring equipment together with a suitable site for the location of said check measuring equipment which shall be operated by Buyer. Any property of Buyer which may be placed thereon shall be and remain Buyer's property. Such check meters and equipment shall be so installed as not to interfere with the operation of meters of Seller. Seller shall have access to such check measuring equipment at all reasonable hours but the reading, calibrating and adjusting thereof and the changing of charts shall be done only by employees or agents of Buyer. Seller shall have the right to be present, at its election, at the time of any installing, reading, cleaning, repairing, inspecting, calibrating or adjusting done in connection with such check measuring equipment or with Buyer's meters measuring gas to Special Industrial Customers. Charts and records from said check measuring equipment, together with calculations therefrom, shall be available to Seller for inspection and verification, subject to return by Seller within ten (10) days after receipt thereof.

6. If for any reason meters are out of service and/or out of repair so that the quantity of gas delivered is not

correctly indicated by the reading thereof, the gas delivered through the period such meters are out of service and/or out of repair shall be estimated and agreed upon by the parties hereto upon the basis of the best data available, using the first of the following methods which is feasible:

(a) By using the registration of any check meter or meters if installed and accurately registering;

(b) By correcting the error if the percentage of error is ascertainable by calibration, test or mathematical calculation; or

(c) By estimating the quantity of delivery by deliveries during preceding periods under similar conditions when the meter was registering accurately.

7. From time to time, and at least once each month, on a date as near the first of the month as practicable, the accuracy of Seller's measuring equipment shall be verified, at Seller's expense, in the presence of representatives of both Seller and Buyer, and the parties shall jointly observe any adjustments which are made in such measuring equipment. If either party at any time shall notify the other that it desires a special test of any meter, the parties shall cooperate to secure an immediate verification of the accuracy of the measuring equipment and joint observation of any adjustments. Each party shall give to the other notice of the time of all tests of meters sufficiently in advance of the holding of the tests in order that the other party may conveniently have its representative present.

8. If upon any test any meter is found to be not more than two per cent. (2%) fast or slow, previous readings of such meters shall be considered correct in computing the volume of gas delivered by Seller to Buyer; but the meter shall at once be properly adjusted to record accurately. If upon any test any meter shall be found to be inaccurate by an amount exceeding two per cent. (2%), then any previous readings of such meter shall be corrected to zero error for any period which is definitely known and/or agreed upon, but in case the period is not definitely known and/or agreed upon, such correction shall be for a period

extending over one-half of the time elapsed since the date of last calibration, not exceeding a correction period of sixteen (16) days.

9. The meters of Seller shall be read at seven o'clock Standard Time (or Daylight Saving Time whichever shall be in effect), in the morning of each day of each calendar month, or as near to that time as practical operating conditions will permit.

10. Each party hereto shall preserve for a period of at least five (5) years all test data, charts and other records resulting from performance by it of the terms of this Agreement.

Article VII.

Rate and Computation of Bills

1. All gas purchased by Buyer from Seller for resale to Special Industrial Customers shall be paid for at the respective prices agreed upon between Buyer and Seller for such gas.

2. For all gas purchased by Buyer from Seller hereunder, other than gas purchased for resale to Special Industrial Customers, subject to the provisions of Sections 3, 4 and 5 of this Article VII, the price shall be as follows:

Demand Charge:

For each month, a sum equal to thirty-eight cents (38c) multiplied by the maximum daily demand, as hereinafter defined. The term "maximum daily demand" shall mean the greatest number of therms delivered on any one day during the immediately preceding winter period, consisting of the months of December, January, February and March, after deducting the sum of the demands of the Special Industrial Customers provided for herein on said day, except that the demand for each month prior to the expiration of the first winter period shall be billed on the actual maximum daily demand established during the said month.

Commodity Charge:

In addition to the demand charge, the sum of one and one-half cents (1½c) per therm for the total number of

therms delivered by Seller to Buyer hereunder during such month.

If the total quantity of therms taken in any one year is less than the minimum requirement provided in Section 4 of Article II, then for the therms representing such deficiency Buyer shall pay at the same average rate per therm as it has paid for such gas as it has actually taken in said year.

3. For all gas delivered between the Date of Initial Delivery and the Effective Date, the price shall be at a flat rate of three cents (3c) per therm.

4. If, at the end of any calendar year during the term of this Agreement, it shall be found that by reason of any legislation enacted by the Federal Government, or regulations or orders of any of its governmental agencies, or, as hereinafter limited and defined, by reason of any state or local legislation, or regulations or orders of state or local governmental agencies, there has been a direct increase or decrease in the operating costs of Seller's transmission line, applicable and incidental to the gas delivered to Buyer hereunder, in respect only to the rates of wages, hours of labor, prices of materials and supplies and rates of taxation, as a result of which (computed as hereinafter set out) such operating costs have for such year just passed increased or diminished 20% or more from the costs experienced by Seller during the first twelve calendar months of operation after the Effective Date of this Agreement, then and in such event one-half of one-twelfth of the amount of such increase or decrease shall be added to or deducted from the charge for gas as provided in paragraph 2 of Article VII for each month of the ensuing year.

In computing the amount of any such increase or decrease, applicable to the gas sold to Buyer, the increases or decreases due to national legislation, regulations or orders shall be that proportion of the total amount which the gas sold to Buyer hereunder (other than to Special Industrial Customers) bears to the total gas transmitted by the Seller in its pipe line; and due to State of Michigan and local legislation, regulations or orders shall be that proportion of the total amount which the gas sold to

Buyer hereunder (other than to Special Industrial Customers) bears to the total gas transmitted and sold by Seller in said State and locality respectively.

In the event of the imposition of a production tax or other similar tax in Texas or Kansas or either of them, the increase or decrease due thereto shall be determined by first ascertaining the quantity of gas produced and/or purchased by Seller in such State and delivered to said pipe line and upon which such tax has been paid. Buyer shall be deemed to have received of such gas the same proportion thereof that the gas purchased by Buyer bears to the total gas transmitted by Seller in its pipe line. In general the applicable increase or decrease due to such State legislation, regulations or orders shall be that proportion of the increased cost which the quantity of gas sold to Buyer bears to the total quantity transmitted beyond the boundary line of such State.

Adjustments shall be made thereafter annually, at the close of each calendar year and in the same manner, but if at the end of any calendar year it be found that the increase or decrease for such calendar year, based upon the costs during the first twelve calendar months period of operation, and computed as herein provided, be less than 20%, then the charge for gas set forth in Section 2 of Article VII shall remain in force for the next succeeding calendar year.

In computing increase or decrease in taxation there shall not be considered changes in income taxes, excess profits taxes, capital stock taxes, franchise taxes or general property taxes, or such taxes as by plain provision or intent of the law are to be paid by the party taxed and not passed on to the consumer. Neither shall there be considered any increase or decrease in costs or regulation by any state or national commissions engaged purely in the regulation of utilities or carriers.

As soon as possible after the close of each calendar year Seller shall furnish Buyer with a computation showing the increase or decrease in such operating costs, and such amount as it claims the charges for gas should be increased or decreased for the ensuing year. For the purpose of determining the accuracy of such computation and

the facts upon which it is based, Buyer shall have the right at any reasonable time or times, by its duly authorized agents or accountants, but no more than once a year, to audit the pertinent records and books of account of Seller, and of any successor carrying out this Agreement.

5. As Seller's share in Buyer's cost of changing over its distribution system to adapt it to the distribution of natural gas or mixed gas, Seller will contribute to Buyer the sum of $220,000, by way of twelve equal monthly credits against the monthly bills to be rendered by Seller to Buyer pursuant to Article VIII of this Agreement, and during the first year immediately following the Effective Date.

Article VIII.

Billing

1. On or before the fifth day of each month, Buyer shall render to Seller a statement showing for the preceding calendar month the volume of natural gas shown by its meters to have been delivered by Buyer to each of its Special Industrial Customers.

2. Seller shall, on or before the tenth day of each calendar month, render to Buyer a statement showing the following:

(1) The total number of therms delivered by Seller to Buyer during the preceding calendar month; with complete computation showing procedure by which determined;

(2) The number of therms delivered by Buyer to each of the Special Industrial Customers during the preceding calendar month, in accordance with its aforesaid statement;

(3) The total number of therms delivered by Seller to Buyer for other than Special Industrial Customers during the preceding calendar month, in accordance with its aforesaid statements (1) and (2);

(4) The maximum daily demand applicable to the period; and

(5) The payment then due from Buyer to Seller determined as provided in this Agreement and in any other

Agreements between the parties relating to sales to Special Industrial Customers.

Such statements shall be accompanied by charts showing the basis on which the daily deliveries in therms were computed.

3. Each party shall have the right to examine at reasonable times the books, records and charts of the other party to the extent necessary to verify the accuracy of any statement, charge or computation made under or pursuant to any of the provisions of this Agreement.

Article IX.

Payments

1. Buyer agrees to pay Seller at its designated office on or before the twentieth day of each calendar month for natural gas delivered during the preceding month, according to the measurements, computations and prices herein provided and billed by Seller in the statement for said month, excepting that in the event that at any time Buyer shall dispute the correctness of any statement so rendered, then payment shall be made by Buyer for such amounts as it concedes to be correct and such amount as may be in dispute shall be settled by agreement by mutual submission to arbitration, or by court action. Any payment by Buyer shall not prejudice its right to adjustment of any bill to which it has taken exception or may subsequently take exception within a reasonable time after discovery of its right to such adjustment, but in any event within twelve (12) months from date of bill.

2. Should Buyer fail to pay the amount of any bill for gas rendered by Seller as herein provided, when such amount is due, interest thereon shall accrue at the rate of 6% per annum from the due date until the date of payment. If such failure to pay continues for 60 days after payment is due, Seller may, in addition to any other remedy it may have hereunder, suspend further delivery of gas until such amount is paid, provided, however, that if the Buyer shall, in good faith, either dispute the amount of any such bills or parts thereof, or present a counterclaim or offset against the same, and shall at any time

thereafter within thirty (30) days of a demand made by Seller, furnish a good and sufficient surety bond, in amount and with sureties to be approved by Seller, conditioned upon the payment of any amounts ultimately to be found due upon such bills after a final determination, which may be reached either by agreement, arbitration award or judgment of the courts as may be the case, then such bills shall not be deemed to be due within the meaning of this paragraph unless and until default be made in the conditions of such bond.

Except as Seller may question the ability of Buyer to respond in damages, it need not demand or require such bond and it may permit such disputed amounts to accumulate, but in the event Seller shall require Buyer to give bond then Seller shall be obligated to institute appropriate legal action to determine such dispute within one year after the date of the bills in question, or unless by agreement of the parties the matter be submitted to arbitration within such period.

3. If presentation of bill by Seller is delayed after the tenth day of the month, then the time of payment shall be extended correspondingly, unless the delay in the presentation of the bill is occasioned by the delay on the part of Buyer in furnishing a statement of the amount of natural gas delivered to Special Industrial Customers.

4 If it shall be found at any time that Buyer has been overcharged in any form whatsoever under the provisions hereof, and Buyer shall have actually paid the bills containing such overcharges, Seller shall refund such amount or amounts of overcharges within thirty (30) days of the determination thereof, with interest thereon at the rate of six per cent. (6%) per annum from the times respectively when such overcharges were paid until the date of refund, provided, however, that claim therefor shall have been made within sixty (60) days from the date of discovery of any such overcharges, but in any event within twelve (12) months of bill.

Article X.

Operations By Seller

1. Seller agrees that all construction of pipe lines shall be of adequate capacity for the delivery of gas to Buyer

in accordance with the requirements of this Agreement, but not to exceed a maximum amount of 90,000,000 cubic feet of gas per day or its equivalent nine hundred and twelve thousand six hundred therms.

2. In addition to the sources of supply, contracts for the purchase of gas, and transmission facilities which Seller represents it now holds or has available through subsidiaries, Seller agrees at all times to hold or have available through subsidiaries, sufficient gas acreage and gas production facilities to meet the requirements of this Agreement and its other obligations for the sale of gas and to have sufficient gas available and/or to hold long term gas purchase contracts with responsible parties calling for the sale and delivery to it of gas in sufficient quantities for the aforesaid purposes and to own or have available through subsidiaries or contract rights a system of pipe lines which shall be of adequate size for the transmission of gas from the various sources of supply to the Place of Delivery hereunder.

3. It is further understood and agreed that Buyer is a public utility company operating in the metropolitan area of Detroit, Michigan, and that, inasmuch as one of its most important obligations is to supply the City of Detroit and its environs with gas, Seller shall operate its pipe line, or cause the same to be operated in such manner as to assure, as nearly as is reasonably possible, continuous supply of gas in the quantity and of the quality required by this Agreement.

Article XI.

Buyer's Facilities

1. Buyer agrees to make such changes in its distribution system as may be necessary to enable it to distribute natural gas and agrees to proceed to make such changes in time to be prepared to receive deliveries of natural gas on the Effective Date.

2. Buyer agrees to give Seller notice at all times, as far in advance as operating conditions will permit, of the estimated daily, monthly and annual quantities of natural gas required hereunder and the anticipated peak hourly

demands. Buyer shall use its best judgment and experience in arriving at such estimates, but shall not be bound by the quantities thereof.

3. Buyer agrees that it will, subject to temporary or permanent outage resulting from either unavoidable deterioration or casualty, maintain in operation the storage holders which it now has, and will operate the same each day so as to assist in leveling the peak demands for natural gas to be delivered by Seller hereunder, subject, however, to the right of Buyer to keep at all times in its holders a reserve of gas of sufficient quantity to insure safe and adequate service to its customers as determined by Buyer; and Buyer will as nearly as practicable, with such storage capacity, take natural gas in equal and uniform hourly volumes. Subject to the aforesaid use by Buyer of holder capacity, Seller agrees to deliver to Buyer natural gas in accordance with the hourly and daily demands of the markets of Buyer up to but not to exceed a maximum daily demand of 90,000,000 cubic feet, or its equivalent nine hundred and twelve thousand six hundred therms.

4. Inasmuch as interruptions in the delivery of gas hereunder may, from time to time occur due to force majeure, as herein defined, or otherwise, and Buyer serving the large population and industries within the metropolitan area of Detroit, being in duty bound to maintain its present water gas generating plants in good operating condition to effect continuity of service during such periods of interrupted service on the part of Seller, and because, in order to furnish gas of substantially the heat equivalent of natural gas it will be necessary for Buyer to make large expenditures on such generating equipment, Seller recognizes and agrees that notwithstanding the covenant that Buyer will purchase from Seller all its natural gas requirements, Buyer may use its present generating plants from time to time to manufacture gas substantially equivalent in heat units to natural gas, to assist in leveling those peak demands which would otherwise increase the cost of gas under this Agreement, provided, however, that Buyer shall pay for the minimum requirements specified in Section 4 of Article II; pro-

vided, further, that nothing in this Section contained shall limit Seller's obligation to furnish Buyer's requirements for gas as elsewhere herein provided.

Article XII.

Place and Point of Delivery

The Place of Delivery for all gas to be delivered by Seller to Buyer hereunder shall be at Buyer's River Rouge plant, Greenfield and Allen Roads, in Melvindale, Michigan, except in the case of such Special Industrial Customers as shall be served directly from some other point on Seller's pipe line, as may be agreed on by the parties. The Point of Delivery shall be the outlet side of Seller's meters at the Place of Delivery and before passing through Buyer's regulators.

Article XIII.

Possession of Gas

1. As between the parties hereto, Seller shall be in control and possession of the gas deliverable hereunder and responsible for any damage or injury caused thereby until the same shall have been delivered to Buyer at the Point of Delivery, after which Buyer shall be deemed to be in exclusive control and possession thereof and responsible for any injury or damage caused thereby.

2. Each party shall indemnify and save harmless the other party on account of any and all damages, claims or actions arising out of the maintenance or operation of the property and/or equipment of the indemnifying party, the Point of Delivery of the gas as hereinbefore specified to be the point of division of responsibility between the parties.

Article XIV.

Pressure

Seller agrees to furnish gas hereunder at such pressures as Buyer may require, up to but not exceeding 100 pounds to the square inch gauge pressure, at the Point

of Delivery. Buyer agrees to install, operate and maintain at the Point of Delivery such regulating devices as may be necessary to regulate the pressure of the gas delivered hereunder. Seller agrees to use due care and diligence to furnish gas to Buyer at a uniform pressure.

Article XV.

Force Majeure

1. Neither party shall be liable in damages to the other for any act, omission or circumstance occasioned by or in consequence of any acts of God, strikes, lockouts, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of rulers and peoples, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, the binding order of any court or governmental authority which has been resisted in good faith by all reasonable legal means, and any other cause, whether of the kind herein enumerated, or otherwise, not within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome.

2. Such causes or contingencies affecting the performance of this Agreement by either party, however, shall not relieve it of liability in the event of its concurring negligence or in the event of its failure to use due diligence to remedy the situation and remove the cause in an adequate manner and with all reasonable dispatch, nor shall such causes or contingencies affecting the performance of this Agreement relieve either party from its obligations to make payments of amounts then due hereunder; nor shall such causes or contingencies relieve either party of liability unless such party shall give notice and full particulars of the same in writing or by telegraph to the other party as soon as possible after the occurrence relied on.

Article XVI.

Warranty of Title to Gas.

Seller agrees that it will and hereby does warrant generally the title to all gas delivered under this Agreement

and the right to sell the same and that such gas shall be free and clear from all liens and adverse claims and that it will indemnify Buyer and save it harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising from or out of adverse claims of any or all persons to said gas and/or to royalties, taxes, license fees or charges thereon, which are applicable before the title to the gas passes to Buyer or which may be levied and assessed upon the sale thereof to Buyer. In the event any adverse claim of any character whatsoever is asserted in respect of any of said gas, Buyer may retain the purchase price thereof up to the amount of such claim without interest until such claim has been finally determined, as security for the performance of Seller's obligations with respect to such claim under this Section, or until Seller shall have furnished bond to Buyer, in an amount and with sureties satisfactory to Buyer, conditioned for the protection of Buyer with respect to such claim.

Article XVII.

Patents

In case Buyer should wish to use gas purchased hereunder for reforming, Seller will undertake to secure for Buyer, without cost to Buyer, the right to use in the area now served by Buyer, necessary processes covered by patents which Seller can control.

Article XVIII.

Remedies

In the event that:

(a) Seller should be unable to, or fail, for a period longer than ninety (90) days to deliver gas of a standard and British thermal unit content as provided in this Agreement or which would meet the approval of any governmental agency having jurisdiction over Buyer, Buyer may by written notice to Seller cancel and terminate this

Agreement in five days, on condition that at least sixty (60) days before said notice be given, Buyer shall have notified Seller that the gas delivered, or sought to be delivered, is below standard or unacceptable to the regulatory body and that said condition has then pertained for a period of thirty (30) days.

In the event that:

(b) Seller should, for a period of five (5) consecutive days, fail to deliver to Buyer and material portion of the gas which under this Agreement it is bound to deliver, or

(c) there should be a deficiency in deliveries, caused by the failure or inability of Seller to deliver the quantity of gas which Buyer desires and is entitled to demand under this Agreement on any day of each seven (7) day period over a period of six (6) consecutive seven (7) days periods, commencing with the day on which such deficiency first occurred,

Buyer may, within two (2) weeks of the last day of any such periods provided in (b) and (c), by written notice cancel and terminate this Agreement, to be effective six (6) months from the delivery of such notice, on condition that Buyer shall have notified Seller in writing of each such daily deficiency or deficiencies within forty-eight (48) hours after the same shall have occurred.

If by reason of any of the causes enumerated in Section 1, Article XV, either party is effectively prevented or prohibited from further carrying out this Agreement, or if by reason of any order of court or governmental agency resisted by all reasonable legal means, Buyer is prevented from selling and distributing gas within the City of Detroit, then either party may by five (5) days written notice to the other party, cancel and terminate this Agreement, without liability of any kind from one to the other, excepting for such transactions and dealings as were had and completed prior to the effective date of such cancellation.

In the event that Buyer shall fail to pay any bill rendered it by Seller for gas delivered under this Agreement within sixty (60) days after the same became due, Seller may, in addition to all other remedies which it may have at law in addition to those provided herein, at any time thereafter by written notice to Buyer, cancel and terminate this Agreement, to be effective six (6) months from the delivery of such notice, provided that this remedy shall not be available or effective in case of default in the payment of disputed bills as elsewhere provided herein.

2. Any cancellation of this Agreement pursuant to the provisions of this Article XVIII shall be without prejudice to the right of Seller to collect any amounts then due it for gas delivered prior to the effective date of the cancellation, subject to any proper counter-claims or set-offs of Buyer, and without waiver of any remedy to which the party not in default may be entitled for violation of this Agreement.

3. The remedies herein specifically provided for are cumulative, and in addition to all rights and remedies for specific performance or for damages, including loss of return and profits, or otherwise, which either party may have at law or in equity for breach by the other party of any agreement, condition or covenant contained herein, which rights and remedies neither Buyer nor Seller shall in anywise be deemed to have waived either by the expressed provisions for the foregoing remedies or by the exercise of any thereof; provided, however, that in the event that this Agreement be cancelled or terminated by reason of any of the causes enumerated in Section 1 of Article XV hereof, or by reason of any order of court or governmental agency prohibiting the Buyer from distributing natural gas within the City of Detroit which has been resisted by all reasonable legal means, there shall be no liability upon the part of either party to the other, excepting such liability as remains unsettled between the parties arising from the sale of gas and such transactions as were had and completed between the parties prior to cancellation.

4. If Seller shall at any time fail to deliver gas in volumes and/or at such pressures as Buyer may require

up to the limits otherwise herein provided, Seller shall, unless relieved by the terms of Article XV hereof, reimburse and indemnify Buyer for any expenses, loss or damage which it may sustain by reason of such failure; including the expense of putting into operation any gas manufacturing equipment, and/or obtaining manufactured gas or natural gas to remedy such deficiency.

Article XIX.

Miscellaneous

1. There shall be no modification of the terms and provisions hereof except by the formal execution of supplementary written contracts.

2. No waiver by either party of any one or more defaults by the other in the performance of any provisions of this Agreement shall operate or be construed as a waiver of any future default or defaults, whether of a like or of a different character.

3. Seller may assign its rights and obligations hereunder to a corporation to be formed for the purpose of carrying out this Agreement. Either Seller or Buyer may assign the rights and obligations of this Agreement to a corporation which shall receive the assets of such assignor and obligate itself to carry out the provisions hereof binding on such assignor, in which event the assignor shall be released hereunder, but otherwise neither party shall assign this Agreement or any of its rights hereunder unless it shall first have obtained the consent thereto of the other party.

4. Any notice, request, demand, statement or bill provided for in this Agreement shall be in writing and shall be duly delivered when mailed by registered mail to the Post Office address of either of the parties hereto, as the case may be, as follows:

Seller: Panhandle Eastern Pipe Line Company, 101 West 11th Street, Kansas City, Mo.

Buyer: Detroit City Gas Company, 415 Clifford Street, Detroit, Michigan.

or at such other address as either party shall designate for the purpose.

5. This Agreement shall be binding on any company which shall succeed by purchase, merger or consolidation to the properties of the Seller or Buyer, as the case may be.

6. Buyer will adopt and use schedules and forms of rates which will in its judgment tend to stimulate sales of natural gas for domestic, industrial and commercial purposes and for house heating. Buyer will make every reasonable effort to increase and build up the sales of natural gas throughout its gas distribution system and Seller will cooperate with Buyer in accomplishing this result. Buyer agrees to make such reasonable extensions to its distribution system as would be susceptible of earning a reasonable return on the investment.

In Witness Whereof, the parties hereto have caused this Agreement to be signed by their respective Presidents or Vice-Presidents thereunto duly authorized, and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries, the day and year first above written.

PANHANDLE EASTERN PIPE LINE COMPANY,
By B. R. Bay, President.

(Corporate Seal)

Attest: N. F. Paxton, Assistant Secretary.

DETROIT CITY GAS COMPANY,
By Wm. G. Woolfolk, President.

(Corporate Seal)

Attest Chas. S. Ritter, Secretary.

Approved as to form: James O. Murfin, Park Chamberlain.

(Exhibit 264)

Supplement 2 of Schedule 12.

Supplemental Gas Contract

Between

Panhandle Eastern Pipe Line Company

and

Detroit City Gas Company

Dated June 2, 1936.

Supplemental Gas Contract

Panhandle Eastern Pipe Line Company

and

Detroit City Gas Company.

Agreement made this 2nd day of June, 1936, by and between Panhandle Eastern Pipe Line Company, a corporation of the State of Delaware (hereinafter called Seller), party of the first part, and Detroit City Gas Company, a corporation of the State of Michigan (hereinafter called Buyer), party of the second part,

Whereas, under date of August 31, 1935, the parties entered into a contract (hereinafter called the Gas Contract) whereby, among other things, Seller agreed to sell and deliver to Buyer and Buyer agreed to buy and take from Seller all of the natural gas requirements of Buyer for distribution and sale to any and all of its present and future customers and for its own use, within the limits therein specified;

Whereas Seller is making large investments in extensions, additions and reinforcements of its existing pipeline system in order to enable it to comply with and meet the requirements of the Gas Contract, and desires Buyer to create as rapidly as possible a market for natural gas larger than that which now exists;

Whereas Buyer now represents that, under the conditions hereinafter provided, it will be able to obtain within the near future a substantial number of additional

househeating customers and thereby increase its natural gas requirements under the Gas Contract, but that the obtaining of such househeating customers will involve it in considerable expense;

Whereas Seller desires Buyer to increase its natural gas requirements under the Gas Contract through the acquisition of additional househeating customers;

Whereas Buyer contemplates maintaining and operating the storage holders and the water gas generating plants which it now has to assist in leveling peak demands for natural gas to be delivered by Seller, as set forth in Sections 3 and 4 of Article XI of the Gas Contract; and

Whereas, upon condition that Buyer shall sell and distribute gas having a heating value approximately equal to the heating value of the natural gas delivered by Seller to Buyer, the parties hereto have concluded to enter into this Supplemental Contract;

Now, Therefore, in consideration of the mutual covenants and agreements of the parties as herein set forth, the parties hereto covenant and agree as follows:

Article I

Definitions

Except where the context otherwise indicates another or different meaning or intent, the following terms are intended and used and shall be construed to have meaning as follows:

1. The term "Househeating Customer" shall mean a customer of Buyer who uses no other kind of fuel than gas for his space heating purposes and who purchases gas from Buyer under Buyer's rate schedule applicable to such customers.

2. The term "Househeating Purposes" shall apply to that portion of the gas sold by Buyer to its Househeating

Customers which shall be used by them for space heating purposes.

3. The term "Average Number of Househeating Customers" served during any calendar month shall mean one-half of the total number of Househeating Customers actually receiving househeating service on the last day of the calendar month preceding the calendar month in question plus one-half of the total number of Househeating Customers actually receiving househeating service on the last day of the calendar month in question.

4. The term "Winter Period" shall mean a period consisting of the four consecutive months of December, January, February and March.

5. The term "Total Measured Deliveries" for any given day shall mean the total number of therms of natural gas delivered by Seller to Buyer on that day at the Point of Delivery specified in the Gas Contract, exclusive of gas sold by Seller to Buyer and resold to Special Industrial Customers.

6. The term "Degree Day Deficiency" for any day shall mean the number of degrees the mean outside temperature for that day is below 65° Fahrenheit. The term "Degree Day Deficiency" for any other period shall mean the sum of the Degree Day Deficiencies for that period. The outside temperature shall be the 24-hour mean of outside temperature reported by the United States Weather Bureau at Detroit, Michigan.

7. The term "Factor K" shall mean the number of therms of gas which the average Househeating Customer is deemed to take for Househeating Purposes per unit of Degree Day Deficiency and shall be fixed for the purposes of this contract at .31 until changed as hereinafter provided.

8. The term "Househeating Daily Delivery of Buyer" shall mean the number of therms of gas calculated to have been sold by Buyer for Househeating Purposes on any given day during a month, determined by multiplying the

Degree Day Deficiency for that day by the Factor K, and multiplying this product by the Average Number of Househeating Customers served during that month, determined as described in Section 3 of this Article I.

In order to limit the extent of the application of the special rate for Househeating Purposes herein provided for, it is agreed that the Average Number of Househeating Customers used as a factor for the purpose of the computations to be made under this Section shall not exceed 6,000 in connection with each of the months prior to May, 1937, 10,000 in connection with each of the months after April, 1937 and prior to May, 1938, 13,000 in connection with each of the months after April, 1938 and prior to May, 1939, 16,000 in connection with each of the months after April, 1939 and prior to May, 1940 and shall never exceed 20,000, even if the actual Average Number of Househeating Customers in any month is greater than 20,000.

9. The term "Base Load" for any given day shall mean (a) the total number of therms of gas (other than gas sold to Special Industrial Customers) sent out by Buyer on that day minus the Househeating Daily Delivery of Buyer for that day or (b) the Total Measured Deliveries for that day, whichever shall be less.

10. The term "Househeating Daily Delivery of Seller" shall mean the number of therms, if any, by which the Total Measured Deliveries for any given day exceed the Base Load for that day.

11. The term "Base Load Maximum Demand" shall mean the Base Load delivered on that day of the preceding Winter Period on which the delivery of Base Load was a maximum.

12. Prior to the end of the first Winter Period following the "Effective Date" of the Gas Contract, the "Base Load Maximum Demand" shall mean the Base Load delivery on that day on which the delivery of Base Load was a maximum.

Article II

Billing Basis

1. From the "Effective Date," as defined in the Gas Contract, until the date of termination of this Supplemental Gas Contract, as hereinafter set forth, the Demand Charge for each month, in lieu of the Demand Charge set forth in Section 2 of Article VII of the Gas Contract, shall be an amount equal to 38c multiplied by the sum of (a) the established Base Load Maximum Demand, and (b) twice the average Househeating Daily Delivery of Seller for the current billing month. Monthly payments by Buyer to Seller shall be made on the basis of the modified Demand Charge hereinabove provided and the Commodity Charge as set forth in the Gas Contract; provided, however, that if for any twelve-months' period ending on March 31 in any year (or for a period of less than 12 months commencing on the Effective Date of the Gas Contract and ending on March 31, 1937), the total payments due to Seller for natural gas, other than that purchased for resale to Special Industrial Customers, calculated on the foregoing basis shall exceed the total amount that would have been payable for such period if calculated pursuant to the provisions of the Gas Contract unaffected by this Supplemental Gas Contract, then Seller shall refund to Buyer an amount equal to such excess by credit against the monthly payment due in the succeeding month.

2. On or before June 1st of each year during the life of this Supplemental Gas Contract, a redetermination of the accuracy of Factor K shall be made by two engineers or representatives, one designated by each of the parties hereto. Such redetermination shall be made in the light of the data which Buyer shall procure as to the average number of therms of gas consumed by Househeating Customers per unit of Degree Day Deficiency in the territory served by Buyer during the heating season just ended and during prior heating seasons. If such redetermination discloses that the Factor K is inaccurate, said engineers or representatives shall fix and agree upon the correct value of the Factor to be applied during the ensuing heating season, and such new value shall be binding on both parties during the ensuing heating season, and thereafter until changed as herein provided.

In the event that the said engineers or representatives shall fail to agree, they shall select an impartial engineer whose decision on the question or questions involved shall be final and shall be binding on both parties during the ensuing heating season and thereafter until changed as herein provided.

For the purpose of providing actual operating data by means of which the accuracy of Factor K may be redetermined, Buyer agrees to install in the houses of at least one per cent of its Househeating Customers separate meters for the determination of the amount of gas sold to such customers for Househeating Purposes. Such customers shall be selected in such manner as to give a representative cross section of the consumption of Buyer's Househeating Customers.

4. On or before the fifth day of each month, Buyer shall render to Seller a statement showing for the preceding calendar month all data (other than the total daily and monthly deliveries of natural gas by Seller to Buyer) necessary to enable Seller to make the computations called for by the provisions of this Article II.

5. Representatives of Seller shall have the right at all reasonable times to inspect, audit and check the records of Buyer for the purpose of verifying or correcting any of the statements rendered to Seller by Buyer pursuant to the provisions of Section 4 of this Article II.

Article III

Buyer's Covenant

1. Buyer agrees promptly to inaugurate a campaign and deligently to continue its efforts to induce customers in the territory served by Buyer to install the necessary equipment and to use natural gas for heating their houses.

Article IV

New Special Househeating Customers

1. For Househeating Customers obtained by Buyer, whose premises are heated solely by gas through the means of a central heating system (hereinafter in this

Article IV referred to as "Special Househeating Customers") in addition to those Buyer has obtained prior to May 1, 1936, Seller will pay to Buyer, within the dates and limits hereinafter specified, the amounts set forth in the following table:

Obtained during period			Total payment per new customer	
Commencing	Ending			
May 1, 1936	April 30 1937	$10 00	Not exceeding	5,000 customers
" " 1937	" " 1938	8 00	" "	4,000 "
" " 1938	" " 1939	6 00	" "	3,000 "
" " 1939	" " 1940	4 00	" "	3,000 "
" " 1940	" " 1941	2 00	" "	3,000 "

2. As soon as practicable after the execution of this Supplemental Gas Contract, Buyer shall furnish to Seller a statement of the number of its Special Househeating Customers on May 1, 1936. On or before the 10th day of the month following the rendition of the aforesaid statement, and on or before the 10th day of each calendar month thereafter, to and including the month of May, 1941, Buyer shall furnish to Seller a statement of the total number of new Special Househeating Customers obtained subsequent to the 1st day of May next preceding the month for which such statement is rendered and actually connected to its distribution system on the last day of the preceding calendar month.

3. The payments above specified shall be made per new Special Househeating Customer, by credit against the monthly statement rendered in August following the close of the yearly period in question for natural gas sold by Seller to Buyer under this Agreement. No payments shall be made pursuant to this Section 3 in respect of new Special Househeating Customers obtained after April 30, 1941.

Should Buyer obtain fewer new Special Househeating Customers in any year than the maximum for which Buyer would be entitled for such year to receive the payments above specified, the number for which Buyer would be entitled for the succeeding year to receive the payments for the succeeding year shall be increased by the arithmetic deficit of the previous year. Except as the maximum number of new Special Househeating Customers for which

Buyer would be entitled for any year to receive the payments above specified may be increased as provided in this paragraph, no payments shall be made at any time on account of new Special Househeating Customers obtained by Buyer in any year in excess of the maximum number set forth in the foregoing table.

4. Payments in any year shall be based on the monthly average of the monthly totals of the number of new Special Househeating Customers to whom such payments are applicable. Said average shall be determined from Buyer's records and the monthly statements referred to in Section 2 of this Article IV.

5. Representatives of Seller shall have the right at all reasonable times to inspect, audit and check the records of Buyer for the purpose of verifying or correcting statements of Buyer concerning number of new Special Househeating Customers secured or actually served during any period in question.

Article V

Termination

If Buyer shall fail to sell and distribute gas having a heating value approximately equal to the heating value of the natural gas delivered by Seller to Buyer under the Gas Contract, this Supplemental Gas Contract shall terminate and be automatically cancelled and thereafter all payments for such natural gas shall be made pursuant to the provisions of Article VII of the gas contract. In no event shall the life of this Supplemental Gas Contract exceed the life of the Gas Contract.

Article VI

Miscellaneous Provisions

1. Seller shall not be required, by reason of anything contained herein, to supply in the aggregate hereunder and under the Gas Contract, more than 90,000,000 cubic feet or its equivalent, 912,600 therms, of natural gas in any one day.

2. All of the provisions of the Gas Contract, except in so far as they are inconsistent herewith, shall be applicable

to natural gas sold and purchased for Househeating Purposes hereunder.

In Witness Whereof, the parties hereto have caused this Agreement to be signed by their respective Presidents or Vice-Presidents thereunto duly authorized and their respective corporate seals to be hereto affixed and attested by their respective Secretaries or Assistant Secretaries the day and year first above written.

PANHANDLE EASTERN PIPE LINE COMPANY,
By James L. Harrop,
Vice-President

(Corporate Seal)

Attest:

Leith V. Watkins,
Secretary

DETROIT CITY GAS COMPANY,
By Wm. G. Woolfolk,
President

(Corporate Seal)

Attest:

Chas. S. Ritter,
Secretary

FEDERAL TRADE COMMISSION EXHIBIT NO. 366 (FOR IDENTIFICATION)
DATE IDENTIFIED 4/23/42

FINANCIAL STATEMENT
FOR YEAR ENDING
DECEMBER 31 1941
TAX DEPT

366
2.66
4/23/42

[fol. 16644].

Columbia System

Financial Statement

Of

Indiana Gas Distribution Corporation

Columbus Group

For period ended December 31, 1941.

Signed—Signature Unreadable,

Treasurer.

Date January 20, 1942.

(Exhibit 266.)

1 Assets

Columbia System
Indiana Gas Distribution Corporation
Balance Sheet as of December 31, 1941

Acc't No.		Summary	Detail on Page		Increase Over Previous Month	Increase Since January First
1		Fixed Capital	x x	197 956 95	940 28	7 050 47
2		Investments In Subsidiary Companies	x x	—	—	—
3		Other Investments	x x	—	—	—
4		Current And Working Assets	x x	39 790 91	+10 303 93	+5 734 31
5		Inter-Company Accounts	x x	422 35	56 95	30 51
6		Special Deposits And Funds	x x	—	—	—
7		Deferred Debits	x x	7 41	7 41	7 41
8		Clearing And Contra Accounts	x x	—	—	—
9						
10		Total Assets		238 177 62	+9 299 29	1 354 08
11						
12		Detail Of Assets				
13		Fixed Capital				
14	1	Property, Plant and Equipment		197 956 95	5 789 35	7 050 47
15	2	Construction Work in Progress	x x	—	+4 849 07	—
16						
17						
18		Total Fixed Capital		197 956 95	940 28	7 050 47
19		Investments In Associated Companies				
20	3	Capital Stocks	20			
21	4	Bonds	20			
22	5	Notes Receivable	20			
23	6	Income Demand Notes Receivable	20			
24	7	Loans Receivable	20			
25	8	Income Demand Notes Receivable	20			
26						
27		Total Investments In Subsidiary Co's.		—	—	—
28		Other Investments				
29		Columbia Oil & Gasoline Corporation				
30	10	Capital Stock — Preferred	20			
31	11	Bonds	20			
32		Other Companies				
33	12	Capital Stocks	20			
34	13	Bonds	20			
35	14	Miscellaneous	20			
36	187	Less: Reserve for Investment Securities				
37		Total Other Companies				
38		Total Other Investments		—	—	—
39		Current And Working Assets				
40	20	Cash	x x	11 581 26	+8 676 53	+983 39
41	21	Working Funds	x x	200 00	—	—
42	23	Temporary Cash Investments	20	—	—	—
43	24	Notes Receivable	20	—	—	—
44	25	Accounts Receivable — Utility Service	20-B	29 548 94	+1 518 10	+4 038 16
45	26	" " — Appliance — Current Acc'ts	20-B	387 12	(11 47)	+385 99
46	27	" " — Appliance — Install't Acc'ts	20-B	382 62	(—)	+21 97
47	28	" " — Other	20-B	1 75	+49 62	+99 21
48		Total Notes and Accounts Receivable		30 320 43	+1 556 25	+4 545 33
49	188	Less: Reserve for Uncollectible Accounts	21-B	3 936 36	1 42	+50 65
50		Net Notes and Accounts Receivable		26 384 07	+1 557 67	+4 494 68
51	31	Interest Receivable	x x	—	—	—
52	32	Dividends Receivable	x x	—	—	—
53	33	Supplies — General	21-A	1 176 93	+199 42	20 82
54	34	Supplies — Fuel	x x	—	—	—
55	35	Merchandise Stock	x x	164 55	20	+291 95

					Month	First
1		Fixed Capital	x x	197 956 95	940 28	7 050 47
2		Investments In Subsidiary Companies	x x	—	—	—
3		Other Investments	x x	—	—	—
4		Current And Working Assets	x x	39 790 91	+10 303 93	+5 734 31
5		Inter-Company Accounts	x x	422 35	56 95	30 51
6		Special Deposits And Funds	x x	—	—	—
7		Deferred Debits	x x	7 41	7 41	7 41
8		Clearing And Contra Accounts	x x	—	—	—
9						
10		Total Assets		238 177 62	+9 299 29	1 354 08
11						
12		**Detail Of Assets**				
13		Fixed Capital				
14	1	Property, Plant and Equipment		197 956 95	5 789 35	7 050 47
15	2	Construction Work in Progress	x x	—	+4 849 07	—
16						
17						
18		Total Fixed Capital		197 956 95	940 28	7 050 47
19		Investments In Associated Companies				
20	3	Capital Stocks	20			
21	4	Bonds	20			
22	5	Notes Receivable	20			
23	6	Income Demand Notes Receivable	20			
24	7	Loans Receivable	20			
25	8	Income Demand Notes Receivable	20			
26						
27		Total Investments In Subsidiary Co's.		—	—	—
28		Other Investments				
29		Columbia Oil & Gasoline Corporation				
30	10	Capital Stock — Preferred	20			
31	11	Bonds	20			
32		Other Companies				
33	12	Capital Stocks	20			
34	13	Bonds	20			
35	14	Miscellaneous	20			
36	187	Less: Reserve for Investment Securities				
37		Total Other Companies				
38		Total Other Investments		—	—	—
39		Current And Working Assets				
40	20	Cash	x x	11 581 26	+8 676 53	+983 39
41	21	Working Funds	x x	200 00	—	—
42	23	Temporary Cash Investments	20	—	—	—
43	24	Notes Receivable	20	—	—	—
44	25	Accounts Receivable — Utility Service	20-B	29 548 94	+1 518 10	+4 038 16
45	26	" " — Appliance — Current Acc'ts	20-B	387 12	(11 47)	+385 99
46	27	" " — Appliance — Install't Acc'ts	20-B	382 62	(—)	+21 97
47	28	" " — Other	20-B	1 75	+49 62	+99 21
48		Total Notes and Accounts Receivable		30 320 43	+1 556 25	+4 545 33
49	188	Less: Reserve for Uncollectible Accounts	21-B	3 936 36	1 42	+50 65
50		Net Notes and Accounts Receivable		26 384 07	+1 557 67	+4 494 68
51	31	Interest Receivable	x x	—	—	—
52	32	Dividends Receivable	x x	—	—	—
53	33	Supplies — General	21-A	1 176 93	+199 12	20 82
54	34	Supplies — Fuel	x x	—	—	—
55	35	Merchandise Stock	x x	164 66	20	+291 95
56	36	Gas Stored	20	—	—	—
57	37	Miscellaneous Inventories	x x	—	—	—
58	38	Prepaid Accounts	21-A	283 99	129 49	14 89
59	39	Other Current and Accrued Assets	21	—	—	—
60						
61						
62						
63		Total Current And Working Assets		39 790 91	+10 303 93	+5 734 31
		+Indicates red figures.		(A)	(B)	(C)

6931

(Exhibit 266.)

Columbia System
Indiana Gas Distribution Corporation

Assets 1-A
Balance Sheet as of December 31, 1941

	Acc't No.	Detail of Assets (Continued)	Detail on Page		Increase Over Previous Month	Increase Since January First
64		Inter-Company Accounts				
65	55	Accounts Receivable — This Group	20	—	*360 00	*375 96
66	56	" " — Other Groups	20-A	422 35	416 95	406 47
67	57	Dividends Receivable	20	—	—	—
68	58	Interest Receivable	20	—	—	—
69						
70						
71		Total Inter-Company Accounts		422 35	56 95	30 51
72		Special Deposits And Funds				
73	71	Impounded Cash	20			
74	72	Employees Welfare Fund.	20			
75	75	Miscellaneous	20			
76						
77						
78						
79		Total Special Deposits And Funds		—	—	—
80		Deferred Debits				
81	81	Unamortized Debt Discount and Expense	21	—	—	—
82	82	Extraordinary Property Losses	21	—	—	—
83	83	Preliminary Survey and Investigation Charges	21	—	—	—
84	84	Other Deferred Debits	21-A	7 41	7 41	7 41
85						
86						
87						
88						
89						
90		Total Deferred Debits		7 41	7 41	7 41
91		Clearing And Contra Accounts				
92	85	Maintenance and Jobbing Work in Progress		x x		
93	88	Shop Expense-Clearing		x x		
94	89	Other Clearing Accounts		x x		
95	90	Inter-Co. Contingent Interest Receivable (Contra Acc't)				
96	91	Inter-Co. Contingent Interest Expense (Contra Acc't)		x x		
97	92	Contingent Assets (Contra Account)		x x		
98	93	Non-Productive Well Drilling Expense		x x		
99	94-5	Special Deposits-Interest & Dividends (Contra Acc't)				
100						
101						
102						
103						
104						
105						
106		Total Clearing And Contra Acc'ts		—	—	—
107		Total Assets		238 177 62	*9 299 29	1 354 08
				(A)	(B)	(C)

*Indicates red figures.

(Exhibit 266)
Columbia System
Indiana Gas Distribution Corporation
Liabilities 2.
Balance Sheet as of December 31, 1941

Corrected Copy

Acc't No.	Summary	Detail on Page		Increase Over Previous Month	Since January First	
	Long Term Debt (Except Current Maturities)	x x	—	—	—	1
	Long Term Debt-Inter-Company	x x	126 000 00	—	—	2
	Current And Accrued Liabilities	x x	20 785 27	1 441 47	5 404 61	3
	Inter-Company Accounts	x x	42 606 05	+3 156 14	+4 812 61	4
	Deferred Credits	x x	34 75	+2 62	8 70	5
	Clearing And Contra Accounts	x x	438 53	16 26	467 34	6
	Reserves	x x	40 336 45	461 19	+3 841 67	7
	Capital And Surplus	x x	7 976 57	+8 059 45	4 127 71	8
						9
	Total Liabilities		238 177 62	+9 299 29	1 354 08	10
						11
	Detail Of Liabilities					12
	Long Term Debt (Except Current Maturities)					13
110	Bonds	20				14
111	Miscellaneous	20				15
	Total Long Term Debt		—	—	—	16
	Long Term Debt-Inter-Company					17
115	Notes Payable	20-A	126 000 00	—	—	18
116	Income Demand Notes Payable	20	—	—	—	19
117	Loans Payable	20	—	—	—	20
118	Income Demand Loans Payable	20	—	—	—	21
						22
						23
	Total Long Term Debt-Inter-Company		126 000 00	—	—	24
	Current And Accrued Liabilities					25
120	Notes Payable	20	—	—	—	26
121	Accounts Payable	x x	1 515 80	447 82	+86 99	27
122	Compensation Awards Payable	20	—	—	—	28
123	Long Term Debt-Current Maturities	20	—	—	—	29
124	Dividends Declared	x x	—	—	—	30
125	Customers Deposits	x x	1 495 00	10 00	520 00	31
126	Other Current Liabilities	x x	37 87	22 47	9 30	32
127	Accrued Taxes	21-A	17 609 23	954 29	4 903 24	33
128	Accrued Interest-Customers' Deposits	21-A	127 37	6 89	49 06	34
129	" " -Long Term Debt	21	—	—	—	35
130	" " -Other	21	—	—	—	36
131	Accrued Dividends	x x	—	—	—	37
132	Other Accrued Liabilities	21	—	—	—	38
						39
						40
						41
						42
						43
	Total Current And Accrued Liabilities		20 785 27	1 441 47	5 404 61	44
	Inter-Company Accounts					45
155	Accounts Payable-This Group	20-A	437 82	+274 56	+297 55	46
156	" " -Other Groups	20-A	42 168 23	+1 471 58	+4 515 06	47
157	Dividends Payable	20	—	—	—	48
158	Interest Payable	20	—	+1 410 00	—	49
						50
						51
	Total Inter-Company Accounts		42 606 05	+3 156 14	+4 812 61	52
	Deferred Credits					53
	Customers' Undertaking Pending Rate Decision	21				54

	Current And Accrued Liabilities	x x				
	Inter-Company Accounts	x x	42 606 05	+3 156 14	+4 812 61	4
	Deferred Credits	x x	34 75	+2 62	8 70	5
	Clearing And Contra Accounts	x x	438 53	16 26	467 34	6
	Reserves	x x	40 336 45	461 19	+3 841 67	7
	Capital And Surplus	x x	7 976 57	+8 059 45	4 127 71	8
						9
	Total Liabilities		238 177 62	+9 299 29	1 354 08	10
						11
	Detail Of Liabilities					12
	Long Term Debt (Except Current Maturities)					13
110	Bonds	20				14
111	Miscellaneous	20				15
	Total Long Term Debt		—	—	—	16
	Long Term Debt-Inter-Company					17
115	Notes Payable	20-A	126 000 00	—	—	18
116	Income Demand Notes Payable	20	—	—	—	19
117	Loans Payable	20	—	—	—	20
118	Income Demand Loans Payable	20	—	—	—	21
						22
						23
	Total Long Term Debt-Inter-Company		126 000 00	—	—	24
	Current And Accrued Liabilities					25
120	Notes Payable	20	—	—	—	26
121	Accounts Payable	x x	1 515 80	447 82	+86 99	27
122	Compensation Awards Payable	20	—	—	—	28
123	Long Term Debt-Current Maturities	20	—	—	—	29
124	Dividends Declared	x x	—	—	—	30
125	Customers Deposits	x x	1 495 00	10 00	530 00	31
126	Other Current Liabilities	x x	37 87	22 47	9 30	32
127	Accrued Taxes	21-A	17 609 23	954 29	4 903 24	33
128	Accrued Interest-Customers' Deposits	21-A	127 37	6 89	49 06	34
129	" " -Long Term Debt	21	—	—	—	35
130	" " -Other	21	—	—	—	36
131	Accrued Dividends	x x	—	—	—	37
132	Other Accrued Liabilities	21	—	—	—	38
						39
						40
						41
						42
						43
	Total Current And Accrued Liabilities		20 785 27	1 441 47	5 404 61	44
	Inter-Company Accounts					45
155	Accounts Payable-This Group	20-A	437 82	+274 56	+297 55	46
156	" " -Other Groups	20-A	42 168 23	+1 471 58	+4 515 06	47
157	Dividends Payable	20	—	—	—	48
158	Interest Payable	20	—	+1 410 00	—	49
						50
						51
	Total Inter-Company Accounts		42 606 05	+3 156 14	+4 812 61	52
	Deferred Credits					53
160	Contingent Earnings Pending Rate Decision	21	—	—	—	54
79	Less: Income Tax on Contingent Earnings	21	—	—	—	55
	Net Contingent Earnings		—	—	—	56
161	Customers Advances for Construction	21	—	—	—	57
162	Unclaimed Customers' Deposits Including Interest	21	—	—	—	58
163	Other Deferred Credits	21-B	34 75	+2 62	8 70	59
						60
						61
						62
	Total Deferred Credits		34 75	+262	8 70	63
			(A)	(B)	(C)	

There are no known Unrecorded Contingent Liabilities.
+Indicates red figures.

Columbia System
Indiana Gas Distribution Corporation

2-A Liabilities
*Corrected Copy

Balance Sheet as of December 31, 1941

Acc't No.	Detail Of Liabilities (Continued)	Detail on Page		Increase Over Previous Month	Increase Since January First	
	Clearing And Contra Accounts					64
86	Transportation Expenses — Clearing	21-B	438 53	16 26	467 34	65
166	Other Clearing Accounts	21	—	—	—	66
167	Contingent Liabilities (Contra Account)	21	—	—	—	67
168	Unpres. Coupons & Unclaimed Dividends (Contra Acc't)	21	—	—	—	68
169	Inter-Co. Contingent Interest Payable (Contra Acc't)	21	—	—	—	69
170	Inter-Co. Contingent Interest Income (Contra Acc't)	21	—	—	—	70
						71
	Total Clearing And Contra Acc'ts		438 53	16 26	467 34	72
	Reserves And Special Surplus					73
180	Retirement and Depletion	21-B	27 069 92	77 18	3 931 23	74
97	Less: Retirement Work in Progress	21-B	—	219 61	—	75
	Net Reserve for Retirement and Depletion		27 069 92	*142 43	3 931 23	76
181	Injuries and Damages	21-B	8 977 78	87 00	1 000 00	77
182	Non-Productive Well Drilling	21	—	—	—	78
183	Contributions In Aid of Construction	21-B	3 600 00	65 00	*170 00	79
184	Columbia System Protection Fund	21	—	—	—	80
185	Contingencies	21-B	688 75	451 62	688 75	81
186	Other Reserves	21	—	—	—	82
190	Special Capital Surplus	18-A	—	—	—	83
191 & 2	Surplus Prior to January 1, 1938	18-A	—	—	*9 291 65	84
						85
	Total Reserves And Special Surplus		40 336 45	461 19	*3 841 67	86
	Capital And Surplus Since Dec. 31, 1937					87
101	20 Shares Common (No Par)		1 000 00	—	—	88
	Less Shares in Treasury	x x				89
103	Shs. Pref. (%) (Par)					90
	Less Shares in Treasury	x x				91
	Shs. Pref. (%) (Par)					92
	Less Shares in Treasury	x x				93
	Shs. Cum. Pref. (%) (Par)					94
	Less Shares in Treasury	x x				95
	Authorized 10,000 Shares Common					96
	Unissued 9,980		—			97
						98
	Total Capital Stocks		1 000 00	—	—	99
193	Capital Surplus Since December 31, 1937	18-A	—	—	—	100
194	Earned Surplus Since December 31, 1937	18	6 976 57	*8 059 45	4 127 71	101
						102
						103
						104
	Total Surplus	x x	6 976 57	*8 059 45	4 127 71	105
	Total Capital And Surplus Since Dec. 31, 1937	x x	7 976 57	*8 059 45	4 127 71	106
	Total Liabilities		238 177 62	*9 299 29	1 354 08	107
	*Indicates red figures.		(A)	(B)	(C)	

[fol. 16649]

Exhibit 266.
Columbia System
Indiana Gas Distribution Corporation

Income Statement 3

Month of December — 1941

	Detail on Page	Amount	Percent of Gross This Year	Percent of Gross Previous Year	Increase Over Previous Year Amount	Increase Over Previous Year Percent	
			Month of December				1
							2
Gross Revenues							3
Gas	4A	34 138 67	100 1	99 6	+3 732 40	+9 9	4
Electric	5A	—	—	—	—	—	5
Railway and Bus	6 & 7	—	—	—	—	—	6
Water and Heating	8A	—	—	—	—	—	7
Non-Utility	9	+28 29	+ 1	4	+186 60	-+117 9	8
Total Revenues		34 110 38	100 0	100 0	+3 919 00	+10 3	9
							10
Operating Expenses							11
Operation	x x	28 696 62	84 1	86 1	+4 063 98	+12 4	12
Maintenance	x x	53 58	2	5	+122 26	+69 5	13
Provision for Retirements and Depletion	x x	340 42	1 0	8	21 75	6 8	14
Taxes	24-B	2 641 14	7 7	5 7	481 03	22 3	15
Total Expenses		31 731 76	93 0	93 1	+3 683 46	+10 4	16
Net Operating Revenue		2 378 62	7 0	6 9	+235 54	+9 0	17
Other Income	16	2 62	—	—	41	18 6	18
Gross Corporate Income		2 381 24	7 0	6 9	+235 13	+9 0	19
Other Deductions	17	718 43	2 1	1 9	+2 45	+ 3	20
Less: Interest Charged to Construction-Credit	17	—	—	—	—	—	21
Net Income		1 662 81	4 9	5 0	+232 68	+12 3	22
		Months Ended					23
Gross Revenues							24
Gas	4B						25
Electric	5B						26
Railway and Bus	6 & 7						27
Water and Heating	8B						28
Non-Utility	9						29
Total Revenues			100 0	100 0			30
							31
Operating Expenses							32
Operation	x x						33
Maintenance	x x						34
Provision for Retirements and Depletion	x x						35
Taxes	24						36
Total Expenses							37
Net Operating Revenue							38
Other Income	16						39
Gross Corporate Income							40
Other Deductions	17						41
Less: Interest Charged to Construction-Credit	17						42
Net Income							43
		12 Months Ended December 31					44
Gross Revenues							45
Gas	4C	395 617 28	99 9	99 9	+7 960 73-	+2 0	46
Electric	5C	—	—	—	—	—	47
Railway and Bus	6 & 7	—	—	—	—	—	48
Water and Heating	8C	—	—	—	—	—	49
Non-Utility	9	663 74	1	1	284 65	75 1	50
Total Revenues		396 281 02	100 0	100 0	+7 676 08	+1 9	51
							52
Operating Expenses							53
	x x	337 138 41	85 1	87 4	+15 844 12	+4 5	54
				3	736 44	59 2	

Electric	5A	—	—	—	—	—	5
Railway and Bus	6 & 7	—	—	—	—	—	6
Water and Heating	8A	—	—	—	—	—	7
Non-Utility	9	+28 29	1	4	+186 60	+117 9	8
Total Revenues		34 110 38	100 0	100 0	+3 919 00	+10 3	9
							10
Operating Expenses							11
Operation	x x	28 696 62	84 1	86 1	+4 063 98	+12 4	12
Maintenance	x x	53 58	2	5	+122 26	+69 5	13
Provision for Retirements and Depletion	x x	340 42	1 0	8	-21 75	6 8	14
Taxes	24-B	2 641 14	7 7	5 7	-481 03	-22 3	15
Total Expenses		31 731 76	93 0	93 1	+3 683 46	+10 4	16
Net Operating Revenue		2 378 62	7 0	6 9	+235 54	+9 0	17
Other Income	16	2 62	—	—	41	18 6	18
Gross Corporate Income		2 381 24	7 0	6 9	+235 13	+9 0	19
Other Deductions	17	718 43	2 1	1 9	+2 45	+ 3	20
Less: Interest Charged to Construction-Credit	17	—	—	—	—	—	21
Net Income		1 662 81	4 9	5 0	+232 68	+12 3	22
		Months Ended					23
Gross Revenues							24
Gas	4B						25
Electric	5B						26
Railway and Bus	6 & 7						27
Water and Heating	8B						28
Non-Utility	9						29
Total Revenues			100 0	100 0			30
							31
Operating Expenses							32
Operation	x x						33
Maintenance	x x						34
Provision for Retirements and Depletion	x x						35
Taxes	24						36
Total Expenses							37
Net Operating Revenue							38
Other Income	16						39
Gross Corporate Income							40
Other Deductions	17						41
Less: Interest Charged to Construction-Credit	17						42
Net Income							43
		12 Months Ended December 31					44
Gross Revenues							45
Gas	4C	395 617 28	99 9	99 9	+7 960 73	+2 0	46
Electric	5C	—	—	—	—	—	47
Railway and Bus	6 & 7	—	—	—	—	—	48
Water and Heating	8C	—	—	—	—	—	49
Non-Utility	9	663 74	1	1	284 65	75 1	50
Total Revenues		396 281 02	100 0	100 0	+7 676 08	+1 9	51
							52
Operating Expenses							53
Operation	x x	337 138 41	85 1	87 4	+15 844 12	+4 5	54
Maintenance	x x	1 980 85	5	3	736 44	59 2	55
Provision for Retirements and Depletion	x x	3 740 80	9	9	200 00	5 6	56
Taxes	24-B	21 619 75	5 5	3 9	5 718 97	36 0	57
Total Expenses		364 479 31	92 0	92 5	+9 188 71	+2 5	58
Net Operating Revenue		31 801 71	8 0	7 5	1 512 63	5 0	59
Other Income	16	29 40	—	—	+16 23	+35 6	60
Gross Corporate Income		31 831 11	8 0	7 5	1 496 40	4 9	61
Other Deductions	17	8 551 07	2 2	2 1	26 65	3	62
Less: Interest Charged to Construction-Credit	17	—	—	—	—	—	63
Net Income		23 280 04	5 8	5 4	1 469 75	6 7	64
		(A)	(B)	(C)	(D)	(E)	

+Indicates red figures

(Exhibit 266.)

Columbia System
Indiana Gas Distribution Corporation

Gas 4-A

1 Month Ended December 31, 1941

Acc't No.		Detail on Page	Amount	Percent of Gross	Cents Per M C F †	Increase Over Previous Year Amount	Percent	Cents Per MCF †	
	Gross Revenue—Gas								1
1200	Residential	x x	7 397 70	21.7	93.38	559 62	8.2	2.42	2
1201	Commercial	x x	1 292 30	3.8	79.67	+213 34	+14.2	4.87	3
1202	Municipal & Other Public	x x	46 62	.1	89.65	+9 52	+17.0	5.86	4
1203	Industrial	x x	25 371 92	74.3	25.73	+4 055 36	+13.8	.40	5
1204	Other Public Utilities	x x	—	—	—	—	—	—	6
1205	Other Sales	x x	—	—	—	—	—	—	7
									8
	Total		34 108 54	99.9	31.52	+3 718 60	+9.8	1.45	9
1208	Inter-Company Sales—This Group	24-	—	—	—	—	—	—	10
1209	" " " —Other Groups	24-	—	—	—	—	—	—	11
	Total Sales—Inter-Company		—	—	—	—	—	—	12
	Total Revenue—Gas		34 108 54	99.9	31.52	+3 718 60	+9.8	1.45	13
	Other Gas Department Revenues	24-C	30 13	.1	—	+13 80	+31.4	—	14
	Total Revenue		34 138 67	100.0	31.55	+3 732 40	+9.9	1.14	15
	Operating Expenses								16
	Gas Purchased—Inter-Co.—This Group	25	—	—	—	—	—	—	17
	" " " " —Other Groups	25	27 037 80	79.2	24.73	+4 561 02	+14.4	+.38	18
	Total Purchased—Inter-Co.		27 037 80	79.2	24.73	+4 561 02	+14.4	+.38	19
	Gas Purchased—Others	25	—	—	—	—	—	—	20
	Interchange of Gas—Net	25	—	—	—	—	—	—	21
	Gas In or Out of Storage—Net	25	—	—	—	—	—	—	22
	Purchased Gas Expense—Operation	25	15 60	—	.01	15 60	—	.01	23
	" " " —Maintenance	25	—	—	—	—	—	—	24
	Production—Operation	26-7	—	—	—	—	—	—	25
	" —Maintenance	26-7	—	—	—	—	—	—	26
	Transmission—Operation	28	—	—	—	—	—	—	27
	" —Maintenance	28	—	—	—	—	—	—	28
	Distribution—Operation	29	544 15	1.6	.50	+113 20	+17.2	+.02	29
	" —Maintenance	29	53 58	.2	.05	+122 26	+69.5	+.09	30
	Customers Acc't'g & Collecting	30	389 71	1.1	.36	+15 60	+3.8	.04	31
	Sales Promotion	30	546 60	1.6	.51	458 49	520.4	.44	32
	Administrative & General—Operation	31	262 19	.8	.24	20 98	8.7	.05	33
	" " " —Maintenance	31	—	—	—	—	—	—	34
	Misel. Duplicate Charges—Credit	31	139 47	.4	.13	+99.26	+41.6	+.06	35
	Total Operation & Maintenance		28 710 16	84.1	26.53	+4 217 75	+12.8	.35	36
		% of Gross Prev. Year							37
	Total Operation	86.4	28 656 58	83.9	26.48	+4 095 49	+12.5	.44	38
	Total Maintenance	.5	53 58	.2	.05	+122 26	+69.5	+.09	39
	Prov. for Retirements & Depletion	.8	340 42	1.0	.31	—21 75	6.8	.06	40
	Taxes—Federal	3.9	1 842 30	5.4	1.70	380 80	26.1	.54	41
	Taxes—State and Other	1.9	798 84	2.3	.75	100 23	14.3	.19	42
	Total Expenses	93.5	31 691 72	92.8	29.29	+3 714 97	+10.5	1.14	43
	Net Operating Revenue—Gas	6.5	2 446 95	7.2	2.26	+17 43	+.7	.30	44
									45
	Statistics								46
	MCF—Sales to Public and Other Utilities	51	108 211	99.0	x x x	+17 571	+14.0	x x x	47
	" Sales Inter-Company—This Group	51	—	—	x x x	—	—	x x x	48
	" " " " —Other Groups	51	—	—	x x x	—	—	x x x	49
	" Total All Sales	51	108 211	99.0	x x x	+17 571	+14.0	x x x	50
	" Company Use, Elec. Gen. Stations	51	—	—	x x x	—	—	x x x	51
	" Other Company Use	51	15	—	x x x	+27	+64.3	x x x	52
	" Other Miscellaneous	51	—	—	x x x	—	—	x x x	53
	Total Deliveries	51	108 226	99.0	x x x	+17 598	+14.0	x x x	54

1202	Municipal & Other Public		x x	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
1203	Industrial		x x	25 371 92	74.3	25 73	+4 055 36	+13.8	.40	5
1204	Other Public Utilities		x x	—	—	—	—	—	—	6
1205	Other Sales		x x	—	—	—	—	—	—	7
										8
	Total			34 108 54	99.9	31.52	+3 718 60	+9.8	1.45	9
1208	Inter-Company Sales—This Group	24-		—	—	—	—	—	—	10
1209	" " " —Other Groups	24-		—	—	—	—	—	—	11
	Total Sales—Inter-Company			—	—	—	—	—	—	12
	Total Revenue—Gas			34 108 54	99.9	31.52	+3 718 60	+9.8	1.45	13
	Other Gas Department Revenues	24-C		30 13	.1	—	+13 80	+31.4	—	14
	Total Revenue			34 138 67	100.0	31.55	+3 732 40	+9.9	1.44	15
	Operating Expenses:									16
	Gas Purchased—Inter-Co.—This Group	25		—	—	—	—	—	—	17
	" " " —Other Groups	25		27 037 80	79.2	24.73	+4 561 02	+14.4	+.38	18
	Total Purchased- Inter-Co.			27 037 80	79.2	24.73	+4 561 02	+14.4	+.38	19
	Gas Purchased—Others	25		—	—	—	—	—	—	20
	Interchange of Gas—Net	25		—	—	—	—	—	—	21
	Gas In or Out of Storage—Net	25		—	—	—	—	—	—	22
	Purchased Gas Expense—Operation	25		15 60	—	.01	15 60	—	.01	23
	" " " —Maintenance	25		—	—	—	—	—	—	24
	Production—Operation	26-7		—	—	—	—	—	—	25
	—Maintenance	26-7		—	—	—	—	—	—	26
	Transmission—Operation	28		—	—	—	—	—	—	27
	" —Maintenance	28		—	—	—	—	—	—	28
	Distribution—Operation	29		544 15	1.6	.50	+113 20	+17.2	+.02	29
	" —Maintenance	29		53 58	.2	.05	+122 26	+69.5	+.09	30
	Customers Acc't'g & Collecting	30		389 71	1.1	.36	+15 60	+3.8	.04	31
	Sales Promotion	30		546 60	1.6	.51	+458 49	520.4	.44	32
	Administrative & General—Operation	31		262 19	.8	.24	20 98	8.7	.05	33
	" " —Maintenance	31		—	—	—	—	—	—	34
	Miscl. Duplicate Charges—Credit	31		139 47	.4	.13	+99 26	+41.6	+.06	35
	Total Operation & Maintenance			28 710 16	84.1	26 53	+4 217 75	+12.8	.35	36
		% of Gross Prev. Year								37
	Total Operation	86.4	31	28 656 58	83.9	26.48	+4 095 49	+12.5	.44	38
	Total Maintenance	.5	31	53 58	.2	.05	+122 26	+69.5	+.09	39
	Prov. for Retirements & Depletion	.8	31	340 42	1.0	.31	21 75	6.8	.06	40
	Taxes—Federal	3.9	31	1 842 30	5.4	1.70	380 80	26.1	.54	41
	Taxes—State and Other	1.9	31	798 84	2.3	.75	100 23	14.3	.19	42
	Total Expenses	93.5	31	31 691 72	92.8	29.29	+3 714 97	+10.5	1.14	43
	Net Operating Revenue—Gas	6.5		2 446 95	7.2	2.26	+17 43	+.7	.30	44
										45
				Statistics						46
MCF	Sales to Public and Other Utilities		51	108 211	99.0	x x x	+17 571	+14.0	x x x	47
"	Sales Inter-Company—This Group		51	—	—	x x x	—	—	x x x	48
"	" " " —Other Groups		51	—	—	x x x	—	—	x x x	49
"	Total All Sales		51	108 211	99.0	x x x	+17 571	+14.0	x x x	50
"	Company Use, Elec. Gen. Stations		51	—	—	x x x	—	—	x x x	51
"	Other Company Use		51	15	—	x x x	+27	+64.3	x x x	52
"	Other Miscellaneous		51	—	—	x x x	—	—	x x x	53
	Total Deliveries		51	108 226	99.0	x x x	+17 598	+14.0	x x x	54
MCF	Purchased—Inter-Co.—This Group		51	—	—	x x x	—	—	x x x	55
"	" " " —Other Groups		51	109 311	100.0	x x x	+16 513	+13.1	x x x	56
"	Purchased—Others		51	—	—	x x x	—	—	x x x	57
"	Produced		51	—	—	x x x	—	—	x x x	58
"	Interchanged—Net		51	—	—	x x x	—	—	x x x	59
"	In or Out of Storage—Net		51	—	—	x x x	—	—	x x x	60
						x x x			x x x	61
"	Total Gas Available For Deliveries		51	109 311	100.0	x x x	+16 513	+13.1	x x x	62
"	Unaccounted For—[Estimated]*		51	1 085	1.0	x x x	1 085	—	x x x	63
† Two Places Beyond Decimal Point				(A)	(B)	(C)	(D)	(E)	(F)	

* Losses in Black +Indicates red figures.

[fol. 16651]

(Exhibit 266.)

Columbia System

Indiana Gas Distribution Corporation

Gas 4-C

12 Months Ended December 31, 1931

Acc't No.		% of Gross Prev. Year	Detail on Page	Amount	Percent of Gross	Cents Per MCF †	Increase Over Previous Year Amount	Increase Over Previous Year Percent	Increase Over Previous Year Cents Per MCF †	
	Gross Revenue—Gas									1
1200	Residential		x x	68 827 72	17 4	106 82	2 213 38	3 3	4.51	2
1201	Commercial		x x	12 926 08	3.3	80 38	+214 18	+1 6	1 48	3
1202	Municipal & Other Public		x x	439 51	1	95 55	31 31	7 7	+ 05	4
1203	Industrial		x x	313 007 72	79 1	25 60	+9 885 33	+3 1	+1 81	5
1204	Other Public Utilities		x x	—	—	—	—	—	—	6
1205	Other Sales		x x	—	—	—	—	—	—	7
										8
	Total			395 201 03	99 9	30 32	+7 854 82	+1 9	+1 66	9
1208	Inter-Company Sales—This Group		24-	—	—	—	—	—	—	10
1209	" " " —Other Groups		24-	—	—	—	—	—	—	11
	Total Sales—Inter-Company			—	—	—	—	—	—	12
	Total Revenue—Gas			395 201 03	99 9	30 32	+7 854 82	+1 9	+1 66	13
	Other Gas Department Revenues		24-C	416 25	1 <	—	+105 91	+20 3	—	14
	Total Revenue			395 617 28	100 0	30 35	+7 960 73	+2 0	+1 67	15
	Operating Expenses—									16
	Gas Purchased—Inter-Co.—This Group		25	—	—	—	—	—	—	17
	" " " " —Other Groups		25	320 181 22	80 9	24 51	+15 540 48	+4 6	+2 11	18
	Total Purchased—Inter-Co.			320 181 22	80 9	24 57	+15 549 48	+4 6	+2 11	19
	Gas Purchased—Others		25	—	—	—	—	—	—	20
	Interchange of Gas—Net		25	—	—	—	—	—	—	21
	Gas In or Out of Storage—Net		25	—	—	—	—	—	—	22
	Purchased Gas Expense—Operation		25	34 31	—	—	8 47	32 8	—	23
	" " " —Maintenance		25	—	—	—	+2 29	+100 0	—	24
	Production—Operation		26-7	—	—	—	—	—	—	25
	—Maintenance		26-7	—	—	—	—	—	—	26
	Transmission—Operation		28	—	—	—	—	—	—	27
	" " —Maintenance		28	—	—	—	—	—	—	28
	Distribution—Operation		29	7 088 66 √	1 8	54	1 140 02	19 2	07	29
	" —Maintenance		29	1 980 35 √	5	15	738 73	59 5	05	30
	Customers Acc'tg & Collecting		30	4 795 56	1 2	37	+1 175 26	+19 7	+ 10	31
	Sales Promotion		30	1 933 38	5	15	190 87	11 0	01	32
	Administrative & General—Operation		31	3 419 21	9	26	+935 30	+21 5	+ 09	33
	" " —Maintenance		31	—	—	—	—	—	—	34
	Misc. Duplicate Charges—Credit		31	776 32	2	06	+233 64	+23 1	+ 02	35
	Total Operation & Maintenance			336 656 37	85 3	25 98	+15 341 70	+4 3	+2 11	36
		% of Gross Prev. Year								37
	Total Operation	87 4	31	336 676 02	85 1	25 83	+16 678 14	+4 6	+2 16	38
	Total Maintenance	3	31	1 980 35	5	15	736 44	59 2	05	39
	Prov. for Retirements & Depletion	9	31	3 740 80	1 0	28	200 00	5 6	—	40
	Taxes—Federal	1 7	31	12 746 38	3 2	98	3 788 39	83 2	43	41
	Taxes—State and Other	2 2	31	8 873 37	2 2	68	+69 42	+ 8	+ 03	42
	Total Expenses	92 5	31	364 016 92	92 0	27 92	+9 422 73	+2 5	+1 71	43
	Net Operating Revenue—Gas	7 5		31 600 36	8 0	2 43	1 462 00	4 9	04	44
										45
				Statistics						46
	MCF—Sales to Public and Other Utilities		51	1 303 619	99 8	x x x	43 209	3 4	x x x	47
	Sales Inter-Company—This Group		51	—	—	x x x	—	—	x x x	48
	" " " —Other Groups		51	—	—	x x x	—	—	x x x	49
	Total All Sales		51	1 303 619	99 8	x x x	43 209	3 4	x x x	50
	Company Use, Elec. Gen. Stations		51	—	—	x x x	—	—	x x x	51
	Other Company Use		51	182	—	x x x	+18	+9 0	x x x	52

	Gross Revenue—Gas									
1200	Residential	x x	68 827 72	17 4	100 00	—	—	—		1
1201	Commercial	x x	12 926 08	3 3	80 38	+214 18	+1 6	1 48		3
1202	Municipal & Other Public	x x	439 51	1	95 55	31 31	7 7	+05		4
1203	Industrial	x x	313 007 72	79 1	25 60	+9 885 33	+3 1	+1 81		5
1204	Other Public Utilities	x x	—	—	—	—	—	—		6
1205	Other Sales	x x	—	—	—	—	—	—		7
										8
	Total		395 201 03	99 9	30 32	+7 854 82	+1 9	+1 66		9
1208	Inter-Company Sales—This Group	24-	—	—	—	—	—	—		10
1209	" " " —Other Groups	24-	—	—	—	—	—	—		11
	Total Sales—Inter-Company		—	—	—	—	—	—		12
	Total Revenue—Gas		395 201 03	99 9	30 32	+7 854 82	+1 9	+1 66		13
	Other Gas Department Revenues	24-C	416 25	1	—	+105 91	+20 8	—		14
	Total Revenue		395 617 28	100 0	30 35	+7 960 73	+2 0	+1 67		15
	Operating Expenses									16
	Gas Purchased—Inter-Co.—This Group	25	—	—	—	—	—	—		17
	" " " —Other Groups	25	320 181 22	80 9	24 51	+15 540 48	+4 6	+2 11		18
	Total Purchased—Inter-Co.		320 181 22	80 9	24 51	+15 540 48	+4 6	+2 11		19
	Gas Purchased—Others	25	—	—	—	—	—	—		20
	Interchange of Gas—Net	25	—	—	—	—	—	—		21
	Gas In or Out of Storage—Net	25	—	—	—	—	—	—		22
	Purchased Gas Expense—Operation	25	34 31	—	—	8 47	32 8	—		23
	" " " —Maintenance	25	—	—	—	+2 29	+100 0	—		24
	Production—Operation	26-7	—	—	—	—	—	—		25
	" —Maintenance	26-7	—	—	—	—	—	—		26
	Transmission—Operation	28	—	—	—	—	—	—		27
	" —Maintenance	28	—	—	—	—	—	—		28
	Distribution—Operation	29	7 088 66	1 8	54	1 140 02	19 2	07		29
	" —Maintenance	29	1 980 35	5	15	738 73	59 5	05		30
	Customers Acc'g & Collecting	30	4 795 56	1 2	37	+1 175 26	+19 7	+10		31
	Sales Promotion	30	1 933 38	5	15	190 87	11 0	01		32
	Administrative & General—Operation	31	3 419 21	9	26	+935 40	+21 5	+09		33
	" " " —Maintenance	31	—	—	—	—	—	—		34
	Misc. Duplicate Charges—Credit	31	776 32	2	-06	+233 64	+23 1	+02		35
	Total Operation & Maintenance		338 656 37	85 6	25 98	+15 341 70	+4 3	+2 11		36
		% of Gross Prev. Year								37
	Total Operation	87 4	336 676 02	85 1	25 83	+16 078 14	+4 6	+2 16		38
	Total Maintenance	3	1 980 35	5	15	736 44	59 2	05		39
	Prov. for Retirements & Depletion	9	3 740 80	1 0	28	200 00	5 6	—		40
	Taxes—Federal	1 7	12 746 38	3 2	98	5 788 39	83 2	43		41
	Taxes—State and Other	2 2	8 873 37	2 2	68	+69 42	+8	+03		42
	Total Expenses	92 5	364 016 92	92 0	27 92	+9 422 73	+2 5	+1 71		43
	Net Operating Revenue—Gas	7 5	31 600 36	8 0	2 43	1 462 00	4 9	04		44
										45
			Statistics							46
MCF	Sales to Public and Other Utilities	51	1 303 649	99 8	x x x	43 209	3 1	x x x		47
	Sales Inter-Company—This Group	51	—	—	x x x	—	—	x x x		48
"	" " —Other Groups	51	—	—	x x x	—	—	x x x		49
"	Total All Sales	51	1 303 649	99 8	x x x	43 209	3 4	x x x		50
"	Company Use—Elec. Gen. Stations	51	—	—	x x x	—	—	x x x		51
"	Other Company Use	51	182	—	x x x	+18	+9 0	x x x		52
"	Other Miscellaneous	51	—	—	x x x	—	—	x x x		53
	Total Deliveries	51	1 303 831	99 8	x x x	43 191	3 4	x x x		54
MCF	Purchased—Inter-Co.—This Group	51	—	—	x x x	—	—	x x x		55
"	" " —Other Groups	51	1 306 394	100 0	x x x	44 994	3 6	x x x		56
"	Purchased—Others	51	—	—	x x x	—	—	x x x		57
"	Produced	51	—	—	x x x	—	—	x x x		58
"	Interchanged—Net	51	—	—	x x x	—	—	x x x		59
"	In or Out of Storage—Net	51	—	—	x x x	—	—	x x x		60
					x x x			x x x		61
"	Total Gas Available For Deliveries	51	1 306 394	100 0	x x x	44 994	3 6	x x x		62
"	Unaccounted For—(Estimated)*	51	2 593	2	x x x	1 803	228 2	x x x		63
	† Two Places Beyond Decimal Point		(A)	(B)	(C)	(D)	(E)	(F)		

* Losses in Black. +Indicates red figures.

(Exhibit 266.)

Columbia System

Non-Utility 9

Indiana Gas Distribution Corporation

	Detail on Page	Amount	Month of December — 1941 Increase Over Previous Year Amount	Percent	
					1
	Month of December				2
Gross Revenue—Non-Utility					3
Gasoline	10A	—	—	—	4
Appliance	11A	+43 84	+202 15	+127 7	5
Farm	12	—	—	—	6
Shop and Jobbing	12	15 55	15 55	—	7
Miscellaneous	12	—	—	—	8
Garage	13	—	—	—	9
					10
					11
Total Revenue—Non-Utility		+28 29	+186 60	+117 9	12
Operating Expenses					13
Operation		40 04	31 51	369 4	14
Maintenance		—	—	—	15
Provision for Retirements		—	—	—	16
Taxes—Federal		—	—	—	17
Taxes—State and Other		—	—	—	18
					19
Total Expenses		40 04	31 51	369 4	20
Net Revenue—Non-Utility		+68 33	+218 11	+145 6	21
					22
	Months Ended				23
Gross Revenue—Non-Utility					24
Gasoline	10B				25
Appliance	11B				26
Farm	12				27
Shop and Jobbing	12				28
Miscellaneous	12				29
Garage	13				30
					31
					32
Total Revenue—Non-Utility					33
Operating Expenses					34
Operation					35
Maintenance					36
Provision for Retirements					37
Taxes—Federal					38
Taxes—State and Other					39
					40
Total Expenses					41
Net Revenue—Non-Utility					42
					43
	12 Months Ended				44
Gross Revenue—Non-Utility					45
Gasoline	10C	—	—	—	46
Appliance	11C	397 09	27 00	7 3	47
Farm	12	—	—	—	48
Shop and Jobbing	12	266 65	257 65	—	49
Miscellaneous	12	—	—	—	50
Garage	13	—	—	—	51
					52

	Detail on Page	Amount	Previous Year Amount	Previous Year Percent	
					1
Month of December					2
Gross Revenue—Non-Utility					3
Gasoline	10A	—	—	—	4
Appliance	11A	+43 84	+202 15	+127 7	5
Farm	12	—	—	—	6
Shop and Jobbing	12	15 55	15 55	—	7
Miscellaneous	12	—	—	—	8
Garage	13	—	—	—	9
					10
					11
Total Revenue—Non-Utility		+28 29	+186 60	+117 9	12
Operating Expenses					13
Operation		40 04	31 51	369 4	14
Maintenance		—	—	—	15
Provision for Retirements		—	—	—	16
Taxes—Federal		—	—	—	17
Taxes—State and Other		—	—	—	18
					19
Total Expenses		40 04	31 51	369 4	20
Net Revenue—Non-Utility		+68 33	+218 11	+145 6	21
					22
Months Ended					23
Gross Revenue—Non-Utility					24
Gasoline	10B				25
Appliance	11B				26
Farm	12				27
Shop and Jobbing	12				28
Miscellaneous	12				29
Garage	13				30
					31
					32
Total Revenue—Non-Utility					33
Operating Expenses					34
Operation					35
Maintenance					36
Provision for Retirements					37
Taxes—Federal					38
Taxes—State and Other					39
					40
Total Expenses					41
Net Revenue—Non-Utility					42
					43
12 Months Ended					44
Gross Revenue—Non-Utility					45
Gasoline	10C	—	—	—	46
Appliance	11C	397 09	27 00	7 3	47
Farm	12	—	—	—	48
Shop and Jobbing	12	266 65	257 65	—	49
Miscellaneous	12	—	—	—	50
Garage	13	—	—	—	51
					52
					53
Total Revenue—Non-Utility		663 74	284 65	75 1	54
Operating Expenses					55
Operation		462 39	234 02	102 5	56
Maintenance		—	—	—	57
Provision for Retirements		—	—	—	58
Taxes—Federal		—	—	—	59
Taxes—State and Other		—	—	—	60
					61
Total Expenses		462 39	234 02	102 5	62
Net Revenue—Non-Utility		201 35	50 63	33 6	63
		(A)	(B) (C)	(D)	

+Indicates red figures.

(Exhibit 266.)

Columbia System
Indiana Gas Distribution Corporation

Appliance 11-A

1 Month Ended December 31, 1941

Acc't No.		Amount	Percent of Net Sales	Increase Over Previous Year Amount	Increase Over Previous Year Percent	
	Gross Sales	-				1
1901	Merchandise Sales—Electric	—	—	—	—	2
9102	Merchandise Sales—Gas	189 00	133 3	+355 75	+65 3	3
1903	Merchandise Sales—Miscellaneous	—	—	—	—	4
1904	Fixture and Wiring Sales	—	—	—	—	5
1905	Jobbing Work Sales	—	—	+18 00	+100 0	6
	Total Gross Sales	189 00	133 3	+373 75	+66 4	7
1911-2-3	Less: Merchandise Returns	—	—	—	—	8
1918	Discounts and Allowances	47 25	33 3	47 25	—	9
	Total Deductions	47 25	33 3	47 25	—	10
	Total Net Sales	141 75	100 0	+421 00	+74 8	11
	Cost of Sales					12
9001-2-3	Cost of Merchandise Sales	125 52	88 5	+190 16	+60 2	13
9004	Cost of Fixture and Wiring Sales	—	—	—	—	14
9005	Cost of Jobbing Sales	—	—	+5 05	+100 0	15
9011-2-3	Cost of Merchandise Returned	—	—	—	—	16
9016	Inward Freight and Drayage	11 47	8 1	7 43	183 9	17
9018-20	Merchandise Installation	43 74	30 9	+28 35	+39 3	18
9022	Merchandise Reconditioning	—	—	—	—	19
9024	Warehouse Expenses	4 86	3 4	+2 72	+35 9	20
9026	Inventory Adjustments	—	—	—	—	21
	Total Cost Of Sales	185 59	130 9	+218 85	+54 1	22
	Gross Profit	+43 84	+30 9	+202 15	+127 7	23
	Selling Expenses					24
9031	Salaries	—	—	—	—	25
9032	Commissions	—	—	—	—	26
9033	Advertising and Demonstration	—	—	—	—	27
9034	Delivery Expenses	—	—	+45	+100 0	28
9035	Servicing Guaranteed Appliances	2 68	1 9	1 82	211 6	29
9036	Miscellaneous	—	—	—	—	30
						31
						32
	Total Selling Expenses	2 68	1 9	1 37	104 6	33
	Customers Accounting & Collecting Exp.					34
9041	Credit Investigation	—	—	—	—	35
9042	Billing and Accounting	1 49	1 1	+10	+6 3	36
9043	Collecting Expenses	—	—	—	—	37
9044	Rents—Billing Equipment	—	—	—	—	38
9045	Uncollectible Accounts	1 42	1 0	+4 21	+74 8	39
9048	Miscellaneous	—	—	—	—	40
9098	Earned Carrying Charges—Credit	—	—	—	—	41
						42
	Total Cust s. Acctg. & Collect'g. Exp.	2 91	2 1	+4 31	+59 7	43
	Administrative & General Expenses					44
9060	General Officers Salaries and Expenses					45
9064	General Office Employee's Salaries and Expenses					46
9067	General Office Supplies and Expenses					47
9068	Management & Supervision Fees & Expenses					48
9069	Buying Expenses					49
9070	Rent, Light and Heat					50
9077	Insurance					51
9079	Injuries and Damages					52
9081	Employees Welfare Expenses					53
9082	Rents—Accounting Equipment					54
9085	Miscellaneous					55
						56

1903	Merchandise Sales [illegible]					
1904	Fixture and Wiring Sales	—	—	—	—	5
1905	Jobbing Work Sales	—	—	+18 00	+100 0	6
	Total Gross Sales	189 00	133 3	+373 75	+66 4	7
1911–2–3	Less: Merchandise Returns	—	—	—	—	8
1918	Discounts and Allowances	47 25	33 3	47 25	—	9
	Total Deductions	47 25	33 3	47 25	—	10
	Total Net Sales	141 75	100 0	+421 00	+74 8	11
	Cost of Sales					12
9001–2–3	Cost of Merchandise Sales	125 52	88 5	+199 16	+60 2	13
9004	Cost of Fixture and Wiring Sales	—	—	—	—	14
9005	Cost of Jobbing Sales	—	—	+5 05	+100 0	15
9011–2–3	Cost of Merchandise Returned	—	—	—	—	16
9016	Inward Freight and Drayage	11 47	8 1	7 43	183 9	17
9018–20	Merchandise Installation	43 74	30 9	+28 35	+39 3	18
9022	Merchandise Reconditioning	—	—	—	—	19
9024	Warehouse Expenses	4 86	3 4	+2 72	+35 9	20
9026	Inventory Adjustments	—	—	—	—	21
	Total Cost Of Sales	185 59	130 9	+218 85	+54 1	22
	Gross Profit	+43 84	+30 9	+202 15	+127 7	23
	Selling Expenses					24
9031	Salaries	—	—	—	—	25
9032	Commissions	—	—	—	—	26
9033	Advertising and Demonstration	—	—	—	—	27
9034	Delivery Expenses	—	—	+45	+100 0	28
9035	Servicing Guaranteed Appliances	2 68	1 9	1 82	241 6	29
9036	Miscellaneous	—	—	—	—	30
						31
						32
	Total Selling Expenses	2 68	1 9	1 37	104 6	33
	Customers Accounting & Collecting Exp.					34
9041	Credit Investigation	—	—	—	—	35
9042	Billing and Accounting	1 49	1 1	+10	+6 3	36
9043	Collecting Expenses	—	—	—	—	37
9044	Rents—Billing Equipment	—	—	—	—	38
9045	Uncollectible Accounts	1 42	1 0	+4 21	+74 8	39
9048	Miscellaneous	—	—	—	—	40
9098	Earned Carrying Charges—Credit	—	—	—	—	41
						42
	Total Cust's. Acctg. & Collect'g. Exp.	2 91	2 1	+4 31	+59 7	43
	Administrative & General Expenses					44
9060	General Officers Salaries and Expenses					45
9064	General Office Employee's Salaries and Expenses					46
9067	General Office Supplies and Expenses					47
9068	Management & Supervision Fees & Expenses					48
9069	Buying Expenses					49
9070	Rent, Light and Heat					50
9077	Insurance					51
9079	Injuries and Damages					52
9081	Employees Welfare Expenses					53
9082	Rents—Accounting Equipment					54
9085	Miscellaneous					55
						56
	Total Admin. & General Expenses	—	—	—	—	57
	Total Operation	5 59	4 0	+2 94	+34 5	58
9090	Provision for Retirements	—	—	—	—	59
9096	Taxes—Federal	—	—	—	—	60
9097	Taxes—State and Other	—	—	—	—	61
	Total Expenses	5 59	4 0	+2 94	+34 5	62
	Net Operating Revenue—Appliance	+49 43	+34 9	+199 21	+133 0	63
		(A)	(B)	(C)	(D)	

+Indicates red figures.

Columbia System
Indiana Gas Distribution Corporation

Appliance 11-C

Acc't No.		Amount	Percent of Net Sales	12 Months Ended December 31, 1941 Increase Over Previous Year Amount	Percent	
	Gross Sales					1
1901	Merchandise Sales—Electric	—	—	—	—	2
1902	Merchandise Sales—Gas	4 118 70	121 1	+704 38	+14 6	3
1903	Merchandise Sales—Miscellaneous	—	—	—	—	4
1904	Fixture and Wiring Sales	—	—	—	—	5
1905	Jobbing Work Sales	1 00	—	+17 00	+94 4	6
	Total Gross Sales	4 119 70	121 1	+721 38	+14 9	7
1911-2-3	Less: Merchandise Returns	4 20	1	11 36	—	8
1918	Discounts and Allowances	714 62	21 0	701 21	—	9
	Total Deductions	718 82	21 1	712 57	—	10
	Total Net Sales	3 400 88	100 0	+1 433 95	+29 7	11
	Cost Of Sales					12
9001-2-3	Cost of Merchandise Sales	2 257 63	66 4	+1 507 14	+402 0	13
9004	Cost of Fixture and Wiring Sales	—	—	—	—	14
9005	Cost of Jobbing Sales	—	—	+15 76	+100 0	15
9011-2-3	Cost of Merchandise Returned	+4 20	+1	+4 20	—	16
9016	Inward Freight and Drayage	47 58	1 4	+45 72	+49 0	17
9018-20	Merchandise Installation	654 67	19 2	68 63	11 7	18
9022	Merchandise Reconditioning	6 25	2	+12	+66 1	19
9024	Warehouse Expenses	41 86	1 2	55 40	—	20
9026	Inventory Adjustments	—	—	—	—	21
	Total Cost Of Sales	3 003 79	88 3	+1 460 95	+32 7	22
	Gross Profit	397 09	11 7	27 00	7 3	23
	Selling Expenses					24
9031	Salaries	—	—	—	—	25
9032	Commissions	83 00	2 4	83 00	—	26
9033	Advertising and Demonstration	4 50	1	4 50	—	27
9034	Delivery Expenses	1 45	1	+76	+34 4	28
9035	Servicing Guaranteed Appliances	41 64	1 2	+67 95	+62 0	29
9036	Miscellaneous	2 07	1	2 07	—	30
						31
						32
	Total Selling Expenses	132 66	3 9	20 86	18 7	33
	Customers Accounting & Collecting Exp.					34
9041	Credit Investigation	—	—	—	—	35
9042	Billing and Accounting	16 96	5	+43 22	+71 8	36
9043	Collecting Expenses	3 12	1	-27	9 5	37
9044	Rents—Billing Equipment	—	—	—	—	38
9045	Uncollectible Accounts	34 39	1 0	+14 29	+29 4	39
9048	Miscellaneous	36	—	+36	+50 0	40
9098	Earned Carrying Charges—Credit	—	—	—	—	41
						42
	Total Cust's Acctg. & Collect'g. Exp.	54 83	1 6	+57 60	+51 2	43
	Administrative & General Expenses					44
9060	General Officers Salaries and Expenses					45
9064	General Office Employee's Salaries and Expenses					46
9067	General Office Supplies and Expenses					47
9068	Management & Supervision Fees & Expe.					48
9069	Buying Expenses					49
9070	Rent, Light and Heat					50
9077	Insurance					51
9079	Injuries and Damages					52
9081	Employees Welfare Expenses					53
9082	Rents—Accounting Equipment					54
9085	Miscellaneous					55
						56
	Total Admin. & General Expenses	—	—	—	—	57
	Total Operation	187 49	5 5	+36 74	+16 4	58
9090	Provision for Retirements	—				

			Sales	Amount	Percent	
	Gross Sales					1
1901	Merchandise Sales—Electric	—	—	—	—	2
1902	Merchandise Sales—Gas	4 118 70	121 1	+704 38	+14 6	3
1903	Merchandise Sales—Miscellaneous	—	—	—	—	4
1904	Fixture and Wiring Sales	—	—	—	—	5
1905	Jobbing Work Sales	1 00	—	+17 00	+94 4	6
	Total Gross Sales	4 119 70	121 1	+721 38	+14 9	7
1911-2-3	Less: Merchandise Returns	4 20	1	11 36	—	8
1918	Discounts and Allowances	714 62	21 0	701 21	—	9
	Total Deductions	718 82	21 1	712 57	—	10
	Total Net Sales	3 400 88	100 0	+1 433 95	+29 7	11
	Cost Of Sales					12
9001-2-3	Cost of Merchandise Sales	2 257 63	66 4	+1 507 14	+40 0	13
9004	Cost of Fixture and Wiring Sales	—	—	—	—	14
9005	Cost of Jobbing Sales	—	—	+15 76	+100 0	15
9011-2-3	Cost of Merchandise Returned	+4 20	+1	+4 20	—	16
9016	Inward Freight and Drayage	47 58	1 4	+45 72	+49 0	17
9018-20	Merchandise Installation	654 67	19 2	68 63	11 7	18
9022	Merchandise Reconditioning	6 25	2	+12 16	+66 1	19
9024	Warehouse Expenses	41 86	1 2	55 40	—	20
9026	Inventory Adjustments	—	—	—	—	21
	Total Cost Of Sales	3 003 79	88 3	+1 460 95	+32 7	22
	Gross Profit	397 09	11 7	27 00	7 3	23
	Selling Expenses					24
9031	Salaries	—	—	—	—	25
9032	Commissions	83 00	2 4	83 00	—	26
9033	Advertising and Demonstration	4 50	1	4 50	—	27
9034	Delivery Expenses	1 45	1	+76	+34 4	28
9035	Servicing Guaranteed Appliances	41 64	1 2	+67 95	+62 0	29
9036	Miscellaneous	2 07	1	2 07	—	30
						31
						32
	Total Selling Expenses	132 66	3 9	20 86	18 7	33
	Customers Accounting & Collecting Exp.					34
9041	Credit Investigation	—	—	—	—	35
9042	Billing and Accounting	16 96	5	+43 28	+71 8	36
9043	Collecting Expenses	3 12	1	27	9 5	37
9044	Rents—Billing Equipment	—	—	—	—	38
9045	Uncollectible Accounts	34 39	1 0	+14 29	+29 4	39
9048	Miscellaneous	36	—	+36	+50 0	40
9098	Earned Carrying Charges—Credit	—	—	—	—	41
						42
	Total Cust's Acctg. & Collect'g. Exp.	54 83	1 6	+57 60	+51 2	43
	Administrative & General Expenses					44
9060	General Officers Salaries and Expenses					45
9064	General Office Employee's Salaries and Expenses					46
9067	General Office Supplies and Expenses					47
9068	Management & Supervision Fees & Expenses					48
9069	Buying Expenses					49
9070	Rent, Light and Heat					50
9077	Insurance					51
9079	Injuries and Damages					52
9081	Employees Welfare Expenses					53
9082	Rents—Accounting Equipment					54
9085	Miscellaneous					55
						56
	Total Admin. & General Expenses	—	—	—	—	57
	Total Operation	187 49	5 5	+36 74	+16 4	58
9090	Provision for Retirements	—	—	—	—	59
9096	Taxes—Federal	—	—	—	—	60
9097	Taxes—State and Other	—	—	—	—	61
	Total Expenses	187 49	5 5	+36 74	+16 4	62
	Net Operating Revenue—Appliance	209 60	6 2	63 74	23 7	63
		(A)	(B)	(C)	(D)	

+Indicates red figures.

Acc't No.	Description	Current Month	Increase Over Previous Year	12 Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year	
	Gross Revenue—Farm							1
	Crops							2
	Rents							3
	Other Miscellaneous							4
								5
	Total Revenue—Farm	—	—			—	—	6
	Operating Expenses							7
	Operation							8
	Maintenance							9
	Other Miscellaneous Expense							10
								11
	Total Operation And Maintenance	—	—			—	—	12
	Total Operation							13
	Total Maintenance							14
	Provision for Retirements							15
	Taxes—Federal							16
	Taxes—State and Other							17
								18
	Total Expenses	—	—			—	—	19
								20
	Net Revenue—Farm	—	—			—	—	21
								22
								23
								24
								25
								26
	Gross Revenue—Shop And Jobbing, Misc.							27
	Shop and Jobbing	15 55	15 55			266 65	257 65	28
	Miscellaneous	—	—			—	—	29
								30
	Total Revenue—Shop And Jobbing, Misc.	15 55	15 55			266 65	257 65	31
	Operating Expenses							32
	Operation	34 45	34 45			274 90	270 76	33
	Maintenance	—	—			—	—	34
	Other Miscellaneous Expense	—	—			—	—	35
								36
								37
	Total Operation And Maintenance	34 45	34 45			274 90	270 76	38
	Total Operation	34 45	34 45			274 90	270 76	39
	Total Maintenance	—	—			—	—	40
	Provision for Retirements	—	—			—	—	41
	Taxes—Federal	—	—			—	—	42
	Taxes—State and Other	—	—			—	—	43
								44
	Total Expenses	34 45	34 45			274 90	270 76	45
								46
	Net Revenue—Shop And Jobbing, Misc.	*18 90	*18 90			*8 25	*13 11	47
*Indicates red figures.		(A)	(B)	(C)	(D)	(E)	(F)	

[fol. 16636]

(Exhibit 266.)

Columbia System
Indiana Gas Distribution Corporation

Other Income 16

Month of December - 1941

Acc't No.		Detail on Page	Amount	Increase Over Previous Year Amount	Increase Over Previous Year Percent	
						1
	Month Of December					2
	Interest					3
1971	Inter-Company—This Group					4
1972	Inter-Company—Other Groups					5
1973	Others					6
	Total Interest					7
	Dividends					8
1976	Inter-Company—This Group					9
1977	Inter-Company—Other Groups					10
1978	Others					11
						12
	Total Dividends					13
	Miscellaneous					14
1981	Revenues from Sinking & Other Funds					15
1982	Earned Carrying Charges		2 62	41	18.6	16
1983	Others					17
						18
	Total Miscellaneous		2 62	41	18.6	19
						20
	Total Other Income		2 62	41	18.6	21
						22
	Months Ended					23
	Interest					24
1971	Inter-Company—This Group					25
1972	Inter-Company—Other Groups					26
1973	Others					27
	Total Interest					28
	Dividends					29
1976	Inter-Company—This Group					30
1977	Inter-Company—Other Groups					31
1978	Others					32
						33
	Total Dividends					34
	Miscellaneous					35
1981	Revenues from Sinking & Other Funds					36
1982	Earned Carrying Charges					37
1983	Others					38
						39
	Total Miscellaneous					40
						41
	Total Other Income					42
						43
	12 Months Ended December 31					44
	Interest					45
1971	Inter-Company—This Group		—	—	—	46
1972	Inter-Company—Other Groups		—	—	—	47
1973	Others		—	+4 36	+100 0	48
	Total Interest		—	+4 36	+100.0	49
	Dividends					50
1976	Inter-Company—This Group					51
1977	Inter-Company—Other Groups					52
1978	Others					53
						54
	Total Dividends					55

	Interest					3
1971	Inter-Company—This Group					4
1972	Inter-Company—Other Groups					5
1973	Others					6
	Total Interest	—		—	—	7
	Dividends					8
1976	Inter-Company—This Group					9
1977	Inter-Company—Other Groups					10
1978	Others					11
						12
	Total Dividends	—		—	—	13
	Miscellaneous					14
1981	Revenues from Sinking & Other Funds	—		—	—	15
1982	Earned Carrying Charges	2 62		41	18 6	16
1983	Others	—		—	—	17
						18
	Total Miscellaneous	2 62		41	18 6	19
						20
	Total Other Income	2 62		41	18 6	21
						22
	Months Ended					23
	Interest					24
1971	Inter-Company—This Group					25
1972	Inter-Company—Other Groups					26
1973	Others					27
	Total Interest					28
	Dividends					29
1976	Inter-Company—This Group					30
1977	Inter-Company—Other Groups					31
1978	Others					32
						33
	Total Dividends					34
	Miscellaneous					35
1981	Revenues from Sinking & Other Funds					36
1982	Earned Carrying Charges					37
1983	Others					38
						39
	Total Miscellaneous					40
	Total Other Income					41
						42
						43
	12 Months Ended December 31					44
	Interest					45
1971	Inter-Company—This Group	—		—	—	46
1972	Inter-Company—Other Groups	—		—	—	47
1973	Others	—		+4 36	+100 0	48
	Total Interest	—		+4 36	+100 0	49
	Dividends					50
1976	Inter-Company—This Group					51
1977	Inter-Company—Other Groups					52
1978	Others					53
						54
	Total Dividends	—		—	—	55
	Miscellaneous					56
1981	Revenues from Sinking & Other Funds			—	—	57
1982	Earned Carrying Charges	29 40		13 13	80 7	58
1983	Others	—		+25 00	+100 0	59
						60
	Total Miscellaneous	29 40		+11 87	+28 8	61
						62
	Total Other Income	29 40		+16 23	+35 6	63
	+Indicates red figures	(A)	(B)	(C)	(D)	

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(Exhibit 266.)

Columbia System
Indiana Gas Distribution Corporation

Other Deductions 47

Month of December - 1941

Acc't No.		Detail on Page	Amount	Increase Over Previous Year Amount	Increase Over Previous Year Percent	
						1
	Month of December					2
	Interest					3
9571	Bonds		—	—	—	4
9572	Miscellaneous Long Term Debt		—	—	—	5
9573	Inter-Co. Notes & Loans—This Group		—	—	—	6
9574	" " " " " —Other Groups	24-A	705 00	—	—	7
9575	Other—Customers Deposits, Etc.	24-A	7 43	2 55	52 3	8
						9
						10
	Total Interest		712 43	2 55	4	11
9580	Amortization—Debt Discount And Expense		—	—	—	12
	Total Fixed Charges		712 43	2 55	4	13
9583	Miscellaneous Deductions		6 00	+5 00	+45 5	14
9585	Preferred Dividends of Subsidiaries		—	—	—	15
9586	Rent for Lease of Utility Plant		—	—	—	16
						17
	Total Other Deductions		718 43	+2 45	+ 3	18
9587	Less: Interest Charged to Construction—Credit		—	—	—	19
						20
	Net Deductions From Income		718 43	+2 45	+ 3	21
						22
	Months Ended					23
	Interest					24
9571	Bonds					25
9572	Miscellaneous Long Term Debt					26
9573	Inter-Co. Notes & Loans—This Group					27
9574	" " " " " —Other Groups					28
9575	Other—Customers Deposits, Etc.					29
						30
						31
	Total Interest					32
9580	Amortization—Debt Discount and Expense					33
	Total Fixed Charges					34
9583	Miscellaneous Deductions					35
9585	Preferred Dividends of Subsidiaries					36
9586	Rent for Lease of Utility Plant					37
						38
	Total Other Deductions					39
9587	Less: Interest Charged to Construction—Credit					40
						41
	Net Deductions From Income					42
						43
	12 Months Ended December 31					44
	Interest					45
9571	Bonds		—	—	—	46
9572	Miscellaneous Long Term Debt		—	—	—	47
9573	Inter-Co. Notes & Loans—This Group		—	—	—	48
9574	" " " " " —Other Groups	24-A	8,460 00	—	—	49
9575	Other—Customers Deposits, Etc	24-A	73 44	25 02	51 7	50
						51
						52

		Month of December					2
	Interest						3
9571	Bonds		—		—	—	4
9572	Miscellaneous Long Term Debt		—		—	—	5
9573	Inter-Co. Notes & Loans—This Group		—		—	—	6
9574	" " " " " —Other Groups	24-A	705 00		—	—	7
9575	Other—Customers Deposits, Etc.	24-A	7 43		2 55	52 3	8
							9
							10
	Total Interest		712 43		2 55	4	11
9580	Amortization—Debt Discount And Expense		—		—	—	12
	Total Fixed Charges		712 43		2 55	4	13
9583	Miscellaneous Deductions		6 00		+5 00	+45 5	14
9585	Preferred Dividends of Subsidiaries		—		—	—	15
9586	Rent for Lease of Utility Plant		—		—	—	16
							17
	Total Other Deductions		718 43		+2 45	+ 3	18
9587	Less: Interest Charged to Construction—Credit		—		—	—	19
							20
	Net Deductions From Income		718 43		+2 45	+ 3	21
							22
		Months Ended					23
	Interest						24
9571	Bonds						25
9572	Miscellaneous Long Term Debt						26
9573	Inter-Co. Notes & Loans—This Group						27
9574	" " " " " —Other Groups						28
9575	Other—Customers Deposits, Etc.						29
							30
							31
	Total Interest						32
9580	Amortization—Debt Discount and Expense						33
	Total Fixed Charges						34
9583	Miscellaneous Deductions						35
9585	Preferred Dividends of Subsidiaries						36
9586	Rent for Lease of Utility Plant						37
							38
	Total Other Deductions						39
9587	Less: Interest Charged to Construction—Credit						40
							41
	Net Deductions From Income						42
							43
		12 Months Ended December 31					44
	Interest						45
9571	Bonds				—	—	46
9572	Miscellaneous Long Term Debt		—		—	—	47
9573	Inter-Co. Notes & Loans—This Group		—		—	—	48
9574	" " " " " —Other Groups	24-A	8 460 00		—	—	49
9575	Other—Customers Deposits, Etc.	24-A	73 44		25 02	51 7	50
							51
							52
	Total Interest		8 533 44		25 02	3	53
9580	Amortization—Debt Discount And Expense		—		—	—	54
	Total Fixed Charges		8 533 44		25 02	3	55
9583	Miscellaneous Deductions		17 63		1 63	10 2	56
9585	Preferred Dividends of Subsidiaries		—		—	—	57
9586	Rent for Lease of Utility Plant		—		—	—	58
							59
	Total Other Deductions		8 551 07		26 65	3	60
9587	Less: Interest Charged to Construction—Credit		—			—	61
							62
	Net Deductions From Income		8 551 07		26 65	3	63

+Indicates red figures.

(A) (B) (C) (D)

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(Exhibit 266.)

Columbia System

Indiana Gas Distribution Corporation — Surplus 18

Corrected Copy — 12 Months Ended December 31, 1941

	Detail on Page			
		Earned Surplus Since December 31, 1937		
Balance—January 1, 1941		xxxxxxxxxx	2 848 86	3
Credits:				4
Net Income 12 Months Ended Dec. 31, 1941 As Shown by Income Statement			23 280 04	5
Profit from Sale of Investments †				6
Other Credits †			1 556 02	7
				8
Total		xxxxxxxxxx	27 684 92	9
Debits:				10
Deficit 12 Months Ended Dec. 31, 1941 As Shown by Income Statement				11
Dividend Appropriations—Preferred Stock—Cum. 6% Series A—C.G.& E. Corp.				12
Dividend Appropriations—Preferred Stock—Cum. 5% Series—C.G.& E. Corp.				13
Dividend Appropriations—Preference Stock—5% Cum.—C. G. & E. Corp.				14
Dividend Appropriations—				15
Dividend Appropriations—Common Stock †			20 708 35	16
Loss from Sale of Investments †				17
Investments Written Down or Written Off †				18
Surplus Appropriated to Reserves †				19
Other Debits †				20
				21
				22
Total Debits		xxxxxxxxxx	20 708 35	23
Balance		xxxxxxxxxx	6 976 57	24

† Show Detail:

Credits:				25
Other Credits				26
Excess Accrual for Federal Taxes for the Year 1940			1 278 28	27
Federal Income Tax	$ 376 85			28
Federal Excess Profits Tax	901 43			29
	$1 278 28			30
				31
Final Distribution from Liquidation of Columbia System Protection Fund	$ 416 95			32
Less: Provision for Federal Income, Surtax and Excess Profits Taxes	139 21		277 74	33
			1 556 02	34
Debits:				35
Dividend Appropriations—Common Stock				36
Declared June 23, 1941, Payable June 27, 1941 to Shareholders as of record June 25, 1941		10 708 35		37
Total Dividend—20 Shares @ $1,000 per share $20,000 00				38
Charged to:				39
Earned Surplus Prior to January 1, 1938	$ 9 291 65			40
Earned Surplus Since December 31, 1937	10 708 35			41
	$20 000 00			42
Declared December 19, 1941, Payable December 23, 1941 to Shareholders as of record December 22, 1941				43
Total Dividend—20 Shares @ $500.00 per share		10 000 00		44
		20 708 35		45

(Exhibit 266.)

Columbia System
Indiana Gas Distribution Corporation — Surplus 18A

*Corrected Copy — 12 Months Ended December 31, 1941

	Detail on Page			
				1
Special Capital Surplus				2
Balance—January 1, 19		xxxxxxxxxx	—	3
Credits:				4
				5
Debits:				6
				7
				8
				9
Balance—		xxxxxxxxxx	—	10
				11
Surplus Prior To January 1, 1938				12
Balance—Surplus Prior To January 1, 1938 At January 1, 1941		xxxxxxxxxx	9 291 65	13
Capital Surplus Prior To January 1, 1938				14
At Date Of Acquisition By C. G. & E. Corp.				15
Balance—January 1, 19		xxxxxxxxxx	—	16
Credits:				17
				18
Debits:				19
				20
				21
Balance—		xxxxxxxxxx	—	22
Since Date Of Acquisition By C. G. & E. Corp.				23
Balance—January 1, 19		xxxxxxxxxx	—	24
Credits:				25
				26
Debits:				27
				28
				29
Balance—		xxxxxxxxxx	—	30
Balance—Capital Surplus Prior To January 1, 1938		xxxxxxxxxx	—	31
Earned Surplus Prior To January 1, 1938				32
Balance—Earned Surplus Prior To January 1, 1938 At January 1, 1941		xxxxxxxxxx	9 291 65	33
At Date Of Acquisition By C. G. & E. Corp.				34
Balance—January 1, 19		xxxxxxxxxx	—	35
Credits:				36
				37
				38
Debits:				39
				40
				41
Balance—		xxxxxxxxxx	—	42
Since Date Of Acquisition By C. G. & E. Corp.				43
Balance—January 1, 1941		xxxxxxxxxx	9 291 65	44
Credits:				45
				46
Debits:	20-C		9 291 65	47
				48
				49
Balance—		xxxxxxxxxx	—	50
Balance—Earned Surplus Prior To January 1, 1938		xxxxxxxxxx	—	51
Balance—Surplus Prior To January 1, 1938		xxxxxxxxxx	—	52

			8
			9
Balance—	x x x x x x x x x x	—	10
			11
Surplus Prior To January 1, 1938			12
Balance—Surplus Prior To January 1, 1938 At January 1, 1941	x x x x x x x x x x	9 291 65	13
Capital Surplus Prior To January 1, 1938			14
At Date Of Acquisition By C. G. & E. Corp.			15
Balance—January 1, 19	x x x x x x x x x x	—	16
Credits:			17
			18
Debits:			19
			20
			21
Balance—	x x x x x x x x x x	—	22
Since Date Of Acquisition By C. G. & E. Corp.			23
Balance—January 1, 19	x x x x x x x x x x	—	24
Credits:			25
			26
Debits:			27
			28
			29
Balance—	x x x x x x x x x x	—	30
Balance—Capital Surplus Prior To January 1, 1938	x x x x x x x x x x	—	31
Earned Surplus Prior To January 1, 1938			32
Balance—Earned Surplus Prior To January 1, 1938 At January 1, 1941	x x x x x x x x x x	9 291 65	33
At Date Of Acquisition By C. G. & E. Corp.			34
Balance—January 1, 19	x x x x x x x x x x	—	35
Credits:			36
			37
			38
Debits:			39
			40
			41
Balance—	x x x x x x x x x x	—	42
Since Date Of Acquisition By C. G. & E. Corp.			43
Balance—January 1, 1941	x x x x x x x x x x	9 291 65	44
Credits:			45
			46
Debits:	20-C	9 291 65	47
			48
			49
Balance—	x x x x x x x x x x	—	50
Balance—Earned Surplus Prior To January 1, 1938	x x x x x x x x x x	—	51
Balance—Surplus Prior To January 1, 1938	x x x x x x x x x x	—	52
			53
Capital Surplus Since December 31, 1937			54
Balance—January 1, 19	x x x x x x x x x x		55
Credits:			56
			57
			58
Debits:			59
			60
			61
			62
Balance—	x x x x x x x x x x	—	63

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*Indicates Corrected Copy. (A) (B)

Description	No.	Original Amount	Date	Due	Int. %	Amount		
Assets								1
Accounts Receivable—Other Groups								2
Columbia System Protection Fund						416 95		3
Michigan Gas Transmission Corporation						5 40		4
								5
Total, Page 1-A, Line 66							422 35	6
								7
Liabilities								8
Notes Payable	No.	Original Amount	Date	Due	Int. %	Amount		9
Columbia Gas & Electric Corporation	2	125 000 00	8-1-37	On Demand	6	125 000 00		10
Columbia Gas & Electric Corporation	3-R-1	1 000 00	12-1-37	" "	6	1 000 00		11
								12
Total, Page 2, Line 18							126 000 00	13
								14
Accounts Payable—This Group								15
The Ohio Fuel Gas Company								16
Total, Page 2, Line 46							437 88	17
								18
Accounts Payable—Other Groups								19
Unassigned								20
Columbia Gas & Electric Corporation						15 000 00		21
Columbia Engineering Corporation						123 92		22
Michigan Gas Transmission Corporation						27 045 21		23
								24
Total, Page 2, Line 47							42 168 23	25
								26
								27
								28
								29
								30
								31
								32
								33
								34
								35
								36
								37
								38
								39
								40
								41
								42
								43
								44
								45
								46
								47

Description					
Current And Working Assets					1
Accounts Receivable—Utility Service					2
Fiscal Closing Balance			34 437 82		3
Cash Receipts to Close of Month			4 888 88		4
					5
Calendar Closing Month, Page 1, Line 44				29 548 94	6
					7
Accounts Receivable—Appliances—Current Accounts					8
Straight Charge Accounts—Due Within 90 Days			387 12		9
Delinquent Balance on Installment Accounts					10
					11
Total, Page 1, Line 45				387 12	12
					13
Accounts Receivable—Appliances—Installment Accounts					14
Due Per Terms of Contracts	First Half Year	Second Half Year	Total		15
Year 1942	172 95	100 92	273 87		16
" 1943	32 10	32 10	64 20		17
" 1944	32 10	12 45	44 55		18
					19
Total, Page 1, Line 46				382 62	20
					21
Accounts Receivable—Other					22
Shop and Contract Work			26 35		23
Officers and Employees			*24 60		24
					25
Total, Page 1, Line 47				1 75	26
					27
					28
					29
					30
					31
					32
					33
					34
					35
					36
					37
					38
					39
					40
					41
					42
					43
					44
					45
					46
					47

*Indicates red figures

Description	(A)	(B)	(C)	(D)	
Earned Surplus Prior To January 1, 1938					1
Since date of Acquisition by Columbia Gas & Electric Corp.					2
Debits:					3
Dividend Appropriations—Common Stock				9 291 65	4
Dividend of 20 Shares @ $1,000 Per Share		20 000 00			5
Charged to					6
Earned Surplus Prior to January 1, 1938	9 291 65				7
Earned Surplus Since December 31, 1937	10 708 35				8
	20 000 00				9
Total, Page 14-A, Line 47				9 291 65	10
					11
					12
					13
					14
					15
					16
					17
					18
					19
					20
					21
					22
					23
					24
					25
					26
					27
					28
					29
					30
					31
					32
					33
					34
					35
					36
					37
					38
					39
					40
					41
					42
					43
					44
					45
					46
					47

Acc't No.	Title of Account and Description		Total Amount Basis	Mos. to Run	Balance Beginning of Month	Changes During Month Debits	Changes During Month Credits	Balance End of Month	
	Current and Working Assets								1
33	Supplies—General				1 376 35				2
	Purchased					130 79			3
	Returns					77 93			4
	Issues						408 14		5
									6
	Total, Page 1, Line 53				1 376 35	208 72	408 14	1 176 93	7
									8
38	Prepaid Accounts								9
	Insurance			Var.	152 01	151 59	19 61	283 99	10
					2 49	—	2 49	—	11
									12
	Total, Page 1, Line 58				154 50	151 59	22 10	283 99	13
									14
84	Deferred Debits								15
	Other Deferred Debits								16
	Inter-Company								17
	Total, Page 1, A Line 84				—	7 41	—	7 41	18
									19
	Current And Accrued Liabilities								20
127	Accrued Taxes								21
	Federal Capital Stock	(1942)	625 00	6	260 33	—	52 17	312 50	22
	Federal Income	(1940)		—	1 334 05	1 334 05	—	—	23
	Federal Income	(1941)		—	7 749 90	—	1 410 77	9 160 67	24
	Federal Unemployment Ins.	(1941)	3% of Pay Roll	—	24 99	—	3 53	28 52	25
	Federal Old Age Benefit	(1941)	1.0% of Pay Roll	—	15 40	—	11 79	27 19	26
	Property	(1940)		—	107 57	—	—	107 57	27
	Property	(1941)	4 900 00	—	4 345 00	30 64	447 43	4 761 79	28
	Indiana Gross Income	(1941)	1.0% of Gross Receipt	—	675 74	—	358 74	1 034 48	29
	Indiana Unemployment Ins?	(1941)	35% of Pay Roll	—	21 83	—	*18 15	3 68	30
	Federal Excess Profits Tax	(1941)		—	*2 120 13	—	52 70	2 172 83	31
									32
	Total, Page 2, Line 33				16 654 94	1 364 69	2 318 98	17 609 23	33
									34
128	Accrued Interest								35
	Customers' Service Deposits								36
	Total, Page 2, Line 34		6.0% Prev. Mos. Bal.		120 48	*54	7 43	127 37	37
									38
									39
									40
									41
									42
									43
									44
									45
									46
									47

Detail of Balance Sheet Accounts	(A)	(B)	(C)	(D)	(E)	(F)

*Indicates red figures.

(Exhibit 266.)

Acct No.	Title of Account and Description	Total Amount Basis	Mos. to Run	Balance Beginning of Month	Changes During Month Debits	Changes During Month Credits	Balance End of Month	
	Deferred Credits							1
162	Unclaimed Customers' Service Deposits Including Interest							2
	Total, Page 2, Line 58				17 78	17 78	—	3
								4
163	Other Deferred Credits							5
	Unearned Carrying Charges							6
	Total, Page 2, Line 59			37 37	2 62		34 75	7
								8
	Clearance And Contra Accounts							9
86	Transportation Expense—Clearing							10
	Total, Page 2-A, Line 65			422 27	250 99	267 25	338 53	11
								12
	Reserves							13
180	Retirement and Depletion							14
	Property, and Plant Equipment	2% of P. P. & E.		25 265 62	326 03	340 42	25 280 01	15
	Automobiles	Estimated Life		1 727 12	—	62 79	1 789 91	16
	Total			26 992 74	326 03	403 21	27 069 92	17
	Less: Retirement Clearance Acct.			*270 61	612 37	392 76	—	18
	Net Retirement and Depletion Reserves (p. 2-A, L. 76)			27 212 35	938 40	795 97	27 069 92	19
								20
181	Injuries and Damages							21
	Other							22
	Total, Page 2-A, Line 77	1 900 00		8 890 78		87 00	8 977 78	23
								24
183	Contributions in Aid of Construction							25
	Total, Page 2-A, Line 79			3 530 00	5 00	70 00	3 600 00	26
								27
185	Contingencies							28
	Taxes							29
	Total, Page 2-A, Line 81			237 13	—	451 62	688 75	30
								31
188	Uncollectible Accounts							32
	Customers	Accrual 1% of Gross		( )			( )	33
		Recoveries		(3 853 29)	—	—	(3 857 29)	34
		Total		3 853 29	—	—	3 853 29	35
								36
	Appliance	Accrual 1% of Net		( )		1 42	( )	37
		Recoveries		(81 65)	—	—	(83 07)	38
		Total		81 65	—	1 42	83 07	39
								40
	Total, Page 1, Line 49			3 934 94	—	1 42	3 936 36	41
								42
								43
								44
								45
								46
								47

(A)	(B)	(C)	(D)	(E)	(F)

(Exhibit 26[illegible])

Acc't No.	Description	Current Month	Increase Over Previous Year	Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year
2001	Gas Purchased—Other Groups						
	Unassigned						
	Michigan Gas Transmission Corp.						
	Total, P. 4-S & C, L. 18	27 037 80	*4 561 02			320 181 22	*15 540 48
	Other Deductions						
9574	Interest—Other Groups						
	Unassigned						
	Columbia Gas & Electric Corp. (N.Y.)						
	Total, P. 17, L. 7 & 49	705 00	—			8 460 00	—
9575	Interest—Other						
	Customers' Deposits						
	Total, P. 17, L. 8 & 50	7 43	2 55			73 44	25 02

(A)	(B)	(C)	(D)	(E)	(F)

Detail Of Income Accounts
Inter-Company Earnings And Expenses
Other Deductions

Indiana Gas Distribution Corporation
Columbia System

Month of December — 1941 24 A

*Indicates red figures.

[fol. 16666] (Exhibit 266.)

Acc't No.	Description	Current Month	Increase Over Previous Year	Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year	
	Gas Department							1
	State and Other							2
	Property	447 43	47 43			4 792 43	142 43	3
	Gross Income	358 74	81 47			4 034 37	+3 62	4
	Unemployment Insurance	+7 33	+28 67			46 57	+208 23	5
								6
2997	Total, State and Other	798 84	100 23			8 873 37	+69 42	7
								8
	Federal							9
	Capital Stock	52 17	20 17			745 50	342 50	10
	Unemployment Insurance	3 28	92			26 75	+1 49	11
	Old Age Benefit	10 97	3 05			91 09	+3 34	12
	Income	887 68	+332 87			9 360 73	3 829 84	13
	Excess Profits	888 20	689 53			2 522 31	1 620 88	14
								15
2996	Total, Federal	1 842 30	+380 80			12 746 38	5 788 39	16
								17
	Total Taxes, P. 3, L. 14 & 56	2 641 14	481 03			21 619 75	5 718 97	18
								19
								20
	+Note: Taxes Charged to Fixed Capital, Surplus And Transportation-Clearance Are Not Included							21
								22
								23
								24
								25
								26
								27
								28
								29
								30
								31
								32
								33
								34
								35
								36
								37
								38
								39
								40
								41
								42
								43
								44
								45
								46
								47

Acc't No.	Description	Current Month	Increase Over Previous Year	Months To Date	Increase Over Previous Year	Twelve Months To Date	Increase Over Previous Year	
1210	Rent from Property	—	—			—	—	1
1212	Customers' Forfeited Discounts	29 22	+7 18			399 78	+80 51	2
1215	Miscellaneous Other Revenue	91	+6 62			16 47	+25 40	3
								4
	Total, P. 4-A, & C. L. 14	30 13	+13 80			416 25	+105 91	5
								6
								7
								8
								9
								10
								11
								12
								13
								14
								15
								16
								17
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								35
								36
								37
								38
								39
								40
								41
								42
								43
								44
								45
								46
								47

(A) (B) (C) (D) (E) (F)

+Indicates red figures.

(Exhibit 266.)

Columbia System — Gas Expenses 25
Indiana Gas Distribution Corporation — Month of December - 1941

12 Months To Date	Increase Over Previous Year	Acc't No.	Gas Purchased For Resale		Current Month	Increase Over Previous Year	
							1
—	—	2000	Natural Gas Purchased—This Group		—	—	2
320 181 22	+15 540 48	2001	" " " —Other Groups		27 037 80	+4 561 02	3
—	—	2002	" " " —Others		—	—	4
—	—	2003	Manufactured Gas Purchased—This Group		—	—	5
—	—	2004	" " " —Other Groups		—	—	6
—	—	2005	" " " —Others		—	—	7
—	—	2010	Interchange of Gas—Net—This Group		—	—	8
—	—	2011	" " " " —Other Groups		—	—	9
—	—	2012	" " " " —Others		—	—	10
—	—	2014	Gas Placed in Storage		—	—	11
—	—	2015	Gas Withdrawn from Storage		—	—	12
320 181 22	+15 540 48		Total		27 037 80	+4 561 02	13
							14
			Gas Purchase Expenses				15
			Operation				16
7 86	+15 58	2016	Purchase Expenses—Natural Gas	—Labor	—	—	17
26 45	24 05	2017	" " " " "	—M. & E.	15 60	15 60	18
—	—	2018	" " —Manufactured Gas	—Labor	—	—	19
—	—	2019	" " " "	—M. & E.	—	—	20
							21
							22
34 31	8 47		Total Operation		15 60	15 60	23
			Maintenance				24
—	+2 29	2054	Struc. & Equip.—Natural Gas	—Labor	—	—	25
—	—	2055	" " " " "	—M. & E.	—	—	26
—	—	2062	" " " —Manufactured Gas	—Labor	—	—	27
—	—	2063	" " " " "	—M. & E.	—	—	28
							29
							30
—	+2 29		Total Maintenance		—	—	31
34 31	6 18		Total Purchase Expenses		15 60	15 60	32
							33
			Gas Purchased Summary				34
			Natural Gas				35
320 181 22	+15 540 48		Total Purchases		27 037 80	+4 561 02	36
34 31	8 47		Total Purch. Exp.—Operation		15 60	15 60	37
—	+2 29		" " " —Maintenance		—	—	38
320 215 53	+15 534 30		Total		27 053 40	+4 545 42	39
			Manufactured Gas				40
			Total Purchases				41
			Total Purch. Exp.—Operation				42
			" " " —Maintenance				43
—	—		Total		—	—	44
			Interchange of Gas—Net				45
			Gas In & Out of Storage—Net				46
—	—		Total		—	—	47
320 215 53	+15 534 30		Total Gas Purchased Expenses		27 053 40	+4 545 42	48
							49
			Gas Purchase Statistics				50
1 306 394	44 994		Natural Gas Purchased	—MCF	109 311	+16 513	51
—	—		Interchange of Gas—Net	—MCF	—	—	52
—	—		Natural Gas Stored—Cr.	—MCF	—	—	53
1 306 394	44 994		Total		109 311	+16 513	54
			Average Cost Per MCF (Cents)		24 75	+.38	55

—	—	2003	Manufactured Gas Purchased—This Group		—	—	5
—	—	2004	" " " —Other Groups		—	—	6
—	—	2005	" " " —Others		—	—	7
—	—	2010	Interchange of Gas—Net—This Group		—	—	8
—	—	2011	" " " " —Other Groups		—	—	9
—	—	2012	" " " " —Others		—	—	10
—	—	2014	Gas Placed in Storage		—	—	11
—	—	2015	Gas Withdrawn from Storage		—	—	12
320 181 22	+15 540 48		Total		27 037 80	+4 561 02	13
							14
			Gas Purchase Expenses				15
			Operation				16
7 86	+15 58	2016	Purchase Expenses—Natural Gas	—Labor	—	—	17
26 45	24 [illegible]	2017	" " " " "	—M. & E.	15 60	15 60	18
—	—	2018	" " —Manufactured Gas	—Labor	—	—	19
—	—	2019	" " " " "	—M. & E.	—	—	20
							21
							22
34 31	8 47		Total Operation		15 60	15 60	23
			Maintenance				24
—	+2 29	2054	Struc. & Equip.—Natural Gas	—Labor	—	—	25
—	—	2055	" " " " "	—M. & E.	—	—	26
—	—	2062	" " " —Manufactured Gas	—Labor	—	—	27
—	—	2063	" " " " "	—M. & E.	—	—	28
							29
							30
—	+2 29		Total Maintenance		—	—	31
34 31	6 18		Total Purchase Expenses		15 60	15 60	32
							33
			Gas Purchased Summary				34
			Natural Gas				35
320 181 22	+15 540 48		Total Purchases		27 037 80	+4 561 02	36
34 31	8 47		Total Purch. Exp. —Operation		15 60	15 60	37
—	+2 29		" " " —Maintenance		—	—	38
320 215 53	+15 534 30		Total		27 053 40	+4 545 42	39
			Manufactured Gas				40
			Total Purchases				41
			Total Purch. Exp. —Operation				42
			" " " —Maintenance				43
—	—		Total		—	—	44
			Interchange of Gas—Net				45
			Gas In & Out of Storage—Net				46
—			Total		—	—	47
320 215 53	+15 534 30		Total Gas Purchased Expenses		27 053 40	+4 545 42	48
							49
			Gas Purchase Statistics				50
1 306 394	44 994		Natural Gas Purchased	—MCF	109 311	+16 513	51
—	—		Interchange of Gas—Net	—MCF	—	—	52
—	—		Natural Gas Stored—Cr.	—MCF	—	—	53
1 306 394	44 994		Total		109 311	+16 513	54
24 51	+2 11		Average Cost Per MCF (Cents)		24 75	+36	55
			Manufactured Gas Purchased	—MCF			56
			Manufactured Gas Stored—Cr.	—MCF			57
—	—		Total		—	—	58
—	—		Average Cost Per MCF (Cents)		—	—	59
—	—		Gas Withdrawn from Storage	—MCF	—	—	60
—	—		Average Cost Per MCF (Cents)		—	—	61
1 306 394	44 994		Total Gas Purchased—MCF		109 311	+16 513	62
24 51	+2 11		Avg. Cost Per MCF (Cents)		24 75	+36	63
(A)	(B)				(C)	(D)	

+Indicates red figures.

(Exhibit 266.)

Columbia System
Indiana Gas Distribution Corporation

12 Months To Date	Increase Over Previous Year	Acc't No.	Distribution		Month of December - 1941 Current Month	Increase Over Previous Year	
			Operation				1
1 058 93	+92 67	2400	Supervision & Engineering	—Labor	83 53	+11 47	2
967 51	+166 89	2401	" " "	—M. & E.	66 42	+13 15	3
39	+1 33	2404	Distribution Maps & Records	—Labor	—	+2 95	4
22	+28 87	2405	" " " "	—M. & E.	—	+26 46	5
—	—	2406	Distr. Pumping, Meas. and Reg. Equip.	—Labor	—	—	6
—	—	2407	" " " " " "	—M. & E.	—	—	7
548 90	1 89	2412	Distribution Lines	—Labor	40 95	+24 55	8
449 67	174 92	2413	" "	—M. & E.	32 09	14 24	9
352 44	276 01	2418	Rem. and Reset Meters and Hse. Reg.	—Labor	66 45	+12 10	10
564 19	249 71	2419	" " " " " " "	—M. & E.	36 42	10 56	11
787 77	199 81	2420	Other Services on Customers Prem.	—Labor	59 24	+7 58	12
568 19	269 85	2421	" " " " "	—M. & E.	44 69	+1 15	13
50 79	98	2424	Meter Department	—Labor	4 14	2 64	14
35 43	26 80	2425	" "	—M. & E.	19 74	19 49	15
300 90	61 40	2426	Other Distribution Expenses	—Labor	27 19	+15 57	16
514 34	211 17	2427	" " "	—M. & E.	32 24	+53 20	17
—	—	2428	Street Lighting	—Labor	—	—	18
—	—	2429	" "	—M. & E.	—	—	19
288 99	+2 76	2433	Rents		31 05	11 05	20
							21
							22
							23
7 088 66	1 140 02		Total Operation		544 15	+113 20	24
			Maintenance				25
288 61	154 99	2450	Supervision & Engineering	—Labor	23 47	8 00	26
257 73	61 49	2451	" " "	—M. & E.	17 70	+5 74	27
62 27	49 90	2452	Structures & Improvements	—Labor	—	+6 57	28
46 77	29 30	2453	" " "	—M. & E.	—	+7 40	29
39 66	33 15	2454	Distribution Meas. and Reg. Equip.	—Labor	11 76	9 57	30
5 05	+5 12	2455	" " " " "	—M. & E.	3 30	+1 92	31
—	—	2456	Distribution Pumping Equipment	—Labor	—	—	32
—	—	2457	" " "	—M. & E.	—	—	33
126 29	33 40	2460	Distribution Lines	—Labor	—	+18 99	34
107 62	59 30	2461	" "	—M. & E.	—	+9 50	35
19 88	+5 13	2468	Services	—Labor	77	+5 87	36
8 57	+20 20	2469	"	—M. & E.	4 74	8 20	37
359 64	197 15	2472	Meters	—Labor	07	+33 33	38
458 99	260 98	2473	"	—M. & E.	45	+32 75	39
33 78	+79 43	2474	House Regulators	—Labor	1 32	+3 10	40
106 31	+51 06	2475	" "	—M. & E.	+10 00	+22 86	41
—	—	2478	Street Lighting Equipment	—Labor	—	—	42
—	—	2479	" "	—M. & E.	—	—	43
7 12	+14 68	2480	Miscellaneous Distribution Equipment	—Labor	—	—	44
52 03	34 74	2481	" " "	—M. & E.	—	—	45
							46
							47
							48
							49
							50
1 980 35	738 73		Total Maintenance		53 58	+122 26	51
9 069 01	1 878 75		Total Distribution Expenses		597 73	+235 46	52
1 791	145		Number Of Customers		1 881	143	53
506 37	69 54		Average Cost Per Customer (Cents)		31 78	+16 16	54
							55
							56
							57

12 Months To Date	Increase Over Previous Year	Acc't No.	Distribution		Month of December - 1941 Current Month	Increase Over Previous Year	
			Operation				1
1 058 93	+92 67	2400	Supervision & Engineering	—Labor	83 53	+11 47	2
967 51	+166 89	2401	" " " "	—M. & E.	66 42	+13 15	3
39	+11 33	2404	Distribution Maps & Records	—Labor	—	+2 95	4
22	+28 87	2405	" " " "	—M. & E.	—	+26 46	5
—	—	2406	Distr. Pumping, Meas. and Reg. Equip.	—Labor	—	—	6
—	—	2407	" " " " " "	—M. & E.	—	—	7
548 90	1 89	2412	Distribution Lines	—Labor	40 95	+24 55	8
449 67	174 92	2413	" "	—M. & E.	32 09	14 24	9
352 44	276 01	2418	Rem. and Reset Meters and Hse. Reg	—Labor	66 45	+12 10	10
564 19	249 71	2419	" " " " " "	—M. & E.	36 42	10 56	11
787 77	199 81	2420	Other Services on Customers Prem.	—Labor	59 24	+7 58	12
568 19	269 85	2421	" " " "	—M. & E.	44 69	+1 15	13
50 79	98	2424	Meter Department	—Labor	4 14	2 64	14
35 43	26 80	2425	" "	—M. & E.	19 74	19 49	15
300 90	61 40	2426	Other Distribution Expenses	—Labor	27 19	+15 57	16
514 34	211 17	2427	" "	—M. & E.	32 24	+53 20	17
—	—	2428	Street Lighting	—Labor	—	—	18
—	—	2429	" "	—M. & E.	—	—	19
288 99	+2 76	2433	Rents		31 05	11 05	20
							21
							22
							23
7 088 66	1 140 02		Total Operation		544 15	+113 20	24
			Maintenance				25
288 61	154 99	2450	Supervision & Engineering	—Labor	23 47	8 00	26
257 73	61 49	2451	" " " "	—M. & E.	17 70	+5 74	27
62 27	49 90	2452	Structures & Improvements	—Labor	—	+6 57	28
46 77	29 30	2453	" " "	—M. & E.	—	+7 40	29
39 66	+33 15	2454	Distribution Meas. and Reg. Equip.	—Labor	11 76	9 57	30
5 05	+5 12	2455	" " " " " "	—M. & E.	3 30	+1 92	31
—	—	2456	Distribution Pumping Equipment	—Labor	—	—	32
—	—	2457	" " "	—M. & E.	—	—	33
126 29	33 40	2460	Distribution Lines	—Labor	—	+18 99	34
107 62	59 30	2461	" "	—M. & E.	—	+5 50	35
19 88	+5 13	2468	Services	—Labor	77	+5 87	36
8 57	+20 20	2469	"	—M. & E.	4 74	8 20	37
359 64	197 15	2472	Meters	—Labor	07	+33 33	38
458 99	260 93	2473	"	—M. & E.	45	+32 75	39
33 78	+79 43	2474	House Regulators	—Labor	1 32	+3 10	40
106 31	+51 06	2475	" "	—M. & E.	+10 00	+22 86	41
—	—	2478	Street Lighting Equipment	—Labor	—	—	42
—	—	2479	" " "	—M. & E.	—	—	43
7 13	+14 68	2480	Miscellaneous Distribution Equipment	—Labor	—	—	44
52 05	34 74	2481	" " "	—M. & E.	—	—	45
							46
							47
							48
							49
							50
1 980 35	738 73		Total Maintenance		53 58	+122 26	51
9 069 01	1 878 75		Total Distribution Expenses		597 73	+235 46	52
1 791	145		Number Of Customers		1 881	143	53
506 37	69 54		Average Cost Per Customer (Cents)		31 78	+16 16	54
							55
							56
							57
							58
							59
							60
							61
							62
							63
(A)	(B)				(C)	(D)	

+Indicates red figures.

6979

(Exhibit 266.)

Columbia System

Indiana Gas Distribution Corporation

Gas Expenses 30

Month of December 1941

12 Months To Date	Increase Over Previous Year	Acc't No.	Customers Accounting & Collecting		Current Month	Increase Over Previous Year	
							1
551 44	+354 37	2600	Supervision	—Labor	38 20	+7 80	2
308 68	127 60	2601	"	—M. & E.	20 17	13 15	3
37 32	+62 62	2602	Customers Contract & Orders	—Labor	2 80	+20	4
3 93	1 49	2603	" " " "	—M. & E.	13	13	5
31 77	+28 58	2604	Credit Investigation & Records	—Labor	2 80	+20	6
6 58	+6 91	2605	" " " "	—M. & E.	26	26	7
720 71	+44 34	2606	Meter Reading	—Labor	61 81	1 81	8
235 32	+125 38	2607	" "	—M. & E.	14 87	1 35	9
251 65	+185 87	2608	Collecting	—Labor	19 41	+5 92	10
1 034 39	+35 16	2609	"	—M. & E.	86 23	+10 47	11
488 40	+236 15	2610	Customers Billing & Acctg	—Labor	41 43	+3 64	12
246 22	+8 58	2611	" " " "	—M. & E.	28 14	+21	13
375 79	256 94	2612	Delivering Bills	—Labor	28 89	24 39	14
201 38	+198 97	2613	"	—M. & E.	11 25	+23 13	15
25 30	+75 69	2614	Miscellaneous	—Labor	1 40	+10	16
23 17	+36 56	2615	"	—M. & E.	10 52	+9 13	17
		2630	Uncollectible Accounts		—	—	18
71 68	3 06	2633	Rents—Billing Equipment		5 87	+42	19
181 83	34 83	2634	" —Other		15 53	4 53	20
							21
							22
							23
							24
							25
							26
							27
							28
							29
							30
							31
							32
							33
							34
							35
							36
4 795 56	+1 175 26		Total Cust. Acctg. & Coll. Exp.		389 71	+15 60	37
							38
			Sales Promotion				39
848 00	422 00	2700	Supervision	—Salaries	454 00	420 00	40
380 02	179 56	2701	"	—M. & E.	25 76	16 58	41
393 11	103 94	2704	Canvassing and Soliciting	—Salaries	40 19	18 81	42
209 86	+101 55	2705	" " "	—M. & E.	18 02	10 19	43
5 00	+455 00	2706	Commissions		—	—	44
—	—	2708	Demonstration	—Labor	—	—	45
5 00	5 00	2709	"	—M. & E.	—	—	46
—	—	2710	Advertising	—Labor	—	—	47
65 65	1 13	2711	"	—M. & E.	2 58	+12 86	48
20 38	20 38	2714	Miscellaneous	—Labor	3 52	3 52	49
16 36	15 41	2715	"	—M. & E.	2 25	2 25	50
—	—	2719	Rents		—	—	51
							52
							53

Month of December - 1941

12 Months To Date	Increase Over Previous Year	Acc't No.	Customers Accounting & Collecting		Current Month	Increase Over Previous Year	
							1
551 44	+554 37	2600	Supervision	—Labor	38 20	+7 80	2
308 68	127 60	2601	"	—M. & E.	20 17	13 15	3
37 32	+62 62	2602	Customers Contract & Orders	—Labor	2 80	+20	4
3 93	1 49	2603	" " " "	—M. & E.	13	13	5
31 77	+28 58	2604	Credit Investigation & Records	—Labor	2 80	+20	6
6 58	+6 91	2605	" " " "	—M. & E.	26	26	7
720 71	+44 34	2606	Meter Reading	—Labor	61 81	1 81	8
235 32	+125 38	2607	" "	—M. & E.	14 87	1 35	9
251 65	+185 87	2608	Collecting	—Labor	19 41	+5 92	10
1 034 39	+35 16	2609	"	—M. & E.	86 23	+10 47	11
488 40	+236 15	2610	Customers Billing & Acctg	—Labor	41 43	+3 64	12
246 22	+8 58	2611	" " " "	—M. & E.	28 14	+21	13
375 79	256 94	2612	Delivering Bills	—Labor	28 89	24 39	14
201 38	+198 97	2613	"	—M. & E.	11 25	+23 13	15
25 30	+75 69	2614	Miscellaneous	—Labor	1 40	+10	16
23 17	+36 56	2615	"	—M. & E.	10 52	+9 13	17
—	—	2630	Uncollectible Accounts		—	—	18
+71 68	— 3 06	2633	Rents—Billing Equipment		5 87	+42	19
181 83	34 83	2634	" —Other		15 53	4 53	20
							21
							22
							23
							24
							25
							26
							27
							28
							29
							30
							31
							32
							33
							34
							35
							36
4 795 56	+1 175 26		Total Cust. Acctg. & Coll. Exp.		389 71	+15 60	37
							38
			Sales Promotion				39
848 00	122 00	2700	Supervision	—Salaries	454 00	120 00	40
380 02	179 56	2701	"	—M. & E.	25 76	16 58	41
383 11	103 94	2704	Canvassing and Soliciting	—Salaries	40 19	18 81	42
209 86	+101 55	2705	" " "	—M. & E.	18 02	10 19	43
5 00	+455 00	2706	Commissions		—	—	44
—		2708	Demonstration	—Labor	—	—	45
5 00	5 00	2709	"	—M. & E.	—	—	46
—		2710	Advertising	—Labor	—	—	47
65 65	1 13	2711	"	—M. & E.	2 86	+12 86	48
20 38	20 38	2714	Miscellaneous	—Labor	3 52	3 52	49
16 36	15 41	2715	" "	—M. & E.	2 25	2 25	50
—	—	2719	Rents		—	—	51
							52
							53
							54
							55
							56
							57
							58
							59
							60
							61
							62
1 933 38	+190 87		Total Sales Promotion Expenses		546 60	458 49	63
(A)	(B)				(C)	(D)	

+Indicates red figures.

1939

(Exhibit 265.)

Columbia System

Indiana Gas Distribution Corporation

Gas Expenses 31

Month of December - 1941

12 Months To Date	Increase Over Previous Year	Acc't No.	Administrative & General		Current Month	Increase Over Previous Year	
			Operation				1
—	—	2800	General Officers	—Salaries	—	—	2
11 53	11 53	2801	" "	—Expenses	—	—	3
300 85	+2 71	2804	General Office Employees	—Salaries	25 00	—	4
54 16	+13 33	2805	" " "	—Expenses	—	+7 45	5
14 62	+18 90	2807	General Office Supplies and Expenses		—	—	6
323 32	+312 76	2809	Mgmt. & Supervision Fees & Expenses		26 90	49 33	7
50 00	25 00	2810	Special Services—Legal		50 00	50 00	8
446 69	96 96	2811	" " —Audit & Taxes		19 81	9 07	9
329 09	+319 10	2814	" " —Other		+15 88	+1 09	10
—	—	2815	Regulatory Commission Expenses		—	—	11
282 32	+6 30	2817	Insurance		53 61	28 86	12
1 008 01	+68	2819	Injuries and Damages		87 72	21	13
22	+15 22	2821	Employees Welfare Exp.Grp. Life Ins.		+38 49	+41 97	14
12 77	2 83	2823	" " " —Other		2 16	2 16	15
—	—	2824	Pensions		—	—	16
35 52	+10 18	2825	Miscellaneous General—Public Relations		16 50	16 50	17
1 00	+33 01	2829	" " —Other		—	—	18
—	—	2831	Franchise Requirements		—	—	19
—	—	2832	Rents—Accounting Equipment		—	—	20
—	—	2833	General Rents		—	—	21
549 11	+303 87	2835	Stores Expenses		34 86	+14 64	22
							23
							24
							25
							26
3 419 21	+935 40		Total Operation		262 19	20 98	27
			Maintenance				28
		2850	Structures & Improvements				29
		2852	General Office Furniture & Equipment				30
		2854	Communication Equipment				31
		2856	Miscellaneous General Equipment				32
							33
							34
							35
							36
							37
							38
—	—		Total Maintenance		—	—	39
3 419 21	+935 40		Total Administrative & General Exp.		262 19	20 98	40
							41
			Miscellaneous Duplicate Charges				42
123 99	+58 79	2982	Adm. & Gen'l. Exp. Transf. to Constr.	—Credit	49 84	+132 88	43
—	—	2983	Joint Operating Expenses Trans.	—Credit	—	—	44
—	—	2985 1	Gas Used by Gas Dept. for Power	—Credit	—	—	45
—	—	2985 2	" " " " " " Mfd. Gas	—Credit	—	—	46
87 85	+42 30	2985 3	" " " " " " Co. Bldgs.	—Credit	7 45	+13 90	47
—	—	2985 4	" " " " " " Other	—Credit	—	—	48
—	—	2987	" " Other Depts.	—Credit	—	—	49
—	—	2988	Free Gas	—Credit	—	—	50
564 54	+162 55	2989	Stores Expenses Transferred	—Credit	82 18	47 52	51
							52
776 32	+233 64		Total Duplicate Charges		139 47	+99 26	53
							54
336 676 02	+16 078 14		Total Operation		28 656 58	+4 095 49	55
1 980 35	736 44		Total Maintenance		53 58	+122 26	56
3 740 80	200 00	2990	Provision for Retirements		340 42	21 75	57
—	—	2992	Extraordinary Retirement Expenses		—	—	58
12 746 38	5 788 39	2996	Taxes—Federal		1 842 30	380 80	59
8 873 37	+69 42	2997	Taxes—State and Other		798 84	100 23	60
							61
							62
364 016 92	+9 422 73		Total Gas Expenses		31 691 72	+3 714 97	63

Month of December - 1941

12 Months To Date	Increase Over Previous Year	Acc't No.	Administrative & General		Current Month	Increase Over Previous Year	
			Operation				1
—	—	2800	General Officers	—Salaries	—	—	2
11 53	11 53	2801	" "	—Expenses	—	—	3
300 85	+2 71	2804	General Office Employees	—Salaries	25 00	—	4
54 16	+13 33	2805	" " "	—Expenses	—	+7 45	5
14 62	+18 90	2807	General Office Supplies and Expenses		—	—	6
323 32	+312 76	2809	Mgmt. & Supervision Fees & Expenses		26 90	49 33	7
50 00	25 00	2810	Special Services—Legal		50 00	50 00	8
446 69	96 96	2811	" " —Audit & Taxes		19 81	9 07	9
329 09	+319 10	2814	" " —Other		+15 88	+71 09	10
—	—	2815	Regulatory Commission Expenses		—	—	11
282 32	+6 30	2817	Insurance		53 61	28 86	12
1 008 01	+68	2819	Injuries and Damages		87 72	21	13
22	+45 22	2821	Employees Welfare Exp.Grp. Life Ins.		+38 49	+41 97	14
12 77	+2 83	2823	" " " —Other		2 16	2 16	15
—	—	2824	Pensions		—	—	16
35 52	+10 18	2825	Miscellaneous General—Public Relations		16 50	16 50	17
1 00	+33 01	2829	" " —Other		—	—	18
—	—	2831	Franchise Requirements		—	—	19
—	—	2832	Rents—Accounting Equipment		—	—	20
—	—	2833	General Rents		—	—	21
549 11	+303 87	2835	Stores Expenses		34 86	+14 64	22
							23
							24
							25
							26
3 419 21	+935 40		Total Operation		262 19	20 98	27
			Maintenance				28
		2850	Structures & Improvements				29
		2852	General Office Furniture & Equipment				30
		2854	Communication Equipment				31
		2856	Miscellaneous General Equipment				32
							33
							34
							35
							36
							37
							38
—	—		Total Maintenance		—	—	39
3 419 21	+935 40		Total Administrative & General Exp.		262 19	20 98	40
							41
			Miscellaneous Duplicate Charges				42
123 93	+58 79	2982	Adm. & Gen'l. Exp. Transf. to Constr.	—Credit	49 84	+132 88	43
—	—	2983	Joint Operating Expenses Trans.	—Credit	—	—	44
—	—	2985 1	Gas Used by Gas Dept.—for Power	—Credit	—	—	45
—	—	2985 2	" " " " " " Mfd. Gas	—Credit	—	—	46
87 85	+12 30	2985 3	" " " " " " Co. Bldgs.	—Credit	7 45	+13 90	47
—	—	2985 4	" " " " " " Other	—Credit	—	—	48
—	—	2987	" " " Other Depts.	—Credit	—	—	49
—	—	2988	Free Gas	—Credit	—	—	50
564 54	+162 55	2989	Stores Expenses Transferred	—Credit	82 18	47 52	51
							52
776 32	+233 64		Total Duplicate Charges		139 47	+99 26	53
							54
336 676 02	+16 078 14		Total Operation		28 656 58	+4 095 49	55
1 980 85	+86 44		Total Maintenance		53 58	+122 26	56
3 740 80	200 00	2990	Provision for Retirements		340 42	21 75	57
—	—	2992	Extraordinary Retirement Expenses		—	—	58
12 746 38	5 788 39	2996	Taxes—Federal		1 842 30	380 80	59
8 873 37	+69 42	2997	Taxes—State and Other		798 84	100 23	60
							61
							62
364 016 92	+9 422 73		Total Gas Expenses		31 691 72	+3 714 97	63

(A) (B) (C) (D)

+Indicates red figures.

(Exhibit 266.)

Deliveries	Consumers Current Month	Consumers Increase Over Previous Year	MCF Current Month	MCF Increase Over Previous Year	MCF Percent Increase	MCF Months To-Date	MCF Increase Over Previous Year	MCF Percent Increase	MCF 12 Months To Date	MCF Increase Over Previous Year	Per Incr
Retail											
Residential	1 689	136	7 922	404	5.4				64 435	*674	*1
Commercial	182	7	1 622	*391	*19.4				16 081	*573	*
Municipal and Other Public	9	—	52	*15	*22.4				460	33	
Industrial †	1	—	98 615	*17 569	*15.1				1 222 643	44 423	3
Other	—	—	—	—	—				—	—	
Total Retail Sales	1 881	143	108 211	*17 571	*14.0				1 303 619	43 209	3
Wholesale											
Other Public Utilities †	—	—	—	—	—				—	—	
Other Utilities—Col. Sys. †	—	—	—	—	—				—	—	
Total Sales To Public	1 881	143	108 211	*17 571	*14.0				1 303 619	43 209	3
Inter-Company											
This Group †											
Other Groups †											
Total Inter-Company Sales			—	—	—				—	—	
Total All Sales			108 211	*17 571	*14.0				1 303 619	43 209	3
Miscellaneous Deliveries											
Company Use, Elec. Gen. Stations †			—	—					—	—	
Other Company Use, etc.			15	*27	*64.3				182	*18	*9
Free, Municipal and Other			—	—	—				—	—	
Total Miscellaneous Deliveries			15	*27	*64.3				182	*18	*9
Total Gas Deliveries			108 226	*17 598	*14.0				1 303 801	43 191	3
Available For Deliveries											
Purchased—Inter-Company											
This Group †			—	—	—				—	—	
Other Groups †			109 311	*16 513	*13.1				1 306 394	44 994	3
Total Purchased—Inter-Company			109 311	*16 513	*13.1				1 306 394	44 994	3
Purchased—Independents											
Natural Gas †											
Artificial Gas †											
Total Purchased—Independents			—	—	—				—	—	
Total Gas Purchased			109 311	*16 513	*13.1				1 306 394	44 994	3
Produced											
Natural Gas											
Artifical Gas											
Total Gas Produced			—	—	—				—	—	
Interchange Of Gas—Net			—	—	—				—	—	
Gas In Or Out Of Storage—Net			—	—	—				—	—	
Total Gas Available For Deliveries			109 311	*16 513	*13.1				1 306 394	44 994	3
Loss (Black) Gain (Red)			1 085	1 085	—				2 593	1 803	228
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)

† Detail on Page 53
* Indicates red figures

Acc't No.	Account Title	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
	Intangible Plant					1
201	Organization	119 52	—	—	119 52	2
202	Franchises and Consents					3
202-1	Perpetual	355 56	—	—	355 56	4
202-2	Limited					5
203	Miscellaneous Intangible Plant	10 938 90	—	—	10 938 90	6
	Production Plant—Natural Gas					7
210	Land and Land Rights					8
210-1	Gas Land Owned in Fee					9
210-2	Gas Land Leaseholds					10
210-3	Gas Land Rights					11
210-4	Rights-of-Way					12
210-5	Other Land					13
210-6	Other Land Rights					14
211	Structures and Improvements					15
211-1	Gas Well Structures					16
211-2	Field Measuring and Regulating Station Structures					17
211-3	Other Production System Structures					18
212	Gas Wells					19
212-1	Gas Well Construction					20
212-2	Gas Well Equipment					21
213	Gathering Lines					22
214	Measuring and Regulating Equipment					23
215	Drilling and Cleaning Equipment					24
216	Purification Equipment					25
217	Miscellaneous Production Equipment					26
	Production Plant—Manufactured Gas					27
220	Land and Land Rights					28
220-1	Land					29
220-2	Land Rights					30
221	Structures and Improvements					31
222	Boiler Plant Equipment					32
223	Other Power Equipment					33
224	Benches and Retorts					34
225	Coke Ovens					35
226	Producer Gas Equipment					36
227	Water Gas Generating Equipment					37
228	Petrolgum Gas Equipment					38
229	Other Gas Generating Equipment					39
230	Gas Reforming Equipment					40
231	Purification Equipment					41
232	Residual Refining Equipment					42
233	Miscellaneous Production Equipment					43
233-1	Coal, Coke and Ash Handling Equipment					44
233-2	Other Miscellaneous Production Equipment					45
						46
	Amount Carried Forward	11 413 98	—	—	11 413 98	47
		(A)	(B)	(C)	(D)	

Acc't No.	Account Title	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
	Amount Brought Forward	11 413 98	—	—	11 413 98	1
	Storage Plant					2
235	Land and Land Rights					3
235-1	Land					4
235-2	Land Rights					5
236	Structures and Improvements					6
237	Gas Holders					7
238	Gas Storage Wells					8
238-1	Gas Storage Well Construction					9
238-2	Gas Storage Well Equipment					10
239	Miscellaneous Storage Equipment					11
						12
	Transmission Plant					13
240	Land and Land Rights					14
240-1	Land					15
240-2	Land Rights					16
240-3	Rights-of-Way	2 677 89	*3 25	—	2 674 64	17
242	Structures and Improvements					18
242-1	Compressor Station Structures					19
242-2	Transmission System Measuring and Regulating Station Structures					20
242-3	Other Transmission System Structures					21
243	Compressor Station Equipment					22
244	Measuring and Regulating Equipment					23
245	Mains	35 652 86	189 88	128 96	35 713 78	24
246	Miscellaneous Transmission Equipment					25
						26
	Distribution Plant					27
250	Land and Land Rights					28
250-1	Land	375 45	93 99	—	469 44	29
250-2	Land Rights		1 01		1 01	30
250-3	Rights-of-Way	91 17	79 55	—	170 72	31
251	Structures and Improvements	1 041 18	—	—	1 041 18	32
252	Pumping, Regulating and Measuring Equipment	1 884 91	*95 00	—	1 789 91	33
253	Mains	67 205 23	1 241 38	—	68 446 61	34
259	Services	26 173 05	2 253 35	38 41	28 387 99	35
260	Meters					36
260-1	Meters	18 095 34	4 315 90	2 640 52	19 770 72	37
260-2	Meter Installations	5 175 90	355 72	21 13	5 510 49	38
260-3	House Regulators	15 432 11	*4 095 03	293 45	11 043 93	39
260-4	Industrial Measuring Installations Included in a/c 252					40
260-5	House Regulator Installations	794 24	5 916 45	258 83	6 451 86	41
261	Other Property on Customers' Premises	4 31	—	—	4 31	42
263	Street Lighting Equipment					43
264	Miscellaneous Distribution Equipment	190 00	—	—	190 00	44
	Since Jan. 1st, 1940 Previous to Jan. 1st 1940 in a/c 260-3					45 46
	Amount Carried Forward	186 207 62	*10 253 95	3 381 00	193 080 57	47
		(A)	(B)	(C)	(D)	

(Exhibit 266.)

Acc't No.	Account Title	Balance First of Year	Current Year Additions	Current Year Retirements	Balance End of Period	
	Amount Brought Forward	186 207 62	10 253 95	3 381 00	193 080 57	1
	General Plant					2
270	Land and Land Rights					3
270-1	Land					4
270-2	Land Rights	—				5
271	Structures and Improvements	—				6
272	Office Furniture and Equipment	788 22	—	—	788 22	7
273	Transportation Equipment	—				8
273-1	Automobiles and Trucks	3 056 55	59 32	—	3 115 87	9
273-2	Other Automotive Equipment	—	—	—	—	10
273-3	Trailers	85 34	118 20	—	203 54	11
273-4	Other	—	—	—	—	12
274	Stores Equipment	—	—	—	—	13
275	Shop Equipment	—	—	—	—	14
276	Laboratory Equipment	—	—	—	—	15
277	Tools and Work Equipment	768 75	—	—	768 75	16
278	Communication Equipment	—	—	—	—	17
279	Miscellaneous General Equipment	—	—	—	—	18
						19
						20
						21
						22
						23
						24
						25
290	Other Tangible Property					26
291	Gas Plant Purchased					27
292	Gas Plant Sold					28
293	Gas Plant in Process of Reclassification					29
						30
						31
						32
						33
						34
						35
						36
	Total Gas Plant In Service	190 906 48	10 431 47	3 381 00	197 956 95	37
1-22	Gas Plant Leased to Others					38
1-23	Gas Plant Held for Future Use					39
1-24	Gas Plant Acquisition Adjustments					40
1-25	Gas Plant Adjustments					41
						42
						43
						44
						45
						46
	Total Property, Plant And Equipment—Gas Page 1—Line 14	190 906 48	10 431 47	3 381 00	197 956 95	47
		(A)	(B)	(C)	(D)	

Detail Of
Property, Plant And Equipment
Gas

Indiana Gas Distribution Corporation
Columbia System

For Period Ended December 31, 1941

Exhibit 267

Schedule 1
Page 1

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Comparative Balance Sheets — Per Books
March 31, 1942 And March 31, 1941

Line No.	(A)	March 31st 1942 (B)	March 31st 1941 (C)	Increase or Decrease (D)
1	Assets			
2	Gas Plant	$85 156 035 11	$66 407 005 40	$18 749 029 71
3	Investments And Fund Accounts			
4	Other Investments	3 297 115 55 (1)	218 928 55	3 078 187 00
5	Current And Accrued Assets			
6	Cash	6 949 285 99	5 791 163 10	1 158 122 89
7	Special Deposits	200 017 25	1 665 828 23	+1 465 810 98
8	Working Funds (Petty Cash			
9	and Advances)	20 774 44	8 937 07	11 837 37
10	Accounts Receivable	1 806 209 46	1 460 521 07	345 688 39
11	Interest and Dividends			
12	Receivable	8 470 73	691 57	7 779 16
13	Materials and Supplies	541 129 21	259 513 00	281 616 21
14	Prepayments	197 199 76	157 185 25	40 014 51
15	Total Current and Accrued Assets	9 723 086 84	9 343 839 29	379 247 55
16	Deferred Debits			
17	Unamortized Debt Discount			
18	and Expense		2 158 254 43	+2 158 254 43
19	Clearing Accounts	13 200 07	5 609 86	7 590 81
20	Retirement Work in Progress	+1 145 77	4 577 40	+5 723 17
21	Other Work in Progress	298 803 89	655 560 49	+356 756 60
22	Other Deferred Debits	63 786 73	349 20	63 437 53
23	Total Deferred Debits	374 645 52	2 824 351 38	+2 449 705 86
24	Total Assets And Other Debits	$98 550 883 02	$79 794 124 62	$19 756 758 40

+Indicates red figures.

This Exhibit was requested at T 10,583 and should be added to the Permanent file of Exhibits received.

S. H. Crosby, Trial Examiner,
May 8, 1942

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Comparative Balance Sheets — Per Books
March 31, 1942 And March 31, 1941

Line No.	(A)	March 31st 1942 (B)	1941 (C)	Increase or Decrease (D)
1	Liabilities			
2	Capital Stock			
3	Common Capital Stock	$20 184 175 00	$20 184 175 00	—
4	Preferred Capital Stock	16 000 000 00	11 000 000 00	$ 5 000 000 00
5	Total Capital Stock	36 184 175 00	31 184 175 00	5 000 000 00
6	Long-Term Debt			
7	Bonds	28 250 000 00	18 250 000 00	10 000 000 00
8	Miscellaneous Long-Term Debt	5 004 500 88	5 022 113 66	*17 612 78
9	Total Long-Term Debt	33 254 500 88	23 272 113 66	9 982 387 22
10	Current And Accrued Liabilities			
11	Accounts Payable	511 684 35	228 323 92	283 360 43
12	Dividends Declared	418 683 50	165 000 00	253 683 50
13	Matured Long-Term Debt	94 781 25	1 659 795 23	*1 565 013 98
14	Matured Interest	3 720 00	5 380 00	*1 660 00
15	Customers' Deposits	1 555 00	—	1 555 00
16	Taxes Accrued	4 941 583 65	2 975 199 46	1 966 384 19
17	Interest Accrued	300 401 98	225 260 41	75 111 57
18	Other Current and Accrued			
19	Liabilities	4 969 28	2 410 10	2 559 18
20	Total Current and Accrued			
21	Liabilities	6 277 379 01	5 261 369 12	1 016 009 89
22	Deferred Credits			
23	Other Deferred Credits	45 342 61	43 355 32	1 987 29
24	Reserves			
25	Reserve for Depreciation of			
26	Gas Plant	12 428 678 60	8 929 025 92	3 499 652 68
27	Reserve for Amortization and			
28	Depletion of Producing Natural			
29	Gas Land and Land Rights	465 126 01	381 535 00	83 591 01
30	Reserve for Abandoned Leases	438 217 20	371 458 24	66 758 96
31	Reserve for Uncollectible Accounts	58 665 36	42 119 88	16 545 48
32	Injuries and Damages Reserve	134 354 12	89 249 74	45 104 38
33	Other Reserves	944 704 59	624 800 94	319 903 65
34	Total Reserves	14 469 745 88	10 438 189 72	4 031 556 16
35	Contributions In Aid Of			
36	Construction	55 050 53	40 596 91	14 453 62
37	Surplus			
38	Paid in Surplus (Premium on 5.60%			
39	Cumulative Preferred Stock)	42 489 93	—	42 489 93
40	Earned Surplus	8 222 199 18(2)	8 554 324 89	*332 125 71
41	Total Surplus	8 264 689 11	8 554 324 89	*289 635 78
42	Total Liabilities And Other			
43	Credits	$98 550 883 02	$78 794 124 62	$19 756 758 40

*Indicates red figures.

[fol. 16678] Exhibit 267

Schedule 1

Page 3

Panhandle Eastern Pipe Line Company and Subsidiary Companies Notes to Balance Sheets

Line No.		(A)
1	(1)	Including $3,110,000 principal amount of United
2		States Treasury Notes of Tax Series B-1945
3		(Tax anticipation Notes)
4	(2)	Surplus is restricted by supplement dated Jan-
5		uary 1, 1942 to the Mortgage and Deed of Trust
6		dated November 1, 1940 as to payment of div-
7		idends, in the amount of $2,849,476.45

Exhibit 267
Panhandle Eastern Pipe Line Company And Subsidiary Companies
Comparative Earnings Summary — Per Books
Three Months Ended March 31, 1942 And March 31, 1941

Schedule 2
Page 1

Line No.	(A)	Three Months Ended March 31 1942 (B)	1941 (C)	Increase or Decrease (D)
1	Income			
2	Operating Revenues			
3	Gas			
4	Residential	$ 31 394 68	$ 25 743 59	$ 5 651 09
5	Commercial	5 615 27	5 312 82	302 45
6	Industrial	274 028 12	258 374 28	15 653 84
7	Sales to Gas Utilities	5 294 397 44	4 689 851 54	604 545 90
8	Other Sales — Field	9 10	43 20	*34 10
9	Gasoline	207 918 44	128 410 96	79 507 48
10	Pipe Line Rentals	3 000 00	2 250 00	750 00
11	Miscellaneous	3 578 54	2 174 58	1 403 96
12	Total Operating Revenues	5 819 941 59	5 112 160 97	707 780 62
13	Operating Revenue Deductions			
14	Operation and Maintenance			
15	Production	168 890 23	152 209 47	16 680 76
16	Gas Purchased	378 884 90	356 372 20	22 512 70
17	Transmission	645 760 43	496 238 02	149 522 41
18	Distribution	2 434 22	2 498 25	*64 03
19	Customers Accounting and			
20	Collecting	9 105 81	7 113 62	1 992 19
21	Sales Promotion	5 635 03	8 932 45	*3 297 42
22	Administrative and General	229 109 76	204 402 40	24 707 36
23	Non-Operating Expense	1 934 49	1 404 02	530 47
24	Gas Used in Operating Etc. —			
25	Credit	*288 720 18	*246 442 82	*42 277 36
26	Depreciation (Including Amorti-			
27	zation)	696 722 84	674 779 61	21 943 23
28	Amortization and Depletion of			
29	Producing Land and Land Rights	*27 961 34	24 547 39	3 413 95
30	Abandoned Leases	18 587 21	18 962 77	*375 56
31	Amortization of Other Limited			
32	Term Gas Investments	83 169 59	83 509 67	*340 08
33	Charges in Lieu of Federal Income			
34	and Excess-Profits Taxes		236 300 00	*236 300 00
35	Taxes			
36	State, Local and Miscellaneous			
37	Federal	233 113 59	236 838 56	*3 724 97
38	Federal Income	875 135 05	584 685 49	290 449 56
39	Federal Excess-Profits	1 034 539 62	348 883 97	685 655 65
40	Total Operative Revenue Deduc-			
41	tions	4 122 263 93	3 191 235 07	931 028 86
42	Net Operating Revenue	1 697 677 66	1 920 925 90	*223 248 24
43	Other Income			
44	Interest Revenues	7 228 88	4 579 28	2 649 60
45	Gross Income	$1 704 906 54	$1 925 505 18	$*220 598 64

*Indicates red figures.

[fol. 16689]

Exhibit 267

Panhandle Eastern Pipe Line Company And Subsidiary Companies — Schedule 2

Comparative Earnings Summary — Per Books

Three Months Ended March 31, 1942 And March 31, 1941 — Page 2

Line No.	(A)	Three Months Ended March 31 1942 (B)	Three Months Ended March 31 1941 (C)	Increase or Decrease (D)
1	Income Deductions			
2	Interest on Long-Term Debt	$ 230 348 39	$ 377 357 38	$*147 008 99
3	Amortization of Debt Discount and Expense	—	27 486 70	*27 486 70
4	Other Interest Chares	8 826 31	2 092 75	6 733 56
5	Interest Charged to Construction Credit	52 131 02	—	52 131 02
6	Total Income Deductions	187 043 68	406 936 83	*219 893 15
7	Net Income	$1 517 862 86	$1 518 568 35	$ *705 49
8	Notes			
9	The provision for Federal Income and Excess-Profits Taxes for the three month period ended March 31, 1942 while based on the Revenue Act of 1941 includes an amount in anticipation of new legislation.			
10	The operations of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation (Companies acquired February 6, 1942) are included in figure for the three month period ended March 31, 1941 which have been restated in certain instances for purpose of comparison.			

*Indicates red figures

[fol. 16681]

Exhibit 267

Panhandle Eastern Pipe Line Company and Subsidiary Companies — Schedule 3

Adjusted Comparative Earnings Summary

Three Months Ended March 31, 1942 And March 31, 1941 — Page 1

Line No	(A)	Three months ended March 31st 1942 (B)	1941 (C)	Increase or Decrease (D)
1	Income			
2	Operating Revenues			
3	Gas			
4	Residential	$ 31 394 68	$ 25 743 59	$ 5 651 09
5	Commercial	5 615 27	5 312 82	302 45
6	Industrial	274 028 12	258 374 28	15 652 84
7	Sales to Gas Utilities	5 294 397 44	4 689 851 54	604 545 90
8	Other Sales—Field	9 10	43 20	+34 10
9	Gasoline	207 918 44	128 410 96	79 507 48
10	Pipe Line Rentals	3 000 00	2 250 00	750 00
11	Miscellaneous	3 578 54	2 174 58	1 403 96
12	Total Operating Revenues	5 819 941 59	5 112 160 97	707 780 62
13	Operating Revenue Deductions			
14	Operation and Maintenance			
15	Production	168 890 23	152 209 47	16 680 76
16	Gas Purchased	378 884 90	356 372 20	22 512 70
17	Transmission	645 760 43	496 238 02	149 522 41
18	Distribution	2 434 22	2 498 25	+64 03
19	Customers Accounting and			
20	Collecting	9 105 81	7 113 62	1 992 19
21	Sales Promotion	5 635 03	8 932 45	+3 297 42
22	Administrative and General	229 109 76	204 402 40	24 707 36
23	Non-Operating Expense	1 934 49	1 404 02	530 47
24	Gas Used in Operation, etc			
25	Credit	+288 720 18	+246 442 82	+42 277 36
26	Depreciation (Including Amorti-			
27	zation)	696 722 84	674 779 61	21 943 23
28	Amortization and Depletion of			
29	Producing Land and Land Rights	27 961 34	24 547 39	3 413 95
30	Abandoned Leases	18 587 21	18 962 77	+375 56
31	Amortization of Other Limited			
32	Term Gas Investments	83 169 59	83 509 67	+340 08
33	Charges in Lieu of Federal Income			
34	and Excess Profits Taxes		236 300 00	+236 300 00
35	Taxes			
36	State, Local and Miscellaneous			
37	Federal	233 113 59	236 838 56	+3 724 97
38	Federal Income	1 117 900 00	584 685 49	533 214 51
39	Federal Excess Profits	1 103 500 00	348 883 97	754 616 03
40	Total Operating Revenue Deduc-			
41	tions	4 433 989 26	3 191 235 07	1 242 754 19
42	Net Operating Revenue	1 385 952 33	1 920 925 90	+534 978 57
43	Other Income			
44	Internal Revenues	7 228 88	4 579 28	2 649 60
45	Gross Income	$1 392 781 21	$1 925 505 18	$+532 323 97

+Indicates red figures

Exhibit 267
Panhandle Eastern Pipe Line Company And Subsidiary Companies
Adjusted Comparative Earnings Summary
Three Months Ended March 31, 1942 And March 31, 1941

Schedule 3
Page 2

Line No.	(A)	Three months ended March 31st 1942 (B)	1941 (C)	Increase or Decrease (D)
1	Income Deductions			
2	Interest on Long Term Debt	$ 230 348 39	$ 377 357 38	$+147 008 99
3	Amortization of Debt Discount			
4	and Expense	—	27 486 70	+27 486 70
5	Other Interest Charges	8 826 31	2 092 75	6 733 56
6	Interest Charged to Construction —			
7	Credit	52 131 02	—	52 131 02
8	Total Income Deductions	187 043 68	406 936 83	+219 893 15
9	Net Income	$1 206 137 53	$1 518 568 35	$+312 430 82

10 Notes:
11 The provision for Federal Income and Excess Profits Taxes for the three
12 months period ended March 31, 1942 is based upon rates proposed by the
13 Secretary of Treasury Morgenthau before the House Ways and Means Com-
14 mittee March 3, 1942.

15 The operation of Michigan Gas Transmission Corporation and Indiana Gas
16 Distribution Corporation (companies acquired February 6, 1942) are in-
17 cluded in figure for the three month period ended March 31, 1941 which
18 have been restated in certain instances for purpose of comparison.

+Indicates red figures.

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[fol. 16683] Exhibit 267 Schedule 1
Page 1

Panhandle Eastern Pipe Line Company And Subsidiary Companies
(Including Michigan Gas Transmission Corporation And
Indiana Gas Distribution Corporation)
Gas Plant — Per Books
March 31, 1942

Line No.	(A)	(B)
1	Intangible Plant	
2	Organization	$ 125 625 13
3	Franchises and consents	355 56
4	Miscellaneous intangible plant	149 033 79
5	Totals Intangible Plant	275 014 48
6	Production Plant	
7	(a) Natural Gas Production Plant	
8	Natural gas producing leaseholds — drilled	1 019 620 67
9	Natural gas producing leaseholds — not drilled	750 901 54
10	Other land and land rights	299 00
11	Other production system structures	47 797 15
12	Producing gas wells — well construction	2 078 583 48
13	Producing gas wells — well equipment	609 458 21
14	Drilling and cleaning equipment	20 696 46
15	Purification and residual refining equipment	704 284 31
16	Other production equipment	826 16
17	Totals Natural Gas Production Plant	5 232 466 98
18	Transmission Plant	
19	Land	142 944 68
20	Land rights	1 437 601 30
21	Pumping station structures	1 867 564 71
22	Measuring and regulating station structures	127 595 28
23	Other transmission structures	516 432 59
24	Mains	56 267 396 00
25	Pumping station equipment	10 808 989 25
26	Measuring and regulating station equipment	680 555 56
27	Other transmission equipment	48 022 42
28	Totals Transmission Plant	871 897 101 79

[fol. 16684] Exhibit 267 Schedule 4
Page 2

Panhandle Eastern Pipe Line Company And Subsidiary Companies
(Including Michigan Gas Transmission Corporation And
Indiana Gas Distribution Corporation)
Gas Plant — Per Books
March 31, 1942

Line No.	(A)	(B)
1	Distribution Plant	
2	Land and land rights	$ 641 17
3	Structures and improvements	1 041 18
4	Mains	68 446 61
5	Pumping and regulating equipment	1 789 91
6	Services	28 383 30
7	Meters	18 976 52
8	Meter installations	5 496 89
9	House regulators and installations	17 225 09
10	Other distribution equipment	194 31
11	Totals Distribution Plants	142 194 98
12	General Plant	
13	General office structures	—
14	Office furniture and equipment	104 497 41
15	Transportation equipment	173 219 02
16	Stores equipment	1 979 30
17	Shop equipment	—
18	Laboratory equipment	6 550 71
19	Tools and work equipment	59 494 24
20	Communication equipment	370 556 79
21	Miscellaneous equipment	2 097 05
22	Totals General Plant	718 394 52
23	Other Undistributed Gas Plant	
24	Undistributed gas plant	19 730 34
25	Gas plant purchased	439 326 08
26	Totals Other Undistributed Gas Plant	459 056 42
27	Total Gas Plant Classified	78 724 229 17
28	Construction work in progress	5 120 495 16
29	Gas sales and purchase contracts	2 930 286 40
30	Reserve for amortization of gas sales and purchase contracts	*1 831 428 75
31	Other gas sales and purchase contracts	351 953 13
32	Consolidation reduction in investment in subsidiary company	*139 500 00
33	Gas Plant	$85 156 035 11

*Indicates red figures.

* * * * * * *

[fol. 16686] Petition.

(Received February 28, 1941, Federal Power Commission.)

Before the

Federal Power Commission.

City of Detroit and County of Wayne, Municipal Corporations, Complainants,

No. G-200 vs.

Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

Petition

To the Honorable Members of the Federal Power Commission:

The City of Detroit and the County of Wayne, municipal corporations in the State of Michigan, respectfully show:

First: The complainants are the City of Detroit, a municipal corporation, and the County of Wayne, a municipal corporation, both established and existing under and by virtue of the laws of the State of Michigan, and both of which are municipalities within the meaning of the Federal Natural Gas Act. Said petitioners represent the interest of the customers of Michigan Consolidated Gas Company which distributes natural gas having its source in Texas and Kansas to approximately 450,000 residential, house heating, commerical and industrial customers in the City of Detroit and in and throughout the County of Wayne, in the State of Michigan.

[fol. 16687] Second: The defendant, Panhandle Eastern Pipe Line Company, is a corporation organized and existing under the laws of the State of Delaware, and is engaged in the transmission and sale of natural gas in interstate commerce, transporting said gas from fields in the states of Texas and Kansas to the lines of Michigan Consolidated Gas Company, in the County of Wayne, State of Michigan, in the vicinity of the City of Detroit, and said Panhandle Eastern Pipe Line Company sells said natural gas to said

Michigan Consolidated Gas Company at said point of delivery aforesaid.

Third: Michigan Gas Transmission Corporation is a corporation organized and existing under the laws of the State of Delaware, and is a natural gas company as defined by the Federal Natural Gas Act, being engaged in the transmission of natural gas from the State of Indiana in and to the State of Michigan, and that said Michigan Gas Transmission Company is engaged in the transportation of the natural gas being sold by Panhandle Eastern Pipe Line Company to Michigan Consolidated Gas Company, transporting said natural gas from the Illinois-Indiana state line to said distribution system of Michigan Consolidated Gas Company near the City of Detroit in the County of Wayne, performing said transportation service for said Panhandle Eastern Pipe Line Company under contract. Said Michigan Gas Transmission Corporation is affiliated with said Panhandle Eastern Pipe Line Company in that both of said companies are controlled by Columbia Gas and Electric Company.

Fourth: The rates and charges of said Panhandle Eastern Pipe Line Company to Michigan Consolidated Gas Company are governed by a certain contract dated August 31, 1935, between Panhandle Eastern Pipe Line Company and Detroit City Gas Company, the predecessor of Michigan Consolidated Gas Company, as amended by supplemental agreements. Under the terms of said contract as supplemented, there is provided a demand charge of 58 cents per therm per month, based upon the maximum daily demand in the months of December, January, February and March, and a commodity charge of 1.5 cents per therm. [fol. 16688] A special provision is made in respect to computing the cost of gas for house heating customers up to a maximum of 25,000 customers. There are at the present time approximately 40,000 house heating customers and there are available a large number of additional customers for house heating gas.

Fifth: Under the terms of said contract, the cost of gas to Michigan Consolidated Gas Company cannot be definitely known, but said average cost has varied from a low of approximately 32 cents per thousand cubic feet of natural

gas, to upwards of 34 cents. The cost of house heating gas for the first 25,000 customers has been approximately 41 cents per thousand cubic feet, but for customers in excess of 25,000, the price of said gas as the same may be estimated, will be approximately 62 cents per thousand cubic feet. The exact price of said gas cannot be known until the maximum day's delivery during the winter season of 1940-1941 is ascertained, and the demand charge computed upon said maximum delivery will be applicable for one year from and after April 1st, 1941.

Sixth: Your petitioners charge that the cost of gas to said Michigan Consolidated Gas Company is excessive and that the rates and charges maintained by Panhandle Eastern Pipe Line Company and the division thereof to Michigan Gas Transmission Corporation are unjust and unreasonable as the same affect the interest of domestic and house heating customers of Michigan Consolidated Gas Company for said gas, and said rates, charges and divisions are unjust and unreasonable as they affect the rates and charges of said Michigan Consolidated Gas Company in the commercial and industrial classifications.

Seventh: Said Panhandle Eastern Pipe Line Company, in violation of the provisions of the Natural Gas Act, maintains an unreasonable difference in rates and charges as between house heating customers, and has adopted a general system and plan whereby a demand for house heating service should be fostered, and when said demand should result in the acquisition of substantially more than 25,000 [fol. 16689] customers, a marked increase in cost for such additional customers should ensue, with the result that the claim would arise on the part of Michigan Consolidated Gas Company for a general increase in the house heating rate. That such claim has already materialized and has found favor with the Michigan Public Service Commission, the body having the authority to fix rates for Michigan Consolidated Gas Company, and said Michigan Public Service Commission has granted an increase in said house heating rate and has predicated said increase upon the additional cost of gas to serve house heating customers in excess of 25,000, as provided by the contract above referred to.

Eighth: Wherefore, the complainants pray for an investigation by the Federal Power Commission, a finding that the rates and charges of said Panhandle Eastern Pipe Line Company are unjust and unreasonable, are unlawfully preferential and work undue prejudices and disadvantages, and that said rates shall be reduced below the present schedules, and that a fair and reasonable rate shall be established in respect to natural gas sold and transmitted by the defendants for the use of customers in said Detroit district and in said County of Wayne, and that the demand charge feature practiced by said defendants may be prohibited.

CITY OF DETROIT,
By Paul E. Krause,
Corporation Counsel.
James H. Lee,
Assistant Corporation Counsel,
Attorneys for City of Detroit,
301 City Hall, Detroit, Mich.

COUNTY OF WAYNE,
By William E. Dowling,
Prosecuting Attorney.
Harold Goodman,
Special Counsel.
Attorneys for County of Wayne,
1300 Beaubien Street,
Detroit, Michigan.

[fol. 16690] State of Michigan,
County of Wayne,—ss.:

Paul E. Krause and James H. Lee, both of the city of Detroit, County of Wayne and State of Michigan, being first duly sworn, depose and say that they are the Corporation Counsel and Assistant Corporation Counsel, respectively, of the City of Detroit, State of Michigan, a municipal corporation, Complainant herein; that they have read the foregoing complaint by them subscribed and that the statements and allegations contained therein are true.

PAUL E. KRAUSE,
JAMES H. LEE.

Subscribed and sworn to before me and subscribed in my presence this 26th day of February, A. D. 1941.

GORDON N. McKEE,
Notary Public, Wayne County, Michigan.
My Commission Expires: Jan. 30, 1942.

State of Michigan,
County of Wayne,—ss.:

Harold Goodman, of the City of Detroit, County of Wayne and State of Michigan, being first duly sworn, deposes and says that he is Special Assistant Prosecuting Attorney for the County of Wayne, State of Michigan, a municipal corporation, Complainant herein; that he has read the foregoing complaint by him subscribed and that the statements and allegations contained therein are true.

HAROLD GOODMAN.

Subscribed and sworn to before me and subscribed in my presence this 26th day of February, A. D. 1941.

GORDON N. McKEE,
Notary Public, Wayne County, Michigan,
My Commission Expires: Jan. 30, 1942.

[fol. 16691] From the Corporation Counsel

February 19, 1941.

To the Honorable, the Common Council:

Gentlemen—In conjunction with the investigation made by this Department incidental to the natural gas rate schedules, we have done considerable work with reference to the so-called gate rate contracts between the Detroit City Gas Company (now Michigan Consolidated Gas Company), and the Panhandle Eastern Pipe Line Company and the Michigan Gas Transmission Company.

At the time these contracts were executed, there was no Federal or other agency which had jurisdiction over the contracts, despite the fact that the Pipe Line companies were engaged in interstate commerce. However, during the past three years, the United States Congress passed an act amending the Federal Power Commission Act, and which, in effect, gives the Federal Power Commission the

sion jurisdiction over pipe lines as it has over interstate power transmission facilities.

Inasmuch as there has been a great deal of controversy over the provisions of the contracts, above referred to, it is our firm opinion that the public's interest could be best protected by petitioning the Natural Gas Division of the Federal Power Commission to make a thorough investigation of these gate rate contracts. This position is concurred in by the Prosecuting Attorney of Wayne County, who has co-operated with the City in the gas rate schedule hearings before the Michigan Public Service Commission.

We, therefore, recommend that your Honorable Body approve the filing of such a petition on behalf of the City and the County of Wayne, as represented by the Prosecuting Attorney, and suggest the adoption of the enclosed resolution.

Very truly yours,

JAMES H. LEE,
Assistant Corporation Counsel.

Approved:

PAUL E. KRAUSE,
Corporation Counsel.

By Councilman Ewald:

Whereas, the Corporation Counsel has recommanded that it is in the public's interest for the City of Detroit to file a petition with the Natural Gas Division of the Federal Power Commission, praying that such Commission make a thorough investigation of the existing contracts between the Michigan Consolidated Gas Company and the Panhandle Eastern Pipe Line Company and the Michigan Gas Transmission Company, which contracts provide for the delivery of natural gas to the City of Detroit; and

Whereas, the Prosecuting Attorney of Wayne County, who has co-operated with the City in the hearings respecting natural gas rate schedules before the Michigan Public Service Commission, concurs in the opinion that such a petition should be filed with the Federal Power Commission.

Now, therefore be it Resolved, that on behalf of the City of Detroit, this Common Council does approve of the sug-

gestion of the Corporation Counsel and does recommend and authorize that such a petition be filed by the Corporation Counsel jointly on behalf of the City of Detroit and the Prosecuting Attorney on behalf of the County of Wayne.

Adopted as follows:

Yeas—Councilmen Ewald, Garlick, Hamilton, Lodge, Sweeny, Van Antwerp and the President—7.

Nays—None.

True Copy Certificate.

State of Michigan,
City of Detroit,—ss.:

City Clerk's Office, Detroit.

I, Thomas D. Leadbetter, City Clerk of the City of Detroit, in said State, do hereby certify that the annexed paper is a true copy of a Resolution adopted by the Common Council, at a session held on the 25th day of February, 1941, as appears from the Journal of said Common Council remaining in the office of the City Clerk of Detroit, aforesaid; that I have compared the same with the original, and the same is a correct transcript therefrom, and of the whole of such original.

In Witness Whereof, I have hereunto set my hand and affixed the corporate seal of said City, at Detroit, this 26th day of February, A. D. 1941.

THOMAS D. LEADBETTER,
(Seal) City Clerk.

[fol. 16693] Separate Answer of Michigan Gas Transmission Corporation

(Received March 28, 1941, Federal Power Commission.)

Before the

Federal Power Commission

City of Detroit and County of Wayne, Municipal Corporations, Complainants,
Docket No. G-200. vs.
Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

To the Honorable Members of the Federal Power Commission:

Michigan Gas Transmission Corporation, defendant, for its separate answer to the petition of the complainants, respectfully shows to the Commission as follows:

First: In answer to the paragraph of the complaint numbered First: defendant admits the allegations of the first sentence thereof. It also admits the allegation of the second sentence thereof that Michigan Consolidated Gas Company distributes natural gas having its source in Texas and Kansas to customers in the City of Detroit and in the County of Wayne, State of Michigan, but as to the remainder of the allegations of said second sentence it denies knowledge or information thereof sufficient to form a belief.

Second: In answer to the paragraph of the complaint numbered Second: defendant admits the allegations thereof, except that it states that the line of Panhandle Eastern [fol. 16694] Pipe Line Company terminates at a point in Indiana near the Illinois-Indiana state line, at which point its pipe line connects with the pipe line of the defendant Michigan Gas Transmission Corporation which transports the gas from that point to the line of the Michigan Consolidated Gas Company in the County of Wayne, State of Michigan, where it delivers said gas sold by Panhandle Eastern Pipe Line Company to said Michigan Consolidated Gas Company for the account of Panhandle Eastern Pipe Line Company.

Third: In answer to the paragraph of the complaint numbered Third: defendant admits the allegations of the first sentence thereof. It admits the allegation of the second sentence thereof that Michigan Gas Transmission Corporation is controlled by Columbia Gas & Electric Corporation; but it denies the remaining allegations of said second sentence.

Fourth: In answer to the paragraph of the complaint numbered Fourth, it admits the allegations of the first sentence of paragraph Fourth, but it denies that the al-

legations of the second and third sentences of said paragraph Fourth correctly state the terms of the contract referred to as amended and if states that the demand charge provided for in said contract as amended is 38 cents per therm per month instead of 58 cents, and prays leave in general to refer to the provisions of said contract as amended for an accurate statement of the terms thereof. It admits upon information and belief that there are at the present time approximately 40,000 househeating customers but denies any information or knowledge sufficient to form a belief as to the remaining allegations of the last sentence of said paragraph Fourth.

[fol. 16695] Fifth: In answer to the paragraph of the complaint numbered Fifth: It denies that the average cost of gas to Michigan Consolidated Gas Company under the terms of said contract as amended varied from a low of approximately 32 cents per thousand cubic feet of natural gas to upwards of 34 cents and alleges that such average cost for the year 1937 was 29.54 cents, for the year 1938, was 31.15 cents, for the year 1939 was 32.79 cents, and for the year 1940 was 32.44 cents, and further states that said contract as amended sets forth in detail the rate for gas to said latter Company and prays leave to refer to the same for an accurate statement thereof.

Sixth: In answer to the paragraph of the complaint numbered Sixth: defendant denies the allegations of paragraph Sixth of the complaint, in so far as it is alleged therein that the division to Michigan Gas Transmission Corporation of the rates and charges maintained by Panhandle Eastern Pipe Line Company are unjust and unreasonable, or that any charges of Michigan Gas Transmission Corporation in connection with the sale or delivery of gas to Michigan Consolidated Gas Company are excessive, unjust or unreasonable and denies any knowledge or information sufficient to form a belief as to the remaining allegations of said paragraph Sixth.

Seventh: In answer to the paragraph of the complaint numbered Seventh: defendant denies the allegations of the first sentence of paragraph Seventh. It denies any [fol. 16696] knowledge or information thereof sufficient to form a belief as to the allegations of the second sentence of said paragraph Seventh.

Wherefore, defendant prays that the petition of the complainants be denied and the above-entitled proceeding be dismissed.

MICHIGAN GAS TRANSMISSION CORPORATION,
By Walter C. Beckjord, President,
Office and Post Office Address:
Suite 2901, No. 61 Broadway,
New York, N. Y.

[fol. 16697] State of New York,
County of New York.—ss.:

Walter C. Beckjord, being duly sworn, deposes and says:

That he is the President of Michigan Gas Transmission Corporation, one of the defendants in the above-entitled proceeding; that he has read the foregoing complaint and knows the contents thereof and that the same is true to his own knowledge except as to the matters therein stated to be alleged upon information and belief and that as to those matters he believes it to be true.

WALTER C. BECKJORD.

Sworn to before me this 27th day of March, 1941.

(Notary Public) MAUDE H. CURRY,
Notary Public, New York County,
N. Y. Co. Clk's. No. 390, Reg. No. 2C-543,
Nassau County Clerk's No. 35-C-40,

Commission expires March 30, 1942.

[fol. 16698] (Petition of Michigan Public Service Commission for Leave to Intervene.)

(Filed March 31, 1941, Federal Power Commission.)

Before the

Federal Power Commission

City of Detroit and County of Wayne, Municipal Corporations, Complainants,
Docket No. G-200. vs.
Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

Michigan Public Service Commission, Intervener.

To the Honorable Members of the Federal Power Commission:

Comes now the Michigan Public Service Commission, by and through its attorneys Herbert J. Rushton, Attorney General of the State of Michigan and James W. Williams, [Assistance] Attorney General for the State of Michigan, and, in accordance with part (a) section 15 of the "Natural Gas Act" and upon the grounds that its participation in the proceedings may be in the public interest, moves the Federal Power Commission that it be granted permission [fol. 16699] to intervene in the proceedings now pending upon the petition for an investigation of the rates and charges of the Panhandle Eastern Pipe Line Company made by the Michigan Municipalities: the City of Detroit and the County of Wayne; and for the following reasons:

1.

It is an administrative commission of the State of Michigan, created by Act 3 of the public acts of 1939 of the State of Michigan, and made successor to the Michigan Public Utilities Commission, vested with the power and authority to regulate public utilities doing business within the State of Michigan.

2.

The Michigan Consolidated Gas Company is a corporation doing business within the State of Michigan as a public utility, in that; the Michigan Consolidated Gas Company distributes natural gas to the consuming public; accessible to its plant, in the cities of Detroit, Grand Rapids, Muskegon and Ann Arbor and certain adjacent municipalities.

3.

The natural gas distributed to the consuming public within the cities of Detroit, Ann Arbor and certain adjacent municipalities, is purchased by the Michigan Consolidated Gas Company from the Panhandle Eastern Pipeline Company and the terms of the purchase and sales contract between these companies relating to the natural gas distributed within the municipalities of the City of De- [fol. 16700] troit and the County of Wayne are material and relevant to the investigation pending before your Honorable Commission.

4.

The fixing of reasonable rates and charges to customers of the Michigan Consolidated Gas Company is within the power and authority of your petitioner and any modification of the cost of natural gas to the Michigan Consolidated Gas Company may affect the reasonableness of that Company's rates and charges to consumers.

5.

Further, there is presently pending before this Commission a petitioner by National Utilities Company of Michigan, a corporation doing business within the State of Michigan as a public utility, for permission to serve the City of Monroe and certain adjacent municipalities with natural gas, which petition has a contract with the Panhandle Eastern Pipe Line Company whereby said Pipe Line Company undertakes to supply natural gas to it, which gas will be transported over the same pipe line now used to supply the municipalities of Detroit and Wayne County. The contract differs from the Detroit purchase contract in that it provides for a price for the natural gas of three cents per therm for "year round" gas and four cents per therm for seasonal gas during winter months and has no general clause of the type and kind found in the "Detroit" contract.

6.

All allegations herein contained other than those relating to the municipalities of the City of Detroit and the County of Wayne are not intended to broaden or narrow the scope [fol. 16701] of the issues presented in the instant proceedings and are made solely for the purpose of more fully disclosing your petitioner's interest. Further, your petitioner is of the opinion that public interest will best be served through your permission for it to intervene as a party with interest and without compelling it to elect to intervene in behalf of any other party to the proceedings.

7.

Your petitioner offers to make available to your Honorable Commission such services, records, and facilities as it may afford in furtherance of the instant proceedings.

Wherefore your petitioner prays:

(a) That it may be permitted to intervene and be treated as a party hereto;

(b) That it be given the right to have notice of any and all proceedings;

(c) That it be given the right to appear and be represented by counsel;

(d) That it be given the right to have notice of and appear at the taking of testimony;

(e) That it be given the right to produce and cross-examine witnesses;

(f) That it be given the right to be heard on brief and on argument, if oral argument be heard; and

[fol. 16702] (g) That it be given such other and further rights as may be necessary to the full and complete protection of the public interest.

(h) Your petitioner will ever pray, etc.

MICHIGAN PUBLIC SERVICE COMMISSION,
By James W. Williams,
Assistant Attorney General,
Assigned to the Commission.

Dated: March 27, 1941.

HERBERT J. RUSHTON,
Attorney General,
By James W. Williams,
Asst. Atty. Gen'l.
Business Address:
Attorney General Department,
State Capitol,
Lansing, Michigan.

State of Michigan,
County of Ingham.—ss.:

On this 28th day of March, A. D., 1941, before me, a Notary Public, appeared James W. Williams, to me known, who, being first duly sworn, did say that he knows the contents of the foregoing petition by him subscribed and that the same are true, except as to those matters therein

stated upon information and belief which he believes to be true.

Seal

H. A. FORSTER,
Notary Public, Kalamazoo County, Acting in Ingham County, Michigan.

My Commission Expires April 18, 1941.

[fol. 16705] Separate Answer of Panhandle Eastern Pipe Line Company.

(Filed April 3, 1941, Federal Power Commission.)

Before the

Federal Power Commission

City of Detroit and County of Wayne, Muncipal Corporations, Complainants,

Docket No. G-200. vs.

Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

To The Honorable Members of The Federal Power Commission:

Defendant, Panhandle Eastern Pipe Line Company, for its separate answer to the petition of complainants, respectfully shows to the Commission:

1. That in answer to paragraphs numbered first, second, and third of the petition, this defendant admits that the complainants are municipal corporations existing under and by virtue of the laws of the State of Michigan, and are municipalities within the meaning of the Natural Gas Act; that this defendant is a corporation organized and existing under the laws of the State of Delaware and is engaged in the transmission and sale of natural gas in interstate commerce; that it sells natural gas to Michigan Consolidated Gas Company for resale in the City of De-[fol. 16706] troit and environs in the County of Wayne, State of Michigan; and that it transports said natural gas from its sources of supply in Texas and Kansas to a point in Indiana near the Illinois-Indiana state line, at which point its transmission facilities connect with the trans-

mission facilities of Michigan Gas Transmission Corporation and from which point said company transports and delivers said natural gas to Michigan Consolidated Gas Company at the point of delivery near the City of Detroit for the account of this defendant, such transportation and delivery by Michigan Gas Transmission Corporation being performed by it under a contract, as amended, with this defendant dated March 17, 1936.

This defendant denies that it is affiliated with Michigan Gas Transmission Corporation or that it is controlled by Columbia Gas & Electric Corporation.

2. In answer to paragraph numbered fourth of the petition, except the last sentence thereof which is answered in paragraph numbered five hereof, this defendant admits that its rates and charges to Michigan Consolidated Gas Company for gas sold by this defendant to said company for resale in Detroit and environs are governed by contract dated August 31, 1935, as amended by four certain supplemental agreements, between this defendant and Michigan Consolidated Gas Company, formerly Detroit City Gas Company, but denies that said contract provides a demand charge of fifty-eight (58) cents per therm per month. This defendant alleges the fact to be that said con- [fol. 16707] tract provides for a demand charge of thirty-eight (38) cents per therm, per month, based upon the maximum daily demand established during the four months' period December to March, inclusive, of each year, and for a commodity charge of one and five tenths (1.5) cents per therm.

3. With respect to paragraph numbered fifth of the petition, this defendant denies the allegations thereof and states that further answer thereto is made in paragraph numbered five hereof.

4. Answering paragraphs numbered sixth and seventh of the petition, except the allegations in paragraph seventh thereof with respect to the rates of this defendant for gas used for househeating purposes by customers of Michigan Consolidated Gas Company, which allegations are fully answered in paragraph five hereof, this defendant denies that its rates and charges and the cost of gas to Michigan

Consolidated Gas Company are unjust, unreasonable or excessive, or that the same adversely affect the customers of Michigan Consolidated Gas Company in any classification. This defendant denies that the amount received by it for gas sold under the aforesaid contract of August 31, 1935, as amended, after deducting therefrom the amount paid to Michigan Gas Transmission Corporation for transporting said gas from the Illinois-Indiana state line to the Detroit point of delivery is excessive.

With respect to the allegations to the effect that the division of this defendant's rates and charges to Michigan Gas Transmission Corporation is unjust and unreasonable, [fol. 16708] this defendant states that it believes that at the time its contract with Michigan Gas Transmission Corporation, dated March 17, 1936, was entered into, the charges of that company for transporting gas were equitable and reasonable, and that at this time this defendant has insufficient knowledge and information to form a belief as to the present reasonableness of said charges.

5. Further answering paragraphs numbered fourth, fifth and seventh of the petition, this defendant in denying the allegations thereof, states that its contract with Michigan Consolidated Gas Company dated August 31, 1935, as amended, sets forth in detail the rates and charges for natural gas delivered thereunder and respectfully refers this Commission to said contract for an accurate statement thereof; that the average prices per therm paid for such gas during the calendar years 1937, 1938, 1939, and 1940 were 2.92 cents, 3.08 cents, 3.24 cents, and 3.20 cents, respectively; that under this defendant's aforesaid contract, as amended, with Michigan Consolidated Gas Company, the rate for gas resold to househeating customers in excess of twenty five thousand might, under certain extreme conditions, be sixty two (62) cents per thousand cubic feet; that by supplemental gas contract with Michigan Consolidated Gas Company, dated June 2, 1936, this defendant in effect guaranteed that the rate for a quantity of natural gas equal to the requirements of twenty thousand househeating customers would not be greater than four and one tenth (4.1) cents per therm, and by a third supplemental contract with said company dated September 29,

[fol. 16709] 1939, this defendant in effect extended said guarantee to include an amount of natural gas equal to the requirements of twenty five thousand househeating customers; that the actual rate for gas resold to househeating customers in excess of twenty five thousand is dependent on the rate of growth of such business of Michigan Consolidated Gas Company from year to year and upon the relation of the demand on the maximum day to such deliveries of said company during the year; that this defendant has calculated the average rate paid by Michigan Consolidated Gas Company for househeating gas delivered to customers in excess of twenty five thousand during the calendar year 1940 to have been less than three (3) cents per therm and has estimated that during the calendar year 1941 said rate will be less than three and five tenths (3.5) cents per therm instead of a rate even approaching sixty two (62) cents per thousand cubic feet as estimated and alleged by complainants; that during all calendar years to date under said contract the rate for all househeating gas has been less than four and one tenth (4.1) cents per therm; that by letter to Michigan Consolidated Gas Company dated July 18, 1940, this defendant offered to substitute for the rate provided in the aforesaid contract a different form of rate which would result in a charge of not more than four (4) cents per therm for natural gas sold to Michigan Consolidated Gas Company for resale to househeating customers regardless of the number thereof; that said offer was not accepted by Michigan Consolidated Gas Company because, as this defendant believes, of the then existing characteristics of its business and particularly [fol. 16710] the continuing growth thereof; that on information and belief, this defendant states that the Michigan Public Service Commission did on November 20, 1940 order an increase in househeating rates of Michigan Consolidated Gas Company in the Detroit area effective January 4, 1941, that at the time of the issuance of said order said Commission was not aware of this defendant's offer of a new form of rate by said letter dated July 18, 1940, that after being informed of said offer, the Michigan Public Service Commission postponed the effective date of said increased rates to May 1, 1941 and ordered a rehearing in the matter of the househeating rates of Michigan Consolidated Gas Company.

6. Further answering the petition, this defendant shows the Commission:

That about eighteen months ago it commenced studies of its rate structure with the view of eliminating the demand feature of its rates; that about twelve months ago it developed rates for its customers which eliminated the changing demand feature of its then existing rates and said rates have been generally accepted by such customers, but, as hereinabove stated, was rejected by Michigan Consolidated Gas Company.

This defendant has continued its studies and believes it can develop a new rate which will be accepted by Michigan Consolidated Gas Company; that if such a rate is developed and accepted for the Detroit area, it will necessitate a modification of this defendant's rates to certain other of its customers; that it hesitates to propose such a modifi- [fol. 16711] cation of said rates pending the outcome of the April 7, 1941 election to be held in the City of Detroit, and the final determination thereafter of the question of municipal ownership of the gas plant in Detroit and environs; that upon final determination of the question of municipal ownership this defendant believes it will be in a position to offer such a new rate either to Michigan Consolidated Gas Company or to the City of Detroit as the case may be and that negotiations with such owner will develop a rate which will satisfy the complaint filed in this cause.

This defendant desires to acquire the properties of Michigan Gas Transmission Corporation and states on information and belief that the Department of Justice and the Securities and Exchange Commission have indicated that Columbia Gas & Electric Corporation should dispose thereof; that this defendant believes that such acquisition may occur in the near future and in that event no question of divided revenues or separate plant accounts will be involved herein.

This defendant has continuously found it necessary to expend large sums of money for additional facilities in order to increase the capacity of its system sufficiently to keep pace with the requirements of new and expanding markets; that such expansion, in addition to normal

growth, has been so rapid that it is impossible to accurately appraise the results of any rate modifications which it might make effective: that taxes have increased and the estimated Federal Income and Excess Profits Tax liability of this defendant in 1940 will be one hundred forty five [fol. 16712] per cent greater than was its Federal Income Tax liability in the year 1939; that as a more stabilized condition of this defendant's markets, operating costs, and tax liability is approached, an appraisal of its rate structure becomes simpler and more susceptible of accurate analysis.

This defendant believes, and therefore states, that should it later appear that an investigation as prayed for by complainants is necessary or advisable, the same will be greatly facilitated and simplified by the occurrence of any of the matters set forth in this paragraph numbered six and should this Commission postpone such an investigation, this defendant represents that it stands ready to keep the Commission informed as to the progress of its rate studies and negotiations and the developments occurring with respect to all of the matters and things in this paragraph numbered six referred to.

Wherefore, this defendant prays that the petition of complainants be denied, or in the alternative that the investigation prayed for therein be postponed pending further developments with respect to the matters and things set forth in paragraph numbered six hereof, or in the event of undue delay of such developments, for such time as this Commission shall determine is reasonable in view of all [fol. 16713] circumstances.

Respectfully submitted,

PANHANDLE EASTERN PIPE LINE COMPANY,
By G. J. Neuner,
Vice-President.

1221 Baltimore Avenue,
Kansas City, Missouri.

GLENN W. CLARK,
Attorney.

1221 Baltimore Avenue,
Kansas City, Missouri.

State of Missouri,
County of Jackson,—ss.:

G. J. Neuner, being first duly sworn, deposes and says that he is Vice-President of Panhandle Eastern Pipe Line Company, one of the defendants herein; that he has read the foregoing Separate Answer of Panhandle Eastern Pipe Line Company and knows the contents thereof and that the same is true of his own knowledge, except as to the matters therein stated to be alleged upon information or belief and as to those matters he believes it to be true.

G. J. NEUNER,

Subscribed and sworn to before me this 1st day of April, 1941.

MARY C. MAGERS,
(L. S.) Notary Public.

My Commission expires August 31, 1943.

[fol. 16714] Affidavit of Service

State of Missouri,
County of Jackson,—ss.:

Glenn W. Clark, being first duly sworn, deposes and says that he is Counsel for Panhandle Eastern Pipe Line Company; that on this 1st day of April, 1941 he has served a copy of the foregoing Separate Answer of Defendant, Panhandle Eastern Pipe Line Company, upon Paul E. Krause and James H Lee, Corporation Counsel and Assistant Corporation Counsel, respectively, for the City of Detroit, upon William E. Dowling and Harold Goodman, Prosecuting Attorney and Special Counsel, respectively, for the County of Wayne, Michigan, and upon Michigan Gas Transmission Corporation by depositing the same in the United States air mail, properly addressed to said parties with postage prepaid.

GLENN W. CLARK.

Subscribed and sworn to before me this 1st day of April, 1941.

MARY C. MAGERS,
(L. S.) Notary Public.

My Commission expires August 31, 1943.

[fol. 16715] Order Fixing Date of Hearing.

United States of America

Federal Power Commission.

Commissioners: Claude L. Draper, Acting Chairman, Basil Manly, John W. Scott and Clyde L. Seavey. Leland Olds not participating.

June 10, 1941.

City of Detroit, Michigan and County of Wayne, Michigan,
Docket No. G-200 vs.
Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

It appearing to the Commission that:

(a) On February 28, 1941, the City of Detroit and the County of Wayne, Michigan, both of which are municipalities within the meaning of the Natural Gas Act, filed a petition which, among other things, alleges in substance: that the Panhandle Eastern Pipe Line Company is engaged in the transportation of natural gas in interstate commerce from producing fields in the States of Texas and Kansas, to a point of delivery near the City of Detroit; that it is also engaged in the sale of such gas to the Michigan Consolidated Gas Company for resale in said City of Detroit and County of Wayne; that such gas is transported from a point on the Indiana-Illinois boundary line to a point at or near the City of Detroit by the Michigan Gas Transmission Corporation for the account of the Panhandle Eastern Pipe Line Company, for which transportation Panhandle Eastern Pipe Line Company pays its affiliate, Michigan Gas Transmission Corporation, an excessive rate or charge; that the rates and charges demanded and collected by Panhandle Eastern Pipe Line Company from the Michigan Consolidated Gas Company are unjust, unreason-[fol. 16716] able, and unduly discriminatory; and said City of Detroit and County of Wayne request this Commission, after investigation, to fix and determine the just and reasonable rates to be thereafter observed and in force in respect of such transportation and sale of natural gas for resale in said City and County;

(b) Michigan Gas Transmission Corporation filed an answer to said petition on March 28, 1941, denying, among other things, that it is affiliated with Panhandle Eastern Pipe Line Company, or "that the division to Michigan Gas Transmission Corporation of the rates and charges maintained by Panhandle Eastern Pipe Line Company are unjust and unreasonable, or that any charges of Michigan Gas Transmission Corporation in connection with the sale or delivery of gas to Michigan Consolidated Gas Company are excessive, unjust or unreasonable";

(c) Panhandle Eastern Pipe Line Company filed an answer to said petition, on April 3, 1941, denying, among other things, that it is affiliated with the Michigan Gas Transmission Corporation, or that it is controlled by the Columbia Gas & Electric Corporation, or that its rates are unjust, unreasonable, or discriminatory;

(d) The Panhandle Eastern Pipe Line Company is engaged in the transportation of natural gas in interstate commerce through a transmission pipe line extending from the State of Texas to a point on the border line between the States of Illinois and Indiana, and the sale in interstate commerce of natural gas for resale, and may be a natural-gas company within the meaning of the Natural Gas Act;

(e) The Michigan Gas Transmission Corporation is engaged in the transportation of natural gas in interstate commerce through a transmission pipe line extending from a point on the border line between the States of Illinois and Indiana to a point at or near the City of Detroit, Michigan, and the sale in interstate commerce of natural gas for resale, and may be a natural-gas company within the meaning of the Natural Gas Act;

(f) Natural gas sold by the Panhandle Eastern Pipe Line Company to the Michigan Consolidated Gas Company for resale in the City of Detroit is transported by Michigan Gas Transmission Corporation through its interstate transmission pipe line for the account of Panhandle Eastern Pipe Line Company.

(g) By letter of June 4, 1941, the said City of Detroit and County of Wayne have advised the Commission "that at a date approximately 30 days from date hereof, your

[fol. 16717] petitioners will be prepared to present evidence to substantiate the allegations contained in our petition";

The Commission orders that:

A public hearing in this proceeding be held commencing on July 15, 1941, at 9:45 o'clock, a. m. (E.S.T.), at 1800 Pennsylvania Avenue, N. W., in the City of Washington, D. C.

By the Commission.

LEON M. FUQUAY,
Secretary.

[fol. 16718] (Order permitting Michigan Public Service Commission to Intervene.)

United States of America

Federal Power Commission

Commissioners: Claude L. Draper, Acting Chairman, Basil Manly, John W. Scott and Clyde L. Seavey. Leland Olds not participating.

June 10, 1941.

City of Detroit, Michigan and County of Wayne, Michigan,
Docket No. G-200 vs.
Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

It appearing to the Commission that:

(a) On March 31, 1941, the Michigan Public Service Commission filed a petition praying for leave to intervene in this proceeding;

(b) The participation of the Michigan Public Service Commission in this proceeding may be in the public interest;

The Commission orders that:

The Michigan Public Service Commission be and it is hereby permitted to become an intervenor in this proceeding, provided, however, such permission shall not be

construed as recognition by this Commission that said Michigan Public Service Commission might be aggrieved by any order of this Commission issued in this proceeding.

By the Commission.

LEON M. FUQUAY,
Secretary.

[fol. 16720] (Petition of Panhandle Eastern Pipe Line Company for Continuance of hearing.)

(Received June 26, 1941, Federal Power Commission.)

Before the

Federal Power Commission.

City of Detroit and County of Wayne, Municipal Corporations, Complainants,

Docket No. G-200 vs.

Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

Panhandle Eastern Pipe Line Company, one of the defendants in the above entitled cause, hereby petitions the Commission for a six months' continuance of the hearing now set for July 15, 1941 and as grounds therefor states:

1. The public interest does not require an early hearing in this cause.

The petition filed by the City of Detroit and the County of Wayne on or about February 28, 1941, although containing general allegations and a broad prayer for relief, manifestly was primarily aimed at and instituted because of a supposed discriminatory rate affecting gas ultimately to be used by housheating customers in excess of twenty-five thousand in number in the City of Detroit, Michigan. It is apparent that the general allegations as to the unreasonableness of this defendant's rates and the division [fol 16721] of revenues between this defendant and the defendant, Michigan Gas Transmission Corporation, bring into question the value of defendants' properties, the expected life of the enterprise as a whole, the lawful and

proper rate of depreciation, the reasonableness of operating expenses, and many other factors which complainants are not equipped to develop and, even if so equipped, would be unable to develop because of the lack of any right to make adequate investigation. Probably for this reason this Commission instituted an investigation (Docket No. G-207) and undoubtedly intends, by virtue of the powers vested in it by Congress and by the use of a staff equipped to obtain necessary information and to develop the pertinent facts, to inquire through its customary proceedings as to the matters involved under the general allegations of complainants' petition filed at Docket G-200. Therefore, as to those matters, the public interest does not require that complainants be heard on July 15, 1941.

As to the apparent gravamen of complainants' petition, that is, the allegation of discrimination as to gas sold by this defendant to Michigan Consolidated Gas Company for resale to househeating customers in excess of twenty-five thousand, the public interest does not require an early hearing because the alleged discrimination does not in fact exist, but is merely a claim born either of a lack of correct information and data or of a complete misunderstanding [fol. 16722] of correct information and data and the applicable contracts. Although at first blush this might be considered by the Commission as a statement of an ultimate fact to be determined by hearing, and although such a position might technically be correct, it nevertheless is true that the staff of this Commission can ascertain beyond any question of a reasonable doubt from contracts, reports and other data which has been furnished to this Commission by this Defendant, and without any reasonable necessity for an early hearing, that the average rate paid by Michigan Consolidated Gas Company for househeating gas delivered to customers in excess of twenty-five thousand during the calendar year 1940 was substantially less than three (3) cents per therm.

The billing demand which will govern until April, 1942 has been established and by the application of reasonable estimates based upon information and data derived from known experience, this Commission's staff can readily determine from such data as this defendant has furnished the

Commission that the average rate paid and to be paid by Michigan Consolidated Gas Company for househeating gas delivered and to be delivered to customers in excess of twenty five thousand during the calendar year 1941 will not exceed three and five-tenths (3.5) cents per therm, and that there is not, and could not be, under present conditions, any foundation for a claim that such gas will cost Michigan Consolidated Gas Company more than gas for other househeating customers and much less for complainants' extravagant claim that such gas may cost [fol. 16723] Michigan Consolidated Gas Company sixty-two (62) cents per thousand cubic feet.

2. The public interest does require that this defendant's petition for continuance be granted.

For several months it has been apparent to this defendant that requirements of its customers during the winter of 1941 and 1942 will be such as to gravely tax and probably render inadequate the capacity of its facilities without frequent interruption or curtailment of gas supplied to many industries contributing to National Defense unless facilities for a substantial increase in capacity can be installed prior to the severe winter months. The Defense Program has created an acute shortage in steel for private industry and it is practically impossible to obtain steel plate for the manufacture of pipe without the assistance of the United States Government by way of priorities granted because of the need for steel in activities directly related to National Defense.

Therefore, several weeks ago this defendant, in order to substantiate its claim for priority, set out to obtain estimates of the requirements of its customers for the winter of 1941-42, together with data as to the defense materials being manufactured by industries using its gas. The data thus acquired shows that almost all industries now using gas from this defendant's pipe lines are engaged in defense work, that fully fifty per cent of their entire output is directly related to the defense program and that practically all of the increase in their gas requirements for the winter of 1941-42, in the estimated quantity of more than [fol. 16724] fifteen million (15,000,000) cubic feet per day

over and above their requirements for the last winter, will be used in defense work.

In addition to present consumers, this defendant expects to serve the requirements of additional domestic, commercial and industrial consumers in and near many cities, towns and communities in the State of Michigan, including Flint, Pontiac, Kalamazoo, Jackson, and Battle Creek, none of which are presently being served with natural gas. Included among these consumers are many industries which are vital to the Defense Program, now using gas but faced with an inadequate supply. This defendant is now engaged in obtaining necessary certificates and licenses for the construction of pipe lines in the State of Michigan and will apply to this Commission for a certificate of convenience and necessity if required under the provisions of the Natural Gas Act as construed under the decisions of this Commission.

The industries, now using gas from this defendant's pipe lines and manufacturing defense materials, number eighty-nine in the City of Detroit, Michigan, seventy-four in the State of Indiana; thirty-six in the State of Illinois, and ten in the State of Missouri. More than fifty additional industries engaged in defense work elsewhere in the State of Michigan are expected to be supplied with gas to be transported by this defendant upon completion of its pipe lines in the State of Michigan.

Seeking a preference rating sufficiently high to insure [fol. 16725] deliveries of steel pipe to meet its schedule for the construction of facilities for additional capacity and its proposed pipe lines in the State of Michigan, this defendant filed its formal application, supported by extensive data, including the above, with the Priorities Division of the Office of Production Management. Complete analysis of said data has been made by the Priorities Division and hearings have been held before it with the result that on June 17, 1941 it issued its Certificate No. C-102393 granting a Preference Rating, sufficiently high to meet this defendant's construction schedule, on steel for all pipe required by this defendant for the aforesaid construction program.

This defendant's construction program involves the obtaining of more than fifty five thousand (55,000) tons of steel pipe, together with large quantities of gate valves,

couplings, and pipe coating; and the construction of over four hundred (400) miles of pipe line for which rights of way and river, railroad and highway crossing permits must be obtained before the construction work can be done.

This defendant's personnel, while sufficient for ordinary operations, is not large enough to carry out the aforementioned complex program without every man bending unusual efforts to that end. Sufficient additional men of adequate training and experience are unavailable, and therefore present employees must devote their time to this program in addition to their regular work. To this end many of this defendant's employees have been required to [fol. 16726] defer vacations. Under the best conditions obtainable in view of these circumstances, this defendant will be unable to complete its construction program before the first of the coming year. The full time and efforts of the men who would be required to prepare for and attend the hearing now set for July 15, 1941 are all important to the aforementioned program which is vital not only to the National Defense Program but also to many thousands of residential users of gas. To divert the efforts of these men, even for a short time, would seriously impede the work now being carried on.

For the foregoing reasons this defendant believes that the public interest requires that the hearing be postponed.

Wherefore, this defendant prays that this Commission enter an order continuing the hearing now set for July 15, 1941 for a period of approximately six months, at which time much of the work connected with its present construction program will have been completed.

Respectfully submitted,

PANHANDLE EASTERN PIPE LINE COMPANY,

By G. J. Neuner,
Vice-President,
1221 Baltimore Avenue,
Kansas City, Missouri.

Glenn W. Clark,
Attorney,
1221 Baltimore Avenue,
Kansas City, Missouri.

[fol. 16728] (Concurring Petition of Michigan Gas Transmission Corporation for Continuance of Hearing.)

(Received July 3, 1941, Federal Power Commission.)

Before the

Federal Power Commission.

City of Detroit and County of Wayne, Municipal Corporations, Complainants,
Docket No. G-200 vs.
Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

Michigan Gas Transmission Corporation, one of the defendants in the above entitled cause, hereby joins in the petition of Panhandle Eastern Pipe Line Company for a six months' continuance of the hearing now set for July 15, 1941, and as additional grounds therefor states:

1. The granting of a continuance would tend to simplify the hearings.

It is probable that a substantial saving of time and effort, both to the Commission and to the various parties to the proceeding as well, could be realized by a continuance of six months. It has for some time been contemplated that Panhandle Eastern Pipe Line Company would, pursuant to a certain Plan, acquire the stock and indebtedness of Michigan Gas Transmission Corporation. On June 7, 1941 an agreement was entered into providing for the carrying out of this Plan, with certain modifications. Under said agreement it is contemplated that Panhandle Eastern Pipe [fol. 16729] Line Company will acquire said stock and indebtedness of Michigan Gas Transmission Corporation by October 1, 1941, and said agreement provides that it shall terminate unless all the transactions provided for are effected by that date, but that such date shall be extended to December 1, 1941 upon the request of any one of the parties. In connection with carrying out the various provisions of said agreement, applications must be made to the United States District Court for the District of Delaware and the Securities and Exchange Commission, and said applications are now in course of preparation.

It is obvious that after the acquisition by Panhandle Eastern Pipe Line Company of the stock and indebtedness of Michigan Gas Transmission Corporation the problem of determining questions involving rates will be considerably simplified, particularly if the physical properties of Michigan Gas Transmission Corporation and Panhandle Eastern Pipe Line Company are put into the same corporation by merger or otherwise, a move which Michigan Gas Transmission Corporation is informed is under consideration after said acquisition by Panhandle Eastern Pipe Line Company.

2. The grounds urged by Panhandle Eastern Pipe Line Company in its petition for continuance are largely applicable to Michigan Gas Transmission Corporation as well.

Not only is Michigan Gas Transmission Corporation hampered in its individual operations at this time by reason of various circumstances and conditions arising out of the present emergency, but it is necessarily affected by emergency conditions applicable to Panhandle Eastern [fol. 16730] Pipe Line Company by reason of the fact that all gas received and transported by Michigan Gas Transmission Corporation comes from the lines of Panhandle Eastern Pipe Line Company.

3. The Defendant Primarily Involved is Panhandle Eastern Pipe Line Company.

The gravamen of this case appears to be the charge of discrimination against Panhandle Eastern Pipe Line Company, and that company is the defendant principally and primarily involved. Michigan Gas Transmission Corporation has no contractual relationships with the City of Detroit or the County of Wayne, the complainants herein, but the contractual relationships in question are between said complainants and Panhandle Eastern Pipe Line Company. It may be, therefore, that evidence as to Michigan Gas Transmission Corporation will prove not to be pertinent in this proceeding. In any event it could hardly be pertinent until after an investigation into the rates and charges of Panhandle Eastern Pipe Line Company demonstrated its relevance and pertinency as bearing upon such rates and charges.

Wherefore the defendant Michigan Gas Transmission Corporation prays that the hearing now set for July 15, 1941 be deferred for a period of six months as requested by Panhandle Eastern Pipe Line Company.

Respectfully submitted,

MICHIGAN GAS TRANSMISSION CORPORATION,

By Walter C. Beckjord,

President.

Office and Post Office Address:
Suite 2901, 61 Broadway,
New York, N. Y.

[fol. 16731] State of New York,
County of New York—ss:

Walter C. Beckjord, being duly sworn, deposes and says:

That he is the President of Michigan Gas Transmission Corporation, one of the defendants in the above-entitled proceeding; that he has read the foregoing concurring petition for continuance and knows the contents thereof and that the same is true to his own knowledge except as to the matters therein stated to be alleged upon information and belief and that as to those matters he believes it to be true.

WALTER C. BECKJORD.

Sworn to before me this 1st day of July, 1941.

(Notarial Seal)

JOHN E. CLEARY,
Notary Public, Bronx County, N. Y.
Bronx Co. Clk's No. 47, Reg. No. 57C42
N. Y. Co. Clk's No. 218, Reg. No. 2C182
Commission expires March 30, 1942.

[fol. 16733] (Objection of City of Detroit and County of Wayne to Defendants' Petition for Continuance.)

(Received July 3, 1941, Federal Power Commission.)

The City of Detroit and the County of Wayne, complainants herein, file this objection to the petition for continu-

ance of Panhandle Eastern Pipe Line Company and say as follows:

There exists an emergency in connection with the rates of Michigan Consolidated Gas Company affecting the inhabitants in the complainant municipalities for the reason that the Michigan Public Service Commission has a hearing scheduled on July 21, 1941, continued to said date from prior dates, wherein will be considered the question of whether the entire house-heating rates for customers in the complainant municipalities should be increased.

The allegations in respect to a cost of 3.5 cents per therm appearing on page 3 of respondent's petition for continuance are on their face confused and deceptive in purport, for it is there alleged and concluded that "during the cal- [fol. 16734] endar year of 1941 such cost will not exceed three and five-tenths (3.5) cents per therm." But the average cost of gas during the calendar year 1941 is affected by the peak dates of December, 1939, and January, February, March, 1940, when the number of customers did not exceed 25,000 and the only reflection of the peak occurring in December, 1940, or in January, February, March, 1941, in the calendar year, will be for such use as is made of house-heating gas in the fall and early winter season of the 1941-1942 heating season. From the evidence before complainants, it appears that the house-heating demand has a load factor of 25% and in view thereof, that particular demand so enlarges the demand charge as to create an additional burden equal to about six (6) cents per therm in respect to the gas consumed by house-heating customers in excess of 25,000.

The emergency confronting complainants municipalities still exists, for the Michigan Public Service Commission appears to be about to increase the rates for all house- [fol. 16735] heating customers unless such action shall be rendered unnecessary by the prompt and appropriate action of this Commission.

Respectfully submitted,

CITY OF DETROIT,
By Paul E. Kraus,
Corporation Counsel.

JAMES H. LEE,
Assistant Corporation Council.
COUNTY OF WAYNE,
WILLIAM E. DOWLING,
Prosecuting Attorney.
HAROLD GOODMAN,
Special Assistant Prosecuting Attorney.

District of Columbia—ss.

Harold Goodman, being duly sworn, deposes and says that the foregoing statements by him subscribed are true according to his best knowledge and belief.

[fol. 16736] Designation of Trial Examiner.

By virtue of the order of the Commission adopted November 3, 1939, authorizing Commissioners and others to preside at hearings, and the Commission, by order adopted June 10, 1941, having directed that a hearing be held in the above matter, to convene at 9:45 o'clock a. m. on July 15, 1941, Samuel H. Crosby is designated as trial examiner to preside at said hearing.

Done, this 8th day of July 1941, by authority of the Commission.

LELAND OLDS,
Chairman.

[fol. 16737] (Order Denying Petitions for Continuance of Date of Hearing.)

United States of America
Federal Power Commission

Commissioners, Leland Olds, Chairman, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

July 8, 1941.

City of Detroit, Michigan,
and
County of Wayne, Michigan,
Docket No. G-200. vs.
Panhandle Eastern Pipe Line Company,
and
Michigan Gas Transmission Corporation.

Upon petition of the Panhandle Eastern Pipe Line Company filed June 26, 1941, and petition of the Michigan Gas Transmission Corporation filed July 3, 1941, for a continuance of the hearing in this proceeding now fixed for July 15, 1941;

It appearing to the Commission that:

No good cause for the granting of said petitions has been shown;

The Commission orders that:

The petitions of the Panhandle Eastern Pipe Line Company and the Michigan Gas Transmission Corporation filed on June 26, 1941, and July 3, 1941, respectively, be and the same are hereby denied.

By the Commission.

LEON M. FUQUAY,
Secretary.

[fol. 16739] (Petition of Michigan Consolidated Gas Company for Leave to Intervene.)

(Received July 10, 1941, Federal Power Commission.)

Before the Federal Power Commission.

City of Detroit and County of Wayne, Municipal Corporations, Complainants,
Docket No. G-200. vs.
Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

Michigan Consolidated Gas Company, Intervener.

To the Honorable Members of the Federal Power Commission:

Comes now the Michigan Consolidated Gas Company by and through its attorney, Park Chamberlain, and, upon the ground that its participation in the proceedings may be in the public interest, moves the Federal Power Commission that it be granted permission to intervene in the proceedings now pending upon the petition for an investigation of the rates and charges of the Panhandle Eastern Pipe

[fol. 16740] Line Company and Michigan Gas Transmission Corporation, made by the City of Detroit and the County of Wayne, municipal corporations of the State of Michigan, and in the proceeding instituted by the Federal Power Commission upon its own motion to investigate Panhandle Eastern Pipe Line Company and the Michigan Gas Transmission Corporation to determine the status of such companies under the "Natural Gas Act", whether rates charged by them for natural gas in interstate commerce are excessive, unjust, unreasonable, or discriminatory, and what rates and charges for natural gas for resale in the Detroit area would be just and reasonable, and for the following reasons:

1.

It is a public utility incorporated under the laws of the State of Michigan, engaged in the distribution of natural gas in the metropolitan area of Detroit, Michigan, and to a small extent in the production, sale, and distribution of manufactured gas.

2.

Petitioner has, since about July 1st, 1936, purchased its entire supply of natural gas from the defendant, Panhandle Eastern Pipe Line Company, (which delivers the gas through Michigan Gas Transmission Corporation, an affiliate), under the terms of a contract entered into between petitioner and Panhandle Eastern Pipe Line Company August 31st, 1935, and four supplemental contracts, all of which are subject to orders within the jurisdiction of the Federal Power Commission.

[fol. 16741]

3.

The natural gas purchased by petitioner from Panhandle Eastern Pipe Line Company is distributed to approximately 435,000 consumers within the State of Michigan for domestic, commercial, house heating, and industrial purposes, and the cost of natural gas is an operating expense which directly affects the rates which must be charged by petitioner to the public.

4.

The rates and charges of petitioner are established by the Public Service Commission of the State of Michi-

gan, an intervener in these actions, and rates heretofore established by said Public Service Commission have been suspended pending the hearings before this Commission, and it is necessary in the public interest that the house-heating rates which have been suspended be promptly established because of the approaching fall and winter demand.

5.

Inasmuch as natural gas has, up to this time, been purchased under written contracts with Panhandle Eastern Pipe Line Company, petitioner is directly interested in such revisions of rates and in such regulations as may be required and enforced by this Commission with respect to the service and the discriminatory practices of Panhandle Eastern Pipe Line Company.

6.

Petitioner attaches hereto its duly verified petition directed toward and made a part of the investigations of [fol. 16742] Panhandle Eastern Pipe Line Company, its rates and charges as aforesaid, and asks that the same be filed therein and that it be allowed to become a party by way of intervention.

Wherefore your petitioner prays:

(a) That it may be permitted to intervene and be treated as a party hereto;

(b) That it be given the right to have notice of any and all proceedings;

(c) That it be given the right to appear and be represented by counsel;

(d) That it be given the right to have notice of and appear at the taking of testimony;

(e) That it be given the right to produce and cross-examine witnesses;

(f) That it be given the right to be heard on brief and on argument if oral argument be heard; and

(g) That it be given such other and further rights as may be necessary to the full and complete protection of the public interest.

(h) Your petitioner will ever pray, etc.

MICHIGAN CONSOLIDATED GAS COMPANY,
By Park Chamberlain, Its Attorney.
Business Address: 815-15 St. N. W., Washington, D. C.

By Frank L. Conrad, Vice President,
Business Address: Of Petitioner, 415 Clifford Street, Detroit, Michigan.

Dated: July 9, 1941.

[fol. 16743] State of Illinois,
County of Cook—ss.

On this 9th day of July, A. D. 1941 before me, a Notary Public, appeared Frank L. Conrad, to me known, who, being first duly sworn, did say that he is the Vice President of the Michigan Consolidated Gas Company, the petitioner herein; that he has read the foregoing petition for leave to intervene and that the statements therein contained are true, except as to those matters therein stated upon information and belief which he believes to be true.

ANNETTE HELBIG,
Notary Public in and for Cook County, Illinois.

My commission expires Aug. 25, 1942.

[fol. 16744] (Intervention of Michigan Consolidated Gas Company.)

To the Honorable Members of the Federal Power Commission:

The Michigan Consolidated Gas Company respectfully shows:

I.

Petitioner is a corporation duly organized and existing under and by virtue of the laws of the State of Michi
[fol. 16745] gan, with principal place of business at 415

Clifford Street in the City of Detroit, County of Wayne, and State of Michigan. It is a public utility engaged in the sale and distribution of natural gas, which it purchases from Panhandle Eastern Pipe Line Company, and in the production, sale, and distribution of manufactured gas in small amount. It serves, at the present time, approximately 435,000 residential, househeating, commercial, and industrial consumers located in the City of Detroit and environs, the area served being about 500 square miles in extent, including the cities of Hamtramck, Highland Park, Dearborn, River Rouge, Grosse Pointe, Melvindale, Wyandotte, Lincoln Park and 22 smaller municipalities, with a total population estimated on the basis of Federal Census to be 1,855,000.

2.

The defendant, Panhandle Eastern Pipe Line Company, is a corporation organized and existing under and by virtue of the laws of the State of Delaware, with principal place of business at Kansas City, Missouri, and is engaged in the transportation of natural gas in interstate commerce and in the sale in interstate commerce of natural gas for resale for ultimate public consumption. It is a "natural gas company" as defined by the "Natural Gas Act" and has, since 1936, been furnishing the entire natural gas requirements of petitioner for distribution to its consumers, delivering such gas into the transmission mains of petitioner in Melvindale, Wayne County, Michigan. For convenience it will sometimes hereinafter be referred to as "Panhandle Eastern".

[fol. 16746]

3.

The defendant, Michigan Gas Transmission Corporation, is a corporation organized and existing under and by virtue of the laws of the State of Delaware, engaged in the transportation of natural gas in interstate commerce, and in the sale in interstate commerce of natural gas for resale for ultimate public consumption and is a "natural gas company" as defined by the "Natural Gas Act". It has, throughout the period in which Panhandle Eastern has furnished natural gas to petitioner, transported all of said gas from the terminus of the pipe line of Panhandle Eastern situate at the Illinois-Indiana state

line at or near the town of Dana, Indiana, to the point of delivery to petitioner. For convenience it will sometimes hereinafter be referred to as "Michigan Gas Transmission".

4.

Panhandle Eastern is a subsidiary of Columbia Oil and Gasoline Corporation, which is in turn a subsidiary of Columbia Gas and Electric Corporation, both Delaware corporations. Michigan Gas Transmission is a wholly owned subsidiary of Columbia Gas and Electric Corporation and, therefore, an affiliate of Panhandle Eastern.

5.

On or about August 31, 1935, Panhandle Eastern entered into a written contract with petitioner, then named Detroit City Gas Company, agreeing to supply petitioner's requirements of natural gas up to a maximum daily demand of 90,000,000 cubic feet, or 912,600 therms, under what is known as a two-part rate. The demand or capacity charge is a monthly charge equal in amount to 38c [fol. 16747] multiplied by the number of therms delivered on the maximum day during the preceding months of December, January, February, and March, and the commodity charge is 1.5c per therm. Under this contractual rate, the cost of gas to petitioner at the point of delivery varies in accordance with the load factor on which it is taken, the rate at the following indicated load factors being approximately as follows:

Load Factor	Rate in Cents Per M.c.f.
27%	62.5
50%	40
70%	32.9
85%	29
100%	27.5

(In this and the next succeeding section (6) the computation as to cost per M.c.f. is based on 1,000 B.t.u. gas.)

Under this contract it was made mandatory upon petitioner to ultilize its existing gas-holders, with capacity

of approximately 56,000,000 cubic feet, to assist in leveling peak loads, and petitioner was permitted to use its water gas generating equipment at its option for the purpose of reducing and leveling such peak loads, thereby increasing the load factor, releasing capacity to the pipe line company for other and further public service, and lowering the rate which petitioner is required to pay for natural gas.

6.

Under the contract, petitioner was required to pay 3¢ per therm for all gas taken prior to such time as its customers' appliances were completely adjusted for the use of natural gas. Since March 31st, 1937, shortly thereafter, petitioner has paid the following average rate per M.c.f. for each of the years indicated:

[fol. 16748] For the year ending March 31, 1938..29.07¢

For the year ending March 31, 1939.....32.08¢

For the year ending March 31, 1940.....32.13¢

For the calendar year 1940.....33.00¢

Due to the increased demand for gas for househeating and for defense purposes it is estimated and believed that the average cost of gas for 1941 will be substantially increased.

7.

Detroit, located in a northern area, affords a large market for househeating gas. Due to the seasonal character of this type of service, the load factor is poor and is estimated to be around 27½%. The rates contained in the contract of August 31, 1935, failed to recognize that petitioner could not market househeating gas which cost in the neighborhood of 62½¢ per M.c.f. and not until some months after the contract had been made firm did did Panhandle Eastern become convinced that petitioner would not promote househeating sales if it be required to purchase under the contract rate. Desirous of promoting sales for househeating purposes, notwithstanding its low load factor, Panhandle Eastern entered into further

negotiations with petitioner and on or about June 2nd, 1936, voluntarily entered into a contract stipulating that it would pay petitioner a bonus of from $10.00 down to $2.00 per househeating consumer connected to its distribution mains up to 18,000 customers, the aggregate payment to be $118,000. It further agreed that petitioner might place a total of 20,000 househeating customers on its mains and that the charge for the gas consumed for that purpose should not exceed approximately 4¢ per therm (equal to the rate provided for gas taken under the contract on a 50% load factor). Provision was made that [fol. 16749] the cost of househeating gas should be computed under both the original and supplemental contracts and that petitioner would be charged the lowest of the two rates.

On or about September 29, 1939, by a third supplemental contract, Panhandle Eastern voluntarily extended the same househeating rate of not to exceed approximately 4¢ per therm, to 5,000 additional customers and increased the maximum daily demand to 100,000,000 cubic feet, the latter being increased to 125,000,000 cubic feet by a fourth supplemental contract under date of June 29, 1940.

To stimulate sales of househeating gas, petitioner established and announced a rate which is believed fair and reasonably compensatory for that class of service and soon succeeded in placing 25,000 househeating customers on its mains. Additional consumers sought the same type of service and, notwithstanding Panhandle Eastern had made a voluntary rate for 25,000 consumers at approximately 4¢ per therm and paid a bonus or premium for the business, it refused to furnish gas for other consumers at that rate, thus wilfully discriminating against petitioner.

Petitioner, as a public utility, is unable to discriminate as against others in the class of househeating consumers and Panhandle Eastern, although repeatedly requested to make househeating gas available to petitioner at the same rate, in amount sufficient to serve other consumers demanding the same type of service under the same conditions, has refused such gas to petitioner except that petitioner pay for it under the terms of the original con-

tract, or on a basis of about 62¢ per M.c.f. More than 40,000 housheating consumers are now attached to petitioner's distribution mains and it is believed that within a year or two that number will be increased to 60,000. [fol. 16750] No intervening circumstances or costs justify the refusal of Panhandle Eastern to make available to petitioner a rate for housheating gas, available to all applicants for that type of service, no higher than that which it voluntarily put into effect for the first 25,000 gas consumers attached to the mains of petitioner which were procured at the solicitation of and at large expense to Panhandle Eastern and its action constitutes unjust discrimination and undue prejudice within the meaning of the "Natural Gas Act".

8.

Sales of natural gas made by Panhandle Eastern in 1935 were approximately 15,979,390 M. c. f. and were the largest for any year since the pipe line was placed in operation. Its net earnings from operations for 1935 were approximately $1,494,650.91, wholly inadequate to provide any return to stockholders after the payment of interest and fixed charges and, in fact, creating an additional deficit of $326,054.03. Since 1935 the annual sales of Panhandle Eastern in M. c. f., and the amount taken by petitioner, have been as follows:

	Total Sales	Sales to Petitioner	% of Total
1936	26,747,931	3,957,058	14·8
1937	40,806,962	15,969,598	39·1
1938	41,185,762	16,032,297	39
1939	49,233,072	18,391,954	37·35
1940	56,394,762	22,281,273	39·5

As a result of the increased sales made possible by the Detroit contract, the corporate income of Panhandle has increased as indicated in the following statement:

	Net Earnings from Operations	Net Income Available to Stockholders
1934	$1,004,104 52	$ 872,006 76*
1935	1,494,660 91	326,054 03*
1936	2,859,441 49	1,711,185 43
1937	4,859,071 78	3,759,527 81
1938	4,386,985 18	3,059,223 74
1939	5,615,979 84	4,363,399 34
1940	5,727,645 85	4,548,323 98

*Deficit

[fol. 16751] Defendant, Panhandle Eastern, has expended for improvements and extensions to its physical properties approximately $15,500,000 during the years 1936 to 1939, inclusive, and $5,750,000 in 1940, a total of $21,250,000. The book value of its plant as of the close of 1940 is reported as approximately $65,000,000 with accrued depreciation reserves of over $9,000,000, leaving a net value of $56,000,000. The book value as of the beginning of 1936, less depreciation, was therefore between thirty-five and forty million dollars.

The contract with petitioner has resulted in a sale of approximately 40% of the total sales of Panhandle Eastern since its effective date, the sales in that area having increased in the same proportion as the increase along the length of the pipe line. Not only does petitioner take 40% of the total sales of Panhandle Eastern, but the gas purchased is delivered at one point with a minimum of accounting, testing and measurement expense. This is in direct contrast with the remaining sales which are made up of small deliveries along the entire length of a 1,200 mile transmission line.

Since 1935 the sales of Panhandle Eastern have increased 252% and the increased investment in facilities was approximately only 50%. Further the construction of the connecting line necessary to supply Detroit has enabled Panhandle Eastern to enormously increase its sales in Indiana, the increase by 1940 being more than eight billion cubic feet.

Further, the execution of this contract with its advantageous terms and the practical pledge of the great do-
[fol. 16752] mestic and industrial market of the metropolitan area of Detroit for the future, instantly and permanently established the economic soundness of the pipe line project and guaranteed its earning capacity over such a period of years that no question could arise as to its ability to fully amortize its facilities during the period of their useful life. It turned failure into success and transformed Panhandle Eastern from a losing venture to an investment of the highest class, enabling it to attract money at unusually low cost and making service possible and cheaper to the communities served along the line, together with many additional ones.

Therefore, in the establishment of rates the Detroit area is entitled to recognition not only for the lessened cost of delivery of so great a quantity, but for the contribution made by it, insuring the stability and permanence of the investment and extending a needed public service to communities otherwise unable to obtain it.

Notwithstanding the fact that the sales to petitioner enabled Panhandle Eastern to greatly increase its income, and notwithstanding its income has been constantly increasing, the cost of gas to petitioner for use in the Detroit area per unit of consumption has continually increased, whereas rates in other areas have been lowered.

Petitioner alleges that the rate charged by Panhandle Eastern for natural gas for resale for public consumption in the Detroit area under this contract is now unreasonable and excessive, and that Panhandle Eastern is earning more [fol. 16753] than a fair return on its property used and useful in the conduct of the business as a result thereof. It further alleges that said rates are unjustly discriminatory as against both the locality served and the class of service rendered, and that by a practical construction of the terms of said contract made and insisted upon by Panhandle Eastern, petitioner and the gas consumers to whom it distributes natural gas are suffering undue discrimination, prejudice, and disadvantage.

Wherefore petitioner prays for an investigation by the Federal Power Commission of the rates, classifications, and practices of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation and of the unjust discrimination, undue prejudice and disadvantages suffered by petitioner and the public by reason of the acts and practices of defendants and the practical interpretations placed by them upon their contracts and rate schedules. Petitioner further prays for a finding that the rates and charges of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation are unjust and unreasonable, and unlawfully preferential and cause undue prejudice and disadvantages to petitioner and the public in the Detroit metropolitan area, and that a schedule of fair and reasonable rates be established for natural gas sold for resale for

public consumption, and for such other relief as may be found just and right in the public interest.

And petitioner will ever pray, etc.

MICHIGAN CONSOLIDATED GAS COMPANY,
By Park Chamberlain,
Its Attorney,
Business Address: 815—15th St., N. W.
Washington, D. C.

By Frank L. Conrad,
Vice President,
Business Address: Of Petitioner,
415 Clifford Street,
Detroit, Michigan.

Dated: July 9, 1941.

[fol. 16754] State of Illinois,
County of Cook—ss.

On this 9th day of July, A. D. 1941 before me, a Notary Public, appeared Frank L. Conrad, to me known, who, being first duly sworn, did say that he is the Vice President of the Michigan Consolidated Gas Company, the petitioner herein; that he has read the foregoing petition and that the statements therein contained are true, except as to those matters therein stated upon information and belief which he believes to be true.

ANNETTE HELBIG,
Notary Public in and for
Cook County, Illinois.

My commission expires Aug. 25, 1942.

[fol. 16755] (Order Permitting Intervention of Michigan Consolidated Gas Company.)

United States of America

Federal Power Commission

Commissioners Claude L. Draper, Acting Chairman, Basil Manly, John W. Scott and Clyde L. Seavey. Leland Olds not participating.

July 12, 1941.

City of Detroit, Michigan, and County of Wayne, Michigan,
Docket No. G-200. vs.
Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

It appearing to the Commission that:

(a) On July 10, 1941, the Michigan Consolidated Gas Company filed a petition with this Commission for leave to intervene in the above-entitled matter;

(b) The participation of the Michigan Consolidated Gas Company in this matter may be in the public interest;

The Commission orders that:

The Michigan Consolidated Gas Company be and it is hereby permitted to become an intervener and a party to this proceeding, subject to the rules and regulations of this Commission; provided, however, that the admission of the Michigan Consolidated Gas Company as an intervener and party to this proceeding shall not be construed as recognition by the Commission that such party might be aggrieved by any order of the Commission issued in this proceeding.

By the Commission.

LEON M. FUQUAY,
Secretary.

[fol. 16757] Answer of Michigan Gas Transmission Corporation to Petition of Intervener, Michigan Consolidated Gas Company.

(Received August 12, 1941, Federal Power Commission.)

Before the Federal Power Commission

City of Detroit and County of Wayne, Municipal Corporations, Complainants,
Docket No. G-200. vs.
Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

To The Honorable Members of the Federal Power Commission:

Michigan Gas Transmission Corporation, defendant, in answer to the petition of the intervener, Michigan Con-

solidated Gas Company, respectfully shows to the Commission as follows:

First: In answer to the paragraph of said petition, numbered "1": said defendant denies that it has any knowledge or information sufficient to form a belief as to the allegations thereof, except that said defendant admits that said petitioner is a public utility engaged in the sale and distribution in the City of Detroit and environs of natural gas, which it purchases from Panhandle Eastern Pipe Line Company.

Second: In answer to the paragraph of said petition, numbered "4": said defendant admits that it is a wholly [fol. 16758] owned subsidiary of Columbia Gas & Electric Corporation and that the Securities and Exchange Commission has held that Panhandle Eastern Pipe Line Company is a "subsidiary company" of Columbia Oil & Gasoline Corporation and that Columbia Oil & Gasoline Corporation is a "subsidiary company" of said Columbia Gas & Electric Corporation, as the term "subsidiary company" is defined in Section 2(a)(8) of the Public Utility Holding Company Act of 1935, but denies on information and belief that for any other purpose whatsoever said Panhandle Eastern Pipe Line Company is a subsidiary of said Columbia Oil & Gasoline Corporation or that said Columbia Oil & Gasoline Corporation is a subsidiary of said Columbia Gas & Electric Corporation or that said defendant is an affiliate of Panhandle Eastern Pipe Line Company.

Third: In answer to the paragraph of said petition, numbered "5": said defendant admits that on or about August 31, 1935, Panhandle Eastern Pipe Line Company entered into a written contract with said petitioner, and begs leave to refer to said contract for a full and accurate statement of the terms and conditions thereof and the effect thereof.

Fourth: In answer to the paragraph of said petition, numbered "6": said defendant admits that said contract provided for a price of 3¢ per therm for gas delivered thereunder between the Date of Initial Delivery and the Effective Date, as such terms are defined in said contract, and admits that said petitioner has paid under said contract the average rate per Mcf (based on a hypothetical

1,000 Btu gas) alleged in said paragraph for the years ended March 31, 1938 and March 31, 1939, respectively, but denies that the average rates paid under said contract for the year [fol. 16759] ended March 31, 1940, and the calendar year 1940, respectively, were as stated in said paragraph, and denies that it has any knowledge or information sufficient to form a belief as to the truth of the remaining allegations in said paragraph.

Fifth: In answer to the paragraph of said petition, numbered "7": said defendant denies that it has any knowledge or information sufficient to form a belief as to the truth of the allegations contained therein, except that it admits that Detroit, located in a northern area, affords a large market for househeating gas, that due to the seasonal character of this type of service the load factor is poor, and that certain supplemental contracts were entered into between Panhandle Eastern Pipe Line Company and said Michigan Consolidated Gas Company and begs leave to refer to the provisions of said supplemental contracts for a full and accurate statement of the terms and conditions thereof and the effect thereof.

Sixth: In answer to the paragraph of said petition, numbered "8": said defendant denies that it has any knowledge or information sufficient to form a belief as to the truth of the allegations contained therein, except that it admits that the sales of natural gas made by Panhandle Eastern Pipe Line Company to said petitioner for the years 1936, 1937, 1938, 1939 and 1940 were approximately of the respective amounts stated in said paragraph.

Seventh: In answer to the paragraph of said petition, numbered "9": said defendant denies that it has any knowledge or information sufficient to form a belief as [fol. 16760] to the truth of the allegations contained therein.

Eighth: In answer to the paragraph of said petition, numbered "10": said defendant denies that it has any knowledge or information sufficient to form a belief as to the truth of the allegations contained therein, except that it admits that the gas purchased by said petitioner from Panhandle Eastern Pipe Line Company for resale

and distribution in the City of Detroit and environs is delivered at one point.

Ninth: In answer to the paragraph of said petition, numbered "11": said defendant denies that the rates charged to said petitioner for gas have been increased.

Tenth: In answer to the paragraph of said petition, numbered "12": said defendant denies that it has any knowledge or information sufficient to form a belief as to the truth of the allegations contained therein.

Eleventh: Said defendant points out that while said petitioner prays for a finding that the rates of said Michigan Gas Transmission Corporation are unjust, unreasonable, and unlawfully preferential, it is nowhere in said petition alleges that said defendant's rates and charges are unjust, unreasonable, or unlawfully preferential, and that said petitioner makes no allegation as to the rates, charges, or practices of said Michigan Gas Transmission Corporation.

Wherefore, said defendant prays that said petition be dismissed as to said defendant, Michigan Gas Transmission Corporation.

MICHIGAN GAS TRANSMISSION CORPORATION,
By Walter C. Beckjord, President.

Office and Post Office Address: Suite 2901, No. 61 Broadway, New York, N. Y.

[fol. 16761] State of New York:
County of New York—ss.

Walter C. Beckjord, being duly sworn, deposes and says:

That he is the President of Michigan Gas Transmission Corporation, one of the defendants in the above entitled proceeding; that he has read the foregoing answer and knows the contents thereof and that the same is true to his own knowledge except as to the matters therein stated to be alleged upon information and belief and that as to those matters he believes it to be true.

WALTER C. BECKJORD.

Sworn to before me this 11 day of August, 1941.

Maude H. Curry,

Notary Public, New York County, N. Y. Co. Clk's No. 390, Reg. No. 2C-543 Nassau County Clerk's No. 35-C-40. Commission expires March 30, 1942.
(Notarial Seal)

[fol. 16762] Answer of Defendant, Panhandle Eastern Pipe Line Company, to the Petition of Michigan Consolidated Gas Company, Intervener

(Received August 18, 1941.)

Before the

Federal Power Commission

Docket No. G-200

City of Detroit and County of Wayne, Municipal Corporations, Complainants,

v.

Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

Michigan Consolidated Gas Company, Intervener.

To the Honorable Members of the Federal Power Commission:

Defendant, Panhandle Eastern Pipe Line Company, for its separate answer to the petition of intervenor, respectfully shows:

1. Answering paragraphs 1, 2, and 3 of said petition, this defendant admits the allegations thereof, except those with respect to the status of Michigan Gas Trans-[fol. 16763] mission Corporation under the Natural Gas Act, concerning which this defendant is without sufficient knowledge and information to form a belief.

2. Answering paragraph 4 of the petition, defendant denies the allegations thereof, except that it admits that under the provisions of the Public Utility Holding Company Act of 1935, it has been held by the Securities and Exchange Commission to be a subsidiary of Columbia Oil and Gasoline Corporation, which in turn is a subsidiary of Columbia Gas and Electric Corporation, and except that it admits on information and belief that Michigan Gas Transmission Corporation is a subsidiary of Columbia Gas and Electric Corporation.

3. Answering paragraph 5 of said petition, this defendant admits that on August 31, 1935, it entered into a written contract with intervener, then named Detroit City Gas Company, providing, among other things, for the sale and delivery of natural gas to intervener up to a maximum daily demand and at the rate set forth by petitioner and admits that the cost of gas per MCF at the different load factors enumerated by intervener is approximately correct when based on one thousand BTU gas. Defendant also admits that said contract of August 31, 1935, required intervener to utilize its existing storage holders and permitted it to use its water gas generating equipment for the purpose of leveling peaks, but alleges that intervener has not, by the use of its storage holders and gas generating plant, released pipe line capacity of this defendant for other and further public service.

4. Answering paragraph 6 of the petition, defendant admits that for the years ending March 31, 1938, March [fol. 16764] 31, 1939, and March 31, 1940, the average cost per MCF to intervener was approximately the amounts set forth in said paragraph, but denies that the average cost to intervener for the calendar year 1940 was 33.80 cents. It says that in truth the average cost of gas to intervener for the calendar year 1940, based on one thousand BTU gas, was approximately 32.01 cents per MCF or 1.79 cents less than the amount alleged by intervener. In this connection, the defendant points out that it is obviously erroneous and misleading to compare (as intervener has done) the rate for the calendar year 1940 with the rate for the preceding fiscal year ending March 31, 1940; and says that if a comparison between the period following March 31, 1940, and the preceding period is of importance, the comparison should be made by the use of the fiscal year ending March 31, 1941, rather than with the calendar year 1940, and that the actual cost to intervener for gas produced during the fiscal year ending March 31, 1941, was 31.88 cents.

5. Answering paragraph 7 of the petition, defendant admits that it is now and has at all times been desirous of promoting sales for househeating purposes, as well as any other purposes for which gas sold to intervener might

be suitably used, and that it paid intervener bonuses for 18,000 househeating customers added to intervener's mains. It admits that by a Supplemental Contract of September 29, 1939, it entered into a contract with intervener, increasing this defendant's maximum daily obligation to 100,000,000 cubic feet and extended the househeating rate provided in the contract of June 2, 1936, to include an amount of natural gas equal to the requirements of an additional 5,000 househeating customers and that by contract dated June 29, 1940, defendant's maximum daily obligation was further increased to 125,000,000 cubic feet.

[fol. 16765] It admits that the original contract and all supplemental contracts were entered into by defendant voluntarily and without coercion of any kind and that said contracts have resulted in the sales of substantial volumes of gas to intervener.

It admits that intervener has succeeded in placing 25,000 househeating customers on its mains, but denies that it has wilfully or otherwise discriminated against intervener or subjected it to undue prejudice. It denies that the contracts heretofore entered into between intervener and this defendant have been at the solicitation of this defendant, but says that said contracts were entered into as a result of arms length bargaining between intervener and this defendant and that the supplemental contracts relating to househeating customers were excuted as a result of solicitation by intervener therefor.

Defendant denies that it has ever required intervener to pay for househeating gas at the rate of 62 cents per MCF during any year of operations under said original contract or said supplemental contract. It admits that more than 40,000 househeating customers are now attached to intervener's distributing mains.

Defendant denies that it his ever placed any limitation on the number of househeating customers which intervener might place on its mains and states that the only limitation with respect to househeating customers contained in said contracts is that intervener's right to purchase gas thereunder at a rate which would not exceed four cents per therm, was limited to a total of 25,000 customers.

Further answering said paragraph 7, defendant alleges that the actual unit cost to intervener for quantities of gas purchased for resale to househeating customers in [fol. 16766] excess of 25,000 in number is dependent upon the rate of growth of its househeating business from year to year and upon the relation of the demand contributed or created by househeating customers in excess of 25,000 to the consumption during the year of househeating customers in excess of 25,000. Defendant further alleges that intervener has been purchasing gas from defendant for resale to househeating customers on a "lagging demand" and for that reason its unit cost of gas for resale to househeating customers in excess of 25,000 has been substantially less than four cents per therm. Defendant alleges that the average cost per therm to intervener of gas resold to such excess househeating customers during the calendar year 1940 was only 2.395 cents per therm; and that, based upon reasonable estimates, its average cost of gas for resale to househeating customers in excess of 25,000 during the calendar year 1941 will be less than 3.5 cents per therm and may not exceed the cost during the calendar year 1940, depending upon the rate of growth of househeating business during the calendar year 1941.

Further answering, defendant alleges that by letter to intervener, dated July 18, 1940, it offered to substitute for the rate provided in the aforesaid contract, as supplemented and amended, a different form of rate which would result in a charge of not more than four cents per therm for natural gas sold to it for resale to househeating customers, regardless of the number thereof, but said offer was not accepted. Defendant also alleges that in April, 1941, it indicated to intervener in writing a willingness to recommend to its Board of Directors another rate schedule in substitution for the existing rate schedule under the househeating portion of which intervener could purchase natural gas for resale to an unlimited number of [fol. 16767] househeating customers at a cost of four cents per therm. Defendant states that to this date intervener has not indicated a willingness to accept said rate schedule, although it would effect a substantial savings to intervener.

6. Answering paragraph 8 of the petition, defendant denies that the figures set forth by intervener purporting to represent defendant's total sales and net earnings from operations are correct, but in this connection states that said figures reasonably approximate the correct figures for consolidated sales and consolidated net earnings from operations of defendant and its subsidiary companies. Defendant admits that the other figures set forth in paragraph 8 of the petition reasonably approximate the correct figures.

7. Answering paragraph 9 of the petition, defendant admits that the amount of expenditures for improvements and extensions to its physical properties from 1936 to 1940, inclusive, reasonably approximate the amount set forth therein. Defendant admits that its books reflect a plant account of approximately sixty-five million dollars and that entries for depreciation, depletion and amortization, as recorded on its books, are in excess of nine million dollars, but denies that the figures set forth in said paragraph represent either the value of defendant's plant, or the actual depreciation, depletion or amortization thereof.

8. Answering paragraph 10 of the petition, defendant admits that its present sales to intervener are approximately forty per cent of its total sales.

Defendant admits that its sales and investment in facilities have increased approximately as set forth in said [fol. 16768] petition, and admits that through use of the connecting line now used in supplying Detroit, defendant has increased its sales in the State of Indiana.

In this connection, defendant shows that when the decision was finally reached to supply gas for use in the City of Detroit and it became necessary, in order to supply that market, for defendant to increase its other facilities, both with respect to pipe line and reserves, the management of defendant decided to increase its facilities to such an extent that by the use of that same line for transporting this gas it could market additional gas in the State of Indiana. Likewise, when the connecting line referred to was constructed, it was constructed with facilities adequate for use in transporting gas not only to the

City of Detroit but to various points in the State of Indiana.

Defendant admits that operations under its contract with intervener have contributed to the successful operation of defendant's project, but denies that there was any greater earnings resulting from such operations than from equivalent sales to defendant's other customers or from sales which might have been negotiated in other markets or to other purchasers who might have desired to furnish gas to the City of Detroit if intervener had not seen fit to enter into a contract with defendant.

Defendant further alleges in this connection that the contract between it and intervener has been one extremely valuable to intervener in that it has made available to intervener for distribution in the Detroit area greater volumes of gas than theretofore distributed by it in said area, at a cost to it which was, as stated in a letter from the President of intervener to its customers, written in June, 1936, [fol. 16769] thirty-four per cent lower than the lowest previous proposal offered it by any company.

Defendant denies that from a regulatory or any other standpoint intervener is entitled to special recognition or favors greater than those allowed other customers of defendant with respect to the prices charged for gas or with respect to contractual provisions relating to the price of gas.

9. Answering paragraph 11 of the petition, defendant denies that, eliminating the period of preliminary build-up of intervener's load, there has been any material increase in the price of gas charged intervener by defendant. In this connection, defendant says that such slight variations in the unit cost of gas under the contract and various supplements as have occurred during the several years since the preliminary build-up period closed, such slight variations have been the result of the manner selected by intervener in the operation of its business and failure to take advantage of privileges granted by said contract which, if exercised, might reasonably have resulted in a substantially lower unit cost than that now being paid.

10. Answering paragraph 12 of the petition, defendant denies that its rates for natural gas for resale for pub-

lic consumption in the Detroit area are unreasonable or excessive, and denies that it is earning more than a fair rate on its property used and useful in the conduct of its business. Defendant further denies that its rates are unjustly discriminatory, either as against the locality served or as to the class of service rendered, and denies that by reason of a practical construction of the terms of its contract with intervener, or otherwise, intervener and [fol. 16770] the gas consumers to whom it distributes natural gas are suffering undue discrimination, prejudice or disadvantage.

Wherefore, defendant prays that the petition of intervener, Michigan Consolidated Gas Company, be dismissed or denied.

Respectfully submitted,

PANHANDLE EASTERN PIPE LINE COMPANY,
By G. J. Neuner, Vice President.
1221 Baltimore Avenue, Kansas City, Missouri.

Glenn W. Clark, Attorney.
1221 Baltimore Avenue, Kansas City, Missouri.

State of Missouri,
County of Jackson—ss.:

G. J. Neuner, being first duly sworn, deposes and says that he is Vice President of Panhandle Eastern Pipe Line Company, one of the defendants herein; that he has read the foregoing Answer of Defendant, Panhandle Eastern Pipe Line Company, to the Petition of Michigan Consolidated Gas Company, Intervener, and knows the contents thereof, and that the same are true to his own knowledge, except as to the matters therein stated to be alleged upon information or belief and as to those matters he believes them to be true.

G. J. NEUNER.

Subscribed and sworn to before me this 16th day of August, 1941.

MARY C. MAGERS,
Notary Public.

My Commission expires August 31, 1943.

[fol. 16771] (Motion to Dismiss of Panhandle Eastern Pipe Line Company.)

(Received August 20, 1941, Federal Power Commission.)

To the Honorable Members of the Federal Power Commission:

Comes Now Defendant, Panhandle Eastern Pipe Line Company, and moves that the above named and numbered complaint be forthwith dismissed by this Commission, upon the ground that complainants, although offered full opportunity to present evidence in support of their com-
[fol. 16772] plaint, have failed to offer or present evidence of sufficient probative value to justify this Commission in finding that the rates and charges of this defendant, or any of said rates and charges, are either unjust or unreasonable or are unlawfully preferential or work undue prejudice or disadvantages in respect to complainants, or either of them, or in respect to any other person or corporation.

Respectfully submitted,

PANHANDLE EASTERN PIPE LINE COMPANY,
By G. J. Neuner,
Vice President,
1221 Baltimore Avenue,
Kansas City, Missouri.

Glenn W. Clark,
Attorney,
1221 Baltimore Avenue,
Kansas City, Missouri.

D. H. Culton,
Attorney,
1221 Baltimore Avenue,
Kansas City, Missouri.

Carl I. Wheat,
Attorney,
520 Shoreham Building,
Washington, D. C.

[fol. 16773] (Motion to Dismiss of Michigan Gas Transmission Corporation.)

To The Honorable Members Of The Federal Power Commission:

Comes Now Defendant Michigan Gas Transmission Corporation and moves that the above named and numbered complaint be forthwith dismissed by this Commission upon the ground that complainants, although offered full opportunity to present evidence in support of their complaint, have failed to offer or present evidence of sufficient probative value to justify this Commission in finding that the rates and charges of said defendant, or any of said rates and charges, are either unjust or unreasonable or are unlawfully preferential or work undue prejudice or disadvantages in respect to complainants, or either of them, or in respect to any other person or corporation, [fol. 16774] and on the further ground that no relief is asked by said complainants, against said defendant Michigan Gas Transmission Corporation in their petition herein.

Respectfully submitted,

MICHIGAN GAS TRANSMISSION CORPORATION,
By Walter C. Beckjord,
President,
Suite 2901,
61 Broadway,
New York, N. Y.

Milton C. Baldridge,
Attorney,
61 Broadway,
New York, N. Y.

Dated, August 19, 1941.

[fol. 16775] (Order of Federal Power Commission Denying Motions to Dismiss of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.)

United States of America,

Federal Power Commission.

Commissioners: Leland Olds, Chairman, Claude L. Draper and John W. Scott. Basil Manly and Clyde L. Seavey not participating.

September 2, 1941.

City of Detroit, Michigan, and County of Wayne, Michigan,

Docket No. G-200, vs.

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

Upon consideration of a motion filed by Panhandle Eastern Pipe Line Company on August 20, 1941, and motion filed by Michigan Gas Transmission Corporation on August 21, 1941, to dismiss the proceeding herein upon certain grounds as specified in said motions, and the request for oral argument thereon;

It appearing to the Commission that an order has this day been adopted consolidating this proceeding with the proceedings at Docket No. G-207 in the matter of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, and that no good cause exists for granting the said motions;

The Commission orders that:

The motions be and they are hereby denied.

By the Commission.

LEON M. FUQUAY,
Secretary.

[fol. 16776] Order Instituting Investigation.

United States of America,

Federal Power Commission.

Commissioners) Leland Olds, Chairman, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

May 22, 1941.

In the Matter of

Panhandle Eastern Pipe Line Company,
and
Michigan Gas Transmission Corporation.

Docket No. G-207.

It appearing to the Commission that:

(a) On February 28, 1941, the City of Detroit and the County of Wayne, Michigan, both of which are municipalities within the meaning of the Natural Gas Act, filed, at Docket No. G-200, a petition which, among other things, alleges in substance that the Panhandle Eastern Pipe Line Company is engaged in the transportation of natural gas in interstate commerce from producing fields in the States of Texas and Kansas to a point of delivery near the City of Detroit; that it is also engaged in the sale of such gas to the Michigan Consolidated Gas Company for resale in said City of Detroit and County of Wayne; that such gas is transported from a point on the Indiana-Illinois boundary line to a point at or near the City of Detroit by the Michigan Gas Transmission Corporation for the account of the Panhandle Eastern Pipe Line Company, for which transportation Panhandle Eastern Pipe Line Company pays its affiliate, Michigan Gas Transmission Corporation, an excessive rate or charge; that the rates and charges demanded and collected by Panhandle Eastern Pipe Line Company from the Michigan Consolidated Gas Company are unjust, unreasonable, and unduly discriminatory; and said City of Detroit and County of Wayne request this Commission, after investigation, to fix and determine the just and reasonable rates to be thereafter observed and in force in respect of such transporta-

tion and sale of natural gas for resale in said City and County;

(b) Michigan Gas Transmission Corporation filed an answer to said petition on March 28, 1941, denying, among other things, that it is affiliated with Panhandle Eastern Pipe Line Company, or "that the division to Michigan Gas Transmission Corporation of the rates and charges maintained by Panhandle Eastern Pipe Line Company are unjust and unreasonable, or that any charges of Michigan [fol. 16777] Gas Transmission Corporation in connection with the sale or delivery of gas to Michigan Consolidated Gas Company are excessive, unjust or unreasonable";

(c) Panhandle Eastern Pipe Line Company filed an answer to said petition, on April 3, 1941, denying, among other things, that it is affiliated with the Michigan Gas Transmission Corporation, or that it is controlled by the Columbia Gas & Electric Corporation, or that its rates are unjust, unreasonable, or discriminatory;

(d) The Panhandle Eastern Pipe Line Company is engaged in the transportation of natural gas in interstate commerce through a transmission pipe line extending from the State of Texas to a point on the border line between the States of Illinois and Indiana, and the sale in interstate commerce of natural gas for resale, and may be a natural-gas company within the meaning of the Natural Gas Act;

(e) The Michigan Gas Transmission Corporation is engaged in the transportation of natural gas in interstate commerce through a transmission pipe line extending from a point on the border line between the States of Illinois and Indiana to a point at or near the City of Detroit, Michigan, and the sale in interstate commerce of natural gas for resale, and may be a natural-gas company within the meaning of the Natural Gas Act;

(f) Natural gas sold by the Panhandle Eastern Pipe Line Company to the Michigan Consolidated Gas Company for resale in the City of Detroit is transported by Michigan Gas Transmission Corporation through its interstate transmission pipe line for the account of Panhandle Eastern Pipe Line Company;

(g) It is necessary and proper, in the public interest, and to aid in the enforcement of the provisions of the Natural Gas Act that an investigation be instituted by the Federal Power Commission, on its own motion, (1) to determine whether the Panhandle Eastern Pipe Line Company or the Michigan Gas Transmission Corporation is a natural-gas company within the meaning of the Natural Gas Act; and (2) into and concerning all rates, charges, or classifications demanded, observed, charged, or collected by the Panhandle Eastern Pipe Line Company and the Michigan Gas Transmission Corporation in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, and any rules, regulations, practices, or contracts affecting such rates, charges, or classifications;

The Commission, on its own motion, orders that:

[fol. 16778] An investigation of the Panhandle Eastern Pipe Line Company and the Michigan Gas Transmission Corporation be and it is hereby instituted for the purpose of enabling the Commission:

(1) To determine with respect to each of said companies (a) whether it is a natural-gas company within the meaning of the Natural Gas Act, and (b) whether in connection with any transportation or sale of natural gas subject to the jurisdiction of this Commission, any rates, charges, or classifications demanded, observed, charged, or collected, or any rules, regulations, practices, or contracts affecting such rates, charges, or classifications, are unjust, unreasonable, unduly discriminatory, or preferential; and

(2) If the Commission, after hearing has been had, shall find that the Panhandle Eastern Pipe Line Company or the Michigan Gas Transmission Corporation is a natural-gas company within the meaning of the Natural Gas Act, and that any of their rates, charges, classifications, rules, regulations, practices, or contracts, subject to the jurisdiction of this Commission, are unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders, just and reasonable

rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force.

By the Commission.

J. H. GUTRIDE,
Acting Secretary.

[fol. 16779] Order Consolidating Proceedings For Purposes of Hearing.

United States of America,

Federal Power Commission.

Commissioners: Leland Olds, Chairman, Claude L. Draper and John W. Scott. Basil Manly and Clyde L. Seavey not participating.

September 2, 1941.

City of Detroit, Michigan, and County of Wayne, Michigan,

Docket No. G-200. vs.

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

In the Matter of

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

Docket No. G-207.

It appearing to the Commission that:

(a) By order of June 10, 1941, the Commission fixed the date of hearing in the above-entitled proceeding at Docket No. G-200 for July 15, 1941, and hearing thereon was held on July 15, 16, and 18 and was adjourned to reconvene on September 2, 1941;

(b) The proceedings in the above-entitled matters at Docket No. G-200 and Docket No. G-207 involve similar issues and facts;

The Commission orders that:

(A) A public hearing in the proceeding at Docket No. G-207 be held commencing on September 2, 1941, at 9:45

a. m. (E.S.T.), at 1800 Pennsylvania Avenue, N. W., in the City of Washington, D. C.;

(B) The proceedings in the above-entitled matters at Docket No. G-200 and Docket No. G-207 be and they are hereby consolidated for the purposes of hearing thereon.

By the Commission.

LEON M. FUQUAY,
Secretary.

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* * * * * * *

[fol. 16799] (Petition of Panhandle Eastern Pipe Line Company for Continuance of Hearing.)

(Received February 4, 1942, Federal Power Commission.)

Before the Federal Power Commission of the United States

In the matter of

City of Detroit, Michigan, and County of Wayne, Michigan, Complainants,

Docket No. G-200 vs.

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, Defendants.

In the matter of

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

Docket No. G-207.

Panhandle Eastern Pipe Line Company, one of the defendants in the above-entitled cause, hereby petitions the Commission for a continuance of the hearing now in progress, and as grounds therefor states:

I.

Status of Hearing.

The hearing in these proceedings has been in progress since July 15, 1941. Short recesses only have been taken, these having been solely for such periods of time as were necessary to enable the defendants to prepare their direct

testimony and also to enable counsel for other parties to prepare for cross-examination of defendants' witnesses.

[fol. 16800] The direct testimony of defendant Panhandle Eastern Pipe Line Company was completed on October 29, 1941, except for such additional testimony as may be required to complete certain phases of the case. The direct testimony of defendant Michigan Gas Transmission Corporation was completed on November 19, 1941. Five days thereafter, on November 24, 1941, Commission counsel and counsel for the complainants and interveners commenced cross-examination of defendant Panhandle Eastern Pipe Line Company's witnesses. This cross-examination has been continuous, except for a brief recess during the holiday season. Since cross-examination commenced, more than 5,000 pages of oral testimony have been taken, the entire record now containing more than 7500 pages of oral testimony and more than 150 exhibits. The cross-examination of witnesses offered by defendant Panhandle Eastern Pipe Line Company on their direct testimony to date has now been practically completed. However, cross-examination of the witnesses offered by defendant Michigan Gas Transmission Corporation has not been commenced. Counsel for all parties to these proceedings have fully cooperated with the Trial Examiner in expediting the hearing.

The defendants Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, while joint defendants, have to date operated under entirely separate managements, and have therefore presented their evidence separately. They have offered different witnesses, and [fol. 16801] have been represented by separate counsel. Defendant Panhandle Eastern Pipe Line Company has not participated in any way in the development or presentation of the evidence offered by Michigan Gas Transmission Corporation.

II.

The Changed Status of Defendants' Corporate Structures and Relations

By an order of the Securities and Exchange Commission, dated January 21, 1942 (Exhibit No. 147 in these proceedings), defendant Panhandle Eastern Pipe Line Company was authorized

(a) To acquire from Columbia Oil & Gasoline Corporation all the Class A preferred stock of Panhandle Eastern Pipe Line Company of the par value of $10,000,000;

(b) To acquire from Columbia Gas & Electric Corporation all of the stock and debt of Michigan Gas Transmission Corporation and of Indiana Gas Distribution Corporation at the cost of $10,780,840.59 for the Michigan Corporation and $153,698.20 for the Indiana Corporation;

(c) To acquire from The Ohio Fuel Gas Company certain pipe lines and other property in the States of Indiana and Ohio at a price of $439,326.08;

(d) To issue and sell a new class of preferred stock to the amount of 150,000 shares of the par value of $100 per share;

[fol. 16802] (e) To issue and sell first mortgage and first lien bonds to the amount of $10,000,000.

Pursuant to proper notice, a contract for the sale of these bonds and the issue of preferred stock was entered into on February 2, 1942, and the sale thereof to be consummated on February 6, 1942, has been approved by the Securities and Exchange Commission. A copy of said contract has been filed as an exhibit in these proceedings. The proceeds from the sale of said bonds and stock are to be used in liquidating the outstanding Class A preferred stock of defendant Panhandle Eastern Pipe Line Company, to the extent of $10,000,000; to the payment of the purchase price for the stock and debt of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation, and as payment for the properties to be acquired from The Ohio Fuel Gas Company. Any balance remaining is to be expended in connection with capital expenditures now being made by Panhandle Eastern Pipe Line Company for expansion of its facilities.

All parties to the transactions above outlined have agreed that the transactions will be closed on February 6, 1942, at which time Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation will become wholly owned subsidiaries of defendant Panhandle Eastern Pipe Line Company, and on the same date the pro-

perties of Ohio Fuel Gas Company will become a part of the Panhandle Eastern Pipe Line Company system.

[fol. 16803] Obviously, upon the consummation of these transactions, the corporate structures and relations of the defendants in these proceedings will be changed. Defendant Panhandle Eastern Pipe Line Company will then have securities outstanding different in certain respects from those heretofore outstanding, and the operating problems of defendants Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation must be considered from a consolidated standpoint rather than from the standpoint of a separate entities.

III.

Defendant Panhandle Eastern Pipe Line Company Requires Time to Consider and to Prepare Evidence Concerning the Effect of the Change in Status Upon its Present and Future Operations

Upon the consummation of these transactions on February 6, 1942, it will become necessary for the executives and employees of Panhandle Eastern Pipe Line Company, in connection with present war emergency requirements, and these corporate changes, to study the operating practices of Michigan Gas Transmission Corporation, with a view to determining whether any changed methods of operation would enable the two companies more adequately to serve the public interest. This will include, among other things, a consideration of whether additional pipe line capacity or power should be installed by Michigan Gas Transmission Corporation so that its facilities could be used to the best advantage in connection with the necessary expansion of Panhandle Eastern Pipe Line Company's system to serve its customers.

[fol. 16804] It will also be necessary for the executives of Panhandle Eastern Pipe Line Company to prepare and to supervise the preparation of such exhibits, for introduction in these proceedings, as will be necessary to reflect the consolidated operations of these properties. The present record does not comprehend such a situation. It is expected that such exhibits will not be numerous, and they will be supplemental to those now in evidence. They are,

however, necessary, in order that the record may reflect the correct situation as it has now developed.

IV.

General World Situation

In further support of the prayer of this motion, defendant Panhandle Eastern Pipe Line Company represents that since the hearings in these proceedings commenced, and in fact since the conclusion of its direct testimony, the United States has been precipitated into a state of war. During this period, and largely as a result of world conditions, there has been a more rapid rise in price levels than was originally anticipated. Data respecting these matters should also be prepared and presented in these proceedings.

Wherefore, defendant Panhandle Eastern Pipe Line Company respectfully prays that the Commission grant a continuance of the hearing in these proceedings for a period of at least sixty (60) days.

Respectfully submitted,

PANHANDLE EASTERN PIPE LINE COMPANY.
By J. D. Creveling,
President.

[fol. 16805] District of Columbia,
United States of America,—ss.:

J. D. Creveling, being duly sworn, deposes and says: that he is President of Panhandle Eastern Pipe Line Company, a party to the above-entitled proceedings; that he has read the foregoing petition, and knows the contents thereof; that the same are true as stated, except as to matters and things if any, stated on information and belief, and that as to those matters and things, he believes them to be true.

J. D. CREVELING.

Subscribed in my presence, and sworn to before me, by the affiant above named, this 4th day of February, 1942.

(Seal) Notary Public.

My Commission expires

[fol. 16806] I hereby certify that I have this day served the foregoing document upon all parties of record in these proceedings by delivery in person to the following.

Harry Littman, Esq.,
Federal Power Commission,
Washington, D. C.

James H. Lee, Esq.,
City of Detroit,
Washington, D. C.

Harry Goodman, Esq.,
County of Wayne,
Washington, D. C.

Park Chamberlain, Esq.,
Michigan Consolidated Gas Company,
Washington, D. C.

Milton C. Baldridge, Esq.,
Michigan Gas Transmission Corporation,
Washington, D. C.

Dated at Washington, D. C., this 4th day of February, 1942.

D. H. CULTON,
Of counsel for
PANHANDLE EASTERN PIPE LINE COMPANY.

Objections of Complainants to Defendants' Motion for Continuance.

[fol. 16809] (Received February 11, 1942, Federal Power Commission.)

Now come the City of Detroit, and the County of Wayne, the Complainants, by their respective attorneys, and object to the granting of a continuance to the defendants for a sixty day period, as requested, for the following reasons:

This case, though prosecuted with diligence, has, nevertheless, required a protracted time. It is the plaintiffs' contention that, upon the evidence admitted, a very sub-

stantial rate reduction will be in order, and that, prior to the inception of this case, the defendants were maintaining unjust and unreasonable rates as against the consumers represented by the complainants; and that, if reasonable rates had been in effect from the beginning of this case, the saving to all of the defendants' customers would have [fol. 16810] amounted to a figure in excess of Ten Thousand ($10,000.00) Dollars per day. If complainants' contentions are well founded, the defendants' customers are losing in excess of Ten Thousand ($10,000.00) Dollars per day for each day the hearing is protracted.

There has been allowed to the defendants an adjournment from February 4, 1942 to February 23, 1942, and, in this interim, the defendants ought to be able to make adequate preparations for such further presentation of evidence as may be proper.

The conditions of the war actually require that the price of great natural resources be fixed at the lowest possible level, and that controversies in respect to rates be determined with the utmost diligence.

It is recognized that persons who might be engaged with matters in connection with this case may have, at various times, paramount duties to attend to, but such circumstances, as they arise, should be determined simply as a matter of orderly trial procedure under the directions of the examiner, and are wholly apart from protracted delays amounting to two months.

Wherefore, complainants respectfully submit that the motion for continuance be denied.

WILLIAM E. DOWLING,
Prosecuting Attorney for Wayne County.

HAROLD GOODMAN,
Special Assistant Prosecuting Attorney.

PAUL E. KRAUSE,
Corporation Counsel for the City of Detroit.

JAMES H. LEE,
Assistant Corporation Counsel.

[fol. 16811] Order Denying Petition for Continuance and Changing Place of Hearing.

United States of America

Federal Power Commission.

Commissioners Leland Olds, Chairman, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

February 17, 1942.

City of Detroit, Michigan, and County of Wayne, Michigan,
Docket No. G-200. vs.
Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

In the Matter of

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

Docket No. G-207.

Upon application, filed February 4, 1942, by Panhandle Eastern Pipe Line Company, Defendant, for a continuance of the hearing in this proceeding for a period of at least 60 days; and

It appearing that:

(a) The City of Detroit, Michigan, and County of Wayne, Michigan, Complainants, on February 11, 1942, filed objections to the said petition for continuance;

(b) Subsequent to the filing of said petition for continuance, the hearing was recessed by the Commission's Examiner to reconvene on February 23, 1942;

(c) No good cause exists for a 60-day postponement of the hearing;

The Commission orders that:

[fol. 16812] (A) The said petition for a continuance of 60 days be and is hereby denied;

(B) The hearing in this proceeding be resumed on February 24, 1942, at 9:45 a. m., C. W. T., in Room 406, County Building, at Detroit, Michigan.

By the Commission.

LEON M. FUQUAY,
Secretary.

[fol. 16814] (Petition of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation for Continuance of Hearing.)

(Received February 28, 1942, Federal Power Commission.)

Before the Federal Power Commission of the United States.

In the matter of

City of Detroit, Michigan, and County of Wayne, Michigan, Complainants,

Docket No. G-200. vs.

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, Defendants.

In the matter of

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

Docket No. G-207.

Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, defendants in the above numbered and entitled proceedings, hereby petition and move the Commission for a continuance of the hearing now in progress therein, and as grounds therefor state:

Since the dates upon which these defendants presented their direct evidence in these proceedings the surrounding conditions have so changed as a result of matters and happenings not caused by them and not predictable when such evidence was prepared and presented, that many of the estimates and much of the factual data on which estimates and other testimony were based, do not now apply. Therefor, the Commission cannot, without consideration of such changed conditions and the manifold present and potential results thereof, determine or be in a position properly or reasonably to determine the issues involved in these proceedings in a manner calculated to give effect to the actual-[fol. 16815] ities which now confront these defendant corporations.

In this connection defendants point out:

These proceedings were instituted in the Spring of 1941, and in July 1941 defendants were required to be prepared

to present their evidence at hearings commencing on September 2, 1941. Defendants promptly commenced and carried forward the preparation of their direct testimony, based on June 30, 1941 conditions, and as expeditiously as possible actually completed such preparations and the presentation of such evidence to this Commission. As a matter of fact, subject to certain reservations, Panhandle Eastern Pipe Line Company completed the presentation of its direct evidence on October 29, 1941 and Michigan Gas Transmission Corporation completed the presentation of its direct evidence on November 19, 1941.

In order properly to present their evidence, however, defendants at that time could only anticipate and estimate sales and market conditions for the immediate future in the light of conditions theretofore existing. Thus, market conditions at the various points of delivery were perforce treated as normal. Prices reasonably expected to be received for gas sold were based on those then existing. With respect to defendants' largest single customer, Michigan Consolidated Gas Company, the estimates were prepared and presented on the basis of reasonable expectancy in the light of the 1940-1941 maximum demand and on information received from its customer as to its then expected 1941-1942 maximum demand. However, as a result of information now available, and as a result of matters and events which have transpired since defendants' closed the presentation of their direct evidence, it is now apparent [fol. 16816] that the estimates then made do not properly, reasonably or adequately reflect the conditions which now obtain.

With respect to the Detroit market, the estimates offered by defendants were based on the assumption that the maximum day's purchases for that market during the winter season 1941-1942 would at least equal the maximum provided under the contract, to wit: 125,000,000 cu. ft. As of today, although defendants are reliably informed that the maximum Detroit market requirements for gas have already exceeded 140,000,000 cu. ft. per day in 1942, the maximum volume actually taken from defendants under said contract has at no time exceeded 110,000,000 cu. ft., thus resulting in the establishment of a maximum day at least 15,000,000 cu. ft. less than that heretofore estimated,

and thereby greatly reducing the demand charge collectible by defendants with a resultant substantial decrease in their revenues. This result was made possible by the exercise by the customer of its contractual right to "shave its peaks" through the operation of its manufactured gas facilities.

Defendants further show that since their evidence was prepared and introduced in these proceedings, the United States has been forced into an all-out war and is now faced with a national emergency which unquestionably will exist for some time. These defendants have not escaped and cannot escape the results of such national emergency. Defendants directly or indirectly furnish gas to more than two hundred defense industries and have been and are now continuously being requested to furnish service to many others, with which requests defendants, to the extent of their capacity, desire to comply. Because of the importance [fol. 16817] of defendants' lines and properties from the standpoint of the national defense effort, defendants have been warned by the War Department and by the Federal Bureau of Investigation of the possibility of attempts at sabotage. Following defendants' best judgment of the proper protection which should be afforded to these properties against such potential acts of sabotage and in line with views expressed by said Federal Agencies, defendants have organized a property protection department. To date defendants have employed in this department more than one hundred carefully selected men at substantial additional annual expense. This expense will be increased from time to time because of the necessary addition of other employees for these purposes.

Defendants further represent that on February 16, 1942, the Federal War Production Board issued its official "Limitation Order L-31", applicable to the States of Michigan, Ohio, Indiana, Illinois and Missouri, in which defendants operate, as well as to numerous other States. This order, a copy of which (together with the release of the War Production Board which accompanied it) is attached hereto as "Exhibit A". The order has been incorporated in the record in these proceedings. It was promulgated in the interest of national defense and, although styled "to curtail consumption of natural gas" is rather an order issued for

the purpose of controlling and determining the use to which natural gas may be put under certain defined circumstances, as well as for the purpose of determining priorities of use for such gas. The provisions of said order impose upon these defendants certain definite and significant obligations not theretofore existing; similarly it imposes new obligations on defendants' customers, and finally it imposes new obligations on the customers of defendants' customers.

[fol. 16818] The full extent of the effects of such order upon defendants and their customers has not yet been determined and cannot reasonably be determined for some time; yet it is already apparent that as a result of such order, defendants' previous estimates with respect to the volumes of gas which they may sell to their various classes of customers will necessarily be materially altered and that all former estimates of gross revenues will be substantially decreased. This result necessarily flows from the circumstances that priority in use is provided for gas sold to manufacturing industries engaged in war activities. Moreover the full extent of the effects of said order cannot be determined without considering the purpose for which each ultimate user of gas is purchasing such gas, and also the standby facilities available to such user or to the distributor furnishing such gas. These defendants now serve directly or indirectly more than two hundred industries directly engaged in defense activities, as well as approximately seven hundred thousand domestic, commercial and other industrial users of gas. A determination of the effect of this important federal order on defendants' operations and on the revenues to be received therefrom is essential, and obviously can be determined only as a result of careful and detailed analysis. Such analysis will, of necessity, require considerable time. This is obviously a situation not at all of defendants' making, but results wholly from the war in which the nation is now engaged.

Furthermore, it appears upon the record herein that large capital expenditures will be required in the immediate future for additions and improvements in defendants' trans- [fol. 16819] mission and production facilities, in order to enable them more adequately to serve their existing market areas, and in order to provide for such increases in sales of gas as would normally have been expected therein. Such

capital expenditures are still required, probably at an accelerated rate in [in] order to meet war conditions and demands. In developing their direct evidence in these proceedings, defendants estimated and then believed that the revenues resulting from such increased sales would produce returns comparable to those received from existing sales. Under normal conditions defendants believe that such assumptions would have been justified, but the regulations and limitations contained in said War Production Board Order L-31 have so materially altered the surrounding circumstances and conditions as to render such assumptions wholly unwarranted and presently untenable. Said order would, in effect, confine additional sales of gas to uses less remunerative per unit than would otherwise be the case in the absence of such limitation. Obviously, a careful analysis of such changed situation must be reflected in the record herein before any fair or reasonable evaluation of defendants' rates can be arrived at.

This is a matter of paramount import. In the light of the considerations above outlined; in view of the complex and wholly unprecedented situation which now confronts these defendants; in view of the serious nature of the factors which have intervened since the presentation of defendants' direct testimony in these proceedings, and by reason of the state of war which has come into being since such presentation, and the order of the War Production Board herein mentioned, defendants now ask this Commission to direct a continuance of the hearings in said proceedings [fol. 16820] for a period of not less than one hundred and twenty days, in order to afford to these defendants a minimum opportunity to attempt to ascertain the effect of and to develop and present evidence in respect to the probable effect upon them of such changed conditions, and in order to afford to these defendants that measure of due process of law to which they are entitled under the Constitution of the United States.

Respectfully submitted,

PANHANDLE EASTERN PIPE LINE COMPANY,
By J. D. Creveling, Its President.

MICHIGAN GAS TRANSMISSION CORPORATION,
By J. D. Creveling, Its President.

[fol. 16821] State of Michigan,
County of Wayne—ss.

J. D. Creveling, being duly sworn, deposes and says: that he is President of Panhandle Eastern Pipe Line Company, and President of Michigan Gas Transmission Corporation, parties to the above-entitled proceedings; that he has read the foregoing petition, and knows the contents thereof; that the same are true as stated, except as to matters and things if any, stated on information and belief, and that as to those matters and things, he believes them to be true.

J. D. CREVELING.

Subscribed in my presence, and sworn to before me by the affiant above named, this 27th day of February, 1942.

(Seal) KATHERYN STIMMELL,
Notary Public.

My Commission expires April 3, 1943.

[fol. 16822] I hereby certify that I have this day served the foregoing document upon all parties of record in these proceedings by delivery in person to the following:

Harry Littman, Esq., Federal Power Commission, Washington, D. C.

James H. Lee, Esq., City of Detroit, Detroit, Michigan.

Harry Goodman, Esq., County of Wayne, Detroit, Michigan.

Park Chamberlain, Esq., Michigan Consolidated Gas Company, Detroit, Michigan.

Dated at Detroit, Michigan, this 28th day of February, 1942.

D. H. CULTON.

Of counsel for
Panhandle Eastern Pipe Line Company

[fol. 16823] Exhibit A.

Title 32—National Defense

Chapter IX—War Production Board

Subchapter B—Division of Industry Operations

Part 1056—Natural Gas

Limitation Order L-31

To Curtail Consumption of Natural Gas

Whereas, because of increased gas requirements for war production and civilian uses, and because of scarcity of materials for the construction of pipe lines and other facilities, shortages of natural gas have occurred in certain areas of the United States and are threatened in others; and

Whereas, during periods of adverse weather conditions, the demand for natural gas in many areas will increase beyond the capacity of existing facilities to meet such demand; and

Whereas, the limitations upon deliveries of natural gas and the integration of gas system operations hereinafter ordered are necessary in order to maintain gas deliveries to war industries and essential civilian services;

Now, Therefore, It Is Ordered That:

Part 1056.1—General Limitation Order

(a) Definitions. For the purposes of this Order:

(1) "Person" means any individual, partnership, association, business trust, corporation, governmental corporation or agency, or any organized group of persons whether incorporated or not.

(2) "Utility" means any person in the United States supplying natural gas or mixed natural and manufactured gas, directly or indirectly, for general use by the public.

(3) "Consumer" means an ultimate user of gas purchased or otherwise received from any Utility.

(4) "Standby Facilities" means equipment in serviceable operating condition designed to use oil, electricity, coal

or other fuel to replace natural gas, and for the operation of which a supply of such fuel is available.

(b) Integration of Gas System Operation. Each Utility shall so operate its gas manufacturing, transmission, storage, distribution, and other facilities, and shall so interchange gas with other Utilities as to achieve as far as practicable maximum output in the area or areas in which a shortage exists or is imminent, and each Utility shall make such pooling arrangements as may be necessary to effectuate such purpose. Where necessary for such purpose, the Director of Industry Operations will, from time to time, issue specific directions as to the operation of gas manufacturing, transmission, storage, distribution, and other facilities, and as to deliveries of gas.

[fol. 16824] (c) Limitation on Deliveries of Natural or Mixed Natural and Manufactured Gas.

(i) In the event that the supply of natural or mixed natural and manufactured gas available in an area served by any Utility is insufficient to meet the demand therefore, and reduction in deliveries to Consumers becomes necessary, the Utility supplying such area shall reduce deliveries to its Consumers in the following manner and in accordance with such other specific directions as the Director of Industry Operations may from time to time issue:

(ii) First, the Utility shall, within the limits of its contractual rights, reduce deliveries to all dump or surplus Consumers, not engaged in war production, and deliveries to Consumers who have Standby Facilities, the operation of which can directly or indirectly reduce the total demand for natural or mixed natural and manufactured gas in the area.

(ii) Second, the Utility shall, to the extent necessary, operate all of its available gas manufacturing equipment so as to effect directly or indirectly the maximum increase in the supply of gas in the area.

(iii) Third, the Utility shall, without regard to its contractual rights or those of any Consumer, reduce deliveries to all other Consumers who have Standby Facilities to the extent that the operation of such facilities can directly or

indirectly alleviate the shortage of natural or mixed natural and manufactured gas in the area, and no such Consumer, after notification of the reduction in deliveries required shall accept deliveries of gas unless his Standby Facilities are being operated so as to effect the required reduction in his purchases of gas.

(iv) Fourth, the Utility shall, without regard to its contractual rights or those of any Consumer, reduce as far as practicable deliveries to Consumers in such manner as will cause the least interference with war production, and each Consumer who receives notification of the reduction in deliveries required shall reduce his acceptance of deliveries accordingly.

(2) Whenever any Utility finds it necessary to make any reduction in deliveries of gas to any Consumer in accordance with paragraphs (c) (1) (iii) and (c) (1) (iv) of this Order, it shall promptly notify the Consumer and at the same time give telegraphic notice thereof, to the Power Branch, War Production Board.

(3) Following each such shortage period, each affected Utility shall submit a detailed report of the quantities of gas conserved by the operation of Standby Facilities and the duration of curtailment and the extent to which each industrial Consumer was curtailed. Such report shall be filed on Form PD-283.

[fol. 16825] (4) Any Consumer who considers that any reduction in deliveries to him interferes materially with war production shall have the right to apply by telegram for relief to the Director of Industry Operations, who may grant such specific exemptions or take such other action as may be consistent with the purposes of this Order. Such application shall state the nature of the war materials being manufactured, the extent to which production has been curtailed because of reduced delivery of gas, and the increase in delivery of gas required for restoration of full production.

(5) No consumer shall be relieved of the requirements of section 944.2 or any other section of Priorities Regulation No. 1 Amended, by reason of the provisions of this paragraph (c).

(d) Restrictions upon Increased Deliveries to Non-residential Consumers. No Utility shall, after ten days following the effective date of this Order, deliver natural or mixed natural and manufactured gas to any new non-residential Consumer in the areas specified in Exhibit "A" annexed hereto, as the same may be amended from time to time, or increase deliveries of such gas to any existing non-residential Consumer in such areas for the operation of any new gas equipment, unless:

(1) Such new or existing non-residential Consumer shall have installed, prior to the date of the increase in deliveries, Standby Facilities of sufficient capacity to replace the new or increased deliveries of such gas during periods of shut-off, or

(2) Such new or existing non-residential Consumer cannot reasonably use any fuel other than gas, natural, or mixed natural and manufactured, because of technical utilization factors or process requirements.

(3) Such new delivery or increase in deliveries shall have been specifically approved in advance by the Director of Industry Operations. Any Consumer or Utility who considers that such deliveries are necessary for war production may apply for such approval to the Director of Industry Operations, who may grant such specific exemptions or take such other action as may be consistent with the purposes of this Order.

(e) Prohibition against Delivery to New Space Heating Installations.

(1) No Utility shall deliver and no Consumer shall accept delivery of natural gas or mixed natural and manufactured gas in the areas specified in Exhibit "A" annexed hereto, as the same may be amended or modified from time to time by the Director of Industry Operations, for either of the following purposes:

(i) For the operation of central space heating equipment (or heating equipment supplying the major portion of the heating requirements of the premises), unless such equipment was installed prior to March 1, 1942, or unless, in the case of new construction, the equipment was speci-

fied in the construction contract, and the foundation under [fol. 16826] the main part of the structure in which the equipment is to be installed was completed prior to March 1, 1942; or

(ii) For the operation of central space heating equipment (or heating equipment supplying the major portion of the heat requirements of the premises), which has been converted from other fuel to natural or mixed natural and manufactured gas unless such conversion has been completed prior to ten days after the effective date of this Order.

(2) Any Utility affected by the provisions of this paragraph (e) or any governmental agency which considers that supply of gas available on any particular system or portion thereof is adequate to take care of all existing and estimated future requirements of war industry, and unrestricted civilian use for the period ending April 1, 1944, may apply for exemption of the system or any portion thereof from the provisions of this paragraph to the Director of Industry Operations, who may grant such specific exemptions or take such other action as may be consistent with the purposes of this Order.

(f) Appeal. Any person affected by this Order who considers that compliance therewith would work an exceptional and unreasonable hardship on him may appeal for relief to the Director of Industry Operations who may grant such specific exemptions or take such other action as may be consistent with the purposes of this Order.

(g) Reports and Information

(1) Each Utility shall keep and preserve for not less than two years accurate and complete records concerning deliveries of natural gas to Consumers.

Such records shall be subject to inspection by duly authorized representatives of the War Production Board.

(2) All persons affected by this Order shall execute and file with the War Production Board such reports and questionnaires as said Board shall, from time to time, request.

(h) Communications to War Production Board. All reports required to be filed hereunder, and all communications concerning this Order, shall, unless otherwise directed, be addressed to:

"War Production Board

Washington, D. C. Ref.: L-31."

(i) Violations. Any person who wilfully violates any provisions of this Order, or any other order, direction or regulation, issued pursuant hereto, or who by any act or omission falsifies records to be kept or information to be furnished pursuant to this Order, may be prohibited from delivering or receiving gas, or any other material subject to allocation, and such further action may be taken as is deemed appropriate, including a recommendation for prosecution under Section 35(A) of the Criminal Code (18 U. S. C. 80).

[fol. 16827] (j) Effective Date. This Order shall take effect immediately and, unless sooner terminated, shall continue in full force and effect until April 1, 1943.

(P. D. Reg. 1 Amended, Dec. 23, 1941, 6 F. R. 6680; W. P. B. Reg. 1 Jan. 26, 1942, 7 F. R. 561; E. O. 9024, Jan. 16, 1942, 7 F. R. 329; E. O. 9040, Jan. 24, 1942, 7 F. R. 527; sec. 2(a), Public No. 671, 76th Congress, Third Session, as amended by Public No. 89, 77th Congress, First Session.)

Issued this 16th day of February, 1942.

J. S. KNOWLSON,
Director of Industry Operations.

[fol. 16828] Exhibit A.

Areas subject to prohibitions contained in paragraph (e) of Limitation Order L-31.

Alabama—(except the area served by the United Gas Pipe Line Company)

Arkansas—(only the area served by the Mississippi River Fuel Company).

California

District of Columbia

Georgia
Illinois
Indiana
Kentucky
Maryland
Michigan
Mississippi—(except the area served by the United Gas Pipe Line Company)
Missouri
New York
Ohio
Pennsylvania
Tennessee
Virginia
West Virginia

[fol. 16829] Advance Release: for Monday Morning Papers, February 16, 1942.

24033

War Production Board

WPB 230

The War Production Board today ordered a curtailment in the consumption of natural gas and mixed natural and manufactured gas.

The action was taken to assure adequate supplies of gas for war production. It was necessary because of increased gas requirements for both war production and civilian use, coupled with the scarcity of materials that would be required if existing systems were expanded.

Parts of the order (L-31) apply to the entire country. They do not become operative until a gas shortage occurs or becomes imminent in any area.

Other parts of the order apply only to 17 states and the District of Columbia, where the need for curtailment is greatest. They become effective by March 1 but do not

affect present uses of existing customers. That is, a consumer now using gas to cook or heat water is not restricted in such uses but he may not install a gas heating system in his home, store, or factory, or convert heating equipment now using other fuel to gas.

The order affects companies distributing natural gas or natural gas mixed with manufactured or artificial gas. It does not affect companies distributing only artificial or manufactured gas.

Gas companies operating in 17 states and the District of Columbia are ordered as follows:

1. They are prohibited from delivering gas for heating new homes, stores, factories or other buildings, unless the heating equipment is installed prior to March 1, 1942, or the equipment was specified in the construction contract and the foundation under the main part of the building is completed prior to March 1. This applies to a heating system intended to furnish all or the major part of the heat for a home or building. It does not apply to individual room heaters.

2. They are prohibited from delivering gas for the operation of heating equipment that has been converted from some other fuel to gas, unless such conversion is completed within 10 days after the issuance of the order.

Any utility or any governmental agency (such as a housing company) affected by this prohibition against new and converted installations, which considers that the available gas supply is adequate for all existing and estimated future war requirements as well as unrestricted civilian use until April 1, 1944, may apply to the Director of Industry Operations for exemption from this provision.

[fol. 16830] 3. They are prohibited from delivering gas to any new non-residential consumer or increasing delivery to any existing non-residential consumer, unless: (a) such new or existing consumer has installed standby facilities sufficient to replace the new or increased delivery during periods of shut-off; or (b) such new or existing consumer cannot reasonably use any fuel other than gas; or (c) approval shall have been granted in advance by the Director of Industry Operations for delivery to such new or existing

consumer. This provision becomes effective 10 days after the issuance of the order.

The areas subject to the prohibitions just listed are:

Alabama—(except the area served by the United Gas Pipe Line Co.)

Arkansas—(only the area served by the Mississippi River Fuel Co.)

California

District of Columbia

Georgia

Illinois

Indiana

Kentucky

Maryland

Michigan

Mississippi—(except the area served by the United Gas Pipe Line Co.)

Missouri

New York

Ohio

Pennsylvania

Tennessee

Virginia

West Virginia

Other provisions of the order apply to gas companies throughout the country. They become operative only if and when a shortage exists or becomes imminent.

These sections provide:

1. Each utility operating in an area where a shortage exists or is imminent is required, insofar as practical, to integrate its system with other systems, so as to obtain maximum supply of gas.

2. If and when the supply of gas becomes insufficient and reduction to consumers becomes necessary, and in the absence of specific directions by the Director of Industry Operations, the utility supplying such area is required to take the following steps, in the order given:

(a) Reduce deliveries to all dump or surplus consumers not engaged in war production. Dump or surplus consumers are consumers whose gas service is subject to interruption during shortage periods.

(b) Operate as much of its available gas manufacturing equipment as is necessary to relieve the shortage.

[fol. 16831] (c) Reduce deliveries to all firm gas consumers who have standby facilities.

(d) Reduce deliveries to other consumers in such manner as to cause the least interference with war production. All possible measures will be taken before interference with war production is permitted.

. . . . . .

[fol. 16834] (Order Enlarging Investigation and Making Illinois Natural Gas Company a Party Respondent.)

United States of America,

Federal Power Commission.

Commissioners) Leland Olds, Chairman, Claude L.) Draper, Basil Manly, John W. Scott) and Clyde L. Seavey.

March 26, 1942.

In the Matter of

City of Detroit, Michigan,

and

County of Wayne, Michigan,

Docket No. G-200. vs.

Panhandle Eastern Pipe Line Company

and

Michigan Gas Transmission Corporation

In the Matter of

Panhandle Eastern Pipe Line Company

and

Michigan Gas Transmission Corporation.

Docket No. G-207.

It appearing to the Commission that:

(a) By order of May 22, 1941, the Commission instituted an investigation in Docket No. G-207, of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation for the purpose of enabling the Commission to determine with respect to each of said companies (1) whether it is a natural-gas company within the meaning of the Natural Gas Act, and (2) whether in connection with any transportation or sale of natural gas subject to the jurisdiction of this Commission, any rates, charges, or classifications demanded, observed, charged, or collected, or any rules, regulations, practices, or contracts affecting such rates, charges, or classifications, are unjust, unreasonable, unduly discriminatory, or preferential;

(b) By order of September 2, 1941, the Commission directed that said proceeding in Docket No. G-207 be consolidated with the complaint proceeding in Docket No. G-200 for the purposes of hearing thereon;

(c) Hearings in the proceeding designated Docket No. G-200 were commenced on July 15, 1941, and hearings in the said consolidated proceedings are now in progress;

[fol. 16835] (d) During said hearings, Panhandle Eastern Pipe Line Company presented evidence showing that its wholly owned subsidiary, Illinois Natural Gas Company, an Illinois corporation, purchases natural gas from Panhandle Eastern Pipe Line Company at several points of delivery in the State of Illinois, and transports said gas in interstate commerce and resells such gas to certain distributing companies located in the State of Illinois which, in turn, resell said gas for ultimate public consumption for domestic, commercial, and industrial use;

(e) The evidence adduced in the hearings respecting the revenues, expenses, costs, return and other data relating to Panhandle Eastern Pipe Line Company has been presented on a consolidated basis for both Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company;

(f) Counsel for Panhandle Eastern Pipe Line Company have stated on the record that Illinois Natural Gas Company is "an operating department or arm of the Panhandle Eastern Pipe Line Company" and that they "are disregarding the separate corporate entity of these two companies in this investigation";

(g) The Supreme Court of the United States, in the October Term, 1941, has held (Illinois Natural Gas Company vs. Central Illinois Public Service Company and Illinois Commerce Commission, opinion dated January 5, 1942) that said Illinois Natural Gas Company engages in interstate commerce in the purchase and sale of natural gas and is a natural-gas company within the meaning of the Natural Gas Act;

(h) The rates, charges, classifications, rules, regulations, practices, or contracts, of Illinois Natural Gas Company, subject to the jurisdiction of this Commission, may be unjust, unreasonable, unduly discriminatory, or preferential;

The Commission orders that:

(A) The investigation instituted by the Commission's order of May 22, 1941, is hereby enlarged to include an investigation of the Illinois Natural Gas Company for the purpose of enabling the Commission:

(1) To determine with respect to said Company whether in connection with any transportation or sale of natural gas subject to the jurisdiction of this Commission, any rates, charges, or classifications demanded, observed, charged, or collected, or any rules, regulations, practices, or contracts affecting such rates, charges, or classifications, are unjust, unreasonable, unduly discriminatory, or preferential; and

[fol. 16836] (2) If the Commission, after hearing has been had, shall find that any of said Company's rates,

charges, classifications, rules, regulations, practices, or contracts, subject to the jurisdiction of this Commission, are unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders, just and reasonable rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force;

(B) Illinois Natural Gas Company be and it is hereby made a party respondent to the proceeding designated Docket No. G-207.

By the Commission.

LEON M. FUQUAY,
Secretary.

[fol. 16839] (Motion of Counsel for Federal Power Commission for Immediate Order Fixing Just and Reasonable Rates.)

(Docketed April 27, 1942, Federal Power Commission.)

City of Detroit, Michigan and County of Wayne, Michigan, Docket No. G-200 100-2. vs.
Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

In the Matter of

Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company:

Docket No. G-207.

Comes now Harry S. Littman, Counsel, for the Federal Power Commission, in the above-entitled cause, who respectfully represents that:

1. On February 28, 1941, a petition was filed by the City of Detroit and the County of Wayne, Michigan, in Docket No. G-200, alleging, among other matters, that Panhandle Eastern Pipe Line Company[1] sells natural gas to

[1]Hereinafter sometimes referred to as "Panhandle Eastern".

the Michigan Consolidated Gas Company for resale in the City of Detroit and County of Wayne, Michigan; that such gas is produced in the States of Texas and Kansas and is transported to a point of delivery near the City of Detroit; that such gas is transported from a point on the Indiana-Illinois boundary line to a point at or near the City of Detroit by Michigan Gas Transmission Corporation[2] for the account of Panhandle Eastern, for which transportation Panhandle Eastern pays its affiliate, Michigan Gas, an excessive rate or charge; that the rates and charges demanded and collected by Panhandle Eastern from Michigan Con- [fol. 16840] solidated Gas Company are unjust, unreasonable, and unduly discriminatory; and praying that the Commission, after investigation, fix and determine the just and reasonable rates to be thereafter observed and in force in respect of such transportation and sale of natural gas for resale in said City and County.

2. On March 28, 1941, Michigan Gas filed an answer denying that any of its charges in connection with the sale or delivery of gas to Michigan Consolidated Gas Company are excessive, unjust or unreasonable; and on April 3, 1941, Panhandle Eastern filed an answer to the said petition denying that its rates are unjust, unreasonable or discriminatory.

3. By order of May 22, 1941, the Commission on its own motion instituted an investigation, in Docket No. G-207, for the purpose of enabling the Commission to determine whether, in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, the rates and charges of Panhandle Eastern and Michigan Gas are unjust, unreasonable, unduly discriminatory, or preferential, and, if so, to fix by appropriate order or orders just and reasonable rates or charges.

4. By order of June 10, 1941, the Commission permitted the Michigan Public Service Commission to become an intervener in the complaint proceeding designated Docket No. G-200; and by order of July 12, 1941, the Commission permitted Michigan Consolidated Gas Company to become an intervener and a party to said proceeding.

---

[2]Hereinafter sometimes referred to as "Michigan Gas".

5. On September 2, 1941, the Commission directed that the proceeding in Docket No. G-207 be consolidated with the complaint proceeding in Docket No. G-200 for purposes of hearing.

6. On March 26, 1942, the Commission ordered that the investigation, instituted by the Commission's order of May [fol. 16841] 22, 1941, be enlarged to include an investigation of the rates and charges of Illinois Natural Gas Company[1], a wholly-owned subsidiary of Panhandle Eastern, and making said Illinois Natural Gas Company a party respondent to the proceeding designated Docket No. G-207.

7. Hearings were commenced on July 15, 1941, and have continued for approximately 84 days during which a total of approximately 10,700 pages of testimony has been adduced and 27 witnesses have appeared who offered approximately 260 exhibits.

8. From a consideration of all the evidence it appears that:

I. Rate Base

(a) The cost of plant, as claimed by the respondents, at December 31, 1941, is $82,952,156.82, as follows:

Claimed Cost of Plant[2]

Panhandle Eastern	$66,541,913
Illinois Natural	3,108,120
Michigan Gas	12,664,841
Indiana Gas	197,957
Pipe Line Purchased	439,326
Total (Exh. 194)	$82,952,157

(b) Included in the said claimed cost of plant is the amount of $2,910,734 of construction work in progress, which should properly be deducted from said total claimed cost in arriving at the original cost of plant in service at December 31, 1941.

[fol. 16842] (c) Included in the said claimed cost of plant of Panhandle Eastern is the purported unamortized cost

[1]Sometimes hereinafter referred to as "Illinois Natural".

[2]Giving effect to financing transactions consummated on February 6, 1942 and the acquisition on that date of capital stock and debt of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation (herein sometimes referred to as "Indiana Gas") and purchase of a pipe line of Ohio Fuel Gas Company.

of "Gas Sales and Purchase Contracts" in the amount of $1,172,115; and the evidence shows that the said sum of $1,172,115 does not represent actual cost but it is in fact a write-up and should properly be eliminated from the said claimed cost of plant in arriving at original cost of plant in service at December 31, 1941.

(d) Included in the said claimed cost of plant are "Contributions in Aid of Construction" totaling $55,016, which should properly be deducted in arriving at the original cost of plant in service as of December 31, 1941.

(e) The original cost of plant in service at December 31, 1941, reflecting the deductions and eliminations set forth in paragraphs (b), (c) and (d) above, is not more than $78,814,292, as here shown:

Cost of Plant in Service

Panhandle Eastern	$62,665,568
Illinois Natural	2,871,194
Michigan Gas	12,643,847
Indiana Gas	194,357
	78,374,966
Pipe Line Purchased from Ohio Fuel Gas Co. subsequent to December 31, 1941	439,326
Total	$78,814,292

(f) The respondents[1] have accumulated reserves for depreciation, depletion and amortization, as of December 31, 1941, in the amount of $12,596,987, as follows (Exh. 194):

[fol. 16843] Reserves for Depreciation, Depletion and Amortization.

Panhandle Eastern	$10,405,047
Illinois Natural	502,976
Michigan Gas	1,661,966
Indiana Gas	26,998
Total	$12,596,987

[1]Panhandle Eastern, Michigan Gas and Illinois Natural are hereinafter sometimes referred to collectively as "respondents".

The evidence shows that the said reserves, totaling $12,596,987 represent the accrued depreciation, depletion and amortization of the plant in service, as of December 31, 1941; and the said amount is deducted from the aforesaid cost of plant to arrive at the rate base for purposes of this motion.

(g) The evidence shows that the allowable working capital is not in excess of $920,000, as follows:

Working Capital

Panhandle Eastern	$726,000
Illinois Natural	17,000
Michigan Gas	173,000
Indiana Gas	4,000
Total (Exh. 221)	$920,000

(h) Based upon paragraph (a) to (g) above, the rate base, i. e., original cost, less accrued depreciation, plus working capital, is not in excess of $67,137,305, as here shown:

Rate Base

Cost of Gas Plant in Service at December 31, 1941	$78,814,292
Less: Depreciation Reserves	12,596,987
Net Original Cost	$66,217,305
Working Capital	920,000
Rate Base	$67,137,305

[fol. 16844] II. Gross Operating Revenue

The consolidated gross operating revenue of the respondents for the year 1941 amounted to $17,789,573 (Exh. 195).

III. Operating Expenses

(a) The consolidated operating expenses, as shown by the respondents' exhibits, for the year 1941, were as follows:

Operation and Maintenance	$2,648,694
Gas Purchased[1]	1,180,918
Depreciation, Depletion and Amortization	2,473,383
Amortization—Gas Contracts	332,143
Taxes—Federal Income[2]	2,063,175
Taxes—Federal Excess Profits	1,677,054
Taxes—Property and Miscl.	901,387
Total (Exh. 195)	$11,276,754

(b) Included in said operating expenses is the sum of $293,029 charged annually for the purpose of amortizing "Gas Sales and Purchase Contracts"; the evidence shows that the purported unamortized cost of such contracts in the amount of $1,172,115, as of December 31, 1941, does not represent actual cost but is in fact a write up; and the said expense of $293,029 should be eliminated from operating expense.

(c) Said total operating expenses include the sum of $6,000 charged for rate case expense, which amount should be eliminated from operating expenses for purposes of this proceeding.

[fol. 16845] (d) The Federal income taxes should be reduced from $2,063,175 to $942,951, and the Federal excess profits taxes should be entirely eliminated in order to reflect the tax savings due to the indicated reduction in gross revenue hereinafter shown.

(e) The sum of the deductions set forth in paragraphs (b), (c) and (d) above total $3,096,307, leaving $8,180,447 as the maximum allowable operating expenses, as follows:

Operation and Maintenance	$2,642,694
Gas Purchased	1,180,918
Depreciation, Depletion and Amortization	2,473,383
Amortization—Gas Contracts	39,114
Taxes—Federal Income	942,951
Taxes—Property and Miscl.	901,387
Total (as adjusted)	$8,180,447

[1]Inter-company gas purchases eliminated.

[2]Includes charges in lieu of Federal Income and Excess Profits Taxes in the amount of $823,881. Does not include pro-forma adjustments.

IV. Return

(a) The amount available for return after operating expenses and taxes, as adjusted in III, above, is $9,609,126, as follows:

Gross Operating Revenue	$17,789,573
Operating Expenses (as adjusted)	8,180,447
Net Operating Revenue	$ 9,609,126

(b) A fair rate of return for respondents is not more than 6 per cent, or $4,028,238 upon the rate base of $67,137,305.

(c) The gross revenue of respondents, therefore, exceeds a fair return by not less than $5,580,888 as follows:

Net Operating Revenue	$9,609,126
Return at 6%	4,028,238
Excess of Revenue Above 6% Return	$5,580,888

[fol. 16846] (d) During the five years 1937 to 1941, inclusive, Panhandle Eastern and subsidiary companies earned an average return of not less than 10.64% on their average net investment in plant of $53,997,936 (Exh. 222-A).

(e) During the period March 1, 1936, to December 31, 1941, Michigan Gas earned an average return of not less than 8½% on its average net investment in plant of $9,134,568 (Exh. 232).

9. The evidence now clearly establishes that the present rates charged and collected by the respondents are unjust and unreasonable.

10. The respondents have had a full and complete hearing; and counsel for the respondents have stated that their case on direct had been completed (T. 10651).

11. In order to aid the regulatory agencies in the States of Michigan, Ohio, Indiana, Illinois, Missouri and Kansas in fixing fair and reasonable rates for gas sold to ultimate consumers in said States, it is necessary that an immediate order be entered reducing the rates and charges of the respondents.

12. Nothing herein contained is to be taken as an admission of the accuracy or propriety of any of the claims made by the respondents or their witnesses.

Wherefore, Commission Counsel prays that the Commission enter an immediate interim order fixing just and reasonable rates for gas sold and transported by the respondents, Panhandle Eastern Pipe Line Company, Illi-
[fol. 16847] nois Natural Gas Company and Michigan Gas Transmission Corporation.

HARRY S. LITTMAN,
Counsel for Federal Power Commission.

[fol. 16848] Certificate of Service.

I hereby certify that today I have served copies of the attached motion on all parties to this proceeding by personally serving such copies on their respective counsel of record.

Dated: Washington, D. C. This 23rd day of April, 1942.

HARRY S. LITTMANN.

[fol. 16849] (Motion of Michigan Consolidated Gas Company for immediate Order reducing Rates.)

Before the
Federal Power Commission.

Docket No. G-200. Docket No. G-207

City of Detroit and County of Wayne, Municipal Corporations, Complainants,

vs.

Panhandle Eastern Pipe Line Company, and Michigan Gas Transmission Corporation, Defendants.

Michigan Consolidated Gas Company, Intervenor.

To the Honorable Members of the Federal Power Commission:

Comes now Michigan Consolidated Gas Company, intervenor in the above-entitled matter and moves the Commission to enter an interim order at this time finding that the rates and charges now made by Panhandle Eastern

[fol. 16850] Pipe Line Company and Michigan Gas Transmission Corporation are unreasonable and excessive and that as a result thereof these corporations, now in common ownership and management, are receiving and collecting annually the sum of not less than five million dollars in excess of the amount of a fair return; that said rates and charges as presently filed and maintained are unjustly discriminatory as against the intervenor and its customers in the Detroit area, as well as with respect to the various classes of service rendered and the localities in which they are rendered; and that by reason thereof the intervenor and the gas consumers to whom it distributes natural gas are suffering undue discrimination, prejudice and disadvantage; and ordering that the said Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation immediately file with the Commission rate schedules under which the gross revenues to be derived by them from the transportation and sale of natural gas for resale for public consumption (other than that sold for industrial use, directly as well as indirectly under special industrial contracts) be reduced by the amount of five million dollars per year, in which said schedules the rates for natural gas delivered to intervenor for resale and distribution be made uniform with all others, or in any event not higher than the average rate charged by respondents for similar service to all others.

As grounds for such finding and the entry of the order as above requested, intervenor states that the uncontradicted evidence introduced and received in these proceedings, up to and including this date, including the evidence introduced by respondents, viewed and construed in its most favorable light to such respondents, establishes the fact that the respondents are each maintaining rates and charges for the sale of natural gas for resale for ultimate public consumption which are excessive, unreasonable, unjust and unduly discriminatory and that intervenor and [fol 16851] all of its natural gas consumers are suffering undue prejudice and disadvantage thereby, and that the gross revenues now being collected by these respondents under their rate schedules now in force for such natural gas service are more than five million dollars per annum in excess of the amount of a just and fair return for such

service. Such undisputed evidence further conclusively establishes that the rate schedules now in force covering natural gas sold and delivered to intervenor for resale in its area of distribution are unduly discriminatory, based upon the rates charged others both in respect to the class of services rendered and as to localities.

Intervenor has in course of preparation studies containing statistical data and accounting analyses and will on or before Tuesday, April 28, 1942, file with the Commission by way of a supplement hereto, such studies, data and analyses with necessary descriptive text and personally serve upon counsel on that date (or by mailing not later than Monday, April 27, 1942).

Dated this 23rd day of April, 1942.

Respectfully submitted,
MICHIGAN CONSOLIDATED GAS COMPANY,

By Park Chamberlain,
815 Fifteenth St. N. W.
Washington, D. C.

Henry A. Montgomery,
1553 Penobscot Building,
Detroit, Michigan.

A. V. McRee,
415 Clifford Street,
Detroit, Michigan.

Its Attorneys.

[fol. 16853] (Motion of City of Detroit and County of Wayne for immediate order reducing Rates.)

The City of Detroit, and the County of Wayne, complainants jointly, move that this commission make and enter an order forthwith finding and declaring that the existing rates and divisions thereof maintained by the defendant companies affecting the rates applicable to customers in the district or territory of complainants purchasing natural gas for resale for ultimate public consumption, be held and declared to be unjust and unreasonable, and altering and fixing the just and reasonable rates, charges, classifications, rules, regulations or contracts to be observed and in

force to said customers, and determining and fixing such other rates, charges, classifications, rules, regulations or [fol. 16854] contracts to be observed by defendants as are involved in or incidental thereto.

The grounds of this motion are as follows:

1. The parties hereto are about to complete and conclude a full hearing upon all the issues in controversy; adequate evidence has been adduced for the determination of all substantial issues, from which it appears that the existing rates affecting the interest of complainants are very greatly in excess of just and reasonable rates, and, as such, are unlawful, and from which just and reasonable rates may be fixed forthwith pending such further investigation as may be made by the commission.

2. The average property in service in 1941, allowing $750,000 for working capital and current assets, was $78,555,077. It is conceded by the company's president that the gas fields will last for thirty more years at an average annual withdrawal of 80 billions cubic feet. The enterprise has been in operation for over nine years and its principal market, the Detroit district, has been served five and one-half years. The annual requirement to yield 6% upon the unamortized cost as the same declines, and to provide amortization or depreciation upon a thirty-five year life basis is 6.9% of cost. The effect of a somewhat shorter or a somewhat longer general service life is insignificant; thus the requirement for return and depreciation to yield 6% on declining value, cost basis, is 7%; on a thirty-three year life basis.

Exhibit A hereto attached indicates a calculated requirement for return and depreciation of $5,492,548, to afford a return of 6%. This is 7% of plant cost and working capi- [fol. 16855] tal. The reasonable requirement for return is a rate of 6%, and based upon present value, cost basis, amounts to $4,322,825.

The requirement for depreciation and replacements does not exceed $1,169,723.

The requirement for Federal income tax upon an income of $4,322,825 in consideration of the deductions avail-

able for tax purposes of depreciation and interest paid does not exceed $765,547.

The operating income before Federal taxes and depreciation is $13,058,574; and this realization against a requirement for depreciation and Federal income taxes makes available for rate reduction at least $6,800,479.

The above facts are set forth in further tabulated detail in Exhibit A hereto attached and made a part hereof.

Ample evidence has been presented to establish said facts and to determine all reasonable controverted issues in respect thereto.

The rate reductions in prospect amount to $18,800 per day. In view of the magnitude thereof and the clarity with which the evidence indicates that such reductions are available they should not be deferred for further investigation and research, the probable effect of which would be to enhance them.

3. A hearing is pending before the Michigan Public Service Commission designed to enforce the maximum rate reduction to consumers in the Detroit district, resale customers of Michigan Consolidated Gas Company, and including the object of requiring any reductions obtained in [fol. 16856] this proceeding to be made immediately available to such customers. Said hearing is continued pending the order of the Federal Power Commission in the premises.

WILLIAM E. DOWLING,
Prosecuting Attorney-Wayne County, Michigan.

HAROLD GOODMAN,
Special Assistant Prosecuting Attorney.

PAUL E. KRAUSE,
Corporation Counsel-City of Detroit.

JAMES H. LEE,
Assistant Corporation Counsel.

[fol. [6857]

Exhibit A

Available Rate Reduction
Panhandle Eastern Pipe Line Company
1941

1	Cost of gas plant (excluding construction in progress and unamortized portion of $2,930,000 gas sales and purchase contracts) Average during year	—	$77,805,077
2	Accrued depreciation	—	6,507,994
3	Value of average plant	—	71,297,083
4	Materials, supplies, and working capital	—	750,000
5	Property in service	—	72,047,083
6	6% Return requirement	—	4,322,825
7	Federal income tax requirement	—	765,547
8	Requirement for depreciation and retirement	—	1,169,723
9	Total lines 6, 7 and 8	—	6,258,095
10	Available for depreciation, Federal income taxes and profit (Ex.196)	—	13,058,574
11	Available for rate reduction	—	6,800,479

1. Based upon approximation equivalent to expiration of 9 1/2 years of 35 year life and consideration of salvages as follows:

(Ex. 66A)	Panhandle E. Gas Co.	8,261,258
(Ex. 86)	Mich. Gas Trans. adjusted to 15% on mains and 5% on compressor sta. eq.	1,791,029

In view of a future life expectancy of 30 years, at an output of 80 billion cu. ft. per year (Creveling Ex. 218) and the fact that some items may be retired in advance of others, both the accrued depreciation and the present re- [fol. 16858] quirement are approximated as substantially equivalent to a property having a thirty-five year life of which eight and one-half years have expired. The overall effect of this approximation is to allow rates more liberal to the company than closer calculation will justify. The current annual allowance is increased by $200,000 as an excessively liberal allowance for replacement in view of Ex. 193.

[fol. 16859] State of Michigan,
County of Wayne.—ss.

Harold Goodman, being duly sworn, deposes and says that he prepared the foregoing motion by him subscribed and knows the contents thereof, and that the same are true according to his best knowledge and belief.

HAROLD GOODMAN.

Subscribed and sworn to before me this 20th day of April, 1942.

(Seal) BEATRICE BROWN,
Notary Public Wayne County, Michigan.

My commission expires May 21, 1944.

[fol. 16860] (Amendment to Motion of Michigan Consolidated Gas Company for Order reducing Rates.)

(Received April 28, 1942, Federal Power Commission.)

To the Honorable Members of the Federal Power Commission:

Michigan Consolidated Gas Company, by leave of the trial examiner and consent of counsel for the parties hereto (Transcript p. 40752), amends and supplements its motion for an interim order finding the present rates and charges of Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation to be unreason-
[fol. 16861] able, excessive and unduly discriminatory as follows:

It attaches hereto a series of studies containing statistical data and accounting analyses based upon evidence and exhibits filed in the hearings in Dockets G-200 and G-207, together with those facts readily and indisputably deducible therefrom, which conclusively show that the rates and charges of the respondents are excessive and unreasonable in that they produce for respondents an aggregate amount of gross revenue not less than $5,489,874.00 per annum in excess of the amount necessary to provide a fair return.

It states that in the preparation of these studies and analyses it has acted upon and used the evidence offered by the respondents themselves, and such other evidence received as remains uncontradicted. It does not concede

the correctness of the facts, theories, philosophy or conclusions of the witnesses and the exhibits presented by respondents but, for purposes of this motion, attempts to interpret them in the most favorable light to respondents. It has used the evidence and exhibits tendered by respondents and, with such few adjustments as are noted, necessary to square with reality, it has determined the minimum reduction in rates and charges required to reduce the gross revenues of respondents to a point which will eliminate the excess return. These studies and analyses are not offered as reflecting the reduction which would be necessary should it be deemed appropriate to reduce the return to a point [fol. 16862] barely above confiscation, nor has it included in its computation many pertinent factors, other than those noted, which upon a complete accounting study would undoubtedly necessitate further substantial reductions.

As a typical illustration intervenor uses, in the first instance, in its computations the sum of $681,680.82 which the witness Biddison testified would be a necessary annual operating expense throughout the life of the enterprise to provide for replacements (Ex. 68-A) to reflect the method proposed by respondents for providing amortization, depreciation and depletion of their plants and properties, in the most favorable light to respondents. Evidence in the record shows it to have been excessive beyond reason with respect to transmission mains and compressor station equipment, and a later adjustment is made in these studies which brings the estimate somewhere within the realm of reality.

The test is made from the standpoint of two separate corporate entities (natural gas utilities) as they existed at the time of the initiation of this inquiry. The fair return to which each is entitled is measured by a fair and reasonable charge against the public for the operation and use of property in public service. Changes in intercorporate relationship or in the ownership of property dedicated to public service add nothing to the value of that service. No recognition is given to the claim that the cost of utility service to the public can be increased because of increased income taxes incurred by a utility in its own interest,

[fol. 16863] wholly unrelated to the cost of performing utility service. On the contrary there has been omitted for lack of proper figures the economies publicly prophesied and admittedly possible through joint operation of the two utilities.

The sum of the two returns indicated would be a maximum return for the joint properties and it is obvious that if the properties are to be treated separately and the rate schedules to be filed by Panhandle Eastern Pipe Line Company give a lessened cost of operation to Michigan Gas Transmission Corporation, the excess return of that company as herein shown would be increased by the amount of such lessened operating expense.

Since the volume of unregulated business (direct industrial sales) is insignificant, and the evidence conclusively shows that respondent Panhandle Eastern Pipe Line Company has at all times maintained and constructed full capacity for the transportation of such direct industrial sales and contemplates continuance of construction to provide the capacity for future sales (Exhibits 40 and 47), any allocation has been disregarded and could avail respondents nothing. And since a new schedule of rates, inevitable under the record, may eliminate the discrimination in present rates and charges, such studies will be left to the brief.

Dated this 27th day of April, 1942.

[fol. 16864] Respectfully submitted,

MICHIGAN CONSOLIDATED GAS COMPANY.

By Park Chamberlain,
815 Fifteenth St. N. W.
Washington, D. C.

Henry A. Montgomery,
1553 Penobscot Building
Detroit, Michigan.

A. V. McRee,
415 Clifford Street,
Detroit, Michigan.
Its Attorneys.

[fol. 16865]

Panhandle Eastern Pipe Line Company
and
Michigan Gas Transmission Corporation

Excess Return for Year 1941
and
Reduction in Gross Revenues Required to Eliminate Excess Return

		Panhandle	Mich. Gas Trans. Corp.	Total
1.	Average Utility Plant for Year 1941	$65,165,629	$12,550,119	$77,715,748
2.	Working Capital	713,345	162,647	875,992
3.	Rate Base	$65,878,974	$12,712,766	$78,591,740
4.	Return Allowable at 6 1/2%	$ 4,282,133	$ 826,330	$ 5,108,463
5.	Return Earned for Year 1941	6,363,417	1,120,091	7,483,508
6.	Excess Return	$ 2,081,284	$ 293,761	$ 2,375,045
7.	Reduction in Gross Revenues Required to Eliminate Excess Return Before Adjustment of Claim for Replacements	$ 4,437,368	$ 472,796	$ 4,910,164
8.	Additional Reduction in Gross Revenues Required by Adjustment Downward of $400,000 in Claim Made for Replacements (Exhibit 48-A)	579,710		579,710
9.	Reduction in Gross Revenues Required to Eliminate Excess Return	$ 5,017,078	$ 472,796	$ 5,489,874

[fol. 16866]

Panhandle Eastern Pipe Line Company
And Subsidiary Company

Excess Return For Year 1941
(Before Adjustment of Claim for Replacements)

		6% Return
1.	Average Utility Plant for Year 1941	$65,165,629
2.	Working Capital	713,345
3.	Rate Base	$65,878,974

4. Return Allowable	$ 4,282,133
5. Return Earned for Year 1941 as Adjusted	6,363,417
6. Excess Return	$ 2,081,284
7. Reduction in Gross Revenues Required to Eliminate Excess Return	$4,437,368

[fol. 16867]

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Rate Base For Year 1941

Utility Plant		
December 31, 1940 —		
Total Gas Plant Classified	$64,380,427.86	
(Exhibit 176, page 2, line 38, Column L)		
Other Gas Sales and Purchase Contracts	372,006.38	$64,752,434.24
(Exhibit 176, page 2, line 44, column L)		
December 31, 1941 —		
Total Gas Plant Classified	$65,225,927.15	
(Exhibit 176, page 2, line 38, column M)		
Other Gas Sales and Purchase Contracts	352,897.28	$65,578,824.43
(Exhibit 176, page 2, line 44, column M)		
Average for Year 1941		$65,165,629
Working Capital		
Funds for Operating Expenses		
1941 Operation and Maintenance expenses	$ 3,392,827.05	
(Exhibit 173, page 1, line 9, column M)		
Less cost of natural gas purchased	1,180,917.63	
(Exhibit 190, page 1, line 36, column C)	$ 2,211,909.42	
1.5 months/12 months		$ 276,572
Prepayments		
June 30, 1941 (Exhibit 48, page 1, line 14, column M)	$ 135,113.86	
Dec. 31, 1941 (Exhibit 172, page 1, line 14, column M)	94,732.18	
Average		114,923
Materials and Supplies		
June 30, 1941 (Exhibit 48, page 1, line 13, column M)	$ 268,861.88	
Dec. 31, 1941 (Exhibit 172, page 1, line 13, column M)	374,839.09	
Average		321,850
		$ 713,345
Rate Base		$65,878,974

Panhandle Eastern Pipe Line Company
And Subsidiary Companies

Income Statement — Year 1941

Line		Year 1941 Per Exhibit 173 Column M	Adjustments See attached	1941 Income Statement Adjusted
1	Income			
2	Operating Revenues			
3	Gas	$14,688,263.44	$ —	$14,688,263.44
4	Gasoline	735,077.94	—	735,077.94
5	Pipe Line Rentals	—	—	—
6	Miscellaneous	11,515.35	—	11,515.35
7	Total Operating Revenues	$15,434,856.73	$ —	$15,434,856.73
8	Operating Revenue Deductions			
9	Operation and Maintenance Expenses	$ 3,392,827.05	$269,600.00 +(1)	$ 3,662,427.05
10	Depreciation (Including Amortization)	1,937,994.80)		
11	Amortization and Depletion of Producing	)		
12	Natural Gas Land and Land Rights	90,177.06)		
13	Abandoned Leases	74,685.45)	+978,302.20 (2)	1,456,697.80
14	Amortization of Other Limited Term	)		
15	Gas Investments	332,142.69)		
16	Charges in Lieu of Federal Income and			
17	Excess Profits Taxes (see note)	823,881.49	—	823,881.49
18	Taxes			
19	State, Local and Miscellaneous			
20	Federal	733,622.93	—	733,622.93
21	Federal Income	1,690,000.00	+33,430.40 (3)	1,656,569.60
22	Federal Excess Profits	900,000.00	+161,760.00 (4)	738,240.00
23	Total Revenue Deductions	$ 9,975,331.47	$+903,892.60	$ 9,071,438.87
24	Net Operating Revenue	$ 5,459,525.26	$903,892.60	$ 6,363,417.86
25	Other Income			
26	Interest Revenues	$ 18,541.89	$ —	$ 18,541.89
27	Miscellaneous Non-Operating Revenues	—	—	—
28	Total Other Income	$ 18,541.89	$ —	$ 18,541.89
29	Gross Income	$ 5,478,067.15	$903,892.60	$ 6,381,959.75
30	Income Deductions			
31	Interest on Long-Term Debt	$ 651,903.65	$ —	$ 651,903.65
32	Amortization of Debt Discount and			
33	Expense	27,486.70	$ —	$ 27,486.70
34	Other interest charges	5,958.57	—	5,958.57
35	Interest Charged to Construction	+11,774.51	—	+11,774.51
36	Total Income Deductions	$ 673,574.41	$ —	$ 673,574.41
37	Net Income	$ 4,804,492.74	$903,892.60	$ 5,708,385.34

Note: Charges in lieu of Federal income and excess profits taxes represent an amount equivalent to taxes which would have been payable on current earnings if the company had not had the benefit for tax purposes of deductions for discount, premium and expense resulting from the refinancing of long-term debt.

+Indicates red figures.

[fol. 16869]

Panhandle Eastern Pipe Line Company

Adjustments to 1941 Income Statement for Changes in Operating Expenses during 1941 not fully effective for entire calendar year 1941

*(1)	**Operation and Maintenance Expenses**		
	(a) Payroll increases to field employees of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company May 1 and July 1, 1941		
	Total annual increases	$ 22,800	
	Included in 1941 expenses	14,600	$ 8,200
	(Exhibit 247, line 4)		
	(b) Change of hours of work week of field employees of Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company		
	Increase in annual expense	$92,400	
	Included in 1941 expenses	38,500	
	(Exhibit 247, line 13)		$ 53,900
	(c) Emergency property protection for Panhandle Eastern Pipe Line Company		
	Annual Expense	$156,000	
	Included in 1941 expenses	6,500	$ 149,500
	(Exhibit 247, line 18)		
	(d) Rate Case Expense.		
	Estimated total cost of rate case expenses in dockets G200 and G207 for Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation (Exhibit 250)	$350,000	
	Estimated portion for Michigan Gas Transmission Corporation based on monthly rate of write-off of $1,000 for 60 months	$ 60,000	
	(Exhibit 163, page 21A, line 42)		
	Balance applicable to Panhandle Eastern Pipe Line Company	$290,000	
	Annual rate of amortization on 5-year basis	$ 58,000	
	Included in 1941 expenses of Panhandle	0	$ 58,000
			$269,600
*(2)	Adjustment of Charge for Depreciation, Depletion, and Amortization of Gas Contracts as Included in 1941 Income Statement to a Basis for Amortization of Investment, depletion, and Replacement		
	Annual requirement for amortization of investment, depletion and replacements — amortization of investment on a 6½% sinking fund basis. (Exhibit 66A recalculated from 2½% basis to 6½% with provision for amortizing investment added 6/30/41 to 12/31/41. See attached)	$913,292.92	
[fol. 16870]	Less—Improper inclusion in 66A for amortization of gas sales and purchase contracts included in above figure on a 10 year straight life basis	$293,028.64	
	Annual amount for amortization of investment	$620,264.28	
	Depletion for 1941 at rates in exhibit 67 (see attached)	154,753.52	
	Provision for replacements per exhibit 68A	681,680.00	$1,456,697.80
	Deductions per 1941 books from Exhibit 173 Line 10—Depreciation (Including Amortization)	$1,937,994.80	
	Lines 11 & 12—Amortization and Depletion of Producing Natural Gas Land and Land Rights	90,177.06	
	Line 13—Abandoned Leases	74,685.45	
	Lines 14 & 15—Amortization of Other Limited Term Gas Investments	332,142.69	2,435,000.00
	Reduce charges included in 1941 income statement by		$ *978,302.20
*(3)	Federal Income Tax		
	12.4% of $269,600 (*(1) above)		$ *33,430.40
	(*(2) above does not affect taxable income)		
*(4)	Federal Excess Profits Tax		$*161,760.00
	60% of $269,600 (*(1) above)		

*Indicates red figures.

[fol. 16871] Panhandle Eastern Pipe Line Company

Amortization Of Investment

Annual Deduction From Revenues Which Will Return That Portion Of Stated Book Cost Of Property Not Recoverable Upon The Expiration Of The Useful Life Of The Project Through Salvage, Accruals For Depletion Or Accruals For Replacements

Biddison's requirement for "annual accrual for Property as of June 30, 1941" on 2 1/2% sinking fund basis as set out in Exhibit 66A		$1,468,597.76
Biddison's figures in Exhibit 66A computed on a 6 1/2% sinking fund basis		$ 902,413.43(a)
Increase in property, recoverable through amortization, which was added from 6/30/41 to 12/31/41 (see attached)	$591,340.78(b)	
Factor at 6 1/2% interest compounded annually which will recover investment in 24 years	1.8818	
Annual requirement to recover increase in investment added 6/30/41 to 12/31/41		10,879.49
		$ 913,292.92

[fol. 16872]

Michigan Consolidated Gas Company

Panhandle Eastern Pipe Line Company And Subsidiary Companies
Annual Accrual Rate For Amortization Of Property
As Of June 30, 1941

Biddison's Exhibit 66A, admitted March 3, 1942, recalculated from a 2 1/2% to a 6 1/2% interest basis compounded annually.

Year	Property at End of Year	Subject to Amortization	Annual Accrual	Interest Term to Dec. 31, 1941	Cumulative Interest Factor to Dec. 31, 1942	Cumulative Amount at Dec. 31, 1942
(A)	(B)*	(BB)	(C)	(D)	(E)	(F)
1931	$13,409,544 31	$ 2,930,286 40	$293,028 64		Straight line 10 yrs	$2,930,286.40
	41,815,781 37	30,116,519 65	277,302 72	10	13.4944	3,742,035.83
1932	45,621,674 44	560,034 64	5,808 18	9	11.7319	68,140.99
1933	45,488,440 67	101,700 99	1,304 70	8	10.0769	13,147.33
1934	45,648,083 45	105,398 30	1,146 82	7	8.5229	9,774.38
1935	45,494,592 04	8,061 92	131 91	6	7.0637	925.42
1936	371,076 00	358,658 20	23,910 67		Straight line 15 yrs	119,553.34
	49,317,360 59	3,483,193 40	46,327 79	5	5.6936	265,771.91
1937	61,360,851 55	11,961,709 52	162,602 02	4	4.4072	716,619.62
			*8,265.88	4	4.4072	*36,429.39
1938	401,443 07	6,676 79	445 12		Straight line 15 yrs.	1,335.36
	61,681,621 62	431,086 57	6,739 29	3	3.1992	21,560.34
1939	62,542,548 57	183,337 95	3,568.69	2	2.0650	7,369.34
1940	67,682,720 64	4,347,148 55	74,405.88	1	1.0000	74,405.88
1941	67,917,770 05	649,472 16	13,957.78	0		
		$55,243,285 04	$902,413 43			$7,932,494 60

Annual deduction from revenues which will return that portion of stated book cost of property not recoverable upon expiration of the useful life of the project through salvage, accruals for depletion or accruals for replacements:

Set aside for amortization of property on a sinking fund basis earning 6.5% interest compounded annually	$ 585,029 00
Set aside for amortization of property on a straight line basis	317,384 43
	$ 902,413 43

*Exclusive of construction work in progress, credits for reserves for gas sales and purchase contracts and consolidation reduction in investment in subsidiary company.

*Indicates red figures.

[fol. 16873] Panhandle Eastern Pipe Line Company

Year 1941

Annual Accrual For Amortization Of Property At June 30, 1941

Annual Accrual per Exhibit 66A at 2 1/2% compound interest	$ 1,468,597 76
Similar figure with 6 1/2% interest compounded annually	902,413 43

Annual Accrual For Amortization Of Property Added 6/30/41 To 12/31/41

	June 30, 1941	Dec. 31, 1941
Total gas plant (Exh. 52, p.2, l.47)	$66,689,669 57	
Add — reserve for amortization of gas sales and purchase contracts (Exh. 52, p.2, l.42)	1,611,657 30	
	$68,301,326 87	
Less — Work in progress (Exh. 52, p.2, l.39)	383,556 82	
Property at June 30, 1941 per Exh. 66A	$67,917,770 05	
Total gas plant (Exh. 176, p.2, l.47)		$69,650,032 63
Add — Reserve for amortization of gas sales and purchase contracts (Exh. 176, p.2, l.42)		1,758,171 60
		$71,408,204 23
Less — Work in progress (Exh. 176, p.2, l.39)		2,899,093 40
Corresponding figure for Dec. 31, 1941 to figure in 66A		$68,509,110 83
Increase in property to be recovered through amortization June 30 — Dec. 31, 1942		$ 591,340 78
Factor at 6 1/2% compound interest for recovery in 24 years		1 8398
Annual requirement to amortize net additions June 30 — Dec. 31, 1942 in 24 years		$ 10,879 49

[fol. 16874] Panhandle Eastern Pipe Line Company

Depletion

Provision made on books in 1941 —		
Exh. 173, line 12, col. M	$90,177 06	
MCF at .3¢		30,059,020 MCF

Gas produced in 1941 as shown on Exhibit 177 —

Amarillo	22,708,705 MCF	
Hugoton	7,317,038 "	
Other	33,278 "	30,059,021 MCF

Application of Biddison's Rates Set Out in Exhibit 67

Panhandle field	22,708,705 MCF	@ .5162¢	$117,222.34
Hugoton	7,317,038 "	@ .5106	37,360.80
Other	33,278 "	@ .5120 *(1)	170.38
			$154,753.52

*(1) Price for consolidated fields.

Replacements

Amount per Exhibit 68A $681,680

*Indicates red figures.

[fol. 16875] Michigan Gas Transmission Corporation

Excess Return For Year 1941

		6 1/2% Return
1.	Average Utility Plant for Year 1941	$12,550,119
2.	Working Capital	162,647
3.	Rate Base	$12,712,766
4.	Return Allowable	$ 826,330
5.	Return Earned for 1941 as Adjusted	$ 1,120,091
6.	Excess Return (5 minus 4)	$ 293,761
7.	Reduction in Gross Revenues required to eliminate excess return	$ 472,799

[fol. 16876]

Michigan Gas Transmission Corporation

Rate Base For Year 1941

Utility Plant			
Utility Plant at December 31, 1940 (Exhibit 88, page 1)	$12,295,896 99		
Utility Plant at December 31, 1941 (Exhibit 163, page 1, line 1)	12,804,341 16		
Average for year 1941			$12,550,119
Working Capital			
Funds for Operating Expenses			
Total operating expenses for 1941 (Exhibit 163, page 3, line 53)	$ 3,614,865 37		
Total maintenance expenses (Exhibit 163, page 3, line 54)	52,159 96		
	$ 3,667,025 33		
Less — gas purchased (Exhibit 163, page 4-B, line 20)	3,249,178 39		
	$ 417,846 94		
Amount for 1-1/2 mos. (1.5/12)		$ 52,231	
Prepayments			
June 30, 1941 (Exhibit 88, page 1)	$ 6,000 76		
Dec. 31, 1941 (" 163, " 1, line 58)	6,364 61		
Average		6,183	
Materials and Supplies			
June 30, 1941 (Exhibit 88, page 1)	$ 93,412 78		
Dec. 31, 1941 (" 163, " 1, line 53)	115,053 90		
Average		104,233	162,647
Rate Base			$12,712,766

[fol. 16877]

Michigan Gas Transmission Corporation

Income Statement — Year 1941

	Exhibit 163	Adjustments See Attached	1941 Income Adjusted
Gross Revenues			
Sales to Other Gas Utilities	$3,576,343.78	$ —	$3,576,343.78
Inter-Company Sales	322,819.43	—	322,819.43
Total Gas Sales	$3,899,163.21	$ —	$3,899,163.21
Rent from Gas Property	755.00	$ —	$ 755.00
Revenue from Transportation of Gas for Others	1,627,746.55	—	1,627,746.55
Total Other Gas Revenues	$1,628,501.55	$ —	$1,628,501.55
Total Gas Revenues	$5,527,664.76	$ —	$5,527,664.76
Non-Utility Revenues	130.00	—	130.00
Total Revenues	$5,527,794.76	$ —	$5,527,794.76
Operating Revenue Deductions			
Operating Expenses	$3,614,865.37	$ 89,400*(1)	$3,704,265.37
Maintenance	52,159.96	—	52,159.96
Provision for Retirements	366,785.40	*129,443(2)	237,342.40
Taxes — Local and miscellaneous Federal	158,027.67	—	158,027.67
" — Federal income	222,707.99	*13,857(3)	208,850.99
" — Excess Profits	91,756.60	*44,700(4)	47,056.60
Total Operating Revenue Deductions	$4,506,302.99	$*98,600	$4,407,702.99
Net Operating Revenue	$1,021,491.77	$ 98,600	$1,120,091.77
Other Income (Interest)	227.42	—	227.42
Gross Income	$1,021,719.19	$ 98,600	$1,120,319.19
Income Deductions			
Interest on Loans of Columbia Gas & Electric Corp.	$ 503,230.00	$ —	$ 503,230.00
Interest — Other	12,769.04	—	12,769.04
Interest — Charged to Construction	*4,178.67	—	*4,178.67
Total Income Deductions	$ 511,820.37	$ —	$ 511,820.37
Net Income	$ 509,898.82	$ 98,600	$ 608,498.82

*Indicates red figures.

[fol. 16878]

Michigan Gas Transmission Corporation

Adjustments To 1941 Income Statement For
Changes In Operating Expenses Not
Fully Effective For Entire Calendar Year 1941

*(1) Operating Expenses			
(a) Payroll increases to employees effectiye July 1, 1941 —			
Total annual increases		$ 22,800	
Included in 1941 expenses (Exhibit 247, line 7)		11,400	$ 11,400
(b) Emergency property protection —			
Total per year		$ 72,000	
Included in 1941 expenses (Exhibit 247, line 19)		0	72,000
(c) Rate case expense —			
Annual rate of write-off (Exhibit 163, page 21A, line 42)		$ 12,000	
Included in 1941 expenses		6,000	6,000
			$ 89,400
*(2) Provision for Retirements			
Amortization of Investment —			
Original cost of Utility Plant at June 30, 1941 (Exhibit 92)		$12,261,261	
Less — Original cost of Short Term Property at June 30, 1941 (Exhibit 85)		54,000	
		$12,207,261	
Additions July 1, 1941 to December 31, 1941 —			
Utility Plant account Dec. 31, 1941 (Exhibit 163, page 1, line 1)	$12,804,341		
Utility Plant Account June 30, 1941 (Exhibit 88, page 1)	12,402,884		
Increase last 6 months of 1941		401,457	
Long Term Investment at December 31, 1941			12,608,718
Deduct — estimated salvage on long term property			
On property at June 30, 1941 (Exhibit 104, page 6)		$ 127,935	
On increase in property in last 6 months of 1941 —			
Ratio of estimated salvage used in Exhibit 104, page 6 — $127,935/$12,207,261 or 1.05%			
Estimated salvage on additions in last 6 months of 1941 — 1.05% of $401,457 equals		4,215	132,150
Long Term Investment to be recovered through amortization			$12,476,568

*Indicates red figures.

[fol. 16879]

Factor for Annual Rate of Amortization on a sinking fund basis earning 6 1/2% compounded annually for 24 years	1.83977
Annual Amortization of Long Term Investment	$ 229,540
Annual Amortization of Short Term Investment — Straight Line Basis (Exhibit 104, page 1, item 12)	7,802
Total Annual Requirement to Amortize Investment in Utility Plant	$ 237,342
Provision for Retirements Charged on Books for Year 1941	366,785
Reduction	$ *129,443
(3) Federal Income Tax	
15.5% (31% after 50% Excess-Profits Tax) of $89,400 shown in (1) above	$ *13,857
(4) Excess Profits Tax	
Increase in expenses per (1) above of $89,400 reduces taxable income by this amount which falls within the 50% bracket of Excess-Profits Tax	$ *44,700

*Indicates red figures.

[fol. 16880] Certificate of Service

I hereby certify that I have this day mailed, postage prepaid, to the respective counsel for each of the parties to this proceeding copies of the amended motion of Michigan Consolidated Gas Company for an interim order reducing rates.

Dated at Washington, D. C., this 27th day of April, 1942.

PARK CHAMBERLAIN,
Counsel for Michigan Consolidated Gas Company.

[fol. 16881] (Stipulation of Counsel for various Parties and Federal Power Commission Counsel consenting to withdrawal of Federal Power Commission Counsel's Motion for Immediate Order reducing Rates, etc.)

(Received May 7, 1942, Federal Power Commission.)

(Docketed May 11, 1942, Federal Power Commission.)

City of Detroit, Michigan
and
County of Wayne, Michigan
vs.
Panhandle Eastern Pipe Line Company
and
Michigan Gas Transmission Corporation

Docket No. G-200.—100-2

Formal

In the Matter of

Panhandle Eastern Pipe Line Company
Michigan Gas Transmission Corporation
and
Illinois Natural Gas Company

Docket No. G-207

It is hereby stipulated by and between counsel for the respective parties to the above-entitled proceedings that Commission counsel's motion for an immediate order reducing rates, filed with the Trial Examiner during the hearing on April 23, 1942, and copied in the transcript of

the proceedings at pages 10753 to 10764, may be withdrawn and that Commission counsel may file in substitution therefor the motion for an immediate order reducing rates, a copy of which is hereto attached.

It is understood that the execution of this stipulation by and on behalf of Respondents shall not indicate or be deemed to indicate approval of the merits of the motion or the proposed changes therein, or approval or assent to any allegation or assertion contained in said motion, or to the validity of any such allegation; and, in particular, it is understood that the execution of this stipulation by and on behalf of Respondents is being made at the request of counsel for the Commission, and does not constitute and may not be deemed to constitute a waiver of any of the rights of said Respondents, or any of them, whether under such contention as they may make of denial to them of due process of law in these proceedings, or otherwise.

CARL J. WHEAT,
Counsel for
PANHANDLE EASTERN PIPE LINE COMPANY,

MICHIGAN GAS TRANSMISSION CORPORATION,

ILLINOIS NATURAL GAS COMPANY

HARRY S. LITTMAN,
Counsel for
FEDERAL POWER COMMISSION.

JAMES H. LEE,
Counsel for
CITY OF DETROIT, MICHIGAN

HAROLD GOODMAN,
Counsel for
COUNTY OF WAYNE, MICHIGAN

PARK CHAMBERLAIN,
Counsel for
MICHIGAN CONSOLIDATED GAS COMPANY.

[fol. 16882] (Motion of Counsel for Federal Power Commission for Immediate Order reducing Rates.)

Comes now Harry S. Littman, Counsel, for the Federal Power Commission, in the above-entitled cause, who respectfully represents that:

1. On February 28, 1941, a petition was filed by the City of Detroit and the County of Wayne, Michigan, in Docket No. G-200, alleging, among other matters, that Panhandle Eastern Pipe Line Company[1] sells natural gas to the Michigan Consolidated Gas Company for resale in the City of Detroit and County of Wayne, Michigan; that such gas is produced in the States of Texas and Kansas and is transported to a point of delivery near the City of Detroit; that such gas is transported from a point on the Indiana-Illinois boundary line to a point at or near the City of Detroit by Michigan Gas Transmission Corporation for the account of Panhandle Eastern, for which transportation Panhandle Eastern pays its affiliate, Michigan Gas, an excessive rate or charge; that the rates and charges demanded and collected by Panhandle Eastern from Michigan Consolidated Gas Company are unjust, [fol. 16883] unreasonable, and unduly discriminatory; and praying that the Commission, after investigation, fix and determine the just and reasonable rates to be thereafter observed and in force in respect of such transportation and sale of natural gas for resale in said City and County.

2. On March 28, 1941, Michigan Gas filed an answer denying that any of its charges in connection with the sale or delivery of gas to Michigan Consolidated Gas Company are excessive, unjust or unreasonable; and on April 3, 1941, Panhandle Eastern filed an answer to the said petition denying that its rates are unjust, unreasonable or discriminatory.

3. By order of May 22, 1941, the Commission on its own motion instituted an investigation, in Docket No. G-207, for the purpose of enabling the Commission to determine whether, in connection with any transportation or sale of

[1] Hereinafter sometimes referred to as "Panhandle Eastern".

[2] Hereinafter sometimes referred to as "Michigan Gas".

natural gas subject to the jurisdiction of the Commission, the rates and charges of Panhandle Eastern and Michigan Gas are unjust, unreasonable, unduly discriminatory, or preferential, and, if so, to fix by appropriate order or orders just and reasonable rates or charges.

4. By order of June 10, 1941, the Commission permitted the Michigan Public Service Commission to become an intervener in the complaint proceeding designated Docket No. G-200; and by order of July 12, 1941, the Commission permitted Michigan Consolidated Gas Company to become an intervener and a party to said proceeding.

5. On September 2, 1941, the Commission directed that the proceeding in Docket No. G-207 be consolidated with the complaint proceeding in Docket No. G-200 for purposes of hearing.

6. On March 26, 1942, the Commission ordered that the investigation, instituted by the Commission's order of [fol. 1688] May 22, 1941, be enlarged to include an investigation of the rates and charges of Illinois Natural Gas Company[1], a wholly-owned subsidiary of Panhandle Eastern, and making said Illinois Natural Gas Company a party respondent to the proceeding designated Docket No. G-207.

7. Hearings were commenced on July 15, 1941, and have continued for approximately 84 days during which a total of approximately 10,000 pages of testimony has been taken; one witness appeared for the petitioners who introduced approximately 15 exhibits, 21 witnesses appeared for the respondents[2] who introduced approximately 186 exhibits, and 4 witnesses appeared for the Commission who introduced approximately 30 exhibits; intervener Michigan Consolidated Gas Company introduced 9 exhibits; all of said witnesses were either cross-examined or were tendered for cross-examination, and full and complete opportunity has been given to the respondents to cross-examine all wit-

[1] Sometimes hereinafter referred to as "Illinois Natural".

[2] Panhandle Eastern, Michigan Gas, and Illinois Natural are hereinafter sometimes referred to collectively as "respondents".

nesses offered by the petitioners and the Commission; and full and complete opportunity has been afforded to the respondents to present testimony and to rebut the testimony offered by the petitioners and the Commission.

8. The respondents have introduced evidence with respect to book cost and original cost of plant, "going concern value", capital additions, working capital, depreciation, gas reserves, revenues, expenses, allocation, operations, rate of return and other matters alleged to relate to the issue of the reasonableness of their rates, and have presented a complete case in attempted justification of the said rates; the petitioners also presented evidence on certain similar subjects; Commission counsel, introduced evidence relating to a write-up in the book cost of plant accounts, historical earnings on average net investment, [fol. 16885] working capital, depreciation and, allocation rate of return; the evidence now contained in the record, which includes the respondents' entire presentation on direct covering all elements allegedly relating to the issue of reasonableness of the existing rates, is sufficient and complete in establishing that the present rates charged and collected by the respondents are unjust and unreasonable (as hereinafter shown) and should be immediately reduced before the taking of further testimony of the Commission's witnesses.

9. At page 10651 of the transcript of the proceedings, counsel for the respondents stated that they had concluded the presentation which they desired to make; at page 10772 of the transcript of the proceedings, at the conclusion of all the evidence now contained in the record, respondents' counsel stated that they had no further testimony to offer; at page 10773 of the transcript of the proceedings respondents' counsel stated "We will not make the contention that we have not had an opportunity to put on additional testimony here if we had so desired"; and the respondents have had in every respect a full, fair and complete hearing.

10. From a consideration of all the evidence it appears that:

I. Rate Base

(a) The book cost of plant, as claimed by the respondents, at December 31, 1941, is $82,952,156.82, as follows:

Claimed Book Cost of Plant[1]

Panhandle Eastern	$66,541,913
Illinois Natural	3,108,120
Michigan Gas	12,664,841
Indiana Gas	197,957
Pipe Line Purchased	439,326
Total (Exh. 194)	$82,952,157

[fol. 16886] Respondents' claim that the investment in properties as shown on their books substantially represents the original cost of said properties (T. 926-927; Exh. 91).

(b) Included in the said claimed cost of plant is the amount of $2,910,734 of construction work in progress, which should properly be deducted from said total claimed cost in arriving at the original cost of plant in service at December 31, 1941.

(c) Included in the said claimed cost of plant of Panhandle Eastern is the purported unamortized cost of "Gas Sales and Purchase Contracts" in the amount of $1,172,115; and the evidence shows that the said sum of $1,172,115 does not represent actual cost but it is in fact a write-up and should properly be eliminated from the said claimed cost of plant in arriving at original cost of plant in service at December 31, 1941.

(d) Included in the said claimed cost of plant are "Contributions in Aid of Construction", totaling $55,016, which should properly be deducted in arriving at the original cost of plant in service as of December 31, 1941.

(e) The original cost of plant in service at December 31, 1941, reflecting the deductions and eliminations set

[1] Giving effect to financing transactions consummated on February 6, 1942 and the acquisition on that date of capital stock and debt of Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation (herein sometimes referred to as "Indiana Gas") and purchase of a pipe line of Ohio Fuel Gas Company.

forth in paragraphs (b), (c) and (d) above, is not more than $78,814,292, as here shown:

Cost of Plant in Service	
Panhandle Eastern	$62,665,568
Illinois Natural	2,871,194
Michigan Gas	12,643,847
Indiana Gas	194,357
	$78,374,966
Pipe Line Purchased from Ohio Fuel Gas Co. subsequent to December 31, 1941	439,326
Total	$78,814,292

[fol. 16887] (f) The respondents have accumulated reserves for depreciation, depletion and amortization, as of December 31, 1941, in the amount of $12,596,987, as follows (Exh. 194):

	Reserves for Depreciation, Depletion and Amortization
Panhandle Eastern	$10,405,047
Illinois Natural	502,976
Michigan Gas	1,661,966
Indiana Gas	26,998
Total	$12,596,987

The evidence shows that the said reserves, totalling $12,596,987, represent the accrued depreciation, depletion and amortization of the plant in service, as of December 31, 1941; and the said amount is deducted from the aforesaid cost of plant to arrive at the rate base for purposes of this motion.

(g) The evidence shows that the allowable working capital is not in excess of $920,000, as follows:

Working Capital

Panhandle Eastern	$726,000
Illinois Natural	17,000
Michigan Gas	173,000
Indiana Gas	4,000
Total (Exh. 221)	$920,000

(h) Based upon paragraphs (a) to (g) above, the rate base, i. e., original cost, less accrued depreciation, plus working capital, is not in excess of $67,137,305, as here shown:

Rate Base

Cost of Gas Plant in Service at December 31, 1941	$78,814,292
Less:	
Depreciation Reserves	12,596,987
Net Original Cost	$66,217,305
Working Capital	920,000
Rate Base	$67,137,305

[fol. 16888] II. Gross Operating Revenue

The consolidated gross operating revenue of the respondents for the year 1941 amounted to $17,789,573 (Exh. 195).

III. Operating Expenses

(a) The consolidated operating expenses, as shown by the respondents' exhibits, for the year 1941, were as follows:

Operation and Maintenance	$2,648,694
Gas Purchased[1]	1,180,918
Depreciation, Depletion and Amortization	2,473,383
Amortization—Gas Contracts	332,143
Taxes—Federal Income[2]	2,063,175
Taxes—Federal Excess Profits[2]	1,677,054
Taxes—Property and Miscl.	901,387
Total (Exh. 195)	$11,276,754

[1] Inter-company gas purchases eliminated.

[2] Includes charges in lieu of Federal Income and Excess Profits Taxes in the amount of $823,881. Does not include pro-forma adjustments.

(b) Included in said operating expenses is the sum of $293,029 charged annually for the purpose of amortizing "Gas Sales and Purchase Contracts"; the evidence shows that the purported unamortized cost of such contracts in the amount of $1,172,115, as of December 31, 1941, does not represent actual cost but is in fact a write-up; and the said expense of $293,029 should be eliminated from operating expense.

(c) Said total operating expenses include the sum of $6,000 charged for rate case expense, which amount should be eliminated from operating expenses for purposes of this proceeding.

(d) The Federal income taxes should be reduced from $2,063,175 to $942,951, and the Federal excess profits taxes should be entirely eliminated in order to reflect the tax savings due to the indicated reduction in gross revenue hereinafter shown.

[fol. 16889] (e) The sum of the deductions set forth in paragraphs (b), (c) and (d) above total $3,096,307, leaving $8,180,447 as the maximum allowable operating expenses, as follows:

Operation and Maintenance	$2,642,694
Gas Purchased	1,180,918
Depreciation, Depletion and Amortization	2,473,383
Amortization—Gas Contracts	39,114
Taxes—Federal Income	942,951
Taxes—Property and Miscl.	901,387
Total (as adjusted)	$8,180,447

IV. Return

(a) The amount available for return after operating expenses and taxes, as adjusted in III, above, is $9,609,126, as follows:

Gross Operating Revenue	$17,789,573
Operating Expenses (as adjusted)	8,180,447
Net Operating Revenue	$ 9,609,126

(b) A fair rate of return for respondents is not more than 6 per cent, or $4,028,238 upon the rate base of $67,137,305.

(c) The gross revenue of respondents, therefore, exceeds a fair return by not less than $5,580,888 as follows:

Net Operating Revenue	$ 9,609,126
Return at 6%	4,028,238
Excess of Revenue Above 6% Return	$5,580,888

(d) During the five years 1937 to 1941, inclusive, Panhandle Eastern and subsidiary companies earned an average return of not less than 10.64% on their average net investment in plant of $53,997,936. (Exh. 222-A).

(e) During the period March 1, 1936, to December 31, 1941, Michigan Gas earned an average return of not less than 8½% on its average net investment in plant of $9,134,568 (Exh. 232).

[fol. 16890] 11. The evidence now clearly establishes that the present rates charged and collected by the respondents are unjust and unreasonable.

12. In order to aid the regulatory agencies in the States of Michigan, Ohio, Indiana, Illinois, Missouri and Kansas in fixing fair and reasonable rates for gas sold to ultimate consumers in said States, it is necessary that an immediate order be entered reducing the rates and charges of the respondents.

13. Nothing herein contained is to be taken as an admission of the accuracy or propriety of any of the claims made by the respondents or their witnesses.

Wherefore, Commission Counsel prays that the Commission enter an immediate interim order fixing just and reasonable rates for gas sold and transported by the respondents, Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company and Michigan Gas Transmission Corporation.

HARRY S. LITTMAN,
Counsel for Federal Power Commission.

[fol. 16891] Certificate of Service

I hereby certify that today I have served copies of the attached motion on all parties to this proceeding by mailing such copies to their respective counsel of record.

Dated: Washington, D. C. This 11 day of May, 1942.

HARRY S. LITTMAN.

. . . . . .

[fol. 16892] (Opinion Number 80 of Federal Power Commission.)

Memorandum of Clerk of U. S. Circuit Court of Appeals:

The Opinion No. 80 of the Federal Power Commission in Dockets Nos. G-200 and G-207 was made a part of the typewritten transcript of record at this place but same is omitted from the printed record to avoid duplication inasmuch as a copy of such Opinion of the Federal Power Commission heretofore appears in this printed record as Exhibit A to the Petition of the Panhandle Eastern Pipe Line Company, et al., to Review and Set Aside an Order of the Federal Power Commission at folio page q.

(Order of Federal Power Commission Reducing Rates, September 23, 1942.)

Memorandum of Clerk of U. S. Circuit Court of Appeals:

The Order of the Federal Power Commission of September 23, 1942, in Dockets Nos. G-200 and G-207 was made a part of the typewritten transcript of record at this place but same is omitted from the printed record to avoid duplication inasmuch as a copy of such Order of the Federal Power Commission heretofore appears in this printed record as a part of Exhibit A to the Petition of the Panhandle Eastern Pipe Line Company, et al., to Review and Set Aside an Order of the Federal Power Commission at folio page rr.

[fol. 16934] (Petition of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company for Extension of Time Within Which to File New Schedules of Rates of Charges.)

(Received October 9, 1942, Federal Power Commission.)

Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation, and Illinois Natural Gas Company, Respondents in these proceedings, respectfully request that this Commission extend the time for filing new schedules of rates and charges from October 15, 1942, as directed in the Commission's Order made pursuant to Opinion No. 80 in these proceedings, to December 1, 1942, and in support of this request Respondents state:

"1. That since the receipt on September 29, 1942 of the Commission's Order above referred to, Respondents have [fol. 16935] proceeded diligently in attempting to devise rates and charges which might effect a reduction of not less than $5,094,384.00 below their 1941 consolidated gross operating revenues of $17,789,573.00 when applied to their 1941 transportation and sales; that although a number of rates and charges of varying types and form which might accomplish the result ordered by the Commission have been considered, none of them has as yet proven satisfactory to Respondents from the standpoint of their desire to adopt a simple form of rate capable of meeting the varying conditions prevailing on their system and of equitably distributing the ordered reduction among their various customers.

Respondents further state that they are continuing their rate studies with diligence in an effort soon to design rates and charges which will be satisfactory to them and which they believe would satisfy their customers and this Commission if and when the Commission's Order becomes finally effective.

2. Respondents state that upon designing such rates and charges, they still will face the difficult task of designing new rate schedules which, insofar as possible, they hope

to make uniform and capable of accomplishing simplification of their entire rate structure. In this connection Respondents state that their present rate schedules are complicated and unwieldy by reason of the fact that each rate schedule applying to deliveries east of Dana, Indiana is accompanied by a separate carrying agreement between Panhandle Eastern and Michigan Gas; that anticipating an [fol. 16936] ultimate merger of Michigan Gas and Illinois Natural into Panhandle Eastern, it is the desire of Respondents, pending the anticipated merger, that any new sales rate schedules which might take the place of those presently existing be filed in the name of Panhandle Eastern and that all gas which might be transported and delivered by Illinois Natural and Michigan Gas be covered by one simple carrying agreement between Panhandle Eastern and each of its two subsidiaries.

3. Respondents further state that they presently have on file with this Commission sixty-four wholesale rate schedules with numerous supplements and although they already have accomplished uniformity in many of these schedules, it would be highly desirable from the standpoint both of this Commission and of Respondents if further elimination of nonuniform terms and conditions in Respondents' rate schedules could be accomplished. Respondents believe that with the possible exception of two customers where attending circumstances might require nonuniformity of terms and conditions, they can design rate schedules which will apply uniformly to all of their customers. Respondents hope and believe that with an extension of the time within which to file new rates and charges to December 1, 1942, they can design new rates and rate schedules which would be satisfactory to all concerned upon final effectiveness of the Commission's Order above referred to.

4. Respondents state that they have not yet determined [fol. 16937] whether to file with this Commission a Petition for Rehearing in these proceedings or (should such petition be filed and denied) whether to perfect an appeal to a Federal Circuit Court of Appeals having jurisdiction, but in any event Respondents state that they do not by this

request for an extension of time ask this Commission to extend the date from which new rates and charges shall be applicable in the event the Commission's Order pursuant to Opinion No. 80 in these proceedings should finally become effective.

Respectfully submitted,

PANHANDLE EASTERN PIPE LINE COMPANY,

MICHIGAN GAS TRANSMISSION CORPORATION,

ILLINOIS NATURAL GAS COMPANY,

By G. J. Neuner,
Vice President,
1221 Baltimore Avenue,
Kansas City, Missouri.

State of Missouri,
County of Jackson—ss.

G. J. Neuner, being first duly sworn, deposes and says that he is Vice President of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company; that he has read the foregoing Request for Extension of Time and knows the contents thereof, and that the same is true to his own knowledge except as to the matters therein stated upon information or belief and as to those matters he believes them to be true.

G. J. NEUNER.

Subscribed and sworn to before me this 7th day of October, 1942.

(Notarial Seal)

MARY C. MAGERS,
Notary Public.

My Commission expires August 31, 1943.

[fol. 16938] (Order of Federal Power Commission Granting Extensions of Time to Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company to File New Schedules of Rates and Charges.)

United States of America

Federal Power Commission.

Commissioners Leland Olds, Chairman, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

October 12, 1942.

City of Detroit, Michigan and County of Wayne, Michigan,
Docket No. G-200, vs.
Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

In the Matter of

Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company.

Docket No. G-207.

Upon motion filed with the Commission October 9, 1942, by Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company, praying that additional time be granted Respondent-Defendants for the preparation and filing of new schedules of rates and charges as provided for in Section (B) of the Commission's order of September 23, 1942:

It appearing to the Commission that:

Good cause has been shown for the granting of the extension of time hereinafter ordered:

The Commission orders that:

The time within which the Respondent-Defendants shall file the new schedules of rates and charges required by the Commission's order of September 23, 1942, be and the same is hereby extended to November 10, 1942, provided, however, that:

(i) The extension of time herein granted shall not operate as a change of the date on which the new schedules of rates and charges shall be effective, namely, November 1, 1942;

[fol. 16939] (ii) Nothing in this order shall be construed as staying the time within which Respondent-Defendants shall file a petition for rehearing or a petition for review as provided in Section 19 of the Natural Gas Act.

By the Commission.

J. H. GUTRIDE,
Acting Secretary.

[fol. 16940] (Petition of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company for Stay of Order of Federal Power Commission of September 23, 1942.)

(Received October 23, 1942, Federal Power Commission.)

To The Honorable Federal Power Commission:

Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company, defendants-respondents in the above entitled and numbered causes, and herein termed respondents respectfully petition the Commission to enter and issue an order staying in all respects the effective date and operation of the Commission's order of September 23, 1942 entered pursuant to its Opinion No. 80, and served on respondents on September 28, 1942 (said order having, in effect, been amended by the Commission's order of October 12, 1942, extending the time in which respondents are required to file new schedules of rates and charges).

The following facts are alleged in support of this petition:

[fol. 16941] (1) Respondents have, within the time required by the National Gas Act and the Rules of the Commission, filed with the Commission their Petition for Re-

hearing and Reconsideration, in which they seek an order of the Commission abrogating and setting aside said order of September 23, 1942, which motion has not yet been determined by the Commission.

(2) In said petition, complaint is made of certain rulings of the Examiner, and of certain findings, holdings and orders of the Commission.

(3) Respondents have many customers who purchase gas for resale, under rate contracts and schedules of varying types, and there is a lack of uniformity in the prices paid by such distributors for the gas purchased by them.

(4) In the event said order is not stayed, and the Commission upon consideration shall grant respondents' Petition for Rehearing and Reconsideration, or if said petition be denied, and as a result of a proceeding for review filed in a court of competent jurisdiction, said order shall be modified or set aside, in whole or in part, respondents probably will be faced with the necessity of filing many suits to recover the deficiency in collections during the pendency of the consideration of said petition for rehearing by the Commission, and during the pendency of such review proceedings, if any; but the rights of respondents and their customers as well as the rights of the ultimate consumers may be fully protected by a reasonable impounding order issued by the Commission as a condition for stay.

(5) Respondents do not by this application for stay ask the Commission to postpone the date from which new rates and charges shall be applicable in the event the Commission's order pursuant to Opinion No. 80 shall become finally effective, but only that compliance with said order be stayed pending a consideration and determination by the Commission of their said Petition for Rehearing and Reconsideration, and pending a review, if any be sought, [fol. 16942] of said order by a court of competent jurisdiction as provided by the terms and provisions of the Natural Gas Act.

Respondents stand ready to comply with any reasonable impounding requirement which the Commission may find

appropriate as a condition for granting this application for stay.

Respectfully submitted,

PANHANDLE EASTERN PIPE LINE COMPANY,

MICHIGAN GAS TRANSMISSION CORPORATION,

ILLINOIS NATURAL GAS COMPANY,

By Glenn W. Clark, Attorney of Record,
1221 Baltimore Avenue,
Kansas City, Missouri.

State of New York,
County of New York.

J. D. Creveling, being duly sworn, makes the following statement on oath; that he is the President of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company, defendant-respondents named in the above and foregoing petition; that he has read said application and that the statements of fact therein contained are true, according to his best knowledge and belief.

J. D. CREVELING.

Subscribed and sworn to before me this 22nd day of October, 1942.

(Notarial Seal)

FRANK A. MOYER,
Notary Public,
New York County, New York,
Notary Public, Kings Co., N. Y.
Kings Co. Clk's No. 80, Reg. No. 4074
N. Y. Co. Clk's No. 104, Reg. No. 4M79

Commission expires March 30, 1944.

[fol. 16943] State of New York,
County of New York.

Glenn W. Clark, being duly sworn, states on oath that he is an attorney of record for respondents named in the foregoing Petition for Stay; that on this 22nd day of October 1942 he has served a copy of said Petition for Stay

upon an attorney of record for each party to these proceedings by properly addressed U. S. Mail, postage prepaid.

GLENN W. CLARK.

Subscribed and sworn to before me this 22nd day of October, 1942.

(Notarial Seal)

FRANK A. MOYER,
Notary Public,
New York County, New York,
Notary Public, Kings Co., N. Y.
Kings Co. Clk's No. 80, Reg. No. 4074
N. Y. Co. Clk's No. 104, Reg. No. 4M79

Commission expires March 30, 1944.

[fol. 16944] (Petition of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company for Rehearing.)

(Received October 23, 1942, Federal Power Commission.)

To The Honorable Federal Power Commission:

Now come Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company, defendants-respondents in the above entitled and numbered causes, and herein termed respondents, and apply for a rehearing and reconsideration on the order of the Commission dated September 23, 1942, and served on respondents on September 28, 1942. The grounds upon which this application is based are stated specifically in the specifications of error, hereinafter set out, addressed to certain rulings of the Commission's Examiner in the course of the hearing of evidence, and to certain rulings, holdings and findings in the memorandum opinion upon which said order is based, and in the order itself; and cer-
[fol. 16945] tain assignments are based on the failure in such order to make certain rulings, holdings and findings under the record in these proceedings.

Specifications of Error.

I.

The Examiner for the Commission erred in refusing to admit in evidence the exhibits showing the reproduction

cost new of respondents' physical properties, and the present value of such properties as evidenced by the reproduction cost new of such properties less observed depreciation thereof. Such facts are disclosed in Exhibits Nos. 39, 39A, 62, 83 and 84, objections to the admission of which were sustained by the Examiner, and subsequent tender of proof thereon rejected.

II.

The Examiner for the Commission erred in refusing to admit in evidence the present value of the gas leasehold estates owned by Respondent Panhandle Eastern, based on the prices at which said gas leaseholds could now be sold, whether the production therefrom be sold by the purchaser in a regulated or in an unregulated market. The details of such valuation and the testimony of the witness Wallace explanatory thereof fully appear in Exhibits 37 and 37A, objections to the admission of which were sustained by the Examiner, and subsequent tender of proof thereon rejected.

III.

The Examiner erred in refusing to admit in evidence testimony dealing with the value of the properties of Respondent Panhandle Eastern at the approximate date of the enactment of the Natural Gas Act. Such evidence was reflected in Exhibits 71 and 75. Objections were sustained by the Examiner to the admission of Exhibit 71, and motion to strike pages 17, 20, 21, 22 and 32 of Exhibit 75 was sustained. Subsequently tender of proof of Exhibit 71 and the stricken pages of Exhibit 75 was refused. The evidence so rejected was of importance because it, considered in [fol. 16946] connection with the additions to plant account and depreciation charged since 1937, has a bearing on the present value of Panhandle Eastern's properties, and a determination of an appropriate rate base and return.

IV.

The Commission erred in refusing to allow as a part of the rate base, the investment represented by work in progress on December 31, 1941, since such property represented actual cost on that date.

V.

The Commission erred in refusing to include in the rate base the property represented by construction work in progress on February 28, 1942, since such property represented actual cost on that date.

VI.

The Commission erred in refusing to include in the rate base the property represented by construction work in progress on March 31, 1942, since such property represented actual cost on that date.

VII.

The Commission erred in refusing to include in the rate base the additional capital expenditures, which are covered by current budgets, are in course of construction, and will be completed by the end of 1942, since the evidence clearly shows that the expenditures will be made, and that funds are on hand to make the required payments.

VIII.

The Commission erred in refusing to include as a part of the rate base the amount by which the Gas Plant classified was increased during the period December 31, 1941 to March 31, 1942 since such increase reflects actual cost to Respondents.

[fol. 16947]

IX.

The Commission erred in refusing to include in the rate base the unamortized portion ($251,505) of the item of $654,989 included in "old gas sales and purchase contracts" which concededly reflects cost to Panhandle Eastern.

X.

The Commission erred in refusing to accept as the rate base Respondents' "Prudent Investment" represented by its invested capital, adjusted by a reduction therefrom of the unamortized portion of the item representing the contracts acquired by Panhandle Eastern from Missouri Kansas Pipe Line Company, originally for $2,398,402, the only item reflected in the invested capital as to which any question has been raised relating to cost to Panhandle Eastern.

XI.

The Commission erred in failing to allow as a part of operating expenses the sum of $73,500 per annum required in 1942 and subsequent years, but not reflected in 1941 operating expenses, which additional expense results from payroll increases not incident to increase in revenues.

XII.

The Commission erred in failing to allow as a part of the operating expenses, the sum of $221,500, not reflected in 1941 expenses, required for emergency property protection as a result of the war.

XIII.

The Commission erred in failing to allow as an operating expense, the sum of $70,000 representing a reasonable annual charge for amortizing in five years the expense of these proceedings.

[fol. 16948]

XIV.

The Commission erred in failing to allow as an operating expense, the sum of $30,000 representing an increased cost of Employees' Welfare and Pension Expense resulting from the employees of Michigan Gas becoming employees of the Panhandle Eastern System and thereby entitled to participate in such benefits.

XV.

The Commission erred in failing to find and recognize that of the revenue received for 1941, at least $980,000 represented increased sales to companies engaged in war work, and did not represent normal sales.

XVI.

The Commission erred in using Respondents' 1941 experience as a test period without adjusting same so as to deduct the increased sales to purchasers engaged in war work, and so as to increase operating expenses by increases in payroll, cost of Employees' Welfare and amortization of rate case expenses.

XVII.

The Commission erred in using Respondents' 1941 experience as a test period, without adjusting same to take account of the certain increase in Federal Income and Excess Profits Taxes required by the 1942 act, which rates all must recognize will not be substantially reduced for many years.

XVIII.

The Commission erred in finding that 6½% is a fair return upon the rate base allowed because there is no evidence of probative value to support that finding.

XIX.

The Commission erred in finding that $4,363,925 constitutes a reasonable return to Respondents because there is no evidence of probative value showing that such amount [fol. 16949] is a fair and reasonable return on either Respondents' invested capital, or the fair value of their property.

XX.

The Commission erred in finding that $4,363,925 constitutes a reasonable return to Respondents because there is no evidence of probative value that such sum reflects that "cost of service" as that term is used in applying the prudent investment doctrine of regulation.

XXI.

The Commission erred in finding that $4,363,925 constitutes a reasonable return to Respondents, because there is no evidence of probative value that such a return will be adequate to attract capital to the enterprise.

XXII.

The Commission erred in finding that $4,363,925 constitutes a reasonable return to Respondents, because there is no evidence of probative value that such a return will be adequate to maintain and support their credit, and enable them to raise the money necessary for the discharge of their public duties.

XXIII.

The finding of the Commission that $4,363,925 constitutes a reasonable return to Respondents is against the uncontroverted evidence to the effect that such a return will not represent Respondents' cost of service, and the Commission erred in failing to so find.

XXIV.

The finding of the Commission that $4,363,925 constitutes a fair return to Respondents is against the uncontroverted evidence to the effect that such a return will not be adequate to attract capital to the enterprise, and the Commission erred in failing to so find.

[fol. 16950]

XXV.

The finding of the Commission that $4,363,925 constitutes a fair return to Respondents is against the uncontroverted evidence to the effect that such a return will not be adequate to maintain and support Respondents' credit and enable it to raise the money necessary for the proper discharge of their public duties.

XXVI.

The Commission erred in failing to adopt at least Respondents' Invested Capital (less the unamortized portion of the old gas sales and purchase contracts) as of March 31, 1942, in the sum of $76,563,961, as the appropriate rate basis and the cost of service thereof, $5,173,686 as the return to which Respondents are entitled,—a "rate of return" of 6.75% on the invested capital.

XXVII.

The Commission erred in failing to adopt at least Respondents' Pro Forma Invested Capital (less the unamortized portion of the old gas sales and purchase contracts) as of December 31, 1941 in the sum of $75,738,202, as the rate base, and the cost of service thereof, $5,074,292, as the return to which Respondents are entitled,—a rate of return of 6.69% on such invested capital.

XXVIII.

The Commission erred in the assumption that future increases in net revenues will equal the increases in expenses

since there is no evidence of probative value to sustain such assumption.

XXIX.

The Commission erred in taking into consideration the possibility that Respondents' lines may for a time be operated at a 90% capacity factor without also taking into consideration the additional capital expenditures which [fol. 16951] will be required to permit such operation more than a few months, and the increased unit production cost resulting therefrom.

XXX.

The Commission erred in holding that increased tax burdens must be borne by a regulated utility, and are not to be allowed for in the fixing of Respondents' rates.

XXXI.

The Commission erred in disallowing as an operating expense the amortization of that unamortized portion of the old gas sales and purchase contracts which represent cost to Panhandle Eastern.

XXXII.

The Commission erred in requiring a reduction of Respondents' rates and charges so as to reflect, when applied to their 1941 transportation and sales, a reduction of not less than $5,094,384 below their 1941 consolidated gross operating revenue; thus taking from Respondents a large portion of their required cost of service.

XXXIII.

The Commission erred in assuming jurisdiction of respondents' direct sales by taking the proceeds from such sales into consideration in determining the amounts of respondents' profits, and then directing that the excess return so determined [to] reduced through a reduction of the prices and charges for gas sold for resale.

XXXIV.

The Commission erred in failing reasonably to allocate respondents' earnings between regulated sales and unregulated sales.

[fol. 16952]

XXXV.

The Commission erred in failing to consider, in determining either the rate base or the appropriate return, the cost of carrying unused capacity until its use was required, since it was not shown that during the period 1932 to 1937 the earnings of respondent Panhandle Eastern constituted a reasonable return on its invested capital or that such cost was thereafter recouped from excessive earnings.

XXXVI.

The Commission erred in finding that the failure of respondent Panhandle Eastern fully to utilize its capacity during the development period 1932 to 1937 was because of the restraint of its holding company because

(1) There is no evidence of probative value sufficient to justify the finding.

(2) The amount of revenues, if any, lost to the company, as a result of such restraint, if any there was, is not made to appear.

(3) There is no evidence to support the finding that customers along the line were clamoring for service.

Wherefore, Respondents pray that they be granted a rehearing and reconsideration herein, and that the Commission enter an order abrogating and setting aside its order of September 23, 1942 directing a reduction of Respondents' rates.

Respectfully submitted,

PANHANDLE EASTERN PIPE LINE COMPANY,

MICHIGAN GAS TRANSMISSION CORPORATION,

ILLINOIS NATURAL GAS COMPANY

By Glenn W. Clark,
Attorney of Record,
1221 Baltimore Avenue,
Kansas City, Missouri.

[fol. 16953] State of New York,
County of New York.

J. D. Creveling, being duly sworn, makes the following statement on oath: that he is the President of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company, defendants-respondents named in the above and foregoing petition; that he has read said motion and that the statements of fact therein contained are true, according to his best knowledge and belief.

J. D. CREVELING,

Subscribed and sworn to before me this 22nd day of October, 1942.

(Notarial Seal) FRANK A. MOYER,
Notary Public, New York County, New York.
Notary Public, Kings Co., N. Y.
Kings Co. Clk's No. 80, Reg. No. 4074
N. Y. Co. Clk's No. 104, Reg. No. 4M79
Commission expires March 30, 1944.

State of New York,
County of New York.

Glenn W. Clark, being duly sworn, states on oath that he is an attorney of record for respondents named in the foregoing Petition for Rehearing; that on this 22nd day of October 1942 he has served a copy of said Petition for Rehearing upon an attorney of record for each party to these proceedings by properly addressed U. S. Mail, postage prepaid.

GLENN W. CLARK.

Subscribed and sworn to before me this 22nd day of October, 1942.

(Notarial Seal) FRANK A. MOYER,
Notary Public, New York County, New York.
Notary Public, Kings Co., N. Y.
Kings Co. Clk's No. 80, Reg. No. 4074
N. Y. Co. Clk's No. 104, Reg. No. 4M79
Commission expires March 30, 1944.

[fol. 16954] (Order of Federal Power Commission denying Petitions for Rehearing and for Stay in Dockets Nos. G-200 and G-207.)

United States of America,

Federal Power Commission.

Commissioners: Basil Manly, Acting Chairman, Claude L. Draper, John W. Scott and Clyde L. Seavey. Leland Olds not participating.

October 30, 1942.

City of Detroit, Michigan and County of Wayne, Michigan
Docket No. G-200 vs.
Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation.

In the Matter of

Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company.

Docket No. G-207.

Upon consideration of the petitions filed on October 23, 1942, by Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company, Respondents-Defendants in the above-entitled matters, for a rehearing and for stay of the Commission's order reducing rates entered September 23, 1942, pursuant to Opinion No. 80;

The Commission finds that:

No new facts have been presented or alleged in the Respondents-Defendants' petitions which would justify a reversal or revision of the Commission's order and opinion, and no principles of law are stated in said petitions which were not fully considered by the Commission before it entered said order and opinion;

Therefore, the Commission orders that:

The said petitions be and the same are hereby denied.

By the Commission.

LEON M. FUQUAY,
Secretary.

[fol. 16955] Certification of Transcript of Record Of Federal Power Commission.

In the United States Circuit Court of Appeals for the Eighth Circuit.

Panhandle Eastern Pipe Line Company, a Corporation, Illinois Natural Gas Company, a Corporation, and Michigan Gas Transmission Corporation, a Corporation, Petitioners,

No. 12466 vs.

Federal Power Commission, City of Detroit, County of Wayne, Michigan Consolidated Gas Company, a Corporation, and Michigan Public Service Commission, Respondents.

I, Leon M. Fuquay, Secretary of the Federal Power Commission and official custodian of the records of said Commission, do hereby certify that the attached are true copies of:

	Vol.	Page
Transcript of hearing held July 15, 1941	I	1
Transcript of hearing held July 16, 1941	I	133
Transcript of hearing held July 18, 1941	I	144
Transcript of hearing held September 2, 1941	I	281
Transcript of hearing held September 3, 1941	I	381
Transcript of hearing held September 4, 1941	I	503
Transcript of hearing held October 6, 1941	II	579
Transcript of hearing held October 7, 1941	II	682
Transcript of hearing held October 8, 1941	II	852
Transcript of hearing held October 9, 1941	II	993
Transcript of hearing held October 10, 1941	II	1,163
Transcript of hearing held October 11, 1941	II	1,248
[fol. 16956] Transcript of hearing held October 27, 1941	III	1,295
Transcript of hearing held October 28, 1941	III	1,406
Transcript of hearing held October 29, 1941	III	1,541
Transcript of hearing held November 17, 1941	III	1,651
Transcript of hearing held November 18, 1941	III	1,857

Transcript of hearing held November 19, 1941	IV	2,014
Transcript of hearing held November 24, 1941	IV	2,117
Transcript of hearing held November 25, 1941	IV	2,228
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	Transcript of hearing held April 17, 1942	XVI	10,110
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2	Determination of possible revenue reduction.	XVII	10,783
3	Excerpts from Registration Statement of Panhandle Eastern Pipe Line Company filed with the Securities & Exchange Commission Feb. 12, 1937 with respect to gas reserves.	XVII	10,785
4	Excerpt from Registration Statement of Panhandle Eastern Pipe Line Company filed with the Securities & Exchange Commission Nov. 13, 1940 with respect to gas reserves.	XVII	10,786
5	Excerpts from Registration Statement of Panhandle Eastern Pipe Line Company filed with the Securities & Exchange Commission Nov. 13, 1940 with respect to design, construction and maintenance of property	XVII	10,789
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12	Statement showing United States Treasury bond yields.	XVII	10,801

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	Schedule 2. List of communities receiving service directly or indirectly from Panhandle Company including population and number of customers as of June 30, 1941.		10,849
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	Schedule 5. Description of compressor stations—equipment and structure.		10,865
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19	Map of Panhandle Eastern Pipe Line Company —Acreage in Panhandle field owned as of March 31, 1932.	XVII	10,947
20	Map of Hugoton and West Panhandle field showing portions of Southwestern Kansas and Oklahoma and Texas Panhandles.	XVII	10,948
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22	Geologic cross section from northern Potter County to northwest Hutchinson County, Texas	XVII	10,950
23	Map of Hugoton west Panhandle fields — Rock pressure map, 1932	XVII	10,951
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25	Map of Hugoton west Panhandle fields — Rock pressure map, 1939	XVIII	10,953
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27	Map of Hugoton west Panhandle fields — Rock pressure map, 1941.	XVIII	10,955
28	Productivity chart showing varying conditions in the relation of gas pay thickness to initial open flow for representative wells in Moore and Potter Counties.	XVIII	10,956
29	Productivity chart showing varying conditions in the relation of gas pay thickness to initial open flow for representative wells in Carson County.	XVIII	10,957
30	Written testimony of witness Rufus E. Smith and Schedules 1 to 12 presented in connection with such testimony.	XVIII	10,958
31	Map of Hugoton west Panhandle fields showing initial open flow of wells.	XVIII	11,005
32	Map of Lakin-Hugoton-Guymon area of Kansas and Oklahoma, March 1939.	XVIII	11,006
33	Geologic cross section of the Lincoln-Hugoton-Guymon area of Kansas and Oklahoma.	XVIII	11,007

34	Graph showing the relation of gas pay thickness to initial open flow for wells in western Stevens County, Kansas, and northern Texas County, Oklahoma.	XVIII	11,008
35	Productivity chart showing the relation of gas pay thickness to initial natural open flow for representative wells in Stevens and Morton Counties, Kansas and North Texas County, Oklahoma.	XVIII	11,009
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37	Parts 1 and 2 (not received in evidence)	XIX & XX	11,045 & 11,538
37-A	(Not received in evidence)	XXI	12,014
38	Basic statistics used in calculating interest, ad valorem taxes and operating expenses attributable to unused capacity.	XXI	12,159
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39-A	(Not received in evidence)	XXII	13,129
40	Table showing estimated main line sales, years 1941-1946, incl.	XXIII	13,149
41	Graph showing sales and gas plant by years, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIII	13,150
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44	Map of Hugoton and West Panhandle fields showing portions of southwestern Kansas and Oklahoma and Texas Panhandle's present and probable development, Panhandle Eastern Pipe Line Company, without consideration for increased load.	XXIII	13,203
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46	Map of production properties and gathering system west Panhandle field — Texas divided into group areas.	XXIII	13,205

	47	Panhandle Eastern Pipe Line Company and subsidiary companies, future capital requirements, gas transmission facilities, Liberal Station and eastward.	XXIII 13,206
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	49	Income statement per books—period from April 1, 1932 to December 31, 1941.	XXIII 13,210
	50	Statement showing earned surplus per books, period from commencement of operations to June 30, 1941.	XXIII 13,212
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	52	Statement showing investment in gas plant.	XXIII 13,215
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	55	Statement showing comparison of sales and revenue, principal industrial customers, years 1939, 1940 and 1941.	XXIII 13,220
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	56	Statement of gas produced, period from April 1, 1932 to June 30, 1941.	XXIII 13,222
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	58	Statement of gas revenue, period from April 1, 1932 to June 30, 1941 and schedule showing detail of sales to various types of customers 1939 and 1940.	XXIII 13,224
	59	Statement of gas revenue by states, period from April 1, 1932 to December 31, 1941.	XXIII 13,229
	60	Statement showing sales agreements with other gas companies as at June 30, 1941.	XXIII 13,230
	61	Study of current and future trends in commodity prices and wages, by David Friday.	XXIII 13,238
	62	(Not received in evidence)	

[fol. 16964]	63	Investors' appraisal of the risk of capital in the natural gas industry as compared with other divisions of the utility industry, Vol. 1, summary of analyses, prepared by Paul B. Coffman, Vice-President of Standard and Poors Corp.	XXIII 13,321
	64	Statistics supporting data, Vol. 1 (Exh. 63) Appendixes A, B, and C.	XXIV 13,379
	65	Study relative to rate of return on Panhandle Eastern Pipe Line Company prepared by Paul B. Coffman, Vice President, Standard and Poors Corp.	XXIV 13,533
	66	Panhandle Eastern Pipe Line Company annual accrual for amortization for property as of June 30, 1941.	XXV 13,650
	66-A	(First) correction of Exhibit 66.	XXV 13,676
	66-A	(Second) correction of Exhibit 66.	XXV 13,699 A
	67	Panhandle Eastern Pipe Line Company and subsidiary companies unit charge for depletion as of June 30, 1941.	XXV 13,700
	68	Panhandle Eastern Pipe Line Company and subsidiary companies annual accrual rate for replacements of property as of June 30, 1941.	XXV 13,707
	68-A	Correction of Exhibit 68.	XXV 13,708
	69	Statement showing amount of depreciation on book cost of property as of June 30, 1941.	XXV 13,709
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	71	(Not received in evidence)	XXV 13,712
	72	Statement of net additions to gas plant per books from October 1, 1938 to June 30, 1941.	XXVI 14,178
	73	Comparison of cost of certain equipment, materials and labor, Panhandle Eastern Pipe Line Company and Illinois Natural Gas Company.	XXVI 14,179
	74	Statement of total additional necessary materials and supplies by departments.	XXVI 14,198
	75	Natural gas supply, value of gas reserves and wells February 1, 1937 (excluded in part).	XXVI 14,202
[fol. 16965]	76	Natural gas supply September 30, 1940.	XXVI 14,243
	77	Description of physical property of Michigan Gas Transmission Corporation.	XXVI 14,251

78	Map showing transmission lines of Michigan Gas Transmission Corporation.	XXVI	14,310
79	Comparison of daily provided capacity to deliver firm gas with maximum daily delivery of firm gas from system of Michigan Gas Transmission Corporation.	XXVI	14,311
79-A	Comparison of daily provided capacity to deliver firm gas with maximum daily delivery of firm gas and total delivery of gas from the pipe lines owned or operated by Michigan Gas Transmission Corporation for the winter period of 1941-1942 to February 27, 1942.	XXVI	14,312
79-B	Total delivery of gas from pipe lines owned and operated by Michigan Gas Transmission Corporation on days on which the delivery of firm gas from system was the maximum.	XXVI	14,313
80	Report of inspection of equipment in the compressor stations of the Michigan Gas Transmission Corporation — H. C. Lehn.	XXVI	14,314
81	Depreciation study, Michigan Gas Transmission Corporation — H. S. Riddle.	XXVI	14,321
82	Accrued depreciation on compressor station structure, measuring and regulating station structures and equipment and other transmission structures and general equipment as of June 30, 1941 — Francis S. Haberly.	XXVI	14,369
83	Reproduction cost new of plant and property of Michigan Gas Transmission Corporation as of June 30, 1941 — Francis S. Haberly (excluded in part).	XXVI	14,375
84	Reproduction cost new less depreciation of Michigan Gas Transmission Corporation as of June 30, 1941 — Francis S. Haberly (excluded in part).	XXVI	14,443
85	Tabulation showing average age as of June 30, 1941 and estimated remaining life and estimated salvage value of short-lived property of Michigan Gas Transmission Corporation.	XXVI	14,452
[fol. 16966]	86 (Not received in evidence)	XXVI	14,453
87	Materials and supplies restatement of cost of major items as of June 30, 1941, Michigan Gas Transmission Corporation—Francis S. Haberly.	XXVI	14,466
88	Michigan Gas Transmission Corporation—comparative balance sheets, per books as at December 31, 1936 to 1940, inclusive, and June 30, 1941.	XXVI	14,475

89	Michigan Gas Transmission Corporation statement showing earned surplus per books for the ten months ended December 31, 1936, years 1937 to 1940, inclusive, year and six months ended June 30, 1941.	XXVI	14,477
90	Michigan Gas Transmission Corporation—statement showing capital surplus, per books, for the ten months ended December 31, 1936, years 1937 to 1940, inclusive, year and six months ended June 30, 1941.	XXVI	14,478
91	Michigan Gas Transmission Corporation—preliminary report on original cost studies by Central Service Corporation.	XXVI	14,479
92	Michigan Gas Transmission Corporation statement showing original cost depreciated to present conditions as at June 30, 1941 and observed depreciation as at June 30, 1941.	XXVI	14,507
93	Michigan Gas Transmission Corporation—statement of contributions made to customers for business development for the years 1936, 1937 and five months ended May 31, 1938.	XXVI	14,508
94	Michigan Gas Transmission Corporation—statement showing working capital as of June 30, 1941.	XXVI	14,510
95	Michigan Gas Transmission Corporation—estimated cost of completing work in progress at June 30, 1941 and estimated gross income to be derived from the completed projects.	XXVI	14,517
96	Michigan Gas Transmission Corporation—estimated cost of rate gas proceedings before Federal Power Commission.	XXVI	14,518
97	(Not received in evidence)	XXVI	14,519
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99	Michigan Gas Transmission Corporation—statement of income and expense per books for years ended December 31, 1936 to 1940, inclusive, twelve months ended June 30, 1941 and six months ended June 30, 1941 and December 31, 1940.	XXVI	14,530
100	Michigan Gas Transmission Corporation—statement of income and expense per books and after adjustments and redistributions necessary to reflect the 2-6 months period per books on an annual basis.	XXVI	14,533

101	Michigan Gas Transmission Corporation—comparative statement of operating revenues.	XXVI	14,537
102	Michigan Gas Transmission Corporation—operation and maintenance expense per books for the twelve months ended June 30, 1941.	XXVI	14,538
103	Michigan Gas Transmission Corporation—statement showing gas balance, gas transported, gas used by Company, line losses and gas purchased.	XXVI	14,540
104	Michigan Gas Transmission Corporation—estimates—original cost rate base, per formula utility income and allowance for amortization of investment, etc.	XXVI	14,541
105	Michigan Gas Transmission Corporation—estimated average annual increased Federal nominal and excess profits taxes responsive to the corporation's operations based on 1941 Act.	XXVI	14,547
106	Registration statement of Panhandle Eastern Pipe Line Company No. 2-4597, filed with the Securities & Exchange Commission November 18, 1940.	XXVII	14,548
107	Report A-11488 of the committee on stock list, New York Stock Exchange, authorizing the listing of the first mortgage and first lien 3% bonds, Series B due November 1, 1960 of Panhandle Eastern Pipe Line Company.	XXVII	14,651
[fol. 16968] 108	Letter of P. McDonald Biddison re provision for retirements, depletion and amortization for year 1938.	XXVII	14,732
109	Letter of P. McDonald Biddison re provision for retirements, depletion and amortization for year 1939.	XXVII	14,733
110	Letter of P. McDonald Biddison re provision for retirements, depletion and amortization for year 1940.	XXVII	14,734
111	Letter of P. McDonald Biddison re provision for retirements, depletion and amortization for year 1941.	XXVII	14,735
112	Table of subsidiary companies of Panhandle Eastern Pipe Line Company.	XXVII	14,736
113-129 Incl.	Identified only—(not received in evidence)		
130	Details of data used in Exhibit No. 44, C. J. Peterson, witness—as requested by Federal Power Commission.	XXVII	14,739

131	Future division of production between fields considering a reasonable expected load increase.	XXVII	14,768
132	Future division of production between fields without consideration for increased loads.	XXVII	14,769
133	Graph showing pressure trend—Panhandle field, Texas.	XXVII	14,770
134	Past production and estimated future production from Panhandle field, Texas.	XXVII	14,771
135	Graph showing rate of pressure drop from 1935 to 1940—Panhandle field performance.	XXVII	14,772
136	Charts of Panhandle Eastern Pipe Line Company wells—pressure trend in group areas.	XXVII	14,773
137	Acres used in determining weighted average pressures of Texas Panhandle fields.	XXVII	14,783
138	Dry gas production and pressure decline—Texas Panhandle filed.	XXVII	14,784
[fol. 16969] 139	Estimated intake pressures at Sneed compressor station.	XXVII	14785
140	Estimated average working pressures at well head for "group areas" shown on Exhibit 46.	XXVII	14,786
141	Annual and cumulative production from Panhandle field, Texas.	XXVII	14,787
142	Summary of cost of gas produced and purchased —basic load for the years 1940-46, inclusive.	XXVII	14,789
143	Summary of cost of gas produced and purchased —estimated future load for the years 1940 to 1946, inclusive.	XXVII	14,795
144	Estimate of prospective loads.	XXVII	14,801
145	Panhandle Eastern Pipe Line Company—compiled registration statement No. 2-4919 filed with the Securities & Exchange Commission December 24, 1941.	XXVIII	14,824
145-A	Post-effective amendment No. 1 to registration statement No. 2-4919.	XXVIII	14,968
146	Prospectus Panhandle Eastern Pipe Line Company $10,000,000 first mortgage series C due January 1, 1963 and 150,000 shares % cumulative preferred stock.	XXVIII	15,006
147	Holding Company Act Release No. 3286, Jan. 23, 1942—findings and opinion of the Securities & Exchange Commission in the matter of Columbia Gas and Electric Corporation et al.	XXIX	15,091

148	Order of the Securities & Exchange Commission dated January 21, 1942 consenting to the filing of amendments to registration statement No. 2-4919 in the matter of Panhandle Eastern Pipe Line Company.	XXIX	15,116
149	Statement showing investment by owners and long term creditors at June 30, 1941, Panhandle Eastern Pipe Line Company.	XXIX	15,117
150	Financial data of common stock issues of electric and gas utilities, years 1935 to 1940, inclusive.	XXIX	15,118
[fol. 16970] 151	Earnings—price ratios of common stocks in various divisions of the utility industry.	XXIV	15,122
152	Estimate of Federal Income and excess profits taxes, applying rates levied in the Revenue Act of 1941 to net income for the year ended June 30, 1941, Panhandle Eastern Pipe Line Company.	XXIX	15,131
153	Statement of cost of business development period from April 1, 1932 to June 30, 1941, Panhandle Eastern Pipe Line Company.	XXIX	15,135
154	Panhandle Eastern Pipe Line Company, certificate of incorporation of Interstate Pipe Line Company and amendment thereto changing name to Panhandle Eastern Pipe Line Company and other certificates of amendment to certificate of incorporation.	XXIX	15,138
155	Section of amendment of certificate of incorporation of Panhandle Eastern Pipe Line Company filed May 27, 1941.	XXIX	15,199
156	Section of amendment of certificate of incorporation of Panhandle Eastern Pipe Line Company filed January 26, 1942.	XXIX	15,203
157	Exhibits H-6, H-9 and I-2 to registration statement filed with the Securities & Exchange Commission December 30, 1936 by Panhandle Eastern Pipe Line Company under file No. 2-2764.	XXIX	15,227
158	Statement showing gas revenue from Indiana Gas Transmission Corporation from November 1931 to November 1941, inclusive, Panhandle Eastern Pipe Line Company.	XXIX	15,280
159	Statement of terms with respect to contract between Panhandle Eastern Pipe Line Company and Detroit City Gas Company entered into on August 31, 1935.	XXIX	15,284

160	Purchase agreement dated February 2, 1942 between Panhandle Eastern Pipe Line Company and Glore, Forgan, & Company and Kidder, Peabody & Company.	XXIX	15,285
161	Estimated main line sales and revenues, years 1941-1946, inclusive, Panhandle Eastern Pipe Line Company.	XXIX	15,300
[fol. 16971] 162	Ten years' estimate (1941-1951) of sales to Detroit and other areas and types of sales.	XXIX	15,301
163	Financial statement of Michigan Gas Transmission Corporation for period ended December 31, 1941.	XXIX	15,312
164	Supplementary statement of financial statement (Exhibit 163).	XXIX	15,353
165	Operating budget of Michigan Gas Transmission Corporation for the year 1942.	XXIX	15,355
166	Statements showing gas purchase and sales transactions between Panhandle Eastern Pipe Line Company and subsidiaries.	XXIX	15,372
	(Substitute exhibit)		15,373
167	Statement showing checks of Michigan Consolidated Gas Company in favor of Michigan Gas Transmission Corporation drawn on National Bank of Detroit.	XXIX	15,374
168	Tabulation of measuring and regulating stations showing stations which were inspected by Francis S. Haberly and those which were not inspected.	XXIX	15,375
169	Statement showing percentage increase or decrease of sales of natural gas of Michigan Gas Transmission Corporation for year 1937 to 1941, inclusive, to other affiliates.	XXIX	15,376
170	Section setting forth the designation and certain of the terms of the 5.60% cumulative preferred stock of Panhandle Eastern Pipe Line Company filed February 3, 1942 in Delaware.	XXIX	15,378
171	Certificate of purchase and retirement of Class A preferred stock of Panhandle Eastern Pipe Line Company filed February 14, 1942 in Delaware.	XXIX	15,393
172	Balance sheets per books Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,397

[fol. 16972]	173 Income statement per books, period from April 1, 1932 to December 31, 1941, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,400
	174 Earned surplus per books, period from commencement of operations to December 31, 1941, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,402
	175 Capital surplus per books, period from September 1, 1930 to December 31, 1941, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,404
	176 Gas plant accounts—Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,405
	177 Statement of gas produced, period from April 1, 1932 to December 31, 1941, Panhandle Eastern Pipe-Line Company and subsidiary companies.	XXIX	15,407
	178 Statement of gas purchased from period April 1, 1932 to December 31, 1941, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,408
	179 Statement of gas revenue, period from April 1, 1932 to December 31, 1941, Penhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,409
	180 Statement of gas revenue by states, period from April 1, 1932 to December 31, 1941, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,410
	181 Net additions to gas plants per books October 1, 1938 to December 31, 1941, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,411
	182 Comparative statement of depreciation, depletion and amortization of unoperated leases authorized by Board of Directors, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,412
	183 Statement showing amount of depreciation claimed in Federal income tax returns and settlement basis for the nine months ended December 31, 1932 and the years 1925 to 1940, inclusive, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,413
[fol. 16973]	184 Comparative statement of State, local and miscellaneous Federal taxes paid with the amounts accrued years 1936 to 1940, inclusive.	XXIX	15,414

185	Statement of taxes paid for the years 1936 through 1940, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,415
186	Reconcilement Federal income and Federal excess profits taxes paid with amounts accrued years 1936 through 1940, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,416
187	Panhandle Eastern Pipe Line Company and subsidiary companies' statements and copies of contracts with Missouri Power and Light Company, Illinois Iowa Power Company, Caterpillar Tractor Company, Keystone Steel & Wire Company, R. Hershell Manufacturing Company and Peoria Malleable Castings Company.	XXIX	15,417
188	Panhandle Eastern Pipe Line Company annual report for year 1940.	XXIX	15,455
189	Panhandle Eastern Pipe Line Company annual report for year 1941	XXIX	15,469
190	Comparative statement of operating and maintenance expenses, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,486
191	Reconcilement of net income per books with net income per Federal income tax return for the year 1939, Panhandle Eastern Pipe Line Company.	XXIX	15,490
192	Reconcilement of net income per books with net income per Federal income tax return for the year 1940, Panhandle Eastern Pipe Line Company.	XXIX	15,491
193	Analysis of reserve for depreciation of gas plant, Panhandle Eastern Pipe Line Company and subsidiary companies.	XXIX	15,492
194	Panhandle Eastern Pipe Line Company and subsidiary companies proforma consolidated balance sheet as of December 31, 1941 giving effect to financing transactions consummated on February 6, 1942 and acquisition on that date of capital stock and debt of Michigan Gas Transmission Corporation, an Indiana gas distribution corporation, and purchase of certain property of Ohio Fuel Gas Company.	XXIX	15,494
[fol. 16974]	195 Panhandle Eastern Pipe Line Company and subsidiary companies pro forma consolidated income account for the year ended December 31, 1941.	XXIX	15,499

196	Panhandle Eastern Pipe Line Company and subsidiary companies pro forma consolidated income account for the year ended December 31, 1941 as adjusted to give the effect to Federal income and Federal excess profits tax returns proposed in recommendation of Secretary of Treasury Morgenthau on March 3, 1942 before House, Ways and Means committee.	XXIX	15,502
197	Panhandle Eastern Pipe Line Company and subsidiary companies balance sheet per books February 28, 1942.	XXIX	15,506
198	Panhandle Eastern Pipe Line Company and subsidiary companies pro forma consolidated income account for the twelve months ended February 28, 1942.	XXIX	15,510
199	Panhandle Eastern Pipe Line Company and subsidiary companies pro forma consolidated income account for the twelve months ended February 28, 1942 as adjusted to give effect to Federal income and Federal excess profits tax rates proposed in recommendation in Secretary of Treasury Morgenthau on March 3, 1942 before House, Ways and Means Committee.	XXIX	15,513
200	Panhandle Eastern Pipe Line Company and subsidiary companies (including Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation) comparative statement of gas plant as of December 31, 1939, December 31, 1940, June 30, 1941, December 31, 1941 and February 28, 1942.	XXIX	15,517
201	Michigan Gas Transmission Corporation—Gas Plant Account	XXIX	15,519
202	Panhandle Eastern Pipe Line Company and subsidiary companies statement of estimated Federal income and excess profits taxes for the year 1941 (based on the Revenue Act of 1941)	XXIX	15,520
203	Panhandle Eastern Pipe Line Company and subsidiary companies statement of operation and maintenance expense year 1941 (restated to include Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation for entire year)	XXIX	15,525
[fol. 16975] 204	Panhandle Eastern Pipe Line Company and subsidiary companies 1942 construction and retirement budgets summary by companies.	XXIX	15,529

205	Panhandle Eastern Pipe Line Company and subsidiary companies statement of certain estimated construction expenditures for the year 1942	XXIX	15,537
206	Financial statement of Panhandle Eastern Pipe Line Company and subsidiary companies for the period ended December 31, 1939	XXX	15,538
207	Financial statement of Panhandle Eastern Pipe Line Company and subsidiary companies for the period ended December 31, 1940	XXX	15,677
208	Financial statement of Panhandle Eastern Pipe Line Company and subsidiary companies for the period ended December 31, 1941	XXXI	15,783
209	Letter of Panhandle Eastern Pipe Line Company to Detroit City Gas Company dated March 30, 1936 designating the office to which the latter company should make payment for gas delivered pursuant to contract of October 31, 1935	XXXI	15,899
210	Index numbers of wholesale prices of commodities by groups (1926 = 100)	XXXI	15,901
211	U. S. Department of Labor, Bureau of Labor Statistics Release of March 26, 1942	XXXI	15,902
212	U. S. Department of Labor, Bureau of Labor Statistics, "Index Numbers of Wholesale Prices of All Commodities by Months, 1890-1940 (1926 = 100)"	XXXI	15,904
213	Table showing average hourly earnings and average hours per week per wage earner in 25 manufacturing industries 1914-1942	XXXI	15,905
214	Graph showing average hourly earnings and average actual hours per week per worker in 25 manufacturing industries 1914-1942	XXXI	15,912
215	Table showing "Employment, payrolls and average weekly earnings in representative New York State factories, 1914-1941 employment (Index numbers with average 1925-1927 as 100)"	XXXI	15,913
[fol. 16976] 216	Indexes of wholesale prices and cost of living for certain months 1913-1942 (1935-1939 = 100)	XXXI	15,914
217	Graph showing indexes of wholesale prices and cost of living 1913-1941	XXXI	15,916

218	Testimony of Mr. Joe D. Creveling before the Securities and Exchange Commission on November 29, 1942, In the Matter of Columbia Gas & Electric Corporation, et al., File No. 59-33, etc.	XXXI	15,917
219	Panhandle Eastern Pipe Line Company gas sales and purchase contracts, copy of report by Bureau of Internal Revenue and related correspondence	XXXI	15,931
220	Panhandle Eastern Pipe Line Company excerpts from minutes of meetings of board of directors relating to provisions for depreciation, depletion, and amortization	XXXI	15,962
221	Panhandle Eastern Pipe Line Company and subsidiary companies computation of working capital requirement	XXXI	15,975
222	Panhandle Eastern Pipe Line Company and subsidiary companies computation of average return earnings on net investment for the period April 1, 1932 to December 31, 1941	XXXI	15,980
222A	Panhandle Eastern Pipe Line Company and subsidiary companies comparison of average return earned on net investment for the periods April 1, 1932 to December 31, 1936, and January 1, 1937 to December 31, 1941	XXXI	15,982
223	Panhandle Eastern Pipe Line Company and subsidiary companies' substitute estimate (less economic) of additional capital expenditures south and west of Liberal Compressor Station required to meet peak-day sales of 307,000 Mcf 1942	XXXI	15,983
224	Panhandle Eastern Pipe Line Company and subsidiary companies' substitute estimate (less economic) of additional capital expenditures south and west of Liberal Compressor Station required to meet peak-day sales of 338,000 Mcf 1942	XXXI	15,984
225	Panhandle Eastern Pipe Line Company and subsidiary companies estimate of operation and maintenance costs south and west of Liberal Compressor Station, Panhandle field, 307,000 Mcf continuous daily sales capacity operations at 70% capacity factor	XXXI	15,985
[fol. 16,977] 226	Panhandle Eastern Pipe Line Company and subsidiary companies estimate of operation and maintenance costs south and west of Liberal Compressor Station, Panhandle field, 307,000 Mcf continuous daily sales capacity operation at 90% capacity factor	XXXI	15,987

227	Panhandle Eastern Pipe Line Company and subsidiary companies estimate of operation and maintenance costs south and west of Liberal Compressor Station, Panhandle field, 338,000 Mcf continuous daily sales capacity operation at 70% capacity factor	XXXI	15,989
228	Panhandle Eastern Pipe Line Company and subsidiary companies estimate of operation and maintenance costs south and west of Liberal Compressor Station, Panhandle field, 338,000 Mcf continuous daily sales capacity operation at 90% capacity factor	XXXI	15,991
229	Capacity study April 7, 1942 continuous daily delivery capacity—307,000 Mcf	XXXI	15,993
230	Capacity Study April 7, 1942 completely looped and economically powered main line system with economic production-transmission expenditures	XXXI	15,998
231	Capacity study April 7, 1942 revised completely looped and economically powered main line system with less economic production-transmission expenditures	XXXI	16,003
232	Michigan Gas Transmission Corporation computation of average return earned on net investment for the period March 1, 1936 to December 31, 1941	XXXI	16,008
233	Prospectus Panhandle Eastern Pipe Line Company 10,000,000 First Mortgage and First Lien 3% Bonds, Series C, due January 1, 1962, and 150,000 shares 5.60% cumulative preferred stock	XXXI	16,009
234	Summary of construction and retirement budgets and work order procedure	XXXI	16,095
235	Panhandle Eastern Pipe Line Company and subsidiary companies statement showing the computation of depreciation for Federal income tax purposes as claimed in Federal income returns	XXXI	16,097
236	Panhandle Eastern Pipe Line Company and subsidiary companies statement showing the computation of depreciation for Federal income tax purposes for the year 1939 on the basis as settled with the Bureau of Internal Revenue	XXXI	16,098
[fol. 16978]	237 Panhandle Eastern Pipe Line Company and subsidiary companies statement showing the computation of depreciation for Federal income tax purposes for the year 1940 as claimed in Federal income tax return	XXXI	16,099

238	Panhandle Eastern Pipe Line Company and subsidiary companies statement showing the computation of depreciation for Federal income tax purposes for the year 1940 on the basis as settled with the Bureau of Internal Revenue	XXXI	16,100
239	Panhandle Eastern Pipe Line Company and subsidiary companies analysis of Account 795, Special Services, years 1940 and 1941	XXXI	16,101
240	Panhandle Eastern Pipe Line Company and subsidiary companies (including Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation) analysis of Account 795, Special Services, year 1941	XXXI	16,102
241	Panhandle Eastern Pipe Line Company and subsidiary companies analysis of Account 796, Special Legal Services, years 1940 and 1941	XXXI	16,103
242	Panhandle Eastern Pipe Line Company and subsidiary companies (including Michigan Gas Transmission Corporation and Indiana Gas Distribution Corporation) analysis of Account 796, Special Legal Services, year 1941	XXXI	16,104
243	Panhandle Eastern Pipe Line Company and subsidiary companies statement of estimated Federal income and excess profits taxes for the 12 months ended February 28, 1942 (based on Revenue Act of 1941)	XXXI	16,105
244	Panhandle Eastern Pipe Line Company and subsidiary companies statement of budget items included in Exhibit No. 205	XXXI	16,108
245	Agreement between Columbia Gas & Electric Corporation and Panhandle Eastern Pipe Line Company dated February 5, 1942	XXXI	16,110
246	Panhandle Eastern Pipe Line Company and subsidiary companies preliminary determination of the second installment of purchase price to be paid to Columbia Gas & Electric Corporation	XXXI	16,123
[fol. 16979] 247	Panhandle Eastern Pipe Line Company and subsidiary companies statement showing certain increased costs not fully present in income account	XXXI	16,124
248	Panhandle Eastern Pipe Line Company and subsidiary companies pro forma consolidated income account for the year ended December 31, 1941	XXXI	16,125

249	Panhandle Eastern Pipe Line Company and subsidiary companies pro forma consolidated income account for the year ended December 31, 1941, as adjusted to give effect to Federal income and Federal excess profits taxes proposed in recommendation of Secretary of Treasury Morgenthau on March 3, 1942 before House Ways and Means Committee	XXXI	16,128
250	Panhandle Eastern Pipe Line Company and subsidiary companies statement of rate case expenses in connection with Federal Power Commission consolidated dockets G-200 and G-207 including actual cost to February 28, 1942 and estimated cost to complete	XXXI	16,131
250A	Panhandle Eastern Pipe Line Company and subsidiary companies statement of rate case expenses in connection with Federal Power Commission consolidated dockets G-200 and G-207 including actual cost to February 28, 1942 and estimated cost to complete	XXXI	16,131 A
251	Panhandle Eastern Pipe Line Company and subsidiary companies statement showing pro forma consolidated net operating revenue as adjusted for a full year's cost as allocated between regulated and non-regulated sales for the year ended December 31, 1941	XXXI	16,132
252	Panhandle Eastern Pipe Line Company and subsidiary companies additional information requested in re Exhibit No. 17	XXXI	16,138
253	Study relative to minimum return requirements of Panhandle Eastern Pipe Line Company (giving effect to property acquisitions) prepared by Paul B. Coffman	XXXII	16,145
254	Investors' appraisal of the risk of capital in 153 stable industrial companies for the years 1937-1941, inclusive, prepared by Paul B. Coffman	XXXII	16,242
[fol. 16980] 255	Letter of Panhandle Eastern Pipe Line Company dated April 11, 1942 to Mr. Park Chamberlain, and tabulation of comparative statement of demand charges under original and supplemental contracts, Panhandle Eastern Pipe Line Company and Michigan Consolidated Gas Company for Detroit	XXXIII	16,582
256	Letter agreement among Columbia Oil & Gasoline Corporation, National City Company and Missouri-Kansas Pipe Line Company dated September 19, 1930	XXXIII	16,585

257	Panhandle Eastern Pipe Line Company and subsidiary companies reconcilement of net income per books with estimated excess profits net income for the year 1941	XXXIII	16,595
258	Holding Company Act Release No. 3415 dated April 1, 1942, Findings and Opinion of the Securities and Exchange Commission in the Matter of Columbia Gas & Electric Corporation, File Nos. 59-33, etc.	XXXIII	16,599
259	Weighted average earnings—price ratios on common stocks 153 stable industrial companies	XXXIII	16,608
260	Panhandle Eastern Pipe Line Company status of proposed 1942 construction program, production and gathering system south and west of Liberal Station	XXXIII	16,609
261	Panhandle Eastern Pipe Line Company and subsidiary companies main line system approximate coincidental maximum day sales during the winter periods of 1940-1941 and 1940-1942	XXXIII	16,612
262	Panhandle Eastern Pipe Line Company and its subsidiary company interruptible customers curtailment—January 4-12, 1942	XXXIII	16,617
263	Panhandle Eastern Pipe Line Company and subsidiaries allocation of adjusted 1941 costs between regulated and non-regulated sales	XXXIII	16,618
264	Index of gas rate schedules of Illinois Natural Gas Company, Michigan Gas Transmission Corporation and Panhandle Eastern Pipe Line Company	XXXIII	16,621
265	List of proposed rate schedules and notices of termination, Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation	XXXIII	16,638
[fol. 16981] 266	Financial statement for year ending December 31, 1941 (Tax Department)	XXXIII	16,643
267	Panhandle Eastern Pipe Line Company and subsidiary companies comparative balance sheets per books March 31, 1942, and March 31, 1941	XXXIII	16,679
	Complaint of City of Detroit and County of Wayne, Complainants v. Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, Defendants, filed February 28, 1941, Federal Power Commission, Docket No. G-200	XXXIV	16,685

Separate answer of Michigan Gas Transmission Corporation filed March 28, 1941 in Docket No. G-200.	XXXIV	16,692
Petition of Michigan Public Service Commission for leave to intervene filed March 31, 1941 in Federal Power Commission, Docket No. G-200.	XXXIV	16,698
Separate answer of Panhandle Eastern Pipe Line Company filed April 3, 1941 in Federal Power Commission, Docket G-200.	XXXIV	16,704
Order entered June 10, 1941 fixing date of hearing in Federal Power Commission, Docket No. G-200.	XXXIV	16,715
Order entered June 10, 1941 permitting the Michigan Public Service Commission to intervene in Federal Power Commission, Docket No. G-200.	XXXIV	16,718
Petition of Panhandle Eastern Pipe Line Company filed June 26, 1941 for continuance of hearing in Docket No. G-200.	XXXIV	16,719
Concurring petition of Michigan Gas Transmission Corporation filed July 3, 1941 for continuance of hearing in Docket No. G-200.	XXXIV	16,727
Objection of City of Detroit and County of Wayne to Defendant's petition for continuance of hearing filed July 3, 1941 in Docket No. G-200.	XXXIV	16,732
Commission's designation of Trial Examiner.	XXXIV	16,736
Order entered July 8, 1941 denying petition for continuance of hearing in Docket No. G-200.	XXXIV	16,737
[fol. 16982] Petition of Michigan Consolidated Gas Company for leave to intervene filed July 10, 1941 in Docket No. G-200.	XXXIV	16,738
Order entered July 12, 1941 permitting Michigan Consolidated Gas Company to intervene in Docket No. G-200.	XXXIV	16,755
Answer of Michigan Gas Transmission Corporation to petition of Intervenor, Michigan Consolidated Gas Company.	XXXIV	16,756
Answer to Panhandle Eastern Pipe Line Company to petition of Michigan Consolidated Gas Company, Intervenor, filed August 18, 1941 in Docket No. G-200.	XXXIV	16,762

Motion to dismiss filed by Panhandle Eastern Pipe Line Company on August 20, 1941 in Docket No. G-200.	XXXIV	16,771
Motion to dismiss filed by Michigan Gas Transmission Corporation on August 21, 1941 in Docket No. G-200.	XXXIV	16,773
Commission's order denying motion to dismiss entered September 2, 1941 in Docket No. G-200.	XXXIV	16,775
Commission's order entered May 22, 1941 instituting investigation in Docket No. G-207.	XXXIV	16,776
Commission's order entered September 2, 1941 consolidating proceedings for purposes of hearing, Dockets Nos. G-200 and G-207.	XXXIV	16,779
Petition of Michigan Consolidated Gas Company filed October 1, 1941 requesting the issuance of subpoenas duces tecum in Dockets Nos. G-200 and G-207.	XXXIV	16,780
Commission's order entered October 3, 1941 authorizing the issuance of subpoenas duces tecum in Dockets Nos. G-200 and G-207.	XXXIV	16,785
Application of County of Wayne filed December 8, 1941 requesting the issuance of subpoenas duces tecum in Dockets Nos. G-200 and G-207.	XXXIV	16,791
[fol. 16983] Commission's order entered December 11, 1941 authorizing the issuance of subpoena duces tecum in Docket Nos. G-200 and G-207.	XXXIV	16,795
Petition of Michigan Consolidated Gas Company filed December 27, 1941 requesting the issuance of subpoenas duces tecum.	XXXIV	16,797
Petition of Panhandle Eastern Pipe Line Company filed February 4, 1942 for continuance of hearing.	XXXIV	16,798
Petition filed by Panhandle Eastern Pipe Line Company on February 9, 1940 requesting change of place of hearing.	XXXIV	16,807
Objection of City of Detroit and County of Wayne filed February 11, 1942 to petition for continuance of hearing.	XXXIV	16,808
Commission's order entered February 17, 1942 denying petition for continuance and changing place of hearing in Docket Nos. G-200 and G-207.	XXXIV	16,811

Petition for continuance of hearing filed by Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation on February 28, 1942.	XXXIV	16,813
Commission's order dated March 16, 1942 denying petition for 120 day postponement and fixing date of hearing in Docket Nos. G-200 and G-207.	XXXIV	16,832
Commission's order entered March 26, 1942 enlarging investigation and making Illinois Natural Gas Company a party respondent in proceeding designated Docket No. G-207.	XXXIV	16,834
Copy of subpoena (ad testificandum) served upon W. G. Maguire.	XXXIV	16,837
Motion of Commission Counsel filed April 27, 1942, praying that the Commission enter an immediate order fixing just and reasonable rates.	XXXIV	16,839
Motion filed by Michigan Consolidated Gas Company on April 27, 1942 praying that the Commission enter an immediate order reducing rates.	XXXIV	16,849
Motion filed by City of Detroit and County of Wayne on April 27, 1942 praying that the Commission enter an immediate order reducing rates.	XXXIV	16,852
[fol. 16984] Amendment to motion for order reducing rates filed by Michigan Consolidated Gas Company on April 28, 1942.	XXXIV	16,860
Stipulation of counsel for the various parties and Commission Counsel consenting to withdrawal of Commission Counsel's motion for immediate order reducing rates filed May 11, 1942.	XXXIV	16,881
Motion for immediate order reducing rates filed by Commission Counsel on May 11, 1942.	XXXIV	16,882
Federal Power Commission Opinion No. 80 in City of Detroit, Michigan and County of Wayne, Michigan v. Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, Docket No. G-200 and in the matter of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company, Docket No. G-207 and order reducing rates.	XXXIV	16,892

Petition of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company filed October 9, 1942 requesting an extension of time within which to file new schedules of rates and charges.	XXXIV	16,933
Commission's order of October 12, 1942 granting extensions of time to Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company to file new schedules of rates and charges	XXXIV	16,938
Petition of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company filed October 23, 1942 for stay of the Commission's order of September 23, 1942.	XXXIV	16,940
Petition of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company filed October 23, 1942 requesting a rehearing in Docket Nos. G-200 and G-207.	XXXIV	16,944
Commission's order of October 30, 1942 denying petitions for rehearing and for stay in Dockets Nos. G-200 and G-207.	XXXIV	16,954

[fol. 16985] All of which constitute the record of the Federal Power Commission in City of Detroit, Michigan and County of Wayne, Michigan vs. Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, Docket No. G-200 and in the matter of Panhandle Eastern Pipe Line Company, Michigan Gas Transmission Corporation and Illinois Natural Gas Company, Docket No. G-207.

In Witness Whereof, I hereunto subscribed my hand and cause the seal of the Federal Power Commission to be affixed this 20th day of January 1943 at Washington, D. C.

(Seal Federal Power Com. U. S. A.)

LEON M. FUQUAY,
Secretary.

Filed Feb. 6, 1943, E. E. Koch, Clerk.

[fol. 16986] (Order of United States Circuit Court of Appeals directing Respondents to Show Cause why Petition for stay of Rate Order should not be granted.)

United States Circuit Court of Appeals, Eighth Circuit.

November Term, 1942.
Monday, November 2, 1942.

No. 12,466.

Panhandle Eastern Pipe Line Company, a Corporation, Illinois Natural Gas Company, a Corporation, and Michigan Gas Transmission Corporation, a Corporation, Petitioners,

vs.

Federal Power Commission, City of Detroit, County of Wayne, Michigan Consolidated Gas Company, a Corporation, and Michigan Public Service Commission.

This cause this day came on for hearing before the Court upon the Petition of Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company, and Michigan Gas Transmission Corporation for a stay, pending review, of a Rate Order of the Federal Power Commission. The petition is presented to the Court by Mr. D. H. Culton, attorney for petitioners, and counsel for respondents not being notified of the filing and presentation thereof, It is Ordered that the respondents above named, and each of them, show cause before this Court on Saturday, November 14, 1942, at ten o'clock in the forenoon in the United States Court House in the City of St. Louis, Missouri, why the petition for an order should not be granted staying the operation of the order of the Commission dated September 23, 1942, pending the preparation and filing by petitioner in this Court with the time prescribed by the Natural Gas Act of their petition for review, and pending the review of said order by this Court.

And it is further Ordered by this Court that pending the disposition of this order to show cause the enforcement of the said order of the Federal Power Commission is hereby suspended.

A copy of this order and of the aforesaid petition shall be transmitted to counsel for the respective parties.

November 2, 1942.

[fol. 16987] (Order of United States Circuit Court of Appeals Denying Petition for Stay of Operation of Rate Order Without Prejudice, etc.)

United States Circuit Court of Appeals,
Eighth Circuit.

November Term, 1942.

Saturday, November 14, 1942.

Panhandle Eastern Pipe Line Company, a Corporation, Illinois Natural Gas Company, a Corporation, and Michigan Gas Transmission Corporation, a Corporation, Petitioners.

No. 12466. vs.

Federal Power Commission, City of Detroit, County of Wayne, Michigan Consolidated Gas Company, a Corporation, and Michigan Public Service Commission.

Order was entered by this Court on November 2, 1942, directed at the above named respondents to show cause why the petition should not be granted for an order staying the operation of the rate order of the Federal Power Commission dated September 23, 1942, pending the filing by petitioners in this Court of their petition to review and pending the review of said order. Said order to show cause was made returnable this day and response of the Federal Power Commission and answer of the Michigan Consolidated Gas Company have been filed.

Following counsel have presented oral argument:

For Petitioner: Mr. D. H. Culton.

For Respondents: Federal Power Commission, Mr. Harry S. Littman, Senior Attorney, County of Wayne, Mr. Harold Goodman, City of Detroit, Mr. James H. Lee, As-

sistant Corporation Counsel. Michigan Consolidated Gas Company, Mr. Park Chamberlain.

After hearing counsel and having considered the various matters and the Court being fully advised, It is ordered by the Court that said petition for stay be, and is hereby, denied without prejudice to the filing of a petition for the same or similar relief after petition for review of the order of the Federal Power Commission has been filed and the review docketed in this Court.

November 14, 1942.

[fol. 16988] (Order of United States Circuit Court of Appeals Granting Stay Pending Further Hearing of Application Therefor.)

United States Circuit Court of Appeals,
Eighth Circuit.

November Term, 1942.

Monday, November 23, 1942.

Panhandle Eastern Pipe Line Company, a Corporation, et al., Petitioners,
No. 12,466. vs.
Federal Power Commission, et al., Respondents.

This comes before the Court on the application of petitioners for stay order pending disposition of their petition to review and set aside the order of the Federal Power Commission, and the Court being advised,

It is Ordered that such stay be granted as of this date until there can be further hearing upon and determination of such application—hearing being set for Saturday, November 28, 1942.

November 23, 1942.

[fol. 16989] (Order of United States Circuit Court of Appeals Granting Stay of Order of Federal Power Commission Dated September 23, 1942, Requiring Reduction in Rates and Charges for Gas Furnished by Petitioners, etc.)

United States Circuit Court of Appeals,
Eighth Circuit.

November Term, 1942.

Monday, December 7, 1942.

Panhandle Eastern Pipe Line Company, a Corporation, et al., Petitioners,
No. 12,466. vs.
Federal Power Commission, et al., Respondents.

This matter comes before the Court upon the petition of petitioners for an order of stay of the order of the Federal Power Commission, dated September 23, 1942, requiring reduction in rates and charges for gas furnished by petitioners; the pleadings filed thereto; the reply of the petitioners; various memoranda presented by the parties; and oral presentation by Mr. Glenn W. Clark and Mr. D. H. Culton for petitioners, Mr. Harry S. Littman for the Commission, Mr. Harold Goodman for Wayne County, Mr. James H. Lee for the City of Detroit, and Mr. Park Chamberlain for Michigan Consolidated Gas Company.

Until further order of this Court, the above order of the Federal Power Commission is stayed upon the conditions following:

1. The monthly difference between payments to petitioners under existing rates or arrangements and those required under the order of the Commission shall be promptly paid over to John G. Hughes of Kansas City, Missouri, as the custodian of this Court, not later than the twenty-fifth of the succeeding month, to be held by him for the benefit of the ultimate consumers or of petitioners as in this litigation may be determined entitled thereto. Such

payments for months prior to this order shall be made by December 15, 1942. Triplicate receipts for each of such payments shall be given petitioners by the custodian, one of which shall be promptly filed, by petitioners, with the Clerk of this Court and one with the Federal Power Commission.

[fol. 16990] 2. The entire expenses of impounding (including, among other things, protecting, investing and distributing to petitioners or to ultimate consumers) of these funds shall be borne by petitioners. Whether any earnings on such funds (while so impounded) may be applied upon such expenses is reserved for future determination. When and as required by orders of this Court, petitioners shall pay to the custodian such expense money, upon triplicate receipts, which shall be filed as above.

3. No interest shall be charged petitioners upon such impounded funds unless allowed upon application hereafter made by respondents or any of them. Such future applications may be made only (a) if and when petitioners fail to be ready to present this review upon the merits on May 14, 1943 (as set for hearing by a separate order entered as of this date), or (b) if and when this Court shall enter its decree or order sustaining the above order of the Commission and shall deny any petition for rehearing which may be filed thereto. Any interest allowed hereafter shall be at the rate of four percentum annually from the date of such allowance or thereafter as required by any orders of allowance.

4. Full power and jurisdiction is reserved to cancel or modify this order and to enter any other orders (with or without application of the parties) to protect or to promote the rights and interests of the parties to his litigation and of the ultimate consumers financially interested in the impounded funds.

It is further Ordered that the Clerk of this Court is directed to transmit a copy of this order to each of the parties to this proceeding or to their above counsel.

December 7, 1942.

[fol. 16991] (Order of United States Circuit Court of Appeals Appointing John G. Hughes as Custodian of Funds to be Impounded Under Provisions of Stay Order.)

United States Circuit Court of Appeals,
Eighth Circuit.

November Term, 1942,

Monday, December 7, 1942.

Panhandle Eastern Pipe Line Company, a Corporation, et al., Petitioners,
No. 12,466. vs.
Federal Power Commission, et al., Respondents.

It is Ordered that Mr. John G. Hughes, of Kansas City, Missouri, is hereby appointed an officer of this Court for the purposes of acting as Custodian of the funds to be impounded under the provisions of an order of stay (entered at this time). He shall qualify by filing with the Clerk of this Court a bond in the sum of One Hundred Thousand ($100,000.00) Dollars, to be approved by any Judge of this Court. Upon order of this Court, the premium for such bond shall be paid by petitioners as an expense of this review proceeding. All expenditures of the Custodian allowed by this Court and any compensation so allowed him shall (upon order of this Court), be paid by petitioners as expenses of this proceeding.

Quarterly (beginning March 31, 1943), such Custodian shall file reports of his receipts, expenditures and disposition of funds on hand and shall make any other reports as required by this Court.

He shall pay out no money except upon the order of this Court and all bank deposits (herein provided for) made by him shall be subject to this provision. As money is received by the Custodian, he shall promptly deposit the same in either the Commerce Trust Company or the First National Bank (both of Kansas City, Missouri) or in both of such banks.

The Custodian or any party to this review proceeding may, at any time, call to the attention of this Court any

action or lack of action by the Custodian, by any party to this proceeding or by any one which might tend to defeat the purpose of this Court to collect, impound and eventually distribute the difference in rates or charges under existing contracts or arrangements of petitioners and in rates or charges under the order of the Federal Power Commission involved in this review proceeding.

It is further Ordered that the Clerk of this Court is directed to transmit a copy of this order to each of the parties to this proceeding or to their counsel.

December 7, 1942.

[fol. 16992] (Order of United States Circuit Court of Appeals as to form of record to be printed and fixing time for filing Designations therefor.)

United States Circuit Court of Appeals,
Eighth Circuit.

November Term, 1942.

Monday, December 7, 1942.

Panhandle Eastern Pipe Line Company, a Corporation, et al., Petitioners,
No. 12,466. vs.
Federal Power Commission, et al., Respondents.

This matter comes before the Court upon the oral request of counsel for petitioners and for the respondent Federal Power Commission as to the form of condensation of the evidence taken before the Commission for printing in this review proceeding. The Court having heard the views of such counsel and being advised thereby as to the situation,

It is Ordered:

That the evidence to be printed for presentation of this review proceeding be determined as follows: Petitioners to designate such portions of the evidence as they desire printed, in question and answer form, and serve identifying notice of such designations upon respondents on or before

January 15, 1943; that, within thirty (30) days after receipt of such designations, respondents designate such additional portions of the evidence as they desire included and serve identifying notice thereof upon petitioners; that the portions thus designated by the parties be printed as one transcript and in the order in which the evidence so designated appears in the typewritten transcript.

December 7, 1942.

[fol. 16993] (Order of United States Circuit Court of Appeals Instructing Custodian as to Manner of Handling Funds and Securities in his Possession.)

United States Circuit Court of Appeals,
Eighth Circuit.

November Term, 1942.

Saturday, December 12, 1942.

Panhandle Eastern Pipe Line Company, a Corporation, et al., Petitioners,
No. 12,466. vs.
Federal Power Commission, et al., Respondents.

On Application presented to this Court on this 11th day of December, 1942, by John G. Hughes (appointed on December 7, 1942, as an officer of this Court for the purpose of acting as Custodian of the funds to be impounded under the provisions of an Order of Stay entered on the same date) for an order of this Court instructing him with respect to the manner in which he shall properly handle and safeguard any and all securities which he may from time to time purchase and come into possession of, as such Custodian, pursuant to orders of this Court in this proceeding,

It is Ordered:

(1) That when and as such Custodian shall purchase and come into possession of any securities, pursuant to the order of this Court in this proceeding, he shall forthwith deposit the same with the Federal Reserve Bank of Kansas City, at its office in Kansas City, Missouri, said bank to hold said securities in safekeeping subject solely to the order and direction of this Court, and no securities so deposited shall be withdrawn except upon specific order of this Court.

(2) That such Custodian, in anticipation of the purchase and deposit, as aforesaid, of securities, shall deliver promptly to the Federal Reserve Bank of Kansas City, Missouri certified copies of the Order of this Court dated December 7, 1942, appointing him an officer of this Court, the Order of Stay entered by this Court on December 7, 1942, in this proceeding, this Order, and, from time to time [fol. 16994] as entered, any order of this Court authorizing such Custodian to invest funds impounded by such Custodian in securities or authorizing withdrawal thereof from the custody of such Federal Reserve Bank or otherwise effecting the custody thereof by it.

December 12, 1942.

[fol. 16995] (Order of United States Circuit Court of Appeals, authorizing Custodian to purchase certain securities as investments.)

November Term, A. D. 1942.

Saturday, December 12, 1942.

On application presented to this Court on the 11th day of December, 1942, by John G. Hughes (appointed on December 7, 1942, as an officer of this Court for the purpose of acting as Custodian of the funds to be impounded under the provisions of an Order of Stay entered in this proceeding on December 7, 1942) for an order of this Court authorizing him, as Custodian, to place his order for Seven-eighths Per Cent Treasury Certificates of Indebtedness of Series E-1943 in an amount not to exceed $2,000,000.00, par value, plus accrued interest, if any, and to purchase said securities up to that amount when and as he receives sufficient payments from petitioners,

It is Ordered:

That John G. Hughes of Kansas City, Missouri, appointed on December 7, 1942, as Custodian of the funds to be impounded under the provisions of an Order of Stay entered in this proceeding on the same date, is hereby authorized to place his order, as Custodian, for the above described securities, dated and bearing interest from December 1, 1942 and due December 1, 1943, in an

amount not to exceed $2,000,000.00, par value, plus accrued interest, if any, such order for securities to be subject to no premium or penalties except accrued interest.

It is further Ordered that such Custodian is hereby authorized to purchase from time to time and pay for such portions of the securities so ordered as and when the [fol. 16996] funds then paid to him for impoundment by petitioners will allow, payments therefor by him to be made from his bank Account Number 1.

December 12, 1942.

[fol. 16997] (Order of United States Circuit Court of Appeals directing Petitioners to pay to Custodian certain sums to cover Bond Premium, etc.)

November Term, A. D. 1942.

Saturday, December 12, 1942.

On application presented to this Court on this 11th day of December, 1942, by John G. Hughes (appointed on December 7, 1942, as an officer of this Court for the purpose of acting as Custodian of the funds to be impounded under the provisions of an Order of Stay entered on December 7, 1942) for an order of this Court (1) directing Petitioners in this proceeding to pay to such Custodian the sum of $1,100.00 required to pay the premium of the Custodian's bond and for anticipated general expenses of the Custodian, (2) fixing and requiring Petitioners to pay the Custodian's monthly compensation, and (3) authorizing the Custodian to expend such amounts for the purposes required in his application,

It is Ordered:

1. That Petitioners (or any one of them) promptly pay to such Custodian the sum of $1,000.00 which amount the Custodian is hereby ordered to pay to R. B. Jones & Sons, Inc., as the premium for the Custodian's bond, which was approved by this Court on December 10, 1942, such payment to be made from his bank Account Number 2.

2. That Petitioners (or any one of them) promptly pay to such Custodian the sum of $100.00, to be used by the Custodian as a general expense fund, he being hereby

authorized to expend so much of said sum from time to [fol. 16998] time as may be necessary to cover his general expenses in carrying out his duties as Custodian, such expenditures to be made from his bank Account Number 2.

3. That the compensation of such Custodian is hereby fixed at $200.00 per month and Petitioners (or any one of them) are hereby ordered and directed, until further order of this Court, to pay to John G. Hughes of Kansas City, Missouri, as the Custodian appointed by this Court, on or before the last day of December, 1942, and on and before the last day of each succeeding month, the sum of $200.00. The Custodian is hereby authorized, until further order of this Court, to pay to himself, individually, from his bank Account Number 2, as Custodian of this Court, the amount of $200.00 per month as his compensation for performing the duties of Custodian.

December 12, 1942.

[fol. 16999] (Order of United States Circuit Court of Appeals requiring Custodian to set up Account No. 1 and Account No. 2, etc.)

November Term, A. D. 1942.

Saturday, December 12, 1942.

Under the provisions of the Stay Order of December 7, 1942, it was provided that described funds should be paid by petitioners to John G. Hughes, as Custodian, for impoundment, and it was further provided therein that petitioners should, as and when ordered by this Court, pay to the Custodian money needed for expenditures by the Custodian for his compensation and for other expenses; also, in the order of December 7, 1942, appointing John G. Hughes as Custodian, it was provided that he should promptly deposit all receipts in designated banks. For the purpose of securing entire separation of such receipts for and payments from impoundments and such receipts for and payments from expenses, until further order of this Court,

It is Ordered that the Custodian shall open and keep two separate deposit accounts in said banks or bank to

be designated as "Account Number 1" and "Account Number 2". In Account Number 1 shall be deposited receipts of payments to be impounded and any earnings thereon or accumulations thereof; in Account Number 2 shall be deposited receipts of payments for expenses.

It is further Ordered that no payment or expenditure of money shall be made by the Custodian except by check upon the appropriate account; and that all checks drawn by the Custodian shall state, upon the face thereof, the account upon which drawn and the date of the order of this Court authorizing the expenditure for which the check is drawn.

It is further Ordered that the Custodian keep such books [fol. 17000] of account and office files as will faithfully and clearly reflect each and all receipts and expenditures and transactions by him as Custodian.

December 12, 1942.

[fol. 17001] (Order of United States Circuit Court of Appeals authorizing Custodian to purchase certain Securities, etc.)

January Term, A. D. 1943.

Tuesday, February 23, 1943.

On Application presented to this Court on the 23rd day of February, 1943, by John G. Hughes (appointed on December 7, 1942, as an officer of this Court for the purpose of acting as Custodian of the funds to be impounded under the provisions of an Order of Stay entered in this proceeding on December 7, 1942) for an order of this Court authorizing and directing him, as Custodian, to purchase Treasury Tax Savings Notes, Tax Series C, with Funds to be received by him from Petitioners in February and March of 1943 and available for investments in addition to those heretofore authorized by this Court,

It is Ordered:

That John G. Hughes of Kansas City, Missouri, appointed on December 7, 1942, as Custodian of the funds to be impounded under the provisions of an Order of Stay entered in this proceeding on the same date, is hereby

authorized and instructed to purchase United States of America Treasury Tax Savings Notes, Tax Series C, with that portion of those funds to be paid to him for impoundment by Petitioners on or before February 25, 1943 (estimated to be approximately Six Hundred Seventy Five Thousand ($675,000.00) Dollars, over and above approximately Two Hundred Eighty One Thousand Six Hundred ($281,600.00) Dollars required to take up the unpaid balance of the Seventh-eighths Per Cent Treasury Certifi- [fol. 17002] cates of Indebtedness of Series E-1943 ordered for purchase by the Custodian pursuant to Order of this Court, dated December 12, 1942, and with all or substantially all of the funds to be so paid to him on or before March 25 [1942] payments for such notes to be made from his bank account Number 1.

It is further ordered that upon the purchase of such securities by the Custodian, he immediately deposit the same with the Federal Reserve Bank of Kansas City at its office in Kansas City, Missouri, in accordance with this Court's Order, dated December 12, 1942, instructing the Custodian with respect to the manner in which to properly handle and safeguard securities which he may from time to time purchase or come into possession of as such Custodian.

February 23rd, 1943.

[fol. 17003] (Stipulation that coloring matter appearing on certain Exhibits may be omitted from copies inserted in printed record, etc.)

United States Circuit Court of Appeals
Eighth Circuit

Panhandle Eastern Pipe Line Company, a corporation, et al., Petitioners,
No. 12,466 vs.
Federal Power Commission, et al., Respondents.

It is stipulated between Petitioners and Respondents as follows:

1. In preparation of the printed record, it shall be unnecessary to color the various charts incorporated in Ex-

hibits Nos. 63, 64 and 253. If the charts, without further designation, are not clear, it will be permissible to cross-hatch, dot, or otherwise distinguish different blocks.

2. Since the Commission did not incorporate in the record the rate schedules referred to in Exhibit No. 264, it will be permissible for Petitioners to furnish the Clerk, for incorporation in the printed record, Schedule 12 and Supplement No. 2 to Schedule 12, described in Petitioners' designation.

GLENN W. CLARK,
D. H. CULTON,
Attorneys for Petitioners.

HARRY S. LITTMAN,
Attorney for Federal Power Commission.

JAMES H. LEE,
Attorney for City of Detroit.

HAROLD GOODMAN,
Attorney for County of Wayne.

PARK CHAMBERLAIN,
Attorney for Michigan Consolidated Gas Company.

JAMES W. WILLIAMS,
Attorney for Michigan Public Service Commission.

(Endorsed): No. 12,466. Filed in U. S. Circuit Court of Appeals on March 25, 1943.

[fol. 7193] (Appearance of Mr. D. H. Culton as Counsel for Petitioners.)

The Clerk will enter my appearance as Counsel for the Petitioners.

D. H. CULTON.

(Endorsed): Filed in U. S. Circuit Court of Appeals, Nov. 14, 1942.

(Appearance of Mr. Glenn W. Clark as Counsel for Petitioners.)

The Clerk will enter my appearance as Counsel for the Petitioners.

GLENN W. CLARK.

(Endorsed): Filed in U. S. Circuit Court of Appeals, Nov. 14, 1942.

[fol. 7194] (Appearance of Mr. Robert J. Bulkley as Counsel for Petitioners.)

The Clerk will enter my appearance as Counsel for the Petitioners.

ROBERT J. BULKLEY.

(Endorsed): Filed in U. S. Circuit Court of Appeals, May 14, 1943.

(Appearance of Mr. Arthur G. Logan as Counsel for Petitioners.)

The Clerk will enter my appearance as Counsel for the Petitioners.

ARTHUR G. LOGAN.

(Endorsed): Filed in U. S. Circuit Court of Appeals, May 14, 1943.

[fol. 7195] Appearance of Mr. John S. L. Yost as Counsel for Petitioners.)

The Clerk will enter my appearance as Counsel for the Petitioners.

JOHN S. L. YOST.

(Endorsed): Filed in U. S. Circuit Court of Appeals, Mar. 13, 1944.

(Appearance of Mr. Charles V. Shannon and Mr. Harry S. Littman as Counsel for Respondent, Federal Power Commission.)

The Clerk will enter my appearance as Counsel for the Respondent, Federal Power Commission.

CHARLES V. SHANNON,
Assistant General Counsel.

HARRY S. LITTMAN,
Senior Attorney.

(Endorsed): Filed in U. S. Circuit Court of Appeals, Nov. 14, 1942.

[fol. 7196] (Appearance of Mr. James H. Lee as Counsel for Respondent, City of Detroit.)

The Clerk will enter my appearance as Counsel for the City of Detroit, Respondent.

JAMES H. LEE,
Assistant Corporation Counsel,
City of Detroit,
301 City Hall Bldg.,
Detroit, Michigan.

(Endorsed): Filed in U. S. Circuit Court of Appeals, Nov. 14, 1942.

(Appearance of Mr. Harold Goodman as Counsel for Respondent, County of Wayne.)

The Clerk will enter my appearance as Counsel for the respondent, County of Wayne.

HAROLD GOODMAN,
526 Dime Bank Bldg.,
Detroit, Mich.

(Endorsed): Filed in U. S. Circuit Court of Appeals, Nov. 14, 1942.

[fol. 7197] (Appearance of Mr. Park Chamberlain as Counsel for Respondent, Michigan Consolidated Gas Company.)

The Clerk will enter my appearance as Counsel for the Respondent, Michigan Consolidated Gas Company.

PARK CHAMBERLAIN.

(Endorsed): Filed in U. S. Circuit Court of Appeals, Nov. 14, 1942.

(Appearance of Mr. James W. Williams as Counsel for Respondent, Michigan Public Service Commission.)

The Clerk will enter my appearance as Counsel for the Respondent, Michigan Public Service Commission.

JAMES W. WILLIAMS,
502 State Office Bldg.
Lansing, Michigan.

(Endorsed): Filed in U. S. Circuit Court of Appeals, Dec. 19, 1942.

[fol. 7198] (Appearance of Mr. Henry A. Montgomery as Counsel for Respondents.)

The Clerk will enter my appearance as Counsel for the Respondents.

HENRY A. MONTGOMERY.

(Endorsed): Filed in U. S. Circuit Court of Appeals, Apr. 28, 1943.

(Appearance of Mr. A. V. McRee as Counsel for Respondents.)

The Clerk will enter my appearance as Counsel for the Respondents.

A. V. McREE,
415 Clifford Street,
Detroit, Michigan.

(Endorsed): Filed in U. S. Circuit Court of Appeals, May 1, 1943.

[fol. 7199] (Order of Submission.)

May Term, 1943.

Friday, May 14, 1943.

This cause having been called in its regular order, upon application of counsel for the respective parties in open Court, the time for oral argument was enlarged and permission granted for oral argument by more that two counsel on each side. Oral argument was made by Mr. D. H. Culton, Mr. Robert J. Bulkley and Mr. Arthur G. Logan for petitioners, and by Mr. Harry S. Littman, Principal Attorney Federal Power Commission, and Mr. Harold Goodman, Special Assistant Prosecuting Attorney for Wayne County, Michigan, for respondents.

Thereupon, this cause was submitted to the Court on the printed record and briefs of counsel filed herein.

[fol. 7200] (Order for Resubmission of Case to United States Circuit Court of Appeals.)

January Term, 1944.

Wednesday, January 12, 1944.

The case above entitled was argued and submitted to this Court at the May, 1943, Term at St. Paul, Minnesota. Decision was deferred pending a determination by the Supreme Court of the United States of the cases of Federal Power Commission, City of Akron and Pennsylvania Public Utility Commission vs. Hope Natural Gas Company; and City of Cleveland vs. Hope Natural Gas Company. Those cases have now been decided by that court. In view of the opinion of the Supreme Court in those cases, the division of this Court which heard this case considers that it is desirable that the case be resubmitted upon supplemental briefs and argument.

It is therefore ordered that the petitioners shall have until February 15, 1944, to file supplemental brief or briefs, that the respondents shall have until March 6, 1944, to file answering briefs, and that the petitioners shall have

until March 16 1944, to reply thereto. It is further ordered that this case be set down for argument on March 17, 1944, at Kansas City, Missouri, before the same division of this Court to which it was originally submitted.

January 12, 1944.

[fol. 7201] (Order resetting case for argument at Kansas City, Mo., on March 13, 1944.)

January Term, 1944.

Thursday, January 27, 1944.

This cause has heretofore been set down for argument on March 17, 1944, at Kansas City, Missouri, and it now appearing that the date of hearing should be changed, the case is now set for argument on Monday, March 13th, 1944, at Kansas City, Missouri, at ten o'clock in the forenoon. Briefs may be filed within the times provided for in the Order made by this Court January 12, 1944.

January 27, 1944.

[fol. 7202] (Order of Resubmission.)

March Term, 1944.

Monday, March 13, 1944.

This cause came on this day for reargument, in pursuance of the orders heretofore entered by this Court, and after hearing Mr. D. H. Culton for petitioners, Mr. Harry S. Littman, Assistant General Counsel, Federal Power Commission, for respondent, Mr. Harold Goodman, Special Assistant Prosecuting Attorney, for respondent Wayne County, Michigan, and Mr. John S. L. Yost for petitioners, this cause is thereupon taken by the Court as resubmitted on the record and briefs filed herein. Leave granted to respondent Federal Power Commission to hereafter file memorandum in response to petitioners' reply brief on reargument.

[fol. 7203] (Opinion.)

United States Circuit Court of Appeals
Eighth Circuit.

No. 12,466

Panhandle Eastern Pipe Line Company, a corporation, Illinois Natural Gas Company, a corporation, and Michigan Gas Transmission Corporation, a corporation,

Petitioners,

vs.

Federal Power Commission, City of Detroit, Michigan, County of Wayne, Michigan, Michigan Consolidated Gas Company, a corporation, and Michigan Public Service Commission,

Respondents.

On Petition to Review and Set Aside Order of Federal Power Commission.

[June 6, 1944]

Mr. D. H. Culton, Mr. Robert J. Bulkley, Mr. Arthur G. Logan, and Mr. John S. L. Yost (with whom Mr. Glenn W. Clark and Mr. Ira Lloyd Letts were on the briefs) for petitioners.

Mr. Harry S. Littman, Assistant General Counsel, Federal Power Commission, and Mr. Harold Goodman, Special Assistant Prosecuting Attorney, County of Wayne, Michigan, (with whom Mr. Charles V. Shannon, Gen-

eral Counsel, Federal Power Commission, Mr. Robert L. Russell, Attorney, Federal Power Commission, Mr. Paul E. Krause, Corporation Counsel, City of Detroit, Michigan, Mr. James H. Lee, Assistant Corporation Counsel, City of Detroit, Michigan, Mr. William E. Dowling, Prosecuting Attorney, County of Wayne, Michigan, and Mr. Park Chamberlain, Mr. Henry A. Montgomery and Mr. A. V. McRee, counsel for respondent Michigan Consolidated Gas Company, were on the briefs) for respondents.

Before SANBORN, WOODROUGH, and RIDDICK, Circuit Judges.

SANBORN, Circuit Judge, delivered the opinion of the Court.

The petitioners, pursuant to §19(b) of the Natural Gas Act,[1] seek a review and reversal of an interim rate reduction order made by the Federal Power Commission on September 23, 1942. The case was argued and submitted at the May, 1943, term of this Court. Decision was deferred awaiting the determination by the Supreme Court of the United States of the cases of *Federal Power Commission, et al.* v. *Hope Natural Gas Company*, and *City of Cleveland* v. *Hope Natural Gas Company*. After the opinion in those cases was rendered (January 3, 1944, 320 U.S. 591) a resubmission of the instant case at the March, 1944, term of this Court, upon supplemental briefs and a reargument, was ordered, so that we might have the benefit of the views of counsel as to the impact of the opinion of the Supreme Court in the Hope Natural Gas Company cases upon the questions here involved.

The petitioners are Panhandle Eastern Pipe Line Company and its wholly owned subsidiaries, Illinois Natural Gas Company and Michigan Gas Transmission Corpora-

[1] Act of June 21, 1938, c. 556, 52 Stat. 821, 831; 15 U.S.C.A. §717r(b).

tion. Their separate holdings constitute a single system for the gathering, transportation, and sale of natural gas, and appropriately may be regarded and referred to as though jointly owned and operated by the petitioners. The respondents are Federal Power Commission, City of Detroit, Michigan, County of Wayne, Michigan, Michigan Consolidated Gas Company, and Michigan Public Service Commission.

The petitioners gather, through production and purchase, natural gas in the Amarillo gas field of the Texas Panhandle and in the Hugoton gas field in southwestern Kansas. This gas is transported to markets through a main transmission pipeline which extends for a distance of about 860 miles from a point in Moore County, Texas, across the states of Oklahoma, Kansas, Missouri and Illinois, to a point near Dana, Indiana, close to the Illinois-Indiana boundary, where the line connects with a transmission pipeline extending from Dana, Indiana, to a point near Zionsville, Indiana, where the line branches. One branch runs to Detroit, Michigan, and the other to Muncie, Indiana. Lateral pipelines extend from petitioners' main transmission line in Illinois. Through their system of pipelines, natural gas is marketed by the petitioners, mainly for resale, in Texas, Kansas, Missouri, Illinois, Indiana, Michigan, and Ohio. The petitioners serve more than 200 communities and upwards of 700,000 consumers of gas and have the longest natural gas pipeline in existence.

On February 28, 1941, the City of Detroit and the County of Wayne, Michigan, filed a petition with the Federal Power Commission, asserting that the rates and charges of petitioners Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation for natural gas sold to Michigan Consolidated Gas Company, for resale in that City and County, were unjust, unreasonable and unduly discriminatory. On May 22, 1941, the Commission, of

its own motion, instituted an investigation of the wholesale rates and charges of those two petitioners for natural gas. The investigation was later enlarged to include the Illinois Natural Gas Company. The two proceedings before the Commission, known as Docket No. G-200 and Docket No. G-207, were consolidated for hearing. The Michigan Consolidated Gas Company and the Michigan Public Service Commission were permitted to intervene. The hearing was begun on July 15, 1941, before a trial examiner, and continued from time to time thereafter until April 23, 1942. More than 10,000 pages of testimony was taken, and more than 250 exhibits were received in evidence.[2]

On April 23, 1942, the trial examiner adjourned the hearing pending the disposition of motions filed by counsel for the Federal Power Commission and by the City of Detroit, the County of Wayne, and Michigan Consolidated Gas Company for an interim order directing a reduction of petitioners' rates pending further hearing and investigation. It appears that the complainants before the Commission were contending that petitioners' rates should immediately be reduced by $6,800,479 per annum, and that counsel for the Commission and the Michigan Consolidated Gas Company were urging a rate reduction of approximately $5,500,000 per annum.

The Commission filed its opinion on September 23, 1942. It took the year 1941 as the appropriate test period. It found that the "Actual Cost of Gas Plant in Service at

[2] In describing the hearing, the Commission in its opinion states:

"The complainants [City of Detroit and County of Wayne, Michigan] offered one witness in support of their petition. The respondents [petitioners in this Court] offered 24 witnesses who presented a complete rate case including, among other matters, evidence of operations, revenues, expenses, book cost and original cost of their properties, 'going concern value,' working capital, gas reserves, depreciation, rate of return, future capital expenditures and allocation of costs. Counsel for the Commission called 5 witnesses whose testimony related principally to depreciation, a write-up, historical earnings on average net investment, working capital, rate of return, and allocation of costs. The interveners [Michigan Public Service Commission and Michigan Consolidated Gas Company] presented no witnesses. The witnesses were tendered to all parties for cross-examination and full opportunity was given to present rebuttal evidence."

December 31, 1941," was $78,814,292; that accrued depreciation was $12,596,987; that the actual cost less accrued depreciation was $66,217,305. To this amount the Commission added $920,000 for working capital; and this produced a rate base of $67,137,305. The Commission determined that a fair annual rate of return was 6½% of that amount, or $4,363,920; that the net operating revenue of petitioners for 1941 ("Available for Return") was $9,458,309, which was $5,094,384 in excess of the return found by the Commission to be reasonable. The Commission concluded that to that extent the rates and charges of petitioners were unjust, unreasonable, unlawful, and violative of the provisions of the Natural Gas Act. The order of the Commission, filed September 23, 1942, required that:

"The rates and charges made, demanded, or received by the respondents [petitioners here] for or in connection with their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption shall be so reduced as to reflect, when applied to respondents' [petitioners'] 1941 transportation and sales, a reduction of not less than $5,094,384 per annum below their 1941 consolidated gross operating revenues of $17,789,573; . . ."

The petitioners contend that the order of the Commission is invalid because: (1) The trial examiner excluded relevant and material evidence of the value of their property; (2) the Commission erred in assuming jurisdiction over the petitioners' production and gathering of natural gas; (3) the Commission erred in assuming jurisdiction over the petitioners' revenues from direct sales of gas to customers for their own use; (4) the return allowed by the Commission is unjust, unreasonable and confiscatory.

These contentions will be considered in their order.

1.

The petitioners state that the evidence offered by them and rejected by the trial examiner showed that the present

reproduction or replacement cost of Panhandle Eastern's physical properties as of June 30, 1941, less observed and determined depreciation, was $7,892,174 greater than original cost less book reserves; that the present reproduction cost of the physical properties of the Michigan Gas Transmission Corporation, similarly ascertained, was $2,933,808 in excess of actual cost less book reserves; and that Panhandle Eastern's leaseholds have a present market value $7,384,626 greater than the net investment therein as shown by its books. The rejected evidence tended to establish a reproduction cost or replacement value, less observed depreciation, for all of the petitioners' property of $83,957,083.

The ruling of the trial examiner excluding this evidence was approved by the Commission in its opinion of September 23, 1942. The reasons given by the Commission for its approval of the exclusion of the evidence of reproduction cost are, in substance: that §6(a) of the Natural Gas Act [15 U.S.C.A. §717e(a)] provides that "The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property;" that there is no need for estimating the cost of petitioners' property; that petitioners' cost records are accurate, complete and properly maintained; that their plant was constructed in recent years and there is no difficulty in ascertaining from petitioners' books the actual legitimate cost of or investment in their property; that the Commission has held that reproduction cost evidence is inherently fallacious and should be disregarded under the statute; that the defects of such evidence have been pointed out by the Supreme Court of the United States; that it seems evident that Congress recognized the fallacy of the reproduction cost doctrine and sought by the enactment of

§6(a) to do away with that concept of rate-making; that the Supreme Court, in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U.S. 575, 586, said:

"The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances;"

that, in a concurring opinion in that case, Justices Black, Douglas, and Murphy said (p. 606 of 315 U.S.):

"As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or of giving any weight to that element of 'fair value.' The Commission may now adopt, if it chooses, prudent investment as a rate base — the base long advocated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in the Southwestern Bell Telephone case [*Southwestern Bell Telephone Co.* v. *Public Service Commission*, 262 U.S. 276], there could be no constitutional objection if the Commission adhered to that formula and rejected all others;"

that the Commission has been authorized by Congress to determine in the first instance the actual legitimate cost of utility properties and the depreciation therein; that the rate base is such cost less existing depreciation, plus necessary working capital; that it is certain from the record that no necessity exists requiring consideration of other facts in determining a rate base in these proceedings.

The petitioners assert that the power granted to the Commission under the Natural Gas Act to reduce rates can be exercised only if the Commission, after a full and fair hearing, shall determine that existing rates are unjust, unreasonable, unduly discriminatory or preferential [§5(a) of the Act; 15 U.S.C.A. §717d]; that the duties of the Commission are of a quasi judicial character; that it must receive and consider any evidence that might or could be

determined by a fair-minded person to be material in reaching a determination of the ultimate fact, namely, a fair price for the commodity sold or the service rendered; that, in determining the just and reasonable return to be allowed, any and all evidence which is relevant must first be admitted and considered.

Apparently no court has as yet ruled that the Federal Power Commission may, in a rate hearing, refuse to receive and consider evidence of replacement or reproduction cost of the properties of a company subject to the Natural Gas Act. It was held, in effect, in the case of *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U.S. 575, 586, 606-607, and in the *Hope Natural Gas Company* cases, 320 U.S. 591, 602-605, that the Commission was not bound to give weight to such evidence in determining rates.

Nevertheless, the question whether the refusal of the Commission to receive the evidence of reproduction or replacement cost or value offered by the petitioners amounted to a denial of due process is not free from doubt. That §6(a) of the Natural Gas Act authorizes the Commission to reject evidence which it regards as not "necessary for rate-making purposes" is questionable. There is little to indicate that Congress, in enacting §6(a), intended to change the law of evidence. That section apparently relates to the investigation and ascertainment by the Commission of material facts relevant to the question of "fair value", and probably has no controlling effect upon the admissibility of evidence at a rate hearing.

In *Donnelly Garment Co.* v. *National Labor Relations Board*, 8 Cir., 123 F.2d 215, 224, this Court said:

"That a refusal by an administrative agency such as the National Labor Relations Board to receive and consider competent and material evidence offered by a party to a proceeding before it, amounts to a denial of due process is not open to debate."

And:

"• • • That the Board would or might have reached no different conclusion had the rejected evidence been received, is entirely beside the point. The truth is that a controversy tried before a court or before an administrative agency is not ripe for decision until all competent and material evidence proffered by the parties has been received and considered."

This is a correct statement of the law. The respondents do not contend to the contrary, but deny the applicability of the rule in the instant case. The evidence rejected in the Donnelly Garment Company case was competent, relevant and material. It bore directly upon the issue being tried by the National Labor Relations Board, namely, whether an independent union of the employees of the Donnelly Garment Company was company-dominated or not. The basis for rejecting the evidence in that case was, in substance, that it was not worthy of belief and would not be credited.

The case of *Pittsburgh Plate Glass Co.* v. *National Labor Relations Board*, 313 U.S. 146, indicates that the rejection of relevant evidence by an administrative agency does not always constitute a denial of due process. In that case the question before the Board was whether all of the employees at all of the plants of the Glass Company constituted an appropriate unit for collective bargaining or whether the employees at the Crystal City plant of the company, who had an independent union of their own and wanted to have their own bargaining representative, should be considered a separate unit. The Board determined to disregard the wishes of the employees at the Crystal City plant, and excluded evidence thereof. The Board had a wide discretion with respect to the selection of the appropriate unit for the purposes of collective bargaining. The Glass Company contended that, in rejecting relevant evidence as to the wishes and situation of the employees at the Crystal City plant, the Board had denied a fair hearing. This

Court, on review of the Board's order, thought that, under the circumstances of that case, the rejection of the evidence did not amount to a denial of due process. *(Pittsburgh Plate Glass Co.* v. *National Labor Relations Board,* 8 Cir., 113 F.2d 698, 703.) The Supreme Court affirmed, saying (page 163 of 313 U.S.):

"Further, if we consider all the contentions about exclusion of evidence together instead of separately, we do not find that in the aggregate the evidence excluded could have materially affected the outcome on the 'appropriate unit' issue, in the light of the criteria by which the Board determined that issue."

Mr. Justice Stone, in expressing his dissent and that of Mr. Chief Justice Hughes and Mr. Justice Roberts, said in conclusion (page 177 of 313 U.S.):

"One of the most important safeguards of the rights of litigants and the minimal constitutional requirement, in proceedings before an administrative agency vested with discretion, is that it cannot rightly exclude from consideration facts and circumstances relevant to its inquiry which upon due consideration may be of persuasive weight in the exercise of its discretion. *Interstate Commerce Commission* v. *Chicago, R. I. & P. Ry. Co.*, 218 U.S. 88, 102; *St. Joseph Stock Yards Co.* v. *United States*, 298 U.S. 38, 75, 78; *Ohio Bell Telephone Co.* v. *Commission*, 301 U.S. 292, 304, 305."

The majority opinion of the Supreme Court in the Pittsburgh Plate Glass Company case indicates that where an administrative agency has authority to choose the criteria determinative of an issue of fact, it may reject evidence which has no materiality in view of the criteria adopted, and that, under those circumstances, the rejection of such evidence is not a denial of due process.

The Federal Power Commission is not bound "to the service of any single formula or combination of formulas" *(Federal Power Commission* v. *Natural Gas Pipeline Co., supra,* p. 586 of 315 U.S.) in fixing rates. It follows that the

Commission may, for rate-making purposes, select any permissible formula or combination of formulas which it considers appropriate under the circumstances. While one may reasonably believe that the Commission should in any case receive all evidence which is relevant and material under any theory of rate making, we think it cannot be said, in view of the majority opinion in the Pittsburgh Plate Glass Company case (313 U.S. 146), that the rejection of evidence of reproduction cost or of market or replacement value in the case before us amounted to a denial of due process requiring a remand of the proceeding to the Commission. It is, of course, apparent from the opinion of the Commission that the remand of this proceeding so that the evidence offered and rejected might be received, considered, and then disregarded by the Commission, would be a useless formality. The Commission has stated that it regards such evidence as valueless under the circumstances of this case, and considers that the legitimate cost or prudent investment formula is alone applicable. While the importance of requiring administrative agencies to observe the minimal requirements of due process cannot be over-emphasized, practical considerations are not to be completely ignored in determining whether a case shall be remanded, where the rights of a party have not been prejudiced by the rejection of evidence which, though admissible, is immaterial in the light of permissible criteria adopted by an agency for determining the issue before it. Moreover, for the purpose of review, this Court may assume that the proffered evidence, if admitted, would have proved all that the petitioners claim for it, namely, that the reproduction cost of their property, less observed depreciation, on June 30, 1941, was $83,957,083.

2.

The second question is whether the Commission erroneously assumed jurisdiction over the petitioners' production and gathering of natural gas.

Section 1(b) of the Natural Gas Act [15 U.S.C.A. §717(b)] reads:

"The provisions of this Act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas."

The basis for the petitioners' assertion that the Commission unlawfully exercised jurisdiction over their facilities used in the production of natural gas seems to be that the inclusion in the rate base of the depreciated book cost of such facilities, instead of their present enhanced market value, was erroneous and amounted to an abuse of power.

Petitioners claimed before the Commission, and offered to prove, that leaseholds which were carried on their books at less than $1,000,000 had a market value of about $8,400,000. In their reply brief on reargument, petitioners concede the right of the Commission to value their production property, but state that.—

"Their objection to the Commission's procedure is that it refused to admit *evidence from which such a valuation could have been made.* Having refused to admit that evidence, it erred in entering an order which, in effect, limits petitioners' earnings from their production and gathering properties to a return far below that which would have resulted had the Commission determined the value of the gas through a consideration of the present value of petitioners' production and gathering properties. The entering of this arbitrary order after the exclusion of evidence from which the *value* of the gas at the point where it enters the interstate pipe line could have been determined necessarily constituted an exercise of jurisdiction over produc-

tion and gathering, a jurisdiction expressly withheld from the Commission."

That is saying, in effect, that the jurisdiction of the Commission extends to making a valuation of petitioners' gathering and production facilities, for rate-making purposes, provided that the Commission does not use a method or apply a formula which results in an underestimate of the value of the gas produced. If there is an infirmity in the Commission's determination of the amount which should be included in the rate base as the cost or value of such facilities, we think the infirmity arises from the method used in making the valuation, and not from any lack of jurisdiction. Since the Commission was not obliged to adopt reproduction or replacement cost in determining "fair value" for rate-making purposes, but could adopt the actual cost or prudent investment formula as a basis, it is impossible for us to say that the Commission exceeded its power in not including in the rate base the present market value of petitioners' leaseholds. The Commission could, no doubt, have increased the rate base by the enhancement in market value of the leaseholds, but we think it was not compelled to do so.

3.

The third question is whether the order is invalid because of the Commission's failure to make an allocation or segregation of revenues derived from direct sales of gas to customers for their own use.

Concededly, the Commission has not fixed the petitioners' rates for such sales, and has only prescribed reduced rates for interstate sales of natural gas for the purpose of resale. The petitioners assert, however, that the necessary effect of the Commission's order is to reduce their rates and revenues on all sales and to deprive them of substantial profits from direct sales, and amounts to an as-

sumption of jurisdiction over a part of their business which the Commission may not regulate.

The reasons given by the Commission for declining to make an allocation or segregation of revenues are that the direct sales are made to 19 industrial customers on an interruptible basis, and at prices fixed by competition with other fuels; that no plant capacity has been provided for the direct industrial customers; that deliveries to them are made only when there is excess capacity not required by wholesale customers; that $128,848 of the entire investment in plant (less than one-sixth of one per cent) is used exclusively in the service of the direct sales; that petitioners treat their entire business as a unit and make no segregation of costs or profits as between the two classes of sales; that the incidental direct industrial business of petitioners is in reality a by-product of the wholesale business, comparable to the petitioners' gasoline extraction business; and that there is no showing that the direct sales are so distinct and separate from the general wholesale business that the two cannot be considered together.

The respondents deny that an allocation or segregation of the revenues and expenses attributable to direct sales would have materially affected the result or that the Commission's order reduces the petitioners' income from direct sales. The respondents contend that the order of the Commission gives the petitioners more than the return on direct sales which they contended in their evidence they were entitled to receive. The petitioners, however, assert that the order of the Commission takes from them approximately one-half of the revenue of $1,000,828 a year derived from direct sales.

The record indicates that the 1941 revenue of petitioners from direct industrial sales less expenses, but before Federal income taxes, was $1,000,828; that a fair allocation of

this revenue would be to treat one-half of it as derived from direct sales; and that the net amount properly attributable to that nonregulated portion of the business would be $319,656 ($500,414 return less $180,758 income taxes at 1941 tax rates). Under the Commission's order, the petitioners are allowed a 6½% return ($4,363,925) on their entire business. Under the method of allocation proposed by an expert witness of the Commission, $4,017,878 of the return would be attributable to sales at wholesale (subject to regulation), and $346,047 to direct industrial sales (not subject to regulation). There is in the record a substantial basis for the Commission's conclusion that, in determining reasonable rates for sales of natural gas subject to regulation, it was unnecessary to make a segregation of revenues attributable to sales not subject to regulation, and that, if a segregation had been made, it would not materially have affected the result.

In determining whether the wholesale rates of a natural-gas company subject to the Act are unreasonable, the Commission is, no doubt, obligated to give appropriate consideration to the fact that the revenues of the company derived from direct sales to customers are not subject to regulation. A failure of the Commission to give appropriate effect to that fact, unless arbitrary or capricious, does not, we think, deprive the Commission of its jurisdiction to make a rate order with respect to sales which are subject to regulation. Jurisdiction to decide a doubtful question of fact includes jurisdiction to decide it either correctly or incorrectly. *Pittsburgh Plate Glass Co.* v. *National Labor Relations Board*, 8 Cir., 113 F.2d 698, 701. The adjustments made necessary by reason of the fact that certain of the sales and revenues of the petitioners are not subject to regulation are, we think, "pragmatic adjustments * * * called for by particular circumstances" (*Federal Power Commission* v. *Natural Gas Pipeline Co.*,

315 U.S. 575, 586), which the Commission has power to make.

4.

The last question for consideration is whether the return allowed by the Commission has been shown to be unjust, unreasonable or confiscatory.

The opinion of the Supreme Court in the Hope Natural Gas Company cases indicates to us that, aside from questions relating to procedural due process and to jurisdiction, a reviewing court may interest itself only in the effect of the Commission's order. The court cannot concern itself with the Commission's choice of formulae or the propriety of the methods employed by it in reaching its conclusion, but only with the consequences of the order made. If the effect of the order is to deny to the utility a return sufficient reasonably to meet its necessities and to enable it to continue to render adequate public service, the order is arbitrary and confiscatory and may be set aside. It seems apparent that the Supreme Court is presently of the opinion that, within broad limits, the Federal Power Commission should be freed from judicial interference in regulating rates of natural-gas companies. It is evidently no longer necessary for a reviewing court to consider many of the doubtful and debatable questions which ordinarily arise in every rate case, such as: Whether replacement or reproduction cost less observed depreciation, or prudent investment, or historical cost, shall be used as a rate base; whether proper allocation of revenues which are subject to regulation and revenues which are not subject to regulation has been made by the Commission; whether the cost or value of items of property which, for reasons deemed sufficient by the Commission, have been excluded by it from the rate base should have been included; whether the Commission has given due consideration to every

pertinent fact; and whether the reasoning of the Commission which underlies its final determination is sound or unsound.[3]

The order of the Commission must be affirmed unless the petitioners have made a convincing showing that it is unreasonable in its consequences because the return allowed is insufficient to enable them to meet their expenses of operation, to pay interest on their bonds and dividends on their stock, to maintain their credit, and to attract capital, or is clearly out of line with the returns on investments in enterprises involving comparable risks.

In the Hope Natural Gas Company cases, original investment or actual cost had been estimated at about $70,000,000, of which $17,000,000 had been charged to operating expenses. The Commission found "actual legitimate cost" to be $51,975,416. From this it deducted $22,328,016 for depletion and depreciation. It added $1,392,021 for future net capital additions, $566,105 for

[3] In *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U.S. 591, 602-603, the Supreme Court said:

"We held in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, *supra* [315 U.S. 575], that the Commission was not bound to the use of any single formula or combination of formulae in determining rates. Its rate-making function, moreover, involves the making of 'pragmatic adjustments.' Id., p. 586. And when the Commission's order is challenged in the courts, the question is whether that order 'viewed in its entirety' meets the requirements of the Act. Id., p. 586. Under the statutory standard of 'just and reasonable' it is the result reached not the method employed which is controlling. Cf. *Los Angeles Gas & Electric Corp.* v. *Railroad Commission*, 289 U.S. 287, 304-305, 314; *West Ohio Gas Co.* v. *Public Utilities Commission* (No. 1), 294 U.S. 63, 70; *West* v. *Chesapeake & Potomac Tel. Co.*, 295 U.S. 662, 692-693 (dissenting opinion). It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end. The fact that the method employed to reach that result may contain infirmities is not then important. Moreover, the Commission's order does not become suspect by reason of the fact that it is challenged. It is the product of expert judgment which carries a presumption of validity. And he who would upset the rate order under the Act carries the heavy burden of making a convincing showing that it is invalid because it is unjust and unreasonable in its consequences. Cf. *Railroad Commission* v. *Cumberland Tel. & T. Co.*, 212 U.S. 414; *Lindheimer* v. *Illinois Bell Tel. Co.*, *supra* [292 U.S. 151] pp. 164, 169; *Railroad Commission* v. *Pacific Gas & Electric Co.*, 302 U.S. 388, 401.

"The rate-making process under the Act, i. e., the fixing of 'just and reasonable' rates, involves a balancing of the investor and the consumer interests.

useful unoperated acreage, and $2,125,000 for working capital. This produced a rate base of $33,712,536, which was about one-half of the amount claimed by the company to have been actually invested, and was also about one-half of estimated reproduction cost less depreciation. The allowed return of 6½% upon this rate base gave the Hope Natural Gas Company an annual return of $2,191,314, as compared with a return of $5,801,171 during the test year 1940.

In the instant case, petitioners assert that the "prudent investment" (as of December 31, 1941) upon which they were entitled to earn a fair return was at least $75,725,676. As already stated, the Commission found actual legitimate cost to be $78,814,292; deducted $12,596,987 for depreciation; and added $920,000 for working capital; producing a rate base of $67,137,305. The Commission declined to include in the rate base $4,944,820 invested in construction work in progress, and budget estimates of $6,372,100 to complete construction. The Commission found that the facilities under construction were to meet new demands for

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Thus we stated in the Natural Gas Pipeline Co. case that 'regulation does not insure that the business shall produce net revenues.' 315 U.S. p. 590. But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. Cf. *Chicago & Grand Trunk Ry. Co.* v. *Wellman*, 143 U.S. 339, 345-346. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital. See *Missouri ex rel. Southwestern Bell Tel. Co.* v. *Public Service Commission*, 262 U.S. 276, 291 (Mr. Justice Brandeis concurring). The conditions under which more or less might be allowed are not important here. Nor is it important to this case to determine the various permissible ways in which any rate base on which the return is computed might be arrived at. For we are of the view that the end result in this case cannot be condemned under the Act as unjust and unreasonable from the investor or company viewpoint."

The court also said (page 605 of 320 U.S.)

"• • • Rates which enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed certainly cannot be condemned as invalid, even though they might produce only a meager return on the so-called 'fair value' rate base."

service to territory not already served by the petitioners, the revenues from which could not be estimated. The 6½% return allowed by the Commission gave petitioners a return of $4,363,925 annually over and above expenses of operation and allowances for depreciation, depletion, amortization, and taxes. The petitioners' long-term debt as of February 28, 1942, was $33,254,500. The annual interest cost upon it was determined to be 2.88%, or $957,730. The preferred stock outstanding was $16,000,000, and the dividend cost upon it was found to be 5.87%, or $939,200 annually. Therefore, the service cost on bonds and preferred stock is $1,896,930 per annum; leaving $2,466,995 as earnings for the comon stock. Petitioners have common stock outstanding to the amount of $20,184,175. The annual return upon common stock under the rates allowed by the Commission exceeds 12%. Petitioners, however, contend that they are entitled to at least a 12% return on their common stock and surplus, which together amount to $27,294,990. They state that unless they have such a return the common stock will not be attractive to purchasers. They argue that the least amount they should be allowed to earn upon common stock and surplus is $3,275,399, and that the return allowed by the Commission is about $800,000 short of being adequate. They also refer to the fact that sinking fund requirements and necessary additions to surplus will or may prevent adequate distributions of earnings to common stockholders.

It is, to say the least, doubtful that earnings of approximately $2,500,000 annually (9%) upon the common stock and surplus of petitioners — whether such earnings are distributed each year or accumulated — would make the petitioners' securities unattractive to purchasers. The evidence indicates that such a return compares not unfavorably with the returns upon similar investments involving comparable risks. In any event, there is nothing in the opinion in the Hope Natural Gas Company cases to

justify a belief that this Court could successfully substitute its judgment for that of the Commission with respect to the debatable question whether the return allowed the petitioners is sufficient to attract investors, or that we could invalidate the Commission's order upon the theory that the return allowed is obviously so unfair and inadequate as to be confiscatory.

Attention should be directed to the fact that the order complained of is not final and irrevocable. *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U.S. 591, 615. It must be assumed that if actual experience demonstrates that the rates as reduced by the Commission are unreasonably low, the Commission will allow the petitioners to increase their rates. This Court cannot presume that if either unreasonably low or unreasonably high interim rates are prescribed by the Commission, they will be perpetuated. We regard the order under review as a preliminary one made to cover a reasonable test period and subject to change by the Commission if experience shall prove that the rates fixed are either too low or too high.

Unless we have misconceived the teachings and implications of the opinion of the Supreme Court in the Hope Natural Gas Company cases, the standards by which the validity of the Commission's order is to be judged require its affirmance.

We shall, of course, retain jurisdiction over the funds which have been and are being impounded under the stay order which was granted by this Court to preserve the *status quo* pending the final determination of this case.

The mandate of this Court will be withheld for sixty days to allow the petitioners to apply to the Supreme Court for certiorari. If certiorari is applied for within that time, the mandate will be retained until the applica-

tion is ruled upon, and, if it is granted, until the case is finally determined.

The order of the Commission is affirmed.

RIDDICK, Circuit Judge, dissenting.

I agree with the result reached by the majority on all points decided except on the question concerning the refusal of the Commission to make an allocation as between the interstate sales and transportation of petitioners, subject to the Commission's jurisdiction, and their interstate sales and transportation beyond the jurisdiction of the Commission. Heretofore, the Commission has recognized the necessity of such an allocation and has made it. *Re Interstate Natural Gas Co., Inc.*, 48 PUR (NS) 267, 279; *Re Canadian River Gas Co., et al.*, 43 PUR (NS) 205, 231; *Re Cities Service Gas Co.*, 50 PUR (NS) 65, 89. That a separation of transactions within and beyond the jurisdiction of the Commission is required by the Natural Gas Act, and must be made in order that "regulation may be confined to its permitted field" is held in *Colorado Interstate Gas Co.* v. *Federal Power Commission*, 10 Cir., decided May 16, 1944. Here the Commission has admittedly refused to observe the limit upon its jurisdiction, fixed by Congress. In this situation it seems to me idle to inquire whether the Commission's order, call it a "pragmatic adjustment" or what-not, does or does not result in confiscation of petitioners' property, or whether it is less or more favorable to petitioners than would have been the case had the Commission confined itself to its permitted field. It is enough to require a remand of this proceeding that the Commission has exceeded the statutory limitation on its powers.

[fol. 7226] (Judgment.)

United States Circuit Court of Appeals
Eighth Circuit.

May Term, 1944.

Tuesday, June 6, 1944.

Panhandle Eastern Pipe Line Company, a corporation, Illinois Natural Gas Company, a Corporation, and Michigan Gas Transmission Corporation, a Corporation, Petitioners,

No. 12466 vs.

Federal Power Commission, City of Detroit, Michigan, County of Wayne, Michigan, Michigan Consolidated Gas Company, a Corporation, and Michigan Public Service Commission.

On Petition to Review and Set Aside Order of Federal Power Commission.

This cause came on to be heard on the petition to review and set aside the order of the Federal Power Commission dated September 23, 1942, as amended October 12, 1942, and was argued by counsel.

On Consideration Whereof, It is now here Ordered and Adjudged by this Court that the order of the Federal Power Commission in this cause be, and the same is hereby, affirmed without taxation of costs in this Court in favor of either of the parties.

It is further Ordered by this Court that jurisdiction over the funds which have been and are being impounded under the stay order which was granted by this Court to [fol. 7227] preserve the status quo pending the final determination of this case be, and is by the Court hereby, retained.

And it is further Ordered by this Court that issuance of mandate in this cause be withheld for a period of sixty days from and after this date to allow the petitioners to apply to the Supreme Court of the United States for a writ of certiorari. If certiorari is applied for within that

time the mandate will be retained until the application is ruled upon, and, if it is granted, until the case is finally determined.

June 6, 1944.

[fol. 7228] (Clerk's Certificate.)

United States Circuit Court of Appeals
Eighth Circuit

I, E. E. Koch, Clerk of the United States Circuit Court of Appeals for the Eighth Circuit, do hereby certify that the foregoing transcript composed of sixteen volumes, Volume I consisting of pages a to 512, inclusive, Volume II consisting of pages 513 to 1024, inclusive, Volume III consisting of pages 1025 to 1520, inclusive, Volume IV consisting of pages 1521 to 2016, inclusive, Volume V consisting of pages 2017 to 2512, inclusive, Volume VI consisting of pages 2513 to 3040, inclusive, Volume VII consisting of pages 3041 to 3536, inclusive, Volume VIII consisting of pages 3537 to 4056, inclusive, Volume IX consisting of pages 4057 to 4429, inclusive, Volume X consisting of pages 4431 to 4852, inclusive, Volume XI consisting of pages 4853 to 5267, inclusive, Volume XII consisting of pages 5269 to 5603, inclusive, Volume XIII consisting of pages 5605 to 5967, inclusive, Volume XIV consisting of pages 5969 to 6243, inclusive, Volume XV consisting of pages 6245 to 6725, inclusive, and Volume XVI consisting of pages 6727 to 7229, inclusive, contains the transcript of the record on Petition to Review and Set Aside Order of Federal Power Commission as prepared and printed, pursuant to designations, under the rules of the United States Circuit Court of Appeals for the Eighth Circuit, under the supervision of its Clerk, and full, true and complete copies of the pleadings, record entries and proceedings, including the opinion, had and filed in the United States Circuit Court of Appeals, except the full [fol. 7229] captions, titles and endorsements omitted in pursuance of the rules of the Supreme Court of the United States, prepared at the direction of counsel for petitioners, in a certain matter in said Circuit Court of Appeals wherein Panhandle Eastern Pipe Line Company, a Corporation, et al., were Petitioners, and the Federal Power Commis-

sion, et al., were Respondents, No 12466, as full, true and complete as the originals of the same remain on file and of record in my office.

In Testimony Whereof, I hereunto subscribe my name and affix the seal of the United States Circuit Court of Appeals for the Eighth Circuit, at office in the City of St. Louis, Missouri, this 11th day of July, A. D. 1944.

(Seal)

E. E. KOCH,
Clerk of the United States Circuit Court of Appeals for the Eighth Circuit.

[fol. 7230] SUPREME COURT OF THE UNITED STATES

ORDER ALLOWING CERTIORARI—January 3, 1945

On Petition for Writ of Certiorari to the United States Circuit Court of Appeals for the Eighth Circuit.

A motion for leave to file a petition for rehearing and petition for rehearing having been submitted in this case to enlarge the scope of review.

Upon consideration thereof, it is ordered by this Court that the motion for leave to file and petition for rehearing be, and the same are hereby, granted.

The order of November 13, 1944, granting certiorari is vacated. The petition for writ of certiorari herein is granted limited to questions 2 and 3 presented by the petition for the writ.

And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

JUL 28 1944
CHARLES ELMORE CROPLEY

No. 296

IN THE

Supreme Court of the United States

OCTOBER TERM, 1944

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY, AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS

v.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

THE TWENTIETH CENTURY PRESS, INC., CHICAGO

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v.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION, RESPONDENTS

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

To the Honorable the Chief Justice and the Associate Justices of the Supreme Court of the United States:

Panhandle Eastern Pipe Line Company, a Delaware corporation (herein referred to as "Panhandle Eastern"), Illinois Natural Gas Company, an Illinois corporation (herein referred to as "Illinois Natural"), and Michigan Gas Transmission Corporation, a Delaware corporation (herein referred to as "Michigan Gas"), pray that a writ of certiorari issue to review the judgment of the United States Circuit Court of Appeals for the Eighth Circuit entered in the above cause on June 6, 1944.

OPINIONS BELOW

The opinion of the court below (R. 7198) and the dissent thereto (R. 7218) filed June 6, 1944, are not yet officially reported. The opinion of the Federal Power Commission was entered September 23, 1942 (R. 14).

JURISDICTION

The judgment of the Circuit Court of Appeals was entered on June 6, 1944 (R. 7219). Jurisdiction of this Court is invoked under Section 240 (a) of the Judicial Code, as amended by the Act of February 13, 1925, and section 19 (b) of the Natural Gas Act.

STATUTE INVOLVED

The pertinent provisions of the Natural Gas Act, approved June 21, 1938 (52 Stat. 821; 15 U. S. C. 717), are set forth in the Appendix hereto (pp. 29-31).

QUESTIONS PRESENTED

(1) Whether the refusal of the Commission to receive evidence of reproduction or replacement cost and evidence of the value of petitioners' producing properties amounted to a denial of due process.

(2) Whether limiting the sale price of petitioners' gas for resale so as to provide an over-all return of 6½ per cent on the depreciated cost of petitioners' properties including those devoted to production and gathering of natural gas and excluding petitioners' tendered evidence as to the market value of petitioners' gas leaseholds constituted an exercise of jurisdiction over production and gathering of natural gas in violation of the Natural Gas Act.

(3) Whether the Commission's action in treating petitioners' business as an entirety and refusing to make any allocation or separation with respect to petitioners' regulated and unregulated sales was beyond its statutory power.

(4) Whether the return allowed by the Commission and affirmed by the court below is just and reasonable under the tests and standards established by this Court.

STATEMENT

On February 28, 1941, the City of Detroit and the County of Wayne, Michigan, filed a complaint before the Commission against petitioners, alleging that petitioners' rates and charges for natural gas sold to Michigan Consolidated Gas Company for resale in that City and County were unreasonable, unjust, and unduly discriminatory (R. 7002). The Commission, on its own motion, instituted an investigation of all wholesale natural gas rates and charges of petitioners (R. 7061). These proceedings were consolidated (R. 7064). After a lengthy hearing before the Commission's trial examiner, the Commission on September 23, 1942, entered its order upon such consolidated docket requiring petitioners to file new schedules of rates and charges for, or in connection with, their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption, so as to reflect, when applied to their 1941 transportation and sales, a reduction of not less than $5,094,384 per annum below their 1941 consolidated gross operating revenues of $17,789,573 (R. 38, 42). On October 30, 1942, petitioners' motion for rehearing and reconsideration, seasonably filed (R. 7141), was denied (R. 7150).

Thereupon, petitioners promptly filed in the United States Circuit Court of Appeals for the Eighth Circuit (in whose jurisdiction petitioners had their principal place of business) their petition for review of said order of the Commission (R. 1). On June 6, 1944, that court rendered the judgment review of which is sought here, affirming the order of the Commission (R. 7219).

The properties of petitioners, now owned by Panhandle Eastern[1], constitute a natural gas production, transportation and marketing system. The system produces and purchases gas from the Panhandle Field in Texas and from the Hugoton Field in Kansas, Oklahoma, and Texas. It extends from the Panhandle Field and the Hugoton Field through the states of Oklahoma, Kansas, Missouri, Illinois, Indiana, Ohio, and Michigan, with termini in Indiana, Ohio and Michigan. When the proceedings before the Commission were commenced, Michigan Gas, a wholly owned subsidiary of Columbia Gas and Electric Corporation, owned that portion of the then existing transmission system extending eastward from Dana, Indiana. Michigan Gas purchased its entire supply of natural gas from Panhandle Eastern and sold such gas to various distributing companies for resale. It also transported for the account of Panhandle Eastern gas sold by Panhandle Eastern directly to various distributing companies serving communities in Ohio and Michigan. Illinois Natural, a wholly owned subsidiary of Panhandle Eastern, owned the lateral lines in the State of Illinois extending from Panhandle Eastern's main line and purchased its entire supply of gas from Panhandle Eastern and sold such gas to distributing companies and industrial companies in Illinois (R. 17-18).

Most of the gas is sold to distributing companies for resale, but a very substantial quantity is sold direct to industrial customers. For the year 1941 direct sales represented 13.2% of all gas transported and sold. The revenue derived therefrom amounted to $1,500,527 (R. 5947, Ex. 251, L. 23, Col. F.).

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[1] Panhandle Eastern purchased Michigan Gas February 6, 1942, and dissolved it March 31, 1943, after acquiring all of its properties. Illinois Natural, a wholly owned subsidiary of Panhandle Eastern, was dissolved March 31, 1943, after the latter acquired all of its properties.

At the hearing, petitioners caused to be identified and offered in evidence certain exhibits, and testimony relating thereto, which would have shown the present replacement or reproduction cost of their physical properties as of June 30, 1941, less observed depreciation, and the market value of petitioners' gas leaseholds. The Commission's trial examiner sustained a motion to strike and exclude the exhibits above referred to and all testimony in support thereof (R. 715-718; R. 3973-3975). At the time the evidence was tendered, counsel for petitioners made it clear that it was offered as being relevant not only to a determination of what rate base should be used and what rate of return should be applied but also to a determination of the present value of petitioners' property and to a determination of the return in dollars which they are justly and equitably entitled to receive (R. 715).

The evidence excluded would have shown that the reconstruction cost of the fixed physical properties of Panhandle Eastern, less observed depreciation, was $61,807,269[2] while the book cost of such properties less reserves for depreciation was $53,915,095[3], a difference of $7,892,174.

The excluded evidence would have shown that the present value of the physical properties of Michigan Gas, determined by deducting the observed depreciation from the

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[2] The value of "fixed properties," $70,502,792, shown in excluded Exhibit 62, Col. D., L. 33,—R. 4347, included $8,695,524 as the market value of leases. Subtracting the latter item leaves $61,807,268 as the value of physical properties, determined by deducting the amount of observed depreciation from reproduction cost.

[3] The "gas plant classified" on that date stood at $64,622,148, and the "construction work in progress" at $383,556—a total of $65,005,704. This, however, included cost of leaseholds in the aggregate sum of $1,745,206, leaving $63,260,498 as the cost of physical properties (Exhibit 52—R. 4275-4277). On that date, depreciation reserves for physical properties amounted to $9,345,403 (Exhibit 48—R. 4261). The difference, $53,915,095, represents the book cost of physical properties, less reserves therefor.

trended original cost of June 30, 1941, was $13,810,092 (Ex. 84, R. 4851), while the "book cost" of such properties, less the reserves for depreciation, amounted to $10,876,284[4], a difference of $2,933,808.

The excluded evidence would have shown that the present value of Panhandle Eastern's leaseholds, as reflected in their market value, is $8,339,722 (Ex. 39, R. 4199, 4201, 492), while the book cost of such leaseholds, less reserves for depletion, amounted to $955,096 on that date[5], a difference of $7,384,626.

Thus, had this rejected evidence been received and considered and, upon consideration, been held to reflect the present value of petitioners' properties, the present value of such properties as of June 30, 1941, would have been found to be $18,210,608 in excess of the book cost of those properties less book accruals for depreciation and depletion.

Petitioners further offered an exhibit (R. 4726) showing a valuation made in 1937 of Panhandle Eastern's leaseholds and an exhibit (R. 4719) showing a valuation made in 1938 of Panhandle Eastern's physical properties. This valuation showed a total value of $63,248,549 (R. 4723), approximately $7,300,000 in excess of book cost less accruals for depreciation and depletion as of that date (Ex. 48, R. 4259, 4261). These exhibits and all evidence explanatory thereof were also excluded by the examiner. They would have shown a valuation of Panhandle Eastern's property at the time the Natural Gas Act became effective.

[4] The book cost was $12,402,884, and the depreciation reserve was $1,526,600 (Ex. 88, R. 4863-4864).

[5] Cost of leaseholds was $1,745,206 (Exhibit 52, p. 1, LL. 10 and 12—R. 4275), and reserves for depletion, etc. aggregated $790,110 (Exhibit 48, p. 2, LL. 10 and 33—R. 4261). These leaseholds were acquired through foresight and good judgment at low prices prior to a determination of the limits of the field and principally over a period from 1930 to 1932.

The Commission approved the trial examiner's action in striking all evidence of reproduction cost and value of leaseholds, both as of the time of enactment of the Natural Gas Act and as of the time of the hearing, basing its ruling upon its construction of the Natural Gas Act.[6]

Petitioners presented at the hearing a suggested basis for allocating earnings and cost of service between regulated and unregulated sales (R. 5947, Ex. 251; R. 3631-3676, 3857). The Commission's staff also presented a suggested allocation (R. 6883-6887, Ex. 263; R. 3994-4002). The Commission refused, however, to make any allocation, and treated petitioners' business as one subject to regulation in its entirety, saying (R. 34),

> We conclude, therefore, that, under such circumstances, it is not unreasonable to treat the entire business as a unit requiring no allocation as between the two classes of sales.

Panhandle Eastern commenced doing business as a going concern in 1932 with a capital structure of $49,278,869 (Ex. 48, p. 2, R. 4261). As of March 31, 1942, the invested capital of the system had been increased to $77,703,364, represented by (Ex. 267, R. 6993A)

Long term debt	$33,254,500
Preferred stock	16,000,000
Common stock and surplus	28,448,864
Total	$77,703,364

[6] The Commission in its opinion stated: "We held in the *Chicago District Electric Generating* case that under section 208(a) of the Federal Power Act (the provisions of which are identical with Sec. 6(a), supra) that reproduction cost evidence is inherently fallacious and should be disregarded under that statute." (R. 19). It may be observed that the Commission's opinion in the cited case, 39 P.U.R. (N.S.) 263, has never been reviewed by any Court.

In view of the Commission's criticism of certain capital items amounting to $1,153,874 petitioners herein eliminate those items and treat their unquestioned invested capital as of March 31, 1942, as being $76,549,490, and their common stock and surplus as being $27,294,990.

Petitioners are operating companies wholly dependent upon their own credit and resources in obtaining capital for growth and expansion (Ex. 147, R. 5107). Petitioners own no distribution companies, nor have they affiliations with the owners of any such companies.

Their equity capital comprises only approximately 35% of the corporate structure. The other securities, preferred stock and long term debt, have favorable interest rates (having been issued during the recent period of low service costs on debt capital), but contain burdensome sinking fund requirements, thus increasing the risk of the equity capital and restricting the payment of dividends to the equity stockholders (R. 6075, 6994). Panhandle Eastern paid no dividend on its equity capital until 1937 (Ex. 174, R. 5449).

Petitioners' evidence showed that they required a minimum return of $5,172,129 to provide adequate service costs on their capital structure, as follows:[7]

Cost of servicing long term debt	$ 957,730
Cost of servicing preferred stock	939,000
Cost of servicing common stock and surplus	3,275,399
Total	$5,172,129

The Commission found the reasonable cost of servicing the long term debt and preferred stock to be as stated above, but made no finding as to cost of servicing the equity

[7] These figures are derived from Ex. 267, R. 6993-A and Ex. 253, R. 6097, after deducting the items of invested capital aggregating $1,153,874 questioned by the Commission.

capital (R. 29). It did not fix the return allowed from a consideration of cost of service, but found that a "fair and liberal" return would be 6½% on the "rate base" selected by it (R. 30). This rate base was $67,137,305, which the Commission determined to be the actual legitimate cost of the plant in service (including leaseholds) at December 31, 1941, less accrued depreciation plus working capital of $920,000. It did not include petitioners' properties in the course of construction at December 31, 1941, which were completed and in service at March 31, 1942, before the hearing was closed, nor did it include any allowance for construction work in progress at the close of the hearing. The resulting return allowed was only $4,363,925 (R. 30), $808,204 less than petitioners' cost of servicing their unquestioned invested capital.

On review the court below, with one judge dissenting, affirmed the Commission's order on the following grounds: (1) The ruling of the trial examiner in excluding all evidence of the reproduction or replacement cost of Panhandle Eastern's properties and the market value of Panhandle Eastern's leaseholds was not a denial of due process. The court on this point stated that the action of the trial examiner presents a question not free from doubt, as the precise issue has not heretofore been decided; (2) The Commission had not erroneously assumed jurisdiction over petitioners' production and gathering of natural gas; (3) The Commission's failure to make an allocation or segregation of revenues derived from direct sales of gas to customers for their own use did not make its order invalid, and (4) The return allowed by the Commission was not shown to be unjust, unreasonable or confiscatory.

REASONS FOR GRANTING THE WRIT

1. *The question involved in the rejection by the Commission of the tendered evidence is of great public importance.*

The question of whether the lower court was right in upholding the Commission's exclusion of petitioner's evidence involves a constitutional issue of due process of broad and grave public interest. It is not a mere question of construing Section 6(a) of the Natural Gas Act, as the Commission visualized the issue, nor is it one of searching, as did the court below, for "teachings and implications" from decisions of this Court in cases wherein the issue was not involved.

In the case at bar the Commission at the threshold of its consideration excluded all evidence of reproduction cost and market value. The Commission in advance selected one formula for determining a rate base, barring all others and evidence germane thereto.

The question involved is what are the minimal requirements, as a matter of constitutional right, of a fair and full hearing before an administrative Commission with quasi-judicial authority.

Heretofore, courts have recognized that regulatory commissions are frequently manned by lay members less trained in a careful discrimination and appraisal of evidence as offered than the regularly constituted courts. These commissions have been consistently required as a minimal requirement of due process to afford parties in interest a full and complete hearing, to permit, within reasonable bounds, each party to present the full facts as he visualizes the issues involved. This course safeguards the interests concerned, restrains the regulatory commissions from arbitrary action based upon inadequate information and affords the reviewing court a sufficient presentation of all the facts to enable it to pass intelligently upon the resulting ruling both from the point of view of the public interest and the constitutional rights of the regulated enterprise or body.

This Court has many times placed its approval upon several criteria as *proper for consideration* for rate making purposes. This Court has held that the Commission is not bound in its final determination to adopt any one or any combination of approved formulas. Notwithstanding this background of the law the Commission in the instant case selected in advance of its consideration of the case one of the several such approved formulas and, receiving evidence consonant with it, rejected all other evidence offered by petitioners although having probative value in relation to other proper criteria.

The Commission did this on the theory that Section 6(a) of the Natural Gas Act amply supported it in so doing.

The court below disagreed with the Commission's interpretation of Section 6(a), saying:

> There is little to indicate that Congress in enacting § 6(a) intended to change the law of evidence. That section * * * probably has no controlling effect upon the admissibility of evidence at a rate hearing.

The court below, however, reached, in effect, the same result as the Commission and, in so doing, said:

> Unless we have misconceived the teachings and implications of the opinion of the Supreme Court in the Hope Natural Gas Company cases, the standards by which the validity of the Commission's order is to be judged require its affirmance.

The holding of the court below is not based upon any rule of statutory construction; it is prompted by that court's acceptance of a new and delimited concept of the "minimal requirements" of due process for a full and fair hearing.

The question involved is of great and far reaching public interest. It affects, or is likely to affect, procedure before

the increasing number of Federal regulatory bodies and commissions. The lower court's decision, being rested upon "teachings and implications" of opinions of this Court, if permitted to stand, would likewise have a far reaching effect as a precedent, though not binding, upon innumerable regulatory and rate making bodies of the several states. The judicial interpretation of the requirements of due process under the Constitution of the United States has consistently influenced the interpretation of like protective clauses in the constitutions of the various states.

No issue could more definitely be affected with a public interest than the question involved in the rejection by the Commission, affirmed by the court below, of the evidence tendered by petitioners.

2. *The question of whether the Commission may refuse to receive and consider in a rate hearing evidence of the character offered has never been decided by this Court.*

The precise question of whether the Commission may refuse to admit and consider evidence of the type offered by petitioners has never been decided by this Court. In a long line of decisions this Court has indicated that the rejection of evidence of probative value is violative of due process. *Morgan* v. *U. S.*, 298 U. S. 468; *Ohio Bell Telephone Company* v. *Public Utilities Comm.*, 301 U. S. 292; *Interstate Commerce Commission* v. *L. & N. R. R. Company*, 227 U. S. 88; *Los Angeles Gas & Electric Corp.* v. *R. R. Commission*, 289 U. S. 287; *Driscoll* v. *Edison Light & Power Co.*, 307 *U. S.* 104; *Bluefield Waterworks and Improvement Company* v. *Public Service Commission*, 262 U. S. 679. The Commission's affirmance of the trial examiner's action was based upon its construction of section 6(a) of the Natural Gas Act and upon a dictum in

the concurring opinion in *Federal Power Commission* v. *Natural Gas Pipe Line Company*, 315 U. S. 575, 606. No support is to be found for the Commission's position in any opinion of this Court. The court below stated (R. 7205):

> Apparently no court has as yet ruled that the Federal Power Commission may, in a rate hearing, refuse to receive and consider evidence of replacement or reproduction cost of the properties of a company subject to the Natural Gas Act. It was held, in effect, in the case of Federal Power Commission v. Natural Gas Pipe Line Co., 315 U. S. 575, 586, 606-607, and in the Hope Natural Gas Company cases, 320 U. S. 591, 602-605, that the Commission was not bound to give weight to such evidence in determining rates.
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> Nevertheless, the question whether the refusal of the Commission to receive the evidence of reproduction or replacement cost or value offered by the petitioners amounted to a denial of due process is *not free from doubt*. (Italics ours.)

In the *Natural Gas Pipe Line* case, *supra*, the Commission, for the purpose of issuing an interim order, accepted the company's statement that the book cost of the property existing at the end of 1938 was $60,172,843, including working capital of $975,000. It also accepted the company's estimate that the value of all physical property calculated at reproduction cost new was $74,420,424. Evidence of reproduction cost was not only admitted but the Commission used it as the rate base. Clearly, the question presented here was not before this Court in that case. This Court stated at page 586:

> The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjust-

ments which may be called for by particular circumstances. Once a fair hearing has been given, proper findings made and other statutory requirements satisfied, the courts cannot intervene in the absence of a clear showing that the limits of due process have been over-stepped.

The Court did not state that the Commission might adopt at the outset a single formula and exclude all evidence not consistent with such formula; nor is such a view implicit in the Chief Justice's statement. If the Commission is free to exclude all evidence despite its probative value except evidence going to the question of original cost, then there is little room, indeed, within which it is called upon to make pragmatic adjustments based upon the peculiar facts of any rate case.

The Chief Justice stated at pages 585-586:

> By long standing usage in the field of rate regulation, the "lowest reasonable rate" is one which is not confiscatory in the constitutional sense. * * * Assuming that there is a zone of reasonableness within which the Commission is free to fix a rate varying in amount and higher than a confiscatory rate, * * * the Commission is also free under section 5(a) to decrease any rate which is not the "lowest reasonable rate."

There can be no doubt as to the Commission's wide discretion in the matter of fixing rates, but, clearly, the Commission, on the basis of the above statement, has authority to fix rates above the "lowest reasonable rate." This being true, the petitioners should have been given a full and fair hearing in order that they might produce evidence of probative value which might persuade the Commission to fix a rate higher than the lowest reasonable rate. The action of the Commission in the instant case amounts to a disregard of the oft repeated statement in the cases that rate-making

is a process of selection from all available data. It is in effect to prejudge a case before its hearing.

If Congress had intended that the Commission should adopt a single formula, it would have said so. Congress did not intend by section 6(a) to free the Commission from hearing evidence of fair value.

In the concurring opinion in the *Natural Gas Pipe Line* case, *supra*, it was stated at page 606:

> As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or of giving any weight to that element of "fair value." The Commission may now adopt, if it chooses, prudent investment as a rate base—the base long advocated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in the *Southwestern Bell Telephone* case there could be no constitutional objection if the Commission adhered to that formula and rejected all others.

Mr. Justice Jackson in his dissent in *Federal Power Commission et al* v. *Hope Natural Gas Company*, 320 U. S. 591, in reference to the above quoted statement, said, at page 628:

> The Minority opinion I understood to advocate the "prudent investment" theory as a sufficient guide in a natural gas case. The view was expressed in the court below that since this opinion was not expressly controverted it must have been approved. I disclaim this imputed approval with some particularity, because I attach importance at the very beginning of federal regulation of the natural gas industry to approaching it as the performance of economic functions, not as the performance of legalistic rituals.

This Court, in affirming the Commission in the *Hope* case, *supra*, and reversing the Circuit Court, did not lay down the rule that the Commission could reject all evidence ex-

cept that which might go to the determination of original cost. As noted, the Commission in that case admitted and considered evidence of reproduction cost and, thus, the question here presented was not before this Court.

Mr. Justice Reed dissenting on another ground stated, page 623:

> I agree with the Court in not imposing a rule of prudent investment alone in determining the rate base. This leaves the Commission free, as I understand it, to use any available evidence for its finding of fair value, including both prudent investment and the cost of installing at the present time an efficient system for furnishing the needed utility service.
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> The Federal Power Commission did not, as I construe their action, disregard its statutory duty. They heard the evidence relating to historical and reproduction cost and to the reasonable rate of return, and they appraised its weight. The evidence of reproduction cost was rejected as unpersuasive, but from the other evidence they found a rate base which is to me a determination of fair value. On that base the earnings allowed seemed fair and reasonable.

It is thus apparent that Mr. Justice Reed was of the opinion that the Commission in the *Hope* case had performed its satutory duty in permitting the introduction of evidence tending to show reproduction cost or present value.

The court below, in affirming the action of the Commission, stressed what it considered implications of this Court's opinion in *Pittsburgh Plate Glass Company v. National Labor Relations Board*, 313 U. S. 146. The issue in that case was not, however, the same as that in the case at bar. The point upon which this Court divided in the *Pittsburgh Plate Glass Company* case was not as to whether due process required the National Labor Relations Board to hear

evidence pertinent to a determination of the criteria to be adopted in selecting the appropriate bargaining unit. The point was whether the National Labor Relations Board had heard and considered evidence as to the appropriate unit and made a determination of the issue in a former proceeding which was binding upon all the parties to the subsequent proceedings. The *Pittsburgh Plate Glass Company* case is not authority for the Commission's action in the case at bar. Here, there had been no prior hearing but the Commission was in the initial stage of its rate-making process as applied to petitioners. The Commission, in order properly to exercise its wide discretion, was bound to admit petitioners' evidence regardless of the weight ultimately given to it.

It may be observed that Mr. Justice Reed, who wrote the opinion for the Court in the *Pittsburgh Plate Glass Company* case, recognized in his dissent in the *Hope* case that the Commission was required to hear evidence of reproduction cost or present value. It may also be noted that the present Chief Justice, with the then Chief Justice and Mr. Justice Roberts concurring, wrote a vigorous dissent in the *Pittsburgh Plate Glass Company* case, stating at page 177:

> One of the most important safeguards of the rights of litigants and the minimal constitutional requirement, in proceedings before an administrative agency vested with discretion, is that it cannot rightly exclude from consideration facts and circumstances relevant to its inquiry which upon due consideration may be of persuasive weight in the exercise of its discretion.

From the foregoing discussion, it is clear that the issue involved in the case at bar has never been decided by this Court. The public importance of the question warrants a final determination thereof.

3. *The decision of the court below is in conflict with a decision of the U. S. Circuit Court of Appeals for the Tenth Circuit.*

In the instant case the Commission treated petitioners' business as an entirety without making an allocation between property, capital and revenue related to direct sales and sales for resale. The Commission considered such an allocation or segregation unnecesary. It may be observed, however, that the revenue derived from direct sales constituted a substantial portion of petitioners' business. In 1941 direct sales represented 13.2% of all gas transported and sold. The revenue derived therefrom amounted to $1,500,527 (R. 5947).

Section 1(b) of the Natural Gas Act provides:

> The provisions of this Act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, *but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.* (Italics supplied.)

Judge Riddick, dissenting below, stated (R. 7218):

> Heretofore, the Commission has recognized the necessity of such an allocation and has made it. Re *Interstate Natural Gas Co., Inc.*, 48 PUR (NS) 267, 279; Re *Canadian River Gas Co.*, et al, 43 PUR (NS) 205, 231; Re *Cities Service Gas Co.*, 50 PUR (NS) 65, 89. That a separation of transactions within and beyond the jurisdiction of the Commission is required by the Natural Gas Act, and must be made in order that "regulation may be confined to its permitted field" is

held in *Colorado Interstate Gas Co.* v. *Federal Power Commission*, 10 Cir., decided May 16, 1944. Here the Commission has admittedly refused to observe the limit upon its jurisdiction, fixed by Congress. In this situation it seems to me idle to inquire whether the Commission's order, call it a "pragmatic adjustment" or what-not, does or does not result in confiscation of petitioners' property, or whether it is less or more favorable to petitioners than would have been the case had the Commission confined itself to its permitted field. It is enough to require a remand of this proceeding that the Commission has exceeded the statutory limitation on its powers.

In *Colorado Interstate Gas Co., et al.* v. *Federal Power Commission, et al.*, decided by the Circuit Court of Appeals for the Tenth Circuit May 16, 1944, cited by Judge Riddick, (not yet reported) the question of whether the Commission had made a proper allocation arose and the Court stated:

> Where, as here, a natural gas company is engaged in an integrated business, part of which is subject to regulation and part of which lies beyond the reach of the regulatory jurisdiction of the Commission, *some separation of the property, capital, and revenue is essential in order that regulation may be confined to its permitted field.* The separation may be appropriately effected by estimating or appraising the value of the property used in the regulated business and that used in the unregulated business. Smith v. Illinois Bell Telephone Co., 282 U. S. 133. But that method in its completeness is not always exclusive of others. The separation or allocation may be effected by application of any formula which makes the principle a working one suitably adapted to the particular circumstances. Columbus Gas & Fuel Co. v. Public Utilities Commission, supra. (Italics supplied.)

In that case, the Commission had made an allocation, although it was not in accordance with that contended for

by the Companies. In the case at bar, however, the Commission declined to make any allocation whatever, notwithstanding the evidence introduced by petitioners and by its own staff. (R. 3994-4002 and R. 5943-5955).

The question should be settled not only because of the conflict between the court below and the Tenth Circuit but also because a final determination by this Court is essential in order properly to delimit the authority of the Commission under the Act.

4. *The decision of the court below is in conflict with principles established by this Court and with specific statutory provisions of the Natural Gas Act.*

(a) The holding of the court below that it was not error for the Commission's trial examiner to exclude evidence of reproduction or replacement cost of petitioners' physical properties and the market value of their leaseholds is in conflict with decisions of this Court.[8]

It is petitioners' contention that evidence of the price at which the physical facilities can now be reproduced and the price at which certain of its properties can now be sold is relevant and material in determining the just and reasonable return which the regulated company is entitled to receive. Petitioners in the case at bar insisted that the Commission, exercising its discretion, could and should take into account the increased value which the proffered evidence would show exists in petitioners' physical properties and in the present value of the gas leaseholds when determining the return allowed, irrespective of the con-

[8] Morgan v. U. S. 298 U. S. 468; Ohio Bell Telephone Company v. Public Utilities Comm., 301 U. S. 292; Los Angeles Gas & Electric Corporation v. R. R. Commission, 289 U. S. 287; Driscoll v. Edison Light & Power Co., 307 U. S. 104; Bluefield Waterworks and Improvement Co. v. Public Service Commission, 262 U. S. 679.

sideration, if any, given such evidence in fixing the rate base. Petitioners' excluded evidence unquestionably constitutes "facts and circumstances which ought to be considered." *Morgan* v. *U. S.* 298 U. S. 468, 480. Petitioners fail to see how anyone can deny the practical value and importance of such evidence to the Commission in determining what formula or combination of formulas it would use in making its pragmatic adjustments and to the reviewing Court in appraising the "end result" of the Commission's action "viewed in its entirety."

As pointed out, the Commission is not bound by the statute to reduce the regulated company's revenues to the lowest possible rates which would serve the constitutional test of confiscation. The rates are to be just and reasonable. (Sec. 5 (a) of the Act; 15 U.S.C. 717 (d).) Under this statutory standard there is a "zone of reasonableness" within which a rate higher than that which would be barely non-confiscatory could be allowed. Evidence of present value furnishes an excellent guide for determining, within this zone of reasonableness, the just and reasonable rate if the Commission finds that strict adherence to the formula of depreciated original cost produces an "end result" which is not confiscatory but is unreasonable and discriminatory from the standpoint of the stockholders of the regulated company. There is, clearly, nothing in the opinions in the *Hope* case and in the *Natural Gas Pipe Line* case which would lend support to the Commission's action. There are expressions in those cases which would indicate that the action of the Commission is in conflict with those decisions.

(b) Section 1(b) of the Act expressly provides that the provisions of the Act shall not apply to the production or gathering of natural gas. It is petitioners' contention that

it was the statutory duty of the Commission to segregate petitioners' production and gathering properties and the revenues and expenses related thereto. An alternative approach, which seems to lead to the same result was the contention that, while the operations might all be included within the petitioners' rate accounting structure, the rate base valuations of leases and other assets relating solely to production and gathering must be consistent with their status as unregulated properties. The Commission, however, not only failed to segregate the production and gathering phase of petitioners' business but it actually included in the rate base all of petitioners' production and gathering facilities and gas leaseholds at their original cost depreciated, depleted and amortized. These leaseholds were carried on petitioners' books at only $955,096, although petitioners were prepared to show, and offered to prove, that these leaseholds had a market value on June 1, 1941, of nearly $8,500,000 (Ex. 39, R. 4199, 4201, 492). Thus, in total disregard of the Congressional mandate, the Commission arrogated unto itself jurisdiction over an unregulated portion of petitioners' property and business as fully and completely as it exercised jurisdiction over petitioners' transportation facilities and business, which latter facilities and resale business are within the ambit of the Commission's statutory authority.

The order of the Commission is peculiarly subject to attack in these proceedings because, as noted, the Commission excluded evidence which was admissible in reaching a determination with respect to the value of the commodity in the fields where produced. The decision of the court below in affirming the action of the Commission is in conflict with applicable decisions of this Court.[9]

[9] Cases cited in footnote 8, supra.

While the Natural Gas Act excludes the production and gathering of gas from the Commission's jurisdiction and permits it to exercise jurisdiction only over the interstate transportation of gas and over certain (not all) sales thereof in interstate commerce, the Commission has by its order herein found that petitioners are entitled to a price in the field for their gas, predicated solely on a consideration of the original cost of their leaseholds less accruals for depletion and the application thereto of a 6½% rate of return. This it has done notwithstanding the fact that production and gathering of gas are expressly excluded from the application of the provisions of the Natural Gas Act.

It is obvious that, if petitioners' leaseholds can now be sold for more than $8,000,000, an allowance of an earning on only a value of less than $1,000,000 is wholly erroneous and arbitrary. It is to be assumed that the market value of the leaseholds is largely reflected in the market price, or the value of the gas in the respective areas where it is produced. Such market price or field value is determined by many economic conditions and field transactions having no relation to the original cost of the leaseholds.

The Commission in reaching into and regulating this phase of the petitioners' business clearly went beyond the scope of its authority.

(c) The holding of the court below that the Commission did not commit error in refusing to make an allocation between the regulated and the unregulated portions of petitioners' business is in conflict with applicable decisions of this Court.[10]

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[10] Smith v. Illinois Bell Telephone Co., 282 U. S. 133, 150; Minnesota Rate Cases (Simpson v. Shepard) 230 U. S. 352, 435, 437; Banton v. Belt Line Ry. Corp. 268 U. S. 413, 421; Northern Pacific Railway Co. v. McCue, 236 U. S. 585, 596-597.

Section 1(b) of the Act expressly excludes from its application, and consequently from the jurisdiction of the Commission, any sale of natural gas which is not a "sale in interstate commerce of natural gas *for resale* for ultimate public consumption for domestic, commercial, industrial or any other use." (Italics supplied.)

The Commission recognized its lack of jurisdiction over direct sales in proceedings before it involving other "natural-gas companies" and in such proceedings made the necessary allocations.[11]

It refused, however, in the case at bar to allocate and set apart that portion of petitioners' gross revenue attributable to their direct sales for customers' own use and their expenses incident thereto, although both the Commission's staff and the petitioners presented for the Commission's consideration detailed exhibits and supporting testimony to serve as a basis for an allocation (Ex. 263, R. 6883-6887, R. 3994-4002; Ex. 251, R. 5949-5955, 3631-3676, 3919-3933).

The Commission, in refusing to make such an allocation, committed a fundamental error which renders its order void and unenforceable.

(d) The decision of the court below, affirming the order of the Commission reducing petitioners' rates is erroneous in that under the tests and standards established by this Court the return allowed petitioners is inadequate.

In petitioners' case the Commission construed the Natural Gas Act as prescribing the use of a single formula. This construction permeates its entire opinion and accounts for the results reached. The Commission construed the Act as limiting petitioners' return to the allowance of

[11] Re Interstate Natural Gas Company, Inc., 48 PUR (NS) 267, 279; Re Canadian River Gas Co., Inc., 43 PUR (NS) 205, 231; Re Cities Service Gas Co., 50 PUR (NS) 65, 89.

what it determines to be a "fair and reasonable" return upon the actual legitimate cost of petitioners' property devoted to public service, less existing depreciation, plus a reasonable allowance for working capital "and no more" (R. 29).

The opinion of this Court in the *Hope* case shows that such a construction is erroneous. That opinion supports the contention made by petitioners throughout this case that, when rates are tested to determine whether the return allowed is confiscatory, it is necessary to ascertain whether the revenues available from the rates allowed will be adequate to pay all operating charges of the company and such service charges on its invested capital, including debt capital, preferred stock, common stock and surplus, as will be required by investors to compensate them for the risks assumed and to induce them to continue to invest in the company's securities. This contention of petitioners was characterized by the Commission as a "novel theory" (R. 29). Nevertheless, it is exactly the theory adopted by this Court in the *Hope* case in reaching a determination that the dollars allowed Hope as a return were adequate for the needs of that particular company.

The opinion in the *Hope* case clearly shows that the Act provides no formula for determining either rate base or rate of return; that the Commission's duty is to fix a just and reasonable price for the commodity, the gas sold in interstate commerce for resale; that, in fixing such a price, the Commission is not limited to any formula; that, in determining whether the end point, i.e., the price fixed, is non-confiscatory, the Court will consider, among other things, whether the return allowed a particular company will enable it to pay its operating expenses and service charges on its capital structure and will be adequate to maintain the credit of that particular company and to

attract capital to its securities. It was for this reason that this Court discussed in some detail the corporate structure, ownership, affiliation and earnings of Hope. These were the elements which were used in testing the constitutional and statutory adequacy of the return allowed. After making such a test, the Court reached the conclusion that the Company had failed to show that the return allowed, $2,191,314, was inadequate, from the "investor or company viewpoint."

Petitioners' evidence showed that they required a return of $5,172,129 as the necessary cost of servicing their capital structure. The Commission allowed only $4,363,925 as a return. The Commission found the cost of servicing the long term debt and preferred stock, but made no finding as to the cost of servicing the common stock and surplus, and failed in the order to make adequate provision for a return sufficient to service the entire structure.

There are many points at which the facts in the *Hope* case and the case at bar differ and yet, in considering the adequacy of the return allowed petitioners, the Commission and the court below ignored many facts of importance in this case which are comparable to facts considered important by this Court in the *Hope* case.

Panhandle Eastern is not an old and seasoned enterprise. It has not had four decades of highly profitable operations. It has not earned, as did Hope, its original investment several times, plus a surplus available for dividends in poor years far in excess of its original capitalization. Panhandle Eastern during its life of nine and three-quarters years had not earned the amount of its original capital, whereas Hope had earned its original investment more than eight times over. It is, therefore, obvious that Hope's financial position and history, which this Court viewed as significant when considering the propriety of

the Commission's action, are entirely different from petitioners' in many material respects.

Hope's capital structure was composed of only common stock and surplus, whereas petitioners' capital structure is composed of long-term debt ($33,254,500), preferred stock ($16,000,000) and common stock and surplus ($27,294,990). It is also apparent that there is considerable difference in the corporate ownership of petitioners and of Hope. Hope was a wholly owned subsidiary of Standard Oil Company (N. J.). The corporate stability and advantages for readily obtaining financing resulting from such an affiliation are obvious. Panhandle Eastern, on the other hand, has been required to rely wholly on its own resources when seeking needed capital. This Court considered it of importance that Hope's principal market outlets were affiliated distributing companies, whereas petitioners have no such protection.

The Commission included in Hope's rate base $1,392,021 as future capital additions for 1941, 1942, and 1943. It refused to include in petitioners' rate base capital additions to transmission plant in the course of actual construction at the close of the hearing, although petitioners then had in their treasury the funds to pay for such construction and although a substantial part of such construction (approximately $5,000,000) would not increase the daily sales capacity of the transmission system (R. 1951-1954).

The Commission allowed Hope an annual operating expense of $600,000 as future field exploration and development costs but refused to include in petitioners' rate base the capital expenditures required in the gas fields to maintain their present load. Of these capital expenditures $2,811,902 was required during the years 1941 and 1942 (R. 4244). The Commission's allowance for working capi-

tal was inadequate. It allowed nothing for line pack (R. 26). It allowed only $489,893 for material and supplies and only $101,097 for prepayments (R. 25). The amounts of these items on March 31, 1942, as shown by petitioners' books were $541,129 and $197,199, respectively (Ex. 267, R. 6993). The Commission refused petitioners any of their rate case expense in the amount of $350,000 (R. 31, 33) and refused to include in estimated operating expenses their increased payroll costs and increased expense of employees' welfare and pension plans amounting to $103,500 annually (R. 31).

It is apparent that facts which this Court considered sufficient to sustain the Commission's order in the *Hope* case do not exist as support for the Commission's order in petitioners' case. The adequacy of the return allowed must be determined from a consideration of petiitoners' requirements arising out of their particular situation. This the Commission failed to do, and the end result is inadequate, unjust and unreasonable to petitioners.

CONCLUSION

For the foregoing reasons it is respectfully submitted that the petition for a writ of certiorari should be granted.

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APPENDIX

The pertinent provisions of the Natural Gas Act of 1938, 52 Stat. 821, et seq. (15 U. S. C. Sec. 717) are as follows:

SEC. 1. (a) As disclosed in reports of the Federal Trade Commission made pursuant to Senate Resolution 83 (Seventieth Congress, first session) and other reports made pursuant to the authority of Congress, it is hereby declared that the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.

(b) The provisions of this act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.

* * * * *

SEC. 5. (a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge,

classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however,* That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural-gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural-gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates.

* * * * *

SEC. 6. (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

* * * * *

SEC. 19. (b) Any party to a proceeding under this act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. No objection to the order of the Commission shall be considered by the court unless such objection shall

have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such order of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 239 and 240 of the Judicial Code, as amended (U. S. C., title 28, secs. 346 and 347).

FILE COPY

No. 296

IN THE

Supreme Court of the United States

OCTOBER TERM, 1944

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY, AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS

v.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICH., COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

PETITIONERS' REPLY TO BRIEF OF CITY OF CLEVELAND, AMICUS CURIAE.

THE TWENTIETH CENTURY PRESS, INC., CHICAGO

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INTRODUCTORY STATEMENT

On September 29, 1944, the City of Cleveland, Ohio, as amicus curiae, filed its brief herein suggesting (P. 2) that

> • • • the questions upon the merits which the petition for a writ of certiorari seeks to raise are not presented for review by the Supreme Court of the United States for the reason that the United States Circuit Court of Appeals for the Eighth Circuit was without jurisdiction over the subject matter of the controversy.

This reply of Petitioners[1] to that brief is filed pursuant to notice dated October 7, 1944, that the Court desires additional briefs from the parties directed to the question raised by the City of Cleveland.

Since Petitioners sought review in a circuit court of appeals of the United States, we think the challenge to the locality of the review proceedings presents a question of venue only and not a question of jurisdiction over the subject matter,[2] even though the litigation be regarded as a suit against the United States.[3] In either view, however, the statutory requirements are satisfied if, as a matter of fact, Petitioners had their principal place of business within the Eighth Circuit at the time that the petition for review of the order of the Commission was filed.[4]

This issue of fact was not raised at any time in the proceedings below, presumably, because it was common knowledge among all interested parties that Petitioners had their principal place of business at 1221 Baltimore Avenue, Kansas City, Missouri. Michigan Consolidated Gas Company alleges in its petition of intervention that Panhandle Eastern is a corporation organized under the laws of Delaware "with principal place of business at Kansas City, Mis-

[1] Herein we refer to Panhandle Eastern Pipe Line Company as "Panhandle Eastern", Michigan Gas Transmission Corporation as "Michigan Gas", and Illinois Natural Gas Company as "Illinois Natural". The three are referred to collectively as "Petitioners". The Federal Power Commission is referred to as "the Commission".

[2] *Freeman* v. *Bee Machinery Company*, 319 U. S. 448, 453; *Neirbo Company* v. *Bethlehem Corporation*, 308 U. S. 165, 167-168; *Terminal R. Asso.* v. *Kimbrel* (C.C.A. 8) 105 F(2) 262, 264.

[3] *Peoria Ry. Co.* v. *United States*, 263 U. S. 528, 535.

[4] Section 19(b) of the Natural Gas Act provides, "Any party to a proceeding under this act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for *any circuit* wherein the natural-gas company to which the order relates is located or has its principal place of business, • • •." (Italics supplied.)

souri" (R. 7039). That allegation is not merely a conclusion of law; it is likewise the statement of a fact, made by one of the parties to this case which had dealt with Panhandle Eastern over a period of many years and which was in a position to know the location of its principal place of business. Its contract for the purchase of gas from Panhandle Eastern provides that any notice, request, demand, statement, or bill provided for in the agreement shall be mailed to Panhandle Eastern at Kansas City, Missouri (R. 6918).

Had the issue been raised in the court below, all pertinent evidence could have been adduced and incorporated into the record in concise form. Since it is raised for the first time here, we must rely upon such relevant evidence as appears incidentally in the record and upon matters of which the Court will take judicial notice.

PETITIONERS HAD THEIR PRINCIPAL PLACE OF BUSINESS AT KANSAS CITY, MISSOURI, WHEN THE PETITION FOR REVIEW WAS FILED.

The City of Cleveland points out that each of Petitioners was a separate corporate entity at the time that the proceedings were pending before the Commission and to the fact that the pipe lines of Michigan Gas and those of Illinois Natural and the customers served thereby were located outside the territorial limits of the Eighth Circuit. Upon these facts the negative argument is made that Petitioners did not have their principal place of business in the Eighth Circuit. It does not refer the Court to any evidence showing that the place where the actual business of Petitioners was transacted and conducted was elsewhere than at the offices in Kansas City, Missouri. It ignores completely the fact that, after Michigan Gas was acquired by Panhandle Eastern February 6, 1942, (R. 21, Note 12) the operations of Petitioners were conducted as one business.

The Commission found as a fact (Finding No. 5, R. 40)

> (5) Panhandle Eastern, Michigan Gas, Illinois Natural hereinafter referred to collectively as "the respondents") and Indiana Gas Distribution Corporation (hereinafter referred to as "Indiana Gas") are under common control and ownership, and are operated as a single, inter-connected and integrated system for the production, purchase, gathering, transportation, sale and delivery of natural gas;

At the time the petition for review was filed, November 18, 1942, (R. 1) the integrated system was conducted in all of its business and operating phases from the offices maintained by Petitioners at 1221 Baltimore Avenue, Kansas City, Missouri.

In the "Directory of Gas Utilities in the United States" for 1942, published by the Federal Power Commission, Panhandle Eastern is shown to be doing business in Illinois (P. 74), Indiana (P. 93), Kansas (P. 126), Michigan (P. 200), Missouri (P. 228), Ohio (P. 327), and Texas (P. 448). In each instance its address is shown to be 1221 Baltimore Avenue, Kansas City, Missouri. Illinois Natural is shown as having its business address at 1221 Baltimore Avenue, Kansas City, Missouri, and to be controlled by Panhandle Eastern Pipe Line Company through 100% of voting power (P. 71). Michigan Gas is shown as having its business address at 1221 Baltimore Avenue, Kansas City, Missouri, and to be controlled by Panhandle Eastern Pipe Line Company, through 100% of voting power (P. 91). An office at Detroit, Michigan, is also shown (P. 199).

The City of Cleveland refers (Cleveland brief, P. 9) to the testimony of Mr. George S. Young (R. 579) as showing that the business of Michigan Gas was conducted at Detroit. At the time that Mr. Young was testifying, November 17, 1941, (Tr.[5] 1651, 1664) he was vice-president and

a director of Michigan Gas, which was then owned by Columbia Gas and Electric Corporation and was not under the control of Panhandle Eastern. The record shows that on March 3, 1942, in the course of the taking of testimony, counsel for Panhandle Eastern stated, in response to an inquiry from the Commission's trial examiner, that Mr. Watkins was then in Kansas City arranging for the transfer from Detroit to Kansas City of all of the accounting records of Michigan Gas (Tr. 8814). Mr. Young was not retained as an officer or director of Michigan Gas after that company was acquired by Panhandle Eastern February 6, 1942.

The Directory of Gas Utilities in the United States for 1942, shows that, with respect to Petitioners, Mr. Creveling was President of all three corporations, Mr. Neuner was Vice-President of all three corporations, Mr. Watkins was Secretary and Controller of all three corporations, Mr. Sperry was Treasurer of all three corporations, Mr. Paxton was Assistant Secretary and Assistant Treasurer of all three corporations, and Mr. Jellings was Assistant Treasurer of all three corporations.

The record discloses that Mr. Neuner, as Vice-President in Charge of Operations, was located at 1221 Baltimore Avenue, Kansas City, Missouri (R. 4969), and that Mr. Paxton, who was also head of the Accounting Department (R. 1052), and Mr. Jellings were located at 1221 Baltimore Avenue, Kansas City, Missouri (R. 4969). Mr. Watkins testified that he spent a vast amount of his time at the Kansas City office (R. 2616).

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[5] The abbreviation "Tr." designates the typewritten transcript of the proceedings before the Commission filed in the Circuit Court of Appeals. Recourse to the transcript is had when the pertinent matter is not in the printed record.

The City of Cleveland makes reference in its brief (Note 1 on P. 7) to the fact that Illinois Natural is the same company which was the appellant in *Illinois Natural Gas Company* v. *Central Illinois Public Service Company*, 314 U. S. 498. The record in that case shows (PP. 25-27), that Mr. Neuner testified that he was Vice-President and Chief Operating Officer of Panhandle Eastern and of Illinois Natural, and that both companies had their principal place of business at Kansas City, Missouri.

The City of Cleveland stresses in its brief (PP. 7-10) the pipe line mileage of Petitioners and the quantities of gas supplied through such pipe lines in the various states outside of the territorial boundaries of the Eighth Circuit. Considering the physical characteristics of the business of transporting natural gas, these facts have very little probative value in determining Petitioners' principal place of business. The principal place of business of a corporation is the place where its business is actually conducted, from which its operations are directed, and at which it holds itself out to do business with the public.[6] It has been held that, where a corporation conducts its business at a number of places, no one of which is clearly the place where its business is principally conducted, one of such places where a substantial business is transacted and from which general supervision of all of its business is exercised may properly be held to be the principal place of business of such corporation.[7]

Here, the only fair inference to be drawn from the record is that, after February 6, 1942, there was only one place, namely, 1221 Baltimore Avenue, Kansas City, Missouri, at

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[6] *Burdick* v. *Dillon* (C.C.A. 1) 144 Fed. 737; *Dryden* v. *Ranger Refining and Pipe Line Company* (C.C.A. 5) 280 Fed. 257; *Colorado Interstate Gas Company* v. *Federal Power Commission* (C. C.A. 10) 142 F(2) 943, 950-951; *Continental Coal Corp.* v. *Roszelle Bros.* (C.C.A. 6) 242 Fed. 243, 246.

[7] *Chicago Bank of Commerce* v. *Carter* (C.C.A. 8) 61 F(2) 986.

which the business of Panhandle Eastern and its two wholly owned subsidiaries, Illinois Natural and Michigan Gas, was conducted. There is no evidence in the record to indicate that the office at 90 Broad Street, New York, was maintained by Panhandle Eastern for any other purpose than as a convenient meeting place for its directors (seven of whom, out of a total of eight, resided in New York (R. 4969)), and in order that Mr. Gano Dunn, who resided in New York, (R. 4971) might keep in touch with the principal executives of the Company in discharging his responsibility as trustee under a consent decree entered by the United States District Court for the District of Delaware in anti-trust proceedings affecting Panhandle Eastern brought by the United States.[8]

The record is replete with evidence supporting the sworn statement of Mr. J. D. Creveling, (R. 14) President of each of Petitioners, in their petition for review that (R. 6)

> Each of petitioners has its principal place of business in Kansas City, Jackson County, Missouri, within the jurisdiction of the Eighth Circuit Court of Appeals.

In addition to the officers mentioned *supra* P. 5, all of the principal department heads with their respective staffs were located at Kansas City. Mr. C. H. M. Burnham, Chief Engineer (R. 101), Mr. C. H. Hinton, Production Engineer (R. 4215), Mr. Oscar William Morton, Rate Engineer (R. 15[illegible]), and Mr. Rufus M. Smith, Company Geologist (R. 4103) gave testimony to that effect.

When the Commission made its investigation of Petitioners' business, its staff accountants and engineers had to go to Petitioners' place of business at Kansas City in

[8] These proceedings are fully described in the transcript of record filed in this Court in *Missouri-Kansas Pipe Line Company* v. *United States, et al.*, 312 U. S. 502. The consent decree appears at page 142 of that record.

order to examine the pertinent records and books of account (R. 2515, 3435) and to confer with the officers and persons in charge of the conduct of Petitioners' business (R. 1051, 1053, 1054-1055, 1058). The Bureau of Internal Revenue dealt with Petitioners at their office at Kansas City (R. 5795, 5811).

Mr. R. J. Wallace, who was employed to make a report on the market value of gas leases owned by Panhandle Eastern, had to go to Petitioners' office at Kansas City for access to the necessary records (R. 4190).

The Company's active bank account was in Kansas City (R. 1384; Tr. 4460-4461). All budgets were prepared in the Kansas City office and delivered to the Vice-President in Charge of Operations, Mr. Neuner, by whom they were sent to New York for Board action (R. 1937); and, upon their return, work orders were issued by the Accounting Department at Kansas City (R. 1938).

Although we do not regard the location of transmission lines and volume of distribution in a particular place as controlling or even persuasive, the record discloses that a substantial part of the transmission line and a number of lateral lines are located in the State of Missouri, and substantial volumes of gas were sold to industrial consumers and also to utilities for resale in the State of Missouri (R. 4091-4093, 4293, 4295).

The convenient location of Kansas City as a point from which to carry on Petitioners' business and operations readily appears from an inspection of the map introduced as Chart No. 1 of Exhibit 65 (R. 4559).

Witness Burnham testified (R. 247) that Panhandle Eastern had a private telephone system covering all of its properties west of Kansas City; that, with a completely looped system from Liberal to the Indiana line and greatly

increased loads, the response to pressure increases would be much quicker and would require much closer attention "from the central office in Kansas City"; and that it would be necessary for the Company to extend its telephone system across the state of Missouri and Illinois to connect with each and every compressor station along the line in those states and also the warehouses, "so that we will be in complete communication at all times with the employees and important points of operation on our line east of Kansas City." He stated that the Company was then depending upon the commercial telephone and telegraph lines for communications east of Kansas City but that this service was not entirely satisfactory (R. 248). He said that the Company maintained its gas dispatching office at Kansas City; that the chief dispatcher made certain observations on the existing load on the system; that weather predictions were telegraphed to him with estimates of the requirements of customers on the system; that, on the basis of all of this information, the dispatcher was able to determine when more gas should be turned on in the field and when pressures should be raised over the entire system or at certain points on the system; that the dispatcher then issued instructions to the various compressor stations and to the field headquarters accordingly. He stated that the chief dispatcher at Kansas City had a chart showing, from hourly reports, what the pressures were from time to time at the various points on the system, including points on the Michigan Gas system, which enabled him to see that the pressures responded in accordance with the deliveries required.

The dispatcher and his staff at Kansas City determine, in cases of emergency, which of the customers supplied on an interruptible basis must be shut off or given curtailed deliveries (R. 1986).

The record shows that, although Panhandle Eastern had as its General Counsel a New York lawyer, he was engaged in the general practice and was only called upon for services of an advisory character with respect to general corporate matters and in connection with proceedings before the Securities and Exchange Commission. Full time Company Counsel, Mr. Glenn Clark, whose duties were concerned with the legal phases of the day to day conduct of the corporate affairs, was employed at the offices in Kansas City (R. 3570).

The procedural documents in the nature of pleadings filed on behalf of Panhandle Eastern and Illinois Natural emanated from the Kansas City office and bore the signature of Mr. Clark, who gave his address as 1221 Baltimore Avenue, Kansas City, Missouri. The same is true with respect to Michigan Gas after it was acquired by Panhandle Eastern (R. 7020-7021, 7136, 7140, 7148).

We submit that the pertinent facts establish clearly that Petitioners had their principal place of business at Kansas City, Missouri, within the Eighth Circuit, at the time their petition for review was filed with the United States Circuit Court of Appeals for that circuit.

SECTION 19(b) OF THE NATURAL GAS ACT IS NOT SUSCEPTIBLE OF THE CONSTRUCTION ADVOCATED BY THE CITY OF CLEVELAND.

The City of Cleveland contends that "Even if but one of the three natural-gas companies to which the Federal Power Commission's order relates in this case did not have its 'principal place of business' within the Eighth Circuit, the United States Court of Appeals for the District of Columbia had exclusive jurisdiction and the Eighth Circuit had no jurisdiction over the subject matter." (Cleveland brief, P. 17)

No authority is cited in support of this contention. The exact contrary was held in *Hicks* v. *National Labor Relations Board, et al.* (C.C.A. 4), 100 F. (2) 804, 805-806; cert. denied 308 U. S. 554, under analagous circumstances and where the statutory provision for court review was almost identical with the provisions of Section 19(b) of the Natural Gas Act. To the same effect is *Standard Oil Company* v. *National Labor Relations Board* (C.C.A. 8), 114 F. (2) 743, 744. In the latter case, where two corporations affected by an order of the National Labor Relations Board sought review in different circuits, the Court (P. 744) stressed the fact that

> One decision, including findings of fact and conclusions of law, was issued by the Board, and it filed one order based upon a single record.

Here, the Commission treated Petitioners as engaged in one integrated business under single ownership, control, management, and operation. It issued one decision, including findings of fact and conclusions of law, and issued one order, based upon a single record, requiring that the gross revenues of the integrated business be reduced in a prescribed amount, without apportioning the burden of such reduction among Petitioners.

In *Federal Power Commission, et al.* v. *Natural Gas Pipeline Co., et al.*, 315 U. S. 575, the order of the Commission related to two natural-gas companies, Natural Gas Pipeline Company of America and Texoma Natural Gas Company. Review was sought by both companies in the Circuit Court of Appeals for the Seventh Circuit and the case came to this Court on certiorari. Texoma Natural Gas Company neither had any properties nor conducted any of its physical operations within the territorial limits

of the Seventh Circuit. It was a Delaware corporation producing gas only in the State of Texas and transporting that gas through its pipe line to a point in the State of Oklahoma, within the Tenth Circuit, where it was delivered to Natural Gas Pipeline Company.[9] The Commission treated the combined businesses of the two companies (as it did those of Petitioners here) as one enterprise under substantially common control and ownership. Mr. Chief Justice Stone, writing the opinion for this Court, stressed the unified nature of the entire enterprise and disposed of the case on that basis. He stated (P. 578):

> The two companies are engaged in business as a single enterprise. They produce natural gas from their own reserves in the Panhandle gas fields in Texas, and purchase gas produced there by others. They transport the gas by their own pipeline in interstate commerce to Illinois, where they sell the bulk of it at wholesale to utilities, which distribute and sell it for domestic, commercial and industrial uses.

The provision of Section 19(b) of the Natural Gas Act that review may be had in "any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business" is clearly for the benefit of "the natural-gas company to which the order relates".[10] The intent of Congress in this respect would, obviously, be defeated if, in the case of an order relating to three natural-gas companies located in different circuits and having their principal places of business in different circuits, all three companies were denied this benefit and were forced to seek review in the Court of Appeals of the District of Columbia. There is no occasion

[9] *Illinois Commerce Commission* v. *Natural Gas Pipeline Company of America, et al.*, 2 F.P.C.R. 218, 233-234.

[10] *Peoria R. Co.* v. *United States*, 263 U. S. 528, 535.

here, however, for the Court to decide this question of statutory construction, since we have demonstrated that all three of the Petitioners had their principal place of business at Kansas City, Missouri, within the Eighth Circuit, at the time the petition for review was filed.

CONCLUSION.

For the foregoing reasons it is respectfully submitted that the court below had jurisdiction of the subject matter of this cause and over the parties, and there is no jurisdictional impediment to the granting of the writ of certiorari.

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No. 296

IN THE

Supreme Court of the United States

OCTOBER TERM, 1944

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY, AND MICHIGAN GAS TRANSMISSION CORPORATION,

Petitioners,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION,

Respondents.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

BRIEF FOR THE PETITIONERS.

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Respondents.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

BRIEF FOR THE PETITIONERS.

OPINIONS BELOW.

The opinion of the court below (R. XVI, 7198)[1] and the dissent thereto (R. XVI, 7218) filed June 6, 1944, are reported in 143 F. (2) 488. The opinion and order of the Federal Power Commission (R. I, 14-43) are reported in 45 P.U.R. (N.S.) 203.

[1] In the record citations, Roman numerals refer to the volume, and Arabic numerals refer to the page.

JURISDICTION

The judgment of the Circuit Court of Appeals was entered on June 6, 1944 (R. XVI, 7219). The petition for a writ of certiorari was filed on July 28, 1944. The petition was granted November 13, 1944, limited to the third question presented by the petition. By order of this Court entered January 3, 1945, the scope of review was enlarged to include the second question presented by the petition. The jurisdiction of this Court is invoked under Section 240(a) of the Judicial Code, as amended by the Act of February 13, 1925, and Section 19(b) of the Natural Gas Act.

STATUTE INVOLVED.

The pertinent provisions of the Natural Gas Act, approved June 21, 1938 (52 Stat. 821; 15 U.S.C. 717), are set forth in Appendix A. The section of the Act primarily involved is Section 1(b), which reads as follows:

> (b) The provisions of this act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but *shall not apply to any other transportation or sale* of natural gas or to the local distribution of natural gas or to the facilities used for such distribution *or to the production or gathering of natural gas.* (Emphasis supplied.)

QUESTIONS PRESENTED.

(1)* Whether the Commission's action in treating petitioners' business as an entirety and refusing to make any allocation or separation with respect to petitioners' regulated and unregulated sales was beyond its statutory power.

*Presented as question (3) in the Petition for Certiorari.

(2) Whether limiting the sale price of petitioners' gas for resale so as to provide an over-all return of 6½ per cent on the depreciated cost of petitioners' properties including those devoted to production and gathering of natural gas and excluding petitioners' tendered evidence as to the market value of petitioners' gas leaseholds constituted an exercise of jurisdiction over production and gathering of natural gas in violation of the Natural Gas Act.

STATEMENT.

On February 28, 1941, the City of Detroit and the County of Wayne, Michigan, filed a complaint before the Commission against Panhandle Eastern Pipe Line Co., alleging that its rates and charges for natural gas sold to Michigan Consolidated Gas Company for resale in that City and County were unreasonable, unjust, and unduly discriminatory (R. XVI, 7002). The Commission, on its own motion, instituted an investigation of all wholesale natural gas rates and charges of petitioners (R. XVI, 7061, 7088). These proceedings were consolidated (R. XVI, 7064). After a lengthy hearing before the Commission's trial examiner, the Commission, on September 23, 1942, entered in such consolidated docket the order under review here, requiring petitioners to file new schedules of rates and charges for, or in connection with, their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption, so as to reflect, when applied to their 1941 transportation and sales, a reduction of not less than $5,094,384 per annum below their 1941 consolidated gross operating revenues of $17,789,573 (R. I, 38, 42). On October 30, 1942, petitioners' motion for rehearing and reconsideration, seasonably filed (R. XVI, 7141), was denied (R. XVI, 7150).

Thereupon, petitioners promptly filed in the United States Circuit Court of Appeals for the Eighth Circuit (in

whose jurisdiction petitioners had their principal place of business) their petition for review of said order of the Commission (R. I, 1). On June 6, 1944, that court rendered the judgment under review here, affirming the order of the Commission (R. XVI, 7219).

The properties of petitioners (now owned by Panhandle Eastern[2]) constitute a natural gas production, transportation and marketing system. The system produces and purchases gas from the Panhandle Field in Texas and from the Hugoton Field in Kansas, Oklahoma, and Texas. It extends from the Panhandle Field and the Hugoton Field through the states of Oklahoma, Kansas, Missouri, Illinois, Indiana, Ohio, and Michigan, with termini in Indiana, Ohio, and Michigan. (A map of the system, as of 1941, appears in Appendix B.) When the proceedings before the Commission were commenced, Michigan Gas, a wholly owned subsidiary of Columbia Gas and Electric Corporation, owned that portion of the then existing transmission system extending eastward from Dana, Indiana. Michigan Gas purchased its entire supply of natural gas from Panhandle Eastern and sold such gas to various distributing companies for resale. It also transported for the account of Panhandle Eastern gas sold by Panhandle Eastern directly to various distributing companies serving communities in Ohio and Michigan. Illinois Natural, a wholly owned subsidiary of Panhandle Eastern, owned the lateral lines in the State of Illinois extending from Panhandle Eastern's main line and purchased its entire supply of gas from Panhandle Eastern and sold such gas to distributing companies and industrial companies in Illinois (R. I, 17-18).

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[2] In this brief we refer to Panhandle Eastern Pipe Line Company as "Panhandle Eastern", Illinois Natural Gas Company as "Illinois Natural", and Michigan Gas Transmission Corporation as "Michigan Gas".

Panhandle Eastern purchased Michigan Gas February 6, 1942, and dissolved it March 31, 1943, after acquiring all of its properties. Illinois Natural, a wholly owned subsidiary of Panhandle Eastern, was dissolved March 31, 1943, after the latter acquired

At the hearing, petitioners caused to be identified and offered in evidence certain exhibits, and testimony relating thereto, which would have shown the market value of petitioners' gas leaseholds. The Commission's trial examiner sustained a motion to strike and exclude the exhibits above referred to and all testimony in support thereof (R. II, 715-718; R. VIII, 3973-3975). At the time the evidence was tendered, counsel for petitioners made it clear that it was offered as being relevant not only to a determination of what rate base should be used and what rate of return should be applied but also to a determination of the present value of petitioners' property and to a determination of the return in dollars which they are justly and equitably entitled to receive (R. II, 714-715).

The Commission approved the trial examiner's action in striking all evidence of the fair value of petitioners' leaseholds, basing its ruling upon its construction of the Natural Gas Act.[3]

The excluded evidence would have shown that the present value of Panhandle Eastern's leaseholds, as reflected in their market value, is $8,339,722 (Ex. 39, R. IX, 4199, 4201, 492), while the book cost of such leaseholds, less reserves for depletion amounted to $955,096,[4] a difference of $7,384,626.

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[3] The Commission in its opinion stated: "We held in the Chicago District Electric Generating case that under section 208(a) of the Federal Power Act (the provisions of which are identical with Sec. 6(a), supra) that reproduction cost evidence is inherently fallacious and should be disregarded under that statute." (R. I, 19). It may be observed that the Commission's opinion in the cited case, 39 P. U. R. (N. S.) 263, has never been reviewed by any Court. Furthermore, no properties comparable to gas leaseholds were involved in that case.

[4] Cost of leaseholds was $1,745,206 (Ex. 52, p. 1, LL. 10 and 12—R. IX, 4275), and reserves for depletion, etc. aggregated $790,110 (Ex. 48, p. 2, LL. 10 and 33—R. IX, 4261). These leaseholds were acquired through foresight and good judgment at low prices prior to a determination of the limits of the field and principally over a period from 1930 to 1932.

The excluded evidence was tendered through a witness of many years' experience in the Panhandle and Hugoton fields. During this experience he had bought and sold many leases, both on his own behalf and as broker. He was not in any way connected with petitioners. His analysis of the market value was based on a knowledge of the locations of the various wells and an examination of each of the leases. He took into consideration the unitization agreements which Panhandle Eastern had obtained from its lessors, the subjection to outside drainage, the productivity of each drilled lease,[5] the productivity of the undrilled leases as indicated by nearby production, the rock pressures, and other matters appropriate for consideration in arriving at market value (R. IX, 4190). After having reviewed each lease separately, he placed it in a certain classification representing what was, in his opinion, the then market value of the lease "from a willing seller to a willing buyer" (R. IX, 4195). He then tabulated the number of leases in each classification, fixing a market value as to each classification ranging in the Panhandle Field from $5 per acre to $100 per acre and in the Hugoton Field from $5 per acre to $35 per acre (R. IX, 4199, 4201). In the tendered narrative of his testimony, he stated (R. I, 4198):

> In valuing the leases of Panhandle Eastern Pipe Line Company, I have not considered as a value factor the fact that the wells drilled thereon are connected to pipe lines; nor have I attempted to place a value upon the wells or equipment used in connection therewith. The values shown in the tabulations reflect merely the present market value of the leases, accord-

[5] The average open flow potential in 1940 for the West Sweet Panhandle Field (in which petitioners' wells in the Panhandle Field were located) was 16,019 MCF daily, whereas the open flow potential of petitioners' wells was 25,025 MCF daily (R. IX, 4129, ll. 2 and 3, col. D).

> ing to my judgment. It is my opinion that if this acreage reserve owned by the Panhandle Eastern Pipe Line Company in the two fields was available, it could unquestionably secure an outlet for its gas, exclusive of any pipe line now in the fields and could be sold at the valuation fixed by me.

The valuation of $8,339,722 placed by the witness upon petitioners' 264,971 acres of gas leaseholds shows an average value per acre of approximately $31, whereas the average value per acre under the Commission's valuation was $3.60.

The evidence admitted by the trial examiner showed that, for 1940 (the last full year for which statistics were available at the time), petitioners paid for purchased gas an average field price of 3.8429¢ per MCF, whereas for their own produced gas, under the Commission's formula, petitioners would have received only 2.9924¢ per MCF. Comparable figures for the year 1941 (based in part on estimates) were: 3.8336¢ per MCF paid by petitioners for purchased gas and 2.8272¢ per MCF allowed by the Commission to petitioners for their own produced gas.[6]

The evidence also showed that there were thirty-four wells jointly owned by petitioners and others, the gas from which flowed into petitioners' transmission system (R. IX, 4153). Under gas purchase contracts, petitioners paid the co-owners of the wells for the latter's share of the production 5¢ per MCF (R. III, 1107). The Commission found no fault with this price in its allowance of operating expenses; yet, by reason of its valuation of petitioners' gas leaseholds at only depreciated original cost, the effect of the Commission's order was to allow petitioners only 2.8272¢ per MCF for their share in the production from these wells in 1941.[7]

[6] See computations with record references, Appendix C.
[7] See computations with record references, Appendix C.

The evidence also showed that petitioners owned a particular group of thirteen producing wells, the gas from which was sold to Argus Natural Gas Company for distribution in nearby towns in Kansas. The wells were not even physically connected with any part of petitioners' transmission system, but were connected with the gathering system of Argus Natural Gas Company (R. I, 255-256; XIII, 5893; IX, 4133). The revenue derived from sales of gas from these wells to the Argus Natural Gas Company amounted to $67,365.40 for the year 1941. The average price paid by Argus Natural Gas Company to petitioners for this gas at the wellhead was 6.13¢ per MCF (R. XIII, 5707, l. 32). The Commission included all of these wells and the revenue derived therefrom in its unit treatment of petitioners' business.

Most of the gas sold by petitioners is sold to distributing companies for resale, but a very substantial quantity is sold direct to industrial customers for consumption by them. For the year 1941 direct sales represented 13.2% of all gas transported and sold (R. I, 33). The revenue derived therefrom amounted to $1,500,527 (R. XIII, 5947, Ex. 251, l. 23, Col. F). There was testimony to the effect that $128,848 of the entire investment in plant was used exclusively in serving industrial consumers purchasing gas directly from petitioners (R. I, 33). A very substantial part of the investment in plant was used exclusively in serving distributing companies buying for resale. A map of the system (Appendix B) upon which the locations of the nineteen industrial customers served in 1941 are indicated shows that all of the transmission system from Zionsville, Indiana, to Detroit, Michigan, was used exclusively in serving customers buying for resale.

Petitioners presented at the hearing a suggested basis for an allocation between the regulated and the non-regulated sales (R. XIII, 5947, Ex. 251; R. VIII, 3631-3676,

3857). The Commission's staff also presented a suggested allocation (R. XVI, 6883-6887, Ex. 263; R. VIII, 3994-4002). The Commission refused, however, in its rate reduction order, to make any separation of property or to make any allocation with respect to petitioners' regulated sales and non-regulated sales or to make any findings upon which such separation or allocation could be based; it treated petitioners' business as one subject to regulation in its entirety (R. I, 34).

The Commission allowed petitioners a return of $4,363,925, 6½% on a rate base selected by it, $67,137,305 (R. I. 30). This rate base was determined on the basis of petitioners' business as an entirety without regard to the fact that a substantial portion of petitioners' sales and their business of production and gathering were expressly excluded from the Commission's jurisdiction by the Natural Gas Act.

On review, the court below, with one judge dissenting, affirmed the Commission's order.

SPECIFICATION OF ERRORS TO BE URGED.[8]

The court below erred:

1. In affirming the order of the Federal Power Commission.

2. In failing to set aside the order of the Federal Power Commission.

3. In failing to hold that the Commission's action in treating petitioners' business as an entirety and refusing to make any allocation or separation with respect to petitioners' regulated and unregulated sales was beyond its statutory power.

[8] This specification adheres in substance to the assignments of error urged before the Commission in the application for rehearing (R. XVI, 7141-7148) and to the specification of errors in the petition to review (R. I, 7-12).

4. In holding that the Commission can, consistently with the Natural Gas Act and Article V of the Amendments to the Constitution of the United States, limit the sale price of petitioners' gas for resale so as to provide an over-all return of 6½ per cent on the depreciated cost of petitioners' properties, including those devoted to production and gathering of natural gas, excluding petitioners' tendered evidence as to the market value of petitioners' gas leaseholds.

SUMMARY OF ARGUMENT.

I.

THE COMMISSION'S ACTION IN TREATING PETITIONERS' BUSINESS AS AN ENTIRETY AND REFUSING TO MAKE ANY ALLOCATION OR SEPARATION WITH RESPECT TO PETITIONERS' REGULATED AND UNREGULATED SALES WAS BEYOND ITS STATUTORY POWER.

A. The Natural Gas Act excludes direct sales from the rate making powers of the Commission.

Section 1(b) of the Natural Gas Act (Appendix A) specifically provides that the provisions of the Act shall apply to the transportation and sale in interstate commerce of natural gas *for resale* for ultimate public consumption, but *shall not apply* "to any other transportation or sale of natural gas". It necessarily follows that a direct sale to an industrial consumer for such consumer's own use is not subject to the rate making powers of the Commission.

The legislative history of the Natural Gas Act makes it clear that Congress regarded sales of natural gas by a natural gas company to industrial customers for such customers' own use as not imbued with a public interest and that it was the intent of Congress that such sales should be free from regulation.

B. The Commission failed and refused to observe the statutory limitation on its powers and to make the necessary findings and requisite allocations.

The Commission has recognized its lack of jurisdiction over direct sales in proceedings before it involving other "natural-gas companies" and, in such proceedings, has made allocations supported by specific findings.

The Commission refused in the case at bar to make any allocation, although the Commission's staff and petitioners presented for the Commission's consideration detailed plans for allocation.

The Commission failed to make the necessary findings required by the evidence before it. The Commission made no finding as to the component parts of petitioners' consolidated gross operating revenue, $17,789,573, which included all of the revenue from petitioners' unregulated sales and which petitioners were required to reduce by $5,094,384. There is no finding of any kind relating to allocation.

The order cannot be sustained upon findings so inadequate, in the face of the undisputed facts that (a) 13.2% of all gas sold was not sold for resale but for consumption by the purchaser; (b) $1,500,527 of the gross revenue was derived from such direct sales; (c) $128,848 of the plant investment was used exclusively in the service of direct industrial customers; and (d) the entire transmission system from Zionsville, Indiana, to Detroit, Michigan, was used exclusively in the service of customers buying gas for resale.

The Commission's reasons for failing to make an allocation, stated in its opinion, afford no support for such failure.

The Commission erred in its assumptions (1) that petitioners carried the burden of "showing that the direct industrial sales are so distinct and separate from the general wholesale business that the two cannot here be considered together" and (2) that it could treat all of the business of petitioners "as an entirety requiring no allocation as between the two classes of sales" simply because it appeared reasonable to the Commission to do so.

It is not responsive to the issue for respondents to say that the action of the Commission was "supported by substantial evidence and cannot be said to lack a rational basis".

The question is whether the Commission exceeded the statutory limitation upon its powers. "Only when statutory standards have been applied can the question be reached as to whether the findings are supported by evidence."

The plain fact is that the Commission exceeded its jurisdiction. In determining the amount of the rate reduction ordered, the Commission failed to separate transactions which were within its jurisdiction and those which were beyond its jurisdiction.

As a result, there is a "congenital infirmity" in the order, which renders it void and unenforceable.

C. The Court below erred in holding that no allocation was required.

The court below upheld the Commission's action on the erroneous assumption that "if a segregation had been made it would not materially have affected the result".

The Commission made no findings addressed to the evidence bearing on allocation examined by the court below; it made no segregation or any findings showing what the result of a segregation, if made, would be; and it made no findings in support of the conclusion (imputed to it by the court below but not found in the opinion or findings of the Commission) that, "if a segregation had been made, it would not materially have affected the result".

The court below completely ignored the fact that, in reaching their respective estimates of "cost of service" allocable to the unregulated sales, both the witness for the

Commission's staff and the witness for petitioners had made *pragmatic adjustments* which were not reviewed by the Commission, and *upon which the Commission had made no findings whatever.* The absence of this essential element of the legislative process delegated to the administrative body appears to have been completely overlooked by the court below.

The decisions of this court are uniform in holding that, where part of a regulated business is not subject to regulation, the regulatory body must make an appropriate separation or allocation of property, revenue, and expense as between the regulated and non-regulated transactions.

D. The order of the Commission should be set aside.

The failure of the Commission to make the necessary separation of property, revenue, and expenses as between the sales subject to regulation and the sales not subject to regulation renders its order null and void. Under the provisions of the Natural Gas Act, the order should be set aside. Although Section 19(b) of the Natural Gas Act (Appendix A) provides that, upon review, the Court may modify an order of the Commission, relief to petitioners by modification of the order is impossible here because the legislative process is incomplete and forms no adequate basis upon which the Court can modify the order without departing from the judicial function and performing the legislative function.

II.

THE COMMISSION CANNOT, CONSISTENTLY WITH THE NATURAL GAS ACT AND WITH DUE PROCESS OF LAW, RESTRICT THAT PART OF PETITIONERS' EARNINGS DERIVED FROM THEIR PRODUCING AND GATHERING PROPERTIES TO 6½ PER CENT ON THE DEPRECIATED ORIGINAL COST OF SUCH PROPERTIES.

By Section 1(b) of the Act, Congress expressly provided that the provisions of the Act *shall not apply to the production or gathering of natural gas.*

When the provisions of Section 1(b) are considered together and in their relation to the whole scheme of regulation, particularly the declared policy set forth in Section 1(a) of the Act, the conclusion is inescapable that the intent of Congress was to exclude from regulation the entire business of production and gathering, including the interstate sale of gas by the producer thereof even though it could constitutionally regulate such sale; likewise, to exclude from regulation the production and gathering phase of the business of a "natural-gas company" engaged in interstate transportation and sale.

It is the *service* of transporting gas to the interstate markets that Congress declares to be imbued with a public interest and to require regulation. Where Congress has authorized price fixing with respect to *a commodity*, as distinguished from *a service*, it has not delegated to the administrative agency freedom of action within the broad limits of the conventional rate making guide "just and reasonable", but has provided specific standards peculiarly adapted to the particular commodity.

The exclusion of production and gathering of natural gas from the application of the provisions of the Act is not

qualified so as to apply only to producers who do not also have transportation facilities. The Commission cannot regulate petitioners' production and gathering any more than it can regulate the numerous producers of natural gas and royalty owners who sell their production to petitioners.

It was incumbent on the Commission to determine the field price or actual field value of natural gas in the areas in which petitioners produce their gas, to eliminate petitioners' leaseholds and producing and gathering facilities from the rate base, to disallow expenses of gathering and production—in short, to segregate completely the production phase of petitioners' business from the regulated phase thereof—and to allow to petitioners as an expense item the market price or actual field value for all gas produced by petitioners and taken into their main transmission system.

There was evidence in the record upon which the Commission could have found the market price or field value of petitioners' gas at the well.

Petitioners did not attempt during the hearings to segregate their production and gathering properties and the revenues and expenses related thereto; this was the statutory duty of the Commission. An alternative approach which seemed to lead to substantially the same result was petitioners' contention that, while the operations might all be included within the Commission's rate structure, the rate base valuation of leases and other assets relating solely to production and gathering must be consistent with their legal status as unregulated properties.

The Commission failed to segregate the production and gathering phase of petitioners' business; it included in the rate base all of petitioners' production and gathering facilities and gas leaseholds at only their original cost less reserves for depreciation and depletion. These leaseholds

were carried on petitioners' books at only $955,096, although petitioners offered to prove (but the evidence was excluded) that their leaseholds had a market value of $8,339,722. The exclusion of this evidence was a denial of due process.

The Commission's action in restricting that part of petitioners' earnings derived from their producing and gathering properties to ½ per cent on the depreciated original cost of such properties was arbitrary, discriminatory, lacking any rational basis, and amounted to a denial of due process for the following further reasons:

1. The prevailing market price or field value of gas at the well in the Hugoton Field was from 4¢ per MCF to 5¢ per MCF and such market price or field value in the Panhandle Field was 4½¢.

2. Petitioners and other gas companies in the Panhandle Field paid their royalty owners 4½¢ per MCF for the ⅛ of the gas produced owned by such royalty owners. These payments to royalty owners were allowed by the Commission as an operating expense without criticism.

3. Petitioners produced approximately fifty per cent of the gas which they transported and sold; the remainder was purchased from royalty owners and numerous independent producers in the field. The average field price paid by petitioners for gas in the year 1940 was 3.8429¢ per MCF. Under the Commission's formula petitioners would have been allowed for the gas which they produced only 2.9924¢ per MCF. Comparable figures for the test year, 1941 (based partly on estimates), were 3.8336¢ per MCF paid by petitioners for purchased gas and 2.8272¢ per MCF allowed petitioners under the Commission's formula for their produced gas. The payments for purchased gas were allowed by the Commission as an operating expense without criticism.

4. With respect to thirty-four wells jointly owned by petitioners and others, petitioners are required to pay 5¢ per MCF for the co-owner's share, but receive only 2.8272¢ per MCF for their share, of the gas coming out of the same well.

5. No separation or segregation was made by the Commission with respect to thirteen producing wells owned by petitioners which were not even connected with petitioners' transmission system but were connected with the gathering system of a local gas company serving local market. Petitioners sold the gas from these wells at the well head at 6.13¢ per MCF. The revenue from these sales for 1941 was $67,365.40. The Commission included all of these sales, and the revenue derived therefrom, in its unit treatment of petitioners' business whereby it determined that $5,094,384 of petitioners' consolidated gross operating revenues for 1941 of $17,789,573 was "available for rate reduction."

ARGUMENT.

I.

THE COMMISSION'S ACTION IN TREATING PETITIONERS' BUSINESS AS AN ENTIRETY AND REFUSING TO MAKE ANY ALLOCATION OR SEPARATION WITH RESPECT TO PETITIONERS' REGULATED AND UNREGULATED SALES WAS BEYOND ITS STATUTORY POWER.

A. The Natural Gas Act excludes direct sales from the rate making powers of the Commission.

Section 1(b) of the Natural Gas Act (Appendix A) specifically provides that the provisions of the Act shall apply to the transportation and sale in interstate commerce of natural gas *for resale* for ultimate public consumption, but *shall not apply* "to any other transportation or sale of natural gas". It necessarily follows that a direct sale to an industrial consumer for such consumer's own use is not subject to the rate making powers of the Commission.

The intent of Congress that such interstate sales should be free of regulation is clearly shown by the legislative history of the Act. The report of the "Hearing before the Sub-Committee of the Committee on Interstate and Foreign Commerce of the House of Representatives" (74th Congress, 2nd session) on H.R. 11662,[9] April, 1936,

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[9] The bill that was finally enacted by the Congress as the "Natural Gas Act" was H.R. 6586. In its report to the House (Rep. No. 709, H. Repres., 75th Congress, First Session), the Committee states that the said H.R. 6586 "is substantially identical with H.R. 12680" which, as amended, had been favorably reported by the Committee in the 74th Congress, Second Session. The H.R. 12680, referred to in the said report, contained the following provision as a part of Section 1(b): "Provided, That nothing in this Act shall be construed to authorize the Commission to fix the rates or charges • • • *for the sale of natural gas for industrial use only.*" (Emphasis supplied.) An identical provision was contained in Section 1(b), H.R. 11662.

In the bill, as finally enacted, the exclusion clause is even broader in scope: Sec. 1(b) "*The provisions of this Act* • • • • shall not apply to *any other* transportation or sale of natural gas • • • •." (Emphasis supplied.)

incorporated as a part thereof the brief of Mr. Dozier A. DeVane, then Solicitor for the Federal Power Commission, which brief was submitted to the Committee by Mr. DeVane, at the time of his appearance for the purpose of explaining the various sections of the bill. In speaking of direct sales, Mr. DeVane said in his brief (Page 17 of the said report):

> The bill makes no attempt to regulate the production or gathering facilities of a natural-gas company. - - - - *Likewise natural gas in the process of transportation in high-pressure mains in interstate commerce for industrial use is excluded upon the basis that such sale is made under highly competitive conditions and is not imbued with a public interest.* (Emphasis supplied.)

When H.R. 6586 (the bill which was enacted as "The Natural Gas Act") was being considered in the House on July 1, 1937, the following colloquy took place:

> Mr. Thompson of Illinois: Is there anything in this bill that would affect the relationship through which the large industrial consumer buys natural gas directly from the pipe line company and not through a local distributing company or agency?
>
> Mr. Lea: The question there involved is whether the purchase is for private consumption, or for resale to the public.
>
> Mr. Thompson of Illinois: It would be for private consumption.
>
> Mr. Lea: If it is for private consumption, it would not be affected by this act; if it were for public consumption, the gas rate would be regulated.
>
> Mr. Thompson of Illinois: There is an industry in my district which I understand buys natural gas directly from the pipe line company and has established its own connection. As I understand, this bill does not purport to regulate such a transaction or existing contracts of that nature.

> Mr. Lea: Not unless it falls within the class of public consumption. A natural gas company engaged in the transportation or sale of gas, as I have just indicated, is subject to regulation under this bill. (Con. Rec., Vol. 81, Part 6, P. 6721.)

Later in the discussion Representative Halleck stated, in explaining the bill:

> The question was asked as to whether or not the price that might be charged to a manufacturer who buys direct from the transportation company would be affected by this bill. As I view it, the answer to that question is that this bill seeks only to reach those sales where the sale is for resale to the ultimate consumer. So a purchaser for industrial use who bought the gas not for resale but for consumption in his own plant, would not be reached by the measure. (Con. Rec., Vol. 81, Part 6, P. 6723.)

It seems clear that Congress recognized that the direct sale of natural gas to industrial plants or for the purchaser's own use is, as Mr. DeVane put it, "not imbued with a public interest". Such plants are served on an interruptible basis and are equipped with stand-by equipment for the use of other fuels. Gas is sold to them on a competitive basis and the price must be in line with the prices of competitive fuels. It is immaterial whether that part of the business of a natural gas company which is not subject to regulation by the Commission, is operated at a loss or at a high profit. The rate making powers of the Commission under Section 5 of the Natural Gas Act (Appendix A) are confined to sales for resale for ultimate public consumption.

B. The Commission failed and refused to observe the statutory limitation on its powers and to make the necessary findings and requisite allocations.

The Commission has recognized its lack of jurisdiction over direct sales in proceedings before it involving other "natural-gas companies" and, in such proceedings, has made allocations supported by specific findings.[10] In the *Cities Service Gas Company* case, 50 P. U. R. (N. S.) 65, 89, the Commission said:

> The Company's facilities and operations are devoted in part to natural gas service which is not subject to our jurisdiction. This service consists principally of gas sales made directly to large industrial customers. The necessity arises, therefore, for making an allocation of costs as between the jurisdictional and non-jurisdictional sales.

The Commission refused, however, in the case at bar, to make any allocation, although the Commission's staff[11] and petitioners[12] presented for the Commission's consideration detailed plans for allocation.

The Commission found that petitioners' consolidated gross operating revenue in 1941 totaled $17,789,573. Treating this consolidated gross revenue as though it were derived entirely from sales for resale, the Commission found that it was $5,094,384 in excess of the consolidated gross revenue which the Commission determined petitioners were entitled to earn. It ordered petitioners to reduce their rates for gas sold for resale so as to reflect in the aggregate a reduction of that amount, but *the impact of the Commission's order was upon petitioners' gross revenue*, which included all of the revenue from petitioners' direct sales. The Commission's formal findings (R. I, 38-43) contain no

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[10] *Cities Service Gas Company*, 50 P. U. R. (N. S.) 65, 89; *Colorado Interstate Gas Company*, 43 P. U. R. (N. S.) 205, 231; *Interstate Natural Gas Company*, 48 P. U. R. (N. S.) 267, 279-280; *Canadian River Gas Co.*, 43 P. U. R. (N. S.) 205, 231; *Cf. Hope Natural Gas Company*, 44 P. U. R. (N. S.) 1, 35.

[11] Commission's witness Shattuck, Ex. 263 (R. XVI, 6883-6887), and explanatory testimony (R. VIII, 3994-4002).

[12] Petitioners' Ex. 251 (R. XIII, 5949-5955) and explanatory testimony (R. VIII, 3631-3676, 3919-3933).

finding of the amount of petitioners' revenue derived from their direct sales or of their property used in such service or of the amount of operating expense attributable thereto. There is no finding of any kind relating to allocation.

The order cannot be sustained upon findings so inadequate, in the face of the undisputed facts that (a) 13.2% of all gas sold was not sold for resale, but for consumption by the purchaser (R. I, 33); (b) $1,500,527 of the gross revenue was derived from such direct sales (R. XIII, 5947); (c) $128,848 of the plant investment was used exclusively in the service of direct industrial customers (R. I, 33); and (d) the entire transmission system from Zionsville, Indiana, to Detroit, Michigan, was used exclusively in the service of customers buying gas for resale (R. VIII, 3616-17, Appendix B).

Although the Commission's findings are silent on the issue presented here, its opinion sets forth its reasons for refusing to make an allocation (R. I, 33-34). Several of the stated reasons, in themselves, show injury to petitioners resulting from the Commission's failure to make an allocation, rather than any sound basis for such failure. None of them finds any basis whatever in the Natural Gas Act. These reasons may be summarized as follows:

1. "No capacity has ever been constructed or provided in their gas plant for these direct industrial customers" and only a relatively small investment in plant is used exclusively in the service of the direct industrials;

2. Deliveries to direct industrial customers are made on an interruptible basis and only when there is available excess off-peak capacity "not required by the other wholesale customers";

3. "Respondents themselves treat their entire business as a unit and make no segregation of costs or profits on their books as between the two classes of sales";

4. The "incidental direct industrial business is in reality a by-product of the wholesale business, comparable to the Respondents' gasoline extraction business".

Examining these reasons in the numerical order stated above, we submit:

1. The facts that no capacity has ever been constructed or provided in petitioners' gas plant for these direct industrial customers and that only a relatively small investment in plant is used exclusively in the service of the direct industrials are material only to the extent that they show the relatively small proportion of the expense of construction and operation of the properties which should be allocated to the direct industrial sales. If the Commission has no jurisdiction over these sales, it cannot deal with them as regulated sales, regardless of the comparative volume, the relatively small investment in properties exclusively used in such service, or the predominant use in the regulated business of the jointly used properties.

2. The fact that petitioners' direct sales to industrial customers are made on an interruptible basis and are almost completely curtailed on peak days, when substantially the entire capacity of the line is required for the service of regulated sales, emphasizes the relatively small amount of the cost of construction and operation attributable to such sales. It does not in any way support a failure to allocate. The interruptible nature of such sales was well known to Congress at the time the Natural Gas Act was being considered (see discussion of legislative history, *supra*, pages 19-21). With this knowledge, Congress excluded such sales from the rate making powers of the Commission and, thus, established the necessity of allocation.

3. The Commission's jurisdiction with respect to rate making cannot be enlarged by any waiver on the part of petitioners. An intent to waive their statutory right to have their exempted sales free from regulation cannot be inferred, however, from the manner in which their books were kept. There is no showing that petitioners' books were not kept in accordance with the rules and regulations prescribed by the Commission. Furthermore, the record shows that sufficient evidence upon which to make a separation or allocation was before the Commission.

4. The Commission's statement that the "direct industrial business is in reality a by-product of the wholesale business, comparable to the respondents' gasoline extraction business" has no support in reason or in fact. The extraction of gasoline and water from the natural gas as it comes from the well is absolutely necessary in order that the gas can be safely and economically transported. The extracted gasoline may be termed a by-product. The gas sold to the consumer directly rather than through a distributing company, is not in any sense a by-product. It is the same commodity that is sold to distributing companies for resale. The distinction between the direct sale and the sale for resale created by the Natural Gas Act is artificial. The basis for the distinction is found in the legislative history of the Natural Gas Act (*supra*, pages 19-21). Congress recognized that such sales are governed by competitive conditions, that they are "not imbued with a public interest", and that they form an important segment of the natural gas industry. Such sales were exempted from the rate making powers of the Commission.

The Commission characterized the direct sales as "purely incidental" (although the record shows that petitioners, from the outset, have sought, and obtained, direct sales as well as sales for resale (Ex. 479, R. XII, 5457); referred to some remarks of Panhandle Eastern's President to the effect that allocation of cost of service, including "return",

was "theoretical", "unrealistic" and "not practical" (comments, clearly, lending no legal support to the Commission's failure to make an allocation); and concluded its discussion of the subject with the statement (R. I, 34):

> It is obvious from the record that respondents have made no clear and convincing showing that the direct industrial sales are so distinct and separate from the general wholesale business that the two cannot here be considered together. We conclude, therefore, that, under such circumstances, it is not unreasonable to treat the entire business as a unit requiring no allocation as between the two classes of sales.

This statement shows that the Commission fell into error in two further respects—(1), in assuming that any such burden was placed upon petitioners by the statute, and (2) in assuming that the statute conferred upon the Commission authority to include, or segregate, petitioners' non-regulated business, according to its judgment of what would be reasonable under the circumstances.

As to the first of these errors, the natural Gas Act places no burden upon petitioners to make "a clear and convincing showing that the direct industrial sales are so distinct and separate from the general wholesale business that the two cannot here be considered together" (such a showing, however, was actually made). The duty was heavy upon the Commission to refrain from exercising jurisdiction over a subject matter expressly excluded from its authority. The flagrance of its disregard of this duty is emphasized by the fact that its own staff submitted a plan for separating the non-regulated from the regulated.

As to the second of these errors, we know of no authority for the proposition that an administrative agency may knowingly regulate within a field expressly excluded from its jurisdiction by the source of its authority; simply be-

cause it appears reasonable to do so.[13] The courts have always been alert to inquire *sua sponte* into questions affecting their jurisdiction. Where it appears that the subject matter is expressly excluded from the court's jurisdiction, no waiver or other action of the parties can confer such jurisdiction.[14] Administrative agencies should be equally alert.

It is not responsive to the issue for respondents to say, as they did at page twelve of their brief in opposition to the petition for certiorari herein:

> The Commission's finding that it was unnecessary in this case to make a detailed allocation was accordingly supported by substantial evidence and cannot be said to lack a rational basis.

The substantial evidence rule may be invoked only *after* jurisdiction is established. The question is whether the Commission exceeded the statutory limitation upon its powers. "Only when the statutory standards have been applied can the question be reached as to whether the findings are supported by evidence."[15] The plain fact is that the Commission exceeded its jurisdiction. In determining the amount of the rate reduction ordered, the Commission failed to separate transactions which were within its jurisdiction and those which were beyond its jurisdiction. Its order was based upon inadequate findings. The findings rested upon the theory that petitioners' *entire* business was subject to the jurisdiction of the Commission (R. I, 38, 42):

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[13] *Cf. Federal Trade Comm.* v. *Bunte Bros., Inc.*, 312 U. S. 349; *Smith* v. *Illinois Bell Tel. Co.*, 282 U. S. 133, 148-150; and *Mitchell* v. *United States, et al.*, 313 U. S. 80, 97.

[14] *Cutler* v. *Rae*, 7 How. 729, 730; *United States* v. *Corrick*, 298 U. S. 435, 440.

[15] *United States, et al.* v. *Carolina Freight Carriers Corp.*, 315 U. S. 475, 489.

whereas a substantial part thereof was expressly excluded by the Act. As a result, there is a "congenital infirmity" in the order, which renders it void and unenforceable.

In *United States et al.* v. *Baltimore & Ohio Railroad Co.*, 293 U. S. 454, an order of the Interstate Commerce Commission was under attack. Mr. Justice Brandeis, speaking for a unanimous court, said (page 462):

> The railroads contend that to support the order certain basic findings are essential; that these were not made; and that, hence, the order is void. This contention is in our opinion sound.

And further, (page 464):

> This complete absence of "the basic or essential findings required to support the Commission's order" renders it void. *Florida* v. *United States*, 282 U. S. 194, 215. Compare *Wichita Railroad & Light Co.* v. *Public Utilities Comm'n*, 260 U. S. 48, 58-59; *Mahler* v. *Eby*, 264 U. S. 32, 44-45.

In *United States, et al.* v. *Carolina Freight Carriers Corp.*, 315 U. S. 475, an order of the Interstate Commerce Commission made under the provisions of the Motor Carrier Act of 1935 was under attack. Mr. Justice Douglas said (pages 488-489):

> It is impossible to say that the standards which we have set forth were applied to the facts in this record. Hence, as in *Florida* v. *United States*, 282 U. S. 194, 215, the defect is not merely one of the absence of a "suitably complete statement" of the reasons for the decision; it is the "lack of the basic or essential findings required to support the Commission's order." And see *United States* v. *Baltimore & Ohio R. Co.*, 293 U. S. 454, 464; *United States* v. *Chicago, M. St. P. & P. R. Co.*, 294 U. S. 499, 510-511. Congress has made a grant of rights to carriers such as appellee. Congress

has prescribed statutory standards pursuant to which those rights are to be determined. Neither the Court nor the Commission is warranted in departing from those standards because of any doubts which may exist as to the wisdom of following the course which Congress has chosen. Congress has also provided for judicial review as an additional assurance that its policies be executed. That review certainly entails an inquiry as to whether the Commission has employed those statutory standards. If that inquiry is halted at the threshold by reason of the fact that it is impossible to say whether or not those standards have been applied, then that review has indeed become a perfunctory process. *If, as seems likely here, an erroneous statutory construction lies hidden in vague findings, then statutory rights will be whittled away.* An insistence upon the findings which Congress has made basic and essential to the Commission's action is no intrusion into the administrative domain. It is no more and no less than an insistence upon the observation of those standards which Congress has made "prerequisite to the operation of its statutory command." *Opp Cotton Mills, Inc. v. Administrator*, 312 U. S. 126, 144. Hence the requirement is not a mere formal one. *Only when the statutory standards have been applied can the question be reached as to whether the findings are supported by evidence.* (Emphasis supplied.)

C. The Court below erred in holding that no allocation was required.

The court below examined the method of allocation submitted by the Commission's staff and the method of allocation submitted by petitioners' witnesses, made its own calculation (predicated upon a misapprehension of what the testimony and computations of the witnesses showed) and concluded (R. XVI, 7212):

> There is in the record a substantial basis for the Commission's conclusion that, in determining reasonable rates for sales of natural gas subject to

regulation, it was unnecessary to make a segregation of revenues attributable to sales not subject to regulation, and that, if a segregation had been made, it would not materially have affected the result.

In its calculation, the court below had to charge the direct sales *twice* with the same item, $500,414, in order to reach its conclusion that "if a segregation had been made, it would not materially have affected the result". It had to treat the entire $1,000,828, net revenue from direct sales, as revenue from sales for resale by, first, *contributing* $500,414 to the "return" and, second, regarding the remaining $500,414 as being *in* the "return".

Upon analysis of the opinion of the court below, two erroneous conceptions appear to be primarily responsible for the result reached, namely, (1) its conception that petitioners' witness Biddison's "businessman's judgment" had the same legal force as a finding and determination by the Commission, and (2) its conception of the meaning and effect of the term "return", as used in the method of allocation which the witness was pursuing from his understanding of the Commission's prior opinion in the Colorado Interstate case.[16]

Discussing these in order, we submit:

1. Exhibit 251 (R. XIII, 5947), on which Biddison's testimony was based, purported to be only his determination of a proper segregation of revenues and a proper allocation of operating expenses between regulated and non-regulated sales in accordance with the method Biddison understood the Commission had adopted in the Colorado Interstate case. The exhibit showed that, after such allocation, including Federal income taxes in the amount of $349,062.28, the sum of $651,766.70 remained as earnings

[16] In re: Colorado Interstate Gas Co., 43 P.U.R. (N.S.) 295; now under review in this Court, No. 379, October term, 1944.

from direct sales. This sum, plus the item of $349,062.28, representing Federal income taxes, totalled $1,000,828, and this is the source from which the court below obtained that figure.

Biddison was unwilling to go further with the allocation. When he was pressed by counsel for the Commission as to what "some fair basis" of allocation beyond this would be, he said (R. VIII, 3873):

> I do not think I should be sitting in the judge's bench on that matter. Before anybody could make a definite statement about what he thought was fair on that matter, he would have to know what the procedure was going to be in regard to the subsequent allocation of earnings between the two classes of business. • • •
>
> In the subsequent procedure in this case of allocating *return as if it were an item of cost*, one should know that and then, knowing that, I think that some compromise could be reached between whether the whole million dollars should be retained or what amount of it should be charged as a rental and credited to the regulated business *as a reduction in expense*. (Emphasis supplied.)

Previously, Biddison had been asked: "Is there any engineering basis for a division, from an engineering standpoint?" He had replied:

> Not as an engineering matter. I do not know of any basis. As a business matter I think there are ways in which it could be fairly decided (R. VIII, 3872).

When pressed by the trial examiner for his judgment on the matter, he said:

> If the examiner wants my opinion, I will give it. It is my opinion that the $1,000,828.98 should be divided 50-50.

The examiner asked, "Why?" and Biddison said:

> It is my judgment. It is just my judgment as a businessman, that would be a fair allocation of it (R. VIII, 3874).

This is the evidence upon which the court below held:

> The record indicates that the 1941 revenue of petitioners from direct industrial sales less expenses, but before Federal income taxes, was $1,000,828; that a fair allocation of this revenue would be to treat one-half of it as derived from direct sales; and that the net amount properly attributable to that nonregulated portion of the business would be $319,656 ($500,414 return less $180,758 income taxes at 1941 tax rates) (R. XVI, 7211, 7212).

We shall demonstrate presently the fallacy of this conclusion. We make the point here that the court below committed a fundamental error in its conception that the "businessman's judgment" of Biddison had the same legal effect as a finding thereon by the Commission. As the witness himself stated, he was not "sitting in the judge's bench on that matter".

2. The court's conception of the meaning of the word "return" as used by the witness Biddison (according to his understanding of the method of allocation applied by the Commission in the Colorado Interstate case) was clearly erroneous. The term "return", as so used, is regarded as an item of cost but is, in effect, the earning which the Commission allows the regulated company, as the owner of the properties, for the use of such properties in the regulated portion of its business.

Although, in the course of examination by different counsel, the witness referred to his "50-50" allocation as mak-

ing a "contribution" to the regulated business and as a "fee" for the privilege of using the equipment and as a "rental credited to the regulated business", he definitely stated that, if his suggestion were adopted by the Commission, whatever amount were "contributed" would go to *return and depreciation.* He said (R. VIII, 3857):

> If you take some of the profits from the non-regulated business and credit to the costs of the other business considered as a rental charge for the privilege of using the facilities, you can consider that it has contributed *to return and to depreciation.* (Emphasis supplied.)

Thus, when Biddison suggested a "contribution", "fee", or "rental" of $500,414 as a fair payment by the direct sales for the use of the properties, he clearly meant that it would be a part of the *return* eventually allowed by the Commission. Nowhere in the record is there any testimony that a fair allocation of the net revenue from direct sales of $1,000,828 "would be to treat one-half of it as derived from direct sales". It is apparent, therefore, that, when the court below made the computation by which it arrived at the conclusion that an allocation would yield petitioners only $319,656 net earnings, after taxes, on their direct sales, it misconceived the effect of Biddison's suggested contribution of $500,414 *to return.*

Adopting Biddison's suggested formula and his "businessman's judgment" of a reasonable contribution, "to depreciation and return", we find that petitioners were deprived of at least $319,656 net earnings after taxes, over and above return, by the Commission's failure to make an allocation. This is demonstrated by the following computations:

Gross revenue from direct sales (Ex. 251, R. XIII, 5947, L. 23, Col. F)	$1,500,527
Operating expenses, depreciation, etc., allocable to direct sales (R. XIII, 5947, lines 25 to 36, Col. F)	$ 699,699
Available for income tax, return, and excess earnings	$1,000,828
Contribution to depreciation and return	$ 500,414
Available as excess earnings (above return)	$ 500,414
Federal income taxes on $500,414 (in the percentage of taxes shown on the books which the $500,414 bears to total earnings)	$ 180,758
Earnings on direct sales *in excess* of amount included in return (on entire business) after expenses of operation, taxes and contribution to depreciation *and return*	$ 319,656

The court below also misinterpreted the testimony of the Commission's witness Shattuck, who had a different approach to the problem of allocation. The court below said (R. XVI, 7212):

> Under the Commission's order, the petitioners are allowed a 6½% return ($4,363,925) on their entire business. Under the method of allocation proposed by an expert witness of the Commission, $4,017,878 of the return would be attributable to sales at wholesale (subject to regulation), and $346,047 to direct industrial sales (not subject to regulation).

Shattuck allocated to direct sales all charges of every kind which he thought should be borne by such sales, including Federal income taxes, and arrived at a total figure of $823,922. His testimony and exhibit (Ex. 263. R. XVI, 6883) stopped at this point. He regarded "return" as an item of "cost of service" and said he could go no further with his allocation until the Commission had determined

the "return". He stated, however, the method he would use if he knew what the amount of return would be (R. VIII, 4002).

If we adopt his method, we find that, after his total costs allocated to direct sales, $823,922, are deducted from the undisputed amount of gross revenue from direct sales, $1,500,527, the company earned on its direct sales the sum of $676,605. If we subtract from this amount the $346,047 which the court below found was the amount which the order permitted as an earning on direct sales, we find that the Commission's failure to make an allocation deprived petitioners of earnings in the amount of at least $330,558 per year on their sales not subject to regulation. This is demonstrated by the following computation:

Gross revenue from direct sales (Ex. 251, R. XIII, 5947, L. 23, Col. F)	$1,500,527
Total expenses, depreciation, and taxes allocated by Shattuck to direct sales (Ex. 263, L. 5, Col. E, R. XVI, 6883)	$ 823,922
Net earnings from direct sales	$ 676,605
Amount of 6½% return allocated to direct sales by the court below, *not by the Commission or by any witness*	$ 346,047
Net earnings from direct sales over and above expenses of operation, depreciation, taxes, and share of 6½% return	$ 330,558

Pursuing another approach, it appears that the Commission's failure to make appropriate findings and allocations deprived petitioners of at least $330,982 per year net revenue from direct sales after all expenses, share in permitted return, and taxes.

In Shattuck's exhibit 263 (R. XVI, 6883), he allocated to direct sales, a total operating expense of $823,922. This includes an allocation of depreciation, taxes (including Federal income taxes) and all other operating revenue deductions, but does not include return on investment. The allocation of $823,922 represents 7.92% of the entire allocated expenses of $10,399,651. Applying that same percentage to the permitted return ($4,363,925), that portion of the so-called "return" allocated to direct sales would be $345,623, which, added to the operating cost of $823,922, would result in a total "cost", including return, taxes, and depreciation, of $1,169,545. Subtracting that cost from the item of $1,500,527, the net earnings from direct sales to which Petitioners are entitled *over and above return*, is found to be $330,982.

The necessity of making findings and allocations to avoid injury to the petitioners can likewise be illustrated by still another approach:

It is uncontradicted that the gross revenue from the direct sales was $1,500,527.89. Biddison found that the operating cost allocable to these sales was $499,698.91, leaving, before taxes, $1,000,828.98 (R. VIII, 3873). Shattuck's estimate of cost attributable to direct sales, excluding taxes, would indicate an operating expense of $539,384.16 and a net, before taxes, of $960,143.03. Thus, it is clear that petitioners had, before taxes, operating profits from their direct sales of at least $960,143.03, which should have been set apart as unregulated revenue; whereas, the Commission, in fact, blanketed the whole of this revenue into its unit consideration of petitioners' business in arriving at the figure of $5,094,384 found to be "available for rate reduction".

We do not concede that the Commission's "cost of service" method of allocation (now under review by this Court

in number 379 October term, 1944), which Biddison and Shattuck attempted to follow, is a valid substitute for a proper separation of property according to its use. The conclusions and calculations of these witnesses have been discussed in order to demonstrate the fallacy in the reasoning of the court below and also to illustrate that allocations could have been made by the Commission, and that its failure to make appropriate findings and allocations worked a substantial injury to petitioners.

The exact injury is not reflected in the record and is impossible of definite determination in the absence of the required findings by the Commission. That injury did result from the Commission's failure to discharge its statutory duty is clear, however, and is emphasized by certain additional facts:

In the Hugoton Field in Kansas, Panhandle Eastern owned a particular group of thirteen producing wells, the gas from which was sold to Argus Natural Gas Company, operating in Kansas. The wells were not even physically connected with any part of petitioners' transmission system but were connected with the gathering system of Argus Natural Gas Company (R. I, 255-256; XIII, 5893; IX, 4133). This part of petitioners' business was beyond the jurisdiction of the Commission under Section 1(b) of the Natural Gas Act, not only because of its intrastate character, but also because it was essentially production.

The revenue derived from the sales of gas from the thirteen wells to the Argus Natural Gas Company, $67,365.40 for the year 1941 (R. XIII, 5707) was all included in the Commission's unit consideration of petitioners' entire business in determining the amounts which should be retained by the petitioners in the form of net revenue available for its 6½ per cent return upon the allowed rate base.

The Commission made no findings addressed to the evidence bearing on allocation examined by the court below; it made no segregation or any findings showing what the result of a segregation, if made, would be; and it made no findings in support of the conclusion (imputed to it by the court below (R. XVI, 7212) but not found in the opinion or findings of the Commission) that, "if a segregation had been made, it would not materially have affected the result".

Furthermore, the court below completely ignored the fact that, in arriving at their respective estimates of "cost of service" allocable to the unregulated sales, both the witness for the Commission's staff and the witness for petitioners had made *pragmatic adjustments* which were not reviewed by the Commission, and *upon which the Commission had made no findings whatever*. The absence of this essential element of the legislative process delegated to the administrative body appears to have been completely overlooked by the court below. The majority opinion held (R. XVI, 7212) that:

> • • • a failure of the Commission to give proper effect to that fact [the fact that the revenues of the company derived from direct sales to customers are not subject to regulation] unless arbitrary or capricious, does not, we think, deprive the Commission of its jurisdiction to make a rate order with respect to sales which are subject to regulation.

Judge Riddick, dissenting, expressed the view (R. XVI, 7218) that:

> In this situation it seems to me idle to inquire whether the Commission's order, call it a "pragmatic adjustment" or what-not, does or does not result in confiscation of petitioners' property or whether it is less or more favorable to petitioners than would have been the case had the Commission confined itself to its per-

mitted field. It is enough to require a remand of this proceeding that the Commission has exceeded the statutory limitation on its powers.

We submit that Judge Riddick was clearly correct and that the holding of the majority was error. The decisions of this court are uniform in holding that, where part of a regulated business is not subject to regulation, the regulatory body must make an appropriate separation or allocation of property, revenue, and expense as between the regulated and non-regulated transactions.[17]

The rule was stated in the *Minnesota Rate Cases*, 230 U. S. 352, 435, as follows:

> Where the business of the carrier is both interstate and intrastate, the question whether a scheme of maximum rates fixed by the state for intrastate transportation affords a fair return *must be determined by considering separately the value of the property employed in the intrastate business* and the compensation allowed in that business under the rates prescribed. This was also ruled in the Smyth Case (id. p. 541). The reason, as there stated, is that the state cannot justify unreasonably low rates for domestic transportation, considered alone, upon the ground that the carrier is earning large profits on its interstate business, and, on the other hand, the carrier cannot justify unreasonably high rates on domestic business because only in that way is it able to meet losses on its interstate business. • • •

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[17] *Smith* v. *Illinois Bell Telephone Co.*, 282 U. S. 133, 150;
Minnesota Rate Cases (*Simpson* v. *Shepard*), 230 U. S. 352, 435, 437;
Banton v. *Belt Line Ry. Corp.*, 268 U. S. 413, 421;
Northern Pacific Railway Co. v. *McCue*, 236 U. S. 585, 596-597;
United Fuel Gas Co. v. *Railroad Commission*, 278 U. S. 300, 319;
Northern Pacific Rwy. v. *Dept. Public Works*, 268 U. S. 39; 43-44.

> When rates are in controversy, it would seem to be *necessary* to find a basis for a division of the total value of the property independently of revenue, and this must be found in the use that is made of the property. That is, there should be assigned to each business that proportion of the total value of the property which will correspond to the extent of its employment in that business. (Emphasis supplied.)

In *Smith* v. *Illinois Bell Telephone Company*, 282 U. S. 133, property of the company was used both for intrastate and interstate business. This Court said (pp. 147, 149):

> At the threshold of the discussion, we are met with the fact that, in these findings, the commission and the court made no distinction between the intrastate and the interstate property and business of the company. It appears that the property of the company in Chicago is used to render (1) what is called exchange service, all of which is intrastate, (2) intrastate toll service over its own lines and under arrangements with companies other than the American Company, and (3) interstate toll service, which includes all the toll service rendered under arrangements with the American Company. The company introduced evidence separating the intrastate and interstate business and also the intrastate exchange business. While the court regarded these computations as correct, and approved the method in which they had been made, still *the court made no specific findings* based on a separation of the intrastate and interstate property, revenues and expenses, but determined the issue on the basis of the total Chicago property of the company.
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> * * * * *
>
> The separation of the intrastate and interstate property, revenues and expenses of the company is important not simply as a theoretical allocation to two branches of the business. *It is essential* to the appropriate recognition of the competent governmental authority in each field of regulation. * * * The proper

> regulation of rates can be had only by maintaining the limits of state and federal jurisdiction, and this can not be accomplished unless there are findings of fact underlying the conclusions reached with respect to the exercise of each authority. In view of the questions presented in this case, the validity of the order of the state commission can be suitably tested only by an appropriate determination of the value of the property employed in the intrastate business and of the compensation receivable for the intrastate service under the rates prescribed. * * * As to the value of that property, and as to the revenue and expenses incident to that business, separately considered, *there should be specific findings. Railroad Commission* v. *Maxcy*, 281 U. S. 82, 83, 74 L. Ed. 717, 718, 50 S. Ct. 228. (Emphasis supplied.)

In *Banton* v. *Belt Line Railway Corp.*, 268 U. S. 413, the Court was considering an order of the New York Public Service Commission establishing maximum joint fares on street railways in New York City, of which appellee formed a part. It alleged that the order deprived it of any return on the fair value of its property used to perform the service covered by the joint fare. On the question of allocation, this Court said (page 421):

> There is involved only the rates applicable to a part of the company's business. In this respect, the case is similar to *Northern Pacific Railway* v. *North Dakota*, 236 U. S. 585; *Norfolk & Western Ry.* v. *West Virginia*, 236 U. S. 605, and *Northern Pacific Railway* v. *Department of Public Works of Washington*, 268 U. S. 39. The applicable law is plain. The State is without power to require the traffic covered by the fare enjoined to be carried at a loss or without substantial compensation over its proper cost. And such cost includes not only the expenditures, if any, incurred exclusively for that traffic, but also a just proportion of the expenses incurred for all traffic of which that in question forms a part. The

cost of doing such business is not, and properly cannot be, limited to the amount by which total operating expenses would be diminished by the elimination of, or increased by adding, the transfer passengers in question. It would be arbitrary and unjust to charge to that class of business only the amount by which the operating expenses were, or would be, increased by adding that to the other traffic carried. Outlays are none the less attributable to transfer passengers because also applicable to other traffic. Operating expenses which are incurred on account of all passengers carried, and which are not capable of direct allocation to any class, should be attributed to the transfer passengers in question in like proportion as such expenses are fairly chargeable to other passengers receiving like service.

In *United Fuel Gas Co.* v. *Railroad Commission of Kentucky*, 278 U. S. 300, a final decree of the District Court denying an injunction restraining the Railroad Commission from enforcing rates for natural gas in certain communities in Kentucky was under review. In considering the treatment of certain facilities of the gas company which were used jointly in the regulated business of distributing gas to consumers and in the unregulated business of extracting gasoline from the natural gas, this Court said (pages 319-320):

In the process of extracting gasoline from natural gas, the gas flows from the field to the extraction plant, where the gasoline is taken out, the residual gas being returned to the transmission system for distribution to consumers. In the production of this gasoline, therefore, joint use is made of the gas, gas field and certain facilities of the gas company. This joint use requires a prorating of joint investment and expenses and of the return from the joint enterprise.

D. The order of the Commission should be set aside.

The failure of the Commission to make the necessary separation of property, revenue, and expenses as between the sales subject to regulation and the sales not subject to regulation renders its order null and void; under the provisions of the Natural Gas Act, the order should be set aside. Although Section 19(b) of the Natural Gas Act (Appendix A) provides that, upon review, the Court may modify an order of the Commission, relief to petitioners by modification of the order is impossible here because the legislative process is incomplete and forms no adequate basis upon which the Court can modify the order without departing from the judicial function and performing the legislative function.

The necessary separation, segregation or allocation requires, not only an examination of the record and the weighing of the ultimate facts shown by the evidence introduced by the Commission's staff and by petitioners on the subject of allocation, but also requires a careful examination of the numerous pragmatic adjustments and allocations made by the witnesses with respect to items of property, revenue, and expense. These were made purely on the judgment of the witnesses as to what would be fair and equitable under the circumstances. Where there is a conflict in the judgment of the witnesses, such conflict must be resolved. Where there is no conflict, the appropriateness of the result must still be reviewed. If the Commission finds that an appropriate allocation is not presented by the witnesses, it is still under a duty to make findings and appropriate allocations.[18]

These are matters requiring expertise, forming part of the legislative process which Congress has delegated to the Federal Power Commission. They are part of the rate

[18] See argument supra, pages 27-29, 39-42.

making function. The function of the court with respect thereto can be performed only after the administrative body has examined and weighed *all of the pertinent evidence* and made adequate findings.[19]

In *Newton* v. *Consolidated Gas Co.*, 258 U. S. 165, this Court said (Page 177):

> Rate making is no function of the courts and should not be attempted either directly or indirectly.

In *Keller* v. *Potomac Electric Co.*, 261 U. S. 428, the Court was considering the Public Utilities Law of the District of Columbia, which established a commission and provided that any person dissatisfied with an order of the Commission "may commence a proceeding in equity in the Supreme Court of the District of Columbia * * * to vacate, set aside or modify any such decision" and that the same should be tried "as are equity proceedings in said court." Mr. Chief Justice Taft said (pages 440-441):

> What is the nature of the power thus conferred on the District Supreme Court? Is it judicial or is it legislative? Is the court to pass solely on questions of law, and look to the facts only to decide what are the questions of law really arising, or to consider whether there

[19] *Terminal Railroad Asso. of St. Louis* v. *United States, et al.* 266 U. S. 17, 30;
Keller v. *Potomac Electric Co.*, 261 U. S. 428;
Ohio Valley v. *Ben Avon Borough*, 253 U. S. 287, 289;
Louisville & Nashville R. R. Co. v. *Garrett*, 231 U. S. 298;
Prentis v. *Atlantic Coast Line Co.*, 211 U. S. 210, 226;
Texas & Pacific Railroad v. *Abilene Cotton Oil Co.*, 204 U. S. 426, 440;
Robinson v. *B. & O. R. R. Co.*, 222 U. S. 506;
Skinner & Eddy Corp. v. *United States*, 249 U. S. 557;
United States v. *Abilene & Southern Railroad Co.*, 265 U. S. 274;
O'Donoghue v. *United States*, 289 U. S. 516;
Newton v. *Consolidated Gas Co.*, 258 U. S. 165;
Interstate Commerce Commission v. *Inland Waterways Corp.*,

was any showing of facts before the Commission upon which, as a matter of law, its finding can be justified? Or has it the power, in this equitable proceeding to review the exercise of discretion by the Commission and itself raise or lower valuations, rates, or restrict or expand orders as to service? Has it the power to make the order the Commission should have made? If it has, then the court is to exercise legislative power in that it will be laying down new rules, to change present conditions and to guide future action and is not confined to definition and protection of existing rights. In *Prentis* v. *Atlantic Coast Line Co.*, 211 U. S. 210, 226, we said:

> "A judicial inquiry investigates, declares and enforces liabilities as they stand on present or past facts and under laws supposed already to exist. That is its purpose and end. Legislation on the other hand looks to the future and changes existing conditions by making a new rule to be applied thereafter to all or some part of those subject to its power. The establishment of a rate is the making of a rule for the future, and therefore is an act legislative not judicial in kind. . . ."

In *Interstate Commerce Commission* v. *Inland Waterways Corp.*, 319 U. S. 671, Mr. Justice Jackson said (pages 691-692):

> Our function does not permit us either to prescribe or approve rates, and our decision carries no implication or approval of any rates here involved. Nor are we at liberty to prescribe general attitudes the Commission must adopt towards the exercise of discretion left to it rather than to courts. We decide only whether the Commission has acted within the power delegated to it by law.

II.

THE COMMISSION CANNOT, CONSISTENTLY WITH THE NATURAL GAS ACT AND WITH DUE PROCESS OF LAW, RESTRICT THAT PART OF PETITIONERS' EARNINGS DERIVED FROM THEIR PRODUCING AND GATHERING PROPERTIES TO 6½ PER CENT ON THE DEPRECIATED ORIGINAL COST OF SUCH PROPERTIES.

By Section 1(b)[20] of the Act, Congress expressly provided that the provisions of the Act *shall not apply to the production or gathering of natural gas.* The same section provides that the Act shall apply to "the sale in interstate commerce of natural gas for resale * * *." Considering the latter clause in isolation, it might appear that the Commission has jurisdiction to fix the price which the producer of gas is entitled to receive, after he has reduced the gas to possession, where he sells for interstate transportation and resale.

When, however, the provisions of Sections 1(b) are considered together and in their relation to the whole scheme of regulation, particularly the declared policy set forth in Section 1(a) of the Act, the conclusion is inescapable that the intent of Congress was to exclude from regulation the entire business of production and gathering, including the interstate sale of gas by the producer thereof even though it could constitutionally regulate such sale; likewise, to exclude from regulation the production and gathering phase of the business of a "natural-gas company" engaged in interstate transportation and sale.

Section 1(a) declares that "the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest." Thus, it is the

[20] Appendix A.

service of transporting gas to the interstate markets that Congress declares to be imbued with a public interest and to require regulation. There is nothing in the Act or in its legislative history indicating that Congress found that the prices of natural gas prevailing at the points of production were exorbitant or that the public interest required federal regulation of such prices.

Where Congress has authorized price fixing with respect to *a commodity*, as distinguished from *a service*, it has not delegated to the administrative agency freedom of action within the broad limits of the conventional rate-making guide "just and reasonable", but has provided specific standards peculiarly adapted to the particular commodity.[21]

In excluding production and gathering from the application of the provisions of the Act, Congress might well have had in mind the peculiar nature of this phase of the natural gas business. Mr. Justice Jackson said, in his dissenting opinion in the *Hope* case, that this phase of the business is "more erratic and irregular and unpredictable in relation to investment than any phase of any other utility business • • • Gas itself is tangible, possessible, and does have a market and a price in the field" (320 U. S. 591, 647). He recognized that the value of gas reserves lies in discovery, possibility of discovery and market, and that this value has little, if any, relationship to the ordinary rate case concept of rates or prices for services rendered by means of replaceable property.

The exclusion of production and gathering of natural gas from the application of the provisions of the Act is not qualified so as to apply only to producers who do not also have transportation facilities. The Commission can no

[21] Cf. Agricultural Marketing Agreement Act of 1937, 7 U.S.C., Sections 608c et seq.

Bituminous Coal Act of 1937, 15 U.S.C., Sections 828 et seq.

more regulate petitioners' production and gathering than it can regulate the numerous producers of natural gas who sell their production to petitioners.[22]

It was incumbent on the Commission to determine the field price or actual field value of natural gas in the areas in which petitioners produce their gas, to eliminate petitioners' leaseholds and producing and gathering facilities from the rate base, to disallow expenses of gathering and production—in short, to segregate completely the production phase of petitioners' business from the regulated phase thereof[23]—and to allow to petitioners as an expense item the market price or actual field value for all gas produced by petitioners and taken into their main transmission system.

There was evidence in the record upon which the Commission could have found the market price or field value of petitioners' gas at the well. It was stipulated that in the Hugoton field, Panhandle Eastern was purchasing from numerous companies at 4¢, from others at 4½¢ and from still others at 5¢ per MFC (R. III, 1107). It was shown that, in the Panhandle field, Panhandle Eastern had certain gas purchase contracts at prices less than 4¢ per MCF. The witness, Biddison, said these contracts had a value to Panhandle Eastern in excess of $1,500,000, because they were long time contracts, made when low field prices existed, at purchase prices of 2½¢ and 3½¢ per MCF (R. III, 1095-1098), whereas, in his opinion, 4½¢ represented the general field price for high pressure sweet gas at the wells (R. III, 1099) and 4½¢ was "a fair measure of its present well head value" (R. III, 1101).

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[22] Petitioners purchase approximately fifty per cent of the gas they transport (R. IX, 4155), under contracts which are for the life of the production. Therefore, the reserves of natural gas of these producers are effectively dedicated to petitioners' system.

[23] Cf. *Smith* v. *Illinois Bell Telephone Co.*, 282 U. S. 133, 148-150.

It was further shown by this witness that Panhandle Eastern and other gas companies were then paying their royalty owners in the Panhandle field on a basis of 4½¢ per MCF; that the royalty provision was ordinarily for ⅛th of the product and that "compensation is generally made in cash at what is construed to be the value per unit of the amount of royalty gas * * * produced" (R. III, 1100-1101). The average unit price paid by Panhandle Eastern to its royalty owners during the year 1941 was approximately 4.5¢ per MCF for their ⅛th of the gas produced. The total volume of gas produced during the year was 30,059,021 MCF (R. XIII, 5713). One-eighth of that volume, 3,757,377 MCF, represented the interest of the royalty owners in such production. For that royalty interest petitioners paid their royalty owners $171,043.82 (R. XIII, 5679). This was an average of 4.5¢ per MCF. These payments to royalty owners were allowed by the Commission, as an operating expense, without criticism.

Petitioners did not attempt during the hearings to segregate their production and gathering properties and the revenues and expenses related thereto; this was the statutory duty of the Commission. An alternative approach which seemed to lead to substantially the same result (see *infra* pages 53-54) was petitioners' contention that, while the operations might all be included within the Commission's rate structure, the rate base valuation of leases and other assets relating solely to production and gathering must be consistent with their legal status as unregulated properties.

But the Commission ignored its statutory duty and made no attempt to segregate petitioners' production and gathering facilities, or to determine separately the value of the gas and a reasonable allowance for transportation thereof. It chose the easier, though unwarranted, course of treating petitioners' properties, regulated and unregu-

lated, as one inseparable unit. It not only failed to segregate the production and gathering phase of petitioners' business, but it actually included in the rate base all of petitioners' production and gathering facilities and gas leaseholds at only their original cost less reserves for depreciation and depletion. These leaseholds were carried on petitioners' books at only $955,096, although petitioners were prepared to show, and offered to prove, that those leaseholds had a market value on June 1, 1941, of $8,339,722.

The Commission's action in the case at bar in assuming jurisdiction over matters excluded from the application of the provisions of the Natural Gas Act was based on an erroneous concept of its powers under the Act. The order is, moreover, peculiarly subject to attack in these proceedings as a denial of due process because the Commission, through its trial examiner, excluded evidence which was admissible in reaching a determination with respect to the value of petitioners' gas leaseholds and also the value of the commodity in the fields where produced.

The excluded evidence was tendered through a witness of many years' experience in the Panhandle and Hugoton fields. During this experience he had bought and sold many leases, both on his own behalf and as broker. He was not in any way connected with petitioners. His analysis of the market value was based on a knowledge of the locations of the various wells and an examination of each of the leases. He took into consideration the unitization agreements which Panhandle Eastern had obtained from its lessors, the subjection to outside drainage, the productivity of each drilled lease, the productivity of the undrilled leases as indicated by nearby production, the rock pressures, and other matters appropriate for consideration in arriving at market value (R. IX, 4190). After having reviewed each lease separately, he placed it in a certain classification representing what was, in his opinion, the

then market value of the lease "from a willing seller to a willing buyer" (R. IX, 4195). He then tabulated the number of leases in each classification, fixing a market value as to each classification ranging in the Panhandle Field from $5 per acre to $100 per acre and in the Hugoton Field from $5 per acre to $35 per acre (R. IX, 4199, 4201). In the tendered narrative of his testimony, he stated (R. I, 4198):

> In valuing the leases of Panhandle Eastern Pipe Line Company, I have not considered as a value factor the fact that the wells drilled thereon are connected to pipe lines; nor have I attempted to place a value upon the wells or equipment used in connection therewith. The values shown in the tabulations reflect merely the present market value of the leases, according to my judgment. It is my opinion that if this acreage reserve owned by the Panhandle Eastern Pipe Line Company in the two fields was available, it could unquestionably secure an outlet for its gas, exclusive of any pipe line now in the fields and could be sold at the valuation fixed by me.

The valuation of $8,339,722 placed by the witness upon petitioners' 264,971 acres of gas leaseholds shows an average value per acre of approximately $31, whereas the average value per acre under the Commission's valuation was $3.60.

While the Natural Gas Act excludes the production and gathering of gas from the Commission's jurisdiction and permits it to exercise jurisdiction only over the interstate transportation of gas and over certain (not all) sales thereof in interstate commerce, the Commission has, by its order herein, found that petitioners are entitled to a price in the field for their gas, determined wholly on a consideration of the original cost of their leaseholds, less accruals for depletion and the application thereto of a 6½ per cent rate of return.

It is obvious that, if petitioners' leaseholds can now be sold for more than eight million dollars, an allowance of an earning on a value of less than one million dollars is wholy erroneous. It is to be assumed that the market value of the leaseholds is largely reflected in the market price, or the value of the gas, in the respective areas where it is produced. Such market price or field value is determined by many economic conditions, field transactions and local competitive factors having no relation to the original cost of the leaseholds.

This fact was pointed out by Mr. Justice Jackson in the *Hope* case and emphasized with a most vivid illustration. He said (320 U. S. 591, 649):

> Let us assume that Doe and Roe each produces in West Virginia for delivery to Cleveland the same quantity of natural gas per day. Doe, however, through luck or foresight or whatever it takes, gets his gas from investing $50,000 in leases and drilling. Roe drilled poorer territory, got smaller wells, and has invested $250,000. *Does anybody imagine that Roe can get for his gas five times as much as Doe because he has spent five times as much?*" (Emphasis supplied.)

A comparable illustration is presented by actual facts in this case. Evidence admitted by the trial examiner showed that, for 1940 (the last full year for which statistics were available at the time), petitioners paid for purchased gas an average field price of 3.8429¢ per MCF, whereas, for their own produced gas, under the Commission's formula, petitioners would have received only 2.9924¢ per MCF. Comparable figures for the test year, 1941, (based partly on estimates) were: 3.8336¢ per MCF paid by petitioners for purchased gas and 2.8272¢ per MCF, computed under the Commission's formula, realizable for gas which they produced.[24]

[24] See computations with record references, Appendix C.

This discrimination appears in more glaring form in the situation with respect to thirty-four wells jointly owned by petitioners and others (R. IX, 4153). Petitioners buy from the co-owners of these wells the share of such co-owners in the production at 5¢ per MCF (R. III, 1107). The result is that, for gas coming out of the same well, petitioners are allowed for their share, under the Commission's order, only 2.9924¢ per MCF, based on 1940 actual figures, or 2.8272¢ per MCF, based on 1941 figures, whereas, their co-owners receive 5¢ per MCF for their share. The Commission found no fault with the prices paid for purchased gas, in its allowance of operating expenses.

The evidence also showed that petitioners owned a particular group of thirteen producing wells, the gas from which was sold to Argus Natural Gas Company for distribution in nearby towns in Kansas. The wells were not even physically connected with any part of petitioners' transmission system, but were connected with the gathering system of Argus Natural Gas Company (R. I, 255-256; XIII, 5893; IX, 4138). The revenue derived from sales of gas from these wells to the Argus Natural Gas Company amounted to $67,365.40 for the year 1941. The average price paid by Argus Natural Gas Company to petitioners for this gas at the wellhead was 6.13¢ per MCF (R. XIII, 5707, L. 32). The Commission included all of these wells and the revenue derived therefrom in its unit treatment of petitioners' business. It also ignored this further evidence of the market value of gas at the wellhead.

Had the Commission admitted petitioners' evidence showing the market value of their gas leaseholds to be $8,339,722 and adopted that valuation in the rate base, the increased return thereon, applied to their production in 1941, the test year, would yield 1.8411¢ per MCF, which, added to the 2.8272¢ per MCF realizable under the Commission's valuation (as demonstrated in Appendix C) would have allowed petitioners for their gas at the well a price of 4.6683¢ per

MCF, as compared with 5¢ per MCF paid by petitioners to their co-owners of the jointly owned wells, 3.8336¢ per MCF average price paid by petitioners for gas purchased from other producers, 4½¢ per MCF paid by petitioners for royalty gas, and 6.13¢ per MCF paid petitioners by Argus Natural Gas Company for gas at the well.

We have demonstrated that the Commission's action in limiting the sale price of petitioners' gas for resale so as to provide an over-all return of 6½% on the depreciated cost of petitioners' properties, including those devoted to production and gathering of natural gas, and excluding petitioners' tendered evidence as to the market value of petitioners' gas leaseholds, was arbitrary, discriminatory, lacking any rational basis and amounted to a denial of due process. We submit that such action also constituted an exercise of jurisdiction over production and gathering of natural gas in violation of the Natural Gas Act.

CONCLUSION.

It is respectfully submitted that the judgment of the Circuit Court of Appeals be reversed and that the order of the Federal Power Commission be set aside.

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APPENDIX A.

The pertinent provisions of the Natural Gas Act of 1938, 52 Stat. 821, et seq. (15 U. S. C. Sec. 717) are as follows:

SEC. 1. (a) As disclosed in reports of the Federal Trade Commission made pursuant to Senate Resolution 83 (Seventieth Congress, first session) and other reports made pursuant to the authority of Congress, it is hereby declared that the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.

(b) The provisions of this act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.

* * * * *

SEC. 5. (a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission

shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however,* That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural-gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural-gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates.

* * * * *

SEC. 6. (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

* * * * *

SEC. 19. (b) Any party to a proceeding under this act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part.

No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such order of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 239 and 240 of the Judicial Code, as amended (U. S. C., title 28, secs. 346 and 347).

APPENDIX B.

Names of the nineteen industrial customers (Ex. 58, Schedule 3, R. IX, 4293) purchasing gas directly from petitioners, with locations of plants numbered to correspond with numbered locations superimposed upon map made a part of this appendix, which map was introduced as Chart No. 1 of Exhibit 65, R. X, 4559.

Customer Number	Name of Customer	Location of Customer's Plants Served
		Kansas
1	Phillips Petroleum Company	(a) Sharpe (b) Paola
2	State of Kansas	Osawatomie
		Missouri
3	United Brick and Tile Company	Vale
4	W. J. Small Company, Inc.	(a) Liberty (b) Boonville
5	Phillips Petroleum Company	(a) Harrisonville (b) Leeton (c) Jefferson City
6	Missouri Power and Light Company	(a) Jefferson City (b) Boonville (c) Moberly (d) Mexico
7	Fayette Brick and Tile Company	Fayette
8	Edwards-Conley Brick and Tile Company	Columbia
9	Harbison-Walker Refractories Company	(a) Fulton (b) Vandalia
10	Mexico Refractories Company	Mexico
11	Wellsville Fire Brick Company	Wellsville
12	North American Refractories Company	Farber
13	Walsh Refractories Corporation	Farber
14	Freiling Greenhouses	Hannibal
15	Universal Atlas Cement Company	Hannibal

- CHART NO. 1 -

MAIN TRANSMISSION SYSTEM OF PANHANDLE EASTERN PIPE LINE CO. & SUBSIDIA

- LEGEND -

——— PANHANDLE EASTERN PIPE LINE COMPANY

ⒾⒾⒾ ILLINOIS NATURAL GAS COMPANY

(C) COMPRESSOR STATION

(D) DEHYDRATION PLANT

(G) GASOLINE PLANT

---- MICHIGAN GAS TRANSMISSION CORPORATION

25 0 25 50 75 100 125 150 175 200

- SCALE OF MILES -

COMPANY AS OF SEPTEMBER 30, 1940 OWNED OR CONTROLLED OIL AND GAS LEASEHOLDS ON APPROXIMATELY 286,000 ACRES IN THE AMARILLO AND HUGOTON GAS FIELDS LOCATED IN THE PANHANDLE OF TEXAS, SOUTHWESTERN KANSAS AND TEXAS COUNTY, OKLAHOMA, AND IN ADDITION CONTROLLED THROUGH GAS PURCHASE CONTRACTS THE GAS PRODUCTION FROM APPROXIMATELY 66,000 ACRES IN THIS TERRITORY. IT IS ESTIMATED THAT THE GAS SUPPLY CONTROLLED BY THE COMPANY IN THE AMARILLO AND HUGOTON FIELDS IS ADEQUATE TO SUPPLY THE PRESENT MARKETS AND ANY REASONABLY ANTICIPATED INCREASE IN GAS REQUIREMENTS OF SAID MARKETS FOR A PERIOD OF MORE THAN 25 YEARS.

COMPANY IS PRODUCING GAS FROM 67 GAS WELLS IN THE HUGOTON FIELD IN WHICH IT CONTROLS NOT LESS THAN 1.8 TRILLION CUBIC FEET OF RECOVERABLE GAS.

NEBRASKA

IOWA

ILLINOIS

INDIANA

MISSOURI

KENTUC

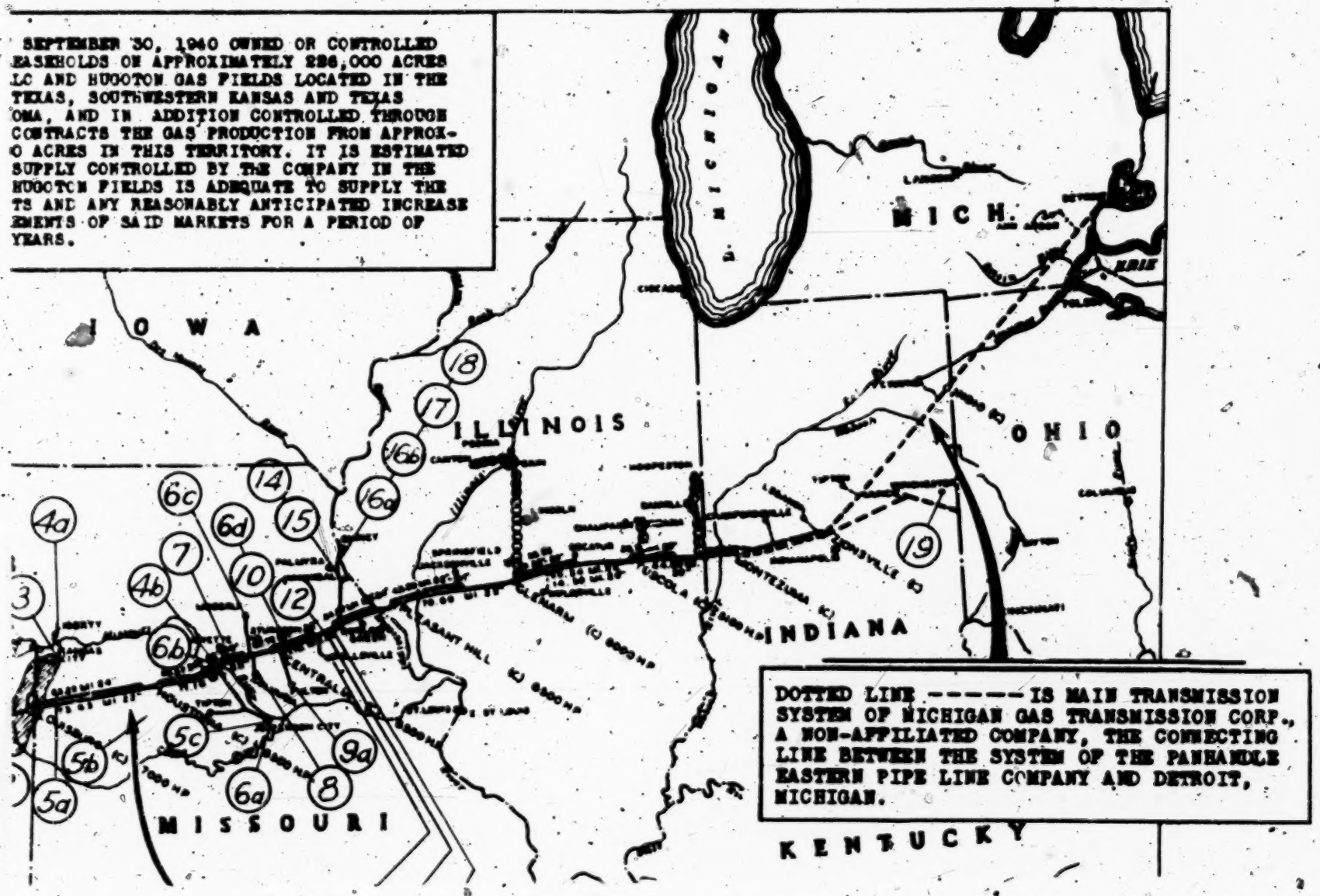
MIC

DOTTED LINE --- SYSTEM OF MICHIG A NON-AFFILIATE LINE BETWEEN TH EASTERN PIPE LI MICHIGAN.

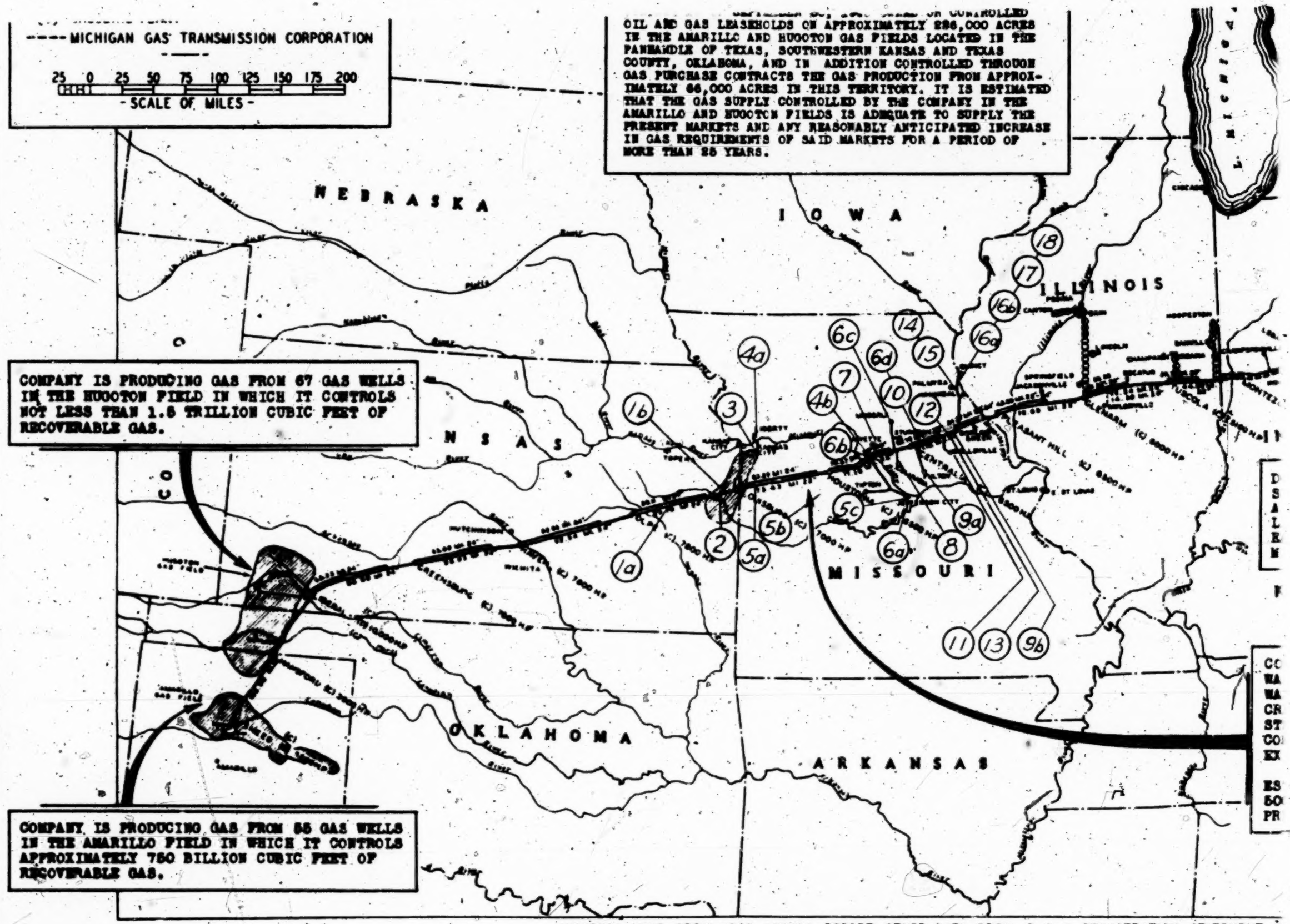
-CHART NO. 1-

SMISSION SYSTEM OF
PIPE LINE CO. & SUBSIDIARY

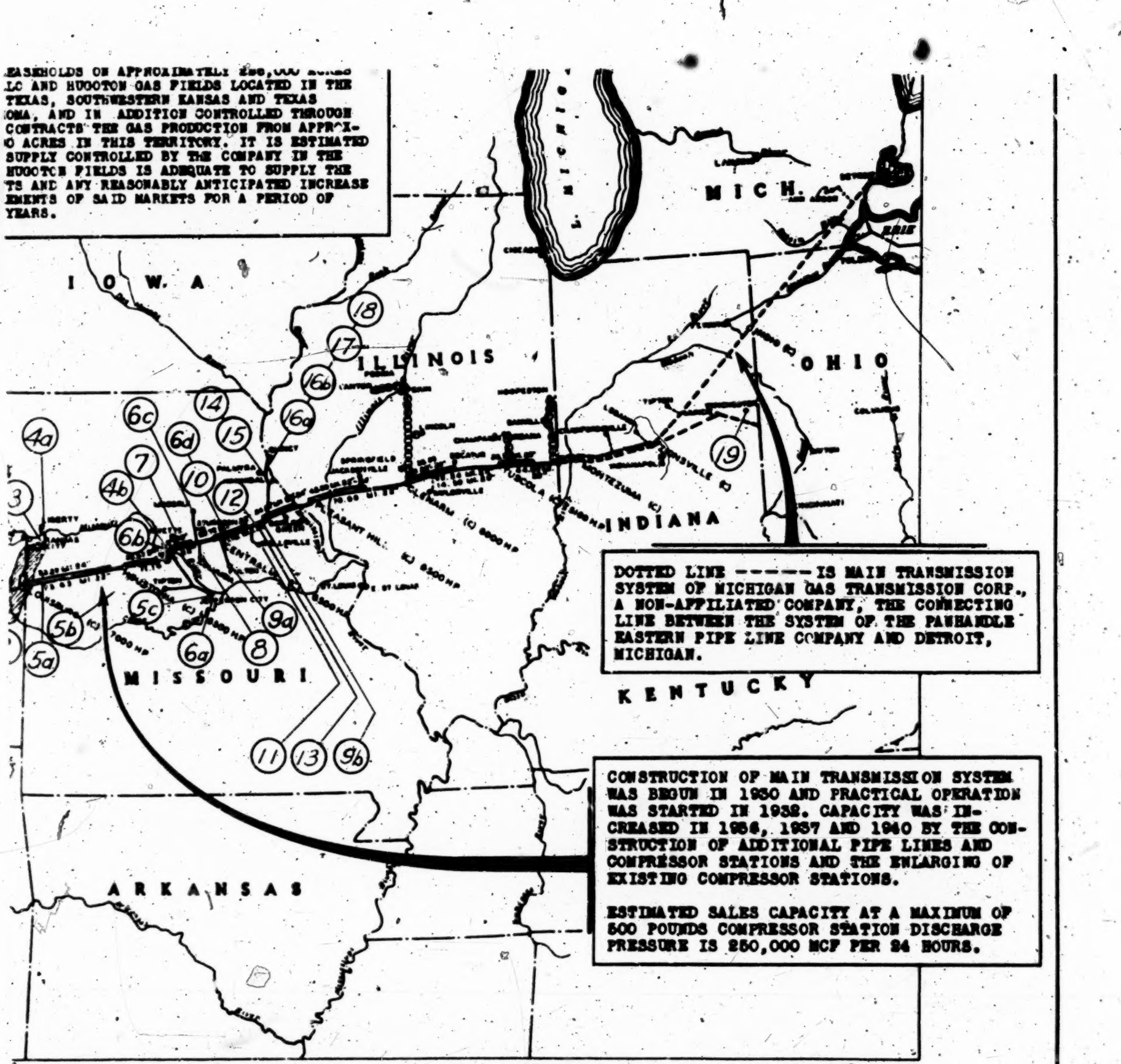
SEPTEMBER 30, 1940 OWNED OR CONTROLLED
EASEHOLDS ON APPROXIMATELY 286,000 ACRES
LC AND HUGOTON GAS FIELDS LOCATED IN THE
TEXAS, SOUTHWESTERN KANSAS AND TEXAS
OMA, AND IN ADDITION CONTROLLED THROUGH
CONTRACTS THE GAS PRODUCTION FROM APPROX-
0 ACRES IN THIS TERRITORY. IT IS ESTIMATED
SUPPLY CONTROLLED BY THE COMPANY IN THE
HUGOTON FIELDS IS ADEQUATE TO SUPPLY THE
TS AND ANY REASONABLY ANTICIPATED INCREASE
EMENTS OF SAID MARKETS FOR A PERIOD OF
YEARS.



DOTTED LINE ------ IS MAIN TRANSMISSION SYSTEM OF MICHIGAN GAS TRANSMISSION CORP., A NON-AFFILIATED COMPANY, THE CONNECTING LINE BETWEEN THE SYSTEM OF THE PANHANDLE EASTERN PIPE LINE COMPANY AND DETROIT, MICHIGAN.



SOURCE — MAP FROM 1940 ANNUAL REPORT, OTHER DATA FROM S. E. C. REGISTRATION STATEMENT



940 ANNUAL REPORT, OTHER DATA FROM S. E. C. REGISTRATION STATEMENT NO. 2-4579, FILED NOVEMBER 18, 1940

		Illinois
16	Marblehead Lime Company	(a) Marblehead (b) Quincy
17	Menke Stone and Lime Company	Quincy
18	Black White Lime Company	Quincy
		Indiana
19	Anchor-Hocking Glass Corporation	Winchester

APPENDIX C.

COMPARISON OF WELL-HEAD PRICE PER MCF REALIZABLE UNDER COMMISSION'S FORMULA BY PETITIONERS FOR GAS PRODUCED WITH AVERAGE FIELD PRICE PER MCF PAID BY PETITIONERS FOR GAS PURCHASED, FOR THE YEARS 1940 AND 1941

	1940 Cents per MCF	1941 Cents per MCF
COMPUTATION OF PRICE FOR PRODUCED GAS		
(a) Production Cost per MCF		
Schedule 3, Exhibit 142, R. XI, 5031 (for year 1941: six months actual and six months estimated) excluding amount paid for purchase of royalty gas. . . (This cost does not include carrying charges on the cost of reserves, the cost of existing facilities, or facilities to be added subsequent to the years 1940 and 1941, nor does it include amortization, depletion, depreciation and replacements with respect to production system properties R. XI, 5026)	0.7435	0.9266
(b) Amortization of Unoperated Leaseholds Allowed by Federal Power Commission		
Year 1940 $80,408.63, total amortization (Schedule 1, Exhibit 173, R. XII, 5443) divided by 22,382,000 MCF Produced (⅞ of 25,578,900)	0.3593	
Year 1941 $74,685.45, total amortization (Schedule 1, Exhibit 173, R. XII, 5443) divided by 26,072,000 MCF Produced (⅞ of 29,796,400)		0.2865
(c) Depletion Allowed by Federal Power Commission:—		
Year 1940 $79,736.27, total depletion allowance (Schedule 1, Exhibit 173, R. XII, 5443) divided by 22,382,000 MCF Produced (⅞ of 25,578,900)	0.3562	
Year 1941 $90,177.06, total depletion allowance (Schedule 1, Exhibit 173, R. XII, 5443) divided by 26,072,000 MCF Produced (⅞ of 29,796,400)		0.3459

(d) Computation of Depreciation Allowed by Federal Power Commission:—

Cost of Depreciable Production Property (Excluding Gathering and Gasoline Facilities)

	1940	1941
Line 13, Page 1, Schedule 176, R. XII, 5453	$ 299.00	$ 299.00
" 15, " 1, " " " " "	46,426.96	47,797.15
" 17, " 1, " " " " "	2,023,739.02	2,067,934.08
" 19, " 1, " " " " "	592,983.62	604,915.00
" 21, " 1, " " " " "	20,762.34	20,691.46
" 24, " 1, " " " " "	399.08	826.16
Total	$2,684,610.03	$2,742,462.85

Year 1940 $2,684,610 × 6% = $161,079 divided by 22,382,000 MCF Produced (⅞ of 25,578,900)	0.7197	
Year 1941 $2,742,462 × 6% = $164,548 divided by 26,072,000 MCF Produced (⅞ of 29,796,400)		0.6311

(e) Computation of Return Allowed by Federal Power Commission:—

	1940	1941
Cost of Depreciable Production Property (Excluding Gathering and Gasoline Facilities)	$2,684,610.03	$2,742,462.85
Cost of Operated Leaseholds Line 10, Pg. 1, Ex. 176, R. XII, 5453	996,613.19	1,017,993.19
Cost of Unoperated Leaseholds Line 12, Pg. 1, Ex. 176, R. XII, 5453	759,239.20	747,784.12
Total Cost of Production Property	$4,440,462.42	$4,508,240.16

Year, 1941 $2,742,462 × 6% = $164,548 divided by 26,072,000 MCF Produced (⅞ of 29,796,400)		0.6311

(e) Computation of Return Allowed by Federal Power Commission:—

	1940	1941
Cost of Depreciable Production Property (Excluding Gathering and Gasoline Facilities)	$2,684,610.03	$2,742,462.85
Cost of Operated Leaseholds Line 10, Pg. 1, Ex. 176, R. XII, 5453	996,613.19	1,017,993.19
Cost of Unoperated Leaseholds Line 12, Pg. 1, Ex. 176, R. XII, 5453	759,239.20	747,784.12
Total Cost of Production Property	$4,440,462.42	$4,508,240.16
Less Reserves		
Depreciation (for computation see schedule below)	$ 927,961.00	$1,090,528.00
Depletion Line 32, Page 2, Exhibit 172, R. XII, 5439	356,987.61	447,164.67
Amortization Line 33, Page 2, Exhibit 172, R. XII, 5439	353,557.18	415,074.53
Total Reserves	$1,638,505.79	$1,952,767.20
Depreciated Cost of Production Properties	$2,801,956.63	$2,555,472.96

$2,801,957 × 6½% = $182,127 divided by 22,382,000 MCF Produced (⅞ of 25,578,900)	0.8137	
$2,555,472 × 6½% = $166,105 divided by 26,072,000 MCF Produced (⅞ of 29,796,400)		0.6371
PRICE FOR PRODUCED GAS (TOTAL COST AND RETURN ALLOWED BY FEDERAL POWER COMMISSION)	2.9924	2.8272
AVERAGE PRICE PAID FOR GAS PURCHASED—Exhibit 142—Total of lines 3 and 25; Schedule 2, R. XI, 5029, and lines 7 and 24; Schedule 3, R. XI, 5031, divided by total of line 39; Schedule 2, R. XI, 5029, and ⅛ of line 37; Schedule 3, R. XI, 5031		
1940—$1,134,306 ÷ 29,517,000 MCF	3.8429	
1941— 1,300,654 ÷ 33,928,000 MCF		3.8336
DIFFERENCE	.8505	1.0064
PRODUCTION MCF (reduced to nearest thousand)	22,382,000	26,072,000
AGGREGATE DIFFERENCE IN DOLLARS	$ 190,400	$ 262,400

Computation of Depreciation or Production Properties Allowed by Federal Power Commission

At December 31 Year	Cost	Average Cost Per Year	Depreciation at 6%
10/1/36 (1)			$ 369,323
1936	$1,452,675	$1,452,675	14,526 (2)
1937	2,096,917	1,774,296	106,487
1938	2,340,235	2,218,576	133,115
1939	2,564,860	2,452,548	147,153
1940	2,680,368	2,622,614	157,357
1941	2,738,526	2,709,447	162,567
Total at December 31, 1941			$1,090,528
Total at December 31, 1940			$ 927,961

(1) From records of Texas Interstate Pipe Line Company—10/1/36.
(2) 1/6th year.

FILE COPY

NO. 296

IN THE

Supreme Court of the United States

OCTOBER TERM, 1944

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY, AND MICHIGAN GAS TRANSMISSION CORPORATION,

Petitioners,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION,

Respondents.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

REPLY BRIEF OF PETITIONERS.

IRA LLOYD LETTS,
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Providence, Rhode Island.

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THE TWENTIETH CENTURY PRESS, INC., CHICAGO

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ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

REPLY BRIEF OF PETITIONERS.

The argument in respondents' brief presents their contentions under four points. We will reply herein to each of these points in the order stated by respondents.

ARGUMENT.

I.

THE COMMISSION'S FINDING THAT NO ALLOCATION WAS NECESSARY IN THE CIRCUMSTANCES OF THIS CASE WAS ARBITRARY AND UNREASONABLE AND DOES NOT HAVE A SUBSTANTIAL BASIS IN THE RECORD.

Petitioners pointed out in their brief (pages 23-27) that the Commission's former findings are silent on the question of allocation but that its reasons for making no allocation are set forth in its opinion (R. I. 33-34). They pointed out that those reasons form no adequate basis for the Commission's failure to make an allocation but tended, rather, to show the necessity of making an allocation.

Respondents concede (Resp. Brf. P. 12) that "petitioners presented an allocation study (Ex. 251; R. XIII, 5947-5955) through their witness Biddison," and respondents base their entire discussion of allocation on his testimony and exhibits. Respondents make no mention of the fact that the Commission's staff also presented a basis for allocation through the Commission's witness Shattuck (Ex. 263; R. XVI, 6883-6887 and explanatory testimony R. VIII, 3994-4002).

Respondents criticize the result shown by Biddison's allocation of operating expenses. They fail to mention the fact that the Commission's own witness Shattuck, applying a somewhat different method of allocation, reached substantially the same result.

Respondents state in note 8 at page 13 of their brief that Biddison's result "appears even more incongruous in the

light of the fact that petitioners' rates for direct industrial gas in 1941 averaged only 17¢ per MCF, as compared with $1.00 for residential gas, 82.4¢ for commercial gas, and 28.7¢ for gas sold to other utilities." This statement, without explanation, is very misleading. Respondents well know that petitioners have no residential or commercial sales, as such. Respondents derived these figures from a "pro forma" statement of net operating revenue for 1941 in which were included sales by Indiana Gas Distributing Corporation, a local Indiana distributing utility not owned in 1941 by any of petitioners here but owned by Columbia Gas and Electric Corporation. Its sales were included because on or about February 6, 1942, prior to the preparation of this "pro forma" statement, Panhandle Eastern had acquired Indiana Gas Distribution Corporation. On or about July 10, 1942, Panhandle Eastern sold this local utility. If the sales of Indiana Gas Distribution Corporation are eliminated, as they should be, the few remaining so-called "residential" and "commercial" sales of petitioners for 1941 are negligible. In obtaining rights of way and easements in the construction of their transmission line, petitioners were required, in some instances, to agree with the owner of the land that he would be provided with gas from the line for his own use. As a result, they are serving such scattered rural customers and employees occupying company houses along the line throughout the eight states through which it passes, but the total revenue from such sales in 1941 was only $9,446.77. The sales designated as "commercial" amounted to only $290.39 (R. XII, 5459).

The purpose of the attack on Biddison's allocation seems to be to create the impression that the Commission considered Biddison's evidence and concluded that it was not reliable. The plain fact is, however, that the Commission's

opinion and its findings make no mention of this evidence or the testimony and exhibits of Commission's witness Shattuck. One of the principal points which petitioners make is the defect in the administrative process by reason of the Commission's *failure to make proper findings on the evidence before it* and the lack of support in the evidence for the Commission's finding that $5,094,384 of petitioners' consolidated gross revenue for 1941 *was available for rate reduction.*

The essence of the order was the requirement that petitioners consolidated gross revenue be reduced by that amount. The fact that the order requires that the reduction be reflected only in rates for gas sold for resale is of minor significance.

The inquiry is directed to the administrative process by which the Commission reached its basic finding that $5,094,384 was available for rate reduction. Respondents admitted in the court below that the Commission treated petitioners' business as subject to the Commission's rate-making powers in its entirety. They said (page 60 of their brief on original argument):

> What the Commission did was to treat the business as a unit, eliminating only the profit *in excess* of a 6½% return on petitioners' entire business (R. 33-34). Under the Commission's order petitioners are allowed a 6½% profit (return) *on all* gas sales, both regulated and unregulated.

The record shows that the Commission had before it evidence of (a) the exact amount of the unregulated sales, (b) the volume of unregulated sales, (c) the exact facilities, and the value thereof, used exclusively in the service of the unregulated sales, (d) the exact facilities, and the value thereof, used exclusively in the service of the regulated sales, (e) a proposed allocation of operating expense sub-

mitted by petitioners, and (f) a proposed allocation of operating expense submitted by the Commission's own staff. This, we think, shows clearly that the Commission's refusal to make an allocation was arbitrary and unreasonable.

Respondents say, however, that, in any event, petitioners were not injured. Petitioners have shown in their brief (pages 29-38) that they were injured, and the point is illustrated with computations from different approaches. We will not restate them here. It will be seen that there is nothing in the quotation from petitioners' brief before the Commission, mentioned in note 13 on page 19 of respondents' brief, inconsistent with petitioners' position here.

II.

THE ABSENCE OF A FORMAL ALLOCATION IN THE INSTANT CASE DOES INVALIDATE THE COMMISSION'S ORDER.

We accept the negative of respondents' point as stated in their brief, but we fail to see the significance of the use of the phrase "a formal allocation," since it is conceded here that no allocation, formal or otherwise, was made by the Commission.

The fact that "The Act does not in terms require an allocation" is of no significance. The controlling fact is that the Act marks out the boundary of the Commission's rate-making powers and excludes from such powers petitioners' direct industrial sales. It does not follow that, as respondents say at page 21 of their brief, "Congress rather obviously left the problem of allocation to the expert judgment of the Commission." No authority is cited for the proposition that a segregation of property or an allocation

is not necessary unless the statute which is the source of the regulatory body's authority specifically requires it.

The fact that Congress, as respondents say, page 21 of their brief, "could have provided for the same regulation over direct industrial sales as it did for interstate sales for resale" does not aid their argument in the slightest degree. Congress expressly provided that "the same regulation" should not apply to both. We have no quarrel with the proposition, stated in note 14, page 21, of respondents' brief, that petitioners' direct industrial sales are not subject to state regulation. Our point is that they were not made subject to the rate-making powers of the Commission under the Natural Gas Act.

In note 16 on page 23 of respondents' brief, respondents, challenging our statement that it is immaterial whether that part of the business of a natural gas company which is not subject to regulation by the Commission is operated at a loss or at a high profit, say:

> A loss might burden the 'regulated' business and a high profit might well be evidence that the 'unregulated' business is not bearing its proper share of the costs.

This very possibility is one of the impelling reasons why courts have held that there must be a separation between the regulated business and the unregulated business where the two are conducted as parts of the same enterprise.

Respondents' further argument that the order requires only a reduction in the rates for resale gas is of no significance here. The injury to the petitioners arises out of the finding that $5,094,384 of their 1941 gross consolidated revenue was *available for rate reduction* and the requirement that they reduce their revenue by that amount.

Judge Ricklick, dissenting below, held that an allocation was necessary in order that the Commission might stay within the confines of its statutory authority. We think that he was right. The only case cited by respondents in support of their argument *contra* is *Lone Star Gas Company* v. *Texas*, 304 U. S. 224. That case, however, is not in point. The ruling of the court was based on its determination that all of the properties of Lone Star Gas Company valued by the Railroad Commission of Texas in fixing the rates complained of were devoted to the intrastate transactions subject to the Commission's jurisdiction and there was no interstate commerce as to which segregation could be required.

All of the other cases relied on by respondents are cited only for the proposition that "a fair division of costs alone is adequate." (Rsp. Brf. P. 27, n. 18). That proposition is vigorously opposed by the petitioners in Number 379, this term. It is not an issue here because, concededly, no allocation or separation of any kind was made. We comment here, however, on the fact that in *Wabash Valley Electric Co.* v. *Young*, 287 U. S. 488, 495, there was a separation of property and, in the two other cases cited, namely, *Banton* v. *Belt Line Railway Corporation*, 268 U. S. 413, and *Houston* v. *Southwestern Telephone Co.*, 259 U. S. 318, the attack was directed to the result of the allocation and not any failure to make a separation of property as between the regulated and the unregulated.

Finally, under this point, respondents urge that the necessity of an allocation disappears if no confiscation is shown. We challenge this proposition and we submit that it is fundamentally unsound. Like the substantial evidence rule, the question of confiscation can be reached only *after* the statutory standards have been applied. We rely upon the holding of this court in *United States, et al.* v. *Carolina*

Freight Carriers Corporation, 315 U. S. 475, wherein Mr. Justice Douglas said:

> Only when the statutory standards have been applied can the question be reached as to whether the findings are supported by evidence.

Respondents place great reliance upon certain remarks of Panhandle Eastern's president to the effect that allocation of cost of service was "theoretical," "unrealistic" and "not practical." (Rsp. Brf. P. 16, 28 n. 19). These remarks were mentioned by the Commission in its opinion (R. I, 34) and by respondents in their briefs below. We fail to see what legal significance such remarks can have in determining the question at issue here but, since respondents appear to lay such emphasis upon them, we ask that the court read the portion of the testimony forming the context from which these remarks were lifted. It will be seen that these remarks were made in criticism of the method of allocation adopted and applied by the Commission in the case of *Colorado Interstate Gas Company*, now under review in Number 379, this term.

In support of their argument that there was no confiscation by reason of the failure to allocate, respondents rest on the proposition that, if the return allowed be reduced by $331,000, "the remaining return would be $4,032,925, slightly in excess of a six per cent rate of return on the overall rate base." (Rsp. Brf., p. 29). They insist that an allowance of only six per cent as a rate of return would not be confiscatory. The defect in this argument lies in the fact that the Commission has not found that a six per cent rate of return on the rate base would provide a fair and reasonable return and, if the Court undertakes to make such a determination here, it will be departing from the judicial

function and engaging in the legislative function of rate-making.[1]

In the case of *Lone Star Gas Company* v. *Texas*, 304 U. S. 224, relied upon by respondents, the facts were different. There, the Railroad Commission of Texas had found that a six per cent rate of return was "a minimum fair rate of return." The jury found that the rates fixed by the Commission were confiscatory. Upon review, this court held that it was error for the Texas Appellate Court to disturb the finding of the jury.

III.

THE COMMISSION EXCEEDED ITS JURISDICTION WITH RESPECT TO PETITIONERS' PRODUCING AND GATHERING FACILITIES.

Respondents assert that petitioners raised the issue as to the jurisdiction of the commission over petitioners' producing and gathering facilities for the first time in petitioners' reply brief in the Court below. While we submit that this issue, being a question of jurisdiction, can be raised at any time in the course of the proceedings, nevertheless, the record shows that petitioners presented their case before the Commission on alternative theories, either that the Commission should, on the basis of all of the evidence before it, separate petitioners' production and gathering properties or, in valuing them for rate making purposes, should recognize their status as unregulated properties. Furthermore, we think that petitioners' position in this respect was preserved by their specifications of error in the petition for re-hearing filed with the Commission (specification numbered II, R. XVI, 7142) and in their

[1]See argument and authorities cited in petitioners' brief, pages 43-45.

petition for review in the Court below (assignment of error numbered third, R. I, 7-8).

The issue drawn between petitioners and the respondents under this point resolves itself into a question of statutory construction. We point out in our brief (pages 47-48) that the legislative history indicates clearly that Congress intended by the Natural Gas Act to regulate the *service* of transporting gas to interstate markets for resale there and not the field price of gas as a *commodity*.

The legislative history in this regard is fully discussed in the brief of the Independent Natural Gas Association of America, *amicus curiae* in *Canadian River Gas Company* v. *Federal Power Commission, et al.*, No. 380, this term. We will not burden the Court here with a repetition of what is said there, but we respectfully refer the Court to that brief for a full discussion of the subject.

In the *Natural Gas Pipe Line Company* case, 315 U. S. 575, and the *Hope Natural Gas Company* case, 320 U. S. 591, cited by respondents, the issue was not raised and the discussion of the legislative history found in the *Hope* case was not directed to the question presented here.

Respondents' statement (Rsp. Brf. p. 35) that "the valuation of production and gathering facilities historically has been an integral part of the regulatory procedure in fixing rates for natural gas" is purely academic here. Such historical background and the cases cited centered around state regulation under statutes which did not contain, as does the Natural Gas Act, a specific provision excluding production and gathering from the regulatory scheme.

Sections 5(b), 6(a), 6(b), 8(a), 9(a), 10(a) and 14(b) of the Act, mentioned by respondents, do not support their contention that the Commission may exercise rate regulatory power over the business of production and gathering.

These sections confer upon the Commission investigatory powers and in no way qualify the express provision of Section 1(b) excluding production and gathering from the application of the provisions of the Act.

IV.

THE COMMISSION CANNOT CONSISTENTLY WITH DUE PROCESS OF LAW, RESTRICT THAT PART OF PETITIONERS' EARNINGS DERIVED FROM THEIR PRODUCING AND GATHERING PROPERTIES TO 6½% ON THE DEPRECIATED ORIGINAL COST OF SUCH PROPERTIES.

Respondents' point IV is stated as follows:

> In determining the reasonableness of petitioners' interstate wholesale rates the Commission is not required to value the gas which they produce on the basis of a 'field price.'

The point, as thus stated, is, obviously, too narrow and does not meet the due process issue presented by petitioners' point II in their brief, pages 46-54. Since, however, the discussion under respondents' point IV is directed entirely to that issue we restate it here in replying to respondents' point IV.

Respondents do not challenge the correctness of the computations in Appendix C of petitioners' brief showing a price of 2.8272¢ per MCF allowed petitioners for their gas at the wellhead and an average field price of 3.8336¢ paid by petitioners for all gas purchased in both fields. Respondents assert, however, (Rsp. Brf. p. 47-48, Note 29) that "the allowed cost of gas produced by petitioners averages 3.75¢ per MCF as compared with the 3.71¢ per MCF average cost of gas purchased."

These results are reached by a series of errors in respondent's Appendix B, which we will now proceed to point out:

Price for Purchased Gas.

3.71¢ per MCF is not the average cost of gas purchased in 1941. The correct figure is 3.99¢ per MCF. The error arises in the failure to recognize that royalty gas in the amount of 3,757,377 MCF was purchased in 1941 at approximately 4½¢ per MCF, the total paid being $171,044.

Therefore, to the total purchase price of gas purchased from other producers in the amount of $1,180,918 used in respondents' appendix B must be added $171,044; and to the total volume purchased, namely, 30,137,409 MCF, must be added the 3,757,377 MCF purchased from royalty owners.

The variation between this price of 3.99¢ per MCF and the price for purchased gas shown in petitioners' Appendix C, namely, 3.8336¢ per MCF, is due to the fact that petitioners' Appendix C was based on Exhibit 142, which was six months actual and six months estimated for 1941, whereas actual figures for 1941 show the price of 3.99¢.

It is proper to treat the royalty gas as purchased gas because the nature of a royalty is such that ⅛ of the gas belongs to the lessor at the wellhead. Petitioners purchase all of the royalty gas from their producing wells.

Commission's Allowance for Petitioners' Produced Gas.

The price of 3.75¢ computed in respondents' Appendix B as the allowance to petitioners for their produced gas is incorrect by reason of the following errors:

1. Included in the cost of producing petitioners' gas is the item of $171,044 paid to royalty owners. This item

is not properly a cost of petitioners' produced gas because it is the purchase price of the royalty gas, as explained above. Likewise, the volume of produced gas appearing in respondents', Appendix B namely, 30,059,021, should be reduced by the volume of the royalty gas, to-wit: 3,757,377 MCF, to reach the correct volume of produced gas, namely, 26,301,644 MCF.

2. Included in the cost of producing petitioners' gas (In expenses designated "Gas Well Operation" and "Gas Well Maintenance") are two items which should have been eliminated.

(a) Field Measuring Station Operation and Maintenance Expense amounting to $17,643 (R. XII, 5595);

(b) Supervision and Engineering Operation and Maintenance Expense amounting to $18,433 (Part of total Supervision and Engineering Operation and Maintenance Expense of $31,892 is applicable to items which should not be included as part of the cost of producing petitioners' gas).

Thus where $377,542 is shown in respondents' Appendix B, the amount should be $170,422.

3. The allocation (developed in respondents' Appendix B but nowhere to be found in the Commission's opinion or findings or in the record) of $120,300 of administrative and general expense to the operation of wells and leases is not computed correctly. This allocation appears to be based on an apportionment of an item of $841,848 whereby 14.29% thereof is charged to wells and leases and 85.71% thereof is charged to other operation and maintenance. These percentages are derived from the percentage relation of $377,542 to $2,265,152. These two items represent, respectively, production expense and other operation and maintenance expense totalling $3,823,612 less $1,180,918

for natural gas purchased. Included in the figure $377,542 is $171,044 paid for royalty gas and $36,076 ($17,643 + $18,433) also improperly included as explained above (1+2). These, of course, should have been taken out, reducing the figure $377,542 to $170,422. The $36,076 should be added to the figure $2,265,152. If this is done, the resulting percentages are 6.9 and 93.1. If we apply the percentage 6.9 to the item of $841,848, we find that the general and administrative expense allocable to wells and leases is approximately $58,088 instead of $120,300 (adopting this method of allocation developed for the first time in respondents' Appendix B). It may be observed in this connection that it is difficult to believe that the overhead costs of a natural gas pipe line company having a total rate base of approximately $67,000,000 of which only about 3%, or $2,555,472 (Appendix C of petitioners' brief), is invested in leases and wells should be allocated to the extent of 6.9% to such wells and leases.

4. The Depreciation figure of $94,628 determined through use of an average rate for 1941 is incorrect and should have been $164,548 (shown in petitioners' Appendix C). The depreciation rate applicable to petitioners' production properties is stated to be 6% (R. I, 279 and R. V., 2162).

5. The item of production taxes, $52,811, is incorrect as it includes, "Gross Production, Receipts, Etc." (R. XII 5591). The correct amount is $41,551 (R. XI 5031, Lines 13 and 30).

6. The item of $54,142 shown as the federal income tax allocated to wells and leases is incorrect because it is based on the ratio of an assumed return on production properties of $215,672 to the total return; whereas we have shown

in petitioners' Appendix C that the portion of the return actually allowed on the wells and leases was but $166,105. The ratio of the latter figure to the total return allowed is 3.81% and the amount of federal taxes thereby allocable to wells and leases is $41,672.

7. The amount of the return shown in respondents' Appendix B, to-wit: $215,672, is incorrect due to their use of the figure $417,405 instead of the correct figure (shown in petitioners' Appendix C) of $1,090,528 for the reserves for depreciation applicable to gas wells and equipment. As a result, the net investment in wells and leases allowed in the rate base was found by respondents to be $3,318,034, whereas the correct amount is $2,555,472, as shown in petitioners' Appendix C, item (e). Respondents accept this figure as correct in their computations in note 31 at page 49 of their brief.

When adjustments are made to correct all of the above errors in respondents' Appendix B the result shows an allowance for petitioners' produced gas of 3.25¢ per MCF.

Respondents assert that fair and stable field prices would not prevail if the Commission followed a practice of separating production and gathering properties from the rate base and allowing a field price for gas at the point where it enters the interstate transmission system. Nothing envisioned by respondents may be compared with the chaotic results which are bound to follow if the value of gas in the field is determined upon a 6½% rate of return on the original depreciated cost to each individual producer. The hazards and uncertainties of the production and gathering business are such that a wide variation in prices would inevitably result from application of the Commission's formula. This, we think, was well known to Congress and is a further indication of the wisdom of the law makers in

providing that the provisions of the Act shall not apply to production and gathering. It is interesting to note the statement of respondents (Rsp. Brf. p. 49 that

> "Finally, if the commodity price rather than cost were adopted by the Commission there would no longer be any peculiar necessity for treating the gas business as presenting any hazards. As a result, the transmission facilities, which constitute the larger portion of the pipe lines' investment, would be entitled to a lower rate of return than 6½%."

It is suggested in the note to the quoted paragraph that the return allowed on transmission facilities might be limited to 5½% or 6%. This appears to be a concession that, by reason of the difference between the production and gathering busin. s and the service of transportation, the former requires different treatment in the rate-making process than the latter. By the same token, gas leasehold properties require different treatment in arriving at their value for rate-making purposes.

The fallacy of the Commission's valuation formula is demonstrated by the respondents' computations in the same note. If six per cent were allowed on the transmission facilities (and there is certainly sufficient hazard in that business alone to warrant such a return), the $489,015 return on production property would afford only a rate of return of approximately 4.3% on petitioners' production properties if the market value of their gas leaseholds, shown by their excluded evidence to be $8,339,722, is used in the rate base. Such valuation is proper because the theory of respondents' computation is that petitioners are no longer bound by the depreciated original cost valuation of their producing properties.

The argument is made that Petitioners tendered evidence was subject to the same criticism directed to the evidence

dealing with leaseholds, which was *admitted and considered*, in *Dayton Power and Light Co.* v. *Commission*, 292 U. S. 290, 296-301, and respondents refer also to the criticism by this Court of the weight of the evidence of leasehold values which was *heard and considered* in *United Fuel Company* v. *Commission*, 278 U. S. 300.

The *United Gas Company* cases and the *Dayton Power & Light* case can be distinguished on the following grounds:

1. The evidence offered was admitted.

2. Generous valuations, in excess of original cost, had been made below. The Kentucky Commission had allowed over $6,000,000 and the West Virginia court had allowed over $10,000,000 for 137,000 acres. The Ohio Commission had allowed over $7,000,000 for approximately 291,000 acres. Here, the allowance was only $955,000 for approximately 265,000 acres in proven fields far superior in actual production, potential reserves, and possibility of successful drilling.

3. The evidence of value was all based on an assumed quantity of gas underlying the leaseholds, recovered over a period of years, transported to an unregulated market 130 miles away and there sold at 30c per MCF. Even so the court said only that the evidence did not have controlling effect. Mr. Justice Cardozo said in the *Dayton Power & Light Co.* case 292 U. S. 290, 301:

> It had no such commanding quality as to apply coercion to the judgment of the appointed triers of the facts and exclude every choice but one.

4. In the *United Gas* case the court pointed out that evidence of market value was lacking. Here, the evidence offered and excluded dealt solely with market value, as more fully shown in the record (R. IX, 4187-4201) and summarized in petitioner's brief, pages 50-51.

The evidence offered in the *Dayton* and *United Gas* cases dealt with leaseholds in the Appalachian area. That area has in the past produced large volumes of gas but the fields in that area are small in size and substantial risks of dry holes exist. Thus in the Commission's opinion in the *Hope* case, 44 P. U. R. (N. S.) 1 the Commission said, with respect to that area,

> "the permeability and porosity characteristics of the region caused isolated pools of natural gas and the company's gas productive properties are intermingled with nonproductive areas and other companies' properties."

Mr. Justice Jackson stated, discussing the same field (320 U. S. 631), that the development risks appear from the circumstances that up to 1928, even in the proven area, 15.7 per cent of the wells drilled had failed to produce in commercial quantities.

The converse of this situation is clearly shown by the record to obtain both as to the Panhandle field and the Hugoton field (the field in which Petitioners own their gas leases). While it is generally assumed that at some point these fields probably are tied together (R. IX, 4196), each field is generally regarded as being an enormous *common reservoir*. Thus, Witness Smith stated that the gas in the Panhandle field is contained in a common reservoir; that the field extends 125 miles in length with an average width of approximately 20 miles; and that, as classified by the Railroad Commission of Texas, 1,085,270 acres produce sweet gas and 372,437 acres produced sour gas (R. VIII, 4104).

With respect to the Hugoton field, Dr. Bartle testified (R. IX, 4161) that, while ultimate limits of the Hugoton field have not yet been definitely determined, he had indi-

cated on his map a large area in which *no dry holes had been drilled*. This area was about 65 miles in length and from 25 to 45 miles in width in the State of Kansas; about 35 miles in length and 30 to 40 miles in width in Oklahoma; and about 30 miles in length and 12 to 30 miles in width in the extreme northern part of Texas. The total field thus outlined contained approximately 2,540,000 acres (R. IX, 4161).

In the early history of both fields Panhandle Eastern acquired acreage in what has been found to be, as a result of subsequent drilling both by it and other producers, choice portions of both fields and has made consolidations of its leases in the areas which are located at the top of the structure (R. III, 1152), areas which will probably be the last portions of the fields to be abandoned (R. III, 1154). The quality of this acreage is reflected in the circumstance that while the average open flow potential (productive capacity) of all wells in the West Panhandle field is only 16,019 MCF, the average open flow potential of Panhandle Eastern's wells in that field is 25,025 MCF daily (R. IX, 4129). In the Hugoton field the reserves of Panhandle Eastern's wells constitute at least an average of the proven area of the field (R. XIII, 1297).

Respondents tacitly concede that petitioners are paying 4½¢ per MCF for gas purchased from their royalty owners, and 5¢ per MCF for gas purchased from the co-owners of the thirty-four wells jointly owned by petitioners and others. They make no answer whatever to the proposition that, where A and B are selling gas from the same well, it is fundamentally unjust and unreasonable to let A charge the consumer 5¢ per MCF and to allow B to charge only 3¼¢ per MCF.

CONCLUSION.

For the reasons assigned in petitioners' brief and in this reply brief, we respectfully submit that the judgment of the Circuit Court of Appeals should be reversed and that the order of the Federal Power Commission should be set aside.

Respectfully submitted,

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FILE COPY

No. 296

In the Supreme Court of the United States

OCTOBER TERM, 1944

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY, AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS

v.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICH., COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

BRIEF FOR THE RESPONDENTS IN OPPOSITION

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OPINIONS BELOW

The opinion and order of the Federal Power Commission (R. I, 14–43)[1] are reported in 45 P. U. R. (N. S.) 203. The opinion of the Circuit Court of Appeals (R. XVI, 7198–7218) is not yet officially reported.

[1] In the record citations, roman numerals refer to the volume, Arabic numerals refer to the page.

JURISDICTION

The judgment of the Circuit Court of Appeals was entered on June 6, 1944 (R. XVI, 7219–7220). The petition for a writ of certiorari was filed on July 28, 1944. Jurisdiction of this Court is invoked under Section 19 (b) of the Natural Gas Act and Section 240 (a) of the Judicial Code, as amended by the Act of February 13, 1925.

QUESTIONS PRESENTED

1. Whether the Commission's interim rate order, allowing petitioners a return of 6½ per cent upon the actual investment in their properties and leaseholds in service, yielding a return of 12 percent upon petitioners' common stock and 9 per cent on their combined common stock and surplus, after payment of all necessary operating expenses, interest on the long-term debt and dividends on the preferred stock, is unjust and unreasonable.

2. Whether the Commission must, as a matter of law, receive and consider evidence of the "reproduction cost" of petitioners' physical properties and the "market value" of their leaseholds, where, petitioners, although afforded an opportunity, failed to establish the relevance of such evidence, and where the Commission, having before it accurate and reliable evidence of the actual legitimate cost of such properties and leaseholds, found the former evidence to be irrelevant.

3. Whether, in determining the amount of reduction to be made in petitioners' wholesale rates, the Commission was required to make a detailed cost allocation as between petitioners' wholesale business and direct industrial business, where the latter was found to be minor and incidental to the wholesale business, and where petitioners' president testified that a detailed allocation would be "unrealistic" and "impracticable."

STATUTES INVOLVED

The relevant provisions of the Natural Gas Act of 1938 (52 Stat. 821; 15 U. S. C. 717) are set forth in the Appendix, *infra*, pp. 18–21.

STATEMENT

The proceedings before the Commission arose out of a complaint filed February 28, 1941 by the City of Detroit and County of Wayne, Michigan, alleging that the rates and charges of petitioners, Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, for natural gas sold to Michigan Consolidated Gas Company for resale for ultimate public consumption in that City and County were unjust, unreasonable, and unduly discriminatory (R. XVI, 7002). The Commission, on its own motion, instituted an investigation on May 22, 1941 of all interstate wholesale rates and charges of such petitioners, and later expanded the investigation to include.

those of petitioner, Illinois Natural Gas Company (R. XVI, 7061, 7088). Respondent Michigan Public Service Commission and respondent Michigan Consolidated Gas Company, also urging the propriety of a reduction in the challenged rates and charges, were permitted to intervene in the proceedings, which were consolidated for hearing (R. XVI, 7024, 7046, 7064). After these proceedings were initiated, petitioner Panhandle Eastern Pipe Line Company acquired all the properties of the other two petitioners, which were then dissolved (Pet. 4, n. 1).

After extensive hearings were had (R. I, 45–R. XVI, 7001) and petitioners' case was closed (R. VIII, 3975, 4011), counsel for Detroit and Wayne County, counsel for the Commission, and counsel for Michigan Consolidated Gas Company, in April 1942, filed separate motions with the Commission requesting an interim order reducing petitioners' rates by $6,800,479, $5,580,888, and $5,489,874 per annum, respectively (R. XVI, 7100, 7104, 7125). Following submission of briefs the Commission, on September 23, 1942, entered its opinion and interim order here under review, finding that petitioners' interstate wholesale rates were excessive and requiring petitioners to reduce such rates on and after November 1, 1942, so that if the reduced rates had been in effect during 1941, there

would have resulted a reduction in revenue of $5,094,384 (R. I, 15–37, 38–43).[2]

The Commission founded its order upon the $78,814,292 actual legitimate cost of petitioners' property in service on December 31, 1941; less $12,596,987 for accrued depreciation; plus $920,000 for working capital; which resulted in a rate base of $67,137,305.[3] Petitioners presented evidence purporting to show the "reproduction cost new" of their physical properties and the "market value" of their gas leaseholds, totalling $89,672,102.[4] The trial examiner, after affording petitioners a full opportunity to establish its relevance, sustained a motion to strike this evidence; and the action of the trial examiner was approved

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[2] The Commissioner's order (R. I, 42) required:

"(A) The rates and charges made, demanded, or received by the respondents for or in connection with their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption shall be so reduced as to reflect, when applied to respondents' 1941 transportation and sales, a reduction of not less than $5,094,384 per annum below their 1941 consolidated gross operating revenues of $17,789,573 * * *."

[3] There is no dispute as to the actual legitimate cost of petitioners' property (R. I, 21–22; Pet. 8). The amount of accrued depreciation was taken from petitioners' books as petitioners had requested in their brief before the Commission (R. I, 23). The allowance for working capital was not questioned in the petition for review in the court below (R. I, 6–12).

[4] R. I, 18–21; R. IX, 4209, 4277; R. X, 4810; R. XI, 4885; R. XII, 5455, 5531.

by the Commission in its opinion (R. I, 18–21, 488; R. II, 628, 712, 717).

The Commission allowed a 6½% return on the rate base, which return it found to be "fair and liberal." Using 1941 as the test year, the Commission allowed all operating expenses, including the annual depreciation expense, the exploration and development costs incurred by petitioners in that year as shown by their books, and Federal income taxes (R. I, 30–31).[5] With respect to increases in operating expenses which petitioners claimed would occur after 1941, including increased taxes and amortization of rate case expense, the Commission found, in the light of petitioners' earnings during the first three months of 1942, that these claimed increases in expenses would be more than offset by increased revenues (R. I, 30–33).

Petitioners' application for rehearing (R. XVI, 7141–7149) was denied by the Commission on October 30, 1942 (R. XVI, 7150). Thereafter they filed a petition for review in the circuit court of appeals. That court heard argument on May 14, 1943 (R. XVI, 7196), but deferred its decision pending this Court's disposition of *Federal Power Commission* v. *Hope Natural Gas Company*, 320 U. S. 591 (R. XVI, 7196). After this Court handed down its opinion in that case on January 3, 1944, the instant case, at the re-

[5] Two minor adjustments were made, which are not now in dispute (R. I, 30–31).

quest of the court below, was resubmitted upon supplemental briefs and argument (R. XVI, 7196, 7197), and the court then entered its opinion and judgment on June 6, 1944, affirming the Commission's order (R. XVI, 7198, 7219).

ARGUMENT

The court below properly held that the rates established by the Commission are just and reasonable, and that petitioners were not denied any rights guaranteed by the due process clause or by the Natural Gas Act. In view of this Court's decisions in *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, and *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, we submit that this case presents no question calling for review.

I. Petitioners contend (Pet. 24–28) that the Commission's rate order allows them an inadequate return. It is a sufficient answer that, as held below, the "end result" of the Commission's order, when "viewed in its entirety," is not "unjust and unreasonable" under the standards laid down by this Court in *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, and *Federal Power Commission* v. *Natural Gas Pipeline Company*, 315 U. S. 575.

The Commission's rate order, allowing a 6½% return on the rate base, will permit petitioners to earn $4,363,925 upon the basis of the test year, after meeting all operating expenses, including

annual depreciation expenses, exploration and development costs, and Federal income taxes (R. I, 30). The undisputed annual cost of servicing petitioners' long-term debt is $957,786 (or 2.88 per cent), and the cost of servicing their preferred stock is $939,000 (or 5.8 per cent), a total of $1,896,786 (R. XIV, 6097; Pet. 8), which leaves $2,467,139 for petitioners' $20,184,175 of common stock, a return on such stock of 12% (R. XII, 5501; XIV, 6097).[6] Petitioners urge (Pet. 26) that they are also entitled to a return on their surplus, but they have no cause for complaint on that score even if their position is sound. For the earnings of $2,467,139 available for the common stock and surplus will provide a return of 9 percent on the combined common stock and surplus of $27,294,000. The allowed rate of return, as the Commission found (R. I, 28–30), is commensurate with returns on investments in other enterprises having corresponding risks, and is more than sufficient to insure confidence in petitioners' financial integrity.[7] There is thus no room for any contention that the re-

[6] In the *Hope* case, this Court found unobjectionable a rate order the result of which was to permit earnings of 7.8 per cent on the common stock (320 U. S. 591 at 603–604).

[7] The record shows that comparable earnings on the combined common stock and surplus of 153 of the most stable industrial companies in the country during the test year 1941 averaged 8.65% (R. XVI, 6867; VIII, 3978–3980). These industrials were characterized by petitioners' witness as "closely approximating stability that one would expect in a

turn afforded petitioners is "unjust and unreasonable." Cf. *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, at p. 586.[8]

2. The court below properly rejected petitioners' contention that they were denied due process by the Commission's approval of the trial examiner's action in striking their evidence of the "reproduction cost" of the physical properties and the "market value" of the leaseholds. While the point was not raised in the court below, it is to be observed that petitioners did not apply to the court under Section 19 (b) of the Act for leave to adduce this evidence, a procedural defect which this Court held to be fatal under cognate circumstances in *Consolidated Edison Company* v. *N. L. R. B.*, 305 U. S. 197, 226. See also *Cali-*

regulated industry" (R. VIII, 3714, 3718–3719). The Commission found that Panhandle Eastern has earned an average of 10.64% on its net investment over the past five years, and Michigan Gas an average of 8.5% during approximately the same period (R. I, 29).

[8] Nor does petitioners' experience since issuance of the Commission's order support that contention. Earnings in excess of the reduction prescribed by the Commission have been and are currently being impounded under the stay order of the court below, and are not available to petitioners for dividend or other purposes. Yet during the past year petitioners, out of revenues represented by the reduced rates, paid dividends of 8 percent on their outstanding common stock (see Standard and Poor's Corporation 1943 Annual Dividend Record, p. 112), and in June 1943 sold to the public at a premium $10,000,000 of their 10-year debentures paying interest at only 2¾ percent (see Moody's Public Utilities for June 23, 1943, p. 1147).

fornia Lumbermen's Council v. *Federal Trade Commission*, 115 F. (2d) 178, 183 (C. C. A. 9), certiorari denied, 312 U. S. 709; *Hershey Chocolate Corporation* v. *Federal Trade Commission*, 121 F. (2d) 968, 971 (C. C. A. 3); but see *Fashion Originators' Guild* v. *Federal Trade Commission*, 114 F. (2d) 80, 82 (C. C. A. 2), affirmed on other grounds, 312 U. S. 457, 467–468.

In any event, the Commission is not required, as a matter of law, to receive and consider such evidence. Cf. *Federal Power Commission* v. *Hope Natural Gas Company*, 320 U. S. 591, and *Federal Power Commission* v. *Natural Gas Pipeline Company*, 315 U. S. 575. Similar evidence, while received by the Commission in the *Hope Natural Gas Co.* case, was rejected for rate base purposes because it was considered "hypothetical and without probative value" (44 P. U. R. (N. S.) 1, 8–9). This Court, noting the Commission's action in that regard (320 U. S. at 596–597), specifically held that neither the Constitution nor the Natural Gas Act requires the use of "reproduction cost" or "fair value" evidence in arriving at the rate base, and reversed the contrary ruling of the circuit court of appeals. As this Court has stated, the "Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas." *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 586.

Nor is there any basis for petitioners' contention that the effect of the Commission's action was "to prejudge a case before its hearing" (Pet. 15). The trial examiner, before he excluded this evidence, afforded petitioners several opportunities to establish its relevance (R. I, 488; R. II, 628, 712, 717). This petitioners failed to do, merely reiterating the contention, which they now advance, that the Commission was compelled, as a matter of law, to receive and consider such evidence (R. II, 714–716; Tr. 1254, 1283). In reviewing and approving the action of the trial examiner, the Commission found on the basis of the record that the excluded evidence was irrelevant in this proceeding (R. I, 18–21). This action was proper, as the lower court held (R. XVI, 7202–7208). The properties have been built within recent years, construction having begun in 1930. The cost records were complete and properly maintained and there was no need to resort to estimates. There is clearly a rational basis for the informed judgment of the Commission that these circumstances made it unnecessary to consider opinion evidence as to the reproduction cost of the property and the market value of the leaseholds (R. I, 18–21).

3. Petitioners contend that the Commission, in finding the rate base, should have made an allocation between property, capital and revenue which relate to sales at wholesale and that which relates to direct industrial sales (Pet. 18, 23–24). This

contention was properly rejected below (R. XVI, 7210–7213).

The undisputed evidence established that petitioners' property and capital are devoted to a unified business consisting primarily and almost exclusively of the production and the interstate transmission and sale of natural gas at wholesale; that the direct sales, which are made to only 19 industrial consumers, constitute a minor portion of the business; that petitioners have not constructed or provided any main line capacity for such direct industrial consumers (R. VIII, 3652); and that direct sales to them are made on an interruptible basis, only at times when the capacity in petitioners' lines is not required for service to the wholesale customers (R. VIII, 3862–3864, 3616–3617).[*] Moreover, petitioners' president testified that any attempt to make a detailed allocation between the direct industrial sales and the sales at wholesale would be "theoretical," "unrealistic" and "not practical" because of the unified nature of the business (R. VIII, 3960–3962). The Commission's finding that it was unnecessary in this case to make a detailed allocation was accordingly supported by substantial evidence and cannot be said to lack a rational basis.

[*] While direct sales in 1941 involved 13% by volume of all gas sold by petitioners, only 8 per cent of petitioners' gross revenues in 1941 was derived from direct industrial consumers and deliveries to them on the peak days of the 1941–1942 winter amounted to only 2.69 per cent of total deliveries (R. XVI, 6871–6883).

But in any event, the Commission's determination to make no allocation for the relatively minor portion of direct sales caused petitioners no damage. Petitioners have made no showing to the contrary, nor would the record support it. Petitioners' witness testified that in determining the net return from the wholesale business for rate making purposes, the cost of carrying on the wholesale business should be reduced by an amount equal to one-half of the apparent profits on the direct industrial sales during the test year, leaving a net return of some $319,000 allocable to direct industrial sales.[10] The Commission's order is in fact even more favorable to petitioners, for under it the return allocable to the direct indus-

[10] According to petitioners' witness Biddison's theoretical cost allocation, the total revenues from direct industrial sales were $1,500,527; the total expenses applicable to such sales (before Federal income taxes) were $499,699, leaving $1,000,828 available for Federal income taxes and return (R. XIII, 5947). He testified on cross-examination that, "in fairness" to the wholesale customers, one-half of the latter amount, or $500,414, should be contributed toward the reduction in the cost of carrying on the wholesale (regulated) business, i. e., that this sum was the amount allocable as the additional cost of carrying on the direct industrial (unregulated) business (R. VIII, 3857, 3872-3874). Petitioners admit that of the remaining one-half ($500,414) available for income taxes and return for the direct industrial business, $180,758 is for Federal income taxes, and the balance of $319,656 represents the return to which they claim to be entitled as profit for the direct industrial business. As stated in petitioners' main brief in the court below (p. 193): "If this suggestion [by petitioners' witness Biddison] were followed, there would be a net earning by unregulated sales of $500,414 before Federal taxes, and $319,656 after applying 1941 tax rates."

trial sales is some $26,000 more than that contended for by petitioners.[11]

There is no basis for petitioners' contention (Pet. 18–20) that the decision below conflicts with that of the Tenth Circuit Court of Appeals in *Colorado Interstate Gas Company* v. *Federal Power Commission*, 142 F. (2d) 943. As petitioners' witness recognized at the hearings in this case (R. VIII, 3869), the facts here are essentially different from those in the *Colorado* case, where "a major portion of the facilities was constructed for the express purpose of serving direct industrial customers whose sales constituted more than one-half of the volume of the system output (R. VIII, 3868–3869)."[12] Moreover, in the *Colorado* case, the Commission did make a detailed alloca-

[11] As the court below stated (R. XVI, 7212): "Under the Commission's order, the petitioners are allowed a 6½% return ($4,363,925) on their entire business. Under the method of allocation proposed by an expert witness of the Commission, $4,017,878 of the return would be attributable to sales at wholesale (subject to regulation), and $346,047 to direct industrial sales (not subject to regulation)." (See R. IX, 4002; R. XVI, 6883.) This amount is $26,391 more than the $319,656 testified to by petitioners' witness.

[12] As stated in the Commission's opinion in that case (43 P. U. R. (N. S.) at 210), one of the "primary objectives" of the business was to supply gas to the Colorado Fuel & Iron Corporation, a large industrial customer and one of the two markets which were "the essential prerequisite" of the construction of the main line. Here direct industrial sales were an incidental, subordinate and entirely minor part of petitioners' business, to which it would be concededly "unrealistic" and "not practical" to make any allocation of facilities.

tion between the wholesale and direct sales, and it was the method of allocation which was challenged on review. Since there was no issue before the Tenth Circuit Court of Appeals as to the necessity of a detailed allocation in every case, the portion of the court's opinion on which petitioners here rely was dictum.

There is no merit in the implication in the petition (Pet. 7) that the absence of a detailed allocation results in a regulation of the rates charged by petitioners for direct sales to industrial customers. The Commission's order, by its terms, is limited to a reduction of petitioners' interstate wholesale rates on and after November 1, 1942. The order does not prescribe rates for gas sold directly to industrial consumers, and does not prevent petitioners from increasing or decreasing such rates at will. In addition, the rate order in question is an interim order, subject to pragmatic adjustments as need or justification is shown.

4. Certain incidental contentions of petitioners may be dealt with briefly. It is urged that in taking actual legitimate cost rather than "reproduction cost new" or "market value" of the facilities devoted to production and gathering of gas, the Commission exercised "jurisdiction over production and gathering of natural gas in violation of the Natural Gas Act" (Pet. 2). The argument as developed in the petition (Pet.

21–23) is substantially the same as that advanced in *Federal Power Commission* v. *Hope Natural Gas Company*, 320 U. S. 591, 614, n. 25. In there rejecting such contentions, this Court pointed out that the ascertainment of the cost of producing and gathering natural gas, "like the provisions for operating expenses, is essential to the rate-making function as customarily performed in this country." Further discussion of that question here seems unnecessary.

It is also contended (Pet. 27–28) that the Commission should have included in the rate base the cost of construction work in progress and future capital expenditures. This Court ruled in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 587, that "the refusal to include in the rate base capital expenditures not yet made can not involve confiscation." Moreover, petitioners follow the policy of capitalizing interest during construction (R. I, 275–276), and it would be a duplication to allow a return on such expenditures during the construction period. In any event, consideration of future expenditures to serve new business would also have required consideration of the additional revenues which will result therefrom, and as to this petitioners failed to adduce any evidence (R. I, 28).

CONCLUSION

The decision below fully accords with those of this Court in the *Hope* and *Natural Gas Pipeline* cases, and there is no substance to the alleged conflict of decisions. We respectfully submit that

the petition for a writ of certiorari should be denied.

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AUGUST 1944.

APPENDIX

The pertinent provisions of the Natural Gas Act of 1938, 52 Stat. 821, et seq. (15 U. S. C. 717) are as follows:

SEC. 1. (a) As disclosed in reports of the Federal Trade Commission made pursuant to Senate Resolution 83 (Seventieth Congress, first session) and other reports made pursuant to the authority of Congress, it is herby declared that the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.

(b) The provisions of this Act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.

* * * * * *

SEC. 5. (a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, munici-

pality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however,* That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates.

* * * * *

SEC. 6. (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

* * * * *

SEC. 19 (b) Any party to a proceeding under this Act aggrieved by an order issued

by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and condi-

tions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such order of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 239 and 240 of the Judicial Code, as amended (U. S. C., title 28, secs. 346 and 347).

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No. 296

In the Supreme Court of the United States

OCTOBER TERM, 1944

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY, AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS

v.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICH., COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

SUPPLEMENTAL BRIEF FOR THE RESPONDENTS

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ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

SUPPLEMENTAL BRIEF FOR THE RESPONDENTS

SUBJECT OF THIS BRIEF

This brief is filed by the respondents pursuant to the request of this Court, contained in a letter of October 7, 1944, from the Clerk, and is directed solely to the question raised in the Brief Amicus Curiae filed by the City of Cleveland, Ohio, on September 29, 1944: Whether the court below had jurisdiction over the subject matter of

this case under Section 19 (b) of the Natural Gas Act (52 Stat. 821, 15 U. S. C. §717r (b)), which provides:

> (b) Any party to a proceeding under this Act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. * * *

The respondents submit that the court below had jurisdiction to hear and decide this case, because:

I. The designation of the circuit wherein the company "is located or has its principal place of business" is a matter of venue and not jurisdic-

tion, and any possible objection to the venue of the court below has been waived.

II. In any event, the "natural-gas company to which the order relates" had "its principal place of business" in the Eighth Circuit.

STATEMENT

The Federal Power Commission's order here under review was entered under the Natural Gas Act on September 23, 1942, and required petitioner Panhandle Eastern Pipe Line Company, and its wholly-owned subsidiaries, petitioner Illinois Natural Gas Company and petitioner Michigan Gas Transmission Corporation, to reduce their interstate wholesale rates on and after November 1, 1942, by $5,094,384 per annum based on their consolidated revenues during the test year 1941 (R. I, 38–43). The petitioners filed a joint application for rehearing (R. XVI, 7141–7149) which the Commission denied by order of October 30, 1942 (R. XVI, 7150).

On November 18, 1942, the petitioners filed a joint petition for review under Section 19 (b) of the Act in the court below, the United States Circuit Court of Appeals for the Eighth Circuit (R. I, 1–14). The petition, which was sworn to by the president of each petitioner, stated that "each of Petitioners has it principal place of business in Kansas City, Jackson County, Missouri, within the jurisdiction of the Eighth Circuit Court of Appeals;" that petitioners together constitute "a

pipe line production transmission and marketing system owning large gas reserves in Texas, Oklahoma, and Kansas, and a pipe line with lateral lines connecting such reserves with markets in Texas, Kansas, Missouri, Illinois, Indiana, Ohio, and Michigan; and that "a substantial portion of the transmission facilities lie within the territory over which this Court has jurisdiction." (R. I, 6).

Upon petitioners' joint application, the court below on December 7, 1942, issued a stay of the Commission's order pending review, upon the condition *inter alia* that "the monthly difference between payments to petitioners under existing rates or arrangements and those required under the order of the Commission" be impounded with the custodian of the court "for the benefit of the ultimate consumers or of petitioners as in this litigation may be determined entitled thereto" (R. XVI, 7182).[1]

While the review proceeding was pending in the court below, on or about April 1, 1943, petitioner Panhandle Eastern acquired all the properties and assumed the liabilities of its wholly-owned subsidiaries, petitioners Illinois Natural Gas and Michigan Gas, which were then dissolved (Pet. 4, n. 1).[2]

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[1] The impounded funds now total some $15,000,000.

[2] The acquisition was approved by the Securities and Exchange Commission on April 1, 1943. *Re Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company, Michigan Gas Transmission Corporation*, S. E. C. Holding Company Act Release No. 4212.

The court below heard argument on May 14, 1943, but deferred its decision pending this Court's disposition of *Federal Power Commission* v. *Hope Natural Gas Company*, 320 U. S. 591 (R. XVI, 7196). After this Court handed down its opinion in that case on January 3, 1944, the instant case, at the request of the court below, was resubmitted upon supplemental briefs and argument (R. XVI, 7196, 7197), and the court then entered its opinion and judgment on June 6, 1944, affirming the Commission's order (R. XVI, 7198, 7219). It is this order which the petition for certiorari herein seeks to review.

On June 19, 1944, after the court below had entered its decree affirming the Commission's order, the City of Cleveland, Ohio, which had not participated in the proceedings before the Commission or the court below, filed a motion in the court below, requesting "leave to intervene and be named a party respondent in this proceeding."[3] The stated purposes of the motion were (p. 6):

> (1) To oppose the granting of certiorari by the Supreme Court of the United States

[3] While this proceeding was pending in the lower court, a shortage of natural gas developed in the Appalachian area which includes the City of Cleveland. To alleviate this shortage, it was deemed advisable to make gas from the Panhandle Eastern system available to The East Ohio Gas Company which serves the City of Cleveland. Appropriate authorization of the necessary interconnecting facilities was issued by the Commission, with the concurrence of the War Production Board, on November 30, 1943. *Re East Ohio Gas Company*, 52 P. U. R. (N. S.) 91. Panhandle Eastern commenced the delivery of gas to East Ohio in October 1943.

to review the decree of this Honorable Court affirming the order of the Federal Power Commission reducing the rates of Panhandle Eastern Pipe Line Company if Panhandle applies for certiorari; (2) to participate in the defense of said decree and order in the Supreme Court of the United States if certiorari is granted; and (3) to protect the interest of the City of Cleveland and the ultimate consumers of gas within the City of Cleveland in the impounded fund.

The City raised no question in its motion as to the venue or jurisdiction of the court.[4] However, on August 28, 1944, just prior to argument on the motion, the City tendered for filing an "Intervening Petition" in which it requested that "the stay order be dissolved for lack of jurisdiction," or else "modified and conditioned to permit Panhandle to charge for the future no more than the interim rate fixed by the Federal Power Commission." The attack upon the jurisdiction was based upon the contention that "none of the natural-gas companies to which the * * * Commission's order relates was located within the Eighth Circuit" or had "its principal place of business within the Eighth Circuit" (p. 2).

The court below heard argument on the City's motion on September 2, 1944. The motion was

[4] The petition for certiorari herein was filed on July 28, 1944. Respondents' joint brief in opposition thereto was filed on September 3, 1944.

opposed by counsel for the Commission, the City of Detroit, and the County of Wayne, all respondents herein. Counsel for the petitioners also opposed the City's motion and, pursuant to leave granted at the argument, subsequently filed a memorandum of points and authorities, pointing out *inter alia* that the petitioners' principal place of business was in the Eighth Circuit; that the City's objection "that these proceedings were not brought in the proper circuit raises a question of venue and not a question of jurisdiction;" and that "venue in these proceedings has been waived." The court below took the motion under advisement.[1]

ARGUMENT

The amicus brief questions the jurisdiction of the court below over the subject matter on the ground that when the petition for review was filed, the petitioners were not "located" and did not have their "principal place of business" in the Eighth Circuit, within the meaning of Section 19 (b) of the Natural Gas Act. We submit that these contentions raise merely a question of venue, which has been waived; but even assuming that the objection is jurisdictional, it is clear from the record that the Eighth Circuit was the proper one for this proceeding.

[1] Suspension of the decision on the motion is of no practical effect, since the object of the motion was "to oppose the granting of certiorari" by this Court.

I

THE REFERENCE TO A PARTICULAR CIRCUIT IN SECTION 19 (b) OF THE ACT IS A MATTER NOT OF JURISDICTION BUT MERELY OF VENUE, WHICH CAN BE AND HAS BEEN WAIVED

Section 19 (b) of the Natural Gas Act provides that:

> Any party * * * aggrieved by an order issued by the Commission * * * may obtain a review of such order in the circuit court of appeals of the United States for *any* circuit wherein the natural-gas company to which the order relates *is located or has its principal place of business*, or in the United States Court of Appeals for the District of Columbia. [Italics supplied.]

The use of the comprehensive term "any circuit," plus the unqualified availability of the Court of Appeals for the District of Columbia, show a Congressional intention to vest *all* intermediate federal appellate courts with the power to review orders of the Commission, leaving the selection of the particular tribunal to the petitioner for review, subject only to objection by the respondent if the circuit selected possesses none of the qualifications specified in Section 19 (b). Since there is thus a general grant of power to all the courts of appeals, the question of which one should exercise that power in a particular case is a question of venue (*Camp* v. *Gress*, 250 U. S.

308, 311), and, unlike jurisdictional objections, the objection to the selection of a particular circuit can be waived. In *Neirbo Company* v. *Bethlehem Corporation*, 308 U. S. 165, 167–168, this Court said:

> The jurisdiction of the federal courts—their power to adjudicate—is a grant of authority to them by Congress and thus beyond the scope of litigants to confer. But the locality of a law suit—the place where judicial authority may be exercised—though defined by legislation relates to the convenience of litigants and as such is subject to their disposition. * * *

We submit that the decision of this Court in *Peoria Railroad Company* v. *United States*, 263 U. S. 528, should be dispositive of the City's contentions. In that case the Interstate Commerce Commission on petition of Minneapolis & St. Louis Railroad, a resident of Iowa, had issued an emergency order under the Transportation Act, 1920, requiring the Peoria & Pekin Union Railway Company to continue to interchange freight traffic with the Minneapolis Railroad. The Urgent Deficiencies Act provided that any suit to enjoin or annul such an order of the Interstate Commerce Commission should be brought in the district of the residence of the party on whose petition the order had been made. Although the Minneapolis Railroad, upon whose petition the order had been issued, was a resident of Iowa, the

Peoria Railroad brought suit against the United States to enjoin enforcement of the order in the federal district court for the Southern District of Illinois. The Minneapolis Railroad and the Commission intervened as defendants, without objecting to the venue of the court. The United States objected to such venue and the district court overruled the objection. The case was then heard upon application for a temporary injunction, which the court denied. The Peoria Company took a direct appeal to this Court; the United States did not cross-appeal. In urging affirmance in this Court of the decree dismissing the bill, the United States contended that the venue of the suit was in the district court of Iowa, since that was the residence of the Minneapolis Railroad on whose petition the I. C. C. order had been entered. In disposing of this contention, and reversing and remanding on the merits, Mr. Justice Brandeis, speaking for a unanimous court, stated (p. 535):

> * * * The provision that suit shall be brought in the district of the residence of the party on whose petition the order was made is obviously one inserted for his benefit. If there were a lack of jurisdiction in the district court over the subject matter, we should be obliged to take notice of the defect, even if not urged below by the appellee. *Mattingly* v. *Northwestern Virginia R. R. Co.*, 158 U. S. 53, 57. But the challenge is merely of the jurisdiction of the court for the particular district. The ob-

jection is to the venue. See *Camp* v. *Gress*, 250 U. S. 308, 311. This privilege not to be sued elsewhere can be waived; and it was waived both by the Minneapolis & St. Louis Railroad and the Commission. The United States was, nevertheless, entitled to insist upon compliance with the venue provision; and its objection was properly taken below. But by failure to enter a cross appeal from the court's action in overruling its objection, the right to insist upon it here was lost. The appellees can be heard before this Court only in support of the decree which was rendered. *The Maria Martin*, 12 Wall. 31, 40; *Bolles* v. *Outing Co.*, 175 U. S. 262, 268. We have, therefore, no occasion to consider whether the suit was brought in the proper district.

The venue prescribed in Section 19 (b) of the Natural Gas Act is clearly related to the convenience of the two parties who are principally interested in the review proceeding, namely, the Commission and the natural-gas company to which the order relates. Review in the Court of Appeals for the District of Columbia is convenient for the Commission, which is required by statute to maintain its "principal office" and hold its "general sessions" in the District of Columbia (Sec. 1 of the Federal Power Act). The provision for review in any circuit wherein the natural-gas company to which the order relates "is located or has its principal place of business," like the venue provision in the Urgent Deficiencies

Act, "is obviously one inserted for [the] benefit" of the company. Cf. *Peoria Railroad Company* v. *United States*, 263 U. S. 528, 535.

None of the respondents questioned the venue of the court below, and they do not now seek to do so. The City of Cleveland, as an applicant for intervention, was required to take the case as it found it and could not attack the judgment which had already been rendered when it filed its motion to intervene. *United States* v. *California Canneries*, 279 U. S. 553, 556; *Vinson* v. *Washington Gas Company*, 321 U. S. 489, 499. But even if the City had been permitted to intervene, it would have waived any objection to venue, since it did not question the venue or jurisdiction of the court below when it filed its motion. The City's position can surely be no better in this regard where it has not been permitted to become

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The Urgent Deficiencies Act granted jurisdiction in one sentence to "the several district courts of the United States" over suits to enjoin or annul an I. C. C. order, and in another sentence provided that "the venue" of such suits relating to transportation should be in the district wherein resides the party on whose petition the order was made (Act of October 22, 1913, c. 32, 38 Stat. 219; 28 U. S. C. § 41 (28), § 43).

Section 19 (b) of the Federal Power Act contains the grant of jurisdiction and the specification of venue in the same sentence, without using the term "venue." But we do not think this circumstance is material, for in both statutes the designation of a particular court centers "on the convenience of the private parties involved." Final Report, Attorney General's Committee on Administrative Procedure (1941), pp. 93–94.

a party to the proceeding. In any event, the legislative history of Section 19 (b) shows conclusively that the convenience of the company and the Commission is alone relevant.

A serious difficulty would be presented if the specification of a particular circuit in Sec. 19 (b) were held to be jurisdictional. Since, as the *amicus* points out (Br. 12–13), suit against the Federal Power Commission is based upon a waiver of sovereign immunity, a judgment rendered without jurisdiction would not be *res judicata* on the jurisdictional question. Compare *United States* v. *United States Fidelity Co.*, 309 U. S. 506, 514. Consequently, unless the view urged herein is adopted, a judgment rendered under Sec. 19 (b) might be subject to collateral attack in another circuit if that court should find that the company's principal place of business was located elsewhere than had theretofore been assumed.

Section 19 (b) is derived from Section 313 (b) of the Federal Power Act of 1935. As originally drafted, Section 313 (b) of the Power Act would have permitted "*any person aggrieved*" by an order of the Commission to file a petition for review of such order in the Circuit Court of Appeals "for any circuit wherein *such person* resides or has his principal place of business" or in the Court of Appeals for the District of Columbia (S. 1725, 74th Cong., 1st Sess.). In the bill which was enacted (S. 2796, 74th Cong., 1st Sess.), this was changed to permit review in any circuit in which *the company* to which the order relates is located or has its principal place of business."

II

PETITIONERS' PRINCIPAL PLACE OF BUSINESS WAS IN THE EIGHTH CIRCUIT AT THE TIME THE PETITION FOR REVIEW WAS FILED.

Even if the reference to "principal place of business" in Section 19 (b) of the Act relates to jurisdiction, it is clear from the record that the court below properly acquired jurisdiction over the proceeding since at the time of the filing of the petition to review the principal place of business of Panhandle Eastern and its wholly-owned subsidiaries Illinois Natural and Michigan Gas was in the Eighth Circuit.

The petition for review alleged, under the oath of the president of each of the petitioners, that the principal place of business of each petitioner was in Kansas City, Missouri, which lies within the Eighth Circuit (R. 4, 6). This allegation, unchallenged by any of the parties to this cause, is fully supported by the facts of record.

Panhandle Eastern produces, purchases and gathers natural gas in Texas and Kansas, which it transports to markets along its main transmission line extending a distance of about 860 miles from Moore County, Texas, through the States of Oklahoma, Kansas, Missouri and Illinois to the Illinois-Indiana boundary. At that point, the gas is delivered into a main transmission line extending to Zionsville, Indiana, where the line branches to

Detroit, Michigan, and to Muncie, Indiana. This line was owned by Panhandle Eastern's subsidiary, Michigan Gas, until on or about April 1, 1943, while the proceedings below were pending, when Panhandle Eastern acquired the line and dissolved Michigan Gas. A number of lateral lines extending from Panhandle Eastern's main line in Illinois were owned by Panhandle Eastern's subsidiary, Illinois Natural. These lines were also acquired by Panhandle Eastern and Illinois Natural was dissolved on or about April 1, 1943 (R. I, 18; Pet. 4, n. 1).

Moreover, even prior to such acquisition, Panhandle and its subsidiaries, Michigan Gas and Illinois Natural, were "operated as a single system for the production, gathering, transportation and sale in interstate commerce of natural gas" (R. I, 18). Throughout the proceedings before the Commission, the three companies were treated as a single unit. The Commission issued one order requiring a reduction of rates based on the consolidated revenues and expenses of the three companies (R. I, 38–43). As stated in the Commission's opinion, it was "not controverted that the separate corporate entities may be disregarded" (R. I, 18).

The record shows that each of petitioners maintained its "principal business office" and kept its general corporate books and records at 1221 Balti-

more Avenue, Kansas City, Missouri.* This office was the headquarters of petitioners' vice president in charge of operations, chief engineer, production engineer, rate engineer, geologist, chief accountant and assistant treasurer, and assistant secretary (R. III, 1052; R. IX, 4103, 4215; R. X, 101, 152). The secretary-controller of the three petitioners spent a "vast amount of time" in that office (R. VI, 2616). The Kansas City office was the nerve center of the petitioners' natural gas operations from which the companies' telephone and telegraph lines radiated throughout the system, and from that office the chief gas dispatcher controlled pressures and issued instructions to the various compressor stations and to the field headquarters (R. IV, 1983–1986). The principal banking activities were also located in Kansas City at the Commerce Trust Company, where cash balances of $700,000 to $900,000 were maintained and against which 25,000 to 30,000 checks per year were drawn (R. III, 1364, 1384).

Moreover, a substantial portion of Panhandle Eastern's properties is located in Missouri, in the Eighth Circuit. More than 762 miles of pipelines are located in that State serving gas to 37 communities (R. IX, 4092–4093, 4101). These

*This is stated under oath in the 1941 and 1942 Annual Reports filed by the petitioners with the Commission, the former of which was incorporated into the record of the proceedings before the Commission by reference to its files (R. VIII, 4005–5096).

markets were characterized by petitioners' president as "very important" (R. VIII, 3943).

These facts of record establish clearly that each of the petitioners had its "principal place of business" in the Eighth Circuit within the meaning of the Natural Gas Act. It is significant that the brief amicus, while denying that the principal place of business of petitioners is in the Eighth Circuit, does not undertake to specify where that principal place of business is.

There is no merit in the contention of the amicus (Br. 17) that when the Commission's order relates to more than one natural gas company and such companies have their principal places of business in different circuits, "Congress has consented to suit against the United States only in the United States Court of Appeals for the District of Columbia." As above stated, the provision for venue in the Court of Appeals of the District of Columbia is primarily intended for the convenience of the Commission, and the Commission has not urged that such venue should be availed of here. Moreover, the statute contemplates that the Commission, in the light of its intimate knowledge of the operations of natural gas companies, will have the principal concern as to the venue of proceedings involving review of its orders. And to avoid unnecessary disputes with respect to such venue, Section 19 (b) of the Act provides that when the Commission has filed in a circuit court of appeals the "transcript of

the record upon which the order complained of was entered" such court "shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part." See *Columbia Oil and Gasoline Corporation* v. *S. E. C.*, 134 F. (2d) 265 (C. C. A. 3); *L. J. Marquis and Co.* v. *S. E. C.*, 134 F. (2d) 822 (C. C. A. 3); *Standard Oil Co.* v. *National Labor Relations Board*, 114 F. (2d) 743 (C. C. A. 8).

CONCLUSION

For the foregoing reasons, it is respectfully submitted that the court below had jurisdiction of the proceedings before it, and that the petition for certiorari should be denied for the reasons noted in our brief in opposition.

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In the Supreme Court of the United States

OCTOBER TERM, 1944

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY, AND MICHIGAN GAS TRANSMISSION CORPORATION, PETITIONERS

v.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICH., COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

BRIEF FOR THE RESPONDENTS

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ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT

BRIEF FOR THE RESPONDENTS

OPINIONS BELOW

The opinion and order of the Federal Power Commission (R. I, 14–43)[1] are reported in 45 P. U. R. (N.S.) 203. The opinion of the Circuit Court of Appeals (R. XVI, 7198–7218) is reported in 143 F. (2d) 488.

[1] In the record citations, roman numerals refer to the volume, arabic numerals refer to the page.

JURISDICTION

The judgment of the circuit court of appeals was entered on June 6, 1944 (R. XVI, 7219-7220). The petition for a writ of certiorari was filed on July 28, 1944. A writ of certiorari was granted on November 13, 1944, limited to Question No. 3 presented in the petition. By order entered January 3, 1945, the scope of review was enlarged to include Question No. 2 presented in the petition. Jurisdiction of this Court rests upon Section 19 (b) of the Natural Gas Act and Section 240 (a) of the Judicial Code, as amended by the Act of February 13, 1925.

QUESTIONS PRESENTED

The questions as to which a writ of certiorari was granted, as stated in the petition and in the order presented in petitioners' brief, are as follows:

(1)[1] Whether the Commission's action in treating petitioners' business as an entirety and refusing to make any allocation or separation with respect to petitioners' regulated and unregulated sales was beyond its statutory power.

(2) Whether limiting the sale price of petitioners' gas for resale so as to provide an over-all return of 6½ percent on the depreciated cost of petitioners' properties including those devoted to production and gathering of natural gas and excluding petitioners' tendered evidence as to

[1] Presented as question (3) in the Petition for Certiorari.

the market value of petitioners' gas leaseholds constituted an exercise of jurisdiction over production and gathering of natural gas in violation of the Natural Gas Act.

STATUTE INVOLVED

The relevant provisions of the Natural Gas Act of 1938 (52 Stat. 821; 15 U. S. C. 717) are set forth in Appendix A, *infra*, pp. 52–67.

STATEMENT

The proceedings before the Commission arose out of a complaint filed February 28, 1941, by the City of Detroit and County of Wayne, Michigan, alleging that the rates and charges of petitioners Panhandle Eastern Pipe Line Company and Michigan Gas Transmission Corporation, for natural gas sold to Michigan Consolidated Gas Company for resale for ultimate public consumption in that City and County, were unjust, unreasonable, and unduly discriminatory (R. XVI, 7002). The Commission, on its own motion, instituted an investigation on May 22, 1941, of all interstate wholesale rates and charges of such petitioners, and later expanded the investigation to include those of petitioner Illinois Natural Gas Company (R. XVI, 7061, 7088). Respondent Michigan Public Service Commission and respondent Michigan Consolidated Gas Company, also urging the propriety of a reduction in the challenged rates and charges, were permitted to intervene in the proceedings, which were consolidated for hearing

(R. XVI, 7024, 7046, 7064). After these proceedings were initiated, petitioner Panhandle Eastern Pipe Line Company acquired all the properties of the other two petitioners, which were then dissolved (Pet. Br. 4, n. 2).

After extensive hearings were had (R. I., 45–R. XVI, 7001) and petitioners' case was closed (R. VIII, 3975, 4011), counsel for Detroit and Wayne County, counsel for the Commission, and counsel for Michigan Consolidated Gas Company, in April 1942, filed separate motions with the Commission requesting an interim order reducing petitioners' rates by $6,800,479, $5,580,888, and $5,489,874 per annum, respectively (R. XVI, 7100, 7104, 7125). Following submission of briefs, the Commission, on September 23, 1942, entered its opinion and interim order here under review, finding that petitioners' interstate wholesale rates were excessive and requiring petitioners to reduce such rates on and after November 1, 1942, so that if the reduced rates had been in effect during 1941, there would have resulted a reduction in revenue of $5,094,384 (R. I, 15–37, 38–43).[1]

[1] The Commission's order (R. I, 42) required:

"(A) The rates and charges made, demanded, or received by the respondents for or in connection with their transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption shall be so reduced as to reflect, when applied to respondents' 1941 transportation and sales, a reduction of not less than $5,094,384 per annum below their 1941 consolidated gross operating revenues of $17,789,573 * * *."

The Commission founded its order upon the $78,814,292 actual legitimate cost of petitioners' property in service on December 31, 1941; less $12,596,987 for accrued depreciation, depletion and amortization; plus $920,000 for working capital; which resulted in a rate base of $67,137,305.[4] The Commission allowed a 6½% return on the rate base, which return it found to be "fair and liberal." Using 1941 as the test year, the Commission allowed all operating expenses, including the annual depreciation expense, the exploration and development costs incurred by petitioners in that year as shown by their books, and Federal income taxes (R. I, 30–31).[5] With respect to increases in operating expenses which petitioners claimed would occur after 1941, including increased taxes and amortization of rate case expense, the Commission found, in the light of petitioners' earnings during the first three months of 1942, that these claimed increases in expenses would be more than offset by increased revenues (R. I, 30–33).

Petitioners' application for rehearing (R. XVI, 7141–7149) was denied by the Commission on

[4] There is no dispute as to the actual legitimate cost of petitioners' property (R. I, 21–22; Pet. 8). The amount of accrued depreciation was taken from petitioners' books, as petitioners had requested in their brief before the Commission (R. I, 23). The allowance for working capital was not questioned in the petition for review in the court below (R. I, 6–12).

[5] Two minor adjustments were made, which are not now in dispute (R. I, 30–31).

October 30, 1942 (R. XVI, 7150). Thereafter they filed a petition for review in the circuit court of appeals. That court heard argument on May 14, 1943 (R. XVI, 7196), but deferred its decision pending this Court's disposition of *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591 (R. XVI, 7196). After this Court handed down its opinion in that case on January 3, 1944, the instant case, at the request of the court below, was resubmitted upon supplemental briefs and argument (R. XVI, 7196, 7197), and the court then entered its opinion and judgment on June 6, 1944, affirming the Commission's order (R. XVI, 7198, 7219).

SUMMARY OF ARGUMENT

1. The Commission, in determining the reasonableness of petitioners' interstate wholesale rates under the Act, declined, as unnecessary in the circumstances of the particular case, to make an allocation between petitioners' regulable (interstate wholesale) sales and their non-regulable (interstate direct industrial) sales. The Commission's finding as to the lack of necessity for such an allocation had a substantial basis in the record and was neither arbitrary nor unreasonable. Petitioners' own witness, while presenting an allocation study which segregated the total revenues received from the two classes of business, conceded that his study made no proper allocation of the charges which should be borne by each class, and

while suggesting that a "fair and equitable" allocation could be obtained by crediting to the wholesale business 50% of the apparent profits being derived by the direct industrial sales, he emphasized that the final determination was essentially a matter of "business judgment" to be made by the Commission. Petitioners' president testified that an allocation would be impracticable and unrealistic in view of the unified character of petitioners' business. These views as to the lack of necessity for an allocation were entirely warranted by the fact that petitioners had constructed no capacity for their direct industrial sales, and justified the Commission in treating such sales as a by-product of petitioners' wholesale business.

It may be doubted whether in the light of petitioners' position taken below it is still open to them to argue that nevertheless a formal allocation was essential to the preservation of their rights; but if such a contention may now properly be made, it is without basis in the provisions of the Act. Interstate industrial business is within the Commission's jurisdiction in many respects. It may be conceded that the Commission is without authority to prescribe rates on such business; but here the rate order did not, either in terms or in practical effect, alter petitioners' direct industrial rates. Petitioners under the order are entirely free to raise or lower their direct industrial rates, or maintain them at their 1941 level; and

in the light of this Court's decision in *Lone Star Gas Co.* v. *Texas*, 304 U. S. 224, it is clear that no jurisdictional defect is created by the mere failure to make a formal allocation in respect of the industrial business. The issue is one of confiscation only; and in the light of the liberal return allowed to petitioners by the rate order there is no basis for a claim that the order was in any sense confiscatory.

2. The action of the Commission in reflecting petitioners' production and gathering facilities in the rate base and then limiting the return to 6½% was not a regulation of "production or gathering" forbidden by Section 1 (b) of the Act. That section withholds from the regulatory authority of the Commission the *activity* of producing or gathering natural gas, but there is nothing therein to indicate a Congressional intent to preclude the Commission from considering either such facilities in calculating the rate base or the expenses incident thereto for the purpose of determining the reasonableness of the interstate wholesale rates. *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, 614, n. 25. The legislative history of the Act confirms this view. The Committee report, after stating that the negative language in Section 1 (b) was largely surplusage, also stated that the Act contemplated regulation along "more or less standardized lines". The

valuation of production and gathering facilities historically has been an integral part of the regulatory rate fixing procedure. *Dayton Power & Light Co.* v. *Commission*, 292 U. S. 290.

Sections 6 (a), 6 (b), 8 (a), 9 (a) and 10 (a) of the Act all contain language authorizing the Commission to ascertain the costs of production and gathering facilities. The language and legislative history of Section 14 (b) confirm the view that the Commission is required to investigate such costs. The uniform administrative interpretation of the Commission consistently has been to consider production and gathering facilities in fixing the rate base, and the Commission has so reported to Congress. Finally, legislative approval of the administrative interpretation may be inferred from the fact that when Section 7 was amended in 1942, no legislative change was made in respect of this matter although the Commission's administration of the Act was thoroughly reviewed.

Neither the Commission's refusal to allow the alleged "market value" of petitioners' leaseholds in the rate base nor its failure to calculate costs on a "field" or "commodity" price basis for the natural gas produced by petitioners constituted a deprivation of due process. Evidence of market value of the character offered by petitioners is not compelling or even persuasive. *Dayton Power & Light Co.* v. *Commission*, 292 U. S. 290, 296–

301. Evidence of field or commodity price of gas is open to the same objections. This is particularly true of the Panhandle and Hugoton fields. The only substantial market is furnished by the large pipelines which fix their own prices, and to speak of commodity value in such circumstances is unrealistic. This Court has recognized the peculiar situation which there obtains in *Thompson* v. *Consolidated Gas Co.*, 300 U. S. 55. The actual legitimate cost system adopted by the Commission on the other hand is just to consumers and pipelines alike. It considers costs as best calculated to insure continuity in the production of natural gas and the financial soundness of the pipelines themselves. The fact that it has become possible to finance such enterprises at progressively lower rates discloses that the investing public appreciates the ultimate soundness of the Commission's approach.

ARGUMENT

The order of the Commission here under review directed petitioners to reduce their interstate wholesale rates by an amount of not less than $5,094,384 per annum below the 1941 consolidated gross operating revenues of $17,789,573 (R. 4, 42). The Commission did not make an allocation of property, profits and expenses, holding that in the peculiar circumstances of this case it was unnecessary so to do. Petitioners, adverting to the fact that their consolidated gross revenues include

profits from both their regulable (interstate wholesale) sales and their non-regulable (interstate direct industrial) sales, contend that, under the statute, the Commission was required to make a formal allocation, supported by detailed findings, of their property, revenues and expenses; that the Commission's action in not doing so is a jurisdictional defect which vitiates the entire rate reduction order; and that the Commission, by considering petitioners' producing and gathering facilities and the expenses incident thereto, exercised a jurisdiction prohibited by Section 1 (b) of the Act.

We submit that, in the circumstances of this case, the Commission's rate reduction order was not arbitrary or unreasonable and that its finding that no allocation was necessary has a substantial basis in the record; that no formal allocation was required in the instant case; and that the Commission was clearly authorized to reflect petitioners' production and gathering facilities in the rate base and to consider the expenses incident thereto.

I

THE COMMISSION'S FINDING THAT NO ALLOCATION WAS NECESSARY IN THE CIRCUMSTANCES OF THIS CASE HAS A SUBSTANTIAL BASIS IN THE RECORD AND WAS NEITHER ARBITRARY NOR UNREASONABLE

The Commission, upon consideration of the evidence with respect to petitioners' regulable

(interstate wholesale) sales and their non-regulable (interstate direct industrial) sales, found that it was "unnecessary to make an allocation" in determining the reasonableness of petitioners' interstate wholesale rates under the Act. We submit that in the circumstances here presented, the Commission's action in this regard was neither arbitrary nor unreasonable.

At the hearing, petitioners presented an allocation study (Exh. 251; R. XIII, 5947–5955) through their witness Biddison,[7] showing that 91.57% of their total revenues, or $16,289,045, was received from their interstate wholesale sales and 8.43%, or $1,500,527, was received from their direct industrial customers (R. XIII, 5947). Of the total operating expenses of $7,425,826, including depreciation, but excluding Federal income taxes and return, this study assigned only $499,699 to the direct industrial business (R. XIII,

[6] Petitioners, for the first time, contend (Pet. Br. 8, 37) that the Commission erroneously assumed jurisdiction over their wellhead sales to Argus Natural Gas Company. This contention was not advanced in the petition for rehearing (R. XVI, 7147), the petition for review (R. I, 11–12), the briefs below, or the petition for certiorari. Moreover, petitioners' witness Biddison included these sales in his "regulated sales" (R. XIII, 5947, line 7). In any event, the revenue from these sales was negligible, amounting to less than four-tenths of one per cent of petitioners' gross revenues in the test year (See Pet. Br. 37 and R. I, 31).

[7] Biddison's testimony appears at R. VIII, 3631–3676, 3853–3881, 3919–3933

5947, lines 25–36, incl.). Thus, with revenues of $1,500,527 and assigned operating expenses of $499,699, the direct industrial business was shown to have earned $1,000,828 in the test year, before income taxes (See Pet. Br. 34). The exorbitant margin of profit of more than 200% thus shown[8] on petitioners' direct industrial business was obviously due to the fact that in this study such business had not been assigned its fair share of the cost of transporting gas through the main transmission pipeline.[9]

[8] This result appears all the more incongruous in the light of the fact that petitioners' rates for direct industrial gas in 1941 averaged only 17¢ per Mcf as compared with $1.00 for residential gas, 82.4¢ for commercial gas, and 28.7¢ for gas sold to other utilities (R. XIII, 5947, lines 1–20, incl.). Petitioners sold 1,730,142 Mcf to Missouri Power and Light Co. for boiler fuel at a price of 11¢ per Mcf (R. XIII, 5947).

[9] For example, petitioners did not allocate a single dollar of the main transmission line annual depreciation expense of $2,238,589 to the direct industrial business, but assessed all of such amount to the regulated business (R. XIII, 5955, line 5). Of the ad valorem taxes on the main transmission line, totaling $633,270, only $1,738, applicable to the laterals used exclusively for the direct industrial customers, was allocated to them (R. XIII, 5955). None of the main transmission line operating and maintenance costs was charged to the direct industrial business. For example, the transmission mains operating labor was $288,564, of which only $490 (applicable only to exclusively used laterals) was allocated to direct industrials; the maintenance cost of mains was $94,212, of which only $160 (applicable to exclusively used laterals) was allocated to the cost of conducting the direct industrial business (R. XIII, 5951, lines 15 and 27).

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Petitioners' witness recognized that his allocation study would impose an undue burden upon the wholesale business, since virtually all of the main transmission line costs would be saddled upon the domestic and commercial consumers. He admitted that his exhibit did not show the proper charges between the two classes of business (R. VIII, 3856). He testified that a further "step" was necessary to arrive at a fair and equitable distribution of the charges between petitioners' regulable and non-regulable sales. He recommended that a portion of the apparent profit of $1,000,828, shown by his exhibit to have been derived from the direct industrial business, should "as a matter of fairness and equity" be "made a charge against the non-regulated business and substantially paid to the regulated business as a fee for the privilege of using the equipment through which delivery of this non-regulated business is effected." He also emphasized that the determination of what amount should be credited to the regulated business is a matter of "business judgment" for the Commission to decide.[10] He further stated (R. VIII, 3873–3874):

[10] In view of the importance of this testimony, which was quoted only in part in petitioners' brief (p. 33), we set it forth in full at this point (R. VIII, 3856–3857):

"Q. Well, Exhibit No. 251 reflects the manner in which you, in your opinion, believe the allocation of costs should be made, doesn't it?

"A. Yes, when you go to allocating costs and that is all this purports to do, is to allocate the costs. I think there is

"Q. Now, Mr. Biddison, you have testified in many rate cases and I understand it is your opinion that the matter of this further allocation would be a matter of the exercise of enlightened judgment by those

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another step necessary after you have allocated the costs. I have not carried out the other step but it is a matter of business judgment as to how much of profits of the one class of business ought to be paid to the other class, as a matter of fairness and equity, in business judgment.

"Q. Let me see if I understand your last answer. Are you now referring to the allocation of return?

"A. If you take some of the profits from the non-regulated business and credit to the costs of the other business considered as a rental charge for the privilege of using the facilities, you can consider that it has contributed to return and to depreciation.

"Q. I am sorry. I do not quite follow what you have in mind, Mr. Biddison. Maybe if you would explain that in a little different way I might understand you better.

"A. On page 1 of Exhibit No. 251, it is shown that before the modification from proposed new income tax rates at line 42, there is available from these non-regulated sales $651,766.70. Before the income tax of $349,062.28; there was available for income tax and return a little over $1,000,828.98. I think it would be entirely fair and just, in line with what Mr. Goodman commented last week, that some portion of that little over a million dollars should be made a charge against the non-regulated business and substantially paid to the regulated business as a fee for the privilege of using the equipment through which delivery of this non-regulated business is effected. In other words, I think you should first find out how much this non-regulated business is costing and then make some division of the profits from it.

"Now, what that division should be, I think is a matter of business judgment but, in fairness, I think there ought to be some division of it in spite of the fact that the language in the Colorado case does not indicate that to be the view of the Commission."

charged with the duty of making the decisions in this case. Is that right?

"A. That is right, and I further think that they should have the opinion of the experienced management in coming to their final conclusions on that matter."

Upon inquiry by the Trial Examiner as to his own view of a proper division, petitioners' witness expressed the opinion that the $1,000,828 of apparent profits from the direct industrial business (before Federal income tax) should be split "fifty-fifty," stating (R. VIII, 3874):

"* * * In that way, this non-regulated business has contributed half a million dollars a year *towards the reduction in cost of the regulated* business and if it does not contribute something, I do not think there is any justification for having the business." [Emphasis supplied.]

In addition to this testimony by petitioners' witness Biddison, petitioners' president testified that it would be "theoretical", "unrealistic," "not practical", and "a crazy idea" to make a detailed or formal allocation in this case in view of the unified character of the business (R. I, 34; R. VIII, 3960–3962).

In their brief before the Commission, counsel for petitioners requested that the Commission find that petitioners "have built no capacity" for their direct industrial sales, which are "incremental in nature", and that it is "reasonable" to allocate

"50 per cent of the net earnings from nonregulated sales as a credit to net earnings from regulated sales, as compensation for the temporary use of such facilities provided for regulated sales but used from time to time in transporting the gas for direct, interruptible, nonregulated sales, when not required for regulated sales." They requested that the Commission find:

> "27. On the basis of 1941 *pro forma* consolidated revenues, total operating revenues were $17,789,572, of which $16,289,045 are allocable to regulated sales, and $1,500,527 are allocable to nonregulated sales. A credit of $500,414, representing a charge against the nonregulated sales of one-half the profits resultant from such sales, increases total revenues from (and allocable to) regulated sales to $16,789,459."[11]

It was in this setting that the Commission for the reasons stated in its Opinion found that it would be fair and equitable to credit to the wholesale business any earnings of the direct industrial business in excess of a 6½% return for the use of the main transmission line facilities. Stated another way, the incidental direct industrial business was treated as a "by-product of the wholesale business, comparable to [petitioners'] gaso-

[11] Sec. 50.68 of the Commission's Rules and Regulations Under the Natural Gas Act provides that briefs "should include requests for such specific findings as the party thinks the Commission should make." 18 CFR (1943 Supp.) 4539.

line extraction business" (R. I, 34).[12] In such circumstances, it was, of course, unnecessary to make any formal or detailed allocation, and the Commission so held (R. I, 33–34).

We submit that in view of the foregoing there is no basis for any contention that the Commission's finding that no allocation was necessary represented arbitrary or unfair action.

Petitioners, however, seek to escape the effect of Biddison's testimony (Pet. Br. 30, 32–34). Although we have difficulty following the ramifications of petitioners' calculations and statements by which such conclusion is sought to be reached (Pet. Br. 32–34), it appears that they now contend that they are entitled to the $319,656 of apparent earnings on direct industrial sales in *addition* to the 6½% return fixed by the Commission on the entire business. Thus, petitioners seek to lay a basis for the claim that they were "deprived" of $319,656 by the Commission's action. This contention has no foundation in the record, is contrary to Biddison's testimony (R. VIII, 3857, 3872–3874) and represents a complete shift of

[12] Petitioners agreed in the hearing that the expenses and revenues in connection with the sale of gasoline extracted from the natural gas should be treated in like manner, i. e., as an integral part of petitioners' entire operations (R. I, 34). No contention has been advanced by petitioners that by so doing the Commission was exercising jurisdiction over their gasoline sales.

position from that taken by petitioners before the Commission.[15]

[15] In their principal brief before the Commission, petitioners stated (pp. 72–73):

"Application of Biddison's recommendation. Witness Biddison explained that Exhibit 251 was prepared for the purpose of determining the 'cost' to Respondents [petitioners] of the gas service subject to regulation and that not regulated; but that, with certain adjustments, *it could be used for a determination of the 'profit' earned from non-regulated sales of gas*, one-half of which he thought might well be credited to the regulated part of the business as a carrying charge for the use of facilities provided for that regulated business and used for unregulated service only to the extent not required and when not required for the regulated gas. [Emphasis supplied.]

"Earnings before Federal taxes. He explained that by the addition of lines 38 and 42, columns E and F, page 1 of that exhibit, it was disclosed that earnings before Federal taxes were $8,863,218 from sales of regulated gas and $1,000,828 from sales of the nonregulated gas—a total of $9,864,046. It was his business judgment that one-half these earnings of $1,000,828 (or $500,414) should be credited to the regulated gas as a carrying cost or charge. This would result in a *total earning* before such Federal taxes of $9,363,632 from the regulated gas and $500,414 from the nonregulated gas, the proportions of the total being 94.92 per cent and 5.08 per cent respectively. [Emphasis supplied.]

"Application of Federal income and excess profits taxes. Witness Biddison stated that after making this computation the approximate income and excess profits taxes should be applied proportionally to the earnings of the respective classes of sales, since it is earnings which fix the amounts of such taxes. The total tax payable on these earnings being $3,558,228, that sum may therefore be allocated between the earnings from regulated sales and earnings from nonregu-

It is thus apparent that the Commission's finding that no allocation was necessary in the circumstances of this case has a substantial basis in the record and was neither arbitrary nor unreasonable. Due process requires no more.

II

THE ABSENCE OF A FORMAL ALLOCATION IN THE INSTANT CASE DOES NOT INVALIDATE THE COMMISSION'S ORDER

The absence of a formal allocation in the instant case is not a jurisdictional defect, and the rate reduction order, being addressed to interstate sales for resale only, is to be tested by the ordinary criteria as to whether the rates prescribed were confiscatory *vel non*.

A. ALLOCATION IS NOT A JURISDICTIONAL REQUIREMENT

At the outset, it is to be noted that the Act does not in terms require an allocation, although it must have been a matter of common knowledge that the majority of the companies subject to the

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lated sales, and the net operating revenues may thus be determined as follows:

	Regulated Sales	Non-regulated Sales
Indicated earnings before taxes	$9,363,632	$500,414
Taxes (aggregating $3,558,228)	3,377,470	180,758
Net Operating Revenues	5,986,162	319,656

jurisdiction of the Commission in respect to their interstate sales for resale also had intrastate sales and direct interstate industrial sales. Congress rather obviously left the problem of allocation to the expert judgment of the Commission. This it was at liberty to do, for it is clear that Congress could have provided for the same regulation over direct industrial sales as it did for interstate sales for resale. In any event we submit that allocation is not a jurisdictional requirement in the instant case, as the Act does not leave the interstate direct industrial sales wholly unregulated [14] and the rate order here under review neither operated nor purported to operate upon the direct sales.

1. *Jurisdiction over the direct industrial business of a natural gas company is not entirely withheld from the Commission.* While it may be conceded that the Commission has no authority to fix rates for direct industrial sales (see *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, 615–616), it does possess certain regu-

[14] There is nothing to indicate that the states have any jurisdiction over interstate direct industrial sales of gas and we do not understand petitioners to contend or suggest that their direct industrial sales are subject to state regulation. Such sales are made pursuant to contract and not under rates in which there might conceivably be some matter of local concern. Compare *Pennsylvania Gas Co.* v. *Public Service Commission*, 252 U. S. 23, 30–31, with *Missouri* v. *Kansas Gas Co.*, 265 U. S. 298, 307–309.

latory powers in respect of that phase of the business of a natural gas company. Section 1 (a) of the Act, *infra*, p. 52, declares "that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest." It is, of course, clear that the direct industrial business involved in the instant case comprises both interstate transportation and interstate sales. Section 4 (c) of the Act requires the filing with the Commission not only of all schedules embodying rates and charges subject to the jurisdiction of the Commission and the classification practices and regulations affecting such rates and charges, but also "all contracts which in any manner affect or relate to such rates, charges, classifications and services." Contracts for direct interstate industrial sales of course come within Section 4 (c).[15] Section 5 (a) of the Act authorizes the Commission either upon complaint or upon its own motion to investigate and determine whether any rate or charge subject to the jurisdiction of the Commission "is unjust, unreasonable, unduly discriminatory, or preferen-

[15] By Rule 54.30 of its Rules and Regulations Under the Natural Gas Act the Commission requires the filing of all contracts for direct industrial sales which involve sales in excess of 100,000 M. C. F. per year (7 Fed. Reg. 4824). The contracts involving petitioners' direct sales have been filed with the Commission.

tial," or whether "any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential." Inasmuch as the matters subject to the control exercised under Section 5 (a) are by the terms of the Act coextensive with those included in Section 4 (c), it follows that contracts covering direct sales in interstate commerce are not entirely outside the scope of the Act.

Petitioners' contentions that their interstate direct industrial business was to be entirely free of regulation is not persuasive (Br. 19–21).[16] They overlook the fact that Section 1 (b) makes the provisions of the Act applicable "to the transportation of natural gas in interstate commerce," and incorrectly state (Br. 19) that the section makes the provisions of the Act applicable only to the transportation and sale in interstate commerce of natural gas for resale. They rely upon the legislative history of H. R. 11662, which was not the bill enacted and which specifically excluded from the jurisdiction of the Commission authority to fix rates and charges "for the sale of natural gas

[16] The assertion of petitioners that it is immaterial whether the business "not subject to regulation by the Commission" is operated at a loss or at high profit (Br. p. 21) finds no foundation in the Act. A loss might burden the "regulated" business and a high profit might well be evidence that the "unregulated" business is not bearing its proper share of the costs.

for industrial use only."[17] No such provision appears in the Natural Gas Act.

2. *The rate reduction order of the Commission did not, either in terms or in effect, alter the direct industrial rates.* The order of the Commission directed petitioners to reduce their rates and charges for their interstate sales for resale for ultimate public consumption, effective as of November 1, 1940, so as to reflect, when applied to petitioners' 1941 transportation and sales, a reduction of not less than $5,094,384 per annum below their 1941 consolidated gross operating revenue of $17,789,573. Concededly the Commission, in thus determining what would be a just and reasonable rate on petitioners' wholesale business, considered their entire consolidated income available for return, including income from direct industrial sales. But the Commission's order operates prospectively. As to the years in which it is in effect, it prescribes merely that rates of sales for resale shall be maintained at a given level. This level was calculated on the basis of

[17] Thus, in reporting H. R. 11662, the Committee report stated (H. Rep. 2651, 74th Cong., 2d Sess., p. 1): "The sale of natural gas for industrial use only is also exempted from the jurisdiction of the Commission." In H. R. 6586, which emerged as the Natural Gas Act, no such language appeared in Section 1 (b) and both the House and Senate reports significantly refrained from making any such assertion. H. Rep. 709, 75th Cong., 1st Sess.; S. Rep. 1162, 75th Cong., 1st Sess.

a specified rate of return (6½%) for the test year on petitioners' entire business, but the order, even though based on such a rate of return, in no way fixes the rate of return which may be earned by petitioners during the years in which they may operate under the order. They are merely required to maintain their resale rates at the level fixed; they may vary their industrial rates as they will, up or down, or leave them the same; and they may earn such a return on their business, both direct industrial and resale, as business conditions and the effectiveness of their management will allow. The order, therefore, not only falls short of directly regulating their rates on industrial business; it does not even regulate such rates indirectly by limiting the return which may be secured from such business.

3. *An allocation is not required merely because a portion of an integrated utility's operations is not subject to the Commission's jurisdiction.* This precise question was before this Court in *Lone Star Gas Co.* v. *Texas,* 304 U. S. 224. There the Railroad Commission of Texas had issued an order requiring a reduction in the rates charged in Texas by the company, which operated an integrated production, gathering and transmission system for the sale of natural gas

in Texas and Oklahoma. The State Commission had treated the system as a unit in establishing a rate base and had made no allocation of the company's property, profits and expenses. (304 U. S. at 227, 239, 241). In a suit to enforce the order, the state court had directed that a segregation of property between intrastate and interstate functions be made. The Court of Civil Appeals for the Third Judicial District of Texas reversed the lower court but affirmed its holding that it was necessary to allocate or segregate the property used in Texas. This Court, after holding that "The Commission did not attempt to regulate the interstate transportation of gas" nor the "sales and deliveries of gas in interstate commerce" (304 U. S. at 236), stated (p. 241):

> We think that this ruling as to the necessity of segregation, and that the sufficiency of appellant's evidence should be determined by that criterion, was erroneous. This was not a case where the segregation of properties and business was essential in order to confine the exercise of state power to its own proper province. Compare *Smith* v. *Illinois Bell Telephone Co.*, 282 U. S. 133, 148, 149.

Similarly the order of the Commission here did not operate upon any rates other than those for resale. The decision in the *Lone Star* case demonstrates, we submit, that there was no juris-

dictional necessity in such a situation for making an allocation.[18]

It is thus clear that in this, as in other judicial reviews of rate reduction orders, the essential question is that of confiscation. *Railroad Commission* v. *Pacific Gas Co.*, 302 U. S. 388, 394; *Federal Power Commission* v. *Natural Gas Pipeline Company*, 315 U. S. 575, 585. Where certain of the interstate rates of a natural gas company are not subject to regulation by the Commission, but the order of the Commission is directed exclusively to those rates over which it has jurisdiction, the purpose to be served by an allocation is clear. The allocation between the regulable and non-regulable sales assists the Court in determining on review whether the prescribed rates violate constitutional standards. *Banton* v. *Belt Line Ry. Corp.*, 268 U. S. 413; *Wabash Val-*

[18] The contention of petitioners (Br. 39), also vigorously urged by petitioners in *Canadian River Gas Co.* v. *Federal Power Commission*, No. 380 (Pet. Br., pp. 72–75), that a segregation or allocation of physical property is required is without merit. Whatever current vitality the *Minnesota Rate Cases*, 230 U. S. 352, 435, and *Smith* v. *Illinois Bell Telephone Co.*, 282 U. S. 133, 150, now possess in respect of a state regulatory body's failure to segregate physical property when the question of state regulation of interstate commerce is concerned (but see *Lone Star Gas Co.* v. *Texas*, 304 U. S. 224, 239, 241), the rule is well settled that in cases not involving any such conflict of jurisdiction a fair division of costs alone is adequate. *Banton* v. *Belt Line Ry. Corp.*, 268 U. S. 413, 421; *Wabash Valley Elec. Co.* v. *Young*, 287 U. S. 488, 498–500; cf. *Houston* v. *Southwestern Tel. Co.*, 259 U. S. 318, 322–323.

ley Elec. Co. v. *Young*, 287 U. S. 488, 497–498. It is in this light, we submit, that the question of the necessity of an allocation must be approached.[19]

B. THERE WAS NO CONFISCATION

In the instant case, there is no significance to the fact that the amount of the reduction in petitioners' interstate wholesale rates was measured by the difference between their total revenues and a fair return on all their properties. It was petitioners' resale rates alone which were directed to be reduced. Petitioners now contend that in the test year they were actually earning in excess of a 6½% return on their direct industrial sales, and that this return cannot be maintained under the rates fixed by the Commission without reducing

[19] While a failure to make a suitable allocation or allowance of costs in an appropriate case may be a denial of due process (cf. *Banton* v. *Belt Line Ry. Corp.*, 268 U. S. 413, 421; *Columbus Gas Co.* v. *Commission*, 292 U. S. 398, 404–405; Beutel, *Valuation As A Requirement Of Due Process*; 43 Harv. L. R. 1249, 1268–1274), petitioners are in no position here to claim a denial of due process, since the Commission's finding that an allocation was unnecessary was based upon the testimony of petitioners' own witnesses. See *supra*, pp. 12–16. Where factors are present which indicate that an allocation is appropriate, as in *Colorado Interstate Gas Co.* v. *Federal Power Commission*, *Canadian River Gas Co.* v. *Federal Power Commission*, and *Colorado-Wyoming Gas Co.* v. *Federal Power Commission*, Nos. 379, 380 and 575, this Term, the Commission makes an allocation. The "broad distinction" between those cases and the case at bar was explicitly recognized by petitioners' witness Biddison, who testified that the lack of provision of capacity for petitioners' industrial customers justified a different treatment (R. VIII, 3868–69).

below 6½% their rate of return on their interstate wholesale business. Even assuming that in the light of their position taken at the hearing petitioners are now free to advance this contention, the conclusion of confiscation does not follow. It cannot seriously be contended that a return of 6½%, which the Commission here found to be "fair and liberal" for purposes of this interim order (R. I, 30), is the lowest possible permissible rate of return (see Hearings, Committee on Interstate and Foreign Commerce, on H. R. 4008, 75th Cong., 1st Sess., p. 35). The Commission's return, computed at 6½% on the rate base of $67,137,305, amounted to $4,363,925. Even if this return were reduced by $331,000 (the maximum amount of which the petitioners claim (Pet. Br. 33–36) they were "deprived"), the remaining return would be $4,032,925, slightly in excess of a 6% rate of return on the over-all rate base. In this connection, it may be noted that this Court has found no constitutional difficulty with a rate of return for a natural gas utility of 6 per cent. *Lone Star Gas Co.* v. *Texas*, 304 U. S. 224. We, accordingly, submit that no allocation is required in the instant case to aid the Court in determining whether the rate reduction order resulted in confiscation.

The end result of the Commission's order "viewed in its entirety" is not "unjust and unreasonable" under the standards laid down by this Court. *Federal Power Commission* v. *Hope Nat-*

ural Gas Co., 329 U. S. 591, 602; *Federal Power Commission* v. *Natural Gas Pipeline Company*, 315 U. S. 575, 585–586. The Commission's rate order allowing the 6½% return on the rate base will permit petitioners to earn $4,363,925 upon the basis of the test year after meeting all operating expenses, including annual depreciation expenses, exploratory and development costs, and Federal income taxes (R. I, 30). The undisputed annual cost of servicing petitioners' long-term debt is $957,786 (or 2.88%) and the cost of servicing the preferred stock is $939,000 (or 5.8%), a total of $1,896,786 (R. XIV, 6097), which leaves $2,467,139 for petitioners' $20,184,175 of common stock, a return upon such stock of 12% (R. XII, 5501). Assuming even that petitioners are entitled to a return on their surplus, the earnings of $2,467,139 would provide a return of 9 per cent on the combined common stock and surplus of $27,650,000 (R. XII, 5501). The allowed rate of return, as the Commission found (R. I, 28–30), is commensurate with the returns on investments in other enterprises having corresponding risks and is more than sufficient to insure confidence in petitioners' financial integrity. There is thus no room for any contention that the rate afforded petitioners is "unjust and unreasonable." Cf. *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 586.

III

THE COMMISSION DID NOT EXCEED ITS JURISDICTION WITH RESPECT TO PETITIONERS' PRODUCING AND GATHERING FACILITIES

Petitioners contend that the Commission was under a statutory duty by reason of Section 1 (b) of the Act to eliminate petitioners' producing and gathering facilities from the rate base, to disallow expenses of producing and gathering, and in lieu thereof, to allow a so-called "field price" for the gas produced by petitioners (Pet. Br. 48). We submit that, as this Court held in *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, 614, n. 25, there is no merit in this contention, which was raised for the first time in this proceeding in the reply brief which petitioners filed in the court below.[20] While it is clear that under Section 1 (b) of the Act the Commission has no jurisdiction to regulate "production and gathering" as such, the Commission, in determining the reasonableness of a natural gas company's interstate wholesale rates, properly reflects its production and gathering facilities in

[20] In the proceedings before the Commission, petitioners admittedly "did not attempt" to segregate their producing and gathering properties or the expenses incident thereto (Pet. Br. 49); nor did petitioners raise the objection in their petition for rehearing (R. XVI, 7141-7148), as required by Section 19 (b) of the Act, or in their petition for review in the court below (R. I, 1-44).

the rate base, and properly considers the expenses, including depletion, incident thereto. This is apparent from the purposes and provisions of the Natural Gas Act, as well as its legislative history.

Section 1 (a) of the Natural Gas Act declares that "Federal regulation *in matters relating to* the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest" (emphasis supplied), and in accordance with this declaration of policy, Section 1 (b) provides that the Act "shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale."

As petitioners tacitly recognize (Pet. Br. 46), the above quoted provision in Section 1 (b), considered alone, clearly vests the Commission with jurisdiction over the production and gathering facilities of a natural-gas company. Petitioners contend, however, that the Act as a whole indicates that Congress intended to exclude from regulation the production and gathering phase of the business of a natural-gas company. In support of this contention petitioners principally rely upon the "but" clause in Section 1 (b), which specifies that the Act "shall not apply to any other transportation or sale of natural gas or to the local

distribution of natural gas or to the facilities used for such distribution or *to the production or gathering of natural gas*" (emphasis supplied).

At the outset, it may be conceded that Section 1 (b) withholds from the regulatory power of the Commission the *activity* of producing or gathering natural gas, and that accordingly the Commission has no authority over such matters as, for example, the determination of the drilling or spacing of wells in the field, the number of wells to be drilled in a common reservoir, proration of the production of oil or gas, or cycling or other recovery operations. However broad may be the catalogue of activities thus excluded from the Commission's jurisdiction, we submit that there is no warrant for assuming that Congress, by excluding such activities, intended to preclude the Commission from reflecting the production and gathering facilities of a natural-gas company in the rate base and considering the expenses incident thereto for the purpose of determining the reasonableness of interstate wholesale rates under the Act.

The legislative history confirms the fact that the "but" clause in Section 1 (b) does not remove from the Commission's jurisdiction what would otherwise be subject thereto by reason of its authority over the transportation and sale of natural gas in interstate commerce for resale under the first part of Section 1 (b). Thus, the House

Committee on Interstate and Foreign Commerce in reporting the bill (H. R. 6586, 75th Cong., 1st Sess.) which became the Natural Gas Act, quoted the "but" clause in its report (H. Rep. No. 709, 75th Cong., 1st Sess., p. 3) and then stated:

> "*The quoted words are not actually necessary,* as the matters specified therein could not be said fairly to be covered by the language affirmatively stating the jurisdiction of the Commission, but similar language was in previous bills, and, rather than invite the contention, however unfounded, that the elimination of the negative language would broaden the scope of the act, the committee has included it in this bill. That part of the negative declaration stating that the act shall not apply to 'the local distribution of natural gas' *is surplusage* by reason of the fact that distribution is made only to consumers in connection with sales, and since no jurisdiction is given to the Commission to regulate sales to consumers the Commission would have no authority over distribution, whether or not local in character." [Emphasis supplied.]

Section 5 (a) of the Act places the duty upon the Commission to determine "the just and reasonable rate, charge * * * to be thereafter observed and in force, and * * * fix the same by order." In both *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, and *Federal Power Commission* v. *Hope Natural Gas*

Co., 320 U. S. 591, the Commission, without challenge by either the natural-gas companies or this Court, included the production and gathering facilities in the rate base on which a return was allowed. Indeed, in the *Hope* case, this Court observed (320 U. S. 616) that the Natural Gas Act contemplated "regulation along recognized and more or less standardized lines", citing H. Rep. 709, *supra*, p. 3. The valuation of production and gathering facilities historically has been an integral part of the regulatory procedure in fixing rates for natural gas. *Dayton Power & Light Co. v. Commission*, 292 U. S. 290; *Lone Star Gas Co. v. Texas*, 304 U. S. 224.

There are numerous provisions in the Natural Gas Act which clearly indicate that the Commission has jurisdiction over the production and gathering properties of a natural-gas company to the extent necessary to carry out its functions under the Act and particularly its principal function of determining the reasonableness of the company's interstate wholesale rates. Thus, Section 6 (a) authorizes the Commission to "investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property." Section 6 (b)

requires every natural-gas company, upon request, to file with the Commission "an inventory of all or any part of its property and a statement of the original cost thereof." It will be noted that Section 6, which is directly related to the Commission's rate-making powers, extends to all the property of a natural-gas company. Similarly, Section 8 (a), in authorizing the Commission to prescribe uniform and correct accounting for natural-gas companies, extends to all the property of such companies.[21] And under Section 9 (a), the Commission is authorized to determine and to fix by order the proper and adequate rates of depreciation and amortization "of the several classes of property of each natural-gas company used or useful in the production, transportation, or sale of natural gas." That the Commission's authority under this section is directly related to its rate-making powers is indicated by the proviso that nothing in that section shall limit the power of a state commission to determine the rates of depreciation or amortization to be allowed for the purpose of determining rates or charges subject to state regulation. Under Section 10 (a) the Com-

[21] Section 8 (a) of the Natural Gas Act is identical with and was taken from Section 301 (a) of the Federal Power Act. In reporting out the latter, the Senate Committee on Interstate Commerce stated (S. Rep. No. 621, 74th Cong., 1st Sess., p. 53) that "the authority of the Commission over the accounts of companies under its jurisdiction extends to the entire business of such companies."

mission is authorized to require natural-gas companies to file reports giving full information as to assets and liabilities as well as the cost of maintenance and operation "of facilities for the production, transportation, or sale of natural gas."[22]

The conclusion that Congress contemplated that the Commission would consider the production and gathering properties of a natural-gas company in determining interstate wholesale rates, is reinforced by the provisions and legislative history of Section 14 (b) of the Act. That section authorizes the Commission, after hearing, to determine the adequacy or inadequacy of the gas reserves of natural-gas companies, and, also after hearing, to "determine the propriety and reasonableness of the inclusion in operating expenses, capital, or surplus of all delay rentals or other forms of rental or compensation for unoperated lands and leases." The section further provides that the Commission, for purposes of such determinations, may require each natural-gas company to file copies of "all its lease and royalty agreements with respect to such gas reserves."

The direct relation of Section 14 (b) to the Commission's rate-making authority is clearly

[22] Section 5 (b) further provides that the Commission "may investigate and determine the cost of the production or transportation of natural gas by a natural-gas company in cases where the Commission has no authority to establish a rate governing the transportation or sale of such natural gas."

indicated by its legislative history. As introduced, the bill (H. R. 4008, 75th Cong., 1st Sess.) which, as amended (H. R. 6586, 75th Cong., 1st Sess.), became the Natural Gas Act, did not contain the provisions of Section 14 (b).[23] In the hearings before the House Committee the National Secretary of the Cities Alliance urged that the provisions of Section 14 (b) be added to the bill, "to prevent great pipe-line corporations from acquiring more acreage than is necessary to supply the consuming public which it serves, and so far as the proposed amendment is concerned, would keep them from passing on the charge of carrying that property to the consuming public." He recognized that he could not ask the Committee "to go so far as to prevent them from making the purchase, if they want to, but we can ask that provision can be made whereby the Commission can see that the cost of carrying those excess acres, that are not necessary in the public interest, shall not be taken into consideration in passing upon the question of what are proper rates to be charged the consuming public" (Hearings on H. R. 4008, 75th Cong., 1st Sess., pp. 60, 67, 84).

The purpose of Section 14 (b) is further apparent from the testimony of Mr. William A. Dougherty before the Committee. Mr. Dougherty,

[23] The provisions of Section 14 (b) were contained in another bill (H. R. 5711, 75th Cong., 1st Sess.) which the Committee then had before it in addition to H. R. 4008.

who identified himself as a New York attorney connected with the management of certain natural gas pipe-line companies, including Colorado Interstate Gas Company (Petitioner in No. 379, this Term), which he named (Hearings, p. 123), objected to the proposed amendment because of the additional expense which would be involved in filing copies of all leases and royalty agreements. He contended that such a requirement was "not necessary" since the "only purpose of having information on lease and royalty agreements is when you are determining a rate and when you are going to determine a rate you can have those things brought in" (Hearings, p. 131). Mr. Dougherty further stated that careful consideration should be given to the provisions of the proposed amendment authorizing the Commission to determine the adequacy or inadequacy of gas reserves, and pointed out that "the Commission can exclude carrying charges of vast amounts of reserves as charges that have no immediate bearing on the immediate rate" (Hearings, p. 132). He added that "the law already gives the Commission the right to exclude delay rentals if the Commission feels that the reserve for which the delay rentals are included are too extensive, and I think the Commission would have that right even without this wording with respect to determining the adequacy or the inadequacy of gas reserves" (Hearings, pp. 132–133).

The hearings which the House Committee on Interstate and Foreign Commerce held on the first predecessor bill (H. R. 11662, 74th Cong., 2nd Sess.) which was reported out (H. Rep. 2651, 74th Cong., 2nd Sess.) confirm the Commission's view. There the then Solicitor of the Federal Power Commission, Dozier A. DeVane, agreed with a member of the committee that the Commission "would go into all the great natural gas fields of this country to determine costs" and "ascertain the cost of generating plant, and all the facilities, and, of course, build up a proper foundation for your rate finally to be sustained" as was done under Title II of the Federal Power Act (Hearings, pp. 31–32).

In addition, the Commission's administrative interpretation of the Act in this connection is of particular significance since it has been impliedly approved by Congress. The Commission in determining the reasonableness of interstate wholesale rates has consistently reflected the company's production and gathering facilities in the rate base.[21] This administrative interpretation

[21] *Illinois Commerce Comm.* v. *Natural Gas Pipeline Co.*, 35 P. U. R. (N. S.) 41, affirmed 315 U. S. 575; *Re Lone Star Gas Co.*, Order of May 4, 1942, in Docket No. G-209; *Cleveland* v. *Hope Natural Gas Co.*, 44 P. U. R. (N. S.) 1, affirmed 320 U. S. 591; *Re El Paso Natural Gas Co.*, Order of October 29, 1942, in Docket No. G-257; *Re Northern Natural Gas Co.*, 47 P. U. R. (N. S.) 74.

of the Act was brought to the attention of Congress in the Commission's Twentieth Annual Report for the year 1940, which summarized the Commission's work in connection with major rate cases and in so doing, stated (p. 77):

> *Gas reserves.*—As the natural-gas industry is an extractive industry, *one of the important elements of cost which must be determined pertains to the exhaustion of the service life of the properties due to the depletion of the natural-gas reserves which the properties were constructed to produce or transport.* The Commission's geologists have been engaged in estimating the volume of gas reserves in a number of important fields, among them the Panhandle field in Texas, the Hugoton field in Kansas and a major portion of the fields located in West Virginia, Pennsylvania, and New York. A few years' difference in the estimated life of available gas reserves supplying a given market may *make a large difference in the rates* which can be justified for that area. [Emphasis supplied.] [25]

Soon after this report was submitted, the House Committee on Interstate and Foreign Com-

[25] The report also pointed out that the Commission's staff, in connection with the organization of natural gas rate cases "along the lines indicated", had made four comprehensive field investigations, including the "Canadian River Gas Co., Colorado Interstate Gas Co., and Colorado-Wyoming Gas Co. in the Mid-West," the proceedings now under review in Nos. 379, 380 and 575, this Term.

merce held hearings on a bill (H. R. 5249, 77th Cong., 1st Sess.) to amend Section 7 of the Natural Gas Act to broaden the Commission's jurisdiction with respect to certificates of public convenience and necessity. Following extensive hearings, during which the Commission's administration of the Act was fully explored (see Hearings pp. 34–35, 40–46, 60–61), the bill was favorably reported and enacted on February 7, 1942.

We accordingly submit that the Commission had jurisdiction to reflect petitioners' producing and gathering facilities in their rate base, and to consider the expenses incident thereto in determining the reasonableness of their interstate wholesale rates. And the contention to the contrary which petitioners now advance therefore furnishes no support to their claim that the Commission should have found and allowed a so-called "field price" for the gas which they produce.

IV

IN DETERMINING THE REASONABLENESS OF PETITIONERS' INTERSTATE WHOLESALE RATES THE COMMISSION IS NOT REQUIRED TO VALUE THE GAS WHICH THEY PRODUCE ON THE BASIS OF A "FIELD PRICE"

Petitioners contend that the Commission's failure to determine and allow a so-called "field price" for the gas which they produce "was arbitrary, discriminatory, lacking any rational basis and

amounted to a denial of due process" (Pet. Br. 54). They also contend that a second approach which substantially would have achieved the same result—including leaseholds in the rate base at their market value—was also improperly rejected by the Commission (Pet. Br. 49). We submit that these contentions, not being supported by the alleged absence of jurisdiction over production and gathering facilities (pp. 31–42, *supra*), resolve themselves into the sole question of whether the "end result" of the Commission's rate order is confiscation (*Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, 602) and this Court did not grant review of that question presented in the petition (p. 3).

In any event, petitioners' contention (Pet. Br. 52) that its leaseholds "can be sold" for more than $8,000,000 is based upon the opinion evidence of their own witness. The "value" ranging from $100 to $5 per acre (R. IX, 4199) which this witness assigned to the leaseholds reflected the assumed "value" from the demand for gas by petitioners' customers and the construction of pipeline facilities to serve them (R. IX, 4192). Such "value" was also enhanced by the benefits of conservation legislation (R. IX, 4193). This was thus the same type of testimony which this Court condemned in the *Dayton Power & Light Company* case (292 U. S. 290, 299):

> * * * But plainly opinions thus offered, even if entitled to some weight, have

> no such conclusive force that there is error of law in refusing to follow them. This is true of opinion evidence generally, whether addressed to a jury [cases cited] or to a judge [cases cited] or to a statutory board [cases cited]. There are reasons why the principle has special application here. In the first place, the intrinsic value of the leases is dependent upon the capacity of the lands to yield productive wells, a capacity seldom to be judged with even a fair approach to certainty until tested by experience. *Natural Gas Co. of W. Va. v. Public Service Comm.*, 95 W. Va. 557, 569, 121 S. E. 716. In the second place, the profits to be earned in a regulated business must vary with the rates established by the supervising agencies of government, with the result that prophecies, however radiant, may be upset over night by the publication of a lower schedule.

Obviously, testimony of such a character is not so compelling as to require the Commission to disregard the actual legitimate cost of the properties involved.

As indicated in petitioners' brief (pp. 53–54), there is no essential difference between petitioners' claim of a so-called "field price" for the natural gas which they produce and their claim of the "market value" of their leaseholds. While evidence as to field price is subject to the same infirmities as were attributed in the *Dayton* case to

evidence of market value, the vice of the "field price" test lies even deeper.

The only substantial markets for gas in large reserves, such as the Hugoton and Panhandle fields, are located at points distant from the fields, and in order to transport gas to these markets it is necessary to construct expensive pipe lines.[26] Before embarking on such an undertaking, it is essential that the company constructing the line be assured of an adequate supply of gas. This is accomplished either by acquiring sufficient producing and proved gas acreage to insure future supplies, or by entering into long-term contracts with producers of gas under which the parties are bound to the sale and purchase of the gas as long as it shall be produced in paying quantities. Federal Trade Commission Report pursuant to Senate Resolution No. 83, 70th Cong., 1st Sess., Vol. 84–A, pp. 70 *et seq.* In a sense the cost which the pipeline company will be required to pay for the natural gas is determined at the inception of the enterprise. In a setting such as this the concept of a "field" or commodity price is unrealistic.

This Court had occasion to review the situation which obtains in the Panhandle field in *Thompson* v. *Consolidated Gas Co.*, 300 U. S. 55. Without access to pipelines and their distant

[26] E. g., petitioners' pipeline represented an investment in excess of $70,000,000 (R. XII, 5527). Natural Gas Pipeline Co. had a book cost in excess of $60,000,000 (315 U. S. at 579).

markets, natural gas produced in the fields had no commercial value other than the extraction of natural gasoline or the production of carbon black (id., pp. 59, 70). In the *Thompson* case, this Court held unconstitutional a Texas statute which sought to compel large pipeline companies to purchase a part of their gas requirements from private producers. There the question of commodity price was not even reached—the pipeline companies did not want the gas at any price.

The value which gas obtains in a market such as the Panhandle or Hugoton field depends exclusively upon the price which the few large pipeline companies are willing to pay. Cf. *United Fuel Gas Co.* v. *Railroad Commission*, 278 U. S. 300; *Dayton Power & Light Co.* v. *Commission*, 292 U. S. 290, 301. Whatever might be the situation where the demand equals or exceeds the supply of natural gas, it is apparent that where the market can absorb only a small fraction of the gas produced the purchaser is in a superior bargaining position. In such circumstances the commodity price, if the law of supply and demand is permitted to operate, will necessarily tend to reflect cost alone. And should competition be sufficiently keen, that cost would probably not carry a 6½% profit.[27] Were petitioners deprived of their markets outside the state, their gas would have little if any value.

[27] The Commission, in fixing costs in the instant case, included therein a return of 6½% on the rate base.

Prevailing prices accordingly do not establish a commodity value. When the sales contracts extend for the life of the wells, and vary among themselves, the rates fixed therein merely reflect what the parties to the contract at one time considered to be a fair price. It could currently be either more or less. There is no such thing as a true commodity price unless there are frequent adjustments in price to reflect the changing supply and demand. Moreover, the adoption of a commodity price would open the door for the establishment of fictitious prices. Over 80% of the total area of the Panhandle fields is controlled by major pipeline companies (300 U. S. at 60). It would be possible for these companies to buy small amounts of gas from independent producers at a high Mcf price and accordingly claim that the price so paid represented the commodity value to which they were entitled in calculating the value of the gas which they produced themselves. "When the pipe-line interests control the only outlets to markets, an arbitrary setting of field prices seems inevitable." [28]

On the other hand, the cost system adopted by the Commission is fair alike to consumers and natural-gas companies.[29] It is readily apparent that if a field such as Panhandle or Hugoton

[28] Federal Trade Commission Report No. 84-A, p. 133.

[29] Contrary to the contentions which petitioners advance on the basis of the tabulation in Appendix C to their brief, as we show in Appendix B of this brief, when actually computed, the allowed cost of gas produced by petitioners aver-

should be discovered near Chicago or Detroit, the cost of delivering gas from such field to those cities would be low and gas companies which were incurring higher transportation costs in delivering gas from distant points would be faced with bankruptcy if they were held to the commodity price.[30] On the other hand the Commission allows the acquisition costs of leaseholds, the delay rentals thereon while they are being held in reserve, well drilling and exploratory costs and all expenses incident to the operation of the gas leaseholds, including royalty payments. Thus the pipeline companies, whose business in the final analysis consists of the interstate sale of gas at wholesale, are assured of the cost of producing the commodity which they sell. Certainly, it may not be said that the action of the Commission in electing to use the cost rather than the commodity value of the gas lacks a rational basis. See *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, 615–616. Indeed, since the Commission has established its policy of allowing cost of production, investors have been lending money at progressively lower rates (Exhibit 253, Charts Nos. 33 and 34, R. XIV, 6031, 6033). The average yield on bonds, debentures and notes issued

ages 3.75¢ per Mcf as compared with the 3.71¢ per Mcf average cost of gas purchased.

[30] It is significant to note that Hope Natural Gas Company purchased gas at prices lower than the cost of producing its own gas. See record in No. 34, Oct. Term 1943, II, 309, 342.

by natural-gas companies has declined from 4.59% in 1936 to 3.11% in 1941 (ibid.).

Finally, if the commodity price rather than cost were adopted by the Commission there would no longer be any necessity for treating the gas business as presenting any hazards peculiar. As a result, the transmission facilities, which constitute the larger portion of the pipe lines investment, would be entitled to a lower rate of return than 6½%.[31]

We accordingly submit that there was no requirement that the Commission, in fixing petitioners' rates for the interstate sale for resale of natural gas, should fix the cost of the gas so sold on a commodity rather than a cost of production basis.

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[31] If the return on petitioners' transmission facilities were limited to 5½% or 6%, the liberality of the return on their production facilities under the Commission's order is apparent:

	Return allowed on Production Property	
	If Other Property Entitled to 5½%	If Other Property Entitled to 6%
1. Rate base allowed	$67,137,305	$67,137,305
2. Deduct: Depreciated cost of production property (See Pet. Br. App. C)	2,555,473	2,555,473
3. Rate base—other property	64,581,832	64,581,832
4. Total return allowed	4,363,925	4,363,925
5. Return on property other than production property	3,552,000	3,874,910
6. Return on production property	811,925	489,015
7. Per cent of return allowed on production property	31.8%	19.1%

CONCLUSION

For the reasons stated, it is respectfully submitted that the decision below should be affirmed.

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APPENDIX A

The pertinent provisions of the Natural Gas Act of 1938, c. 556, 52 Stat. 821 (15 U. S. C. § 717 *et seq.*), as amended by the Act of February 7, 1942 (56 Stat. 83), are as follows:

SECTION 1. (a) As disclosed in reports of the Federal Trade Commission made pursuant to Senate Resolution 83 (Seventieth Congress, first session) and other reports made pursuant to the authority of Congress, it is hereby declared that the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.

(b) The provisions of this act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.

SEC. 4. (a) All rates and charges made, demanded, or received by any natural-gas company for or in connection with the

transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.

(b) No natural-gas company shall, with respect to any transportation or sale of natural gas subject to the jurisdiction of the Commission, (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.

(c) Under such rules and regulations as the Commission may prescribe, every natural-gas company shall file with the Commission, within such time (not less than sixty days from the date this act takes effect) and in such form as the Commission may designate, and shall keep open in convenient form and place for public inspection, schedules showing all rates and charges for any transportation or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges, together with all contracts which in any manner affect or relate to such rates, charges, classifications, and services.

(d) Unless the Commission otherwise orders, no change shall be made by any natural-gas company in any such rate, charge, classification, or service, or in any rule, regulation, or contract relating thereto, except after thirty days' notice to

the Commission and to the public. Such notice shall be given by filing with the Commission and keeping open for public inspection new schedules stating plainly the change or changes to be made in the schedule or schedules then in force and the time when the change or changes will go into effect. The Commission for good cause shown, may allow changes to take effect without requiring the thirty days' notice herein provided for by an order specifying the changes so to be made and the time when they shall take effect and the manner in which they shall be filed and published.

(e) Whenever any such new schedule is filed the Commission shall have authority, either upon complaint of any State, municipality, or State commission, or upon its own initiative without complaint, at once, and if it so orders, without answer or formal pleading by the natural-gas company, but upon reasonable notice, to enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service; and, pending such hearing and the decision thereon, the Commission, upon filing with such schedules and delivering to the natural-gas company affected thereby a statement in writing of its reasons for such suspension, may suspend the operation of such schedule and defer the use of such rate, charge, classification, or service, but not for a longer period than five months beyond the time when it would otherwise go into effect: *Provided*, That the Commission shall not have authority to suspend the rate, charge, classification, or service for the sale of natural gas for resale for industrial use only; and after full hearings, either completed before or after the

rate, charge, classification, or service goes into effect; the Commission may make such orders with reference thereto as would be proper in a proceeding initiated after it had become effective. If the proceeding has not been concluded and an order made at the expiration of the suspension period, on motion of the natural-gas company making the filing, the proposed change of rate, charge, classification, or service shall go into effect. Where increased rates or charges are thus made effective, the Commission may, by order, require the natural-gas company to furnish a bond, to be approved by the Commission, to refund any amounts ordered by the Commission, to keep accurate accounts in detail of all amounts received by reason of such increase, specifying by whom and in whose behalf such amounts were paid, and upon completion of the hearing and decision, to order such natural-gas company to refund, with interest, the portion of such increased rates or charges by its decision found not justified. At any hearing involving a rate or charge sought to be increased, the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the natural-gas company, and the Commission shall give to the hearing and decision of such questions preference over other questions pending before it and decide the same as speedily as possible.

SEC. 5. (a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in

connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however*, That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates.

(b) The Commission upon its own motion, or upon the request of any State commission, whenever it can do so without prejudice to the efficient and proper conduct of its affairs, may investigate and determine the cost of the production or transportation of natural gas by a natural-gas company in cases where the Commission has no authority to establish a rate governing the transportation or sale of such natural gas.

SEC. 6. (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction.

SEC. 7. (c) No natural-gas company or person which will be a natural-gas company upon completion of any proposed construction or extension shall engage in the transportation or sale of natural gas, subject to the jurisdiction of the Commission, or undertake the construction or extension of any facilities therefore, or acquire or operate any such facilities or extensions thereof, unless there is in force with respect to such natural-gas company a certificate of public convenience and necessity issued by the Commission authorizing such acts or operations: *Provided, however,* That if any such natural-gas company or predecessor in interest was bona fide engaged in transportation or sale of natural gas, subject to the jurisdiction of the Commission, on the effective date of this amendatory Act, over the route or routes or within the area for which application is made and has so operated since that time, the Commission shall issue such certificate without requiring further proof that public convenience and necessity will be served by such operation, and without further proceedings, if application for such certificate is made to the Commission within ninety days after the effective date of this amendatory Act. Pending the determination of any such application, the continuance of such operation shall be lawful.

In all other cases the Commission shall set the matter for hearing and shall give such reasonable notice of the hearing thereon to all interested persons as in its judgment may be necessary under rules and regulations to be prescribed by the Commission; and the application shall be decided in accordance with the procedure provided in subsection (e) of this section and such certificate shall be issued or denied accordingly: *Provided, however,* That the Commission may issue a temporary certificate in cases of emergency, to assure maintenance of adequate service or to serve particular customers, without notice or hearing, pending the determination of an application for a certificate, and may by regulation exempt from the requirements of this section temporary acts or operations for which the issuance of a certificate will not be required in the public interest.

(e) Except in the cases governed by the provisos contained in subsection (c) of this section, a certificate shall be issued to any qualified applicant therefore, authorizing the whole or any part of the operation, sale, service, construction, extension, or acquisition covered by the application, if it is found that the applicant is able and willing properly to do the acts and to perform the service proposed and to conform to the provisions of the Act and the requirements, rules, and regulations of the Commission thereunder, and that the proposed service, sale, operation, construction, extension, or acquisition, to the extent authorized by the certificate, is or will be required by the present or future public convenience and necessity; otherwise such application shall be denied. The Commission shall have the

power to attach to the issuance of the certificate and to the exercise of the rights granted thereunder such reasonable terms and conditions as the public convenience and necessity may require.

(f) The Commission, after a hearing had upon its own motion or upon application, may determine the service area to which each authorization under this section is to be limited. Within such service area as determined by the Commission a natural-gas company may enlarge or extend its facilities for the purpose of supplying increased market demands in such service area without further authorization.

(g) Nothing contained in this section shall be construed as a limitation upon the power of the Commission to grant certificates of public convenience and necessity for service of an area already being served by another natural-gas company.

SEC. 8. (a) Every natural-gas company shall make, keep, and preserve for such periods, such accounts, records of cost-accounting procedures, correspondence, memoranda, papers, books, and other records as the Commission may by rules and regulations prescribe as necessary or appropriate for purposes of the administration of this act: *Provided, however*, That nothing in this act shall relieve any such natural-gas company from keeping any accounts, memoranda, or records which such natural-gas company may be required to keep by or under authority of the laws of any State. The Commission may prescribe a system of accounts to be kept by such natural-gas companies, and may classify such natural-gas companies and prescribe a system of accounts for each class. The Commission,

after notice and opportunity for hearing, may determine by order the accounts in which particular outlays or receipts shall be entered, charged, or credited. The burden of proof to justify every accounting entry questioned by the Commission shall be on the person making, authorizing, or requiring such entry, and the Commission may suspend a charge or credit pending submission of satisfactory proof in support thereof.

(b) The Commission shall at all times have access to and the right to inspect and examine all accounts, records, and memoranda of natural-gas companies; and it shall be the duty of such natural-gas companies to furnish to the Commission, within such reasonable time as the Commission may order, any information with respect thereto which the Commission may by order require, including copies of maps, contracts, reports of engineers, and other data, records, and papers, and to grant to all agents of the Commission free access to its property and its accounts, records, and memoranda when requested so to do. No member, officer, or employee of the Commission shall divulge any fact or information which may come to his knowledge during the course of examination of books, records, data, or accounts, except insofar as he may be directed by the Commission or by a court.

(c) The books, accounts, memoranda, and records of any person who controls directly or indirectly a natural-gas company subject to the jurisdiction of the Commission and of any other company controlled by such person, insofar as they relate to transactions with or the business of such natural-gas company, shall be subject to ex-

amination on the order of the Commission.

SEC. 9. (a) The Commission may, after hearing, require natural-gas companies to carry proper and adequate depreciation and amortization accounts in accordance with such rules, regulations, and forms of account as the Commission may prescribe. The Commission may from time to time ascertain and determine, and by order fix, the proper and adequate rates of depreciation and amortization of the several classes of property of each natural-gas company used of useful in the production, transportation, or sale of natural gas. Each natural-gas company shall conform its depreciation and amortization accounts to the rates ascertained, determined, and fixed. No natural-gas company subject to the jurisdiction of the Commission shall charge to operating expenses any depreciation or amortization charges on classes of property other than those prescribed by the Commission, or charge with respect to any class of property a percentage of depreciation or amortization other than that prescribed therefor by the Commission. No such natural-gas company shall in any case include in any form under its operating or other expenses any depreciation, amortization, or other charge or expenditure included elsewhere as a depreciation or amortization charge or otherwise under its operating or other expenses. Nothing in this section shall limit the power of a State commission to determine in the exercise of its jurisdiction, with respect to any natural-gas company, the percentage rates of depreciation or amortization to be allowed, as to any class of property of such natural-gas company, or the composite depreciation or

amortization rate, for the purpose of determining rates or charges.

(b) The Commission, before prescribing any rules or requirements as to accounts, records, or memoranda, or as to depreciation or amortization rates, shall notify each State commission having jurisdiction with respect to any natural-gas company involved and shall give reasonable opportunity to each such commission to present its views and shall receive and consider such views and recommendations.

SEC. 10. (a) Every natural-gas company shall file with the Commission such annual and other periodic or special reports as the Commission may by rules and regulations or order prescribe as necessary or appropriate to assist the Commission in the proper administration of this act. The Commission may prescribe the manner and form in which such reports shall be made, and require from such natural-gas companies specific answers to all questions upon which the Commission may need information. The Commission may require that such reports shall include, among other things, full information as to assets and liabilities, capitalization, investment and reduction thereof, gross receipts, interest due and paid, depreciation, amortization, and other reserves, cost of facilities, cost of maintenance and operation of facilities for the production, transportation, or sale of natural gas, cost of renewal and replacement of such facilities, transportation, delivery, use, and sale of natural gas. The Commission may require any such natural-gas company to make adequate provision for currently determining such costs and other facts. Such reports shall be made

under oath unless the Commission otherwise specifies.

(b) It shall be unlawful for any natural-gas company willfully to hinder, delay, or obstruct the making, filing, or keeping of any information, document, report, memorandum, record, or account required to be made, filed, or kept under this act or any rule, regulation, or order thereunder.

SEC. 11. (a) In case two or more States propose to the Congress compacts dealing with the conservation, production, transportation, or distribution of natural gas it shall be the duty of the Commission to assemble pertinent information relative to the matters covered in any such proposed compact, to make public and to report to the Congress information so obtained, together with such recommendations for further legislation as may appear to be appropriate or necessary to carry out the purposes of such proposed compact and to aid in the conservation of natural-gas resources within the United States and in the orderly, equitable, and economic reduction, transportation, and distribution of natural gas.

(b) It shall be the duty of the Commission to assemble and keep current pertinent information relative to the effect and operation of any compact betwen two or more States heretofore or hereafter approved by the Congress, to make such information public, and to report to the Congress, from time to time, the information so obtained, together with such recommendations as may appear to be appropriate or necessary to promote the purposes of such compact.

SEC. 14. (b) The Commission may, after hearing, determine the adequacy or inadequacy of the gas reserves held or controlled

by any natural-gas company, or by anyone on its behalf, including its owned or leased properties or royalty contracts; and may also, after hearing, determine the property and reasonableness of the inclusion in operating expenses, capital, or surplus of all delay rentals or other forms of rentals or compensation for unoperated lands and leases. For the purpose of such determinations, the Commission may require any natural-gas company to file with the Commission true copies of all its lease and royalty agreements with respect to such gas reserves.

SEC. 16. The Commission shall have power to perform any and all acts, and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations as it may find necessary or appropriate to carry out the provisions of this act. Among other things, such rules and regulations may define accounting, technical, and trade terms used in this act; and may prescribe the form or forms of all statements, declarations, applications, and reports to be filed with the Commission, the information which they shall contain, and the time within which they shall be filed. Unless a different date is specified therein, rules and regulations of the Commission shall be effective thirty days after publication in the manner which the Commission shall prescribe. Orders of the Commission shall be effective on the date and in the manner which the Commission shall prescribe. For the purposes of its rules and regulations, the Commission may classify persons and matters within its jurisdiction and prescribe different requirements for different classes of persons or matters. All rules

and regulations of the Commission shall be filed with its secretary and shall be kept open in convenient form for public inspection and examination during reasonable business hours.

SEC. 19. (a) Any person, State, municipality, or State commission aggrieved by an order issued by the Commission in a proceeding under this act to which such person, State, municipality, or State commission is a party may apply for a rehearing within thirty days after the issuance of such order. The application for rehearing shall set forth specifically the ground or grounds upon which such application is based. Upon such application the Commission shall have power to grant or deny rehearing or to abrogate or modify its order without further hearing. Unless the Commission acts upon the application for rehearing within thirty days after it is filed, such application may be deemed to have been denied. No proceeding to review any order of the Commission shall be brought by any person unless such person shall have made application to the Commission for a rehearing thereon.

(b) Any party to a proceeding under this act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of

the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such order of the

Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 239 and 240 of the Judicial Code, as amended (U. S. C., title 28, secs. 346 and 347).

(c) The filing of an application for rehearing under subsection (a) shall not, unless specifically ordered by the Commission, operate as a stay of the Commission's order. The commencement of proceedings under subsection (b) of this section shall not, unless specifically ordered by the court, operate as a stay of the Commission's order.

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APPENDIX B

Schedule 1, page 1

PANHANDLE EASTERN PIPE LINE COMPANY
COST OF GAS PRODUCED AT WELL HEAD
COMPARED WITH AVERAGE COST OF PURCHASED GAS
BASED ON THE FEDERAL POWER COMMISSION'S OPINION

Account		Commission Opinion Total Cost	Commission Opinion Operation of Wells & Leases
OPERATION AND MAINTENANCE			
Production Expense			
Gas Well Operation	(R. XII, 5595)	$ 59,695	$ 59,695
Gas Well Maintenance	"	19,087	19,087
Gas Well Royalties	"	171,044	171,044
Natural Gas Land Dept.	"	11,135	11,135
Delay Rentals	"	116,781	116,781
Field Line Operation	"	17,838	
Field Line Maintenance	"	9,036	
Sub-total	"	405,116	377,542
Natural Gas Purchased	"	1,180,918	
Gas Purchasing Expense	"	25,270	
Natural Gasoline Expenses	(R. XII, 5599)	202,587	
Transmission Expense	(R. XVI, 6885)	1,048,909	
Distribution Expense	"	4,069	
Customers' Acctg. & Coll. Exp.	"	28,760	
Sales Promotion Expense	"	32,724	
Administrative & General Expense	"	843,848	120,300 1/
Dupl. Charges - Gas Used in Oper., etc.	"	(749,889)	
Sub-total Oper. & Maint.	(R. XII, 5505)	2,822,632	
AMORTIZATION, DEPLETION AND DEPRECIATION			
Depletion of Producing Leases	(R. XII, 5505)	90,177	90,177
Amortization - Abandoned Leases	"	74,685	74,685
Depreciation	"	2,308,521	94,628 2/
Amortization - Gas Contracts	"	39,114	
Sub-total		2,512,497	
TAXES			
Production Taxes	(R. XII, 5504)	52,811	52,811
Other Taxes	(R. XII, 5505)	848,576	48,505 3/
Federal Income Tax	(R. I, 30)	1,093,768	54,142 4/
TOTAL OPERATING REVENUE DEDUCTIONS PER COMMISSION'S OPINION	(R. I, 31)	8,331,264	912,790
RETURN (6% OF $67,137,305)	(R. I, 31)	4,365,925	215,672 5/
TOTAL COST OF SERVICE		$12,695,189	$1,128,462
M.C.F. of Gas Produced - 1941	(R. XII, 5567)		30,059,021
Average Cost per M.C.F. of Gas Produced - 1941			3.75¢
Average Cost per M.C.F. of Gas Purchased - 1941 ($1,180,918 divided by 30,157,409 MCF, R. XII, 5567)			3.71¢

NOTE: See Footnotes on Page 2.

PANHANDLE EASTERN PIPE LINE COMPANY

ALLOCATION OF GENERAL OVERHEAD, DEPRECIATION, TAXES AND RETURN TO WELLS AND LEASES

1/ Allocation of Gen. and Adm. Expense to Wells and Leases on basis of direct operating expenses:

	Total	Ratio	Gen. & Adm.
Wells and Leases	$ 377,542	14.29%	$ 100,300
Other Operation and Maint.	2,265,152	85.71%	721,548
Total, except purchased gas	$ 2,642,694	100.00%	$ 841,848

2/ Depreciation Expense Applicable to Wells:

Investment in Wells and Leases	$2,742,463
General Plant Applicable to Above	40,707
Depr. Base	$2,783,170
Depreciation rate for 1941 (P.U. IX, 4267)	3.4%
Depreciation for Wells and Leases	$ 94,628

3/ Property and Misc. Taxes Applicable to Wells and Lease Allocated on basis of gross investment:

	Total	Ratio	Taxes
Wells and Leases	$ 4,508,240	5.713%	$ 48,509
Other Plant	74,360,067	94.284	800,071
Total	$78,868,307	100.000%	$ 848,576

4/ Allocation of Federal Income Tax on basis of earnings:

	Return	Ratio	Income Tax
Return on Wells and Leases	$ 215,672	4.95	$ 54,142
Return on Other Plant	4,148,253	95.05	1,039,626
Total Return at 6%	$ 4,363,925	100.00	$1,093,768

5/ Allocation of Return:

	Rate Base	Rate of Return	Return
Net Investment Wells and Leases	$ 3,578,034	6.5%	$ 215,672
Net Investment Other Plant	63,849,271	6.5	4,148,253
Net Investment - Comm. Rate Base	$67,427,305	6.5	$4,363,925

Schedule 2

PANHANDLE EASTERN PIPE LINE COMPANY
NET INVESTMENT APPLICABLE TO WELLS AND LEASES
PER FEDERAL POWER COMMISSION OPINION

Plant Accounts	Commission Opinion Plant	Commission Opinion Depr. & Depl. Reserves	Net Investment Wells And Leases
Production Plant:			
Leases-Owned	$ 1,817,502	$ 247,166	$ 570,408
Leases-Unowned	727,344	145,071	330,710
Sub-total Leases	1,544,846	392,237	901,118
Gas Wells and Equip.	2,781,163	117,095	2,325,068
Total Wells and Leases	4,326,009	1,100,332	3,226,186
Refining Plant	40,051		
Transmission and Gathering Plant	11,711,105		
Distribution Plant	1,145,279		
Intangible and Undistributed Plant	200,716		
Purchased Pipeline	39,555		
Gas Sales and Purchase Contracts	360,007		
General Plant	717,153		34,852 1/
Total Other Plant	70,761,067	11,717,413	
Total Plant	70,760,587	12,817,745	57,942,842
Contributions In Aid of Constr.	(50,315)		
Working Capital	900,000		52,587 1/
Commission's Rate Base (3.1.57)	71,610,272	12,817,745	57,995,429

Depreciation Reserve:	Plant	Ratio	Depr. Reserve
Wells and Equip.	2,781,163	4.257%	$ 117,095
Other Plant	70,761,067	15.4%	11,717,413
Sub-total.	73,542,230	15.9%	11,834,508
Leases	1,785,777	Direct	862,239
Total Plant and Reserves	75,328,007		12,696,747

1/ Allocation of General Plant and Working Capital to Wells and Leases

	Total	Ratio	Applicable to Wells and Leases
General Plant	$ 717,153	4.77%	$ 34,207
Depr. and Amort. Reserve 15.22%	109,140	4.557%	4,955
Net Investment in General Plant	608,013		29,252
Working Capital	900,000	5.84%	52,587
	$ 1,508,013		$ 81,839

Ratio of Wells and Leases to Total Plant is 5.71%
Ratio of Wells to Total Plant is 4.257%

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CLERK

In the Supreme Court of the United States

No. 296.

OCTOBER TERM, 1944.

PANHANDLE EASTERN PIPE LINE COMPANY,
ILLINOIS NATURAL GAS COMPANY, and
MICHIGAN GAS TRANSMISSION CORPORATION,
Petitioners,

vs.

FEDERAL POWER COMMISSION,
CITY OF DETROIT,
COUNTY OF WAYNE, MICH.,
MICHIGAN CONSOLIDATED GAS COMPANY, and
MICHIGAN PUBLIC SERVICE COMMISSION,
Respondents.

On Petition for a Writ of Certiorari to the United States Circuit Court of Appeals for the Eighth Circuit.

BRIEF OF THE CITY OF CLEVELAND, OHIO, AMICUS CURIAE, SUGGESTING THAT THE COURT BELOW WAS WITHOUT JURISDICTION OVER THE SUBJECT MATTER.

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In the Supreme Court of the United States

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FEDERAL POWER COMMISSION,
CITY OF DETROIT,
COUNTY OF WAYNE, MICH.,
MICHIGAN CONSOLIDATED GAS COMPANY, and
MICHIGAN PUBLIC SERVICE COMMISSION,
Respondents.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

BRIEF OF THE CITY OF CLEVELAND, OHIO, AMICUS CURIAE, SUGGESTING THAT THE COURT BELOW WAS WITHOUT JURISDICTION OVER THE SUBJECT MATTER.

This brief of the City of Cleveland,[1] a political subdivision of the State of Ohio, suggesting that the court below was without jurisdiction over the subject matter of

[1] The City of Cleveland, Ohio, is the largest city served by The East Ohio Gas Company, which, since January 1, 1944, has been and is the second largest customer of the Panhandle Eastern Pipe Line Company. Cleveland, like all the State and local parties representing the interests of ultimate consumers in this case, is in the Sixth Circuit.

the petition for review, is presented amicus curiae, without consent of the parties, under Rule 27, paragraph 9, of the Rules of the Supreme Court (306 U. S. 708-709).

The City of Cleveland respectfully suggests that the questions upon the merits which the petition for a writ of certiorari seeks to raise are not presented for review by the Supreme Court of the United States for the reason that the United States Circuit Court of Appeals for the Eighth Circuit was without jurisdiction over the subject matter of the controversy.

This Court will investigate and determine on its own motion whether the United States Circuit Court of Appeals for the Eighth Circuit had jurisdiction over the subject matter, even though that question was not raised by counsel for any of the parties in the court below, and this Court will not review on certiorari or otherwise the merits of a controversy over which the lower court was without jurisdiction. *Shanferoke Corporation v. Westchester Corporation*, 293 U. S. 449, 451; *Stratton v. St. Louis-Southwestern Railway Company*, 282 U. S. 10, 18; *M. C. and L. M. Railway Company v. Swan*, 111 U. S. 379, 382-384.

OPINIONS BELOW.

The opinion of the United States Circuit Court of Appeals for the Eighth Circuit (R. XVI, 7198) filed June 6, 1944, is now officially reported in 143 F. (2d) 488. The opinion of the Federal Power Commission entered September 23, 1942 (R. I, 14) is reported in 45 P. U. R. (N. S.) 203.

JURISDICTION.

Jurisdiction of this Court is invoked by the petitioners under Section 240(a) of the Judicial Code, as amended by the Act of February 13, 1925, and Section 19(b) of the Natural Gas Act. (Pet. for Cert., p. 2.)

Application for rehearing was denied by the Federal Power Commission on October 30, 1942. (R. XVI, 7150.)

The petition for review was filed with the United States Circuit Court of Appeals for the Eighth Circuit on the 18th day of November, 1942. (R. I, 44.)

The decree of the United States Circuit Court of Appeals for the Eighth Circuit was entered on June 6, 1944. (R. XVI, 7226.)

The Petition for Certiorari alleges that the United States Circuit Court of Appeals for the Eighth Circuit was the jurisdiction in which "petitioners had their principal place of business." (Pet. for Cert., p. 3.)

The Petition for Review filed with the Circuit Court of Appeals for the Eighth Circuit alleged that, "each of petitioners has its principal place of business in Kansas City, Jackson County, Missouri within the jurisdiction of the Eighth Circuit Court of Appeals." (R. I, 6.)

Said allegation of the Petition for Review is contradicted by the record, which shows upon its face that none of the petitioners had its "principal place of business" within the jurisdiction of the United States Circuit Court of Appeals for the Eighth Circuit.

STATUTE INVOLVED.

The statute involved is the Natural Gas Act (52 Stat. 821; 15 U. S. C. 717), and particularly Section 19(b) thereof, which provides:

> "(b) *Any party to a proceeding under this chapter aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia*, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the

Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing, in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such order of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 346 and 347 of Title 28, as amended." (15 U. S. C. A. 717r(b).)

QUESTION PRESENTED.

The primary question presented is whether the United States Circuit Court of Appeals for the Eighth Circuit had jurisdiction over the subject matter of the Petition for Review.

STATEMENT.

The order issued by the Federal Power Commission in this proceeding relates to three natural gas companies, namely, Illinois Natural Gas Company, Michigan Gas Transmission Corporation, and Panhandle Eastern Pipe Line Company. (R. I, 38, 42.) The Commission found that each of said corporations is a "natural gas company" within the purview of the Natural Gas Act. (R. I, 38-40.) The Natural Gas Act defines a "natural gas company" as "a person engaged in the transportation of natural gas in interstate commerce, or the sale in interstate commerce of such gas for resale." (Natural Gas Act, Sec. 2, par. (6).) The Commission did *not* find that all of said corporations together constitute a single "natural gas company" within the meaning of the Natural Gas Act.

Panhandle Eastern owned all the stock of both Michigan Gas and Illinois Natural. (R. I, 18, 40.) For rate-making purposes, the parties agreed that the corporate entities might be disregarded. (R. I, 18.) But for jurisdictional purposes, both the Federal Power Commission and the petitioners treated Illinois Natural, Michigan Gas and Panhandle Eastern as separate corporate entities, each owning its own lines and each operating its own lines. (R. I, 6, 17, 38-40, 42.) The Commission made its order against three natural gas companies. And the petition for review was filed on behalf of three natural gas companies. Each of petitioners had its own contracts with customers and each of petitioners had its own rate schedules on file with the Federal Power Commission under the Natural Gas Act. (R. IX, 4306, 4307-4309.) After the acquisition of all the stock of Michigan Gas by Panhandle Eastern, Commission counsel stated on the record (C. C. A. 8, typewritten transcript, p. 7988; omitted from printed record, R. VI, 2833):

> "Michigan Gas Transmission Corporation was a corporate entity before and is a corporate entity after this sale of its securities to Panhandle Eastern. It is

still Michigan Gas Transmission Corporation. It still owns and operates this line. The mere fact that its common stock has changed from the hands of one holding company to the hands of another company is wholly immaterial so far as Michigan Gas Transmission is concerned * * *. This is not a merger, this is not a consolidation, we are still dealing with Michigan Gas Transmission at the same old stand, they still own the lines and they still operate the lines."

The record does not show any acquisition by Panhandle Eastern of the properties of Michigan Gas or Illinois Natural. Nor does the record show any merger or consolidation of Panhandle Eastern, Illinois Natural, and Michigan Gas. There was no such acquisition of properties, consolidation or merger, at the time the petition for review was filed in the court below. Nor was there any such acquisition of properties, consolidation or merger within sixty days after the Federal Power Commission's denial of petitioners' application for rehearing. If there was any such acquisition of properties, merger, or consolidation, as the petition for certiorari goes outside the record to assert (Pet. for Cert., p. 4, note 1), it took place some time in 1943, and is immaterial for jurisdictional purposes.

The Petition for Review invoked the jurisdiction of the United States Circuit Court of Appeals for the Eighth Circuit solely under the clause of Section 19(b) of the Natural Gas Act which conditions jurisdiction upon that being the "circuit wherein the natural gas company to which the order relates * * * has its principal place of business." (R. I, 6.)

Petitioners did not claim that the Eighth Circuit was a circuit "wherein the natural gas company to which the order relates is located," nor could they have done so. The Petition for Review admits that Illinois Natural is an Illinois corporation, that Michigan Gas is a Delaware corporation, and that Panhandle Eastern is a Delaware corporation. (R. I, 6.) Illinois Natural was therefore located in

the Seventh Circuit and Michigan Gas and Panhandle Eastern were therefore located in the Third Circuit. The Eighth Circuit is not a circuit "wherein the natural gas company to which the order relates is located." *Colorado Interstate Gas Company v. Federal Power Commission*, 142 F. (2d) 943, 950 (C. C. A. 10).

The Petition for Review merely alleged that "each of petitioners has its principal place of business in Kansas City, Jackson County, Missouri, within the jurisdiction of the Eighth Circuit Court of Appeals." (R. I, 6.)

The allegation of the Petition for Review that "each of petitioners has its principal place of business in Kansas City, Jackson County, Missouri, within the jurisdiction of the Eighth Circuit Court of Appeals" is contradicted by the record.

In fact, the record shows that none of the natural gas companies to which the Federal Power Commission's order relates had its "principal place of business" within the jurisdiction of the United States Circuit Court of Appeals for the Eighth Circuit.

The allegation of the Petition for Review that Illinois Natural Gas Company,[1] one of the natural gas companies to which the Federal Power Commission's order relates, "has its principal place of business in Kansas City, Jackson County, Missouri, within the jurisdiction of the Eighth Circuit Court of Appeals" is contradicted by the record. The Petition for Review alleged and the Commission found that Illinois Natural was a "natural gas company." (R. I, 6, 40.) The Commission found that Illinois Natural was engaged in the sale in interstate commerce of natural gas transported in interstate commerce. (R. I, 39.) The record shows that the situs of the operations of Illinois

[1] This is the same Illinois Natural Gas Company which was recently a party to a case before this Court, *Illinois Natural Gas Company v. Central Illinois Public Service Company*, 314 U. S. 498 (1942).

Natural was wholly within the State of Illinois, which is in the Seventh Circuit. (R. XVI, 7089.) Illinois Natural owned 261 miles of pipe lines located wholly within the State of Illinois in the Seventh Circuit. (R. I, 18, 124; R. IX, 4101.) Illinois Natural was engaged in the business of selling natural gas in interstate commerce for resale solely to customers within the State of Illinois in the Seventh Circuit. (R. XIII, 5885; R. IX, 4095.) Illinois Natural transported natural gas in interstate commerce solely through said 261 miles of pipe lines located wholly within the State of Illinois in the Seventh Circuit. (R. I, 18.) Illinois Natural had no physical properties within the Eighth Circuit, transported no natural gas within the Eighth Circuit, sold no natural gas within the Eighth Circuit, had no natural gas customers within the Eighth Circuit, received no revenues from sales of natural gas within the Eighth Circuit. Even if the petition for review be construed as alleging that Illinois Natural had its principal executive office at Kansas City, Missouri, in the Eighth Circuit, the record plainly contradicts the allegation of the petition for review that Illinois Natural had its "principal place of business" in the Eighth Circuit.

The allegation of the petition for review that Michigan Gas Transmission Corporation, one of the natural gas companies to which the Federal Power Commission's order relates, "has its principal place of business in Kansas City, Jackson County, Missouri, within the jurisdiction of the Eighth Circuit Court of Appeals" is contradicted by the record. The petition for review alleged and the Commission found that Michigan Gas was a "natural gas company." (R. I, 6, 39.) The record shows that the situs of the operation of Michigan gas was partly within the State of Indiana, which is in the Seventh Circuit and partly within the states of Michigan and Ohio, which are in the Sixth Circuit. (R. XIII, 5885; R. X, 4757, *et seq.*) Michigan Gas owned approximately 496 miles of pipe lines located partly

within the State of Indiana, which is in the Seventh Circuit, and partly within the States of Michigan and Ohio, which are in the Sixth Circuit. (R. I, 39; R. XIII, 5885; R. X, 4757-4761.) Michigan Gas was engaged in the business of selling natural gas in interstate commerce transported in interstate commerce to various customers in Indiana, and in transporting natural gas in interstate commerce wholly within the states of Ohio, Indiana and Michigan for the account of Panhandle Eastern to various distributing companies which served forty communities in Ohio and Michigan, including the City of Detroit. (R. X, 4757.) Michigan Gas had no physical properties within the Eighth Circuit; transported no natural gas within the Eighth Circuit, sold no natural gas to customers within the Eighth Circuit, received no revenues from sales of natural gas within the Eighth Circuit. Michigan Gas had offices in Detroit, Michigan. (R. II, 579.) Even if the petition for review be construed as alleging that Michigan Gas had its principal executive office at Kansas City, Missouri, in the Eighth Circuit, the record plainly contradicts the allegation of the petition for review that Illinois Natural had its "principal place of business" in the Eighth Circuit.

The allegation of the petition for review that Panhandle Eastern Pipe Line Company, one of the natural gas companies to which the Federal Power Commission's order relates, "has its principal place of business in Kansas City, Jackson County, Missouri, within the jurisdiction of the Eighth Circuit Court of Appeals" is contradicted by the record. The petition for review alleged and the Commission found that Panhandle Eastern is a "natural gas company" within the meaning of the Natural Gas Act. (R. I, 6, 38.) The record shows that Panhandle Eastern owned producing wells in Texas in the Fifth Circuit and Kansas in the Tenth Circuit (R. I, 105), owned a main transmission line beginning in Texas in the Fifth Circuit, crossing Oklahoma and Kansas in the Tenth Circuit, Mis-

souri in the Eighth Circuit, Illinois in the Seventh Circuit, and ending at Dana, Indiana, in the Seventh Circuit. (R. I, 39; R. XIII, 5885.) Panhandle Eastern was engaged in the business of selling in interstate commerce natural gas transported in interstate commerce. (R. I, 18, 39.) Michigan Gas and Illinois Natural purchased the entire supplies of gas which they respectively transported and sold from Panhandle Eastern. (R. I, 18; R. X, 4757.) The record shows that in 1941 Panhandle Eastern delivered into the Seventh Circuit to Michigan Gas and Illinois Natural over 80 per cent of the gas which it sold (R. XI, 5059), and that the sales of Panhandle Eastern were principally in the Sixth and Seventh Circuits, the Michigan Consolidated Gas Company, which serves the city of Detroit in the Sixth Circuit being by far its largest customer. (R. XI, 5059, 5057.) The record shows that in 1941 Panhandle Eastern delivered only about 15 per cent of the gas which it sold into the State of Missouri in the Eighth Circuit. (R. XI, 5059.) Panhandle Eastern had no large customer for resale in the Eighth Circuit. (R. IX, 4091.) The record shows that in 1941, Panhandle Eastern received nearly all of its gas revenues from sales in the Sixth and Seventh Circuits and only a minor and incidental percentage from the Eighth Circuit. (R. XII, 5461.) Panhandle Eastern had two offices which it called "principal executive offices," one at 90 Broad Street, New York, New York, in the Second Circuit, and one at 1221 Baltimore Avenue, Kansas City, Missouri, in the Eighth Circuit. (R. XI, 5051.) Even if the petition for review be construed as alleging that Panhandle Eastern had its principal executive office at Kansas City, Missouri, in the Eighth Circuit, the record plainly contradicts the allegation of the petition for review that Panhandle Eastern had its principal place of business in the Eighth Circuit.

Upon these facts, the City of Cleveland suggests that the United States Circuit Court of Appeals for the Eighth Circuit was without jurisdiction over the subject matter.

ARGUMENT.

THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT WAS WITHOUT JURISDICTION OVER THE SUBJECT MATTER OF THE CONTROVERSY.

I.

CONGRESS HAS AUTHORIZED THE EIGHTH CIRCUIT TO REVIEW ORDERS OF THE FEDERAL POWER COMMISSION UNDER THE NATURAL GAS ACT ONLY UPON CONDITION, AND ABSENT THE CONDITION STIPULATED BY CONGRESS, THE EIGHTH CIRCUIT WAS WITHOUT JURISDICTION OVER THE SUBJECT MATTER.

Congress has authorized the Eighth Circuit to review orders of the Federal Power Commission under the Natural Gas Act only upon condition.

The pertinent part of Section 19(b) of the Natural Gas Act (52 Stat. 831; 15 U. S. C. A. Sec. 717r(b) provides:

> "(b) Any party to a proceeding under this chapter aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part * * *."

Congress obviously has not conferred general jurisdiction upon all circuit courts of appeals as a class to review Federal Power Commission orders under the Natural Gas Act. Nor has the Congress conferred jurisdiction upon the Eighth Circuit in particular to hear all reviews of this class.

On the contrary, the statute manifestly confers jurisdiction in particular to review all orders of the Federal Power Commission under the Natural Gas Act solely upon the United States Court of Appeals for the District of Columbia.

As to circuit courts of appeals, other than the United States Court of Appeals for the District of Columbia, Congress has conditioned the special grant of power to review orders of the Federal Power Commission under the Natural Gas Act upon the existence of one of two alternative circumstances.

Jurisdiction of the Eighth Circuit, for example, to review orders of the Federal Power Commission under the Natural Gas Act is expressly conditioned upon that circuit's being either (1) the "circuit wherein the natural-gas company to which the order relates is located" or (2) the "circuit wherein the natural-gas company to which the order relates * * * has its principal place of business."

In other words, Congress has conferred jurisdiction to hear and determine the controversy upon the Eighth Circuit only in a given set of circumstances.

If neither of the circumstances is present upon which this extraordinary grant of original jurisdiction to review orders of the Federal Power Commission under the Natural Gas Act is conditioned, the Eighth Circuit lacks jurisdiction over the subject matter. *In the Matter of the Petition of National Labor Relations Board*, 304 U. S. 486, 494.

A suit against the Federal Power Commission, an agency of the United States, is a suit against the United States, and courts may not go beyond the statutory letter of the consent to be sued or permit suit except in the courts and upon the terms permitted by the Congress: *Okin v. S. E. C.*, 46 F. Supp. 481, 482 (D. C., S. D. New York) (1942); *Schillinger v. U. S.*, 155 U. S. 163, 166; *S. E. C. v. Andrews*, 88 F. (2d) 441 (C. C. A. 2) (1937); *Illinois Cen-*

tral v. P. U. C., 245 U. S. 493, 504; *Kennedy v. P. W. A.*, 23 F. Supp. 771, 773 (D. C., N. D., New York) (1938).

A fortiori, in a suit against an agency of the United States, counsel for the federal agency can not by waiver or consent enlarge the consent of Congress so as to permit suit against the United States in other courts or upon other terms than those permitted by the Congress. *Finn v. U. S.*, 123 U. S. 227, 233; *Minnesota v. United States*, 305 U. S. 382, 388-389; *United States v. Shaw*, 309 U. S. 495, 501.

In this case, if the Eighth Circuit was not the "circuit wherein the natural-gas company to which the order relates * * * has its principal place of business," the Eighth Circuit was wholly without jurisdiction over the subject matter.

II.

THE EIGHTH CIRCUIT WAS WITHOUT JURISDICTION OVER THE SUBJECT MATTER FOR THE REASON THAT PETITIONERS DID NOT SATISFY THE SOLE CONDITION UPON WHICH CONGRESS CONSENTED TO SUIT AGAINST THE UNITED STATES IN THE EIGHTH CIRCUIT.

A. None of the three natural gas companies to which the Federal Power Commission's order relates had its "principal place of business" within the Eighth Circuit.

Congress has consented to suit against the United States within the Eighth Circuit in this case only if that is the "circuit wherein the natural-gas company to which the order relates * * * has its principal place of business." (Natural Gas Act, Sec. 19(b).).

In *Colorado Interstate Gas Company v. Federal Power Commission*, 142 F. (2d) 943, 951 (C. C. A. 10) (1944) (Bratton, Circuit Judge), the court construed this language of Section 19(b) as follows:

> "* * * No doubt mature considerations of convenience gave rise to the deliberate care with which Con-

gress, in the exercise of its discretion, authorized review in the circuit within which the principal business of the company is conducted. And the principal place of business is where the actual business of the corporation is conducted or transacted. It is a question of fact to be determined in each particular case by taking into consideration such factors as the character of the corporation, its purposes, the kind of business in which it is engaged, and the situs of its operations. Cf. *In re Guanacevi Tunnel Co.*, 2 Cir., 201 F. 316; *In re Hudson River Nav. Corp., supra; Chicago Bank of Commerce v. Carter*, 8 Cir., 61 F. 2d 986."

Was the Eighth Circuit the circuit wherein Illinois Natural Gas Company had its "principal place of business"? The business of Illinois Natural was the furnishing of gas to customers in the Seventh Circuit for ultimate public consumption in the Seventh Circuit. The pipe lines of Illinois Natural were located wholly within the Seventh Circuit. All the gas which Illinois Natural sold was delivered into the Seventh Circuit. All the revenues which Illinois Natural received came from the Seventh Circuit. Illinois Natural sold no gas in the Eighth Circuit for ultimate public consumption in the Eighth Circuit, had no pipe lines in the Eighth Circuit, transported no gas within the Eighth Circuit, and received no revenues from sales or transportation within the Eighth Circuit. The unsupported allegation of the petition for review filed in the Eighth Circuit that Illinois Nafural had its "principal place of business" in the Eighth Circuit is contradicted by the record.

Was the Eighth Circuit the circuit wherein Michigan Gas Transmission Corporation had its "principal place of business"? The business of Michigan Gas was the furnishing of natural gas to customers in the Sixth and Seventh Circuits for ultimate public consumption in the Sixth and Seventh Circuits. The pipe lines of Michigan Gas were located wholly within the Sixth and Seventh Circuits. All the gas transported and sold by Michigan Gas was trans-

ported and sold within the Sixth and Seventh Circuits. All the revenues which Michigan Gas received came from the Sixth and Seventh Circuits. Michigan Gas transported no gas in the Eighth Circuit, delivered no gas into the Eighth Circuit, sold no gas in the Eighth Circuit, received no revenues from the Eighth Circuit, had no pipe lines in the Eighth Circuit. Between the easternmost boundary of the Eighth Circuit at the Missouri line and the westernmost point to which the lines of Michigan Gas extended, lies the entire width of the State of Illinois. The unsupported allegation of the petition for review that Michigan Gas had its "principal place of business" in the Eighth Circuit is manifestly contradicted by the record.

Was the Eighth Circuit the circuit wherein Panhandle Eastern Pipe Line Company had its "principal place of business"? The principal business of Panhandle Eastern Pipe Line Company was the delivery of gas into the Seventh Circuit to Illinois Natural and Michigan Gas for ultimate public consumption in the Sixth and Seventh Circuits. Nearly all the gas which Panhandle Eastern sold was delivered into the Seventh Circuit. Nearly all the revenues which Panhandle Eastern received came from the Sixth and Seventh Circuits. Panhandle Eastern sold only minor and incidental quantities of gas in the Eighth Circuit for ultimate public consumption in the Eighth Circuit and received only a minor and incidental part of its revenues from gas furnished to customers within the Eighth Circuit. The unsupported allegation of the petition for review filed in the Eighth Circuit that Panhandle Eastern had its "principal place of business" in the Eighth Circuit is manifestly contradicted by the record.

The words "principal place of business" as used in the Natural Gas Act and other federal statutes relating to jurisdiction of the lower federal courts, do not mean "principal office" or "principal executive office." *Caceres v. United States Shipping Board Emergency Fleet Corporation*, 299 Fed. 968, 970-971; *Dryden v. Ranger Refining*

Company, 280 Fed. 257, 259, cert. den. 260 U. S. 726; *Roszell Bros. v. Continental Coal Corp.*, 235 Fed. 343, 356-357, aff'd. 242 Fed. 243, 246; *In re Tugarts River Coal Co.*, 203 Fed. 178, 179-180; *Watters v. Hamilton Gas Company*, 10 F. Supp. 323, 326; *Colorado Interstate Gas Company v. Federal Power Commission*, 142 F. (2d) 943, 951.

The allegation of the petition for review that "each of petitioners has its principal place of business in Kansas City, Jackson County, Missouri, within the jurisdiction of the Eighth Circuit Court of Appeals" is upon this record merely a mistaken conclusion. See *Toraway Hotel Company v. Smathers*, 216 U. S. 439, 448.

It is respectfully submitted that none of the three natural gas companies to which the Federal Power Commission's order relates had its "principal place of business" within the Eighth Circuit.

B. Even if but one of the three natural gas companies to which the Federal Power Commission's order relates did not have its "principal place of business" within the Eighth Circuit, the Eighth Circuit did not have jurisdiction over the subject matter.

Congress has consented to suits against the United States in the Eighth Circuit only if that is the "circuit wherein *the* natural gas company to which the order relates * * * has its principal place of business." (Natural Gas Act, Sec. 19(b).) Congress has not consented to suit against the United States in the circuit wherein *any* natural gas company to which the order relates has its principal place of business. Congress has not consented to suit against the United States in the Circuit wherein *some* of the natural gas companies to which the order relates have their principal places of business. If the Federal Power Commission's order relates to more than one natural gas company, Congress has consented to suit against the United States in a circuit other than the District of Columbia only if it is the circuit wherein each of the natural gas companies

to which the order relates is located or has its principal place of business. If a Federal Power Commission order relates to more than one natural gas company, and the natural gas companies to which the order relates have their principal places of business in different circuits and are located in different circuits, Congress has consented to suit against the United States only in the United States Court of Appeals for the District of Columbia.

Even if but one of the three natural gas companies to which the Federal Power Commission's order relates in this case did not have its "principal place of business" within the Eighth Circuit, the United States Court of Appeals for the District of Columbia had exclusive jurisdiction and the Eighth Circuit had no jurisdiction over the subject matter.

In short, Congress has authorized the Eighth Circuit to review orders of the Federal Power Commission under the Natural Gas Act only upon condition, and absent the condition stipulated by Congress, the Eighth Circuit was without jurisdiction over the subject matter. None of the three natural gas companies to which the Federal Power Commission's order relates had its "principal place of business" within the Eighth Circuit. Even if but one of the three natural gas companies to which the Federal Power Commission's order relates did not have its "principal place of business" within the Eighth Circuit, the Eighth Circuit did not have jurisdiction over the subject matter. The Eighth Circuit was without jurisdiction over the subject matter for the reason that petitioners did not satisfy the sole condition upon which Congress consented to suit against the United States in the Eighth Circuit.

SUMMARY OF ARGUMENT.

The United States Circuit Court of Appeals for the Eighth Circuit was without jurisdiction over the subject matter of the controversy.

The Federal Power Commission is an agency of the United States.

A statutory proceeding to review an order of the Federal Power Commission is a suit against the United States.

Congress has consented to suits against the United States under the Natural Gas Act only upon certain terms and conditions.

Courts may not go beyond the statutory letter of the consent to be sued, or permit suit against the United States except in the courts and upon the terms permitted by the Congress.

In a suit against an agency of the United States, counsel for the federal agency can not by his action or inaction enlarge the consent of Congress so as to permit suit against the United States in other courts or upon other terms than those permitted by the Congress.

Under the Natural Gas Act, Congress has unconditionally consented to suits against the United States only in the United States Court of Appeals for the District of Columbia.

Under the Natural Gas Act, Congress has conditionally consented to suits against the United States in other circuits only if the circuit is either (1) the "circuit wherein the natural-gas company to which the order relates is located" or (2) the "circuit wherein the natural-gas company to which the order relates * * * has its principal place of business."

Under the Natural Gas Act, where, as here, the Federal Power Commission's order relates to more than one natural gas company, suits against the United States may be brought in a circuit other than the District of Columbia only if it is the circuit wherein each of the natural-gas companies to which the order relates is located or has its principal place of business.

In the instant case, the Federal Power Commission's order relates to three natural gas companies.

In the instant case, none of the three natural-gas companies to which the Federal Power Commission's order relates was located in the Eighth Circuit.

In the instant case, if but one of the three natural-gas companies to which the Federal Power Commission's order relates did not have its principal place of business in the Eighth Circuit, jurisdiction of the Eighth Circuit is defeated.

In the instant case, none of the three natural-gas companies to which the Federal Power Commission's order relates had its principal place of business in the Eighth Circuit.

It is respectfully submitted that the United States Circuit Court of Appeals for the Eighth Circuit was without jurisdiction over the subject matter of the controversy.

CONCLUSION.

The City of Cleveland respectfully suggests that the questions upon the merits set up in the Petition for a Writ of Certiorari are not presented for review by the Supreme Court of the United States for the reason that the United States Circuit Court of Appeals for the Eighth Circuit was without jurisdiction over the subject matter of the controversy.

Respectfully submitted,

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No. 296

IN THE

Supreme Court of the United States

OCTOBER TERM, 1944

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY, AND MICHIGAN GAS TRANSMISSION CORPORATION,

Petitioners,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICH., COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

Motion of Petitioners for Enlargement of Time Under Rule 33 and Petition for Rehearing and for Enlargement of Scope of Review

THE TWENTIETH CENTURY PRESS, INC., CHICAGO

IN THE

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ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE EIGHTH CIRCUIT.

Motion of Petitioners for Enlargement of Time Under Rule 33 and Petition for Rehearing and for Enlargement of Scope of Review

To the Honorable the Chief Justice and the Associate Justices of the Supreme Court of the United States:

Petitioners heretofore filed their petition for a writ of certiorari herein, presenting four separate questions. By its order of November 13, 1944, this honorable Court granted said petition, limited to the third question presented by the petition, namely, the following question:

> (3) Whether the Commission's action in treating petitioners' business as an entirety and refusing to make any allocation or separation with respect to petitioners' regulated and unregulated sales was beyond its statutory power.

The first and second questions presented by petitioners' said petition for writ of certiorari read as follows:

> (1) Whether the refusal of the Commission to receive evidence of reproduction or replacement cost and evidence of the value of petitioners' producing properties amounted to a denial of due process.
>
> (2) Whether limiting the sale price of petitioners' gas for resale so as to provide an over-all return of 6½ per cent on the depreciated cost of petitioners' properties including those devoted to production and gathering of natural gas and excluding petitioners' tendered evidence as to the market value of petitioners' gas leaseholds constituted an exercise of jurisdiction over production and gathering of natural gas in violation of the Natural Gas Act.

Heretofore, Canadian River Gas Company filed its petition for a writ of certiorari in cause number 380, October term, 1944, pending in this Court, presenting nine separate questions. By its order of November 13, 1944, this Court granted said petition of Canadian River Gas Company, limited to the eighth question presented thereby, which eighth question is as follows:

> Whether the Commission can, consistently with the Fifth Amendment to the Constitution of the United States and the provisions of the Act, reduce the rates and charges of Canadian on that part of its natural gas sales to Colorado interstate which is not sold by the latter for ultimate distribution to the public but is sold by it directly to its industrial customers; furthermore, independent of the above question, whether the Commission erred in making no separation or allocation as between Canadian's properties devoted to intrastate sales in Texas and its properties devoted to interstate sales, or as between the properties of Canadian and the properties of Colorado Interstate, and in using in lieu thereof a substitute method of allocation of cost of service which results in burden-

ing non-regulable gas with costs actually chargeable against regulable gas, in violation of the Fifth Amendment to the Constitution of the United States and the Act.

Thereafter, Canadian River Gas Company filed in said cause number 380 its petition "for rehearing and for enlargement of scope of review". Petitioners are advised that on December 21, 1944, this honorable Court granted said petition and that on January 2, 1945, a formal order will be entered, enlarging the scope of review in said cause number 380 to include, in addition to the aforesaid eighth question, the following questions:

1. Whether the Circuit Court, after correctly holding that the Commission has no rate regulatory jurisdiction over Canadian's production and gathering properties, facilities and business, erroneously concluded and ruled that the Commission in this case did not exercise such prohibited jurisdiction.

2. Whether, even assuming, arguendo, that the Commission has rate regulatory jurisdiction over Canadian's production and gathering properties, facilities and business, the Commission can, consistently with the Fifth Amendment to the Constitution of the United States, the requirements of the Act, and the decisions of this Court in the Natural Gas Pipeline, Hope and other cases, limit Canadian generally to a return only on the "wildcat", or original cost of its gas leaseholds to predecessor companies prior to discovery and development over 20 years ago, to the exclusion of all evidence of value, market or otherwise, the result of this procedure being, among other things, the inclusion in the Commission's rate base of a substantial block of Canadian's most valuable leaseholds at zero valuation and a still larger block of valuable leaseholds at only 10¢ per acre valuation.

Petitioners respectfully show that the aforesaid questions 1 and 2 which this honorable Court, by enlarging

the scope of review therein, has consented to review in cause No. 380, present the same fundamental issue presented by petitioners herein by their aforesaid questions 1 and 2 set forth at page two of their petition for certiorari herein. Petitioners further show that the factual background upon which Canadian River Gas Company presents its questions 1 and 2 is similar in all essential respects to the factual background upon which petitioners herein present their questions 1 and 2.

Wherefore, petitioners respectfully move the Court to enlarge the time provided under Rule 33 of the rules of this Court for filing their petition for rehearing herein; and, if said motion is granted, petitioners respectfully petition this Court to grant a rehearing to the extent that its order of November 13, 1944, denies review of questions 1 and 2 set forth in their petition for a writ of certiorari and to enlarge the scope of the review to be had in this Court so as to include the questions 1 and 2, in addition to the question 3, set forth in their said petition for a writ of certiorari.

ARGUMENT IN SUPPORT OF MOTION.

In support of their motion, petitioners respectfully show:

Petitioners did not file their petition for rehearing and enlargement of the scope of review within the time limited by Rule number 33 of the rules of this Court because it appeared that such action would be futile in view of the fact that there were pending before this honorable Court petitions for writs of certiorari in causes number 379, 380, and 575, October term, 1944, and on November 13, 1944, this honorable Court entered an order in each case restricting the review, as in petitioners' case, to the sole question of the propriety of the action of the Federal Power Commission in dealing with sales of gas not subject to its rate making powers. The refusal of this honorable Court to review any other question in any of these cases convinced petitioners that the limitation upon the review in their case was not based upon facts peculiar to their situation but represented a determination reached upon a consideration of the four cases as a group.

Considering the cases as a group, it would appear that, if the scope of review is enlarged to include an additional question, such question should be reviewed in each of the cases where it is presented. Furthermore, it would seem that this honorable Court would desire to hear full argument on the question and, if relief is granted in one case, to grant the same relief in another case where it is shown to be appropriate. As we will show hereinafter, the same considerations which would impel the granting of relief to Canadian River Gas Company are present, with equal force, here.

ARGUMENT IN SUPPORT OF PETITION.

The fundamental issue presented by Canadian River Gas Company in its questions 1 and 2 (quoted supra page 3) and by petitioners in their questions 1 and 2 (quoted supra page 2) is the same.

That issue is whether the Federal Power Commission can, consistently with the Natural Gas Act and Article Five of the Amendments to the Constitution of the United States, restrict that part of the earnings of a natural-gas company derived from its properties used in production and gathering of gas to 6½ per cent on the depreciated original cost of such properties.

In supporting the negative of this proposition, petitioners urged that the Federal Power Commission could effectively exercise its rate making powers over interstate sales for resale, without regulating production and gathering, by either (a) separating the properties used for production and gathering from the rate base and establishing a fair commodity price in the field, or (b) including the production and gathering properties in the rate base at their fair value measured by the present market value. (Pages 21-22, petition for certiorari herein.)

Canadian River Gas Company took the same position in its petition for rehearing and enlargement of the scope of review (see pages 12, 13-14 of said petition).

The similarity of the two cases is striking in the following respects:

1. Both companies have large and valuable gas leaseholds and producing and gathering facilities. For the year 1941 petitioners produced approximately one-half of the total amount of gas transported and sold by them (Exs. 56 and 57, R. IX, 4284, 4285).

2. Both companies acquired their gas leaseholds in the "wildcat" period of development at prices far below their present values and by arm's-length bargaining.

3. With respect to each company, the Federal Power Commission treated the production and gathering properties, which are not subject to regulation, in exactly the same manner that it treated the properties used for interstate transportation and sale for resale, which are subject to regulation.

A comparison of the argument presented by Canadian River Gas Company in its petition for rehearing and enlargement of the scope of review with the argument presented by petitioners in their petition for a writ of certiorari discloses no basic difference.

Canadian River Gas Company said at pages 11-12 of its aforesaid petition:

> We submit it approaches absurdity to state that the Commission does not have rate regulatory jurisdiction over production and gathering and at the same time to rule that rate regulatory jurisdiction is not exercised where the Commission includes production and gathering properties in a rate base; where it applies its own formula of original cost or prudent investment to production and gathering properties; where it includes production and gathering expenses in its estimate of future expenses; where it allows working capital for the production and gathering business, and considers and determines what wells are to be drilled in the future; and finally, where, in determining an alleged excess revenue, it applies a 6½% rate of return not only to the transmission system properties but also to the production and gathering properties which constitute approximately two-thirds of the total rate base as determined by the Commission. Obviously the Commission has treated every element of Canadian's production and gathering properties, facilities and business in precisely the same

manner as its interstate transmission properties, facilities and business, and has subjected every element of Canadian's production and gathering facilities to the same rate regulatory measures and procedures as Canadian's interstate transmission properties, facilities and business for the purpose of arriving at its ultimate conclusions with respect to rates and charges. If the Act had expressly delegated full and complete rate regulatory jurisdiction over Canadian's producing and gathering properties, facilities and business, the Commission could have done no more than it has done in this case. The Circuit Court's opinion is inconsistent and contradictory. Its effect, not only in the instant case but also in all other cases, if allowed to stand, is to vest complete rate regulatory jurisdiction over production and gathering and thus to assume and exercise a legislative veto power over an express and unambiguous Act of Congress.

Petitioners said at pages 21-23 of their petition for a writ of certiorari:

Section 1(b) of the Act expressly provides that the provisions of the Act shall not apply to the production or gathering of natural gas. It is petitioners' contention that it was the statutory duty of the Commission to segregate petitioners' production and gathering properties and the revenues and expenses related thereto. An alternative approach, which seems to lead to the same result was the contention that, while the operations might all be included within the petitioners' rate accounting structure, the rate base valuations of leases and other assets relating solely to production and gathering must be consistent with their status as unregulated properties. The Commission, however, not only failed to segregate the production and gathering phase of petitioners' business but it actually included in the rate base all of petitioners' production and gathering facilities and gas leaseholds at their original cost depreciated, depleted and amortized. These leaseholds were carried on petitioners' books at only $955,096, although petitioners

were prepared to show, and offered to prove, that these leaseholds had a market value on June 1, 1941, of nearly $8,500,000 (Ex. 39, R. 4199, 4201, 492). Thus, in total disregard of the Congressional mandate, the Commission arrogated unto itself jurisdiction over an unregulated portion of petitioners' property and business as fully and completely as it exercised jurisdiction over petitioners' transportation facilities and business, which latter facilities and resale business are within the ambit of the Commission's statutory authority.

The order of the Commission is peculiarly subject to attack in these proceedings because, as noted, the Commission excluded evidence which was admissible in reaching a determination with respect to the value of the commodity in the fields where produced. The decision of the court below in affirming the action of the Commission is in conflict with applicable decisions of this Court.

While the Natural Gas Act excludes the production and gathering of gas from the Commission's jurisdiction and permits it to exercise jurisdiction only over the interstate transportation of gas and over certain (not all) sales thereof in interstate commerce, the Commission has by its order herein found that petitioners are entitled to a price in the field for their gas, predicated solely on a consideration of the original cost of their leaseholds less accruals for depletion and the application thereto of a 6½% rate of return. This it has done notwithstanding the fact that production and gathering of gas are expressly excluded from the application of the provisions of the Natural Gas Act.

It is obvious that, if petitioners' leaseholds can now be sold for more than $8,000,000, an allowance of an earning on only a value of less than $1,000,000 is wholly erroneous and arbitrary. It is to be assumed that the market value of the leaseholds is largely reflected in the market price, or the value of the gas, in the respective areas where it is produced. Such market price or field value is determined by many economic

conditions and field transactions having no relation to the original cost of the leaseholds.

The Commission in reaching into and regulating this phase of the petitioners' business clearly went beyond the scope of its authority.

CONCLUSION.

For the foregoing reasons, petitioners respectfully submit that their motion and petition herein should be granted and that the scope of review upon writ of certiorari should be enlarged to include questions 1 and 2 presented by their petition for a writ of certiorari.

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Certificate of Counsel.

I, John S. L. Yost, being of counsel herein, do hereby certify that the foregoing motion for enlargement of time under Rule 33 and the foregoing petition for rehearing and for enlargement of the scope of review herein are presented in good faith and not for delay.

.....,

JOHN S. L. YOST,
Attorney for Petitioners.

FILED
APR 25 1945
CHARLES ELMORE CROPLEY
CLERK

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1944

No. 296

PANHANDLE EASTERN PIPE LINE COMPANY, ILLINOIS NATURAL GAS COMPANY, AND MICHIGAN GAS TRANSMISSION CORPORATION,

Petitioners,

vs.

FEDERAL POWER COMMISSION, CITY OF DETROIT, MICH., COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION.

On Writ of Certiorari to the United States Circuit Court of Appeals for the Eighth Circuit.

PETITION FOR REHEARING AND STAY OF MANDATE.

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FEDERAL POWER COMMISSION, CITY OF DETROIT, MICH., COUNTY OF WAYNE, MICH., MICHIGAN CONSOLIDATED GAS COMPANY, AND MICHIGAN PUBLIC SERVICE COMMISSION.

On Writ of Certiorari to the United States Circuit Court of Appeals for the Eighth Circuit.

PETITION FOR REHEARING AND STAY OF MANDATE.

To the Honorable the Chief Justice and the Associate Justices of the Supreme Court of the United States:

PRELIMINARY STATEMENT.

On April 2, 1945, this honorable Court entered judgment in the above entitled cause sustaining the order of the Federal Power Commission complained of herein.

The Court's opinion, while fairly stating certain of petitioner's[1] contentions, makes no reference to other contentions of petitioner which go to the very root of the dispute. Furthermore, the opinion indicates that petitioner has not succeeded in making clear its contention with respect to the Commission's treatment of its revenues from unregulated sales. The Court holds (opinion, p. 5) that "The question is whether a formal allocation was necessary under the exceptional circumstances of this case."

We sincerely believe that, upon a rehearing of this cause, we can convince the Court that petitioner is not insisting upon mere legalism, but is urging that the Commission be required to follow some administrative procedure which will clearly define the line of demarcation between its regulated business and its unregulated business. The order under review here does not do that and results not considered by the Court are obviously unfair.

Petitioner respectfully shows unto the Court that a rehearing of this cause should be granted on the following grounds:

1. In the absence of basic and essential findings, the Court is unable to appraise the effect of the Commission's failure to allocate. Results not considered by the Court are obviously unfair.

2. The "exceptional circumstances of this case" relied upon by the Court to sustain the Commission's failure to allocate are either inferences unsupported by the record

1. For brevity, we refer herein to Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company, and Michigan Gas Transmission Corporation, as "petitioner", Colorado Interstate Gas Company v. Federal Power Commission, et al., No. 379 October term, 1944, as "the Colorado Interstate case", Canadian River Gas Company v. Federal Power Commission, et al., No. 380 October term, 1944, as "the Canadian River case" and Colorado-Wyoming Gas Company v. Federal Power Commission, et al., No. 575 October term, 1944, as "the Colorado-Wyoming case". All page references to the opinions in the above cases are to the pamphlet copies supplied by the Clerk of the Court.

or not exceptional in any sense. None of these so-called exceptional circumstances presents any obstacle to the application by the Commission in petitioner's case of the same method of allocation which it applied to Canadian River Gas Company, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company.

(a) The circumstance that "a witness for petitioner testified at the hearing that under petitioner's allocation of costs the unregulated business has the use of facilities of the company without any charge" is an inference unsupported by the record.

(b) The circumstance that "the company attempts no allocation in the conduct of its business. The business is operated as a unit" is not an exceptional circumstance, but a common practice in the natural gas industry.

(c) The circumstance that one of petitioner's officers testified on cross-examination that "any attempt to allocate return, as between regulated business and unregulated business" is "unrealistic", "theoretical" and "not practical" is not exceptional when considered in the light of the circumstances under which he was testifying and the fact that such officer was not produced by petitioner to testify on allocation.

(d) The statement of the Court that "none of the main transmission line operating and maintenance costs was charged to the direct industrial sales" is inaccurate.

(e) The Court's statement that "all agreed that an allocation on the basis of investment or costs would be impractical" is an inference not supported by the record.

(f) The Court's statement that "all agreed that the fair division was a matter of judgment not mathematics" is an inference not supported by the record.

3. The Court has failed to consider the allocation submitted by the Commission's staff through a witness who was better informed than anyone else on the Commission's method of allocation.

4. The Court has failed to consider the fact that petitioner not only requested the Commission to make a segregation of property as between regulated and unregulated sales, but also requested (submitting detailed proposed findings) the Commission to make an allocation of costs; and that petitioner, in its application for rehearing, urged its objection to the Commission's failure to make such allocation.

5. The holding of the Court that once the use of "a formula is waived or is conceded to be impractical or theoretical", the general effect of what the Commission did may be accepted as an allocation, without specific findings of any kind, is contrary to established principles of law consistently recognized and applied by this Court.

6. The question discussed in the Court's opinion under the heading "Producing and Gathering Facilities" should be re-examined in the Canadian River case, and here.

GROUNDS OF PETITION.

I.

In the Absence of Basic and Essential Findings the Court Is Unable to Appraise the Effect of the Commission's Failure to Allocate. Results Not Considered by the Court Are Obviously Unfair.

In the Colorado-Wyoming case, the Court sets forth the standard for judicial review of an order of the Federal Power Commission as follows (opinion, page 7):

> The review which Congress has provided for these rate orders is limited. Sec. 19(b) says that the "finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive." But we must first know what the 'finding' is before we can give it that conclusive weight. *We have repeatedly emphasized the need for clarity and completeness in the basic or essential findings* on which administrative orders rest. * * * Their absence can only clog the administra-

> tive function and add to the delays in rate-making. *We cannot dispense with them* for Congress has provided the standards for judicial review under this Act. * * * The courts cannot perform the function which Congress assigned to them in absence of adequate findings. Nor are they authorized under §19(b) to make findings and substitute them for those of the Commission. (Italics added.)

In the case at bar, however, this standard for judicial review is not applied, although the Commission made no findings of the dollars charged as costs or allowed as earnings with respect to the unregulated sales, and stated in its opinion that it had made no allocation (R. J. 34). The Court stated (opinion, p. 5):

> What the Commission did was to allocate to the interstate wholesale business all of the earnings from the entire business in excess of a 6½ per cent return. Insofar as that procedure allocated to the interstate wholesale business *any earnings from the direct industrial sales in excess of 6½ per cent*, it is said to be justified by the use which the direct industrial business made of the main transmission line and its facilities. If that was unfair, the order must be set aside. If it was fair, no reversible error is shown. (Italics added.)

Under this standard of "unfair" or "fair", a result is approved, the measure of which is so vague and uncertain that it can only be expressed in the language of the Court, italicized in the above quotation, as shown *infra* page 10.

Another result, not considered by the Court, is so grossly unfair as to warrant a rehearing of the cause: The order of the Commission requires a reduction in the gross revenues of petitioner from all sources, but does not permit petitioner to reflect any part of such reduction in a reduction of its unregulated rates. It would appear that, if it is fair to treat the business as one subject to regulation in

its entirety (as the Commission frankly admitted it did, R. I. 34) in determining the amount of gross revenues in excess of a fair return upon all of the business, it is grossly unfair to require, *without further findings*, that such reduction in revenues be reflected only in reduced rates applicable to part of the business; yet, that is exactly what the Commission did.

To comply with the order, petitioner cannot accord to its direct customers any reduction in rates without reducing its gross revenues substantially beyond the amount of reduction ordered by the Commission.

The Court states in its opinion (page 4):

> We agree that the Commission must make a separation of the regulated and unregulated business when it fixes the interstate wholesale rates of a company whose activities embrace both. Otherwise the profits or losses, as the case may be, of the unregulated business would be assigned to the regulated business and the Commission would transgress the jurisdictional lines which Congress wrote into the Act.

Directly in point is the following statement of the Court in the Colorado-Interstate case (opinion, p. 9):

> The cases are presented as if the 6½ per cent allowed by the Commission on the rate base limits the earnings from the whole enterprise to 6½ per cent. That also is not true. The return merely measures the earnings allowed from the regulated business. As we have noted, the excess of earnings which Colorado Interstate makes from direct industrial sales (on the basis of 6½ per cent return) is $131,000 annually.

Here, it is conceded that the 6½ per cent allowed by the Commission on the rate base limits the earnings from the whole enterprise to 6½ per cent. It is apparent that, in order to maintain its earnings at the 6½ per cent return allowed by the Commission, petitioner will be forced to

continue in effect existing rates for direct industrial customers.

If petitioner's business in its entirety is earning $5,094,384 in excess of a 6½ per cent return, what the Commission did with respect to the unregulated business cannot be regarded as fair unless there is a finding, supported by evidence in the record, that the net earnings from the unregulated business do not exceed a specified portion of the 6½ per cent return allocated to the unregulated sales. Such a finding is essential here to support the requirement in the order of the Commission that all of the reduction must be reflected in the regulated rates, but that finding is lacking. Furthermore, such a finding would be contrary to the facts in this record. The Court states in its opinion (p. 9) that the earnings derived from these rates to direct customers show "an apparent profit of more than 200 per cent." The only evidence in the record on the subject is the evidence presented by the Commission's staff through its witness Shattuck and the evidence presented by petitioner. There is no support for such a finding in any of this evidence, but, if such a finding could be made, it must still be compared with an unknown quantity, namely, what part of the return allowed on the entire business is properly allocable to the unregulated business.

The difficulty presented here arises out of the fundamental error of the Commission in failing to find the exact amount of earnings and costs attributable to the wholesale business and to make an allocation as between the regulated sales and the unregulated sales. Had this been done, a proper and fair order could have been framed, requiring a reduction, not in the gross revenues of the company, but in the revenues derived from the regulated sales, and requiring that this reduction be reflected in a reduction of the rates subject to the jurisdiction of the Commission.

Petitioner is not asking to be reheard merely to insist on adherence to ritual. It is seeking to have its unregulated business recognized as such and to have the expenses chargeable thereto defined with some degree of certitude.

Examined from a realistic point of view, the Court's statement that "What the Commission did was to allocate to the interstate wholesale business all of the earnings from the entire business in excess of a 6½ per cent return" (opinion, p. 5) does not meet petitioner's contention that the Commission treated the business as subject to regulation in its entirety and did not observe the statutory limitations upon its jurisdiction. Under either the test of "fairness" or the test of "end result" the Court's use of the word "allocate" (in spite of the Commission's frank statement that it did not "allocate", R. I, 34) does not place a different aspect on what the Commission did. Obviously, what the Commission did was to disregard the statutory limitation upon its jurisdiction.

The Commission did not, as the Court holds (opinion, p. 8) use "its informed judgment instead" of "a formula." Its action in treating the business as one subject to regulation in its entirety reflects a refusal to exercise its informed judgment within the jurisdictional limits of the Act.

The record before the Commission contains all facts and figures required for either a separation of property or an allocation of costs as between the regulated sales and the unregulated sales. In addition to the evidence on allocation offered by petitioner, the Commission's witness Shattuck prepared, in accordance with the Commission's method of allocation, discussed and approved by this Court in the Colorado Interstate case, and presented (R. XVI 6883) an allocation complete in every respect except for the one

item of cost which depended on the rate base and rate of return to be fixed by the Commission, namely, an allocation of the return allowed.[2]

A proper exercise of "informed judgment" would require that the Commission adopt or modify one of the two allocations offered, or, in any event, make complete and adequate findings showing the amount of revenue derived from the regulated business and *the amount of reduction therein* to be reflected in reduced regulated rates. It requires no "informed judgment" to treat both the regulated and the unregulated business as subject to regulation.

A statute so rigid in its procedural requirements as applied to the regulated company (particularly those of section 19(b) invoked against petitioner here), can hardly be so flexible in its jurisdictional requirements as applied to the administrative agency, where the right to retain substantial revenues is involved. While the amount of money impounded under the order of the Circuit Court of Appeals (stated by Government counsel in the course of oral argument to be nearly $17,000,000 but now nearer $20,000,000), will go primarily to the United States treasury in the form of excess profits taxes if the order is set aside and, if it is sustained, may reach ultimate consumers only in part (in view of the decision of this Court in *Central States Electric Company* v. *City of Muscatine*, ... U. S. ... No. 85, Oct. Term 1944) the stockholders of petitioner should not be deprived of their comparatively small share in this fund by administrative procedure which disregards statutory limtations or is lacking in essential findings.

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2. In the Colorado Interstate case (opinion, p. 3) the Court quotes the Commission as follows:

> All that can be accomplished by an allocation of physical properties can be attained by allocating costs including the return. The latter method is by far the most practical and businesslike.

No more glaring instance of a lack of "basic and essential findings" can be found in any reported case. If this case is "exceptional" in any respect, it is certainly so in that regard. In the Colorado-Wyoming case the Court reversed in part the judgment below because of defects in a finding of the Commission with respect to allocation. The Court said (opinion, p. 5):

> When we read that finding against the record there are ambiguities which we are unable to resolve were it our province to do so.

Here, by reason of the lack of the basic and essential administrative findings, the Court expresses its view of what the Commission did (opinion, p. 5), but is unable to state the measure of its effect or "end-result" except in the following language: "insofar as that procedure allocated to the interstate wholesale business any earnings from the direct industrial sales in excess of 6½ per cent * * *." This is, patently, an unknown quantity.

The question immediately arises: *6½ per cent of what?* Treating the business as subject to regulation in its entirety, the Commission found that 6½ per cent on its rate base would yield a fair return. There was no separation of property as between the regulated business and the unregulated business, and there was no allocation of the return allowed. Consequently, it is impossible to determine from the Commission's opinion and findings just what were the "earnings from the direct industrial sales in excess of 6½ per cent." It is thus apparent that, by reason of the lack of "the basic or essential findings", it is impossible for the Court (except by making these essential findings itself, which, the Court holds, it cannot do) to determine whether what the Commission did was fair or unfair. We submit that the Court's holding (opinion, p. 9) that "the Commission did not exceed the limits of its discre-

tion when it allocated to the regulated business all excess earnings of the entire business over 6½ per cent" should be reconsidered.

II.

The "Exceptional Circumstances of This Case" Relied Upon by the Court to Sustain the Commission's Failure to Allocate Are Either Inferences Unsupported by the Record or Not Exceptional in Any Sense. None of These So-Called Exceptional Circumstances Presents Any Obstacle to the Application by the Commission in Petitioner's Case of the Same Method of Allocation Which It Applied to Canadian River Gas Company, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company.

The Court's opinion indicates that "a formal allocation" would be required were it not for what the Court regards as "the exceptional circumstances of this case." The Court states (opinion, p. 5):

> The question is whether a formal allocation was necessary under the exceptional circumstances of this case.

While we suggest that the introduction of such an exception to established principles of law applicable to judicial review of administrative action is of such far-reaching effect and public importance as to warrant reconsideration, our purpose here is to convince the Court that the circumstances of this case regarded as exceptional by the Court are either inferences which cannot fairly be drawn from the record or are not exceptional in any sense.

Presentation of this ground of our petition necessarily requires a discussion of the facts. We shall, however, observe the brevity required in a petition for rehearing.

(a) The Court's statement (opinion, p. 5) that "A witness for petitioner testified at the hearing that under peti-

tioner's allocation of costs the unregulated business has the use of facilities of the company without any charge" is an inference which cannot fairly be drawn from the witness' testimony.

Biddison, the witness testifying, was an independent consulting engineer employed by petitioner to value its properties and to testify with respect thereto. He also prepared and testified with respect to Exhibit 251, which was introduced, not as representing a complete allocation "under petitioner's allocation of costs", as the Court infers, but as showing an allocation of only the costs directly attributable to each class of business under his interpretation of the Commission's opinion in the Colorado-Wyoming case. The complete allocation suggested by Biddison is set forth with record references at pages 30 to 34 of petitioners' brief and is tabulated on page 34 thereof. By reference thereto, it will be seen that a substantial and fair charge against the unregulated business was made for the use of facilities of the company used jointly by the regulated and unregulated business.

(b) The circumstance that the company operates its business as a unit and attempts no allocation in the conduct of its business is not exceptional in any sense.

Petitioner kept its books in accordance with the usual practice and custom of the industry. In no case that has come to petitioner's attention has a natural gas company maintained accounts reflecting an allocation of property and expense as between regulated and unregulated business. The Commission's opinion in the Canadian River, Colorado Interstate and Colorado-Wyoming cases (43 P. U. R. (N. S.) 205), indicates that the records of those companies did not reflect any such separation. The Commission said (p. 232):

> Nowhere in the entire evidence submitted by Canadian and Colorado Companies is there a complete presentation of the entire operations of the company broken down between jurisdictional and nonjurisdictional operations.

Moreover, petitioner's books are kept in accordance with the Uniform System of Accounts prescribed by the Federal Power Commission, which does not require such separation. Neither the Commission's staff nor petitioner's witness Biddison experienced any difficulty by reason of the manner in which petitioner's books were kept in making an allocation of costs.

(c) The circumstance that one of petitioner's officers testified on cross-examination that "any attempt to allocate return, as between regulated business and unregulated business" is "unrealistic", "theoretical" and "not practical" is not exceptional when considered in the light of the circumstances under which he was testifying and the fact that such officer was not produced by petitioner to testify on allocation.

That witness testified on direct examination with respect to operating problems in connection with proposed increases in capacity (R. VIII, 3933-3959). He gave no testimony on direct examination as to what would be a proper allocation; he was not produced by petitioner as a witness qualified to testify on that question. On cross-examination, he was interrogated briefly with respect to allocation of "return." He expressed his judgment that any attempt to allocate *return* was unrealistic, theoretical and not practical, but made no statement that it was impossible or impractical to make an allocation of petitioner's earnings as between the two classes of business. Believing, as did witness Biddison, that an attempt to "allocate return" was

not the appropriate way to allocate earnings, he said (R. XVIII, 3960) in commenting on the Commission's opinion in the Colorado cases:

> The idea of taking two classes of business and trying to divide, as is tried in this proration. I can't see how it is possible to not recognize both classes of business, when each business contributes something to the other. Now, unfortunately, that isn't apparently the position that some members of this Commission had in mind, but nevertheless it is my opinion. I think each one contributes something to the other, and that should be recognized.

The remarks of petitioner's officer were made before Commission's witness Shattuck testified and presented his exhibit, and he spoke without the benefit of the Commission's interpretation of its opinion in the Colorado-Wyoming case.

(d) The statement of the Court that "none of the main transmission line operating and maintenance costs were charged to the direct industrial sales" is inaccurate. The Court's reference is to the cost allocation reflected in Exhibit 251. It is shown at page 3, line 33 of that exhibit (R. XIII, 5951) that, of the total transmission and maintenance expense, amounting to $2,130,708, the sum of $165,259 was allocated against unregulated sales. This total sum of $2,130,708 includes items aggregating in excess of $1,000,000 which were allocated between regulated sales and unregulated sales on a volume basis with 86.8 per cent charged to regulated sales and 13.2 per cent charged to unregulated sales (lines 7, 11, 18, 28, 31 and 32 of page 3 of Exhibit 251).

(e) The Court's statement that "all agreed that an allocation on the basis of investment or cost would be impractical" is an inference not supported by the record. On the contrary, all agreed that it was possible to allocate on the basis of investment and also that an allocation on the basis

of costs was practical. Both Biddison and Shattuck did allocate on a basis of costs. The only difference between Biddison and Shattuck lay in Biddison's suggestion that $500,414 be contributed to depreciation and "return", as compared with Shattuck's allocation of depreciation and his adherence to the Commission's formula requiring an allocation of *return as an item of costs.* Shattuck stated that he could not compute the allocation of return until the rate base and rate of return were established (R. VIII, 4002). Biddison's "contribution" method could be applied regardless of the amount of the return. The results reached, respectively, by application of the two methods may be compared by reference to the computations appearing on pages 34 and 35 of petitioner's brief.

The Shattuck method shows $330,558 earned from the unregulated sales in excess of the 6½ per cent return after allocation; application of the Biddison method shows a comparable figure of $319,656. These figures are identical in nature with the item of $54,000 with respect to Canadian River Gas Company and the item of $131,000 with respect to Colorado Interstate Gas Company, appearing in the Court's tabulation at the bottom of page 4 of its opinion in those cases, and also with the item of $40,000 in the Colorado-Wyoming case (the difference between the sum of $159,000 and the sum of $119,000 mentioned in the Court's opinion in that case at the top of page 2).

(f) The Court's statement that "all agreed that a fair division was a matter of judgment not mathematics" is an inference not supported by the record. The two witnesses produced as experts on allocation used a combination of judgment and mathematics according to the respective principles adopted by each. All of Biddison's allocations of costs, as such, were made according to engineering principles and mathematics (R. VIII, 3656-3657). The one element in his method of allocation which he said was a matter

for the Commission's judgment and did not depend upon engineering principles was the amount of "contribution" to depreciation and return (R. VIII, 3872-3873). Shattuck's judgment was controlled by the method applied by the Commission in the Canadian River, Colorado Interstate and Colorado-Wyoming cases.

Petitioner took the position in its brief, and maintains here, that it was the duty of the Commission to examine this evidence and make findings with respect thereto. *Nowhere in the Commission's opinion or findings is either of the allocations suggested by these witnesses discussed or even mentioned.*

III.

The Court Has Failed to Consider the Allocation Submitted by the Commission's Staff Through a Witness Who Was Better Informed Than Anyone Else on the Commission's Method of Allocation.

The Court's opinion appears to proceed on the theory that the only evidence on allocation before the Commission was that presented by petitioner through its witness Biddison. The Court has failed to consider the complete allocation submitted by the Commission's staff through its witness Shattuck, who was better informed than anyone else on the Commission's method of allocation with respect to natural gas companies, which was revealed for the first time in the Commission's opinion and order in the Canadian River, Colorado Interstate and Colorado-Wyoming cases. That opinion and order were released March 18, 1942, a few weeks before the evidence of Biddison on allocation was introduced by petitioner. Petitioner's counsel and the witness Biddison advised the Examiner and Commission counsel in open hearing that they had been unable to understand the Commission's explanation of its treatment of demand costs in the Colorado-Wyoming case. In response, counsel for the Commission said (R. VIII, 3671):

> Of course, you will have that in greatest detail and in practical application very shortly.

Subsequently, the testimony of Shattuck and his detailed exhibit on allocation were introduced by the Commission's staff (R. VIII, 3991-4002; R. XVI, 6883-6887).

The purpose of the proceedings was to determine whether petitioner's rates were just and reasonable. Petitioner was entitled to have the evidence of Shattuck considered by the Commission and is entitled to have it considered by the Court in determining whether the Commission has performed its statutory duty.

IV.

The Court Has Failed to Consider the Fact That Petitioner Not Only Requested the Commission to Make a Segregation of Property As Between Regulated and Unregulated Sales, But Also Requested (submitting Detailed Proposed Findings) the Commission to Make an Allocation of Costs; and That Petitioner, in Its Application for Rehearing, Urged Its Objection to the Commission's Failure to Make Such Allocation.

In its opinion (p. 7) the Court points to the circumstance that petitioner requested the Commission to find that it had built no capacity for its direct industrial sales and that it was reasonable to allocate 50 per cent of the net earnings from unregulated sales as a credit to net earnings from regulated sales as compensation for the temporary use of such facilities provided for regulated sales but used from time to time in transporting the gas for direct interruptible unregulated sales, when not required for regulated sales, and continues

> But it does not appear that Petitioner requested the Commission to make a segregation of the properties used in the two classes of business.

The Court's reference is to paragraph 21 of "Proposed Findings of Fact" forming part of petitioner's opening brief before the Commission. That brief is not in the printed record. It is not even a part of the record certified by the Commission to the court below. Inasmuch, however, as the Court has quoted from one of petitioner's requested findings, it is not inappropriate that petitioner call to the Court's attention other requested findings of fact by which petitioner sought not only an allocation of properties but also appropriate allocations of costs.

In Finding No. 22, petitioner requested the Commission to find that a proper allocation of petitioner's gas plant as between regulated sales and unregulated sales resulted in a reduction of the prudent investment rate base by $591,727, of which $515,527 represented the depreciated portion of the investment applicable to unregulated sales and $76,200 represented the allocable portion of $1,500,000 working capital.

Petitioner also requested allocations of expenses. In Finding No. 23, it requested the Commission to find that, of the annual operating and maintenance expenses, $413,321 should be allocated to unregulated sales; in Finding No. 24, that, of the depreciation, depletion, and amortization charges, $34,404 should be allocated to unregulated sales; in Finding No. 25, that ad valorem and certain other taxes should be allocated in the sum of $51,972 to unregulated sales; and in Finding No. 26, that, of the income and excess profits taxes, $197,350 should be allocated to unregulated business.

In Finding No. 27, petitioner requested the Commission to find that, on the basis of 1941 consolidated revenues, $1,500,527 should be allocated to unregulated sales and that a credit of $500,414 representing a charge against the unregulated sales of one-half of the profits resultant from

said sales would increase the total revenues from, and allocable to, regulated sales to $16,789,459.

Thus, in the proposed findings of fact filed with the Commission before its order was entered, petitioner made an appropriate request to the Commission for findings both as to an allocation of property and as to an allocation of costs and earnings. The Commission should have disposed of those requests by making appropriate findings. It did not.

The Court observes in its opinion (p. 7) that, in the petition to the Commission for rehearing, petitioner did not complain of the Commission's failure to allocate properties, but merely complained of the Commission's action in taking the proceeds of direct industrial sales into consideration in determining the amount of petitioner's profits and in ordering the rate reduction; and in failing reasonably to allocate petitioner's earnings between regulated sales and unregulated sales. It is said "that precludes an attack in the courts on the Commission's order for failure to make a segregation of properties."

But petitioners have attacked the Commission's order because of *its failure to make an allocation of any kind* as between the regulated and unregulated business. The attack is made on the ground that the effect of the Commission's order is to assign profits from the unregulated business to the regulated business and, in the language of the Court (opinion, pp. 4-5), to "transgress the jurisdictional lines which Congress wrote into the Act." That is what the Commission has done in this case and petitioner's objection thereto was fully preserved in its petition for rehearing.

The proposed findings of fact filed with the Commission by petitioner included findings dealing with both an allocation of property and an allocation of costs. At the time

the petition for rehearing was prepared, however, petitioner was persuaded that, as the Commission had held in the Colorado cases (and as this Court has expressly held in reviewing those cases), it is not necessary, in order to allocate earnings, to make an allocation of property, but that a satisfactory result can be arrived at through an allocation of costs.

It is obvious that an allocation of earnings requires both a determination and allocation of receipts and a determination and allocation of appropriate charges against those receipts. Petitioner's objection to the Commission's failure to allocate was urged in the petition for rehearing in specifications 33 and 34 (R. XVI, 7147) which read as follows:

> XXXIII
>
> The Commission erred in assuming jurisdiction of respondents' direct sales by taking the proceeds from such sales into consideration in determining the amounts of respondents' profits, and then directing that the excess return so determined be reduced through a reduction of the prices and charges for gas sold for resale.
>
> XXXIV
>
> The Commission erred in failing reasonably to allocate respondents' earnings between regulated sales and unregulated sales.

By these specifications, petitioner brought notice to the Commission that it was complaining of the Commission's action in treating its business as subject to regulation in its entirety, thus, assigning profits from the unregulated business to the regulated business.

V.

The Holding of the Court that, Once the Use of "A Formula Is Waived or Is Conceded to Be Impractical or Theoretical," the General Effect of What the Commission Did May Be Accepted As an Allocation, Without Specific Findings of Any Kind, Is Contrary to Established Principles of Law Consistently Recognized and Applied by This Court.

In this case and in the Colorado Interstate, Canadian River, and Colorado-Wyoming cases, the Court has held that it is the statutory duty of the Commission to make an allocation of the earnings of a natural gas company between the regulated and nonregulated business and to limit its rate-making activities to that part of the business which is by statute made subject to its jurisdiction. In performing its statutory duty in this regard, it is essential that the Commission make specific findings as to the portion of the expenses of operation to be borne by the unregulated business and the portion of the earnings from that business that should be allocated to "the return" as an item of costs or contributed to the regulated business for the use of the jointly used facilities. Such findings, it is admitted, the Commission did not make.

The holding of the Court that, once the use of "a formula is waived or is conceded to be impractical or theoretical", the general effect of what the Commission did may be accepted as an allocation, without specific findings of any kind, is contrary to established principles of law consistently recognized and applied by this Court. It is in direct conflict with the principles announced and applied in the Colorado-Wyoming case.

This Court has repeatedly held that an order of an administrative tribunal which exceeds its statutory authority

or lacks an essential basic finding which will permit the Court to determine whether or not the statutory standards have been applied is void.[3]

As shown *supra* pages 8-11, any statement of the general effect of what the Commission did merely serves to emphasize the fact, admitted by the Commission (R. I, 34), that it made no allocation but treated the business as subject to regulation in its entirety.

The Natural Gas Act does not invest the Commission with authority to determine under what circumstances it will or will not assume jurisdiction over direct sales of natural gas companies. Such a grant of authority would be invalid as an attempt to delegate legislative powers in the absence of standards prescribing the occasion for, and the manner of, its exercise.[4] The Natural Gas Act does not provide such standards.

The objection that the Commission has exceeded its statutory powers is fundamental and goes to the jurisdiction of the Commission over the subject matter. This jurisdiction cannot be conferred either by waiver or by express consent.[5]

In *Beaumont, S. L. & W. Ry* v. *United States*, 282 U. S. 74, this Court held that a division of joint rates by the

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3. *Florida* v. *United States*, 282 U. S. 194; *United States* v. *Baltimore & Ohio R. R. Co.*, 293 U. S. 454; *Arizona Grocery Co.* v. *Santa Fé R. R.*, 284 U. S. 370; *Texas & Pacific Ry. Co.* v. *United States*, 289 U. S. 629; *United States* v. *Carolina Freight Carriers Corp.*, 315 U. S. 475; *Chicago Junction Cases*, 264 U. S. 258; *Wichita R. & L. Co.* v. *Public Utilities Commission of Kansas*, 260 U. S. 48.

4. *Panama Refining Company* v. *Ryan*, 293 U. S. 388; *A. L. A. Schechter Poultry Corp. et al.* v. *United States*, 295 U. S. 495.

5. *United States* v. *Griffin*, 303 U. S. 226; *Florida* v. *United States*, 282 U. S. 194; *United States* v. *American Ry. Express*, 265 U. S. 425; *Inter Mountain Rate Cases*, 234 U. S. 476; *Tap Line Cases*, 234 U. S. 1; *Beaumont, S. L. & W. Ry.* v. *United States*, 282 U. S. 74; *United States, et al.* v. *Corrick, et al.*, 298 U. S. 435; *Skinner & Eddy Corp.* v. *United States*, 249 U. S. 557.

Interstate Commerce Commission based upon evidence on a group basis and the use of averages was invalid even though the carriers had not objected to the method used by the Commission and had presented evidence on that basis. The Court said, page 87:

> And the Commission is not excused by the fact that the carriers presented evidence on a group basis or by the omission of the southwestern lines in their petition for a rehearing to object to the use of averages. The proceedings before the Commission were for the determination of what divisions are and for the future will be reasonable. Here the issue is whether the Commission's amended determinations and the order based on them are valid. Appellants are not estopped from assailing the averages or groups adopted. A sound basis for the rule or formula prescribing the divisions is essential to compliance with the Act.

In *United States, et al.* v. *Corrick, et al.*, 298 U. S. 426, the Court said, page 440:

> The appellants did not raise the question of jurisdiction at the hearing below. But the lack of jurisdiction of a federal court touching the subject matter of the litigation cannot be waived by the parties, and the district court should, therefore, have declined *sua sponte*, to proceed in the cause. And if the record discloses that the lower court was without jurisdiction this court will notice the defect, although the parties make no contention concerning it.

In *Skinner & Eddy Corporation* v. *United States*, 249 U. S. 557, the Court said, page 562:

> The contention is that the Commission has exceeded its statutory powers; and that, hence, the order is void. In such a case the courts have jurisdiction of suits to enjoin the enforcement of the order, even if the plaintiff has not attempted to secure redress in a proceeding before the Commission.

We submit that the failure of the Commission to limit the exercise of its powers to petitioner's wholesale business presents a question of the jurisdiction of the Commission over the subject matter, which petitioner could not waive either expressly or by implication.

VI.

The Question Discussed in the Court's Opinion Under the Heading "Producing and Gathering Facilities" Should Be Reexamined in the Canadian River Case and Here.

Under the heading "Producing and Gathering Facilities" the Court discusses petitioner's objection to the Commission's treatment of its producing and gathering properties in determining the amount of petitioner's gross revenues available for rate reduction. The Court holds (opinion, p. 10) that (1) this phase of the case is controlled by the Canadian River case and (2) petitioner is precluded by section 19(b) of the Act from attacking the order on this ground.

For the reasons set forth in the petition for rehearing filed by Canadian River Gas Company and by the Independent Natural Gas Association of America, Amicus Curiae, in the Canadian River case, we think the Commission's treatment of production and gathering properties in this case, as well as that, should be reconsidered.

Petitioner is barred from having the issue re-examined here unless it can convince the Court that it is not precluded from raising the issue by section 19(b) of the Act. This question was not fully briefed and argued before the

Court[6] and is of such public importance in the judicial review of orders of the Commission under the Natural Gas Act that it should be reconsidered and a determination thereof made only with the benefit of full argument.

We submit that petitioner is not so precluded because (a) the application for rehearing before the Commission fairly presented to the Commission petitioner's objection to the treatment of its production and gathering facilities and (b) the question, being one of jurisdiction, can be raised at any time in the course of the proceedings.

(a) *The application for rehearing before the Commission fairly presented to the Commission petitioner's objection to the treatment of its production and gathering facilities.*

We recognize that the soundness of petitioner's contention that it preserved its objection to the Commission's treatment of its production and gathering facilities depends on the construction of section 19(b) of the Act. If the provisions of that section are construed so strictly that no argument in support of an objection to the order can be made in the reviewing court unless such supporting argument appears in the application to the Commission for rehearing, then, petitioner must admit that its arguments here were not presented in its application for rehearing.

6. It appears in the brief for respondents only as a passing remark on page 31 with a short reference note, and was answered in petitioner's reply brief at page 9 with a short statement pointing out that it was a question of jurisdiction and could be raised at any time but that, nevertheless, the objection had been preserved in substance in the petition for rehearing filed with the Commission. By reason of the enlargement of the scope of review herein, respondents were unable to serve their brief within the time limited by the rules of this Court, and it did not reach petitioner's counsel until late in the afternoon of the Wednesday preceding Monday, January 29, the day the case was argued. Consequently, in order to have its reply brief printed and filed within the time limited by the rules of Court, petitioners had little more than twenty-four hours for its preparation, with the result that points raised by the respondents could be answered only briefly and without supporting argument and citation of authorities.

We do not think, however, that the provisions of section 19(b) should be so construed; we think that such was not the intent of Congress. The purpose of the section appears to be to give the administrative agency an opportunity to reconsider its order before judicial review and to prevent the Commission from being taken by surprise in the reviewing court by an objection to its procedure or determinations of which it did not have fair notice. The provision that even such an objection may be considered by the Court if "there is reasonable ground for failure" to urge it in the application for rehearing indicates that it was not the intent of Congress that the regulated company should suffer an injustice by reason of a strict construction of the limitation on the scope of review.

Here, the Commission can be presumed to have been aware of the limitation on its jurisdiction expressly set forth in section 1(b) of the Act providing that the provisions of the Act should not apply to the production or gathering of natural gas. In the course of the hearing, the question of valuation of the producing and gathering facilities arose. After extended argument before the Commission's Examiner, the Examiner ruled (R. I, 718; VIII 3974) that the valuation of all properties of petitioner, including its producing and gathering properties, should be based on evidence of original cost, and refused to permit petitioner to introduce evidence showing the present value of its gas leasehold estates. The Commission, in its opinion, approved the ruling of the Examiner (R. I, 18-21) and, for the purposes of its order, treated petitioner's business as subject to regulation in its entirety, valuing all of petitioner's property at original cost.

We think that petitioner's specification of error number II fairly placed the Commission on notice that peti-

tioner sought a rehearing for the purpose of fully arguing in all aspects, both factual and legal, results flowing from the refusal of the Examiner to admit petitioner's evidence of the present value of its gas leasehold estates.[7]

Mr. Justice Jackson, in his concurring opinion in the Canadian River case recognizes that production and gathering of natural gas are excluded from the jurisdiction of the Commission, but holds that the Commission may *value* such properties for the purpose of fixing the rates for interstate sales subject to the jurisdiction of the Commission. He holds, however, that valuation of natural gas producing properties at original cost has no rational basis. That is precisely the position of petitioner, with the added contention that such method of valuation, even if otherwise lawful, may not be applied to petitioner's unregulated properties and business.

Petitioner's position before the Commission was that, if its production and gathering facilities were included in the rate base, their valuation should be consistent with their status as unregulated properties. On the application for rehearing, this position was preserved, in that, petitioner's specification number II thereof was directed to the action of the Examiner, approved by the Commission, in refusing to admit petitioner's evidence of the present value of its leasehold estates.

7. This specification of error (R. XVI, 7142) reads as follows:

The Examiner for the Commission erred in refusing to admit in evidence the present value of the gas leasehold estates owned by Respondent Panhandle Eastern, based on the prices at which said gas leaseholds could now be sold, whether the production therefrom be sold by the purchaser in a regulated or in an unregulated market. The details of such valuation and the testimony of the witness Wallace explanatory thereof fully appear in Exhibits 37 and 37A, objections to the admission of which were sustained by the Examiner, and subsequent tender of proof thereon rejected.

(b) *The question, being one of jurisdiction, can be raised at any time in the course of the proceedings.*

The Court's opinion recognizes in its discussion of the challenge made by the City of Cleveland, as Amicus Curiae, to the jurisdiction of the court below over the subject matter of this litigation, that a question of jurisdiction can be raised at any time. The question presented here is recognized, discussed and decided by the Court as a question of jurisdiction in the Canadian River case. It is a fundamental principle that, where Congress has withheld jurisdiction, it cannot be conferred or exercised by waiver, concession, or other act of the parties.

Unless the pertinent provision of section 19(b) of the Act be regarded as a qualification of the jurisdictional limitations set forth in section 1(b) thereof, it would appear that a contention directed to the jurisdiction of the Commission under the Act would not be an objection to an order within the pertinent language of section 19(b). It seems to us that the type of objection which cannot be raised on review unless urged in the application for rehearing includes only objections directed to administrative action of the Commission exercised within the ambit of its authority.

The purpose of Congress in delimiting the jurisdiction of the Commission would be defeated if the power of the reviewing court to notice and set aside an exercise of jurisdiction on the part of the Commission expressly withheld by the statute were denied simply because, through design or oversight, no objection to the Commission's action in such regard was made in the application for rehearing. We submit that the decision in the Canadian River case should be reconsidered, and petitioner should have an opportunity to fully brief and argue here the question of whether the provisions of section 19(b) preclude petitioner from a reconsideration of the question as applied

Prayer.

Wherefore, petitioner prays that a rehearing be granted herein for the purpose of reconsidering the issues presented and the judgment entered and that, pending the Court's consideration of this petition, and until a ruling is made thereupon, the mandate to the court below be stayed, and the time for issuance thereof be enlarged.

Respectfully submitted,

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Certificate of Counsel.

I, John S. L. Yost, being of counsel herein, do hereby certify that the foregoing petition for rehearing and for a stay of the mandate herein is presented in good faith and not for delay.

....., John S. L. Yost,
Attorney for Petitioner.

SUPREME COURT OF THE UNITED STATES.

No. 296.—October Term, 1944.

Panhandle Eastern Pipe Line Company, Illinois Natural Gas Company and Michigan Gas Transmission Corporation, Petitioners, *vs.* Federal Power Commission, City of Detroit, County of Wayne, Michigan, et al.	On Writ of Certiorari to the United States Circuit Court of Appeals for the Eighth Circuit.

[April 2, 1945.]

Mr. Justice Douglas delivered the opinion of the Court.

Panhandle Eastern Pipe Line Co. (whom we will call Panhandle Eastern) owns properties which constitute a natural gas production, transportation, and marketing system.[1] The system extends from gas fields in Texas, Oklahoma and Kansas through Missouri, Illinois, Indiana and Ohio and into Michigan.[2] The City of Detroit and the County of Wayne, Michigan, filed a complaint with the Federal Power Commission alleging that Panhandle Eastern's rates on gas sold to a distributing company in Michigan for resale there were unjust and unreasonable. The Commission on its own motion instituted an investigation under the Natural Gas Act of 1938, 52 Stat. 821, 15 U. S. C. § 717, of all of the interstate wholesale rates of Panhandle Eastern.[3] Following extended hearings the Commission entered an interim order, here under review, finding petitioner's interstate wholesale rates to be excessive and requiring petitioner to reduce them on and after November 1, 1942, as to reflect, when applied to petitioner's 1941 transportation and sales a reduction of not less

[1] The other petitioners, Illinois Natural Gas Co. and Michigan Gas Transmission Corp., were wholly owned subsidiaries of Panhandle Eastern. They sold all of their properties to Panhandle Eastern after these proceedings were instituted and were then dissolved. Accordingly, we will refer throughout to the three companies as "petitioner".

[2] The Commission found that the aggregate lines in this system constitute "the longest natural-gas pipe line in the world, serving more than 200 cities, towns, and communities with more than 700,000 retail customers in Texas, Kansas, Missouri, Illinois, Indiana, Michigan, and Ohio." 45 P. U. R. (N. S.) 203, 208.

[3] The investigation also included Illinois Natural Gas Co. and Michigan Gas Transmission Corp. See note 1, *supra*.

than $5,094,384 per annum below the 1941 consolidated gross operating revenues of $17,789,573. See 45 P. U. R. (N. S.) 203, 223. That order was affirmed by the Circuit Court of Appeals for the Eighth Circuit, one judge dissenting in part. 143 F. 2d 488. The case is here on a petition for a writ of certiorari which we granted limited to the two questions which we will discuss. But before we reach them we must dispose of a challenge made by the City of Cleveland, as *amicus curiae*, to the jurisdiction of the Circuit Court of Appeals for the Eighth Circuit over the subject matter of this litigation. Panhandle Eastern sought review in that court of the Commission's order under § 19(b) of the Act which so far as material here provides:

> "Any party to a proceeding under this chapter aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia . . . ."

The petition for review stated that petitioner had its principal place of business in Kansas City, Missouri. That was not denied by the Commission and at no time prior to the entry of the judgment affirming the Commission's order was the jurisdiction of the Circuit Court of Appeals challenged. After the judgment of affirmance had been entered, however, the City of Cleveland filed a motion in the Circuit Court of Appeals for leave to intervene and challenged the jurisdiction of that court on the ground that petitioner did not have its principal place of business in that circuit. The same objection is pressed here.

If the objection is to the jurisdiction of the court, it does not come too late. *Industrial Addition Assoc.* v. *Commissioner*, 323 U. S. 310. But we think it goes to venue not to jurisdiction. We read § 19(b) to invest all intermediate federal courts with the power to review orders of the Commission, provided, however, that if a Circuit Court of Appeals, rather than the Court of Appeals for the District of Columbia, is chosen, the parties may object that the particular circuit lacks the specified qualifications. Venue relates to the convenience of litigants. *Neirbo Co.* v. *Bethlehem Corp.*, 308 U. S. 165. The provisions of § 19(b) plainly are of that character. Review in the Court of Appeals for the District of Columbia where the Commission must maintain its principal office and hold its general sessions (46 Stat. 797, 16 U. S. C. § 792) is convenient for the Commission. Review in any circuit where the

natural gas company is located or has its principal place of business is designed to serve the convenience of the company. The general grant of authority in § 19(b) to all the courts of appeal suggest that the question of which one should exercise the power in a particular case is a question of venue. None of the respondents objected at any time to the venue of the court below. The right to have a case heard in the court of proper venue may be lost unless seasonably asserted. *Industrial Addition Assoc.* v. *Commissioner, supra.* It may be waived by any party, including the government. *Peoria By. Co.* v. *United States,* 263 U. S. 528, 535-536; *Industrial Addition Assoc.* v. *Commissioner, supra.* The objection of the City of Cleveland which came after judgment had been rendered came too late. Cf. *United States* v. *Californina Canneries,* 279 U. S. 553, 556. Hence, we need not decide whether the suit was brought in the proper circuit.

Segregation of the Regulated and Unregulated Businesses. Panhandle Eastern makes direct industrial sales as well as sales to distributing companies for resale. The Commission made no segregation or separation of the properties used in these two classes of business. Nor did it make an allocation of costs between the regulated and unregulated phases of the business as it did in *Colorado Interstate Gas Co.* v. *Federal Power Commission, Canadian River Gas Co.* v. *Federal Power Commission,* and *Colorado-Wyoming Gas Co.* v. *Federal Power Commission,* decided this day. The reasons which the Commission advanced for its failure to make any allocation are so crucial to the disposition of the case that we quote from the opinion:

> "Upon the record before us, we consider it unnecessary to make an allocation of the respondents' business as between sales for resale and direct sales. The direct sales are made to nineteen industrial customers on an interruptible basis and at prices fixed in competition with other fuels.
>
> "According to respondents' own evidence, no capacity has ever been constructed or provided in their gas plant for these direct industrial customers. It is equally clear that deliveries are made to them only when there is available excess off-peak capacity not required by the other wholesale customers. As evidence of this fact, in 1941 the volume of gas sold to the direct industrial customers amounted to 13.2 per cent of the total system sales, whereas on the system peak day of the 1941-1942 winter the direct industrial sales constituted only 2.69 per cent of the total deliveries, due to interruptions and curtailments brought about by the necessity for meeting the wholesale customer requirements.

"Testimony of respondents' witnesses discloses that only $128,848 of the entire investment in plant (less than one-sixth of one per cent) is used exclusively in the service of the direct industrials. Moreover, the respondents themselves treat their entire business as a unit and make no segregation of costs or profits on their books as between the two classes of sales. Indeed, Panhandle Eastern's president testified quite clearly on cross-examination that any attempt to allocate would be 'theoretical,' 'unrealistic,' and 'not practical' because of the unified character of the business.

"Deliveries to the direct industrials are made only when the plant is not fully used in serving the requirements of the wholesale business, and are curtailed or interrupted when the capacity is required by the wholesale customers. It is apparent that the incidental direct industrial business is in reality a by-product of the wholesale business, comparable to the respondents' gasoline extraction business. All parties are agreed that the expenses and revenues in connection with the sale of gasoline extracted from the natural gas should be treated as an integral part of the respondents' entire operations. Thus, it is manifest from the evidence that the direct industrial sales are purely incidental to the main or principal enterprise, viz.: the wholesale business of the respondents." 45 P. U. R. (N. S.) p. 218.

Petitioner contends that these reasons do not justify the failure of the Commission to make a formal allocation either of the property or the costs between the regulated and unregulated business. It says that the direct sales are beyond the jurisdiction of the Commission even though they are comparatively small. It asserts that the fact that the direct sales are on an interruptible basis merely emphasizes the relatively small amount of the cost of construction and operation attributable to such sales. It says that no waiver of the statutory right to have the direct sales free from regulation can be inferred and that in any event the Commission's jurisdiction cannot be enlarged by waiver. And it contends that the Commission's finding that the direct industrial business is "in reality a by-product of the wholesale business" is not supported in reason or in fact.

We agree that the Commission must make a separation of the regulated and unregulated business when it fixes the interstate wholesale rates of a company whose activities embrace both. Otherwise the profits or losses, as the case may be, of the unregulated business would be assigned to the regulated business and the Commission would transgress the jurisdictional lines which

Congress wrote into the Act.[4] The Commission recognizes this necessity. As it stated in *Re Cities Service Gas Co.*, 50 P. U. R. (N. S.) '65, 89: "The company's facilities and operations are devoted in part to natural gas service which is not subject to our jurisdiction. This service consists principally of gas sales made directly to large industrial consumers. The necessity arises, therefore, for making an allocation of costs as between the jurisdictional and non-jurisdictional sales." The question is whether a formal allocation was necessary under the exceptional circumstances of this case.

We state the question that narrowly because the dispute in this case reflects not a rejection by the Commission of the principle of allocation but a disagreement over the propriety of the procedure followed here.

What the Commission did was to allocate to the interstate wholesale business all of the earnings from the entire business in excess of a 6½ per cent return. Insofar as that procedure allocated to the interstate wholesale business any earnings from the direct industrial sales in excess of 6½ per cent, it is said to be justified by the use which the direct industrial business made of the main transmission line and its facilities. If that was unfair, the order must be set aside. If it was fair, no reversible error is shown.

A witness for petitioner testified at the hearing that under petitioner's allocation of costs the unregulated business has the use of facilities of the company without any charge. He testified that there should be a charge against the unregulated business for the use of that property. Another witness for petitioner stated that the company did not make any allocation between the regulated and unregulated business—"that is, allocation of jointly-used assets"—in determining what would be charged to the unregulated sales. He stated, "It may be heresy to say so but we try to charge our nonregulated customers all the traffic will bear." It was conceded that the company attempts no allocation in the conduct of its business. The business is operated as a unit. And one of petitioner's officers testified:

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[4] Sec. 1(b) provides:

"The provisions of this chapter shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas."

"Q. That is, any attempt to allocate return, as between regulated business and unregulated business: is that what you meant was unrealistic?

"A. That is correct * * * * If you are going to allocate it theoretically you should allocate it on the basis of the investment and the expenses incident to each part of the business.

"Q. But it is theoretical?

"A. That is correct.

"Q. And not practical?

"A. That is what I am trying to say."

Petitioner presented evidence showing that in the test year 91.57 per cent of its total revenues, or $16,289,045, was received from its wholesale sales and 8.43 per cent, or $1,500,527, was received from its direct industrial sales. It presented a study showing total operating expenses of about $7,900,000 (not including federal income taxes and return) and assigning $499,699 to the direct industrial sales. Thus an apparent profit of $1,000,828 before income taxes was shown for the direct industrial sales. But that study did not allocate any of the annual depreciation expense of the main transmission line ($2,238,589) to the direct industrial sales. Of the $633,270 ad valorem taxes on transmission lines, only $1,738 applicable to the laterals used exclusively for direct industrial sales were allocated to them. None of the main transmission line operating and maintenance costs was charged to the direct industrial sales.

Petitioner recognized the unfairness of attributing to the direct industrial sales all of the apparent profit of $1,000,828. One of petitioner's witnesses testified:

"Q. Is there any engineering basis for a division, from an engineering standpoint?

"A. Not as an engineering matter. I do not know of any basis. As a business matter, I think there are ways in which it could be fairly decided. I think it requires some judgment based upon business experience to make a fair allocation of it but there is a little over a million dollars, some portion of which could, in all fairness, be set aside as a charge against operations on the non-regulated sales and a credit against operations on the regulated sales."

He went on to indicate what he thought a fair allocation would be:

"A. It is my opinion that that $1,000,828.98 should be divided fifty-fifty.

"Q. Why?

"A. It is just my judgment as a businessman that would be a fair allocation of it.

"Q. You mean fifty-fifty as between regulated and non-regulated business?

"A. That is correct. I think that would be a fair allocation.

"Q. That is a business judgment estimate, not a mathematical estimate?

"A. That is right. In that way, this non-regulated business has contributed half a million dollars a year towards the reduction in cost of the regulated business and if it does not contribute something, I do not think there is any justification for having the business."

Petitioner requested the Commission to find that it had built no capacity for its direct industrial sales which were "incremental" in nature and that it was reasonable to allocate "50 per cent of the net earnings from nonregulated sales as a credit to net earnings from regulated sales, as compensation for the temporary use of such facilities provided for regulated sales but used from time to time in transporting the gas for direct, interruptible, nonregulated sales when not required for regulated sales." But

included in the petition for rehearing", the following: Petitioner asserts that it also requested the Commission to make a segregation of the properties used in the two classes of business. No such request, however, was included in the petition for rehearing."

Commission erred (1) in taking the proceeds from the direct industrial sales into consideration in determining the amount of its profits and in ordering the rate reduction; and (2) in failing reasonably to allocate petitioner's earnings between regulated sales and unregulated sales. That precludes an attack in the courts on the Commission's order for failure to make a segregation of property. For § 19(b) of the Act provides that "No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do." No such excuse has been tendered.

On these facts we cannot say that the Commission transgressed the jurisdictional requirements of the Act when it failed to make a formal allocation of costs or of property. All agreed that an allocation on the basis of investment or costs would be impractical. All agreed that some division of the apparent profit from the direct industrial business had to be made. All agreed that the fair division was a matter of judgment not mathematics. In view of those concessions by petitioner, the manner in which it conducted its business, its failure to insist on a segregation of property

in its petition for rehearing, and its own failure to keep accounts which reflected a segregation of the properties or an allocation of costs among the two classes of business, we do not think it can now be asserted that the Commission erred in forsaking a formula and using its informed judgment instead.

We do not mean to imply that such concessions would warrant a departure of the Commission from the statutory scheme of regulation. The issue is a much narrower one. The Commission did not undertake to fix industrial rates. The Commission, as was its duty, merely determined what earnings were properly allocable to the unregulated business. Petitioner disagrees with the result. The use of a formula for an allocation of costs or a segregation of property might or might not have been more favorable to petitioner. But once the use of such a formula is waived or is conceded to be impractical or theoretical, there must be some discretion in the Commission to make that determination through the exercise of its informed judgment. We cannot say that the Commission abused its discretion by conceding on the basis of the special circumstances here presented that earnings of the entire business in excess of a 6½ per cent return should be allocated to the interstate wholesale business. The small investment in the direct industrial business, the incremental nature of it, the extent of the interruptions in service to the direct industrial customers, the manner in which the management has treated it afford a basis for the refusal of the Commission to credit it with a larger share of the earnings than 6½ per cent.

The Commission, while it lacks authority to fix rates for direct industrial sales, may take those rates into consideration when it fixes the rates for interstate wholesale sales which are subject to its jurisdiction. For § 5(a) provides that whenever the Commission "shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, *or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential*, the Commission shall determine the just and reasonable rate". (Italics added) It is clear that contracts covering direct industrial sales come within that italicized clause of § 5(a).[5] The

[5] There must be filed with the Commission not only schedules of rates subject to the jurisdiction of the Commission but "the classifications, practices, and regulations affecting such rates and charges, together with all

industrial rates in force here produce revenues of $1,500,527 with expenses of $499,699 which, according to petitioner, result in earnings of $1,000,828 before income taxes. That is an apparent profit of more than 200 per cent. It is a fairly obvious indication that the regulated business is being saddled with costs which in fairness should be borne by direct industrial sales. That is an extremely relevant consideration for the Commission to take into account when it determines what costs are fairly attributable to each business and what the resultant rate for the wholesale business should be. Sec. 5(a) does not of course give the Commission authority to disregard the jurisdictional lines which Congress has drawn between interstate wholesale sales and direct industrial sales so as to level the profits between the two classes of business. But § 5(a) reinforces our conclusion that in the exceptional circumstances of this case the Commission did not exceed the limits of its discretion when it allocated to the regulated business all excess earnings of the entire business over 6½ per cent.

Producing and Gathering Facilities. The Commission constructed a rate base on the actual legitimate cost of petitioner's property in service on December 31, 1941, which it found to be $78,814,292. It deducted $12,596,987 for accrued depreciation, depletion and amortization. It added $920,000 for working capital. The result was a rate base of $67,137,305 on which the Commission allowed a return of 6½ per cent which it found to be "fair and liberal". It included in the rate base petitioner's producing properties[6] and gathering facilities. Petitioner claims that was error. It contends that it was incumbent on the Commission to determine the field price or actual field value of natural gas in the areas in which petitioner produces gas, to eliminate petitioner's leaseholds and producing and gathering facilities from the rate base, to disallow expenses of gathering and production, and to allow petitioner as an expense item the field price or actual field value for all gas produced by it and taken into the pipe line system. Evidence was offered to show what the market price or actual field value of the gas was. The argument is that the procedure followed by the Commission extends its jurisdiction

contracts which in any manner affect or relate to such rates, charges, classifications, and services." Sec. 4(c). By Rule 54.30 the Commission requires the filing with it of all contracts for direct industrial sales involving sales in excess of 100,000 Mcf per year. See 8 Fed. Reg. 16101.

[6] Petitioner produces approximately 50 per cent of the gas which it transports and sells, the remainder being purchased. The payments for gas purchased were allowed by the Commission as an operating expense.

over "the production or gathering of natural gas" contrary to the mandate of § 1(b).[7] Petitioner suggests moreover that if its leaseholds are to be included in the rate base they should not be included at cost but at what petitioner claims to be the market value.[8]

This phase of the case is controlled by *Canadian River Gas Co.* v. *Federal Power Commission, supra.* We need not repeat what we said there. It is clear that the value of producing properties and gathering facilities is affected whenever rates are fixed. That is inevitably true whether the leaseholds are put into the rate base or whether as petitioner urges the gas is valued as a commodity. That result is not avoided unless Congress puts a floor under production properties and gathering facilities of natural gas companies and fixes a minimum return on them. That Congress has not done. As Judge Sanborn aptly stated in the opinion of the Circuit Court of Appeals: "If there is an infirmity in the Commission's determination of the amount which should be included in the rate base as the cost or value of such facilities, we think the infirmity arises from the method used in making the valuation, and not from any lack of jurisdiction." 143 F. 2d 495. Petitioner, moreover, failed to object in its application for rehearing before the Commission to the inclusion of its producing properties and gathering facilities in the rate base. It is accordingly precluded by § 19(b) of the Act from attacking the order of the Commission on the ground that they are included.

Federal Power Commission v. *Hope Natural Gas Co.*, 320 U. S. 591, holds that the Commission is not bound to use any single formula for the fixing of rates. It is not precluded from using actual legitimate cost as it did here. The question on review is not the method of valuation which was used but the end result obtained since the issue is whether the rate fixed is "just and reasonable." § 5. In the present case the 6½ per cent return allowed by the Commission will permit petitioner to earn $4,363,925 annually on the basis of the test year after meeting all operating expenses which include depreciation, exploratory and development costs, and federal income taxes. The cost of servicing petitioner's long-term debt is $957,786 or 2.88 per cent. The cost of meeting the requirements of the preferred stock is $939,000 or 5.8 per cent. That leaves $2,467,139 for $20,184,175 of common

[7] See note 4, *supra*.

[8] The market value is alleged to be about $8,400,000 as compared with some $955,000 which the Commission found to be the actual legitimate cost.

stock—a return of 12 per cent. The return would be 9 per cent figured on the basis of common stock and surplus of $27,650,000. We are unable to say on these undisputed facts that the return is not commensurate with the risks, that confidence in petitioner's financial integrity has been impaired, or that petitioner's ability to attract capital, to maintain its credit, and to operate successfully and efficiently has been impeded.[9] See *Federal Power Commission* v. *Hope Natural Gas Co.*, *supra*, p. 603.

Affirmed.

Mr. Chief Justice STONE, concurring.

Mr. Justice ROBERTS, Mr. Justice REED, Mr. Justice FRANKFURTER and I concur for the following reasons only.

Petitioners did not raise objections in their application for rehearing to the Commission to the inclusion of their producing and gathering facilities in the rate base. By § 19(b) of the Natural Gas Act "No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing, unless there is reasonable ground for failure so to do." No reason appears for the failure of petitioners here to make objection on rehearing to the inclusion of the production and gathering facilities in the rate base.

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[9] The Commission stated on this phase of the case:

"The evidence discloses that the respondents' business is exceptionally free from serious business hazards. The gas supply is assured for at least thirty to thirty-five more years. We have made ample provision in the annual depreciation allowance for the restoration of the capital investment in the property over the claimed life of the gas supply. The respondents' markets are rapidly expanding and embrace the large metropolitan area of Detroit, which alone takes 40 per cent of the entire output under a long-term contract. Panhandle Eastern's president testified that the demand for service is so great that within the next year the respondents will be called upon to sell every cubic foot of gas that can possibly be delivered through the lines, and that the capacity factor will increase from 70 per cent to 90 per cent.

"It is likewise apparent from respondents' own evidence that Panhandle Eastern has been able to raise considerable capital at low cost. Only recently it successfully completed a financing program at remarkably low rates which resulted in a substantial reduction in its annual cost of capital. In February, 1941, Panhandle Eastern sold $18,250,000 of first mortgage and first lien bonds and $5,000,000 of serial notes at an average annual interest cost of 2.74 per cent. In February, 1942, it sold an additional $10,000,000 of first mortgage bonds at an interest cost of 3.13 per cent and $15,000,000 of preferred stock at a cost of 5.86 per cent. After the financing, Panhandle Eastern's annual cost of long-term debt was 2.88 per cent and preferred stock was 5.87 per cent, a combined annual cost of only 3.85 per cent for these securities.

"Panhandle Eastern has earned an average of 10.64 per cent on its net investment over the past five years, and Michigan Gas an average of 8.5 per cent during approximately the same period." 45 P. U. R. (N. S.) p. 215.